COMMANDER NAVY REGION HAWAII (COMNAVREG HI)

INTEGRATED CONTINGENCY PLAN (ICP)

FOR OFFICIAL USE ONLY

August 2018

COMMANDER NAVY REGION HAWAII

INTEGRATED CONTINGENCY PLAN

FOR OFFICIAL USE ONLY

Prepared by:

PCCI
Marine and Environmental Engineering

300 North Lee Street, Suite 201
Alexandria, Virginia 22314
703-684-2060

August 2018

(Change 6)

PAGE INTENTIONALLY LEFT BLANK

U.S. Department of Homeland Security

United States Coast Guard

Commander
United States Coast Guard
Sector Honolulu

400 Sand Island Parkway
Honolulu, HI 96819
Phone: (808) 842-2640
Fax: (808) 842-2649

16610/18-283

NOV 30 2018

U.S. Navy (USN) Fleet Logistics Center
Attn: Patricia Lee
850 Ticonderoga St., Suite 110
Joint Base Pearl Harbor-Hickam, HI 96860-5101

Dear Patricia Lee:

My staff has completed a comprehensive review of your Facility Response Plan (FRP) for USN Fleet Logistics Center submitted on November 5, 2018. Based on their recommendation, your FRP is approved in accordance with Title 33 Code of Federal Regulations (CFR) Part 154 and will remain valid until the five-year anniversary date of this letter. Please keep a copy of this approval letter with your FRP.

I commend your efforts in developing a response plan reflecting the Navy's operating procedures and organizational structure. Your plan is a vital working document and implementing it will help ensure effective oil spill response and mitigation in the Captain of the Port Honolulu zone. You are reminded that your plan must be re-submitted no later than 60 days prior to the expiration date of this letter or whenever a significant change occurs at the facility that affects the plan. All re-submissions must be in accordance with 33 CFR 154 and consistent with the National Contingency Plan (NCP) and the most recent Area Contingency Plan (ACP).

If you have any questions, please contact the Facilities and Waterways Management Division at (808) 522-8260 or e-mail honofac@uscg.mil.

Sincerely,

R. N. Samuel
Commander, U. S. Coast Guard
By direction

5090
N00
31 March 2020

From: Commander, Navy Region Hawaii
To: Mr. James D. Saul

Subj: DESIGNATION AS FEDERAL ON-SCENE COORDINATOR REPRESENTATIVE, NAVY ON-SCENE COORDINATOR REPRESENTATIVE, AND QUALIFIED INDIVIDUAL

Ref: (a) 40 CFR 300
(b) OPNAV M-5090.1

1. In accordance with references (a) and (b), you are designated as the Navy On-Scene Coordinator (NOSC) Representative and Federal On-Scene Coordinator (FOSC) Representative for releases of oil and hazardous substances, respectively, for Commander Navy Region Hawaii. You are directed to respond to actual or potential Navy oil and hazardous substance spills or releases within the Navy Region Hawaii Area of Responsibility (AOR). Additionally, you are the Region's designated Qualified Individual (QI) acting as the incident commander overseeing environmental emergencies which exceed the response capability or extend beyond the fence line of a facility. As the QI, you are also responsible for responding to non-Navy events as requested by other FOSCs within the AOR.

2. In my absence, you are authorized to direct Naval activities, activate contractors, commit funds for actions required, carry out response efforts, act as a liaison with any pre-designated FOSC, State On-Scene Coordinator (SOSC) or Local On-Scene Coordinator (LOSC), and task commands in my AOR for any assistance required. Navy Region Hawaii staff and regional commands are directed to provide you with full support in the event of an emergency.

3. You are directed to carry out all duties assigned in accordance with references (a) and (b). In addition, you will keep the chain of command informed of the status and impact of any oil or hazardous substance spill for which Navy Region Hawaii is responsible or involved.

Robert B. Chadwick, II
Rear Admiral

EPA RESPONSE PLAN COVER SHEET

General Facility Information

Facility Name:	Joint Base Pearl Harbor-Hickam (JBPHH)
Location:	850 Ticonderoga St., Suite 110 Joint Base Pearl Harbor-Hickam, HI 96860-5101
Physical Location:	7 miles west of Honolulu. Includes Joint Base Pearl Harbor-Hickam, the harbor and shoreline facilities.
County:	Honolulu
Facility Phone Number:	Navy On-Scene Coordinator (NOSC) Representative - Work: (808) 473-4689; Cell: (808) 864-2463 (24/7)
Latitude:	21° 21' 30"
Longitude:	157° 56' 54"
Wellhead Protection Area:	No
Owner/Operator:	U.S. Navy
Date of Oil Storage Start-Up	Approximately 1925
Current Operation (NAICS Code):	928110 - National Security
(SIC Code):	9711 - National Security
Largest Aboveground Oil Storage Tank Capacity (Gal.):	6,300,000
Number of Aboveground Oil Storage Tanks:	455
Maximum Oil Storage Capacity (Gal.):	48,244,112
Worst Case Oil Discharge Amount (Gal.):	6,309,952
Maximum Most Probable Discharge (Gal.):	36,000
Average Most Probable Discharge (Gal.):	2,100
Facility Distance to Navigable Water: 0 – 1/4 mile __X_____ 1/4 – 1/2 mile _____ 1/2 – 1 mile____ >1 mile_____	

Attachment F-1

PAGE INTENTIONALLY LEFT BLANK

Applicability of Substantial Harm Criteria

Does the facility transfer oil over-water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes___X_____ No_____

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and, within any storage area, does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation?

Yes_____ No____X_____

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Appendix C or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes___X_____ No_____

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Appendix C or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes_____ No____X_____

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes_____ No____X_____

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate, and complete.

Signature:_____ Title:_____

Name:_____ Date:_____

PAGE INTENTIONALLY LEFT BLANK

REGULATORY CROSS-REFERENCE MATRIX

EPA'S OIL POLLUTION PREVENTION REGULATION (40 CFR 112)

Regulatory citation(s)			ICP Section
112.7(g)	(1)	Response plan must be consistent with the NCP and applicable Area Contingency Plans (ACPs)	Introduction (1.3.4); App. B (B.8); App. N (N.1); App. W (W.1)
	(2)	The owner or operator shall review relevant portions of the NCP and ACPs annually and, if necessary, revise the response plan to ensure consistency with these plans	App. W (W.1)
	(3)	The owner or operator shall review and update the response plan periodically to reflect changes at the facility	App. W (W.2)
112.20(h)		Response plan elements	
	(1)	Emergency response action plan (Appendix F1.1 of 40 CFR 112):	
		(i) Identity and telephone number of qualified individual (F1.2.5)	Introduction (1.8.2); Core Plan (2.5)
		(ii) Identity of individuals/organizations to contact if there is a discharge (F1.3.1)	Core Plan (2.6 - 2.8); App. A; App. T (T.3); Tab 4
		(iii) Description of information to pass to response personnel in event of a reportable spill (F1.3)	Core Plan (2.10); App. A (A.3)
		(iv) Description of facility's response equipment and its location (F1.3.2)	App. E (E.1)
		(v) Description of response personnel capabilities (F1.3.4)	App. E (E.2); Q (Q.2)
		(vi) Plans for evacuation of the facility and a reference to community evacuation plans (F1.3.5)	App. L (L.3)
		(vii) Description of immediate measures to secure the source (F1.7.1)	Core Plan (2.9; 2.11-2.12)
		(viii) Diagram of the facility (F1.9)	App. M
	(2)	Facility information (F1.2, F2.0)	Response Cover Sheet; Introduction (1.4); App. C (C.1); App. F (F.2)
	(3)	Information about emergency responses:	
		(i) Identity of private personnel and equipment to remove to the maximum extent practicable a WCD or other discharges (F1.3.2, F1.3.4)	App. D (D.6); App. E (E.1 - E.3); App. T (T.3, T.4); Tab 4
		(ii) Evidence of contracts or other approved means for ensuring personnel and equipment availability	App. E (E.1 - E.3); App. T (T.4)
		(iii) Identity and telephone of individuals/organizations to be contacted in event of a discharge (F1.3.1)	Introduction (1.8); Core Plan (2.6, 2.7); App. A; Tab 4
		(iv) Description of information to pass to response personnel in the event of a reportable spill (F1.3.1)	Core Plan (2.9, 2.10); App. A (A.3)
		(v) Description of response personnel capabilities (F1.3.4)	App. E (E.2); App. Q (Q.2)
		(vi) Description of a facility's response equipment, location of the equipment, and equipment testing (F1.3.2, F1.3.3)	App. E (E.1); Tab 4
		(vii) Plans for evacuation of the facility and a reference to community evacuation plans as appropriate (F1.3.5)	App. L (L.3)
		(viii) Diagram of evacuation routes (F1.9)	App. L (L.5)
		(ix) Duties of the qualified individual (F1.3.6)	Core Plan (2.5); App. B (B.3)
	(4)	Hazard evaluation (F1.4)	App. F (F.4 - F.8)
	(5)	Response planning levels (F1.5, F1.5.1, F1.5.2).	App. C (C.2 - C.6); App. D (D.2, D.3)
	(6)	Discharge detection systems (F1.6, F1.6.1, F1.6.2)	App. H (H.1 - H.3)
	(7)	Plan implementation (F1.7)	
		(i) Response actions to be carried out (F1.7.1.1)	Core Plan (2.8 - 2.12); App. D (D.4 - D.6), Tab 1
		(ii) Description of response equipment to be used for each scenario (F1.7.1.1)	App. D (D.3, D.6); Tab 4
		(iii) Plans to dispose of contaminated material (F1.7.2)	App. K (K.3, K.4, K.7, K.8)

Regulatory citation(s)		ICP Section
	(iv) Measures to provide adequate containment and drainage of spilled oil (F1.7.3)	App. I (I.5)
	(8) Self-inspection, drills/exercises, and response training (F1.8.1-F1.8.3.2)	App. Q (Q.1, Q.2), Tab 3
	(9) Diagrams (F1.9)	App. M
	(10) Security systems (F1.10)	App. J (J.1 - J.10)
	(11) Response plan cover sheet (F2.0)	Page i
112.21	Facility response training and drills/exercises (F1.8.2, F1.8.3)	App. Q (Q.1, Q.2), Tab 3
112	Appendix F: Facility-Specific Response Plan	
	1. Model Facility - Specific Response Plan	
	1.1 Emergency Response Action Plan	Core Plan
	1.2 Facility Information	Resp. Plan Cover Sheet; Intro. (1.4, 1.5); App. C (C.1, C.3); F (F.2)
	1.3 Emergency Response Information	
	1.3.1 Notification	Intro. (1.8); Core Plan (2.6 - 2.9); App. A; Tab 4
	1.3.2 Response Equipment List	App. E (E.1); Tab 4
	1.3.3 Response Equipment Testing/Deployment	App. E (E.1) and Q (Q.1)
	1.3.4 Personnel	App. E (E.2); App. U (U.1)
	1.3.5 Evacuation	App. L (L.1 - L.5)
	1.3.6 Qualified Individual's Duties	Core Plan (2.5); App. B (B.3)
	1.4 Hazard Evaluation	
	1.4.1 Hazard Identification	App. F (F.2)
	1.4.2 Vulnerability Analysis	App. F (F.7)
	1.4.3 Analysis of the Potential for an Oil Spill	App. F (F.5)
	1.4.4 Facility Reportable Oil Spill History	App. F (F.9)
	1.5 Discharge Scenarios	
	1.5.1 Small and Medium Discharges	App. D (D.2)
	1.5.2 Worst-Case Discharge	App. D (D.2, D.5, D.6)
	1.6 Discharge Detection Systems	
	1.6.1 Discharge Detection by Personnel	App. H (H.1)
	1.6.2 Automated Discharge Detection	App. H (H.2)
	1.7 Plan Implementation	
	1.7.1 Response Resources for Small, Medium, and Worst-Case Spills	App. D (D.3, D.6); Tab 4
	1.7.2 Disposal Plans	App. K (K.11)
	1.7.3 Containment and Drainage Planning	App. I (I.5)
	1.8 Self-Inspection, Drills/Exercises, and Response Training	
	1.8.1 Facility Self-Inspection	App. Q (Q.1)
	1.8.2 Facility Drills/Exercises	App. Q (Q.1)
	1.8.3 Response Training	App. Q (Q.2), Tab 3
	1.9 Diagrams Appendix	App. M
	1.10 Security	App. J (J.1 - J.10)
	2. Response Plan Cover Sheet	Page i
	3. Acronyms	App. V
	4. References	App. V

USCG'S OIL POLLUTION PREVENTION REGULATION (33 CFR PART 154 - Subpart F)

Regulatory citation(s)		ICP Section
154.1026	Qualified individual and alternate qualified individual	Introduction (1.8); Core Plan (2.5)
154.1028	Availability of response resources by contract or other approved mean	App. D (D.6); App E (E.1 - E.3), App. T (T.3, T.4)
154.1029	Worst case discharge	App. C (C.4 - C.6); App. D (D.2, D.3, D.5, D.6)
154.1030	General response plans contents	
	(a) Cross-references	Page iii
154.1035	Significant and substantial harm facilities	
	(a) Introduction and plan content	
	(1) Facility's name, physical location and mailing address, county, telephone and fax	Resp. Cover Sheet; Introduction (1.5)
	(2) Description of a facility's location in a manner that could aid in locating the facility	Response Plan Cover Sheet; Introduction (1.5)
	(3) Name, address, and procedures for contacting the owner/operator on a 24-hour basis	Response Plan Cover Sheet; Introduction (1.5)
	(4) Table of contents	Table of Contents (Page ix)
	(5) Cross index, if appropriate	Page iii
	(6) Record of change(s) to record information on plan updates	Page vii
	(b) Emergency response action plan	
	(1) Notification procedures	
	(i) Prioritized list identifying person(s), including name, telephone number, and role in plan, to be notified in event of threat or actual discharge	Intro. (1.8); Core Plan (2.6 – 2.9); App. A
	(ii) Information to be provided in initial and follow-up notifications to federal, state, and local agencies	Core Plan (2.10); App. A (A.2, A.3, A.6)
	(2) Facility's spill mitigation procedures	
	(i) Volume(s) of persistent and non-persistent oil groups	App. D (D.2); App. F (F.2)
	(ii) Prioritize procedures/task delegation to mitigate or prevent a potential or actual discharge or emergencies involving certain equipment/scenarios	Core Plan (2.9, 2.11, 2.12); App. B (B.3, B.4); App. D (D.4 – D.6)
	(iii) List of equipment and responsibilities of facility personnel to mitigate an average most probable discharge	App. B (B.3 - B.5); App. D (D.4 - D.6); App. E (E.1 - E.3)
	(3) Facility response activities	
	(i) Description of facility personnel's responsibilities to initiate/supervise response until arrival of qualified individual	Core Plan (2.9); App. D (D.4 - D.6)
	(ii) Qualified individual's responsibility/authority	Core Plan (2.5); App. B (B.3)
	(iii) Facility or corporate organizational structure used to manage response actions	App. B (B.2, B.6); App. U (U.1, U.2)
	(iv) Oil spill response organization(s) spill management team available by contract or other approved means	App. B (B.2); App. T (T.3); App. U (U.1, U.2)
	(v) For mobile facilities that operate on more than one COTP, the oil spill response organization(s)/spill management team in the applicable geographic-specific appendix	N/A
	(4) Fish and wildlife sensitive environments	
	(i) Areas of economic importance and environmental sensitivity as identified in the ACP that are potentially impacted by a WCD	App. N (N.1, N.2, N.4)

Regulatory citation(s)		ICP Section
	(ii) List areas and provides maps/charts and describe response actions	App. N (N.3); App. M, Tab 1
	(iii) Equipment and personnel necessary to protect identified areas	App. E (E.1 - E.3); App. T (T.3); App. N (N.3)
	(5) Disposal plan	App. K
	(c) Training and exercises	App. Q, Tab 3
	(d) Plan review and update procedures	App. W
	(e) Appendices	
	(1) Facility specific information	Resp. Plan Cover Sheet; Introduction; App. C (C.1); App. F (F.2)
	(2) List of contacts	Core Plan (2.6); App. A; Tab 4
	(3) Equipment lists and records	App. E (E.1 - E.3); Tab 4
	(4) Communications Plan	App. A (A.5); Tab 5
	(5) Site-specific safety and health plan	App. R (R.7); Tab 5
	(6) List of acronyms and definitions	App. V
	(7) A geographic-specific appendix	N/A
154.1040	Specific requirements for substantial harm facilities	App. C (C.1 - C.6); App. D (D.1 - D.3)
154.1041	Specific response information to be maintained on mobile MTR facilities	N/A
154.1045	Groups I-IV petroleum oils	App. C (C.4, C.5); App. D (D.2); App. F (F.2, F.4)
154.1047	Group V petroleum oils	N/A
154.1050	Training	App. Q, Tab 3
154.1055	Drills	App. Q
154.1057	Inspection and maintenance of response resources	App. E (E.1); App. Q
154.1060	Submission and approval procedures	App. W
154.1065	Plan revision and amendment procedures	App. W
154.1070	Deficiencies	N/A
154.1075	Appeal Process	App. N/A
Appendix C	Guidelines for determining and evaluating required response resources for facility response plans	App. D (D.2, D.3), Tab 1
Appendix D	Training elements for oil spill response plans	App. Q, Tab 3

RECORD OF CHANGES*				
Change Number	**Section**	**Abstract**	**Date**	**Author's Initials**
1	Introduction	Updated format of sections and tables. Updated names and phone numbers. Changed OPNAV 5090.1B to OPNAV 5090.1C. Changed Hawaiian Area Contingency Plan to Hawaii Area Contingency Plan.	May 2010	J.W.
1	Core Plan	Updated format of sections and tables. Updated names and phone numbers. Changed OPNAV 5090.1B to OPNAV 5090.1C. Updated names and phone numbers	May 2010	J.W.
1	Appendix C	Updated Response Management Appendix to incorporate the latest NIMS ICS.	May 2010	J.W.
1	Appendix D	Updated Response Management Appendix to incorporate the latest NIMS ICS.	May 2010	J.W.
1	Appendix E	Updated Response Management Appendix to incorporate the latest NIMS ICS.	May 2010	J.W.
1	Appendix F	Updated Response Management Appendix to incorporate the latest NIMS ICS.	May 2010	J.W.
1	Appendix G	Updated Response Management Appendix to incorporate the latest NIMS ICS.	May 2010	J.W.
1	Tab 1	Updated names and phone numbers.	May 2010	J.W.
1	Whole Plan	Added "For Official Use Only" to footers.	May 2010	J.W.
2	Whole Plan	Incorporated the Hickam AFB Integrated Contingency Plan (ICP) into the CNR HI ICP as a result of both Hickam AFB and Naval Base Pearl Harbor joining together to form Joint Base Pearl Harbor-Hickam.	May 2012	J.W.
2	Whole Plan	Updated: • Emergency Response Procedures (Core Plan) • Storage tank information • Response personnel • Response equipment • Environmentally sensitive areas • Booming strategies • Name and phone numbers • Response organization • Drainage information • Maps and figures	May 2012	J.W.
2	Whole Plan	Reordered the pagination of the Appendices as the result of incorporating the Hickam AFB ICP.	May 2012	J.W.
2	Core Plan All	Updated format of sections and tables. Updated names and phone numbers.	May 2013	J.W.
3	EPA Response Cover Sheet	Updated information, added missing field.	May 2014	J.W.
3	Record of Change	Recorded updates to plan.	August 2014	J.W.
3	Table of Contents	Updated to add new sections and changes in pagination.	August 2014	J.W.
3	Introduction	Updated plan format section. Updated facility information section. Updated phone numbers.	August 2014	J.W.
3	Core Plan	Added section on "spills and reportable quantities". Updated phone numbers. Updated spill information log.	August 2014	J.W.

RECORD OF CHANGES*				
Change Number	**Page(s) Affected**	**Abstract**	**Date**	**Author's Initials**
3	Appendix E	Updated equipment listings. Updated SWOB information. Updated SUPSALV section. Added section on aerial observation.	August 2014	J.W.
3	Appendix F	Updated SWOB information. Updated/expanded information on BOWTS facility.	August 2014	J.W.
3	Appendix J	Added access requirement information for restricted sites.	August 2014	J.W.
3	Appendix M	Updated Hickam tank map and broke map up into four smaller maps. Created "JBPHH Response Resources Map". Updated "Pearl Harbor Booming Strategies Map"	August 2014	J.W.
3	Appendix N	Updated environmental, cultural, and economic sensitive areas. Updated response countermeasures and protection strategies. Added new booming strategies matrices. Developed cultural resources section. Added ESI maps.	August 2014	J.W.
3	Appendix O	Redid "wildlife oil vulnerabilities" section. Updated phone numbers.	August 2014	J.W.
3	Appendix T	Revised procedures to activate BOAs. Updated BOA listings.	August 2014	J.W.
3	Appendix U	Updated SMT roster.	August 2014	J.W.
3	Appendix W	Moved record of periodic review/changes table to front of plan.	August 2014	J.W.
3	Tab 3	Created a table of contents for the tab.	August 2014	J.W.
3	Tab 4	Created response permit and consultation table.	August 2014	J.W.
4	Whole Plan	Administrative and phone number changes/updates.	December 2015	J.W.
4	EPA Response Plan Cover Sheet	Updated AST count and volume.	December 2015	J.W.
4	Cross-Reference Matrix	Updated cross-reference matrix to reflect changes and updates.	December 2015	J.W.
4	Record of Change	Updated record of change table to reflect changes and updates.	December 2015	J.W.
4	Table of Contents	Updated table of contents to reflect changes and updates.	December 2015	J.W.
4	Introduction	Updated plan format section. Updated POCs and phone numbers.	December 2015	J.W.
4	Appendix A	Updated POCs and phone numbers.	December 2015	J.W.
4	Appendix C	Updated data for deriving MTR WCD. Updated MTR WCD for individual pipelines. Updated MTR WCD planning volumes.	December 2015	J.W.
4	Appendix D	Updated MTR WCD scenario data. Updated tables in Section D.3, Response Resources Required by OPA 90. Updated Section D.6, Plan Implementation for Facility WCD. Updated multiple tables covering equipment resources.	December 2015	J.W.
4	Appendix E	Updated all equipment listings, including SUPSALV equipment. Updated POCs and phone numbers.	December 2015	J.W.

RECORD OF CHANGES*				
Change Number	**Page(s) Affected**	**Abstract**	**Date**	**Author's Initials**
4	Appendix F	Updated all tank listings (ASTs, USTs, Mobile Tanks, and Drums Storage). Updated hazardous substance inventories. Updated hazard analysis. Updated vulnerability analysis. Updated environmentally sensitive area identification.	December 2015	J.W.
4	Appendix K	Updated waste management procedures.	December 2015	J.W.
4	Appendix L	Updated evacuation procedures and figures for the Red Hill Facility.	December 2015	J.W.
4	Appendix M	Updated all tank location maps.	December 2015	J.W.
4	Appendix O	Updated and simplified appendix. Removed all wildlife response information.	December 2015	J.W.
4	Appendix P	Removed NRDA information as there is a separate NRDA plan. Appendix is now reserved for future use.	December 2015	J.W.
4	Appendix S	Removed FISC Pearl Instruction. Appendix is now reserved for future use.	December 2015	J.W.
4	Appendix T	Updated procedures for activating a BOA contract. Updated BOA Contractor listing.	December 2015	J.W.
4	Appendix U	Updated the CNRHI spill management team roster.	December 2015	J.W.
4	Tab 1	Removed Tab 1, Phone and Resource Directory, as information can be found in Hawaii ACP.	December 2015	J.W.
4	Tab 2	Removed Tab 2, Best Practices for Migratory Bird Care, as the Navy would not be performing bird care.	December 2015	J.W.
4	Tab 3	Tab 3 is now Tab 1.	December 2015	J.W.
4	Tab 4	Tab 4 is now Tab 2.	December 2015	J.W.
5	Whole Plan	Updated NOSC and NOSC PM contact information.	April, 2016	J.W.
6	Whole Plan	Administrative and phone number changes/updates.	August, 2018	J.W
6	Whole Plan	Reviewed and updated plan to ensure consistency with the Hawaii ACP (Version 6.2).	August, 2018	J.W
6	EPA Response Plan Cover Sheet	Updated AST count and volume.	August, 2018	J.W
6	Cross-Reference Matrix	Updated cross-reference matrix to reflect changes and updates.	August, 2018	J.W.
6	Table of Contents	Updated table of contents to reflect changes and updates.	August, 2018	J.W.
6	Core Plan	Updated format of section. Updated names and phone numbers.	August, 2018	J.W.
6	Appendix C	Updated data for deriving NTR WCD. Updated NTR WCD for individual pipelines. Updated NTR WCD planning volumes.	August, 2018	J.W.
6	Appendix D	Updated tables in Section D.3, Response Resources Required by OPA 90. Updated multiple tables covering equipment resources.	August, 2018	J.W.
6	Appendix E	Updated all facility response equipment and response personnel listing. Updated non-Navy response resources.	August, 2018	J.W
6	Appendix F	Updated all tank listings (ASTs, USTs, Mobile Tanks, and Drums Storage). Updated hazardous substance inventory. Added a listing of all hazardous waste storage sites.	August, 2018	J.W
6	Appendix T	Updated Basic Ordering guidance.	August, 2018	J.W
6	New Tab 3	Created Tab 5 "NOSC Rep Training Resources."	August, 2018	J.W

RECORD OF CHANGES*				
Change Number	**Page(s) Affected**	**Abstract**	**Date**	**Author's Initials**
6	New Tab 4	Created Tab 4 "Phone and Resource Listing."	August, 2018	J.W
6	New Tab 5	Created Tab 5 "Forms."	August, 2018	J.W
6	All	Changed NOSC to NOSC Representative	August, 2018	J.W.
7	EPA Response Cover Sheet	Updated NOSC contact information, WCD/MMPD planning volumes, tank numbers, and maximum oil storage capacity.	August, 2020	J.W.
7	Record of Change	Documented changes made in this update.	August, 2020	J.W.
7	Table of Contents	Updated table of contents	August, 2020	J.W.
7	Introduction	Updated NOSC contact information and WCD/MMPD planning volumes.	August, 2020	J.W.
7	Core Plan	Updated NOSC contact information and other phone numbers.	August, 2020	J.W.
7	Appendix A	Updated phone numbers.	August, 2020	J.W.
7	Appendix B	Updated NOSC contact information.	August, 2020	J.W.
7	Appendix C	Updated: - Facility description - Multi-level discharge planning volumes - Data for deriving MTR WCD - Fueling pier data - MTR WCD for individual pipelines - MTR WCD volume - MTR WCD on-water & onshore recovery planning vol. - Data for deriving NRT WCD - NRT WCD volumes for Type I & III oils - NTR WCD on-water & onshore recovery planning vol. - Discharge planning volume summary	August, 2020	J.W.
7	Appendix D	Updated: - EPA/USCG multi-level discharge planning volumes - Small discharge scenarios - Medium/maximum most probable discharge scenario - MTR and NTR WCD scenario - Response resources required by OPA 90 - Spill analysis for facility WCD - Resource requirements	August, 2020	J.W.
7	Appendix E	Updated oil spill removal organization (OSRO) information.	August, 2020	J.W.
7	Appendix F	Updated: - Hazard identification - Facility operations - MTR operation descriptions - NRT operation descriptions - Aboveground storage tank inventory - Underground storage tank inventory - Reorganized and consolidated tables - Hazard analysis - Reportable oil spill history	August, 2020	J.W.
7	Appendix H	Updated phone numbers.	August, 2020	J.W.
7	Appendix I	Updated available references and facility-specific containment information.	August, 2020	J.W.
7	Appendix M	Updated AST and UST maps. Renumbered maps.	August, 2020	J.W.
7	Appendix T	Updated USCG BOA contractors.	August, 2020	J.W.
7	Appendix W	Updated NOSC contact information	August, 2020	J.W.

RECORD OF CHANGES*				
Change Number	Section	Abstract	Date	Author's Initials

PAGE INTENTIONALLY LEFT BLANK

MASTER TABLE OF CONTENTS

EPA RESPONSE PLAN COVER SHEET i
REGULATORY CROSS-REFERENCE MATRIX v
RECORD OF CHANGE ix
TABLE OF CONTENTS xv
1.0 INTRODUCTION xvii
2.0 CORE PLAN xix
APPENDIX A NOTIFICATIONS xxi
APPENDIX B RESPONSE MANAGEMENT - INCIDENT COMMAND SYSTEM xxiii
APPENDIX C FACILITY INFORMATION xxv
APPENDIX D PLAN IMPLEMENTATION xxvii
APPENDIX E RESPONSE EQUIPMENT, PERSONNEL, AND RESOURCES xxix
APPENDIX F HAZARD ANALYSES xxxi
APPENDIX G RESPONSE GUIDELINES FOR HS RELEASES xxxiii
APPENDIX H DISCHARGE DETECTION xxxv
APPENDIX I DRAINAGE AND CONTAINMENT xxxvii
APPENDIX J SECURITY xxxix
APPENDIX K WASTE MANAGEMENT AND DISPOSAL PROCEDURES xli
APPENDIX L EVACUATION xliii
APPENDIX M FIGURES xlv
APPENDIX N ENVIRONMENTAL PROTECTION xlvii
APPENDIX O WILDLIFE MANAGEMENT xlix
APPENDIX P RESERVED li
APPENDIX Q EXERCISES, DRILLS, AND TRAINING liii
APPENDIX R SITE SAFETY AND HEALTH PLAN lvii
APPENDIX S RESERVED lix
APPENDIX T BASIC ORDERING AGREEMENT GUIDANCE DOCUMENT lxi
APPENDIX U COMNAVREG HAWAII SPILL MANAGEMENT TEAM lxiii
APPENDIX V ACRONYMS AND GLOSSARY lxv
APPENDIX W PLAN REVIEW AND UPDATE lxvii
TAB 1 OIL CONTAINMENT AND RECOVERY METHODS lxix
TAB 2 RESPONSE PERMITS AND CONSULTATIONS lxix
TAB 3 NOSC REPRESENTATIVE TRAINING RESOURCES lxix
TAB 4 PHONE AND RESOURCE DIRECTORY lxix
TAB 5 FORMS lxix

PAGE INTENTIONALLY LEFT BLANK

1.0 INTRODUCTION

1.1 PURPOSE....1-1
1.2 SCOPE....1-1
1.3 REGULATORY COMPLIANCE....1-1
1.3.1 Facility Response Planning Requirements....1-2
1.3.2 U.S. Navy Environmental Policy....1-2
1.3.3 State and Local Regulations....1-2
1.3.4 National Contingency Plan and Hawaii Area Contingency Plan....1-2
1.4 GEOGRAPHIC AREA OF RESPONSIBILITY FOR COMNAVREG HI....1-2
1.5 JOINT BASE PEARL HARBOR-HICKAM....1-2
1.6 PLAN FORMAT....1-3
1.7 PLAN MAINTENANCE AND USE....1-3
1.7.1 Plan Review and Update....1-3
1.8 GENERAL INFORMATION....1-4
1.8.1 Facility Information....1-4
1.8.2 Qualified Individual Information....1-4
1.8.3 Emergency Points of Contact....1-5

TABLES

TABLE 1-1 FACILITY INFORMATION....1-4
TABLE 1-2 QUALIFIED INDIVIDUAL INFORMATION....1-4
TABLE 1-3 EMERGENCY POINTS OF CONTACT....1-5

PAGE INTENTIONALLY LEFT BLANK

2.0 CORE PLAN

2.1 INTRODUCTION 2-1
2.2 SPILLS AND REPORTABLE QUANTITIES 2-1
2.3 CORE PLAN ORGANIZATION 2-2
2.4 NAVY INCIDENT MANAGEMENT 2-2
2.5 NAVY ON-SCENE COORDINATOR (NOSC) 2-2
2.5.1 NOSC Representative 2-2
2.5.2 Responsibilities 2-3
2.5.3 Qualified Individual 2-3
2.6 SPILLER OR DISCOVERER'S RESPONSIBILITY 2-4
2.7 DISPATCH/PORT OPERATIONS CONTROL TOWER RESPONSIBILITIES 2-4
2.8 AGENCY NOTIFICATION REQUIREMENTS 2-4
2.9 SPILLER NOTIFICATION CHECK-OFF LIST 2-5
2.10 OHS SPILL FLOWCHART 2-6
2.11 OHS SPILL CHECKLIST 2-7
2.12 SPILL INFORMATION LOG 2-11
2.13 EMERGENCY RESPONSE PROCEDURES FOR LAND-BASED SPILLS 2-13
2.13.1 Immediate Actions for Aboveground Fuel Storage Tank Failure 2-15
2.13.2 Immeidate Actions for Piping Failure 2-17
2.13.3 Immediate Actions for Equipment Failures. 2-19
2.13.4 Immediate Actions for Tank Truck Overfill 2-23
2.13.5 Immediate Actions for Tank Truck or Truck Loading Rack Component Failure 2-25
2.13.6 Immediate Actions for Day Tank Overfill 2-27
2.13.7 Immediate Actions for Day Tank or Associated Component Failure 2-29
2.13.8 Immediate Actions for Explosions or Fire 2-31
2.14 EMERGENCY RESPONSE PROCEDURES FOR MARINE SPILLS 2-33
2.14.1 Immediate Actions for Manifold, Loading Arm, Transfer Hose and Other Transfer Equipment Failures 2-35
2.14.2 Immediate Actions for Vessel Tank Overfill 2-37
2.14.3 Immediate Actions for Facility Tank Overfill 2-39
2.14.4 Immediate Actions for Piping Rupture and Leaks 2-41
2.14.5 Immediate Actions for Other Equipment Failures, such as Pipes, Relief Valves, Flow Control Valves, Flanges, Etc. 2-43
2.14.6 Immediate Actions for Explosions or Fires 2-45
2.15 NAVSUP FLC PH FUEL SPILL/MISHAP NOTIFICATION PROCEDURES FOR HICKAM AIRFIELD FUEL SERVICE CENTER (FSC) 2-47
2.16 ESTABLISHMENT OF A RESPONSE MANAGEMENT SYSTEM 2-49

2.17 RESPONSE ACTIONS....2-49
2.18 DISPOSAL....2-50
2.19 TERMINATION AND FOLLOW-UP ACTIONS....2-51

TABLES

TABLE 2-1: CORE PLAN ORGANIZATION....2-2
TABLE 2-2: NOSC AND NOSC REPRESENTATIVE INFORMATION....2-3
TABLE 2-3: AGENCY NOTIFICATION REQUIREMENTS....2-4
TABLE 2-4: SPILLER NOTIFICATION CHECK-OFF LIST....2-5
TABLE 2-5: SPILL INFORMATION LOG....2-11

FIGURES

FIGURE 2-1: OHS SPILL FLOWCHART....2-6

APPENDIX A
NOTIFICATION

A.1 HAWAII ACP NOTIFCATION LIST A-1
A.2 COMNAVREG HI NOTIFICATION LISTS A-1
A.2.1 COMNAVREG HI Notifications A-1
A.2.2 Navy Follow-up Reports A-2
A.2.3 External Agency Notifications A-2
A.2.4 Community Notifications A-3
A.3 REGULATORY NOTIFICATIONS A-3
A.3.1 Reportable OHS Discharges A-4
A.3.2 National Response Center (NRC) Notification A-4
A.3.3 Reporting Information for Extremely Hazardous Substances A-4
A.3.4 Reporting Information for Hazardous Waste A-4
A.3.5 State of Hawaii Hazardous Substance Release Notification Requirements A-5
A.3.5.1 Overview of Requirement A-5
A.3.5.2 Immediate Notification Content A-6
A.3.5.3 Written Follow-Up Notification Content A-7
A.4 REGULATORY NOTIFICATION CHECK-OFF LIST A-13
A.5 HAWAII ACP COMMUNICATIONS PLAN A-13
A.6 NAVY NOTIFICATION REQUIREMENTS A-15
A.6.1 OPNAV M-5090.1 Message Reports A-15
A.6.2 OPREP-3 Reporting A-15

TABLES

TABLE A-1: COMNAVREG HI NOTIFICATIONS A-1
TABLE A-2: FOLLOW-UP REPORTS AND MESSAGES FOR REPORTABLE OHS DISCHARGES A-2
TABLE A-3: EXTERNAL AGENCY NOTIFICATION LIST A-3
TABLE A-4: HAWAII HAZARDOUS SUBSTANCE RELEASE NOTIFICATION REQUIREMENTS A-6
TABLE A-5: REGULATORY NOTIFICATION CHECK-OFF LIST A-13
TABLE A-6: INCIDENT RADIO COMMUNICATIONS PLAN – HAWAII ACP A-14
TABLE A-7: OIL SPILL DATABASE CAUSE CODES AND SUPPLEMENTAL INFORMATION A-21

FIGURES

FIGURE A-1: OIL SPILL REPORT (MESSAGE FORMAT) A-17
FIGURE A-2: HAZARDOUS SUBSTANCE SPILL REPORT (MESSAGE FORMAT) A-25

FIGURE A-3: OIL SPILL REPORT MESSAGE (SAMPLE) A-29
FIGURE A-4: HAZARDOUS SUBSTANCE SPILL REPORT MESSAGE (SAMPLE) A-31
FIGURE A-5: OPREP- 3 EXAMPLE NAVY BLUE MESSAGE REPORT A-33

APPENDIX B
RESPONSE MANAGEMENT - INCIDENT COMMAND SYSTEM

B.1 NATIONAL INCIDENT MANAGEMENT SYSTEM INCIDENT COMMAND SYSTEM B-1
B.2 NAVY INCIDENT MANAGEMENT B-2
B.2.1 Organization B-2
B.2.2 Activity Responsibilities B-2
B.2.3 NOSC Representative Responsibilities B-2
B.2.4 COMNAVREG HI Response Organization B-2
B.2.5 COMNAVREG HI Spill Management Team B-3
B.2.6 USCG Incident Management Handbook B-3
B.3 QUALIFIED INDIVIDUAL B-4
B.3.1 Qualified Individual's Authority B-4
B.3.2 Qualified Individual's Regulatory Duties B-5
B.3.3 Qualified Individual's Duties B-5
B.4 COMMON RESPONSIBILITIES OF INCIDENT RESPONDERS B-6
B.5 BEST RESPONSE B-8
B.6 INCIDENT COMMAND SYSTEM ORGANIZATION B-9
B.6.1 Unified Command B-9
B.6.2 COMNAVREG HI Spill Management Team B-9
B.6.3 Alternate NOSC Representative B-9
B.6.4 NOSC Representative Command Staff B-10
B.6.5 Functional Sections B-10
B.6.5.1 Operations Section B-10
B.6.5.2 Planning Section B-12
B.6.5.3 Logistics Section B-13
B.6.5.4 Finance Section B-14
B.6.6 ICS Branch/Unit Duties and Responsibilities B-15
B.7 INCIDENT COMMAND SYSTEM: FORMS AND MEETINGS B-15
B.7.1 Incident Command System Forms B-15
B.7.2 Incident Command System Meetings B-15
B.8 HAWAII AREA CONTINGENCY PLAN B-17

TABLES

TABLE B-1: QUALIFIED INDIVIDUAL INFORMATION B-4
TABLE B-2: QUALIFIED INDIVIDUAL'S DUTIES B-6
TABLE B-3: OPERATIONAL PERIOD PLANNING CYCLE B-17

FIGURES

FIGURE B-1: COMNAVREG HI UNIFIED COMMAND ORGANIZATION..... B-1
FIGURE B-2: COMNAVREG HI RESPONSE ORGANIZATION..... B-3
FIGURE B-3: OPERATIONAL PLANNING CYCLE..... B-16

APPENDIX C
FACILITY INFORMATION

C.1 INTRODUCTION C-1
C.2 MULTI-LEVEL DISCHARGE PLANNING VOLUMES FOR JBPHH C-2
C.3 HARM CLASSIFICATION C-2
C.4 WCD AND PLANNING VOLUME FOR MTR COMPONENT C-4
C.4.1 Data for Deriving MTR WCD C-4
C.4.2 MTR WCD for Individual Pipelines C-5
C.4.3 MTR WCD Volume C-6
C.4.4 MTR WCD On-Water and Onshore Recovery Planning Volumes C-6
C.5 WCD AND PLANNING VOLUME FOR NTR COMPONENT C-7
C.5.1 Data for Deriving NTR WCD C-7
C.5.2 NTR WCD Volume for Type I and III Oil C-7
C.5.3 NTR WCD On-Water and Onshore Recovery Planning Volumes C-8
C.6 DISCHARGE PLANNING VOLUME SUMMARY FOR A COMPLEX FACILITY C-9
C.7 RESPONSE PLANNING DISTANCE C-10

TABLES

TABLE C-1: MULTI-LEVEL DISCHARGE PLANNING VOLUMES FOR JBPHH C-2
TABLE C-2: MTR FACILITY CLASSIFICATION (USCG) C-2
TABLE C-3: NTR FACILITY CLASSIFICATION (EPA) C-3
TABLE C-4: MTR PIPING DATA C-4
TABLE C-5: MTR FUEL PIER DATA C-4
TABLE C-6: WCD FOR 18 INCH F-76 PIPELINE C-5
TABLE C-7: WCD FOR 12 INCH JP-5 PIPELINE C-5
TABLE C-8: WCD FOR 12 INCH F-24 PIPELINE C-5
TABLE C-9: MTR FACILITY WCD VOLUME FOR TYPE I OIL C-6
TABLE C-10: WCD ON-WATER AND ONSHORE RECOVERY PLANNING VOLUMES FOR TYPE I OIL, MTR FACILITY C-6
TABLE C-11: DATA FOR DERIVING NTR WCD C-7
TABLE C-12: NTR FACILITY WCD VOLUME FOR TYPE I OIL C-7
TABLE C-13: NTR FACILITY WCD VOLUME FOR TYPE III OIL C-8
TABLE C-14: WCD ON-WATER AND ONSHORE RECOVERY PLANNING VOLUMES FOR TYPE I OIL, NTR FACILITY C-8
TABLE C-15: WCD ON-WATER AND ONSHORE RECOVERY PLANNING VOLUMES FOR TYPE III OIL, NTR FACILITY C-9
TABLE C-16: DISCHARGE PLANNING VOLUME SUMMARY FOR COMPLEX FACILITY FOR TYPE I OIL C-9

TABLE C-17: SUMMARY OF RESOURCE PLANNING ADJUSTMENT FOR REQUIREMENTS THAT EXCEED RESOURCE CAPABILITY CAPS AS OF 18 FEBRUARY 1998 .....C-10
TABLE C-18: MTR FACILITY RESPONSE PLANNING DISTANCE.....C-10
TABLE C-19: NTR FACILITY RESPONSE PLANNING DISTANCE C-10

APPENDIX D
PLAN IMPLEMENTATION

D.1 INTRODUCTION D-1
D.2 OIL SPILL SCENARIOS D-1
D.2.1 EPA and USCG Multi-Level Discharge Planning Volumes D-1
D.2.2 Small Discharge Scenarios D-2
D.2.3 Medium Discharge Scenarios D-3
D.2.4 MTR and NTR WCD Scenarios D-4
D.3 RESPONSE RESOURCES REQUIRED BY OPA 90 ..... D-6
D.3.1 Response Resources Required for Small/Average Most Probable Discharge D-6
D.3.2 Response Resources Required for Medium/Maximum Most Probable Discharge D-7
D.3.3 Response Resources Required for MTR/NTR WCD's D-8
D.4 RESPONSE STRATEGIES D-11
D.4.1 General Response Strategies D-11
D.4.2 Plan Implementation for Small/AMP and Medium/MMP Discharges D-11
D.5 PLAN IMPLEMENTATION FOR VESSEL WORST-CASE DISCHARGE D-13
D.6 PLAN IMPLEMENTATION FOR FACILITY WORST-CASE DISCHARGE D-17
D.6.1 Spill Analysis for Facility WCD D-17
D.6.2 Initial Actions D-18
D.6.3 Spill Response Organization D-19
D.6.4 Resource Requirements D-21
D.6.5 Available Resources and Sources of Procurement D-22
D.6.6 Shortfalls and Options for Alleviating Them D-23
D.6.7 Time Required to Clean Up the Spill D-24
D.6.8 Weather and Aquatic Conditions Impacting Spill Response D-24

TABLES

TABLE D-1: MULTI-LEVEL DISCHARGE PLANNING VOLUMES D-1
TABLE D-2: SMALL SCENARIOS FOR TRANSFER FACILITIES - PUMPHOUSE D-2
TABLE D-3: SMALL SCENARIOS FOR TRANSFER FACILITIES – LOADING RACK D-2
TABLE D-4: SMALL SCENARIOS FOR BULK OIL STORAGE FACILITIES D-2
TABLE D-5: SMALL SCENARIOS FOR PIPELINES, VALVES AND OTHER OIL TRANSFER EQUIPMENT D-3
TABLE D-6: SMALL SCENARIOS FOR DAY TANK SITES D-3
TABLE D-7: MEDIUM SCENARIOS FOR BULK OIL STORAGE FACILITIES D-3

TABLE D-8: MEDIUM SCENARIO FOR PIPELINES, VALVES AND OTHER OIL TRANSFER EQUIPMENT/OPERATIONS D-4
TABLE D-9: MTR/NTR WCD PLANNING VOLUMES D-4
TABLE D-10: WCD SCENARIOS FOR MTR FACILITIES D-4
TABLE D-11: WCD SCENARIO FOR NTR-BULK OIL STORAGE FACILITY D-5
TABLE D-12: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT, AND TEMPORARY STORAGE RESOURCES FOR SMALL/AMPD D-6
TABLE D-13: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR MEDIUM/MMPD D-7
TABLE D-14: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR MTR/NTR WCD D-8
TABLE D-15: IDENTIFICATION OF OSRO FOR SHORELINE CLEANUP OPERATION D-10
TABLE D-16: GENERAL IMPLEMENTATION OF RESPONSE PLAN FOR A SMALL/AMPD D-11
TABLE D-17: GENERAL IMPLEMENTATION OF RESPONSE PLAN FOR A MEDIUM/MMPD D-12
TABLE D-18: COMNAVREG ON-WATER OIL RECOVERY EQUIPMENT TO MEET REQUIREMENTS D-20
TABLE D-19: SUPSALV ON-WATER OIL RECOVERY EQUIPMENT TO MEET SHORTFALL D-21
TABLE D-20: ON-WATER OIL REMOVAL EQUIPMENT CAPABILITY IMMEDIATELY AVAILABLE TO COMNAVREG HI D-22
TABLE D-21: CONTAINMENT BOOM D-22
TABLE D-22: WEATHER AND AQUATIC CONDITIONS IMPACTING SPILL RESPONSE D-25

APPENDIX E
RESPONSE EQUIPMENT, PERSONNEL, AND RESOURCES

E.1 REGIONAL RESPONSE EQUIPMENT E-1
E.1.1 Response Equipment Inspection and Maintenance E-1
E.1.2 Response Equipment Testing and Deployment E-1
E.1.3 Response Equipment Inventories E-1
E.2 RESPONSE PERSONNEL E-12
E.2.1 Immediate Response Team E-12
E.2.2 Spill Management Team E-12
E.3 RESOURCES AVAILABLE TO COMNAVREG HI E-12
E.3.1 Navy Equipment E-13
E.3.1.1 Navy Supervisor of Salvage Equipment E-13
E.3.1.2 Navy Berthing Barges E-21
E.3.2 Oil Spill Removal Organizations E-21
E.3.3 Technical Advisors E-22
E.3.3.1 Navy Superivor of Salvage E-22
E.3.3.2 National Oceanic and Atmospheric Adimistration E-22
E.3.3.3 Regional Response Team E-23
E.3.3.4 Environmental Protection Agency E-23
E.3.3.5 U.S. Coast Guard E-23
E.3.3.6 USCG National Strike Forces E-24
E.3.3.7 International Tankers Owners Pollution Federation, Ltd. E-24
E.3.4 Hazardous Substance Assistance E-25
E.3.5 Federal Special Teams E-25
E.3.6 Aerial Observation E-27
E.3.6.1 Regulatory Requirements E-27
E.3.6.2 Aircraft Support E-27
E.3.6.3 Aircraft Resources E-27
E.3.6.4 Aerial Observation Personnel E-28
E.3.6.5 Aerial Observation Training E-28

TABLES

TABLE E-1: ON-SITE INVENTORY - SKIMMERS E-2
TABLE E-2: ON-SITE INVENTORY - VACUUM TRUCKS E-3
TABLE E-3: ON-SITE INVENTORY - BOOM E-4
TABLE E-4: ON-SITE INVENTORY - VESSELS E-4
TABLE E-5: ON-SITE INVENTORY - SORBENTS AND SPILL KITS E-5
TABLE E-6: ON-SITE INVENTORY – TEMPORARY WASTE OIL STORAGE E-6

TABLE E-7: FIREFIGHTING & CRASH FIRE RESCUE EQUIPMENT E-6
TABLE E-8: HEAVY EQUIPMENT E-9
TABLE E-9: FACILITY RESPONSE TEAM E-12
TABLE E-10: SUPSALV OIL SPILL RESPONSE EQUIPMENT E-13
TABLE E-11: OSROs E-21
TABLE E-12: HAZARDOUS SUBSTANCE RELEASE ASSISTANCE E-25
TABLE E-13: FEDERAL SPECIAL TEAMS E-25
TABLE E-14: AIRCRAFT RESOURCES E-28

APPENDIX F
HAZARD ANALYSIS

F.1 INTRODUCTION F-1
F.2 HAZARD IDENTIFICATION F-1
F.2.1 Facility Operations F-1
F.2.2 MTR Operations F-2
F.2.3 NTR Operations F-2
F.2.4 Bulk Oil Storage Containers F-5
F.2.5 Underground Storage Tanks F-27
F.2.6 Hazardous Substance Storage F-31
F.2.7 Hazardous Waste Accumulation Points F-33
F.3 SURFACE IMPOUNDMENTS AND SECONDARY CONTAINMENT F-39
F.4 HAZARD ANALYSIS F-40
F.4.1 Oil Hazard Analysis F-40
F.4.2 Hazardous Substance Hazard Analyses F-42
F.4.3 Health Hazards F-42
F.5 DAILY OPERATIONS PRESENTING POTENTIAL SPILL RISKS F-43
F.5.1 Oil Spill Potential from Bildge Water Treatment Facility Operations F-45
F.5.2 Oil Spill Potential from Navy Barge Operations F-46
F.6 EFFECT OF THROUGHPUT CHANGES ON SPILL VOLUMES F-46
F.7 VULNERABILITY ANALYSIS F-47
F.7.1 Introduction F-47
F.7.2 Oil Spill Response Planning Distance F-47
F.7.3 Environmentally Sensitive Area Identification F-47
F.8 COMNAVREG HI ANALYSIS OF THE POTENTIAL FOR OIL SPILLS F-49
F.9 REPORTABLE OIL SPILL HISTORY F-52

TABLES

TABLE F-1: BULK OIL STORAGE CONTAINERS F-6
TABLE F-2: UNDERGROUND OIL STORAGE TANKS F-27
TABLE F-3: HAZARDOUS SUBSTANCE STORAGE F-31
TABLE F-4: HAZARDOUS WASTE ACCUMULATION POINTS F-34
TABLE F-5: OIL HAZARD ANALYSIS F-40
TABLE F-6: HAZARDOUS SUBSTANCE HAZARD ANALYSIS F-42
TABLE F-7: PHYSICAL AND TOXICOLOGICAL HAZARDS OF STORED POL PRODUCTS F-42
TABLE F-8: BULK TRANSFER OPERATIONS PRESENTING POTENTIAL SPILL RISKS F-43

TABLE F-9: TRANSFER FACILITIES PRESENTING POTENTIAL SPILLS RISKS..... F-44
TABLE F-10: DAY-TO-DAY OPERATIONS PRESENTING POTENTIAL SPILLS RISKS.... F-45
TABLE F-11: BILGE WATER TREATMENT FACILITY POTENTIAL SPILL RISKS..... F-46
TABLE F-12: EFFECTS OF CHANGES IN THROUGHPUT ON POTENTIAL SPILL VOLUME F-47
TABLE F-13: COMNAVREG HI'S OIL SPILL RESPONSE PLANNING DISTANCE F-47
TABLE F-14 VULNERABILITIES OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS, WATER INTAKES, AND OTHER AREAS..... F-48
TABLE F-15: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS FROM ASTs F-49
TABLE F-16: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS AT FACILITY TRANSFER OPERATIONS, PUMPING OPERATIONS, AND PLANT PIPELINES F-50
TABLE F-17: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS AT THE FUEL OIL RECLAMATION FACILITY F-51
TABLE F-18: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS AT THE BILGE WATER PROCESSING FACILITY..... F-51
TABLE F-19: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS AT UPPER TANK FARM F-52

APPENDIX G
RESPONSE GUIDELINES FOR HAZARDOUS SUBSTANCES RELEASES

G.1 GENERIC RESPONSE GUIDELINES G-1
G.2 GENERIC RESPONSES TO HAZARDOUS SUBSTANCES G-1
G.2.1 EXPLOSIVES AND BLASTING AGENTS: UN CLASS 1.1, 1.2, 1.3, 1.5, OR 1.6 ..... G-3
G.2.2 EXPLOSIVES: UN CLASS 1.4 ..... G-4
G.2.3 FLAMMABLE COMPRESSED GASES: UN CLASS 2.1 ..... G-5
G.2.4 POISONOUS COMPRESSED GASES: UN CLASS 2.3 ..... G-6
G.2.5 FLAMMABLE LIQUIDS: UN CLASS 3 ..... G-7
G.2.6 FLAMMABLE SOLIDS: UN CLASS 4.1 ..... G-8
G.2.7 SPONTANEOUSLY COMBUSTIBLE MATERIAL: UN CLASS 4.2 ..... G-9
G.2.8 DANGEROUS WHEN WET MATERIALS: UN CLASS 4.3 ..... G-10
G.2.9 OXIDIZING MATERIALS: UN CLASS 5.1 ..... G-11
G.2.10 ORGANIC PEROXIDES: UN CLASS 5.2 ..... G-12
G.2.11 POISONOUS LIQUID: UN CLASS 6.1 ..... G-13
G.2.12 POISONOUS SOLIDS: UN CLASS 6.1 ..... G-14
G.2.13 INFECTIOUS SUBSTANCES: UN CLASS 6.2 ..... G-15
G.2.14 RADIOACTIVE MATERIAL: UN CLASS 7 ..... G-16
G.2.15 CORROSIVE MATERIALS: UN CLASS 8 ..... G-17
G.3 SITE-SPECIFIC HAZARDOUS SUBSTANCE SPILL RESPONSE PLANS G-18
G.3.1 Requirements for Developing a Site-Specific HS Spill Response Plan G-18
G.3.2 Notification for HS Spills or Releases G-18
G.4 COMNAVREG HI'S HAZARDOUS SUBSTANCE INVENTORY G-18

PAGE INTENTIONALLY LEFT BLANK

APPENDIX H
DISCHARGE DETECTION

H.1 DISCHARGE DETECTION BY PERSONNEL H-1
H.1.1 Initial Response Actions H-1
H.1.2 Monitoring H-1
H.2 AUTOMATED DISCHARGE DETECTION H-2
H.3 FACILITYSELF-INSPECTION H-3
H.3.1 Tank Inspection Checklist H-4
H.3.2 Secondary Containment Inspection Checklist H-4
H.4 DISCHARGE PREVENTION MEETINGS H-5

TABLES

TABLE H-1: AUTOMATED DISCHARGE DETECTION SYSTEMS UPPER TANK FARM H-2
TABLE H-2: AUTOMATED DISCHARGE DETECTION SYSTEMS HICKAM TANK FARM H-3
TABLE H-3: AUTOMATED DISCHARGE DETECTION SYSTEMS RED HILL FACILITY H-3

PAGE INTENTIONALLY LEFT BLANK

APPENDIX I
DRAINAGE AND CONTAINMENT

I.1 INTRODUCTION I-1
I.2 AVAILABLE REFERENCES I-1
I.3 DRAINAGE PATHWAYS TO NAVIGABLE WATERS I-1
I.3.1 Surface Water Pathways I-1
I.3.2 Storm Water Drainage I-2
I.4 TOPOGRAPHIC AND DRAINAGE PATTERNS WITHIN JBPHH I-3
I.5 FACILITY-SPECIFIC CONTAINMENT INFORMATION I-6
I.5.1 Red Hill Fuel Storage Faciltiy I-6
I.5.2 Underground Pumphouse I-7
I.5.3 Upper Tank Farm I-8
I.5.4 Fuel Oil Reclamation Facility (FORFAC) I-8
I.5.5 Lube Oil Storage I-11
I.5.6 Hickam Tank Farm I-11
I.5.7 Truck Loading/Unloading Racks I-13

TABLES

TABLE I-1: RED HILL FUEL STORAGE FACILITY I-7
TABLE I-2: UNDERGROUND PUMPHOUSE, BUILDING 59 ..... I-7
TABLE I-3: UPPER TANK FARM I-8
TABLE I-4: FUEL OIL RECLAMATION FACILITY I-8
TABLE I-5: LUBE OIL STORAGE, ADJACENT TO KUAHUA TRUCK RACK I-11
TABLE I-6: HICKAM TANK FARM I-11
TABLE I-7: TANK TRUCK FUEL LOADING/UNLOADING RACKS I-13

FIGURES

FIGURE I-1: RED HILL FUEL STORAGE FACILITY I-9
FIGURE I-2: UNDERGROUND PUMPHOUSE, UPPER TANK FARM, AND FORFAC I-10
FIGURE I-3: HICKAM TANK FARM I-12

PAGE INTENTIONALLY LEFT BLANK

APPENDIX J
SECURITY

J.1 FACILITY SECURITY J-1
J.2 COMNAVREG HI SECURITY J-1
J.3 PHYSICAL SECURITY J-1
J.3.1 Oil Storage Container Security J-1
J.3.2 Fences and Gates J-1
J.4 FUEL STORAGE AND TRANSFER FACILITIES J-2
J.5 TANK COMPONENTS SECURED J-3
J.6 FLOW AND DRAIN VALVES SECURED J-3
J.7 STARTER CONTROLS SECURED J-4
J.8 SECONDARY CONTAINMENT DRAINAGE J-4
J.9 PIPELINE LOADING/UNLOADING CONNECTIONS SECURED J-4
J.10 LIGHTING ADEQUATE TO DETECT AND DETER SPILLS J-4
J.11 RESTRICTED AREA ACCESS REQUIREMENTS J-4
J.11.1 NAVSUP FLCPH J-4
J.11.2 West Loch and Lualualei Annexes (Naval Magazine Areas) J-8

TABLES

TABLE J-1: SECURITY FOR FUEL STORAGE AND TRANSFER FACILITIES J-2
TABLE J-2: NAVSUP FLCPH FUEL COMPLEX ESCORT AND VISITOR RESPONSIBILITY AGREEMENT PROCEDURES J-5

FIGURES

FIGURE J-1: ESCORT AND VISITOR RESPONSIBILITY AGREEMENT FORM J-6
FIGURE J-2: WEST LOCH ANNEX RESTRICTED AREA J-8
FIGURE J-3: RESTRICTED AREA IDENTIFICATION BADGE J-9
FIGURE J-4: NO ESCORT REQUIRED BADGE J-9
FIGURE J-5: ESCORT REQUIRED BADGE J-9
FIGURE J-6: NMCEADDETPH ACCESS MEMO J-11

PAGE INTENTIONALLY LEFT BLANK

APPENDIX K
WASTE MANAGEMENT AND DISPOSAL PROCEDURES

K.1 GENERAL K-1
K.2 RESPONSIBILITY K-1
K.3 WASTE COLLECTION, MANAGEMENT, AND DISPOSAL PROCESS K-2
K.3.1 Fuel to be Reclaimed and Sold K-2
K.3.2 Waste Characterization K-2
T.3.3 Waste Accumulation Areas K-4
K.4 TEMPORARY STORAGE FOR COLLECTED OIL AND RESPONSE WASTE K-4
K.5 WASTE CONTAINER MANAGEMENT K-5
K.6 DISPOSAL CONDITIONS AND CRITERIA K-6
K.7 GENERAL WASTE HANDLING AND DISPOSAL METHODS K-6
K.7.1 Solid Materials/Wastes (Non-Hazardous Waste) K-7
K.7.2 Liguid Materials/Wastes (Non-Hazardous Waste) K-8
K.8 NON-HAZARDOUS WASTE DISPOSAL METHODS K-9
K.9 RECYCLABLE MATERIALS K-9
K.10 ANNUAL SOLID WASTE DISPOSAL DOCUMENTATION K-9
K.11 SAMPLE WASTE MANAGEMENT AND DISPOSAL PLAN AND CONTAINER LOG K-9

TABLES

TABLE K-1: MATERIAL CLASSIFICATION AND DISPOSAL STRATEGY K-3
TABLE K-2: TEMPORARY STORAGE FOR COLLECTED OIL AND RESPONSE WASTE K-4
TABLE K-3: WASTE CONTAINER CODES K-6
TABLE K-4: DISPOSAL STRATEGY, DISPOSAL CRITERIA, AND CONDITIONS K-6

FIGURES

FIGURE K-1: WASTE CONTAINER LABELS K-5

PAGE INTENTIONALLY LEFT BLANK

APPENDIX L
EVACUATION

L.1 INTRODUCTION....L-1
L.2 GENERAL EMERGENCY EVACUATION PROCEDURES....L-1
L.3 INCIDENT COMMANDER (IC) RESPONSIBILITIES....L-1
L.4 EVACUATION PLANS....L-2
L.5 EVACUATION MAPS....L-4

TABLES

TABLE L-1: EVACUATION PLAN: UPPER TANK FARM AND FORFAC....L-2
TABLE L-2: EVACUATION PLAN: RED HILL FUEL STORAGE FACILITY....L-3
TABLE L-3: EVACUATION PLAN: HICKAM TANK FARM....L-4

FIGURES

FIGURE L-1: EVACUATION MAP FOR UPPER TANK FARM AND FORFAC....L-5
FIGURE L-2: RED HILL EMERGENCY EVACUATION ZONES....L-7
FIGURE L-3: EVACUATION MAP FOR RED HILL FUEL STORAGE FACILITY....L-9
FIGURE L-4: EVACUATION MAP FOR HICKAM TANK FARM....L-11

PAGE INTENTIONALLY LEFT BLANK

APPENDIX M
FIGURES

FIGURE M-1: JOINT BASE PEARL HARBOR-HICKAM AST MAPS
- FIGURE M-1A: NAVAL SHIPYARD #1
- FIGURE M-1B: NAVAL SHIPYARD #2
- FIGURE M-1C: NAVAL SHIPYARD #3
- FIGURE M-1D: NAVAL SHIPYARD #4
- FIGURE M-1E: HICKAM AFB #1
- FIGURE M-1F: HICKAM AFB #2
- FIGURE M-1G: HICKAM AFB #3
- FIGURE M-1H: HICKAM AFB #4
- FIGURE M-1I: NAVMAG WEST LOCH
- FIGURE M-1J: KALAELOA (BARBERS POINT)
- FIGURE M-1K: RTF LUALUALEI
- FIGURE M-1L: WAHIAWA ANNEX
- FIGURE M-1M: PEARL CITY
- FIGURE M-1N: FORD ISLAND
- FIGURE M-1O: NEX MALL AND GOLF COURSE
- FIGURE M-1P: CAMP SMITH
- FIGURE M-1Q: RED HILL

FIGURE M-2: JOINT BASE PEARL HARBOR-HICKAM UST MAPS
- FIGURE M-2A: NAVAL SHIPYARD
- FIGURE M-2B: HICKAM AFB
- FIGURE M-2C: RED HILL FACILITY
- FIGURE M-2D: RTF LUALUALEI
- FIGURE M-2E: WAHIAWA ANNEX
- FIGURE M-2F: KALAELOA (BARBERS POINT)

FIGURE M-3: JOINT BASE PEARL HARBOR-HICKAM STORMWATER DRAINAGE MAPS
- FIGURE M-3A: NAVAL FACILITIES
- FIGURE M-3B: HICKAM AIRFIELD

FIGURE M-4: JOINT BASE PEARL HARBOR-HICKAM BOOMING STRATEGIES MAP

FIGURE M-5: JOINT BASE PEARL HARBOR-HICKAM RESPONSE RESOURCES MAP

PAGE INTENTIONALLY LEFT BLANK

APPENDIX N
ENVIRONMENTAL PROTECTION

N.1 INTRODUCTION N-1
N.2 PRIORITIZED LIST OF SENSITIVE AREAS N-1
N.2.1 List of Environmental, Cultural and Economically Sensitive Areas N-1
N.2.2 Hawaii ACP Protection Priority Criteria N-1
N.2.3 Environmental, Cultural, and Economic Sensitive Area Locations N-3
N.3 RESPONSE COUNTERMEASURES AND PROTECTION STRATEGIES N-6
N.3.1 Spills from Oil Storage Facilities on the Eastern Shore of South Channel N-6
N.3.2 Spills from Facility Sites on Pearl City Peninsula N-6
N.3.3 Spills from Facility Sites near Mamala Bay and Hickam Harbor N-6
N.3.4 Additional Response and Protection Strategies for Spills within Pearl Harbor N-7
N.3.5 Spills from the USS Arizona N-7
N.3.6 Boom Requirements N-7
N.3.7 Maps N-7
N.3.8 Booming and Collection Strategies Matrix N-7
N.4 CULTURAL RESOURCES WITHIN JBPHH N-11
N.4.1 Introduction N-11
N.4.2 Fishponds N-11
N.4.3 Former Taro/Rice Fields N-11
N.4.4 Habitaion N-12
N.4.5 Burials N-12
N.4.6 Other Archaeological Sites N-12
N.4.7 Cultural/Archaeological Sites and Response Operations N-12
N.4.8 Regulations and Legislative Requirements N-13
N.5 RESPONSE STRATEGY DEVELOPMENT GUIDANCE N-17
N.5.1 Description of Phases N-17
N.5.2 Resources for Developing Environmental Strategies N-17
N.5.2.1 Federal/Regional N-18
N.5.2.2 Local N-18
N.5.2.3 Documents/References N-18
N.5.3 Phase I – Development N-18
N.5.4 Phase II – Validation of Strategies N-25
N.5.5 Phase III – Emergency Response Prioritization of Strategies N-25

TABLES

TABLE N-1: ENVIRONMENTAL, CULTURAL, AND ECONOMIC SENSITIVE AREAS WITHIN THE ICP PLANNING DISTANCE N-2
TABLE N-2: HAWAII ACP PROTECTION PRIORITY CRITERIA N-3
TABLE N-3: CONTAINMENT BOOMING STRATEGIES MATRIX N-8
TABLE N-4: PROTECTION BOOMING STRATEGIES MATRIX N-9
TABLE N-5: SPILL RISKS WITHIN COMNAVREG HAWAII AOR N-19
TABLE N-6: RANKED ESI CODES FOR VARIOUS TYPES OF SHORELINES SENSITIVE TO OILS N-20
TABLE N-7: GASOLINE PRODUCTS- SUMMARY OF RELATIVE ENVIRONMENTAL IMPACT FROM RESPONSE METHODS FOR SPILLS IN WATER ENVIRONMENTS. N-21
TABLE N-8: GASOLINE PRODUCTS- SUMMARY OF RELATIVE ENVIRONMENTAL IMPACT FROM RESPONSE METHODS FOR SPILLS IN SHORELINE HABITATS N-22
TABLE N-9: DIESEL-LIKE OILS- SUMMARY OF RELATIVE ENVIRONMENTAL IMPACT FROM RESPONSE METHODS FOR SPILLS IN WATER ENVIRONMENTS. N-23
TABLE N-10: DIESEL-LIKE OILS- SUMMARY OF RELATIVE ENVIRONMENTAL IMPACT FROM RESPONSE METHODS FOR SPILLS IN SHORELINE HABITATS N-24
TABLE N-11: ENVIRONMENTAL RESPONSE STRATEGY RESOURCES N-25

FIGURES

FIGURE N-1: JBPHH SENSITIVE AREA LOCATIONS - PEARL HARBOR N-4
FIGURE N-2: JBPHH SENSITIVE AREA LOCATIONS - PEARL HARBOR ENTRANCE AND MAMALA BAY N-5
FIGURE N-3: JBPHH ARCHAEOLOGICAL SITE ANALYSES MAP N-14
FIGURE N-4: JBPHH ARCHAEOLOGICAL SITE MANAGEMENT AREAS N-15
FIGURE N-5: HICKAM AREAS OF PROBABILITY FOR ARCHAEOLOGICAL RESOURCES N-16

APPENDIX O
WILDLIFE MANAGEMENT

O.1 WILDLIFE MANAGEMENT O-1
O.1.1 Coordination of Wildlife Management O-1
O.1.2 Identification of Wildlife Resources At Risk O-1
O.2 WILDLIFE OIL VULNERABILITIES O-7
O.2.1 Fish O-7
O.2.2 Marine Mammals O-7
O.2.3 Birds O-8
O.2.4 Reptiles O-11
O.2.5 Shellfish O-12
O.2.6 Crustaceans O-12
O.3 RESPONSE PRIORITIES O-13
O.3.1 No Response Action O-13
O.3.2 Primary Response Strategy O-13
O.3.3 Secondary Response Strategy O-13
O.3.3.1 Wildlife Deterrent Techniques O-14
O.3.3.2 Preemptive Capture O-14
O.3.3.3 Prioritization of Secondary Response Strategies O-14
O.3.3.4 Legal Requirements for Secondary Response Strategies O-14
O.3.4 Tertiary Response Strategy O-15
O.4 IDENTIFICATION OF WILDLIFE RESPONSE ORGANIZATIONS O-15
O.4.1 Activation of Wildlife Response Organization O-15
O.4.2 Use of Volunteers O-16
O.5 FEDERAL AND STATE REQUIREMENTS AND POINTS OF CONTACT O-16
O.5.1 U. S. Fish and Wildlife Service O-16
O.5.2 National Marine Fisheries Service O-16
O.5.3 State Agencies O-17
O.5.4 Natural Resource Policies, Regulations, and Statutes Applicable to Oiled Wildlife Management O-17
O.5.4.1 Applicable Statutes O-18
O.5.5 Permits O-18
O.5.6 Euthanasia Policies O-19
O.5.7 Chain of Custody Issues O-19
O.5.8 Temporary Storage O-19
O.5.9 Disposal O-19

TABLES

TABLE O-1: EFFECTS OF OIL ON WILDLIFE O-3
TABLE O-2: ACTIVATION OF WILDLIFE RESPONSE ORGANIZATIONS O-15
TABLE O-3: STATE TRUSTEE AGENCIES IN COMNAVREG HI AOR O-17
TABLE O-4: STATE AND FEDERAL PERMITS AND/OR AUTHORIZATIONS REQUIRED FOR HAZING, COLLECTING OR HOLDING LIVE ANIMALS O-18

APPENDIX P
RESERVED

PAGE INTENTIONALLY LEFT BLANK

APPENDIX Q
EXERCISES, DRILLS, AND TRAINING

Q.1 DRILLS AND EXERCISES Q-1
Q.1.1 Internal Exercises Q-1
Q.1.2 External Exercises Q-4
Q.1.3 Qualified Individual Notification Exercises Q-4
Q.1.4 Spill Management Team Tabletop Exercises Q-4
Q.1.5 Equipment Deployment Exercises Q-5
Q.1.5.1 Facility Owned and Operated Equipment Q-5
Q.1.5.2 OSRO Involvement In Equipment Deployment Exercises Q-6
Q.1.5.3 Plan Holders Using a Combination of OSRO Equipment and Facility Owned Operated Equipment Q-6
Q.1.6 Internal Unannounced Exercises Q-7
Q.1.7 Government-Initiated Unannounced Exercises Q-8
Q.1.8 Triennial Exercise of the Entire Response Plan Q-8
Q.1.9 Other Credit Issues Q-9
Q.1.9.1 Credit for Spill Response Q-10
Q.1.9.2 Proper Documentation for Self-Certification Q-10
Q.1.9.3 LEPC Drill Credit Q-10
Q.1.10 Exercise Documentation Forms Q-10
Q.1.11 Completed Exercise Forms Q-10
Q.2 RESPONSE TRAINING Q-16
Q.2.1 General Q-16
Q.2.2 Training Program Elements and Procedures Q-16
Q.2.3 COMNAVREG HI Training Requirements Q-17
Q.2.4 OSHA Training Requirements Q-18
Q.2.4.1 Training Information Q-19
Q.2.5 OSHA Responder Category Q-19
Q.2.5.1 Oil Spill First Responder – Awareness Level Q-19
Q.2.5.2 Oil Spill First Responder – Operation Level Q-20
Q.2.5.3 Hazardous Materials Technician Level Q-20
Q.2.5.4 Hazardous Materials Specialist Level Q-21
Q.2.5.5 Incident Commander Q-22
Q.2.5.6 Skilled Support Personnel Q-23
Q.2.5.7 Specialist Employee Q-23
Q.2.5.8 Post-Emergency Response Operations Q-24
Q.2.6 Volunteer Training Q-24
Q.2.7 Oil Handling Personnel Training and Discharge Prevention Briefings Q-24

Q.2.8 Suggested Training Elements for COMNAVREG HI Spill Response Teams ... Q-25
Q.2.9 Suggested Training Elements for SMT Members ... Q-26
Q.2.10 Training for Qualified Individuals ... Q-27
Q.2.11 Training Resources for Navy On-Scene Coordinator Representative ... Q-29
Q.2.12 Training for Contracted Personnel ... Q-29
Q.2.13 Response Training Courses ... Q-30
Q.2.13.1 Facility Response Team ... Q-30
Q.2.13.2 Hazardous Substance Incident Response Management ... Q-30
Q.2.14 Trainers ... Q-30
Q.2.15 Training Documentation ... Q-31
Q.3 ICS TRAINING GUIDELINES ... Q-31
Q.4 DISCHARGE PREVENTION MEETINGS LOG ... Q-48

TABLES

TABLE Q-1: INTERNAL EXERCISES ... Q-2
TABLE Q-2: QI NOTIFICATION EXERCISES FOR EPA-REGULATED FACILITIES ... Q-4
TABLE Q-3: SPILL MANAGEMENT TEAM TABLETOP EXERCISE – EPA-REGULATED FACILITIES ... Q-5
TABLE Q-4: EQUIPMENT DEPLOYMENT EXERCISES/FACILITY OWNED – EPA-REGULATED FACILITIES ... Q-6
TABLE Q-5: EQUIPMENT DEPLOYMENT EXERCISES/OSRO – EPA-REGULATED FACILITIES ... Q-7
TABLE Q-6: GOVERNMENT-INITIATED UNANNOUNCED EXERCISES – EPA-REGULATED FACILITY RESPONSE PLAN HOLDERS ... Q-8
TABLE Q-7: CORE TEST COMPONENTS OF THE RESPONSE PLAN ... Q-9
TABLE Q-8: INTERNAL EXERCISES ... Q-9
TABLE Q-9: EXAMPLE SCHEDULE FOR TRIENNIAL EXERCISE CYCLE ... Q-9
TABLE Q-10: INTERNAL EXERCISE DOCUMENTATION FORM – QUALIFIED INDIVIDUAL NOTIFICATION ... Q-11
TABLE Q-11: INTERNAL EXERCISE DOCUMENTATION FORM – EMERGENCY PROCEDURES EXERCISE ... Q-12
TABLE Q-12: INTERNAL EXERCISE DOCUMENTATION FORM – SMT TABLETOP EXERCISE ... Q-13
TABLE Q-13: INTERNAL EXERCISE DOCUMENTATION FORM – EQUIPMENT DEPLOYMENT EXERCISE ... Q-14
TABLE Q-14: EMERGENCY RESPONSE MINIMUM TRAINING REQUIREMENTS ... Q-17
TABLE Q-15: FACILITY RESPONSE PERSONNEL TRAINING REQUIREMENTS ... Q-18
TABLE Q-16: INCIDENT COMMANDER AND DEPUTY INCIDENT COMMANDER ... Q-32
TABLE Q-17: OPERATIONS SECTION CHIEF ... Q-33
TABLE Q-18: RECOVERY/PROTECTION UNIT LEADER AND TEAM MEMBER ... Q-35

TABLE Q-19: EMERGENCY OPERATIONS UNIT LEADER AND TEAM MEMBER Q-38
TABLE Q-20: AIR OPERATIONS UNIT LEADER AND TEAM MEMBER Q-39
TABLE Q-21: WILDLIFE UNIT LEADER AND TEAM MEMBER Q-40
TABLE Q-22: SITE MANAGEMENT UNIT LEADER AND TEAM MEMBER Q-41
TABLE Q-23: PLANNING SECTION CHIEF Q-42
TABLE Q-24: STRATEGY AND TACTICS PLANNING UNIT LEADER AND TEAM MEMBERS Q-43
TABLE Q-25: HEALTH AND SAFETY PLANNING UNIT LEADER AND TEAM MEMBER Q-43
TABLE Q-26: NATURAL RESOURCES PLANNING UNIT LEADER AND TEAM MEMBER Q-44
TABLE Q-27: DEMOBILIZATION PLANNING UNIT LEADER AND TEAM MEMBER Q-45
TABLE Q-28: FINANCE SECTION CHIEF Q-45
TABLE Q-29: CONTRACT BRANCH LEADER AND TEAM MEMBER Q-46
TABLE Q-30: CLAIMS BRANCH LEADER AND TEAM MEMBER Q-47
TABLE Q-31: LOGISTICS SECTION CHIEF Q-47
TABLE Q-32: SUPPORT UNIT LEADER AND TEAM MEMBER Q-47
TABLE Q-33: COMMUNICATIONS UNIT LEADER AND TEAM MEMBER Q-48
TABLE Q-34: PERSONNEL UNIT LEADER AND TEAM MEMBER Q-48
TABLE Q-35: SERVICE UNIT LEADER AND TEAM MEMBER Q-48
TABLE Q-36: DISCHARGE PREVENTION MEETING LOG Q-49

PAGE INTENTIONALLY LEFT BLANK

APPENDIX R
COMNAVREG HAWAII SITE SPECIFIC SAFETY AND HEALTH PLAN

R.1 PURPOSE R-1
R.2 MEDICAL MONITORING R-1
R.3 RECORDS AND REPORTS R-1
R.4 HEALTH HAZARDS R-1
R.4.1 Pimary Chemical Hazards R-1
R.4.2 Secondary Chemical Hazard Identification R-3
R.4.3 Physical Hazards R-5
R.5 INITIAL RESPONSE ACTIONS R-7
R.5.1 Emergency Safety and Response Plan R-7
R.5.2 Site Security R-7
R.5.3 Surface Terrain and Meteorology R-7
R.5.4 Confined Space Entry Procedures R-8
R.6 MONITORING PLAN R-8
R.7 SAFETY AND HEALTH PROGRAM R-8
R.7.1 Site Safety Plan R-8
R.7.2 Safety Briefing R-10
R.7.3 Audits R-10
R.7.4 COMNAVREG HI Site Safety and Health Plan R-10
R.7.5 Site/Sector Organization Record Sheet R-10
R.8 PPE LEVELS OF PROTECTION R-11
R.8.1 Level D Ensemble R-11
R.8.2 Level C Ensemble R-12
R.8.3 Level B Ensemble R-13
R.8.4 Level A Ensemble R-14
R.9 GENERAL SIGNS/SYMPTOMS THAT INDICATE POTENTIAL TOXIC EXPOSURE R-15
R.10 MANIFESTATIONS OF TOXIC EFFECTS TO VARIOUS TARGET ORGANS R-15
R.11 HEAT STRESS INFORMATION FROM NIOSH 86-112 HEALTH R-16
R.11.1 Safety Problems R-16
R.11.2 Health Problems R-16
R.11.3 Preparing for Work in the Heat R-18
R.11.4 Number and Duration of Exposures R-18
R.12 BULK LIQUID CARGOES THAT CONTAIN BENZENE R-19
R.13 COMNAVREG HAWAII SITE SPECIFIC SAFETY AND HEALTH PLAN R-20
R.13.1 Purpose R-20
R.13.2 Overview and Form Preparation R-20

TABLES

TABLE R-1: PERMISSIBLE EXPOSURE LIMITS OF PRODUCTS STORED OR USED ON JBPHH R-2
TABLE R-2: SECONDARY CHEMICAL HAZARDS R-4
TABLE R-3: GENERAL PHYSICAL HAZARDS R-5
TABLE R-4: SITE/SECTOR ORGANIZATION RECORD SHEET R-11
TABLE R-5: LEVEL D PPE ENSEMBLE R-12
TABLE R-6: LEVEL C PPE ENSEMBLE R-13
TABLE R-7: LEVEL B PPE ENSEMBLE R-14
TABLE R-8: LEVEL A PPE ENSEMBLE R-15
TABLE R-9: POTENTIAL TOXIC EFFECTS TO BODY ORGANS FROM OVER EXPOSURE R-16

APPENDIX S
RESERVED

PAGE INTENTIONALLY LEFT BLANK

APPENDIX T
BASIC ORDERING AGREEMENT GUIDANCE DOCUMENT

T.1 GENERAL T-1
T.2 PROCEDURES T-1
T.3 USCG BOA CONTRACTORS T-2
T.4 CONTRACTS, MEMORANDUM OF UNDERSTANDINGS (MOUs), INTERAGENCY AGREEMENTS (IAGs), AND OTHER AGREEMENTS FOR SUPPORT T-2

TABLES

TABLE T-1: PROCEDURES FOR UTILIZING A USCG BOA T-1
TABLE T-2: USCG BOA CONTRACTORS T-2

PAGE INTENTIONALLY LEFT BLANK

APPENDIX U
COMNAVREG HAWAII SPILL MANAGEMENT TEAM (SMT)

U.1 SPILL MANAGEMENT TEAM ROSTER..... U-1
U.2 INCIDENT COMMNAD ORGANIZATION CHART..... U-3

TABLES

TABLE U-1: COMNAVREG HAWAII SPILL MANAGEMENT TEAM ROSTER..... U-1

FIGURES

FIGURE U-1: COMNAVREG HAWAII SMT ORGANIZATION CHART - EXAMPLE..... U-3

PAGE INTENTIONALLY LEFT BLANK

APPENDIX V
ACRONYMS AND GLOSSARY

V.1 ACRONYMS..... V-1
V.2 GLOSSARY..... V-8

PAGE INTENTIONALLY LEFT BLANK

APPENDIX W
PLAN REVIEW AND UPDATE

W.1 PLAN REVIEWS W-1
W.2 PLAN AMENDMENTS AND UPDATES..... W-1
W.3 AMENDMENT SUBMITTAL W-2
W.4 RECORD OF PERIODIC REVIEW/CHANGES W-2

TABLES

TABLE W-1: NOSC REPRESENTATIVE RESPONSIBILITIES..... W-1
TABLE W-2: RECORD OF PERIODIC REVIEW..... W-3

PAGE INTENTIONALLY LEFT BLANK

TABS

TAB 1 OIL CONTAINMENT AND RECOVERY METHODS
TAB 2 RESPONSE PERMITS AND CONSULTATIONS
TAB 3 NOSC REPRESENTATIVE TRAINING RESOURCES
TAB 4 PHONE AND RESOURCE DIRECTORY
TAB 5 FORMS

PAGE INTENTIONALLY LEFT BLANK

1.0 INTRODUCTION

1.1 PURPOSE

This Integrated Contingency Plan (ICP) serves as a mechanism to ensure that Commander Navy Region Hawaii's (COMNAVREG HI) Spill Management Team (SMT) is adequately prepared to respond to an emergency Oil or Hazardous Substance (OHS) incident. As such, the COMNAVREG HI ICP details procedures for mobilizing personnel and mitigation assets. The resulting response is designed to minimize life threatening situations and damage to natural resources and the environment. The purpose of this ICP is to present a single emergency response plan that:

- Satisfies the regulatory requirements of Federal, State and Local Governments for OHS spill planning, notification, and response per the Oil Pollution Act of 1990 (OPA)
- Eliminates the confusion of having multiple plans for a single facility
- Minimizes the cost of the document maintenance process

1.2 SCOPE

This plan meets the facility response planning requirements for COMNAVREG HI required by both the EPA and USCG under 40 CFR Part 112.20 and 33 CFR Part 154 (Subpart F), respectively, for a "Complex Facility". These regulations require that this plan address the response planning requirement for the following discharge planning volumes (see Appendix C for the derivations of these numbers) as follows:

- Small Discharge/Average Most Probable Discharge (AMPD) of 2,100 gallons;
- Medium Discharge/Maximum Most Probable Discharge (MMPD) of 36,000 gallons; and
- Worst-case Discharge (WCD) of 6,309,952 gallons.

This plan is not for use for small spills that can occur at the shop level or during routine operations, but is meant for larger spills that require the use of regional response equipment and personnel.

1.3 REGULATORY COMPLIANCE

It is the policy of the U.S. Navy to comply with all applicable regulatory requirements regarding the environment, pollution prevention, and OHS discharges. In addition to the federal statutes the U.S. Navy must comply with the applicable state and local laws and regulations regarding the environment, natural resources, and cultural, economic, and historical resources. The U.S. Navy's Environmental Readiness Program is contained in OPNAVINST 5090.1 (series).

COMNAVREG HI has prepared this ICP following guidelines of the National Response Team (NRT) as published in Federal Register Vol. 61, No. 109 of Wednesday, June 5, 1996. This ICP was developed to consolidate and comply with the following federal planning requirements:

- EPA's Facility Response Plan Regulation - 40 CFR Part 112.20-21;
- USCG's Facility Response Plan Regulation - 33 CFR Part 154, Subpart F;
- National Contingency Plan - 40 CFR 300

1.3.1 Facility Response Planning Requirements

This ICP meets the facility response planning requirements for COMNAVREG HI required by both the EPA and USCG under 40 CFR Part 112.20 and 33 CFR Part 154 (Subpart F), respectively. This plan does not cover the Spill Prevention, Control, and Countermeasure (SPCC) requirements required by the EPA under 40 CFR Part 112.7; these are covered under a separate regional SPCC plan.

1.3.2 U.S. Navy Environmental Policy

This ICP meets the requirements of OPNAVINST 5090.1(series), Environmental Readiness Program, which establishes the Navy's organization of regional Navy On-Scene Coordinators (NOSC) and requires that a NOSC contingency plan be prepared for OHS spill response based on WCD scenarios of facilities within the assigned AOR and spills that occur beyond facility boundaries.

1.3.3 State and Local Regulations

This ICP complies with all State of Hawaii and local requirements for spill response planning. For cases when the state and federal regulations overlap, COMNAVREG HI must comply with the more demanding or restrictive regulation.

1.3.4 National Contingency Plan and Hawaii Area Contingency Plan

In addition to the requirements listed above, COMNAVREG HI's ICP is consistent with the requirements of the National Contingency Plan (NCP) and the Hawaii Area Contingency Plan (ACP). The Hawaii ACP describes the strategies for coordinated responses to OHS releases within the Hawaiian Islands. The ACP addresses response efforts, including: mechanical recovery; dispersant use; rescue and rehabilitation of wildlife; and use of volunteers. The latest version of the Hawaii ACP is Change 6.2 dated October 23, 2015.

Area Committees administer the ACP. The Area Committees are composed of experienced environmental and response representatives from federal, state, and local agencies and are responsible for the area's environmental integrity. COMNAVREG HI must be knowledgeable of the Hawaii ACP and how it applies within its AOR. In addition, COMNAVREG HI must ensure that the ICP is kept consistent with the Hawaii ACP.

1.4 GEOGRAPHIC AREA OF RESPONSIBILITY FOR COMNAVREG HI

The area of responsibility for COMNAVREG HI as the NOSC is that area assigned to the command for regional area coordination as per COMPACFLT INST 5400.12(series). This area includes the State of Hawaii (which includes Kure Island and the NW Hawaiian Islands) and the Pacific Islands of Wake, Johnston, Palmyra, and Kingman Reef. In accordance with OPNAVINST 5090.1(series), COMNAVREG HI is also responsible for Navy OHS pollution incidents that occur at sea within 12 nautical miles offshore of the assigned shorelines.

1.5 JOINT BASE PEARL HARBOR-HICKAM

On October 1st, 2010, Naval Station Pearl Harbor joined with Hickam Air Force Base to become Joint Base Pearl Harbor-Hickam (JBPHH).

1.6 PLAN FORMAT

This ICP is comprised of four parts: Introduction, Core Plan, Appendices, and Tabs. The Introduction provides details on the purpose and scope of the plan, regulatory compliance, plan format, and general facility identification information. The Core Plan contains the immediate procedures to be followed during an emergency. It is designed as a stand-alone document, which can be reproduced and distributed among the various emergency planning and response teams. The Core Plan outlines the activities to be carried out by facility personnel once a discharge is detected or emergency incident reported. The Core Plan serves as the implementation document for the ICP.

ICP Appendices contain supporting information and documentation required for a WCD and/or incident planning. The Appendices include information on the Incident Command System (ICS) and on the ICS functional areas. The Appendices also provide detailed information on topics such as evacuation, environmental issues, hazard analysis, response implementation, equipment and resources, site safety plans, security, discharge detection, SOP for HS releases, disposal, and contracting information for spill response organizations.

The Tabs provide information on oil containment and recovery methods, required response permits and consultations, NOSC Representative training resources, a phone directory, a list of response resources available to the Navy, and forms used in this plan.

To aid in the compliance review of this ICP, a cross-reference matrix for 40 CFR 112.20-21 and 33 CFR 154 (Subpart F) has been included in the front of the plan immediately before the table of contents. The matrix identifies the location in the plan of the information that satisfies the particular requirements of the regulation in question.

ICS forms, ICS example plans, and site safety forms used and referenced in this plan can be found in Tab 5 of this plan.

1.7 PLAN MAINTENANCE AND USE

The Master copy of this ICP will be maintained by the NOSC Representative. Photocopies or distribution of the plan with the exception of the Core Plan must be approved by the NOSC Representative. For additional information on this ICP please contact:

James D. Saul
COMNAVREG HI NOSC Representative
NAVFAC HI, Code EV13
Building X-1, 400 Marshall Road
JBPHH, HI 96860-3114
Phone: 473-4689 / Cell: 864-2463 (24/7)

1.7.1 Plan Review and Update

The COMNAVREG HI ICP will be reviewed at least annually. See Appendix W, Plan Review and Update, for more details.

1.8 GENERAL INFORMATION

1.8.1 Facility Information

Table 1-1 provides basic facility information concerning Joint Base Pearl Harbor-Hickam.

TABLE 1-1: FACILITY INFORMATION	
Facility Name:	Joint Base Pearl Harbor-Hickam (JBPHH)
Location:	Commander Navy Region Hawaii 850 Ticonderoga St., Suite 110 Joint Base Pearl Harbor-Hickam, Hawaii 96860-5101
Physical Location:	7 miles west of Honolulu. Includes Joint Base Pearl Harbor-Hickam, the harbor and shoreline facilities.
County:	Honolulu
Facility Phone Number:	Work: 473-4689 / Cell: 864-2463 (24/7) - NOSC Representative
Latitude:	21° 21' 30"
Longitude:	157° 56' 54"
Wellhead Protection Area:	No
Owner/Operator:	U.S. Navy
Date of Oil Storage Start-Up	Approximately 1925
Current Operation (NAICS Code)	928110 - National Security
(SIC Code)	9711 - National Security

1.8.2 Qualified Individual Information

Table 1.2 provides information on the Qualified Individual for COMNAVREG HI. Information on the authority and responsibilities of the Qualified Individual is discussed in Appendix B.

TABLE 1-2: QUALIFIED INDIVIDUAL INFORMATION		
NOSC	Name	**Robert B. Chadwick, II**
Response Time: 1 hour	Position/Title	RADM, USN Commander, Navy Region Hawaii
	Address	850 Ticonderoga St. Joint Base Pearl Harbor-Hickam, HI 96860-5101
	Work Phone	473-2200
	Fax Number	473-4519
	24-Hour Emergency Phone	ROC 473-3215/3216
NOSC Representative	Name	**James D. Saul**
Response Time: 1 hour	Position/Title	Navy On-Scene Coordinator Representative
	Address	Building X-11, 400 Marshall Road JBPHH, HI 96860-3114
	Work Phone	473-4689
	Cell (24/7)	864-2463
	24-Hour Emergency Phone	ROC 473-3215/3216

1.8.3 Emergency Points of Contact

Table 1-3 list important Navy, Federal, State, and local emergency points of contact.

TABLE 1-3: EMERGENCY POINTS OF CONTACT		
Major Claimant - Ships	Point Of Contact	Commander Pacific Fleet (COMPACFLT) N465
	Work Phone	471-8673
Major Claimant - Shore	Point Of Contact	Commander Navy Installations Command (CNIC)
	Work Phone	(800) 362-4704
Cognizant EFD	Point Of Contact	Naval Facilities Engineering Command Pacific (NAVFAC Pacific) Operations Officer
	Operation Office	472-1160
Cognizant EPA Region	Point Of Contact	EPA Region 9, San Francisco
	Work Phone	(415) 972-3035; (415) 971-6829 - FRP POC/OSC (415) 972-3052; (415) 595-8352 - FRP POC/OSC
Hawaii State Emergency Response Commission (HSERC)	Point Of Contact	Hawaii State Department of Health Hazard Evaluation and Emergency Response (HEER) Office
	Work Phone	586-4249 247-2191 (After Hours) 586-7537 (Fax)
Honolulu Local Emergency Planning Committee (LEPC)	Point Of Contact	Department of Emergency Management
	Work Phone	723-8960 911 (After Hours) 524-3439 (Fax)
Hawaii LEPC	Point Of Contact	Hawaii State District Health Office
	Work Phone	936-8181/443-4150 (Day) 895-7318 (Alternative)
Kauai LEPC	Point Of Contact	Kauai Fire Department
	Work Phone	634-0310 (Day) 241-1711 (After hours) 241-6508 (Fax)
Maui LEPC	Point Of Contact	Maui County Fire Department
	Work Phone	870-7404 (Day&After Hours) 270-7911 (Alternate) 270-7917 (Fax)
Cognizant USCG District Office	Point Of Contact	USCG 14th District, Honolulu
	Command Center	331-6176
	Command Center Hotline	535-3222
Cognizant USCG Sector	Point Of Contact	USCG Sector Honolulu
	24 Hour Phone	842-2600

PAGE INTENTIONALLY LEFT BLANK

2.0 CORE PLAN

2.1 INTRODUCTION

This plan serves as a separate, concise, stand-alone guide for immediate response actions to take during an Oil or Hazardous Substance (OHS) release within Commander Navy Region Hawaii's (COMNAVREG HI's) area of responsibility (AOR). The Region will transition to the Incident Command System (ICS) planning process after appropriate notifications and response actions are underway. Each activity/command/squadron shall develop and maintain a site-specific OHS response plan to address small incidental spills.

Prevention procedures for storage and transfer operations are critical in preventing a release. Lighting during night operations to assist personnel in detecting a spill, monitoring connection and transfer points during fueling and bilgewater operations, secondary containment, and storage tank inspections are all measures to help minimize spill risks and prompt notification.

All personnel should be trained in basic spill prevention and emergency reporting procedures annually, as applicable. Personnel working in fuel operations may require additional training such as evacuation procedures, shut down processes, securing operations, etc.

2.2 SPILLS AND REPORTABLE QUANTITIES

Hazardous Substance - Per 40 CFR 302, a release/spill is any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous substance or pollutant or contaminant (this includes the abandonment or discarding of barrels, containers, and other closed receptacles containing such substances).

Oil - Per 40 CFR 110, a discharge of oil includes any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil or an actual or substantial threat of any spilling, leaking pumping, pouring, emitting, emptying or dumping of oil.

A reportable quantity of discharged oil is defined as any quantity of discharged oil that violates state water quality standards, causes a film or sheen on the water's surface, or leaves sludge or emulsion beneath the surface. For this reason, the Discharge of Oil regulation is commonly known as the "sheen" rule. Note that a floating sheen alone is not the only quantity that triggers the reporting requirements (e.g., sludge or emulsion deposited below the surface of the water may also be reportable). Under this regulation, reporting oil discharges does not depend on the specific amount of oil discharged, but instead can be triggered by the presence of a visible sheen created by the discharged oil or the other criteria described above.

Aboveground Storage Tanks – Discharge of oil must be reported to the Spill Prevention, Control and Countermeasure (SPCC) Program Manager when it's more than 1,000 gallons in a single discharge to navigable waters or adjoining shorelines or more than 42 gallons of oil in each of two discharges to navigable waters or adjoining shorelines occurring within any twelve-month period.

Spills to the ground or to permeable secondary containment – Per Hawaii Administrative Rules, oil released to the environment which is greater than 25 gallons and any amount of oil released to the environment which is less than 25 gallons, but which is not contained and remedied within 72 hours shall be reported to the Hawaii State Department of Health

2.3 CORE PLAN ORGANIZATION

Table 2-1 describes the organization of the Core Plan.

TABLE 2-1: CORE PLAN ORGANIZATION

Core Plan Section	Page
2.4: Navy Incident Management	2-2
2.5: Navy On-Scene Coordinator (NOSC)	2-2
2.6: Spiller or Discoverer's Responsibilities	2-4
2.7: Dispatcher/Port Operations Control Tower Responsibilities	2-4
2.8: Agency Notification Requirements	2-4
2.9: Spiller Notification Check-Off List	2-5
2.10: OHS Spill Flowchart	2-6
2.11: OHS Spill Checklist	2-7
2.12: Spill Information Log	2-11
2.13: Emergency Response Procedures for Land-Based Spills	2-13
2.14: Emergency Response Procedures for Marine Spills	2-33
2.15: NAVSUP FLCPH Fuel/Mishap Notification Procedures for Hickam Airfield Fuels Service Center	2-47
2.16: Establishment of a Response Management System	2-49
2.17: Response Actions	2-49
2.18: Disposal	2-50
2.19: Termination and Follow-Up Actions	2-51

2.4 NAVY INCIDENT MANAGEMENT

COMNAVREG HI will use the National Incident Management System (NIMS) Incident Command System (ICS) for all incident management, including prevention, preparedness, response, recovery, and mitigation. The ICS organization is designed to readily expand or contract, as required, to effectively manage the spill response. For small spills, the functional sections may be sufficiently staffed by the activity from which the spill originated. For large incidents, a fully staffed structure using COMNAVREG HI Spill Management Team and other federal and state agency personnel may be required to support the activity.

2.5 NAVY ON-SCENE COORDINATOR (NOSC)

2.5.1 NOSC Representative

Commander Navy Region Hawaii (RDML Robert B. Chadwick, II) has designated Mr. James D. Saul as his NOSC Representative (Rep) for releases of oil and hazardous substances, respectively. See the COMNAVREG HI NOSC designation letter at the beginning of this plan. In addition, Mr. Saul has been designated as the Region's Qualified Individual acting as the incident commander for overseeing environmental emergencies which exceed the response capability, or extend beyond the fence line, of a facility.

Table 2-2 provides details on the NOSC and NOSC Representative.

TABLE 2-2: NOSC AND NOSC REPRESENTATIVE INFORMATION		
NOSC	**Name**	**Robert B. Chadwick, II**
Response Time: 1 hour	Position/Title	RDML, USN, Commander, Navy Region Hawaii
	Address	850 Ticonderoga Street, Pearl Harbor, Hawaii 96860-5101
	Work Phone	473-2200, 473-4519 (Fax)
	24-Hour Phone	Regional Operations Center (ROC): 473-3215/3216
NOSC Representative	**Name**	**James D. Saul**
Response Time: 1 hour	Position/Title	Navy On-Scene Coordinator (NOSC) Representative
	Address	Building X-11, 400 Marshall Road JBPHH, HI 96860-3114
	Work Phone	473-4689
	24-Hour Phone	864-2463 (Cell)

2.5.2 Responsibilities

The NOSC Rep will fill the role of Incident Commander for large spills beyond the response capabilities of a Navy activity. In the event of a spill from a Navy ship or facility outside the boundaries of a Navy installation and within the COMNAVREG HI AOR, the NOSC Rep will act as Incident Commander. The identity of the Navy Incident Commander must be clear at all times to all concerned. The NOSC Rep is the Federal On-Scene Coordinator (FOSC) for a hazardous substance release that is on, or the sole source of the release is from, any facility or vessel under control of the Navy.

If the spill exceeds the capabilities of the NOSC Rep's Spill Management Team the NOSC Rep may request assistance from other local and regional Navy assets within his/her AOR. In addition, the NOSC Rep can mobilize Navy SUPSALV resources to help augment the Spill Management Team or activate a response contractor using a USCG Basic Ordering Agreement.

2.5.3 Qualified Individual

In accordance with U.S. Navy policy, COMNAVREG HI performs the responsibilities of the Qualified Individual for all naval facilities within Hawaii and areas designated per COMPACF LTINST 5400.12 (series). COMNAVREG HI has designated this responsibility to the NOSC Representative.

The Code of Federal Regulations, 40 CFR 112.20(h) and 33 CFR 154.1026, requires that this plan specify a "Qualified Individual" having full authority, including contracting authority, to implement removal actions. These regulations require that the Qualified Individual have the authority to:

- Activate and engage in contracting with oil spill removal organization(s);
- Act as a liaison with the pre-designated Federal On-Scene Coordinator; and
- Obligate funds required to carry out response activities.

In addition the Qualified Individual must:

- Speak fluent English;
- Be available on a 24-hour basis and be able to arrive at the facility within a reasonable time;
- Be familiar with the implementation of the facility response plan; and
- Be trained in the responsibilities of the Qualified Individual under the response plan.

2.6 SPILLER OR DISCOVERER'S RESPONSIBILITIES

When a spill occurs or is discovered, the spiller or discoverer will take immediate action to:

- Assess the problem
- Call:
  - **Land spills**, call 911 for the Federal Fire Department
  - **Waterborne spills**, call the Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- If safe to do so, take immediate action to control and contain the release or spill
- Make required regulatory calls and notifications, without delay. Do not wait to gather additional information (see Section 2.8)
- Implement this ICP or Vessel Response Plan
- Initial priorities are:

  (1) Ensuring personnel health and safety;
  (2) Securing the source of the spill and making required notifications; and
  (3) Protecting sensitive areas.

- Do NOT delay notification pending collection of all the information

If this cleanup is beyond the activity's capabilities, that activity shall request assistance from COMNAVREG HI.

For Land Spills
Call Regional Dispatch Center
911 (Dispatch), or 471-7117

For Oil Releases on Water
Call Port Operations Control Tower
474-6262 or Marine VHF Channel 69

NOSC Rep
473-4689 (day) 864-2463 (cell)

2.7 DISPATCHER/PORT OPERATIONS CONTROL TOWER RESPONSIBILITIES

The Regional Dispatch Center and Port Operations Control Tower are manned 24 hours a day. Upon receiving notification of a release, the dispatcher shall mobilize the Federal Fire emergency response personnel for spills on land, or contact the Port Operations Control Tower for waterborne oil spills. The Port Operations Control Tower shall mobilize the Port Operations Facility Response Team upon notification of an oil spill.

2.8 AGENCY NOTIFICATION REQUIREMENTS

Table 2-3 provides information on required Federal, State, and Local agency notification requirements for oil and hazardous substance spills. **The spiller or discoverer shall make all regulatory notifications per this table**. If the spiller is unsure if a spill is reportable, the spill shall be reported. A spill shall be reported, if so directed by the NOSC Representative.

TABLE: 2-3: AGENCY NOTIFICATION REQUIREMENTS		
Agency	**Spill Size**	**Report**
National Response Center (NRC)	Any spill of oil into the water or on land that threatens navigable waters. Any hazardous substance listed in 40 CFR 302 which meet or exceeds the reportable quantity	Immediate verbal notification.
U.S. Environmental Protection Agency (EPA)	A discharge of more than 1,000 gallons into navigable waters; or two spill events in excess of 42 gallons into navigable waters within any 12 month period	Written report within 60 days of release. See SPCC Plan.
Hawaii State Emergency Response Commission (SERC)	Any amount of oil which causes a sheen to appear on surface water or any navigable water of the State. Any hazardous substance listed in the State Contingency Plan which meets or exceeds the reportable quantity.	Immediate verbal notification. Written follow-up within 30 days.
Local Emergency Planning Committee (LEPC)	Any amount of oil which causes a sheen to appear on surface water or any navigable water of the State. Any hazardous substance listed in the State Contingency Plan which meets or exceeds the reportable quantity.	Immediate verbal notification

2.9 SPILLER NOTIFICATION CHECK-OFF LIST

If you are the spiller of an OHS spill which equals or exceeds the regulatory reportable quantity:

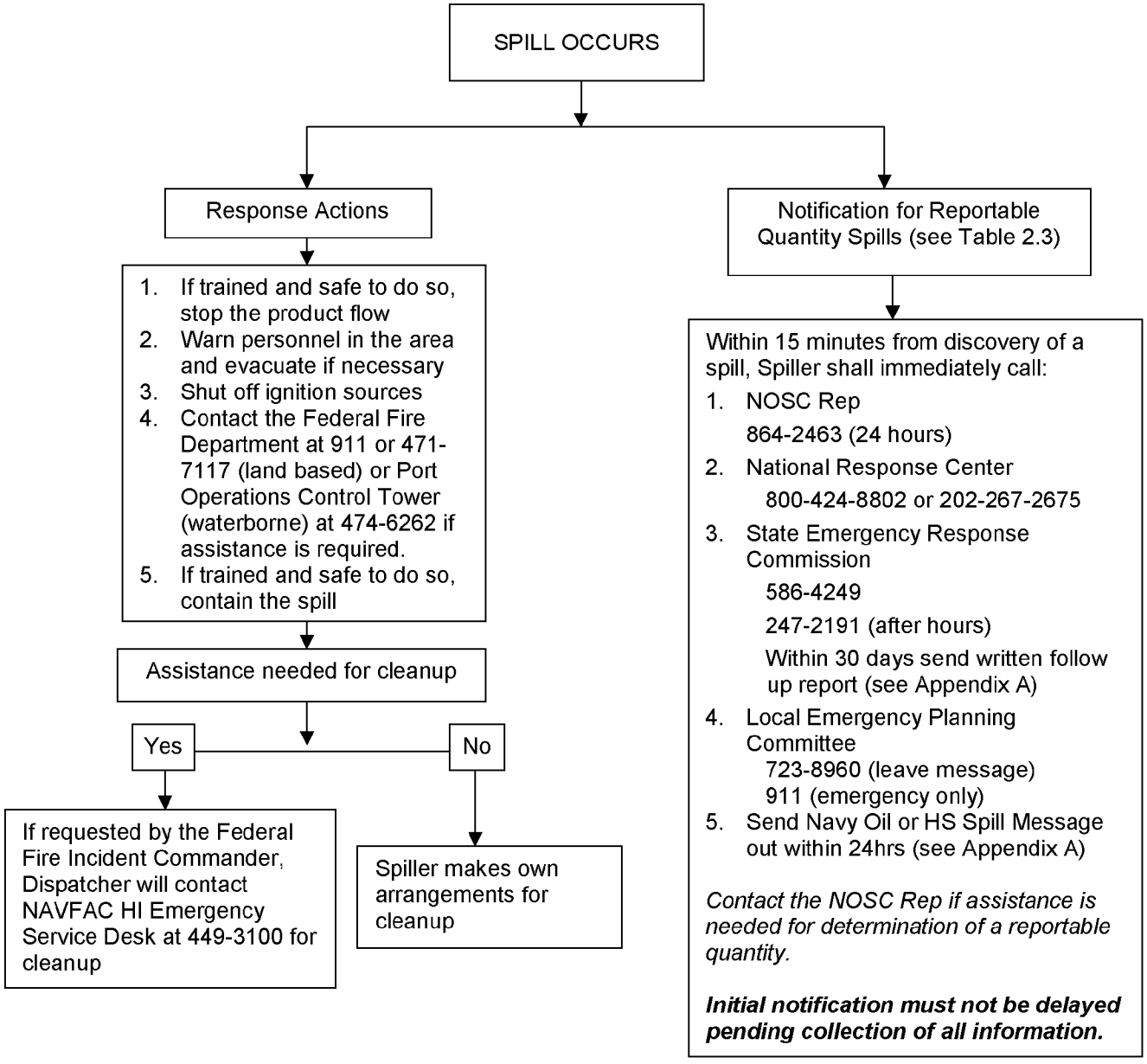
- Complete the notifications in the Spiller Notification Check-Off List (Table 2-4) below.
- Be prepared to relay the information listed on the Spill Information Log (Table 2-5, page. 2-11).

Do NOT delay notification pending collection of all information. **Note: It is the policy of COMNAVREG HI that, whenever possible, all spills or releases will be reported to the NRC no later than 15 minutes after discovery.**

TABLE 2-4: SPILLER NOTIFICATION CHECK-OFF LIST		
Agency or Department	**Phone Number**	**Notified**
Qualified Individual / NOSC Representative	864-2463 (24-hour)	Person Notified: _____ Date / Time Notified: _____
National Response Center (NRC)	800-424-8802 (24-hour) or 202-267-2675 (Direct #)	Person Notified _____ Date / Time Notified: _____ Report No (as applicable): _____
Hawaii State Emergency Response Commission (HSERC) Provide follow-up written notification within 30 days of initial notification.	586-4249 (Days) 247-2191 (After Hours) 586-7537 (Fax)	Person Notified: _____ Date Notified: _____ Time Notified: _____ Report No. (as applicable): _____
Honolulu Local Emergency Planning Committee (LEPC) Submit follow-up written notification within 30 days of initial notification.	723-8960 911 (24 hours) 524-3439 (Fax)	Person Notified: _____ Date / Time Notified: _____ Report No. (as applicable): _____
Send Navy message within 24-hours of discovery	See Appendix A (Section A.6)	See Appendix A

2.10 OHS SPILL FLOWCHART

This flowchart is for spills that exceed the spiller's capability to safely clean up the spill. For spills which the spiller has been properly trained to handle and it's safe to do so, follow the department/command's site-specific response plan.



Note: Within 24 hours, by official Navy Message, reports shall be made to the spiller's chain of command and NOSC Rep. Within 30 days, written follow-up report shall be made to the SERC.

FIGURE 2-1: OHS SPILL FLOWCHART

2.11 OHS SPILL CHECKLIST

Spiller

☐ If trained and safe to do so, stop the spill

☐ Discontinue operations

- Activate emergency shutdown procedures if safe to do (if applicable)

☐ Warn people in the area of hazards

- Direct personnel to move well clear of the release in an upwind direction

☐ Prevent ignition

- Exclude ignition sources from the area
- Do not start electrical equipment or other engines in area

☐ Spills beyond spiller's capability call:

- Call Federal Fire Department at 911 or 471-7117 and provide the following:
  - The time and location of the incident
  - Whether there is any injuries to personnel
  - The type and amount of oil or hazardous substance spilled
  - The status of the source
- For on-water oil spills call the Control Tower at 474-6262 or Marine VHF Channel 69
- If the spill is from a NAVSUP FLCPH pipeline, fuel tank truck, or bulk storage tank, call:
  - Fuel Operations Center at 471-8081 or 473-1075
  - NAVSUP FLCPH Duty Officer at 216-1339
- If the spill is from a NAVSUP FLCPH Hickam Airfield Operations pipeline, airfield fuel hydrant system or bulk storage tank, call:
  - Airfield Fuel Service Center at 448-2509
  - NAVSUP FLCPH Duty Officer at 216-1339

☐ If the spill meets or exceeds the reportable quantity (RQ), immediately notify:

- NOSC Rep at 864-2463 (can provide assistance in determining RQ)
- National Response Center
  - 800-424-8802 or;
  - 202-267-2675
  - Obtain NRC report number for Navy spill message
- State Emergency Response Commission
  - 586-4249

- 247-2191 (after hours)
- Obtain report number for Navy spill message

- Local Emergency Planning Committee
  - 723-8960 (leave message)
  - 911 (emergencies only)

☐ Contain the spill, if trained and safe to do so

☐ Provide information to the first responders

☐ Within 24 hours, the spiller shall complete and send Navy spill message

Federal Fire Department

☐ Site assessment and zone control

☐ Source control

☐ Air monitoring

☐ Containment

☐ Contact NAVFAC HI Emergency Service Desk at 449-3100 for cleanup

- For small car accidents, Dispatch will contact NAVFAC HI to pick up contaminated absorbents. Absorbents will be bagged, left at the accident site, and guarded by security until NAVFAC HI personnel arrive. ETA is within 1 hour.
- NAVFAC HI will coordinate disposal

Facility Response Team (Oil spills on water only)

☐ Conduct initial site assessment

☐ Containment

☐ Remove oil

☐ Make arrangements to dispose contaminated debris

☐ Ensure spiller conducts proper notification and obtain

- NRC report number
- SERC report number
- LEPC date and time

☐ Generate oil spill incident report and cost report. Forward to the NOSC Rep.

Facility Operator

☐ Verify Safety of Personnel

☐ Assess the situation

- Source and extent of release
- Status of operations shutdown
- Number of injured and their condition
- Probable direction of vapors
- Estimate quantity of release
- Wind and weather conditions
- Direction of movement of the release
- Status of ignition sources

☐ Notify shift supervisor of the incident

☐ Stop release

- Stop the source of the release (if safe and trained to do so) or verify that source is stopped
- Shut off transfer pumps, close all headers and tank valves, and drain remaining contents of hoses/pipelines back into tank (if applicable)

☐ Implement site-specific response strategies (if applicable)

- Block storm drains

☐ Document all actions

NOSC Representative

☐ Receive report of the spill

- Ascertain nature and severity of spill
- Ensure safety of onsite personnel
- Assume role as incident commander (if requested)

☐ Recalls COMNAVREG HI Spill Management Team if applicable

- NOSC Rep briefs Spill Management Team on the status of the incident

☐ Establish command center and staging area

☐ Document actions

- Submit reports as required

Safety Officer

- ☐ Evaluate immediate public health and safety risks
- ☐ Recommend site control measures to isolate public from possible exposure
  - Recommend evacuation or shelter in place (if applicable)
- ☐ Assess environmental conditions
  - Air and water monitoring
- ☐ Conduct site safety evaluation
- ☐ Develop site safety plan (see Appendix R)
- ☐ Document actions

2.12 SPILL INFORMATION LOG

TABLE 2-5: SPILL INFORMATION LOG		
SECTION 1 – INITIAL RELEASE INFORMATION (Initial notifications must not be delayed pending collection of data)		
Spiller:	**Discoverer:**	
POC:	Command/Vessel/Company:	
Command/Vessel/Company:		
Phone # (duty & non-duty):	Phone # (duty & non-duty):	
Incident Description:		
Date of Spill:	Time of Spill:	
Spill Location (bldg. no./pier/tank no./etc.):		
Spilled Product:		
Capacity of Container:		
Total Amount Spilled (specify units-gals, lbs., etc.):		
How Much On Land:	How Much in Water:	How Much Entering Storm Drain:
Spill Description (size/color/fumes/slick in water/puddle on pavement/etc.):		
Spill Environment: Weather (clear, overcast, partly-cloudy): _____ Prevailing wind at scene: Direction _____ Speed _____ Air Temperature: _____ Tide (high, low, ebb, flood): _____		
SECTION 2 – RELEASE INFORMATION DETAILS		
Source and Cause of Incident:		
Spill Source/Cause:		
Operations(s) Under Way When Spill Occurred:		

TABLE 2-5: SPILL INFORMATION LOG	
Response Actions:	
Actions Taken to Stop Release:	
Containment Method Planned/Used:	
Clean-Up Method Planned/Used:	
Parties Performing Spill Containment/Clean-Up: Samples Taken: Yes ____ No_____ Volume of Product Recovered (in gallons):	
Impact/Health Threats:	
Number of Injuries:	Number of Deaths:
Describe Any Evacuations Including Number Evacuated:	
Describe Any Property Damaged:	
Description of Environmental and Health Threats Including Areas Threatened:	
Notifications: NOSC Rep: Yes ___ No ____ Date: _____ Time: _____ NRC: Yes ___ No ___ Date:_____ Time:_____ Report No._____ SERC: Yes ___ No ___ Date:_____ Time:_____ Report No._____ LEPC: Yes ___ No ___ Date:_____ Time:_____ **Other Notification:** Department/Command/Agency Date Time Phone POC	

2.13 EMERGENCY RESPONSE PROCEDURES FOR LAND-BASED SPILLS

This section describes the emergency response procedures to be taken for land-based oil spills (or the threat of oil spills) from JBPHH's EPA regulated NTR facilities. These emergency procedures are for the most likely spill scenarios for the NTR facilities and cover the following:

2.13.1 Immediate Actions for Aboveground Fuel Storage Tank Failure; Page 2-15

2.13.2 Immediate Actions for Piping Failure; Page 2-17

2.13.3 Immediate Actions for Equipment Failure; Page 2-19

2.13.4 Immediate Actions for Tank Truck Overfill; Page 2-23

2.13.5 Immediate Actions for Tank Truck or Truck Loading Rack Component Failure; Page 2-25

2.13.6 Immediate Actions for Day Tank Overfill; Page 2-27

2.13.7 Immediate Actions for Day Tank or Associated Component Failure; Page 2-29

2.13.8 Immediate Actions for Explosions or Fires; Page 2-31

PAGE INTENTIONALLY LEFT BLANK.

2.13.1 Immediate Actions for Aboveground Fuel Storage Tank Failure

During Transfers

- ☐ Notify vessel pump operator (if offloading vessel) or Fuel Operations Center (if loading vessel or transferring to another tank or intra facility fuel storage area) to cease pumping
- ☐ Verify closure of containment drainage valve and verify spill containment within the secondary containment system
- ☐ Secure all sources of ignition and spill area
- ☐ If possible and safe to accomplish, close tank's flow control valves
- ☐ Slowly close other valves in the transfer circuit to prevent other potential equipment failures caused by the tank failure
- ☐ Depending on the extent and location of the failure, consider pumping oil from the damaged tank to other tanks to reduce spill magnitude and draw down the oil level below the failure point to stop discharge
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center at 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

Under Static Conditions

- ☐ Verify closure of containment drainage valve and verify spill containment within the secondary containment system
- ☐ Secure all sources of ignition and spill area
- ☐ Verify closure of nearest flow control/block valves and verify that the tank is isolated from all other fuel equipment
- ☐ Depending on the extent and location of the failure, consider pumping oil from the damaged tank to other tanks to reduce spill magnitude and draw down the oil level below the failure point to stop discharge
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center at 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339

- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

2.13.2 Immediate Actions for Piping Failure

During Transfers

- ☐ Notify vessel pump operator (if offloading vessel) or Fuel Operations Center (if loading vessel or transferring to another tank or intra facility fuel storage area) to cease pumping
- ☐ If spill is into a containment system, verify closure of containment drainage valve and spill containment within the secondary containment system
- ☐ If failure occurs at a piping location outside containment, cover or block storm water drains and sewer manholes or block drainage ditches as necessary
- ☐ Secure all sources of ignition and spill area
- ☐ Slowly close nearest flow control/block valve to isolate the ruptured section of piping
- ☐ Use available containers to collect spill from piping if feasible
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

Under Static Conditions

- ☐ If spill is into a containment system, verify closure of containment drainage valve and spill containment within the secondary containment system
- ☐ If failure occurs at a piping location outside containment, cover or block storm water drains and sewer manholes or block drainage ditches as necessary
- ☐ Secure all sources of ignition and spill area
- ☐ Verify closure of nearest block or flow control valves to isolate failed section of piping
- ☐ Use available containers to collect spill from piping if feasible
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:

- Notify Airfield Fuel Service Center at 448-2509
- If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339

☐ Call Federal Fire Department at 911 or 471-7117

2.13.3 Immediate Actions for Equipment Failure

Pump Failure

- ☐ Shut down pump
- ☐ Slowly close aligned valves, after shutting off pump, to stop transfer operation
- ☐ Secure ignition sources and spill area
- ☐ Slowly close flow control/block valves to isolate pumping equipment
- ☐ Verify spill containment in the pump sump
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

Pumping Equipment Leaks

- ☐ If unable to stop leak with available means (e.g. by taking up packing nuts for a packing leak), switch to backup pump
- ☐ If unable to bypass affected equipment, shut down pump
- ☐ Slowly close working storage and receiving tanks flow control valves, after shutting off pump, to stop transfer operation
- ☐ Slowly close flow control/block valves to isolate leaking pumping equipment
- ☐ If effective, use drip pans or other containers to collect spill
- ☐ If necessary, use sorbents to further contain and collect spill
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

Relief Valve Failure during Transfers

- ☐ Shut down transfer pump
- ☐ Slowly close nearest block or flow control valves to isolate failed relief valve, after shutting off pump
- ☐ Secure all sources of ignition and spill area
- ☐ If spill is into a containment system, verify closure of containment drainage valve or ensure drain is blocked
- ☐ If spill is onto open ground, cover or block storm drains and sewer manholes or block drainage ditches as necessary
- ☐ Use available containers to collect spill if feasible
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ If feasible, use a portable pump and holding tank to reduce affected pipe section pressure
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

Relief Valve Failure during Static Conditions

- ☐ Secure all sources of ignition and spill area
- ☐ Cover or block storm drains and sewer manholes or block drainage ditches as necessary
- ☐ Verify closure of nearest flow control/block valves and isolation of leaking section of piping
- ☐ If feasible, use a portable pump and holding tank to reduce affected pipe section pressure to atmospheric pressure
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339

☐ Call Federal Fire Department at 911 or 471-7117

Flow Control Valves, Flanges, and Other Equipment Failure

☐ Stop leak where possible (e.g., by tightening bolts)

☐ If spill occurs during a transfer operation, shut off pumps and then slowly close nearest block or flow control valves to isolate affected equipment

☐ If spill occurs during static conditions, verify closure of nearest flow control/block valves and isolation of affected equipment

☐ Secure all sources of ignition and spill area

☐ Cover or block storm drains and sewer manholes or block drainage ditches as necessary

☐ If effective, use drip pans or other containment equipment to contain and collect the spill

☐ Contain spill outside of containment with sorbent pads, sheets or rolls

☐ For NAVSUP FLCPH Operations:

- Notify the Fuel Operations Center 471-8081 or 473-1075
- If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339

☐ For NAVSUP FLCPH Hickam Airfield Operations:

- Notify Airfield Fuel Service Center at 448-2509
- If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339

☐ Call Federal Fire Department at 911 or 471-7117

PAGE INTENTIONALLY LEFT BLANK.

2.13.4 Immediate Actions for Tank Truck Overfill

During Transfers

- ☐ Shutoff pump
- ☐ Release deadman valve to stop fuel flow into truck, after shutting off pump
- ☐ Secure all sources of ignition and the spill area
- ☐ Cover or block storm water drains and sewer manholes or block drainage ditches as necessary if spill is outside curbed containment
- ☐ Do not start truck until the spill has been removed
- ☐ Contain spill with sorbent pads, sheet or rolls
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

PAGE INTENTIONALLY LEFT BLANK.

2.13.5 Immediate Actions for Tank Truck or Truck Loading Rack Component Failure

During Transfers

- ☐ Shutdown pump
- ☐ Release deadman valve to stop fuel flow into truck, after shutting off pump
- ☐ Slowly close appropriate flow control/block valves to stop fuel flow to truck loading rack and isolate failed component
- ☐ Secure all sources of ignition and the spill area
- ☐ Shutoff containment drainage valve discharging to the oil/water separator and open drainage valve to transfer facility containment holding tank
- ☐ Cover or block storm water drains and sewer manholes or block drainage ditches as necessary if spill is outside containment
- ☐ Do not start truck until spill has been removed
- ☐ If possible, use drip pans or other containment equipment to contain and collect the spill
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

PAGE INTENTIONALLY LEFT BLANK.

2.13.6 Immediate Actions for Day Tank Overfill

During Transfers

- ☐ Shut down pump
- ☐ Slowly close dispensing valve to stop fuel flow into tank, after shutting off pump
- ☐ If spill is into containment ensure containment discharge outlet is closed. Verify containment of spill within secondary containment
- ☐ Secure all sources of ignition and spill area
- ☐ If spill escapes secondary containment, or spill is not into secondary containment, use sorbent pads, sheets or rolls to contain spill
- ☐ Cover or block storm water drains and sewer manholes or block drainage ditches as necessary
- ☐ For NAVSUP FLCPH Operations:
    - Notify the Fuel Operations Center 471-8081 or 473-1075
    - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
    - Notify Airfield Fuel Service Center at 448-2509
    - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

PAGE INTENTIONALLY LEFT BLANK.

2.13.7 Immediate Actions for Day Tank or Associated Component Failure

During Transfers

- ☐ Shut down pump
- ☐ If spill is into containment ensure containment discharge outlet is closed. Verify containment of spill within secondary containment
- ☐ If spill escapes secondary containment, or spill is not into secondary containment, use sorbent pads, sheets or rolls to contain spill
- ☐ Cover or block storm water drains and sewer manholes or block drainage ditches as necessary
- ☐ Secure all sources of ignition and spill area
- ☐ If possible and safe to accomplish, close tank's flow control valves
- ☐ If the failure involves the tank, depending on the extent and location of the failure, consider pumping oil from the damaged tank to another tank to reduce spill magnitude and draw down the oil level below the failure point to stop discharge
- ☐ For NAVSUP FLCPH Operations:
    - Notify the Fuel Operations Center 471-8081 or 473-1075
    - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
    - Notify Airfield Fuel Service Center at 448-2509
    - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

Under Static Conditions

- ☐ If spill is into containment, ensure containment discharge outlet is closed
- ☐ Verify containment of spill within secondary containment
- ☐ Secure all sources of ignition and spill area
- ☐ If spill escapes secondary containment, or spill is not into secondary containment, use sorbent pads, sheets or rolls to contain spill
- ☐ Cover or block storm water drains and sewer manholes or block drainage ditches as necessary
- ☐ Depending on the extent and location of the failure if it involves the tank, consider pumping oil from the damaged tank to other tanks to reduce spill magnitude and draw down the oil level below the failure point to stop discharge

- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ Call Federal Fire Department at 911 or 471-7117

2.13.8 Immediate Actions for Explosions or Fires

- ☐ Activate fire alarm; call Federal Fire Department (911 or 471-7117)
- ☐ Provide Fire Department with required information (e.g. Safety Data Sheets); notify immediately after securing flow and ignition sources
- ☐ If incident occurs at pipeline manifold or pumping facility, shut off power to facility and close valves
- ☐ If electrical fire is involved, shut off electrical power
- ☐ If incident occurs during a transfer operation, notify pump operator to shut off pumping equipment and close nearest block or flow control valves
- ☐ Evacuate to a safe distance and account for personnel if necessary
- ☐ Secure area, stay upwind and keep out of low areas
- ☐ Remove or secure other sources of ignition if possible and safe to accomplish
- ☐ Remove incompatible and flammable materials if possible and safe to accomplish
- ☐ Use fire extinguishers if trained to use and it is safe and appropriate
- ☐ For NAVSUP FLCPH Operations:
  - Notify the Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ For NAVSUP FLCPH Hickam Airfield Operations:
  - Notify Airfield Fuel Service Center at 448-2509
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339

PAGE INTENTIONALLY LEFT BLANK.

2.14 EMERGENCY RESPONSE PROCEDURES FOR MARINE SPILLS

This section describes the emergency response procedures to be taken for marine oil spills (or the threat of oil spills) from JBPHH's USCG regulated MTR facilities. These emergency procedures are for the most likely spill scenarios for the MTR facilities and cover the following:

2.14.1 Immediate Actions for Manifold, Loading Arm, Transfer Hose, and Other Transfer Equipment Failures; Page 2-35

2.14.2 Immediate Actions for Vessel Tank Overfill; Page 2-37

2.14.3 Immediate Actions for Facility Tank Overfill; Page 2-39

2.14.4 Immediate Actions for Piping Rupture and Leaks; Page 2-41

2.14.5 Immediate Actions for Other Equipment Failures, such as Pipes, Relief Valves, Flow Control Valves, Flanges, Etc.; Page 2-43

2.14.6 Immediate Actions for Explosions or Fires; Page 2-45

PAGE INTENTIONALLY LEFT BLANK.

2.14.1 Immediate Actions for Manifold, Loading Arm, Transfer Hose, and Other Transfer Equipment Failures

During Vessel Transfers

- ☐ Notify pump operator (if offloading vessel) or Fuel Operations Center (if loading vessel) to shut down pump(s)
- ☐ Slowly close working storage tank and pier riser flow control valves after shutting off pumps
- ☐ If there is a spill, secure all sources of ignition
- ☐ Slowly close nearest flow control valves to isolate the source of the spill
- ☐ If spill occurs outside of containment or curbed areas on the pier, block pier drains with sorbent pads or rolls
- ☐ Contain spill on pier with sorbent pads, sheets or rolls
- ☐ If spill is contained within containment or curbed areas, verify containment and open containment drainage valves to discharge spill into the pier oil holding tank
- ☐ If effective, use available containers to collect a spill that is occurring outside of containment or the curbed areas
- ☐ Notify NAVSUP FLCPH Fuel Operations Center 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117
- ☐ MAKE NOTIFICATIONS IMMEDIATELY after securing flow and ignitions sources when the spill is into water

PAGE INTENTIONALLY LEFT BLANK.

2.14.2 Immediate Actions for Vessel Tank Overfill

During Vessel Transfers

- ☐ Notify Fuel Operations Center to shut down pump(s)
- ☐ Slowly close pier riser flow control valve after shutting off pumps
- ☐ Slowly close working facility tank flow control valve
- ☐ Secure spill area and all sources of ignition
- ☐ Contain and cleanup spill on vessel using sorbent pads, sheets or rolls
- ☐ Notify NAVSUP FLCPH Fuel Operations Center 471-8081 or 473-1075
  - o If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117
- ☐ MAKE NOTIFICATIONS IMMEDIATELY after securing flow and ignition sources when the spill is into water

PAGE INTENTIONALLY LEFT BLANK.

2.14.3 Immediate Actions for Facility Tank Overfill

During Vessel Transfers

- ☐ Notify vessel pump operator to shut down pump(s)
- ☐ Slowly close overfilled tank's flow valve after shutting off pumps
- ☐ Close pier riser flow control valve
- ☐ Verify closure of the secondary containment drainage valve if applicable
- ☐ Secure all sources of ignition and spill area
- ☐ Consider pumping oil from the overfilled tank into another fuel farm tank that has available storage space to minimize spill
- ☐ Notify NAVSUP FLCPH Fuel Operations Center 471-8081 or 473-1075
  - o If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

During Vessel Offloading

- ☐ Continue offloading to bring the oil level in the affected tank down
- ☐ Secure all sources of ignition in the spill area
- ☐ Notify NAVSUP FLCPH Fuel Operations Center at 471-8081 or 473-1075
  - o If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

During Vessel Loading

- ☐ Notify Fuel Operations Center to shut down pump(s)
- ☐ Slowly close pier riser flow control valve after shutting off pump
- ☐ Slowly close working facility tank flow control valve
- ☐ Secure all sources of ignition and spill area
- ☐ Transfer the oil in the failed vessel tank to another vessel tank or, if possible, pump water into the tank to stop spill by raising level of oil above the failure point
- ☐ If necessary, realign valves to offload contents in the failed vessel tank to a fuel farm tank
- ☐ Notify NAVSUP FLCPH Fuel Operations Center at 471-8081 or 473-1075
  - o If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339

- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

2.14.4 Immediate Actions for Piping Rupture and Leaks

During Transfers

- ☐ Notify pump operator (if offloading vessel) or Fuel Operations Center (if loading vessel) to shut down pump(s)
- ☐ Slowly close working storage tank and pier riser flow control valve aster shutting off pumps
- ☐ Secure all sources of ignition and spill area
- ☐ Slowly close nearest flow control valves to isolate the ruptured or leaking section of piping
- ☐ If spill from rupture or leak is into curbed containment area on dock, verify containment and drain spill into dock holding tank
- ☐ If rupture or leak occurs at a piping location outside containment, cover or block storm water drains and sewer manholes or block drainage ditches as necessary
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ Notify NAVSUP FLCPH Fuel Operations Center at 471-8081 or 473-1075
  - o If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

Under Static Conditions

- ☐ Secure all sources of ignition and spill area
- ☐ Use drip pans or other containers to collect spill
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ Verify closure of nearest flow control valves and isolation of ruptured or leaking section of piping
- ☐ If feasible, use a portable pump and tank truck to reduce affected pipe section pressure to atmospheric pressure
- ☐ Notify NAVSUP FLCPH Fuel Operations Center at 471-8081 or 473-1075
  - o If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

PAGE INTENTIONALLY LEFT BLANK.

2.14.5 Immediate Actions for Other Equipment Failures, such as Pumps, Relief Valves, Flow Control Valves, Flanges, Etc.

Pump Failure or Leaks

- ☐ Switch to backup pump if unable to stop leak (e.g. by taking up packing nuts for a packing leak), or pump fails if unable to use a backup pump, shutdown pump
- ☐ Slowly close working storage tank and pier riser flow control valves after shutting off pump to cease transfer operation
- ☐ Secure ignition sources and spill area
- ☐ Slowly close flow control valves to isolate pumping equipment
- ☐ Verify spill containment in the pump sump
- ☐ If necessary, use containers to collect leak/spill or sorbents to further contain & collect spill
- ☐ Notify NAVSUP FLCPH Fuel Operations Center at 471-8081 or 473-1075
  - o If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

Relief Valve Failure during Transfer Operations

- ☐ Notify pump operator (if offloading vessel) or Fuel Operations Center (if loading vessel) to shut down pump(s)
- ☐ Slowly close working storage tank and pier riser flow control valves after shutting off pump to cease transfer operation
- ☐ Secure spill area and all sources of ignition
- ☐ Slowly close nearest flow control valves to isolate the relief valve
- ☐ Cover or block storm drains and sewer manholes or block drainage ditches as necessary
- ☐ If feasible, use a portable pump and a holding tank to reduce affected pipe section pressure to atmospheric pressure
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ Notify NAVSUP FLCPH Fuel Operations Center at 471-8081 or 473-1075
  - o If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

Relief Valve Failure during Static Conditions

- ☐ Secure all sources of ignition and spill area
- ☐ Cover or block storm drains and sewer manholes or block drainage ditches as necessary
- ☐ Verify closure of nearest flow control valves and isolation of valve
- ☐ If feasible, use a portable pump and holding tank to reduce affected pipe section pressure to atmospheric pressure
- ☐ Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ Notify NAVSUP FLCPH Fuel Operations Center at 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

Flow Control Valves, Flanges and Other Equipment Failure

- ☐ Stop leak where possible (e.g., by tightening bolts)
- ☐ If spill occurs during a transfer operation, shut off pumping equipment and then close nearest isolation or flow control valves to isolate affected equipment
- ☐ Secure spill area and all sources of ignition
- ☐ Cover or block storm drains and sewer manholes or block drainage ditches as necessary
- ☐ If effective, use drip pans or other containment equipment to contain and collect the spill Contain spill outside of containment with sorbent pads, sheets or rolls
- ☐ During work hours, notify the Underground Pumphouse (471©8081 or by radio), if unable to contact Underground Pumphouse, notify Dispatch
- ☐ Notify NAVSUP FLCPH Fuel Operations Center at 471-8081 or 473-1075
  - If unable to contact, notify NAVSUP FLCPH Duty Officer at 216-1339
- ☐ If spill reaches the water, call Port Operations Control Tower at 474-6262 or Marine VHF Channel 69
- ☐ Call Federal Fire Department at 911 or 471-7117

2.14.6 Immediate Actions for Explosions or Fire

- ☐ Activate fire alarm; call Federal Fire Department at 911 or 471-7117
- ☐ Notify Fire Department with required information (e.g. Material Safety Data Sheets); notify immediately after securing flow and ignition sources
- ☐ If incident occurs at pipeline manifold or pumping facility, shut off power to facility and close valves
- ☐ If electrical fire involved, shut off electrical power
- ☐ If incident occurs during a transfer operation, notify pump operator to shut off pumping equipment and close nearest block or flow control valves
- ☐ Evacuate to a safe distance and account for personnel
- ☐ Secure area, stay upwind and keep out of low areas
- ☐ Remove or secure other sources of ignition if possible and safe to accomplish
- ☐ Remove incompatible and flammable materials if possible and safe to accomplish
- ☐ Use fire extinguishers if trained to use and it is safe and appropriate

PAGE INTENTIONALLY LEFT BLANK.

2.15 NAVSUP FLCPH FUEL SPILL/MISHAP NOTIFICATION PROCEDURES FOR HICKAM AIRFIELD FUELS SERVICE CENTER (FSC)

☐ Upon notification of a fuel spill, the following information will be taken:
- Obtain the name and phone number of the person reporting the spill
- Annotate the date and time of the incident
- Estimate quantity of the spill
- What was the cause of the spill?
- Was the spill contained and cleaned up?
- Did the spill reach any waterway?

☐ Once the previous information is gathered, the following personnel will be notified immediately:
- Fire Department at 911
- NAVSUP FLC Duty Officer at 216-1339
- Fuels Management Team
  - Fuel Director at 473-7833 or 690-0115 (cell)
  - Deputy Fuel Director at 479-6188
  - Airfield Operations Supervisor at 478-2557, 371-8822, or 671-0851

☐ Upon arrival to the scene, the Fire Department and the Fuels Management Team will determine what course of action(s) needs to be accomplished and what other agencies need to be notified.

☐ The Fuels Management Team will gather all required information to complete the "Fuels Report of Spill" form located in the FSC Fuel/Spill/Mishap Notification binder which also has a copy of the NAVSUP FLC Pearl Instruction 5090.1J, Oil and Hazardous Substance (OHS) Contingency Plan

☐ Once all of the information is gathered as outlined in the NAVSUP FLCPH Oil and Hazardous Substance Emergency Spill Response and Notification Procedures, this information will be forwarded to the NAVSUP FLCPH CDO who will complete the oil spill message.

☐ For all other mishaps (i.e. accidents, crash aircraft, suspected fuel/cryogenics contamination, etc.) the FSC will contact the Fuels Management Team who will make the decision on what actions will be taken.

PAGE INTENTIONALLY LEFT BLANK.

2.16 ESTABLISHMENT OF A RESPONSE MANAGEMENT SYSTEM

CNRH has adopted the National Incident Management System (NIMS) Incident Command System (ICS) as the basic model for command and control at environmental emergency response incidents. If the event is routine, the IC (typically the Fire Department or Senior Official of the Facility Response Team) has command over the incident. In the event of a major release/spill, the NOSC Rep may take command over the incident. A Unified Command structure would be established.

2.17 RESPONSE ACTIONS

The IC will determine the type of mitigating actions required based on the hazards present with input from operations, planning and other technical support personnel. Each incident is unique depending on the substance released/spilled and appropriate actions such as level of exposure, proper PPE, chemical behavior, etc. must be taken into consideration prior to entry.

For oil spills on water, as a guide, the following factors should be considered:

- Spill Volume – In some cases, a minor volume could produce greater environmental damage than a major volume.
- Location – Oil in Open Ocean or middle of the harbor will disperse quickly due to the sun, wind and current.
- Wind – Strong winds can create choppy conditions on the surface of the water which could help to disperse the oil quickly. Consideration must also be taken regarding oil dispersing in the water column and the
- Tide/Current – The direction of tides and speed of current is important in determining where to direct response efforts. Incoming tides or fast moving currents can push the oil to an environmentally sensitive area.
- Product Type – Lighter oils disperse rapidly but are more toxic to marine life. Heavy oils require more labor intensive cleaning.
- Environmentally Sensitive Areas – Determine and protect the sensitive areas based on the NOAA ESI maps and local knowledge.

In the event of a spill beyond the capabilities of the facility, additional assistance for resources are available from Navy Supervisor of Salvage (SUPSALV) or response contractors when requested through the NOSC Rep.

Protection and cleanup of sensitive shorelines, habitats, marine life, etc. should be done in consult with the NOAA Scientific Support coordinator or other Technical Specialist through the NOSC Rep.

Potential or impact to groundwater: Spills could spread on the surface and begin to migrate downward through the soil and have the potential to impact groundwater.

Under the National Contingency Plan, the Navy has a responsibility to provide oil spill response support in cases where Navy vessels are involved, or for non-Navy incidents, when requested by the Federal On-Scene Coordinator and Navy response will not impact Navy operations. In a collision between a Navy vessel and a non-Navy vessel, Navy assets/resources should respond as if the spill was from a Navy vessel. Fast and effective response actions can reduce the impact to the environment.

2.18 DISPOSAL

Abandoned Hazardous Substances:

HS containers which have been abandoned are considered to be a HS release and must be properly reported, responded to and disposed of. Depending on the condition of the container, threats to the public, etc. contact the Federal Fire Department. For removal support, contact NAVFAC HI Emergency Service Desk (at 449-3100) for immediate pickup and disposal. If the abandoned container is in an area that is a threat to the public, the container can be moved to a secure location under the direction of the NOSC Rep.

Hazardous Substance Release or Oil Spill on land:

- For minor incidents such as small hydraulic oil or gasoline spill from a vehicle accident, Federal Fire may mitigate the spill.
  - Contaminated absorbents will be bagged, taken to the Fire Station
  - Dispatch will contact the NAVFAC HI Emergency Service Desk for pickup
- For non-minor incidents or incidents that pose a threat to the public
  - Area should be secured by base police/security
  - Dispatch will contact NAVFAC HI Emergency Service Desk for removal support
  - Cleanup Team should respond to the site within 1 hr.
  - Disposal of contaminated materials will be done by NAVFAC HI

Bilgewater Spill:

Bilgewater spill is generally caused by residue left in the hose after the operation is completed. It's the responsibility of the ship/sub to cleanup, report and contact NAVFAC HI Emergency Service Desk for pickup. If the spill is from the line or air vent, NAVFAC HI will be notified to respond, cleanup and make the proper notifications.

Oil Spill on Water:

- Contaminated absorbents (sweeps, booms and pads) will be bagged and is the responsibility of the spiller to contact NAVFAC HI for disposal.
  - Contaminated absorbents will not be left unattended on the pier awaiting pickup.
  - Ship can temporarily store the contaminated absorbents on the ship until NAVFAC HI arrives for pickup.
  - If the ship needs to depart prior to pick up, the Facility Response Team can transport the contaminated absorbents to Ford Island for temporary storage until pickup by NAVFAC HI which should be done within 1-2 days.
- Oil or Oil/Water collected by the vacuum trucks will be off loaded into a SWOB.
  - All drivers (including military personnel) of the vacuum trucks must have a CDL
  - If the oil or oil/water mixture is a combustible liquid, and if there are 1,001 pounds or more, then the vacuum truck must be placarded according to DOT if driving on a public highway.

- If the oil or oil/water mixture is a flammable liquid such as F-24, then the hazardous waste regulations apply and a HW manifest must be completed.

See Appendix K, Waste Management and Disposal Procedures, for more detailed information on the requirements and procedures to properly collect, store, manage, and dispose of waste resulting from an oil spill response.

2.19 TERMINATION AND FOLLOW-UP ACTIONS

For non-incidental spills of a reportable quantity, the spiller can in coordination with the On-Scene Coordinator or Incident Commander, terminate the response. In certain cases, environmental regulations may become effective once the "emergency" is declared over.

Normal operations may resume after demobilization actions have been completed. Follow-up written reports to regulatory agencies with copy to the NOSC Rep shall be submitted as soon as practical but no more than 30 days. Navy OHS spill message shall be sent within 24 hrs. from discovery of the spill. Region Spill Management Team members will submit all documentation associated with the response to the NOSC Rep prior to demobilization. Lessons learned and changes to the ICP will be forwarded to the NOSC Rep.

PAGE INTENTIONALLY LEFT BLANK.

EPA COVER SHEET
REGULATORY CROSS-REFERENCE MATRIX
RECORD OF CHANGE
TABLE OF CONTENTS
1.0 INTRODUCTION
2.0 CORE PLAN
APPENDIX A NOTIFICATIONS
APPENDIX B RESPONSE MANAGEMENT
APPENDIX C FACILITY INFORMATION
APPENDIX D PLAN IMPLEMENTATION
APPENDIX E EQUIPMENT, PERSONNEL, & RESOURCES
APPENDIX F HAZARD ANALYSES
APPENDIX G RESPONSE GUIDELINES FOR HS RELEASES
APPENDIX H DISCHARGE DETECTION
APPENDIX I DRAINAGE & CONTAINMENT
APPENDIX J SECURITY
APPENDIX K WASTE MANAGEMENT
APPENDIX L EVACUATION
APPENDIX M FIGURES
APPENDIX N ENVIRONMENTAL PROTECTION
APPENDIX O WILDLIFE MANAGEMENT
APPENDIX P RESERVED
APPENDIX Q EXERCISES, DRILLS, & TRAINING
APPENDIX R SITE SAFETY & HEALTH
APPENDIX S RESERVED
APPENDIX T BOA GUIDANCE DOCUMENT
APPENDIX U SPILL MANAGEMENT TEAM
APPENDIX V ACRONYMS & GLOSSARY
APPENDIX W PLAN REVIEW & UPDATE
TAB 1 OIL CONTAINMENT & RECOVERY METHODS
TAB 2 RESPONSE PERMITS & CONSULTATIONS
TAB 3 NOSC TRAINING RESOURCES
TAB 4 PHONE & RESOURCE DIRECTORY
TAB 5 FORMS

APPENDIX A
NOTIFICATIONS

A.1 HAWAII ACP NOTIFICATION LIST

The Hawaii ACP maintains an up-to-date listing of applicable federal, state, and local agencies and/or organizations that are either stakeholders, have an interest in maintaining the environment, or provide an OHS response service. The ACP can be accessed at the Oceania Regional Response Team (ORRT) website at: www.oceaniarrt.org

A.2 COMNAVREG HI NOTIFICATION LISTS

The NOSC Rep is responsible for ensuring all the proper notifications are made by the responsible party. In addition, the NOSC Rep is responsible for ensuring that notifications/follow-up reports for all unknown source releases are completed. OHS discharges or releases caused by a Navy vessel must be reported by the vessel. However, if the vessel cannot contact the appropriate authorities due to communications limitations, the vessel must contact the area NOSC Rep and request that the NOSC Rep make the necessary notifications. If the NOSC Rep cannot be reached, the vessel must exercise its operational chain of command to request that the necessary notifications are made.

A.2.1 COMNAVREG HI Notifications

Table A-1 provides a list of COMNAVREG HI notifications to be made as directed by the NOSC Rep.

TABLE A-1: COMNAVREG HI NOTIFICATIONS

Contacts	Day Telephone	24-Hour Telephone
NOSC (Admiral)	473-2200	473-3215/3216 (ROC)
NOSC Representative	473-4689	864-2463 (Cell)
Alternate NOSC Representative	471-1171 x 210	864-2463 (Cell)
COMPACFLT AEC	471-0632	471-3201 (CDO)
Commander, 15 Airlift Wing	448-1575	448-1575
Regional Dispatch (Fire Dept., Security, Medical)	911 471-7114	911 471-7114
JBPHH Quarterdeck	473-1222	473-1222
JBPHH EOC	448-2752/2753	448-2752/2753
JBPHH Security	474-6184	474-6184
CNRHI ROC	473-3215/3216	473-3215/3216
Safety	473-1169	473-1169
Liaison	473-4141	368-3150
Public Information	473-2875	554-4813
Legal	473-4731	864-2461
CDO's a. COMPACFLT CDO b. NAVSUP FLCPH c. NAVFAC HI d. NCTAMSPAC e. PHNSY & IMF	 a. 471-5452 b. 216-1339 c. 778-4839 d. 653-5385 e. 473-8000 x1339	 a. 471-5452 b. 216-1339 c. 778-4839 d. 653-5385 e. 473-8000 x1339

TABLE A-1: COMNAVREG HI NOTIFICATIONS		
Contacts	**Day Telephone**	**24-Hour Telephone**
NAVFAC HI Emergency Service Desk	449-3100	449-3100
NAVFAC HI Environmental	471-1171	471-1171
NAVSUP FLCPH Fuel Department Fuel Operations Center Fuel Service Center (Hickam storage tanks)	473-7801 471-8081 448-2509	216-1339 (CDO)
Port Operations	474-6262 or Channel 69	474-6262 or Channel 69
Facility Response Team (FRT)	472-9942	472-9942
COMPAC FLT Salvage Officer	474-5490/6372	471-5452 (Duty Officer)
ESSM Base Hawaii	423-7055 423-6535 (Fax)	423-7055 423-6535 (Fax)
Mobile Diving Salvage Unit (MDSU1)	471-9292	471-9292
Navy SUPSALV	202-781-1731 (Option #2) 202-781-3889 (After Hours)	202-781-1731 (Option #2) 202-781-3889 (After Hours)
COMNAVSURGRU MIDPAC	473-3560	473-3560
Rainbow Bay Marina	473-0279	473-0279
USS Arizona Memorial	422-3399	422-3399
USS Bowfin Submarine Museum & Park	423-1341	423-1341
USS Missouri Memorial	455-1600	455-1600

A.2.2 Navy Follow-up Reports

Table A-2 list the follow-up Navy reports and messages that need to be made for reportable OHS discharges. See Section A.6 for more information on these reports and messages, including examples of each.

TABLE A-2: FOLLOW-UP REPORTS AND MESSAGES FOR REPORTABLE OHS DISCHARGES		
Report/Message	**Destination**	**Deadlines**
Navy Oil Spill Report	To: CNO Per OPNAVINST 5090.1.D	Within 24 hours of the discovery of an oil discharge or substantial threat of a discharge.
Navy Hazardous Substance Release Report	To: CNO Per OPNAVINST 5090.1.D	Within 24 hours of the discovery of an HS release or substantial threat of a release.
Navy Chain of Command Special Incident Reporting: OPREP-3 Navy Blue	To: CNO Per OPNAVINST 5090.1.D Per OPNAVINST 5090.1.D, spills that represent environmentally significant events or have the potential to cause adverse public reaction shall immediately be reported using the OPREP system (see OPNAVINST 3100.6-Series for instructions).	Flash Voice Report immediately to Fleet Command Center (no later than 5 minutes after knowledge of incident.) Message within 20 minutes of voice report with follow-up message reports as necessary.

A.2.3 External Agency Notifications

Table A-3 provides a list of outside agencies that may need to be contacted in an emergency. Note that not all agencies require notification. Some agencies are listed for technical guidance. Notification should be made as directed by the NOSC Rep.

TABLE A-3: EXTERNAL AGENCY NOTIFICATION LIST		
Agencies To Notify	**Action**	**Telephone Number**
National Response Center (NRC)	If NRC has not been notified, notify immediately. Obtain NRC Case Number _____	800-424-8802 202-267-2675 (Direct)
Hawaii State Emergency Response Commission (HSERC)	Notify within 30 minutes of discovery for OHS releases under EPCRA and CERCLA.	586-4249 247-2191 (After-Hours) 586-7537 (Fax)
Honolulu Local Emergency Planning Commiittee (LEPC) LEPC – Hawaii LEPC – Kauai LEPC – Maui	Notify within 30 minutes of discovery for OHS releases under EPCRA and CERCLA.	723-8960 911 (After-Hours) 936-8181/443-4150 634-0310 870-7404
US Coast Guard Sector Honolulu	In the event the NOSC Rep cannot be contacted, notify the USCG Sector Honolulu.	842-2600
US Coast Guard District 14 Command Center	Assistance and resources.	800-331-6176
Hawaiian Islands National Wildlife Refuge	Contact if wildlife, wetlands, or refuges are threatened or impacted.	792-9548
U.S. Fish and Wildlife Service, Pacific Island Office	Notify if Federal natural resources are threatened or impacted.	792-9400
National Park Service - USS Arizona	Noftify if park lands or memorials are threatened or impacted. Superintendent, USS Arizona Memorial.	455-1600
NOAA – Scientific Support Coordinator (SSC)	For advice on scientific issues, communicate with scienitific community, coordinate state and Federal agency requests for specific study assistance and assist On-Scene Coordinator with spill movements and trajectories.	725-5903
NOAA National Marine Fisheries Service - Pacific Island Regional Office	Notify if protected marine species are threatened or impacted. Notify as a natural resources trustee and to assist in spill response if turtles are injured.	725-5000 725-5215 (fax)
Agency for Toxic Substances and Disease Registry	Health information related to the toxicity, chemistry, and decontamination of harzardous materials.	770-488-7100
Hawaii Poison Control Center	Provides toxological information and medical treatment advice for responders.	800-222-1222 (24-hr)
Hunolulu Department of Emergency Management	Department of Emergency Management	723-8960 524-3439 (fax)
Oceania Regional Response Team (RRT)	Notify if public health emergency exists, or may occur.	972-3081 (EPA) 541-2103 (USCG)
NOAA Weather Service	Weather and water conditions and forecasts.	973-5286 (24-hr)
FEMA – Pacific Area Office	If incident presents or may present a MAJOR disaster.	851-7900

A.2.4 Community Notifications

The NOSC Rep may find it necessary to contact local agencies and the media depending on the magnitude and nature of the incident. Refer to the Hawaii ACP for a comprehensive listing of community contacts for all the Hawaiian Islands. The ACP can be accessed at the Oceania Regional Response Team website at: www.oceaniarrt.org

A.3 REGULATORY NOTIFICATIONS

There are Federal and State of Hawaii regulatory requirements to report discharges or substantial threat of a discharge of OHS. It is very important that these discharges be promptly reported to all relevant Federal and State authorities.

A.3.1 Reportable OHS Discharges

Reportable discharges are defined as any oil discharged to the water that meets the requirements of 40 CFR 110.3 [i.e. a discharge or a substantial threat of a discharge that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the navigable water (as defined in 40 CFR 110.1) or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the navigable water or upon adjoining shorelines]. Reportable hazardous substances releases are defined as any release of a hazardous substance (as identified in 40 CFR 302) that exceeds the RQ within any 24-hour period.

A.3.2 National Response Center (NRC) Notification

Reportable OHS releases must be immediately reported to the NRC. Although present regulations do not establish or quantify the reporting time, it is the policy of COMNAVREG HI that, whenever possible, all spills or releases will be reported to the NRC no later than 15 minutes after discovery.

24-hour: (800) 424-8802
Direct: (202) 267-2675

IMPORTANT: Do *not* wait to collect details on the spill before calling the NRC. Call the NRC as soon as a reportable spill occurs. Call back the NRC (reference the NRC Report Number) and provide any additional details if applicable.

A.3.3 Reporting Information for Extremely Hazardous Substances

As per the Emergency Planning and Community Right to Know Act (EPCRA), if the hazardous substance release includes an "extremely hazardous substance" and the release can potentially result in exposure to persons outside the boundary of the facility, follow the procedures found in Section A.3.5 to provide the notifications required by 40 CFR 355.40 to the Hawaii SERC and the City and County of Honolulu LEPC.

A.3.4 Reporting Information for Hazardous Waste

If the substance released is a hazardous waste, also include the following information required by 40 CFR 262.34(d)(5)(iv) and either 40 CFR 264.56(d)(2) or 40 CFR 265.56(d)(2) [depending on the status of the final administrative disposition of the Treatment, Storage, and Disposal Facility (TSDF) permit application]:

- Name and telephone number of the reporter;
- Name, address, and US EPA Generator ID Number of the facility;
- Type and time of incident (i.e. release, fire, etc.);
- Name and quantity of materials involved, to the extent known;
- Extent of injuries, if any;
- Possible hazards to human health, or the environment, outside the facility.

A.3.5 State of Hawaii Hazardous Substance Release Notification Requirements

A.3.5.1 Overview of Requirements

In Hawaii, owners or operators of facilities or vessels reporting releases of hazardous substances are subject to state notification requirements under Chapter 128D, Hawaii Revised Statutes, the Environmental Response Law; Chapter 128E, Hawaii Revised Statutes, the Hawaii Emergency Planning and Community Right-to-Know Act (HEPCRA); and Title 11, Chapter 451, Hawaii Administrative Rules, the State Contingency Plan (SCP).

COMNAVREG HI **must immediately notify** the Hawaii State Emergency Response Commission (HSERC/HEER) at **586-4249 or 247-2191** (after hours) and the Local Emergency Planning Committee (LEPC) for the City and County of Honolulu at **723-8960 or 911** (after hours) after the release of:

1. A listed hazardous substance designated under Section 11-451-5(b), in quantities equal to or exceeding the reportable quantity criteria in Section 11-451-6(b) in any 24-hour period; or
2. An unlisted hazardous substance designated under Section 11-451-5(c), in quantities equal to or exceeding the reportable quantity criteria in Section 11-451-6(c) in any 24-hour period.

Note: The HSERC/HEER are listed together because the Hawaii State Department of Health Hazard Evaluation and Emergency Response Office is the administrative contact for the Hawaii State Emergency Response Commission.

For oil, the reportable quantity is:

- Any amount that causes a sheen to appear on surface water or any navigable water of the State;
- Any free product that appears on ground water;
- Any amount of oil released to the environment greater than 25 gallons;
- Any amount of oil release to the environment which is less than 25 gallons, but which is not contained and remedied within 72 hours.

For trichloropropane, the reportable quantity is:

- 10 pounds released within any 24-hour period.

For unlisted hazardous substances, the reportable quantity is:

- Generally 100 pounds of the material, unless the material exhibits toxicity characteristics. For materials that exhibit toxic characteristics, the RQ of the unlisted hazardous substance would be the RQ (as identified in Table 302.4 of 40 CFR 302) of the material that causes the toxicity characteristic. The RQ identified applies to the entire amount of released unlisted hazardous substance, not just to the component that causes the toxicity characteristic, that is released within any 24-hour period.

Note: Hawaii designates oil, trichloropropane, and unlisted hazardous substances (i.e. a hazardous waste, as defined in Section 11-261-3 of the HAR, that exhibits any of the characteristics of ignitability, corrosivity, reactivity, or toxicity) as hazardous substances.

COMNAVREG HI **must also provide a written follow-up notice** within 30 days of the discovery of the release. If a release of a hazardous substance poses an imminent or immediate threat to public health or the environment, dial 911 to request fire, police, or emergency medical service personnel response.

Table A-4 summarizes the State of Hawaii's hazardous substance release notification requirements.

TABLE A-4: HAWAII HAZARDOUS SUBSTANCE RELEASE NOTIFICATION REQUIREMENTS

Release Characteristics	Required Report
Hazardous substance [1] (not oil) quantity released equals or exceeds RQ identified in Section 11-451-6 of the HAR within any 24-hour period.	• Immediate verbal notification to the HSERC & LEPC. • Written notification to the HSERC within 30 days after the initial discovery.
Hazardous substance (oil) is discharged into the environment in an amount that causes a sheen to appear on surface water, or any navigable water of the State.	• Immediate verbal notification to the HSERC & LEPC. • Written notification to the HSERC within 30 days after the initial discovery.
Hazardous substance (oil) is discharged into the environment in an amount greater than 25 gallons within any 24-hour period.	• Immediate verbal notification to the HSERC & LEPC. • Written notification to the HSERC within 30 days after the initial discovery.
Hazardous substance (oil) is discharged into the environment in an amount less than 25 gallons within any 24-hour period, but which is not contained and remedied within 72 hours.	• Written notification to the HSERC within 30 days after the initial discovery.

Notes: [1] While the codified lists of hazardous substances found in Section 11-451-6 of the HAR refer to the lists found in the 1993 versions of the federal regulations and the Federal Register, COMNAVREG HI personnel can quickly find out the RQ of a hazardous substances by looking at the most recent lists found in:

(a). Table 302.4 – List of Hazardous Substances and Reportable Quantities in 40 CFR 302;
(b). Appendix A – The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (Alphabetical Order) or Appendix B – The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (CAS Number Order) to 40 CFR 355

A.3.5.2 Immediate Notification Content

A reportable quantity of a hazardous substance is a trigger to notify the appropriate government agencies. This is necessary so that government personnel such as the State On-Scene Coordinators can evaluate the need for a response action and ensure that any necessary response actions are undertaken in a timely manner.

Immediate verbal notification shall be provided to the HSERC/HEER and LEPC either via telephone or in person. HEER/HSERC will not accept **initial notification** via fax or e-mail. In addition, unless it is specifically stated that a verbal notification is being given to a State On-Scene Coordinator (SOSC) on scene during an incident, the presence of a SOSC does not constitute a notification.

Provide the following information to the extent known at the time of the notice so long as no delay in responding to the emergency results. It is expected that notification occur **within 20 minutes** of discovery of the release. (Do not delay due to incomplete notification information related to the release):

1. Name and telephone number of the caller.
2. Name and telephone number of a contact person, (if different from the caller) that can provide timely information as the incident is occurring.
3. Name (trade and chemical), of the hazardous substance which has been released.

4. Approximate quantity of the hazardous substance which has been released.
5. Location of the incident.
6. Date and time of spill, release, or threatened release.
7. Description of what happened (source and cause of the release).
8. Immediate danger or threat posed by the release.
9. Name, address, and telephone number of the responsible party or potentially responsible party.
10. Measures taken or proposed to be taken in response to the release as of the time of the notification.
11. Any known injuries or advice regarding medical attention necessary for exposed individuals.
12. The names and phone numbers of other federal, state, or local government agencies that have been notified of the release.
13. Any other information that may help emergency personnel respond to the incident.

Once the information has been provided, the caller will be provided with a HEER Incident Case Number, which shall be referenced in any future correspondence including the written notification submittal.

A.3.5.3 Written Follow-Up Notification Content

A written notice, including all information provided in the verbal notification described above and any other pertinent information not previously provided, shall also be made to the HSERC/HEER. This written notification shall be sent to HSERC/HEER no later than thirty (30) days after initial discovery of a release. The written notification can be sent by certified mail, faxed, hand-delivered, or another means which provides proof of delivery. See Table A-5 for the applicable mailing addresses and fax numbers. Photos should be included to document the incident. A suggested Written Follow-up Notification Form is provided on the following pages.

PAGE INTENTIONALLY LEFT BLANK

Hawaii Hazardous Substance Written Follow-Up Notification Form

PLEASE PROVIDE THE FOLLOWING INFORMATION

Incident Case No.: _____

Contact Information

Caller's Information

Name: _____

Address: _____

City: _____ State _____ Zip _____

Telephone number: _____

Owner's Information

Name: _____

Title: _____

Company: _____

Address: _____

City: _____ State _____ Zip _____

Telephone number: _____

Operator's Information

Name: _____

Title: _____

Company: _____

Address: _____

City: _____ State _____ Zip _____

Telephone number: _____

Name of a contact person at the facility or vessel where the release has occurred: _____

_____

Telephone number: _____

Hazardous Substance Released:

Name (trade and chemical) of the hazardous substance which has been released: _____

_____

Chemical Abstract Service (CAS) Number (if applicable): _____

Approximate quantity of the hazardous substance released: _____

Incident Information

Location of the release: _____

_____

A brief description of the release: _____

_____

Media into which the release occurred or is likely to occur (Indicate all those that apply):

☐ Air ☐ Soil ☐ Groundwater ☐ Concrete ☐ Asphalt ☐ Stream ☐ Ocean ☐ Other

Cause of the release: _____

_____

Date of the release: _____

Time of the release: _____

Duration of the release: _____

Date: _____

Time that the person in charge of the facility or vessel where the release occurred obtained knowledge of the release: _____

Source of the release: _____

_____

Response Information

Response measures taken thus far: _____

_____

Any appropriate information relating to the ability of the owner or operator of the facility or vessel where the release has occurred to pay for or perform any proposed or required response actions: _____

_____

_____

The names of other federal, state, or local government agencies that have been notified of the release: _____

_____

Health Information

Known or anticipated acute health risks: _____

_____

Known or anticipated chronic health risks: _____

_____

Advice regarding medical attention necessary for exposed individuals: _____

_____

Potential impacts to public health or welfare: _____

_____

Potential impacts to the environment: _____

_____

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the submitted info is true, accurate, and complete."

Signature: _____ Date: _____

Printed Name: _____

Title: _____

Company: _____

PAGE INTENTIONALLY LEFT BLANK

A.4 REGULATORY NOTIFICATION CHECK-OFF LIST

Table A-5 provides a check-off list for Federal and State regulatory notifications.

TABLE A-5: REGULATORY NOTIFICATION CHECK-OFF LIST

Contact	Phone Number	Notified
National Response Center (NRC)	800-424-8802 (24-hour) 202-267-2675 (Direct #)	Person Notified _____ Date / Time Notified: _____ Report No (as applicable): _____
Hawaii State Emergency Response Commission (HSERC)/Hawaii State Department of Health Hazard Evaluation and Emergency Response (HEER) Office Provide follow-up written notification within 30 days of initial notification to: 2385 Waimano Home Road Pearl City, Hawaii 96782	586-4249 (Day) 247-2191 (After Hours) 586-7537 (Fax)	Person Notified: _____ Date Notified: _____ Time Notified: _____ Report No. (as applicable): _____
Honolulu Local Emergency Planning Committee (LEPC) Department of Emergency Management 650 South King Street, Basement Honolulu, Hawaii 96813-3078	723-8960 (Day) 911 (After hours) 524-3439 (Fax)	Person Notified _____ Date / Time Notified: _____ Report No (as applicable): _____
Hawaii LEPC Hawaii State District Health Office 1582 Kamehameha Ave. Hilo, Hawaii 96720	936-8181/443-4150 (Day) 895-7318 (Alternative)	Person Notified _____ Date / Time Notified: _____ Report No (as applicable): _____
Kauai LEPC Kauai Fire Department 4444 Rice St., Suite 315 Lihue, HI 96766	634-0310 (Day) 241-1711 (After hours) 241-6508 (Fax)	Person Notified _____ Date / Time Notified: _____ Report No (as applicable): _____
Maui LEPC Maui County Fire Department 200 Dairy Rd. Kahului, Hawaii 96732	870-7404 (Day&After Hours) 270-7911 (Alternate) 270-7917 (Fax)	Person Notified _____ Date / Time Notified: _____ Report No (as applicable): _____

A.5 HAWAII ACP COMMUNICATIONS PLAN

Table A-6 provides the Hawaii ACP Communications Plan. The table details how radio channel will be utilized during a major oil spill.

TABLE A-6: INCIDENT RADIO COMMUNICATIONS PLAN - HAWAII AC					
FCC-Channel Usage	**Marine VHF Channel**	**Function**	**Frequency (MHZ)**	**Working Channel Assignment**	**Authorized User**
Port Operations	05A	Spill Operations as Assigned	156.250	-	Sause Brothers
Inter-ship Safety	06	Spill Operations Hailing Frequency	156.300	All Responders	-
Commercial	7A	Commercial	156.350	-	Hawaii Pilots (Primary)
Commercial (Ship to Ship)	08	Spill Operations Working Frequency	156.400	Burn Group	Hawaii Pilots (Secondary)
Non-Commercial	09	Non-Commercial	156.450	HIE Mooring and Smith Maritime	Hawaii Pilots (Secondary)
Commercial	10	Commercial	156.500	Chevron Mooring	-
Commercial	11	Spill Operations as Assigned	156.550	-	-
Port Operations	12	Port Operations	156.600	Aloha Tower Check-In	-
Navigation (Ship to Ship)	13	Bridge to Bridge	156.650	Bridge to Bridge	-
Port Operations	14	Spill Operations as Assigned	156.700	-	OSRO Secondary
Distress Safety	16	Distress Safety and Call of Vessels	156.800	All Mariners	-
State of Hawaii	17	State of Hawaii	156.850	State of Hawaii	-
Commercial	18A	Surface to Aircraft	156.900	Surface to Aircraft	HTB and Young Brothers
Commercial	19A	Commercial	156.950	-	-
SAR Working Channel	21A	SAR Working Channel	157.050	USCG Sector Honolulu	-
Maritime Safety	22A	Maritime Safety Broadcast	157.100	USCG Sector Honolulu	-
SAR Working Channel	23A	SAR Working Channel	157.150	USCG Sector Honolulu	-
Public Correspondence	26-27	Public Correspondence/ Ship to Shore	Varies	Marine Operator	-
Vessel Traffic System	63A	Commercial	156.175	USCG Sector Honolulu	-
Commercial	67	Commercial	156.375	-	-
Non-Commercial	68	Non-Commercial	156.425	-	-
Non-Commercial	69	Non-Commercial	156.475	Pearl Harbor Control	-
Non-Commercial	71	Non-Commercial	156.575	-	-
Non-Commercial	72	Non-Commercial (Ship to Ship Only)	156.625	Pearl Harbor Control	-
Port Operations	77	Commercial	156.375	USN SUPSALV	-
Non-Commercial	78A	Non-Commercial	156.925	-	-
Commercial	79A	Commercial	156.725	-	Atlantis Submarines
Commercial	80A	Commercial	157.025	-	-
FOSC	81A	FOSC Primary Working Channel	157.075	USCG FOSC	-
FOSC	83	FOSC Secondary Working Channel	157.175	USCG FOSC	-

TABLE A-6: INCIDENT RADIO COMMUNICATIONS PLAN - HAWAII AC					
FCC-Channel Usage	**Marine VHF Channel**	**Function**	**Frequency (MHZ)**	**Working Channel Assignment**	**Authorized User**
Digital Selective Calling	70	-	-	-	-
Commercial	88	Commercial	157.425		American Work Boat and Atlantis Submarines
ICS-205	Prepared by (Communication Unit)				

NOTE: Channel Frequency Plan can and maybe changed if/when a Communications Unit Leader (COM-L) is designated for the response. Channels may vary depending on location and size of the incident.

A.6 NAVY NOTIFICATION REQUIREMENTS

In addition to reporting OHS spills to the NOSC Rep, the Navy requires special notification procedures for reportable OHS discharges.

A.6.1 OPNAV M-5090.1 Message Reports

Figures A-1 (Oil Spill Report Message Format) and A-2 (Hazardous Substance Report Message Format) are report formats to be used for reporting Oil discharges and HS releases, respectively. Example messages are given for both oil (Figure A-3) and hazardous substance (Figure A-4).

A.6.2 OPREP-3 Reporting

In accordance with OPNAVINST 3100.6H, any pollution incident involving oil, gasoline, jet fuel, or a hazardous substance that results from a catastrophic event, or is subject to unusual media scrutiny, or attracts high level U.S. Navy interest, shall be reported immediately on an OPREP-3 Special Incident Report. A sample OPREP-3 message report is provided in Figure A-5.

PAGE INTENTIONALLY LEFT BLANK

FIGURE A-1: OIL SPILL REPORT (MESSAGE FORMAT)

1. **Precedence (for messages only):** Provided that prior voice reports have been made both to the US Coast Guard National Response Center and the reporting command's Chain of Command, use "Routine" precedence for Oil Spill Report Messages. If either voice report has not been made, use "Priority" precedence.

2. **Classification or Special Handling Marks:** Oil Spill Report Messages are unclassified and do not warrant special handling marks unless classified or sensitive business information must be incorporated. Avoid inclusion of such information to the maximum extent possible to allow Oil Spill Report Messages to be handled on a solely unclassified basis.

3. **Spill Volume Classification:** To better advise the Navy On-Scene Coordinator and Navy leadership of the magnitude of each oil spill, the Subject line of an Oil Spill Report Message should bear a volume estimate of the spill, if known, in the following format:

   - OIL SPILL REPORT, X GALLONS, [ACTIVITY NAME] (MINIMIZE CONSIDERED); or
   - OIL SPILL REPORT, UNKNOWN VOLUME, [ACTIVITY NAME] (MINIMIZE CONSIDERED); or
   - OIL SPILL REPORT, SHEEN SIGHTING (MINIMIZE CONSIDERED).

4. **Updating Oil Spill Report Messages:** Oil Spill Report Messages should be updated with a follow-up SITREP message as soon as the reporting activity becomes aware of new information concerning the origin, quantity, type, operation under way or cause of the spill. Similarly, *if the final estimate of the amount spilled differs substantially from the amount initially reported,* the reporting activity must send a SITREP update message to all action and info addresses on the original spill message.

5. **Action and Info Addressees:**

FM: NAVY ACTIVITY OR SHIP RESPONSIBLE FOR OR DISCOVERING THE SPILL
TO: COMNAVREG HI//N00/N01/N4 //
CHAIN OF COMMAND
INFO: CNO WASHINGTON DC//N45//
CHINFO WASHINGTON DC//
COMPACFLT PEARL HARBOR HI//N3/N5/N01CE//
JBPHH HI//N00/N01//
USPACOM CAMPSMITH HI//J4/J44// (for significant spills)
COMNAVSEASYSCOM WASHINGTON DC//00C//
COMCOGARD SECTOR HONOLULU HI//
COGARD NATIONAL RESPONSE CENTER WASHINGTON DC//
NAVFAC EXWC PORT HUENEME CA//424//
NOLSC DC FT BELVOIR VA//
NAVY JAG WASHINGTON DC//11//
CNIC WASHINGTON DC//N45//
NAVSURFWARCENSHPSYSENST PHILADELPHIA//923//

6. Body of Report: Use the following format for the body of all Oil Spill Report Messages:

UNCLAS//NO5090//
SUBJ: OIL SPILL REPORT, X GALLONS, [ACTIVITY NAME] (MINIMIZE CONSIDERED) or
OIL SPILL REPORT, UNKNOWN VOLUME, [ACTIVITY NAME] (MINIMIZE CONSIDERED) or
OIL SPILL SHEEN SIGHTING, (MINIMIZE CONSIDERED)
MSGID/GENADMIN/ORIGINATOR//
RMKS/

1. LOCAL TIME AND DATE SPILL [OCCURRED/DISCOVERED].

2. [FACILITY/VESSEL] ORIGINATING SPILL:
   - For Navy ships list ship name and hull number.
   - For Navy shore facilities list the facility name.
   - For non-Navy spills, list name of responsible party, if known.
   - For organizations under contract to Navy, list firm name and contracting Navy activity.
   - If source UNKNOWN at time of this report, list only "Unknown" until such time as definitively established.

3. SPILL LOCATION:
   - For spills at sea, list latitude, longitude, and distance to nearest land.
   - For spills in port, list port name, host naval command (NAVSTA, Shipyard) and specific location (pier or mooring designation).
   - For spills ashore, list city, state, facility name, and specific location (building designation).

4. VOLUME SPILLED IN GALLONS:
   - Estimates must be made by examining loss at source: i.e. sounding tank, calculating flow rate of spill.
   - If amount unknown at time of this report, list only "Unknown" until such time as definitively established.
   - Estimating volume by visual observation of oil on water can be very unreliable.
   - If volume estimate can only be made by visual observation of oil on water, do not report estimate here.
   - If oil/water mixture, indicate percent oil.

5. TYPE OF OIL SPILLED:
   - List whether diesel fuel marine (DFM); naval distillate; jet fuel (F-24); aviation/automotive gasoline; automotive diesel; heating fuels (grade 1 or 2, kerosene); residual burner fuel (grade 4, 5 or 6); lubricating oil; hydraulic oil; oil/oil mixture (including slops and waste oil); oil/water mixture (including bilge waste).
   - If type unknown at time of this report, list only "Unknown" until such time as definitively established.

6. OPERATION UNDER WAY WHEN SPILL [OCCURRED/DISCOVERED]:
   - If fueling/defueling, list whether underway or in port by pipeline, truck or barge.
   - Whether conducting internal fuel oil transfer operations (including movement from one storage tank to another); pumping bilges; conducting salvage operations; aircraft operations; or "Other" (specify).

- If operation unknown at time of this report, list only "Unknown" until such time as definitively established.

7. SPILL CAUSE:
   - Classify the cause of the spill by referring to Table A-7. Cite one of the Spill Cause Descriptions found in table and then provide a narrative description of the specific spill cause (refer to the "Additional Information Section" in the table). This information will be used by NAVSEA for causal analysis and spill prevention.
   - If cause unknown at time of this report, list only "Unknown" until such time as definitively established.

8. SLICK DESCRIPTION AND MOVEMENT:
   - Size: length and width (yards or nm) and percentage of that area covered.
   - Color: silver transparent, gray, rainbow, blue, dull brown, dark brown, black, brown-orange mousse.
   - Odor: noxious, light, undetectable.
   - Slick movement: set (degrees true toward) and drift (knots).

9. SPILL ENVIRONMENT:
   - Weather: clear, overcast, partly-cloudy, rain, snow, etc.
   - Prevailing wind at scene: direction (degrees true from), speed (knots), fetch (yards or nautical miles).
   - Air and water temperature: indicate ice cover.
   - Sea state: Beaufort Force number.
   - Tide: high, low, ebb, flood or slack/Current: set (degrees true toward) and drift (knots).

10. AREAS DAMAGED OR THREATENED:
    - Body of water, area or resources threatened or affected.
    - Nature and extent of damage to property, wildlife or other natural resources (if any).

11. TELEPHONIC REPORT TO NATIONAL RESPONSE CENTER [WAS/WAS NOT] MADE: IF MADE, LIST:
    - Time and Date of telephonic report.
    - NRC report/case number.
    - Name of NRC official taking report.
    - If not made, provide reason why: beyond 12 nm from US shores, no threat to navigable water, etc.
    - Navy Command making telephonic report.
    - SERC report number.

12. SAMPLES [WERE/WERE NOT] TAKEN:
    - If taken, identify location(s) from which taken: tanks, hoses, piping, slip, jetty, etc.
    - If taken, identify collecting officer by name, rank and agency.

13. CONTAINMENT METHOD [PLANNED/USED]:
    - If none, state reason.
    - Otherwise, indicate equipment utilized: boom; ship's hull; camel; water spray; chemical agent.

14. SPILL REMOVAL METHOD [PLANNED/USED]:
    - If none, state reason.
    - Equipment planned/used: used: Rapid Response Skimmer or Dip 3001 skimmer; portable skimmer, absorbent materials (oil absorbent pads, chips, etc.); dispersants; vacuum trucks/pumps; other (specify).

15. VOLUME OF OIL RECOVERED IN GALLONS: (Decanted pure product.)

16. PARTIES PERFORMING SPILL REMOVAL:
    - Identify lead organization in charge: Navy Command; USCG; EPA.
    - Identify all other parties involved: commercial firms; supporting Navy activities; State or local agencies.
    - Clean-up costs.

17. FEDERAL, STATE OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT:
    - Identify by name and agency any official attending on-scene or making telephonic inquiry.
    - Note whether officials boarded vessel and include date, time and spaces inspected.

18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS:

19. LESSONS LEARNED: How could this spill have been avoided?

20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: List name, rank/rate, command, code, DSN and/or commercial telephone numbers. //

21. COST OF RECOVERY: Probably not known for initial report. Include in follow up report to the extent known.

TABLE A-7: OIL SPILL DATABASE CAUSE CODES AND SUPPLEMENTAL INFORMATION		
Code	**Spill Cause Description**	**Additional Information**
	Personnel Errors	
P01	VALVE AND VALVE MANIFOLD MISALIGNMENT	All valve and manifold operation and alignment errors. Personnel mistakenly opens/closes wrong valve, does not verify valve alignment prior to operation, does not perform alignment as dictated by procedures or does not fully close a valve. This category does not include alignment errors that result from personnel following documented procedures that are in error. (See Cause Code D01) Provide specific system, valve/manifold name and number, and valve alignment/operation error. Are the valves listed in the EOSS or other shipboard documentation? Example: Fuel transfer system. Tank xx-xx-xx manually operated fill valve yy-yyy not fully closed and not verified closed by personnel after fill.
P02	MONITORING/SOUNDING ERRORS	All tank level monitoring and sounding mistakes including failure by personnel to adequately observe a tank level during a fill operation. Provide specific tank name and the sounding/fluid level monitoring procedure used or not followed correctly. Why was the sounding/monitoring error made? Are the sounding tables correct? Are the tanks top sounded or bottom sounded? Was a sounding tape bob broken off in the tube? Example: Personnel incorrectly read sounding tape while monitoring the fuel oil service tank level during transfer. Personnel had not received adequate training and did not know correct procedure for obtaining sounding tape readings.
P03	COMMUNICATION ERRORS/FAILURE TO FOLLOW ORDERS	Failure by personnel to properly signal commands, inability to communicate with watchstanders, misunderstanding of commands and failure of personnel to properly follow commands. What commands were given and how and why were they not received or not followed. Example: Personnel failed to secure fuel transfer pump when order was given.
P04	HOSE AND PIPE HANDLING ERRORS INCLUDING RESIDUAL IN HOSES AND PIPES	Mishandling of hoses and fuel probes, premature disconnect of hoses and fuel probes under pressure, failure to cap, properly drain or blow down hoses or allowing residual in hoses to spill. Spilling residual fuel/oil when disconnecting or repairing pipes and tubing. Were proper blowdown and back suction conducted? Provide specifics on whether spill was a result of a) poor hose handling practices, b) mishandling of fuel probe, c) residual in hose d) residual in pipe/tube.
P05	TANK OVERFILL/OVERPRESSURE/BURP/FUEL IN COMP SEAWATER	Overfilling of tanks or fuel escaping through tank vent caused by personnel error not related to any of the above causes. Usually cause is unexplained or not understood. Includes over-pressurizing tanks by exceeding recommended fill rate or pressure, tank 'burps' associated with over-pressurizing or exceedingly fast fill rates, and oil entrained in overboard compensating seawater. Provide system and tank identification. If possible, determine specific personnel error that resulted in tank overfill, venting or burp.
P06	ACCIDENT/ACCIDENTAL SPILL DUE TO PERSONNEL ERROR	All accidents with the exception of major casualties, crashes and sinkings (see Cause Code C01). Includes spilling or tipping of oil containers, minor vehicle mishaps, mishandling of cargo that results in a spill, movement of equipment that breaks a fuel/oil line, excavation resulting in a broken fuel/oil line, and demolition and construction accidents.

TABLE A-7: OIL SPILL DATABASE CAUSE CODES AND SUPPLEMENTAL INFORMATION		
Code	**Spill Cause Description**	**Additional Information**
		Provide equipment/container information and details on how accident occurred. Determine if lack of or inadequate training was contributory.
P07	ILLEGAL DUMPING OR IMPROPER DISPOSAL	Improper disposal of fuel, oils and waste oil. Dumping of oil illicitly.
P08	ALL OTHER PERSONNEL ERRORS NOT LISTED ABOVE	All personnel errors not listed above that lead to a spill. Includes causes such as failure to remain at watch station, not following repair/maintenance procedures, disobeying a command and conducting unauthorized fuel/oil transfers.
Equipment Failures		
F01	VALVE/VALVE CONTROL/SOLENOID FAILURES	All valve, valve components, valve controller, valve actuator, motor and solenoid failures. Provide specific system name and part numbers. Provide details on the nature of the component/system failure. Can recommendations be made for a design change, improvement to component or use of another part eliminate this problem? Were there any recent repairs or maintenance on the system or component?
F02	PIPING/PIPE FITTING/MANIFOLD/TUBING/TUBE FITTING FAILURES	Piping, all pipe fittings, gage fittings (but not gages), manifold, tubing and tube fitting failures including leakage from cracks and corrosion. Does not include failures of valve, gaskets, packings, seals, o-rings or hoses. Provide specific details on pipe/tubing system, type of fluid carried, specifics on failure mode, part/fitting number (if any). What type of repair/replacement was made? Has this problem or failure occurred before? Were there any recent repairs or maintenance on the system or component? Material of pipe? Is pipe corrosion a result of the wrong material being used in the system?
F03	HOSE/HOSE FITTING/HOSE TENDING LINE/FUEL PROBE FAILURES	All hose and hose fitting related failures including hose tending and fuel probes. Provide information on the hose, type of fluid carried, part number (if appropriate), describe the failure mode. Were there any recent repairs or maintenance on the system or component?
F04	SEAL/GASKET/PACKING/O-RING FAILURES	All pipe joint, flange, fitting, seals, gaskets and o-ring failures. All fluid handling component gaskets, seals, packing and o-rings including pumps and filters. Provide specific system name, part number, type of seal, seal material. What type of repair/replacement was made? Has this problem or failure occurred before? Were there any recent repairs or maintenance on the system or component?
F05	AUTOMATIC CONTROLS/ALARMS AND INDICATOR FAILURES INCLUDING TLIS	Includes all automatic shut-off controls and actuators (but not failures in shut-off valves), Tank Level Indicator components, displays, alarms, indicators, gages, site glass and site tubes. Includes sounding tube and sounding tape failures. Provide specific system name, part number, type of control or indicator. What type of repair/replacement was made? Has this problem or failure occurred before? Were there any recent repairs or maintenance on the system or component?
F06	OIL WATER SEPARATOR SYSTEM/OIL CONTENT MONITOR FAILURES	All components of OWS and the OCM including piping, fittings, indicators and sensors installed as part of the OWS system. Includes diverter valve and oily waste transfer pump. Provide specific part number, type of failure and failure mode. What type of repair/replacement was made? Has this problem or failure occurred before? Provide information (if known) on system operation at the time of failure. Were there any recent repairs or maintenance on the system or component?
F07	FUEL OIL SEPARATOR/PURIFIER/FILTER FAILURES	All components of fuel oil separator, purifier and filtration including piping, fittings, indicators and sensors installed as part of the

TABLE A-7: OIL SPILL DATABASE CAUSE CODES AND SUPPLEMENTAL INFORMATION		
Code	**Spill Cause Description**	**Additional Information**
		separator system. Provide specific part number, type of failure and failure mode. What type of repair/replacement was made? Has this problem or failure occurred before? Provide information (if known) on system operation at the time of failure. Were there any recent repairs or maintenance on the system or component?
F08	HYDRAULIC EQUIPMENT AND HYDRAULIC SYSTEM COMPONENT FAILURES	All components of an equipment's hydraulic system e.g. those for winches, hoists, and vehicles. Includes hoses, piping, fittings and seals. Does not include failures in a shipboard hydraulic oil piping system or transfer of hydraulic fluid. (See Cause Code F02) Do not include maintenance induced or accident induced failures. Provide name of equipment or vehicle type, operation at time of failure of component, component name and number if known. Were there any recent repairs or maintenance on the system or component? Example: Hydraulic supply hose fitting on deck winch began leaking during winch operation and sprayed hydraulic fluid on the deck.
F09	ALL OTHER ELECTRO-MECHANICAL EQUIPMENT FAILURES	All equipment, vehicle, aircraft system, hull, mechanical or electrical system failure not listed above. Provide details on system or vehicle type. Describe failure mode and provide part numbers if known. Were there any recent repairs or maintenance on the system or component?
10	STRUCTURAL FAILURES	Major structural failures including seems, welds and failures due to corrosion. Primarily used to classify failures in storage tanks, ships and craft. Provide information on the type of structure (e.g. fuel oil storage tank) and type of failure (e.g. corrosion in tank bottom). Describe action taken to correct failure. Were there any recent repairs or maintenance on the system or component?
Document Errors		
D01	DOCUMENTATION/EOP/EOSS ERRORS	All spills that result from errors in written procedures, technical documentation or labeling of components. NOTE: Messages may identify cause as a 'Procedural Error' when in actuality a Personnel Error (not following procedures) is meant. Identify the specific name and number of the operating procedure / OSS/technical document in error. Provide description of error. Identify the specific chapter/section/paragraph of the document that is in error and why. If a valve or control is miss-labeled, identify the system, function and part number.
Casualty		
C01	CASUALTY/SINKING/CRASH	All major casualties regardless of cause. Includes mid-air collisions, aircraft crashes, ship collisions, sinking of ships and craft, grounding of ships, major (catastrophic) fires onboard ship or at fuel storage facilities. Does not include ground vehicle collisions. No additional cause information is required for spill reporting.
Other		
T01	NATURAL CAUSES (STORM /RAIN RUN-OFF/TIDE OR WAVE INDUCED ROLL/LIST)	Weather related spills e.g. heavy rains washing oily residue off a pier, storm induced erosion of soil support around a pipeline, unusual high tides, waves or seas causing a spill from a ship or craft's fuel tank. Determine if spill is actually caused by a storm or if personnel error is actual cause. Examples are containers left open and rain water causing overfilling and spillage. Provide information as to how spill occurred and if it was preventable.

TABLE A-7: OIL SPILL DATABASE CAUSE CODES AND SUPPLEMENTAL INFORMATION		
Code	**Spill Cause Description**	**Additional Information**
T02	THERMAL EXPANSION CAUSING TANK OVERFLOW	Heat expansion of fuel (primarily in aircraft fuel tanks) causing overflow from tank vent. Provide information on aircraft or vehicle and determine that cause was indeed thermal expansion and not personnel error or component failure.
T03	RECURRING (WEEPING SEAWALLS/OLD SPILLS/CHRONIC SEEPAGE/CONTAMINATED SOIL)	All old or recurring spills including oil stirred up from under a pier, residual from a spill that was previously reported and contamination of soil from an old spill. Determine that spill is indeed from a documented recurring or old spill.
T04	OTHER CAUSE NOT LISTED ABOVE	Provide brief description of cause of spill and text description of cause.
Unknown		
U01	CAUSE NOT SPECIFIED/CAUSE UNDER INVESTIGATION/TO BE DETERMINED	Follow up with Navy activity or on-scene coordinators is required if cause of spill not identified in message. Determine what if any other fuel/oil transfers may have been conducted in 24 hours prior to spill being sighted.
U02	UNKNOWN CAUSE	Message identifies spill cause as unknown. Includes spills from unknown sources and sheen sightings.

FIGURE A-2: HAZARDOUS SUBSTANCE SPILL REPORT (MESSAGE FORMAT)

1. Precedence (for messages only): Provided that prior voice reports have been made to the US Coast Guard National Response Center and the reporting command's Chain of Command, use "Routine Precedence" for Hazardous Substance (HS) Release Report Messages not classified as an "Extremely Hazardous Substance." If either voice report has not been made, use "Priority Precedence". If Extremely Hazardous Substance, always use "Priority Precedence."

2. Classification or Special Handling Marks: HS Release Report Messages are unclassified and do not warrant special handling marks unless classified or sensitive business information must be incorporated. Avoid inclusion of such information to the maximum extent possible to allow HS Release Report Messages to be handled on a solely unclassified basis.

3. Correcting HS Release Report Messages: HS Release Report Messages should be updated with a follow-up SITREP Message as soon as the reporting activity becomes aware of new information concerning the origin, amount, nature of substance, type of operation at source or cause of release. Similarly, *if the final estimate of the amount released differs substantially from the amount initially reported,* the reporting activity must send a SITREP update message to all action and info addresses on the original message.

4. Action and Info Addressees:

FM: NAVY ACTIVITY OR SHIP RESPONSIBLE FOR OR DISCOVERING THE SPILL
TO: COMNAVREG HI//N00/N01/N4//
CHAIN OF COMMAND
INFO: CNO WASHINGTON DC//N45//
CHINFO WASHINGTON DC//
COMPACFLT PEARL HARBOR HI//N3/N5/N01CE//
JBPHH HI//N00/N01//
USPACOM CAMPSMITH HI//J4/J44// (FOR SIGNIFICANT SPILLS)
COMNAVSEASYSCOM WASHINGTON DC//00C//
COMCOGARD SECTOR HONOLULU HI
COGARD NATIONAL RESPONSE CENTER WASHINGTON DC//
NAVFAC EXWC PORT HUENEME CA//424//
NAVY JAG WASHINGTON DC//11//
CNIC WASHINGTON DC//N45//

5. Body of Report: Use the following format for the body of all HS Release Report Messages:

UNCLAS//N05090//
SUBJ: HAZARDOUS SUBSTANCE RELEASE REPORT (REPORT SYMBOL OPNAV 5090-3) (MIN: CONSIDERED)
MSGID/GENADMIN/ORIGINATOR//
RMKS/

1. LOCAL TIME AND DATE RELEASE [OCCURRED/DISCOVERED]:

2. [FACILITY/VESSEL] ORIGINATING RELEASE:
   - For Navy ships, list ship name and hull number.

- For Navy shore facilities list the facility name.
- For release occurring during transportation, list name of activity responsible for shipment.
- For non-Navy spills, list name of responsible party, if known.
- For organizations under contract to Navy, list firm name and contracting Navy activity.
- If source UNKNOWN at time of this report, list only "Unknown" until such time as definitively established.

3. RELEASE LOCATION:
   - For release at sea, list latitude, longitude and distance to nearest land.
   - For release in port, list port name, host naval command (NAVSTA, Shipyard) and specific location.
   - For release ashore, list city, state, facility name and specific location (building designation).
   - For release during transportation, give exact location (highway mile marker or street number and city).

4. AMOUNT RELEASED:
   - Use convenient units of weight or volume (kg, lb., gallons, liters, etc.).
   - For continuous release, estimate rate of release and amount left in container.
   - Estimates should be made by examining loss at source: sounding tank, calculating flow rate of spill.
   - *Unreliable estimates of volume using visual observation of HS on water may not be reported here.*
   - If amount unknown at time of this report, *list only "Unknown"* until such time as definitively established.

5. HAZARDOUS SUBSTANCE RELEASED:
   - If Extremely Hazardous Substance, headline this paragraph "EXTREMELY HAZARDOUS SUBSTANCE RELEASED:" See chapter 10, subsection 10-4.2 for additional notification requirements.
   - Consult container labels, user directions, reference books, expert advice.
   - Provide chemical/product names, formula, synonym, physical/chemical characteristics, and inherent hazards.
   - "Container label identifies substance as acrylonitrile. Synonyms: cyansethylene, vintleyanide. Characteristics/hazards: poisonous liquid and vapor, skin irritant, highly reactive/flammable."
   - Describe appearance, physical/chemical characteristics, actual/potential hazards observed. For example:
   - "Substance released is colorless to light yellow unidentified liquid; highly irritating to eyes and nose; smells like kernels of peach pits; vaporizing quickly, posing ignition problem."

6. TYPE OF OPERATION AT SOURCE: Plating shop, painting shop, hazardous waste (HW) facility, truck, ship, pipeline, ship rebuilding, entomology shop, etc.

7. CAUSE OF RELEASE:
   - Provide narrative description of specific cause of release.
   - Account for personnel error, equipment failure, etc. directly contributing to release.

- For example: "Railing supporting 55-gal drums on a flatbed truck gave way because it was not securely fastened, causing seven drums to fall and rupture."
- If cause unknown at time of this report, *list only "Unknown"* until such time as definitively established.

8. TYPE OF CONTAINER FROM WHICH SUBSTANCE ESCAPED:
   - 55-gal drums, 5-lb. bags, tank truck, storage tank, can, etc.
   - Estimate number of containers damaged or dangerously exposed.

9. RELEASE ENVIRONMENT:
   - Describe scene of release.
   - Include information on physical characteristics, size and complexity of release and weather conditions.
   - For Example: "Solvent released formed shallow pool covering area about 30 ft by 45 ft of bare concrete. Solvent slowly running into storm drain. Pool emitting highly toxic, flammable vapors. Dark clouds threatening rain. Light wind drifting vapors northbound to residential area about 30 ft above ground."

10. AREAS DAMAGED OR THREATENED:
    - Describe actual and potential danger or damage to surrounding environment,
    - Identify body of water, area or resources threatened or affected.
    - Nature and extent of damage to property, wildlife or other natural resources (if any).

11. NOTIFICATIONS MADE AND ASSISTANCE REQUESTED:
    - List all organizations informed of release within and beyond Navy jurisdiction.
    - Include Navy, federal, state, and local authorities, response teams, fire departments, hospitals, etc.
    - Specify type of assistance requested from these organizations.
    - If telephonic report to National Response Center made, list: DTG of telephonic report; NRC report/case number; name of NRC official taking report; and Navy Command making telephonic report.

12. FIELD TESTING:
    - Indicate findings and conclusions as to concentration, pH, etc.

13. CONTROL AND CONTAINMENT ACTIONS [PLANNED /TAKEN]:
    - If none, explain why.
    - Specify method used to control and contain release.
    - For example: "Gas barriers used to control and contain vapor emissions. Runoff contained by excavating ditch circumscribing affected area."

14. CLEAN-UP ACTIONS [PLANNED /TAKEN]:
    - If none, explain why.
    - Identify on-site or off-site treatment, method used, parties involved in clean-up/removal and disposal area.
    - For example: "No clean-up action taken. Toxic vapors present, potential danger to clean-up crew. Contaminated soil will be excavated and shipped by NAS personnel to Class I HW disposal site in Portstown, CA when conditions allow."

15. AMOUNT OF SUBSTANCE RECOVERED [VOLUME/WEIGHT] (Pure product.):

16. PARTIES PERFORMING [CONTAINMENT/CLEAN-UP] ACTIVITIES:
    - Identify lead organization in charge: Navy Command; USCG; EPA.
    - Identify all other parties involved: commercial firms; supporting Navy activities; State or local agencies.

17. FEDERAL, STATE OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT:
    - Identify by name and agency any regulatory official attending on-scene or making telephonic inquiry.
    - Note whether officials boarded vessel and include date, time and spaces inspected.

18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS.

19. LESSONS LEARNED: How could this release have been avoided?

20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: List name, rank/rate, command, code, DSN and/or commercial telephone numbers.//

FIGURE A-3: OIL SPILL REPORT MESSAGE (SAMPLE)

UNCLASSIFIED
FM USS NEVERSAIL (Vessel originating spill)
TO COMNAVREG HAWAII HI//N00/N01/N4//
INFO CNO WASHINGTON DC//N45//
CHINFO WASHINGTON DC//
COMPACFLT PEARL HARBOR HI//N3/N5/N01CE//
JBPHH HI//N00/N01//
USPACOM CAMPSMITH HI//J4/J44// (for significant spills)
COMNAVSEASYSCOM WASHINGTON DC//00C25//
COMCOGARD SECTOR HONOLULU HI
COGARD NATIONAL RESPONSE CENTER WASHINGTON DC//
NAVFAC EXWC PORT HUENEME CA//424//
NOLSC DC FT BELVOIR VA//
NAVY JAG WASHINGTON DC//11//
CNIC WASHINGTON DC//N45//
(Vessel ISIC or TYCOM)
UNCLAS//N05090//
SUBJ/OIL SPILL REPORT, 25 GALS, USS NEVERSAIL//
MSGIF/GENADMIN/USS NEVERSAIL //
RMKS/

1. LOCAL TIME AND DATE SPILL OCCURRED/DISCOVERED: 11/09/03, 0930

2. FACILITY/VESSEL ORIGINATING SPILL: USS NEVERSAIL, LST 1234, UIC 66666

3. SPILL LOCATION: JBPHH HI PIER BRAVO 12

4. VOLUME SPILLED IN GALLONS: 25

5. TYPE OF OIL SPILLED: DIESEL FUEL

6. OPERATIONS UNDER WAY WHEN SPILL OCCURRED/DISCOVERED: INBOARD FUEL TRANSFER

7. SPILL CAUSE: FUEL OIL SUSPECTED TO HAVE ORIGINATED FROM THE TOP OF FUEL STORAGE EXPANSION TANK.

8. SLICK DESCRIPTION AND MOVEMENT: LARGE SHEEN 30FT BY 120FT, MOVING SW

9. SPILL ENVIRONMENT: CLEAR, WINDS 045, 15 KTS GUSTING TO 20 KTS, AIR TEMP 83F

10. AREA DAMAGED OR THREATENED: NONE

11. TELEPHONIC REPORT TO NATIONAL RESPONSE CENTER MADE: NRC CASE # 14658, on 08/09/2001 at 0840; HAWAII STATE EMERGENCY RESPONSE COMMISSION WAS MADE. CASE # 2000 0905-1212, REPORT MADE BY USS NEVERSAIL.

12. SAMPLES TAKEN: NONE

13. CONTAINMENT METHOD: CONTAINED IN TYPE 2 BOOM

14. SPILL REMOVAL METHOD: ABSORBENT MATERIAL AND 1 WILLARD SKIMMER

15. VOLUME OF PRODUCT RECOVERED IN GALLONS: 15 GALS

16. PARTIES PERFORMING SPILL REMOVAL: JBPHH FRT

17. FEDERAL, STATE OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT: TELEPHONIC INQUIRY BY LT DAN NORTON, MSO HONOLULU

18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS: SPILL CLEANUP COMPLETED ON 9 NOV 03 BY 1630.

19. LESSONS LEARNED: CAUSE STILL UNDER INVESTIGATION

20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: LCDR DAVEY JONES, USS NEVERSAIL, COM 808/476-7890//

BT

FIGURE A-4: HAZARDOUS SUBSTANCE SPILL REPORT MESSAGE (SAMPLE)

UNCLASSIFIED

FM XYZ PEARL HARBOR HI//09//
TO COMNAVREG HAWAII HI//N00/N01/N4//
INFO CNO WASHINGTON DC//N45//
CHINFO WASHINGTON DC//
COMPACFLT PEARL HARBOR HI//N3/N5/N01CE//
JBPHH HI//N00/N01//
USPACOM CAMPSMITH HI//J4/J44// (for significant spills)
COMNAVSEASYSCOM WASHINGTON DC//00C//
COMCOGARD SECTOR HONOLULU HI
COGARD NATIONAL RESPONSE CENTER WASHINGTON DC//
NAVFAC EXWC PORT HUENEME CA//424//
NAVY JAG WASHINGTON DC//11//
CNIC WASHINGTON DC//N45//
UNCLAS//NO5090//
SUBJ/HAZARDOUS SUBSTANCE RELEASE REPORT/PEARL HARBOR HI//
REF/A/DOC/OPNAVINST 5090.1D//
RMKS/

1. LOCAL TIME AND DATE RELEASE: 8/09/01, 0831

2. ACTIVITY ORIGINATING RELEASE: XYZ PEARL HARBOR

3. RELEASE LOCATION: BUILDING 553

4. AMOUNT RELEASED: 5 GALLONS

5. HAZARDOUS SUBSTANCE RELEASED: 2, ETHYL/BUTANOL

6. TYPE OF OPERATION AT SOURCE: WAREHOUSE/STORAGE

7. CAUSE OF RELEASE: CONTAINERS NOT SEALED PRIOR TO PACKING

8. TYPE OF CONTAINER FROM WHICH SUBSTANCE ESCAPED: 5 GALLON CAN

9. RELEASE ENVIRONMENT: MAJORITY OF SPILL WAS INSIDE TRANSPORT TRAILER, LESS THAN A GALLON WENT INTO THE PARKING LOT.

10. AREAS DAMAGED OR THREATENED: NONE

11. NOTIFICATIONS MADE AND ASSISTANCE REQUESTED: NO ADDITIONAL ASSISTANCE REQUIRED. NATIONAL RESPONSE CENTER NOTIFIED 8/09/01, 0840; CONTROL #004507, HAWAII STATE EMERGENCY RESPONSE COMMISSION NOTIFIED; CASE # 2000-0905-1212.

12. FIELD TESTING: NONE

13. CONTROL AND CONTAINMENT ACTIONS (PLANNED/TAKEN): SPEEDY-DRY USED TO CONTAIN AND RECOVER SPILL.

14. CLEAN-UP ACTIONS (PLANNED/TAKEN): THE TRAILER IS TO BE DECONTAMINATED & STEAM CLEANED.

15. AMOUNT OF SUBSTANCE RECOVERED (VOLUME/WEIGHT): 5 GALLONS

16. PARTIES PERFORMING (CONTAINMENT/CLEAN-UP) ACTIVITIES: NAVFAC HI HAWAII AND FEDERAL FIRE DEPARTMENT

17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING INCIDENT: NONE

18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS: NONE

19. LESSONS LEARNED: CHECK ALL CONTAINERS CLOSELY PRIOR TO PACKING. DDNV TO DO FOLLOW-UP INVESTIGATION.

20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: LCDR DAVEY JONES XYZ PEARL HARBOR; COM 808-476-7890//
BT

FIGURE A-5: OPREP- 3 EXAMPLE NAVY BLUE MESSAGE REPORT

FROM: USS EXPLO
TO: COMNAVREG HAWAII HI//N52//
NAVFAC HI PEARL HARBOR HI//20//
COMPACFLT PEARL HARBOR//04E//
COMTHIRDFLT (for pollution originating from ships)
INFO: CNO WASHINGTON DC//OP45//
MSCPAC OAKLAND CA//
NAVY JAG ALEXANDRIA VA//
COMNAVFACENGCOM ALEXANDRIA VA//181//
COMNAVSEASYSCOM WASHINGTON DC//00C24//
PACNAVFACENGCOM PEARL HARBOR HI//114//
NAVFAC EXWC PORT HUENEME CA//112//
NAVPETOFF ALEXANDRIA VA//
(APPLICABLE NOSC)
(PROPERTY OWNING ACTIVITY -- IF OTHER THAN THE ORIGINATOR)
BT
CLASSIFICATION//N03100//
SUBJ: OPREP-3 NAVY BLUE
MSGID/GENADMIN/EXPLO/009B/MAY//
AMPN/INITIAL VOICE REPORT TO COMNAVREG HAWAII//RMKS/

1. INCIDENT: DURING AN INSPECTION OF A CARGO MAGAZINE FOR REPORTED FLOODING, TWO CREW MEMBERS OVERCOME BY TOXIC FUMES.

2. CDR'S ESTIMATE: DUE TO THE NATURE OF THE CARGO, PRESENT EFFORTS ARE LIMITED TO CONTROLLING THE FLOODING OF THE COMPARTMENTS, SHIP MAINTAINS INTEGRITY. ANTICIPATE ARRIVAL AT PEARL HARBOR IN 48 HOURS.

3. REFERENCE: VOICE REPORT TO COMNAVREG HAWAII 231937Z MAY 1986.

4. DETAILS: GGGG
   A. TIME: APPROX 232000Z MAY 1986
   B. LOCATION: 18ON 165OW APPROX 140 NM WSW PEARL HARBOR.

5. NARRATIVE: FLOODING FROM UNKNOWN SOURCE CAUSED ONE OR MORE CONTAINERS TO BEGIN LEAKING. ACTIONS BY SHIPS CREW LIMITED TO USING EDUCTORS AND PUMPS TO PREVENT FLOODING OF THE COMPARTMENT. ASSISTANCE REQUESTED FROM EOD TO STABILIZE THE CARGO FOR OFFLOADING.

6. LOSS/DAMAGE: TWO INJURED CREW MEMBERS BEING READIED FOR MEDEVAC TO NAVAL HOSPITAL AT PEARL HARBOR FOR TREATMENT. NAMES OF INJURED WITHHELD PENDING NOTIFICATION.

7. REMARKS: FOR COMNAVREG HAWAII, REQUEST AUTHORITY TO ENTER JBPHH AFTER CARGO STABILIZED. FOR MSCPAC, REQUEST OFFLOADING INSTRUCTIONS FOR DAMAGED CARGO AND DECONTAMINATION/CHECKUP FOR REMAINING CREW//BT

PAGE INTENTIONALLY LEFT BLANK

APPENDIX B
RESPONSE MANAGEMENT - INCIDENT COMMAND SYSTEM

B.1 NATIONAL INCIDENT MANAGEMENT SYSTEM INCIDENT COMMAND SYSTEM

Homeland Security Presidential Directive (HSPD) 5 directs all Federal departments and agencies to adopt the National Incident Management System (NIMS) Incident Command System (ICS) for all incident management, including prevention, preparedness, response, recovery, and mitigation. The ICS response management system is also consistent with the requirements of the National Contingency Plan (40 CFR 300).

The ability of COMNAVREG HI to implement and/or work within a NIMS ICS structure, in the event of a major spill requiring state or Federal involvement, is important to ensure effective coordination with local responders as well as federal and state on-scene coordinators. Local, state, and federal responders will expect COMNAVREG HI to be familiar with and prepared to function effectively within a NIMS ICS organization.

To facilitate spill management and coordination with local, state, and federal emergency responders (if required), NIMS ICS has been used in this ICP as the organizational template for the COMNAVREG HI Spill Management Team (SMT). The ICS organization is designed to readily expand or contract, as required, to effectively manage the spill response. For small spills, the functional sections may be sufficiently staffed by the activity from which the spill originated. For large incidents, a fully staffed structure using COMNAVREG HI personnel and other federal and state agency personnel may be required.

Figure B-1 shows the COMNAVREG HI Unified Command Structure with the integration of Federal and State On-Scene Coordinators (FOSC and SOSC).

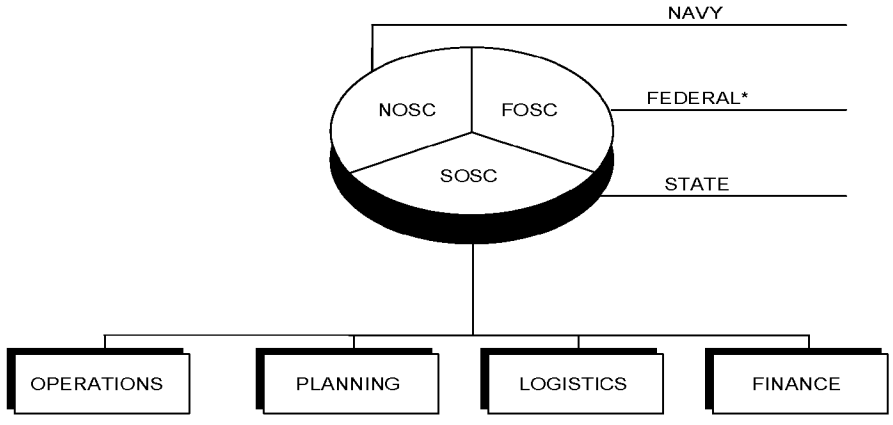


FIGURE B-1: COMNAVREG HI UNIFIED COMMAND ORGANIZATION

***Note:** The FOSC is the U.S. Coast Guard for OHS spills in the coastal zone; the U.S. EPA for OHS spills in the inland zone; and the Navy for Navy HS releases (only HS, not oil), when the release is on, or the sole source from any Navy facility or vessel, including vessels bareboat chartered and operated under the jurisdiction, custody or control of DoD.

B.2 NAVY INCIDENT MANAGEMENT

B.2.1 Organization

The Incident Commander (IC) can activate personnel as required based upon the spill size and complexity. Commander Navy Region Hawaii (RDML Robert B. Chadwick II) has designated Mr. James D. Saul as his Navy On-Scene Coordinator Representative (NOSC Rep) for releases of oil and hazardous substances, respectively. The NOSC Rep will fill the role of Incident Commander for large spills beyond the response capabilities of a Navy activity. In the event of a spill from a ship outside the boundaries of a Navy Facility and within the COMNAVREG HI AOR, the NOSC Rep will act as Incident Commander. If the NOSC Rep assumes direction of the overall response, the initial Incident Commander normally will be assigned a staff position, such as the Deputy Incident Commander or assigned to the Command Staff. The identity of the Navy Incident Commander must be clear at all times to all concerned.

B.2.2 Activity Responsibilities

A Navy facility or vessel (activity) that originates or discovers a spill or release is responsible for the control, containment, and cleanup of the spill. Upon notification of a spill incident, the activity shall:

- Take immediate action to control and contain the release or spill
- Make appropriate notifications
- Implement the activity's Facility or Vessel Response Plan. Initial priorities are (1) ensuring personnel health and safety; (2) securing the source of the spill and making required notifications; and (3) protecting sensitive areas

If this cleanup is beyond the activity's capabilities, that activity shall request assistance from NOSC Rep.

B.2.3 NOSC Representative Responsibilities

The NOSC Rep is responsible for directing and/or coordinating all large oil and hazardous substance spill responses within his/her AOR that are beyond the response capabilities of the spiller. If the spill exceeds the capabilities of the NOSC Rep's spill management team the NOSC Rep may request assistance from other local and regional Navy assets within his/her AOR. In addition, the NOSC Rep can mobilize SUPSALV resources to help augment the spill management team or activate a response contractor using a USCG Basic Ordering Agreement (BOA). As the response organization grows, the identity of the Navy's Incident Commander must be clear at all times.

B.2.4 COMNAVREG HI Response Organization

Figure B-2 shows the organizational chart for COMNAVREG HI's response organization using NIMS ICS. Spills that have, or likely will, impact the environment beyond the boundaries of Joint Base Pearl Harbor-Hickam (JBPHH) will require the direct involvement of agencies or other emergency response entities external to COMNAVREG HI. In this case COMNAVREG HI's response organization will form a Unified Command (UC) as shown in Figure B-1.

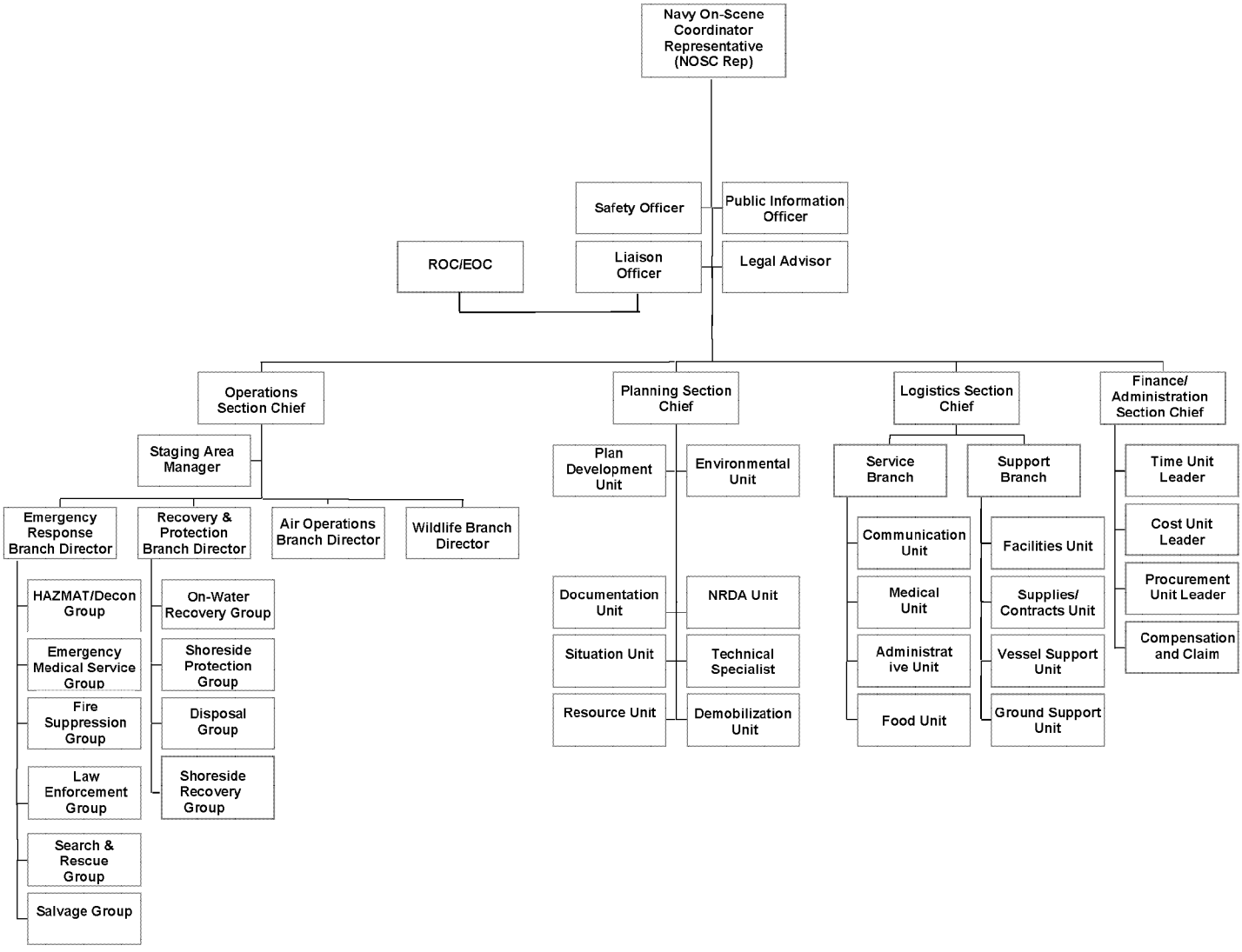


FIGURE B-2: COMNAVREG HI RESPONSE ORGANIZATION

B.2.5 COMNAVREG HI Spill Management Team

COMNAVREG HI's Spill Management Team works within the framework of the response organization shown in Figure B-2 to manage large scale oil or hazardous substances spill response incidents. Participants are trained according to their functional roles; see Appendix Q (Response Personnel Training) for more information. The COMNAVREG HI's SMT recall list is located in Appendix U.

B.2.6 USCG Incident Management Handbook

COMNAVREG HI's SMT will use the USCG Incident Management Handbook (IMH) to assist them in the use of NIMS ICS during large oil or hazardous substances spill response incidents. The IMH was designed to be an easy reference job aid for responders and provides a wealth of

information on NIMS ICS. Information and guidance can be found on topics such as; roles and responsibilities, the planning cycle, meetings, briefings, ICS form, etc. An electronic version of the USCG IMH can be found here: USCG IMH

The IMH is also available as a mobile application that can be downloaded to smartphones or tablets. The mobile application is an interactive job aid and quick reference resource for first responders for use during incident response operations. The app is designed for use in locations outside cellular and Internet coverage, and doesn't require connectivity to use the majority of its features. The application is not designed to replace the paper version of the IMH. The app is available through the Apple app and Google play store. Search: Coast Guard IMH.

B.3 QUALIFIED INDIVIDUAL

B.3.1 Qualified Individual's Authority

The Code of Federal Regulations, 40 CFR 112.20(h) and 33 CFR 154.1026, requires that this plan specify a "Qualified Individual" having full authority, including contracting authority, to implement removal actions" as well as provide a "description of the duties of the qualified individual." Furthermore, these regulations require that the Qualified Individual have the authority to:

- Activate and engage in contracting with oil spill removal organization(s);
- Act as a liaison with the pre-designated Federal On-Scene Coordinator; and
- Obligate funds required to carry out response activities.

In addition, the Qualified Individual must:

- Speak fluent English;
- Be available on a 24-hour basis and be able to arrive at the facility within a reasonable time;
- Be familiar with the implementation of the facility response plan; and
- Be trained in the responsibilities of the Qualified Individual under the response plan;
- Have the authority to obligate appropriate funding required to support all necessary or directed oil spill response activities.

Commander Navy Region Hawaii (RDML Robert B. Chadwick II) has designated Mr. James D. Saul as his NOSC Rep and Qualified Individual. Mr. Saul will be prepared to assume direct control of a response as the Incident Commander and Qualified Individual. Contact information for the Qualified Individual and Alternate is shown in Table B-1 below.

TABLE B-1: QUALIFIED INDIVIDUAL INFORMATION

Qualified Individual	NAME	**James D. Saul**
Response Time: 1 hour	Position/Title	Navy On-Scene Coordinator (NOSC) Representative
	Address	Building X-11, 400 Marshall Road JBPHH, HI 96860-3114
	Commercial Work Phone	473-4689
	Cell (24/7)	864-2463
	24-Hour Emergency Phone	ROC 473-3215/3216

TABLE B-1: QUALIFIED INDIVIDUAL INFORMATION		
Alternate Qualified Individual	NAME	**John Muraoka**
Response Time: 1 hour	Position/Title	Alternate NOSC Representative
	Address	Building X-11, 400 Marshall Road JBPHH, HI 96860-3114
	Work Phone	471-4850
	24-Hour Emergency Phone	ROC 473-3215/3216

B.3.2 Qualified Individual's Regulatory Duties

The regulatory duties [40 CFR 112.20(h)(3)(ix)] of the Qualified Individual are listed below.

- Notification of all response personnel as needed per the OHS Spill Checklist (Section 2.11, Core Plan);
- Identify character, exact source, amount, and extent of release, as well as other items needed for notification;
- Ensure proper notification is made to the appropriate federal, state, and local authorities with designated response roles, including NRC, SERC, and LEPC;
- Assess interaction of spilled substance with water and/or other substances stored at the facility and notify response personnel at the scene of that assessment;
- Assess possible hazards to human health and environment due to the release. The assessment will consider both direct and indirect effects of the release (gases released, effects of any hazardous surface water runoffs from water or chemical agents used to control fire and explosion). Considerations will also be given to environmental hazards posed by releases from the foam suppression systems at the facility;
- Assess and implement prompt removal actions to contain and remove substance released;
- Coordinate rescue and response actions as previously arranged through Memorandum of Agreement(s) (MOA) and during discussions and drills with response personnel, including the local Fire Departments and contractors;
- Use authority to immediately access funding to initiate cleanup activities. The QI has full authority to implement corrective actions; and,
- Direct cleanup activities until properly relieved of this responsibility.

B.3.3 Qualified Individual's Duties

Under the Department of Defense two-tiered planning concept, the NOSC Rep as the QI has full authority and the duty, as described below, to respond to oil and hazardous substance spills. As outlined in the National Contingency Plan (NCP), the NOSC Rep is the Federal On-Scene Coordinator for hazardous substance (HS) spills originating from Department of Defense shore facilities or vessels.

Under Department of Defense policy, the NOSC Rep has full authority and responsibility to coordinate the response to all oil spills under the direction of the predesignated FOSC. Table B-2 provides a listing of the Qualified Individual's duties.

TABLE B-2: QUALIFIED INDIVIDUAL'S DUTIES
Pre-Spill Duties
• Develop a response plan to meet current regulations and to provide for adequate personnel and other resources necessary to respond to a small, average most probable or worst-case discharge.
• Conduct sufficient number of drills to ensure that the response plan, personnel, and equipment are adequate and work as expected.
• Review the response plan at least annually to ensure that it remains up to date.
Spill Response Duties
• Obtain initial incident briefing from the initial response team. Characterize spill to obtain spill notification data.
• Activate notification system to activate spill response management team.
• Characterize the spill as to source, amount, and other items needed to make required notifications.
• Request additional resources as needed. Ensure other appropriate notifications are made.
• Make incompatibility/interaction assessment and notify proper response personnel.
• Assess the situation for possible direct and indirect health and safety hazards, environmental risks, and coordinate prompt rescue, response, removal, containment, diversion actions, and evacuation actions as outlined in the response plan.
• Ensure that personnel safety is accorded highest priority.
• Develop strategic objectives and response priorities.
• Ensure that spill event and response efforts, costs, orders, contracted personnel, and equipment are properly documented.
• Approve Incident Action Plans, site specific Health and Safety Plans, and other plans as needed.
• Serve as primary contact with FOSC and state regulators.
• Attend unified command meetings with the FOSC and federal and state regulators.
• Manage overall response operations to ensure they are consistent with Department of Defense policy, federal, state, and local regulations, and the needs of impacted areas.
• Review and approve resource allocation changes.
• Monitor response effort and adjust as necessary.
• Serve as primary spokesperson with news media.
• Review and approve press releases.
• Approve Demobilization Plan.
After Spill Duties
• Develop spill report to determine strengths and weaknesses of plan, response effort, etc.
• Amend plan based on lessons learned.
• Review plan for deficiencies.

B.4 COMMON RESPONSIBILITIES OF INCIDENT RESPONDERS

Each participant in an OHS response has common responsibilities, as identified below.

- Receive assignment from your agency, including:
  - Job assignment (e.g. designation, position, etc.)
  - Brief overview of type and magnitude of incident.
  - Resource order number and request number/Travel Orders (TONO).
  - Travel instructions including reporting location and reporting time.
  - Any special communications instructions (e.g. travel, radio frequency).
  - Monitor incident related information from media, internet, etc., if available.

  - Assess personal equipment readiness for specific incident and climate (e.g. medications, money, computer, medical record, etc.). Maintain a checklist of items and possibly a personal Go-Kit.
  - Inform others as to where you are going and how to contact you.
  - Review USCG IMH.
  - Take advantage of available travel to rest prior to arrival.
- Upon arrival at the incident, check in at the designated check-in location. Check-in may be found at any of the following locations (Note: If you are instructed to report directly to an on-scene assignment, check in with the Division/Group Supervisor or the Ops. Section Chief.):
  - Incident Command Post (ICP)
  - Base
  - Staging Areas
  - Helibases
- Receive briefing from immediate supervisor.
- Agency representatives from assisting or cooperating agencies report to the Liaison Officer (LNO) at the ICP after check-in.
- Acquire work materials.
- Abide by organizational code of ethics.
- Participate in Incident Management Team (IMT) meetings and briefings as appropriate.
- Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety Officer.
- Supervisors shall maintain accountability for their assigned personnel with regard as to exact location(s), personal safety, and welfare at all times, especially when working in or around incident operations.
- Organize and brief subordinates.
- Know your assigned communication methods and procedures for your area of responsibility and ensure that communication equipment is operating properly.
- Use clear text and ICS terminology (no codes) in all radio communications.
- Complete forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit.
- Ensure all equipment is operational prior to each work period.
- Report any signs/symptoms of extended incident stress, injury, fatigue or illness for yourself or coworkers to your supervisor.
- Brief shift replacement on ongoing operations when relieved at operational periods or rotation out.
- Respond to demobilization orders and brief subordinates regarding demobilization.
- Prepare personal belongings for demobilization.
- Return all assigned equipment to appropriate location.
- Complete Demobilization Check-out process before returning to home base.
- Participate in After-Action activities as directed.
- Carry out all assignments as directed.
- Upon demobilization, notify the Resource Unit Leader at incident site and home unit of your safe return.

B.5 BEST RESPONSE

IC's and their Command and General Staffs need to closely monitor how well the incident objectives, strategies, and tactics are addressing "Best Response" and key response functions, and to make appropriate adjustments where necessary to ensure the maximum potential for success.

The term "Best Response" means that a response organization will effectively, efficiently, and safely respond to oil spills, minimizing the consequences of pollution incidents and to protect our national environmental and economic interests.

"Best Response" equals a successful response based on achievement of certain key success factors (i.e. the things that a response must accomplish to be considered successful) as follows:

- **Human Health**
  - No public injuries
  - No worker injuries
- **Natural Environment**
  - Source of discharge minimized
  - Source contained
  - Sensitive areas protected
  - Resource damage minimized
- **Economy**
  - Economic impact minimized
- **Public Communication**
  - Positive media coverage
  - Positive public perception
- **Stakeholders Support**
  - Minimize stakeholder impact
  - Stakeholders well informed
  - Positive meetings
  - Prompt Handling of claims
- **Organization**
  - Standard Response Management System
  - Sufficient/Efficient resources
- **Operational**
  - Search and Rescue
  - Fire Fighting
  - Salvage and Lightering
  - Protection
  - Shoreline recovery
  - On-Water recovery
  - Dispersants
  - Assessment
  - In-Situ Burning

- Wildlife
- Disposal

- **Support/Coordination**
  - Public Information
  - Assisting and Cooperating Agencies
  - Environmental
  - Economic
  - Political
  - Claims
  - Natural Resource Damage
  - Investigations
  - Safety
  - Command Post Needs

B.6 INCIDENT COMMAND SYSTEM ORGANIZATION

B.6.1 Unified Command

The Unified Command (Figure B-1) is responsible for coordinating interests of the responsible party, federal, state and local agencies, and public and private interests to achieve strategic decision-making for spill cleanup. It jointly determines objectives, strategies, and priorities of the response. Personnel from other Incident Commands may be assigned to the functional sections of the ICS.

The Unified Command for COMNAVREG HI spill response consists of the following:

- A predesignated FOSC from one of the following agencies:
  - U.S. Coast Guard (USCG) for all oil spills in the coastal zone.
  - U.S. EPA (EPA) for all oil spills in the inland zone.
  - Department of Defense (DoD) for hazardous substance releases from DoD facilities and vessels. COMNAVREG HI is the DoD designated FOSC for all Navy HS releases in the AOR.
- A predesignated State On-Scene Coordinator
- A predesignated Navy On-Scene Coordinator

B.6.2 COMNAVREG HI Spill Management Team

The COMNAVREG HI SMT is designed to integrate into a Unified Command as indicated by Figure B-1. The COMNAVREG HI's SMT recall list is located in Appendix U.

B.6.3 Alternate NOSC Representative

The NOSC Rep may designate an alternate to assist in carrying out Incident Command responsibilities. The duties of the NOSC Rep and the Alternate NOSC Rep are the same and are shown in Section B.3.

B.6.4 NOSC Representative Command Staff

In an Incident Command the Command Staff reports directly to the NOSC Rep. Members of the Command Staff are also available as advisors in their specialties to the functional section chiefs. The duties of the Command Staff are summarized below:

The **Public Information Officer** is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to appropriate agencies and organizations. In a large spill incident, the Incident Command will establish a Joint Information Center (JIC).

The coordination of information release is vital to avoid public confusion and adverse impact on response/recovery operations. The Public Information Officer will plan and coordinate VIP arrangements establishing a protocol office when required.

The **Legal Officer** provides legal advice to the NOSC Rep, Operations Section, and Planning Section Chiefs on all aspects of response operations. The potential for extensive liability and numerous claims for damage requires that the Legal Officer be prepared to advise on claims filing procedures, documentation requirements, and permitting regulations

The **Safety Officer** is responsible for monitoring and assessing hazardous and unsafe situations and developing measures for assuring personnel safety. The Safety Officer will correct unsafe acts or conditions through the regular line of authority. Although, the officer may exercise emergency authority to stop or prevent unsafe acts when immediate action is required. The Safety Officer maintains awareness of active and developing situations, ensures the preparation and implementation of the Site Safety Plan, and includes safety messages in each Incident Action Plan.

The **Liaison Officer** is responsible for maintaining outside agency representative information and contacts when an incident warrants multi-jurisdictional involvement. The Liaison Officer should participate in planning meetings providing updates on capabilities and limitations of assisting agency resources, provide information to local government officials, and relay information from government agency representatives to the NOSC Rep and Section Chiefs.

B.6.5 Functional Sections

The duties and responsibilities of the functional sections in an Incident Command are discussed in the following sections.

B.6.5.1 Operations Section

The Operations Section carries out the spill response activities. It may be composed of multiple groups, depending on the size and potential impact of the incident. The Operations Section Chief directs and coordinates all tactical operations within the response area. The Operations Section provides input to the Planning Section in defining the response and operational goals detailed in the action plan and develops mission assignments and schedules to accomplish them.

The Operations Section Chief (OSC) identifies resource requirements and evaluates and reports the results of response operations. Information provided by over flights, site surveys,

and spill impact and risk assessments are used by the OSC to establish priorities in utilizing spill response assets on a day-to-day basis.

The OSC is responsible for the management of all tactical operations directly applicable to the primary mission. The OSC will normally be selected from the organization/agency with the most jurisdictional responsibility for the incident.

The OSC activates and supervises organization elements in accordance with the Incident Action Plan (IAP) and directs its execution. The OSC also directs the preparation of operational plans; requests or releases resources, monitors operational progress and makes expedient changes to the IAP, as necessary; and reports such to the NOSC Rep. The OSC job aid, available at the USCG Homeport website, should be reviewed regarding the organization and duties of the OSC.

The OSC may have Deputy OSCs, who may be from the same agency or from an assisting agency. The Deputy OSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

The major responsibilities of the OSC are:

- Review common responsibilities identified in Section B.4.
- Obtain briefing from NOSC Rep.
- Evaluate and request sufficient section supervisory staffing for both operational and planning activities.
- Supervise Operations Section field personnel.
- Implement the IAP for the Operations Section.
- Evaluate on-scene operations and make adjustments to organization, strategies, tactics, and resources as necessary.
- Ensure the Resources Unit is advised of changes in the status of resources assigned to the section.
- Ensure that Operations Section personnel execute work assignments following approved safety practices.
- Monitor need for and request additional resources to support operations as necessary.
- Assemble/dissemble task force/strike teams as appropriate.
- Identify/utilize staging areas.
- Evaluate and monitor current situation for use in next operational period planning.
- Convert operational incident objectives into strategic and tactical options. These options may be documented on a Work Analysis Matrix (ICS- 234-CG).
- Coordinate and consult with the PSC, SOFR technical specialists, modeling scenarios, trajectories, etc., on selection of appropriate strategies and tactics to accomplish objectives.
- Identify kind and number of resources required to support selected strategies.
- Subdivide work areas into manageable units.
- Develop work assignments and allocate tactical resources based on strategic requirements (i.e. develop the ICS-215-CG).
- Coordinate planned activities with the SOFR to ensure compliance with safety practices.
- Participate in the planning process and the development of the tactical portions (ICS 204-CG and ICS 220-CG) of the IAP.
- Assist with development of long-range strategic, contingency, and demobilization plans.

- Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
- Receive and implement applicable portions of the incident Demobilization Plan.
- Participate in operational briefings to SMT members as well as briefings to media, and visiting dignitaries.
- Recognize that the Search and Rescue (SAR) Mission Coordinator (SMC) is obligated to carry out the SAR mission in accordance with Coast Guard guidelines, if the incident includes a SAR component.
- Maintain Unit Log (ICS 214-CG).

The Operations Section may be sub-divided into four functional Branches: Emergency Response, Recovery and Protection, Air Operations, and Wildlife. Branch and Group roles and responsibilities are discussed in the following sections.

B.6.5.2 Planning Section

The Planning Section is part of the Incident Command Spill Management Team and is responsible for developing an Incident Action Plan defining the response and operational goals. With the assistance of the Operations Section, the Planning Section develops mission assignments and schedules and identifies resource requirements to accomplish the defined goals. Alternative response strategies are evaluated by the Planning Section and incorporated into the Incident Action Plan on a case-by-case basis. The Planning Section is also responsible for documenting and disseminating all technical and environmental information to concerned parties, including updates on response actions and changes to the Incident Action Plan. Finally, the Planning Section is responsible for recording all events and actions taken during the spill incident for future reference.

The Planning Section is led by the Planning Section Chief (PSC). The PSC is responsible for the collection, evaluation, dissemination and use of incident information and maintaining status of assigned resources. Information is needed to:

- Understand the current situation;
- Predict the probable course of incident events;
- Prepare strategies, plans and alternative strategies and plans for the incident;
- Submit required incident status reports.

The PSC job aid, available at the USCG Homeport website, should be reviewed regarding the organization and duties of the PSC.

The PSC may have Deputy PSC's, who may be from the same agency or from an assisting agency. The Deputy PSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

The major responsibilities of the PSC are:

- Review common responsibilities identified in Section B.4.
- Collect, process, and display incident information.
- Assist OSC in the development of response strategies.
- Supervise preparation of the Incident Action Plan (IAP).
- Facilitate planning meetings and briefings.

- Supervise the tracking of incident personnel and resources through the Resources Unit.
- Assign personnel already on-site to ICS organizational positions as appropriate.
- Establish information requirements and reporting schedules for Planning Section units.
- Determine the need for any specialized resources in support of the incident.
- Establish special information collection activities as necessary (e.g., weather, environmental, toxics, etc.).
- Assemble information on alternative strategies.
- Provide periodic predictions on incident potential.
- Keep SMT apprised of any significant changes in incident status.
- Compile and display incident status information.
- Oversee preparation and implementation of the Incident Demobilization Plan.
- Incorporate plans (e.g., traffic, medical, communications, and site safety) into the IAP.
- Develop other incident supporting plans (e.g., salvage, transition, security).
- Maintain Unit Log (ICS 214-CG).

Depending on the spill scenario, the following unit leaders may be appointed to assist the PSC: Situation Unit Leader, Resource Unit Leader, Documentation Unit Leader, Demobilization Unit Leader, Environmental Unit Leader, and Technical Specialists.

B.6.5.3 Logistics Section

The Logistics Section exists primarily to support the Operations Section. Establishing an effective oil and hazardous substance (OHS) response process requires that operations and logistics work as a unified team, and combine their complimentary and mutually dependent functions into a single effort. Logistics support, particularly for a large pollution response operation, includes communications; response personnel support such as food services, berthing, and medical support; and all facets of equipment and material support including staging, field maintenance, transportation, and general supply support. The Logistics Section will communicate with responders to identify their needs and develop a comprehensive strategic logistics plan. This logistics plan will provide for efficient acquisition, delivery, and placement of appropriate resources based upon anticipated need.

The Logistics Section Chief (LSC) is responsible for providing facilities, services, and material in support of the incident. The LSC participates in the development and implementation of the IAP and activates and supervises the branches and units within the Logistics Section. The LSC job aid, available at the USCG Homeport website, should be reviewed regarding the organization and duties of the LSC.

The LSC may have Deputy LSCs, who may be from the same agency or from an assisting agency. The Deputy LSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

The major responsibilities of the LSC are:

- Review common responsibilities identified in Section B.4.
- Plan the organization of the Logistics Section.
- Assign work locations and preliminary work tasks to section personnel.
- Notify the Resources Unit of the Logistics Section units activated, including names and locations of assigned personnel.

- Assemble and brief Logistics Section branch directors and unit leaders.
- Determine and supply immediate incident resource and facility needs.
- Develop and advise all sections of the SMT resource approval and requesting process.
- Review proposed tactics for upcoming operational period for ability to provide resources and logistical support.
- Identify long-term service and support requirements for planned and expected operations.
- Advise the IC and other section chiefs on resource availability to support incident needs.
- Provide input to and review the Communications Plan, Medical Plan, and Traffic Plan.
- Identify resource needs for incident contingencies.
- Coordinate and process requests for additional resources.
- Track resource effectiveness and make necessary adjustments.
- Advise on current service and support capabilities.
- Request and/or set up expanded ordering processes as appropriate to support incident.
- Develop recommended list of Logistics Section resources to be demobilized and initiate recommendation for release when appropriate.
- Receive and implement applicable portions of the incident Demobilization Plan.
- Ensure the general welfare and safety of Logistics Section personnel.
- Maintain Unit Log (ICS 214-CG).

B.6.5.4 Finance Section

The Finance/Administration Section is responsible for handling all accounting services and personnel administrative matters. The Finance/Administration Section works closely with the Logistics Section to track all expenditures of the response operations. The Finance/ Administration Section is led by the Finance Section Chief (FSC) and is assisted by the Time Unit Leader, Compensation/Claims Unit Leader, Procurement Unit Leader, and Cost Unit Leader.

The FSC, generally the Base Comptroller, is responsible for all financial, administrative, and cost analysis aspects of the incident and for supervising members of the Finance/Administration Section. The FSC job aid, available at the USCG Homeport website, should be reviewed regarding the organization and duties of the FSC.

The FSC may have Deputy FSCs, who may be from the same agency or from an assisting agency. The Deputy FSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

The major responsibilities of the FSC are:

- Review common responsibilities identified in Section B.4.
- Participate in incident planning meetings and briefings as required.
- Review operational plans and provide alternatives where financially appropriate.
- Manage all financial aspects of an incident.
- Provide financial and cost analysis information as requested.
- Gather pertinent information from briefings with responsible agencies.
- Develop an operating plan for the Finance/Administration Section; fill supply and support needs.
- Determine the need to set up and operate an incident commissary.
- Meet with assisting and cooperating agency representatives, as needed.

- Maintain daily contact with agency(s) administrative headquarters on Finance/Administration matters.
- Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
- Provide financial input to demobilization planning.
- Ensure that all obligation documents initiated at the incident are properly prepared and completed.
- Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
- Develop recommended list of section resources to be demobilized and initial recommendation for release when appropriate.
- Receive and implement applicable portions of the incident Demobilization Plan.
- Maintain Unit Log (ICS 214-CG).

B.6.6 ICS Branch/Unit Duties and Responsibilities

The number of personnel required in Operations, Planning, Logistics, or Finance varies with the magnitude and circumstances surrounding the source and cause of the event. Section chiefs shall be familiar with the possible tasks that their sections might be required to perform. They will ensure that effective command and control is maintained as the organization expands.

In an Incident Command organization, some section chiefs and branch directors may come from organizations other than the Navy. More detailed information on branch/unit duties and responsibilities can be found in the USCG IMH.

B.7 INCIDENT COMMAND SYSTEM FORMS AND MEETINGS

B.7.1 Incident Command System Forms

ICS forms, plus their instructions, are located in Tab 5 of this plan. Additional information on the use of these forms can be found in the USCG IMH.

B.7.2 Incident Command System Meetings

This section provides information on the meetings, briefings, and action planning process that goes into the Operational Period Planning Cycle that is used to prepare an Incident Action Plan (IAP) for spill response. COMNAVREG HI will use the ICS meeting schedule presented in the USCG IMH.

Figure B-3 depicts the Operational Period Planning Cycle as shown in the USCG IMH. The purpose of the "Operational Period Planning Cycle" is to prepare an Incident Action Plan (IAP). Once prepared, the IAP is used to guide spill response operations during the next operational period.

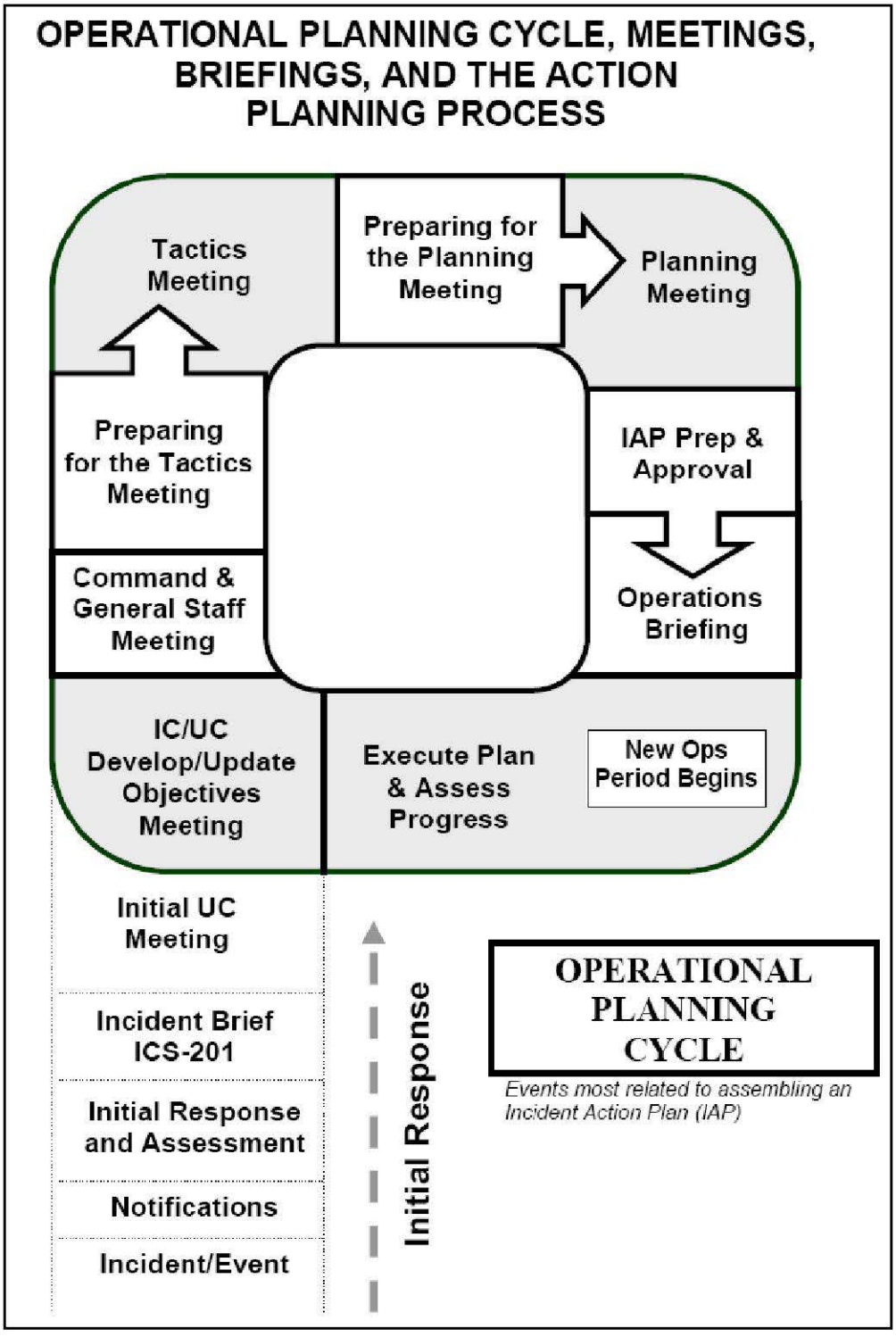


FIGURE B-3: OPERATIONAL PLANNING CYCLE

The process starts at the beginning of the incident. The Initial Response and Assessment occurs in all incidents. Short-term responses, which are small in scope and/or duration (e.g., a few resources working one operational period), can often be coordinated using only ICS-201-CG (Incident Briefing Form).

Table B-3 contains the list of meetings that comprise the Operational Period Planning Cycle. Certain optional "special purpose" meetings are also listed. These special purpose meetings are most applicable to larger incidents of longer duration. Meeting descriptions listing the ICS forms and other types of information that each section must be prepared to brief during these meetings can found in the USCG IMH.

TABLE B-3: OPERATIONAL PERIOD PLANNING CYCLE

Meeting	Timing
Incident Briefing (ICS 201).	At transfer of command (new IC/UC).
Initial Unified Command Meeting.	When the UC is formed.
Unified Command Objectives Meeting.	Prior to the Command and General Staff Meeting.
Command and General Staff Meeting.	Prior to the preparation time for the Tactics Meeting.
Tactics Meeting (draft ICS 215).	Prior to preparation time for the Planning Meeting.
Planning Meeting (final ICS 215).	After preparation time for the Planning Meeting.
Incident Action Plan Preparation.	Immediately following the Planning Meeting. The PSC will assign deadlines for products.
Note: The Incident Action Plan is submitted for IC/UC approval as soon as possible following its preparation.	
Operations Briefing.	Approximately 1 hour before the end of the operational period (both incoming and outgoing shifts attend to perform shift turnover).
Agency Representative Meeting.	As necessary.
Business Management Meeting.	As necessary.
Media Briefing.	As necessary.
Technical Specialists Meeting.	As necessary.
Demobilization Meeting.	As assigned by NOSC Rep.

B.8 HAWAII AREA CONTINGENCY PLAN

The Hawaii ACP contains a section entitled COMMAND (Section 2000). Within this section of the ACP, the COMNAVREG HI Command Staff may find useful information regarding:

- Incident command organization
- Health and safety
- Training
- Liaison and Public Affairs responsibilities
- Standard questions asked by the media
- Community outreach
- Use of volunteers

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX C
FACILITY INFORMATION

C.1 INTRODUCTION

Under OPA 90 regulations Joint Base Pearl Harbor-Hickam (JBPHH) qualifies as a "Complex Facility", i.e. a facility possessing a combination of Marine Transportation-Related (MTR) and Non-Transportation-Related (NTR) components. Under Section 311(j) of the Clean Water Act these sections are subject to the jurisdiction of more than one federal agency. In particular, the MTR portion is regulated by the USCG and the NTR portion is regulated by the EPA. According to the Clean Water Act:

"the MTR portion of the complex extends from the facility oil transfer system's connection with the vessel to the first valve inside the secondary containment surrounding tanks in the non-transportation-related portion of the facility or, in the absence of secondary containment, to the valve or manifold adjacent to the tanks comprising the non-transportation-related portion of the facility, unless another location has otherwise been agreed to by the COTP and the appropriate Federal official.."

At JBPHH, the MTR component (subject to 33 CFR 154) consists of fuel transfer equipment and pipelines on each fueling pier to the first control valve on each pipeline at the valve station or valve chamber at the end of each pier. The valve station or valve chamber for each pier is identified below:

- Bravo Dock - Valve Chamber #20
- Hotel Pier - Valve Station #3
- Kilo Pier - Valve Station #3
- Mike Dock - Valve Chamber #31
- Sierra Pier - Valve Chamber #38

The NTR component (subject to 40 CFR 112) consists of the other remaining oil storage, handling, and use facilities on JBPHH.

This appendix contains information and derivations to establish the following:

- The Multi-Level Discharge Planning Volumes for JBPHH computed under the EPA and USCG Planning Procedures
- The Harm Classification for the MTR and NTR Components of JBPHH.
- The Worst-Case Discharge (WCD) and Planning Volumes for the MTR and NTR Components of JBPHH.
- The Discharge Planning Distance for JBPHH under the EPA and USCG OPA 90 Implementing Instructions.

The discharge planning volumes, response capabilities, and discharge planning distances addressed in this ICP are the **largest** computed under the EPA and USCG OPA 90 implementing regulations.

C.2 MULTI-LEVEL DISCHARGE PLANNING VOLUMES FOR JBPHH

Table C-1 provides a summary of the discharge planning volumes for JBPHH.

TABLE C-1: MULTI-LEVEL DISCHARGE PLANNING VOLUMES FOR JBPHH

Discharge Scenario	Agency	Discharge Determination	Planning Volume*
Average Most Probable Discharge (AMPD)	USCG	The lesser of 50 barrels (2,100 gallons) or 1% of WCD of the facility.	14 bbls / 595 gals
Small Discharge	EPA	Less than or equal to 50 barrels (2,100 gallons). Not to exceed WCD of the facility.	50 bbls / 2,100 gals
Maximum Most Probable Discharge (MMPD)	USCG	The lesser of 1,200 barrels (50,400 gallons) or 10% of WCD of the facility.	142 bbls / 5,946 gals
Medium Discharge	EPA	The lesser of 857 barrels (36,000 gallons) or 10% of WCD of the facility.	857 bbls / 36,000 gals
Worst-Case Discharge (MTR)	USCG	The discharge volume from all piping carrying oil between the marine transfer manifold and the non-transportation-related portion of the facility.	1,416 bbls / 59,459 gals
Worst-Case Discharge (NTR)	EPA	Capacity of largest storage tank within secondary containment, plus the cumulative total volume of all storage tanks without secondary containment.	150,237 bbls / 6,309,952 gals

* OPA 90 requires Complex Facilities to use the larger of the EPA or USCG planning volumes. The larger planning volume is highlighted.

C.3 HARM CLASSIFICATION

JBPHH is a Substantial Harm Facility under the USCG regulations. Table C-2, MTR Facility Classification – shows the applicable criteria for this classification.

TABLE C-2: MTR FACILITY CLASSIFICATION (USCG)

Mobile MTR facility capable of transferring oil to and from vessel with capacity of 250 bbls or more?	
Check	**Classification**
	Yes, MTR facility is a substantial harm facility
	No, maximum capacity of vessel served is _____ bbls and 33 CFR 154 does not apply unless otherwise determined by the COTP.
	No, facility is not a mobile MTR facility and 33 CFR 154 does not apply
Fixed MTR onshore facility or intended to be used to transfer oil to and from vessel with capacity of 250 bbls or more?	
X	Yes, MTR facility is a substantial harm facility
	No, Maximum capacity of vessel served is _____ bbls and 33 CFR 154 does not apply unless otherwise determined by the COTP.
	No, facility is not a mobile MTR facility and 33 CFR 154 does not apply

JBPHH is a Substantial Harm Facility under EPA regulations. Table C-3, NTR Facility Classification – shows the applicable criteria for this classification.

TABLE C-3: NTR FACILITY CLASSIFICATION (EPA)	
Maximum oil storage capacity is approximately 48 million gallons. Is this greater than 42,000 gallons and do operations include over the water transfers of oil to and from vessels?	
Check	**Classification**
X	Yes, NTR facility is a substantial harm facility and a response plan is required
If no, is the maximum oil storage capacity equal to or greater than one million gallons?	
	No, a response plan submission is not required unless required by the EPA Regional Administrator
If yes, is there secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground tank plus sufficient freeboard to allow for precipitation within each storage area?	
	No, NTR facility is a substantial harm facility and a response plan submission is required
If yes, is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments or shut down a public drinking water intake?	
X	Yes, NTR facility is a substantial harm facility and a response plan is required
If no, has the facility had a reportable oil spill in an amount equal to or greater than 10,000 gallons within the past 5 years?	
	Yes, NTR facility is a substantial harm facility and a response plan is required
	No, a response plan submission is not required unless required by the EPA Regional Administrator

C.4 WCD AND PLANNING VOLUMES FOR MTR COMPONENT

C.4.1 Data for Deriving MTR WCD

The MTR WCD is based on three pipelines that run from fuel transfer equipment on Hotel Pier (fueling pier) to the first control valve for each pipeline at Valve Station #3 at the end of the pier. Information on these pipelines is provided in Table C-4.

TABLE C-4: MTR PIPING DATA

Pipeline	Pipeline Section	Type of Oil	MAOP*	Pipeline Length
12 Inch	Hotel Pier to Valve Chamber #3	F-24	8,000	2,800 Feet
12 Inch	Hotel Pier to Valve Chamber #3	JP-5	9,000	2,800 Feet
18 Inch	Hotel Pier to Valve Chamber #3	F-76	16,000	2,800 Feet

*Maximum allowable operating pressure in barrels per hour.

Table C-5 provides data on Hotel Pier.

TABLE C-5: MTR FUEL PIER DATA

Port	Pier Facility	Product	Number of Connections	Number & Size of Pipelines	Number of Berths	Berth Length	Berth MLW	Depth of Approach	Receipt Rate (BPH)	Issue Rate (BPH)
JBPHH	HOTEL PIER	F-76	31	(1) 18"	4	668' EACH	40'	40'	12,000	16,000
		F-24	31	(1) 12"	4	668' EACH	40'	40'	8,000	8,000
		JP-5	31	(1) 12"	4	668' EACH	40'	40'	10,000	9,000
		DEFUEL	17	(1) 6"	4	668' EACH	40' AVG	40'	1,500	NA
		BALLAST	15	(1) 12"	4	668' EACH	40' AVG	40'	NA	NA

NOTES: Hotel Pier details: Reinforced concrete, 1,336 ft causeway, 2,672 ft of total pier space, 31 fueling stations (can each issue F-24, F-76, and JP-5).

C.4.2 MTR WCD for Individual Pipelines

Table C-6 thru C-8 contains the computation of the WCD for the three pipelines that run from the fuel transfer equipment on Hotel Pier to Valve Chamber #3 at the end of Hotel Pier. The maximum allowable operating pressure (MAOP) for the largest pipeline, the 18-inch F-76 line, is a transfer rate of 16,000 barrels per hour.

TABLE C-6: WCD FOR 18-INCH F-76 PIPELINE

Line Drainage Volume				
Pipeline Section	**Section Length (ft)**	**Pipe Diameter (in)**	**Number**	**Volume (ft^3)**
Hotel Pier to Valve Chamber #3	2,800	18	1	4,948
Total Drainage Volume (gals) [A]				37,014
Break-Out Tanks				
Total Break-Out Tank Volume [B]				0
Pumping Discharge Volume				
Pumping Rate (gals per hour) [C]	Time to Discover Discharge (hours) [D]	Time to Stop Pumping (hours) [E]	Pumping Discharge Volume (gals) [F] = [C]*([D]+[E])	
672,000	0.0167	0.0167	22,445	
MTR WCD Volume Non-Persistent (Group I) Oil = [A]+[B]+[F]			59,459 gals (1,416 bbls)	

TABLE C-7: WCD FOR 12-INCH JP-5 PIPELINE

Line Drainage Volume				
Pipeline Section	**Section Length (ft)**	**Pipe Diameter (in)**	**Number**	**Volume (ft^3)**
Hotel Pier to Valve Chamber #3	2,800	12	1	2,199
Total Drainage Volume (cubic feet)				15,851
Break-Out Tanks				
Total Break-Out Tank Volume [B]				0
Pumping Discharge Volume				
Pumping Rate (gals per hour) [C]	Time to Discover Discharge (hours) [D]	Time to Stop Pumping (hours) [E]	Pumping Discharge Volume (gals) [F] = [C]*([D]+[E])	
378,000	0.0167	0.0167	12,625	
MTR WCD Volume Non-Persistent (Group I) Oil = [A]+[B]+[F]			28,476 gals (678 bbls)	

TABLE C-8: WCD FOR 12-INCH F-24 PIPELINE

Line Drainage Volume				
Pipeline Section	**Section Length (ft)**	**Pipe Diameter (in)**	**Number**	**Volume (ft^3)**
Hotel Pier to Valve Chamber #3	2,800	12	1	2,199
Total Drainage Volume (gals) [A]				15,851
Break-Out Tanks				
Total Break-Out Tank Volume [B]				0

TABLE C-8: WCD FOR 12-INCH F-24 PIPELINE			
Pumping Discharge Volume			
Pumping Rate (gals per hour) [C]	Time to Discover Discharge (hours) [D]	Time to Stop Pumping (hours) [E]	Pumping Discharge Volume (gals) [F] = [C]*([D]+[E])
336,000	0.0167	0.0167	11,222
MTR WCD Volume Non-Persistent (Group I) Oil = [A]+[B]+[F]			27,073 gals (645 bbls)

C.4.3 MTR WCD Volume

The WCD for the MTR component of the facility would occur during transfers using the 32-inch pipeline between the bulk storage tanks at the Red Hill Storage Facility and Valve Chamber #3 at the fuel pier (Hotel Pier). Table C-9 below provides the MTR WCD volume for Type I Oil.

TABLE C-9: MTR FACILITY WCD VOLUME FOR TYPE I OIL	
Pipeline	**WCD Planning Volume**
18 in	59,459 gals
Total	59,459 gals (1,416 bbls)

C.4.4 MTR WCD On-Water and Onshore Recovery Planning Volumes

Table C-10 below calculates the required tiered on-water oil recovery, onshore oil recovery, and temporary recovered oil storage capacities for the WCD of Type 1 Oil.

TABLE C-10: WCD ON-WATER AND ONSHORE RECOVERY PLANNING VOLUMES FOR TYPE I OIL, MTR FACILITY					
Emulsification Factor	**% Recovered Floating Oil**	**% Oil Onshore**	**On-Water Oil Recovery Resource Mobilization Factors**		
[A]	[B]	[C]	TIER 1 [D]	TIER 2 [E]	TIER 3 [F]
1.0	20	10	.15	.25	.40
Tiered On-Water Recovery Planning Volumes					
Tier 1 (Gals/Day) (Worst-Case Volume) (A) (B) (D)	Tier 2 (Gals/Day) (Worst-Case Volume) (A) (B) (E)		Tier 3 (Gals/Day) (Worst-Case Volume) (A) (B) (F)		
(59,459) (1) (.2) (.15) = 1,784	(59,459) (1) (.2) (.25) = 2,973		(59,459) (1) (.2) (.40) = 4,757		
Required Capability For Close-To-Shore Response Activities In Shallow Water*					
Tier 1 (Gals/Day)	Tier 2 (Gals/Day)		Tier 3 (Gals/Day)		
(1,784) (.2) = 357	(2,973) (.2) = 595		(4,757) (.2) = 951		
Onshore Recovery Planning Volume (Worst-Case Volume) (A) (C)	**Temporary Oil Storage Capacity** 2x Daily Oil Recovery Rate				
(59,459) (1) (.1) = 5,946 Gals	Tier 1 (Gal/Day)		Tier 2 (Gal/Day)		Tier 3 (Gal/Day)
	(2) (1,784) = 3,568		(2) (2,973) = 5,946		(2) (4,757) = 9,514

*For nearshore/inland/great lakes/rivers and canals = 20% of on-water recovery capability must be able to operate in water depths 6 ft or less

C.5 WCD AND PLANNING VOLUMES FOR NTR COMPONENT

C.5.1 Data for Deriving NTR WCD

Table C-11 contains data for computing the NTR WCD for JBPHH.

TABLE C-11: DATA FOR DERIVING NTR WCD

Facility Operating Area		Inland/Nearshore		
Types of Oil Handled*		Type I: 48,180,163 Gals Type III: 60,000 Gals		
Type Of Oil	Total Capacity Stored With Adequate Secondary Containment [A]	Total Capacity Stored Without Adequate Secondary Containment [B]	Total Facility Storage Capacity [C]	Capacity Of Largest Aboveground Tank In Secondary Containment [D]
I	48,234,160 Gals	9,952 Gals	48,244,112 Gals	6,300,000 Gals
III	60,000 Gals	0	60,000 Gals	30,000 Gals
Storage Capacity of Permanently Manifolded Tanks				
Oil Type		Manifolded Tank Numbers	Combined Capacity (Gals) [E]	
None		0	0	

*Type I Oil is based on the largest bulk storage tank (6,300,000 gallons) at JBPHH's Upper Tank Farm. Type III Oil is based on 30,000-gallon AST containing lubricating oil near the Fuel Department Underground Pumphouse (Building 59).

C.5.2 NTR WCD Volumes for Type I and III Oils

Table C-12 below provides the data for the NTR WCD for Type I Oil.

TABLE C-12: NTR FACILITY WCD VOLUME FOR TYPE I OIL

1) Are *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility *without* adequate secondary containment? **NO**

(a) If the answer is yes, the final WCD planning volume equals the *total aboveground oil storage capacity at the facility:* WCD volume = N/A

(b) If the answer is no, calculate the total aboveground oil storage capacity of tanks without adequate secondary containment. If *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility have adequate secondary containment, ENTER "0": **9,952 Gals**

2) Calculate the capacity of the largest single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater, plus the volume from question 1 (b): **6,309,952 Gals**

WCD volume = 6,309,952 Gals

The NTR WCD volume for Type I Oil is based on the largest bulk storage tank, approximately 6,300,000 gallons, at JBPHH's Upper Tank Farm, plus the total aboveground oil storage capacity of all tanks without adequate secondary containment.

Table C-13 provides the data for the NTR WCD volume for Type III Oil.

TABLE C-13: NTR FACILITY WCD VOLUME FOR TYPE III OIL
1) Are *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility *without* adequate secondary containment? **NO** (a) If the answer is yes, the final WCD planning volume equals the *total aboveground oil storage capacity at the facility:* WCD volume = N/**A** (b) If the answer is no, calculate the total aboveground oil storage capacity of tanks without adequate secondary containment. If *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility have adequate secondary containment, ENTER "0": **0** 2) Calculate the capacity of the largest single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater, plus the volume from question 1 (b): **30,000 Gals** WCD volume = **30,000 gallons**

The NRT WCD volume for Type III Oil is based on 30,000-gallon AST containing lubricating oil near JBPHH's Fuel Department Underground Pumphouse (Building 59).

C.5.3 NTR WCD On-Water and Onshore Recovery Planning Volumes

Table C-14 computes the required tiered on-water oil recovery, onshore oil recovery and temporary recovered oil storage capacities for the WCD of Type I Oil.

TABLE C-14: WCD ON-WATER AND ONSHORE RECOVERY PLANNING VOLUMES FOR TYPE I OIL, NTR FACILITY

Emulsification Factor	% Recovered Floating Oil	% Oil Onshore	On-Water Oil Recovery Resource Mobilization Factors		
[A]	[B]	[C]	Tier 1 [D]	Tier 2 [E]	Tier 3 [F]
1.0	20	10	.15	.25	.40

Tiered On-Water Recovery Planning Volumes		
Tier 1 (Gals/Day) (Worst-Case Volume) (A) (B) (D)	Tier 2 (Gals/Day) (Worst-Case Volume) (A) (B) (E)	Tier 3 (Gals/Day) (Worst-Case Volume) (A) (B) (F)
(6,309,952) (1) (.2) (.15) = 189,299	(6,309,952) (1) (.2) (.25) = 315,498	(6,309,952) (1) (.2) (.4) = 504,796

Required Capability for Response Activities in Shallow Water*		
Tier 1 (Gals/Day)	Tier 2 (Gals/Day)	Tier 3 (Gals/Day)
(189,299) (.2) = 37,860	(315,498) (.2) = 63,099	(504,796) (.2) = 100,959

Onshore Recovery Planning Volume (Worst-Case Volume) (A) (C)	Temporary Oil Storage Capacity 2x Daily Oil Recovery Rate		
	Tier 1 Gals/Day	Tier 2 Gals/Day	Tier 3 Gals/Day
(6,309,952) (1) (.1) = 630,995 Gals	(189,299) (2) = 378,598	(315,498) (2) = 630,996	(504,796) (2) = 1,009,592

*20% of water recovery capability must be able to operate in water depths equal to or less than 6 ft, i.e., 20% of the above recovery capability for each tier.

Table C-15 computes the required tiered on-water oil recovery, onshore oil recovery and temporary recovered oil storage capacities for the WCD of Type III Oil.

TABLE C-15: WCD ON-WATER AND ONSHORE RECOVERY PLANNING VOLUMES FOR TYPE III OIL, NTR FACILITY					
Emulsification Factor	**% Recovered Floating Oil**	**% Oil Onshore**	**On-Water Oil Recovery Resource Mobilization Factors**		
[A]	[B]	[C]	Tier 1 [D]	Tier 2 [E]	Tier 3 [F]
2.0	50	50	.15	.25	.40
Tiered On-Water Recovery Planning Volumes					
Tier 1 (Gals/Day) (Worst-Case Volume) (A) (B) (D)		Tier 2 (Gals/Day) (Worst-Case Volume)(A) (B) (E)		Tier 3 (Gals/Day) (Worst-Case Volume) (A) (B) (F)	
(30,000) (2) (.5) (.15) = 4,500		(30,000) (2) (.5) (.25) = 7,500		(30,000) (2) (.5) (.4) = 12,000	
Required Capability for Response Activities in Shallow Water*					
Tier 1 (Gals/Day)		Tier 2 (Gals/Day)		Tier 3 (Gals/Day)	
(4,500) (.2) = 900		(7,500) (.2) = 1,500		(12,000) (.2) = 2,400	
Onshore Recovery Planning Volume (Worst-Case Volume)(A)(C)		**Temporary Oil Storage Capacity** 2x Daily Oil Recovery Rate			
		Tier 1 Gals/Day	Tier 2 Gals/Day	Tier 3 Gals/Day	
(30,000) (2) (.5) = 30,000 Gals		(4,500) (2) = 9,000	(7,500) (2) = 15,000	(12,000) (2) = 24,000	

*20% of water recovery capability must be able to operate in water depths equal to or less than 6 ft, i.e., 20% of the above recovery capability for each tier.

Although JBPHH stores, handles, and transfers Types I and III Oils, the storage capacity and throughput of Type I Oil exceed those of Type III Oil by orders of magnitude. The response capabilities required for responding to the WCD of Type I Oil will meet the response requirements for responding to the WCD of Type III Oil. In addition, as provided for in the EPA OPA 90 implementing regulation, Section 7.2.1 of Appendix E to 40 CFR 112, other oil groups which constitute 10 percent or less by volume of the facility's total oil storage capacity do not have to be addressed separately in the ICP.

The WCD scenario for the Upper Tank Farm is discussed in Section D.6 of Appendix D.

C.6 DISCHARGE PLANNING VOLUME SUMMARY FOR A COMPLEX FACILITY

Table C-16 summarizes the tiered discharge planning volumes for type I oil for each regulated component of the complex facility. The complex facility's tiered discharge planning volumes are the greater of the respective NTR and MTR discharge planning tiers.

TABLE C-16: DISCHARGE PLANNING VOLUME SUMMARY FOR COMPLEX FACILITY FOR TYPE I OIL			
Facility Component	**Small/Average Most Probable Discharge**	**Medium/Maximum Most Probable Discharge**	**WCD**
MTR (USGC)	595 Gals	5,946 Gals	59,459 Gals
NTR (EPA)	2,100 Gals	36,000 Gals	6,309,952 Gals
Complex Facility	**2,100 Gals**	**36,000 Gals**	**6,309,952 Gals**
For complex facility: The small/average most probable, medium/maximum most probable and WCD are the greater of the respective NTR and MTR discharge planning tiers.			

Table C-17 identifies the response capabilities that must be contracted for up to the regulatory caps and the remaining response capabilities needed that must have their sources identified in the plan.

TABLE C-17: SUMMARY OF RESOURCE PLANNING ADJUSTMENT FOR REQUIREMENTS THAT EXCEED RESOURCE CAPABILITY CAPS AS OF 18 FEBRUARY, 1998			
Calculated WCD Planning Volume (Gals)	6,309,952		
Resource Planning	**On-Water Recovery (Gals/Day)**		
	Tier 1	Tier 2	Tier 3
Calculated recovery planning volumes for each response tier:	189,299	315,498	504,796
Response capability contracting caps for each response tier for the operating area:	525,000	1,050,000	2,100,000
Additional equipment for which sources must be identified to reach 2x the Tier 3 contracting cap or the calculated planning volume, whichever is lower:	0		
Additional temporary storage capacity required:	0		

The required response capabilities for the COMNAVREG HI WCD planning levels are below the regulatory caps as established in CFR 112.20, Table 5 to Appendix E. Additional response capability beyond the contracting caps does not need to be identified.

C.7 RESPONSE PLANNING DISTANCE

Table C-18 establishes the response planning distance for the type of oil handled at the MTR facility and the characteristics of the water receiving the WCD.

TABLE C-18: MTR FACILITY RESPONSE PLANNING DISTANCE				
Oil Type	**Check**	**Type of Water**	**Response Distance Planning Method**	**Distance in Miles From Facility**
I		Non-Tidal	24 hrs X (maximum current) mph	
I	**X**	Tidal-Ebb		**5**
I		Tidal-Flood	5 miles or to point of maximum tidal influence, whichever is less	NA
III		Non-Tidal	48 hrs X (maximum current) mph	
III		Tidal-Ebb		15
III		Tidal-Flood	15 miles or to point of maximum tidal influence, whichever is less	NA

Table C-19 establishes the response planning distance for the NTR facility.

TABLE C-19: NTR FACILITY RESPONSE PLANNING DISTANCE
Moving Tidal Waters
COMNAVREG HI will use the USCG response planning distances since the EPA NTR OPA 90 regulation uses the same guidelines for moving tidal-influenced waters.

In summary, the response planning distance for JBPHH, for Type 1 oils in “tidal-ebb” waters, is 5 miles from the facility.

APPENDIX D
PLAN IMPLEMENTATION

D.1 INTRODUCTION

As required by the OPA 90 implementing regulations this appendix provides information on the following:

- Oil spill scenarios based on the facility's multi-level discharge planning volumes.
- Response resources required by OPA 90 for the multi-level discharge planning volumes.
- Response strategies to the facility's worst-case discharge.
- Plan implementation for vessel worst-case discharge.
- Plan implementation for facility worst-case discharge.

D.2 OIL SPILL SCENARIOS

EPA-regulated facilities are required to develop oil spill scenarios based on the facility's multi-level discharge planning volumes. The OPA 90 implementing regulation requires complex facilities to compare the multi-level discharge planning volumes computed under the EPA and USCG planning procedures and to plan for the greater spill volumes. See Appendix C of this ICP for the basis and derivations of the discharge planning volumes.

The following sections provide information and spill scenarios for the different discharge planning levels as follows:

- Section D.2.1 details the facility's multi-level discharge planning volumes computed under EPA and USCG planning procedures.
- Section D.2.2 describes possible discharge scenarios for "Small" or "Average Most Probable" Discharges (AMPD).
- Section D.2.3 describes possible discharge scenarios for "Medium" or "Maximum Most Probable" Discharges (MMPD).
- Section D.2.4 presents discharge scenarios for both Marine-Transportation Related (MTR) and Non-Transportation Related (NTR) "Worst-Case Discharges" (WCD).

D.2.1 EPA and USCG Multi-Level Discharge Planning Volumes

Table D-1 lists the EPA and USCG multi-level discharge planning volumes for Type 1 Oil (JP-5 and F-24).

TABLE D-1: MULTI-LEVEL DISCHARGE PLANNING VOLUMES

Size Classification	Regulatory Agency	*Spill Volume (Gals)
Small Discharge	EPA	**2,100**
Average Most Probable Discharge	USCG	595
Medium Discharge	EPA	**36,000**
Maximum Most Probable Discharge	USCG	5,946
Worst-Case Discharge	EPA	**6,309,952**
Worst-Case Discharge	USCG	59,459

* OPA 90 requires Complex Facilities to use the larger of the EPA or USCG planning volumes. The larger planning volume is highlighted.

D.2.2 Small Discharge Scenarios

TABLE D-2: SMALL DISCHARGE SCENARIOS FOR TRANSFER FACILITIES - PUMPHOUSE		
Transfer Facility: Underground Pumphouse		
POTENTIAL SPILL VOLUME (gals): 2,100	TYPE OF OIL: I	POTENTIAL FOR SPILL: Low
POTENTIAL SPILL CAUSES:	Equipment failures and leaks, operator errors, over pressurization that causes equipment failures, accidents	
POSSIBLE CHAIN REACTION OF FAILURES:	None evident for small spills	
LOCATION OF MATERIAL SPILLED:	Pump station 59 (Underground Pumphouse) containment sumps connected to Fuel Oil Reclamation Facility.	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	Not likely that small spills at these sites will travel offsite.	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	

TABLE D-3: SMALL DISCHARGE SCENARIOS FOR TRANSFER FACILITIES - LOADING RACK		
Tank Truck Loading Racks: Kuahua Loading Rack		
POTENTIAL SPILL VOLUME (gals): 2,100	TYPE OF OIL: I & III	POTENTIAL FOR SPILL: Low
POTENTIAL SPILL CAUSES:	Transfer hose ruptures, operator errors, equipment failures, accidents.	
POSSIBLE CHAIN REACTION OF FAILURES:	None evident for small spills.	
LOCATION OF MATERIAL SPILLED:	To curbed containment.	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	Not likely that small spills at these sites will travel offsite	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	

TABLE D-4: SMALL DISCHARGE SCENARIOS FOR BULK OIL STORAGE FACILITIES		
Upper Tank Farm, POL Area 11, Red Hill Storage Facility, FORFAC		
POTENTIAL SPILL VOLUME (gals): 2,100	TYPE OF OIL: I	POTENTIAL FOR SPILL: Low
POTENTIAL SPILL CAUSES:	Tank overfills, equipment leaks, leaks from tank bottom drainage systems.	
POSSIBLE CHAIN REACTION OF FAILURES:	None evident for small spills.	
LOCATION OF MATERIAL SPILLED:	Mostly to containment.	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	Not likely that small spills at these sites will travel offsite	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor.	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	

TABLE D-5: SMALL DISCHARGE SCENARIOS FOR PIPELINES, VALVES AND OTHER OIL TRANSFER EQUIPMENT		
Pipelines, Valves, and Other Oil Transfer Equipment		
POTENTIAL SPILL VOLUME (gals): 2,100	TYPE OF OIL: I	POTENTIAL FOR SPILL: Medium
POTENTIAL SPILL CAUSES:	Equipment leaks and failures, over pressurization that causes equipment failures, accidents, operator errors.	
POSSIBLE CHAIN REACTION OF FAILURES:	None evident in a small spills.	
LOCATION OF MATERIAL SPILLED:	Mostly to ground.	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	Spills will follow natural grade of surrounding grounds, local drainage, and stormwater sewer flow upon entry into the sewer system.	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor.	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	

TABLE D-6: SMALL DISCHARGE SCENARIOS FOR DAY TANK SITES		
Adit 1 and Underground Pumphouse Day Tank		
POTENTIAL SPILL VOLUME (gals): 200 - 2,100	TYPE OF OIL: I	POTENTIAL FOR SPILL: Low
POTENTIAL SPILL CAUSES:	Equipment leaks, overfilling during deliveries, tank rupture, leaks and failures involving connected piping and valves	
POSSIBLE CHAIN REACTION OF FAILURES:	None evident for small spills	
LOCATION OF MATERIAL SPILLED:	Spills from Adit 1 and Underground Pumphouse day tanks will be to the ground.	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	Spills from Adit 1 and Underground Pumphouse day tanks will follow natural grade and local drainage; spills can travel offsite during storms and heavy rain.	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	

D.2.3 Medium Discharge Scenarios

The bulk oil storage sites, receipt/issue and intra-facility oil transfer operations present risk of oil spills at the medium/maximum most probable planning volume level.

TABLE D-7: MEDIUM DISCHARGE SCENARIOS FOR BULK OIL STORAGE FACILITIES		
Upper Tank Farm, POL Area 11, Red Hill Storage Facility, FORFAC		
POTENTIAL SPILL VOLUME (gals): 36,000	TYPE OF OIL: I	POTENTIAL FOR SPILL: Low
POTENTIAL SPILL CAUSES:	Overfills during receiving transfers, equipment failures, accidents.	
POSSIBLE CHAIN REACTION OF FAILURES:	None evident.	
LOCATION OF MATERIAL SPILLED:	To containment.	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	Medium spills likely to travel offsite if spills escape containment.	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor.	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	

TABLE D-8: MEDIUM DISCHARGE SCENARIO FOR PIPELINES, VALVES AND OTHER OIL TRANSFER EQUIPMENT/OPERATIONS		
During Vessel and Intrafacility Transfer Operations		
POTENTIAL SPILL VOLUME (gals): 36,000	TYPE OF OIL: I	POTENTIAL FOR SPILL: Low
POTENTIAL SPILL CAUSES:	Equipment failure, operator errors, overpressurization that causes equipment failures, accidents	
POSSIBLE CHAIN REACTION OF FAILURES:	Possible, e.g., pump cavitation causes relief valve failure.	
LOCATION OF MATERIAL SPILLED:	Surrounding grounds or Pearl Harbor	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	Follow natural grade and local drainage. Likely to travel offsite if spill is not contained.	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor.	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	

D.2.4 MTR and NTR WCD Scenarios

Table D-9 lists the discharge planning volumes for the worst-case discharge at the MTR and NTR portions of the facility. Table D-10 and D-11 describes possible spill scenarios for both type of spills.

TABLE D-9: MTR/NTR WCD PLANNING VOLUMES		
Oil Type	**Size Classification**	**Spill Volume (Gals)**
I	WORST-CASE FOR MTR FACILITY	59,459
I	WORST-CASE FOR NTR FACILITY	6,309,952

The vessel transfer facilities at NAVSUP FLCPH Hotel Pier pose the greatest risk of an MTR worst-case discharge.

TABLE D-10: WCD SCENARIOS FOR MTR FACILITIES		
Vessel Issue/Receipt Transfer Operations		
POTENTIAL SPILL VOLUME (gals): 59,459 (See Appendix C)	TYPE OF OIL: I	POTENTIAL FOR SPILL: Low
POTENTIAL SPILL CAUSES:	Pipeline and associated equipment failures, over pressurization during transfers that causes equipment failures, operator errors, accidents.	
POSSIBLE CHAIN REACTION OF FAILURES:	Possible as a result of fires and other events, e.g., pump cavitations or too rapid shutdown of fuel flow during a spill causes other equipment to fail.	
LOCATION OF MATERIAL SPILLED:	To Pearl Harbor or surrounding grounds.	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	Spill on land will follow natural grade and drainage, to include manmade drainage systems. Worst-case spills will travel offsite due to proximity of receiving water and readily accessible pathways.	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor.	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	

The bulk oil storage facilities at the Upper Tank Farm pose the greatest risk of an NTR worst-case discharge.

TABLE D-11: WCD SCENARIO FOR NTR-BULK OIL STORAGE FACILITY		
Bulk Oil Storage Facilities at Upper Tank Farm		
POTENTIAL SPILL VOLUME (gals): 6,309,952 (See note below)	TYPE OF OIL: I	POTENTIAL FOR SPILL: Low
POTENTIAL SPILL CAUSES:	Catastrophic failures of bulk storage tanks as a result of natural disasters, e.g., hurricanes and earthquakes, or a major mishap, e.g., fire/explosion.	
POSSIBLE CHAIN REACTION OF FAILURES:	A fire or explosion at one location could cause other equipment failures.	
LOCATION OF MATERIAL SPILLED:	Initially to containment.	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE:	A worst-case spill from the bulk storage facilities will impact Pearl Harbor and cause massive contamination of the facility grounds, structures, and drainage and sewer systems in the spill flow pathways.	
POTENTIAL RECEIVING NAVIGABLE WATERS:	Pearl Harbor.	
PROXIMITY OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS/RESOURCES INCLUDING DRINKING WATER INTAKES:	See Appendix N and O.	
Note: This worst-case discharge scenario is based on a release from the largest aboveground storage tank within JBPHH.		

D.3 RESPONSE RESOURCES REQUIRED BY OPA 90

The following tables identify the response resources required to respond to the Small/AMPD, Medium/MMPD, and Worst-Case Discharge planning volumes determined and required by the EPA and USCG OPA 90 implementing regulations. Each table lists the facility equipment available to meet planning requirements and the expected deployment times after notification. More importantly, the tables identify any facility equipment shortfalls and the sources to meet the shortfalls. This will allow the IC to rapidly meet shortfalls as they materialize in the course of the response. The three types of response resources that must be addressed according to 40 CFR 112, Appendix E and 33 CFR 154, Appendix C, are: oil recovery devices, booms, and temporary storage equipment. Each table states the regulatory requirements for each discharge planning level and shows how the requirements will be met.

D.3.1 Response Resources Required for Small/Average Most Probable Discharge

TABLE D-12: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT, AND TEMPORARY STORAGE RESOURCES FOR SMALL/AMPD

Oil Recovery Requirement	
Daily Recovery Rate: 2,100 gals/day - On Scene Within 2 Hrs Of Detection	
EQUIPMENT	DERATED CAPACITY (gals/day)
28' Kvichak Skimmer	23,040
TOTAL DERATED CAPACITY (gals/day)	23,040
SOURCE: Building 3, Ford Island	DEPLOYMENT TIME: < 1 hr
FACILITY SHORTFALL: NO SHORTFALL	

Boom Requirements	
1,000 Linear ft. OR 2 X Length of Longest Vessel- 700 ft, whichever is greater: 1,400 FT. Means Of Immediate Deployment (Within 1 hr of Spill Discovery).	
BOOM TYPE	TOTAL LENGTH (ft)
24" Class II	32,200
SOURCE: Varies (See Appendix E)	DEPLOYMENT TIME: < 1 hr
FACILITY SHORTFALL: NO SHORTFALL	

Temporary Oil Storage Equipment			
2 X Required Daily Oil Recovery Rate = 4,200 gals/day On Scene Within 2 Hrs Of Spill detection			
EQUIPMENT	TOTAL STORAGE CAPACITY (gals)	[1]DAILY STORAGE CAPACITY (gals/day)	[2]NO. OF AVAILABLE DAYS
1 SWOB	70,000	> 4,200	16.5
TOTAL AVAILABLE DAILY STORAGE CAPACITY (gals/day)		> 4,200	
SOURCE: JBPHH Port Operations		DEPLOYMENT TIME: < 1 hr	
FACILITY SHORTFALL: NO SHORTFALL			

[1]Daily storage capacity required to facilitate a daily recovery rate of 2,100 gals/day.
[2]Number of day's temporary storage equipment is available to facilitate a continued daily recovery rate of 2,100 gals/day without the need for transferring recovered oil from temporary storage equipment to maintain recovery rate.

D.3.2 Response Resources Required for Medium/Maximum Most Probable Discharge

TABLE D-13: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR MEDIUM/MMPD			
Oil Recovery Requirement			
Daily Recovery Rate: 18,000 gals/day - On Scene Within 12 Hrs Of Detection			
EQUIPMENT		DERATED CAPACITY (gals/day)	
28' Kvichak Skimmer		23,040	
*TOTAL DERATED CAPACITY (gals/day)		23,040	
SOURCE: Building 3, Ford Island		DEPLOYMENT TIME: < 1 hr	
FACILITY SHORTFALL: NO SHORTFALL			
Boom Requirements			
Sufficient Quantities For Oil Collection, Containment And Protection of Fish and Wildlife and Sensitive Environments (see Appendix E). On Scene Within 12 Hrs Of Detection			
BOOM TYPE		TOTAL LENGTH (ft)	
24" Class II (In Water)		32,200	
SOURCE: Varies (See Appendix E)		DEPLOYMENT TIME: < 1 hr	
FACILITY SHORTFALL: NO SHORTFALL			
Temporary Oil Storage Equipment			
2 X Required Daily Oil Recovery Rate = 36,000 gals/day On Scene Within 12 Hrs Of Detection			
EQUIPMENT	TOTAL STORAGE CAPACITY (gals)	[1]DAILY STORAGE CAPACITY (gals/day)	[2]NO. OF AVAILABLE DAYS
2 SWOB	140,000	> 36,000	3.5
TOTAL AVAILABLE DAILY STORAGE CAPACITY (gals/day)			> 36,000
SOURCE: JBPHH Port Operations		DEPLOYMENT TIME: < 1 hr	
FACILITY SHORTFALL: NO SHORTFALL			

[1]Daily storage capacity required to facilitate a daily recovery rate of 18,000 gals/day.
[2]Number of day's temporary storage equipment is available to facilitate a continued daily recovery rate of 18,000 gals/day without the need for transferring recovered oil from temporary storage equipment to maintain recovery rate.

D.3.3 Response Resources Required for MTR/NTR WCD's

TABLE D-14: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR MTR/NTR WCD					
Oil Recovery Requirement					
MTR FACILITY			NTR FACILITY		
TIER 1	TIER 2	TIER 3	TIER 1	TIER 2	TIER 3
1,784 gals/day	2,973 gals/day	4,757 gals/day	189,299 gals/day	315,498 gals/day	504,796 gals/day
ON-SCENE TIER TIMES (hrs)			ON-SCENE TIER TIMES (hrs)		
12	36	60	12	36	60

MTR FACILITY TIER	ON-WATER RECOVERY EQUIPMENT	DERATED CAPACITY	ON- SCENE TIME
TIER 1 1,784 gals/day	1 Kvichak Skimmers @ 23,040 gals/day	23,040 gals/day	< 1 hr
	TOTAL DERATED CAPACITY	23,040 gals/day	
TIER 2 2,973 gals/day	1 Kvichak Skimmers @ 23,040 gals/day	23,040 gals/day	< 1 hr
	TOTAL DERATED CAPACITY	23,040 gals/day	
TIER 3 4,757 gals/day	1 Kvichak Skimmers @ 23,040 gals/day	23,040 gals/day	< 1 hr
	TOTAL DERATED CAPACITY	23,040 gals/day	

NTR FACILITY TIER	ON-WATER RECOVERY EQUIPMENT	DERATED CAPACITY	ON- SCENE TIME
TIER 1 189,299 gals/day	2 Kvichak Skimmers @ 23,040 gals/day	46,080 gals/day	< 1 hr
	3 Vacuum Trucks @ 28,800 gals/day	86,400 gals/day	< 1 hr
	7 Vacuum Trucks @ 23,040 gals/day	161,280 gals/day	< 1 hr
	TOTAL DERATED CAPACITY	293,760 gals/day	
TIER 2 315,498 gals/day	TOTAL DERATED CAPACITY (With same resources as above)	293,760 gals/day	
TIER 3 504,796 gals/day	TOTAL DERATED CAPACITY (With same resources as above)	293,760 gals/day	
SOURCE/LOCATION OF EQUIPMENT	Building 3, Ford Island: 2 Skimmers, 2 Vacuum Truck NAVSUP FLCPH Fuel Dept., Bldg 1757: 3 Vacuum Trucks NAVFAC HI Environmental: 1 Vacuum Truck BOWTS Facility, Bldg 1910: 4 Vacuum Tucks		

TABLE D-14: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR MTR/NTR WCD

Facility On-Water Oil Recovery Shortfall			
MTR FACILITY TIER 1-3	NO SHORTFALL		
NTR FACILITY TIER	NEEDED DERATED CAPACITY	SOURCE	ON-SCENE TIME
TIER 1	0 gals/day	N/A	N/A
	TOTAL DERATED CAPACITY IDENTIFIED: N/A		
TIER 2	21,738 gals/day	OSRO & SUPSALV	< 36 hrs.
	TOTAL DERATED CAPACITY IDENTIFIED: 647,178 gals/day (See Table D-19)		
TIER 3	211,036 gals/day	OSRO & SUPSALV	< 60 hrs.
	TOTAL DERATED CAPACITY IDENTIFIED: 647,178 gals/day (See Table D-19)		

Boom Requirements			
FACILITY BOOMS AVAILABLE TO MEET REQUIREMENTS	BOOM TYPE	PURPOSE	LENGTH (ft)
	24" Class II	Containment and Protection	32,200
	24" Permanent	Containment and Protection	36,100
SOURCE/LOCATION OF BOOMS AND ON-SCENE ARRIVAL TIME (Time for notification, mobilization and travel)	Source: Port Ops. 24" Class II: Location Varies (See Appendix E) Perma-Boom: Piers On-Scene Arrival Time: < 2 hr		
FACILITY SHORTFALL: NO SHORTFALL			

Temporary Oil Storage Requirement					
MTR FACILITY			NTR FACILITY		
TIER 1	TIER 2	TIER 3	TIER 1	TIER 2	TIER 3
3,568 gals/day	5,946 gals/day	9,514 gals/day	378,598 gals/day	630,996 gals/day	1,009,592 gals/day
ON-SCENE TIER TIMES (hrs)			ON-SCENE TIER TIMES (hrs)		
12	36	60	12	36	60

Facility Oil Storage Equipment To Meet Requirement			
MTR FACILITY TIER	EQUIPMENT	DAILY STORAGE CAPACITY (gals/day)	ON- SCENE TIME (hrs)
TIER 1 3,568 gals/day	1 YON @ 300,000 gals storage capacity	3,568 gals/day for 84 days[1]	< 12 hr
	TOTAL DAILY STORAGE CAPACITY (gals/day)	> 3,568	

TABLE D-14: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR MTR/NTR WCD			
TIER 2 5,946 gals/day	1 YON @ 300,000 gals storage capacity	5,946 gals/day for 50 days[1]	< 36 hrs
	TOTAL DAILY STORAGE CAPACITY (gals/day)	> 5,946	
TIER 3 9,514 gals/day	1 YON @ 300,000 gals storage capacity	9,514 gals/day for 31 day[1]	< 60 hrs
	TOTAL DAILY STORAGE CAPACITY (gals/day)	> 9,514	
NTR FACILITY TIER	EQUIPMENT	[1] DAILY STORAGE CAPACITY (gals/day)	ON- SCENE TIME (hrs)
TIER 1 378,598 gals/day	NAVSUP FLC UTF Tank 54 @ 6,300,000 gals storage capacity	378,598 gals/day for 16.5 days[1]	< 12 hrs
	DAILY STORAGE CAPACITY (gals/day)	>378,598	
TIER 2 630,996 gals/day	NAVSUP FLC UTF Tank 54 @ 6,300,000 gals storage capacity	630,996 gals/day for 9.5 days[1]	< 36 hrs
	TOTAL DAILY STORAGE CAPACITY (gals/day)	>630,996	
TIER 3 1,009,592 gals/day	NAVSUP FLC UTF Tank 54 @ 6,300,000 gals storage capacity	1,009,592 gals/day for 6 days[1]	< 60 hrs
	TOTAL DAILY STORAGE CAPACITY (gals/day)	>1,009,592	
SOURCE/LOCATION OF EQUIPMENT	- NAVSUP FLC UTF Tanks 54 - 2 SWOBs and 1 YON - In this case, the SWOBs and YON will serve to transfer recovered oil from on-water skimmers to the shore temporary storage facilities. - Note, that in the event of a worst-case discharge see Table E-6, Appendix E for a complete listing of availible temporary storage.		
[1]Number of day's temporary storage equipment is available to facilitate a continued daily recovery at rate stated without the need for transferring recovered oil from temporary storage equipment to maintain recovery rate.			
FACILITY SHORTFALL: NO SHORTFALL			

Table D-15 identifies resources required for shoreline cleanup operations for a worst-case discharge.

TABLE D-15: IDENTIFICATION OF OSRO FOR SHORELINE CLEANUP OPERATION	
WORST-CASE ONSHORE PLANNING VOLUME (gals)	638,722
OSRO:	OSRO's can be obtained by the NOSC Rep using a BOA contract per an agreement between USCG and NAVFAC HI. Additionally OSRO's can be obtained through SUPSALV's emergency contracting capability (See Appendix E and T).

D.4 RESPONSE STRATEGIES

D.4.1 General Response Strategies

Based on the hazard evaluation contained in Appendix F, the general response strategies are:

- Mitigate spills at the source to minimize impact - Employ the emergency actions in this appendix.
- Prevent spills from getting into navigable waters and fish and wildlife and sensitive areas, use containment and drainage planning described in Appendix I.
- Plan response ahead of spill trajectory.
- Contain and recover spills in Pearl Harbor.
- Exclude or divert all spills from sensitive areas - Refer to Appendix N.
- Perform response with priority to protect human life and health, minimize ecological impacts, and minimize economic and public health impacts.

The following sections discuss the implementation of this ICP for the multi-level discharge planning volumes and the most likely facility spill events described in Appendix F.

D.4.2 Plan Implementation for Small/AMP and Medium/MMP Discharges

Tables D-16 and D-17 describe the general implementation of the plan for Small/AMPD and Medium/MMPD spills.

TABLE D-16: GENERAL IMPLEMENTATION OF RESPONSE PLAN FOR A SMALL/AMPD

Phase	Description of Implementation Actions
Emergency Phase	Description Of Actions • Perform proper and timely notifications and if safe to do so, take emergency steps to stop and contain the spill, secure the spill site, or in the event of a threat of a spill, mitigate or eliminate the threat (Core Plan). • Prevent spill from escaping the containment systems or spill on the ground from entering manmade or natural drainage, sanitary sewers, streams, etc. (See Appendix I) • Contain spills at the vessel mooring areas or in the harbor water. • A spill, especially outside of containment systems in a populated area of the base, may require an evacuation of the local area depending on the time of day and land use of affected areas (Core Plan, Appendix L).
	Potential Problems And Recommended Corrective Actions Small spills from potential spill sites away from the water front areas are not likely to reach the waters of Pearl Harbor if pathways are blocked, e.g., ditches, storm water drains, culverts, etc.. However, spills occurring during heavy rainfall or storms have greater potential to reach pathways due to overland drainage and much less time to take actions to block spills. Recomendations: • Minimize transfer operations during heavy rains. • Block drains near potential spill site and employ sorbent booms in pathway of spill during a transfer operation. (Appendix H and I).
Response Phase	Description Of Actions • Establish a response team as required to meet response needs (Core Plan). For spills in the harbor water: • Employ the Facility Response Team to further contain the spill as needed and recover oil (Core Plan). • Visually track spill to determine if any sensitive areas are threatened; deploy additional booms to protect threatened areas or divert away from areas (Appendix N). For spills onto ground or into containment: • Employ sorbents/use vacuum truck to further contain, recover and remove spill (Core Plan, Appendix E). Monitor appropriate outfalls if spill enters storm drains and prepare to contain and recover in water at outfall (Core Plan, Appendix I).

TABLE D-16: GENERAL IMPLEMENTATION OF RESPONSE PLAN FOR A SMALL/AMPD	
Phase	**Description of Implementation Actions**
Response Phase (Cont.)	Potential Problems And Recommended Corrective Actions • Due to the age of the active drainage systems and the existence of old drainage systems still in place throughout the base, it may be difficult to determine which path a spill that enters the drainage system will take in the drainage system. Subsequently, the spill may not discharge at the anticipated outfall or outfalls. • Fuel spills into the drainage system/sanitary sewer will present a hazard, especially in a populated area. Recomendations: • In addition to monitoring the potential discharge outfalls, monitor harbor waters to detect appearance of spill and location of discharge. • Employ base industrial hygiene personnel or Fire Department to detect hazardous fuel vapors and coordinate with safety personnel to determine and take appropriate actions.
Cleanup Phase	Description Of Actions • Use temporary oil storage equipment to store recovered oil (Appendix E). • Implement waste disposal plan for response wastes (Appendix K).

TABLE D-17: GENERAL IMPLEMENTATION OF RESPONSE PLAN FOR A MEDIUM/MMPD	
Phase	**Description of Implementation Actions**
Emergency Phase	Description Of Actions • Perform proper and timely notifications and take emergency steps to stop and contain the spill, secure the spill site, or in the event of a threat of a spill, mitigate or eliminate the threat (Core Plan, Appendix A). • Prevent spill from escaping the containment systems or spill on the ground from entering manmade or natural drainage, sanitary sewers, streams, etc. (Appendix H and I). • Contain spills at the vessel mooring areas or into the harbor water. • A medium spill, especially outside of containment systems in a populated area of the base, may require an evacuation of the local area depending on the time of day and land use of affected area (Core Plan, Appendix L).
	Potential Problems And Recommended Corrective Actions Medium spills from potential spill sites away from the water front areas are more likely to reach the waters of Pearl Harbor if pathways are not blocked, e.g., ditches, storm water drains, culverts, streams, etc. Also, as in the case of small spills, spills occurring during heavy rainfall or storms have greater potential to reach pathways due to overland drainage and much less time to take actions to block spills. Recommendation: • Minimize transfer operations during heavy rains. • Block drains near potential spill site and employ sorbent booms in pathway of spill during a transfer operation (Appendix H and I).
Response Phase	Description Of Actions • Established a response management team as required to meet response needs (Appendices B and U). For spills in the harbor water: • Employ the Facility Response Team to further contain the spill as needed and recover oil(Core Plan, Appendix N). • Visually track spill to determine if any sensitive areas are threatened; deploy additional booms to protect threatened areas or divert away from areas (Appendix N). For spills onto ground or into containment: • Employ earth, sorbents and other materials/use vacuum truck to further contain, recover and remove spill (Core Plan, Appendix E). • Monitor appropriate outfalls if spill enters storm drains and prepare to contain and recover in water at outfall (Appendix H and I).
	Potential Problems And Recommended Corrective Actions • Due to the age of the active drainage systems and the existence of old drainage systems still in place throughout the base, it may be difficult to determine which path a spill that enters the drainage system will take in the drainage system. Subsequently, the spill may not discharge at the anticipated outfall or outfalls. • Fuel spills into the drainage system/sanitary sewer will present a hazard, especially in a populated area. Recommendation: • In addition to monitoring the potential discharge outfalls, monitor harbor waters to detect appearance of spill and location of discharge. • Employ base industrial hygiene personnel to detect hazardous fuel vapors and coordinate with safety personnel to determine and take appropriate actions.

TABLE D-17: GENERAL IMPLEMENTATION OF RESPONSE PLAN FOR A MEDIUM/MMPD	
Phase	**Description of Implementation Actions**
Cleanup Phase	Description Of Actions • Use temporary oil storage equipment to store recovered oil (Appendix E). • Implement waste disposal plan for response wastes (Appendix K).

D.5 PLAN IMPLEMENTATION FOR VESSEL WORST-CASE DISCHARGE

Currently, public vessels are not subject to OPA 90 regulations, however it is the Navy's policy to provide proper stewardship for the environment, and operate in a manner consistent with federal, state, and local environmental regulations. The NOSC Rep is responsible for Navy vessel spills anywhere within his/her Area of Responsibility (AOR). This section is intended to assist the NOSC Rep in responding to a major discharge from a Naval vessel from anywhere within the NOSC Reps AOR.

When naval vessels experience a major oil spill while berthed at a facility, the facility usually initiates the initial response actions, establish an ICS structure, and the NOSC Rep monitors the situation, assisting as necessary. Since the NOSC Reps AOR for oil spill response extends seaward to 12 NM from the shoreline, there may be situations where the NOSC Rep encounters a spill when the vessel is not located at a facility. Under these circumstances the responsibility for verifying that the ship notified the NRC, made other notifications specific to the AOR, established a response organizations, and responded to the spill rests with the NOSC Rep.

In many cases, especially for minor spills, the responsibility for initial notification and response is with the ship's Commanding Officer. However, regardless of the size of the spill, the ship may need assistance in responding to a spill, especially if the ship is not located at a facility. This is especially true in the case of Military Sealift Command (MSC) vessels. Note that it is standard operating procedure for MSC to notify JBPHH of the cargo (and of any persistent fuel oil) of MSC tankers before they enter Pearl Harbor.

Because of its mission, a MSC Oil Tanker generally represents the worst-case risk of an oil spill within a NOSC Reps AOR. Therefore, the data and examples portrayed in this section are those of a T-AO Class 187 MSC tanker, and are intended to illustrate the type of information that the NOSC Rep will need to obtain from any vessel experiencing an oil spill.

The Incident Command System concept will be used in response to all spills. The size and composition of the team will vary, as determined by the Incident Commander, dependent on spill size, locations and conditions.

While every response may be treated differently, appropriate initial actions are to:

- Ensure human health and safety.
- Secure the source of the spill.
- Minimize environmental impact and property damage.
- Conduct clean-up operations.

T-AO Class 187 MSC tanker

The following pages provide technical specification for the T-AO Class 187 MSC Tanker along with associated response resources calculations and illustrates the type of information that the NOSC Rep would need to respond to a major spill from a Navy vessel.

T-AO 187 CLASS

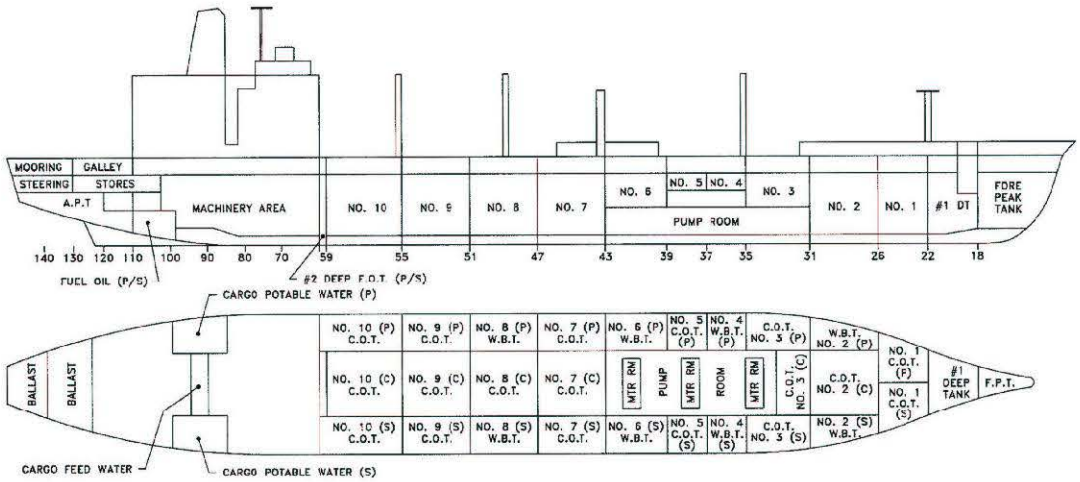
SHIP PARTICULARS

VESSEL CHARACTERISTICS

OFFICIAL NAME	
USNS	T-AO
CALL SIGN	
LENGTH (OA)	677'-5"
LENGTH (BP)	650'-0"
BREADTH (MLD)	97'-5"
DEPTH (MLD)	50'-11"
DISPLACEMENT LIGHT SHIP	40,000 Tons
DISPLACEMENT FULL SHIP	180,000 Tons
SUMMER DRAFT	35'-0"
CARGO FUEL OIL PUMPS DFM	5-3,000 GPM
CARGO FUEL OIL PUMPS JP-5	3-3,000 GPM

PLAN LOCATION

GENERAL ARRANGEMENT	Chief Engineer's Office
MIDSHIP SECTION PLAN	Chief Engineer's Office
CARGO & FUEL PIPING PLAN	Chief Engineer's Office
STOWAGE PLAN	Chief Engineer's Office
DAMAGE STABILITY DATA	Chief Engineer's Office
SPILL RESPONSE EQUIPMENT LOCATION	Main Deck
MATERIAL SAFETY DATA SHEETS	Ship's Computer



COMPARTMENT	Frames	Barrels (100%)
CARGO OIL TANKS - C.O.T.		
NO. 1 (P)	22-26	6,355.5
NO. 1 (S)	22-26	6,355.5
NO. 2 (C)	26-31	21,248.5
NO. 3 (C)	31-33	7,933.5
NO. 3 (P)	31-35	6,541.7
NO. 3 (S)	31-35	6,541.7
NO. 5 (P)	37-39	4,241.6
NO. 5 (S)	37-39	4,241.6
NO. 7 (C)	43-47	15,867.1
NO. 7 (P)	43-47	8,976.4
NO. 7 (S)	43-47	8,976.4
NO. 8 (C)	47-51	15,867.1
NO. 9 (C)	51-55	15,867.1
NO. 9 (P)	51-55	8,896.4
NO. 9 (S)	51-55	8,896.4
NO. 10 (C)	55-59	13,487.1
NO. 10 (P)	55-60	8,463.3
NO. 10 (S)	55-60	8,463.3
CARGO OIL TANK TOTAL		**177,220.2**
FUEL OIL TANKS - F.O.T.		
SETTLING	33-37	3,997.3
SETTLING	40-43	4,848.3
SETTLING	60-64	1,047.7

COMPARTMENT	Frames	Barrels (100%)
FUEL OIL TANKS - F.O.T.		
CONTAMINATED	36-40	894.2
CONTAMINATED	36-40	1,009.2
LUBE OIL TANK	59-60	595.2
NO. 2 DEEP (P)	59-60	1,681.0
NO. 2 DEEP (S)	59-60	1,681.0
AUX. SERVICE TANK FWD	60-64	326.2
AUX. STORAGE TANK	60-68	1,357.7
AUX. SETTLING TANK	60-72	1,026.0
AUX. SERVICE TANK AFT	64-72	367.7
NO. 3 DEEP (P)	96-106	3,337.0
NO. 3 DEEP (S)	96-106	3,337.0
FUEL OIL TANK TOTAL		**25,505.5**
LUBE OIL TANKS - L.O.T.		
MAIN ENGINE SUMP (P)	66-79	139.8
MAIN ENGINE SUMP (S)	66-79	139.8
REDUCTION GEAR SETTLING TANK	68-70	118.4
CRP SETTLING TANK	70-72	118.4
DIESEL GENERATOR STORAGE TANK	72-74	118.4
DIESEL GENERATOR SETTLING TANK	74-76	118.4
MAIN ENGINE SETTLING TANK	76-81	296.0
MAIN ENGINE STORAGE TANK	81-86	296.0
LUBE OIL TANK TOTAL		**1,345.2**

COMPARTMENT	Frames	Barrels (100%)
WATER BALLAST TANKS - W.B.T.		
FORE PEAK	0-18	1,956.6
NO. 1 DEEP TANK	18-22	6,225.6
NO. 2 BALLAST TANK (P)	28-31	3,274.4
NO. 2 BALLAST TANK (S)	28-31	3,274.4
PUMP ROOM BALLAST TANK	33-39	2,407.9
NO. 4 BALLAST TANK (P)	35-37	3,972.2
NO. 4 BALLAST TANK (S)	35-37	3,972.2
NO. 6 BALLAST TANK (P)	39-43	8,852.9
NO. 6 BALLAST TANK (S)	39-43	8,852.9
NO. 8 BALLAST TANK (P)	47-51	8,987.1
NO. 8 BALLAST TANK (S)	47-51	8,987.1
AFT BALLAST TANK	110-119	1,419.0
AFT PEAK	119-152	7,321.9
WATER BALLAST TANK TOTAL		**69,504.**
FRESH WATER TANKS - F.W.T.		
POTABLE WATER FWD	73-80	192.
POTABLE WATER AFT	80-91	117.
RES. FEED WATER	88-91	142.
CARGO POTABLE WATER (P)	102-120	1,2[illegible]7.
CARGO POTABLE WATER (S)	102-120	1,2[illegible]7.
CARGO FEED WATER (P)	107-110	1,154.
CARGO FEED WATER (S)	107-110	1,154.
FRESH WATER TANK TOTAL		**5,666.**

CONVERTED TO 100%

RESPONSE RESOURCE CALCULATION

T-AO 187 CLASS LOA (FT) 677.4

Worst Case Discharge Planning Volumes
OPA GROUP 1 Emulsification Factor 1.0

Base Volume	177,220 Barrels

Recovery Planning Volumes (Barrels)

Geographic Area:	On Water Recovery	Shoreline Removal		On Water Recovery Resource Requirements (Barrels/Day Capacity) Tier 1*	Tier 2	Tier 3
Rivers/Canals	17,722	17,722	Required	5,317	7,089	10,633
			Contracted	1,500	3,000	6,000
			Additional Identified	3,817	4,089	0
Nearshore/Inland	35,444	17,722	Required	207	8,861	14,178
			Contract Cap	10,000	20,000	40,000
			Additional Identified	0	0	0
Offshore	8,861	No planning required	Required	35	1,462	1,861
			Contract Cap	10,000	20,000	40,000
			Additional Identified	0	0	0
Open Ocean	100% Natural Dissipation	No planning required	Required	0	0	0
			Contract Cap	10,000	20,000	40,000
			Additional Identified	0	0	0

*Resources identified for Tier 1 must be mobilized and en route to the scene within 2 hours of notification.

Response Times:	Tier 1	Tier 2	Tier 3
Higher Volume Port Area	12 Hrs	36 Hrs	60 Hrs
Great Lakes	18 Hrs	42 Hrs	66 Hrs
All Other	24 Hrs	48 Hrs	72 Hrs
Open Ocean	24+ Hrs	48+ Hrs	72+ Hrs

(Plus travel time from shore at 5 knots)

T-AO 187 CLASS

C-24

COMSCINST 5090.5
10 AUGUST 1998

RESPONSE RESOURCE CALCULATION

T-AO 187 CLASS

Average Most Probable Discharge Planning Calculation
(A discharge of 50 barrels during oil transfer operations)

Planning Volume	**50** Barrels

Required Resources	Time	Required Amount
Boom	1 hour	Length of boom equal to 2X the length of the largest vessel involved in the transfer. 1354.8 feet minimum for this vessel.
Recovery Devices	2 hours	50 barrels pumping capacity
Storage Capacity	2 hours	100 barrels storage capacity (2X the recovery capacity)

Maximum Most Probable Discharge Planning Calculation
(A discharge of the lesser of: 10% of the vessel's cargo capacity or 2,500 barrels)

Planning Volume	**2,500** Barrels

C-25

Required Resources

Recovery Capacity:	1,250 barrels per day (50% of the planning volume)
Storage Capacity:	2,500 barrels storage capacity (2X the recovery capacity)
Boom:	Sufficient for the collection/containment of 50% of the planning volume

Geographic Area	Response Times
Higher Volume Port Areas and the Great Lakes	Within 12 hours of discovery of discharge.
River/Nearshore/Offshore	Within 24 hours of discovery of discharge.
Open Ocean	24 hours + travel time from shore at 5 knots.

T-AO 187 CLASS

COMSCINST 5090.5
10 AUGUST 1998

D.6 PLAN IMPLEMENTATION FOR FACILITY WCD

D.6.1 Spill Analysis for Facility Worst-Case Discharge

Historical Spill Considerations

In May 1987, a seven-inch crack in an eight-inch non-Navy pipeline resulted in 104,496 gallons of jet fuel being discharged into a stream which emptied into the Middle Loch of Pearl Harbor. The spill threatened endangered species and resulted in the death of one Hawaiian Stilt and one Hawaiian Duck. Resources from the U.S. Navy and two local spill responders (Clean Islands Council and Pacific Environmental Company) responded, first concentrating on protecting wildlife and sensitive areas. Containment equipment was deployed and sorbents, vacuum truck, and skimmers were used in recovery operations. When released fuel impacted the west bank of the Middle Loch, wash pumps were used to contain the product against the shore. The recovered product was temporally stored in lined pits prior to transfer to a local refinery for recycling or disposal.

There have been no historical catastrophic discharges in Pearl Harbor since December 7th, 1941.

Risk/Hazard Assessment

The most challenging worst-case spill planning volume within the COMNAVREG HI AOR is represented by the NTR component of the complex facility. The specific spill planning volume calculations are contained in Appendix C. Identification and evaluation of hazards, spill potential analysis, vulnerability analysis and history of spills at the facility are located in Appendix F.

Facility

COMNAVREG HI uses the Upper Tank Farm (UTF) facility for its worst-case discharge scenario. The UTF has six aboveground storage tanks of similar size with a nominal shell capacity each of 150,000 bbls (6,300,000 gals). All tanks have secondary containment with an impermeable liner. Tanks are filled by pipeline at a maximum rate of 10,000 bbls per hour.

The volcanic mountain known as Red Hill has twenty tanks constructed within; each tank has a shell capacity of approximately 12,600,000 gallons. These tanks were constructed in the early 1940s inside the hollowed-out mountain. Each tank, containing JP-5, F-24, or diesel fuel marine (DFM/F-76), has a diameter of 100 feet and an overall height of 257 feet.

Although the Red Hill tanks do have a greater capacity of fuel, they are underground storage tanks. For this reason, the Upper Tank Farm has been designated as the worst-case discharge.

Event

The worst-case spill scenario is based upon a catastrophic failure of the largest single aboveground tank that is in secondary containment.

Type and Amount of Spill

6,300,000 gals (150,000 bbls) of F-76 (DFM).

Can Pollution Source Be Secured?

The pollution source cannot be secured. The spill scenario represents a catastrophic rupture of one of the storage tanks (Tank #48).

Sensitive Areas at Risk

Fish and wildlife, environmental, historical, economic and cultural areas at risk are discussed in Appendix N.

Time of Year

Worst-case weather conditions for an oil spill within Pearl Harbor exist during the summer months, i.e., between June and August. During these summer months, the northeasterly trade winds are most pronounced. A northeasterly trade combined with an outgoing tide, present the most onerous risk of oil spreading throughout the confines of the harbor, and beyond, potentially threatening the exposed southern shores of Oahu.

In the winter season southwesterly "Kona" conditions occasionally occur. However, should an oil spill happen during these "Kona" conditions, it is likely the prevailing weather would restrict the spread of the discharge and confine the spill to a relatively small section of Pearl Harbor.

On-Scene Weather

Prevailing northeasterly trade winds, 25 knots with gusts to 35 knots, with an outgoing tide.

D.6.2 Initial Actions

Notifications

Notification commences as soon as the spill is discovered. Federal, State, Navy, and local authorities are notified in accordance with the Core Plan and Appendix A. Procedures specified in this plan also include notification of the COMNAVREG HI Spill Management Team and USCG/Navy BOA response contractors (see Appendices U and T), if required.

Initial On-Scene Investigation, Evaluation and Recommendation

The Incident Commander (IC) immediately begins site assessment upon notification of the spill event. Due to the spill volume, an immediate site assessment will be required in at least three general locations; (1) the UTF where the spill occurs; (2) the natural collection and containment areas immediately down gradient of the tank farm; (3) the drainage outfalls into Pearl Harbor. These locations are discussed in Appendix F and I. Appendix I, Figure I-2, provides a diagram of the UTF with drainage indicators.

Initial Response Actions and Strategies

The first priority in responding to a spill is to provide maximum protection to the residents of both JBPHH and the surrounding community, and to the responders and other emergency personnel. Due to the location and volume of the spill, and prevailing trade wind conditions, the residential housing areas downwind of the UTF will be immediately evacuated out the main gate. Kamehameha Highway may be closed one half mile west and one mile east of the tank farm. All operations in and around the Kuahua building and pier side complexes are curtailed.

Concurrent with public safety evacuations, the Federal Fire department performs an initial site assessment to determine the fire hazards associated with free product on land, in structures, and in utility systems. The initial response strategy is to contain as much oil on land as possible, and to prevent more oil from reaching the harbor via storm drains and overland flow. Evacuation plans are placed into effect (see Appendix L).

The immediate strategy for on-the-water response is to contain and recover as much oil as possible near the source of entry into the harbor. The overall strategy is to prevent oil from spreading further into East Lock or the Entrance Channel, and to protect the sensitive shoreline and historical resources in and around the immediate spill location (see Appendix N).

The IC, using the Incident Command System (ICS), conducts initial spill response actions (see Appendix B). Inherent in the ICS structure is the ability to expand and contract the organization as the dynamics of the spill warrant. The NOSC Rep assumes direct control of the spill response when it becomes evident that the capabilities of the facility have been exceeded, as in the case of this worst-case discharge.

Note the USCG is the Federal OSC for all oil spills in coastal waters (including Naval facilities) and the EPA is the Federal OSC for all oil spills on land. The NOSC Rep acts as the Federal OSC for all Navy hazardous substance releases on Navy property.

The NOSC Rep stands up the COMNAVREG HI Spill Management Team (see Appendix U) and establishes a Unified Command.

Assistance from the NOAA Scientific Support Coordinator may be requested by the NOSC Rep to provide a daily computer trajectory analysis based on local weather conditions and available information on currents.

To handle the influx of media interest caused by the spill the Unified Command establishes a Joint Information Center (JIC).

D.6.3 Spill Response Organization

Initial Response

Initial spill response is provided by the JBPHH Facility Response Team. The response team's skimmers and vacuum truck are located at Ford Island (Building 3) and can be activated in less than one hour. NAVSUP FLC vacuum trucks are located at Bldg 1757 and can be deployed within ten minutes (additional vacuum trucks can be obtained from NAVFAC HI and the BOWTs Facility, Bldg 1910).

Table D-18 lists the oil recovery equipment immediately available to the NOSC Rep to meet the worst-case discharge tiered on-water oil recovery requirements. The table provides the derated capacity of the equipment, the location, and response time.

TABLE D-18: COMNAVREG ON-WATER OIL RECOVERY EQUIPMENT TO MEET REQUIREMENTS

Equipment	On-Scene Time (Hrs.)	Equipment Derated Capacity (Gals/Day)	Total Derated Capacity (Gals/Day)
2 Kvichak Skimmers*	< 1	2 @ 23,040 each	46,080

TABLE D-18: COMNAVREG ON-WATER OIL RECOVERY EQUIPMENT TO MEET REQUIREMENTS			
Equipment	**On-Scene Time (Hrs.)**	**Equipment Derated Capacity (Gals/Day)**	**Total Derated Capacity (Gals/Day)**
3 Vacuum Trucks	< 1	3 @ 28,800 each	86,400
7 Vacuum Trucks	< 1	7 @ 23,040 each	169,120
TOTAL TIER CAPACITY			**293,760**
Source and location of equipment: Ford Island, Bldg 3; NAVFAC HI Environmental; NAVSUP FLC Fuel Dept., Bldg. 1757; BOWTS Facility, Bldg. 1910 * Indicates recovery equipment capable of operating in water less that six feet.			

Additional Response Assets

Additional response assets to meet any equipment shortfall will come from local DoD assets, Navy SUPSALV, and Oil Spill Response Organizations (OSRO's) activated through the USCG's BOA.

Assets from Navy SUPSALV's Hawaii warehouse, located at Bishops Point, can respond within four hours. In addition to this equipment, SUPSALV can activate and air-deploy its response equipment pre-staged at California, Alaska, and Virginia. An inventory of SUPSALV response equipment by assigned staging locations is shown in Table E-11, Appendix E.

Containment, Countermeasures and Cleanup Strategies

Human health and safety are the primary consideration. It is recognized that a spill of this magnitude may require that entire areas surrounding the UTF and downwind, be isolated due to fuel vapor. However, should safety conditions permit, the Federal Fire Department may attempt to block storm drains that can be safely approached, to prevent oil from entering or spreading to other areas.

When air monitoring results indicate that areas containing free oil, such as tank dikes and natural collection points, can be safely approached, properly protected response personnel shall commence recovery operations, using vacuum trucks and portable pumping equipment. The fire department can provide backup fire protection for these operations. Due to the volume of oil initially on land, NAVFAC HI and additional contractors may be mobilized to the scene to provide additional on-land containment and recovery support.

The primary staging areas for response operations are the FRT base on Ford Island and the SUPSALV warehouse located at Bishop Point. Equipment arriving from off island is transported to Bishops Point, and from Bishop Point the equipment is deployed to its assigned staging.

Near Shore

The NOSC Rep immediately mobilizes the local Navy response assets described in the ICP. The Facility Response Team is instructed to protect identified sensitive areas threatened by the spill, and to provide on-the-water containment and recovery. The sensitive areas of immediate concern are identified in Appendix N. OSRO's are mobilized (see Appendix T) and requested to provide equipment and manpower support to the response team.

Inland

No inland waters should be impacted in this spill scenario.

Sensitive Areas

The sensitive areas requiring protection in JBPHH are identified in Appendix N.

D.6.4 Resource Requirements

Equipment

The on-water recovery requirement, based on OPA 90 planning requirements, is broken down by tiers, on-scene times, equipment types, derated capacities, and location of equipment.

Table D-18 lists COMNAVREG HI's on-water oil recovery equipment, accounting for a derated recovery capacity of 293,760 gals/day.

Table D-19 lists SUPSALV's on-water oil recovery equipment available to meet Tier 2 and 3 equipment shortfalls (see Table D-14 for details). SUPSALV's Hawaii base can provide on-water oil recovery equipment sufficient to meet COMNAVREG HI's Tier 2 and 3 on-water recovery requirements with a derated recovery capacity of 647,178 gals/day.

Table D-20 summarizes the on-water oil removal capability available to COMNAVREG HI. Table D-21 summarizes the available boom immediately available to COMNAVREG HI.

In addition to the on-water oil recovery equipment listed in this appendix there are a large number of pumps belonging to Navy SUPSALV and various tenant commands within JBPHH that are available to COMNAVREG HI.

Federal assets such as the U.S. Coast Guard National Strike Team are also available. These resources are discussed in Appendix E and the Hawaii ACP.

TABLE D-19: SUPSALV ON-WATER OIL RECOVERY EQUIPMENT TO MEET SHORTFALL

Skimmer Systems Available for Tier 2 and 3 Equipment Shortfall						
System ID	System	Derated Capacity (Gals/Day)	ESSM VA	ESSM CA	ESSM AK	ESSM HI
			#	#	#	#
P16100	Modular Vessel Skimmer	165,018	3	4	2	2
P16200	Salvage Support Skimmer	44,352	2	3	0	2
P16300	High Speed Skimmer VOSS	63,420	10	1	1	1
P16310	Class XI VOSS	165,018	1	0	1	0
P16400	Vessel Skimmer	165,018	5	4	1	1
P16500	Heavy Debris Recovery System	115,794	1	1	2	0
P16700	Inland Support Skimmer	27,342	0	0	2	0
P18100	Vacuum Pump Skimmer	100,800	1	0	0	0
TOTAL DERATED CAPACITY (Gals/Day)			2,424,660	1,632,414	1,009,764	647,178
Total Derated Capacity			5,714,016 gals/day (136,048 bbls/day)			
Response Time (from Hawaii Base)			4 Hours			

TABLE D-20: ON-WATER OIL REMOVAL EQUIPMENT CAPABILITY IMMEDIATELY AVAILABLE TO COMNAVREG HI				
Tiered Requirement (Gals/Day)	**COMNAVREG HI Equipment (Gals/Day)**	**SUPSALV Equipment (Gals/Day)**	**Tier Total (Gals/Day)**	**Cumulative Total (Gals/Day)**
Tier 1 12 hrs 189,299	293,760	0	293,760	293,760
Tier 2 36 hrs 315,498	293,760	647,178*	940,938	940,938
Tier 3 60 hrs 504,796	293,760	647,178	940,938	940,938

* Derated capacity of on-water recovery equipment available from SUPSALV's Base in Hawaii.

TABLE D-21: CONTAINMENT BOOM		
Source	**Amount (Ft)**	**Cumulative Total (Ft)**
COMNAVREG HI	32,200*	32,200
SUPSALV (Hawaii)	38,800	71,000
SUPSALV (Off-island sites)	186,200	293,000
TOTAL (ft)		**257,200**

* 24-inch harbor boom.

Personnel

COMNAVREG HI response assets are operated by the command owning the respective equipment. Navy SUPSALV assets are operated by SUPSALV-contracted personnel. Response equipment available through the BOA contract are manned by personnel from the company providing the equipment. Additional support personnel from military installations within the JBPHH AOR may be accessed through the military chain of command.

The Hawaii ACP maintains an up-to-date listing of oil spill response equipment available from other island locations.

D.6.5 Available Resources and Sources of Procurement

Primary Response Resources

All primary COMNAVREG HI response resources are immediately available.

Additional Resource Assistance

All additional and supplementary response resources can be accessed through the Navy's SUPSALV Emergency Contracting vehicle or a BOA contract

Response Time

All assets can respond within the tier time requirements.

D.6.6 Shortfalls and Options for Alleviating Them

Equipment

No shortfalls exist in either on-water response equipment or temporary storage capacity. Tables D-18 and D-19 list on-water response equipment and Table D-20 displays the cumulative total capacity of the on-water removal equipment. The Hawaii ACP lists additional response organizations and assets available in the local area that may be utilized by COMNAVREG HI (see Tab 4).

Response and protection strategies are contained in the Appendix N. A booming strategy map for Pearl Harbor can be found in Appendix M (Figure M-4). Table D-21 shows the total amount of boom available to COMNAVREG HI. Should the response require more boom than that operated by COMNAVREG HI, additional boom can be obtained through Navy SUPSALV, and local OSRO's.

Table D-14 lists the temporary oil storage equipment (and capacity) available for recovered oil to COMNAVREG HI. As noted in the table, additional storage capacity is available through the use of additional bulk storage tanks at the Navy's Fuel Oil Reclamation Facility (FORFAC) or the UTF.

Personnel

Should response/cleanup activities require additional trained personnel, COMNAVREG HI may draw upon the local assets of the military facilities within the Hawaiian area. Given the number of military personnel available, it is not envisioned that shortfalls of personnel will exist.

Funds

CNIC will provide the initial funding for a worst-case discharge. The resource sponsors, NAVSUP and DLA, will provide funding for ongoing cleanup and restoration costs. The responsible party is ultimately responsible for all cleanup and restoration costs and will reimburse all government agencies.

Minimum Response Time

Tables D-18 and D-19 reflect the response times of the responding units. The minimum response time for the COMNAVREG HI response team is 1 hour. The Navy SUPSALV assets that are located in Hawaii can be mobilized within 4 hours. Responders that are accessed through the BOA contracts can respond in less than six hours.

Navy SUPSALV equipment that is pre-staged off island will require mobilization and air deployment to Hawaii. The additional SUPSALV equipment can respond within the tier time requirements.

Location/Identification of Additional Resources

Table D-20 illustrates that sufficient response equipment is available to meet all regulatory requirements.

D.6.7 Time Required to Clean Up the Spill

Cleanup Operations

Containment and cleanup efforts are geared towards the recovery of oil and related debris, storage, and eventual disposal.

Oil is collected using skimming vessels, shore-based skimmers, vacuum trucks and pumps. On-water skimming devices empty collected oil from storage tanks and bladders to the two 70,000 gallon Ship Waste Oil Barges (SWOBs). Once full, the SWOBs may pump the oil via pipeline to bulk tanks at the FORFAC Facility or the UTF. Additionally, outside contractors may be used. If local refineries are used, the oil/water mixture can be shipped via barge or tank truck to these facilities.

The large amount of solid waste typically generated during response operations will be stored temporarily in plastic trash bags or in disposal drums. See Appendix K for detailed information on waste disposal.

Table D-14 lists the temporary oil storage equipment available to COMNAVREG HI and the storage requirements by response tiers. No shortfalls in temporary storage exists. Consult Hawaii ACP for additional temporary storage options.

The disposal method used will take into consideration the type of waste, the cost of disposal, and permitting and regulatory requirements. Disposal strategies are aimed at keeping both solid and liquid waste centrally located in areas that can be easily isolated to ensure public safety.

The primary disposal methods are incineration of solids, and recycling or re-refining of liquid products.

The facility available for incineration of solids is the H-Power facility. H-Power can handle oil-contaminated debris, booms, and sorbents. For elimination of oil-contaminated carcasses, the Fish and Wildlife Service will be contacted for appropriate disposal. See the Hawaii ACP for additional details.

Procedures/Criteria for Terminating the Cleanup

Termination of the response is determined by the Federal OSC or Unified Command. Due to mission requirements, and the necessity of having unrestricted vessel movements in and out of Pearl Harbor, cleanup procedures, and the ultimate cleanup termination, must consider naval operational requirements. Navy requirements will be communicated to the Federal OSC or the Unified Command for consideration in the termination of response decisions.

D.6.8 Weather And Aquatic Conditions Impacting Spill Response

The information contained in the following table is based on the Hawaii Area Contingency Plan and the COMNAVREG HI Natural Resources Management Plan.

TABLE D-22: WEATHER AND AQUATIC CONDITIONS IMPACTING SPILL RESPONSE					
Condition	**Season**				**Limitations**
	SP	**S**	**F**	**W**	
Predominant Winds	X	X	X	X	Northeasterly tradewinds prevail year round. These trade winds are usually the strongest from March to November. The tradewinds are strongest in the afternoon. There are occasional strong southwesterly "Kona" storms that may persist for two to ten days in the winter months. However, high winds can come from any direction during this period. In well-exposed areas, the trades average under 15 miles per hour. About 2 percent of the time, the wind speed exceeds 31 miles per hour. It is expected that winds will exert the main effect on spills in the waters of Pearl Harbor.
Hurricanes/ Storms	X		X	X	Heavy rainfalls occur during the winter, November through April, with thunderstorms and infrequent hurricanes. The rains can be especially heavy between December and January. Mean annual rainfall for the region is 20-30 inches. Spills during storms or heavy rainfalls will have greater potential to reach the waters of Pearl Harbor due to significantly lessened ability of the ground, natural vegetation and manmade structures to intercept fluids, and increased flow in natural and manmade drainage. Ability to contain and remove spills outside containment systems will be difficult and there will be much less time to do so. On-water recovery will also be severely hampered. There may also be safety concerns for response personnel, e.g., limited visibility, lightning, local flash flooding, etc.
Temperature Range		X	X		Mean daily temperatures range from a high of 81^{0}F during summer to a low of 72^{0}F during winter. The temperature can be as high as 87^{0}F and as low as 65^{0}F. The high summer temperatures together with high humidity will present heat stress dangers for response personnel.
Current Speed:					Tidal currents within Pearl Harbor have minimal effect on spills into the harbor. The entrance channel to Pearl Harbor always has a strong westerly set.
Other Conditions And Limitations: The mean water temperature in the summer is 80^{0}F and in the winter it is 72^{0}F.					
Other Important Factors To Consider: None evident					
KEY: SP - Spring; S - Summer; F - Fall; W - Winter					

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX E
RESPONSE EQUIPMENT, PERSONNEL, AND RESOURCES

E.1 REGIONAL RESPONSE EQUIPMENT

E.1.1 Response Equipment Inspection and Maintenance

Equipment inspection and maintenance will be done according to equipment manufacturer guidelines. Due to the large volume of maintenance records and the frequency of inspections, data will not be kept in this ICP. All records will be maintained at the locations where the equipment is maintained. Maintenance and testing information is kept with equipment records. These records will be maintained in a manner readily available for review and inspection.

This appendix also lists Navy SUPSALV equipment available to COMNAVREG HI (see Table E-10). All SUPSALV equipment goes through a preventive maintenance program, which has been established to perform scheduled inspections and tests on an annual basis for each piece of equipment. In addition, an unscheduled preventive maintenance is accomplished each time a piece of equipment goes out of the storage facility. After use, a full preventive maintenance is accomplished prior to its return to the storage facility.

E.1.2 Response Equipment Testing and Deployment

The purpose of equipment testing and deployment drills are to demonstrate that response equipment is operational and that personnel who operate the equipment are capable of deploying and operating the equipment. Only a representative sample of each type of equipment needs to be deployed. Private contractors who are identified in this plan to provide emergency response services must also conduct deployment exercises and certify that these exercises have been conducted.

See Appendix Q, Section Q.1.5 for details on response equipment testing and deployment drills.

E.1.3 Response Equipment Inventories

Tables E-1 through E-8 list response equipment available for an OHS spill response within COMNAVREG HI.

TABLE E-1: ON-SITE INVENTORY - SKIMMERS			
Vessels Skimmers			
Topic		**Type**	**Type**
NUMBER	ON HAND	1	1
MANUFACTURER	BRAND	Kvichak Marine	Kvichak Marine
	MODEL	30' Skimmer Boat	28' Skimmer Boat
	BOAT ID	SK-1	SK-2
	YEAR	2012	2005
TYPE	OPERATING PRINCIPLE	KVICHAK 1 foot wide filterbelt module	KVICHAK 1 foot wide filterbelt module
	MANNED OR UNMANNED	Manned	Manned
RECOVERY RATES	NOMINAL (gals/min)	80	80
	DE-RATED DAILY (gals/day)	23,040	23,040
	" " (bbls/day)	549	549
	BUILT-IN STORAGE (gals)	1,000	1,000
	BLADDER STORAGE (gals)	0	0
MOBILIZATION	POINT OF CONTACT	Port Operations Facility Response Team (FRT) 474-6262 (24 hr.)	Port Operations Facility Response Team (FRT) 474-6262 (24 hr.)
	STORAGE LOCATIONS	Building 3, Ford Island	Building 3, Ford Island
	TRANSPORTATION NEEDED	Skimmer has Trailer	Skimmer has Trailer
	LAUNCH SITE (S)	Building 3, Ford Island	Building 3, Ford Island
	CREW NEEDED	2	2
	TIME (hrs) (Request on water)	<1	<1
TOTAL DE-RATED DAILY RECOVERY AVAILBALE ON-SITE FROM SKIMMERS: 46,080 gals/day (954 bbls/day)			

Portable Skimmers			
Manufacturer	**Brand**	**Location**	**On Hand**
Douglas Environmental	Skim-Pac Skimmer	Building 3, Ford Island	2
Douglas Environmental	Skim-Pac Skimmer	Building 3, Ford Island	1
Douglas Environmental	Skim-Pac Skimmer	Building 3, Ford Island	1
Applied Fabric	Harbor Buster Towable Skimmer	Building 3, Ford Island	1
Unknown	Duckbill Skimmer	Fuel Department, Bldg 1757	2
Unknown	Skimmer	Fuel Department, Bldg 1757	2
Unknown	Duckbill Skimmer	Hickam Spill Cart, Bldg 2125	1
Douglas Environmental	Skim-Pac Skimmer	Hickam Spill Cart, Bldg 2125	1

TABLE E-2: ON-SITE INVENTORY - VACUUM TRUCKS							
Topic		**Truck Type**	**Truck Type**	**Truck Type**	**Truck Type**	**Truck Type**	**Truck Type**
NUMBER	ON HAND	1	1	3	1	3	1
MANUFACTURER	BRAND	Isometrics	Isometrics	International	Freightliner	Freightliner	Freightliner
	MODEL	Unk	Unk	Unk	Unk	Unk	Unk
	YEAR	2009	2006	Unk	Unk	Unk	Unk
PICK-UP HEAD TYPE (Manta, weir, etc.)		Weir/Hose Nozzles	Weir/Hose Nozzles	Weir/Hose Nozzles	Weir/Hose Nozzles	Weir/Hose Nozzles	Weir/Hose Nozzles
RECOVERY RATES	NOMINAL (gals/min)	80	80	100	80	80	80
	DE-RATED DAILY (gals/day)	23,040	23,040	3 @ 28,800 Each 86,400 Total	23,040	3 @ 23,040 69,120	23,040
	" " (bbls/day)	549	549	3 @ 686 Each 2,058 Total	549	3 @ 549 1,647	549
	TANK SIZE (gals)	2,000	2,000	2,000 Each	2,000	2,000 Each	4,000
MOBILIZATION	POINT OF CONTACT	Port Operations FRT 474-6262 (24 hr.)	Port Operations FRT 474-6262 (24 hr.)	NAVSUP FLCPH 473-7801	NAVFAC HI Emerg. Service Desk 449-3100	NAVFAC HI Emerg. Service Desk 449-3100	NAVFAC HI Emerg. Service Desk 449-3100
	STORAGE LOCATION	Building 3, Ford Island	Building 3, Ford Island	Fuel Department, Bldg 1757	Hickam Air Field Bldg 2125	BOWTS Facility Bldg 1910	BOWTS Facility Bldg 1910
	CREW NEEDED	1	1	1	1	1	1
	TIME (hrs) (Request on the road)	10 mins	10 mins	10 mins	10 mins	10 mins	10 mins
TOTAL DE-RATED DAILY RECOVERY AVAILBALE ON-SITE FROM VACUUM TRUCKS: 247,680 gals/day (5,897 bbls/day)							

TABLE E-3: ON-SITE INVENTORY - BOOM				
Class	**Skirt Size**	**Point of Contacty**	**Amount (Ft)**	**Location**
RESPONSE BOOM (STORAGE AND IN-WATER)				
Class II	24 inch	Port Operations FRT 474-6262 (24 hr.)	29,200	Varies
RESPONSE BOOM ON REELS				
Class II	24 inch	Port Operations FRT 474-6262 (24 hr.)	5,000	5 Reels at: Kilo 1, Kilo 9, Sierra 4, Lima Landing, and Hickam Harbor (1,000 ft / reel)
Total Response Boom: 34,200 Feet				
PERMANENT (HARD) BOOM IN WATER				
Perma-Boom	24 inch	Port Operations FRT 474-6262 (24 hr.)	31,500	Varies
PERMANENT (HARD) BOOM ON REELS				
Perma-Boom	24 inch	Port Operations FRT 474-6262 (24 hr.)	400	Arizona Visitor Center where Halawa Strean empties into Pearl Harbor
PERMANENT (HARD) BOOM IN STORAGE				
Perma-Boom	24 inch	Port Operations FRT 474-6262 (24 hr.)	4,600	Building 174
Total Perma-Boom: 36,500 Feet				

TABLE E-4: ON-SITE INVENTORY - VESSELS				
Equipment	**How Many**	**Type**	**Location**	**Op. Status**
BOOM-DEPLOYING BOATS	1	2006 Northwind 21' Utility Boat (FRT-1)	FRT Dock, Ford Island	Functional
	1	2007 Workskiff 21' Utility Boat (FRT-2)	" "	" "
	1	2006 Northwind 21' Utility Boat (FRT-3)	" "	" "
	1	2007 Workskiff 21' Utility Boat (FRT-4)	" "	" "
	1	1996 Seaarc Marine 30' Platform Boat (RRP-1)	" "	" "
	1	2006 Almar 30' Platform Boat (RRP-3)	" "	" "
	1	30' Platform Boat (RRP-4)	" "	" "
OTHER BOATS	4	Work Boats	Port Operations	Functional
	4	Tugs	" "	" "
	1	Pilot Boat	" "	" "
	1	Personnel Boat	" "	" "
	1	12' Boat	" "	" "

TABLE E-5: ON-SITE INVENTORY - SORBENTS AND SPILL KITS			
Item	**Location**	**Unit**	**In Stock**
Port Operations/FRT			
Absorbent Pads	Ford Island Building 3	100 Pads per Bale	30
Absorbent Sweeps (19' x 100')	" "	1 Sweep per Bale	62
Absorbent Boom (8" x 10")	" "	4 Per Bag	32
Various Spill Kits	" "	Kit	Multiple
Organic Absorbent Beads	" "	Box	Multiple
Particulate Absorbent	" "	Bag	Multiple
Dragnet Pom Poms	" "	Unknown	Multiple
Filter Belts for Skimmer (Fine Foam)	" "	Unknown	Multiple
Federal Fire Department			
Granular Absorbent Floor Dri Brand, Size 24qts.	Station 1	Bag	15
Absorbent Pads, Size 15" x 15"	" "	50/Box	8
2.5 Rolls Absorbent Boom	Station 6	-	-
500 Absorbent Pads	" "	-	-
Granular Absorbent, Size 20 Gallons	Station 8	Overpack	1
Spill Kits For Oils, Coolants, Solvents	Various Stations and Vehicles	Kit	Multiple
Spill Kits for Acids, Caustics, Strong Solvents	" "	Kit	Multiple
Spill Kits for Acid and Caustics	" "	Kit	Multiple
Spill Kit for Non-Aggressive Fluids	" "	Kit	Multiple
Spill Kit for Aggressive Fluids	" "	Kit	Multiple
FLCPH Fuel Department			
Absorbent Diapers	Building 1757	Bale	14
Absorbent Diapers	" "	Box	2
Large Suasage Boom (Orange)	" "	Boom	13
Medium Sausage Boom (White)	" "	Boom	11
Small Sausage Boom (Blue)	" "	Boom	35
Small Sausage Boom (Blue)	" "	Box	1
Absorbent Diabers	" "	100 per Bale	4
Small Napkin Oil Absorbents	" "	Pack	3
Sausage Boom	" "	Boom	4
Absorbent Diapers	" "	100 per Pack	5
10" Sausage Boom	" "	Boom	6
Oil Pig Socks	Bldg 2125	Bundle	2

TABLE E-5: ON-SITE INVENTORY - SORBENTS AND SPILL KITS			
Item	**Location**	**Unit**	**In Stock**
Medium Sausage Boom (White)	" "	Bag	2
Various Spill Kits	Various Locations	Kit	Multiple
NAVFAC Hawaii			
"Speedy Dry" Absorbent	Waste Treatment Plant	Bag	Multiple
Sorbent Pillows	" "	Bag	Multiple
Various Spill Kits	" "	Kit	Multiple

TABLE E-6: ON-SITE INVENTORY - TEMPORARY WASTE OIL STORAGE		
Equipment	**Capacity**	**Location / POC / Telephone**
Bulk Storage Equipment For Recovered Oil		
SWOB Barge # 12 and 48	2 @ 70,000 gals	Waterfront Operations Officer 474-6262
YON Barge # 328, 335, 336	#328 @ 500,000 gals #335 @ 300,000 gals #336 @ 300,000 gals	Fuel Department 473-7833 or 690-0115 (24 hours)
YON Barge # 281	300,000 gals	Waterfront Operations Officer 474-6262
NAVSUP FLCPH Upper Tank Farm Bulk Storage Tanks	Approximately 6,300,000 gals each	Fuel Deptment 473-7833 or 690-0115 (24 hours)
NAVSUP FLCPH FORFAC Bulk Storage Tanks B-1 and B-2	378,000 gals each	Fuel Deptment 473-7833 or 690-0115 (24 hours)
Oil Storage Bladders	1 @ 290,000 gals 2 @ 136,000 gals 2 @ 26,000 gals 1 @ 21,000 gals 6 @ 500 gals	Navy SUPSALV Hawaii ESSM Base (As of November 2017) (202) 781-1731, Option #2 (during work hours) (202) 781-3889 (Duty Officer, after hours)
Storage Equipment For Contaminated Waste/Hazardous Wastes/Response Wastes and Debris		
Drums	Multiple @ 55 gal	NAVFAC HI Environmental Services 471-1171
Dumpsters	Multiple @ Variable	NAVFAC HI Environmental Services 471-1171

TABLE E-7: FIREFIGHTING & CRASH FIRE RESCUE EQUIPMENT					
Station	**Call Sign**	**Year**	**Make**	**Type**	**Location**
First Line Apparatus Inventory					
1	E-101	6/2012	Pierce Saber	Pumper	JBPHH, Shipyard
	Tower 120	2007	Pierce	Tower / Platform	JBPHH, Shipyard
	HazMat-151	2004	Pierce	P-31(HazMat)	JBPHH, Shipyard
	Support 154	1996	Mercedes	Class"C"	JBPHH, Shipyard
2	E-102	6/2012	Pierce Saber	Pumper	JBPHH, Sub base
	Medic-2	2011	Whl Coach	F-450/Type 1	JBPHH, Sub base
3	E-103	6/2012	Pierce Saber	Pumper	Tripler AMC
4	E-104	2006	Pierce	Pumper	Ford Island
5	E-105	6/2012	Pierce Saber	Pumper	Manana, Pearl City

TABLE E-7: FIREFIGHTING & CRASH FIRE RESCUE EQUIPMENT					
Station	**Call Sign**	**Year**	**Make**	**Type**	**Location**
	Tanker-142	2006	Pierce	Tanker	Manana, Pearl City
6	E-106	2010	Pierce	Pumper	(JBPHH)
	Reserve-136	1994	KME	Pumper	(JBPHH)
	Medic 6	2011	Whl Coach	F-450/Type 1	(JBPHH)
	Tanker 143	1994	International	P-26(Water-Dist)	(JBPHH)
	New Tanker 143	2013	Pierce	Tanker	(JBPHH)
	ARFF-171	2005	OshKosh	T-1500	(JBPHH)
	ARFF-172	2006	OshKosh	T-1500	(JBPHH)
	Crash 175	1986	Oshkosh	P-19(FFGT)	(JBPHH)
	Crash 176	1994	Teledyne	P-23(FFGT)	(JBPHH)
	Crash 177	2006	Oshkosh	P-23(Striker)	(JBPHH)
	Crash 178	1998	Oshkosh	Crash 3TK(FFGT)	(JBPHH)
7	E-107	2006	Pierce	Pumper	NCTAMS, Wahiawa
	Medic 7	2011	Whl Coach	F-450/Type 1	NCTAMS, Wahiawa
8	E-108	2008	Pierce	Pumper	MCAS, Kaneohe
	New E-108	2013	Pierce	Pumper	MCAS, Kaneohe
	E-112	2010	Pierce	Pumper	MCAS, Kaneohe
	Medic-8	2008	Whl Coach	F-350/Type 1	MCAS, Kaneohe
	Brush 148	*2011*	Pierce	Large Wildland	MCAS, Kaneohe
	Hazmat 156	2002	Pierce	P-30(Med-Rescue)	(JBPHH)
	HazMat Trailer	2007	Wells Fargo	HazMat Response	MCAS, Kaneohe
	E-109	2010	Pierce	Pumper	West Loch Annex
9	Brush 145	2009	Ford	Medium Wildland	West Loch Annex
	E-110	2006	Pierce	Pumper	Helemano Mil Resv
10	Brush 147	2009	Pierce	Large Wildland	Helemano Mil Resv
	E-114	2005	Pierce	Pumper	Wheeler AAF
14	Brush 144	2009	Ford	Medium Wildland	Wheeler AAF
	ARFF-173	2007	Oshkosh	T-1500	Wheeler AAF
	ARFF-174	2005	OshKosh	T-1500	Wheeler AAF
	Medic-14	2011	Whl Coach	F-450/Type 1	Wheeler AAF
15	E-115	2008	Pierce	Pumper	Schofield Barracks
	New E-115	2013	Pierce	Pumper	MCAS, Kaneohe
	Truck 119	2005	Pierce	105"	Schofield Barracks
	Tanker 141	2009	Pierce	Tanker	Schofield Barracks
	HazMat-152	1995	International	Medium HAZMAT	Schofield Barracks
	New HazMat-152	10/2013	Pierce	Heavy HAZMAT	Schofield Barracks
	HazMat-153	1994	Pierce	Small HAZMAT	Schofield Barracks
	Brush 146	2009	Pierce	Large Wildland	Schofield Barracks
16	E-116	2003	Pierce	Pumper	Camp H.M. Smith
	TAU-155	2009	Ford F-550	Twin Agent Unit	Camp H.M. Smith

TABLE E-7: FIREFIGHTING & CRASH FIRE RESCUE EQUIPMENT					
Station	**Call Sign**	**Year**	**Make**	**Type**	**Location**
Special Operations/Reserve/Support/GSA Vehicles					
1	Storage Trailer	2005	-	Equipment stowage	-
	Storage Trailer	-	-	Equipment stowage	-
	Storage Trailer	2004	Haulmark	Equipment stowage	-
	Special Ops 1	2003	MD288	Mass Decon trailer	-
6	MCI Trailer	-	Wells Fargo	-	-
	Foam Trailer	-	Stanly Emerg	-	-
	Mobile Air Trailer	-	Bauer	-	-
	Pump Test Trailer	2009	Wells Cargo	Pump Test	-
	HazMat Trailer	-	Wells Fargo	-	-
8	HazMat Trailer	2007	Wells Fargo	HazMat Response	-
	HazMat Trailer	-	-	-	-
4	Liberty 1	2006	-	Air Cart	-
WAAF	MAFT (cab)	2000	International	Trainer	-
	MAFT (trailer)	2000	-	Trainer	-
14	Liberty 2	2006	-	Air Cart	-
15	Special Ops 2	2003	-	Mass Decon Trailer	-
	Storage Trailer	2009	Wells Cargo	Equipment stowage	-
Reserve Apparatus Fleet					
15	Reserve 131 (101)	2003	Pierce	Pumper	-
10	Reserve 132 (110)	2003	Pierce	Pumper	-
8	Reserve 133 (103)	1997	KME	Pumper	-
6	Reserve 136 (107)	1994	KME	Pumper	-
NAVFAC	Truck 118	1994	Pierce	Tele-Squirt	-
Command Vehicles					
HQ	District Chief- 1	2005	Ford	Sport Trac/Command	-
HQ	District Chief- 2	2005	Ford	Sport Trac/Command	-
1	Battalion Chief-4	2007	Chevy	Suburban/Command	-
8	Battalion Chief- 1	2012	Cherokee	SUV/Command	-
14	Battalion Chief- 2	2012	Cherokee	SUV/Command	-
HQTR	Battalion Chief Extra Vehicle	2012	Cherokee	SUV/Command	-
6	Battalion Chief- 3	-	Chevy	Suburban/Command	-
6	Fire Marshall	2006	Chevy	Trail Blazer	-
GSA Vehicles					
-	FIRE 1	-	-	-	-
-	FIRE 2/3	-	-	-	-
-	Fire Marshal	-	-	-	-
-	SQUAD 161	2006	Ford	F-350	-
-	Supply	-	-	-	-
-	Supply F-350 (Blue)	2003	Dodge Ram	Pick up 7K LB	-

TABLE E-7: FIREFIGHTING & CRASH FIRE RESCUE EQUIPMENT					
Station	**Call Sign**	**Year**	**Make**	**Type**	**Location**
-	Training	-	-	-	-
-	Prevention 9	2003	Silverado	-	-
-	Prevention	2013	Ford Focus (Red)	-	-
-	Prevention	2013	Ford Focus (Red)	-	-
-	Prevention	2012	Chevy Malibu (Gray)	-	-
-	Prevention	2013	Ford Focus (Silver)	-	-
-	Prevention	2012	Chevy Malibu (Gray)	-	-
-	Prevention	2013	Ford Focus (Black)	-	-
-	Prevention	2012	Chevy Malibu (White)	-	-
-	Prevention	2012	Chevy Malibu (Silver)	-	-
-	Prevention	2013	Ford Focus (Red)	-	-
-	Prevention	2013	Ford Focus (Red)	-	-
Scheduled for DRMO 2014					
Jun-14	Reserve 133 (103)	1997	KME	Pumper	-
Jul-14	Tanker 143	1994	International	P-26(Water-Dist)	-
Jul-14	HazMat-152	1995	International	Medium HAZMAT	-
Aug-14	Truck 118	1994	Pierce	Tele-Squirt	-
Aug-14	Reserve 136 (107)	1994	KME	Pumper	-
Aug-14	Ambulance	-	-	-	-

TABLE E-8: HEAVY EQUIPMENT*			
Vehicle/Equipment Type	**Year**	**ID #**	**Assignment Name**
TRUCK CARGO PICKUP UP TO 8500 GVWR REGULAR CAB	2006	27766	NFH OPC741
TRUCK CARGO PICKUP UP TO 8500 GVWR REGULAR CAB	2014	29004	NFH OPC741
TRUCK CARGO PICKUP UP TO 8500 GVWR REGULAR CAB	2009	29005	NFH OPC741
TRUCK CARGO PICKUP COMPACT 4X2 UP TO 6100 GVWR EXTENDED CAB	2012	27771	NFH OPC741
TRUCK CARGO PICKUP COMPACT 4X2 UP TO 6100 GVWR EXTENDED CAB	2009	28174	NFH OPC741
TRUCK CARGO PICKUP COMPACT 4X2 UP TO 6100 GVWR EXTENDED CAB	2009	28175	NFH OPC741
TRUCK MULTISTOP STEP VAN 8501 - 13999 GVWR DUALLY	2016	28176	NFH OPC741
TRUCK STAKE 21000 GVWR AND UP 12-22 FT BED EXTENDED CAB	2015	60034	NFH OPC741
TRUCK STAKE 21000 GVWR AND UP 12 - 22 FT BED REGULAR CAB HTG	2008	28177	NFH OPC741
TRUCK DUMP 5 CY 28000 GVWR	2009	28179	NFH OPC741
TRUCK DUMP 5 CY 28000 GVWR	1997	28180	NFH OPC741
TRUCK DUMP 10 CY 6X4 52000 GVWR	2000	28178	NFH OPC741
TRUCK DUMP 10 CY 6X4 52000 GVWR	1996	60028	NFH OPC741
TRUCK TRACTOR 6X4 43000 GVWR 70000 GCVWR	2016	29069	NFH OPC741

TABLE E-8: HEAVY EQUIPMENT*			
Vehicle/Equipment Type	**Year**	**ID #**	**Assignment Name**
TRUCK TRACTOR 6 X 4 62000 GVWR 100000 GCVWR	1999	29075	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR	2016	29068	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR	2016	29070	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR	2016	29071	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR	2016	29073	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR 100000 GCVWR	1990	29067	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR 100000 GCVWR	2002	28950	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR 100000 GCVWR	2002	28951	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR 100000 GCVWR	2002	29076	NFH OPC741
TRUCK TRACTOR 6 X 4 62000 GVWR 100000 GCVWR	2002	29077	NFH OPC741
TRUCK MOUNTED OVERHEAD AERIAL SERVICE ARTICULATING NON OVER-CENTER TO 60 FT WORKING HEIGHT	2011	28953	NFH OPC741
TRUCK MOUNTED OVERHEAD AERIAL SERVICE ARTICULATING NON OVER-CENTER TO 60 FT WORKING HEIGHT	2016	28954	NFH OPC741
TRUCK WRECKER ROLLBACK	2016	29055	NFH OPC741
TRUCK TANK FUEL SERVICING 1 SYSTEM 1 TANK	2011	28956	NFH OPC741
TRUCK TANK FUEL SERVICING 1 SYSTEM 1 TANK	2014	28982	NFH OPC741
TRUCK TANK FUEL SERVICING 1 SYSTEM 1 TANK	2014	28983	NFH OPC741
SEMITRAILER STAKE 2-3 AXLE 20 TON 40-55 FT W/O STAKES	2006	27375	NFH OPC741
SEMITRAILER STAKE 2-3 AXLE 20 TON 40-55 FT W/O STAKES	2006	27992	NFH OPC741
SEMITRAILER STAKE 2-3 AXLE 20 TON 40-55 FT W/O STAKES	2002	28055	NFH OPC741
SEMITRAILER STAKE 2-3 AXLE 20 TON 40-55 FT W/O STAKES	2002	28181	NFH OPC741
SEMITRAILER STAKE 2-3 AXLE 20 TON 40-55 FT W/O STAKES	2006	29046	NFH OPC741
SEMITRAILER STAKE 2-3 AXLE 20 TON 40-55 FT W/O STAKES	2002	29047	NFH OPC741
SEMITRAILER DROP DECK 2 AXLE 20 TON	1988	29006	NFH OPC741
SEMITRAILER DROP DECK 2 AXLE 20 TON	1993	29050	NFH OPC741
SEMITRAILER LOWBED 2 AXLE 35 TON NONSTANDARD	1997	29052	NFH OPC741
SEMITRAILER LOWBED 3 AXLE 35 TON	2010	27769	NFH OPC741
SEMITRAILER LOWBED 3 AXLE 35 TON	2010	27770	NFH OPC741
SEMITRAILER LOWBED 3 AXLE 35 TON	1988	29053	NFH OPC741
SEMITRAILER LOWBED 3 AXLE 60 TON AND UP NONSTANDARD	2016	27767	NFH OPC741
SEMITRAILER LOWBED 3 AXLE 60 TON AND UP NONSTANDARD	1999	29054	NFH OPC741
TRAILER HYDRAULIC ELEVATING BODY NONSTANDARD	1992	29056	NFH OPC741
TRAILER LOWBED TRANSPORTER 18001 GVWR AND UP TRAVELING AXLE	2016	29051	NFH OPC741
TRAILER LOWBED TRANSPORTER 18001 GVWR AND UP TRAVELING AXLE	2016	29057	NFH OPC741

TABLE E-8: HEAVY EQUIPMENT*			
Vehicle/Equipment Type	**Year**	**ID #**	**Assignment Name**
SEMITRAILER DEMOLITION REAR DUMP 34 CY	2010	27768	NFH OPC741
SEMITRAILER DEMOLITION REAR DUMP 34 CY	2017	29007	NFH OPC741
SEMITRAILER DEMOLITION REAR DUMP 34 CY	1992	29009	NFH OPC741
SEMITRAILER DEMOLITION REAR DUMP 34 CY	2001	29059	NFH OPC741
SEMITRAILER DEMOLITION REAR DUMP 34 CY	2002	29060	NFH OPC741
SEMITRAILER DEMOLITION REAR DUMP 34 CY	2002	29061	NFH OPC741
SEMITRAILER DEMOLITION REAR DUMP 34 CY	2001	29063	NFH OPC741
SEMITRAILER DEMOLITION REAR DUMP 34 CY	1995	29064	NFH OPC741
SEMITRAILER DEMOLITION REAR DUMP 34 CY	2017	29065	NFH OPC741
TRAILER LOWBED TILT DECK TANDEM AXLE UP TO 60 TON	2015	29010	NFH OPC741
DISTRIBUTER WATER TRUCK/TRAILER COMMERCIAL NONSTANDARD	2015	27990	NFH OPC741
DISTRIBUTER WATER TRUCK/TRAILER COMMERCIAL NONSTANDARD	2015	28171	NFH OPC741
EXCAVATOR CRAWLER MOUNTED HYDRAULIC OPERATED NONSTANDARD	1998	28984	NFH OPC741
EXCAVATOR CRAWLER MOUNTED HYDRAULIC OPERATED NONSTANDARD	2002	28985	NFH OPC741
EXCAVATOR CRAWLER MOUNTED HYDRAULIC OPERATED NONSTANDARD	2002	28986	NFH OPC741
LOADER SCOOP TRACK 1.75 CY BUCKET W/ TEETH	1998	28987	NFH OPC741
LOADER SCOOP TRACK 1.75 CY BUCKET W/ TEETH	2002	28988	NFH OPC741
LOADER SCOOP WHEEL MOUNTED 4X4 NONSTANDARD	2010	27492	NFH OPC741
LOADER SKID STEER NONSTANDARD	1987	27493	NFH OPC741
LOADER SCOOP WHEEL MOUNTED 1.5 CY GP 85 HP CAB	1991	28990	NFH OPC741
ROLLER ROAD 2 AXLE TANDEM 3 - 6 TON	1988	28991	NFH OPC741
ROLLER ROAD 2 AXLE TANDEM 3 - 6 TON	2013	28992	NFH OPC741
TRACTOR WHEELED INDUSTRIAL 4 X 2 60 HP MIN LDR 1 BUCKET BACKHOE	1993	28993	NFH OPC741
TRACTOR WHEELED INDUSTRIAL 4 X 2 60 HP MIN LDR 1 BUCKET BACKHOE	1993	28994	NFH OPC741
TRACTOR WHEELED INDUSTRIAL 4 X 2 60 HP MIN LDR 1 BUCKET BACKHOE	2017	28995	NFH OPC741
TRACTOR WHEELED INDUSTRIAL 4 X 2 60 HP MIN LDR 1 BUCKET BACKHOE	2017	28996	NFH OPC741
TRACTOR WHEELED INDUSTRIAL 4 X 4 90 HP MIN LDR 1.5 BUCKET BACKHOE	2017	28997	NFH OPC741
TRACTOR WHEELED INDUSTRIAL 4 X 4 90 HP MIN LDR 1.5 BUCKET BACKHOE	1995	28998	NFH OPC741
CLEANER SEWAGE/WASTE COLLECTION 1300 GALLON	2016	29001	NFH OPC741
CLEANER SEWAGE/WASTE COLLECTION 1300 GALLON	2016	29002	NFH OPC741
CLEANER SEWAGE/WASTE COLLECTION 1300 GALLON	2011	29003	NFH OPC741
SWEEPER ROTARY SELF-PROPELLED WHEEL MOUNTED NONSTANDARD	2007	28999	NFH OPC741
SWEEPER ROTARY SELF-PROPELLED WHEEL MOUNTED NONSTANDARD	2010	29000	NFH OPC741

*NAVFAC Hawaii Transportation

E.2 RESPONSE PERSONNEL

E.2.1 Immediate Response Teams

The Immediate Response Team for OHS spills on land is the Federal Fire Department. For oil spills on water the Immediate Response Team is the Facility Response Team (FRT), which is a contractor run, on-water spill response team based on Ford Island. The Immediate Response Teams are the first responders to OHS spills. Table E-9 lists the key personnel and contact information for the FRT.

TABLE E-9: FACILITY RESPONSE TEAM

Name	Day Phone	24 Hr Phone	Response Time (Min)	Response Job	Training Type	Training Date
Operations Manager	472-9942	472-9942	< 30 min	Operations Leader	ICS/ 40-HOUR HAZWOPER	See training records
23 Personel	Same	Same	< 30 min	Skimmer/Boat Operator	40-HOUR HAZWOPER	See training records
5 Personel	Same	Same	< 30 min	Decontamination	40-HOUR HAZWOPER	See training records
4 Personel	Same	Same	< 30 min	Vacuum Truck	40-HOUR HAZWOPER	See training records
12 Personel	Same	Same	< 30 min	As Directed	40-HOUR HAZWOPER	See training records
NOTE: The Facility Response Team is manned 24-hours/day and operates out Building 3 on Ford Island.						

E.2.2 Spill Management Team

The Navy policy is to use the ICS/UC for structuring Navy spill response management organizations. These are effective command and control systems specifically designed to be flexible in order to accommodate small to worst case spills and the changing conditions and dynamics that often occur in a spill response. In addition, the ICS and UCS structures facilitate coordination with regulatory agency personnel, contractors, and public organizations or groups.

The COMNAVREG HI Spill Management Team (SMT) takes over control from the Fire Department once the emergency phase of the spill is over. The composition of the team, using the ICS structure, will vary depending on the circumstances and scope of the spill as noted earlier. The Spill Management Teams structure and positions are discussed in Appendix B. Appendix U, Table U-2, provides the COMNAVREG HI SMT organization chart.

E.3 RESOURCES AVAILABLE TO COMNAVREG HI

The NOSC Rep for COMNAVREG HI has access to a number of resources beyond immediate staff support to assist in responding to a major oil or hazardous substance (OHS) pollution incidents. This section discusses the following type of resources:

- Navy centrally procured OHS pollution response equipment
- Commercial OHS pollution response contractors
- Technical advisors with specialized expertise and experience in pollution response decision-making
- Technical sources of information and reference data relative to OHS pollution response.

E.3.1 Navy Equipment

E.3.1.1 Navy Supervisor of Salvage Equipment.

NAVSEA, through the Supervisor of Salvage (SUPSALV), Code 00C, maintains the largest inventory of pollution response equipment anywhere in the Navy. This equipment is suitable for offshore and salvage-related pollution incidents and is located at four Emergency Ship Salvage Material (ESSM) Warehouses around the country for rapid deployment to pollution sites. Table E-10 provides an inventory of SUPSALV pollution control equipment along with its location. Along with the equipment, SUPSALV provides trained contractor personnel to operate equipment, and experienced staff operations personnel to assist the NOSC Rep in key decision-making.

TABLE E-10: SUPSALV OIL SPILL RESPONSE EQUIPMENT

Skimmer Systems						
System ID	System	EDRC	ESSM VA	ESSM CA	ESSM AK	ESSM HI
		bbls/day	#	#	#	#
P16100	Modular Vessel Skimmer	3,929	3	4	2	2
P16200	Salvage Support Skimmer	1,056	2	3	0	2
P16300	High Speed Skimmer VOSS	1,510	10	1	1	1
P16310	Class XI VOSS	3,929	1	0	1	0
P16400	Vessel Skimmer	3,929	5	4	1	1
P16500	Heavy Debris Recovery System	2,757	1	1	2	0
P16700	Inland Support Skimmer	651	0	0	2	0
P18100	Vacuum Pump Skimmer	2,400	1	0	0	0
Total EDRC bbls/day			57,730	38,867	24,042	15,409
Boom Systems						
System ID	System	Boom (ft)	ESSM VA	ESSM CA	ESSM AK	ESSM HI
			#	#	#	#
P16200	Salvage Skim Van	1,000	2	3	0	2
P19070	Oil Containment Boom System, 18" Harbor Boom	2,000	9	8	3	0
P19080	Oil Containment Boom System, USS-18 " IFL Boom	4,000	3	2	5	2
P19090	Oil Containment Boom System, USS-26" Boom	3,200	5	3	3	4
P19100	Oil Containment Boom System (42")	2,000	16	10	7	8
Total Booming (ft)			80,000	56,600	49,600	38,800
Temporary Storage						
System ID	System	TSC (bbls)	ESSM VA	ESSM CA	ESSM AK	ESSM HI
			#	#	#	#
P14200	290K Gallon Bladder	6,905	0	0	1	1
P14100	136K Gallon Bladder	3,238	5	4	2	2
P14300	50K Gallon Bladder	1,190	1	2	0	0
P14300	26K Gallon Bladder	619	1	0	0	0
P16100	26K Gallon Bladder	619	1	2	2	2
P14300	21K Gallon Bladder	500	14	0	1	1

TABLE E-10: SUPSALV OIL SPILL RESPONSE EQUIPMENT						
P16100	21K Gallon Bladder	500	2	2	0	0
P16400	21K Gallon Bladder	500	5	4	2	0
P16700	1,500 Gallon Bladder	36	0	0	2	0
P16200	500 Gallon Bladder	12	6	9	0	6
P16500	500 Gallon Bladder	12	1	1	2	0
Total TSC bbls			29,202	19,690	16,215	15,191

Contact Information - For spills exceeding COMNAVREG HI's response capabilities (Tier 2 & 3 spills) SUPSALV can be contacted at 202-781-1731, extension 2. The numbers will connect to NAVSEA personnel who will in turn notify SUPSALV. SUPSALV can respond from their ESSM base at Bishops Point in JBPHH within 6 hours and within 36 and 60 hours from their West Coast and East Coast locations, respectively.

Equipment requests should be initiated from SUPSALV's CAC enabled website - https://secure.supsalv.org. The ESSM Equipment Request link can be found on the left side menu. If commands are unable to access the CAC enabled site, they may use the following PDF. [Request Form PDF] (Preferred method) or by naval message, official e-mail, or by FAX using sample format provided below. Additional U.S. Navy guidance is available on the instructions section of the 00C2 Salvage Publications section of SUPSALV's CAC enabled web site.

Requests should be forwarded to:
Email: essmmanager@supsalv.org
Phone: 202-781-1731 extension 2, or
Fax: 202-781-4588

Navy Request for ESSM Equipment - Required Content

From:
To: Naval Sea Systems Command (SEA00C) (ESSMManager@supsalv.org)
Subj: REQUEST FOR ESSM EQUIPMENT

1. Requesting Activity:
2. Equipment Required:
3. Justification for Request:
4. Required Delivery Date:
5. Anticipated Return Date:
6. Shipping Instructions:
7. Provide Shipping TAC or TCN number or appropriate line of accounting.
8. Provide appropriate line of accounting to cover repair or replacement of lost or damaged equipment/components.
9. Requestor, Technical P.O.C. Name: Command: Title: Telephone: Fax: Email:
10. Financial P.O.C. Name: Command: Title: Telephone: Fax: Email:
11. Additional Information:

Authority to Utilize U.S. Navy SUPSALV - The below letter from the Department of Navy, dated January 10, 2014, authorizes any DOD facility to list in its FRP/ICP the spill response resources owned and managed by U.S. Navy SUPSALV in order to meet their OPA 90 requirements.

DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND
1333 ISAAC HULL AVENUE SE
WASHINGTON NAVY YARD DC 20376

IN REPLY TO:

5090
Ser 00C25/2002
10 JAN 2014

From: Commander, Naval Sea Systems Command (00C)

Subj: AUTHORITY TO UTILIZE U.S. NAVY SUPERVISOR OF SALVAGE (SUPSALV) OIL SPILL RESPONSE EQUIPMENT

Ref: (a) SUPSALV Ltr Ser 00C25/2016 of 23 May 2008
(b) Oil Pollution Act of 1990 (OPA 90),
(c) OPNAVINST 5090.1(series), Environmental Readiness Program Manual
(d) 40CFR300, National Oil and Hazardous Substances Pollution Contingency Plan

Encl: (1) USCG Tiered Response Requirements, excerpts from 33CFR154, 33CFR155, and 40CFR112
(2) SUPSALV Equipment Capabilities

1. This letter replaces and updates reference (a), including the addition of contract aerial surveillance and dispersant capabilities newly required by reference (b). Pursuant to reference (b), facilities handling threshold quantities of oil are required to maintain Facility Response Plans (FRPs), addressing a full range of spill response scenarios. For each scenario, response equipment and trained personnel are required to respond with a defined capability and within certain time requirements. This letter authorizes any DoD facility to list in its FRP the spill response resources owned and managed by the U.S. Navy Supervisor of Salvage (SUPSALV) to the extent they meet the time and capability requirements of the mandated scenarios.

2. In accordance with reference (c), the Office of the Supervisor of Salvage (SUPSALV) of the Naval Sea Systems Command (NAVSEA Code 00C) is responsible for providing technical support and resources to the Navy Fleet and shore establishment under the oil and hazardous substance (OHS) spill response program. Reference (d) discusses SUPSALV capability to provide spill response assistance, upon request of the On Scene Coordinator (OSC), to other federal agencies. Under its Emergency Ship Salvage Material (ESSM) System, SUPSALV maintains an extensive inventory of centrally-located, open-ocean and catastrophic (on land or afloat) spill response equipment that is strategically

Subj: AUTHORITY TO UTILIZE U.S. NAVY SUPERVISOR OF SALVAGE (SUPSALV) OIL SPILL RESPONSE EQUIPMENT

pre-positioned to provide rapid response to Navy spills. This equipment, with operating personnel, is available for response to any DoD component (and any other federal agency, if requested by the OSC) in the event of large oil spills beyond the capabilities of the facility's locally available spill response assets Access to this equipment is on an actual cost-reimbursable basis for deployment - there is no retainer charge. SUPSALV spill response assets in the United States are located in Williamsburg, VA, Port Hueneme, CA, Pearl Harbor, HI, and Anchorage, AK. SUPSALV military and civilian technical specialists are available around-the-clock to provide further information on available resources and to assist with on-scene emergency response by providing technical assistance and/or coordinating the deployment and management of SUPSALV contractor and ESSM resources as required by the Navy/Federal customer.

3. SUPSALV's equipment inventory is capable of rapid deployment by either air or truck. The gear has been specifically designed to be self-supporting and capable of operating in remote locations if need be. This capability allows SUPSALV to operate in both inland and at-sea environments. SUPSALV personnel, equipment, and technical specialists have extensive operational experience and meet US Coast Guard Oil Spill Removal Organization (OSRO) maintenance, exercise and training requirements.

4. Regulatory agencies have established a combination of required response resources and the times within which the resources must arrive on scene for various spill scenarios, including Worst Case Discharges (WCD). Enclosure (1) provides a summary of WCD Tiered requirements as described in 40CFR112, 33CFR154, and 33CFR155. The geographic dispersion of SUPSALV's Emergency Ship Salvage Material (ESSM) bases allows SUPSALV flexibility in pulling equipment from the closest ESSM site or support contractor site, or by cascading equipment from other bases. This can greatly expedite response times and increase the amount of available assets. Response from the ESSM base in Williamsburg generally meets WCD Tiers 2 and 3 time requirements for the Gulf Coast, East Coast, and Great Lakes, and Tier 3 requirements on the West Coast (except for the Puget Sound area). Response from the ESSM base in Port Hueneme generally meets the WCD Tiers 2 and 3 time requirements for the West Coast and Tier 3 requirements on the Gulf Coast, East Coast, and Great Lakes. This response capability allows most DOD facilities and afloat entities to list SUPSALV as an appropriate responder in their spill contingency plans (such as Facility Response Plans,

Subj: AUTHORITY TO UTILIZE U.S. NAVY SUPERVISOR OF SALVAGE (SUPSALV) OIL SPILL RESPONSE EQUIPMENT

Spill Contingency Plans, and Vessel Response Plans) in order to meet government mandated response requirements (facilities) or voluntary compliance (public vessels). To determine a predicted response time for any specific facility, please call the point of contact at SUPSALV listed below.

5. The SUPSALV web link, www.supsalv.org, may be useful during updates of Oil and Hazardous Substances (OHS) spill contingency plans for Navy and other Department of Defense facilities that cite SUPSALV as a spill response organization. Planning information can be found under the "00C25 Environmental" tab of this website and specifically under "Equipment." General information and equipment descriptions are available as well as the following resources:

- "ESSM Pollution Response Equipment Inventory (By location)" offers users an updated table listing the equipment available at each ESSM location.
- "SUPSALV Contingency Planning" offers users pre-calculated Effective Daily Recovery Capacity (EDRC), Temporary Storage Capacity (TSC) and Feet of Boom for all SUPSALV equipment.
- "ESSM Equipment Request Procedures" provide guidelines for requesting SUPSALV assistance (such as request procedures, funding requirements, and a sample request message).

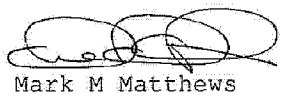
Enclosure (2) lists equipment capabilities using OPA 90 calculations. These figures may be used in determining equipment requirements necessary to meet worst case discharge (WCD) scenarios. Further descriptions of the equipment capabilities can be provided upon request. Each command remains responsible to ensure that they can meet the tiered response requirement criteria outlined in the regulations as applied to their facility.

6. Addressees desiring to include SUPSALV response assets in their contingency planning, or desiring further information, should coordinate with the points of contact listed in this paragraph. Addressees are further requested to distribute information regarding SUPSALV's response resources to their subordinate commands. Questions concerning access to SUPSALV resources can be addressed to the SUPSALV Operations and Ocean Engineering Division at (202) 781-1731, extension 2. Points of contact are Mr. Mike Herb for salvage matters and Mr. Kemp Skudin for pollution response matters.

3

Subj: AUTHORITY TO UTILIZE U.S. NAVY SUPERVISOR OF SALVAGE (SUPSALV) OIL SPILL RESPONSE EQUIPMENT

For after-hours emergencies, contact the NAVSEA Duty Officer at (202) 781-3889.



Mark M Matthews
Supervisor of Salvage and Diving,
Director of Ocean Engineering, USN

DISTRIBUTION:
National Response Team
Regional Response Teams
National Air and Space Administration
National Oceanic and Atmospheric Administration
National Science Foundation
USCG District Offices (dr)
USCG Sector Commands
U.S. Maritime Administration (MAR-610.1)
USNORTHCOM (J3, J5)
Deputy Commandant of the Marine Corps (Installations and Logistics)
HQ USAF (AF/A7C, AF/A7CV)
HQ Air Force Civil Engineer Support Agency (AFCESA)
Air Force Petroleum Agency (AFPA)
HQ Air National Guard (ANG)
Army Corps of Engineers
ATZF-CSS Marine Safety Office (Dept of the Army Watercraft Fleet)
ASAR 63rd RSC/99th RRC (Dept of the Army Reserve Watercraft Fleet)
COMSC (N732)
COMSUBFOR (N451A))
NAVFAC LANT (EV12)
NAVFAC PAC (EV1)
NAVFAC EXWCNAVFAC MIDLANT (N45, EV1)
NAVFAC SOUTHEAST (N45, EV1)
NAVFAC MIDWEST (N45, EV1)
NAVFAC SOUTHWEST (N45, EV1)
NAVFAC NORTHWEST (N45, EV1)
NAVFAC WASH (N45, EV1)
NAVFAC HAWAII (N45, EV1))
NAVFAC MARIANAS (N40, EV1)

Copy to:
USCG Headquarters (CG-533)
USCG Marine Safety Center
Federal Emergency Management Agency

4

Subj: AUTHORITY TO UTILIZE U.S. NAVY SUPERVISOR OF SALVAGE (SUPSALV) OIL SPILL RESPONSE EQUIPMENT

Environmental Protection Agency
Office of the Secretary of Defense (Joint Director of Military Support (JDOMS))
Missile Defense Agency (SBX-1 Program)
Defense Logistics Agency- Energy
OPNAV (N452)
COMPACFLT (N01CE15, N3, N4, N4655)
CUSFFC (N3, N43, N7)
COMUSNAVCENT (N3, N44, N5)
COMUSNAVEUR, COMUSNAVAF (N3, N5)CNIC (N45)
NAVFACHQ (CWA Program Administrator)
NAVFAC FAREAST (EV1)
COMNAVREG MIDLANT (N451)
COMNAVREG SOUTHEAST (N45)
COMNAVREG MIDWEST (N45)
COMNAVREG SOUTHWEST (N45)
COMNAVREG NORTHWEST (N45G)
COMNAVREG HAWAII (N45)
COMJTFREG MARIANAS (N40)
COMNAVFOR JAPAN (N45)
COMNAVFOR KOREA (N91)
COMNAVREG EURAFSWA (N45)
CCOMNAVREG EURAFSWA, Det Bahrain (EVSWA, N45)
NAVFAC EURAFSWA (EV1)
COMTHIRDFLT
COMFOURTHFLT
COMFIFTHFLT
COMSIXTHFLT
COMSEVENTHFLT
NSWCCD-SSES

5

TIERED RESPONSE REQUIREMENTS

RESPONSE TIMES:

33 CFR 154 Required Response Times for Marine-Transportation-Related Facilities	Tier 1 Time Hrs.	Tier 2 Time Hrs.	Tier 3 Time Hrs.
High Volume Port Areas (except for a TAPAA facility located in Prince William Sound, see 33 CFR 154.1135)	**6**	**30**	**54**
Great Lakes	**12**	**36**	**60**
All other river and canal, inland, and nearshore areas	**12**	**36**	**60**

33 CFR 155 Required Response Times for Vessels	Tier 1 Time Hrs.	Tier 2 Time Hrs.	Tier 3 Time Hrs.
High Volume Port Areas	**12**	**N/A**	**N/A**
Great Lakes	**18**	**N/A**	**N/A**
All other river and canal, inland, and nearshore areas	**24**	**N/A**	**N/A**
Open ocean (plus travel time from shore)	**24**	**N/A**	**N/A**

40 CFR 112 Required Response Times for Non-Transportation-related Onshore and Offshore Facilities	Tier 1 Time Hrs.	Tier 2 Time Hrs.	Tier 3 Time Hrs.
High Volume Port Areas	**6**	**30**	**54**
Great Lakes	**12**	**36**	**60**
All other river and canal, inland, and nearshore areas	**12**	**36**	**60**

RESPONSE CAPABILITY REQUIREMENTS CAPS BY OPERATING AREA:

February 18, 1998 *(40 CFR 112, 33 CFR 154 & 33 CFR 155)*	Tier 1	Tier 2	Tier 3
All except Rivers and Canals, Great Lakes	**12.5K bbls/day**	**25K bbls/day**	**50K bbls/day**
Great Lakes	**6.25K bbls/day**	**12.3K bbls/day**	**25K bbls/day**
Rivers and Canals	**1.875K bbls/day**	**3.75K bbls/day**	**7.5K bbls/day**

Note: 1) The caps show cumulative overall effective daily recovery capacity requirements, not incremental increases. Also, requirements for a given facility may be less.

Enclosure (1)

E.3.1.2 Navy Berthing Barges

COMPACTFLT maintains seven berthing barges within JBPHH that can be used to house large numbers of workers during a prolonged spill response. Two of these barges can accommodate 250 people each; the other five can accommodate 150 people each. The berthing barges are available on a reimbursable basis. Details on the berthing barges are listed below:

- Two can accommodate 250 people each.
- Five can accommodate 150 people each.
- Can only be used for government workers.
- Cannot support contractors.
- Need power hookup.
- Reimbursable basis - $30,000 per month.
- Unable to leave JBPHH.
- Bathroom facilities.

POC: Berthing & Messing Manager, COMPACFLT, N43,
Phone: 471-3992, 864-2961 (cell)

E.3.2 Oil Spill Removal Organizations

Table E-11 lists Oil Spill Removal Organizations (OSROs) available in the NOSC Rep's AOR that can be contracted using a USCG Basic Ordering Agreement (BOA). OSRO's can provide the NOSC Rep with additional sources of response capabilities if a shortfall or an additional response requirement arises. See Appendix T for guidance on activating a USCG BOA.

TABLE E-11: OSROs

Name	Day Phone	Other Phone	Response Time	Capability
Pacific Environmental Company (PENCO)	545-5195	524-2307 (fax)	< 12 hours	Can provide on-water containment and recovery, and on-land cleanup capabilities.
National Reponse Cororation (NRC) [1]	631-224-9141	-	< 12 hours	Can provide on-water containment and recovery, on-land cleanup capabilities, and dispersant coverage (including dispersant aircraft).

NOTES

[1]The COMNAVREG HI NOSC Rep can also access the services of the National Response Corporation by going through U.S. Navy SUPSALV.

ADDRESSES:

- Pacific Environmental Company (PENCO), 65 N. Nimitz Hwy, Pier 14, Honolulu, HI 96817
- National Response Corporation (NRC) 3500 Sunrise Highway, Suite 200, Building 200, Great River, NY 11739

E.3.3 Technical Advisors

There are many sources of technical advice that can assist the NOSC Rep during critical decision-making for large or complex oil or hazardous substance spills. The following paragraphs summarize the capabilities of the technical advisors and provide associated points of contact and phone numbers.

Although telephone numbers are provided for each of these sources, the NOSC Rep will normally coordinate all requests for technical advice through SUPSALV or NAVFAC. Personnel at these commands are familiar with the technical advisors and are better able to direct requests for specific information or assistance.

E.3.3.1 Navy Supervisor of Salvage

SUPSALV can provide extensive equipment resources and trained operators in support of a pollution response effort. SUPSALV is also prepared to provide operational advice and assistance to the NOSC Rep or to local FICs regarding oil discharge response, cleanup, contingency planning, training, and salvage. SUPSALV is also available for technical assistance on HS releases as well. Requests for technical support should be made by phone to the numbers listed below.

Reimbursement is required only if the requests involve the expenditure of direct funds, such as for travel. SUPSALV technical representatives are not intended to act as NOSC Rep Environmental/Technical Advisors during a pollution response, as that role should be performed by assigned command staff. However, SUPSALV will work with the NOSC Rep Environmental/ Scientific Advisor on specific operational support problems.

Phone Number: Day: (202) 781-1731 (Option #2)
24 HR: (202) 781-3889 (NAVSEA Duty Officer)

E.3.3.2 National Oceanic and Atmospheric Administration

National Oceanic and Atmospheric Administration (NOAA) Scientific Support Coordinators (SSCs) are one of the Special Forces available to the Federal On-Scene Coordinator (FOSC). These individuals can provide direct support to the NOSC Rep by assessing and integrating technical advice from a variety of experts and sources. The SSCs are particularly qualified to evaluate hazards to human health and the environment and to identify a preferred course of action to reduce these hazards. The SSCs can also provide models of spill trajectories and assessments of impacts to environmental sensitivities.

By coordinating scientific activity on-site, the SSC can ensure that health and environmental concerns are factored into the decision-making, allowing the OSC to focus on other pressing aspects of the response. A total of eleven SSCs are located strategically throughout U.S. coastal areas to provide rapid and specialized support to pollution incidents. In the COMNAVREG HI AOR, the associated SSC is located in Honolulu, Hawaii. Requests for assistance from the SSC can be coordinated through SUPSALV or can be contacted directly.

NOAA SSC
Phone Number: Day: 725-5903

E.3.3.3 Regional Response Team

The Regional Response Teams (RRT) are composed of federal and state agency representatives with regional coordinating responsibilities for pollution incident contingency planning, preparedness, and response. Each EPA region that coincides with the federal region has an RRT. These regional bodies coordinate planning and preparedness functions prior to an oil discharge or hazardous substance release, and advise and assist following an actual pollution incident. Thus, the RRTs can assist the NOSC Rep both in planning for and in responding to Navy pollution incidents. The EPA Regional Headquarters and Coast Guard District Offices provide the Co-Chairs to the RRTs. Requests to the RRT for information or technical support should be coordinated through the DoD representative to the RRT.

Oceania RRT
Phone Number: 541-2710 EPA
535-3307 USCG

E.3.3.4 Environmental Protection Agency

The Environmental Protection Agency (EPA) can provide technical advice or assistance in determining the environmental effects of oil discharges or hazardous substances releases and in selecting the preferred environmental pollution control technique.

EPA Region 9
Phone Number: Day: (415) 947-8000

Environmental Emergencies
Phone Number: 24 HR: (800) 300-2193

The EPA has also established the Environmental Response Team (ERT) to advise and assist the On-Scene Coordinator on environmental issues concerning pollution containment, cleanup, and damage assessment. The ERT has expertise in biology, chemistry, hydrology, geology, and engineering. It can provide access to special decontamination equipment for chemical releases, and can provide advice to the OSC in hazard evaluation, risk assessment, multimedia sampling and analysis, cleanup techniques and priorities, water supply decontamination and protection, on-site safety (including development and implementation of plans), application of dispersants, environmental assessment, degree of cleanup required, and disposal of contaminated materials. The ERT also provides both introductory and intermediate level training courses to prepare response personnel. Requests for ERT support can be coordinated through the DoD or Navy RRT representative, through SUPSALV, or contacted directly.

EPA ERT Email: powell.greg@epa.gov

E.3.3.5 U.S. Coast Guard

The Navy and U. S. Coast Guard (USCG) have a standing Inter-Agency Agreement regarding the sharing of response resources. The USCG can provide the NOSC Rep with technical support, equipment, or personnel to assist in the response to a Navy OHS pollution incident. USCG District Offices provide the co-chairmen to the RRTs. USCG Sectors generally provide the On-Scene Coordinator to pollution incidents under the jurisdiction of the Coast Guard (pollution incidents in the coastal zone, except for DoD hazardous substance releases).

USCG 14 District Command Center
Phone Number: 24 HR Emergency: 331-6176

USCG Sector Honolulu
Phone Number: 24 HR: 842-2600

USCG 14 District Public Affairs Office
Phone Number: 24 HR: 535-3230

E.3.3.6 USCG National Strike Force

The Coast Guard's National Strike Force (NSF), composed of three teams, one each for the Pacific, Atlantic, and Gulf of Mexico, maintains personnel on standby to respond to incidents anywhere off the U.S. coast. National Strike Force members are highly trained and equipped to assist the On-Scene Coordinator in responding to major oil discharges and chemical releases, particularly in the marine environment. The Coast Guard also maintains the Public Information Assist Team (PIAT), a unit of skilled public affairs specialists. During a response event, the PIAT can assist the NOSC Rep's Public Affairs Officer (PAO) with providing timely information to the public and with interfacing with the news media. The Coast Guard District Office legal staffs can provide direct support to the NOSC Rep's Legal Advisor.

National Strike Force Coordination Center - 24Hr. (252) 331-6000

USCG Atlantic Strike Team - 24Hr. (609) 724-0008

USCG Gulf Strike Team - 24Hr. (251) 441-6601

USCG Pacific Strike Team - 24Hr. (415) 883-3311

USCG Public Information Assist Team (PIAT) - 24Hr. (252) 331-6000

E.3.3.7 International Tanker Owners Pollution Federation, Ltd.

International Tanker Owners Pollution Federation, Ltd. (ITOPF) technical Department provides advisory services for oil discharges from tanker incidents. Although a non-profit organization intended primarily to support member tanker owners, its services are available by contract to other organizations. It has performed national surveys on oil discharge response information for the U.S. Navy. When requested by the NOSC Rep, ITOPF can provide the following services:

- Advise and assist on the method of cleanup that is most appropriate, most cost effective, and least damaging to the environment.
- Mount a major cleanup response and secure the key cleanup equipment as necessary.
- Monitor the cleanup operation and provide on-site reports.
- Conduct a post response survey to evaluate the effectiveness of the cleanup measures and to assess any pollution damage resulting from an oil discharge; and;
- Provide access to a library of information and technical papers on response and cleanup techniques.

Phone Number: 011-44-(0)20-7566-6999 (24 Hr. Emergency Number)

E.3.4 Hazardous Substance Assistance

Several government and industry organizations have specialized expertise, resources, and/or response capabilities relative to hazardous material releases. Table E-12 identifies these organizations and their particular expertise.

TABLE E-12: HAZARDOUS SUBSTANCE RELEASE ASSISTANCE

Source and Phone Nunber	Expertise
National Chlorine Institute https://www.chlorineinstitute.org/ (800) 424-9300 (through Chemtrec)	Provides data relevant to chlorine releases. Also maintains Chlorine Emergency Response Teams at various locations to respond on-scene.
National Pesticides Information Center http://npic.orst.edu/ (800) 858-7378	Can provide data, advice, and response personnel for HS releases involving pesticides.
Coast Guard Pacific Strike Team http://www.dco.uscg.mil/Our-Organization/National-Strike-Force/PST/ (415) 883-3311	Located at Hamilton Air Force Base: One of the three teams that comprise the National Strike Force Center. Can provide highly skilled personnel, equipment and other resources for large response events.
Center for Disease Control http://www.cdc.gov/ (404) 639-3311	Located in Atlanta, GA: Can provide extensive data on health hazards associated with various hazardous substances.
Agency for Toxic Substance and Disease Registry http://www.atsdr.cdc.gov/ (800) 232-4636	Public Health Advisor
20th CBRNE www.cbrne.army.mil (410) 436-0330 - Day (410) 436-6200 - After Hours	Can provide expertize and assistance dealing with biological, radiological, nuclear, and explosive incidents.
NOAA Computer Aided Management of Emergency Operations (CAMEO) http://www.epa.gov/cameo	Computer program and database written for IBM (DOS or Windows) and MacIntosh computers to assist emergency response personnel in responding to hazardous material releases.
EPA Region IX Environmental Emergencies (800) 300-2193	24 Hour Environmental Emergencies
National Weather Service http://www.prh.noaa.gov/hnl/ 973-5286	National Weather Service Honolulu Forecast Office
Pacific Disaster Center http://www.pdc.org/weather/index.php/tag/joint-typhoon-warning-center/ 891-0525	Typhoon Warning Center (Hawaii)

E.3.5 Federal Special Teams

Table E-13 lists Federal Special Teams that have expertise in OHS spill response.

TABLE E-13: FEDERAL SPECIAL TEAMS

Expertise		Resources	Locations	Contact Information
NSFCC National Strike Force Coordination Center	International case coordination Response equipment location Spill management; logistics; PREP exercises	Coordination of all NSF resources, including coordination of combined strike team responses; National Spill Response Resources Inventory; Logistical coordination and spill management staff . PIAT (element of NSFCC)	Elizabeth City, NC	Contact direct at: (252) 331-6000 or via NRC at: (800) 424-8802 ACTIVATION BY NOSC REP

TABLE E-13: FEDERAL SPECIAL TEAMS				
Expertise		**Resources**	**Locations**	**Contact Information**
Navy SUPSALV Supervisor of Salvage	Ocean oil spill abatement Shipboard damage control; Diving/ROV expertise; U/W search/recovery; U/W ship husbandry; Ship salvage plans and operations	Specialized pumping and skimming equipmt; Open ocean boom; Boom mooring equipment & fireboom; ROVs; Shipboard damage control equipment; Ship salvage equipment repair, rigging, command and control; Boats, decon vans; Salvage contracts.	Equipment locations are: JBPHH, HI Port Hueneme, CA Anchorage, AK Williamsburg, VA Worldwide salvage contracts	Contact direct: Day: (202) 781-1731 Press option #2 Night: (202) 781-3889 or via NRC at: (800) 424-8802 ACTIVATION BY NOSC REP
NSF USCG Strike Teams Atlantic Strike Team Gulf Strike Team Pacific Strike Team	Lightering; Pumping; Boom; Skimming; Air monitoring; Site safety; Site security In-Situ burning; Dispersant application; Operational & technical expertise; Damage assessment	Cargo lightering pumps; Dewatering/deballasting pumps; Command posts; Chemical response (Level "A"); Open water oil Containment & recovery systems (OWOCRS); Air monitoring equipment; Temporary storage devises; Communications equipment	Atlantic - Ft Dix, NJ Gulf - Mobile, AL Pacific – Navato, CA	Contact direct at: (609) 724-0008 (Atlantic) (251) 441-6601(Gulf) (415) 883-3311(Pacific) or via NRC at: (800) 424-8802 ACTIVATION BY NOSC REP
NOAA SSC Scientific Support Coordinator	Resources at risk; Chemistry; Liaison with scientific community; Dispersant and bioremediation; Trajectories	CAMEO; Air plume modeling equipment; Oil trajectory modeling equipment; Chemical sampling analysis; Biological and water sampling equipment	USCG District Offices: Seattle, WA RTC Yorktown, VA Governors Island, NY	Contact specific SSC: Day: 725-5903 ACTIVATION BY NOSC REP
PIAT Public Information Assist Team	Public affairs and media management assistance; Public affairs training	Press office equipment; Photodocumentation equipment	Elizabeth City, NC	(252) 331-6000 ACTIVATION BY NOSC REP
Oceana Regional Response Team (ORRT)	Provides technical assistance to OSC's during spill responses	Technical assistance	Hawaiin and Pacific Island	541-2710 EPA 535-3307 USCG ACTIVATION BY NOSC REP
EPA ERT Environmental Response Team	Treatment technology Hydrology; engineering; geology; chemistry; Biology; How *clean* is *clean* issue? Health and safety	Sampling equipment to conduct investigations related to the release of oil or hazardous substances; Analytical laboratory available Air monitoring; Underwater ROV	EPA Headquarters, Emergency Response Division Washington DC Edison, NJ Cincinnati, OH	Email: Powell.greg@epa.gov ACTIVATION BY NOSC REP
EPA Region IX Environmental Emergencies	Technical assistance	Technical assistance		(800) 300-2193 ACTIVATION BY NOSC REP

TABLE E-13: FEDERAL SPECIAL TEAMS				
Expertise		**Resources**	**Locations**	**Contact Information**
CDC Center for Disease Control	Health hazard info. and assessment of exposure and dosage to individuals; Medical monitoring associated with oil etiologic agents.	Environmental health laboratory services	Atlanta, GA	(404) 639-3311 ACTIVATION BY NOSC REP
ATSDR Agency for Toxic Substance and Disease Registry	Chemical spill response; scientific consultation; medical; toxicological and chemical safety and information; support in evaluating and abating human health hazards	Health hazard and treatment information Medical consultation for exposed individuals and areas Limited air modeling Toxicologic, chemistry and medical officer staff	Atlanta, GA	(800) 232-4636 ACTIVATION BY NOSC REP

E.3.6 Aerial Observation

E.3.6.1 Regulatory Requirements

Per 33 CFR Part 154.1035(b)(3)(vii) JBPHH, as a "significant and substantial harm" oil facility, must have aerial oil tracking capabilities, with trained observation personnel, under contract or by other approved means. Aerial tracking resources must be capable of being on site in the case of a worst-case discharge in advance of the 12 hour requirement for Tier 1 resources to be on-scene. Aerial resources must be capable of flying for a distance of up to 50 nautical miles from shore and be capable of supporting spill response operations continuously for three 10-hour operation periods during the initial 72 hours of the discharge.

E.3.6.2 Aircraft Support

During a worst-case discharge aircraft or helicopters must be made available to perform the following tasks:

- Survey and track discharged oil and vector equipment to key areas;
- Provide observation flights of the polluted area for local government officials and the media as an effective public relations tool;
- Transfer personnel and equipment to stranded vessels or support operations in remote locations.

During a significant spill, the NOSC Rep will obtain aircraft or helicopter support as required. The observation platform, whether a helicopter or a fixed-wing aircraft, will be determined by a number of different factors. Each platform has advantages and disadvantages. An aircraft (helicopter and fixed-wing) allows for a greater overview of the area impacted by an oil spill. Aircraft allow personnel to reach the scene quicker and investigate the outer edges impacted by a large oil spill. A helicopter can generally fly slower and at a lower altitude, allowing for a better view of the spill.

E.3.6.3 Aircraft Resources

If aerial observation is requested during a significant spill, the NOSC Rep will contact DOD resources to provide aircraft and/or helicopters for aerial observation. Navy SUPSALV has

contracted for access to commercial aerial observation through the National Response Corporation (NRC), this service is available to CNRHI through the SUPSALV duty office; see Table E-14 below. If, due to operational constraints, DOD resources are not available, the NOSC Rep will contract commercial aircraft.

The following table list both DOD and commercial aircraft resources available to CNRHI.

TABLE E-14: AIRCRAFT RESOURCES

Organization	Aircraft Type	Address	Contact Information
DOD			
SUPSALV	Helicopter/Fixed Wing	1333 Isaac Hull Avenue S. Washington Navy Yard, D.C. 20376-1070	(202) 781-1731 Option #2 (Day) (202) 781-3889 Duty Officer (24hr)
Marine Heavy Helicopter Squadron 463	Helicopter	Marine Aircraft Group 24 Box 63055 MCBH Kaneohe Bay, HI 96863	257-2498 (Day) 457-2498 (DSN) 457-1416 (Duty Officer)
Commercial			
Blue Hawaiian Helicopters	Helicopter	Address: 105 Kahului Heliport, Kahului, HI 96732	871-1107 (Day) 871-6971 (Fax)
Makani Kai Helicopters	Helicopter	130 Iolana Place - Honolulu, Hawaii 96819	834-5813 (Day) 837-7867 (Fax)
Paradise Helicopters	Helicopter	P. O. Box 5371 Kailua Kona, HI 96745	969-7392 (Day)
Sunshine Helicopters, Inc.	Helicopter	Kahului Heliport, Hangar #107, Kahului, HI 96732	270-3999 (Day) 871-0682 (Fax)

E.3.6.4 Aerial Observation Personnel

JBPHH will have trained aerial observation personnel available in the case of a significant spill. Aerial observation personnel will be trained in the protocols of oil spill reporting and assessment, including the estimation of slick size, thickness, and quantity. Aerial observation personnel will observe these properties and report them to the Incident Command. Aerial observation personnel will concentrate on observing the on-scene weather, the sea state conditions, the location of the spill, and the color and structure/distribution of the oil. In addition, they may be requested to report on other ancillary on-scene observations that pertain to the response (e.g., location of response equipment, presence of wildlife).

E.3.6.5 Aerial Observation Training

Personnel can receive aerial observation training from a number of sources including NOAA, the USCG, and commercially. NOAA's "Open Water Oil Identification Job Aid for Aerial Observation" is a key training aid and resource; all aerial observation personnel need to be familiar with this document. The job aid covers the following topics:

- Introduction and basic overview of how to visually assess spilled oil.
- Glossary of standard terms used in pollution response.
- Codes you will use to describe oil colors and structure/distribution.
- Chart for visually estimating the percent coverage of spilled oil.
- Thickness and concentration values for each of the oil color codes.
- Checklist for organizing and recording observations of spilled oil.

- Photos showing different types and distributions of oil on water and common response activities, with example text showing how to use standard terminology to describe each scene.

The job aid can be found at their website at:

http://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/resources/open-water-oil-identification-job-aid.html

PAGE INTENTIONALLY LEFT BLANK

APPENDIX F
HAZARD ANALYSIS

F.1 INTRODUCTION

An analysis of the Oil and Hazardous Substance (OHS) hazards present in the COMNAVREG HI Area of Responsibility (AOR) is an important part of response planning for OHS discharges. This contingency plan addresses potential OHS discharges that are beyond the response capabilities of shore activities at Joint Base Pearl Harbor-Hickam (JBPHH) or are directly under the jurisdiction of COMNAVREG HI. This appendix identifies:

- The major OHS hazards that have the potential for injuring human life or damaging fish and wildlife and sensitive environments, including economically sensitive areas.
- The vulnerabilities of human life, fish and wildlife, and sensitive environments to injury or damage from OHS spills and releases.
- The potential for spills to occur due to handling OHS on a routine basis.

The information in this appendix is based on the hazard analyses for COMNAVREG HI. Fish, wildlife, and sensitive environment information in this appendix and other sections of the ICP comply with the Hawaii ACP.

F.2 HAZARD IDENTIFICATION

F.2.1 Facility Operations

This section identifies the potential oil spill hazards at COMNAVREG HI and describes the region's oil operations and associated oil storage and throughput volumes.

JBPHH provides logistics support to home-ported and transient vessels, tenant and transient aircraft, and all shore activities within its AOR. One of the major military missions, which belongs to Navy Supply Systems Command Fleet Logistics Center Pearl Harbor (NAVSUP FLCPH), is to store and distribute fuel. NAVSUP FLCPH Fuel Department has a throughput of approximately 11.6 million barrels per year and a fuel storage capacity of over 6 million barrels.

Under OPA 90 regulations, JBPHH qualifies as a "Complex Facility", i.e., a facility possessing a combination of Marine Transportation-Related (MTR) and Non-Transportation-Related (NTR) components. Appendix C discusses the interface between these components. Under the OPA 90 implementing regulations, JBPHH is required to develop and maintain a Facility Response Plan (FRP) that meets the response, planning and preparedness provisions of the regulations. This Integrated Contingency Plan (ICP) for COMNAVREG HI meets those requirements. Refer to the "Introduction" section of the plan for the applicable criteria under the regulations for developing and submitting facility response plans for regulatory review and/or approval.

JBPHH is **not** a PHMSA-regulated facility. Pipelines used to transfer fuel to, and within, JBPHH include:

- The PAR Hawaii multiproduct pipeline that connects to Valve Station 2A near the Underground Pumphouse at Kuahua. The pipeline supplies diesel, F-24, and JP-5 to NAVSUP FLCPH from the PAR Hawaii refinery at Kapolei. PAR Hawaii is responsible for maintaining and operating this pipeline.

- The F-24 pipeline from the Underground Pumphouse at Kuahua to the Hickam Tank Farm.
- The bilge water pipeline (10,300 feet) from Quarry Loch to the holding tank at the Bilge Oily Waste-Water Treatment System (BOWTS) Facility (Building 1910).
- Small-diameter aboveground and buried piping appurtenant to end-use storage and distribution sites.

NAVSUP FLCPH handles and stores JP-5, F-24, F-76 (DFM), Fuel Oil Reclaimed (FOR), and lubrication oils (types 9250 and 2190 lube oils). NAVSUP FLCPH receives fuel either by commercial pipeline, or by sea via tankers at Hotel Pier. The annual procurement contracts obtained by the Defense Logistics Agency (DLA), Fort Belvoir, Virginia, determine the resupply method for the different fuels.

F.2.2 MTR Operations

NAVSUP FLCPH operates marine fuel transfer facilities to receive fuel supplies from fuel tanker vessels and to fuel Navy vessels. NAVSUP FLCPH also provides fuel to vessels from other DoD and Federal Agencies and to DoD facilities in the Hawaiian Islands.

Fuel is issued to vessels at several piers from one of two bulk fuel storage facilities, the Red Hill Storage Facility or the Upper Tank Farm (UTF). NAVSUP FLCPH can conduct no more than four vessel transfer operations at once. The piers used for ship fueling by NAVSUP FLCPH are listed below along with the products issued at each pier.

- Hotel Pier: JP-5, F-24, F-76
- Bravo Pier: F-76
- Mike Pier: F-76
- Kilo Pier: F-76 (Note: has the capability of issuing JP-5 and F-24)
- Sierra Pier: F-76

Tables F-8, F-10, and F-12 provide additional information related to the vessel fuel transfer operations that present significant spill risks for the MTR component of NAVSUP FLCPH.

MTR Worst-Case Discharge Volume

The worst-case discharge planning volume for the MTR component of the complex oil facility is 59,459 gallons or 1,416 barrels. See Appendix C for the data and calculations used to derive the worst-case discharge planning volume and the derivations of the multi-level spill planning volumes required by OPA 90 for establishing the planning and preparedness provisions addressed in this response plan.

F.2.3 NTR Operations

The NTR component consists of the following:

- Three Bulk Fuel Storage Areas (Red Hill Facility, Upper Tank Farm, Hickam Tank Farm)
- Lube Oil Storage, Receipt, and Issue Facility
- Fuel Oil Reclamation Facility (FORFAC)
- Bilge Water Processing Facility
- Truck Loading and Unloading Racks
- Flightline Hydrant Systems

- Facility Pipelines and Pump Stations

Red Hill Storage Facility

The Red Hill Storage Facility contains twenty field-constructed USTs. Four of these USTs have a shell capacity of 11,970,000 gallons (285,000 Bbls); the other sixteen USTs each have a shell capacity of 12,600,000 gallons (300,000 Bbls). Two tunnels, an upper tunnel and a lower tunnel, provide access to the USTs. The lower tunnel, containing the fuel pipelines, connects the USTs to the Underground Pumphouse at Kuahua. The total underground oil storage capacity of the Red Hill Storage Facility exceeds 249,480,000 gallons (5,940,000 barrels).

Upper Tank Farm

The Upper Tank Farm contains six bulk storage tanks each with a storage capacity of over 6.3 million gallons. The total aboveground oil storage capacity of the UTF exceeds 37 million gallons (880,952 Bbls).

Hickam Tank Farm

The Hickam Tank Farm contains four bulk storage tanks, two with a capacity of 2,310,000 gallons and two with a capacity of 1,050,000 gallons. The total aboveground oil storage capacity of tank farm exceeds 6 million gallons (142,857 Bbls).

Lubrication Oil Storage Area

Lubrication oils (types 9250 and 2190 lube oils) are stored in two 30,000 gallon cylindrical steel ASTs near the Underground Pumphouse at Kuahua.

The Fuel Oil Reclamation Facility

The FORFAC is where used oil from ships, sumps, recovered oil from oil/water separators, and used oil generated by other Base activities is recycled. The FORFAC has three bulk storage tanks (two 378,000 gallon tanks) for storing fuel and water. The FORFAC uses gravity settling to recover oil for recycling.

BOWTS Facility

The Bilge Oily Waste-Water Treatment System (BOWTS) facility (Building 1910), operated by NAVFAC HI, is regulated as an oil storage and transfer facility according to the Oil Pollution Act of 1990. The facility handles oily wastewater generated by Pearl Harbor sources including ships bilge, ships ballast, and fuel reclamation tail waters. The BOWTS facility accepts 8 million gallons per year (20,000 gallons per day) of oily wastewater. The peak design capacity of the facility is 420,000 gallons per day.

Oily wastewaters arrive at the BOWTS facility either by dedicated bilge sewer line, tanker truck, or by barge to a bilge sewer line connection. NAVFAC HI connects ships bilge lines into pier side risers under the control of NAVFAC HI. The pier side risers connect at the Bravo piers to pump stations #7 and #8 and at the submarine piers to pump stations #3, #4, and #5 for delivery to the BOWTS facility by dedicated pipeline. Ships pump to the pipeline at 100 gpm maximum. The main lift station 5 and 8 is capable of pumping to the BOWTS facility at a high rate. Port operation coordinates the delivery time with NAVFAC HI and certifies the wastewater type and flow for delivery to the BOWTS facility. Ships ballast, collected into Ships Waste Off-Load Barges ("SWOBs"), is pumped into the pier side risers for delivery to the BOWTS. Oily wastewater from Pearl Harbor Naval Shipyard (PHNSY) and outlying areas where the bilge

water pipeline is not available is delivered to the BOWTS facility by 5,000 gallon tanker trucks, and 4,000 and 2,000 gallon vacuum trucks.

The facility consists of a 1.6 million gallon bilge water holding tank within a 2.1 million gallon tank that serves as secondary containment. The bilge water is approximately five percent oil. The holding tank is divided into 3 parts; oil settles in two of the parts, and the third is for storing the recovered oil. Typically, when 200,000 gal FOR is recovered DLA has a contract for the oil to be taken to one of the local refineries for recycling. Sludge produced by the process is disposed as solid waste. Effluent water produced by the process is treated with hydrogen peroxide (oxidizer), sodium hydroxide (base), anionic polymer, and cationic polymer to neutralize hydrogen sulfide, remove emulsified TPH and adjust PH level before the water is discharged into the sewer system. The facility has two 330 gallons totes of the sodium hydroxide and two 250 gallons totes of hydrogen peroxide.

Truck Loading and Unloading Racks

There are seven truck loading and unloading racks at the follow locations:

- Lube Oil Loading Rack (two racks) - Lube oil is loaded to refueler tank trucks from two 30,000 gallon storage tanks and delivered to end users throughout JBPHH. There are separate loading racks for each tank.
- Kuahua Loading Rack - JP-5, F-24, and F-76 are loaded to refueler tank trucks from the Upper Tank Farm or Red Hill Tanks and delivered to end users throughout JBPHH.
- POL Area 5 Loading/Unloading Rack - Diesel is loaded to refueler tank trucks from two 30,000 gallon ASTs and delivered to end users throughout JBPHH. Commercial tanker trucks off-load diesel to both ASTs. Reclaimed F-24 is off-loaded from refueler tank trucks and bowsers and transferred to a 2,000 gallon reclaimed F-24 AST.
- POL Area 9 Loading/Unloading Rack - JPTS is loaded to refueler tank trucks from two ASTs (10,000 gallon and 20,000 gallon) for delivery to aircraft on the flightline. Refueler tank trucks also off-load JPTS back into the ASTs.
- POL Loading Rack at Building 2125 - Five loading racks are used to load F-24 from the Hickam Tank Farm bulk storage tanks to refueler tank trucks for delivery to aircraft on the flightline.
- POL Unloading Rack at Building 2125 - Four off-loading racks are used to off-load F-24 from commercial tanker trucks for transfer into bulk storage tanks at the Hickam Tank Farm.

Flightline Hydrant Systems

Two Type 3 constant pressure hydrant systems provide fuel directly to the flight lines on Hickam Airfield for fueling aircraft. Hydrant System 1 has 12 hydrant pits/parking areas that services the AMC Ramp. Hydrant System 2 has 34 hydrant pits/parking areas that services the Lower Ramp. Both hydrant systems are fed by bulk storage tanks at the Hickam Tank Farm.

Facility Pipelines and Pump Stations

The NAVSUP FLCPH Fuel Department transfers, receives and redistributes fuel among its bulk fuel storage sites using five pump stations and miles of pipeline that connect the oil storage and transfer facilities. The Underground Pumphouse at Kuahua (Adit 1), located at the end of and inside the lower tunnel connected to the Red Hill Storage Facility, is the central fuel pumping station for NAVSUP FLCPH Fuel Department. Fuel transfer operations conducted by NAVSUP FLCPH are controlled at this pumphouse.

NRT Worst-Case Discharge Volume

The worst-case discharge planning volume for the NTR component of the complex oil facility is 6,309,952 gallons or 150,237 barrels. See Appendix C for the data and calculations used to derive the worst-case discharge planning volume and the derivations of the multi-level spill planning volumes required by OPA 90 for establishing the planning and preparedness provisions addressed in this response plan.

Under OPA 90, this response plan must address response, planning and preparedness requirements for the station's worst-case discharges from both components. The regulations require response plan developers to compute worst-case discharge planning volumes to use as the basis for preparing responses to worst-case discharges. Appendix C in this response plan contains the derivations of the worst-case discharge planning volumes for the MTR and NTR facility components.

F.2.4 Bulk Oil Storage Containers

Table F-1 provides an inventory of COMNAVREG HI's Bulk Oil Storage Containers, including mobile storage tanks and POL drum storage sites. Figure M-1 (M-1A thru M-1Q), Appendix M, provides maps that shows the locations of all Bulk Oil Storage Containers. For additional detail on each tank see the COMNAVREG HI SPCC Plan.

TABLE F-1: BULK OIL STORAGE CONTAINERS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVSUP FLCPH							
DFSP PH Bulk Terminal	FLC-S660--301	S660	Pipeline Interface Storage	Storage	Diesel (F-76)/Jet A	231,924	Concrete Dike with Impermeable Liner
DFSP PH Bulk Terminal	FLC-310-SG	310	Standby Generator	Storage	Diesel	235	Double-Walled
DFSP PH Bulk Terminal	FLC-490-TP	490	Refueler/Tank Truck Park	Parking Area	Various Oil Products	21,000	Portable Steel Dike for Each Truck
DFSP PH Bulk Terminal	FLC-S660-TR	S660	Refueler/Tank Truck Rack	Truck Load/Unload	NA	NA	Concrete Curbed Truck Pad Secondary Containment System
DFSP PH Bulk Terminal	FLC-1811	1811	Lube Oil Distribution	Receipt/Issue	Steam Turbine Lube Oil	Compartment 1 10,145 Compartment 2 19,861	Double-Walled
DFSP PH Bulk Terminal	FLC-1812	1812	Lube Oil Distribution	Receipt/Issue	Engine Lube Oil	Compartment 1 10,249 Compartment 2 19,950	Double-Walled
DFSP PH Bulk Terminal	FLC-S754-46	S754	Upper Tank Farm	Storage	Jet A	6,300,000	Earthern Berm System with Impermeable Liner
DFSP PH Bulk Terminal	FLC-S755-47	S755	Upper Tank Farm	Storage	Diesel	6,300,000	Earthern Berm System with Impermeable Liner
DFSP PH Bulk Terminal	FLC-S756-48	S756	Upper Tank Farm	Storage	Diesel	6,300,000	Earthern Berm System with Impermeable Liner
DFSP PH Bulk Terminal	FLC-S761-53	S761	Upper Tank Farm	Storage	JP-8	6,300,000	Earthern Berm System with Impermeable Liner
DFSP PH Bulk Terminal	FLC-S762-54	S762	Upper Tank Farm	Storage	F-76	6,300,000	Earthern Berm System with Impermeable Liner
DFSP PH Bulk Terminal	FLC-1751-55	1751	Upper Tank Farm	Storage	JP-5	6,300,000	Earthern Berm System with Impermeable Liner
DFSP PH Bulk Terminal	FLC-S770-B-1	S770	FORFAC	Separation and Storage	Oily Water	378,000	Facility Concrete Dike
DFSP PH Bulk Terminal	FLC-S769-B-2	S769	FORFAC	Storage	Fuel Oil Reclaimed	378,000	Facility Concrete Dike
DFSP PH Bulk Terminal	FLC-1554	1554	Pumphouse	Collection and Storage	Slop Oil	300	Double-Walled
DFSP PH Bulk Terminal	FLC-Adit 1	Adit 1	Standby Generator	Storage	Diesel	1,000	Double-Walled
DFSP PH Bulk Terminal	FLC-S311	S311	Red Hill Adit 3	Collection and Storage	Slop oil and Oily Water	40,000	Concrete Dike with Impermeable Liner
Naval Station	FLC-449-DR	449	FLCPH Maintenance Shop	Drum Storage	POL Products/ Used Oil	605 (11@55-gal drums max.)	Drum Spill Pallet
Naval Station	FLC-1613	1613	AFFF Pumphouse Standby Generator	Storage	Diesel	1,000	Double-Walled

TABLE F-1: BULK OIL STORAGE CONTAINERS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVSUP FLCPH (Continued)							
Naval Station	FLC-1685-1	1685	Fuel Lab	Storage	Reclaimed Fuel	200	Concrete Base Slab w/CMU Walls
Naval Station	FLC-1685-2	1685	Fuel Lab	Storage	Reclaimed Fuel	280	Concrete Base Slab w/CMU Walls
Naval Station	FLC-1718-1	1718	Standby Generator Facility	Storage/ Supply	Diesel	2,500	Concrete Dike
Naval Station	FLC-1718-2	1718	Standby Generator Facility	Storage	Diesel	650	Concrete Dike
Naval Station	FLC-1718-3	1718	Standby Generator Facility	Storage	Out of Service	650	Concrete Dike
Naval Station	FLC-1721	1721	Fire Pump Building	Storage	Diesel	500	Double-Walled
Naval Station	FLC-1747-DR	1747	FLCPH HAZMAT Storage Facility	HAZMAT Storage	POL Products	44,000 (800@55-gal. drums max.)	Curbed Asphalt Floor Containment Area
Naval Station	FLC-1759-PT	1759	Mobile Crane Parking Hangar	Fuel for Forklifts	Diesel	100	Portable Plastic Berm
Naval Station	FLC-9478-1-SG	9478	Ocean Terminal	Standby Generator	Diesel	86	Double-Walled
Naval Station	FLC-9478-2	9478	Ocean Terminal	Fire Pumps	Diesel	120	Double-Walled
Naval Station	FLC-9478-3-DR	9478	Ocean Terminal	Drum Storage	POL Products	3,300 (60@55-gal. drums max.)	None
NCTAMS							
Wahiawa Annex	WAH-5	5	AT&T	Standby Generator	Diesel	400	Double-Walled
Wahiawa Annex	WAH-423-PG	423	NCTAMS Generator Shop	Portable Generator	Diesel	150	None
Wahiawa Annex	WAH-109-1	109	Generator Building	Storage	Diesel	5,200	Double-Walled
	WAH-109-2	109	Generator Building	Generator Day Tank	Diesel	275	Double-Walled
	WAH-109-3			Generator Day Tank	Diesel	275	Double-Walled
Wahiawa Annex	WAH-229-SG	229	BEQ Elevator	Elevator backup generator	Diesel	80	Double-Walled
Wahiawa Annex	WAH-234-1	234	Power Plant	Generator Day Tank	Diesel	275	None
	WAH-234-2			Generator Day Tank	Diesel	275	
	WAH-234-3			Overflow Tank	Diesel	100	
	WAH-234-4-SG			Standby Generator	Diesel	500	
	WAH-234-5			Overflow Tank	Diesel	135	
Wahiawa Annex	WAH-242	242	Coast Guard Building	Standby Generator	Diesel	80	Double-Walled

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NCTAMS (Continued)							
Wahiawa Annex	WAH-261-1	261	Communications Building	Standby Generator	Diesel	150	Double-Walled
	WAH-261-2			Standby Generator	Diesel	150	Steel Dike
Wahiawa Annex	WAH-409-1	409	Telemetry Building	Storage	Diesel	15,000	Concrete Dike
	WAH-409-2			Storage	Diesel	15,000	Concrete Dike
Wahiawa Annex	WAH-409-3	409	Telemetry Building	Generator Day Tank	Diesel	275	Double-Walled
	WAH-409-4			Generator Day Tank	Diesel	275	Double-Walled
	WAH-409-5			Generator Day Tank	Diesel	275	Double-Walled
Wahiawa Annex	WAH-411-1	411	MUOS Site	Storage	Diesel	8,000	Double-Walled
	WAH-411-2			Storage	Diesel	8,000	Double-Walled
	WAH-411-3			Generator Day Tank	Diesel	350	Steel Dike
	WAH-411-4			Generator Day Tank	Diesel	350	Steel Dike
	WAH-411-5-DR			Drum Storage	Used Oil	55	Spill Pallet
Wahiawa Annex	WAH-466	466	Fire Station	Standby Generator	Diesel	150	Steel Dike
Wahiawa Annex	WAH-500-1	500	Communications Building	Storage	Diesel	30,000	Concrete Dike
	WAH-500-2			Generator Day Tank	Diesel	400	Double-Walled
	WAH-500-3			Generator Day Tank	Diesel	400	Double-Walled
	WAH-500-4			Generator Day Tank	Diesel	400	Double-Walled
Wahiawa Annex	WAH-669-1	669	Earth Terminal (Comm. Satellite)	Standby Generator	Diesel	2,000	Double-Walled
	WAH-669-2-SG			Standby Generator	Diesel	127	Double-Walled
	WAH-669-3-SG			Standby Generator	Diesel	335	Double-Walled
Manana	MN-68-1	68	Fire Station	Fuel Storage and Dispensing	Diesel	500	Double-Walled
	MN-68-2-SG	68	Fire Station	Standby Generator	Diesel	70	Double-Walled
Pearl City	PC-794-1	794	NEX Mini Mart	Fuel for Vehicles	Mogas	10,000	Double-Walled
	PC-794-2			Fuel for Vehicles	Mogas	6,000	Double-Walled
Pearl City	PC-987-1-SG	987	SEAL Delivery Team I Headquarters	Standby Generator	Diesel	250	Double-Walled
	PC-987-2-DR			Drum Storage	Used Oil	55	Spill Pallet
	PC-987-3-DR			Drum Storage	Used POL	330 (6 55-gal. drums max.)	Spill Locker

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NCTAMS (Continued)							
Pearl City	PC-989-1-DR	989	Boat Maintenance	Drum Storage	Used Oil	110 (2 55-gal drums max.)	Spill Pallet
	PC-989-2-DR						
Pearl City	PC-995-1-DR	995	Equipment Maintenance	Drum Storage	Used Oil	55	Spill Pallet
Pearl City	PC-992-SG	992	NAVWARSYSCOM	Standby Generator	Diesel	190	Double-Walled
Pearl City	PC-995-1	995	SEAL Delivery Team I Compound	Fuel Storage and Dispensing	Mogas	1,000	Double-Walled
	PC-995-2			Fuel Storage and Dispensing	Diesel	2,000	Double-Walled
	PC-995-3			Fuel Storage and Dispensing	Mogas	5,200	Double-Walled
Pearl City	PC-1020-DR	1020	SEAL Delivery Team 1 Compound	Drum Storage	Lube Oil	110 (2 55-gal. drums max.)	Spill Locker
	PC-1022-DR	1022	SEAL Delivery Team 1 Compound	Drum Storage	Hydraulic Oil	220 (4 55-gal. drums max.)	Spill Locker
RTF Lualualei Annex	RTF-4	4	Grounds keeping Shop	Fuel Storage and Dispensing	Diesel	650	Steel Dike
RTF Lualualei Annex	RTF-81-1	81	Power Plant	Standby Generator	Diesel	2,500	Concrete Base Slab with CMU Walls
RTF Lualualei Annex	RTF-81-2-SG	81	Power Plant	Standby Generator	Diesel	200	None
	RTF-81-3-SG			Standby Generator	Diesel	250	
	RTF-81-4-SG			Standby Generator	Diesel	200	
	RTF-81-5-DR			Drum Storage	Lube Oil	220 (4 55-gal. drums max.)	Spill Pallet
Wahiawa Annex	WAH-554-SG	554	Base Pass & I.D. Office	Standby Generator	Diesel	226	Double-Walled
Pearl City Peninsula	PC-1012-DR	1012	Seal Delivery Vehicle Team 1	Drum Storage	Waste Gasoline	55	Spill Pallet
Opana	OP-1-1	1	Opana Detachment	Storage	Diesel	6,000	Double-Walled
	OP-1-2	1	Opana Detachment	Generator Day Tank	Diesel	200	Rupture Basin
	OP-1-3			Generator Day Tank	Diesel	200	Rupture Basin
Wahiawa Annex	WAH-329-NEX	329	Gas Station	Fuel Sales	MOGAS	2-5,000 gals. and 1-10,000-gals. USTs	NA

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVAL STATION							
Bishop Point	B-17-SG	17	Recompression Chamber	Standby Generator	Diesel	208	Double-Walled
Bishop Point	B-19-1	19	Storage Facility	Storage and Dispensing	Lube Oils	65	Steel Drip Pallet
	B-19-2				Lube Oils	65	
	B-19-3				Lube Oils	65	
	B-19-4				Lube Oils	65	
Bishop Point	B-19-5-DR	19	Storage Facility	Drum Storage	New and Used POLs	1,320 (24 55-gal. drums max.)	Drum Overpacks and Spill Pallets
Bishop Point	B-54-1	54	ESSM Vehicle Filling Station and Storage	Fuel Storage and Dispensing	Diesel	1,000	Double-Walled
Bishop Point	B-54-2-DR	54	ESSM Vehicle Filling Station and Storage	Drum Storage	New and Used POLs	825 (15 55-gal. drums max.)	Drum Overpacks and Spill Pallets
Catlin Park	CP-A19-1	A19	Golf Course Maintenance Facility	Fuel Storage and Dispensing	Diesel	600	Concrete Dike
	CP-A19-2			Fuel Storage and Dispensing	Mogas	1,000	Concrete Dike
	CP-A19-3-DR			Drum Storage	Used Oil	165 (3 55-gal. drums max)	Steel Drum Storage Shed
Catlin Park	CP-6890-1	6890	NEX Mini Mart	Fuel Storage and Dispensing	Mogas	10,000	Double-Walled
	CP-6890-2			Fuel Storage and Dispensing	Mogas	8,000	Double-Walled
Ford Island	FI-42	42	AT&T	Standby Generator	Diesel	250	Double-Walled
Ford Island	FI-75-1	75	FACSAC/ Generator Room	Storage	Diesel	2,000	Double-Walled
	FI-75-2			Generator Day Tank	Diesel	315	None
Ford Island	FI-77-1	77	Generator/ Equipment Yard	Storage	Diesel	10,000	Double-Walled
	FI-77-2			Storage	Diesel	10,000	Double-Walled
	FI-77-3-SG			Generator Day Tank	Diesel	500	Containment Pan
	FI-77-4-SG			Generator Day Tank	Diesel	500	Containment Pan
	FI-77-5-SG			Generator Day Tank	Diesel	500	Containment Pan
Ford Island	FI-217-DR	217	Waste Accumulation Point	Drum Storage	Lube oil, used oil	440 (8 55-gal drums max.)	Polly Spill Pallet
Ford Island	FI-454-1	454	Port Operations	Fuel Storage and Dispensing	Diesel	8,000	Double-Walled

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVAL STATION (Continued)							
Ford Island	FI-454-2	454	Port Operations	Fuel Storage and Dispensing	BioDiesel	8,000	Double-Walled
	FI-454-3			Fuel Storage and Dispensing	Mogas	5,200	Double-Walled
Ford Island	FI-462	462	Brig	Standby Generator	Diesel	1,200	Concrete Dike
Ford Island	FI-511-1	511	Pacific War Fighting Center/ Pacific Aviation Museum	Storage	Diesel	12,000	Double-Walled
	FI-511-2			Generator Day Tank	Diesel	150	Double-Walled
Makalapa	M-250-1	250	COMPACFLT	Standby Generator	Diesel	4,000	Double-Walled
	M-250-2			Standby Generator	Diesel	100	Steel Dike
Makalapa	M-372-SG	372	BOQs	Standby Generator	Diesel	700	Double-Walled
Naval Station	NS-H14-SG	H-14 South of Bldg. 150	Generator Room	Standby Generator	Diesel	600	Double-Walled
Naval Station	NS-284-1	284	CBMU-303 Maintenance Shop	Storage and Dispensing	Lube Oil	65	Drip Pallet
	NS-284-2				Lube Oil	65	
	NS-284-3				Lube Oil	65	
	NS-284-4				Lube Oil	65	
	NS-284-5				Lube Oil	65	
	NS-284-6				Lube Oil	65	
	NS-284-7				Lube Oil	65	
Naval Station	NS-284-8-DR	284	CBMU-303 Maintenance Shop	Drum Storage	New and Used POLs	440 (8 55-gal. drums max.)	Drum Spill Pallets
Naval Station	NS-397-1	397	AT&T	Standby Generator	Diesel	250	Double-Walled
	NS-397-2			Standby Generator	Diesel	200	Double-Walled
	NS-397-3			Standby Generator	Diesel	250	Double-Walled
Naval Station	NS-617-SG	617	Commissary	Standby Generator	Diesel	152	Double-Walled
Naval Station	NS-631-1-SG	631	NEX Mall	Standby Generator	Diesel	230	Double-Walled
Naval Station	NS-631-2	631	NEX Mall	Storage	Used Cooking oil	385	Double-Walled
Naval Station	NS-631-3-SG	631	NEX Mall	Standby Generator	Diesel	55	Double-Walled
Naval Station	NS-926	926	Fire Pump Room	Fire Pump Room	Diesel	120	Double-Walled
Naval Station	NS-1208-SG	1208	Installation Gate (Nimitz Gate)	Standby Generator	Diesel	160	Double-Walled

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVAL STATION (Continued)							
Naval Station	NS-1315	1315	Fire Pump Room	Fire Pump Room	Diesel	75	Double-Walled
Naval Station	NS-1366-SG	1366	BEQ Lockwood Annex A	Standby Generator	Diesel	145	Double-Walled
Naval Station	NS-1487	1487	Medical Laboratory	Standby Generator	Diesel	1,000	Double-Walled
Naval Station	NS-1492-SG	1492	Naval Station	Standby Generator	Diesel	147	Double-Walled
Naval Station	NS-1623	1623	Bachelor Quarters	Boiler	Diesel	1,000	Double-Walled
Naval Station	NS-1634-SG	1634	BEQ	Standby Generator	Standby Generator	260	Double-Walled
Naval Station	NS-1684-1-SG	1684	NEX Warehouse	Standby Generator	Diesel	100	None
	NS-1684-2			Fire Protection Pump	Diesel	150	Concrete Dike
SUBASE	SB-S1552	S1552	Generator Room	Standby Generator	Diesel	500	Concrete Dike
SUBASE	SB-1694-1	1694	Generator Room	Standby Generator	Diesel	1,000	Double-Walled
	SB-1694-2-SG			Standby Generator	Diesel	150	Double-Walled
SUBASE	SB-1731-1	1731	Fire Pump Room	Fire Protection Pumps	Diesel	100	Concrete Curbing
	SB-1731-2		Generator Room	Standby Generator	Diesel	75	Concrete Curbing
Ford Island	FI-39-DR	39	Naval Submarine Training Center Pacific	Drum Storage	Hydraulic Oil	110 (2 55-gal. drums max.)	Drum Spill Pallet
Makalapa	M-352-1	352	Joint Intel Operations Center (JIOC)	Generator Day Tank	Diesel	75	Double-Walled
	M-352-2			Generator Day Tank	Diesel	75	Double-Walled
	M-352-3			Generator Day Tank	Diesel	100	Double-Walled
	M-352-4-DR			Drum Storage	New & Used POL	110 (2 55-gal. drums max.)	Drum Spill Pallet
Makalapa	M-401-1	401	Joint Intel Operations Center (JIOC)	Generator Day Tank	Diesel	150	Double-Walled
	M-401-2			Generator Day Tank	Diesel	150	Double-Walled
Camp Smith	CS-701-1	701	PACOM	Storage	Diesel	7,000	Double-Walled
	CS-701-2			Generator Day Tank	Diesel	275	Rupture Basin
	CS-701-3			Generator Day Tank	Diesel	275	Rupture Basin
Naval Station	NS-71-NEX	71	Gas Station	Fuel Sales	MOGAS	2-10,000 and 1-20,000 gals. USTs	NA
Naval Station	NS-1326-NEX	1326	Gas Station	Fuel Sales	MOGAS	2-10,000 gals. USTs	NA

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVMAG							
Lualualei	LLL-2A-SG	2A	Former Security/Base Police	Standby Generator (Out of Service)	Diesel	75	Concrete base slab with CMU dike
West Loch	WL-3	3	Vehicle Maintenance Shop	Fuel for Vehicles	Diesel/Gas	1,000 (2-500 gals compartment)	Concrete base slab with CMU dike
West Loch	WL-5-DR	5	Rigging Shop	Drum Storage	Lube and Hydraulic Oil	385 gallons (7 55-gal. drums max.)	Drum Spill Containment Pallets
West Loch	WL-440-1	440	Torpedo Shop	Standby Generator	Diesel	1,000	Concrete Dike
West Loch	WL-440-2	440	Torpedo Shop	Torpedo Maint.	Preservative Oil/ Mineral Spirits	275	Concrete Dike
	WL-440-3	440	Torpedo Shop	Torpedo Maint.	Lube Oil	250	Concrete Dike
West Loch	WL-542	542	Generator Building	Standby Generator	Diesel	900	Concrete base slab with CMU dike
West Loch	WL-562	562	Administrative Office for CO and XO	Standby Generator	Diesel	250	Double-Walled
West Loch	WL-568-DR	568	Torpedo Shop	Drum Storage	POL Products	110 gallons (2 55-gal. drums max.)	Drum Spill Containment Pallets
West Loch	WL-569	569	Cruise Missile Shop	Standby Generator	Diesel	400	Concrete Dike
West Loch	WL-573-DR	573	Torpedo Shop	Drum Storage	POL Products	2,200 gallons (40 55-gal. drums max.)	Concrete Curbed Floor
West Loch	WL-600-1-SG	600	Base Security Office	Standby Generator	Diesel	75	Concrete base slab with CMU dike
	WL-600-2-SG	600	Base Security Office	Standby Generator	Diesel	200	Double-Walled
West Loch	WL-603-SG	603	Ordnance Operations Contractor	Standby Generator	Diesel	100	Concrete base slab with CMU dike
Kalaeloa Red. District	KRD-1927-1	1927	Golf Course Maintenance	Fuel for Vehicles	Gasoline	250	Double-Walled
	KRD-1927-2			Fuel for Vehicles	Diesel	250	Double-Walled
Beckoning Point	BP-166-1-SG	166	Magnetic Silencing Facility	Standby Generator	Diesel	375	Double-Walled With Interstitial Leak Detection
	BP-166-2	166	Magnetic Silencing Facility	Submarine oily/bilge water	OWWO	10,000	Double-Walled With Interstitial Leak Detection

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
HICKAM							
Hickam AFB	FLC-2150	2150	DFSP PH Airfield	Collection/ Storage	Recovered Fuel/Oily water	250	Curbed Housekeeping Pad
Hickam AFB	FLC-2170-11-1	2170	DFSP PH Airfield	Storage/Issue	Jet A	2,310,000	Concrete Dike
	FLC-2170-11-2					2,310,000	
Hickam AFB	FLC-2170-11-3	2170	DFSP PH Airfield	Storage/Issue	Jet A	1,050,000	Concrete Dike
	FLC-2170-11-4					1,050,000	
Hickam AFB	FLC-12604/5-TR	12604 and 12605	DFSP PH Airfield	Refueler/ Tank truck Rack	NA	NA	Concrete Curbed Truck Pad Secondary Containment System
Hickam AFB	FLC-2125-TP	2125	DFSP PH Airfield	Refueler and Tank Truck Park	Fuel	104,400 (17 R11 Refuelers @ 6,000 each and 2 C300 Tank Trucks @ 1,200 ea	Concrete pavement truck park sumps
Hickam AFB	FLC-2169-5-1	2169	DFSP PH Airfield	Storage/Issue	Diesel	30,000	Double-Walled
	FLC-2169-5-2					30,000	Double-Walled
Hickam AFB	FLC-2169-9-3	2169	DFSP PH Airfield	Storage/Issue	JPTS	15,000	Secondary Containment Tank
	FLC-2169-9-4					15,000	Secondary Containment Tank
Hickam AFB	FLC-1070-DR	1070	FLCPH General Storage	HAZMART	POL/Other Products	8,910 (162@55-gal. drums max.)	Curbed Concrete Floor Containment Area
Hickam AFB	POL-Bowser-1	2125	DFSP PH Airfield	Mobile Defueler	Reclaimed JP-8	400	Spill Kit
Hickam AFB	POL-Bowser-2	2125	DFSP PH Airfield	Mobile Defueler	Reclaimed JP-8	400	Spill Kit
Hickam AFB	FB92	2030	735 Air Mobility Squadron	Mobile Defueler	Reclaimed F-24	400	Spill Kit
Hickam AFB	FB93	2030	735 Air Mobility Squadron	Fuel Bowser	Reclaimed F-24	400	Spill Kit
Hickam AFB	H-668-SG	668	Sewer Lift Station #3	Standby Generator	Diesel	80	Double-Walled
Hickam AFB	H-726-SG	726	Sewer Lift Station #2	Standby Generator	Diesel	75	Double-Walled
Hickam AFB	H-986-1	986	15th Communications Squadron	Standby Generator	Diesel	3,042	Double-Walled
	H-986-2			Standby Generator	Diesel	3,042	Double-Walled
Hickam AFB	H-1001-SG	1001	15th AW Security Forces	Standby Generator	Diesel	100	None
Hickam AFB	H-1050	1050	65th Air Mobility Support Group	Standby Generator	Diesel	112	Double-Walled

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
HICKAM (Continued)							
Hickam AFB	H-1052-1	1052	Hangar Fire Pump House	Storage	Diesel	350	Concrete Curbed Pad
	H-1052-2			Storage	Diesel	350	
	H-1052-3			Storage	Diesel	350	
	H-1052-4			Storage	Diesel	350	
Hickam AFB	H-1108	1108	AT&T	Standby Generator	Diesel	1,000	Double-Walled
Hickam AFB	H-1109-1	1109	HQ PACAF Power Plant	Supply Day Tank	Diesel	500	Double-Walled
	H-1109-2			Generator Day Tank	Diesel	100	Rupture Basin
	H-1109-3			Generator Day Tank	Diesel	100	
	H-1109-4			Generator Day Tank	Diesel	100	
	H-1109-5			Generator Day Tank	Diesel	100	
	H-1109-6			Generator Day Tank	Diesel	100	
	H-1109-7			Generator Day Tank	Diesel	100	
Hickam AFB	H-1110-SG	1110	15th Wing Headquarters	Standby Generator	Diesel	100	Double-Walled
Hickam AFB	H-1120	1120	Gym	Standby Generator	Diesel	500	Double-Walled
Hickam AFB	H-1200-DR	1200	Power Production	Drum Storage/Dispensing	Used Oil/Lube Oil	550 (10 55-gal drums max.)	Prefabricated plastic 4-drum pallets and concrete curbed pad
Hickam AFB	H-1204-SG	1204	Power Production	Standby Generator	Diesel	100	None
Hickam AFB	H-1207-1	1207	Power Production	Storage	New Lube Oil	60	Drip Pallet
	H-1207-2			Storage	New Lube Oil	60	
	H-1207-3			Storage	New Lube Oil	60	
	H-1207-4-DR			Drum Press	Used Oil	55	Drip Deck Pallet
Hickam AFB	H-1235-SG	1235	Power Production	Standby Generator	Diesel	100	Double-Walled
Hickam AFB	H-1629-SG	1629	Sewer Lift Station #6	Standby Generator	Diesel	175	None
Hickam AFB	H-1728	1728	AAFES Cold Storage Warehouse	Water Pump	Diesel	300	Steel Basin
Hickam AFB	H-1852	1852	Barracks	Water Heater	Diesel	275	Double-Walled
Hickam AFB	H-1854	1854	Barracks	Water Heater	Diesel	275	Double-Walled
Hickam AFB	H-1856	1856	Barracks	Water Heater	Diesel	500	Double-Walled

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
HICKAM (Continued)							
Hickam AFB	H-1861-SG	1861	Dining Hall	Standby Generator	Diesel	260	Double-Walled
Hickam AFB	H-2003-SG	2003	15th Logistical Readiness Squadron	Standby Generator	Diesel (Out of Service)	150	None
Hickam AFB	H-2028-SG	2028	AMC Passenger Terminal	Standby Generator	Diesel	260	Double-Walled
Hickam AFB	H-2030-1	2030	15th Maintenance Squadron	Fuel Storage and Dispensing	F-24/Diesel	1,500/1,500	Double-Walled
Hickam AFB	H-2030-2	2030	15th Maintenance Squadron	Fuel Storage and Dispensing	Diesel	3,000	Double-Walled
Hickam AFB	H-2030-3-DR	2030	15th Maintenance Squadron	Drum Storage (Inside)	Lube Oil	275 (5 55-gal. drums max.)	Spill Pallets
Hickam AFB	H-2030-4-DR	2030	15th Maintenance Squadron	Drum Storage (Outside)	Used Oils	275 (5 55-gal. drums max.)	Spill Pallets & Concrete Curbing
Hickam AFB	H-2036-SG	2036H	Fire Department	Standby Generator	Diesel	100	None
Hickam AFB	H-2039-SG	2039	Sewer Lift Station #1 and #1A	Standby Generator	Diesel	157	Double-Walled
Hickam AFB	H-2051-SG	2051	Base Operations	Standby Generator	Diesel	100	None
Hickam AFB	H-2073-1	2073	Auto Maintenance Shop	Storage	Lube Oil	360	Double-Walled
	H-2073-2				Used Oil	300	Double-Walled
	H-2073-3				Lube Oil	110	Containment Tub
	H-2073-4					110	
	H-2073-5					110	
	H-2073-6-DR			Drum Storage	Used POL	220 (4 55-gal drums max.)	Spill Pallets
Hickam AFB	H-2093-SG	2093	Commissary	Standby Generator	Diesel	150	Double-Walled
Hickam AFB	H-2115	2115	Logistics Readiness Squadron	Standby Generator	Diesel	1,000	Concrete Dike
Hickam AFB	H-2125-1	2125	DFSP PH Airfield	Storage	Used JP-8 (Out of Service)	500	Double-Walled
Hickam AFB	H-2125-2-SG	2125	Fuel Control Center	Standby Generator	Diesel	80	None
Hickam AFB	H-2135	2135	Hangar 19	Standby Generator	Diesel	200	Double-Walled
Hickam AFB	H-2152-SG	2152	Pump House 2152	Standby Generator	Diesel	400	Double-Walled
Hickam AFB	H-2154-SG	2154	Pump House 2154	Standby Generator	Diesel	300	Double-Walled
Hickam AFB	H-2160-SG	2160	Hickam AFB Control Tower	Standby Generator	Diesel	80	None

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
HICKAM (Continued)							
Hickam AFB	H-2169-1	2169	Unknown	Out of Service	Empty	2,000	Double-Walled
Hickam AFB	H-2169-2-SG	2169	Sewer Lift Station	Standby Generator	Diesel	107	Double-Walled
Hickam AFB	H-2192	2192	Golf Course Ground Maintenance	Fuel Storage and Dispensing	Diesel	250	Concrete Dike
Hickam AFB	H-3006-1	3006	Fire Suppression Pumphouse	Storage	Diesel	572	Double-Walled
Hickam AFB	H-3006-2				Diesel	572	Double-Walled
Hickam AFB	H-3205-SG	3205	Hawaii Air National Guard Alert Pad	Standby Generator	Diesel	100	None
Hickam AFB	H-3395	3395	Defense Meteorological Satellite Prog.	Standby Generator	Diesel	500	Concrete Dike
Hickam AFB	H-3576-1	3576	Golf Course Ground Maintenance	Fuel Storage and Dispensing	MOGAS	450	Dike
Hickam AFB	H-3576-2				Diesel	550	Dike
Hickam AFB	H-3577-DR	3577	Golf Course Ground Maintenance	Drum Storage	Used Oil	220 (4 55-gal drums max.)	Drum Pallet/Curbed Concrete Pad
Hickam AFB	H-3592-SG	3592	Hazardous Cargo	Standby Generator	Diesel	400	None
Hickam AFB	H-4002	4002	Auto Hobby Shop	Storage	Used Oil	500	Double-Walled
Hickam AFB	H-4072-SG	4072	"Network Warfare" Squadron	Standby Generator	Diesel	175	None
Hickam AFB	H-4119-1	4119	735 AMS	Fuel Storage and Dispensing	Diesel	1,000	Double-Walled
	H-4119-2			Fuel Storage and Dispensing	Diesel	500	Double-Walled
	H-4119-3-DR			Drum Storage	New/Used Oil	220 (4 55-gal. drums max.)	Spill Locker w/Containment Sump
Hickam AFB	H-7475-SG	7475	Sewer Lift Station	Standby Generator	Diesel	109	Double-Walled
Hickam AFB	H-83228-SG	83228	Power Production	Standby Generator	Diesel	100	Double-Walled
Hickam AFB	H-1207-1-PG	1219	Power Production	Portable Generator	Diesel	200	Curbed Concrete Pad with Containment Trench
	H-1207-15-PG			Portable Generator	Diesel	200	
	H-1207-18-PG			Portable Generator	Diesel	90	
Hickam AFB	H-1207-34-PG	1207	Power Production	Portable Generator	Diesel	55	None
Hickam AFB	H-1207-63-PG	1219	Power Production	Portable Generator	Diesel	90	Curbed Concrete Pad with Containment Trench
	H-1207-260-PG			Portable Generator	Diesel	90	
	H-1207-262-PG			Portable Generator	Diesel	90	

HICKAM (Continued)							
Hickam AFB	H-1207-359-PG	1207	Power Production	Portable Generator	Diesel	80	None
	H-1207-363-PG			Portable Generator	Diesel	80	None
	H-1207-476-PG			Portable Generator	Diesel	55	None
	H-1207-599-PG			Portable Generator	Diesel	125	None
	H-1207-636-PG			Portable Generator	Diesel	100	Double-Walled
	H-1207-700-PG			Portable Generator	Diesel	125	Double-Walled
	H-1207-721-PG			Portable Generator	Diesel	100	Double-Walled
Hickam AFB	H-1207-748-PG	1219	Power Production	Portable Generator	Diesel	200	Curbed Concrete Pad with Containment Trench
Hickam AFB	H-1207-813-PT	1207	Power Production	Mobile Fuel Dispensing	Diesel	179	Spill Kit
	H-1207-814-PT			Mobile Fuel Dispensing	Diesel	120	Double-Walled
	H-1207-4318-PG			Portable Generator	Diesel	90	Double-Walled
Hickam AFB	FB85	2030	15th Maintenance Squadron	Mobile Defueler	Reclaimed F-24 (Jet A)	440	Spill Kit
	FB95			Mobile Defueler	Reclaimed F-24 (Jet A)	600	Concrete Containment Curbing/Spill Kit
	HB01			Bowser	Used Hydraulic Oil	200	None
	HF01			Mobile Fuel Dispensing	Diesel	400	Spill Kit
Hickam AFB	OB91	2030	15th Maintenance Squadron	Bowser	Used Oil	400	Concrete Containment Curbing
	OB92			Bowser	Used Oil	200	None
Hickam AFB	H-2030-AGE	2030	15th Maintenance Squadron	AGE Equipment	Diesel	576 gals. (6 Gen Sets @ 56-gals. each; 3 Air Cond. Units @ 60-gals. each; 1 Hyd. Test Stand @ 60 gals.)	None
					Jet Fuel	940 gals. (7 Turbine Power Units @ 80-gals. each; 2 Power/Air Start Units @ 190 gals. each)	

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
HICKAM (Continued)							
Hickam AFB	H-1037-MGS	1037	Military Gas Station	Fuel Issue	MOGAS	2-10,000 gals. USTs	NA
					Diesel	2-10,000 gals. USTs	
Hickam AFB	H-1754-AAFES	1754	Gas Station	Fuel Sales	MOGAS	2-15,000 gals. USTs	NA
Hickam AFB	H-2072-AAFES	2072	Gas Station	Fuel Sales	MOGAS	3-10,000 gals. USTs	NA
					Diesel	1-10,000 gals. UST	
Hickam AFB	H-2033H-SG	2033H	Hickam Flightline	Standby Generator	Diesel	250	Double-Walled
NAVFAC HI							
Naval Shipyard BOWTS	7	S-1068	BOWTS	Storage	Oily Sludge	400	Concrete Dike
Naval Shipyard BOWTS	9	S-726	BOWTS	Storage	Used Oil	10,000	Concrete Dike
Naval Shipyard BOWTS	10	S-1068	BOWTS	Storage	Oily Sludge	1,000	Concrete Dike
	11				Oily Sludge	1,000	
	12				Oily Sludge	1,000	
	13				Oily Sludge	1,000	
	14				Oily Sludge	1,000	
Naval Shipyard BOWTS	15	S-1068	BOWTS	Storage	Oily Sludge	2,000	Concrete Dike
Naval Shipyard BOWTS	20	S-726	BOWTS	Storage	Sludge	20,000	Concrete Dike
Naval Shipyard BOWTS	21	S-1068	BOWTS	Storage	Used Oil	2,300	Concrete Dike
Naval Shipyard BOWTS	51	S-1068	BOWTS	Storage	Used Oil	5,000	Concrete Dike
	52				Used Oil	5,000	
Naval Shipyard BOWTS	71	S-1068	BOWTS	Storage	Used Oil	7,000	Concrete Dike
Naval Shipyard BOWTS	76	1910	BOWTS	Storage	Oily Sludge	20,000	Double-Walled
	77				Oily Sludge	20,000	
	78				Oily Sludge	20,000	
	79				Oily Sludge	20,000	

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVFAC HI (Continued)							
Naval Shipyard BOWTS	80	1910	BOWTS	Storage	Oily Sludge	18,500	Double-Walled
	81				Oily Sludge	18,500	
	82				Oily Sludge	18,500	
	83				Oily Sludge	18,500	
Naval Shipyard	A-1	229	90-Day Storage Facility	Drum Storage	New & Used POL	1,100 (20 55-gal. drums max.)	Concrete Curbing
Naval Station - HAZMAT	A-3	553	Drum Storage Area	Drum Storage/ Polly Tank	Used POL	3,850 (70 55-gal. drums max.)/ 530 (2 265-gal. poly tanks)	Concrete Curbing
Naval Shipyard BOWTS	A-4	B-S726	BOWTS	Storage	Bilge Water	1,600,000	Steel Dike
Naval Shipyard BOWTS	A-5	1910	BOWTS	Storage	Oily Sludge	3,000	Double-Walled
	A-6				Oily Sludge	3,000	
Naval Shipyard	B-3	166	Electrical Shop	Drum Storage	New Insulating Oil	385 (7 55-gal. drums max.)	Storage Locker w/Integral containment
Naval Shipyard	B-5	166	Electrical Shop	Drum Storage	Used Insulating Oil	1,375 (25-55 gal. drums max.)	Concrete Dike
Naval Station	B-6	88	Electrical Shop	Drum Storage	Insulating Oil	330 gallons (6 55-gal. drums max.)	None
NAVFAC HI WWTP	C-1	1352	WWTP	Storage	Diesel	983	Double-Walled
NAVFAC HI WWTP	C-3	1699	WWTP	Standby Generator	Diesel	275	Steel Dike
NAVFAC HI WWTP	C-4	1701	WWTP	Storage	Diesel	5,200	Double-Walled
NAVFAC HI WWTP	C-5	1701	WWTP	Storage	Diesel	5,200	Double-Walled
Iroquois Point	C-7	4688	Sewage Pump Station IP-87	Standby Generator	Diesel	100	Concrete Containment Curbing
Iroquois Point	C-8	6877	Sewage Pump Station IP-089	Standby Generator	Diesel	900	Concrete Dike
Iroquois Point	C-8A	6877	Sewage Pump Station IP-089	Generator Day Tank	Diesel	55	Rupture Basin
Iroquois Point	C-9	6886	Sewage Pump Station IP-091	Standby Generator	Diesel	100	Concrete Containment Curbing
Iroquois Point	C-10	6887	Sewage Pump Station IP-092	Standby Generator	Diesel	75	Concrete Containment Curbing
Iroquois Point	C-11	6884	Sewage Pump Station IP-093	Standby Generator	Diesel	75	Concrete Containment Curbing
Iroquois Point	C-12	6885	Sewage Pump Station IP-094	Standby Generator	Diesel	75	Concrete Containment Curbing

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVFAC HI (Continued)							
Ford Island	C-13	451 (FI-42)	Sewage Pump Station FI-042	Standby Generator	Diesel	500	Double-Walled
McGrew Point	C-15	6892	Sewage Pump Station MP-018	Standby Generator	Diesel	112	Double-Walled
Naval Station	C-18	1395 (NS-05)	Sewage Pump Station NS-005	Standby Generator	Diesel	200	Double-Walled
Naval Station	C-19	1582 (NS-04)	Sewage Pump Station NS-004	Standby Generator	Diesel	250	Concrete Dike
Naval Station	C-20	1396 (NS-09)	Sewage Pump Station NS-009	Storage	Diesel	1,000	Concrete Dike
Naval Station	C-20A	1396 (NS-09)	Sewage Pump Station NS-009	Generator Day Tank	Diesel	75	Concrete Base Slab with CMU Walls
Naval Station	C-20B	1396 (NS-09)	Sewage Pump Station NS-009	Portable Pump	Diesel	86	None
SUBASE	C-21	1538 (SC-108)	Sewage Pump Station SC-012	Standby Generator	Diesel	500	Concrete Dike
Arizona Memorial Visitors Center	C-22	614 (HL-17)	Sewage Pump Station HL-017	Standby Generator	Diesel	500	Concrete Dike
Naval Shipyard	C-23	1393 (HP-02)	Sewage Pump Station HP-002	Standby Generator	Diesel	200	Double-Walled
Naval Shipyard	C-24	1871 (SY-106)	Sewage Pump Station SY-106	Storage	Diesel	3,500	Concrete Dike
Naval Shipyard	C-24A	1871 (SY-106)	Sewage Pump Station SY-106	Generator Day Tank	Diesel	300	Steel Containment Dike
Naval Shipyard	C-24B	1871 (SY-106)	Sewage Pump Station SY-106	Standby Generator	Diesel	244	Double-Walled
Naval Shipyard	C-27	1358 (SY-01)	Sewage Pump Station SY-001	Standby Generator	Diesel	250	Concrete Base Slab with CMU Walls
CIA Shipyard - Hold Area A7	C-28	1577 (SY-07)	Sewage Pump Station SY-007	Standby Generator	Diesel	225	Double-Walled
Naval Shipyard	C-29	1575 (SY-06)	Sewage Pump Station SY-006	Standby Generator	Diesel	700	Double-Walled
Naval Shipyard	C-30	1540	Sewage Pump Station NS-024	Standby Generator	Diesel	150	Concrete Containment curbing
SUBASE	C-32	1771 (SB-28)	Sewage Pump Station SB-028	Standby Generator	Diesel	180	Concrete Dike
SUBASE	C-33	1586 (SB-14)	Sewage Pump Station SB-014	Standby Generator	Diesel	200	Double-Walled
FLCPH	C-34	1579 (SC-16)	Sewage Pump Station SC-016	Standby Generator	Diesel	300	Double-Walled
Bishop Point	C-35	52 (BI-33)	Sewage Pump Station BI-033	Standby Generator	Diesel	150	Double-Walled

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVFAC HI (Continued)							
Catlin Park	C-36	2182 (CC-21)	Sewage Pump Station CC-021	Standby Generator	Diesel	500	Double-Walled
Doris Miller Park	C-38	7002 (MR-32)	Sewage Pump Station MR-032	Standby Generator	Diesel	100	Double-Walled
Halawa Housing	C-40	2938 (HH-19)	Sewage Pump Station HL-019	Standby Generator	Diesel	350	Double-Walled
Pearl City Peninsula	C-43	994 (PC-053)	Sewage Pump Station PC-053	Standby Generator	Diesel	100	Concrete Curbing
Pearl City Peninsula	C-44	8002 (PC-040)	Sewage Pump Station PC-040	Standby Generator	Diesel	75	Double-Walled
Pearl City Peninsula	C-47	8000 (PC-052)	Sewage Pump Station PC-052	Standby Generator	Diesel	75	Double-Walled
Pearl City Peninsula	C-48	794 (PC-55)	Sewage Pump Station PC-055	Standby Generator	Diesel	369	Double-Walled
NAVMAG West Loch	C-50	605	Sewage Pump Station	Standby Generator	Diesel	100	Concrete Dike
NAVMAG West Loch	C-53	482	Sewage Pump Station	Standby Generator	Diesel	67	Double-Walled
Ford Island	C-54	833 (FI-43)	Sewage Pump Station FI-43	Standby Generator	Diesel	194	Double-Walled
Ford Island	C-55	838 (FI-44)	Sewage Pump Station FI-44	Standby Generator	Diesel	75	Double-Walled
Ford Island	C-56	856 (FI-45)	Sewage Pump Station FI-45	Standby Generator	Diesel	194	Double-Walled
Ford Island	C-57	858 (FI-46)	Sewage Pump Station FI-46	Standby Generator	Diesel	194	Double-Walled
Ford Island	C-58	859 (FI-47)	Sewage Pump Station FI-47	Standby Generator	Diesel	74	Double-Walled
Ford Island	C-59	860 (FI-48)	Sewage Pump Station FI-48	Standby Generator	Diesel	194	Double-Walled
Pearl City Peninsula	C-60	PC-051	Sewage Pump Station PC-051	Standby Generator	Diesel	194	Double-Walled
SUBASE	C-61	1584	Sewage Pump Station	Standby Generator	Diesel	392	Double-Walled
FLCPH	C-62	1581 (SC-15)	Sewage Pump Station SC-15	Standby Generator	Diesel	392	Double-Walled
NAVFAC HI WWTP	C-63	6888	Sewage Pump Station	Standby Generator	Diesel	2,400	Double-Walled
NAVMAG West Loch	C-64	549	Sewage Pump Station WL-85	Standby Generator	Diesel	150	Double-Walled
NAVMAG West Loch	C-65	567	Sewer Pump Station WL-86	Standby Generator	Diesel	135	Double-Walled
NAVMAG West Loch	C-66	550	Sewer Pump Station WL-66	Standby Generator	Diesel	300	Double-Walled

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVFAC HI (Continued)							
NAVFAC HI WWTP	CP-1	WWTP	WWTP	Portable Pump	Diesel	90	Asphalt Concrete Berm
NAVFAC HI WWTP	CP-3	WWTP	WWTP	Portable Pump	Diesel	60	Asphalt Concrete Berm
NAVFAC HI WWTP	CS-1	1356	WWTP	Drum Storage	POL	165 (3 55-gal. drums max.)	Concrete Containment Vault
Shipyard CIA Power Plant #2	D-1	297	Power Plant	Storage	Low Sulfur Diesel	2,000	Concrete Dike
Shipyard CIA Power Plant #2	D-4	149	Power Plant	Storage	JP-5	50,000	Concrete Dike
Shipyard Power Plant #3	D-5	177	Power Plant	Storage	JP-5	9,000	Concrete Dike
Shipyard CIA Power Plant #2	D-6	149	Power Plant	Storage	Diesel	500	CMU Dike
Shipyard CIA Power Plant #2	D-7	149	Power Plant	Standby Generator	Diesel	600	Concrete Containment Curbing
Shipyard CIA Power Plant #2	D-8	149	Power Plant	Drum Storage	New and Used Oil	1,540 (28 55-gal. drums max.)	Spill Pallets
Shipyard Power Plant #3	D-11	177	Power Plant	Storage	JP-5	10,000	Concrete Dike
SUBASE	D-18	643 (Sta K-10)	Gas Turbine Generating Unit	Storage	Diesel	4,000	Double-Walled
SUBASE	D-18A	643 (Sta K-10)	Gas Turbine Generating Unit	Day Tank	Diesel	500	Double-Walled
Red Hill	D-19	S-312	Generator Building	Standby Generator	Diesel	175	Double-Walled
Waiawa	D-20	S-71	Water Pumping Station	Storage	Low Sulfur Diesel	5,000	Concrete Dike
Waiawa	D-20A	S-71	Waiawa Pumping Station	Generator Day Tank	Low Sulfur Diesel	200	Double-Walled
Waiawa	D-21	S-71	Potable Water Pumping Station	Storage	Diesel	200	Double-Walled
Kalaeloa Redevelopment District	D-23	1908	Potable Water Pumping Station	Storage	Diesel	1,000	Concrete Base Slab with CMU Walls
Red Hill	D-24	S-307	Gas Turbine Generating Unit	Generator Storage	Low Sulfur Diesel	5,000	Double-Walled
Red Hill	D-24A	S-307	Water Pumps	Generator Day Tank	Low Sulfur Diesel	200	Double-Walled
Manana	D-25	817	Water Booster Pump Station	Standby Generator	Diesel	300	Double-Walled
NAVMAG Lualualei	D-26	S-531	Water Pumping Station	Standby Generator	Diesel	150	Double-Walled
Wahiawa Annex	D-27	440	Water Booster Pump Station	Standby Generator	Diesel	180	Concrete Dike

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVFAC HI (Continued)							
SUBASE	D-28	1649 (Sta K-33)	Water Pump Station	Standby Generator	Diesel	200	Double-Walled
Naval Shipyard	D-30	41 (Sta C)	Portable Tank and Gas Turbine	Standby Generator	Diesel	150	Double-Walled
Halawa Housing	D-31	408	Halawa Water Pump Station	Standby Generator	Diesel	550	Secondary Containment Pan
Naval Shipyard	D-32	166 (Sta G-15)	Power Production	Standby Generator	Diesel	120	Double-Walled
PWC Compound Boneyard	D-33	X-24	Water Booster Station	Standby Generator	Diesel	100	None
Wahiawa Annex	D-34	321	BEQ	Standby Generator	Diesel	850	Double-Walled
Camp Smith	D-KTR-1	Spiders Facility	Camp Smith	Storage	Diesel	12,000	Double-Walled
	D-KTR-2 (693)			Generator Day Tank	Diesel	100	
	D-KTR-3 (694)			Generator Day Tank	Diesel	100	
	D-KTR-4 (695)			Generator Day Tank	Diesel	100	
	D-KTR-5 (696)			Generator Day Tank	Diesel	100	
Shipyard Power Plant #3	DP-1	177	Portable Tank	Refueler	Diesel	250	General Secondary Containment
Shipyard Power Plant #3	DP-6	177	Portable Generator	Storage	Diesel	250	Double-Walled
Shipyard Power Plant #3	DP-7	177	Portable Generator	Storage	Diesel	500	Double-Walled
NAVFAC Barbers Point	DP-8	177	Portable Generator	Storage	Diesel	500	Double-Walled
Shipyard Power Plant #3	DP-9	177	Portable Generator	Storage	Diesel	250	Double-Walled
Shipyard Power Plant #3	DP-11	177	Portable Generator	Storage	Diesel	169	Double-Walled
Shipyard Power Plant #3	DP-12	177	Portable Generator	Storage	Diesel	272	Double-Walled
Shipyard Power Plant #3	DP-13	177	Portable Generator	Storage	Diesel	230	Double-Walled
Shipyard Power Plant #3	DP-15	177	Portable Tank	Refueler	Diesel	100	General Secondary Containment
Shipyard Power Plant #3	DP-16	177	Portable Generator	Storage	Diesel	370	Double-Walled
NAVMAG Lualualei	E-1	415	PWC Service Station #50	Storage	Diesel	5,000	Steel Dike
	E-2				Mogas	5,000	

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVFAC HI (Continued)							
NAVMAG West Loch	E-3	559A (S-60)	PWC Service Station #60	Storage	Mogas	5,000	Steel Dike
	E-4	559B (S-60)			Diesel	5,000	
Wahiawa Annex	E-7	S-238	PWC Service Station #65	Storage	Mogas	5,000	Steel Dike
	E-8			Out of Service	Empty	5,000	
Naval Shipyard	E-11	S-169	Gas Station	Storage	Diesel/Mogas	12,000 (Dual Compartments, 6,000 gals. each)	Double-Walled
	E-12			Storage	Diesel/Mogas	12,000 (Dual Compartments, 6,000 gals. each)	Double-Walled
Naval Shipyard	E-13	S-169A	Fueling Station	Storage	E-85	10,000	Double-Walled
Naval Shipyard	E-14	197	Fire Maintenance. Shop	Used Oil Storage	Used Oil	250	Closed-Top Steel Dike
Hickam	E-15	1037	Military Fuel Station	Standby Generator	Diesel	99	Double-Walled
Naval Shipyard	EP-5	165	Mobile Tanker	Refueling	Diesel	2,000	General
	EP-8			Refueling	Diesel	2,000	General
	EP-9			Refueling	JP-5	2,000	General
Naval Shipyard	ES-1	35	Transportation Department	Drum Storage	Various	3,190 (58 55-gal. drums max.)	Overpack Drums and Spill Pallets
Naval Shipyard	ES-2	35	Transportation Department	Standby Generator	Diesel	335	Double-Walled
Naval Shipyard	ES-3	197	Fire Maintenance Shop	Drum Storage	New and Used POLs	1,760 (32 55-gal. drums max.)	Overpack Drums and Spill Pallets
Hickam	H-1073H-1	1073	Maintenance Shop	Used Oil Storage	Used Oil	500	Double-Walled
Hickam	H-2002-1	2002	Maintenance Shop	Used Oil Storage	Used Oil	260	Steel Dike
Hickam	H-2002-S1	2002	Transportation Department	Drum Storage	POL	935 (17 55-gal. drums max.)	Overpack Drum, Spill Pallets
Hickam	H-2010-A	2010	Bldg. 2010	Storage	Used Diesel	120	Double-Walled
Hickam AFB	H-2010-B	2010	Bldg. 2010	Storage	Used Oil	170	Double-Walled
Hickam AFB	H-2010-C	2010 (Exterior)	Bldg. 2010	Storage	Reclaimed Jet Fuel	500	Double-Walled
Hickam AFB	H-1073-S1	1073	Maintenance Shop	Drum Storage	POL	1,650 gallons (30 55-gal. drums max.)	Overpack Drum, Spill Pallets
Hickam AFB	H-2010-S1	2010	Bldg. 2010	Drum Storage	New and Used POLs	330 (6 55-gal. drums max.)	Overpack Drum, Spill Pallets

TABLE F-1: ABOVEGROUND STORAGE TANKS							
Geographic Location	**Tank #**	**Building #**	**Building Function**	**Tank Usage**	**Product Stored**	**Capacity (Gals.)**	**Secondary Containment**
NAVFAC HI (Continued)							
Hickam AFB	H-2023H-S1	2023H	Used Transformer Storage	Drum Storage	POL	550 (10 55-gal. drums max.)	Sump and Spill Pallets
Hickam AFB	H-3008H-S1	3008H	Used Transformer Storage	Drum Storage	Used Insulating Oil	2,750 (50 55-gal. drums max.)	Spill Pallets
Naval Shipyard IWTC	T-4	1424	IWTC	Storage	Oily Wastewater	10,000	Concrete Containment Trench
Naval Shipyard IWTC	T-9	1424	IWTC	Storage	Used Industrial Oil	4,000	Concrete Containment Trench
Naval Shipyard IWTC	T-10	1424	IWTC	Storage	Used Oil	500	Concrete Containment Trench
Naval Shipyard IWTC	T-31	1425	IWTC	Storage	Diesel	180	Double-Walled
Hickam AFB	2002H	2002H	Fuels Operations Division	Fuel Storage and Dispensing	E-85	8,000	Double-Walled
Hickam	E-16	35	NAVFAC HI Transportation Shop	Storage	Used Oil	240	Double-Walled
Iroquois Point	6863-NEX	6863	NEX Gas Station	Fuel Sales	MOGAS	2-10,000 gals. USTs	NA
Kalaeloa (Barbers Point)	1928-NEX	1928	NEX Gas Station	Fuel Sales	MOGAS	3-10,000 gals. USTs	NA

Notes: For potential spill predictions, volumes, rates, controls, and tank drawings see the COMNAVREG HI SPCC Plan.

F.2.5 Underground Storage Tanks

Tables F-2 provides an inventory of COMNAVREG HI's Underground Storage Tanks (USTs). Figure M-2 (M-2A thru M-2F), Appendix M, provides maps that shows the locations of all USTs. For additional detail on each tank see the COMNAVREG HI SPCC Plan.

TABLE F-2: UNDERGROUND STORAGE TANKS

Location	Address	Facility Name	DOH Facility ID	Facility Type	New Tank ID	Tank ID	Map ID	Tank Capacity	Product Stored
Hickam AFB	Military Gas Station Bldg. 1037h, Vickers Ave.	JBPHH	9-102052	Gas Station	1 Master	87-1 aka 1037-1	H-1037-1	10,000	Gasohol, 87 Grade
Hickam AFB	Military Gas Station Bldg. 1037h, Vickers Ave.	JBPHH	9-102052	Gas Station	2 Slave	87-2 aka 1037-2	H-1037-2	10,000	Gasohol, 87 Grade
Hickam AFB	Military Gas Station Bldg. 1037h, Vickers Ave.	JBPHH	9-102052	Gas Station	3 Master	D-1 aka 1037-3	H-1037-3	10,000	Diesel
Hickam AFB	Military Gas Station Bldg. 1037h, Vickers Ave.	JBPHH	9-102052	Gas Station	4 Slave	D-2 aka 1037-4	H-1037-4	10,000	Diesel
Hickam AFB	Bldg. 1109H, Hangar Ave.	JBPHH	9-102062	Emergency Generator	M-1 Master	M-1102A	H-1102A	10,000	Diesel
Hickam AFB	Bldg. 1109H, Hangar Ave.	JBPHH	9-102062	Emergency Generator	M-2 Slave	M-1102B	H-1102B	10,000	Diesel
Hickam AFB	Bldg. 1754H, Kuntz Ave./Kokomalei St.	AAFES Kuntz Mini Mall	9-103817	Gas Station	1	1745-1	H-1745-1	15,000	Gasohol, 87 Grade
Hickam AFB	Bldg. 1754H, Kuntz Ave./Kokomalei St.	AAFES Kuntz Mini Mall	9-103817	Gas Station	2	1745-2	H-1745-2	15,000	Gasohol, 92 Grade
Hickam AFB	Bldg. 2072H, Hangar Ave./ G St.	AAFES Hickam Car Care Center	9-102058	Gas Station	2 Master	87 aka 2072-2	H-87	10,000	Gasohol, 87 Grade
Hickam AFB	Bldg. 2072H, Hangar Ave./ G St.	AAFES Hickam Car Care Center	9-102058	Gas Station	3 Slave	87 SLAVE aka 2072-3	H-87 (SLAVE)	10,000	Gasohol, 87 Grade
Hickam AFB	Bldg. 2072H, Hangar Ave./ G St.	AAFES Hickam Car Care Center	9-102058	Gas Station	1	89 aka 2072-1	H-89	10,000	Gasohol, 92 Grade
Hickam AFB	Bldg. 2072H, Hangar Ave./ G St.	AAFES Hickam Car Care Center	9-102058	Gas Station	4	92 aka 2072-4	H-92	10,000	Diesel
Hickam AFB	Bldg. 4069H, McChord St.	JBPHH	9-103154	Emergency Generator	M-1	M-1	H-4069	2,500	Diesel
NAVSTA (Makalapa)	Bldg. 352, Makalapa Crater	JBPHH	9-100991	Emergency Generator	M-1	JPAC-1	JPAC-1	6,000	Diesel
NAVSTA (Makalapa)	Bldg. 352, Makalapa Crater	JBPHH	9-100991	Emergency Generator	M-2	JPAC-2	JPAC-2	6,000	Diesel
NAVSTA (Makalapa)	Bldg. 401, Makalapa Crater	JBPHH	9-101850	Emergency Generator	M-1	M-JPAC-3	JPAC-3	8,000	Diesel
NAVSTA (Makalapa)	Bldg. 398, Makalapa Crater	Joint Typhoon Warning Center	9-102465	Emergency Generator	M-1	398-1	JTWC-398	2,000	Diesel
NAVSTA (Moanalua)	Bldg. 71 Namur Road/ Radford Dr.	NEX Mall Gas Station	9-102384	Gas Station	1	JC-1	JC-1	10,000	Gasohol, 92 Grade

TABLE F-2: UNDERGROUND STORAGE TANKS									
Location	**Address**	**Facility Name**	**DOH Facility ID**	**Facility Type**	**New Tank ID**	**Tank ID**	**Map ID**	**Tank Capacity**	**Product Stored**
NAVSTA (Moanalua)	Bldg. 71 Namur Road/ Radford Dr.	NEX Mall Gas Station	9-102384	Gas Station	2	JC-2	JC-2	10,000	Gasohol, 89 Grade
NAVSTA (Moanalua)	Bldg. 71 Namur Road/ Radford Dr.	NEX Mall Gas Station	9-102384	Gas Station	3	JC-3	JC-3	20,000	Gasohol, 87 Grade
NAVSTA (SUBASE)	Bldg. 60, North Road	JBPHH	9-102280	Diesel Purification Plant	F-1	F-1	DDP-1	18,144	Diesel
NAVSTA (SUBASE)	Bldg. 60, North Road	JBPHH	9-102281	Diesel Purification Plant	F-2	F-2	DDP-2	18,522	Diesel
NAVSTA (SUBASE)	Bldg. 60, North Road	JBPHH	9-102282	Diesel Purification Plant	F-3	F-3	DDP-3	25,704	Diesel
NAVSTA (SUBASE)	Bldg. 60, North Road	JBPHH	9-102283	Diesel Purification Plant	F-4	F-4	DDP-4	97,692	Diesel
NAVSTA (SUBASE)	Bldg. 60, North Road	JBPHH	9-102284	Diesel Purification Plant	F-5	F-5	DDP-5	93,198	Diesel
NAVSTA (SUBASE)	Bldg. 60, North Road	JBPHH	9-102285	Diesel Purification Plant	F-6	F-6	DDP-6	92,526	Diesel
NAVSTA (SUBASE)	Bldg. 60, North Road	JBPHH	9-102286	Diesel Purification Plant	F-7	F-7	DDP-7	92,148	Diesel
NAVSTA (SUBASE)	Bldg. 60, North Road	JBPHH	9-102287	Diesel Purification Plant	F-8	F-8	DDP-8	93,492	Diesel
NAVSTA (SUBASE)	Bldg. 1326, North Road	NEX JBPHH Gas Station	9-102679	Gas Station	1	32	SB-32	10,000	Gasohol, 87 Grade
NAVSTA (SUBASE)	Bldg. 1326, North Road	NEX JBPHH Gas Station	9-102679	Gas Station	2	33	SB-33	10,000	Gasohol, 92 Grade
NAVSTA (SUBASE)	Bldg. 1322, Oakley Road	JBPHH	9-102302	Emergency Generator	M-1	34	SB-34	2,500	Diesel
NAVSTA (SUBASE)	Bldg. 1724, Pierce/Shane St.	JBPHH	9-100055	Emergency Generator	M-1	M-29	SB-29	1,000	Diesel
Iroquois Point	Bldg. 6863, Cormorant Ave.	NEX Iroquois Point Gas Station	9-200976	Gas Station	2	IPA1	IPA1	10,000	Gasohol, 92 Grade
Iroquois Point	Bldg. 6863, Cormorant Ave.	NEX Iroquois Point Gas Station	9-200976	Gas Station	1	IPA2	IPA2	10,000	Gasohol, 87 Grade
Kalaeloa (Barbers Point)	Bldg. 1928, Saratoga Ave.	NEX Touch 'N Go Gas Station	9-102001	Gas Station	3 Slave	81	BP-81	10,000	Gasohol, 87 Grade
Kalaeloa (Barbers Point)	Bldg. 1928, Saratoga Ave.	NEX Touch 'N Go Gas Station	9-102001	Gas Station	2 Master	82	BP-82	10,000	Gasohol, 87 Grade

TABLE F-2: UNDERGROUND STORAGE TANKS									
Location	**Address**	**Facility Name**	**DOH Facility ID**	**Facility Type**	**New Tank ID**	**Tank ID**	**Map ID**	**Tank Capacity**	**Product Stored**
Kalaeloa (Barbers Point)	Bldg. 1928, Saratoga Ave.	NEX Touch 'N Go Gas Station	9-102001	Gas Station	1	83	BP-83	10,000	Gasohol, 92 Grade
Lualualei (RTF LLL)	Bldg. 81, Edison St.	JBPHH, Lualualei Annex	9-200982	Emergency Generator	M-1	RTF-9	RTF-9	25,000	Diesel
Lualualei (RTF LLL)	Bldg. 81, Edison St.	JBPHH, Lualualei Annex	9-200982	Emergency Generator	M-2	RTF-10	RTF-10	25,000	Diesel
Lualualei (RTF LLL)	Bldg. 81, Edison St.	JBPHH, Lualualei Annex	9-200982	Emergency Generator	M-3	RTF-11	RTF-11	25,000	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-1	F-1	F-1	11,980,332	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-2	F-2	F-2	11,986,254	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-3	F-3	F-3	11,980,332	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-4	F-4	F-4	11,980,332	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-5	F-5	F-5	12,697,986	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-6	F-6	F-6	12,695,012	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-7	F-7	F-7	12,703,320	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-8	F-8	F-8	12,680,976	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-9	F-9	F-9	12,702,900	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-10	F-10	F-10	12,698,700	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-11	F-11	F-11	12,715,962	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-12	F-12	F-12	12,694,500	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-13	F-13	F-13	12,714,408	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-14	F-14	F-14	12,719,532	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-15	F-15	F-15	12,706,515	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-16	F-16	F-16	12,702,900	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-17	F-17	F-17	12,712,392	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-18	F-18	F-18	12,712,644	Other

TABLE F-2: UNDERGROUND STORAGE TANKS									
Location	**Address**	**Facility Name**	**DOH Facility ID**	**Facility Type**	**New Tank ID**	**Tank ID**	**Map ID**	**Tank Capacity**	**Product Stored**
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-19	F-19	F-19	12,712,644	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102271	Bulk Fuel Storage	F-20	F-20	F-20	12,704,916	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102288	Surge Tank	F-ST1	F-ST1	F-ST1	421,722	Other
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102289	Surge Tank	F-ST2	F-ST2	F-ST2	422,100	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102290	Surge Tank	F-ST3	F-ST3	F-ST3	422,688	Diesel
Red Hill	Red Hill	Red Hill Bulk Fuel Storage Facility	9-102291	Surge Tank	F-ST4	F-ST4	F-ST4	422,184	Diesel
Wahiawa (NCTAMS PAC)	Bldg. 106, Saipan Dr.	JBPHH, Wahiawa Annex	9-202310	Emergency Generator	M-1	34	NCT-34	5,000	Diesel
Wahiawa (NCTAMS PAC)	Bldg. 234, Power Plant	JBPHH, Wahiawa Annex	9-202313	Emergency Generator	M-1	35	NCT-35	20,000	Diesel
Wahiawa (NCTAMS PAC)	Bldg. 242, Midway Dr.	JBPHH, Wahiawa Annex	9-202315	Emergency Generator	M-1	38	NCT-38	5,000	Diesel
Wahiawa (NCTAMS PAC)	Bldg. 261, Center St.	JBPHH, Wahiawa Annex	9-202316	Emergency Generator	M-1	37	NCT-37	10,000	Diesel
Wahiawa (NCTAMS PAC)	Bldg. 329, Center St.	NEX NCTAMS PAC Gas Station	9-202319	Gas Station	3	30	NCT-30	5,000	Gasohol, 92 Grade
Wahiawa (NCTAMS PAC)	Bldg. 329, Center St.	NEX NCTAMS PAC Gas Station	9-202319	Gas Station	2	31	NCT-31	5,000	Gasohol, 87 Grade
Wahiawa (NCTAMS PAC)	Bldg. 329, Center St.	NEX NCTAMS PAC Gas Station	9-202319	Gas Station	1	32	NCT-32	10,000	Gasohol, 87 Grade

F.2.6 Hazardous Substance Storage

Table F-3 provides an inventory COMNAVREG HI's hazardous substances storage.

TABLE F-3: HAZARDOUS SUBSTANCE STORAGE*

Chemical	Location	Building Number	Cont. Type *
Adhesives	Naval Facilities	44, 229, 1665, 1747, 1772	F
Chemicals	Naval Facilities	44, 164, 229, 1665, 1747, 1772	F
Chemicals	Naval Facilities	44, 164, 229, 1665, 1747, 1772	M
Chemicals	Naval Facilities	44, 164, 229, 1665, 1747, 1772	N
Chemicals	Naval Facilities	1424	J
Chemicals	Naval Facilities	44, 1424	E
Cleaning Compounds	Naval Facilities	44, 229, 1665, 1747, 1772	F
Compressed Gasses	Naval Facilities	229, 1665, 1747, 1772	F
Compressed Gasses	Naval Facilities	307, 308, 309, 1762	L
Compressed Gasses	Naval Facilities	2252	A
Deck & Roof Sealant	Naval Facilities	44, 229, 1665, 1747, 1772	F
Deck & Roof Sealant	Naval Facilities	44	J
Diesel Fuel	Naval Facilities	A-19, 26A, 41, 42, 55, 75, 128, 149, 150, 166, 177, 250, 297, 310, 372, 397, 451, 454, 462, 511, B-610, 661, 794, 833, 838, 856, 858, 859, 860, 926, 987, 992, 994, 995, 1208, 1315, 1358, 1393, 1395, 1396, 1406, 1425, 1487, 1538, 1540, 1557, 1575, 1577, 1579, 1581, 1582, 1584, 1586, 1613, 1623, 1649, 1694, 1699, 1718, 1721, 1731, 1759, 1771, 1871, 6892, 8000, 9478, S-169, S-307, S-1552, Upper Tank Farm, NAVFAC Storage Yard	A
Diesel Fuel	Naval Facilities	Adit 1, Red Hill, 352, 401, 1322, 1724	B
Gasoline (Unleaded)	Naval Facilities	A-19, 44, B-610, S-169	A
Gasoline (Unleaded)	Naval Facilities	SX30	B
Jet Fuel (JP-5)	Naval Facilities	149, 177, 643, Upper Tank Farm	A
Jet Fuel (JP-5)	Naval Facilities	Adit 1, Red Hill	B
Jet Fuel (F-24)	Naval Facilities	Upper Tank Farm	A
Jet Fuel (F-24)	Naval Facilities	Red Hill	B
Nitrogen	Naval Facilities	1320	A
Oil	Naval Facilities	88, 166, 149, Upper Tank Farm, 1910, Adit 3, Waste Oil Recycling Facility, Kuaha Truck Rack	A
Oil	Naval Facilities	35, 229,1665, 1772, 1747	D
Oil	Naval Facilities	44	F
Oxygen Candles, Chlorate	Naval Facilities	229, 1747	F
Paint & Paint Related Mat.	Naval Facilities	44, 229, 1665, 1747, 1772	F
Preservatives and Sealing Compound	Naval Facilities	44, 229, 1665, 1747, 1772	F
Propane	Naval Facilities	29, 55, 71, 78, 88, 149, 214, 284, 393, 404, 449, 452K, 602, 604, 631, 987, 989, 995, 1237, 1352, 1430, 1456, 1484, 1553, 1557, 2252, 9478	A
Sodium Hydroxide	Naval Facilities	149	A
Sodium Hydroxide	Naval Facilities	1424, 1910	C

TABLE F-3: HAZARDOUS SUBSTANCE STORAGE*			
Chemical	**Location**	**Building Number**	**Cont. Type ***
Sodium Hydroxide	Naval Facilities	164, 229, 1665, 1747	N
Solvent	Naval Facilities	35, 44, 229, 1665, 1747, 1772	F
Sulfuric Acid	Naval Facilities	149	A
Sulfuric Acid	Naval Facilities	1424	C
Sulfuric Acid	Naval Facilities	164, 229, 1747	M
Battery (Lead Acid)	Hickam	2002, 2003, 2010, 2030, 2035, 1207, 2133, 1005	R
Diesel Fuel	Hickam	17, 41, 52, 54, 203, 668, 726, 906, 986, 1001, 1037, 1050, 1052, 1109, 1110, 1120, 1204, 1235, 1250, 1352, 1629, 1701, 1728, 1804, 1852, 1854, 1856, 1861, 2003, 2028, 2030, 2036, 2039, 2051, 2093, 2115, 2125, 2135, 2154, 2160, 2165, 2169, 2183, 2192, 3006, 3190, 3205, 3400, 3406, 3424, 3576, 3592, 4002, 4072, 4119, 6888, 83228, FAA Tower, POL Areas 5 and 11	A
Diesel Fuel	Hickam	1037, 1109, 4069	B
Diesel Fuel	Hickam	2125	R
Gasoline (Unleaded)	Hickam	2030, 2183, 3424, 3460, 3572, 4057	A
Gasoline (Unleaded)	Hickam	1037, 2072	B
Gasoline (Unleaded)	Hickam	2125	P
Halogen	Hickam	1202, 2045, 2073, 3380, 3392, 4002	L
Hydraulic Fluid	Hickam	1045, 1055, 1070, 1073, 1207, 2002, 2030, 2036, 2040, 3044, 3220, 3386, 3402, 3424	A
Jet Fuel (F-24)	Hickam	Aero Club, Areas 11-1, 11-2, 11-3, 11-4, Area 12-1, 9-4, 1234, 2003, 2094, 2095,11666	A
Jet Fuel (F-24)	Hickam	2030-1, Areas 5-2, 5-3, 5-4	B
Jet Fuel (F-24)	Hickam	2125, 3020	P
JPTS	Hickam	3023 (POL Area 9)	A
Motor Oil	Hickam	1045, 1055, 1073, 1203, 1207, 1209, 2002, 2010, 2030, 3380, 3386, 3416, 3424, 4057, 11666	A
Motor Oil	Hickam	1073, 2002, 2010, 3572, 4057	D
Nitrogen	Hickam	3023, 3027-3034	A
Nitrogen	Hickam	3023, 3027-3034	L
Oxygen	Hickam	3023	A
Paint	Hickam	1203,1760, 2130	F
Propane	Hickam	203, 220, 309, 313, 344, 422, 425, 484, 559, 723, 900, 907, 918, 922, 934, 940, 941, 970, 998, 999, 1102, 1120, 1153, 1160, 1097, 1168, 1250, 1804, 1860, 1889, 2036, 2096, 2105, 3465, 3572.	A
Propane	Hickam	559	L
Chlorine	Navy - Kalaeloa	S-25	L
Diesel Fuel	Navy - Kalaeloa	1927, 1847, S-25, 1908	A
Diesel Fuel	NAVMAG Lualualei Branch	2, 28, 415, S-531, Kolelole Pass HMF	A
Gasoline (Unleaded)	NAVMAG Lualualei Branch	415	A
Diesel Fuel	NAVMAG West Loch Branch	3, 52, 440, 483, 540, 542, 549, 550, 562, 563, 567, 569, 600, 603, 617, 18th St. & G Ave.	A

TABLE F-3: HAZARDOUS SUBSTANCE STORAGE*			
Chemical	**Location**	**Building Number**	**Cont. Type ***
Gasoline (Unleaded)	NAVMAG West Loch Branch	3, 18th St. & G Ave.	A
Oil	NAVMAG West Loch Branch	440	A
Oil	NAVMAG West Loch Branch	573	D
Oil	NAVMAG West Loch Branch	568	F
Otto Fuel	NAVMAG West Loch Branch	440	A
Otto Fuel	NAVMAG West Loch Branch	440	P
Solvent	NAVMAG West Loch Branch	440	A
Solvent	NAVMAG West Loch Branch	573	D
Solvent	NAVMAG West Loch Branch	568	F
Solvent	NAVMAG West Loch Branch	440	O
Diesel Fuel	NCTAMSPAC Radio Transmitter Facility Lualualei	4, 81	A
Diesel Fuel	NCTAMSPAC Radio Transmitter Facility Lualualei	81 (Three Tanks)	B
Diesel Fuel	NCTAMSPAC	409,440, 109, 229, 234, 234A, 242, 261, 106, 5, 669, 466, 411, 567, 550, 552, 554, 553, 500, HRSOC Antenna Building, HRSOC Warehouse, WSOC, E7, E8	A
Diesel Fuel	NCTAMSPAC	3, 106, 234, 261, 242	B
Gasoline (Unleaded)	NCTAMSPAC	238	A
Propane	Navy Iroquois Point Housing	Tank Farm, Grid JJ14, 5265, Grid JJ19, Cafetorium, Grid LL15, 6882	A
Diesel Fuel	NAVFAC HI Waiawa Water St.	S-71	A

Notes:

*** Container Type Codes:**

A	Above ground tank	G	Carboy	M	Glass bottles or jugs
B	Below ground tank	H	Silo	N	Plastic bottles or jugs
C	Tank inside building	I	Fiber drum	O	Tote bin
D	Steel drum	J	Bag	P	Tank wagon
E	Plastic/non-metal drum	K	Box	Q	Rail car
F	Can	L	Cylinder	R	Other

- EPCRA point of contact: Gary Nakagawa, Chemist, 400 Marshall Rd., Pearl Harbor, HI, 96860, Work # (808) 471-1171 x213
- Inventory based on an EPCRA Tier 2 report generated on February 2017.
- The Federal Fire Department maintains an updated list of all hazardous substance storage.

F.2.7 Hazardous Waste Accumulation Points

Table F-4 provides an listing of COMNAVREG HI's Hazardous Waste Accumulation Points (WAPs).

TABLE F-4: HAZARDOUS WASTE ACCUMULATION POINTS		
Building #	**Location**	**Facility Description**
1089	Barbers Point	Golf course Herbicide/Pesticide
1089	Barbers Point	Golf course Herbicide/Pesticide
1994	Barbers Point	Golf Course Maintenance Compound
55	Beckoning Point	Electric Power Plant
19	Bishop Point	Ship Serv Spt/Op Stg/Admin Office
54	Bishop Point	NAVSEA Emergency Ship Salvage Material
Piers-A	Bishop Point	Berthing Pier
2651NS	Camp Catlin	MWR Pesticide Storage
A19	Camp Catlin	Navy/Marine Golf Course Maintenance
1685	FISC	FISC Fuel Lab
9478	FISC	No information
1757	FISC	FISC Facilities
550	FISC	Printing Operation
449	FISC	FISC MHE
427	FISC	NEX Maintenance (inside
427	FISC	NEX Maintenance (outside)
229	FISC	FISC HAZMIN Center
229	FISC	PRP411 Hazardous Waste Branch
Piers-H	FISC	FISC
Piers-K	FISC	FISC
Piers-Y	FISC	Ships/Contractors
217	Ford Island	Water Trans Hazmat Storage
3	Ford Island	Port Ops Fuel Department
173	Ford Island	Material Storage at Ford Island
26	Ford Island	ATG Admin Bldg.
26A	Ford Island	NSTCP Tactical Training Facility
39	Ford Island	Training Bldg - NSTCP
467	Ford Island	Fire Station
133	Ford Island	MK 32 Target Launcher
170	Ford Island	Machine Shop
170	Ford Island	MK 32 Target Launchers
459	Ford Island	MK-32 Target Launchers
305	Ford Island	Public Restroom at Ford Island
55	Ford Island	BEQ E5/E6
BB63	Ford Island	USS Missouri Memorial Monument
462	Ford Island	Confinement Facility
464	Ford Island	NSTCP, Damage Control/Mock-up Training Center
465	Ford Island	NSTCP Damage Control Fire Fighting Training
75	Ford Island	FASFAC/Admin Bldg
75	Ford Island	Fleet Area Control & Surveillance Operations
1342	Fort Kamehameha	Fort Kamehameha WWTP - Operations

TABLE F-4: HAZARDOUS WASTE ACCUMULATION POINTS		
Building #	**Location**	**Facility Description**
1342	Fort Kamehameha	Fort Kamehameha WWTP - Maintenance
1200H	Hickam AFB	CES Compound
1207H	Hickam AFB	CES Engineering Maintenance (Power Pro)
3380H	Hickam AFB	Vehicle Maintenance
2030H	Hickam AFB	Avionics (Heavy)
2045H	Hickam AFB	-
2133H	Hickam AFB	C-17 Sortie Support Section
2135H	Hickam AFB	Fuel Cell Hanger
3386H	Hickam AFB	Armament
3400H	Hickam AFB	Repair And Reclamation (Light)
3400H	Hickam AFB	Avionics (Light)
3408H	Hickam AFB	Structural Repair (Light)
4069H	Hickam AFB	Aircraft Materials Handling
4119H	Hickam AFB	Materials Handling Refueling Station
559H	Hickam AFB	Dental Clinic
3402H	Hickam AFB	Sortie Support (F22)
2024H	Hickam AFB	Transformer Storage (PCB)
2035H	Hickam AFB	Home Section Check Shop
2060H	Hickam AFB	Force Development
2125H	Hickam AFB	Fuels Maintenance
2130H	Hickam AFB	Aircraft Structural Maintenance (Sap A)
2130H	Hickam AFB	Aircraft Structural Maintenance (Sap E)
2130H	Hickam AFB	Structural Maintenance Paint
2130H	Hickam AFB	Aircraft Structural Maintenance (Sap B)
2130H	Hickam AFB	Aircraft Structural Maintenance (Sap C)
2130H	Hickam AFB	Aircraft Structural Maintenance (Sap D)
2130H	Hickam AFB	Structural Maintenance
2184H	Hickam AFB	Ce Liquid Fuels Maintenance
3576H	Hickam AFB	Golf Course Maintenance Shop
3424H	Hickam AFB	HIANG Vehicle Maintenance Facility
3004H	Hickam AFB	Fuel Systems Repair Shop
3044H	Hickam AFB	Fuel Systems Repair Shop
3424H	Hickam AFB	Age (Light)
1045H	Hickam AFB	Age (Kc-135)
1045H	Hickam AFB	Jet Propulsion (Kc-135)
2183H	Hickam AFB	CE Grounds Shop
1073H	Hickam AFB	Special Purpose - Vehicle Maintenance
2001H	Hickam AFB	Special Purpose - Vehicle Maintenance
1864H	Hickam AFB	Vet Clinic
2131H	Hickam AFB	Non Destructive Inspection (NDI)
2002H	Hickam AFB	General Purpose - Vehicle Maintenance

TABLE F-4: HAZARDOUS WASTE ACCUMULATION POINTS		
Building #	**Location**	**Facility Description**
2022H	Hickam AFB	Allied Trades - Vehicle Maintenance
2010H	Hickam AFB	Refueling - Vehicle Maintenance
4002H	Hickam AFB	Auto Hobby Shop
1055H	Hickam AFB	Metals Technology Shop
1055H	Hickam AFB	Mobility/Supply
1055H	Hickam AFB	ISO Inspection Dock (Kc-135)
1055H	Hickam AFB	Life Support
1055H	Hickam AFB	Gulf Stream
1055H	Hickam AFB	Hydraulic Shop (Kc-135)
1055H	Hickam AFB	Structural (Heavy)
1055H	Hickam AFB	Aircrew Flight Equipment (AFE)
1055H	Hickam AFB	Wheel And Tire/C-17 HSC Inspection
1055H	Hickam AFB	Boeing (C-40)
1055H	Hickam AFB	Repair and Reclamation (Kc-135)
1055H	Hickam AFB	Survival Equipment Shop
1754	JBPHH	Maintenance Shop Storage
1440	JBPHH	Navy Medical/Dental Supply Warehouse
1440	JBPHH	Navy Medical/Dental Supply Warehouse
1634	JBPHH	BEQ, Utah
285	JBPHH	Federal Fire Station
285	JBPHH	Federal Fire Station
1314	JBPHH	MWR
1369	JBPHH	NAVSTA BEQ
1488	JBPHH	BEQ
1508	JBPHH	CPO Barracks
1644	JBPHH	Arizona Hall
575	JBPHH	Marina Boathouse & Boat Storage Yard
Piers-B	JBPHH	Ships/Contractors
Piers-M	JBPHH	Ships/Contractors
1423	JBPHH	Environmental Lab
166	JBPHH	Pole & Line Section
166	JBPHH	Meter And Relay Section
197	JBPHH	Auto & Equipment Maintenance WAP-Building 197
197	JBPHH	Auto & Equipment Maintenance WAP -Heavy Crane
35	JBPHH	Building 197
35	JBPHH	Building 35A
35	JBPHH	Auto & Equipment Maintenance WAP -"Site #6" (35c)
35	JBPHH	Building 35B
35	JBPHH	Used Oil Collection Area
35	JBPHH	Parts Store
35	JBPHH	Heavy Crane (Adjacent To B197)

TABLE F-4: HAZARDOUS WASTE ACCUMULATION POINTS		
Building #	**Location**	**Facility Description**
372	Makalapa	BOQ Billeting Office
284	Marine Barracks	NMCB-Det 40
1684	Moanalua	NEX Distribution Center
2641	Moanalua	MWR Auto Hobby Shop
199	Moanalua	HRSC Pac - Job Center
43	NAVFAC HI Compound	Emergency Generator
X17	NAVFAC HI Compound	Tool Room
X29	NAVFAC HI Compound	Emergency Generator
X29	NAVFAC HI Compound	Refrigeration Shop
X29	NAVFAC HI Compound	Emergency Services
X5	NAVFAC HI Compound	Facilities Sustainment
X39	NAVFAC HI Compound	Roofing Section
2	NAVMAG Lualualei	Security/Former Dispensary
2	NAVMAG Lualualei	Electronic Technicians Storage Bldg
27	NAVMAG Lualualei	Bae Storage
4	NAVMAG Lualualei	Bae Vehicle Maintenance/Former Pesticide Shop
551	NAVMAG Lualualei	Pinger Repair Shop
232	NCTAMS	Emergency Generator Shop
409	NCTAMS	Telemetry Bldg (SATCOM)
108	NCTAMS	DISAPAC Communication Center
410	NCTAMS	BOWLING ALLEY
651	NCTAMS	FFD-Helemano Bldg And Grounds Maintenance
74	NCTAMS	Antenna Rigging Shop
12A	NCTAMS	Automatic Communication Switch Center
242	NCTAMS	Coast Guard
445	NCTAMS	Global Broadcast System (GBS)
466	NCTAMS	Fire Station
6	NCTAMS	Power Plant Maint Shop
5	NCTAMS	Base Security - Office
6	NCTAMS	NAVFAC Hi AC Shop
232	NCTAMS	Emergency Services Section
272	NM Golf Course	Golf Cart Maintenance Shop
998	Pearl City	Space Naval Warfare System Activity
987	Pearl City	Seal Compound Shooting Range
987	Pearl City	Seal Compound Diving Equipment Maintenance 987-2
987	Pearl City	Seal Compound Diving Locker 987-1
987	Pearl City	Seal Weapons Maintenance
989	Pearl City	Seals Compound DDS Maintenance 989-6
989	Pearl City	Seals Compound Battery Shop 989-3
989	Pearl City	Seals Compound Intermediate Maintenance Department 989-2
989	Pearl City	Seals Compound HT Shop 989-1

TABLE F-4: HAZARDOUS WASTE ACCUMULATION POINTS		
Building #	**Location**	**Facility Description**
989	Pearl City	Seals Compound Vehicle Maintenance
989	Pearl City	Seals Compound Boat Maintenance
995	Pearl City	Seals Compound MR Shop 995-2
995	Pearl City	Seals Maintenance
995	Pearl City	Seals Compound HT 995-1
Piers-V	Pearl City	Berthing Pier
23	Richardson Field	CINCPACFLT Admiral's Boathouse
Bowfin	Richardson Field	USS Bowfin Museum
2	RTF Lualualei	VLF
4	RTF Lualualei	Bldg 4r - Riggers/Antenna Maint Shop
4	RTF Lualualei	Bldg 4g-Vehicle & Grounds Maint Shop
81	RTF Lualualei	Power Plant - Standby Generators
85	RTF Lualualei	Cg-Communication Center
140	Schofield	FFD-Schofield
1430	Shipyard	Center For Naval Engineering (Afloat Training Group)
1427	Shipyard	Afloat Training Group
174	Shipyard	PACOM Contingency C41 PKG/JMAST Mobile Ashore Sup
206	Shipyard	PH Fire Station
149	Shipyard	Power Plant 2
177	Shipyard	Power Plant 3
S937	SUBASE	Security Pistol Range
654/655	SUBASE	SUBASE Galley
651	SUBASE	NSSC Sub Squadron 1/7 X-Div.
683	SUBASE	Ns Security Armory
1682	SUBASE	P&R Taxi Service (Formally Admiral Towing & Barge Co.)
1257	SUBASE	NEX Autoworld
1341	SUBASE	Squadron 1st Lt.
1594	SUBASE	NEX Autoworld Garage
650	SUBASE	COMSUBPAC 1st Lt
651	SUBASE	CBQ Maintenance Shop (NAVSTA)
1262	SUBASE	Naval Sub Training Center - Pacific
1323	SUBASE	BEQ, Gabrunas Hall
1334	SUBASE	Andriolo Hall
1367	SUBASE	BEQ, Freaner Hall
1723	SUBASE	BEQ, Smallwood Hall
654	SUBASE	BEQ, Pacquet Hall
662	SUBASE	BOQ, Lockwood Hall
1758	SUBASE	Maintenance Shop (Includes Building 1757)
1588	SUBASE	Port Operations
1742	SUBASE	Torpedo Retriever Storage (Merry Point)
Piers-S	SUBASE	S-19 Thru S-21, Ships/Contractors

TABLE F-4: HAZARDOUS WASTE ACCUMULATION POINTS		
Building #	**Location**	**Facility Description**
Piers-S	SUBASE	S-1 Thru S-18, Ships/Contractors
440/440A	West Loch	Mk-48 Ima
441	West Loch	MK-48 TMD Cleaning And Assembly
563	West Loch	Eodmu3 Det MIDPAC
573	West Loch	MK 48 IMA Aerosol Accumulation
489	West Loch	BAE Fleet Return Segregation In Limited Area
5	West Loch	Bae Weight Handling Gear Maintenance
1	West Loch	BAE Administration Including HAZMAT Lockers
3	West Loch	Bae Vehicle Maintenance Shop
543	West Loch	Mk-46 Ima
562	West Loch	Administration Building
569	West Loch	Missile IMA
577	West Loch	Missile IMA
600	West Loch	Security/BEQ
200	Wheeler Army Air Base	FFD-Wheeler

F.3 SURFACE IMPOUNDMENTS AND SECONDARY CONTAINMENT

There are no surface impoundments. Table F-1 lists the secondary containment systems for all Bulk Oil Storage Containers. The FORFAC, Upper Tank Farm, Hickam Tank Farm, and the BOWTS facility all have sufficient secondary containment to hold the entire contents of their respective bulk storage tanks with sufficient freeboard for precipitation.

F.4 HAZARD ANALYSIS

F.4.1 Oil Hazard Analysis

Table F-5 provides an analysis of the major oil hazards in the COMNAVREG HI AOR.

TABLE F-5: OIL HAZARD ANALYSIS

Hazard Identification

1) Type(s) and Properties of Oil: JP5, F-76 (DFM) and F-24.

Location and Operation: NAVSUP FLCPH, Upper Tank Farm.

Quantities Stored/Transferred: Aproximately 37,800,000 gallons stored in 6 bulk storage tanks at the Upper Tank Farm.

Worst Case Discharge Volume(s): Aproximately 6,300,000 gallons from a bulk storage tank at the Upper Tank Farm.

Vulnerability Analysis:

Vulnerable Area/Distance: Densely populated area at JBPHH.

Vulnerable Population Within Area/Distance: Personnel working within the naval facilities and NAVSUP FLCPH.

Vulnerable Fish and Wildlife and Sensitive Environments Within Area/Distance: Northern shores of East Loch, Middle Loch and West Loch are habitat for 4 endangered bird species that frequent JBPHH.

Vulnerable Private and Public Property Within Area/Distance: JBPHH waters and adjacent shoreline is Federally owned land.

Risk Analysis:

Probability of Hazard Occurrence (Describe as low, medium or high): Low

Consequences of Exposing People to Hazard: High

Consequences of Exposing Fish and Wildlife and Sensitive Environments to Hazard: High - JP-5, F-24, and F-76 are toxic to fish and birds.

Consequences of Exposing Property to Hazard: Low

Probability of Chain Reaction or Simultaneous Emergencies (Describe as low, medium or high): Medium

Other Factors Increasing Risk: NA

Hazard Identification

2) Type(s) and Properties of Oil: Bilge Water (contains approximately 5% oil).

Location and Operation: JBPHH, NAVFAC HI, Bilge Oily Waste-Water Treatment System (BOWTS).

Quantities Stored/Transferred: A total of 1,600,000 gallons (80,000 gallons oil fraction).

Worst Case Discharge Volume(s): 1,600,000 gallons (80,000 gallons oil fraction).

Vulnerability Analysis:

Vulnerable Area/Distance: Densely populated area at JBPHH.

Vulnerable Population Within Area/Distance: JBPHH naval facilities, resedential and elementary school areas.

Vulnerable Fish and Wildlife and Sensitive Environments Within Area/Distance: Quarry Loch, Southeast Loch, and Pearl Harbor Main Channel are habitat for 4 endangered bird species that frequent JBPHH.

Vulnerable Private and Public Property Within Area/Distance: JBPHH waters and adjacent shoreline is Federally owned land.

Risk Analysis:

Probability of Hazard Occurrence (Describe as low, medium or high): Low

Consequences of Exposing People to Hazard: High

Consequences of Exposing Fish and Wildlife and Sensitive Environments to Hazard: Mixed oil fraction of bilge water would be toxic to fish and birds.

Consequences of Exposing Property to Hazard: Low

Probability of Chain Reaction or Simultaneous Emergencies (Describe as low, medium or high): Medium

Other Factors Increasing Risk: NA

TABLE F-5: OIL HAZARD ANALYSIS

Hazard Identification

3) Type(s) and Properties of Oil: F-24.

Location and Operation: JBPHH, Hickam Tank Farm.

Quantities Stored/Transferred: Aproximately 6,720,000 gallons stored in 4 bulk storage tanks at the tank farm.

Worst Case Discharge Volume(s): Aproximately 2,310,000 gallons from a bulk storage tank at the tank farm.

Vulnerability Analysis:

Vulnerable Area/Distance: Densely populated area at JBPHH.

Vulnerable Population Within Area/Distance: Personnel working in facilities near Hickam Airfield.

Vulnerable Fish and Wildlife and Sensitive Environments Within Area/Distance: Northern shores of East Loch, Middle Loch and West Loch are habitat for 4 endangered bird species that frequent JBPHH.

Vulnerable Private and Public Property Within Area/Distance: JBPHH waters and adjacent shoreline is Federally owned land

Risk Analysis:

Probability of Hazard Occurrence (Describe as low, medium or high): Low

Consequences of Exposing People to Hazard: High

Consequences of Exposing Fish and Wildlife and Sensitive Environments to Hazard: High - F-24 is toxic to fish and birds.

Consequences of Exposing Property to Hazard: Low

Probability of Chain Reaction or Simultaneous Emergencies (Describe as low, medium or high): Medium

Other Factors Increasing Risk: NA

4) Type(s) and Properties of Oil: Reclaimed Oil .

Location and Operation: JBPHH, NAVSUP FLCPH, Fuel Oil Reclamation Facility (FORFAC).

Quantities Stored/Transferred: Aproximately 756,000 gallons stored in 2 bulk storage tanks at the FORFAC.

Worst Case Discharge Volume(s): Aproximately 378,000 gallons from a bulk storage tank at the FORFAC.

Vulnerability Analysis:

Vulnerable Area/Distance: Densely populated area at JBPHH.

Vulnerable Population Within Area/Distance: Personnel working within the naval facilities and NAVSUP FLCPH.

Vulnerable Fish and Wildlife and Sensitive Environments Within Area/Distance: Northern shores of East Loch, Middle Loch and West Loch are habitat for 4 endangered bird species that frequent JBPHH.

Vulnerable Private and Public Property Within Area/Distance: JBPHH waters and adjacent shoreline is Federally owned land.

Risk Analysis:

Probability of Hazard Occurrence (Describe as low, medium or high): Low

Consequences of Exposing People to Hazard: Medium

Consequences of Exposing Fish and Wildlife and Sensitive Environments to Hazard: High - Reclaimed oil is toxic to fish and birds.

Consequences of Exposing Property to Hazard: Low

Probability of Chain Reaction or Simultaneous Emergencies (Describe as low, medium or high): Medium

Other Factors Increasing Risk: NA

F.4.2 Hazardous Substance Hazard Analysis

Table F-6 provides an analysis of the major HS hazard in the COMNAVREG HI AOR.

TABLE F-6: HAZARDOUS SUBSTANCE HAZARD ANALYSIS

Hazard Identification

Type(s) and Properties of Chemical: Sodium Hydroxide & Sulfuric Acid

Location and Operation: JBPHH, Building 149

Quantities Stored, Used or Processed: 7,000 gallons Sodium Hydroxide; 7,000 gallons Sulfuric Acid

Worst Case Discharge Volume(s): 7,000 gallons

Vulnerability Analysis:

Vulnerable Area/Distance: Densely populated area at JBPHH.

Vulnerable Population Within Area/Distance: Personnel working within the naval facilities and NAVSUP FLCPH

Vulnerable Fish and Wildlife and Sensitive Environments Within Area/Distance: Northern shores of East Loch, Middle Loch and West Loch are habitat for 4 endangered bird species that frequent JBPHH.

Vulnerable Private and Public Property Within Area/Distance: JBPHH waters and adjacent shoreline is Federally owned land.

Risk Analysis:

Probability of Hazard Occurrence (Describe as low, medium or high): Low

Consequences of Exposing People to Hazard: High

Consequences of Exposing Fish and Wildlife and Sensitive Environments to Hazard: High - Sodium Hydroxide & Sulfuric Acid are toxic to fish and birds

Consequences of Exposing Property to Hazard: Medium

Probability of Chain Reaction or Simultaneous Emergencies (Describe as low, medium or high): Low

Other Factors Increasing Risk: NA

F.4.3 Health Hazards

The specific hazards of the major products stored at JBPHH are listed in Table F-7 below.

TABLE F-7: PHYSICAL AND TOXICOLOGICAL HAZARDS OF STORED POL PRODUCTS

Material Name	Oil Group	Vapor Density[1]	Flammable Range[2] LEL	Flammable Range[2] UEL	Flash Point[3]	Specific Gravity[4]	Toxicity Level[5]
Unleaded Gasoline/ MUR or MOGAS[6]	1	3.0-4.0↓	1.4%	7.4%	<-30°F	0.75 Floats	300 ppm TLV 500 ppm STEL
Diesel Fuel	1	8.0↓	0.4%	7.5%	130°F	0.87 Floats	10 ppm TLV 15 ppm STEL
JP-5	1	4.5↓	0.7%	5%	>140°F	0.80 Floats	NE
F-24	1	4.7↓	0.7%	4.7%	100°F	0.84 Floats	NE

Notes:

1: Vapors/gases with densities less than 1 will rise (↑) in air and be trapped at the top of enclosures. Vapors/gases with densities greater than 1 will sink in air (↓), travel along the ground, and settle in low areas.

2: LEL = lower explosive limit, the same as lower flammable limit
UEL = upper explosive limit, the same as upper flammable limit

3: Flash point is the temperature at which enough vapors are present to ignite and flash across the liquid's surface when an ignition source is provided. Lower Flash Point temperatures mean greater amounts of vapors will be present, resulting in increased risk of fire or explosion.

4: Specific gravity is a relative measure of the density of the material to the density of water. Any number less than 1 means the product will float on water. Any number greater than 1 indicates the material will sink beneath the surface of water. A number equal to 1 indicated the material may float or sink. Actual location of such materials are dependent on other factors such as water temperature, air temperature, sunlight, darkness of material, etc.

TABLE F-7: PHYSICAL AND TOXICOLOGICAL HAZARDS OF STORED POL PRODUCTS
5: These are published exposure limits found on Material Safety Data Sheets (MSDS). PEL = OSHA's permissible exposure limit. TLV = ACGIH's threshold limit value-time weighted average. STEL = Time weighted (8-hour) average-short term (15-min.) exposure limit. IDLH = NIOSH's immediately dangerous to life or health. 6: Unleaded and premium unleaded gasoline contains toluene, xylene, ethylene benzene, and benzene. NE means "not established".

F.5 DAILY OPERATIONS PRESENTING POTENTIAL SPILL RISKS

Tables F-8 to F-10 summarizes the oil handling operations that present the greatest risk of a discharge. Due to the age of the oil equipment, miles of pipelines, and high throughput, oil transfer operations present a high potential for spills.

TABLE F-8: BULK TRANSFER OPERATIONS PRESENTING POTENTIAL SPILL RISKS

Loading/Unloading Operation		Description	Typical Transfer Volume (Gal)
VESSEL	LOADING	NAVSUP FLCPH Fuel Department issues fuel to Navy vessels and barges through pipelines to pierside berths. Any vessel in the Naval fleet can be fueled, including aircraft carriers, tankers, and fleet oilers. The limiting factor for the size of ship that can be accommodated at JBPHH is the Harbor's 40 ft draft limit. The number of fuel transfers that can occur simultaneously is physically limited by pier space and the available fueling personnel, transfer hoses, and pumping capacity. No more than four vessel transfer operations at the same time. NAVSUP FLCPH Fuel Department issues JP-5, F-24, and F-76 to vessels from the Red Hill Storage Facility and/or Upper Tank Farm through a network of pipelines.	300,000 per issue
	UNLOADING	NAVSUP FLCPH Fuel Department receives bulk fuel from tankers at the Hotel pier for transfer to the Red Hill Storage Facility and/or Upper Tank Farm.	5,400,000 per receipt
PIPELINE	RECEIPT	NAVSUP FLCPH Fuel Department can receives bulk JP-5, F-24, and F-76 at the Red Hill Storage Facility and/or Upper Tank Farm from the Tesoro Refinery via the Chevron Refinery pipeline. JP-5, F-24, and F-76 is also be received from tankers at Hotel Pier.	1,680,000 per receipt from pipeline 5,400,000 per receipt from tanker
	ISSUE	NAVSUP FLCPH Fuel Department issues JP-5, F-24, and F-76 to vessels from the Red Hill Storage Facility and/or Upper Tank Farm through a network of pipelines. NAVSUP FLCPH Fuel Department issues F-24 from the Red Hill Storage Facility and/or Upper Tank Farm through a network of pipelines to the Hickam Tank Farm.	300,000 per issue 400,000 to 500,000 per issue

TABLE F-9: TRANSFER FACILITIES PRESENTING POTENTIAL SPILL RISKS			
Loading/Unloading Operation		**Description**	**Typical Transfer Volume (Gal)**
TANK TRUCK	LOADING	NAVSUP FLCPH Fuel Department operates five truck loading racks. These are: the Lube Oil Loading Rack, the Kuahua Loading Rack, the POL Area 5 Loading Rack, the POL Area 9 Loading Rack, and the Hickam Tank Farm Loading Rack. The Lube Oil Loading Rack is used to load lube oil to 1,200 gallon refueler tank trucks which then deliver the lube oil to end users throughout JBPHH. The rack has two loading stations. There is no secondary containment at this rack. The Kuahua Loading Rack is used to load JP-5, F-24, and F-76 to 6,000 gallon refueler tank trucks for delivery to end users throughout JBPHH. The rack has four loading stations and a scully system to prevent early tank truck departure. The loading rack has secondary containment with a capacity of approximately 2,500 gallons. The POL Area 5 Loading Rack is used to load diesel to 1,200 gallon refueler tank trucks for distribution to end users throughout JBPHH. The loading rack has secondary containment with a capacity of approximately 8,300 gallons. The POL Area 9 Loading Rack is used to load JPTS to 6,000 gallon refueler tank trucks for refueling aircraft on the Hickam flightline. There is no secondary containment at this rack. The Hickam Tank Farm Loading Rack has five loading bays and is used to load F-24 to 6,000 gallon refueler tank trucks for refueling aircraft on the Hickam flightline. The loading rack has secondary containment with a capacity of approximately 6,900 gallons.	1,200 - 6,000 per delivery
	UNLOADING	NAVSUP FLCPH Fuel Department operates three unloading racks. These are: the POL Area 5 Unloading Rack, the POL Area 9 Unloading Rack, and the Hickam Tank Farm Unloading Rack. The POL Area 5 Unloading Rack is used to off-load diesel from 1,200 gallon commercial tank trucks into the two diesel ASTs. In addition, reclaimed F-24 from 1,200 gallon refueler tank trucks and bowsers are off-loaded into the reclaimed F-24 AST. The loading rack has secondary containment with a capacity of approximately 8,300 gallons. The POL Area 9 Unloading Rack is used to off-load JPTS from 6,000 gallon refueler tank trucks into the two JPTS ASTs. There is no secondary containment at this rack. The Hick Tank Farm Unloading Rack has four offloading bays and is used to offload F-24 from 8,000 gallon commercial tanker trucks. The rack has approximately 8,200 gallons of secondary containment. NAVSUP FLCPH Fuel Department receives bulk lube oil in 5,000 gal intermodal containers from the U.S. mainland. This lube oil is then transferred into two 30,000 gallon storage tanks.	200 - 8,000 per month receipt

TABLE F-10: DAY-TO-DAY OPERATIONS PRESENTING POTENTIAL SPILL RISKS		
Day-to-Day Operation	**Description**	**Potential Volume Spilled (Gal)**
EQUIPMENT REPAIRS	Equipment failures due to faulty installation or repairs, e.g., installing bolts improperly, installing components with incorrect specifications, and installing improperly selected gaskets. Failure to completely or adequately isolate and evacuate oil In equipment section or component before repairs. Leaks from valve stems due to improperly adjusted valve packings and failures of valve body parts due to improper joining to piping. Improper adjustment of pressure relief valves. Failure to completely or adequately isolate and evacuate oil before repairing valve.	1-50
TANK TRUCK DELIVERIES	Leaks from piping, fittings, valves, hoses, transfer connections, and other equipment, to include the tank truck. Operator errors and equipment malfunctions that cause overfills during loading operations.	1-200
VESSEL TRANSFERS	Leaks from hoses and/or piping, fittings, valves, flanges and pumps; pressure relief valve actuation due to abnormal operating conditions or malfunction.	1-600
DRAINING SEC. CONTAINMENT	Inadequate inspection of impounded berm water before draining berm. Not fully closing berm drainage valve after opening.	1 to several gallons
INVENTORY CONTROL	Improperly calibrated or out-of-calibration measuring containers and meters and gauging errors can result in overfills during oil transfer operations.	Variable, depending on transfer rate
PIPE REPAIR	Equipment failures due to faulty installation or repairs, e.g., installing bolts improperly, installing components with incorrect specifications, and installing improperly selected gaskets. Failure to completely or adequately isolate and evacuate oil in section or component before repairs.	1 to several thousand gallons
VALVE REPAIR	Leaks from valve stems due to improperly adjusted valve packings and failures of valve body parts due to improper joining to piping. Improper adjustment of pressure relief valves. Failure to completely or adequately isolate and evacuate oil before repairing valve.	1-100
TANK-TO-TANK TRANSFERS	Overfills due to valve misalignments, tank gauging errors, or unattended transfers.	Variable, depending on transfer rate
PIPELINE TRANSFERS	Leaks from piping, fittings, valves, flanges and pumps; pressure relief valve actuation due to abnormal operating conditions or malfunction. Catastrophic ruptures and failures of piping, valves, flanges and other equipment.	1 to many thousand gallons
PIPELINE PACKING	Packing lines by allowing air in the lines to escape from high point vents can result in spills through the vents if the procedure is not properly monitored.	Variable

F.5.1 Oil Spill Potential from Bilge Water Treatment Facility Operations

NAVFAC Hawaii's Bilge Water Treatment Facility poses a significant threat of spill primarily because of the volume of oil involved. Table F-11 examines the potential spill risks.

TABLE F-11: BILGE WATER TREATMENT FACILITY POTENTIAL SPILL RISKS		
Spill Risk	**Description**	**Potential Volume Spilled**
LEAKS FROM THE HOLDING TANK	The approximate volume of bilge water involved would be 1.6M gallons (80,000 gallons oil fraction), which is the total capacity of the holding tank.	1.6 Million (80,000 gallon oil fraction)
PUMPING OPERATIONS	A malfunction at the manifold would result in a discharge of bilge water from the SWOB and/or pipeline. The approximate volume of bilge water involved would be 75,000 gallons (3,750 gallons oil fraction), which is the capacity of the SWOB.	75,000 gallons (3,750 gallons oil fraction)
PIPELINE LEAKS	Leaks occurring from the 10,300 linear feet of pipeline used to transport the bilge water from the Quarry Loch to the old Lower Tank Farm. The approximate volume of bilge water involved would be 38,500 gallons (1,925 gallons oil fraction) which is the total volume within the entire length of pipeline.	38,500 gallons (1,925 gallons oil fraction)
EQUIPMENT FAILURE WITHIN THE PROCESSING UNIT	The approximate volume of bilge water involved would be less than 1,500 gallons (75 gallons oil fraction), based on a processing flow rate of 3,000 gph and on shutting down operations within 0.5 hour of equipment failure.	1,500 gallons (75 gallons oil fraction)
TRANSFERRING OF WASTE OIL FROM THE PROCESSING UNIT TO TANKER TRUCKS	The approximate volume of waste oil involved would be less than 100 gallons.	100 gallons

F.5.2 Oil Spill Potential from Navy Barge Operations

Port Operation operates six barges at JBPHH; these barges conduct various operations such as fueling, defueling, and offloading of oily waste and water. Because of the significant amount of oil that these barges hold and transfer, they pose a significant spill threat.

The barges names, oil holding capacity, and contents are as follows:

- YON 281, 300,000 gallons, reclaimed fuel
- YON 328, 500,000 gallons, reclaimed fuel
- YON 335, 300,000 gallons, fueling
- YON 336, 300,000 gallons, fueling
- SWOB 12, 70,000 gallons, oily waste and bilge water
- SWOB 13, 70,000 gallons, oily waste and bilge water **(Currently inactive, parked with inactive ships)**
- SWOB 30, 70,000 gallons, oily waste and bilge water **(Currently inactive, parked with inactive ships)**
- SWOB 48, 70,000 gallons, oily waste and bilge water

F.6 EFFECT OF THROUGHPUT CHANGES ON SPILL VOLUMES

Table F-12 examines the effects of throughput changes on spill volumes.

TABLE F-12: EFFECTS OF CHANGES IN THROUGHPUT ON POTENTIAL SPILL VOLUMES		
Type Throughput	**Normal Daily Throughput (Gal)**	**How Spill Volume Could be Affected by Change in Throughput**
TANK TRUCK TRANSFERS	Unknown	An increase or decrease in throughput will not change the potential spill volume at a tank truck loading/unloading rack unless the rack begins to service larger tank trucks then are currently used or additional fuel loading capabilities are added.
FUEL STORAGE	Unknown	Increases in oil storage capacity due to increase use requirements have the potential to increase spill volumes.
VESSEL RESUPPLY	Unknown	Throughput changes will not change the potential spill volume since it depends on the pipeline drainage volume, the pumping rate and the time for detecting and mitigating the spill.
PIPELINE TRANSFERS	Unknown	Throughput changes will not change the potential spill volume since it depends on the pipeline drainage volume, the pumping rate and the time for detecting and mitigating the spill.
VESSEL TRANSFERS	Unknown	Throughput changes will not change the potential spill volume since it depends on the pipeline drainage volume, the pumping rate and the time for detecting and mitigating the spill.
INTRA-FACILITY TRANSFERS	Unknown	Increased throughputs may result in larger spill volumes

F.7 VULNERABILITY ANALYSIS

F.7.1 Introduction

The OPA 90 implementing regulations require FRPs to be consistent with the NCP and ACPs. The FRP must identify and address the fish, wildlife, and sensitive areas that can be impacted by oil spills within the plans planning distances, and develop appropriate protection strategies. This COMNAVREG HI ICP is intended to meet these requirements.

The fish, wildlife, and environmentally sensitive area information in this section, which are not specifically addressed in the current Hawaii ACP, were developed in coordination and consultation with the Hawaii Area Committee. The NOSC Rep and Spill Management Team will refer to this section when reviewing and planning response and protection strategies during a spill response.

F.7.2 Oil Spill Response Planning Distance

Appendix C, Tables C-18 and C-19 shows the derivations of the response planning distance for a worst-case spill involving MTR and NTR components at NAVSUP FLCPH. Table F-13 summarizes COMNAVREG HI's oil spill response planning distance.

TABLE F-13: COMNAVREG HI'S OIL SPILL RESPONSE PLANNING DISTANCE			
Oil Type	**I.D. of Navigable Water and Type Water**	**Condition/Tide Cycle**	**Distance in Miles from Facility**
I	Pearl Harbor/Tidal Influenced	Ebb Flood	5 N/A

F.7.3 Environmentally Sensitive Area Identification

Table F-14 lists sensitive areas within the COMNAVREG HI response planning distance. The table provides an analysis of potential effects of a worst-case oil spill from NAVSUP FLCPH. A discussion of the particular vulnerability is provided when appropriate. Each vulnerability is ranked with a level of potential impact: high, medium, low.

TABLE F-14: VULNERABILITIES OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS, WATER INTAKES, AND OTHER AREAS

Sensitive Areas	Vulnerability (High, Medium, Low)	Discussion
Drinking water intakes	None - There are no surface public drinking water intakes within the response plan planning area.	Water intakes are a high sensitivity because contamination of a water system can lead to serious human health issues and effects. Once contaminated, returning it to an acceptable level is time-intensive and costly.
Schools	Medium - There are schools that are located in proximity to certain oil storage sites.	Potential impact by secondary effects from a spill such as fire/explosion, evaporation of aromatic compounds, smoke plume from fire/explosion, and interruption from response traffic and activity.
Medical facilities	Low - There are medical facilities, both public and military, in the area but they are not in close proximity to the major oil storage sites. Due to the relatively low amounts of oil stored at any site and the low throughputs, the medical facilities should not be vulnerable to spills.	Potential impact by secondary effects from a spill such as fire/explosion, evaporation of aromatic compounds, smoke plume from fire/explosion, interruption from response traffic and activity. Possible patient overload from spill-related injuries.
Residential areas	Medium - Some of the fuel storage sites are in close proximity to public and military residential areas.	Potential impact from secondary effects from a spill such as fire/explosion, evaporation of aromatic compounds, smoke plume from fire/explosion, and interruption from response traffic and activity.
Businesses	Low - Spills into Pearl Harbor have the potential to impact businesses located along the shoreline of the harbor. However, their vulnerability should be low due to the relatively low oil storage capacity at most oil storage sites at JBPHH.	Potential impact by secondary effects from a spill such as fire/explosion, evaporation of aromatic compounds, smoke plume from fire/explosion, and interruption from response traffic and activity. Loss of business opportunity.
Transportation routes	Medium - A few oil storage sites are in close proximity to major roads and highways.	Safety issues are imminent and the proper authorities must be adequately informed and updated to re-route air, water, and land traffic.
Utilities	Medium - Contamination of East Loch may affect Hawaiian Electric Company Waiau Power Plant cooling water intake.	Presents a serious fire hazard if oil impacts utilities. Other impacts include loss of service to the public.
Wetlands or other sensitive environments	High - See Appendix N. Areas of sensitivity are mangrove swamps, marshes, sheltered tidal flats, habitats for waterfowl and juvenile shellfish. The water of the harbor is a direct pathway to these areas.	Wetlands are highly sensitive to oil spills. The biological diversity is significant and critical habitat is provided for many types of animals and plants. It is extremely difficult to effectively remove oil from sensitive areas such as wetlands. Once oil does impact a sensitive area, the area is at risk to acute and chronic toxicity effects, damage through response and cleanup efforts, and enhanced media/public interest. Recovery/rehabilitation is a slow process.
Fish and wildlife	High - See Appendix N and O. The Pearl Harbor National Wildlife Refuge consists of two units; Waiawa and Honouliuli. Pearl Harbor is one of two important breeding grounds for baitfish.	See Section O.2, Wildlife Vulnerabilities. Note that the Waiawa has two ponds with manmade nesting islands for Hawaiian Stilts, an endangered species. Waiawa pumps water from nearby stream into the ponds. Honouliuli has four impoundments with nesting islands. However, wells supply the water for the impoundments.
Streams and sheltered waters	High - Spills from oil storage sites at JBPHH can discharge directly, or indirectly through storm sewers, into Pearl Harbor.	Lakes and streams provide a means for rapid transport of spill to habitats, fish and wildlife, and industrial water intakes. Sheltered waters have an added problem in that they are a low energy level environment which will cause oil to persist for a longer period of time. Recovery of oil may be difficult because of increased current speed in streams, especially during heavy rains or storms.
Endangered flora & fauna	High - See Appendix N and O	Damage to and possible loss of species of concern.

TABLE F-14: VULNERABILITIES OF FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS, WATER INTAKES, AND OTHER AREAS		
Sensitive Areas	**Vulnerability (High, Medium, Low)**	**Discussion**
Recreational areas	High - See Appendix N.	Habitat degradation, visual impact and loss of use are some of the potential effects. Recreational areas are usually highly visible/popular to the public, which makes cleanup and restoration more complex. Loss of use can lead to a significant amount of money for compensation under the natural resource damage assessment provisions of OPA 90.
Other areas of economic importance (e.g., beaches, marinas) Including terrestrially sensitive environments, aquatic environments, and unique habitats.	High - See Appendix N. Most of JBPHH has been declared a National Historic Landmark. The Arizona Complex is in the East Loch. The landmark boundary includes part of the Pearl City Peninsula. However, none of the structures on the peninsula are on the JBPHH Historic Inventory of Category I facilities (structures to be preserved if possible.) In JBPHH, there are historic sites along the shore (fishponds, burials and habitation deposits). Fishponds are under fill along the shores of the Harbor.	The USS Arizona National Monument Complex is a major tourist attraction and contributes to the state economy. For purposes of response planning, the ACP cautions responders to realize that historic sites are likely to be present anywhere along the shorelines. When indicated, the NOSC Rep will consult with the State Historic Preservation Division Staff to avoid accidental damage to historic sites during a spill response and any subsequent cleanup. Note that according to the ACP there will be a MOA between Federal and state agencies in the future to develop planning measures to cover accidental finds of historic sites and procedures to treat them.

Refer to Appendix N and O for further discussion of environmental protection strategies and identification of sensitive resources.

F.8 COMNAVREG HI ANALYSIS OF THE POTENTIAL FOR OIL SPILLS

Table F-15 through F-19 identifies the likely potential oil spill sources at JBPHH. This section qualitatively assesses the potential for oil spills at the identified sites by reviewing pertinent factors that would contribute to spills. This section also supports the multi-level discharge scenarios described in Appendix C.

In general, the potential for oil spills to reach navigable waters from aboveground and underground storage sites is low because of the locations of the tanks, their design, and their low storage capacities for onsite use. However, several sites are located next to navigable waters and their potential for spills to navigable waters is higher.

TABLE F-15: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS FROM ASTs	
Factor	**Low- Medium-High**
Probability of spills from equipment failure, malfunction, leaks, etc., due to age.	Medium
Probability of spills due to throughput activity. Tables F-9 and F-12, show throughput activity. All transfer operations are manned and there are established procedures to mitigate operating conditions leading to spills.	Low
Probability that corrective actions for spills will not eliminate/minimize same spills in future.	Low
Accessibility of pathways to navigable water/sensitive areas. For the majority of tank sites, the pathway to navigable water is the stormwater drainage system. See JBPHH AST/UST Location Maps and Drainage Map, Figures M-1, M-2, and M-3 (Appendix M)	Medium
Vulnerability to natural disasters. The Naval Base complex was exposed to Hurricane Iniki in 1992 and none of the fuel facilities suffered any mishaps.	Low

TABLE F-15: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS FROM ASTs	
Factor	**Low- Medium-High**
Earthquake of sufficient magnitude could damage tanks and associated pipelines and fuel equipment, the likelihood of such an event is improbable since Oahu is not prone to earthquakes.	
Probability of spills due to maintenance deficiencies. Inspections and maintenance percedures have been established, implemented, and scheduled per the COMNAVREG HI SPCC Plan.	Low
Probability of spills due to operator training and job knowledge (See Appendix Q).	Low
Potential for spills because of noncompliance with the COMNAVREG HI SPCC Plan prevention requirements- See the COMNAVREG HI SPCC Plan for discussions of specific deficiencies.	Medium
OVERALL POTENTIAL	LOW

TABLE F-16: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS AT FACILITY TRANSFER OPERATIONS, PUMPING OPERATIONS, AND PIPELINES	
Factor	**Low-Medium-High**
Probability of spills from equipment failure, malfunction, leaks, etc., due to age. The NAVSUP FLCPH fuel distribution network is extensive and most of the network is underground. All underground piping is wrapped and coated and has cathodic protection. The Fuel Department regularly inspects all aboveground piping and associated transfer equipment per procedures established in the COMNAVREG HI SPCC Plan and NAVSUP FLCPH Operations and Maintenance Manual; and also periodically tests fuel transfer hoses. Because of the extensiveness of the facilities and the fueling operations conducted by the Fuel Department, in combination with the age of the facilities, the probability of spills is medium.	Medium
Probability of spills due to throughput activity.	Medium
Probability that corrective actions for spills will not eliminate/minimize same spills in future. Most corrective actions, according to the spill history, involved repairs.	Low
Accessibility of pathways to navigable water/sensitive areas. All pumping stations are drained to sumps. All tank truck loading and unloading racks have adequate secondary containment to hold the contents of the largest tank trucks used at the rack. Only the Lube Oil loading rack and the POL Area 9 loading rack have no secondary containment. In general, the transfer equipment and facilities are in close proximity to the harbor, drainage ditches, canals, storm water sewers, and paved and developed areas. See JBPHH Drainage Map, Figures M-3 (Appendix M)	High
Vulnerability to natural disasters - Aboveground piping and appurtenances that are not in structures are vulnerable to hurricanes, storms and flooding.	Low
Probability of spills due to maintenance deficiencies – NAVSUP FLCPH has established and implemented periodic inspection and maintenance procedures per the COMNAVREG HI SPCC Plan and the NAVSUP FLCPH Operations and Maintenance Manual.	Low
Probability of spills due to operator training, job knowledge, and SOP shortfalls (See Appendix Q).	Low
Potential for spills because of noncompliance with the COMNAVREG HI SPCC plan prevention requirements - See above.	Medium
OVERALL POTENTIAL	MEDIUM

TABLE F-17: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS AT THE FUEL OIL RECLAMATION FACILITY	
Factor	**Low-Medium-High**
Probability of spills from equipment failure, malfunction, leaks, etc., due to age. Tanks B-1 and B-2 have been recently refurbished.	Low
Probability of spills due to throughput activity.	Low
Probability that corrective actions for spills will not eliminate/minimize same spills in future - Not applicable.	Not applicable
Accessibility of pathways to navigable water/sensitive areas. About half of the facility is enclosed by earthen berm. Concrete and metal sheet pile walls enclose the other half. However, the floor of the containment system is not sufficiently impervious. In addition, all spills in the facility will flow toward the lowest part of the facility where there are sewer drains. Spills reaching the groundwater can reach Pearl Harbor since groundwater flow is into the harbor. Spills breaching the earthen berm and concrete and metal sheet pile walls can enter the harbor primarily through the storm water sewer system. See Figure I-2 in Appendix I for drainage pathways.	High
Vulnerability to natural disasters. The plant is vulnerable to hurricanes, storms, and, less so due to its elevation, Tsunamis. However, the plant was exposed to Hurricane Iniki in 1992 and did not suffer any mishaps. NAVSUP FLCPH has detailed procedures in the Operations and Maintenance Manual for preparing and securing NAVSUP FLCPH facilities for hurricanes and storms, including electrical storms.	Low
Probability of spills due to maintenance deficiencies. NAVSUP FLCPH has established and implemented periodic inspection and maintenance procedures per the COMNAVREG HI SPCC Plan and the NAVSUP FLCPH Operations and Maintenance Manual.	Low
Probability of spills due to operator training, job knowledge, and SOP shortfalls (See Appendix Q).	Low
Potential for spills because of noncompliance with COMNAVREG HI SPCC plan prevention requirements. Tank bottoms are not lined, secondary containment systems are not sufficiently impervious, and the containment system drains into the stormwater drainage system.	Medium
OVERALL POTENTIAL	LOW

TABLE F-18: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS AT THE BILGE WATER PROCESSING FACILITY	
Factor	**Low-Medium-High**
Probability of spills from equipment failure, malfunction, leaks, etc., due to age.	Medium
Probability of spills due to pipeline failure.	Medium
Probability that corrective actions for spills will not eliminate/minimize same spills in future. Most corrective actions, according to the spill history, involved repairs.	Low
Accessibility of pathways to navigable water/sensitive areas. As a result of a large volume pipeline leak or discharge, the bilge water will flow along South Avenue towards Pearl Harbor and into the adjacent Hickam residential and elementary school area. Flow along South Avenue will enter the storm drainage system and accelerate the discharge into the main channel of Pearl Harbor's water.	Medium
Vulnerability to natural disasters - Aboveground piping and appurtenances that are not in structures are vulnerable to hurricanes, storms and flooding.	Low
Probability of spills due to maintenance deficiencies.	Low
Probability of spills due to operator training, job knowledge, and SOP shortfalls (See Appendix Q).	Low
Potential for spills because of noncompliance with COMNAVREG HI SPCC plan prevention requirements - See above.	Medium
OVERALL POTENTIAL	MEDIUM

TABLE F-19: ANALYSIS OF THE POTENTIAL FOR OIL SPILLS AT UPPER TANK FARM	
Factor	**Low-Medium-High**
Probability of spills from equipment failure, malfunction, leaks, etc., due to age. The tank farm tanks have been in service since the twenties. Massive structural tank failures are improbable. Except for Tank 55, which is welded, all tanks are riveted steel and are coated internally with epoxy. Due to the age of the epoxy coatings, there are signs of localized fuel weepings from the riveted seams.	Medium
Probability of spills due to throughput activity. Tables F-9 and F-12, show throughput activity. However, all transfer operations are manned and there are established procedures to mitigate operating conditions leading to spills.	Medium
Probability that corrective actions for spills will not eliminate/minimize same spills in future.	Low
Access ibility of pathways to navigable water/sensitive areas. The Upper Tank Farm Tanks has secondary containment. The earth dike containment systems all have impermeable liners. The diked areas have no provisions to drain to the outside. Spills reaching the groundwater can reach Pearl Harbor since groundwater flow is into the harbor. Spills breaching the secondary containment can enter the harbor primarily through the storm water sewer system See Figure I-2 in Appendix I for drainage pathways.	Medium
Vulnerability to natural disasters. The Tank Farm is vulnerable to hurricanes and storms and less so to Tsunamis due to their elevation. However, the tank farm was exposed to Hurricane Iniki in 1992 and did not suffer any mishaps. NAVSUP FLCPH has detailed procedures as established in the Operations and Maintenance Manual for preparing and securing NAVSUP FLCPH facilities for hurricanes and storms, including electrical storms.	Low
Probability of spills due to maintenance deficiencies. NAVSUP FLCPH has established and implemented periodic inspection and maintenance procedures per the COMNAVREG HI SPCC Plan and the NAVSUP FLCPH Operations and Maintenance Manual.	Low
Potential for spills because of noncompliance with COMNAVREG HI SPCC plan prevention requirements -Tank bottoms are not lined and secondary containment systems are not sufficiently impervious.	Medium
OVERALL POTENTIAL	MEDIUM

F.9 REPORTABLE OIL SPILL HISTORY

A complete record of oil spill history for COMNAVREG HI is kept in the NOSC Representative's office, Building X-11 (NAVFAC HI compound). Records describe the known reportable oil spill history for JBPHH. The EPA OPA 90 implementing regulation requires a history of the facility's reportable spills be kept for the entire life of the facility to the extent that such information is reasonably identifiable. For the definition of REPORTABLE, refer to Appendix V.

Records of reportable spills including Navy oil spill messages are maintained in a separate binder by the On-Scene Coordinator.

APPENDIX G
RESPONSE GUIDELINES FOR HAZARDOUS SUBSTANCES RELEASES

G.1 GENERIC RESPONSE GUIDELINES

This Appendix contains examples of generic Hazardous Substance (HS) responses for each Department of Transportation hazard class. Facilities will incorporate these procedures as applicable in hazardous substance response plans and ensure that response actions for specific hazardous substances are developed and posted at HS storage sites.

The generic responses include:

- Potential hazards
- Emergency actions for fire and/or spill or leak
- Emergency first aid.

The generic responses should also include an indication of the level of Personal Protective Equipment (PPE) to be used. However, it is always recommended that the spilled/released hazardous substance be identified in order to select the correct response methods/PPE.

G.2 GENERIC RESPONSES TO HAZARDOUS SUBSTANCES

The following generic responses to hazardous substance incidents can assist emergency responders in making decisions, but the emergency responders cannot consider these generic response guidelines to be a substitute for their knowledge or judgment. This distinction is important since the recommendations in the guidelines are those most likely to apply in a majority of cases but may not be adequate or applicable in all cases. These guidelines were primarily designed for use at hazardous substance incidents occurring on a highway or a railroad. The guidelines will with certain limitations, be useful in handling incidents in other modes of transportation and at transportation facilities such as terminals and warehouses.

Spills are divided into two categories: Incidental or emergency response. Incidental spills can be handled safely by employees in the immediate area, without the aid of a coordinated response effort. An emergency situation required an emergency response effort may involve the following conditions:

1. High concentrations of toxic substances
2. Situation that is life or injury threatening
3. Imminent Danger to Life and Health (IDLH) environments
4. Situation that presents an oxygen deficient atmosphere
5. Condition that poses a fire or explosion hazard
6. Situation that requires an evacuation of the area
7. A situation that requires immediate attention because of the danger posed to employees in the area.
8. Spill of an unknown substance

Even when a spill is very small, treat it like a major spill until you are able to determine what was spilled, how much was spilled, and what potential dangers are associated with the spill. Follow the four basic components of any spill/fire response:

1. **RESCUE** Rescue yourself. Get clear of the spill area and any fumes, gases, or vapors.
2. **ALERT** Call 911 and notify your supervisor. Provide information and describe the situation.
3. **CONTAIN** Before attempting containment, know what was spilled. Read the Material Safety Data Sheet (MSDS). Do not touch the container unless the material hazard is known and understood. Use extreme caution in approaching any spill. Approach the spill from upwind. Wear appropriate protection equipment. Avoid inhalation of any particulates, vapors, gases and fumes.
4. **EVACUATE** Small spills usually will not require evacuation.

As an emergency responder at the scene of a hazardous substance incident, seek additional and more specific information about any material in question as soon as possible. These guidelines are not intended for use during the clean-up phase of spilled materials, nor should they be used to determine compliance with any regulations. Become familiar with these guidelines before you actually need to use them in an emergency response situation. To obtain additional assistance for the most effective handling of a hazardous substance incident call, as soon as possible, CHEMTREC at (800) 424-9300 or contact one or more of the other technical resources listed in Appendix E.

GENERIC RESPONSES TO HAZARDOUS SUBSTANCES **PAGE**

EXPLOSIVES AND BLASTING AGENTS: UN CLASS 1.1, 1.2, 1.3, 1.5, OR 1.6 Page 3
EXPLOSIVES: UN CLASS 1.4 Page 4
FLAMMABLE COMPRESSED GASES: UN CLASS 2.1 Page 5
POISONOUS COMPRESSED GASES: UN CLASS 2.3 Page 6
FLAMMABLE LIQUIDS: UN CLASS 3 Page 7
FLAMMABLE SOLIDS: UN CLASS 4.1 Page 8
SPONTANEOUSLY COMBUSTIBLE MATERIAL: UN CLASS 4.2 Page 9
DANGEROUS WHEN WET MATERIALS: UN CLASS 4.3 Page 10
OXIDIZING MATERIALS: UN CLASS 5.1 Page 11
ORGANIC PEROXIDES: UN CLASS 5.2 Page 12
POISONOUS LIQUID: UN CLASS 6.1 Page 13
POISONOUS SOLIDS: UN CLASS 6.1 Page 14
INFECTIOUS SUBSTANCES: UN CLASS 6.2 Page 15
RADIOACTIVE MATERIAL: UN CLASS 7 Page 16
CORROSIVE MATERIALS: UN CLASS 8 Page 17

G.2.1 EXPLOSIVES AND BLASTING AGENTS: UN CLASS 1.1, 1.2, 1.3, 1.5, OR 1.6

Potential Hazards

May explode and throw fragments 1 mile or more if fire reaches explosives. Fire may produce irritating or poisonous gases.

Emergency Action

Fire
DO NOT FIGHT A FIRE IF IT HAS REACHED THE EXPLOSIVE CARGO COMPARTMENT, WITHDRAW AND LET THE FIRE BURN.

If you know or suspect that heavily-encased explosives, such as bombs or artillery projectiles are involved, stop all traffic and begin to evacuate all persons, including emergency responders, from the area in all directions for 5,000 feet (one-mile) for rail cars or 4,000 feet (three-quarter mile) for tractor/trailer. When heavily encased explosives are not involved, evacuate the area for 2,500 feet (one-half mile) in all directions.

Positive pressure, self-contained breathing apparatus (SCBA), and structural firefighter's protective clothing will provide limited protection.

Try to prevent fire from reaching the explosive cargo compartment. Flood the compartment/area with water if no water is available use CO_2, dry chemical, or soil.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First, move people out of line-of-sight of the scene and away from windows. Then, obtain more information and specific guidance from competent authorities listed on the shipping papers.

Spill or Leak
Shut off ignition sources; no flares, smoking or open flames are permitted in the hazard area.

Do not touch or walk through any spilled material.

First Aid
Call emergency medical care.

Use first aid treatment according to the nature of the injury.

G.2.2 EXPLOSIVES: UN CLASS 1.4

Potential Hazards

May explode and throw fragments thousands of feet or more if fire reaches explosives. Fire may produce irritating or poisonous gases.

Emergency Action

Fire
DO NOT FIGHT A FIRE IF IT HAS REACHED THE EXPLOSIVE CARGO COMPARTMENT, WITHDRAW AND LET THE FIRE BURN.

Stop all traffic and begin to evacuate all persons, including emergency responders, from the area in all directions for 1,500 feet in all directions.

Positive pressure, self-contained breathing apparatus (SCBA), and structural firefighter's protective clothing will provide limited protection.

Try to prevent fire from reaching the explosive cargo compartment. Flood the compartment/area with water if no water is available use CO_2, dry chemical, or soil.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First, move people out of line-of-sight of the scene and away from windows. Then, obtain more information and specific guidance from competent authorities listed on the shipping papers.

Spill or Leak
Shut off ignition sources; no flares, smoking or open flames are permitted in the hazard area.

Do not touch or walk through any spilled material.

First Aid
Call emergency medical care.

Use first aid treatment according to the nature of the injury.

G.2.3 FLAMMABLE COMPRESSED GASES: UN CLASS 2.1

Potential Hazards

Extremely flammable; may be ignited by heat, sparks, or flames. Vapors may travel to a source of ignition and flash back to the container. Container may explode in due to heat from a fire. Gases present a vapor explosion hazard indoors, outdoors, and in sewers.

Vapors may cause dizziness or suffocation. Contact of gas on skin will cause severe frostbite. Fire may produce irritating or poisonous gases.

Emergency Action

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Positive pressure, self-contained breathing apparatus, and structural firefighter's protective clothing will provide limited protection.

ISOLATE THE AREA FOR ONE-HALF MILE IN ALL DIRECTIONS IF A TANK, RAIL CAR, OR TANK TRUCK IS INVOLVED IN A FIRE.

Let a tank, tank car or tank truck burn unless the gas leak can be stopped without endangering personnel. With smaller tanks or cylinders, extinguish fire/isolate container from other flammable materials.

Use dry chemicals or CO_2 to extinguish small fires and water spray or fog for large fires.

Move gas containers away from the fire area if this can be done without endangering personnel. Apply cooling water to sides of containers that are exposed to flames until well after the fire is out. Stay away from the ends of tanks. For a massive cargo area, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from the area and let the fire burn. Withdraw immediately in case of a rising sound from venting safety devices or upon any discoloration of the tank due to exposure to the fire.

Spill or Leak
Shut off ignition sources; no flares, smoking or open flames are permitted in the hazard area. Do not touch or walk through any spilled material. Stop the leak if it can be done without endangering personnel.

First Aid
Move the victim to fresh air and call emergency medical care. If the victim is not breathing, give artificial respiration. If the victim's breathing is difficult, give oxygen (if qualified to perform this procedure). In case of frostbite, thaw the victim's frosted parts with water. Keep the victim quiet and maintain normal body temperature.

G.2.4 POISONOUS COMPRESSED GASES: UN CLASS 2.3

Potential Hazards

Poisonous gas may be fatal if inhaled or absorbed through the skin. Contact with the gas may cause burns to the skin and eyes. Contact with liquefied gas will cause frostbite. Any clothing that is frozen to the skin should be thawed before attempting to remove it. Run-off from fire control or dilution water may cause pollution.

Some of these materials may burn, but none of them ignite readily. Cylinders may explode in a fire.

Emergency Actions

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Positive pressure, self-contained breathing apparatus and chemical protective clothing that is specifically recommended by the shipper or manufacturer may be worn. The protective clothing may provide little or no thermal protection. Structural firefighter's protective clothing is NOT effective for these materials.

Isolate the immediate area and all adjacent downwind buildings and structures. Contact the manufacturer or MSDS to determine the size of the isolation zone. Use dry chemicals or CO_2 to extinguish small fires and water spray, fog, or regular foam for large fires. Do not get water inside containers.

Move gas containers away from the fire area if this can be done without endangering personnel. Apply cool water to sides of containers that are exposed to flames until well after the fire is out. Stay away from the ends of tanks. For a massive fire in a cargo area, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from the area and let the fire burn. Withdraw immediately in case of a rising sound from venting safety devices or upon any discoloration of the tank due to exposure to the fire. Isolate the fire area until all of the gas has dispersed.

Spill or Leak
Do not touch or walk through any spilled material. Stop the leak if it can be done without endangering personnel. Fully encapsulating, vapor-protective clothing should be worn for spills and leaks with no fire.

Use water spray to reduce vapor. DO NOT PUT WATER DIRECTLY ON LEAK OR SPILL AREA.

First Aid
Move the victim to fresh air and call emergency medical care. If the victim is not breathing, give artificial respiration. If the victim's breathing is difficult, give oxygen (if qualified to perform this procedure). In case of contact with material, immediately flush skin or eyes with running water for at least fifteen minutes. In case of frostbite, thaw the victim's frosted parts with water. Keep the victim quiet and maintain normal body temperature. Effects may be delayed. Keep the victim under observation.

G.2.5 FLAMMABLE LIQUIDS: UN CLASS 3

Potential Hazards

Flammable and combustible liquids that may be ignited by heat, sparks, or flames. Vapors may travel to a source of ignition and flash back. Containers may explode in the heat of a fire. Liquids present a vapor explosion hazard indoors, outdoors, or in sewers. Run-off to sewer may create a fire or explosion hazard.

Some of these materials may be poisonous if the vapors are inhaled or the liquid is absorbed through the skin. Vapors may cause dizziness or suffocation. Contact with the liquid may irritate or burn the skin and eyes. Fire may produce irritating or poisonous gases. Run-off from fire control or dilution water may cause pollution.

Emergency Action

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Positive pressure, self-contained breathing apparatus, and structural firefighter's protective clothing will provide limited protection.

ISOLATE THE AREA FOR ONE-HALF MILE IN ALL DIRECTIONS IF A TANK, RAIL CAR, OR TANK TRUCK IS INVOLVED IN A FIRE.

Use dry chemicals, CO_2, water spray, or regular foam to extinguish small fires and water spray, fog, or regular foam for large fires.

Move liquid containers away from the fire area if this can be done without endangering personnel. Apply cooling water to sides of containers that are exposed to flames until well after the fire is out. Stay away from the ends of tanks. For a massive in a cargo area, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from the area and let the fire burn. Withdraw immediately in case of a rising sound from venting safety devices or upon any discoloration of the tank due to exposure to the fire.

Spill or Leak
Shut off ignition sources; no flares, smoking or open flames are permitted in the hazard area. Do not touch or walk through any spilled material. Stop the leak if it can be done without endangering personnel. Absorb small spills with sand or other noncombustible absorbent material and place into containers for later disposal. Dike far ahead of a large spill and collect the liquid for later disposal.

First Aid
Move the victim to fresh air and call emergency medical care. If the victim is not breathing, give artificial respiration. If the victim's breathing is difficult, give oxygen (if qualified to perform this procedure). In case of contact with a liquid, immediately flush eyes with running water for at least fifteen minutes. Wash skin with soap and water. Remove and isolate contaminated clothing and shoes.

G.2.6 FLAMMABLE SOLIDS: UN CLASS 4.1

Potential Hazards

Flammable and combustible solids that may be ignited by heat, sparks, or flames. Materials may burn rapidly with flare-burning effect.

Fire may produce irritating or poisonous gases. Contact with these materials may cause burns to the skin and eyes. Run-off from fire control or dilution water may cause pollution.

Emergency Actions

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind and keep out of low areas. Positive pressure, self-contained breathing apparatus, and structural firefighter's protective clothing will provide limited protection.

Use dry chemicals, sand, soil, water spray, or regular foam to extinguish small fires and water spray, fog, or regular foam for large fires.

Move containers of solid materials away from the fire area if this can be done without endangering personnel. Apply cooling water to sides of containers that are exposed to flames until well after the fire is out. Stay away from the ends of tanks. For a massive in a cargo area, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from the area and let the fire burn. Withdraw immediately in case of a rising sound from venting safety devices or upon any discoloration of the tank due to exposure to the fire.

Use dry sand, Met-L-X®powder or G-1 graphite powder to extinguish fires involving magnesium.

Spill or Leak
Shut off ignition sources; no flares, smoking or open flames are permitted in the hazard area. Do not touch or walk through any spilled material. Recover spilled material with a clean shovel and place into a clean, dry container. Cover the container loosely and store for disposal.

First Aid
Move the victim to fresh air and call emergency medical care. In case of contact with the material, immediately flush eyes with running water for at least fifteen minutes. Removal of solidified molten material from skin requires medical assistance. Remove and isolate contaminated clothing and shoes.

G.2.7 SPONTANEOUSLY COMBUSTIBLE MATERIAL: UN CLASS 4.2

Potential Hazards

Materials are poisonous if swallowed. Inhalation of dusts from these materials is poisonous.

Fire may produce irritating or poisonous gases. Run-off from fire control or dilution water may cause pollution.

Emergency Action

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind and keep out of low areas. Positive pressure, self-contained breathing apparatus, and structural firefighters' protective clothing will provide limited protection.

ONLY USE WATER to extinguish fires involving these materials. For large fires, flood the fire area with water from a distance.

Move containers of these materials away from the fire area if this can be done without endangering personnel. Apply cooling water to sides of containers that are exposed to flames until well after the fire is out. Stay away from the ends of tanks. For a massive in a cargo area, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from the area and let the fire burn.

Spill or Leak
Do not touch or walk through any spilled material. Keep combustibles (wood, paper, oil, etc.) away from the spilled material. Recover spilled material with a clean shovel and place it into a clean, dry container. Cover the container loosely and store for disposal.

First Aid
Move the victim to fresh air and call emergency medical care. In case of contact with the material, immediately flush eyes with running water for at least fifteen minutes. Remove and isolate contaminated clothing and shoes.

G.2.8 DANGEROUS WHEN WET MATERIALS: UN CLASS 4.3

Potential Hazards

Materials may ignite if exposed to air. The material may re-ignite after the fire is extinguished. Materials may ignite in the presence of moisture. A violent reaction may occur if exposed to water. The reaction may produce flammable gas. Run-off to the sewer may create a fire or explosion hazard. Materials may be poisonous if inhaled. Contact of the material to the skin and eyes may cause burns. Fire may produce irritating or poisonous gases.

Emergency Action

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind and keep out of low areas. Positive pressure, self-contained breathing apparatus, and structural firefighters' protective clothing will provide limited protection.

DO NOT USE WATER or FOAM to extinguish fires involving these materials. Use dry chemical, soda ash, lime, or sand to extinguish small fires. Withdraw from an area involving a large fire of this type of material and let the fire burn.

Use dry sand, Lith-X® powder or G-1 graphite powder to extinguish fires involving lithium.

Move containers away from the fire area if this can be accomplished without endangering personnel.

Spill or Leak
Shut off ignition sources, no flares, smoking, or flames are permitted in the hazard area. Do not touch or walk through any spilled material. Recover spilled material with a clean shovel and place it into a clean, dry container. Cover the container loosely and store for disposal. If the spill is a liquid, absorb with sand or other noncombustible material and place into containers for later disposal.

First Aid
Move the victim to fresh air and call emergency medical care. In case of contact with the material, immediately flush eyes with running water for at least fifteen minutes. Remove and isolate contaminated clothing and shoes.

G.2.9 OXIDIZING MATERIALS: UN CLASS 5.1

Potential Hazards

These materials may ignite other combustible materials (wood, paper, oil, etc.). These materials will accelerate burning when they are involved in a fire. Some of these materials will react violently with fuels. Run-off into a sewer may create a fire or explosion hazard. Contact between these materials and the skin and eyes may cause burns. Vapors and dusts from these materials may be irritating. Fires involving these materials may produce irritating or poisonous gases. Run-off from fire control or dilution water may cause pollution.

Emergency Action

Fire

Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind and keep out of low areas. Positive pressure, self-contained breathing apparatus, and structural firefighters' protective clothing will provide limited protection.

USE ONLY WATER to extinguish small fires involving these materials. Flood a large fire area with large quantities of water. Water should be applied to large fires from a distance. Move containers from the fire area if this can be accomplished without endangering personnel. Apply cooling water to the sides of containers that are exposed to flames until well after the fire is out. For a massive fire in a cargo area, use unmanned hose holders or monitor nozzles to fight the fire. If this cannot be done, withdraw from the area involving the fire and let the fire burn.

Spill or Leak

Do not touch or walk through any spilled material. Keep combustible materials (wood, paper, oil, etc.) away from the area. Recover spilled material with a clean shovel and place into a clean, dry container. Cover the container loosely and store for disposal. If the spill is a liquid, absorb with sand or other noncombustible material and place into containers for later disposal.

First Aid

Move the victim to fresh air and call emergency medical care. In case of contact with the material, immediately flush eyes with running water for at least fifteen minutes. Remove and isolate contaminated clothing and shoes.

G.2.10 ORGANIC PEROXIDES: UN CLASS 5.2

Potential Hazards

These materials may self-ignite if exposed to air. These materials may be ignited by heat, sparks, or flames. Organic peroxides burn rapidly with a flare-ling burning effect. These materials may explode from heat, contamination, or loss of temperature. Contact between these materials and skin and eyes may cause burns. Fires involving these materials may produce irritating or poisonous gases. Run-off from fire control or dilution water may cause pollution.

Emergency Action

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind and keep out of low areas. Positive pressure, self-contained breathing apparatus, and structural firefighters' protective clothing will provide limited protection.

Use dry chemical, CO_2, water spray, or regular foal to extinguish small fires involving these materials. Flood a large fire area with large quantities of water. Water should be applied to large fires from a distance. For a massive fire in a cargo area, use unmanned hose holders or monitor nozzles to fight the fire. If this cannot be done, withdraw from the area involving the fire and let the fire burn.

Spill or Leak
Do not touch or walk through any spilled material. Keep combustible materials (wood, paper, oil, etc.) away from the area. Absorb spilled material with sand or other noncombustible material. Move containers from the spill area.

First Aid
Move the victim to fresh air and call emergency medical care. In case of contact with the material, immediately flush eyes with running water for at least fifteen minutes. Wash contaminated skin with soap and water. Remove and isolate contaminated clothing and shoes. Keep victim quiet and maintain normal body temperature.

G.2.11 POISONOUS LIQUID: UN CLASS 6.1

Potential Hazards

These materials are poisonous. They may be fatal if inhaled, ingested, or absorbed through the skin. Contact between these materials and skin and eyes may cause burns. Contact with some of these liquids may cause frostbite. Clothing that is frozen to the skin should be thawed before being removed. Run-off from fire control or dilution water may cause pollution.

Emergency Action

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind and keep out of low areas. Positive pressure, self-contained breathing apparatus, and chemical protective clothing, which are specifically recommended by the shipper or manufacturer, may be worn. This protective clothing will provide little or no thermal protection. Structural firefighters' protective clothing is NOT EFFECTIVE for these materials. Isolate the leak or spill area immediately for at least 150 feet in all directions. A larger area may need to be isolated. Consult the shipper or manufacturer to assist in making this determination.

Use dry chemical or CO_2 to extinguish small fires involving these materials. Use water spray, fog, or regular foam on larger fires. DO NOT GET WATER INSIDE OF CONTAINERS. Move containers away from the fire area if this can be accomplished without endangering personnel. Apply cooling water to the sides of containers that are exposed to flames until well after the fire is out. Stay away from the ends of tanks.

Spill or Leak
Stop the leak if this can be accomplished without endangering personnel. Do not touch or walk through any spilled material. Fully encapsulating, vapor-protective clothing should be worn for spills and leaks when no fire is involved. Use water spray to reduce vapors, but DO NOT put water directly on the leak or spill area. Flush the area with flooding amounts of water. Dike the area far ahead of the liquid spill and contain for later disposal. Do not get water inside the poisonous liquid container. Isolate the area until all vapors have dispersed.

First Aid
Move the victim to fresh air and call emergency medical care. If the victim is not breathing, provide artificial respiration. If the victim's breathing is difficult, provide oxygen (if qualified to administer this procedure). In case of contact with the material, immediately flush skin and eyes with running water for at least fifteen minutes. Remove and isolate contaminated clothing and shoes. Keep victim quiet and maintain normal body temperature. Effects of exposure to these materials may be delayed, therefore, keep the victim under observation.

G.2.12 POISONOUS SOLIDS: UN CLASS 6.1

Potential Hazards

These materials are poisonous if swallowed or dusts are inhaled. Contact with some of these liquids may cause frostbite. Fires involving these materials may produce irritating or poisonous gases. Run-off from fire control or dilution water may cause pollution. Some of these materials may burn, but none of them ignites readily.

Emergency Action

Fire
Keep unnecessary people away. Isolate hazard area and deny entry. Stay upwind and keep out of low areas. Positive pressure, self-contained breathing apparatus, and structural firefighters' protective clothing will provide limited protection.

Use dry chemical, CO_2, water spray, or regular foam to extinguish small fires involving these materials. Use water spray, fog, or regular foam on larger fires. Move containers away from the fire area if this can be accomplished without endangering personnel.

Spill or Leak
Do not touch or walk through any spilled material. Stop the leak if this can be accomplished without endangering personnel. Use a clean shovel to recover spilled material. Place recovered material into a clean, dry container, cover loosely, and store it for later disposal.

First Aid
Move the victim to fresh air and call emergency medical care. In case of contact with the material, immediately flush skin and eyes with running water for at least fifteen minutes. Remove and isolate contaminated clothing and shoes.

G.2.13 INFECTIOUS SUBSTANCES: UN CLASS 6.2

Potential Hazards

These materials may be ignited if the carrier liquid is flammable. Contact with these materials may cause infection and disease. Run-off from fire control or dilution water may cause pollution.

Emergency Action

Fire
Keep unnecessary people away. Isolate hazard area and deny entry.

Use dry chemical, soda ash, lime, or sand to extinguish fires involving these materials. Move containers away from the fire area if this can be accomplished without endangering personnel.

Spill or Leak
Damage to the outer container may not affect the primary inner container. If the inner container is damaged or leaking, cover the container with a damp towel or rag and keep wet with liquid bleach. Dike and contain all liquids for later disposal. DO NOT APPLY WATER to these materials unless directed to do so by the shipper or manufacturer. Clean up only under the supervision of an expert (person knowledgeable about the specific material).

First Aid
Move the victim to fresh air and call emergency medical care. In case of contact with the material, immediately flush eyes with running water for at least fifteen minutes. Wash affected skin areas with soap and water. Remove and isolate contaminated clothing and shoes.

G.2.14 RADIOACTIVE MATERIAL: UN CLASS 7

Potential Hazards

There is external radiation hazard from unshielded radioactive material and an internal radiation hazard from inhalation, ingestion, or entry of radioactive material through breaks in the skin. The degree of hazard associated with radioactive material will vary greatly depending on the type and quantity of radioactive material present and the type of packaging used. Materials in Special Form or in Type B packaging are not expected to cause contamination in the event of an accident. Commonly available instruments cannot detect some radioactive materials. Some of these materials may burn, but none of them ignite readily. Radioactivity does not change flammability or other properties of the materials. Run-off from fire control or dilution water may cause pollution.

Emergency Action

Keep unnecessary people at least 150 feet upwind of the spill. Greater distances may be necessary for people downwind or if advised by radiation specialists. Isolate the hazard area and deny entry. Response actions may be performed prior to any measurement of radiation, but entry to the incident site must be limited to as short a time as possible. Positive pressure, self-contained breathing apparatus, and structural firefighters' protective clothing will provide limited protection. Notify the National Response Center (NRC) of the accident as soon as possible.

Fire
Use dry chemical, CO_2, water spray, or regular foam to extinguish small fires. Large fires should be extinguished using water spray or fog in flooding amounts. For massive fires in cargo areas, use unmanned hose holders or monitor nozzles to fight the fire.

Spill or Leak
DO NOT TOUCH DAMAGED CONTAINERS OR SPILLER MATERIALS. Damage to outer containers may not affect primary inner container. Use sand, soil, or other noncombustible materials to absorb spilled materials.

First Aid
Use fires aid treatment according to the nature of the injury. Remove and isolate contaminated clothing and shoes if this can be accomplished without affecting the injury. Wrap the victim in a sheet or blanket before transporting. If there is no injury, remove and isolated contaminated clothing and shoes and have the victim shower with soap and water. Advise medical personnel that the victim may be contaminated with radioactive material.

G.2.15 CORROSIVE MATERIALS: UN CLASS 8

Potential Hazards

Contact with these materials causes burns to the skin and eyes. Vapors from these materials may be harmful if inhaled. Fire may produce irritating or poisonous gases. Run-off from fire control or dilution water may cause pollution. Some of these materials may burn, but none of them ignites readily. Flammable/poisonous gases may accumulate in tanks and hopper cars. Some of these materials may ignite combustible materials (wood, paper, oil, etc.).

Emergency Action

Keep unnecessary people away from the spill, isolate the area, and deny entry to the spill site. Stay upwind and keep out of low-lying areas. Positive pressure, self-contained breathing apparatus, and structural firefighters' protective clothing will provide limited protection.

Fire
Some of these materials may react violently with water. Use dry chemical, CO_2, water spray, or regular foam to extinguish a small fire. Use water spray, fog, or regular foam to extinguish large fires. Apply cooling water to sides of containers that are exposed to flames until well after the fire is out. Stay away from the end of tanks.

Spill or Leak
Do not touch or walk through spilled materials. Stop the leak if this can be accomplished without endangering personnel. Use sand or other noncombustible absorbent material to recover spilled material. Place recovered material into clean, dry containers and cover loosely. Dike far ahead of the liquid in large spills and contain the liquid for later disposal.

First Aid
Move the victim to fresh air. Call for emergency assistance immediately. In case of contact with spilled materials, immediately flush skin or eyes with running water for at least fifteen minutes. Remove and isolate all contaminated clothing and shoes. Keep the victim quiet and maintain normal body temperature.

G.3 SITE-SPECIFIC HAZARDOUS SUBSTANCE SPILL RESPONSE PLANS

G.3.1 Requirements for Developing a Site-Specific HS Spill Response Plan

All activities using or storing hazardous substances with the potential to have a reportable spill or release will develop an activity or site-specific HS spill response plan using the guidelines in this appendix. Each activity required to develop a site-specific HS spill response plan will appoint an Emergency Response Coordinator who will be responsible for developing, maintaining, and implementing the plan.

The Site-specific response plans must include:

Information for immediate reporting of the spill/release including:

- Names of emergency coordinators
- Spill/release telephone number
- Fire safety plan
- List of site fire equipment and location
- Building construction/activity description
- Site hazardous substance inventory or the location of and the POC for readily obtaining the inventory in an emergency
- Probable spill route
- On-site spill response equipment
- Safe refuge
- Site diagram.

A general development drawing should be included that indicates the location of each site with a site-specific plan.

G.3.2 Notification for HS Spills or Releases

As described in the ICP Core Plan, an activity spilling or releasing a HS or encountering a substantial threat of a HS spill will conduct the appropriate notifications to determine if the spill or release is reportable under CERCLA and/or EPCRA.

G.4 COMNAVREG HI'S HAZARDOUS SUBSTANCE INVENTORY

See Appendix F, Table F-5, for an inventory of hazardous substances stored at COMNAVREG HI.

APPENDIX H
DISCHARGE DETECTION

This appendix provides a description of the procedures and equipment used to detect discharges of POL at the three bulk fuel storage areas (Upper Tank Farm, Hickam Tank Farm, and Red Hill Facility) operated by NAVSUP FLCPH. Discharge detection by personnel and by automated discharge detection equipment is described for both normal business hours and after-hours operations.

Discharge detection for smaller shop-fabricated storage tanks is discussed in detail in the Regional SPCC Plan.

H.1 DISCHARGE DETECTION BY PERSONNEL

The immediate responsibility for taking action rests with the person causing/discovering the discharge who will take all steps possible to immediately alert others in the area, shut down all fuel operations, notify the Regional Dispatch Center by dialing 911, and initiate steps to control the emergency and reduce its hazard, if safe to do so.

H.1.1 Initial Response Actions

Immediate actions for the individual causing/discovering a discharge are described below and in the Core Plan. The process that personnel will follow upon discovery of a discharge is to:

1. Take any steps that are safe and expedient to stop product flow,
2. Notify personnel in the immediate area to effect evacuation or other response,
3. Call the Regional Dispatch Center (RDC) at 911.
4. The RDC will notify the NAVSUP FLCPH CDO.
5. Call either the Fuel Operations Center at 471-8081 for discharges at the Upper Tank Farm or Red Hill Facility, or the Fuel Service Center at 448-2509 for discharges at the Hickam Tank Farm.

Note: The Fuel Operations Center (Building 1757) handles Pearl Harbor fuel activity. The Fuel Service Center (Building 2125) handles Hickam fuel activity. Both are manned 24 hours per day, 7 days a week.

H.1.2 Monitoring

Monitoring entails the prevention of oil discharges by observing the physical and operational conditions of facilities that could indicate or result in a discharge, thereby providing early detection in the event of a discharge. NAVSUP FLCPH Fuel Department has personnel on duty 24-hours a day, seven days a week. During normal business hours any significant discharge from bulk storage tanks or piping would be readily noticed by on-site personnel, who spend much of their time outside and near the tanks. In addition, the NAVSUP FLCPH CDO makes drive by patrols twice a day at the Upper Tank Farm. After-hours Fuel Department personnel conduct visual checks of tanks and piping systems at all bulk storage areas. Bulk tank fuel levels and systems are monitored electronically continuously at the Fuel Operations Center and Fuel Service Center.

All major fuel systems and bulk storage tanks are inspected daily by NAVSUP FLCPH Fuel Department personnel. Checklists are used to perform a complete inspection of storage tanks,

pumps, valves, and other elements of the fuel distribution system. Prior to each use, visual inspections are performed on all transfer valves, pumps, flanges, and connections, unless they are not readily accessible, that are to be used in the transfer.

During all fuel transfer operations a minimum of two people must be in attendance. Inventories are assessed prior to and after each operation. All valves must be verified to be in the correct position prior to any transfer of fuel. Any problems with the system that pose a threat to cause a discharge or other failure are noted and corrective action is immediately initiated.

H.2 AUTOMATED DISCHARGE DETECTION

Automated discharge detection consists of overfill alarms, emergency shutoff switches, low-level alarms, interstitial monitoring, etc. High-level shutoff valves are associated with alarm systems which are activated when storage tanks are filled above the safe fill limit. These alarms offer protection from discharges due to overfills. Pressure gauges also serve as a form of discharge protection particularly for underground leaks or rupture.

Procedures upon receiving alarm:

- Verify alarm
- If leak has been detected, verify containment of leak in tank containment system
- If leak escapes containment, take emergency actions as described in Section H.1 and the Core Plan.

Tables H-1 through H-3 describes the automated discharge detection systems for the three bulk storage areas operated by NAVSUP FLCPH. See the Regional SPCC Plan for more details on these systems.

TABLE H-1: AUTOMATED DISCHARGE DETECTION SYSTEMS UPPER TANK FARM
Operator: NAVSUP FLCPH
Description: High-level alarms monitored through telemetery at the Fuel Operartions Center.
Detection Threshold: Set at tank safe fill level
Procedures to Check/Test Reliability: Check system per manufacturer's instructions. See the Regional SPCC Plan.
System Inspection Frequency: Per manufacturer's recommendation. Also, see the Regional SPCC Plan.
Procedures to Verify Alarm(s): Fuel Department personnel monitor all transfer operations. High-level alarm transmitted to Fuel Operations Center. Personnel visually verify alarm.
Actions After Alarm(s) Verification: • Stop transfer operation • Take actions as described in Section H.1 and the Core Plan

TABLE H-2: AUTOMATED DISCHARGE DETECTION SYSTEMS HICKAM TANK FARM
Operator: NAVSUP FLCPH
Description: High-level alarms monitored through telemetery at the Fuel Service Center.
Detection Threshold: Set at tank safe fill level
Procedures to Check/Test Reliability: Check system per manufacturer's instructions. See the Regional SPCC Plan.
System Inspection Frequency: Per manufacturer's recommendation. Also, see the Regional SPCC Plan.
Procedures to Verify Alarm(s): Fuel Department personnel monitor all transfer operations. High-level alarm transmitted to Fuel Operations Center. Personnel visually verify alarm.
Actions After Alarm(s) Verification: • Stop transfer operation • Take actions as described in Section H.1 and the Core Plan

TABLE H-3: AUTOMATED DISCHARGE DETECTION SYSTEMS RED HILL FACILITY
Operator: NAVSUP FLCPH
Description: • Tanks 17-20: Leak telltale system consisting of circumferential channel rings spaced at 10-ft intervals around each tank. A ring intercepts any leaks on the annular section of the tank enclosed by the next ring above it. The lower ring collects and routes leaks to the lower tunnel where the leak can be detected. • All Tanks: Each tank has high level alarm and level sensors monitored through telemetery at the Fuel Operations Center and Red Hill Gauging Station.
Detection Threshold: High level alarm set at tank safe fill level. Level sensors measure tank level to a thousandth of an inch.
Procedures to Check/Test Reliability: Check system per manufacturer's instructions. See the Regional SPCC Plan.
System Inspection Frequency: Per manufacturer's recommendation. Also, see the Regional SPCC Plan.
Procedures to Verify Alarm(s): NAVSUP FLCPH personnel monitor all transfer operations. High-level alarm transmitted to Underground Pump House. Personnel visually verify alarm.
Actions After Alarm(s) Verification: • Stop transfer operation • Take actions as described in Section H.1 and the Core Plan

H.3 FACILITY SELF-INSPECTIONS

40 CFR 112.20(h)(8)(i) requires a checklist and record of inspection for tanks and secondary containment be included in this plan. Facility self-inspection requires two steps: (1) a checklist of things to inspect; and (2) a method of recording the actual inspections and findings. The date of each inspection shall be noted and records are required to be maintained for 5 years.

See the Regional SPCC Plan for written inspection procedures (including schedule, inspection forms, and logs) and records of inspections. The following checklists are included for guidance only. See the Regional SPCC Plan for the actual inspection forms.

H.3.1 Tank Inspection Checklist

Tank Inspection Checklist

1. Check tanks for leaks, specifically looking for:
   A. drip marks;
   B. discoloration of tanks;
   C. puddles containing spilled or leaked material;
   D. corrosion;
   E. cracks; and
   F. localized dead vegetation.

2. Check foundation for:
   A. cracks;
   B. discoloration;
   C. puddles containing spilled or leaked material;
   D. settling;
   E. gaps between tank and foundation; and
   F. damage caused by vegetation roots.

3. Check piping for:
   A. droplets of stored material;
   B. discoloration;
   C. corrosion;
   D. bowing of pipe between supports;
   E. evidence of stored material seepage from valves or seals; and
   F. localized dead vegetation.

Tank/Surface Impoundment Inspection Log

Inspector	Tank or SI#	Date	Comments

H.3.2 Secondary Containment Inspection Checklist

Secondary Containment Inspection Checklist

1. Dike or berm system.
   A. Level of precipitation in dike/available capacity;
   B. Operational status of drainage valves;
   C. Dike or berm permeability;
   D. Debris;
   E. Erosion;
   F. Permeability of the earthen floor of diked area; and
   G. Location/status of pipes, inlets, drainage beneath tanks, etc.

2. Secondary containment
   A. Cracks;
   B. Discoloration;
   C. Presence of spilled or leaked material (standing liquid);
   D. Corrosion; and
   E. Valve conditions.

3. Retention and drainage ponds
   A. Erosion;
   B. Available capacity;
   C. Presence of spilled or leaked material;
   D. Debris; and
   E. Stressed vegetation.

H.4 DISCHARGE PREVENTION MEETINGS

40 CFR 112.20(h)(8)(iv) requires a log for discharge prevention meetings be kept in this plan. See Appendix Q (Exercise, Drills, and Training) for a description of the COMNAVREG HI'S response training program, including information on discharge prevention meetings.

Discharge Prevention Meeting Log

Date: Attendees:

Subject/issue identified	Required action	Implementation date

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX I
DRAINAGE AND CONTAINMENT

I.1 INTRODUCTION

Appendix I summarizes drainage information for Joint Base Pearl Harbor-Hickam (JBPHH). This information can assist responders in the event that there is an oil spill, or the threat of an oil spill escaping existing containment. Information is also provided on COMNAVREG HI's ability to contain spills and prevent them from reaching navigable waters and/or impacting fish, wildlife, and sensitive areas as identified in Appendix N and O. Appendix M, Figure M-3A and M-3B, provide drainage drawings of JBPHH. For spills that impact navigable water see Figure M-4, Pearl Harbor Booming Strategy Map.

I.2 AVAILABLE REFERENCES

Available from NAVFAC Hawaii Environmental Department:

- Navy Region Hawaii Storm Water Management Plan (SWMP) - JBPHH is required to prepare an SWMP (NPDES Permit No. HI S000257), this plan has extensive descriptions of drainage and containment facilities on base.
- CNRH Spill Prevention, Control, and Countermeasure Plan (SPCCP) - The CNRH SPCCP provides details on all secondary containment structures for oil storage containers, including detailed drawing of each container and containment structure that shows area drainage.

Available from the NAVFAC Hawaii Environmental Department:

- Water, sewer and other utility plans
- Schematics, maps, and drawings (CAD/GIS)
- Sanitary sewage treatment plant Information

I.3 DRAINAGE PATHWAYS TO NAVIGABLE WATERS

I.3.1 Surface Water Pathways

Eight stream discharge directly into Pearl Harbor, and are listed below. These streams drain forested and agricultural lands, pass through urban and industrial areas, and eventually flow into Pearl Harbor. Most of these streams are intermittent, but flooding can occur along the major streams during heavy rainfall, but generally this has not been a major problem. The eight streams include;

- Waikele Stream
- Waiawa Stream
- Waiau Stream
- Waimalu Stream
- Kalauao Stream
- Halawa Stream
- Honouliuli Stream
- Aiea Stream

In addition to the streams there are three major canals that discharge drainage water into navigable waters; they are the Maunuwai Canal, Kumumauu Canal, and Transportation Canal. The canals discharge into Ahua Lagoon, Mamala Bay, and the Pearl Harbor Entrance Channel respectively. These canals are discussed in further detail in the following section.

I.3.2 Storm Water Drainage

The storm water drainage system for Navy facilities within JBPHH consists of a few major networks supplemented by several minor local systems. The networks and system includes, underground storm water lines, concrete piping, box culverts, and open ditches. Storm water is ultimately discharged through numerous storm water outfalls into Pearl Harbor.

The storm water drainage system for the industrial areas surrounding Hickam Runway collects storm water in interior drainage basins where it is then routed by surface drains, street scuppers, and underground storm sewer lines to one of three major drainage canals. These drainage canals are discussed below:

Maunuwai Canal - This canal collects and conveys drainage from industrial areas on the eastern side of Hickam Runway. The canal begins near the intersection of Kokonali and Ohana Nui Circle as an unlined ditch. The ditch runs about 0.7 mile east to the HNL boundary where it turns south and follows the boundary, emptying into the Ahua Lagoon and ultimately mixing with Mamala Bay on the far-east end. Along the way, the canal co-mingles municipal separate storm sewer system and industrial storm water by way of direct surface and storm sewer outfalls.

Kumumauu Canal - This canal collects and conveys drainage from industrial areas on the western side of Hickam Runway. Two short unlined ditches at the western end of the runway form the canal. The canal extends about 1,000 yards to the south where it discharges into Mamala Bay. Numerous surface swales and two major segments of the industrial storm water sewer feed the channel. One swale, which originates in an industrial drainage basin, crosses and drains part of the municipal section of the base. The canal receives runoff from both industrial and municipal storm water sources.

Transportation Canal - This canal collects and conveys drainage from industrial areas near the central part of Hickam Runway. It begins adjacent to the motor vehicle maintenance complex at the southwestern end of Hangar Drive. The canal continues approximately 1,000 feet southwesterly to the Pearl Harbor Entrance Channel just north of the Fort Kamehameha Wastewater Treatment Plant. The canal comingles both industrial and municipal storm water but only one small industrial basin, at a motor vehicle parking lot, discharges to the Transportation Canal.

Storm water originating within JBPHH discharges to the following navigable waters:

Mamala Bay - The bay's coastline within JBPHH runs from the reef runway on the east and Bishop Point on the west. Several, individual drainage basins discharge directly to the bay, primarily through 6-inch to 30-inch corrugated metal, cast iron, or concrete pipes. Base storm water is also conveyed to Mamala Bay by three constructed or improved channels (1) the HIANG west canal; (2) HIANG east canal; and (3) Kumumauu Canal, just west of HNL, within the Ahua Lagoon.

Ahua Lagoon - This semi-enclosed lagoon is bounded by an airport runway to the west, bounded by another airport runway to the south, and open to the Pacific Ocean on the east. The northeast and eastern portions of JBPHH discharge to Ahua Lagoon via Manuwai Canal.

Pearl Harbor - Pearl Harbor receives flow from all of the streams and springs that discharge into the various lochs and coves of the estuary. Hundreds of storm water outfalls discharge directly into Pearl Harbor, primarily through 6-inch to 30-inch corrugated metal, cast iron, or concrete pipes. In addition the Fort Kamehameha Wastewater Treatment Plant discharges into the Pearl Harbor Entrance Canal.

I.4 TOPOGRAPHY AND DRAINAGE PATTERNS WITHIN JBPHH

This section provides general information on the topography and drainage patterns of the major geographic areas located within JBPHH.

Naval Facilities

This area extends from the Naval Shipyard to the Richardson Recreation Center and includes the Naval Submarine Base and NAVSUP FLCPH Headquarters areas. The topography is generally flat and slopes from higher areas along Kamehameha Highway at approximately elevation 20 feet above mean sea level towards wharves, piers and coastline facilities at approximately elevation 10 feet above mean seal level. Runoff generally drains towards the waters of Pearl Harbor. Areas in the vicinity of Halawa Stream generally drain towards the stream.

Hickam Runway and Industrial Areas

Runoff for Hickam Runway and surrounding industrial areas is controlled by a number of constructed and natural drainage features. Relief is modest and a network of scuppers, catch basins, and storm sewers effects most storm water drainage. These systems discharge to one of the three open canals. A large number of short storm sewers in this area discharge directly into Mamala Bay, Pearl Harbor Entrance, or the Ahua Lagoon

Ford Island

Ford Island encompasses an area of approximately 450 acres, dominated by a runway, which is no longer used. The highest points on Ford Island are approximately at elevation 25 feet above mean sea level near the USS Arizona Memorial. The runway on Ford Island is aligned from southwest to northeast and establishes the drainage pattern on the island. The surface drainage on the northwest side of the island generally flows northwesterly on a very flat slope away from the runway centerline to within approximately 300 feet of the shore. Near the shore, the slope increases to approximately one foot in 30 feet to the water's edge. The surface drainage on the southeast side of the island generally flows southeasterly from the runway to within approximately 500 feet of the shore. Near the shore, the slope increases to approximately one foot in 50 feet to the water's edge. Runoff drains into Pearl Harbor.

NAVFAC Hawaii Compound

The NAVFAC Hawaii Main Compound consists of approximately 71 acres located to the east of the H-1 Freeway and to the north of Radford Drive. Approximately half of the area is located on terraces at the southeast. The topography slopes from the terraces gently downward towards the northwest. Runoff generated within the site is collected by surface and underground drainage systems that terminate at the northwest corner of the PW area. The collected runoff is

conveyed through an 84-inch storm drain, which discharges into Pearl Harbor approximately 3600 feet downstream.

Pearl City Peninsula

Pearl City Peninsula is located on the west shore of East Loch. The majority of the Pearl City Peninsula Storage facilities are located on the central and eastern portion of the peninsula. Waiawa Stream and Kaiapo channel flow through the peninsula and separate the western portion of the peninsula from the central portion of the peninsula. The topography generally slopes gently from the higher elevations at the north central portion of the peninsula towards the southern tip of the peninsula. Lehua Avenue is aligned in a north-south direction near the center of the peninsula. Runoff generated to the east of Lehua Avenue generally flows easterly and discharges into East Loch. Runoff generated to the west of Lehua Avenue generally flows westerly and discharges into Kaiapo Channel, Waiawa Stream, and Middle Loch.

Makalapa

The Makalapa Area consists of approximately 110 acres and is located south of the Aloha Stadium, between Kamehameha Highway and the H-1 Freeway to the west and east, respectively, and Radford Drive to the south. The site is located in the eroded Makalapa Crater with a high elevation of approximately 65 feet above mean seal level. The majority of the Makalapa Area facilities are built on the flatter slopes along the outside slopes of the crater. The remnants of the crater are centered along the eastern boundary. Areas within the crater have been left undeveloped.

Runoff patterns within the Makalapa Area site generally follow the topography of the site, flowing from higher elevations at the crater rim radially away towards the north, west and south. Halawa Stream is located to the north. Drainage systems along Kamehameha Highway and Radford Drive generally intercept and convey drainage to Pearl Harbor and Halawa Stream.

Bishop Point

Bishop Point encompasses an area of approximately 16 acres located along the eastern coastline of the entrance to Pearl Harbor. The site is generally flat with an average slope of one foot in 300 feet, from the northeast to the southwest. The maximum elevation at this activity is approximately six feet above mean sea level. Runoff generally drains into the waters at the entrance to Pearl Harbor.

McGrew Point Housing Area

The McGrew Point Housing area is a small peninsula located in the northeast portion of East Loch. It is bordered by Kamehameha Highway, Kaluao Stream and Aiea Bay. The topography generally slopes gently downward from higher elevations along Kamehameha Highway toward East Loch, Aiea Bay and Kaluao Stream.

Waiawa

The Waiawa Pump Station is located on a small parcel at the end of Waihona Street in the Pearl City Industrial Park. The pump station is located adjacent to Waiawa Stream. The topography at the pump station site is generally flat and slopes gently downwards in an easterly direction towards Waiawa Stream.

Beckoning Point

The Beckoning Point area consists of approximately 11 acres of land located on the east side of Waipio Peninsula adjacent to Middle Loch, Pearl Harbor. The topography of the site is characterized by moderate slopes with localized areas of steep slopes. Surface drainage generally flows from the southwest to the northeast across the site and towards Middle Loch. The highest points on the southwest side of the area are approximately at elevation 20 feet above mean sea level.

Iroquois Point Housing

The Iroquois Point Housing Area is located along the coastline on the west side of the entrance to Pearl Harbor. A lagoon extends from Pearl Harbor into the center of the housing area. The topography is characterized by flat to gently sloping land. Surface runoff generally flows overland and in drainage swales towards the lagoon or to the coastline.

JBPHH West Loch Annex

Including portions of Waipio Peninsula, consists of approximately 4,100 acres of sparsely occupied land located on flat to gently sloping land adjacent to West Loch, Pearl Harbor. The area is characterized by relatively porous coralline material. Surface runoff generally flows overland in drainage swales which discharge into the West Loch of Pearl Harbor.

Kalaeloa Redevelopment District (former Naval Air Station Barbers Point)

The Kalaeloa Redevelopment District is located in the Ewa Plain on lands that were formerly the Naval Air Station Barbers Point. Housing areas and certain community support areas were retained when the base was closed. The retained areas are bordered by Kapolei Housing Areas to the north, the Honouliuli Wastewater Treatment Plant and undeveloped lands to the east, the Kalaeloa Airport to the South, and the Campbell Industrial Park to the west. The area slopes gently downwards from higher elevations located along Franklin D. Roosevelt Avenue, which is parallel to the northern boundary of the area, towards the airfield area to the south. Surface runoff generally follows the terrain. The area is characterized by relatively porous coralline material.

Red Hill

The Red Hill Fuel Complex consists of approximately 230 acres of land. The site is located near the top of Red Hill, which is a moderately flat-topped mesa that gently slopes from the east to the west. The hillcrest is located at an elevation of approximately 450 feet above mean sea level. Surface drainage at the Red Hill Fuel Complex primarily follows the slope of the hillside. The ridgeline conveys the surface drainage in two directions. The surface runoff on the northwest side of the ridgeline flows northerly and discharges to Halawa Stream. The surface runoff on the southeast side of the ridgeline flows southerly and discharges to Moanalua Golf Course and Moanalua Stream.

JBPHH Lualualei Annex

Located in Lualualei Valley on the western coast of Oahu. Naval Magazine Pearl Harbor consists of approximately 7,500 acres of sparsely occupied land. Radio Transmitter Facility Lualualei consists of approximately 1,720 acres of sparsely occupied land adjacent to the western border of Naval Magazine Pearl Harbor. The areas are bounded by the Waianae mountain range to the north and east, and agricultural lands to the south and west. The topography is characterized by the steep western face of the Waianae range, which transitions

rapidly to a flat gently sloping plain. Runoff from the Waianae mountain range flows in a westerly direction in natural streams.

Pipe culverts convey the stream flow under roads along the western boundary of the magazine area and onto the radio transmitter area. Runoff near the main gate flows overland in drainage swales to the intermittent Ulehawa Stream, which exits the magazine area to the southwest. Surface drainage at radio transmitter facility primarily flows in a northwesterly direction following the topography from the southeast to the northwest and discharges into the Mailiilii Stream.

JBPHH Wahiawa Annex

Designated as the main receiver site, consists of approximately 700 acres of land located on an upland plateau in central Oahu known as the Schofield plateau. It is divided by a small gully that separates the operations and community area to the south from the antenna fields to the north. Land occupied by the station slopes gently east to west from an elevation of approximately 1,300 feet above mean sea level to an elevation of 1,000 feet above mean sea level. As the foothills of the Koolau Range are encountered a short distance east of the station, the terrain becomes steeper and extremely rough.

The area has been deeply dissected by major streams draining from the Koolau and Waianae Ranges. The gulches bordering the station were formed by the North Fork Kaukonahua Stream to the south and the Poamoho Stream to the north. Storm water runoff from the areas within NCTAMS PAC generally discharges to one of these two streams.

Opana

Opana is a small communications area located in the Kahuku area on the lower slopes of the Koolau Range. The topography within the site exhibits gentle to moderate slopes that transition to steeper slopes outside the site. Runoff generally follows the topography draining from the higher areas of the Koolau Range in a northerly direction towards the coast.

I.5 FACILITY-SPECIFIC CONTAINMENT INFORMATION

I.5.1 Red Hill Fuel Storage Facility

Two tunnels, the Upper Access Tunnel (UAT) and Lower Access Tunnel (LAT), centered between the two rows of tanks, provide access to the tank tops and bottoms at the facility (see Figure I-1). Adits 4, 5, and 6 provide entry to the Upper Access Tunnel (UAT), and Adits 1, 2, and 3 provide entry to the Lower Access Tunnel (LAT). Two elevators are used for traveling between the UAT and LAT in the tank gallery area of the tunnels. The LAT extends from the tank gallery about 15,000 ft to the Underground Pumphouse at Adit 1.

There is an "Emergency Oil Pressure Door" at the end of the tank gallery in the LAT that is designed to automatically close when oil is detected in its sump (via a high-level float indicating the sump is full) or a nearby push button is activated. Closing of the door activates the fire alarm system which sets off audible and visual alarms throughout the facility and alerts the Federal Fire Department. The door provides a fuel tight seal once closed and is designed to withhold the contents of one of the facility's storage tanks.

There are two drop-track bulkhead doors located along the LAT to prevent fuel from flowing down it. Door A is located at the intersection of the LAT and the water pump station. Door C is located in the LAT before the Makalapa Adit Tunnel and Harbor Tunnel intersection. These

doors are designed to automatically close when fuel oil is detected. A third oil-tight bulkhead door is located at the entrance to the Underground Pumphouse (Receiving Pumphouse) at the bottom of the LAT.

Drainage systems in the LAT collects drainage from natural seepage and tank bottoms. Drainage is directed to sump pits where it is pumped to tanks outside the facility.

Table I-1 provides details on containment and drainage at the Red Hill Fuel Storage Facility.

TABLE I-1: RED HILL FUEL STORAGE FACILITY			
Containment Type and Construction Materials	**Largest Storage Tanks Capacity**	**Containment/Drainage Controls**	**Containment/Drainage Discharge Route**
Tunnels and sumps hollowed out of volcanic rock. Tunnels lined with gunite and are not impervious to spills.	12,600,000 gallon UST	Emergency oil pressure door at end of tank gallery in the LAT to contain spill/release inside tank gallery. Drop-track bulkhead doors to contain spill inside LAT. Tank gallery and LAT drains to sumps.	Contents in sumps are pumped to OWO tanks outside facility for subsequent removal to the FORFAC.
Operator	NAVSUP FLCPH		
Containment/Drainage System Capability to Contain Spill.	Ability of the LAT to contain spills will depend on the size of the spill, cause, and the fuel tightness and integrity of the emergency oil pressure door, drop-track bulkhead doors, tunnel floor and walls.		
Procedures to Take if Spill Cannot be Contained in Containment/Drainage System.	• Remove all spills promptly with sorbents or a vacuum truck. • For large spills, evacuate the Upper and Lower Access Tunnels. • Fuel that is not contained within the LAT can make its way into navigable waters and impact sensitive areas through a variety of pathways including: – Flow from Adit 2 (within 400 ft for Halawa Stream) can reach Halawa Stream directly or through storm drains around the PACFLT building. – Fuel in the water pump station can directly contaminate the JBPHH water supply through the well. – Fuel flowing into the lower portions of Harbor Tunnel, including Adit 2, can contaminate the aquifer beneath the tunnel and Adits 1 and 2.		
Note: The distance of the Red Hill LAT and Harbor Tunnel, from the tanks to the Underground Pumphouse, is about 15,000 ft long. The Pumphouse has a sump to collect spills and leaks.			

I.5.2 Underground Pumphouse

Table I-2 provides details on containment and drainage at the Underground Pumphouse, Building 59.

TABLE I-2: UNDERGROUND PUMPHOUSE, BUILDING 59			
Containment Type and Construction Materials	**Largest Storage Tanks Capacity**	**Containment/Drainage Controls**	**Containment/Drainage Discharge Route**
Concrete sump	420,000 gallon UST	Collection in sump and pumped to FORFAC.	No containment drainage. Sump contents pumped to FORFAC.
Operator	NAVSUP FLCPH		
Containment/Drainage System Capability to Contain Spill.	The sump system and the Pumphouse should be able to contain small spills from the pumps, valves, and other appurtenances in the facility. However, large or catastrophic spills involving the pipelines in the tunnel, Red Hill tanks, or Surge Tanks will probably escape containment in the Pumphouse. A large enough spill can discharge through the exit at Adit 1.		

TABLE I-2: UNDERGROUND PUMPHOUSE, BUILDING 59	
Procedures to Take if Spill Cannot be Contained in Containment/Drainage System.	• Remove all spills promptly with sorbents or a vacuum truck. • For large spills, evacuate the Underground Pumphouse. • Fuel that is not contained within the Underground Pumphouse can make its way into navigable waters and impact sensitive areas, see Figure I-2 below for potential spill pathways.

I.5.3 Upper Tank Farm

Table I-3 provides details on containment and drainage at the Upper Tank Farm.

TABLE I-3: UPPER TANK FARM			
Containment Type and Construction Materials	**Largest Storage Tanks Capacity**	**Containment/Drainage Controls**	**Containment/Drainage Discharge Route**
Earthen berms with impermeable liner, irregular shape.	6,300,000 gallon AST	Drainage Valve	Spills remain within berm containment system until drained to the FORFAC.
Operator	NAVSUP FLCPH		
Containment/Drainage System Capability to Contain Spill.	Adequate		
Procedures to Take if Spill Cannot be Contained in Containment/Drainage System.	• Spills will be contained in bermed area. –Remove all spills promptly with sorbents or a vacuum truck. –For large spills, consider floating fuel for recovery by flooding containment system with water. • In the event spill escapes containment, cover nearby stormwater drains or divert flow away from drains. • Fuel that escapes containment could potentially make its way into navigable waters and impact sensitive areas, see Figure I-2 below for potential spill pathways.		
Note: Each tank has an earthen berm which is lined with a plastic liner to contain spilled oil.			

I.5.4 Fuel Oil Reclamation Facility (FORFAC)

Table I-4 provides details on containment and drainage at the FORFAC.

TABLE I-4: FUEL OIL RECLAMATION FACILITY			
Containment Type and Construction Materials	**Largest Storage Tanks Capacity**	**Containment/Drainage Controls**	**Containment/Drainage Discharge Route**
Earthen grade, metal, and concrete walls, irregular shape.	378,000 gallon AST	None	The facility drains to the lowest part of the plant where there are sewer drains.
Operator	NAVSUP FLCPH		
Containment/Drainage System Capability to Contain Spill.	Containment is not effective since soil and groundwater can be contaminated.		
Procedures to Take if Spill Cannot be Contained in Containment/Drainage System.	• Since the earthen grade walls and floors are not impervious, fuel spills will percolate into the soil and may reach groundwater which flows into Pearl Harbor. – Remove all spills promptly with sorbents or a vacuum truck. • If a spill flows to or there is a threat of a spill entering the lowest area of the plant, cover the sewer drains and/or divert the spill away from the drains. • In the event of a spill escaping containment, cover nearby stormwater drains. • Fuel that escapes containment could potentially make its way into navigable waters and impact sensitive areas, see Figure I-2 below for potential spill pathways.		
Note: An earthen grade, metal, and concrete walls surround most of the facility. Within the facility, drainage flows away from the entrance to a low area serviced by sewer drains.			

FIGURE I-1: RED HILL FUEL STORAGE FACILITY

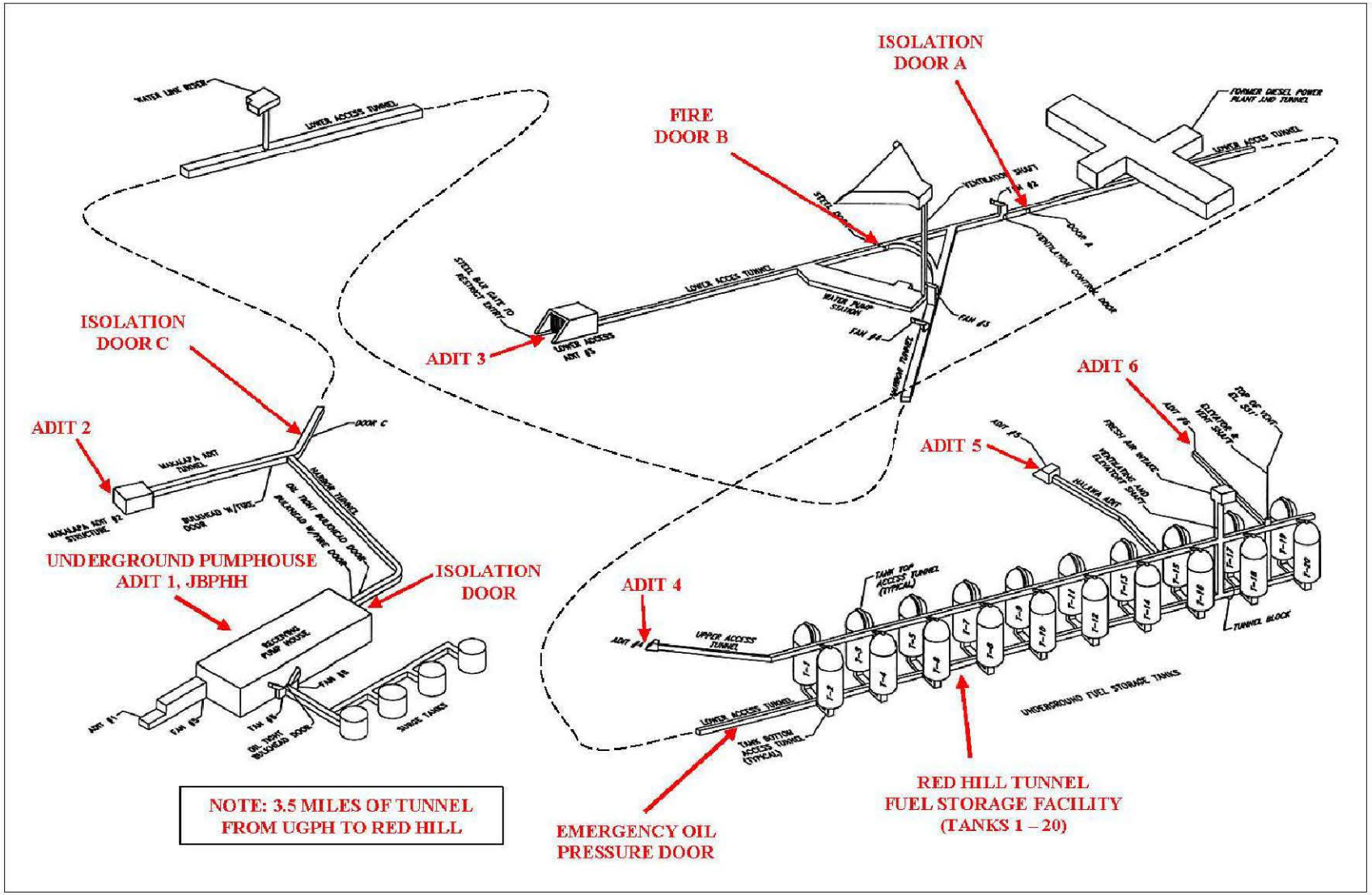
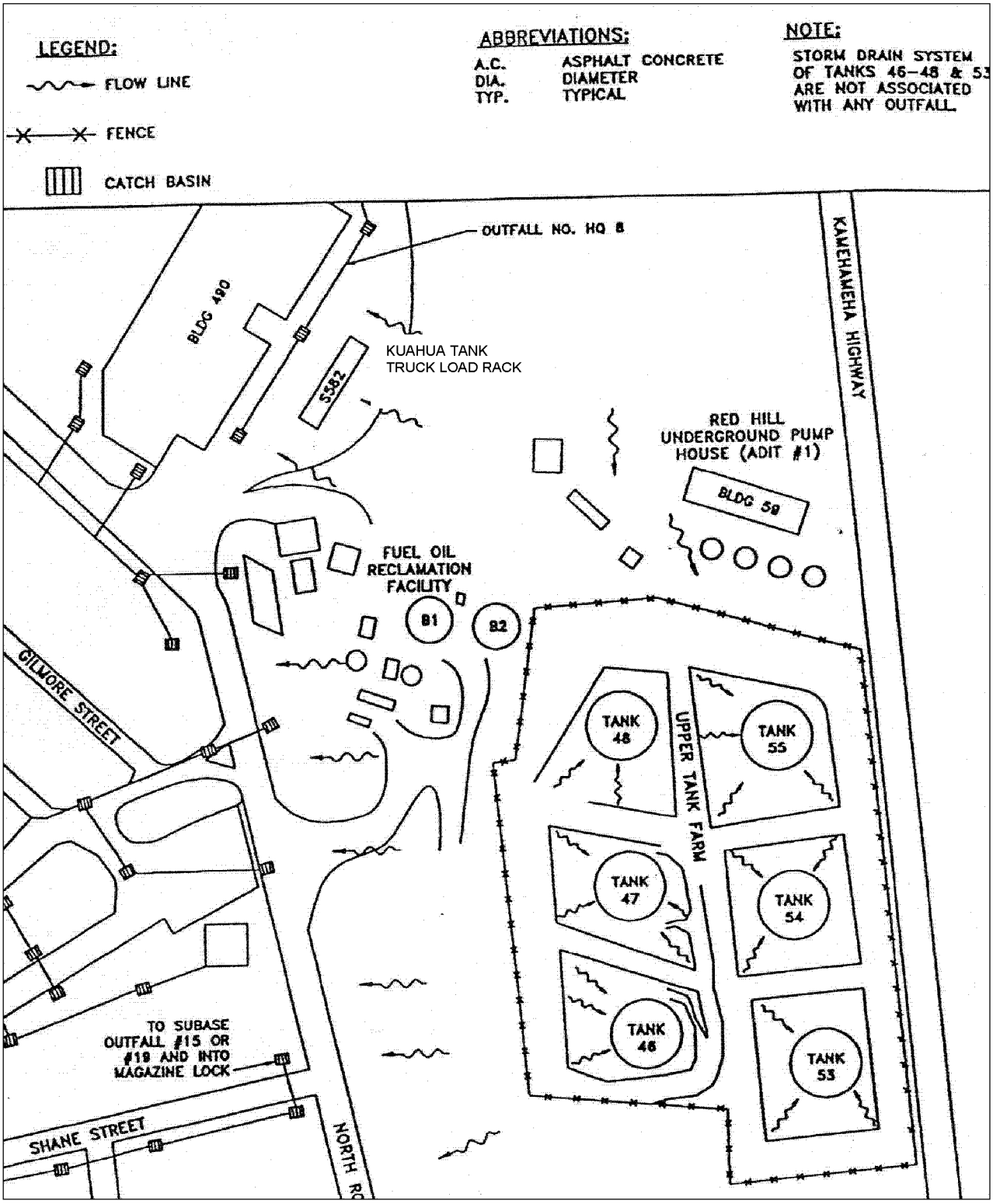


FIGURE I-2: UNDERGROUND PUMPHOUSE, UPPER TANK FARM, AND FORFAC



I.5.5 Lube Oil Storage

Table I-5 provides details on containment and drainage at the Lube Oil Storage Area.

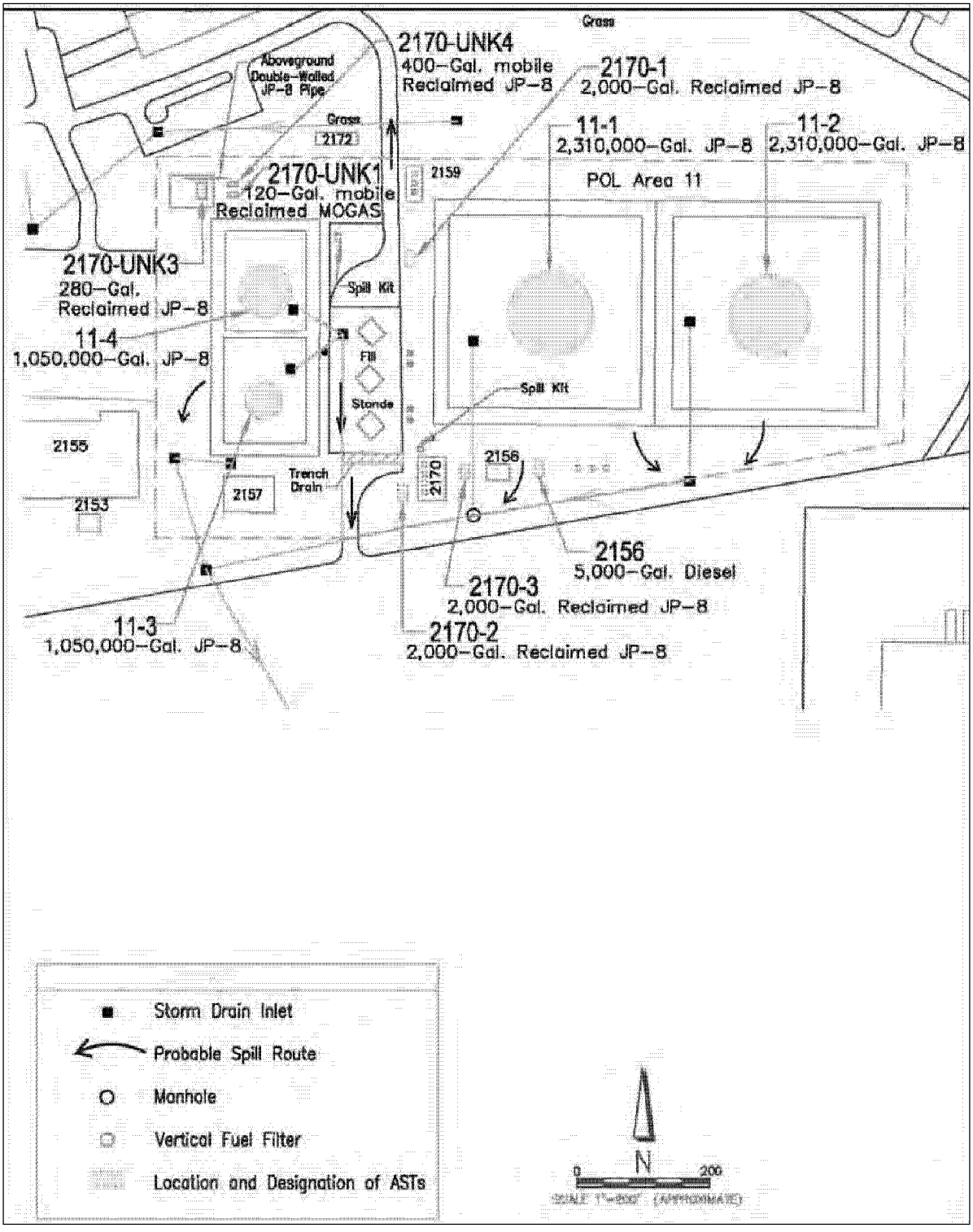
TABLE I-5: LUBE OIL STORAGE, ADJACENT KUAHUA TRUCK RACK			
Containment Type and Construction Materials	**Largest Storage Tanks Capacity**	**Containment/Drainage Controls**	**Containment/Drainage Discharge Route**
Two double-walled steel tank.	10,000 gallon AST	N/A	To surrounding ground
Operator	NAVSUP FLCPH		
Containment/Drainage System Capability to Contain Spill.	Containment is effective for containing spills.		
Procedures to Take if Spill Cannot be Contained in Containment/Drainage System.	• If spill escapes containment: – Remove all spills promptly with sorbents or a vacuum truck. – Cover nearby stormwater drains or divert flow away from drains.		
Note: There are cylindrical steel lubrication oil storage tanks, arranged side-by-side, located adjacent to the Kuahua Truck Rack.			

I.5.6 Hickam Tank Farm

Table I-6 provides details on containment and drainage at the Hickam Tank Farm.

TABLE I-6: HICKAM TANK FARM			
Containment Type and Construction Materials	**Largest Storage Tanks Capacity**	**Containment/Drainage Controls**	**Containment/Drainage Discharge Route**
Concrete Berm	2,310,000 gallon AST	Drainage Valve	Spills remain within concrete berm containment until removed by vacuum turck.
Operator	NAVSUP FLCPH		
Containment/Drainage System Capability to Contain Spill.	Adequate		
Procedures to Take if Spill Cannot be Contained in Containment/Drainage System.	• Spills will be contained in bermed area. –Remove all spills promptly with sorbents or a vacuum truck. –For large spills, consider floating fuel for recovery by flooding containment system with water. • In the event spill escapes containment, cover nearby stormwater drains or divert flow away from drains. • Figure I-3 shows potential spill pathways if a spill escape containment from the berms.		

FIGURE I-3: HICKAM TANK FARM



Note: Figure I-3 was taken from the Hickam AFB SPCC Plan.

I.5.7 Truck Loading/Unloading Racks

Table I-7 provides details on containment and drainage at the six Loading/Unloading Racks on JBPHH. Information provided includes; type of containment, construction material of containment, largest potential release, containment capacity, drainage controls, operator, and procedures to take if a spill cannot be contained.

TABLE I-7: TANK TRUCK FUEL LOADING/UNLOADING RACKS

Location	Containment Type and Construction Materials	Largest Potential Release	Secondary Containment Capacity	Containment/ Drainage Controls	Containment/ Drainage Discharge Route
Lube Oil Loading Rack	None	1,200 gal.	0	None	Drains to adjacent asphalt and grassy area.
Kuahua Loading Rack	4-inch concrete curb surrounding rack. Curbed area drains to sump tank.	6,000 gal.	~2,500 gal.	Drainage valve	Drains to sump tank.
POL Area 5 Loading/Unloading Rack	Concrete curb surrounding rack. Curbed area drains to sump tank.	1,200 gal.	8,300 gal.	Drainage valve	Drains to sump tank.
POL Area 9 Loading/Unloading Rack	None	6,000 gal.	0	None	Drains to adjacent asphalt and grassy area.
Hickam Tank Farm Loading Rack	Five loading stands each surrounded by concrete curbing. Loading stands drain to a sump tank.	6,000 gal.	6,900 gal. each stand	Drainage valve	Drains to sump tank.
Hickam Tank Farm Unloading Rack	Four unloading stands each surrounded by concrete curbing. Unloading stands drain to a sump tank	8,000 gal.	8,200 gal.	Drainage valve	Drains to sump tank.
Operator	NAVSUP FLCPH				
Containment/Drainage System Capability to Contain Spill.	Containment is effective for all loading/unloading racks except for the following: • Lube Oil Loading Rack • Kuahua Loading Rack (partial containment) • POL Area 9 Loading Rack				
Procedures to Take if Spill Cannot be Contained in Containment/Drainage System.	• If spill escapes containment: – Remove all spills promptly with sorbents or a vacuum truck. – Cover nearby stormwater drains or divert flow away from drains.				
Note: Contents in sump tanks are removed by vacuum truck and transferred to the FORFAC facility.					

PAGE INTENTIONALLY LEFT BLANK

APPENDIX J
SECURITY

J.1 FACILITY SECURITY

Security involves the deterrence of unauthorized personnel and/or vehicles into areas where such entry could result in the damage or misuse of equipment containing oil or hazardous materials. Facility security includes, as appropriate:

- Fencing;
- Access control;
- Guards and patrols, day and night;
- Lighting;
- Pump controls;
- Emergency cut-off locations (automatic or manual valves);
- Valve and pump locks; and,
- Pipeline connection caps.

J.2 COMNAVREG HI SECURITY

Base security provides 24 hours a day, 365 days a year, round-the-clock surveillance and protection of all facilities and personnel at Joint Base Pearl Harbor Hickam (JBPHH). Base security personnel are trained to notify proper authorities if a release is discovered. They provide controlled access at all entrances, perform mobile patrols on scheduled and unscheduled routines, and maintain a limited reaction force capability to respond to emergency situations. While there are no guards specifically detailed for security at the major fuel storage and transfer areas, all oil storage tanks are located within the security zone of JBPHH and are included in the regular and unscheduled security patrols.

J.3 PHYSICAL SECURITY

J.3.1 Oil Storage Container Security

To protect fuel vulnerable to misappropriation, contamination, pilferage, and sabotage, tank custodians secure the following unattended tank components:

- Pump-dispensing nozzles and electrical power source for all issue tanks
- Gauge hatches and other access points on all storage tanks
- Bulk fuel off-loading systems
- Low-point drains

Using established proper key control procedures, tank custodians secure these points using number controlled padlocks, seals or plugging valves, or anti-siphoning devices.

J.3.2 Fences and Gates

JBPHH is a controlled access facility restricted by fences, gates, and security patrols. The entire facility, except for the coastline, is surrounded by a chain link fence topped with three strands of barbed wire. The fence is regularly inspected by base security personnel. In

addition, many ASTs, USTs, and generators are also secured within their own fence and locked gate compounds.

Access to JBPHH is controlled by base security personnel 24 hours per day, 365 days per year. Overall access to the base is restricted to active military and civil service personnel, authorized base contractors, families of active military personnel, retired military personnel and their families, and authorized visitors. All entrances require base personnel to show government issued identification prior to entry. Visitors must present satisfactory proof of identification and a statement of purpose for their visit for access to the facility.

J.4 FUELS STORAGE AND TRANSFER FACILITIES

NAVSUP FLCPH Fuel Department operates three bulk fuels storage areas; the Upper Tank Farm, Red Hill Fuel Storage Facility, and POL Area 11. These facilities normally operate five days a week, with personnel manning the facility during normal working hours. Personnel patrol these facilities during off-hours (swing and graveyard shifts). The access to the Red Hill facility is always manned by base security at the locked gate to restrict access to authorized personnel only. Once a person is allowed through the gate, entrance into the Adits to access the upper or lower tunnels is only possible through the use of an electronic "key". These keys are strictly controlled by NAVSUP FLCPH.

Fuel operations personnel make routine checks of the facilities and systems during transfer operations. During periods of non-operation, pump areas and all valves that would allow direct outward flow from the AST are securely locked in the close position. Pipeline connections are always capped or blank flanged when not in operation and inactive/terminated lines are blocked to prevent accidental or malicious spills.

Draining valves on the bulk-tank containment area are chain-locked in the closed position to prohibit tampering by unauthorized persons.

Table J-1 summarizes the security measures in place to prevent unauthorized entry into, use of, or tampering with fuel storage and transfer facilities within JBPHH.

TABLE J-1: SECURITY FOR FUEL STORAGE AND TRANSFER FACILITIES

Security Measures	Location/Description
Base Fencing	Perimeter chain link security fencing secures all JBPHH industrial and other military work facilities.
Storage and Transfer Facility Security	• Each oil pump station, storage and transfer site is either secured with chain link fencing and locked gates or housed in a secured building. • Security personnel control all visitor access to NAVSUP FLCPH Fuels Dept. facilities after hours. During work hours, Fuels Dept. personnel attending the oil facilities monitor and control visitor activities. • Security personnel inspects locks, lighting, fencing integrity, etc., to detect unauthorized entry and vandalism. • Signs are posted throughout the Fuels Dept. facilities to warn potential trespassers and to prevent unintentional entry. <u>Location of Keys:</u> • Fuels Department Admin Office, Bldg 1757 • Security Manager (Code 02) - Duplicate grand master keys (during work hours) • CDO (Custody of duplicate grand master keys after work hours).
Base Access Security and Security Patrols	All access gates to JBPHH are guarded or locked. JBPHH controls entry and only authorized visitors enter the secured base facilities. JBPHH security personnel conduct 24-hour surveillance of the base.

TABLE J-1: SECURITY FOR FUEL STORAGE AND TRANSFER FACILITIES

Security Measures		Location/Description
Emergency Cut- Off Locations	1. Electrical power for pumping equipment	Master switches in secured pump control rooms. **Control room locations:** • Red Hill Underground Pumphouse, Bldg. 59 • Fuels Department Admin. Office, Control Room, Bldg. 1757
Emergency Valve Cut- Off Locations	2. Fuels Department Valve Chambers	Location of Fuels Department valve chambers (Fuels Department Operations Manual): **Chamber** — **Location** VC No.1 — Red Hill Underground Pump House Entrance, Bldg. 59 VC No. 2 — Halawa Gate VC No. 3 — Hotel 5 entrance to Hotel Docks VC No. 4 — In POV lot VC No. 5 — North Road, Bldg 649 VC No. 7 — Next to loading rack near palm trees VC No. 7B — Next to loading rack near palm trees VC No. 8 — North Road to tank No. 47 VC No. 9 — North Road, ballast entrance VC No. 10 — NEX Gasoline Station near FORFAC VC No. 12 — Located at the FORFAC VC No. 13 — Ball park line - front of Bldg. 91 VC No. 14 — DFM (F76) valve- front of Bldg. 91 VC No. 15 — Front of Bldg. 91 VC No. 18 — North road across Bldg. 162 VC No. 20 — Mike-1 entrance VC No. 21 — Ward Field VC No. 31 — Mike-4 ballpark VC No. 32 — NSSC boat house near 1588 VC No. 50 — South Avenue, across from NAVFAC HI Transportation Office
Lighting		JBPHH has outdoor lighting, with adequate illumination, at all oil facilities.
Valve Locks		Valves are maintained in a closed position and locked when in non-operating or non-standby status. Access to master flow and tank drain valves is limited to authorized personnel only.
Pump Locks		NAVSUP FLCPH Pump operators control power to all pump stations using master power switches located in secured control rooms.
Secondary Containment Drainage Valves		The drain valves for secondary containment structures (i.e., dikes) are normally closed and locked, except during drainage of the containment structure. Drainage water from containment structures are checked for sheens before being released. All drainage event are logged, and drain valve secured after the drainage event.
Pipeline/Transfer Hose Connections		NAVSUP FLCPH caps or blind flanges all transfer discharge outlets when transfer equipment is not in service or not on standby for a transfer operation.

J.5 TANK COMPONENTS SECURED

The following tank components are secured: pump dispensing nozzles and electrical power sources for all issue tanks, gauge hatches, and other access points on all storage tanks; bulk fuel off-loading systems; and master flow and low point drain valves. Components are secured using locks, seals or plugging valves, or anti-siphoning devices. Access to starter controls, master flow valves, and tank drain valves is limited to authorized personnel only. See the CNRH SPCC plan for tank specific security measures.

J.6 FLOW AND DRAIN VALVES SECURED

The master flow and drain valves (i.e., tank, rather than secondary containment, drain valves) are maintained in a closed position and locked when in non-operating or non-standby status. Access to master flow and tank drain valves is limited to authorized personnel only.

J.7 STARTER CONTROLS SECURED

The starter controls for oil pumps are maintained in an off position and locked. Access to starter controls is limited to authorized personnel only. Each starter control is located outside in a secure area or within a locked concrete-walled pump house adjacent to the applicable AST or UST. Only authorized personnel have access to keys to pump-houses and starter controls.

J.8 SECONDARY CONTAINMENT DRAINAGE

The drain valves for secondary containment structures (i.e. dikes) are normally closed and locked. After each significant precipitation event, facility operators will inspect the rainfall that has accumulated in the containment areas. If there is no evidence of oil or chemical contamination, the valves are opened to release the clean storm water to the drainage system. If oil or chemicals appear to be present, the contaminants are removed and disposed of in accordance with local, state, and federal regulations. Records of secondary containment structure drainage are kept with the Regional SPCC Plan for at least three years.

J.9 PIPELINE LOADING/UNLOADING CONNECTIONS SECURED

All oil pipeline loading/unloading connections are securely capped or blank-flanged when not in service or standby service. Designated personnel who observe fuel loading/unloading activities verify that these connections are properly capped following each fuel loading/unloading event.

J.10 LIGHTING ADEQUATE TO DETECT AND DETER SPILLS

JBPHH is generally well supported by various type of security lighting. Sufficient lighting is provided at all fuel loading/unloading racks and oil storage structures to identify a release, should one occur and to discourage trespassing or vandalism, with the exception of those areas noted in the COMNAVREG HI SPCC.

J.11 RESTRICTED AREA ACCESS REQUIREMENTS

J.11.1 NAVSUP FLCPH

Routine Access

Per FLCPH INST 5530.1C, Chapter 13, only United States citizens, required to conduct official government business, will be granted access to the Red Hill Underground Tank and Tunnel complex, the Underground Pump House, the Upper Tank Farm, POL Area 11, the Fuel Oil Reclamation Facility, and Hotel Pier. Foreign nationals are not allowed unescorted or escorted access to above facilities.

Positions requiring unescorted work to be performed in Restricted Fuel Areas are considered Public Trust positions. All personnel requiring routine or frequent access to the above areas must obtain a favorable public trust suitability determination based upon completion of a (NACLC) National Agency Check w/ Law and Credit, or (ANACI) Access National Agency Check with Inquiry.

Complex Escort and Visitor Responsibility Agreement Procedures

Table J-2 explains the NAVSUP FLCPH Fuel Complex escort and visitor responsibility agreement procedures.

TABLE J-2: NAVSUP FLCPH FUEL COMPLEX ESCORT AND VISITOR RESPONSIBILITY AGREEMENT PROCEDURES	
1.	Only security cleared government personnel with valid FLCPH security badges are permitted to act as escorts.
2.	Escort must ensure that all visitors are U.S. Citizens by verifying one of the following acceptable documents for proof of US citizenship: • Birth Registration Card (With Registrar's Signature) • Birth Certificate • Certificate Of Naturalization • Record Of Military Processing DD Form 1966 (With Certification That U.S. Citizenship Verified) • Delayed Birth Certificate • Hospital Birth Certificate (Vital Information And Signature) • U.S. Passport • Certificate Of Citizenship • Consular Report Of Birth Abroad Form FS 240 • Consular Report Of Birth Abroad Form FS 545 (PRE-1990) • Consular Report Of Birth Abroad Form DS 1350 (PRE-1990)
3.	A FLCPH Fuel Department employee must coordinate with the appropriate location in advance for sign-out of escort agreement and badges that are available from: • Bldg 475 1st floor code 303 security office near Building 1900 loading zone • Bldg 1757 1st floor operations division dispatcher
4.	A FLCPH Fuel Department employee must verify completion of the visitor escort agreement and document the respective visitor badge ID numbers.
5.	After the authorized business is complete, return badges to the location of sign-out.
6.	Contact Craig Gentry (473-7575, craig.gentry@navy.mil) or Derek Wong (473-7821, derek.wong@navy.mil) to Request Supporting Documentation such as: JB2 0-180 Forms (JBPHH Visitor Passes), or FLCPH Visitor Escort Agreement Forms (Buildings 1757 & 475)

Escort and Visitor Responsibility Agreement Form

A FLCPH Fuel Department employee must verify completion of the visitor escort agreement form and document the respective visitor badge ID numbers. See Figure J-1 below for a copy of the form.

Emergency Access

In cases were emergency access is required, such as an oil spill response or a fire; the Commanding Officer has the authority to grant access to first responders and federal agencies.

Figure J-1: Escort and Visitor Responsibility Agreement Form

FOR OFFICIAL USE ONLY

FLCPH FUEL COMPLEX
ESCORT & VISITOR RESPONSIBILITY AGREEMENT

Name of Company: _____ Date: _____
(Print)

Company POC: _____ Contact Phone: _____
(Print Name)

Contract Number: _____ Contract Dates: _____

FLCPH POC: _____ FLCPH POC: _____
(Print Name) (Signature of verification and approval)

1. I request access for the following date(s): _____

2. The purpose of this request is for: _____

_____

_____

_____

3. As an escort, I am responsible for the conduct of my guests at all times while aboard the Joint Base Pearl Harbor Hickam installation. Irresponsible or disruptive behavior by visitors may result in them being permanently barred from all installations and/or criminal/civil action. As a sponsor of visitors that are irresponsible/disruptive, I may lose visitor-escorting privileges on a permanent basis.

I am aware of and have informed my visitors:

1) Vehicle(s), personnel, and any articles therein or hand-carried are subject to inspection; refusal will result in immediate access denial to the installation.
2) Photography is only allowed with an approved Joint Base Pearl Harbor Hickam Photo Permit.

4. I hereby acknowledge that:

1) All visitors are verified U.S. citizens.
2) I have read all applicable information regarding my privileges associated with escorting guests.
3) I understand that at all times (from the time of entry to the time of exiting) during this visit; I am responsible for the behavior and location of the visitors.
4) I am responsible for the return of visitor badge(s) back to the respective FLCPH offices; upon the completion of authorized business, revocation, or employment termination.

Date	Print Name (Escort)	Escort's Signature	Telephone Number

1 | Page

FOR OFFICIAL USE ONLY

5. I hereby acknowledge that as a sponsored visitor on FLCPH Fuels Complex that I am a U.S. citizen and will only be at the job site while professionally conducting official business pertaining to this request/contract.

I have been informed by my escort:

1) I must wear a hard hat, carry a flashlight, and swipe my visitor badge at all entry and exit readers.
2) Vehicle(s), personnel, and any articles therein or hand-carried are subject to inspection; refusal will result in immediate access denial to the installation.
3) Photography is only allowed with an approved Joint Base Pearl Harbor Hickam Photo Permit.

Date	Print Name (Visitor)	Visitor's Signature	Badge #	Confirm Return FLCPH Initials
Date	Print Name (Visitor)	Visitor's Signature	Badge #	Confirm Return FLCPH Initials
Date	Print Name (Visitor)	Visitor's Signature	Badge #	Confirm Return FLCPH Initials
Date	Print Name (Visitor)	Visitor's Signature	Badge #	Confirm Return FLCPH Initials
Date	Print Name (Visitor)	Visitor's Signature	Badge #	Confirm Return FLCPH Initials
Date	Print Name (Visitor)	Visitor's Signature	Badge #	Confirm Return FLCPH Initials
Date	Print Name (Visitor)	Visitor's Signature	Badge #	Confirm Return FLCPH Initials

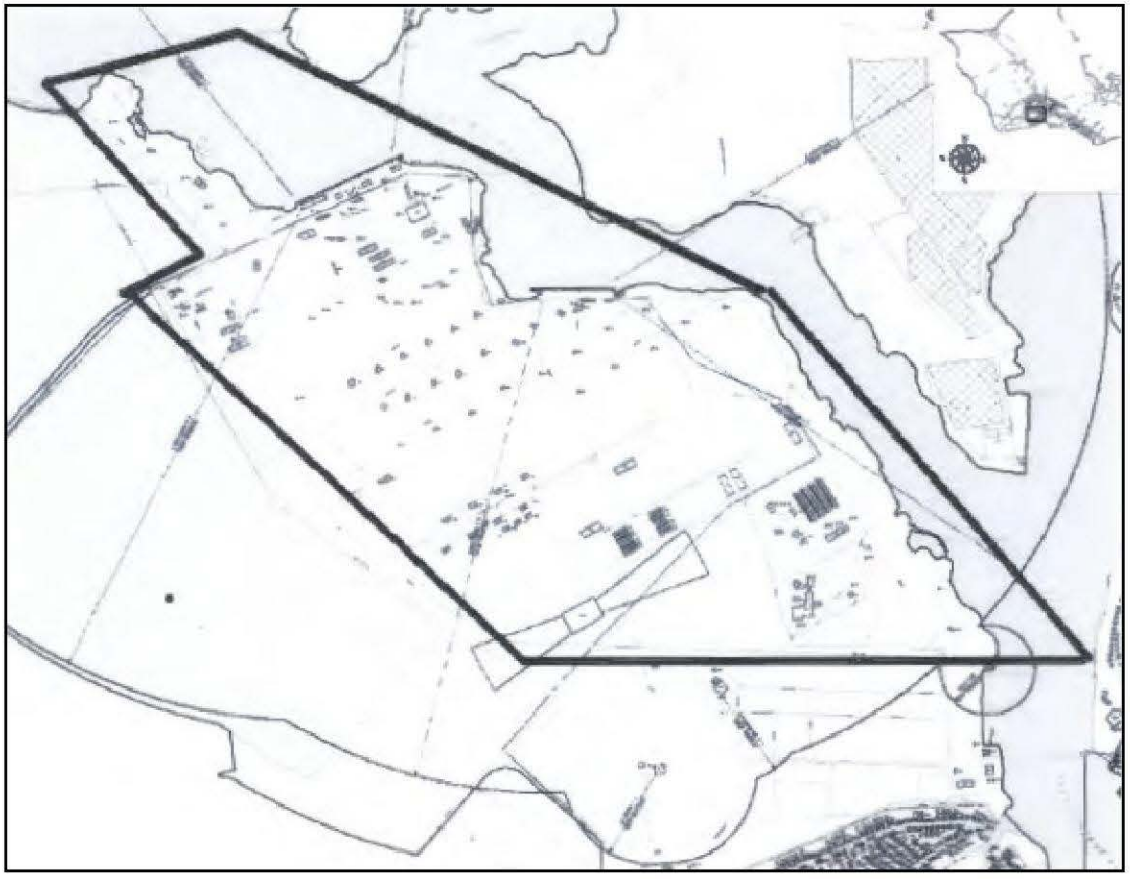
J.11.2 West Loch and Lualualei Annexes (Naval Magazine Areas)

The following is extracted from Navy Munitions Command, East Asia Division, Detachment Pearl Harbor (NMCEADDETPH) Instruction 5500.1C, *Access Regulations to Navy Munitions Command, East Asia Division, Detachment Pearl Harbor, Restricted Areas* (dated 15 March 2013).

Restricted Areas

NMCEADDETPH receives, stores, maintains and issues ordnance for the Joint Services on Oahu, Hawaii. In order to provide the appropriate level of explosive safety and security to all ammunition and explosives, entry control to restricted areas are controlled. Restricted areas are the Whiskey Wharves (W1-5) located at the West Loch Annex and Magazine areas located at West Loch and Lualualei Annexes. Figure J-2 provides a diagram of the West Loch Annex restricted area.

Figure J-2: West Loch Annex Restricted Area



Restricted Area Access Requirements

JBPHH Security Department controls access to the Entry Control Point (ECP) Cattle Gate #2. No person may enter the Restricted Areas without authorization from command personnel with approving authority.

Identification for Restricted Areas Entry

a) Personnel attached to NMCEADDETPH must possess a Restricted Area Identification Badge (Figure J-3) and a Common Access Card to access the restricted area.

b) Other Personnel granted access to the restricted area by the command will wear the "No Escort Required" badge (Figure J-4). Badges must be worn above the waist and shall be visible at all times while in the restricted area.

c) Personnel who have been granted access but require an escort shall wear the "Escort Required" badge (Figure J-5). Badges must be worn above the waist and shall be visible at all times while in the restricted area.

d) The NMCEADDETPH Waterfront Liaison or the Command Duty Officer (CDO) is responsible for the issuing of the "No Escort Required" badge (Figure J-4) and "Escort Required" badge (Figure J-5). He/she will also document all restricted area access. Badges will be issued at Cattle Gate #2.

Note: Mission Receipt, Storage, Segregation and Issue (RSSI) operations, and most importantly, the servicing of ships and submarines will stop if non-essential personnel are in the vicinity of explosives ordnance movement and handling.

Figure J-3

Figure J-4

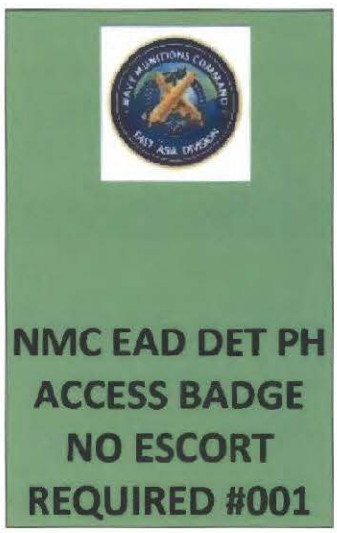
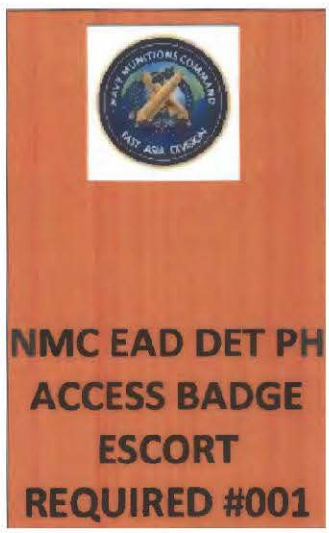


Figure J-5



Restrict Area Access Procedures

a) No Escort Required Access

1. Visit requests to the Restricted Areas will be submitted to and screened by the Waterfront Liaison to determine the legitimacy of the request and balanced against operational schedules. The following three Command Staff Members can approve entry into the Restricted Areas:

- Waterfront Liaison
- Ammunitions Material Officer (AMO)
- Officer in Charge (OIC)

Note: Non-emergency requests for entrance into Restricted Areas occurring during non-working hours, must be pre-arranged through the Waterfront Liaison and approved by the OIC.

2. Upon the approval of the request the Waterfront Liaison will draft an access memo (see Figure J-6).

3. Once the memo is complete, it will be kept in the access control binder.

b) Escort Required Access

1. In the event of a short notice requirement for access to the restricted area, the Waterfront Liaison or CDO can grant access with an escort.
2. The Waterfront Liaison or CDO will determine what shop will provide the escort.

3. Authorized command members will escort the visitor in/out of the Restricted Areas and remain with the escorted personnel at all times while they are in the restricted area.

Emergency Access

In the event of an emergency situation, the Waterfront Liaison will meet first responders at Cattle Gate #2 and escort them to the scene of the incident. Escorts shall remain on scene until first responders are escorted out of the restricted area. If the emergency situation occurs after normal working hours the CDO will provide escort for first responders.

Figure J-6: NMCEADDETPH Access Memo

NMCEADDETPHINST 5500.1C
15 Mar 13

MEMORANDUM

From: Waterfront Liaison, Navy Munitions Command, East Asia Division, Detachment Pearl Harbor
To: Supervisory Police Sergeant, Joint Base Pearl Harbor Hickam West Loch Annex

Subj: ACCESS INTO NAVY MUNITIONS COMMAND, EAST ASIA DIVISION, DETACHMENT PEARL HARBOR RESTRICTED AREAS

Ref: (a) NMCEADDETPHINST 5500.1C

Encl: The following Personnel are hereby authorized into Navy Munitions Command, East Asia Division, Detachment Pearl Harbor's restricted areas.

1. THE FOLLOWING PERSONNEL SHOULD BE FILED UNDER CONTRACTOR / FEDERAL / NAVFAC / MILITARY (Select appropriate description of personnel and delete others)

2. DATE ENTERING / TIME - DATE LEAVING / TIME: e.g., 01/02/2013, 0700 hrs - 06/30/2013 1530 hrs

3. THIS VISIT REQUEST IS VALID FOR: e.g., 6 Months

4. THE PERSONNEL WILL BE GOING TO: e.g., West Loch Magazine Area, West Loch Wharves and/or Lualualei Magazine Area

5. SPECIFICALLY AT WEST LOCH OR LUALUALEI, THE PERSONNEL WILL BE AT: e.g., Wharves W1-5, West Loch Building 1

6. THE PERSON SUBMITTING INFO: e.g., John Doe, (808) 123-4567

7. THE PERSONNEL ARE A PART OF: e.g., Name of Activity / Organization

8. ALL PERSONNEL NEEDING ACCESS: e.g., Mary Jones (Project Manager), Joe Smith (Field Supervisor), Robert Johnson (Field Worker)

9. DETAILED REASON FOR ENTRY INTO THE RESTRICTED AREA: Provide description of project, and work to be performed.

10. Point of contact for this matter is GM1 Robert Phinney, COM: (808) 721-5532, e-mail: robert.phinney@navy.mil

GM1 PHINNEY

PAGE INTENTIONALLY LEFT BLANK.

APPENDIX K
WASTE MANAGEMENT AND DISPOSAL PROCEDURES

K.1 GENERAL

This section provides information on the requirements and procedures to properly collect, store, manage, and dispose of waste resulting from an oil spill response. The types of waste expected from a spill response include:

- Recovered oil
- Oil and water emulsions
- Oil-contaminated wastes such as:
  - Spent sorbents
  - Oil-contaminated debris and materials such as disposable personal protection equipment, rags, plastic bags or sheets, etc.
  - Oiled vegetation, soil and gravel
  - Oil-contaminated wildlife carcasses
- Waste decontamination solutions and effluents from equipment and personnel decontamination operations
- Non-contaminated wastes from response operations

The Planning Section should prepare an incident specific Waste Management and Disposal Plan. This plan provides procedures which may be used by the Disposal Group to ensure that all oil contaminated wastes generated by the incident are properly managed, containerized, marked and disposed. A template for the Waste Management and Disposal Plan is provided in Section K-11. This plan is prepared by the Environmental Unit in collaboration with the Disposal Group and shall be reviewed by the Operations Section Chief and the Planning Section Chief. The plan shall be approved by the IC or UC and made part of the incident action plan. The execution of the plan by the Disposal Group shall be monitored by the Environmental Unit for its effectiveness. The plan shall be updated and modified as necessary. Any changes to the plan shall be approved by the IC or UC. It is recommended that a copy of this section be provided with the plan to the Disposal Group as a reference document.

K.2 RESPONSIBILITY

The IC shall ensure that waste management and disposal operations comply with regulatory requirements and prevent risk to health and safety of response personnel and the public. Management and disposal of oil and wastes generated during cleanup operations is the responsibility of the Disposal Group. During the spill cleanup, the Disposal Group shall:

- Collect spill residue, other contaminated material, and all non-reusable cleanup materials, including disposable clothing, sorbents, brushes, rags, brooms, and containers. Package material in DOT approved containers. Mark and label containers in accordance with DOT and EPA requirements.
- Thoroughly ventilate affected areas, especially if it is within an enclosed area. Comply with all safety, health and fire protection requirements.

If necessary and requested by the IC, the NOSC Rep shall activate the appropriate contracts or agreements for the cleanup. In the event of cleanup by outside contractor or agency, the NOSC Rep shall maintain on-scene command and support cleanup as needed. After the spill cleanup,

the IC shall ensure that all waste and contaminated items generated by the incident are properly identified, containerized, stored, manifested, and disposed, recycled or reclaimed.

K.3 WASTE COLLECTION, MANAGEMENT, AND DISPOSAL PROCESS

Wastes shall be collected in drums, tanks, dumpsters or other appropriate containers that are compatible with the contents to avoid leaks, corrosion or adverse chemical reactions. All containers that hold liquids shall be stored on spill pallets or within impervious berms to prevent any leaks from entering streams, storm drains or other waterways. Large containers shall be placed on plastic sheets. Dumpsters that hold oil-contaminated debris shall be lined with plastic to prevent leaks. Containers that hold flammable or combustible materials shall be stored per fire prevention regulations and NFPA 30.

Waste disposal shall comply with all federal and state regulations. Prior to disposal, waste profiles, laboratory analyses, waste manifests and other documents shall be reviewed and approved by the Environmental Unit. Where possible, disposal of non-hazardous waste at H-Power, such as oil-contaminated absorbents, is preferred. Non-hazardous wastes that are to be disposed at local permitted landfills must meet all requirements of the destination facility. The request for clearance number from the landfill facility shall be signed by the Disposal Group Supervisor or the Environmental Unit Leader on behalf of the Region. When ready for transport, non-hazardous waste manifests shall be signed by the Disposal Group Supervisor. As part of the incident demobilization, all areas used to store waste containers shall be inspected for signs of leaks or spills. Clean up any spills and dispose of the wastes per this disposal plan.

The final step in executing the disposal plan is to submit all documents to the Documentation Unit related to waste identification, management and disposal. This includes laboratory analyses necessary to characterize the waste, photographs, manifests, waste profiles, etc. This is necessary to confirm that all wastes were properly managed in accordance with applicable federal and state regulations and with Navy instructions.

K.3.1 Fuel to be Reclaimed and Sold

A major fuel release will generate large quantities of fuel that has been contaminated by dirt, debris, water, etc. It is possible that this fuel can be reclaimed and sold by the government. If so, then this is not considered waste, including JP-5. Storage of this fuel while awaiting sale will likely be within existing storage tanks as directed by NAVSUP FLCPH Fuel Director Transfer of the fuel from these storage facilities to the buyer is not part of the disposal plan procedures.

K.3.2 Waste Characterization

Each waste stream must be characterized to determine if it is a regulated hazardous waste (HW) per HAR 11-261. This can be done through user's knowledge of the materials or the process by which these materials became wastes. For example, Safety Data Sheets (SDSs) can provide data on certain characteristics such as flash point or pH that can be used to make the HW determination.

Table K-1 provides general guidance on waste material classification and the appropriate disposal strategy. This is a general guide only and it is essential that the classification be verified for each specific incident. If necessary, samples should be analyzed to determine whether the waste meets the criteria of a hazardous waste or whether disposal or recycling

options exist. Laboratory analysis may also be necessary for disposal in permitted industrial landfills.

TABLE K-1: MATERIAL CLASSIFICATION AND DISPOSAL STRATEGY

Material	Classification	Disposal Strategy	Disposal Facility
Recovered Oil	Reclamable	Process through NAVSUP FLCPH Fuel Oil Reclamation Facility (FORFAC) or process as off-specification petroleum for reclamation.	NAVSUP FLCPH FORFAC or permitted used oil processor
	HW	Containerize, label and dispose as HW according to regulatory requirements.	Permitted Treatment, Storage, and Disposal Facility (TSDF)
Oil-Contaminated Wastes	Nonhazardous Waste	Dispose as ordinary solid waste.	Permitted solid waste landfill
	HW	Containerize, label as HW according to regulatory requirements.	Permitted TSDF
Contaminated Soil	Nonhazardous Waste	Consult with Hawaii Dept. of Health to determine disposal or treatment method.	To be determined
	HW	Containerize, label as HW according to regulatory requirements.	Permitted TSDF
Contaminated Equipment	Nonhazardous Waste	Clean according to section maintenance procedures.	N/A
	HW	Decontaminate.	N/A
Waste Chemicals to Include DECON Solutions	Nonhazardous Waste	Process through NAVFAC HI Industrial Waste Treatment Center (IWTC) or contractor.	NAVFAC HI IWTC or contractor
	HW	Containerize, label as HW according to regulatory requirements.	Permitted TSDF
Dead Wildlife	Protected Species	Consult with Fish and Wildlife Service.	To be determined
	Other Species	Consult with Fish and Wildlife Service.	To be determined
Personal Protection Equipment	Nonhazardous Waste	Clean and reuse where possible; dispose of as ordinary solid waste if unable to reuse.	Permitted solid waste landfill
	HW	Containerize, label as HW according to regulatory requirements.	Permitted TSDF
Sorbents	Nonhazardous Waste	Dispose of as ordinary solid waste.	Permitted solid waste landfill
	HW	Containerize, label as HW according to regulatory requirements.	Permitted TSDF
Other Response Wastes	Nonhazardous Waste	Dispose of as ordinary solid waste.	Permitted solid waste landfill
	HW	Containerize, label as HW according to regulatory requirements.	Permitted TSDF
Nickel-cadmium Batteries, Mercury Containing Lamps	HW or Universal Waste	Containerize, label as HW or universal waste according to regulatory requirements.	Permitted TSDF or universal waste destination facility
Lead-acid Batteries	Spent Batteries Being Reclaimed	Turn in to lead-acid battery reclaimer	Permitted battery reclaimer
Recyclable Materials	Nonhazardous	Recycle at the Region Recycling Center Bldg. 159 (474-9207)	Recycling Center Bldg. 159

In some cases, laboratory analysis may be necessary to determine treatability or disposal options, such as possible disposal in the sewer system, at a bioremediation land farm facility, at the City's H-Power facility where it would be burned for energy recovery or disposal at a permitted industrial landfill. Analysis may also be necessary to determine if the wastes are regulated by the EPA as a HW. Sampling methods shall follow EPA SW-846. Use proper sample preparation and storage protocols as required by the analytical laboratory, e.g., sample preservatives, proper containers, cooling, QC blanks, etc. The chain of custody document shall include the waste container identifier. The waste management log shall also use this same identifier and the sample number for tracking purposes.

K.3.3 Waste Accumulation Areas

Wastes shall be stored in areas as determined by the IC or the SMT. If possible, waste storage areas shall be at or near the point where the waste is initially generated. This reduces the distance that the waste is transported from the immediate response site. This also reduces the chances of spills or leaks while the wastes are moved. However, if the quantity of non-HW is large and the storage area interferes with the response or cleanup activities, it may be necessary to store the wastes farther from the incident site. For non-HW, a paved area at NAVSUP FLCPH adjacent to Building 550 to store containers, tanks, etc. could be identified in the plan as a possible non-HW storage area.

Whenever possible, waste accumulation areas should be located away from storm drains, ditches, swales or any drainage system that leads to streams, rivers or Pearl Harbor. Existing paved areas in the area should be considered for use as a waste accumulation area. Where liquids or sludges are stored, consider placing plastic sheets on the ground to prevent any spills from being absorbed into the dirt or gravel. This would contaminate the environment as well as significantly increase the cost of demobilization. Also, storage areas for liquids or sludges should be bermed. Spill kits should be placed in close proximity to these storage areas and personnel should be trained in the proper use of these kits.

K.4 TEMPORARY STORAGE FOR COLLECTED OIL AND RESPONSE WASTE

Table K-2 is an overview of the Navy-owned temporary storage available to COMNAVREG HI for collected oil and response waste.

TABLE K-2: TEMPORARY STORAGE FOR COLLECTED OIL AND RESPONSE WASTE

Equipment	Capacity	Location / Poc / Telephone
Bulk Storage Equipment for Recovered Oil		
SWOB Barge # 12 and 48	2 @ 70,000 gals.	Waterfront Operations Officer 474-6262
YON Barge # 328, 335, 336	# 328 @ 500,000 gals. # 335 @ 300,000 gals. # 336 @ 300,000 gals.	Fuel Department 473-7833 or 690-0115 (24 hours)
YON Barge # 281	300,000 gals.	Waterfront Operations Officer 474-6262
NAVSUP FLCPH Upper Tank Farm Bulk Storage Tanks	Approximately 6,300,000 gals. each	Fuel Department 473-7833 or 690-0115 (24 hours)
NAVSUP FLCPH FORFAC Bulk Storage Tanks B-1 and B-2	2 @ 378,000 gals. each	Fuel Department 473-7833 or 690-0115 (24 hours)
Oil Storage Bladders	1 @ 290,000 gals 2 @ 136,000 gal. 2 @ 26,000 gals. 1 @ 21,000 gals. 6 @ 500 gals.	Navy SUPSALV Hawaii ESSM Base (As of 12/2015) (202) 781-1731, Option #2 (during work hours) (202) 781-3889 (Duty Officer, after hours)
Storage Equipment for Contaminated Wastes, Hazardous Wastes, and Other Response Wastes and Debris		
Drums	Multiple @ 55 gals.	NAVFAC HI Environmental Services 471-1171
Dumpsters	Multiple @ Varies	NAVFAC HI Environmental Services 471-1171

Other storage equipment or containers are available from commercial sources. This includes oil-water separators, fractionalization (frac) tanks, intermodal portable tanks (IMO), intermediate

bulk containers (IBC), tri-wall boxes, etc. Submit requests to obtain containers or storage equipment to the Logistics Section.

K.5 WASTE CONTAINER MANAGEMENT

Collection, storage, management and disposal procedures for contaminated wastes generated during the response must be followed closely. Properly handle, label, store, transport, and dispose of oil, oil contaminated debris and other wastes in accordance with federal, state and local environmental, safety, fire prevention and transportation regulations. Refer to the incident site safety plan for specific safety and health hazard mitigation measures, including PPE requirements. Use heavy duty plastic trash bags and plastic sheets to prevent leaks of liquids from contaminating the ground.

All waste containers shall be labeled when required by applicable federal and state regulations. Figure K-1 shows samples of the various labels that shall be applied to containers with waste. Other labels may be used if approved by the Environmental Unit.

FIGURE K-1: WASTE CONTAINER LABELS

Hazardous Waste

Non- Hazardous Waste

Pending Analysis

In addition, if the waste requires a DOT hazardous material label based on its proper shipping name per 49 CFR 172.101, the HM label shall also be placed on the container next to the waste label while the container is in a storage area. Although not required by law when the container is not being transported, the DOT label alerts others on the hazardous contents of the container. If DOT regulated materials are stored in IMOs, tanker trucks, or other bulk container, placards should be placed per DOT regulations.

Containers must in good condition with no signs of holes, tears, leaks, excessive corrosion, bulging, etc. Containers must be compatible with the materials stored within them. They must be kept closed at all times except when adding or removing materials. All bungs, vents or drum lids must have gaskets that are in good condition to ensure that the container is liquid and vapor tight. Secure all container closures (bungs, vents, retaining bolts, etc.) with a wrench, i.e., not just "finger" tight. Containers to be transported on public roads must meet DOT requirements, including the appropriate performance oriented packaging packing group for that waste per 49 CFR 172.101.

Comply with fire prevention regulations when storing containers that hold flammable or combustible materials or wastes. Segregate containers holding incompatible materials. If required, fire extinguishers of the proper size and type must be placed near the containers with

these flammable or combustible materials. If required, store flammable liquids in approved flammable liquid storage cabinets per NFPA 30.

All wastes shall be tracked in a waste log spreadsheet that is managed by the Disposal Group. Each container shall have a unique identifier consisting of the container code, date on which waste was first added into it followed by a sequential number. Use the container code as shown in Table K-3. The date shall be in "yyyymmdd" format. For example, DM-20150218-1 is the identifier for the first metal drum that received waste on February 18, 2015.

TABLE K-3: WASTE CONTAINER CODES

Container Type	Container Code	Container Type	Container Code
Burlap, cloth, paper, or plastic bags	BA	Dump truck	DT
Fiber or plastic boxes, cartons, cases	CF	Wooden drums, barrels, kegs	DW
Metal boxes, cartons, cases (and roll-offs)	CM	Hopper or gondola cars	HG
Wooden boxes, cartons, cases	CW	Tank cars	TC
Cylinders	CY	Portable tanks	TP
Fiberboard or plastic drums, barrels, kegs	DF	Cargo tanks (tank trucks)	TT
Metal drums, barrels, kegs	DM	-	-

K.6 DISPOSAL CONDITIONS AND CRITERIA

Table K-4 provides information on the conditions and criteria for the acceptance and disposal of waste material.

TABLE K-4: DISPOSAL STRATEGY, DISPOSAL CRITERIA, AND CONDITIONS

Disposal Strategy	Disposal Facility and Location/ POC Information	Conditions and Criteria for Acceptance and Disposal
Reclaim oil	NAVSUP FLCPH FORFAC/Fuel Department Director 473-7833 or 690-0115 (cell)	See NAVSUP FLCPH Instruction 4020.1, Fuel Reclamation at Fuel Oil Reclamation Facility
Nonhazardous waste disposal. Seal in drums or in lined dumpsters. Dispose of via contractor or NAVFAC HI	Contractor or NAVFAC HI/ Environmental Services Branch 471-9588	Contact permitted landfill
Hazardous waste disposal	Permitted TSDF	Pertinent HW Management Plan
Incineration	H-Power, Covanta 682-2099	Only oil-contaminated debris, booms and sorbents approved for incineration by the city and county.
In-situ burning	Oceania RRT 541-2114	Hawaii ACP recommends in-situ burning for an ocean response but must seek RRT approval.
On-shore waste burning for response debris disposal	State On-Scene Coordinator, Ms. Galvez 306-0736	Normally not recommended as a method for disposal.

K.7 GENERAL WASTE HANDLING AND DISPOSAL METHODS

The following briefly describes general disposal methods for various types of response-generated wastes and is provided for guidance only. The specific methods and procedures will be described in the incident specific Waste Management and Disposal Plan. If the collected materials are suspected to be mixed with hazardous wastes (examples: gasoline, halogenated solvents, acid, etc.), keep drummed wastes separate from non-contaminated wastes and notify the Environmental Unit immediately.

K.7.1 Solid Materials/Wastes (Non-Hazardous Waste)

Oiled Natural Inorganic Materials (Oily Soil, Gravel)

1. Place into visqueen-lined dumpsters
2. Decontaminate equipment used to excavate soil.
3. Sample soil and test if able to dispose at permitted landfill or at bioremediation facility.

Oiled Natural Organic Materials (Vegetation, Leaves, Branches, etc.)

1. Collect in translucent heavy-duty plastic bags, and then double bag to ensure that no leakage occurs.
2. Avoid collecting too much liquid (water or oil) in the bags. Drain excess liquids from bag or place absorbents in the bag before closing. Collect liquids and dispose per below. If only a small amount of liquid is present, add particulate absorbents ("kitty litter") or pads to the bags.
3. Place all bagged wastes into dumpsters or visqueen-lined roll-offs.
4. Transport to the on-site storage area or to central storage area.

Oiled Man-Made Materials (Oily Booms and Absorbent Pads, Oil-Contaminated Debris)

1. Collect in translucent heavy-duty plastic bags, and then double bag to ensure that no leakage occurs.
2. Avoid collecting liquid (water or oil) in the bags. Drain excess liquids from bag or place absorbents in the bag before closing. Collect liquids and dispose as oil or oily liquid wastes per below.
3. Place all bagged wastes into dumpsters or visqueen-lined roll-offs at on-site storage area or at the central storage area.
4. Transport filled dumpsters to permitted landfill for disposal. If allowed by Covanta, H-Power can accept for incineration.

Oil Saturated Sorbents and Debris

1. The primary method of storage should be in roll off dumpsters if large quantities of sorbents need to be disposed. These dumpsters should be lined and covered as is the standard industry practice.
2. If sufficient dumpsters cannot be obtained, then an alternative method is to prepare an area by lining it with two layers of 6 millimeter plastic. Raise the edge of the plastic to serve as an impermeable berm. If there is a significant amount of oil that may drip from the material, then the plastic should be covered with a sorbent rug.
3. The area must be secured and access must be restricted.
4. Ingress and egress areas for heavy equipment must be maintained in a fashion which does not compromise the integrity of the liner.
5. Consideration must be given to covering the material to prevent excessive rain water from accumulation in the bermed area. This may also be required if the debris may be blown away by strong winds.

Solid Waste from Decon Operations:

1. Collect dirt, debris, soiled PPE to be disposed, plastic sheeting, etc. in 55 gallon drums at each decon station. Other containers, such as IBCs or tri-walls with plastic sheet liners, may be used if specified in the Waste Management and Disposal Plan.

2. If waste is suspected to be contaminated with hazardous waste, notify the Environmental Unit. If directed, label as "pending analysis". When all decon operations are completed, collect samples, analyze and determine whether it is hazardous waste or if it can be disposed at a local industrial landfill.
3. Dispose based on laboratory analysis and per Environmental Unit.

Waste from Wildlife Rehab Operations:

1. Oily wastes from rehab operations will be collected in plastic bags. Filled bags will be placed in visqueen-lined roll-off bins and will be managed the same as solid oily debris.
2. Uncontaminated waste, such as paper towels, can be disposed as ordinary trash.

Oiled Animal Carcasses:

The disposal of dead oiled wildlife is the responsibility of the Wildlife Branch of the Operations Section. Before removing oiled wildlife carcasses, get specific guidance from the Wildlife Branch. The general handling methods are:

1. Collect in plastic bags.
2. Label with date and time animal found, location found, and person finding animal (name and phone number).
3. Put on ice (chill) but do not freeze.
4. Transport to location designated by Wildlife Branch.

K.7.2 Liquid Materials/Waste (Non-Hazardous Waste)

Recovered Product from Skimmer Boats

The On-Water Recovery Group will recover petroleum product from within the harbor using skimmer boats. Minimize the use of absorbent sweeps or pads if possible. When the skimmer tanks are full, the boats shall return to Ford Island or another site designated by the Recovery Group Supervisor and remove the oil with vacuum trucks. The vacuum trucks shall transfer the product to a ship waste oil barge (SWOB) or directly into the FORFAC after first tested and approved by the NAVSUP FLCPH Fuel Lab at Building 1685 for acceptance. The recovered product will be transferred from the SWOB via vacuum trucks and taken to the FORFAC for reclamation.

Recovered Product for Shoreside Skimmers

If the oil is near a pier or wharf and accessible to vacuum trucks, the Shoreside Recovery Group will use skimmers from dockside and remove the oil. If the recovered product is tested and accepted by the NAVSUP FLCPH Fuel Laboratory, transport the oil to the FORFAC for reclamation. Minimize the use of absorbent sweeps or pads if possible

Oil and Oily Waste:

1. Collect material with pumps or vacuum trucks.
2. Transport to location of temporary storage and empty into collection equipment or tanks.
3. Collect sample, analyze and determine whether or not it can be reclaimed and if it is a HW.
4. If found to be acceptable by the NAVSUP FLCPH Fuel Laboratory, reclaim recovered oil through the NAVSUP FLCPH FORFAC. If the oil is unacceptable by the NAVSUP FLCPH FORFAC, dispose per the incident Waste Management and Disposal Plan.

Rinse Water Waste from Decon Operations:

1. Collect rinse water in 55 gallon drums at each decon station.
2. If waste is suspected to be contaminated with hazardous waste, notify the Environmental Unit. If directed, label container as "pending analysis". When all decon operations completed, collect samples, analyze and determine whether it is HW or if it can be processed as industrial waste via a contractor or discharged into the sewer system.
3. Dispose based on laboratory analysis and as directed by the Environmental Unit.

Waste from Wildlife Rehab Operations:

1. All oily water recovered from rehab operations will be stored in a portable tank for further analysis / waste characterization.
2. Dispose based on analysis.

K.8 NON-HAZARDOUS WASTE DISPOSAL METHODS

There are several options for disposal of non-hazardous wastes. Each will require review of all documentation by the Environmental Unit. Once approved, the Disposal Group Supervisor can sign the shipping papers. In some cases, disposal at a permitted solid waste landfill will require submitting a request for clearance by the landfill operator. The Environmental Unit will prepare the request and sign the application on behalf of the landowner.

Ordinary trash from the incident command post, rest areas, etc., can be disposed in dumpsters without complying with the requirements stated above. However, ensure that no regulated wastes are disposed as ordinary trash.

K.9 RECYCLABLE MATERIALS

Wherever possible, items should be recycled instead of disposed. These include corrugated cardboard boxes, uncontaminated steel or non-ferrous metals, clean plastic (type 1 or 2), aluminum and glass beverage cans, etc. The Environmental Unit will coordinate with the Region Recycling Center for specific recyclable items that they will accept. Private sector recyclers can also be used.

K.10 ANNUAL SOLID WASTE DISPOSAL DOCUMENTATION

At the end of each fiscal year, the amount of wastes disposed, reclaimed or recycled from response and cleanup related to the spill incident for that FY shall be recorded and submitted to NAVFAC HI Code EV4. The Environmental Unit will be responsible for completing this form. This is to comply with the CNO annual solid waste reporting requirements.

K.11 SAMPLE WASTE MANAGEMENT AND DISPOSAL PLAN AND CONTAINER LOG

A sample Waste Management and Disposal Plan (Page K-11) and a Container Log (Page K-17) are located at the end of this section.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date/Time) From: To:	WASTE MANAGEMENT AND DISPOSAL PLAN

SOLID WASTES Covered by Plan

Type	Description	Est. Volume(s)
☐ Oiled Natural Inorganic (Dirt, Gravel, Etc.)		
☐ Oiled Natural Organic (Grass, Branches, Etc.)		
☐ Oiled Man-made Materials (PPE, Sorbents, Etc.)		
☐ Oil-contaminated Wildlife Carcasses		
☐ Other		

Waste Stream	Suspected HW?	HW Code(s)	Determined by:
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?

Comments:

WASTE MANAGEMENT AND DISPOSAL PLAN Page 1 of _____

LIQUID WASTES Covered by Plan		
Type	Description	Est. Volume(s)
☐ Oil / Water Mixtures		
☐ Reclaimable Petroleum Products: ☐ JP-5, ☐ F-24, ☐ F-76, ☐ _____		
☐ Waste Water		
☐ Decontamination Liquids		
☐ Other		

Waste Stream	Suspected HW?	HW Code(s)	Determined by:
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
	☐ Yes ☐ No		☐ User Knowledge? ☐ Laboratory Analysis?
Comments:			
WASTE MANAGEMENT AND DISPOSAL PLAN		Page ___ of _____	

Samples *(If no samples to be taken, check box: ☐ and explain in comments below)*
Media to be sample:
Laboratory Name(s):
Sampling / Analysis Plan Attached? ☐ Yes ☐ No
Comments:

Temporary Waste Storage

Waste Stream	Storage Container Type	Estimated Capacity / Number Required

Storage Locations

Preferred Location, Site Manager	Ground/Runoff Protection Required for Storage Area?	Liners/Cover Protection Required for Storage?
	☐Yes ☐No	☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No

Comments:
WASTE MANAGEMENT AND DISPOSAL PLAN Page ___ of _____

Disposal Methods		
Disposal Method	Waste Stream	Disposal Resource (Provide EPA ID No. for TSDF)
Permitted Landfill on Oahu		
Land farm / Soil Bioremediation		
Wastewater Treatment Plant		
Industrial Wastewater Treatment		
Permitted HW TSDF		
Permitted Mainland Landfill		
Reclaiming		
Recycling		
Other:		
Permits Required for Disposal:		
Comments:		
WASTE MANAGEMENT AND DISPOSAL PLAN		Page ___ of _____

Waste Transportation			
Waste Stream	Is Waste a DOT HM?	Waste Transportation Method	Transportation Resource
	☐ Yes ☐ No		
	☐ Yes ☐ No		
	☐ Yes ☐ No		
	☐ Yes ☐ No		
	☐ Yes ☐ No		
	☐ Yes ☐ No		
	☐ Yes ☐ No		
	☐ Yes ☐ No		
	☐ Yes ☐ No		
	☐ Yes ☐ No		
Permits Required for Disposal:			
Comments:			
WASTE MANAGEMENT AND DISPOSAL PLAN		Page ___ of _____	

PAGE INTENTIONALLY LEFT BLANK

CONTAINER LOG													
Container ID	Description, Volume	Contents	Location	Date Tested	Sample ID	Waste Type	Date Waste Transported	Manifest No.	Destination Facility	TSDF EPA ID	First Transporter	Transporter EPA ID	Date TSDF Rec'd
EXAMPLE DM-20090304-1	1A1 55 gal steel	PPE	Staging Area 1	3/29/15	xxxx	Non-HW	4/16/09		*** Landfill		A Transporter	Hixxxxx	
EXAMPLE DM-20090304-2	1H2 55 gal, poly	Decon rinse water	Adit 3 Decon station	3/25/15	xxxx	Non-HW	5/1/09		***Disposal Co.		B Transporter	Hixxxxx	

CONTAINER LOG													
Container ID	Description, Volume	Contents	Location	Date Tested	Sample ID	Waste Type	Date Waste Transported	Manifest No.	Destination Facility	TSDF EPA ID	First Transporter	Transporter EPA ID	Date TSDF Rec'd

APPENDIX L
EVACUATION

L.1 INTRODUCTION

The evacuation procedures and plans in this appendix cover the following major fuel storage facilities at Joint Base Pearl Harbor-Hickam (JBPHH):

- Upper Tank Farm (UTF);
- Fuel Oil Reclamation Facility (FORFAC);
- Red Hill Fuel Storage Facility; and,
- Hickam Tank Farm.

In the unlikely event that a fuel spill requires the evacuation of areas outside the immediate fuel facilities mentioned above, COMNAVREG HI will coordinate evacuation within JBPHH and work with local civilian authorities on coordinating evacuation of residential and commercial areas outside of JBPHH.

L.2 GENERAL EMERGENCY EVACUATION PROCEDURES

- Each supervisor is responsible for directing employees and visitors in his/her work area to the proper exit and their assigned safe area outside the facility. ALL PERSONNEL SHALL BE FAMILIAR WITH THEIR EVACUATION PROCEDURES BEFORE THE NEED TO VACATE THE FACILITY EVER ARISES.
- All personnel must know each exit location in the facility and the safest and quickest way out of the facility.
- When an evacuation is announced, STOP WORK. Keep calm and avoid panic, and move to the nearest safe exit in your area.
- When evacuating the facility WALK to the nearest safe exit. DO NOT RUN, nor linger in entrance or driveways.
- Leave the facility and report to your designated assembly area (if safe), or to a safe area away from the building (upwind of the spill). Evacuation routes are shown in Section L.5.
- REPORT to your supervisor once outside the building and follow his/her instructions. Stay in your assigned safe area until instructed otherwise.
- Each supervisor must conduct a “Head Count” and report to the Incident Commander when his/her employees have cleared the facility, and if anyone is missing.

L.3 INCIDENT COMMANDER (IC) RESPONSIBILITIES

- The IC shall direct supervisors to evacuate an affected facility if evacuation procedures have not been activated. Security Forces will provide support as necessary in evacuating personnel from the site and in providing security to ensure that no other personnel beside those associated with the response are in the controlled area.
- If applicable, the IC will instruct the facility operations or maintenance supervisor to shut down all critical operations and utilities at the facility prior to evacuation.
- The IC will determine the need for evacuation of personnel from areas outside the control site. Evacuation distances and directions will be defined based on consultation with the appropriate technical references (e.g., DOT Emergency Response Guidebook), expert advice (e.g., Fire Department Chief in case of actual or potential fire or explosion), actual

conditions (e.g., confined spaces, movement of toxic fumes), and the site-specific contingency plan.

- If facility personnel and base residents need to be evacuated, the IC will initiate the evacuation in accordance with the CNRH Emergency Management Plan (EMP) and contact the NOSC Rep for assistance (473-4689 work, 864-2463 cell, ROC 473-3215).
- If communities off-base need to be evacuated the IC will coordinate with the Hawaii Emergency Management Agency (HIEMA) 733-4300 and the Honolulu Fire Department 831-7771 in implementing community evacuation plans

L.4 EVACUATION PLANS

Table L-1 provides an evacuation plan for the Upper Tank Farm and the Fuel Oil Reclamation Facility. Table L-2 provides an evacuation plan for the Red Hill Fuel Storage Facility, and Table L-3 provides and evacuation plan for the Hickam Tank Farm. All are facilities maintained and operated by NAVSUP FLCPH Fuel Department.

TABLE L-1: EVACUATION PLANS: UPPER TANK FARM AND FORFAC

Topic	Description
PROBABLE SPILL FLOW PATHWAYS	Spills from this facility should be contained in the containment berm. If spilled materials escape the containment berms, the spilled materials may flow to the northwest, down gradient and onto North Road. Some of the spilled material may enter the storm drainage system and from there may enter Magazine Loch.
HAZARDS TO PERSONNEL	These are typical petroleum products. Contact with liquid and/or vapors may be irritating to the skin and the eyes. Inhalation of vapor may cause dizziness, nausea, headaches, loss of consciousness, and prolonged exposure could cause death.
WIND CONDITIONS AFFECTING HAZARDS	Vapors from spilled material will flow downwind. All response should be from the upwind direction. Concentration of vapors may cause vapor concentrations to enter the flammable/explosive range.
WATER CONDITIONS AFFECTING HAZARDS	These materials are lighter than water and may travel in the direction of the prevailing currents and/or winds.
HOW FACILITY ALERTING IS INITIATED	Fuel Operator on duty will sound the fire alarm and notify the following: Regional Dispatch Center at: 911 or 471-7117 Fuel Operation Supervisor at: 561-4677 / NAVSUP FLCPH CDO at: 216-1339
HOW SURROUNDING AREA ALERTING IS INITIATED	Regional Dispatch Center (911) will notify the Federal Fire Department and the NOSC Rep (473-4689 work, 864-2463 cell).
METHODS OF ALERTING FACILITY PERSONNEL	Alarm/radio/telephone.
ALARM/SIREN LOCATIONS	Various locations.
WHO DECLARES EVACUATION	FLCPH Fuel Director or Deputy, On-Scene Incident Commander, or NOSC Rep.
ESTIMATED EVACUATION TIME	10 minutes.
EMERGENCY VEHICLE ARRIVAL ROUTE	Emergency equipment should depart the Federal Fire Station. The entrance to the facility is on the east side of North Road opposite Waterfront Street.
HOW INJURED WILL BE TRANSPORTED	Federal Fire emergency vehicles will be used to transport injured personnel. If additional emergency vehicles are needed, local authorities can be called upon for assistance.
INITIAL STAGING AREAS IN FACILITY	Federal Fire Station will be used as the initial staging area for response equipment.
HOW PERSONNEL ARE ACCOUNTED FOR	Federal Fire Chief will be accountable for response personnel. NAVSUP FLCPH Fuel Director will be accountable for NAVSUP FLCPH Fuel Department Personnel.
EVACUATION ROUTE	The route for evacuation from this facility is to exit the facility and take a right onto North Road, turn right on Neshes Ave and head out the Halawa gate, see Figure L-1.
COMMAND CENTER	Adit 1, Building 59. Alternate: Fuels Office, Building 1757.
COMMUNICATIONS CAPABILITIES	Telephone, fax, radio.
COMMENTS	See Figure L-1 for an evacuation map of the Upper Tank Farm and FORFAC.

TABLE L-2: EVACUATION PLAN: RED HILL FUEL STORAGE FACILITY	
Topic	**Description**
KEY EVACUATION INFORMATION	The Red Hill Fuel Storage Facility is divided up into 6 emergency evacuation zones as shown in Figure L-2. Each of these zones has a primary and alternate escape route and a designated assembly area (see Figure L-2). Note that for emergency evacuation zones 5L and 6L, in the Lower Access Tunnel, that you must take one of the elevators, located on either side of Tanks 17 and 18, up to the Upper Access Tunnel to reach your primary escape route exit. In the case of a power failure there are escape ladders ajacent to each elevator that provide access to the Upper Access Tunnel. In the case of a worst-case release the Pacific Fleet Building (Building 250) near Adit 2 will need to be evacuated. The Regional Dispatch Center will notify the Pacific Fleet Command Duty Officer at 471-3201 of any serious or facility-wide emergency at the Red Hill Facility.
PROBABLE SPILL FLOW PATHWAYS	Spills in the lower tunnel, depending on the size, should be mostly contained in the tunnel. Spilled materials would flow down the Lower Access and Harbor Tunnels towards Adit 1 (Underground Pumphouse). In a worst-case release the contents of one of the underground bulk storage tanks fuel would escape the Harbor Tunnel from Adit 2. Spills exiting Adit 2 (behind the Pacific Fleet Building) would follow topographic and drainage features and discharge into Halawa Stream (which drains into Pearl Harbor).
HAZARDS TO PERSONNEL	These are typical petroleum products. Contact with liquid and/or vapors may be irritating to skin and eyes. Inhalation of vapor may cause dizziness, nausea, headaches, loss of consciousness, and after prolonged exposure could cause death.
WIND CONDITIONS AFFECTING HAZARDS	Vapors from spilled material will follow the the flow of the ventalation system in the tunnel. All response should be from the upwind direction. Concentration of vapors may cause vapor to enter the flammable/explosive range.
HOW FACILITY ALERTING IS INITIATED	Operator on duty will sound the fire alarm and notify the following: Regional Dispatch Center at: 911 or 471-7117 Fuel Operations Supervisor at: 561-4677 Deputy Fuel Director at: 473-7801 or 780-3703 NAVSUP FLCPH CDO at: 216-1339
HOW SURROUNDING AREA ALERTING IS INITIATED	Regional Dispatch Center (911) will notify the Federal Fire Department and the NOSC Rep (473-4689 work, 864-2463 cell).
METHODS OF ALERTING FACILITY PERSONNEL	Alarms/radio/telephone.
ALARM/SIREN LOCATIONS	Various locations throughout Red Hill upper and lower tunnels.
EVACUATION INITIATION (WHO DECLARES EVACUATION)	FLCPH Fuel Director or Deputy, On-Scene Incident Commander, or NOSC Rep.
ESTIMATED FACILITY EVACUATION TIME	30 minutes.
EMERGENCY BREATHING GEAR LOCATIONS	Emergency escape breathing apparatus are stationed in the upper and lower access tunnels and Adit 1 tunnel. In addition, emergency escape breathing apparatus is located in storage lockers located near tanks one and eighteen in the upper and lower tunnels, and also outside the Control room at Adit one.
EMERGENCY VEHICLE ARRIVAL ROUTE	From Coast Guard Housing (Entrance to Adit 4/5).
HOW INJURED WILL BE TRANSPORTED	Federal Fire emergency vehicles will be used to transport injured personnel. If additional emergency vehicles are needed, local authorities can be called upon for assistance.
INITIAL STAGING AREAS IN FACILITY	Entrance to Adit 4/5.
HOW PERSONNEL ARE ACCOUNTED FOR	FLCPH Supervisors must conduct a “Head Count” and report to the Control Room Operator at 471-8081 when his/her employees have cleared the facility, and if anyone is missing. Federal Fire Chief will be accountable for response personnel. Contractors will be responsible for accounting for all of their employees and reporting to the Control Room Operator.
EVACUATION ROUTE	Previously described, see Figure L-2 and L-3.
COMMAND CENTER	Adit 1, Building 59. Alternate: Fuels Office, Building 1757.
COMMUNICATIONS CAPABILITIES	Radio/telephone/fax.
COMMENTS	See Figure L-2 and L-3 for evacuation maps of the Red Hill Fuels Facility.

TABLE L-3: EVACUATION PLANS: HICKAM TANK FARM	
Topic	**Description**
PROBABLE SPILL FLOW PATHWAYS	Spills from this facility should be contained in the containment berm system. If spilled materials escape the containment berms, the spilled materials may flow to the south and could enter the storm drain system. Unrestrained spills may eventually discharge to Mamala Bay via Outfall D.
HAZARDS TO PERSONNEL	These are typical petroleum products. Contact with liquid and/or vapors may be irritating to the skin and the eyes. Inhalation of vapor may cause dizziness, nausea, headaches, loss of consciousness, and prolonged exposure could cause death.
WIND CONDITIONS AFFECTING HAZARDS	Vapors from spilled material will flow downwind. All response should be from the upwind direction. Concentration of vapors may cause vapor concentrations to enter the flammable/explosive range.
WATER CONDITIONS AFFECTING HAZARDS	These materials are lighter than water and may travel in the direction of the prevailing currents and/or winds.
HOW FACILITY ALERTING IS INITIATED	Operator on duty will sound the fire alarm and notify the following: Regional Dispatch Center at: 911 or 471-7117 Fuel Operations Supervisor at 561-4677 NAVSUP FLCPH CDO at: 216-1339
HOW SURROUNDING AREA ALERTING IS INITIATED	Regional Dispatch Center (911) will notify the Federal Fire Department and the NOSC Rep (473-4689 work, 864-2463 cell).
METHODS OF ALERTING FACILITY PERSONNEL	Alarm/radio/telephone.
ALARM/SIREN LOCATIONS	Various locations.
EVACUATION INITIATION (WHO DECLARES EVACUATION)	FLCPH Fuel Director or Deputy, On-Scene Incident Commander, or NOSC Rep.
ESTIMATED FACILITY EVACUATION TIME	10 minutes.
EMERGENCY VEHICLE ARRIVAL ROUTE	Emergency equipment should depart the Federal Fire Station and head northwest on H St. toward Vickers Ave., turn right onto Vickers Ave., turn right onto Fox Blvd., turn right onto Vandenberg Blvd., continue onto Kuntz Ave., turn right onto McClelland St., turn right onto Moffet St, turn left onto Engine Test Rd. The entrance to Building 2125 will be on the right side of the street.
HOW INJURED WILL BE TRANSPORTED	Federal Fire emergency vehicles will be used to transport injured personnel. If additional emergency vehicles are needed, local authorities can be called upon for assistance.
INITIAL STAGING AREAS IN FACILITY	Federal Fire Station will be used as the initial staging area for response equipment.
HOW PERSONNEL ARE ACCOUNTED FOR	Federal Fire Chief will be accountable for response personnel. NAVSUP FLCPH Fuel Director will be accountable for NAVSUP FLCPH Fuel Department Personnel.
EVACUATION	The route for evacuation from this facility is to exit the facility and take McClelland St until it hits Kuntz Avenue. Take a right on Kuntz Ave. and follow it to the Kuntz Gate and out of the base, see Figure L-4.
COMMAND CENTER	Fuels Office, Building 2125, Hickam.
COMMUNICATIONS CAPABILITIES	Telephone, fax, radio.
COMMENTS	See Figure L-4 for an evacuation map of the Hickam Tank Farm.

L.5 EVACUATION MAPS

Figure L-1 shows an evacuation map for the Upper Tank Farm and the Fuel Oil Reclamation Facility. Figures L-2 and 1-3 show the Red Hill Fuel Storage Facility Emergency Evacuation Zones and an evacuation map for the facility. Figure L-4 shows an evacuation map for the Hickam Tank Farm.

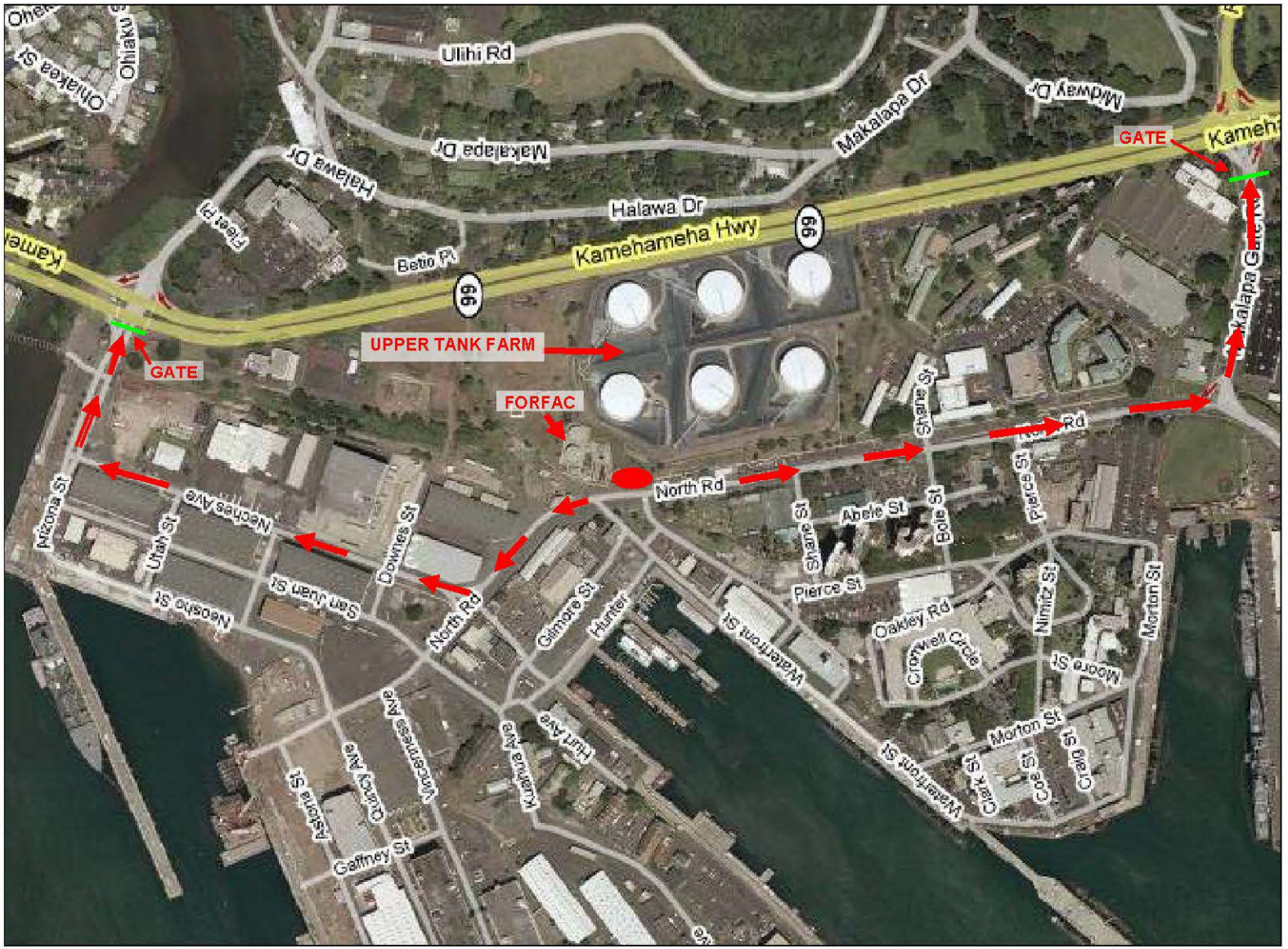


FIGURE L-1: EVACUATION MAP FOR UPPER TANK FARM AND FORFAC

PAGE INTENTIONALLY LEFT BLANK

ZONE	ESCAPE ROUTE	ALT. ROUTE
1	ADIT 1	ADIT 2
2	ADIT 2	ADIT 3
3	ADIT 3	ADIT 6
4U	ADIT 4	ADIT 5
4L	ADIT 3	ADIT 6
5U	ADIT 5	ADIT 4
5L	ADIT 5	ADIT 6
6U	ADIT 5	ADIT 6
6L	ADIT 6	ADIT 3

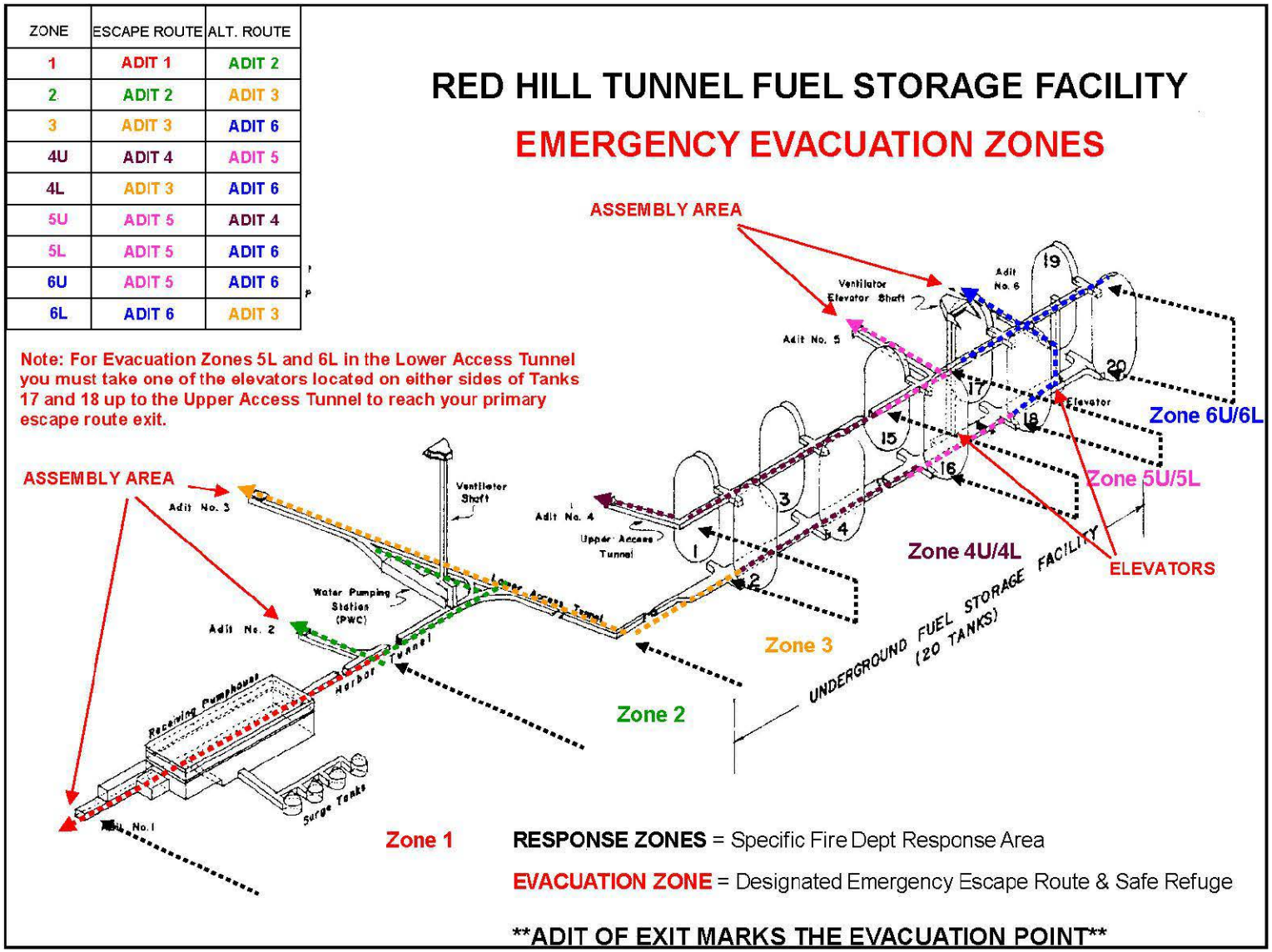


FIGURE L-2: RED HILL EMERGENCY EVACUATION ZONES

PAGE INTENTIONALLY LEFT BLANK

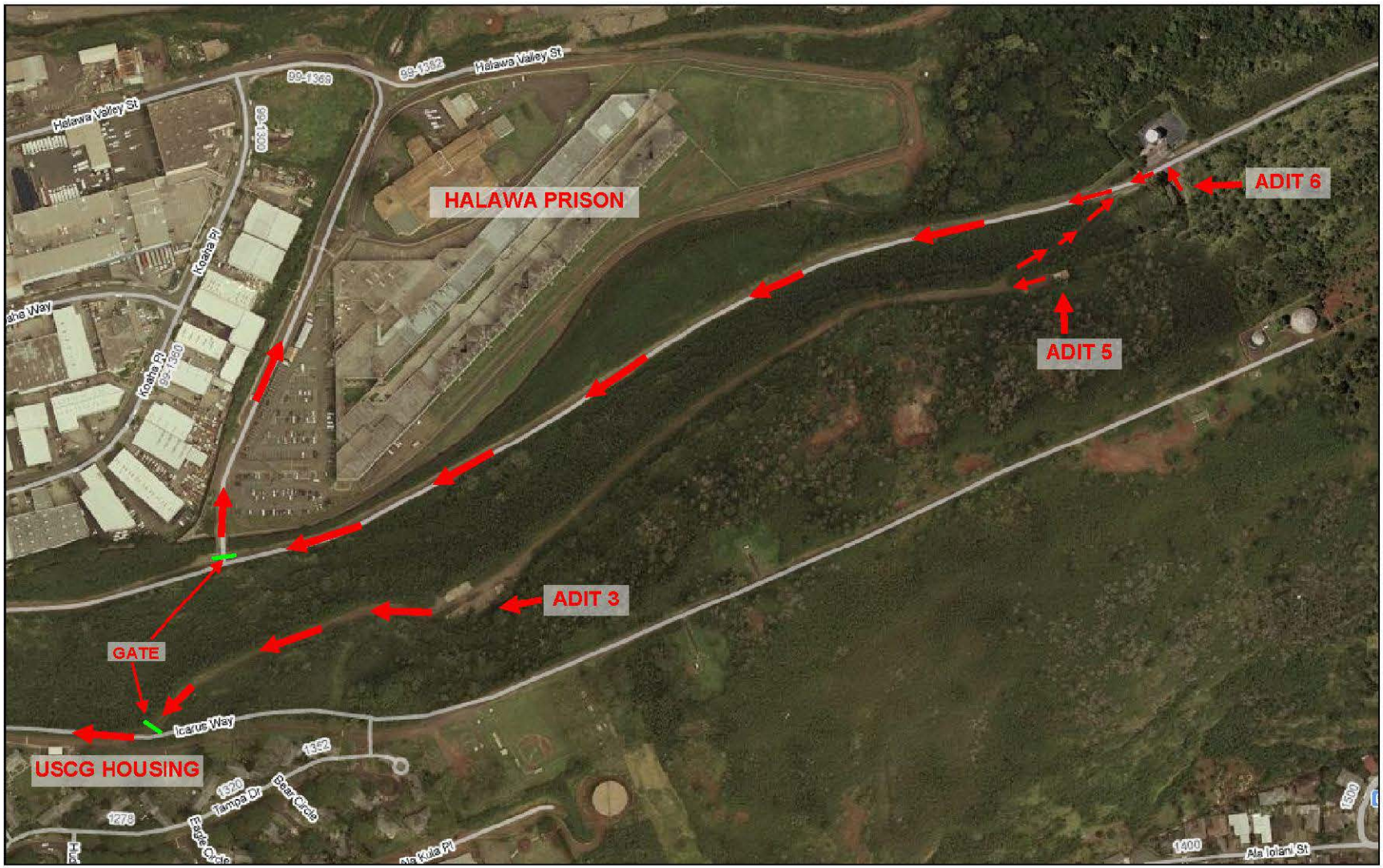


FIGURE L-3: EVACUATION MAP FOR RED HILL FUEL STORAGE FACILITY

PAGE INTENTIONALLY LEFT BLANK

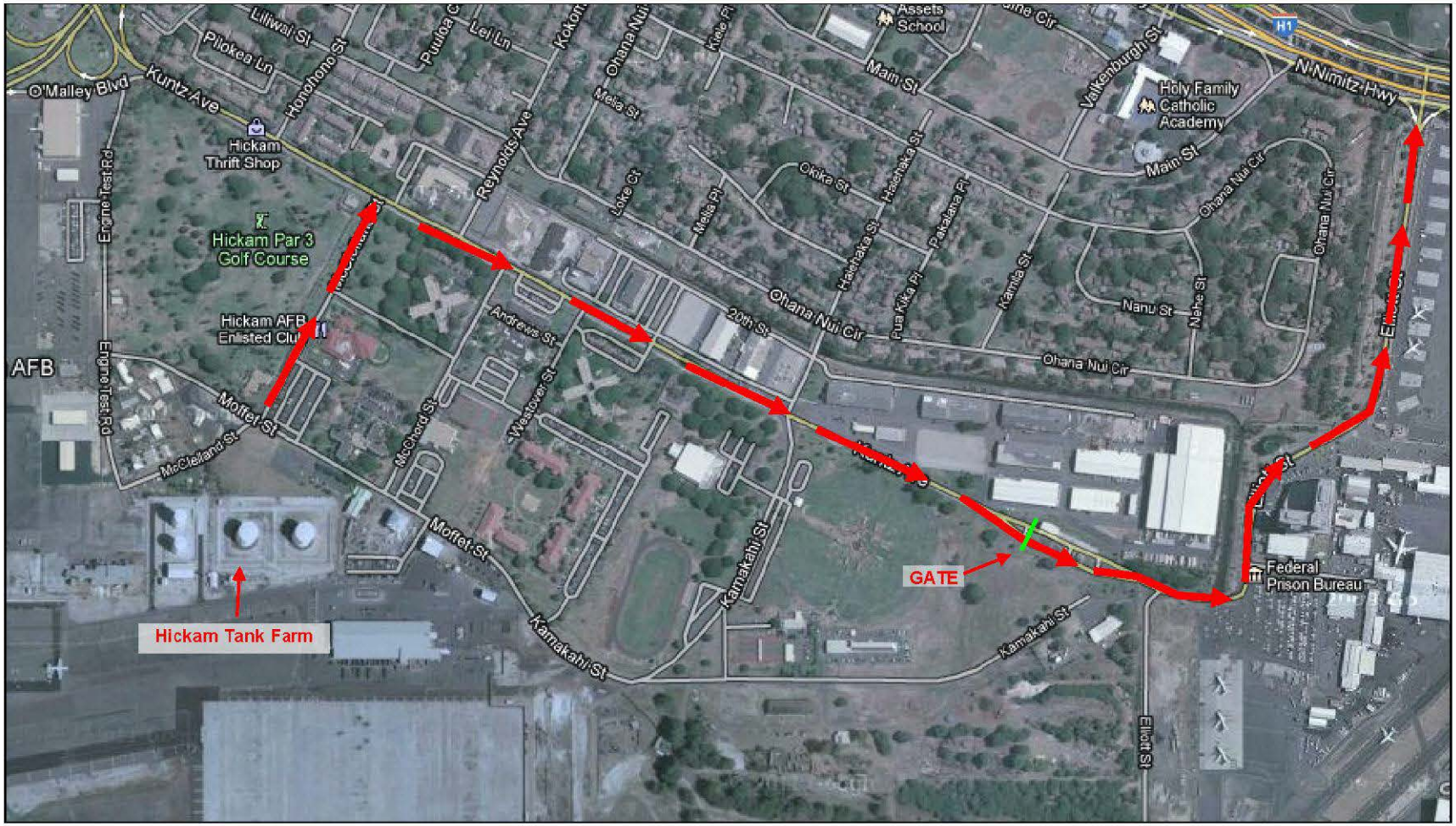


FIGURE L-4: EVACUATION MAP FOR HICKAM TANK FARM

PAGE INTENTIONALLY LEFT BLANK

APPENDIX M
FIGURES

M.1 FIGURES

This appendix contains the following figures:

Figure M-1: Joint Base Pearl Harbor-Hickam AST Maps
- Figure M-1A: Naval Shipyard #1
- Figure M-1B: Naval Shipyard #2
- Figure M-1C: Naval Shipyard #3
- Figure M-1D: Naval Shipyard #4
- Figure M-1E: Hickam AFB #1
- Figure M-1F: Hickam AFB #2
- Figure M-1G: Hickam AFB #3
- Figure M-1H: Hickam AFB #4
- Figure M-1I: NAVMAG West Loch
- Figure M-1J: Kalaeloa (Barbers Point)
- Figure M-1K: RTF Lualualei
- Figure M-1L: Wahiawa Annex
- Figure M-1M: Pearl City
- Figure M-1N: Ford Island
- Figure M-1O: NEX Mall and Golf Course
- Figure M-1P: Camp Smith
- Figure M-1Q: Red Hill

Figure M-2: Joint Base Pearl Harbor-Hickam UST Maps
- Figure M-2A: Naval Shipyard
- Figure M-2B: Hickam AFB
- Figure M-2C: Red Hill Facility
- Figure M-2D: RTF Lualualei
- Figure M-2E: Wahiawa Annex
- Figure M-2F: Kalaeloa (Barbers Point)

Figure M-3: Joint Base Pearl Harbor-Hickam Stormwater Drainage Maps
- Figure M-3A: Naval Facilities
- Figure M-3B: Hickam Airfield

Figure M-4: Joint Base Pearl Harbor-Hickam Booming Strategies Map

Figure M-5: Joint Base Pearl Harbor-Hickam Response Resources Map

PAGE INTENTIONALLY LEFT BLANK

NAVAL SHIPYARD

Building # 614
AST C-22
500 Gal Diesel

Building # 1579
AST C-34
300 Gal Diesel

Building # 1759
AST FLC-1759-PT
100 Gal Diesel

Building # 1685
AST FLC-1685-1
200 Gal
Reclaimed Fuel
AST FLC-1685-2
280 Gal
Reclaimed Fuel

Building # 9478
AST FLC-9478-1-SG
86 Gal Diesel

Building # 9478
AST FLC-9478-2
120 Gal Diesel

Building # 9478
AST FLC-9478-3-DR
3,300 (60@55-gal.
drums max.)
POL Products

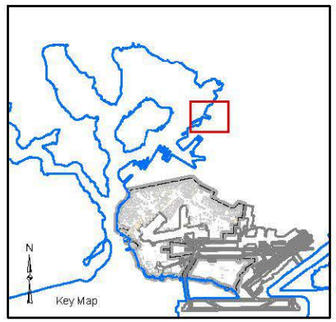
Building # 1747
FLC-1747-DR
44,000 (800@55-gal.
drums max.)
POL Products

Building # 352
AST 352-1 2
75 Gal's Each
Diesel
AST 352-3
100 Gal
Diesel
352-4
110 (2@55-gal.
drums max)
New and Used POL

Building # 401
AST 401-1, 2
150 Gals Each
Diesel

Building # 250
AST 250-1
4,000 Gal
Diesel
AST 250-2
100 Gal
Diesel

Building # 372
AST M-372-SG
700 Gal Diesel



N

Figure M-1A
Naval Shipyard #1

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

NAVAL SHIPYARD

Building # 1718
AST FLC-1718-1
2500 Gal Diesel
AST FLC-1718-2
650 Gal Diesel
AST FLC-1718-3
650 Out of Service

Building # 643
AST D-18
1,000 Gal Diesel
AST D-18A
500 Gal Diesel

Building # 490
Tanker Trucks 490
FLC-490-TP
21,000 Gals
POL Oil Products

Building # S660
AST FLC-S660--301
231,924 Gals Diesel
(F-76)/Jet A

Building # 1811
AST FLC-1811
10 145 Gal
Steam Turbine Lube Oil
AST FLC-1812
10 249 Gal Lube Oil
FLC-S660-TR
Tank Truck Rack

Building # 1721
AST FLC-1721
500 Gal Diesel

Building # Adit 1
AST FLC-Adit 1
1,000 Gal Diesel

Building # 1613
AST FLC-1613
1,000 Gal Diesel

Building # S770
AST B-1
FLC-S770-B-1
378,000 Gal Oily Water
AST B-2
FLC-S769-B-2
378,000 Gal
Fuel Oil Reclaimed

Building # 1581
AST C-62
392 Gal Diesel

Building # 449
AST FLC-449-DR
605 (11@55-gal
drums max.)
POL Products/
Used Oil

Building # 1326
NS-1326-MGS

Building # 1751
AST 55
FLC-1751-55
6,300,000 Gal JP-5

Building # 1649
AST D-28
200 Gal Diesel

Building # 1771
AST C-32
180 Gal Diesel

Building # S756
AST 48
FLC-S756-48
6,300,000 Gal Diesel

Building # S762
AST 54
FLC-S762-54
6,300,000 Gal F-76

Building # 1584
AST C-61
392 Gal Diesel

Building # 1538
AST C-21
500 Gal Diesel

Building # S755
AST 47
FLC-S755-47
6,300,000 Gal JP-8

Building # 1586
AST C-33
200 Gal Diesel

Building # 1554
AST FLC-1554
300 Gal Slop Oil

Building # S761
AST 53
FLC-S761-53
6,300,000 Gal JP-8

Building # 1694
AST SB-1694-1
1000 Gal Diesel
AST SB-1694-2-SG
150 Gal Diesel

Building # S754
AST 46
FLC-S754-46
6,300,000 Gal Jet-A

Building # 1552
AST SB-1552
500 Gal Diesel

Building # 1487
AST NS-1487
1000 Gal Diesel

Building # 1366
AST NS-1336-SG
145 Gal
Diesel

Building # 1731
AST SB-1731-1
100 Gal Diesel
AST SB-1731-2
75 Gal Diesel

Building # 229
Drums A-1
1,100 (20@55-gal.
drums - average)
New & Used POL

Building # 1575
AST C-29
700 Gal Diesel

Building # 1396
AST C-20
1000 Gal Diesel
AST C-20A
75 Gal Diesel
AST C-20B
86 Gal Diesel

Building # 926
AST NS-926
120 Gal Diesel

Building # 1395
AST C-18
200 Gal Diesel

Building # 553
Drums A-3
3,850 (70@55-gal.
drums average)
Used POL
530 (2@265-gals
polytanks)
used cooking oil.

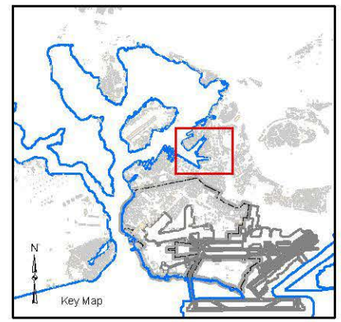
Building # 1582
AST C-19
250 Gal Diesel

Building # 1492
AST NS-1492-SG
147 Gal Diesel

Building # 1623
AST NS-1623
1000 Gal Diesel

Building # 1540
AST C-30
150 Gal Diesel

Building # 1634
AST NS-1634-SG
260 Gal Diesel



N

Figure M-1B
Naval Shipyard #2

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

NAVAL SHIPYARD

Building # 297
AST D-1
2,000 Gal
Low Sulfur Diesel

Building # 149
AST D-4
50,000 Gal JP-5
AST D-6
500 Gal Diesel
AST D-7
600 Gal Diesel
AST D-8
1,540 (28@55-gal. drums average)
New and Used Oil

Building # 41
AST D-30
150 Gal Diesel

Building # 397
AST NS-397-1
250 Gals Diesel
AST NS-397-2
200 Gals Diesel
AST NS-397-3
250 Gal Diesel

Building # S-169
AST E-11
12,000 Gal Diesel/Gasoline (6,000 Gal Each)
AST E-12
12,000 Gal Diesel/Gasoline (6,000 Gal Each)
AST E-13
10,000 Gal Ethanol (E-85)

Building # S-169
Mobile Tankers
EP-5, EP-8
2,000 Gal each Diesel
EP-9
2,000 Gal
JP-5

Building # 150
AST NS-H14-SG
600 Gal Diesel

Building # 165
AST D-32
120 Gal Diesel

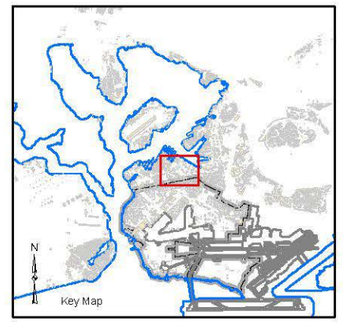
Building # 1315
AST NS-1315
75 Gal Diesel

Building # 1208
AST NS-1208-SG
160 Gal Diesel

Building # 35
AST ES-1
3,190 (58@55-gal. drums average)
Drums Spill Pallets
New and Used POL
AST ES-2
335 Gal Diesel

Building # 197
AST E-14
250 Gal Used Oil
ES-3
1,760 (32@55-gal. drums average)
New and Used POL

Building # 166
Drums B-3,
385 (7@55-gal. drums average)
Insulating Oil
B-5
1,375 (25@55-gal. drums average)
Used Insulating Oil
B-6
330 (6@55-gal. drums average)
New and Used
Insulating Oil



N

Figure M-1C
Naval Shipyard #3

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

Building # 1393
AST C-23
200 Gal Diesel

Building # 1424
AST T-4
10,000 Gal Oily Wastewater
AST T-9
4,000 Gal Oily Wastewater
AST T-10
500 Gal Used Oil

Building # 1425
AST T-31
180 Gal Diesel

Building # 177
AST D-5
9,000 Gal JP-5
AST D-11
10,000 Gal JP-5
AST DP-1
Mobile Tank
250 Gal Diesel

AST DP-7, 8
500 Gal Diesel
AST DP-6, 9
250 Gal Diesel
AST DP-11
169 Gal Diesel
AST DP-12
272 Gal Diesel
AST DP-13
230 Gal Diesel
AST DP-15
100 Gal Diesel
AST DP-16
370 Gal Diesel

Building # 1358
AST C-27
250 Gal Diesel

Building # 284
AST NS-284-1 to 7
65 Gal's each
Lube Oil
NS-284-8-DR
440 (8@55-Gal
Drums Max)
Used Oil

NAVAL SHIPYARD

Building # 1910
AST 73, 74, 75
10,000 Gal Oil Sludge

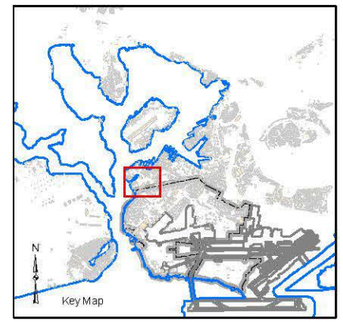
Building # S-726
AST 9
10,000 Gal Used Oil
AST 20
20,000 Gal Sludge

Building # S-1068
AST 7
400 Gal Oily Sludge
AST 15
2000 Gal Oily Sludge
AST 21
2300 Gal Used Oil
AST 10, 11, 12. 13, 14
5 @ 1000 Gal Each Oily Sludge
AST 51 & 52
2 @ 5000 Gal Used Oil
AST 71
7000 Gal Used Oil

Building # 1871
AST C-24
3500 Gal Diesel
AST C-24A
300 Gal Diesel
AST C-24B
244 Gal Diesel

Building # 1910
AST A-5
3000 Gal Oily Sludge
AST A-6
3000 Gal Oily Sludge

Building # B-S726
AST A-4
1,600,000 Gal Bilge Water



N

Figure M-1D
Naval Shipyard #4

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

HICKAM

Building # 1207
AST H-1207-262-PG
90 Gal Diesel

Building # 1207
AST H-1207-476-PG
55 Gal Diesel

Building # 1207
AST H-1207-599-PG
90 Gal Diesel

Building # 1207
AST H-1207-636-PG
100 Gal Diesel

Building # 1207
AST H-1207-721-PG
100 Gal Diesel

Building # 1207
AST H-1207-748-PG
200 Gal Diesel

Building # 1207
AST H-1207-363-PG
80 Gal Diesel

Building # 1207
AST H-1207-359-PG
80 Gal Diesel

Building # 1207
AST H-1207-700-PG
125 Gal Diesel

Building # 1207
AST H-1207-813-PT
179 Gal Diesel

Building # 1207
AST H-1207-063-PG
90 Gal Diesel

Building # 1207
AST H-1207-260-PG
90 Gal Diesel

Building # 1207
AST H-1207-814-PT
120 Gal Diesel

Building # 1207
AST H-1207-034-PG
55 Gal Diesel

Building # 1207
AST H-1207-018-PG
90 Gal Diesel

Building # 1207
AST H-1207-4318-PT
90 Gal Diesel

Building # 1207
AST H-1207-1 & 15-PG
200 Gal's each Diesel

Building # 1235
AST H-1235-SG
100 Gal Diesel

Building # 1207
H-1207-1, 2, 3
60 Gal's each
New Lube Oil
H-1207-4-DR
55 Gal Drum Press
Used Oil

Building # 1207
AST H-1204-SG
100 Gal Diesel

Building # 1200
H-1200-DR
550 (10@55-gal
drums max) Used Oil

Building # 1073
AST H-1073H-1
500 Gal Used Oil
AST H-1073-S1
1,650 (30@55-gal.
drums max.) POL

Building # 1109
AST H-1109-1
500 Gal Diesel
AST H-1109-2, 3, 4, 5, 6, 7
6 AST's @ 100 Gal's each
Diesel

Building # 1110
AST H-1110-SG
100 Gal Diesel

Building # 1120
AST H-1120
500 Gal Diesel

Building # 668
AST H-668-SG
80 Gal Diesel

Building # 1001
AST H-1001-SG
100 Gal Diesel

Building # 1037
H-1037-MGS

Building # 2051
AST H-2051-SG
100 Gal Diesel

Building # 2093
AST H-2093-SG
150 Gal Diesel

Building # 1037
AST E-15
99 Gals Diesel

Building# 2030
H2030-3-DR
275 ;5@55-gal.
drums max)
New Lube Oil
H2030-4-DR
275 ;5@55-gal.
drums max)
Used Oils

Building # 1108
AST H-1108
1,000 Gal Diesel

Building # 2072
H-2072-MSG

Building # 2073
AST H-2073-1
360 Gal Motor Oil
AST H-2073-2
300 Gal Used Oil

Building # 1070
AST FLC-1070-DR
8,910 (162@55-gal.
drums max.) POL

Building # 1052
AST H-1052-1, 2, 3, 4
350 Gal's each Diesel

Building # 2073
AST H-2073-3, -4, -5
110 Gal's Each Lube Oil

Building # 2125
AST H-2125-2-SG
80 Gal Diesel
FB92 & FB93
400 Gal
Reclaimed F-24

Building # 726
AST H-726-SG
75 Gal Diesel

Building # 986
AST H-986-1
AST H-986-2
3,042 Gal's each
Diesel

Building # 2073
H-2073-6-DR
220 (4@55-gal
drums max) Used POL

Building # 1050
AST H-1050
112 Gal Diesel

Building # 2030
AST H-2030-1
1,500 Gal's, F-24
1,500 Gal's, Diesel
AST-H-2030-2
3000 Gal Diesel

Building # 83228
AST H-83228-SG
100 Gal Diesel

Building # 2135
AST H-2135
200 Gal Diesel

Building # 2160
AST H-2160-SG
80 Gal Diesel

Building # 17
AST B-17-SG
208 Gal Diesel

Building # 2002
AST H-2002-1
260 Gal Used Oil
AST H-2002-S1
935 (17@55-gal.
drums max.) POL

Building # 2002
AST 2002H
8,000 Gal E-85

Building # 54
AST B-54-1
1000 Gal Diesel
B-54-2-DR
825 (15@55-gal.
drums average) POL

Building # 2036
AST H-2036-SG
100 Gal Diesel

Building # 52
AST C-35
150 Gal Diesel

Buildirg # 2030
7 - LASS A/M32A-95
80 Gals Jet Fuel
6 - B809D
56 Gals Diesel
2 - GTC A/M32A-60
190 Gals Jet Fuel
3 - MA-3D
60 Gals Diesel
1 - A/27T-17
60 Gals Diesel

Building # 2028
AST H-2028-SG
260 Gal Diesel

Building # 2023
AST OB91
400 Gal Used Oil
AST FB95
600 Gal
Reclaimed F-24

Building # 19
AST B-19-1,2,3,4
65 Gal's Each Lube Oil
B-19-5-DR
1,320 (24@55-gal
drums max) POL

Building # 2030
OB92 & HB01
200 Gal's each Used Oil
HFO1
400 Gal Diesel
FB85
440 Gal's
Reclaimed JP-8

Building # 2039
AST H-2039-SG
157 Gal Diesel

Building # 2023
H-2023H-S1
550 (10@55-gal.
drums max.)
Used Oil

Building # 2003
AST H-2003-SG
150 Gal Diesel

Key Map

N

FIGURE M-1E
HICKAM AFB #1

AST Maps

COMNAVREG HI ICP

PCCI

Updated 12/28/2018, by: K. Lindsey, PCCI, Inc.

N02089

Exhibit N-6N

Building # 2125
AST FLC-2125-TP
(17 R-11 Refuelers
@ 6,000 gals each and
2 C300 Tank Trucks
@ 1,200 gals each)
104,400 GAL's MAX

Building # 2169
AST H-5-3
2,000 Gal
Reclaimed JP-8

Building # 2125
POL-Bowser-1 & 2
400 Gal's each
Reclaimed JP-8
POL-Bowser-3
220 Gal
Reclaimed JP-8

Building # 2115
AST H-2115
1000 Gal Diesel

Building # 12604
FLC-12604/5-TR
TankTruck Rack
POL

Building # 2169
AST FLC-2169-5-1
AST FLC-2169-5-2
30,000 Gal's each
Diesel

Building # 2125
AST H-2125-1
500 Gal
Reclaimed JP-8

Building # 2169
AST FLC-2169-9-3
AST FLC-2169-9-4
15,000 Gal's each
JPTS

Building # 2192
AST H-2192
250 Gal Diesel

Building # 1629
AST H-1629-SG
175 Gal Diesel

Building # 7475
AST H-7475-SG
109 Gal Diesel

HICKAM

Building # 4072
AST H-4072-SG
175 Gal Diesel

Building # 1728
AST H-1728
300 Gal Diesel

Building # 1754
H-1754-MGS

Building # 4002
AST H-4002
500 Gal Used Oil

Building # 1861
AST H-1861-SG
260 Gal Diesel

Building # 2169
AST H-2169-1
2,000 Gal EMPTY
AST H-2169-2-SG
107 Gal Diesel

Building # 2170
AST FLC-2170-11-1
2,310,000 Gal JP-8

Building # 1856
AST H-1856
500 Gal Diesel

Building # 2150
AST FLC-2150
250 Gal POL

Building # 2170
AST FLC-2170-11-2
2,310,000 Gal JP-8

Building # 1854
AST H-1854
275 Gal Diesel

Building # 1852
AST H-1852
275 Gal Diesel

Building # 2152
AST 2152-SG
400 Gal Diesel

Building # 2160
AST H-2160-SG
80 Gal Diesel

Building # 4119
AST H-4119-3-DR
(4 55-Gal Drums)
220 Gal Max
New and Used Oil

Building # 2170
AST FLC-2170-11-4
1,050,000 Gal JP-8

Building # 4119
AST H-4119-1
1000 Gal Diesel

Building # 2154
AST 2154-SG
300 Gal Diesel

Building # 2170
AST FLC-2170-11-3
1,050,000 Gal JP-8

Building # 4119
AST H-4119-2
500 Gal Diesel

Key Map

N

FIGURE M-1F
HICKAM AFB #2

AST Maps

COMNAVREG HI ICP

PCCI

Updated 12/28/2018, by: K. Lindsey, PCCI, Inc.

N02090

Exhibit N-6N

NAVY0006181

Building # 2010
AST H-2010-A
120 Gal Used Diesel
AST H-2010-B
170 Gal Used Oil

Building # 2010
AST H-2010-S1
330 (6@55-Gal. Drums) POL

Building # 2010
AST H-2010-C
500 Gal
Reclaimed Jet Fuel

Building # 1701
AST C-4
5,200 Gal Diesel
AST C-5
5,200 Gal Diesel

Building # 1699
AST C-3
275 Gal Diesel

Building # 1356
CS-1
165 (3@55-Gal Drums Average)
POL

Building # 1352
AST C-1
983 Gal Diesel

Building # 3006
AST H-3006-1
572 Gal Diesel

Building # 3006
AST H-3006-2
572 Gal Diesel

Building # 3008
AST H-3008H-S1
2,750 (50@55 gal. Drums Average)
Used Insulating Oil

Building # 3205
AST H-3205-SG
100 Gal Diesel

Building # WWTP
AST CP-1
90 Gal Diesel
AST CP-2
50 Gal Diesel
AST CP-3
60 Gal Diesel

Building # 6888
AST C-63
2,400 Gal Diesel

Building # 3395
AST H-3395
500 Gal Diesel

HICKAM

N

Key Map

FIGURE M-1G
HICKAM AFB #3

AST Maps

COMNAVREG HI ICP

PCCI

Updated 12/28/2018, by: K. Lindsey, PCCI, Inc.

N02091

Exhibit N-6N

NAVY0006182

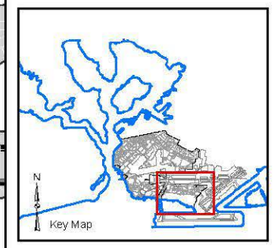
Buiilding # 3592
AST H-3592-SG
400 Gal Diesel

Buiilding # 3576
AST H-3576-1
450 Gal Mogas

Buiilding # 3576
AST H-3576-2
550 Gal Diesel

Building # 3577
AST H-3577-DR
220 (4@55 Gal
Drums Max
Used Oil

HICKAM



N

FIGURE M-1H
HICKAM AFB #4

AST Map

COMNAVREG HI ICP

PCCI

Updated 12/28/2018, by: K. Lindsey, PCCI, Inc.

N02092

Exhibit N-6N

Building # 550
AST C-66
300 Gal Diesel

Building # 549
AST C-64
150 Gal Diesel

Building # 3
AST WL-3
1,000 Gal Diesel/Gasoline
(500 Gals Each)

Building # 5
AST WL-5-DR
385 (7@55-gal
drums max)
Lube & Hydraulic Oils

Building # 540
AST WL-540-SG
75 Gals Diesel

Building # 542
AST WL-542
900 Gals Diesel

Building # 482
AST C-53
67 Gals Diesel

Building # 568
AST WL-568-DR
110 (2@55-gal drums max)
Denatured Oil and Lube Oil

Building # 573
AST WL-573-DR
2,200 (40@55-gal. drums average)
Hydraulic Fluid, Motor Oil, Lube Oil

NAVMAG WEST LOCH

Building # 440
AST WL-440-1
1,000 Gals Diesel
AST WL-440-2
275 Gals Preservative Oil
AST WL-440-3
250 Gals Lube Oil

Building # 562
AST WL-562
250 Gals Diesel

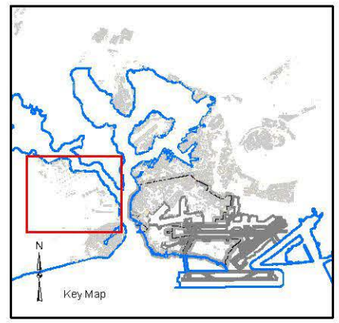
Building # 569
AST WL-569
400 Gals Diesel

Building # 567
AST C-65
135 Gals Diesel

Building # 600
AST WL-600-1-SG
75 Gals Diesel
Building # 600
AST WL-600-2-SG
200 Gals Diesel

Building # 603
AST WL-603-SG
100 Gals Diesel

Building # 559A & B
AST E-3
5,000 Gals Diesel
AST E-4
5,000 Gals Mogas



N

Figure M-1l
NAVMAG West Loch

AST Maps

COMNAVREG HI ICP

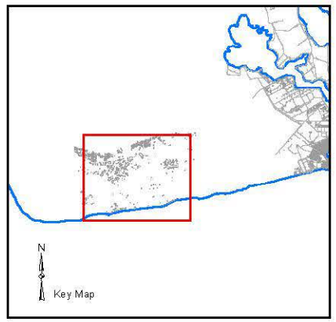
PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

KALAELOA (Barbers Point)

Building # 1928
1928-MSG

Building # 1927
AST KRD-1927-1
250 Gals Mogas
AST KRD-1927-2
250 Gals Diesel



N

Figure M-1J
KALAELOA (Barbers Point)

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

RTF Lualualei

Building # 81
AST RFT-81-1
2,500 GALs Diesel
AST RFT-81-2-SG
200 GALs Diesel
AST RFT-81-3-SG
250 GALs Diesel
AST RFT-81-4-SG
200 GALs Diesel

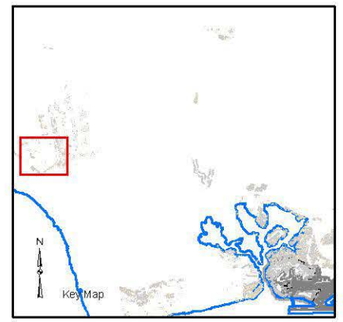
Building # 81
RTF-81-5-DR
220 (4@55-gal. drums max)
Lube Oil

Building # S-531
AST D-26
150 Gals Diesel

Building # 4
RTF-4
650 Gals Diesel

Building # 2A
AST LLL-2A-SG
75 Gals Diesel

Building # 415
AST E-1
5,000 Gals Diesel
AST E-2
5,000 Gals Mogas



N

Figure M-1K
RTF Lualualei

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

WAHIAWA ANNEX

Building # 234
AST WAH-234-1, 2
275 Gal's Each Diesel
AST WAH-234-3
100 Gal's Diesel
AST WAH-234-4-SG
500 Gal's Diesel
AST WAH-234-5
135 Gal's Diesel

Building # 411
AST WAH-411-1&2
8,000 Gals Each Diesel

Building # 411
AST WAH-411-3&4
350 Gals Each Diesel
WAH-411-5-DR
55 Gals Used Oil

Building # 500
AST WAH-500-1
30,000 Gals Diesel

Building # 440
AST D-27
180 Gals Diesel

Building # 500
AST WAH-500-2, 3, 4
400 Gals Each Diesel

Building # 669
AST WAH-669-1
2,000 Gals Diesel
AST WAH-669-2-SG
127 Gals Diesel
AST WAH-669-3-SG
335 Gals Diesel

Building # 242
AST WAH-242
80 Gals Diesel

Building # 6
AST WAH-6-PG
150 Gals Diesel

Building # 321
AST D-34
850 Gals Diesel

Building # S-238
AST E-7
5,000 Gals Mpgas

Building # 409
AST WAH-409-1&2
15,000 Gals Each Diesel
AST WAH-409-3, 4, 5
275 Gals Each Diesel

Building # 109
AST WAH-109-1
5,200 Gals Diesel
AST WAH-109-2, 3
275 Gals Each Diesel

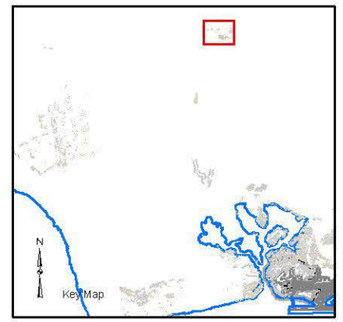
Building # 329
WAH-329-MGS

Building # 466
AST WAH-466
150 Gals Diesel

Building # 261
AST WAH-261-1, 2
150 Gals Each Diesel

Building # 229
AST WAH-229-SG
80 Gals DIESEL

Building # 5
AST WAH-5
250 Gals Diesel



N

Figure M-1L
Wahiawa Annex

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

Building # PC-051
AST C-60
194 Gal Diesel

Building # 794
AST PC-794-1
10,000 Gal Mogas
AST PC-794-2
6,000 Gal Mogas

Building # 794
AST C-48
369 Gal Diesel

PEARL CITY

Building # 994
AST C-43
100 Gal Diesel

Building # 992
AST PC-992-SG
190 Gal Diesel

Building # 8002
AST C-44
75 Gal Diesel

Building # 8000
AST C-47
75 Gal Diesel

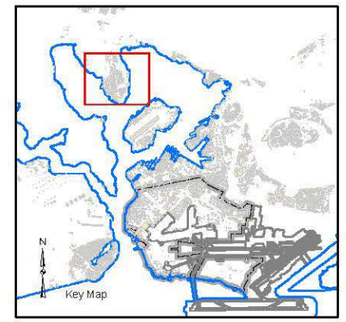
AST PC-995-1
1,000 Gal Mogas
AST PC-995-2
2,000 Gal Diesel
AST PC-995-3
5,200 Gal Mogas

Building # 987
AST PC-987-1-SG
250 Gal Diesel

PC-1020-DR
110 (2@55-gal. drums max)
Lube Oil
PC-1022-DR
220 (4@55-gal. drums max.)
Hydraulic Oil

PC-989-1-DR
55 Gal Used Oil
PC-989-2-DR
55 Gal Used Oil
PC-989-3-DR
55 Gal Used Oil

PC-987-2-DR
55 Gal Used Oil
PC-987-3-DR
330 (5@55-gal. drums max)
Used POL



N

Figure M-1M
Pearl City

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

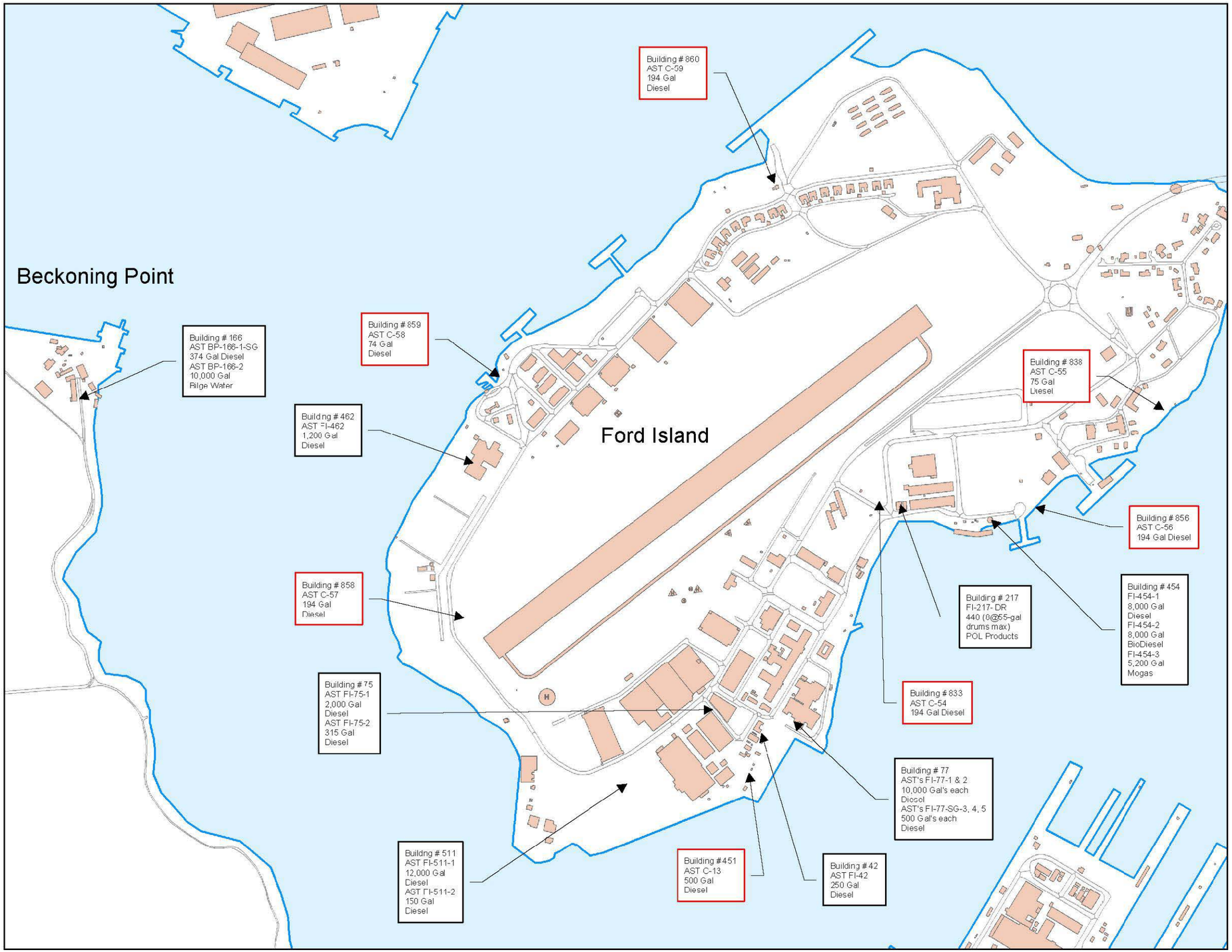


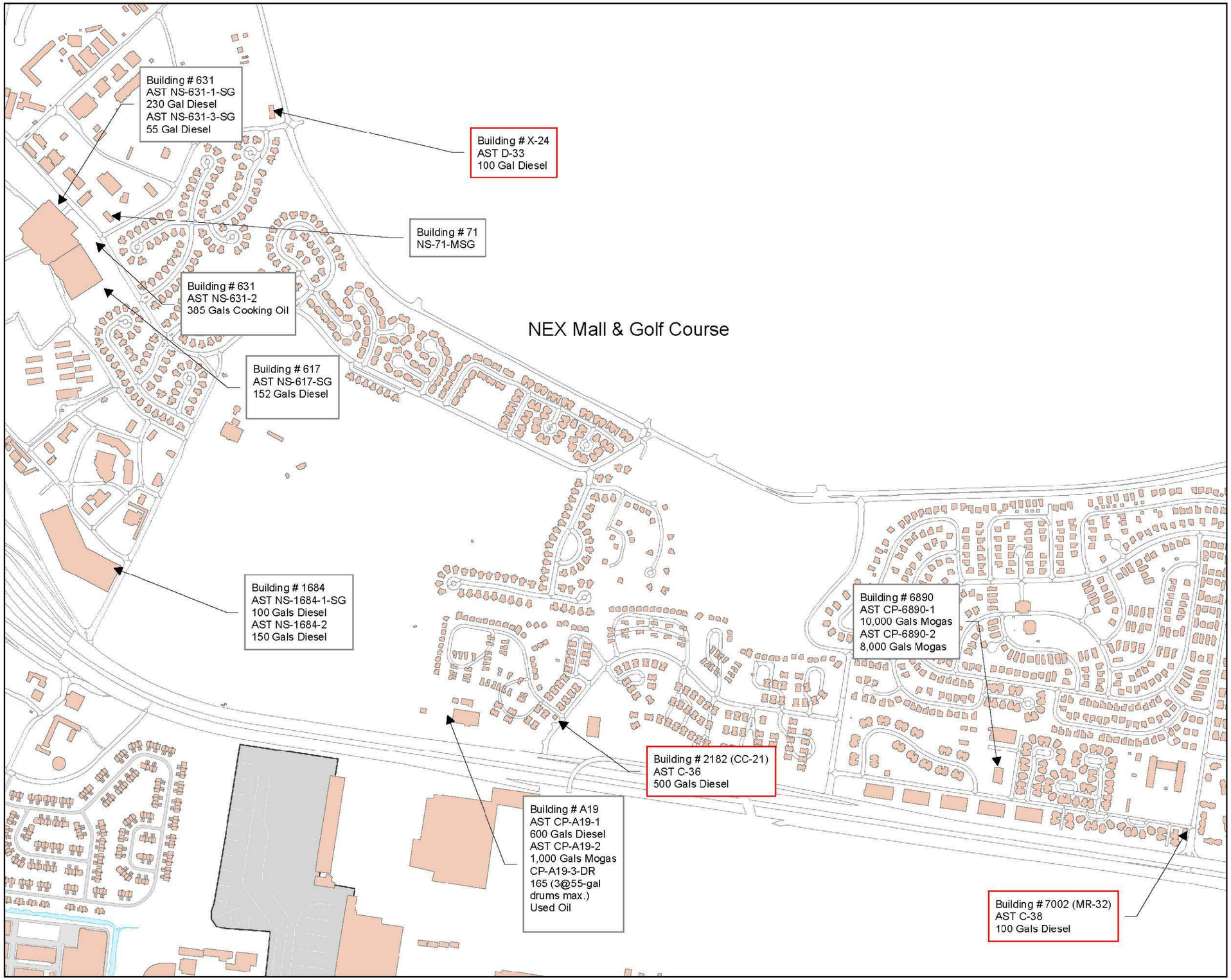
Figure M-1N
Ford Island

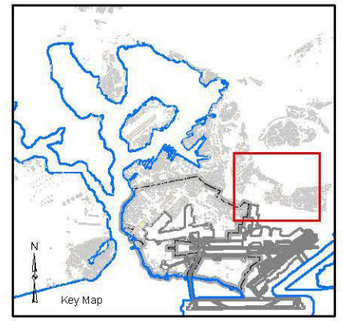
AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.





N

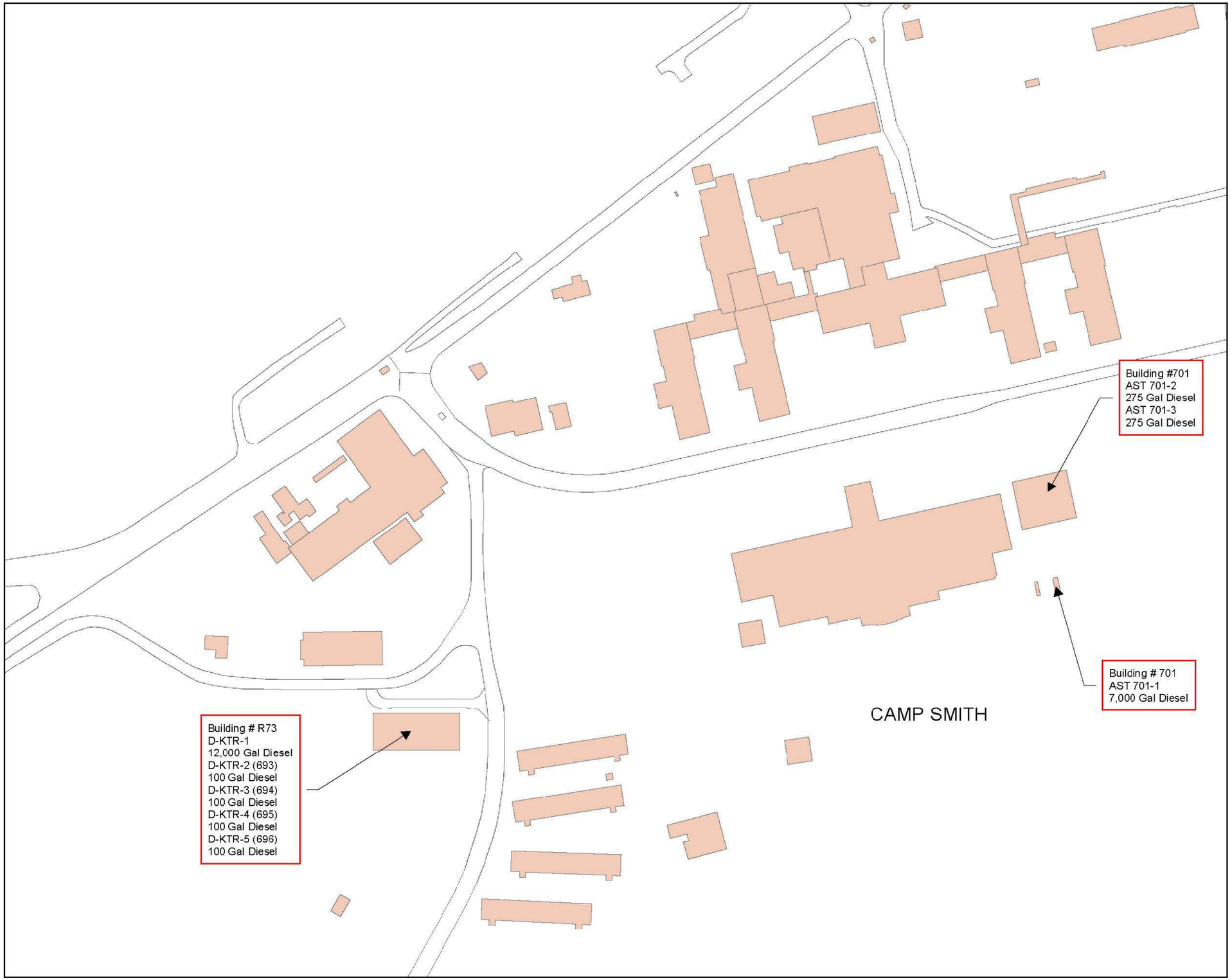
Figure M-1O
NEX Mall & Golf Course

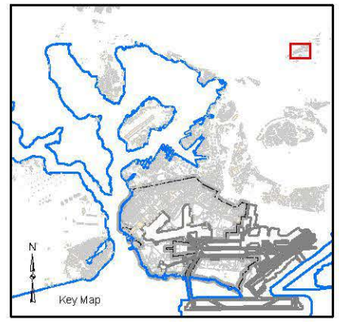
AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.





N

Figure M-1P
Camp Smith

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

N02100

Exhibit N-6N

Red Hill

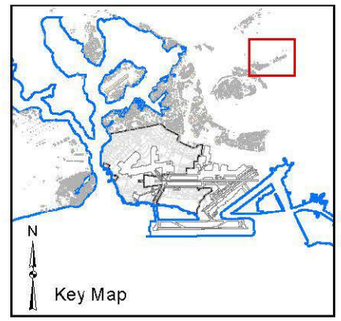
Building # 310
AST FLC-310-SG
235 Gal Diesel

Building # S311
AST FLC-S311
40,000 Gal Slop Oil

Building # 685
Water Storage tank

Building # S-307
AST D-24
5,000 Gals Low Sulfur Diesel
AST D-24A
200 Gals Low Sulfur Diesel

Building # S-312
AST D-19
175 Gal Diesel



N

Figure M-1Q
Red Hill

AST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

N02101

Exhibit N-6N

Building # 401
UST JPAC-3
8,000 Gals Diesel

Building # 352
UST JPAC-1, 2
6,000 Gals Each Diesel

Building # 398
UST JTWC-398
2,000 Gals Diesel

Building # 60
UST DDP-1
18,144 Gals Diesel
UST DDP-2
18,522 Gals Diesel
UST DDP-3
25,704 Gals Diesel
UST DDP-4
97,692 Gals Diesel
UST DDP-5
93,198 Gals Diesel
UST DDP-6
92,526 Gals Diesel
UST DDP-7
92,148 Gals Diesel
UST DDP-8
93,492 Gals Diesel

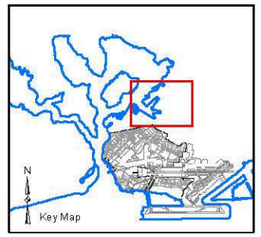
Building # ADIT 1
Underground
Pumphouse
UST F-ST1
421,722 Gals Other
UST F-ST2
422,100 Gals Diesel
UST F-ST3
422,688 Gals Diesel
UST F-ST4
422,184 Gals Diesel

Building # 1724
UST SB-29
1,000 Gals Diesel

Building # 1326
UST SB-32, 33
10,000 Gals Each Gasoline

Building # 1322
UST SB-34
2,500 Gals Diesel

Building # 71
UST JC-1, 2
10,000 Gals Each Gasoline
UST JC-3
20,000 Gals Gasoline



N

Figure M-2A
NAVAL SHIPYARD

UST MAP

COMNAVREG HI ICP

PCCI

Date Amended 12/28/18, by: K. Lindsey, PCCI, Inc.

N02102

Exhibit N-6N

Building # 2072
UST H-87 & H-87 (Slave)
10,000 Gals Each Gasoline
UST H-89
10,000 Gals Gasoline
UST H-92
10,000 Gals Diesel

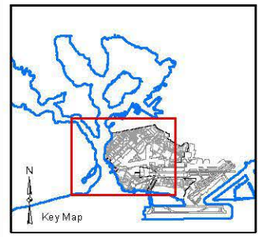
Building # 1109
UST H-1102-A & -B
10,000 Gals Each Diesel

Building # 1037
UST H-1037-1, 2
10,000 Gals Each Gasoline
UST H-1037-3, 4
10,000 Gals Each Diesel

Building # 1754
UST H-1754-1, 2
15,000 Gals Each Gasoline

Building # 4069
UST H-4069
2,500 Gals Diesel

Building # 6863
UST IPA1, 2
10,000 Gals Each Gasoline



N

Figure M-2A
NAVAL SHIPYARD

UST MAP

COMNAVREG HI ICP

PCCI

Date Amended 12/28/18, by: K. Lindsey, PCCI, Inc.

Red Hill

UST F-15
12,706,515 Gal Diesel

UST F-13
12,714,408 Gal Diesel

UST F-11
12,715,962 Gal Diesel

UST F-9
12,702,900 Gal Diesel

UST RH 7
12,703,320 Gal Diesel

UST F-5
12,697,986 Gal Other

UST F-3
11,980,332 Gal Other

UST F-1
11,980,332 Gal Other

UST F-2
11,986,254 Gal Other

UST F-4
11,980,332 Gal Other

UST F-6
12,695,012 Gal Other

UST F-8
12,680,976 Gal Diesel

UST F-10
12,698,700 Gal Diesel

UST F-12
12,694,500 Gal Diesel

UST F-14
12,719,532 Gal Diesel

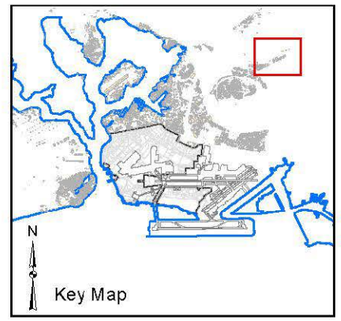
UST F-16
12,702,900 Gal Diesel

ST F-18
12,712,644 Gal Other

UST F-20
12,704,916 Gal Other

UST F-19
12,712,644 Gal Other

UST F-17
12,712,392 Gal Other



N

Figure M-2A
NAVAL SHIPYARD

UST MAP

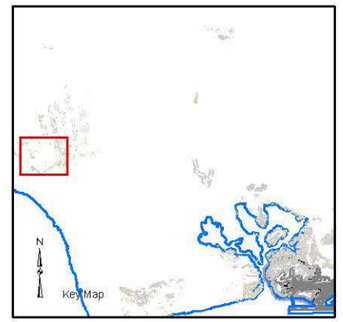
COMNAVREG HI ICP

PCCI

Date: 12/28/18 by: K. Lindsey, PCCI, Inc.

RTF Lualualei

Building # 81
UST RTF-9, 10, 11
25,000 GALs Each Diesel



N

Figure M-2D
RTF Lualualei

UST Maps

COMNAVREG HI ICP

PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

N02105

Exhibit N-6N

Wahiawa Annex

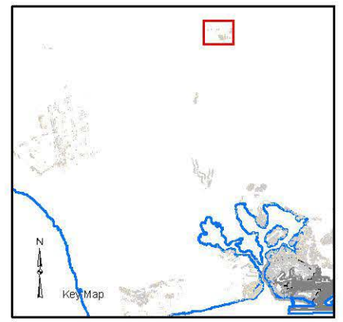
Building # 106
UST NCT-34
5,000 Gals Diesel

Building # 242
UST NCT-38
5,000 GALs Diesel

Building # 261
UST NCT-37
10,000 GALs Diesel

Building # 234
UST NCT-35
20,000 Gal's Diesel

Building # 329
UST NCT-30, 31
5,000 GALs Each Diesel
UST NCT-32
10,000 GALs Diesel



N

Figure M-2A
NAVAL SHIPYARD

UST MAP

COMNAVREG HI ICP

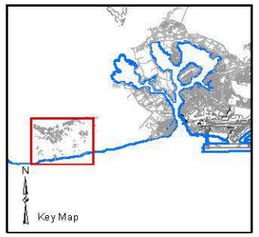
PCCI

Updated: 12/28/18 by: K. Lindsey, PCCI, Inc.

N02106

Exhibit N-6N

Building # 1928
UST BP-81, 82, 83
10,000 Gals Each Gasoline



N

Figure M-2A
NAVAL SHIPYARD

UST MAP

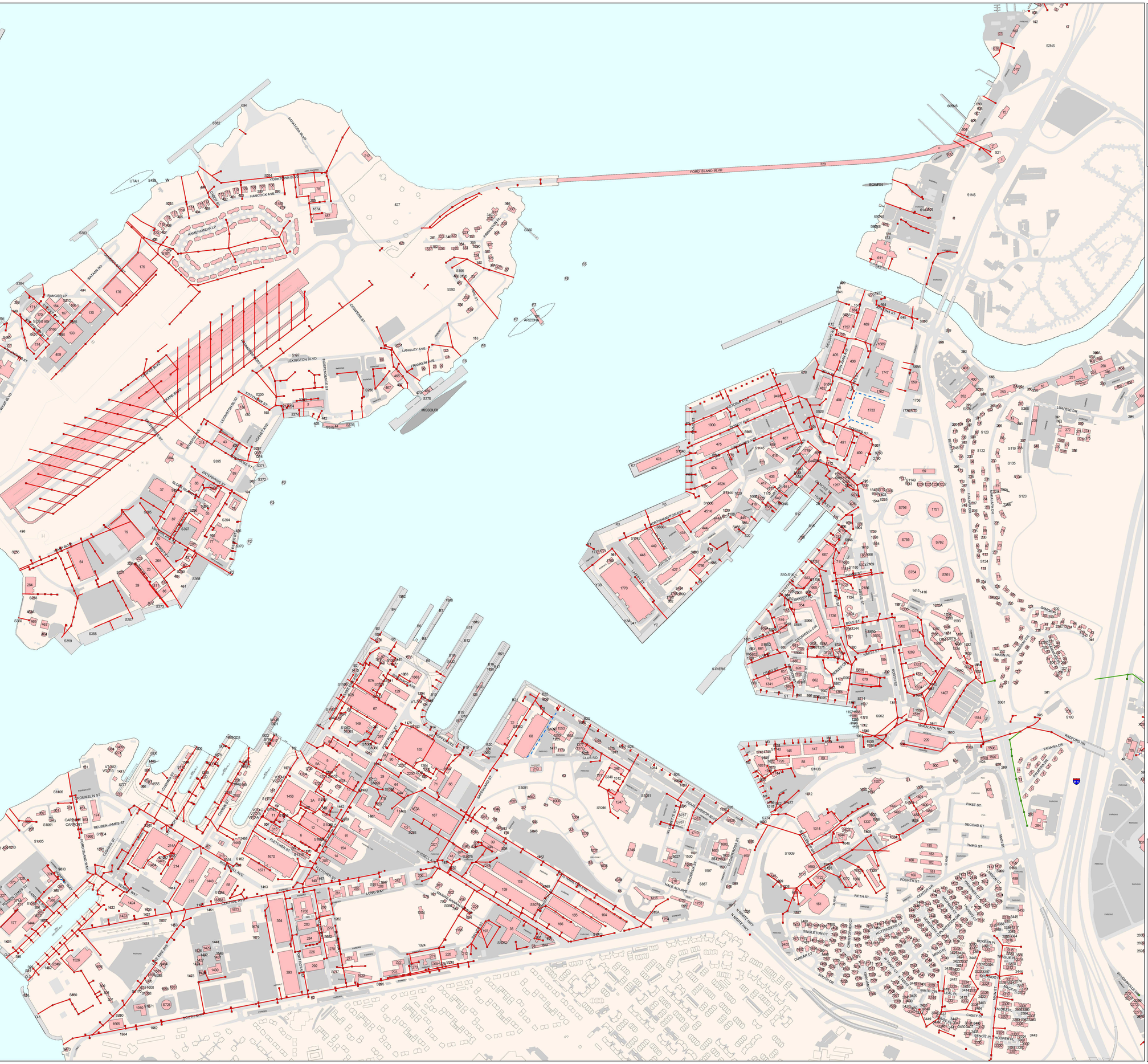
COMNAVREG HI ICP

PCCI

Date Amended 12/28/18, by: K. Lindsey, PCCI, Inc.

N02107

Exhibit N-6N



Facilities

- Navy Facilities
- Non-Navy Facilities
- Concrete Slab
- PHIPHC.road_area

Storm Drain Lines

- Storm Culvert
- Navy
- Non Navy

Storm Drain Manhole

- Navy
- Non Navy

Storm Drain Inlet

- Navy
- Non Navy
- Storm Drain Grate Inlet

Department of the Navy

REGIONAL BASEMAP

Commander Navy Region Hawaii

0 162.5 325 650 975 1,300 Feet

JOINT BASE PEARL HARBOR HICKAM STORMWATER DRAINAGE MAP

FIGURE M-3A: NAVAL FACILITIES

COMNAVREG HI ICP

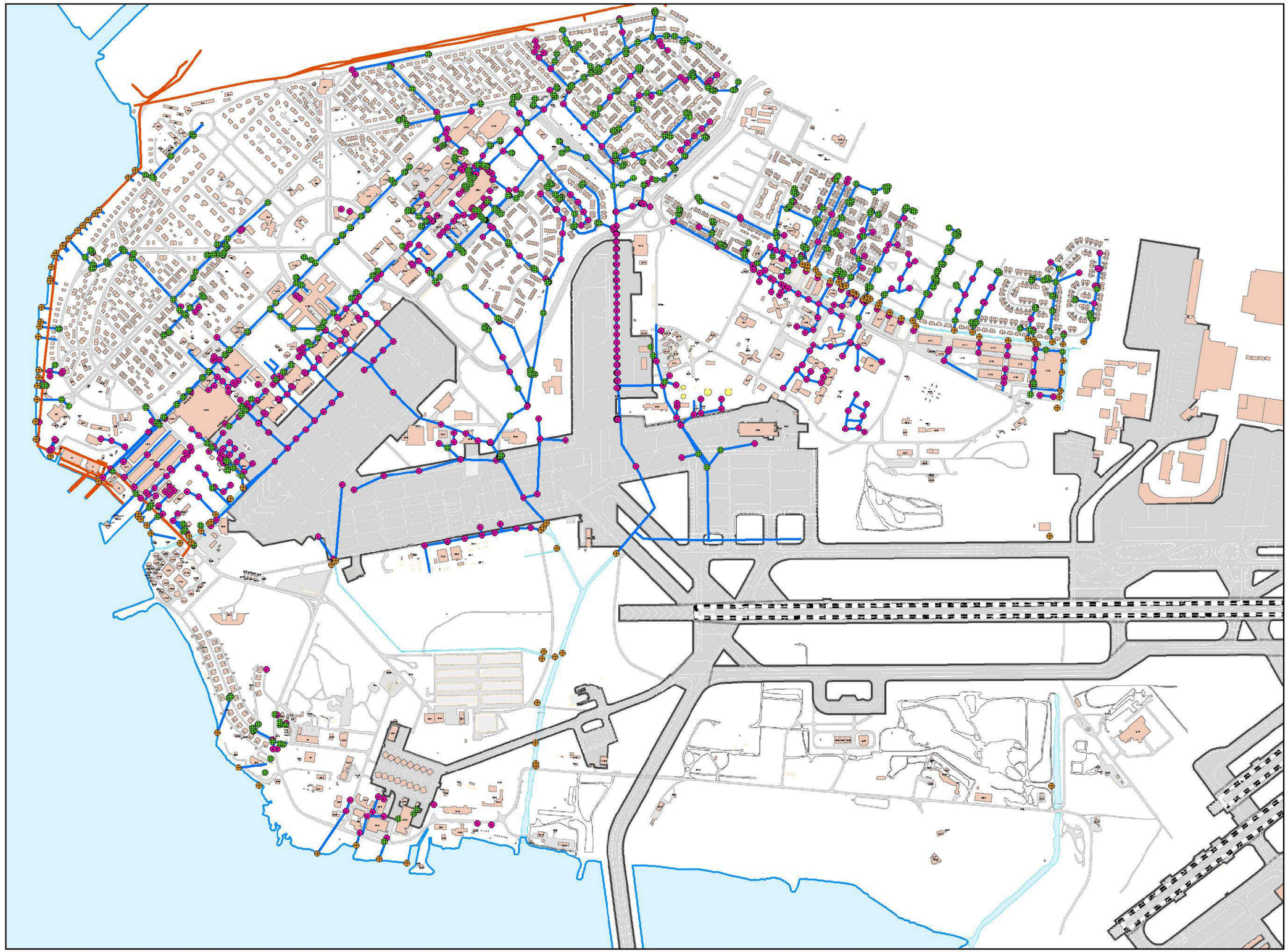
Map Projection:	Transverse Mercator
Vertical Datum:	North American Datum 1983
Horizontal Datum:	National Geodetic Vertical Datum 1929
Coordinate System:	State Plane Zone 3
Units:	Meters

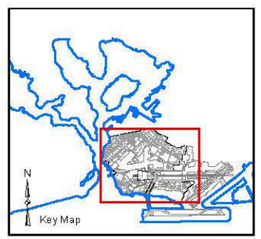
Sheet 1 of 1

N02108

Exhibit N-6N

NAVY0006199





N

Legend

- Storm Sewer Discharge Point
- Storm Sewer Inlet Point
- Manhole
- H36 Fuel Tanks
- Wastewater Line
- Storm Sewer Lines
- Surface Water Course Area
- Structures
- Runway
- Taxi way
- Roads
- Water Body

Figure M-3B
Hickam AFB

Joint Base Pearl Harbor Hickam Stormwater Drainage Maps

COMNAVREG HI ICP

PCCI

Date: 12/20/11 by: K. Lindsey, PCCI, Inc.

N02109

Exhibit N-6N

NAVY0006200

F) 200 ft of boom. Anchor on pier across to Jetty to secure inlet from Power Plant. UT boat OK.

E) 200 ft of boom. Anchored from mangrove to mangrove to secure inlet to Hbr. UT boat OK punt required.

G) 200 ft of boom. Anchored from mangrove to mangrove to secure inlet to Hbr. UT boat OK punt required/wading required.

D) 200 ft of boom. Anchor from mangrove to mangrove to secure inlet to Hbr. UT boat OK punt required/wading required.

H) 200 ft of boom. Anchored from mangrove to mangrove to secure inlet to Hbr. UT boat OK punt requried/wading required.

C) 200 ft of boom. Anchor from mangrove to mangrove to secure inlet to Hbr. UT boat OK punt required/wading required.

#8) 2800 ft of staged boom. 1000 ft along west spans. 1800 ft along east spans connect to shores. UT boat/Work boat required.

J) 200 ft of boom. Anchored from mangrove to mangrove to secure inlet to Hbr. UT boat OK punt required/wading required.

#7) 2 deflection legs of 1200 ft of boom. Connected to shore side of F-12 pier, and from V-4 pier. Anchored in Hbr. UT boat OK.

N) 1000 ft of boom. Anchor from shore to shore to wrap USS Utah Memorial. UT boat OK.

K) 700 ft of boom. Anchor from shore to shore to wrap USS Bowfin memorial. UT boat OK.

#5) deflection legs of 1200 ft of boom. Connected to V-1 pier and from shore at crane landing. Anchor in Hbr. UT boat OK.

M) 1600 ft of boom. Anchor from shore to shore to wrap USS Arizona Memorial. UT boat OK.

L) 400 ft of boom. Anchor from shore to shore to secure inset from Halawa Stream. UT boat OK.

#6) 2 deflection legs of 900 ft of boom. Connected to shore side of F-9 pier, and from V-3 pier. Anchor in Hbr. UT boat OK.

#9) 3 deflection legs of 1200 ft of boom. Connect to bridge span 8 flanked in harbor, then to end of K-7/K-8 pier. Anchor all in harbor. UT boat OK. (Northerly Winds)

#4) 2 deflection legs of 1100 of boom. On shore adjacent to old boat landing and from rocky point. Anchor in Hbr. UT boat OK.

#10) 3 deflection legs of 1000 ft of boom. Connect to N. Side of boat house fuel pier flanked in harbor, then to end of K-7/K-8 piers. Anchor all in harbor. UT boat OK. (Southerly Winds)

#3) 2 deflection legs of 600 ft to boom. Connected shore side of Nav Aid 5, and from range marker. Anchor in Hbr. UT boat OK.

#11) 2 delfection legs of 800 ft of boom. Anchored on B-22 berth across to Y-3B to secure Southeast Loch. UT boat OK.

B) A) 200 ft of boom. Anchored from mangrove to mangrove to secure inlet to fishpond. UT boat OK/wading required.

#2) 2 deflection legs of 800 ft of boom. Anchored on Waipio PT across fence at inlet of fishpond. UT boat OK/ wading required.

#12) 2 deflection legs of 1300 ft of Boom. Connect to shore side of F-1, and west side of DD3. Anchor in Hbr. UT boat OK.

A) 200 ft of boom. Anchored from mangrove to fence to secure inlet to fishpond. UT boat OK/wading required.

#O) 300 ft of boom anchored from mangrove to mangrove to secure inlet to lagoon. Utility boat okay.

#13) Double-boom canal entrance (100 ft per leg). Anchored from mangrove to mangrove. Punt required, wading required.

#Q) 1,000 ft of boom anchored from shore to shore to protect beach. Punt required, wading required.

#14) Double-boom canal entrance at bridge (100 ft per leg). Anchor boom to bridge supports. Punt required, wading required.

#15) Double-boom canal entrance (100 ft per leg). Anchored from mangrove to mangrove. Punt required, wading required.

#1) 2 deflection legs of 1300 ft of boom. Anchored on shore adjacent to range marker connected to Jetty. UT boat OK. SUPSALV per ICP if appr.

#P) 200 ft of boom anchored from shore to shore (west side of marina). 1,000 ft of boom anchored from shore to shore (east side of marina). Punt required, wading required.

LEGEND

ESI WILDLIFE

- ALGAE/SEAGRASS
- BIVALVE
- CORAL REEF
- CRAB
- FISH
- SEAL
- SHOREBIRD
- WADING BIRD
- WATERFOWL

ESI SOCIOECONOMICS

- AIRPORT
- BEACH
- BOAT RAMP
- COMMERCIAL FISHERY
- HELICOPTER
- INDUSTRIAL
- MARINA
- NATIONAL PARK
- PARK
- WATER INTAKE
- WILDLIFE REFUGE

ESI AREAS

- OTHER
- ALGAE/SEAGRASS
- BIVALVE

BOOM STRATEGY

- BOOM

OIL SPILL STRATEGIES

CONTAINMENT

1. Pearl Harbor Entrance
2. West Loch Entrance
3. West Loch Ramp
4. West Loch Basin
5. Middle Loch Basin
6. Lower North Channel
7. Upper North Channel
8. Adm Cleary Bridge
9. Upper South Channel
10. Middle South Channel
11. Southeast Loch Basin
12. Lower South Channel
13. Transportation Canal
14. Kumumauu Canal
15. Manuwai Canal

PROTECTION

- A. Okiokiolele Pond S.
- B. Okiokiolele Pond N.
- C. Waipio Stream
- D. Wildlife Refuge
- E. Pearl City Stream
- F. Hawaiian Electric
- G. Waimalu Stream
- H. Paaiau Pond
- J. Aiea Stream
- K. USS Bowfin
- L. Halawa Stream
- M. USS Arizona
- N. USS Utah
- O. Iroquois Lagoon
- P. Hickam Marina
- Q. Hickam Beach

BOOM REEL SITES

- Building #3
- Kilo 1
- Kilo 9
- Sierra 4
- Lima Landing

0 550 1,100 2,200 3,300 4,400 Feet

LOCATION KEY

Department of the Navy
REGIONAL BASEMAP
Commander Navy Region Hawaii

Map Projection:	Transverse Mercator
Vertical Datum:	North American Datum 1983
Horizontal Datum:	National Geodetic Vertical Datum 1929
Coordinate System:	State Plane Zone 3
Units:	Meters

N02110

Exhibit N-6N

NAVY0006201

Facility Response Team Base, Building #3
4 Utility Boats
3 Platform Boats
2 Skimmers

East Loch

North Loch

Pearl City

McGrew Point

Permanent Boom
Hotel Pier

Boom Reel - Arizona Visitor Center (400 ft)

Permanent Boom
Foxtrot Pier

North Channel

Boom Reel - Kilo Pier 9 (1,000 ft)

Pemanent Boom Kilo Pier

Ford Island

Permanent Boom
Yankee Pier

South Channel

Boom Reel - Kilo Pier 1 (1,000 ft)

West Loch

Ford Island Channel

Permanent Boom Sierra Pier

Boom Reel - Sierra Pier 4 (1,000 ft)

Main Channel

South East Loch

Permanent Boom
Bravo Pier

Permanent Boom
Mike Pier

Navy Base Peal Harbor

NAVMAG Pearl Harbor

Boom Reel - Lima Landing (1,000 ft)

Hickam AFB Pearl Harbor

Iroquois Piont

Main Channel

Boom Reel - Hickam Harbor (1,000 ft.)

N

Legend

- Staging Area
- Boom Reel
- Permanent Boom

Figure M-5

**Joint Base
Pearl Harbor-Hickam
Response Resources Map**

COMNAVREG HI ICP

PCCI

Date: Amended Aug 2020, by: K. Lindsey, PCCI, Inc.

N02111

Exhibit N-6N

APPENDIX N
ENVIRONMENTAL PROTECTION

N.1 INTRODUCTION

The OPA 90 implementing regulations require that the ICP be consistent with the NCP and ACPs. The ICP must identify and address environmentally sensitive areas that can be impacted by oil spills within the plan's response planning distances and include appropriate protection strategies. This plan has been prepared to be consistent with the Hawaii ACP.

This appendix contains:

- A prioritized list of environmental and economic sensitive areas within the worst-case discharge response planning distance for this response plan.
- A description of response strategies proposed to protect sensitive areas.
- A description of culturally important sites with JBPHH.
- A response strategy development process.

N.2 PRIORITIZED LIST OF SENSITIVE AREAS

The information contained in this appendix is intended to be used primarily for the initial or emergency phase of the response and cleanup. The sensitivity of the shorelines has been identified by the Area Committee and cannot be changed. For example, an area listed as a high priority cannot be changed to a medium or low priority by response plan developers or responders during a response. However, during a spill, the decision as to which sensitive areas to protect may vary depending on the time of spill detection, winds, tide, currents, weather, personnel available on-site to respond, and other factors at play. Constant surveillance and re-evaluation must be made to ensure the protection of identified sensitive areas and to make appropriate and effective response decisions.

N.2.1 List Of Environmental, Cultural, and Economically Sensitive Areas

Table N-1 lists environmentally, culturally, and economically sensitive areas within the ICP's discharge planning distance organized by geographical area. The letter(s) in the "Location" column indicates the location of the sensitive area on Figures N-1 or N-2. The "ACP Protection Priority" column indicates the protection priority (high, medium, or low), as established by the Hawaii Area Contingency Plan (ACP), given to the sensitive area, see Table N-2. The protection priority level given to the sensitive area is meant to help responders prioritize their protection decisions when responding to an oil release.

Appendix M, Figure M-3, provides a nautical chart of Pearl Harbor which visually depicts containment and protection booming strategies developed to protect sensitive areas.

N.2.2 Hawaii ACP Protection Priority Criteria

Table N-2 lists the protection priority criteria developed by the Hawaii ACP on which the priorities for protection decisions are based in the Hawaii ACP and this ICP.

TABLE N-1: ENVIRONMENTAL, CULTURAL, AND ECONOMIC SENSITIVE AREAS WITHIN THE ICP PLANNING DISTANCE		
Protection Site	**Location**	**ACP Protection Priority**
Environmental and Cultural Sensitive Areas		
Pearl Harbor - East Loch - Figure N-1		
Mouth of Halawa Stream	A - East Loch	Medium
Aiea Bay/Stream	B - East Loch	Medium
Paaiau Fish Pond and surrounding shoreline, north of McGrew Point	C - East Loch	Medium
Mouth of Kalauao Stream	D - East Loch	Medium
Mouth of Waimalu Stream	E - East Loch	Medium
Mouth of Waiau Stream	F - East Loch	Medium
Wildlife habitats and mangrove areas on E and NE side of the Pearl City Peninsula	G - East Loch	High
Pearl Harbor – Middle Loch - Figure N-1		
Wildlife habitats and mangrove areas near Waiawa Stream	H - Middle Loch	High
Pearl Harbor National Wildlife Refuge, Waiawa Unit and surrounding areas	I - Middle Loch	High
Inlet/stream Kahu Drainage Canal (north of Ted Makalena Golf Course)	J - Middle Loch	Medium
Eastern side of Waipio Peninsula (mangrove area)	K - Middle Loch	Medium
Beckoning Point (mangrove area)	L - Middle Loch	Medium
Pearl Harbor - West Loch - Figure N-1		
NOTE: West Loch is a highly sensitive area with the vast majority of the shorelines being wetlands and wildlife habitat.		
Inlet between Hanaloa Point and Intrepid Point (Walker Bay)	M - Middle West Loch	Medium
Western shoreline of Waipio Peninsula (mangrove area)	N - Upper West Loch	High
Mouth of Kapakahi Stream	O - Upper West Loch	High
Mouth of Waikele Stream	P - Upper West Loch	High
Pouhala Marsh Area	Q - Upper West Loch	High
Laulaunui Fish Pond and Island	R - Upper West Loch	High
Pearl Harbor National Wildlife Refuge – Honouliuli Unit	S - Upper West Loch	High
Pamoku Fish Pond	T - Lower West Loch	Medium
Shoreline south of Keka'a Point (mangrove area)	U - Lower West Loch	Medium
Okiokiolepe Fish Pond	V - Lower West Loch	Medium
Pearl Harbor - Main Channel Entrance - Figure N-2		
Eastern shoreline of Pearl Harbor Entrance (mangrove/beach area)	W - Main Channel	Medium
Transportation Canal	X - Main Channel	Low
Hickam - Mamala Bay Area - Figure N-2		
Kumumauu Canal	Y - Mamala Bay	Low
Ahua Lagoon and Manuwai Canal	Z - Ahua Lagoon	Low
Areas of Economic Importance		
Pearl Harbor - East Loch/South Channel - Figure N-1		
USS Arizona National Monument	AA - South Channel	Medium
USS Missouri	BB - South Channel	Medium
USS Bowfin	CC - East Loch	Medium

TABLE N-1: ENVIRONMENTAL, CULTURAL, AND ECONOMIC SENSITIVE AREAS WITHIN THE ICP PLANNING DISTANCE		
Protection Site	**Location**	**ACP Protection Priority**
Memorial Visitor Center	DD -East Loch	Medium
HECO Water Intake	EE - East Loch	High
Pearl Harbor JBPHH- Figure N-1		
Industrial facility, Sierra Docks	FF - JBPHH	Low
Industrial facility, Bravo Docks	GG - JBPHH	Low
Industrial facility, next to Dry Dock 2	HH - JBPHH	Low
Pearl Harbor - East Loch/North Channel - Figure N-1		
USS Utah, National Monument	II - North Channel	Medium
Pearl Harbor - Main Channel Entrance - Figure N-2		
Iroquois Lagoon	JJ - Main Channel	Medium
Industrial facility, Alpha Docks	KK - Main Channel	Low
Mamala Bay Area - Figure N-2		
Hickam Marina	LL - Mamala Bay	Medium
Hickam Beach	MM - Mamala Bay	Medium
Iroquois Point Beach Area	NN - Mamala Bay	Medium
Ewa Beach Area	OO - Mamala Bay	Medium

TABLE N-2: HAWAII ACP PROTECTION PRIORITY CRITERIA		
High (A)	**Medium (B)**	**Low**
• Protection of public health • Storm drain outlets • Public drinking water intakes • Safety and health of response workers • Industrial water supplies potentially impacting public needs and/or safety • Endangered or threatened species and their habitats • National estuarine research reserves • National wilderness areas • National wildlife refuges • State wildlife refuges and game management areas • Local or private wildlife refuge areas • Seasonal breeding, spawning, and nesting areas • Salt marshes • Freshwater marshes • Brackish marshes.	• National parks, monuments, and seashores • State and county parks • National historic register sites • Commercial and recreational fisheries management areas • Sheltered rocky shores and seawalls • Exposed tidal flats • Gravel beaches and riprap • All other beaches • Other undeveloped land • Public parks, recreation areas, and facilities • Private recreation areas and facilities.	• Industrial water supply not potentially impacting public needs and/or safety • Other tourist/recreation areas • Exposed vertical rocky shores and seawalls • Agricultural land • Other developed land • Industrial facilities.

N.2.3 Environmental, Cultural, and Economic Sensitive Area Locations

Figures N-1 and N-2 shows the locations of the environmental, cultural, and economic sensitive areas identified in Table N-1 that are within the ICP's discharge planning distance.

Figure N-1: JBPHH Sensitive Area Locations - Pearl Harbor

Figure N-2: JBPHH Sensitive Area Locations - Pearl Harbor Entrance and Mamala Bay

N.3 RESPONSE COUNTERMEASURES AND PROTECTION STRATEGIES

Areas to be protected in JBPHH will depend on the location of the spill, weather, and other conditions, such as the tide cycle which affects the behavior and movement of a spill. In general, a catastrophic oil spill can originate from two geographic areas within the facility's response planning area; the Upper Tank Farm and POL Area 11 (Hickam Airfield). Of these two locations, the Upper Tank Farm poses the greatest threat because of its proximity to the harbor and environmentally sensitive areas.

Tables N-3 and N-4 below summarize containment and protection strategies, respectively, for various areas of Pearl Harbor and the multiple locations where spills can occur. Appendix M, Figure M-3, provides a nautical chart of Pearl Harbor which visually depicts the containment and protection strategies discussed in these tables.

Note that these booming strategies are recommendations and will vary depending on the time of spill detection, source of spill, winds, tide, currents, weather, personnel available on-site to respond, and other factors.

N.3.1 Spills from Oil Storage Facilities on the Eastern Shore of South Channel

Under normal northeasterly trade winds and an outgoing tide, it is unlikely that spills would migrate north of where they enter the harbor. With southeasterly Kona winds or an incoming tide, spills will move with the wind and tide and could impact areas north of the spill location. Tables N-3 and N-4 list containment and protection booming strategies, respectively, for the sites to be protected in these areas.

N.3.2 Spills from Facility Sites on Pearl City Peninsula

The Kaiapo Canal provides a direct pathway into Middle Loch for spills entering the canal. A key protection strategy is to boom off or employ barriers to contain spills in the canal before they reach the wetland areas downstream and enter Middle Loch.

Spills can also enter the harbor from Pearl City Peninsula at Victor Docks. During normal northeasterly trade winds and an outgoing tide, spills will threaten the eastern shorelines of the Waipio Peninsula and the shorelines along Ford Island Channel. With southeasterly Kona winds or an incoming tide, spills will move with the wind and tide to impact the western shores of Pearl City and the shorelines of East Loch. Tables N-3 and N-4 list containment and protection booming strategies, respectively, for the sites to be protected in these areas.

N.3.3 Spills from Facility Sites near Mamala Bay and Hickam Harbor

Under normal northeasterly trade winds and an outgoing tide, it is unlikely that spills will migrate north of where they enter Mamala Bay and Hickam Harbor. With southeasterly Kona winds or an incoming tide, spills will move with the wind and tide and could impact areas north of the spill location.

Kumumauu Canal provides a direct spill path from both POL Areas 11 and 5 into Hickam Harbor and Mamala Bay. Permanent containment boom is placed across Kumumauu Canal but a worst-case spill at POL Area 11 would probably be too great to be contained by the boom. Transportation Canal provides a direct spill path from POL Area 9 to Mamala Bay, and Pearl Harbor. Permanent containment boom is also placed across Transportation canal.

Tables N-3 and N-4 list containment and protection booming strategies, respectively, for the sites near Mamala Bay and Hickam Harbor to be protected.

N.3.4 Additional Response and Protection Strategies for Spills Within Pearl Harbor

The overall response objective for this ICP is to contain and keep spills from spreading within Pearl Harbor. As much as possible, all spills, including the worst-case discharge for this ICP will be contained and recovered in Pearl Harbor. Tables N-3 and N-4 list containment and protection booming strategies, respectively, for all areas of Pearl Harbor.

N.3.5 Spills from the USS Arizona

The USS Arizona contains approximately 500,000 gallons of heavy fuel oil. Because of the age of the wreck there is the potential for a catastrophic release of this oil. Periodic underwater surveys and risk analysis are conducted on the USS Arizona; all have indicated that the probability of a catastrophic oil release in the near future is low. The Navy has taken proactive steps in preparing for a catastrophic release from the USS Arizona by developing a response plan, the "USS Arizona Response Plan for Oil Releases". In addition, tabletop exercises are conducted regularly to exercise response plans using a catastrophic release from the USS Arizona as the exercise scenario.

N.3.6 Boom Requirements

Implementing all of the containment and protection booming strategies described in Tables N-3 and N-4 at the same time will require approximately 36,400 feet of response boom. However, it is highly unlikely that this will ever occur, given the geographical features of the protected harbor. A spill can be readily isolated, contained or diverted to prevent it from spreading into other lochs or harbor areas by booming strategic locations, depending on the spill location, wind and water conditions.

COMNAVREG HI maintains approximately 32,200 feet of Class II boom and 36,100 feet of Perma boom (See Table E-3, Appendix E). This is sufficient to implement the specific strategies in specific areas as described in this appendix. Additional boom can be accessed by activating SUPSALV and OSRO's (via a USCG BOA contract), by the NOSC Rep.

N.3.7 Maps

The containment and protection strategies described in this plan will be refined or modified accordingly based on the experience gained from future training, drills and actual response to spills. The containment and protection booming strategies shown on Figure M-3, Appendix M, although drawn to scale, are not meant to specify exact boom locations and boom lengths. Rather, they serve as general guidelines for use during an actual response and as the basis for future refinements.

N.3.8 Booming and Collection Strategies Matrix

Tables N-3 and N-4 describe all containment and protection strategies, respectively, depicted in the COMNAVREG HI ICP booming strategies map (Figure M-3, Appendix M). The matrix list the strategy number, location, response objective, amount of boom needed, strategy implementation, and resource targeted.

TABLE N-3: CONTAINMENT BOOMING STRATEGIES MATRIX					
Strategy	**Location**	**Response Objective**	**Boom (Ft)**	**Strategy Implementation**	**Resource Targeted**
See Appendix M, Figure M-3 for Booming Strategies Map.					
#1	Pearl Harbor Entrance	Prevent oil from entering or exiting Pearl Harbor	2,600	2 deflection legs of 1,300 ft of boom. Anchored on shore adjacent to range marker, and connected to Jetty. Utility boats okay.	Wildlife resources, sensitive habitats, and economic sensitive areas
#2	West Loch Entrance	Prevent oil from entering or exiting West Loch	1,600	2 deflection legs of 800 ft of boom. Anchored on Waipio Point, and connected to fence at inlet of fishpond. Utility boat okay. Wading required.	Wetlands, wildlife sanctuary, and wildlife habitats.
#3	West Loch Ramp	Prevent oil from entering or exiting West Loch	1,200	2 deflection legs of 600 ft of boom. Connected on the shore side of navigation aid #5, and then from the range marker. Anchor in harbor. Utility boat okay.	Wetlands, wildlife sanctuary, and wildlife habitats.
#4	West Loch Basin	Prevent oil from impacting highly environmentally sensitive area found in the upper West Loch	2,200	2 deflection legs of 1,100 ft of boom. Connected on the shore adjacent to old boat landing, and then from rocky point. Anchor in harbor. Utility boat okay.	Wetlands, wildlife sanctuary, and wildlife habitats.
#5	Middle Loch Basin	Prevent oil from entering or exiting Middle Loch	2,400	2 deflection legs of 1,200 ft of boom. Connected to the V-1 pier, and then from shore at crane landing. Anchor in harbor. Utility boat okay.	Wildlife resources, sensitive habitats, and economic sensitive areas
#6	Lower North Channel	Prevent oil from entering or exiting East Loch	1,800	2 deflection legs of 900 ft of boom. Connected to the shore side of F-9 pier, and then from V-3 pier. Anchor in harbor. Utility boats okay.	Wildlife resources, sensitive habitats, and economic sensitive areas
#7	Upper North Channel	Prevent oil from entering or exiting East Loch	2,400	2 deflection legs of 1,200 ft of boom. Connected to the shore side of F-12 pier, and then from V-4 pier. Anchor in harbor. Utility boats okay.	Wildlife resources, sensitive habitats, and economic sensitive areas
#8	Admiral Cleary Bridge	Prevent oil from entering or exiting South Channel	2,800	2,800 ft of staged boom. 1,000 ft along the west span. 1,800 ft along the east spans, then connected to the shore. Utility and work boats required.	Wildlife resources, sensitive habitats, and economic sensitive areas
#9	Upper South Channel	Prevent oil from entering the Upper South Channel	3,600	3 deflection legs of 1,200 ft of boom. Connected to bridge span 8, then flanked in harbor, and then connected to the end of K-7/K-8 piers. Anchor all in harbor. Utility boat okay. (Northerly winds only)	Wildlife resources, sensitive habitats, and economic sensitive areas
#10	Middle South Channel	Prevent oil from exiting the Middle South Channel	3,000	3 deflection legs of 1,000 ft of boom. Connected to the north side of the boat house, then flanked in harbor, and then connected to the end of K-7/K-8 piers. Anchor all in harbor. Utility boat okay. (Southerly winds only)	Wildlife resources, sensitive habitats, and economic sensitive areas
#11	Southeast Loch Basin	Prevent oil from entering or exiting the Southeast Loch Basin	1,600	2 deflection legs of 800 ft of boom. Anchored on B-22 berth, and then from Y-3B pier. Utility boat okay.	Wildlife resources, sensitive habitats, and economic sensitive areas
#12	Lower South Channel	Prevent oil from entering or exiting the Lower South Channel	2,600	2 deflection legs of 1,300 ft of boom. Connected shore side to the side of F-1 pier, and then from west side of DD3 pier. Anchor in harbor. Utility boat okay.	Wildlife resources, sensitive habitats, and economic sensitive areas

TABLE N-3: CONTAINMENT BOOMING STRATEGIES MATRIX					
STRATEGY	**LOCATION**	**RESPONSE OBJECTIVE**	**BOOM (FT)**	**STRATEGY IMPLEMENTATION**	**RESOURCE TARGETED**
See Appendix M, Figure M-3 for Booming Strategies Map.					
#13	Transportation Canal Pearl Harbor Main Channel	Prevent oil from exiting Transportation Canal into Pearl Harbor Main Channel	200	Double-boom canal entrance (100 ft per leg). Anchored from mangrove to mangrove. Punt required, wading required.	Wildlife resources, sensitive habitats, and economic sensitive areas
#14	Kumumauu Canal Mamala Bay	Prevent oil from exiting Kumumauu Canal into Mamala Bay	200	Double-boom canal entrance at bridge (100 ft per leg). Anchor boom to bridge supports. Punt required, wading required.	Wildlife resources, sensitive habitats, and economic sensitive areas
#15	Manuwai Canal Ahua Lagoon	Prevent oil from exiting Manuwai Canal into Ahua Lagoon	200	Double-boom canal entrance (100 ft per leg). Anchored from mangrove to mangrove. Punt required, wading required.	Wildlife resources, sensitive habitats, and economic sensitive areas
Notes: (1) 28,400 feet of boom required to implement all strategies. (2) If field conditions require modification of strategies notify the incident command.					

TABLE N-4: PROTECTION BOOMING STRATEGIES MATRIX					
Strategy	**Location**	**Response Objective**	**Boom (Ft)**	**Strategy Implementation**	**Resource Targeted**
See Appendix M, Figure M-3 for Booming Strategies Map.					
#A	Okiokiolepe Fishpond South	Prevent oil from entering fishpond	200	200 ft of boom anchored from mangrove to fence to secure southern inlet to fish pond. Utility boat okay. Wading required.	Cultural site
#B	Okiokiolepe Fishpond North	Prevent oil from entering fishpond	200	200 ft of boom anchored from mangrove to mangrove to secure northern inlet to fish pond. Utility boat okay. Wading required.	Cultural site
#C	Waipio Stream (Kahu Drainage Canal)	Prevent oil from entering/exiting stream mouth	200	200 ft of boom anchored from mangrove to mangrove to secure inlet to stream and harbor. Utility boat okay. Punt required, wading required.	Sensitive stream
#D	Pearl Harbor Wildlife Refuge, Waiawa Unit	Prevent oil from contaminating wildlife refuge	200	200 ft of boom anchored from mangrove to mangrove to secure inlet to wildlife refuge. Utility boat okay. Punt required, wading required.	Wildlife refuge, sensitive habitats
#E	Pearl City Stream (Waimanu Stream)	Prevent oil from entering stream mouth	200	200 ft of boom anchored from mangrove to mangrove to secure inlet to stream. Utility boat okay. Punt required, wading required.	Sensitive stream
#F	Hawaiian Electric Water Intakes	Prevent oil from entering water intakes of power plant	200	200 ft of boom anchored from pier across to jetty to secure water intakes. Utility boat okay.	Water intake
#G	Waimalu Stream	Prevent oil from entering stream mouth	200	200 ft of boom anchored from mangrove to mangrove to secure inlet to stream. Utility boat okay. Punt required, wading required.	Sensitive stream

TABLE N-4: PROTECTION BOOMING STRATEGIES MATRIX					
Strategy	**Location**	**Response Objective**	**Boom (Ft)**	**Strategy Implementation**	**Resource Targeted**
See Appendix M, Figure M-3 for Booming Strategies Map.					
#H	Paaiau Fishpond	Prevent oil from entering fishpond	200	200 ft of boom anchored from mangrove to mangrove to secure inlet to fish pond. Utility boat okay. Punt and wading required.	Cultural site
#J	Aiea Stream	Prevent oil from entering stream mouth	200	200 ft of boom anchored from mangrove to mangrove to secure inlet to stream. Utility boat okay. Punt required, wading required.	Sensitive stream
#K	USS Bowfin	Prevent oil from contaminating vessel	700	700 ft of boom anchored around the USS Bowfin from shore to shore. Utility boat okay.	Historical site
#L	Halawa Stream	Prevent oil from entering stream mouth	400	400 ft of boom anchored from shore to shore to secure inlet to stream. Utility boat okay.	Sensitive stream
#M	USS Arizona	Prevent oil from impacting war memorial	1,600	1,600 ft of boom anchored around the USS Arizona memorial from shore to shore. Utility boat okay.	Historical site
#N	USS Utah	Prevent oil from impacting war memorial	1,000	1,000 ft of boom anchored around the USS Utah memorial from shore to shore. Utility boat okay.	Historical site
#O	Iroquois Lagoon Pearl Harbor Entrance	Prevent oil from impacting lagoon	300	300 ft of boom anchored from mangrove to mangrove to secure inlet to lagoon. Utility boat okay.	Economically sensitive areas (marina)
#P	Hickam Marina Mamala Bay	Prevent oil from impacting marina	1,200	200 ft of boom anchored from shore to shore (west side of marina). 1,000 ft of boom anchored from shore to shore (east side of marina). Punt required, wading required.	Economically sensitive areas (marina)
#Q	Hickam Beach Mamala Bay	Prevent oil from impacting beach	1,000	1,000 ft of boom anchored from shore to shore to protect beach. Punt required, wading required.	Recreational site
Notes: (1) 8,000 feet of boom required to implement all strategies. (2) If field conditions require modification of strategies notify the incident command.					

N.4 CULTURAL/ARCHEOLOGICAL RESOURCES WITHIN JBPHH

The following information has been extracted in part from the Joint Base Pearl Harbor-Hickam Integrated Cultural Resources Management Plan (ICRMP), dated 2017, and the Hawaii ACP (Version 6.2, dated October, 2015).

N.4.1 Introduction

Previous archaeological, historical, and environmental studies conducted within JBPHH have documented archaeological sites associated with traditional Hawaiian aquaculture, agriculture, and habitation-related activities; and early historic land use activities. An overview of the non-military archaeological site areas known to exist within JBPHH is provided below, and shown on Figure N-3. Figure N-4 shows archaeological site management areas for JBPHH, and Figure N-5 shows areas of probable archeological resources at Hickam. Previously identified archaeological sites that were evaluated as not significant, i.e. not eligible to the National Register, are not included in this category.

N.4.2 Fishponds

The areas around the lochs of Pearl Harbor were used extensively for aquaculture. Historical maps and other sources indicate that there were as many as 31 fishponds (loko), fish traps, and other kinds of aquacultural features along the shoreline of Pearl Harbor. Based on an overlay of historical maps with current facilities, 22 of these features were located wholly or partially within the boundaries of the JBPHH. Archaeological remains of many of these features are still present within JBPHH, including four surviving fishponds and numerous buried fishponds. Although most of the original fishponds have been buried beneath fill and subsequently developed, archaeological and paleo-environmental studies have shown that in some areas, intact fishpond sediments are still present. These buried and existing fishponds have yielded, or have the potential to yield, significant archaeological information pertaining to historic fishpond construction and use in Pearl Harbor. The four surviving fishponds are Loko Paaiau near McGrew Point in East Loch, and Loko Okiokiolepe, Loko Pamoku, and Loko Laulaunui in West Loch.

N.4.3 Former Taro/Rice Fields

Portions of the low-lying lands around Pearl Harbor were traditionally cultivated in taro, particularly along the freshwater streams that empty into the harbor. In these areas, taro was typically grown in small ponded fields known as loʻi connected to the freshwater streams via aqueducts. These loʻi were later used to grow rice in the historic era. Remnants of former taro/rice fields are believed to be present beneath fill in two areas of JBPHH, in the northwestern portion of Navy lands at Pearl City Peninsula, adjacent to Waiawa Stream, and in the low-lying areas adjacent to Loko Paaiau at McGrew Point.

Previous archaeological studies have documented intact wetland soils at Pearl City Peninsula, which may be former taro/rice fields. The presence of intact taro/rice fields at McGrew Point has not yet been confirmed.

N.4.4 Habitation

Prehistoric habitations are primarily identified from subsurface deposits. Site 50-80-13-4499 at Fort Kamehameha and Sites 50-80-13-3703 and 50-80-13-5874 at Iroquois Point contain refuge heaps and artifacts indicative of prehistoric habitation activities.

Site 50-80-13-5972 at Bishop Point consisting of charcoal stained lens and did not contain refuge heaps or artifacts but may represent a cultural lens. Historic habitation remnants can also be found in these two areas, particularly within Sites 50-80-13-3703, 4499, 5875. Bishop Point is also a locus for historic habitation but this site has been highly disturbed.

N.4.5 Burials

For the most part, human and animal burials are rarely encountered in the JBPHH. However, there are two places in particular that are high probability areas for burials based on known burial practices and previous archaeological investigations. Both of these locations are at the entrance to the harbor. Iroquois Point and Fort Kamehameha are situated on sandy beachfront areas and burials have been encountered in these regions.

Site 50-80-13-3703 is located on the beachfront of Iroquois Point and consists of a prehistoric burial and habitation component, in addition to a historic habitation component. Site 50-80-13-4499 is located at Fort Kamehameha and consists of similar cultural material. Prehistoric and historic animal and human burials are present in addition to prehistoric habitation, historic habitation, and historic military debris.

N.4.6 Other Archaeological Sites

Previously identified archaeological sites evaluated as significant are concentrated in two areas of the JBPHH; the undeveloped portions of Naval Magazine Pearl Harbor at West Loch and the shoreline of Iroquois Point housing area. The undeveloped lands at West Loch contain a wide range of archaeological sites, representing traditional Hawaiian and historical land use activities. Site types include stone walls, enclosures, mounds, platforms, modified outcrops, and modified sinkholes. The archaeological sites located at Iroquois Point are limited to subsurface archaeological deposits located beneath fill and naturally deposited soils. One other area that may have archaeological significance is at Pearl City Peninsula at the southern end of the former Paauau fishpond.

Historic era sites consist of wharf remnants (Site 50-80-13-5877), pier remnants (Site 50-80-13-3703), and other miscellaneous sites such as a possible survey marker (Site 50-80-13-5878). These three sites are located at Iroquois Point.

N.4.7 Cultural/Archaeological Sites and Response Operations

Oil pollution response operations on land can severely damage cultural and/or archaeological sites. Damage can result from such activities as trenching, berming, cutting vegetation above the waterline, etc. To ensure that historic sites are not damaged, several actions are recommended:

- All shoreline areas need to be considered sensitive for historic sites, unless specific parcels are documented (in letters from the State Historic Preservation Division to the Coast Guard) to contain no historic sites.

- Onshore activities that will disturb the ground surface (e.g. grading new access roads, excavation, grading storage areas) should not occur, except on parcels pre-approved to contain no historic sites.
- Priority areas should be identified ahead of time, so specific parcels with no historic sites can be identified for use for emergency equipment stockpiling, access roads and the like.

N.4.8 Regulations and Legislative Requirements

Planning measures to avoid damaging historic sites must be in compliance with the National Historic Preservation Act (NHPA), which involves coordination with the State Historic Preservation Office. The NHPA mandates the input of three agencies; the federal agency involved, the State Historic Preservation Office, and the U.S. Advisory Council on Historic Preservation (ACHP).

Section 106 of the NHPA requires the responsible Federal agency to take into account the effects of their undertakings (such as oil pollution response operations) on historic properties. Historic properties are properties that are included in the National Register of Historic Places or that meet the criteria for the National Register. If so, it must identify the appropriate State Historic Preservation Officer (SHPO) to consult with during the process. It should also plan to involve the public, and identify other potential consulting parties. If it determines that it has no undertaking, or that its undertaking is a type of activity that has no potential to affect historic properties, the agency has no further Section 106 obligations.

See Tab 2 (Response Permits and Consultations) of this plan for more information on the Section 106 consultation process.

Contact information of the State of Hawaii Historic Preservation Division is:

Kakuhihewa Building
601 Kamokila Blvd., Suite 555
Kapolei, HI 96707
Ph: (808) 692-8015
Fax: (808) 692-8020

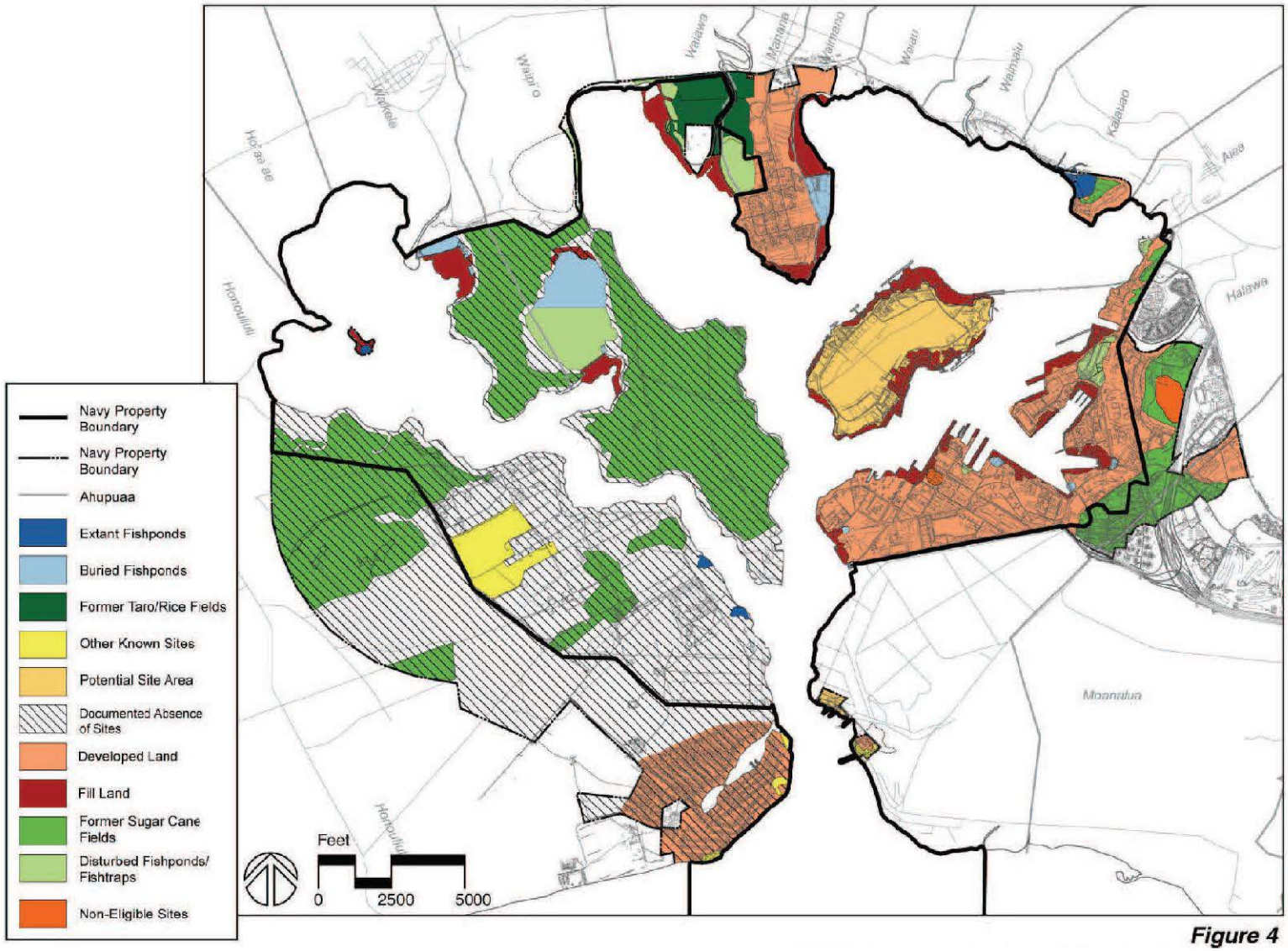


Figure N-3: JBPHH Archaeological Site Analysis Map

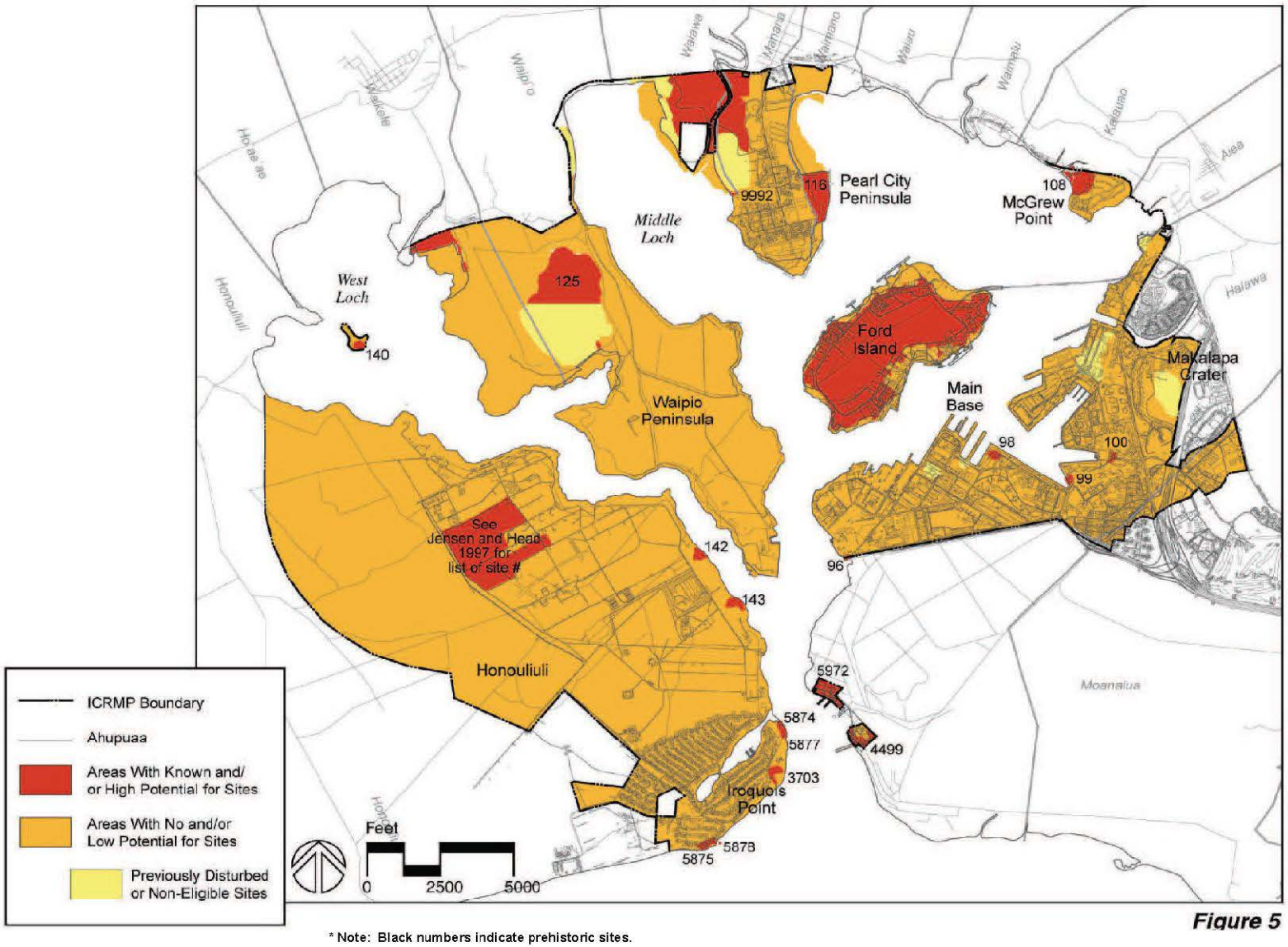


Figure N-4: JBPHH Archaeological Site Management Areas

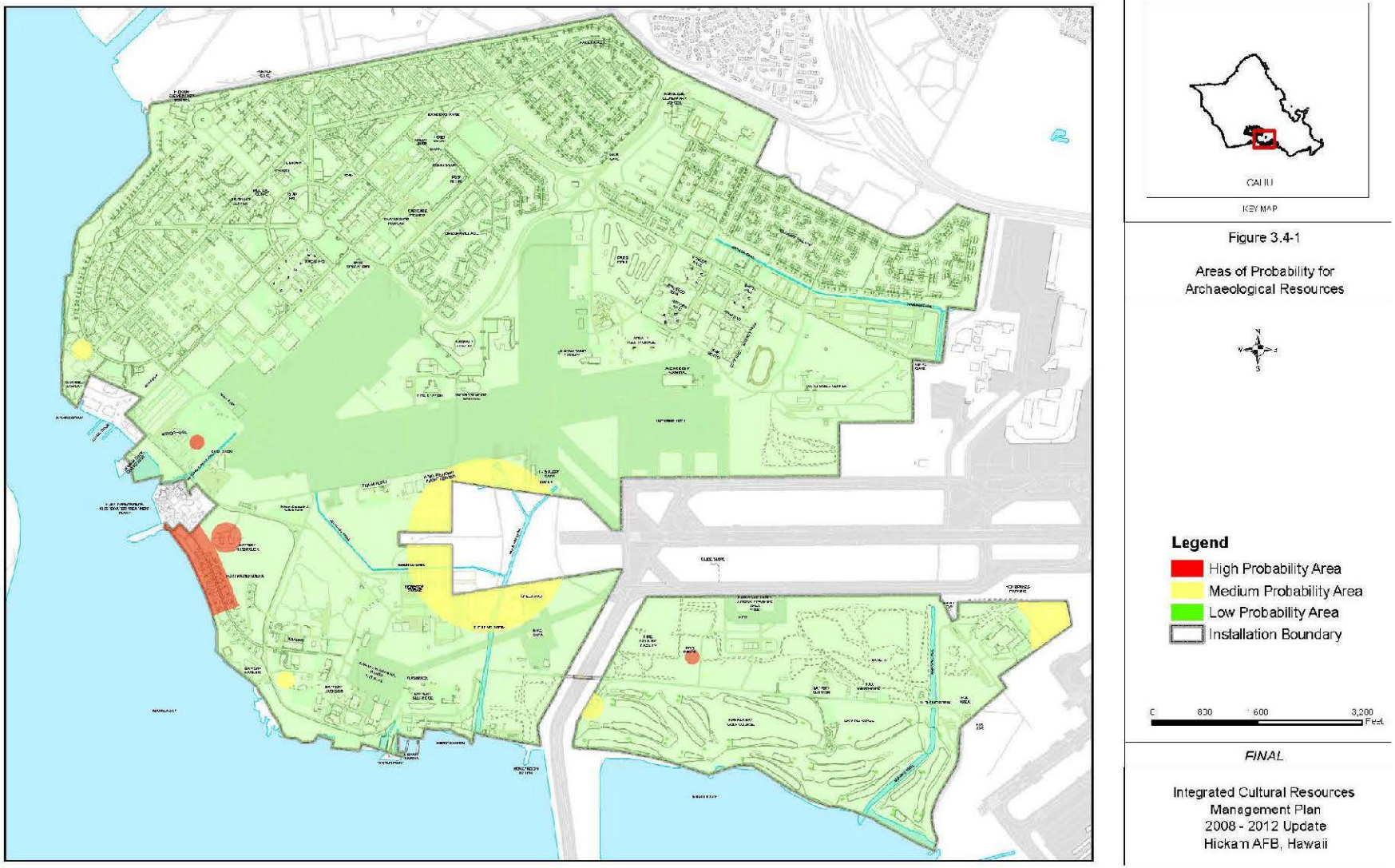


Figure N-5: Hickam Areas of Probability for Archaeological Resources

N.5 RESPONSE STRATEGY DEVELOPMENT GUIDANCE

Selecting appropriate oil spill response techniques during a spill is critical in order to minimize the environmental impacts and costs resulting from a spill. Response strategies should be developed which have a minimal ecological impact and reduce the overall impact of the oil spill on the environment. The development of these strategies are broken down into three stages:

Phase I - Preplanning
Phase II - Validation
Phase III - Emergency response prioritization.

Phases I and II should be completed and updated prior to a spill. Phase III should draw upon the work completed in Phases I and II to ensure the best priorities are established and that decisions are based on sound data and analyses ahead of time. Overall, environmental response strategies should be considered prior to a spill so that minimal time is spent in response preparation during the spill. In the event of an emergency response, go to Section N.5.5 to begin Phase III.

N.5.1 Description Of Phases

The development of sound response strategies to protect shorelines and sensitive areas is a crucial step in spill response pre-planning. In the event of a major spill, the NOSC Rep must be aware of potentially sensitive areas and verify that methods for protecting them have been developed within his or her area of responsibility (AOR). The following steps form the first phase, plan preparation, and are necessary to develop environmental response strategies:

1. Determine the spill risk
2. Define and identify sensitive areas
3. Prioritize the identified sensitive areas for protection as high, medium, or low
4. Develop protection strategies given the expected ranges of environmental conditions and equipment available
5. Develop maps which identify sensitive areas and summarize protection strategies.

Once these steps have been completed, the strategies must be validated through training, drills, and exercises. This second phase will identify gaps in response resources within COMNAVREG HI AOR as well as areas where coordination with other federal agencies may be necessary. The third phase consists of using these environmental strategies during an emergency response to a spill incident. In this stage, the environmentally sensitive areas are prioritized based on the spill incident and potential for impacting these areas. Once these areas are prioritized, corresponding environmental strategies are developed by evaluating pre-planned strategies.

N.5.2 Resources For Developing Environmental Strategies

A variety of resources within the oil spill response community are available to assist COMNAVREG HI in developing environmental response strategies. Federal and state agencies have statutory and regulatory mandates to fulfill this requirement based on in house expertise and experience. These agencies' responsibilities and capabilities are identified in the National Contingency Plan (NCP).

N.5.2.1 Federal/Regional

To ensure consistency among federal agencies, the NOSC Rep must communicate with the appropriate elements of the National Response System structure. The Oil Pollution Act of 1990 (OPA 90) required that Area Committees be established for joint oil and HS spill response efforts. Area Committee Plans (ACPs) and RRT plans should be consulted when developing strategies for COMNAVREG HI. Most Area Committees have completed the first phases of resource identification, prioritization, and protection strategy identification, and have proceeded into subsequent phases of validation and review based on exercises and actual incidents. The NOSC Rep must ensure the identified sensitive areas and protective strategies developed in the ACPs are incorporated into this plan. The Hawaii ACP lists contacts for the COMNAVREG HI RRT(s) and ACP representatives.

Another federal asset available to the NOSC Rep is the NOAA Scientific Support Coordinator (SSC), a member of the Regional Response Team (RRT). The Scientific Support Coordination Branch is part of the Hazardous Materials Response and Assessment Division (HAZMAT) of NOAA's Office of Ocean Resources Conservation and Assessment. Under the National Contingency Plan (NCP), the SSCs are responsible for coordinating the flow of scientific advice to the OSCs on spill response operations in coastal waters. Each regional SSC is available on a 24-hour basis to respond immediately to pollution incidents and to commit additional HAZMAT technical resources, see Appendix E for contact information.

N.5.2.2 Local

Spill response expertise can also be found locally with state wildlife officials, oil spill removal organizations (OSRO), and oil spill response cooperatives such as the Clean Islands Council. These organizations can provide input to the location of sensitive areas and environmental protective strategies. Contacts for these technical specialists are found in Appendix E.

N.5.2.3 Documents/References

Most guidance on developing environmental strategies focuses on shoreline protection of oil spills. The following documents contain valuable information to develop these strategies (also see Appendix V for the full list of references):

1. NOAA/HAZMAT and USCG-NSF Document. *Mechanical Protection Guidelines*. June 1994
2. NOAA. *Template Shoreline Countermeasures Manual: Temperate Coastal Environments.* December 1992
3. NOAA. *Template Shoreline Countermeasures Manual: Tropical Coastal Environments.* May 1993
4. NOAA/API. *Options for Minimizing Environmental Impacts of Freshwater Spill Response*. September 1994
5. NOAA Guidance. *Facility and Vessel Response Plans Fish and Wildlife and Sensitive Environments*. Federal Register Notice.

N.5.3 Phase I - Development

Determination of Spill Risk

When determining the spill risk within COMNAVREG HI's area of responsibility, the “substantial harm” facilities are the primary focus. JBPHH has been classified as a substantial harm facility

based on calculations of the worst-case discharge (Appendix C). Table N-5 provides data for the worst-case discharge volume for both MTR and NTR facilities within JBPHH.

TABLE N-5: SPILL RISKS WITHIN COMNAVREG HI AOR

Facility	WCD Volume (Gal)	Spill Risk Identified	Classification
NAVSUP FLC	MTR: 1,726,048	Release from the 32-inch pipeline between the bulk storage tanks at the Red Hill Storage Facility and Valve Chamber #1 at Hotel Pier during a fuel transfer. See App. C, Section C.4.3.	Substantial
	NTR: 6,387,218	Release from the largest bulk storage tank, approximately 6,300,000 gallons, at JBPHH's Upper Tank Farm. See App. C, Section C.5.2.	

* MTR - "marine transportation related portion of facility subject to USCG FRP regulations 33 CFR Part 154.
NTR - "non-transportation-related" portion of the facility subject to USEPA FRP regulations in 40 CFR Part 112.

Appendix D contains the worst-case discharge scenarios for COMNAVREG HI's area of responsibility. The scenarios were developed for the Hawaii COTP ZONE and focus on the facilities which have the highest spill potential and that could cause the most damage to environmentally and economically sensitive areas.

Definition and Identification of Sensitive Areas

Sensitive areas differ for each facility since they are specific to the local region. In general, the level of sensitivity of a habitat is due to a combination of factors such as natural removal processes, biological productivity in the area, human use of the area, and level of the response effort. Areas in the water or onshore which are sensitive to oil may be impacted by the spill. The primary environments considered when determining sensitive areas are water environments and shoreline habitats. Water environments include: open, large rivers; small lakes and ponds; small lakes; and streams. Shoreline habitats include: bedrock; manmade structures; sand; mixed sand and gravel; vegetated shorelines; mud; and wetlands.

Sensitive areas are identified in the ACP(s) through the area committee planning process which ensures all area environmental specialists have been involved in the decision making process for employing all steps in establishing environmental strategies. Areas that are not identified in the ACP(s) or in the Integrated Contingency Plan (ICP) are identified by the NOSC Rep. The resolution of the area being covered in the ACP may be too large to capture areas close to Navy facilities or on DOD property. It then becomes incumbent upon the Navy to fill in these gaps and establish appropriate strategies.

Establishment of Priorities

Prioritization of sensitive areas has been developed at a national level. The National Response System (NRS) has been adopted as the norm and is reflected in mapping techniques used for oil spill response. Area prioritization done in addition to ACP priorities should be in accordance with this system for maintaining consistency within the NRS.

Development of Protection Strategies

The next step during the pre-planning phase is to develop protection strategies taking into consideration the expected ranges of environmental conditions and equipment available in the region. This step helps identify any weak links in the NOSC Rep response capability. Once protection strategies are developed, it will also assist in determining gaps in the NOSC Rep response resources needed to carry out the protection strategies. Protection tactics are closely examined to determine if the strategies developed are realistic.

The ICP contains the protection strategies for the COMNAVREG HI planning distance. In general, these protection strategies are based on a variety of oil spill response and cleanup methods (natural, chemical, bioremediation, or mechanical). Spill response techniques discussed in NOAA's publication, *Options for Minimizing Environmental Impacts of Freshwater Spill Response*, include protection, recovery, and cleanup methods in all these areas. However, since JBPHH fuels are light and volatile, some methods of response may not be possible due to fire hazards to the responders. Tables N-7 through N-10 are provided to indicate the possible impacts various response methods may have on sensitive areas.

Development of Emergency Response Action Maps

Once environmental strategies are developed, the end product should be a quick and easy reference map with clarifying text that can be quickly understood by people involved in a spill incident. The map immediately illustrates the high sensitivity areas and first response protection strategies. The most modern techniques for oil spill mapping have been developed by NOAA. These maps are used in every oil spill and their success is due in part to standardized terms, symbols, and format. These maps are known as Environmental Sensitivity Index (ESI) maps which are usually used by most Area Committees when developing their plans.

NOAA has developed ESI maps for most of the U.S. coastline. The SSC for each COTP zone has all of the ESI maps for his/her given area of jurisdiction. ESI maps are the primary resource used by the SSC and FOSC at a spill site. These documents depict the distribution of valuable coastal habitats and resources, and characterize shorelines according to their vulnerability to an oil spill (see Table N-6). Potential locations are also identified where booms or other mitigation actions might be deployed to best protect the coast in the event of a spill. ESI maps for Pearl Harbor are located in at the end of this appendix. ESI Map # HI62 covers the southern area (lower portion) of Pearl Harbor and ESI Map # HI63 covers the northern area (upper portion) of Pearl Harbor. Also included is the ESI map legend and data on the seasonality of species and resources found in Pearl Harbor. These maps are an invaluable tool for responders, and should be referenced by the NOSC Rep when making decisions on booming protection strategies.

TABLE N-6: RANKED ESI CODES FOR VARIOUS TYPES OF SHORELINES SENSITIVE TO OILS *

ESI Number	Shoreline Type
1A	Exposed rocky cliffs
1B	Exposed solid sea walls
2	Shelving bedrock shores
3	Eroding scarps in unconsolidated sediments
4	Sand beaches
5	Mixed sand and gravel beaches
6A	Gravel beaches
6B	Riprap structures
7	Exposed tidal flats (not present in Great Lakes)
8A	Sheltered rocky shores
8B	Sheltered, solid, manmade structures
9A	Sheltered vegetated low banks/bluffs
9B	Sheltered sand/mud flats
10A	Freshwater marshes (herbaceous vegetation)
10B	Freshwater swamps (woody vegetation)

* Taken from *Options for Minimizing Environmental Impacts of Freshwater Spill Response*

TABLE N-7: GASOLINE PRODUCTS- SUMMARY OF RELATIVE ENVIRONMENTAL IMPACT FROM RESPONSE METHODS FOR SPILLS IN WATER ENVIRONMENTS *				
Response Method	**Water Environment**			
	Open Water		**Small Lakes/Ponds**	**Small Rivers/Streams**
PHYSICAL RESPONSE METHODS				
Natural Recovery	A		A	A
Booming-Containment	-		-	-
Booming-Deflection/Exclusion	A		A	A
Skimming	-		-	A
Barriers/Berms	-		-	B
Physical Herding	B		C	B
Manual Oil Removal/Cleaning	-		-	-
Mechanical Oil Removal	-		-	-
Sorbents	-		-	-
Vacuum	-		-	-
Debris Removal	-		-	-
Sediment Reworking	-		-	-
Vegetation Removal	-		-	-
In-situ Burning	-		B	C
Flooding	-		-	-
Low-Pressure, Cold-Water Flushing	-		-	-
High-Pressure, Cold-Water Flushing	-		-	-
Low-Pressure, Hot-Water Flushing	-		-	-
High-Pressure, Hot-Water Flushing	-		-	-
Steam Cleaning	-		-	-
Sand Blasting	-		-	-
CHEMICAL RESPONSE METHODS				
Dispersants	D		D	D
Emulsion Treating Agents	-		-	-
Visco-Elastic Agents	-		-	B
CHEMICAL RESPONSE METHODS (Cont.)				
Herding Agents	D		B	D
Solidifiers	D		D	B
Chemical Shoreline Pretreatment	-		-	-
Shoreline Cleaning Agents	-		-	-
BIOLOGICAL RESPONSE METHODS				
Nutrient Enrichment	-		-	-
Natural Microbe Seeding	-		-	-
KEY: A=May cause the least adverse habitat impact; B-May cause some adverse habitat impact; C=May cause significant adverse impact; D=May cause the most adverse impact; I= Insufficient information; "-"=Not applicable for this oil type				
* Taken from *Options for Minimizing Environmental Impacts of Freshwater Spill Response*				

TABLE N-8: GASOLINE PRODUCTS - SUMMARY OF RELATIVE ENVIRONMENTAL IMPACT FROM RESPONSE METHODS FOR SPILLS IN SHORELINE HABITATS *								
Response Method	**Shoreline Habitat/ESI Ranking**							
	Bedrock 1,2,8	Manmade 1,8	Sand 3,4	Vegetated Shores 9	Sand and Gravel/5	Gravel 6	Mud 7,9	Wetlands 10
PHYSICAL RESPONSE METHODS								
Natural Recovery	A	A	A	A	A	A	A	A
Booming-Containment	-	-	-	-	-	-	-	-
Booming-Deflection/Exclusion	-	-	-	-	-	-	-	-
Skimming	-	-	-	-	-	-	-	-
Barriers/Berms	-	-	-	-	-	-	-	-
Physical Herding	-	-	-	-	-	-	-	-
Manual Oil Removal/Cleaning	-	-	D	D	D	D	D	D
Mechanical Oil Removal	-	-	D	D	D	D	D	D
Sorbents	B	B	-	-	-	-	B	C
Vacuum	-	-	-	-	-	-	-	-
Debris Removal	-	-	-	-	-	-	-	-
Sediment Reworking	-	-	D	D	D	D	D	D
Vegetation Removal	-	-	-	D	-	-	-	D
In-situ Burning	-	-	-	-	-	-	C	B
Flooding	B	B	B	B	A	A	B	B
Low-Pressure, Cold-Water Flushing	B	B	B	B	B	A	D	B
High-Pressure, Cold-Water Flushing	B	B	D	D	C	C	D	D
Low-Pressure, Hot-Water Flushing	-	-	D	D	D	D	D	D
High-Pressure, Hot-Water Flushing	-	-	D	D	D	D	D	D
Steam Cleaning	-	-	-	-	-	-	-	-
Sand Blasting	-	-	-	-	-	-	-	-
CHEMICAL RESPONSE METHODS								
Dispersants	-	-	-	-	-	-	-	-
Emulsion Treating Agents	-	-	-	-	-	-	-	-
Visco-Elastic Agents	-	-	-	-	-	-	-	-
	Bedrock 1,2,8	Manmade 1,8	Sand 3,4	Vegetated Shores 9	Sand and Gravel/5	Gravel 6	Mud 7,9	Wetlands 10
CHEMICAL RESPONSE METHODS (Cont.)								
Herding Agents	-	-	-	-	-	-	-	-
Solidifiers	-	B	-	-	-	-	D	D
Chemical Shoreline Pretreatment	-	-	-	-	-	-	-	-
Shoreline Cleaning Agents	-	-	-	-	-	-	-	-
BIOLOGICAL RESPONSE METHODS								
Nutrient Enrichment	-	-	-	-	-	-	-	-
Natural Microbe Seeding	-	-	-	-	-	-	-	-
KEY: A=May cause the least adverse habitat impact; B-May cause some adverse habitat impact; C=May cause significant adverse impact;D=May cause the most adverse impact; I= Insufficient information; "-"=Not applicable for this oil type								
* Taken from *Options for Minimizing Environmental Impacts of Freshwater Spill Response*								

TABLE N-9: DIESEL-LIKE OILS - SUMMARY OF RELATIVE ENVIRONMENTAL IMPACT FROM RESPONSE METHODS FOR SPILLS IN WATER ENVIRONMENTS *				
Response Method	**Water Environment**			
	Open Water		**Small Lakes/Ponds**	**Small Rivers/Streams**
PHYSICAL RESPONSE METHODS				
Natural Recovery	A		B	B
Booming-Containment	A		A	A
Booming-Deflection/Exclusion	A		A	A
Skimming	-		-	A
Barriers/Berms	B		B	B
Physical Herding	-		C	C
Manual Oil Removal/Cleaning	-		C	C
Mechanical Oil Removal	B		A	A
Sorbents	A		A	A
Vacuum	-		B	B
Debris Removal	-		-	-
Sediment Reworking	B		B	B
Vegetation Removal	A		B	B
In-situ Burning	-		-	-
Flooding	-		-	-
Low-Pressure, Cold-Water Flushing	-		-	-
High-Pressure, Cold-Water Flushing	-		-	-
Low-Pressure, Hot-Water Flushing	-		-	-
High-Pressure, Hot-Water Flushing	-		-	-
Steam Cleaning	-		-	-
Sand Blasting	-		-	-
CHEMICAL RESPONSE METHODS				
Dispersants	B		D	D
Emulsion Treating Agents	B		I	I
Visco-Elastic Agents	B		B	B
Herding Agents	B		B	D
Solidifiers	B		B	B
	Open Water		**Small Lakes/Ponds**	**Small Rivers/Streams**
CHEMICAL RESPONSE METHODS (Cont.)				
Chemical Shoreline Pretreatment	-		-	-
Shoreline Cleaning Agents	-		-	-
BIOLOGICAL RESPONSE METHODS				
Nutrient Enrichment	-		I	I
Natural Microbe Seeding	-		I	I
KEY: A=May cause the least adverse habitat impact; B-May cause some adverse habitat impact; C=May cause significant adverse impact; D=May cause the most adverse impact; I= Insufficient information; "-"=Not applicable for this oil type				
* Taken from *Options for Minimizing Environmental Impacts of Freshwater Spill Response*				

TABLE N-10: DIESEL-LIKE OILS - SUMMARY OF RELATIVE ENVIRONMENTAL IMPACT FROM RESPONSE METHODS FOR SPILLS IN SHORELINE HABITATS *

Response Method	Shoreline Habitat/Esi Ranking							
	Bedrock 1,2,8	**Manmade 1,8**	**Sand 3,4**	**Vegetated Shores 9**	**Sand and Gravel/5**	**Gravel 6**	**Mud 7,9**	**Wetlands 10**
PHYSICAL RESPONSE METHODS								
Natural Recovery	A	A	A	A	A	A	A	A
Booming-Containment	-	-	-	-	-	-	-	-
Booming-Deflection/Exclusion	-	-	-	-	-	-	-	-
Skimming	-	-	-	-	-	-	-	-
Barriers/Berms	-	-	-	-	-	-	-	-
Physical Herding	-	-	-	-	-	-	-	-
Manual Oil Removal/Cleaning	B	A	B	B	B	B	D	D
Mechanical Oil Removal	-	-	B	C	C	D	D	D
Sorbents	A	A	A	A	A	A	A	A
Vacuum	B	B	B	B	B	B	C	B
Debris Removal	A	A	A	B	A	A	B	B
Sediment Reworking	-	-	B	D	B	B	D	D
Vegetation Removal	-	-	-	B	-	-	-	C
In-situ Burning	B	B	-	B	-	-	C	B
Flooding	A	A	A	A	A	A	A	A
Low-Pressure, Cold-Water Flushing	A	A	B	A	A	A	C	A
High-Pressure, Cold-Water Flushing	B	A	D	C	C	B	D	D
Low-Pressure, Hot-Water Flushing	C	B	C	D	C	C	D	D
High-Pressure, Hot-Water Flushing	D	B	D	D	D	D	D	D
Steam Cleaning	D	C	-	-	D	D	-	-
Sand Blasting	D	C	-	-	-	-	-	-
CHEMICAL RESPONSE METHODS								
Dispersants	-	-	-	-	-	-	-	-
Emulsion Treating Agents	-	-	-	-	-	-	-	-
Visco-Elastic Agents	-	-	-	-	-	-	-	-
Herding Agents	-	-	-	-	-	-	-	-
Solidifiers	B	B	B	D	-	-	D	D
	Bedrock 1,2,8	**Manmade 1,8**	**Sand 3,4**	**Vegetated Shores 9**	**Sand and Gravel/5**	**Gravel 6**	**Mud 7,9**	**Wetlands 10**
CHEMICAL RESPONSE METHODS (Cont.)								
Chemical Shoreline Pretreatment	I	I	I	I	I	I	I	I
Shoreline Cleaning Agents	-	B	-	I	-	-	D	I
BIOLOGICAL RESPONSE METHODS								
Nutrient Enrichment	C	C	B	B	B	B	I	I
Natural Microbe Seeding	I	I	I	I	I	I	I	I

KEY: A=May cause the least adverse habitat impact; B-May cause some adverse habitat impact; C=May cause significant adverse impact; D=May cause the most adverse impact; I= Insufficient information; "-"=Not applicable for this oil type

* Taken from *Options for Minimizing Environmental Impacts of Freshwater Spill Response*

N.5.4 Phase II - Validation Of Strategies

Once the plan is in place, the strategies should be tested either during equipment deployment training, drills and exercise deployments, or actual incidents. Training and drills are another area where Area Committee participation becomes important (see Appendix Q for requirements).

N.5.5 Phase III - Emergency Response Prioritization Of Strategies

In the event of a spill, resources should be on hand to determine the necessary environmental response strategies for the spill incident, such as relevant ACPs and ICPs (see Table N-11). These resources are valuable tools which include response strategies based on the environmental sensitivities in the planning area and their potential for being impacted during a particular spill scenario. The resources listed in Table N-11 should be consulted prior to determining response strategies to avoid duplicating previous efforts and to make sound response decisions in a timely fashion.

TABLE N-11: ENVIRONMENTAL RESPONSE STRATEGY RESOURCES

Title	Priority List	Map
Facility Response Plans (FRP)		
COMNAVREG HI ICP	Yes	Yes
Area Contingency Plans (ACP)		
Hawaii Area Contingency Plan	Yes	Yes
Other Plans (State Plans, Geographic Response Plans (GRP), Etc.)		
Hawaii State Contingency Plan	No	No

Location of Spill and Slick Movement

Since the physical and chemical properties of oil have a great effect on response operations, information on various properties of the spill must be obtained, such as specific gravity, viscosity, pour point, emulsification, etc. As time goes on, these properties will change due to weathering of the oil which will limit response options.

Other factors may also affect the persistence of the oil in a particular environment. In general, the degree of impact, the type of shoreline sediments affected, and the level of exposure the oil has to the elements (wind, currents, and waves) can greatly increase the residence time of the oil. Therefore, currents, tides, and winds must also be determined to predict the movement of the spill so appropriate priorities can be made. The SSC can assist the NOSC Rep in modeling the oil slick to determine these priorities. These measurements will also assist in the cleanup phase to determine higher priority areas.

Sensitive Areas Impacted

An aerial survey should be performed as soon as possible after a major spill to determine the sensitive areas impacted by the spill. Per 33 CFR Part 154.1035(b)(3)(vii) JBPHH, as a "significant and substantial harm" oil facility, has aerial oil tracking capabilities, with trained observation personnel under contract through Navy SUPSALV. Aerial tracking resources are capable of being on site in the case of a worst-case discharge in advance of the 12 hour requirement for Tier 1 resources to be on-scene.

Reorganization of Priorities

Based on the survey performed by the SSC, those sensitive areas not impacted should be the focus of response and protection efforts. The priorities listed in the ACP and ICP should be reorganized to focus only on these areas and eliminate areas already impacted by the spill. A list of response strategies should be developed which would have the minimal ecological impact and reduction of the spill impact (see Tables N-3 and N-4).

HAWAII

SHORELINE HABITATS

- 1A EXPOSED ROCKY CLIFFS
- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN BEDROCK
- 2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES
- 8B SHELTERED, SOLID MAN-MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B SHELTERED, VEGETATED LOW BANKS
- 10A SALT- AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C FRESHWATER SWAMPS
- 10D MANGROVES
- FRESHWATER SCRUB / SHRUB WETLANDS

HUMAN-USE FEATURES

- AIRPORT
- AQUACULTURE
- ARCHAEOLOGICAL SITE
- ARTIFICIAL REEF
- BOAT RAMP
- COMMERCIAL FISHING
- CRITICAL HABITAT
- DIVE SITE
- HISTORIC FISHPOND
- MARINA
- MARINE SANCTUARY
- NATIONAL PARK
- RECREATIONAL BEACH
- RECREATIONAL FISHING
- SPECIAL MANAGEMENT AREA
- STATE / REGIONAL PARK
- SUBSISTENCE FISHING / COLLECTING
- SURFING
- WATER INTAKE
- WILDLIFE REFUGE
- 123 HUMAN-USE NUMBER
- 10 BATHYMETRY (FATHOMS)
- MANAGEMENT AREA

SENSITIVE BIOLOGICAL RESOURCES

BIRD

- GULL / TERN
- PASSERINE BIRD
- RAPTOR
- SEABIRD
- SHOREBIRD
- WADING BIRD
- WATERFOWL
- NESTING SITE

MARINE MAMMAL

- DOLPHIN
- WHALE
- SEAL
- PUPPING / HAUL-OUT SITE

FISH

- FISH
- NATIVE STREAM / RARE SPECIES OCCURRENCE

INVERTEBRATE

- BIVALVE
- CRAB / OTHER INVERTEBRATES
- ECHINODERM
- GASTROPOD
- INSECT
- LOBSTER
- OCTOPUS
- SHRIMP
- NATIVE STREAM / RARE SPECIES OCCURRENCE

REPTILE

- TURTLE
- NESTING SITE / OCCURRENCE

HABITAT

NATIVE / RARE PLANT

- NATIVE / RARE PLANT

BENTHIC MARINE HABITAT

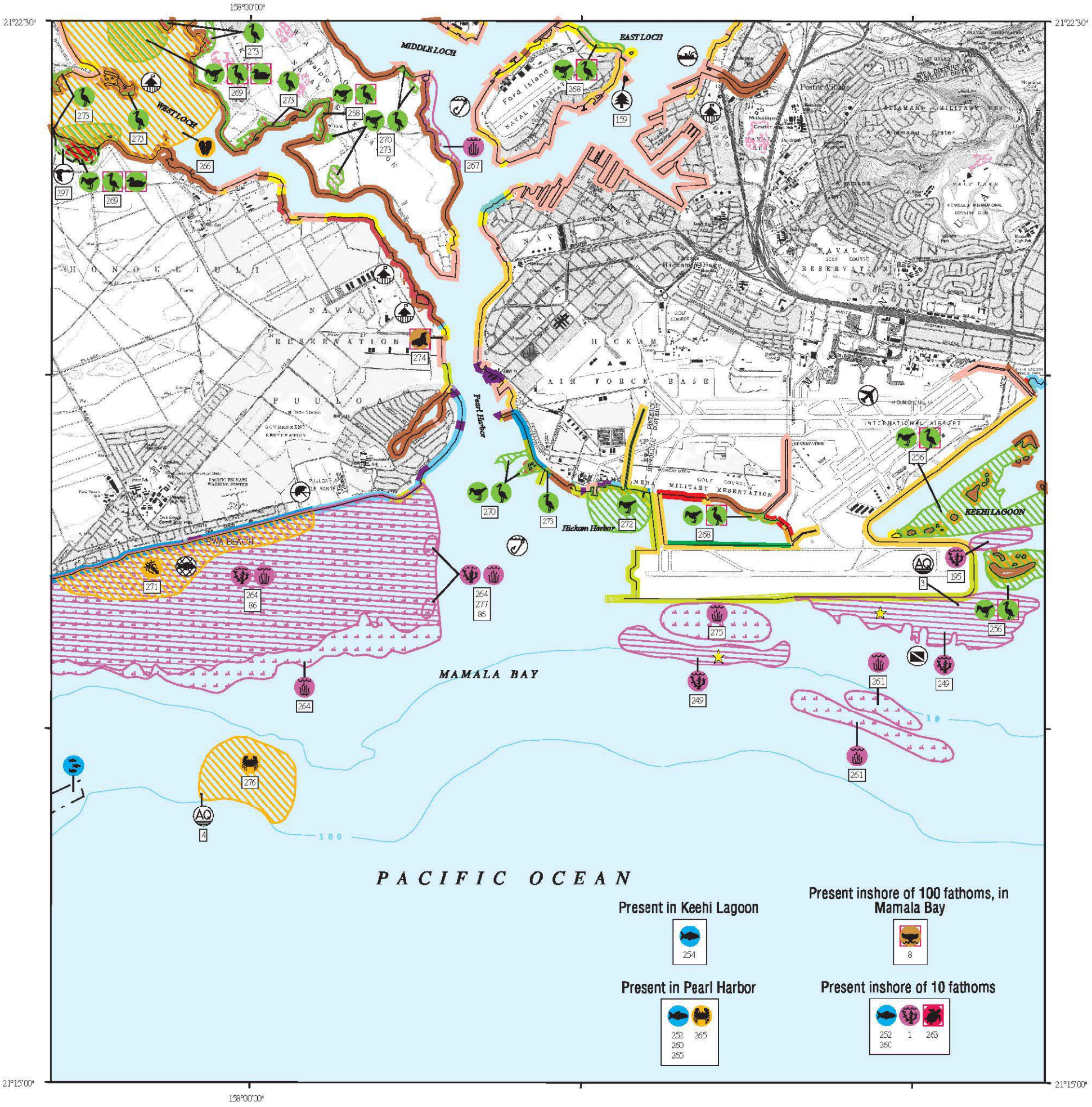
- ALGAE / SEAGRASS
- CORAL
- ANCHIALINE POOL
- CORAL AREA OF SPECIAL SIGNIFICANCE
- MULTI-GROUP
- THREATENED / ENDANGERED
- 123 RAR NUMBER

N02138

Exhibit N-6N

NAVY0006229

ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE HABITATS (ESI)

- 1A EXPOSED ROCKY CLIFFS
  1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN BEDROCK
  2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES
- 8B SHELTERED, SOLID MAN-MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
  9B SHELTERED VEGETATED LOW BANKS
- 10A SALT- AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C FRESHWATER SWAMPS
- 10D MANGROVES
- FRESHWATER SCRUB/SHRUB WETLANDS

PRESENT IN AREA:

Shorebirds | Archaeological Sites *

*SEE INTRO PAGES FOR CONTACT INFORMATION

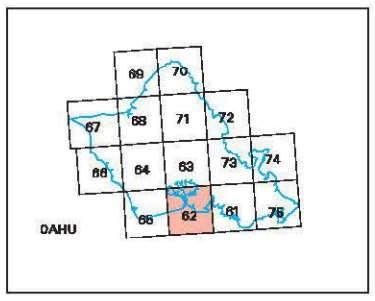
N W E S

SCALE 1:55000

1 .5 0 1 KILOMETER

1 .5 0 1 MILE

Not For Navigation



Published: July 2001

Published at Seattle, Washington
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

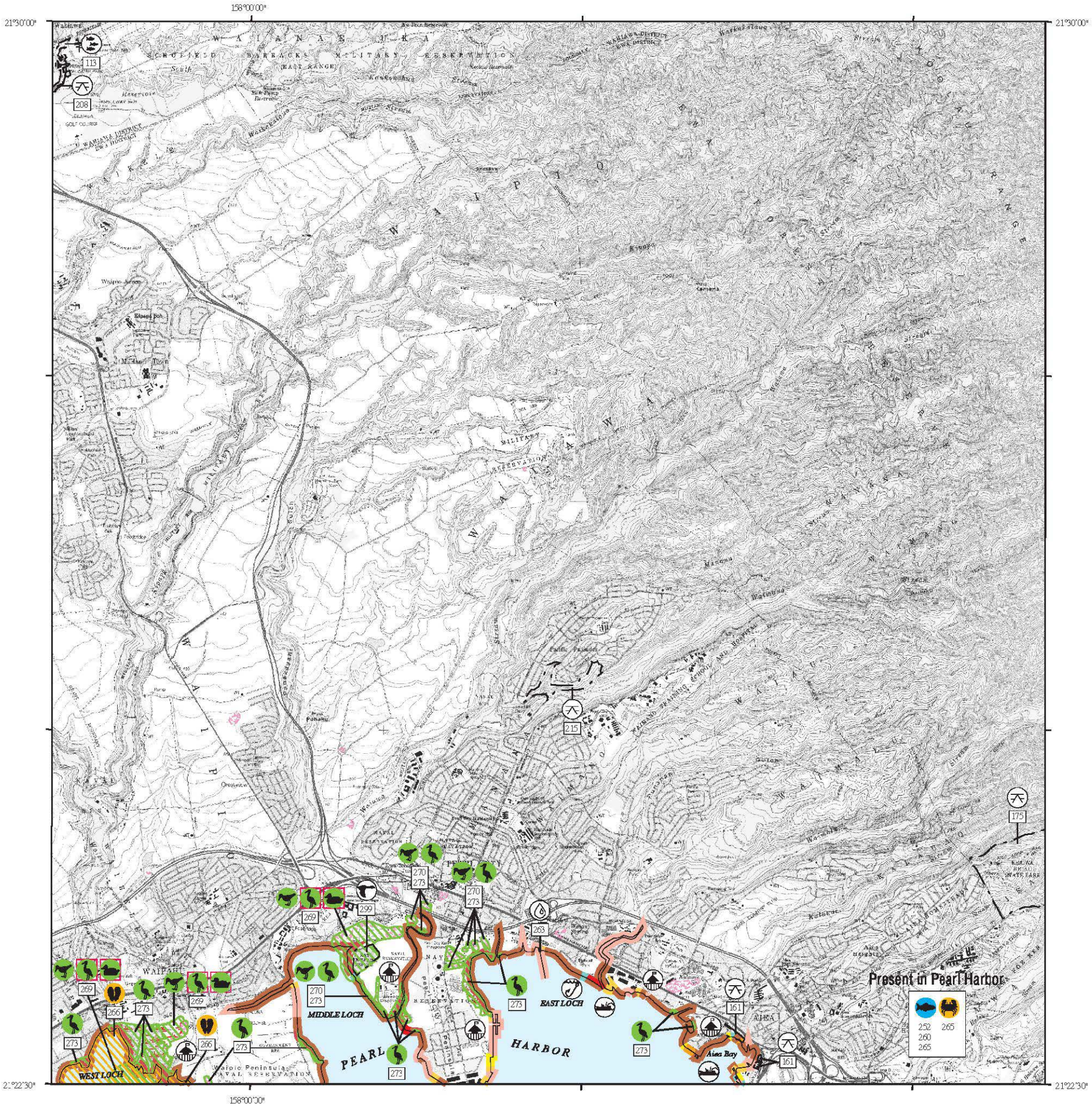
PEARL HARBOR, HI (1983) **HI-62**

N02139

Exhibit N-6N

NAVY0006230

ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE HABITATS (ESI)

- 1A EXPOSED ROCKY CLIFFS
  1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN BEDROCK
  2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES
- 8B SHELTERED, SOLID MAN-MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
  9B SHELTERED VEGETATED LOW BANKS
- 10A SALT- AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C FRESHWATER SWAMPS
- 10D MANGROVES
- FRESHWATER SCRUB/SHRUB WETLANDS

PRESENT IN AREA:

Shorebirds Archaeological Sites*

*SEE INTRO PAGES FOR CONTACT INFORMATION

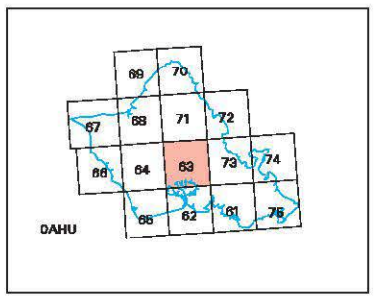
N W E S

SCALE 1:55000

1 .5 0 1 KILOMETER

1 .5 0 1 MILE

Not For Navigation



Published: July 2001

Published at Seattle, Washington
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

WAIPAHU, HI (1983) **HI-63**

N02140

Exhibit N-6N

NAVY0006231

HAWAII - ESIMAP 62

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Laying	Hatching	Fledging
256	Hawaiian stilt	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-
	Long-billed dowitcher				X	X	X	X			X	X	X	X	X		-	-	-	-
	Pacific golden plover				X	X	X	X			X	X	X	X	X		-	-	-	-
	Ruddy turnstone				X	X	X	X			X	X	X	X	X		-	-	-	-
	Sanderling				X	X	X	X			X	X	X	X	X		-	-	-	-
	Shorebirds				X	X	X	X			X	X	X	X	X		-	-	-	-
	Wandering tattler				X	X	X	X			X	X	X	X	X		-	-	-	-
268	Hawaiian stilt	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-	-
	Long-billed dowitcher				X	X	X	X			X	X	X	X	X		-	-	-	-
	Pacific golden plover				X	X	X	X			X	X	X	X	X		-	-	-	-
	Ruddy turnstone				X	X	X	X			X	X	X	X	X		-	-	-	-
	Sanderling				X	X	X	X			X	X	X	X	X		-	-	-	-
	Shorebirds				X	X	X	X			X	X	X	X	X		-	-	-	-
	Wandering tattler				X	X	X	X			X	X	X	X	X		-	-	-	-
269	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Green-winged teal				X	X	X					X	X	X	X		-	-	-	-
	Hawaiian common moorhen	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Hawaiian coot	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Hawaiian duck	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Hawaiian stilt	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-	-
	Lesser scaup				X	X	X					X	X	X	X		-	-	-	-
	Long-billed dowitcher				X	X	X	X			X	X	X	X	X		-	-	-	-
	Northern pintail				X	X	X					X	X	X	X		-	-	-	-
	Northern shoveler				X	X	X					X	X	X	X		-	-	-	-
	Pacific golden plover				X	X	X	X			X	X	X	X	X		-	-	-	-
	Ruddy turnstone				X	X	X	X			X	X	X	X	X		-	-	-	-
	Sanderling				X	X	X	X			X	X	X	X	X		-	-	-	-
	Shorebirds				X	X	X	X			X	X	X	X	X		-	-	-	-
	Wandering tattler				X	X	X	X			X	X	X	X	X		-	-	-	-
	Waterfowl				X	X	X					X	X	X	X		-	-	-	-
270	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Long-billed dowitcher				X	X	X	X			X	X	X	X	X		-	-	-	-
	Pacific golden plover				X	X	X	X			X	X	X	X	X		-	-	-	-
	Ruddy turnstone				X	X	X	X			X	X	X	X	X		-	-	-	-
	Sanderling				X	X	X	X			X	X	X	X	X		-	-	-	-
	Shorebirds				X	X	X	X			X	X	X	X	X		-	-	-	-
	Wandering tattler				X	X	X	X			X	X	X	X	X		-	-	-	-
272	Long-billed dowitcher				X	X	X	X			X	X	X	X	X		-	-	-	-
	Pacific golden plover				X	X	X	X			X	X	X	X	X		-	-	-	-
	Ruddy turnstone				X	X	X	X			X	X	X	X	X		-	-	-	-
	Sanderling				X	X	X	X			X	X	X	X	X		-	-	-	-
	Shorebirds				X	X	X	X			X	X	X	X	X		-	-	-	-
	Wandering tattler				X	X	X	X			X	X	X	X	X		-	-	-	-
273	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-

FISH:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
252	Angelfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Blennies				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Butterflyfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Cardinalfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Damselfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Filefish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Goatfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Gobies				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Hawkfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Moray eels				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Parrotfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Puffers				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Snappers				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Squirrelfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Surgeonfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Triggerfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Trunkfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Wrasses				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
254	Hawaiian anchovy				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Scalloped hammerhead									X	X	X					-	-	-	JUN-AUG	-
	Striped mullet				X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	-	MAR-NOV	JAN-DEC
260	Jacks				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
265	Barracuda				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Goldspot herring			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Hawaiian anchovy			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Hawaiian flagtail				X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	-	JAN-DEC	JAN-DEC
	Hawaiian ladyfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Milkfish				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Scalloped hammerhead			HIGH						X	X	X					-	-	-	JUN-AUG	-
	Striped mullet			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	-	MAR-NOV	JAN-DEC

HABITAT:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning
1	Coral reef habitat				X	X	X	X	X	X	X	X	X	X	X	X	-
86	Structural coral reef				X	X	X	X	X	X	X	X	X	X	X	X	-
195	High live coral cover				X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG
249	High live coral cover				X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG
261	Seagrass				X	X	X	X	X	X	X	X	X	X	X	X	-
264	Algae				X	X	X	X	X	X	X	X	X	X	X	X	-
267	Algae				X	X	X	X	X	X	X	X	X	X	X	X	-
275	Seagrass				X	X	X	X	X	X	X	X	X	X	X	X	-
277	High live coral cover				X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG

INVERTEBRATE:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawn/Mate	Eggs	Larvae	Juveniles	Adults
265	Samoan crab				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Swimming crabs				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
266	Eastern oyster				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
271	Octopus				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
276	Kona crab				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

MARINE MAMMAL:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
8	Humpback whale	S/F	E/E	HIGH	X	X	X	X									-	JAN-APR	-	-
274	Hawaiian monk seal	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-

REPTILE:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Internesting	Juveniles	Adults
263	Green sea turtle	S/F	T/T		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC

HAWAII - ESIMAP 62 (cont.)

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Owner	Contact	Phone
3	AQUACULTURE - PEARL OYSTER	BLACK PEARLS, INC.	FRANCIS OISHI	808/587-0094
4	AQUACULTURE - THREADFIN	CATES INTERNATIONAL	FRANCIS OISHI	808/587-0094

NATIONAL PARK:

HUN#	Name	Owner	Contact	Phone
159	USS ARIZONA MEMORIAL	NATIONAL PARK SERVICE		

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone
297	PEARL HARBOR NWR - HONOULIULI UNIT	USFWS		

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

HAWAII - ESIMAP 63

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Laying	Hatching	Fledging
269	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Green-winged teal				X	X	X					X	X	X	X		-	-	-	-
	Hawaiian common moorhen	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Hawaiian coot	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Hawaiian duck	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Hawaiian stilt	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-	-
	Lesser scaup				X	X	X					X	X	X	X		-	-	-	-
	Long-billed dowitcher				X	X	X	X			X	X	X	X	X		-	-	-	-
	Northern pintail				X	X	X					X	X	X	X		-	-	-	-
	Northern shoveler				X	X	X					X	X	X	X		-	-	-	-
	Pacific golden plover				X	X	X	X			X	X	X	X	X		-	-	-	-
	Ruddy turnstone				X	X	X	X			X	X	X	X	X		-	-	-	-
	Sanderling				X	X	X	X			X	X	X	X	X		-	-	-	-
	Shorebirds				X	X	X	X			X	X	X	X	X		-	-	-	-
	Wandering tattler				X	X	X	X			X	X	X	X	X		-	-	-	-
	Waterfowl				X	X	X					X	X	X	X		-	-	-	-
270	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Long-billed dowitcher				X	X	X	X			X	X	X	X	X		-	-	-	-
	Pacific golden plover				X	X	X	X			X	X	X	X	X		-	-	-	-
	Ruddy turnstone				X	X	X	X			X	X	X	X	X		-	-	-	-
	Sanderling				X	X	X	X			X	X	X	X	X		-	-	-	-
	Shorebirds				X	X	X	X			X	X	X	X	X		-	-	-	-
	Wandering tattler				X	X	X	X			X	X	X	X	X		-	-	-	-
273	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-

FISH:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
252	Angelfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Blennies				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Butterflyfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Cardinalfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Damselfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Filefish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Goatfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Gobies				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Hawkfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Moray eels				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Parrotfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Puffers				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Snappers				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Squirrelfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Surgeonfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Triggerfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Trunkfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Wrasses				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
260	Jacks				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
265	Barracuda				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Goldspot herring			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Hawaiian anchovy			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Hawaiian flagtail				X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	-	JAN-DEC	JAN-DEC
	Hawaiian ladyfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Milkfish				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Scalloped hammerhead			HIGH						X	X	X					-	-	-	JUN-AUG	-
	Striped mullet			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	-	MAR-NOV	JAN-DEC

INVERTEBRATE:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawn/Mate	Eggs	Larvae	Juveniles	Adults
265	Samoan crab				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Swimming crabs				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
266	Eastern oyster				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

==========

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Owner	Contact	Phone
113	WAHIAWA PUBLIC FISHING AREA			

PARK:

HUN#	Name	Owner	Contact	Phone
161	AIEA BAY STATE RECREATION AREA			
175	KEAIWA HEIAU STATE RECREATION AREA			
208	WAHIAWA FRESHWATER STATE RECREATION AREA			
215	WAIMANO GULCH STATE PARK RESERVE			

WATER INTAKE:

HUN#	Name	Owner	Contact	Phone
263	WAIAU POWER PLANT WATER INTAKE	HECO		

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone
299	PEARL HARBOR NWR - WAIAWA UNIT	USFWS		

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

APPENDIX O
WILDLIFE MANAGEMENT

The OPA 90 implementing regulations require that this ICP be consistent with the NCP and ACPs. The ICP must identify and address fish and wildlife that can be impacted by oil spills within the plan's planning distances and include appropriate information for wildlife management and rehabilitation.

O.1 WILDLIFE MANAGEMENT

O.1.1 Coordination of Wildlife Management

This section provides the NOSC Rep and personnel in the Planning Section with background information for responding to the needs of wildlife resources. Much of this information was obtained from the Oceania Regional Response Team (ORRT), National Oceanic and Atmospheric Administration's Hazardous Materials Response and Assessment Division (NOAA/HMRAD), and the U.S. Fish and Wildlife Service (USFWS). Additionally, geographic specificity and unique requirements need to be considered in an overall wildlife management strategy. Accordingly, a unified, area-wide approach, established prior to an incident, will help ensure an effective wildlife response plan.

Oil spills may present significant threats to fish and wildlife resources. Protection of these resources may be accomplished through containment and recovery operations (primary response); deterrent, relocation, removal of resources at risk (secondary response); and capture, treatment, and release of the resources (tertiary response). Each operation requires different types of equipment and personnel. Much of the groundwork involved in wildlife management at an oil spill can be conducted before an incident. The Area Committees are the primary organizations for NOSC Rep to rely on when establishing wildlife management procedures.

In coastal areas, pre-spill wildlife issues are found in the Area Contingency Plan (ACP). Fish, wildlife, and sensitive areas within DoD/USN boundaries are under the trusteeship of DoD and should be identified in the Navy FRPs. These resources are identified in this appendix. It should be noted that an Area Committee is geographically synonymous with the EPA federal region for inland areas. If sensitive area annexes are not current or developed, the NOSC Rep should contact the applicable area committee or regional response team representatives.

O.1.2 Identification of Wildlife Resources At Risk

Habitats and species potentially at risk must be identified in advance so responders can effectively implement appropriate protection measures. Appendix N discusses the development of environmental strategies and includes sensitive area identification. This appendix refines sensitive area identification one step further to species identification. This refinement helps to focus protection strategies and set priorities for species based on vulnerabilities to oil spills and on the probability of impacts.

Spill response strategies are the preferred method to protect wildlife from oil spills. Any method that entails human interaction puts wildlife into an element of risk and should be avoided. Preventing oil movement and recovering oil expeditiously are the best defenses against oiled wildlife. Habitats and species potentially at risk must be identified in advance through the

contingency planning process so that responders can implement protection measures effectively.

Protection strategies for wildlife management are subsets of the general environmental strategies and are a focus of this appendix. NOAA ESI maps (see Appendix N) identify species of concern based on behaviors and habits. The NOAA Scientific Support Coordinator (SSC) uses ESI maps as a planning and response tool. The NOSC Rep should work closely with the SSC, the USFWS, and state agencies to identify species at risk. This appendix has a listing of species and their vulnerabilities to oil in Section O.2. Types of strategies employed depend on the types of species, number of each species, location, type of oil, etc.

Vulnerability and susceptibility of species are necessary data points to determine specific species at risk. Each species' feeding and nesting habits are primary behaviors that must be understood when assessing vulnerability and susceptibility of species. More factors to consider are:

- Feeding and nesting habits (Primary Considerations)
- Home range distributions
- Habitat
- Diet
- Diversity
- Behavioral flexibility
- Population density
- Physical and physiological sensitivities to oil.

Birds are historically the most heavily impacted species. Marine mammals and sea turtles are also at risk depending on the species and the spill-specifics. A concise collection of facts and literature on the vulnerabilities and susceptibilities of marine species is contained in the **NOAA *Response Resource Guides.*** This is a four-part series of field reference documents for: marine mammals, marine birds, shellfish, and marine fish. Additional guidelines may be obtained from the USFWS, NMFS, state and local resource agencies, and academic institutions.

Table O-1 gives a general description of effects of oil on birds, marine mammals, and reptiles. The information was obtained from a NOAA/HAZMAT technical document, *An Introduction to Coastal Habitats and Biological Resources for Oil Spill Response,* and adapted into tabular form.

TABLE O-1: EFFECTS OF OIL ON WILDLIFE		
Species Group	**Effect**	**Vulnerability**
Birds (General)	**Fouling of plumage** • Primary effect -- oil disrupts fine feather structure and leads to loss of waterproofing properties which reduces insulation and causes hypothermia (generally birds die from hypothermia). • Drowning	**High Vulnerability Species** to the effects of direct oiling are those with the following behaviors: • Frequent diving for food • Prolonged roosting on the water • Formation of large flocks • Formation of dense nesting colonies in oil-spill susceptible areas • High percentage of time spent on the open ocean • Low reproduction rates and cycles **Low Vulnerability Species** exhibit the following behaviors: • Rarely immersed in water • High percentage of time spent on land or sheltered water bodies • Prolific breeders • Able to avoid oiled areas by shifting habitats
Birds (General)	**Ingestion of oil** • Effects include: anemia, pneumonia, intestinal irritation, kidney damage, altered blood chemistry, decreased growth, impaired osmoregulation, and decreased production and viability of eggs. * Hemolytic anemia is the most severe effect of ingested oil.	• Occurs when birds preen or consume contaminated prey. • Anemic birds cannot dive or forage for food and will starve on beaches, even after being cleaned.
Birds (General)	**Effects on reproduction** • Direct exposure to eggs is the greatest threat to reproductive viability (even small amounts of oil [1 micro-liter of direct oil contact] cause reduced survival). • Ingested oil in adult species may produce fewer eggs or none at all. • Some species abandon the nest. • Loss of a mate leads to lower reproduction capability.	• Oiled birds can transfer toxic doses to eggs while nesting.
Birds (General)	**Physical disturbances** • Physical intrusions from humans during response and cleanup efforts. • Disrupts breeding: most significant impact to species for both present and future populations.	• Influx of personnel and equipment can cause disturbances to individual birds, breeding colonies, and roosting areas.

TABLE O-1: EFFECTS OF OIL ON WILDLIFE		
Species Group	**Effect**	**Vulnerability**
Surface-feeding pelagic seabirds (albatrosses, petrels, fulmars, and shearwaters)	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance	**High Vulnerability** • These birds spend up to 24 hours a day in and around water. • Large numbers may be affected because of their habits: diving for food and formations of large flocks. • During nesting seasons, entire breeding colonies are at risk. • Dense nesting colonies are often in areas highly susceptible to oil spills. • Alcids (auks and murres) are the most susceptible: • Occur in cold offshore waters; often form large flocks while roosting on water and spend much of the time swimming or floating in the water.
Diving pelagic seabirds (auks, murres, murrelets, puffins, guillemots, and auklets)	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance	
Diving coastal seabirds (pelicans, cormorants, frigatebirds, tropicbirds, gannets, and boobies)	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance	**High Vulnerability** • Pelicans as well as other listed seabirds are considered highly susceptible due to feeding characteristics, small populations, status as an endangered species, and low reproduction rates. These birds inhabit open water territories where spill risk is relatively high.
Surface-feeding coastal seabirds (kittiwakes, skuas, and jaegers)	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance	
Terns	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance	**High Vulnerability** • Terns are at higher risk for direct oiling as they dive into the water to feed on fish. Nesting colony disturbances from cleanup may occur.
Gulls	• Fouling of plumage • Ingestion of oil • Effects on reproduction Physical disturbance	**Low Vulnerability** • Few oiled gulls have been observed during spills. They have the ability to exploit wide ranges of habitats and food sources, and are prolific breeders.
Raptors (osprey, bald eagles, peregrine falcons, and owls)	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance	**High Vulnerability** for bald eagles due to their small populations and low reproduction rates. • Bald eagles are predisposed to consuming oiled prey. See above for effects of oil ingestion.

TABLE O-1: EFFECTS OF OIL ON WILDLIFE

Species Group	Effect	Vulnerability
Shorebirds (plovers, turnstones, surfbirds, sandpipers, phalaropes, and oystercatchers)	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance • Indirectly affected by loss of prey on oiled beaches, especially if impacted areas are important feeding sites along migration routes.	**Low Vulnerability** • Shorebirds rarely encounter the water and are unlikely to be directly contaminated. Shorebirds avoid oiled areas if suitable, unoiled feeding and resting areas are available.
Wading birds (herons, egrets, bitterns, rails, ibises, cranes, spoonbills, stilts, and avocets)	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance • May contact oil on heads and faces while feeding or on legs while wading.	**Low Vulnerability** • Wading birds rarely enter the water other than to wade and feed in shallow, sheltered waters.
Waterfowl (swans, geese, diving sea ducks (eiders, scoters), dabbling ducks, mergansers, coots, gallinules, loons, and grebes)	• Fouling of plumage • Ingestion of oil • Effects on reproduction • Physical disturbance	**High Vulnerability** during migration. • Diving sea ducks and geese use offshore and coastal marine waters for staging and overwintering. Certain species of loons and grebes (esp. Pacific species) are also at high risk because they are highly adapted to the water environment and rarely leave it. • Dabbling ducks have a **Low Vulnerability** because they are rarely found in waters prone to oil spills.
Cetaceans (whales, porpoises, and dolphins)	**Surficial contact** • Little or no effect is expected. may result in a temporary reduction in feeding efficiency for baleen whales. **Ingestion** • Direct consumption unlikely to occur. Exceptions include miller whales and gray whales due to their dietary preferences.	• Generally, cetaceans possess the ability to detect and avoid oil and other petroleum hydrocarbons, although oiled cetaceans have been reported in past spills. Lethal and sublethal effects, however, are relatively unknown. • Behaviors and habitats of whales, dolphins, and porpoises that may predispose them to oil exposure are: 1) Habitat preference 2) Migration routes 3) Migration hierarchies 4) Dietary preference 5) Social structure/Reproduction
Pinnipeds (Hawaiian Monk Sea)	**Surficial contact** • Destroys insulative property of fur • Young and immature pups are at highest risk **Ingestion**	• Pinipeds are highly social, and leave the water to congregate on sand beaches, rocky shores, and tidal flats for resting, breeding, and birthing. • Behaviors and habits of walruses, seals, and sea lions that may predispose them to oil exposure: 1) Habitat preference 2) Maternal recognition

TABLE O-1: EFFECTS OF OIL ON WILDLIFE		
Species Group	**Effect**	**Vulnerability**
	• Direct consumption unlikely to occur. • Indirect consumption may occur from grooming pups.	3) Reproduction 4) Interactions with humans 5) Thermoregulation
Sea Turtles	• Ingestion of tar balls, mistaking them for food, may result in death. • Salt regulatory gland may be inhibited by oil contact, reducing the turtle's ability to maintain a proper salinity balance. • Oil contamination of a turtle nest may result in an egg mortality rate of up to 100%.	• Hatchlings and nesting turtles are most susceptible.

O.2 WILDLIFE OIL VULNERABILITIES

The following sections discuss wildlife vulnerabilities to oil and list species that may be present during a large oil release.

O.2.1 Fish

Reef Fish: There are about 460 species of reef fishes that inhabit both the nearshore reef and estuarine communities in Hawai'i. Reef fishes are found in and around coral and rock reefs. Reef fishes range from tide pools to water with over 200 feet depths. In an oil spill, the degree to which reef fishes are impacted depends on water depths at which the oil is released and spreads, water circulation, extent of the spill (area covered), and cleanup measures. If oil reaches intertidal and reef flats these areas are likely to be the most impacted because the water volumes in these areas would not adequately dilute toxic oil constituents. Oil that reaches areas seaward is likely to impact fishes less because of greater dilution capacity (greater volume of water) of these areas and because fishes can migrate out of the impacted areas. In water beyond reef areas (13 to 35 feet and deeper), fishes are less likely to be impacted unless oil is chemically dispersed. Chemically dispersed oil can still be toxic to reef fishes because both oil and dispersant fractions extend from the surface into the water column. Therefore dispersant use should only be considered when the oil is in sufficient water depths to render both oil and dispersant harmless by dilution.

Estuarine Dependent Fish: There are about 30 fish species that depend upon estuary areas for their existence. These areas are characterized by freshwater input, a wide range in salinity, and include areas such as marshes, river/stream mouths, sheltered tidal flats, mangroves, and quiet embayments. A few species of native Hawaiian freshwater gobies ('O'opu) use these areas for a portion of their life cycles. Other species can tolerate a wide range of salinity and therefore, their home range makes use of the entire estuary area. There are a number of species that spend their juvenile stages in the estuarine environment, then migrate to the reefs as they mature.

Estuaries are usually characterized by shallow water depths and lower, if not poor, circulation. These characteristics make them especially vulnerable to adverse impacts from oil. Fishes that live here can easily be trapped by oil movement into an estuary and succumb to its toxic effects. Cleanup measures using materials such as sorbents and booms would impact estuarine fishes the least because they do not involve agitation and mixing of the water column. Skimmers and mechanical herders would impact fishes more because of the mechanical agitation involved, i.e., causing the oil to extend into the water column. Chemical measures should not be considered for estuarine environments.

O.2.2 Marine Mammals

The marine mammals present in Hawai'i are whales, dolphins and seals. All are present year round with the exception of the humpback whale, which is present in winter and spring. The animals are found primarily in the deeper coastal waters with the exception of the bottlenose dolphin, humpback whale, spinner dolphin, and the monk seal, which are found inshore and in shallow offshore waters.

The effects of oil on marine mammals can include lung and respiratory tract damage from inhalation of oil fumes at the water surface and irritation of mucous membranes, especially the

eyes, from contact with oil. Whales and dolphins generally avoid oil slicks and so it is unlikely that they would come into contact with oil.

The following marine mammal species have been reported in Hawai'i and may encounter oil in the event of a spill:

- Humpback Whale (Koholā) (endangered)
- Sperm Whale (Palaoa)
- False Killer Whale
- Pilot Whale
- Melon-headed Whale
- Pygmy Killer Whale
- Beaked Whales
- Bottlenose Dolphin (Nai'a)
- Spinner Dolphin (Nai'a)
- Spotted Dolphin (Nai'a)
- Rough-toothed Dolphin
- Hawaiian Monk Seal ('Ilio holo I ka uaua) (endangered)

With the exception of the humpback whale and the monk seal, very little data is available on most of the other marine mammal species found in Hawaiian waters. The following information on the humpback whale and the Hawaiian monk seal will help identify and understand the behavior, habitat and possible effects of oil spills on these species.

Humpback Whale: The Hawaiian Islands are a major calving and breeding area for the North Pacific whales. A large percentage of the calves and adults are found in the area around Lāna'i, Maui, Moloka'i, and Kaho'olawe. The effects of oil on the juveniles are unknown, but it is expected that the activities associated with a spill may drive the whales from the area. The whales are not known to feed in the winter breeding areas. The whales feed on krill and other planktonic organisms during the rest of the year (late spring, summer, and fall) in their northern habitats. The Humpback Whale is listed as endangered by the federal government and the state of Hawai'i.

Hawaiian Monk Seal: The majority of the Hawaiian Monk Seal population is found from Nihoa to Kure Island in the Northwestern Hawaiian Islands, but Monk Seals are also regularly seen in the Main Hawaiian islands. Monk seals also travel between these two sections of the Hawaiian archipelago. The Hawaiian Monk Seal is a critically endangered species, with an estimated remaining population of approximately 1,200 individuals. Monk Seals are believed to be more susceptible to disturbances to their habitat than many other marine mammals. The Hawaiian Monk Seal is listed as endangered by the federal government and the state of Hawai'i.

O.2.3 Birds

There is very little migratory movement of birds in Hawai'i. Most of the bird species are present year round. Exposure to spilled oil will be lethal to most birds. Oil can coat the bird's feathers, which can result in a loss of insulation and buoyancy and also interfere with the bird's movement. Birds may also ingest oil when they preen, resulting in toxic effects. Oil on the shell can cause mortality in unhatched eggs of all species.

Seabirds

Vulnerability to Oil: There are various species of seabirds that breed and rest in or around the Hawaiian Islands. The greatest concentrations of nesting seabirds are found in the Northwest Hawaiian Islands and islets off the Main Hawaiian Islands. The nearshore and terrestrial presence of seabirds may vary by species and with the time of year, but some species may be present and nest all year round. Seabirds feed in open water areas and occasionally dive in the water when foraging. Large populations of seabirds could be heavily impacted by an oil spill.

Seabird Species:

- Black Noddy (Noio)
- Brown Noddy (Noio koha)
- Blue-gray Noddy
- Gray-backed Tern (Pakalakala)
- White Tern (Manu-o-ku)
- Red-footed Booby (‘A)
- Masked Booby (‘A)
- Brown Booby(‘A)
- Hawaiian Petrel (‘Ua‘u) (endangered)
- Bonin Petrel
- Band-Rumped Storm Petrel (‘Ake ‘ake) (endangered)
- Tristam’s Storm Petrel
- Bulwers Petrel (‘Ou)
- Great Frigate Bird (‘Iwa)
- Black Footed Albatross
- Short-tailed Albatross
- Laysan Albatross (Moli)
- White-tailed Tropic Bird (Koa‘e kea)
- Red-tailed Tropic Bird (Koe‘e ‘ula)
- Sooty Tern (‘Ewa‘ewa)
- Newell’s Shearwater (‘A‘o) (endangered)
- Christmas Shearwater
- Wedge-tailed Shearwater (‘Ua‘u Kani)
- Lesser Frigate Bird

Waterfowl

Vulnerability to Oil: Waterbirds are most susceptible to spilled oil. These birds spend the majority of their time in the water. Waterfowl remain mostly within the estuarine environment (tidal areas, estuaries and marshes).

Waterfowl Species:

- Hawaiian Duck (Koloa maoli) (endangered; endemic to Hawai‘i)
- Hawaiian Coot (‘Alae Ke‘oke‘o) (endangered; endemic to Hawai‘i)
- Hawaiian Gallinule/Moorhen)‘Alae ‘Ula) (endangered; endemic to Hawai‘i)
- Laysan Duck (endangered; endemic to Hawai‘i)
- American Widgeon

- Green-winged Teal
- Lesser Scaup
- Mallard
- Northern Pintail (Koloa Mapu)
- Northern Shoveler
- Snow Goose
- Brant
- Tundra Swan
- Canada Goose

Shorebirds

Vulnerability to Oil: Shorebirds are rarely in the water, but often are impacted by oil on shore lines and rocky areas. The birds are present on beaches and intertidal areas year round.

Shorebird Species:

- Pacific Golden Plover (Kōlea)
- Bristle-thighed Curlew (Kioea)
- Ruddy Turnstone (ʻAkekeke)
- Wandering Tattler (ʻUlili)
- Black-Necked Stilt (ʻAeʻae) (endangered; endemic to Hawaiʻi)
- Sanderling (Hunakai)
- Black-bellied Plover
- Lesser Yellowlegs
- Semipalmated Plover
- Sharp-tailed Sandpiper
- Common Sandpiper

Perching Birds

Vulnerability to Oil: These birds are not in danger from a spill in the water, but a land spill could impact them through disruption of habitat and ingestion of contaminated food. All perching birds in the Hawaiian Islands are introduced species.

Perching Bird:

- Rock Dove
- Spotted Dove
- Barred/Zebra Dove
- Northern Mockingbird (migratory)
- Japanese White-Eye (migratory)
- Common Mynah
- Red Munia/Green Strawberry Finch
- Nutmeg Mannikin
- Chestnut Mannikin
- House Finch (migratory)
- Common Waxbill

- House Sparrow
- Red-crested/Brazilian Cardinal
- Mourning Dove (migratory)
- Northern Cardinal (migratory)

Wading Birds

Vulnerability to Oil: Wading birds prefer sheltered environments with relatively flat shoreline profiles. Concentrations of wading birds are found in most of the marsh and mangrove environments and in sheltered tidal flats. Wading birds feed in shallow water on fish and benthic invertebrates. The primary nesting areas are the sheltered marshes of O'ahu and Hilo Harbor. The nesting periods occur all year round for these birds. Outside of contacting oil on their head/face during feeding or on their legs while wading, this category of birds is unlikely to be directly impacted by spilled oil. Wading birds are highly vulnerable to pipeline spills in wetland areas.

Wading Bird Species:

- Black-crowned Night Heron ('Auku'u)
- Cattle Egret (introduced species)
- Hawaiian Stilt (Ae'o) (endangered)
- Hawaiian Gallinule or Moorhen ('Alae 'Ula) (endangered)

Hawai'i also occasionally gets visiting Blue Herons, Green Herons, Snowy Egrets, and even wandering Sandhill Cranes.

Raptors

Vulnerability to Oil: These birds are not in danger from a spill in the water, but a land spill could impact them through disruption of habitat and ingestion of contaminated.

Raptors Species:

- Short Eared Owl (Pueo) (endangered)
- Hawaiian Hawk (I'o) (endangered)
- Barn Owl (Pueo) (migratory)

O.2.4 Reptiles

Vulnerability to Oil: The only reptile present in the coastal marine environment is the sea turtle. Turtles rest on the undersides of sheltered ledges, coral recesses and sandy bottom areas. There are certain areas that have concentrations of resting and foraging turtles. If these areas were to be impacted by pollutants (petroleum products) the effect would be felt on the entire population of turtles throughout the islands. Nesting sites on sandy beaches have also been documented for the main Hawaiian Islands.

An oil spill could cause several effects on sea turtles. External oiling can cause deterioration of skin in adult sea turtles resulting in possible mortality. Turtles often ingest tar balls, mistaking them for food, potentially resulting in toxic effects. The turtle's salt regulatory gland may also be affected, which would prevent the turtle from maintaining its proper salt balance. Hatchlings and

juvenile turtles are more susceptible to oil pollution; tar has been found to seal their mouths and nostrils shut. Turtle nests exposed to oil may result in a mortality rate of up to 100 percent of the eggs in the nest.

Feeding Habits: Coastal areas are important foraging grounds for the turtles. Green turtles feed on benthic algae, which is found in shallow areas along the coastal region. Hawksbill turtles feed on sponges and small crustaceans in selected nearshore environments of the main Hawaiian Islands.

Turtle Species:

- Green Sea Turtle (Honu) (threatened)
- Pacific Hawksbill Sea Turtle (Honu'ea) (endangered)
- Leatherback Sea Turtle (endangered)
- Loggerhead Sea Turtle
- Olive Ridley Sea Turtle

O.2.5 Shellfish

Vulnerability to Oil: The marine shellfish of Hawaiian waters can be generally described as those animals having a calcium carbonate shell. Shellfish are either motile or non-motile, and occupy all marine habitat zones from the intertidal to deeper offshore waters. The 'Opihi (Limpet) and A`ama Crab are commercially-valuable species that are common to the rocky inter-tidal zone. Both are impacted when oil washes ashore. These animals could die if exposed to oil and those that survive would not be consumable until after some period of time.

Clams and Oysters: Shellfish such as clams and oysters are established in nearshore shallow waters, especially in large bays like Kaneohe and Pearl Harbor, O'ahu. Although established, recreational fisheries are not open for either species due to public health reasons. Clams and oysters are non-motile and found in calm quiet waters. Because of this they are susceptible to adverse impact depending on the size of the spill and degree of mixing (in the water column) during cleanup.

Shellfish Species:

- Clams
- Giant Pacific Oyster
- 'Opihi (Limpet)
- A'ama crab

O.2.6 Crustaceans

Vulnerability to Oil: Crustaceans are found offshore in deeper waters (10 to 120 foot depths). These species are not likely to be affected unless oil reaches the ocean bottom. Crustaceans are commercially very valuable to the Hawaiian Islands.

Crustacean Species:

- California Rock Lobster
- White Crab
- Kona Crab

O.3 RESPONSE PRIORITIES

It is the responsibility of the spiller to take immediate actions to reduce impacts through containment and removal processes. Through rapid response and deployment of protection strategies, most of the oil can be isolated from wildlife. The following general response priorities (no action, primary, secondary, and tertiary) were developed by the Alaska Regional Response Team (ARRT) and the USFWS. These priorities intend to provide strategies that move from passive, minimal disturbance approaches to the more aggressive, maximum contact approach of movement, relocation, and treatment of threatened or injured fish and wildlife. The goal of wildlife management is to reduce handling or contacting wildlife species. Any contact will cause stress to the animal. Capture, removal, and rehabilitation of wildlife are to be used as a last resort.

The USFWS document titled *"Best Practices for Migratory Bird Care during Oil Spill Response"* is an excellent resource for wildlife rehabilitation. The document was developed to provide national "best practices" using established protocols for keeping unoiled birds away from an oil spill and for dealing with oiled birds. It establishes a standardized approach to help protect wildlife resources, enables On-Scene Coordinators (OSCs) to focus on other aspects of spill response, and helps instill public confidence in overall response activities. Note: The document is not intended as a training manual. The document can be found at the following web location: http://ocw.tufts.edu/data/60/781978.pdf

O.3.1 No Response Action

The goal of "no response" is to minimize injury to wildlife resources by avoiding interference through any action. In some situations, fish and wildlife are not immediately endangered or injured by the discharge of oil. Some habitat types recover better naturally, and human intervention can hinder recovery. For example, in some oiled marshes, oil can be trampled into the sediment from response operations if intrusive attempts are made to remove oil or cut vegetation.

O.3.2 Primary Response Strategy

The primary response strategy for wildlife protection emphasizes the containment of spilled oil at the source to prevent or reduce contamination to species and their habitats. Primary response strategies may include mechanical cleanup, protective booming, *in-situ* burning, and dispersant usage. Removal of oiled debris, especially contaminated food sources (both in the water and on the land), is a primary response strategy that can reduce chances of oiled wildlife entering the spill area.

Dispersion of oil through natural agitation (e.g., wave action) and through chemical dispersant application will remove the oil from the surface of the water, removing the threat to birds. When natural dispersion cannot be controlled or relied upon, the use of chemical dispersants becomes a possible solution. From the Navy's perspective, however, using dispersants is often not an option given the properties of oils in use by the Navy. Refer to the Hawai'i ACP for guidance on dispersant use policy.

O.3.3 Secondary Response Strategy

The secondary response strategy emphasizes the prevention of wildlife from entering the area through the use of deterrent techniques. These techniques may include auditory methods (e.g.,

firing propane cannons), visual methods (e.g., Mylar tape or scarecrows), and other methods, such as preemptive capture and relocation.

O.3.3.1 Wildlife Deterrent Techniques

Deterrent techniques may be used to disperse and exclude wildlife from specific areas. Gas-operated exploders, pyrotechnics, aircraft, electronic sound generators, balloons, and lights have all been used as deterrents to scare wildlife away from a potentially hazardous area, either for wildlife or human safety. The use of deterrents in an oil spill situation is desirable because it has the potential to reduce wildlife impacts and prevent human contact with wildlife. A study of deterrent techniques for marine oil spills was performed by MSRC and Exxon Biomedical, Inc., and was published by MSRC (Technical Report 94-003). This document discusses strategic considerations, habitat-specific techniques, and environmental concerns of deterrent use.

Birds: Although deterrent techniques and preventive oiling management practices for birds are promising, problems do exist:

- Birds habituate to repetitious stimuli;
- Disturbance during highly sensitive times (e.g., nesting seasons) can be detrimental to the welfare and success of nesting birds;
- Divers (Alcids, Grebes Loons) dive from disturbances rather than fly away, so they cannot be displaced.

Marine mammals: Effective hazing or deterring of marine mammals has demonstrated limited success. With the notable exception of sea otters and fur seals, high mortality rates among marine mammals from oil spills have not been observed. For this reason, marine mammal deterrent techniques have not been examined or used to the same extent as bird deterrents.

O.3.3.2 Preemptive Capture

Preemptive capture includes the capture, handling, transportation, holding, and releasing of healthy, uncontaminated wildlife. Preemptive capture is a good alternative for protecting otters from oil contact, since they appear to habituate quickly to visual and auditory deterrents. However, preemptive capture is feasible when only a few otters are threatened.

O.3.3.3 Prioritization of Secondary Response Strategies

Deterrence/hazing or capture and holding all potentially impacted wildlife may not be possible. Prioritization of the areas in which secondary response strategies may be applied must be based on the presence of threatened or endangered species; the ability of a species to recover from losses; and the responsiveness of the species to hazing procedures.

O.3.3.4 Legal Requirements for Secondary Response Strategies

Legal requirements and restrictions need to be followed in the application of secondary response strategies. Some examples of these requirements are listed below:

- Federal requirements: Permits must be obtained from USFWS to haze species managed by FWS, including threatened and endangered species. Likewise, the National marine Fisheries Service (NMFS) must issue permits regarding marine mammals (see Tab 2).

- State Requirements: Some states also require permits to haze, collect, or hold species (see Table O-3).
- Experts: Any decision to haze birds from oiled areas must be carefully coordinated with qualified wildlife scientists.

O.3.4 Tertiary Response Strategy

Tertiary response is a strategy of last resort. This strategy entails the capture and treatment of oiled wildlife. Typically only a small percentage of wildlife highly sensitive to effects of oiling (e.g., birds) will be captured if oiled. Of those captured, some will not be healthy enough to survive the treatment process. For tertiary response to be effective, preplanning for wildlife response capabilities (e.g., expertise, equipment, and facilities) is essential. This section describes the major components of tertiary response. As with secondary response, tertiary response requires approval from the FOSC and from the applicable trustee agencies.

O.4 IDENTIFICATION OF WILDLIFE RESPONSE ORGANIZATIONS

Several wildlife response organizations in the United States have experience in treating wildlife impacted by an oil spill situation. Trained and experienced wildlife specialists deal with recovery and rehabilitation of wildlife under conditions other than oil spills; contracting with an organization that understands oil spill operations, and that can worm within the ICS response system is essential. Knowledge and expertise should be drawn upon from other areas if it can be applied to an oil spill.

When evaluating a wildlife response organization, identify what capabilities are needed for the worst-case discharge and area at risk. Some wildlife response organizations are trained and permitted to respond to avian species only, while others are capable of responding to mammalian species only. Organizations rarely claim total expertise for both categories of animals. Reputable organizations, however, work closely with other entities that have complementary capabilities.

Most wildlife response organizations now require a contract to name them as a responder in a plan. A contractual arrangement ensures that the required capability will be accessible during a spill.

O.4.1 Activation of Wildlife Response Organization

Navy SUPSALV currently has a contractual arrangement with International Bird Rescue Research Centers (IBRRC) for the treatment of oiled wildlife. Table O-2 described the steps necessary to activate IBRRC. When considering activation of a wildlife response organization it must be realized that there is a minimal level of response the organization will provide.

TABLE O-2: ACTIVATION OF WILDLIFE RESPONSE ORGANIZATIONS	
Activation process once the decision to treat wildlife impacted by an oil spill has been made.	
1.	Call SUPSALV (Day): 202-781-1731 Option #2, (24 Hr): 202-781-3889, and request support from International Bird Rescue Research Centers (IBRRC).
2.	SUPSALV will contact IBRRC and COMNAVREG HI to determine the level of support needed. SUPSALV will provide an estimate for IBRRC's response.
3.	Upon COMNAVREG HI acceptence of estmate, IBRRC will be activated and respond.

O.4.2 Use of Volunteers

Navy policy is not to use volunteers. The NOSC Rep should work with the FOSC to direct volunteers to appropriate response organization. Additional information on volunteer programs can be Section 2410 (Community Outreach) and Section 2420 (Volunteer Program) of the Hawai'i ACP (Change 6.2) dated 23 October 2015. The Hawai'i ACP maintains an up-to-date listing of local wildlife response organizations.

O.5 FEDERAL AND STATE REQUIREMENTS AND POINTS OF CONTACT

Federal and state natural resource trustee agencies are responsible for ensuring the protection of fish, wildlife, and sensitive areas. During the pre-incident planning stage, these entities must be identified, and lines of authority must be understood. By identifying the federal and state responsibilities and capabilities that exist in the NOSC Rep AOR, the NOSC Rep will be better prepared to respond to wildlife issues. Discussing wildlife protection strategies and wildlife management plans will enhance the effectiveness of the response and will ensure that federal and state regulations are not violated, and that people are not put at risk by trying to handle injured wildlife without proper training. The following sections discuss the natural resource agencies with which the NOSC Rep may need to cooperate.

O.5.1 U.S. Fish and Wildlife Service

The USFWS, under the Department of the Interior (DOI), is responsible for managing and protecting migratory birds, anadromous and freshwater fishes, terrestrial endangered species, and sea mammals. The USFWS is also responsible for the administration of the Endangered Species Act and is the permitting agency for handling species under its purview. Because birds and sea mammals are the species most vulnerable to spills, the USFWS will be a primary point of contact. In the event of a spill which has impacted wildlife, the NOSC Rep will contact the local USFWS office and request their assistance. The local USFWS office is located at:

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawai'i 96850-0056
(808) 792-9400
(808) 792-9580 (fax)

The USFWS will send a team of technical specialist in wildlife response to evaluate the extent of the impact to wildlife. Although USFWS personnel are trained in wildlife cleaning and rehabilitation, generally, the USFWS will recommend local wildlife response organization and permit them to handle and care for the impacted wildlife.

For very large wildlife responses the USFWS has trained Spill Response Coordinators. These people are trained in ICS, are experienced in spill response, and are permitted to handle migratory birds and other species under the jurisdiction of the Service. Contact the Pacific Islands Fish and Wildlife Office at the number above to request a Spill Response Coordinator.

O.5.2 National Marine Fisheries Service

Examples of NOAA's trusteeship include the following natural resources and their supporting ecosystems: marine fishery resources; anadromous fish; endangered species and marine

mammals; and the resources of National Marine Sanctuaries and National Estuarine Research Reserves.

NOAA's National Marine Fisheries Service (NMFS) has trained people to handle oiled and injured marine mammals. NMFS, through the Department of Commerce, is responsible for the administration of the Endangered Species Act as it applies to certain cetaceans and pinnipeds. NMFS is the permitting agency for handling marine mammals. The contact information for the Pacific Islands Regional Office is:

NOAA Fisheries Service - Pacific Islands Regional Office
NOAA Inouye Regional Center (IRC)
NMFS/PIRO
1845 Wasp Blvd., Building 176
Honolulu, HI 96818
(808) 725-5000
(808) 725-5215 (fax)

O.5.3 State Agencies

State natural resource agencies are also trustee agencies and require consultation and permits for oiled wildlife management. The NOSC Rep should establish a point of contact with the appropriate state agencies through the Area Committee or Regional Response Team. Table O-3 provides contact information for the State of Hawai'i's Trustee Agency.

TABLE O-3: STATE TRUSTEE AGENCIES IN COMNAVREG HI AOR

Agency	Contact	Telephone
Hawai'i Department of Land and Natural Resources	Aquatic Resources Division	(Day) 587-0100 (Fax) 587-0115
	Historic Preservation Division	(Day) 692-8015 (Fax) 692-8020
	Kahoolawe Island Reserve Commission	(Day) 243-5020 (Fax) 243-5885
Hawail Department of Health	Hazard Evaluation and Emergency Response Office	(Day) 586-4249 (Fax) 586-7537 (24-hr) 247-2191
The Hawai'i ACP maintains an up-to-date listing of state agencies with points of contact for each agency listed. If COMNAVREG HI requires a point of contact for a state agency regarding wildlife issues, the Planning Section will consult the ACP to obtain that listing. A copy of the Hawai'i ACP is kept in the NOSC Rep's office, Building 150.		

O.5.4 Natural Resource Policies, Regulations, and Statutes Applicable to Oiled Wildlife Management

Under the Endangered Species Act (ESA) and the Migratory Bird Treaty Act (MBTA), the USFWS has responsibility for managing and protecting threatened and endangered terrestrial plant and animal species (including threatened and endangered seabirds) and migratory birds.

Under the ESA and Marine Mammal Protection Act (MMPA), the National Marine Fisheries Service is responsible for managing and protecting all threatened and endangered marine animal species and cetaceans and pinnipeds, except walruses. Both agencies must be notified if wildlife under their respective jurisdictions is threatened or affected by an oil spill.

O.5.4.1 Applicable Statutes

The **Endangered Species Act** (*16 U.S.C. 1531 et. seq.*), as amended, provides protective measures for species listed as threatened or endangered and their critical habitats. The ESA prohibits federal agencies from jeopardizing the continued existence of listed species and, unless otherwise authorized, prohibits all parties from "taking" listed species. According to the ESA, "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such manner.

Section 7 of the ESA requires any federal agency that authorizes, funds, or carries out activities that may affect listed species or critical habitats to consult with USFWS and/or NMFS. Therefore, the FOSC must immediately consult with USFWS or NMFS whenever a response may affect these resources. The ESA and its implementing regulations provide special provisions for consultations during emergencies such as oil spills. Although informal consultations and emergency provisions exist under the ESA, a formal consultation is recommended to protect both the NOSC Rep and the endangered species adequately. Formal consultations may be conducted through the area committee process, but documentation must be substantive.

The **Migratory Bird Treaty Act** (*16 U.S.C. 703*) prohibits taking or harming migratory and certain other birds, their eggs, nests, or young without the appropriate permit. Migratory bird collection and holding must be coordinated with, and permitted from, the USFWS.

The **Marine Mammal Protection Act** prohibits the taking of sea otters, seals, sea lions, walruses, whales, dolphins, and porpoises. Taking includes harassing or disturbing these animals as well as actual harming or killing. Section 109 (h) of this act allows taking by a federal or state governmental official during official duties, if the taking is for the welfare and protection of the animal. Accordingly, the FOSC is authorized to take marine mammals during an oil spill response. Any takes must be coordinated with and permitted by NMFS.

O.5.5 Permits

Table O-4 provides information on State and Federal permits required for hazing, collecting, or holding live animals. See Tab 2 for further information on response permits and consultations.

TABLE O-4: STATE AND FEDERAL PERMITS AND/OR AUTHORIZATIONS REQUIRED FOR HAZING, COLLECTING OR HOLDING ANIMALS

Animal	State Trustee Agency		USFWS		NMFS	
	Collect and Hold	Haze or Handle	Collect and Hold	Haze or Handle	Collect and Hold	Haze or Handle
Migratory Birds			Yes[2]	No[3]	No	No
Seals (Hawaiian Monk)			No	No	Yes	Yes
Sea Turtles			No	No	Yes	Yes
Terrestrial mammals			No	No	No	No

[1] See "Fax Cover Sheet," Page O-28.
[2] Includes salvage of dead, oiled wildlife.
[3] A FWS permit is also needed to haze or handle species managed by FWS that are listed on the Federal endangered species list.

O.5.6 Euthanasia Policies

The USFWS has a euthanasia policy and requires responsible parties and private contractors to have a similar policy or agree to the USFWS policy. Determination to euthanize an organism must be made and subsequently performed by qualified USFWS personnel and a veterinarian. A Federal Migratory Bird Rehabilitation permit is needed from the USFWS to euthanize any bird.

USFWS policy requires the euthanasia of birds that have sustained injuries requiring amputation of a leg, a foot, or a wing at the elbow or above, and/or is completely blind. Additionally, USFWS policy states that you must not sustain the life of any migratory bird that cannot after medical management feed itself, perch upright, or ambulate without inflicting additional injuries to itself. You must obtain permission before euthanizing any bald or golden eagle or threatened or endangered species from the USFWS unless USFWS personnel are not available and humane considerations warrant prompt euthanasia

O.5.7 Chain of Custody Issues

The USFWS (through its Law Enforcement Division), NMFS, and applicable state trustee agencies will take the lead in tagging injured and dead wildlife. If those organizations are not onsite, personnel should be briefed on tagging collected species and establishing a chain of custody protocol until the resource trustees arrive onsite and relieve them. This must be authorized by USFWS and NMFS unless DoD/USN is the sole trustee. If DoD/USN is the sole trustee, proper chain of custody protocols should be followed.

USFWS and NOAA have similar procedures in place for handling and shipping collected species and samples to ensure data integrity. Good data are necessary for submissible evidence in a court of law. For the Navy, however, other mechanisms should be solidified, preferably before an incident, in the forms of memoranda of understanding, memoranda of agreement, or interagency agreements. These agreements are also important in cases of third party spills where DoD/Navy trust resources are impacted.

O.5.8 Temporary Storage

Temporary storage requirements can be substantial, since recovered carcasses must be kept in a freezer to eliminate possible disease sources and until necessary necropsies, identifications, and samples are made. This area must be identified in consultation with the applicable federal and state natural resource agencies.

O.5.9 Disposal

Wildlife rehabilitation actions generate large amounts of contaminated water and waste material, including contaminated carcasses. In some states, the waste will be classified as hazardous materials. Any disposal of carcasses is the responsibility of the trustee agency, with expenditures incurred by the spiller. As with other response-generated wastes, disposal facilities and permits must be identified in the preplanning stages to alleviate an undue procedural burden during a response and cleanup. The ICP includes disposal of wildlife requirements. If a Navy facility has a disposal facility shortfall, the NOSC Rep will need to identify additional satisfactory sites. Within the Area Committee, resources and information on disposal sites may be shared and agreed upon among the different parties.

PAGE INTENTIONALLY LEFT BLANK

APPENDIX P
RESERVED

PAGE INTENTIONALLY LEFT BLANK

APPENDIX Q
EXERCISES, DRILLS, AND TRAINING

Q.1 DRILLS AND EXERCISES

Drills and exercises are required to ensure the safety of personnel, vessels, and facilities, and to mitigate or prevent a discharge of oil or release of a hazardous substance.

Personnel assigned responsibilities in this plan should be thoroughly briefed and should review this plan as part of their job familiarization.

COMNAVREG HI follows the National Preparedness Response Exercise Program (PREP) Guidelines to satisfy the requirement for drills and exercises found in 40 CFR 112.21. The PREP Guidelines specify that OPA 90 facilities conduct both internal and external drills and exercises.

Q.1.1 Internal Exercises

Internal exercises are performed by personnel responsible for oil spill response and generally do not involve other members of the response community. COMNAVREG HI conducts annual exercises as part of their regional exercise program. At least one major exercise shall involve a worst-case discharge scenario under adverse conditions during the three year cycle.

The following drills and exercises were developed in accordance with the PREP guidelines and should be used as a reference by the exercise evaluation team when scheduling and conducting required COMNAVREG HI exercises. All internal exercises should be self-evaluated and self-certified by the NOSC Rep (or Deputy NOSC Rep). The NOSC Rep will document and maintain records of all exercises. Forms for this purpose are found in Section Q.1.10. Copies of completed documentation shall be retained on file for 5 years to document compliance.

Internal exercises will include:

- Qualified individual notification exercises;
- Emergency procedures exercises for facilities (optional);
- Spill management team tabletop exercises;
- Equipment deployment exercises; and,
- Unannounced exercises.

Table Q-1 describes the frequency, participating elements, initiating authority, scope, objectives, and certifications of the mandatory internal exercises.

TABLE Q-1: INTERNAL EXERCISES[1]					
	QI Notification Drill	**Tabletop Drill**	**Equipment Deployment Drill**	**Unannounced Drill**	**Area Exercise**
Frequency[2]	Quarterly	Annually	Semiannually	Annually	Triennially
Participating Elements	Facility personnel and QI	Spill Management Team (SMT) as established in the ICP	Facility Response Team/Facility personnel.	Facility personnel, QI, and/or SMT.	The response community within the ACP Area of Operations
Initiating Authority	QI or Plan Holder/ Agency Policy	QI or Plan Holder/ Agency Policy	QI or Plan Holder/ Agency Policy	QI or Plan Holder/ Agency Policy	Federal On-Scene Coordinator (FOSC)
Scope	Exercise communications between the facility and the QI.	Exercise the spill management team's organization, communication, and decision-making in managing a spill response.	Deploy and operate facility owned and operated response equipment identified in the response plan. The equipment to be deployed would be either (1) the minimum amount of equipment for deployment as described in "Guiding Principles" found in the PREP Guidelines, or (2) the equipment necessary to respond to a small discharge at the facility, whichever is less. All of the facility personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the facility equipment must be included in a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The owner must document all inspection and maintenance.	Annually, each plan holder should ensure that one of the following exercises is conducted unannounced: • Spill management team tabletop exercise; or • Equipment deployment exercise. An unannounced exercise is where the exercise participants do not have prior knowledge of the exercise, as would be the situation in an actual spill incident.	The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in OPA 90. The response community includes the federal, state, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response. The area exercises do not necessarily have to be large-scale productions. The scenario does not always have to involve a worst-case discharge. However at a minimum, the scenario must involve exercise of Tier I worst-case discharge capability.

TABLE Q-1: INTERNAL EXERCISES[1]					
	QI Notification Drill	**Tabletop Drill**	**Equipment Deployment Drill**	**Unannounced Drill**	**Area Exercise**
Objectives	• Contact must be made with the QI. • At least once a year, the QI Notification exercise should be conducted during non-business hours.	Exercise the SMT in a review of: • Knowledge of the response plan. • Proper notifications. • Communications system. • Ability to Access the OSRO. • Coordination of internal organization personnel with responsibility for spill response. • An annual review of the transition from a local team to a regional, national, and international team, as appropriate. • Ability to access information in the Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of the area, etc. At least one SMT tabletop exercise in the triennial cycle should involve a worst-case discharge scenario	• Demonstrate ability of facility personnel to deploy and operate equipment. • Ensure the equipment is in proper working order	To ensure that the facility maintains an adequate posture for response preparedness, and to satisfy the OPA 90 requirement for unannounced exercises, it is necessary to have an exercise program that is comprised of both announced and unannounced exercises. The requirement for the annual unannounced exercise is essential to maintain the level of preparedness necessary to effectively respond to a spill.	The primary purpose of the area exercise is to activate and observe the response infrastructure in the area, and the ability of the entire response community to effectively conduct a spill response. The focus should be on the interaction between the responsible party and the federal, state, and local government to exercise both the Area Contingency Plan and the responsible party's response plan. The exercise scenario will involve some amount of equipment deployment. Area exercise equipment deployment should include testing adequacy of various response strategies contained in the plan. Equipment deployment need not be conducted simultaneously with the tabletop portion of the exercise. It may be done several weeks or even months prior to or after the tabletop to allow more efficient allocation of exercise planning and execution resources.
Certification	Self-certification	Self-certification	Self-certification		
Note 1: For additional guidance on planning and implementing drills and exercises see USCG PREP Guidelines, dated August 2002.					
Note 2: May take drill and/or exercise credit for actual spill events if the events meet drill and exercise objectives.					

Q.1.2 External Exercises

External exercises extend beyond the internal focus of COMNAVREG HI and include other members of the response community. External exercises will be developed to examine the ICP and the installation's ability to coordinate with the response community in conducting an effective response to a spill incident. The scenario should be typical of COMNAVREG HI's worst-case oil discharge that could affect the local community.

Q.1.3 Qualified Individual Notification Exercises

The purpose of the Qualified Individual (QI) notification exercise is to ensure that the QI (or designee) can be reached in a spill response emergency to carry out the required duties. For COMNAVREG HI, the QI is the NOSC Rep. The NOSC Rep's contact numbers are listed in Table 1-2.

To satisfy ICP requirements, the QI notification exercise will be conducted during non-duty hours at least once a year. Any time the QI is notified during an actual event and this occurrence is properly documented, the notification will serve as satisfying this requirement. Table Q-2 summarizes the requirements for QI notification exercises. Blank forms can be found in Section Q.1.10.

TABLE Q-2: QI NOTIFICATION EXERCISES FOR - EPA-REGULATED FACILITIES	
Applicability:	Facility.
Frequency:	Quarterly.
Initiating Authority:	COMNAVREG HI policy.
Participating Elements:	Facility personnel and qualified individual.
Scope:	Exercise communications between facility personnel and qualified individual.
Objectives:	Contact must be made with a qualified individual or designee, as designated in the response plan.
Certification:	Self-certification.
Verification:	EPA Region 9.
Record Retention:	5 years.
Record Location:	Records to be kept at COMNAVREG HI.
Evaluation:	Self-evaluation.
Credit:	COMNAVREG HI will take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Q.1.4 Spill Management Team Tabletop Exercises

COMNAVREG HI has identified a Spill Management Team (SMT) in this ICP. The SMT will conduct an annual tabletop exercise (TTX) in accordance with the PREP guidelines. The ICP will be utilized in the exercise to ensure the SMT is familiar with the plan and is able to use it effectively to conduct a spill response. At least one SMT TTX in a triennial cycle will involve a worst-case discharge scenario. SMT TTXs will take into account shift changes to ensure that all personnel serving as part of the SMT an actual spill have participated in an exercise.

Table Q-3 summarizes the requirement of the SMT TTX.

TABLE Q-3: SPILL MANAGEMENT TEAM TABLETOP EXERCISE EPA REGULATED FACILITIES	
Applicability:	Region spill management team.
Frequency:	Annually.
Initiating Authority:	COMNAVREG HI policy.
Participating Elements:	Spill management team as established in the response plan.
Scope:	Exercise the spill management team's organization, communication, and decision-making in managing a spill response.
Objectives:	Exercise the SMT in a review of: • Knowledge of the ICP; • Proper notifications; • Communications system; • Ability to access an OSRO; • Coordination of internal organization personnel with responsibility for spill response; • An annual review of the transition from a local team to a regional, national, and international team, as appropriate; • Ability to effectively coordinate spill response activity with the National Response System (NRS) infrastructure. (If personnel from the NRS are not participating in the exercise, the spill management team should demonstrate knowledge of response coordination with the NRS.) • Ability to access information in Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of area, etc. (This is only applicable if the Area Contingency Plan is available for the exercise). • At least one spill management team tabletop exercise in a triennial cycle would involve simulation of a worst-case discharge scenario.
Certification:	Self-certification.
Verification:	EPA Region 9.
Record Retention:	5 years
Record Location:	COMNAVREG HI.
Evaluation:	Self-evaluation.
Credit:	COMNAVREG HI will take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Q.1.5 Equipment Deployment Exercises

The two primary requirements for the equipment deployment exercise are:

- The personnel that will normally operate or supervise the operation of the response equipment will participate in the exercise. The personnel will demonstrate their ability to deploy and operate the equipment. All personnel involved in equipment deployment and operation will be involved in a training program.
- The response equipment will be in good operating condition. The equipment will be appropriate for the intended operating environment. The equipment will operate during the exercise. All response equipment will be included in a maintenance program.

Q.1.5.1 Facility Owned and Operated Equipment

Facility personnel who operate this equipment will be involved in equipment deployment exercises. This equipment will be deployed twice a year. The facility will deploy the minimum amount of equipment for deployment or that amount of equipment necessary to respond to an

average (most probable) discharge, whichever is less. Table Q-4 summarizes the requirement for equipment deployment exercises. Blank forms can be found in Section Q.1.10.

Credit can be taken for actual spill responses when the objectives in Table Q-4 are met. The response must be properly evaluated and documented.

Q.1.5.2 OSRO Involvement in Equipment Deployment Exercises

COMNAVREG HI also identifies Oil Spill Removal Organization (OSRO) owned equipment in its ICP to meet it response equipment requirements for its worst-case discharge. Therefore, the OSRO equipment must be deployed and operated in accordance with the equipment deployment requirements for OSRO-owned equipment. These requirements are summarized in Table Q-5. OSRO's do not have to conduct equipment deployment exercises in each specific area (area being the geographic boundaries for which an Area Contingency Plan has been developed) of the various plan holders they cover. The facility will ensure that the OSRO has the local knowledge relevant to an effective, efficient response in the operating area.

Q.1.5.3 Plan Holders Using a Combination of OSRO Equipment and Facility Owned Operated Equipment

The facility has cited both OSRO equipment and their own equipment in their response plan; therefore, both types of equipment have to be exercised.

Minimum Amount of Equipment for Deployment:

1. 1,000 feet of each type of boom in the inventory.
2. One of each type of skimming system.

Operating Environments:

Equipment appropriate for the operating environment, i.e. inland or oceans.

TABLE Q-4: EQUIPMENT DEPLOYMENT EXERCISES/FACILITY OWNED - EPA-REGULATED FACILITIES	
Applicability:	Facilities with facility owned and operated response equipment.
Frequency:	Semiannually.
Initiating Authority:	COMNAVREG HI policy.
Participating Elements:	Facility personnel.
Scope:	• Deploy and operate facility owned and operated response equipment identified in the response plan. The equipment to be deployed would be either: 1) the minimum amount of equipment for deployment as described in Section Q.1.5.3, or, (2) the equipment necessary to respond to an average most probable discharge at the facility, whichever is less. • All of the facility personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the facility equipment must be included in a comprehensive maintenance program. Credit will be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The owner must document all inspection and maintenance.
Objectives:	• Demonstrate ability of facility personnel to deploy and operate equipment. • Ensure equipment is in proper working order.

TABLE Q-4: EQUIPMENT DEPLOYMENT EXERCISES/FACILITY OWNED - EPA-REGULATED FACILITIES	
Certification:	Self-certification.
Verification:	EPA Region 9.
Record Retention:	5 years.
Record Location:	COMNAVREG HI.
Evaluation:	Self-evaluation.
Credit:	COMNAVREG HI will take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

TABLE Q-5: EQUIPMENT DEPLOYMENT EXERCISES/OSRO - EPA-REGULATED FACILITIES	
Applicability:	Facilities with OSRO response equipment cited in their response plan.
Frequency:	Annually.
Initiating Authority:	COMNAVREG HI policy.
Participating Elements:	Facility owner or operator and OSRO.
Scope:	• Deploy and operate response equipment identified in the response plan. The equipment to be deployed would be the minimum amount of equipment for deployment as described in Section Q.1.5.3. • All of the OSRO personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the OSRO equipment must be included in a comprehensive maintenance program. Credit should be taken for equipment deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The facility owner or operator must ensure that inspection and maintenance by the OSRO is documented. The OSRO must provide inspection and maintenance information to the COMNAVREG HI.
Objectives:	• Demonstrate the ability of the personnel to deploy and operate response equipment. • Ensure the response equipment is in proper working order.
Certification:	COMNAVREG HI will ensure that the OSRO identified in the response plan provides adequate documentation that the requirements for this exercise have been met.
Verification:	EPA Region 9.
Records:	COMNAVREG HI.
Retention:	5 years.
Evaluation:	Self-evaluation.
Credit:	COMNAVREG HI will take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Q.1.6 Internal Unannounced Exercises

This is not a separate exercise. This section outlines the requirement that one of the PREP exercises listed below must be conducted unannounced. An unannounced exercise is when the exercise participants do not have prior knowledge of the exercise, as would be the situation in an actual spill event. Annually, one of the following exercises is conducted unannounced:

- Emergency procedures exercise for facilities (optional);
- Spill management team tabletop exercise; or

- Equipment deployment exercise.

Response to an actual spill will be evaluated and taken as credit for the unannounced exercise requirement.

Q.1.7 Government-Initiated Unannounced Exercises

The government-initiated unannounced exercises are designed to give the EPA the opportunity to evaluate, on a random basis, the response preparedness of COMNAVREG HI. The government is limited to four area unannounced exercises per year. COMNAVREG HI is required to participate as directed in the exercise. The cost of the exercise is incurred by the facility. COMNAVREG HI would not be required to participate in a government-initiated unannounced exercise for at least 36 months from the time of the last exercise. The facility must maintain documentation of participation. Table Q-6 summarizes requirements for these exercises. Blank forms can be found in Section Q.1.10.

TABLE Q-6: GOVERNMENT-INITIATED UNANNOUNCED EXERCISES - EPA-REGULATED FACILITY RESPONSE PLAN HOLDERS	
Applicability:	EPA-regulated facility response plan holders within the area.
Frequency:	Annually, if selected. *(Plan holders who have participated in a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise.)*
Initiating Authority:	EPA Region 9.
Participating Elements:	EPA-regulated facility response plan holders.
Scope:	• Unannounced exercises are limited to a maximum of four exercises per area per year. • Exercises are limited to approximately 4 hours in duration. • Exercises would involve response to an average most probable discharge scenario. • Exercise would involve equipment deployment to respond to spill scenario.
Objectives:	• Conduct proper notifications to respond to unannounced scenario of an average most probable discharge. • Demonstrate that the response is: - Timely and - Conducted with adequate amount of equipment for scenario.
Certification:	EPA Region 9.
Verification:	EPA Region 9.
Records Retention:	5 years.
Record Location:	COMNAVREG HI.
Evaluation:	Evaluation to be conducted by initiating agency.
Credit:	Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. COMNAVREG HI will also take credit for notification and equipment deployment exercises.

Q.1.8 Triennial Exercise of the Entire Response Plan

Every three years, all components of the entire ICP must be exercised. Rather than requiring each plan holder to conduct a major exercise every three years, the PREP allows for individual components to be exercised in portions through the required exercises. Table Q-7 summarizes the basic types of plan components that must be exercised at least once every three years. The installation exercise evaluation team will ensure these components (where applicable) are properly addressed in their spill exercises. To satisfy the requirement of the triennial exercise of

the entire response plan, it is not necessary to execute the entire plan at one time. The plan may be exercised in segments over a period of three years, as long as each component of the plan is exercised at least once within the three-year period.

TABLE Q-7: CORE TEST COMPONENTS OF THE RESPONSE PLAN		
Organizational Design	**Operational Response**	**Response Support**
Notifications	Discharge Control	Communications
Staff Mobilization	Assessment of Discharge	Transportation
Ability to operate within the response management system described in the plan	Containment of Discharge	Personnel Support
	Recovery of Spilled Material	Equipment Maintenance and Support
	Protection of Economically, Politically, Socially, and Environmentally Sensitive Areas	Procurement
	Disposal of Recovered Products	Documentation

In the triennial cycle, the number of internal exercises must be conducted is identified in Table Q-8.

TABLE Q-8: INTERNAL EXERCISES	
Number	**Exercise Type**
12	Qualified Individual notification drills (QIN).
3	Spill Management Team table top exercises, one of which must involve a worst case discharge scenario (TTX).
3	Unannounced Exercises (any of the exercises, with the exception of the QI Notification Drill, if conducted unannounced, will satisfy this requirement). One of the Unannounced Exercises must be an Equipment Deployment Exercise.
6	Facility-owned Equipment Deployment Exercises (for facilities with facility-owned equipment identified in their response plan) (FEX).
3	OSRO Equipment Deployment Exercises (OEX).

Drills will be designed to test the fifteen core components of a response plan. Table Q-9 provides an example schedule that can be used to plan the triennial cycle:

TABLE Q-9: EXAMPLE SCHEDULE FOR TRIENNIAL EXERCISE CYCLE												
	JAN	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**
Year 1	QIN	TTX	FEX	QIN			QIN	FEX	OEX	QIN		
Year 2	FEX (U)	QIN	OEX		QIN	TTX (U)	FEX	QIN			QIN	
Year 3			QIN		FEX (U)	QIN	OEX (U)	IN	QIN	TTX	FEX	QIN

Q.1.9 Other Credit Issues

There are three other credit issues that pertain to COMNAVREG HI:

- Credit for Spill Response;
- Proper Documentation for Self-Certification and LEPC Drill Credit.

Q.1.9.1 Credit for Spill Response

COMNAVREG HI will take credit for internal exercises conducted in response to actual spills. The spill response must be properly evaluated and documented. The National Scheduling and Coordinating Committee is responsible for authorizing credit for area exercises according to the following circumstances:

- The response plan was utilized in an actual spill response;
- The response involved the entire response community;
- The objectives of the exercise were met as outlined in the above tables;
- The response was evaluated; and,
- The spill response was properly documented and certified.

Q.1.9.2 Proper Documentation for Self-Certification

Proper documentation for self-certification will include, as a minimum, the following information:

- The type of exercise;
- Date and time of the exercise;
- A description of the exercise;
- The objectives met in the exercise;
- The components of the response plan exercised; and
- Lessons learned.

This documentation must be in writing and signed by the COMNAVREG HI NOSC Rep.

Q.1.9.3 LEPC Drill Credit

LEPCs are required to conduct exercises periodically. The facility will coordinate their exercises with the LEPCs, whenever possible, and should take credit, as long as the PREP exercise objectives are met.

Q.1.10 Exercise Documentation Forms

The following internal exercise documentation forms (Table Q-10 – Q-13) are provided only as guidance to the facility and will be replaced with base-specific forms, as developed.

Q.1.11 Completed Exercise Forms

Completed exercise forms are to be kept for a period of 5 years. The COMNAVREG NOSC Rep will retain the original documentation of all exercises for this period.

TABLE Q-10: INTERNAL EXERCISE DOCUMENTATION FORM - QUALIFIED INDIVIDUAL NOTIFICATION			
Date Performed:		Exercise or actual response?	
Facility Initiating Exercise:			
Name of person notified:			
Is this person identified in your response plan as Qualified Individual or designee?			
Time Initiated:		Time in which Qualified Individual or designee responded:	
Method used to contact:	Telephone?	Pager?	Radio?
	Other?		
Emergency Scenario:			
Evaluation:			
Changes to be implemented and person/agency responsible:			
Time table for implementation and person/agency responsible:			
Identify which of the 15 core components of your response plan were exercised:			
Printed Certifying Name:			
Certifying Signature:			
Retain this form for a minimum of 5 years (for EPA).			

TABLE Q-11: INTERNAL EXERCISE DOCUMENTATION FORM - EMERGENCY PROCEDURES EXERCISE			
Date Performed:		Exercise or actual response?	
Location:			
Facility Initiating Exercise:			
Time Initiated:		Time completed:	
Section of facility emergency procedures exercised:			
Description of exercise:			
Changes to be implemented and person/agency responsible:			
Time table for implementation and person/agency responsible:			
Identify which of the 15 core components of your response plan were exercised:			
Printed Certifying Name:			
Certifying Signature:			
Retain this form for a minimum of 5 years (for EPA).			

TABLE Q-12: INTERNAL EXERCISE DOCUMENTATION FORM - SMT TABLETOP EXERCISE			
Date performed:		Exercise or actual response?	
If an exercise, announced or unannounced:			
Location of Tabletop:			
Time started:		Time completed:	
Response plan scenario used (check one):		Average most probable discharge	
		Maximum most probable discharge	
		Worst case discharge	
Size of (simulated) spill:	(gal)		
Describe how the following objectives were exercised:			
SMT's knowledge of oil spill response plan:			
Proper notifications:			
Communications system:			
SMT's ability to access contracted oil spill removal organizations:			
SMT's ability to coordinate spill response with FOSC, state, and applicable agencies:			
SMT's ability to access sensitive site and resource information in the ACP:			
Identify which of the 15 core components of your response plan were exercised:			
Attach a description of the lesson(s) learned and person(s) responsible for follow up of corrective measures.			
Printed Certifying Name:			
Certifying Signature:			
Retain this form for a minimum of 5 years (for EPA).			

TABLE Q-13: INTERNAL EXERCISE DOCUMENTATION FORM - EQUIPMENT DEPLOYMENT EXERCISE							
Date(s) performed:		Exercise or actual response?					
If an exercise, announced or unannounced:							
Deployment location(s):							
Time started:		Time completed:					
Equipment deployed was (check all applicable): Include OSRO name (if applicable):	Base-owned:						
	OSRO-owned:						
	Both						
List type and amount of all equipment (e.g., boom and skimmers) deployed and number of support personnel employed:							
Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. (Attach a sketch of equipment deployments and booming strategies)							
For deployment of base-owned equipment, was the amount of equipment deployed <u>at least</u> the amount necessary to respond to the average most probable spill:			Yes		No		
If no, explain why not:							
Was the equipment deployed in its intended operating environment?			Yes		No		
If no, explain why not:							
For deployment of OSRO-owned equipment, was a representative sample (at least 1,000 feet of each boom type and at least one of each skimmer type) deployed?			Yes		No		
If no, explain why not:							

TABLE Q-13: INTERNAL EXERCISE DOCUMENTATION FORM - EQUIPMENT DEPLOYMENT EXERCISE				
Was the equipment deployed in its intended operating environment?	Yes		No	
If no, explain why not:				
Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all population response equipment involved in a comprehensive maintenance program?				
If so, describe the program:				
If not, explain why not:				
Date of last equipment inspection:				
Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill?	Yes		No	
If no, explain why not:				
Was all deployed equipment operational?	Yes		No	
If no, explain why not:				
Identify which of the 15 core components of your response plan were exercised during this particular exercise:				
Attach a description of the lesson(s) learned and person(s) responsible for follow up of corrective measures.				
Printed Certifying Name:				
Certifying Signature:				
Retain this form for a minimum of 5 years (for EPA).				

Q.2 RESPONSE TRAINING

Personnel employed at facilities that transfer or store products in bulk, classified as hazardous substances by the Occupational Safety and Health Administration (OSHA), must comply with HAZWOPER regulations. OSHA considers crude oil, petroleum oil, and petroleum distillates as hazardous substances.

Workers with a limited role in a response need to be trained to protect their health and to perform their normal duties in a safe manner. They must also be trained to conduct the proper notifications to the National Response Center and to immediately intervene to mitigate a spill once it has occurred.

Q.2.1 General

Response personnel will be trained to:

- Respond to OHS releases or potential releases.
- Initiate site management and defensive control actions during an OHS release.
- Respond in a defensive fashion to control an OHS release from a safe distance and keep it from spreading.

Personnel will be trained to meet the minimum requirements of the First Responder Awareness and Operational levels from 29 CFR 1910.120*, Hazardous Waste Operations and Emergency Response*, and the following standards as appropriate:

- 29 CFR 1910.1200, *Hazard Communication*;
- 29 CFR 1910.38, *Emergency Action Plans*;
- 49 CFR 172, Subpart H, *Training for the Safe Transportation of Hazardous Materials* (HM-126F); and,
- 40 CFR 112.21, *Facility Response Training and Drills/Exercises.*

This level of training will also allow them to meet the criteria for post-emergency response operations as outlined in 29 CFR 1910.120(q)(11) for recovery operations on facility property.

Q.2.2 Training Program Elements and Procedures

No later than thirty days after assignment to a response team, the respective spill response team leaders will:

- Introduce personnel to this response plan and their responsibilities (1-hour).
- Indoctrinate personnel assigned to the Facility Response Team on boom deployment and the response requirements and strategies (8-hour).
- Identify the personnel and the type of training needed and coordinate required training with the COMNAVREG Spill Response Training Coordinator (see Table Q-14). All new employees will receive required training within 6 months from the date of employment.
- Develop and maintain a training schedule for assigned team personnel.

In addition, the respective spill response team leaders will:

- Periodically evaluate and monitor knowledge and skill levels and to identify additional training needs.
- Conduct periodic refresher training.
- Maintain training records.
- Develop and maintain certifications of employee competencies and a record of the methodologies used to demonstrate competencies.

Q.2.3 COMNAVREG HI Training Requirements

All military and civilian employees with an OHS emergency response role must receive training appropriate to their role before they can take part in an actual OHS spill incident response. The specific training requirements for each response role have been briefly outlined in Table Q-14. Additional information on the training categories can be found in Section Q.2.5.

TABLE Q-14: EMERGENCY RESPONSE MINIMUM TRAINING REQUIREMENTS

Employee Category	OSHA Training Categories (See Table Q-15) [A]				
	1	2	3	4	5
Incident Commander	X	O			O
Senior Fire Officials	X	X	O		X
OHS Response Team	X	X	X		O
Fire Protection	X	X	O		O
Explosive Ordinance Disposal	X	O	O	O	
Acute or Urgent Care/ER Staff	X				
Ambulance Service (not assigned to Fire Dept.)	X	X/O			
Medical Security Team	X	X/O			
Casualty Management/Patient Admin Teams	X/O	X/O			
In-Place Patient Decontamination (IPPD) Team	X	X			
Security Forces [b]	X				
Emergency Operations Center Representatives	O				

Key:

X = designates mandatory training O = designates optional training

K = designates knowledge of tasks outlined in requirements; does not require DoD certification.

X/O = Level of training depends on team duties. If a team operates in a warm zone because of mission requirements, train to Level 2 (Operations), i.e. security team members outside the Medical Treatment Facility in support of IPPD; Casualty Management/Patient Admin Teams or Ambulance crews retrieving patients from the warm zone.

Notes:

a. TRAINING CATEGORIES (See Table Q-15):

(1) First Responder Awareness Level [29 CFR 1910.120 and National Fire Protection Association (NFPA) 472].

(2) First Responder Operations Level (29 CFR 1910.120 and NFPA 472)

(3) HAZMAT Technician Level (29 CFR 1910.120 and NFPA 472)

(4) HAZMAT Specialist Level (29 CFR 1910.120 and NFPA 472)

(5) Incident Commander (29 CFR 1910.120 and NFPA 472)

b. As a minimum, security forces assigned to duties that require direct response to HAZMAT incidents (i.e., installation entry controllers, mobile patrols, and flight supervisors) in order to secure the scene require First Responder Awareness level training. Security forces dispatchers will receive First Responder Awareness level training.

Q.2.4 OSHA Training Requirements

OSHA has promulgated training requirements in 29 CFR 1910.120 that apply to on-water oil spill cleanup operations. OSHA issued updated guidelines in OSHA Booklet 3172, *Training Marine Oil Spill Response Workers under OSHA's Hazardous Waste Operations and Emergency Response Standards*, in late 2001, for on-water oil spill response and cleanup. These guidelines can be found on-line at the following site:

http://www.osha.gov/Publications/3172/3172.html

Table Q-15 outlines the response-training plan for identified response personnel. The plan addresses USCG guidelines and OSHA training requirements in 29 CFR 1910.120 for personnel engaged in emergency response operations. Additional information follows this table.

TABLE Q-15: FACILITY RESPONSE PERSONNEL TRAINING REQUIREMENTS

Type Of Responder	Applicable Personnel	Minimum Training Required
1 - FIRST RESPONDER AWARENESS LEVEL (discovery-and-reporting-only personnel – anyone likely to witness or discover a release and trained to report releases, but who takes no further action)	Building Emergency Coordinators, watch-standers, and other personnel who routinely work with oils or hazardous substances	Sufficient hours to demonstrate the requirements identified in Section Q.2.5.1 below [see OSHA Pub 3172 and 29 CFR 1910.120(q)(6)(i) for additional information]
2 - FIRST RESPONDER OPERATIONS LEVEL (defensive-response-only personnel – responders only qualified for containment and control)	Facility Response Team members (FRT)	8-hour initial emergency response training **AND** Competency in key subjects identified in Section Q.2.5.2 below [see OSHA Pub 3172 and 29 CFR 1910.120(q)(6)(ii) for additional information]
3 - HAZARDOUS MATERIALS TECHNICIAN (active response personnel – responders qualified to stop release at its source by plugging, patching, etc.)	Emergency Response/Cleanup Team members	24-hour initial operations level emergency response training **AND** Competency in key subjects identified in Section Q.2.5.3 below [see OSHA Pub 3172 and 29 CFR 1910.120(q)(6)(iii) for additional information]
4 - HAZARDOUS MATERIALS SPECIALIST (active response personnel – responders who provide support to the responding hazardous materials technician, but on a more specialized level, and to act as liaison with authorities)	Facility Emergency Response/Cleanup Team members	24-hour initial hazardous materials technician level emergency response training **AND** Competency in key subjects identified in Section Q.2.5.4 below [see OSHA Pub 3172 and 29 CFR 1910.120(q)(6)(v) for additional information]
5 - INCIDENT COMMANDER	Incident Commander and deputies	24-hour initial operations level emergency response training **AND** Competency in key subjects identified in Section Q.2.5.5 below [see OSHA Pub 3172 and 29 CFR 1910.120(q)(6)(v) for additional information]
6 - SKILLED SUPPORT PERSONNEL (non-HAZWOPER-trained equipment operators – skilled equipment operators not normally exposed to hazardous substances, e.g., bulldozer, backhoe, and crane operators)	As required for specific areas of the Activity	Initial briefing at site covering the topic identified in Section Q.2.5.6 below [see OSHA Pub 3172 and 29 CFR 1910.120(q)(4) for additional information]
7 - SPECIALIST EMPLOYEES (HAZWOPER-trained specialists in specific substances – employees who regularly work with SPECIFIC hazardous substances and who may provide advice or assistance during response)	As required for specific areas of the Activity	Initial briefing at site covering the topic identified in Section Q.2.5.7 below [see OSHA Pub 3172 and 29 CFR 1910.120(q)(5) for additional information]
8 - POST-EMERGENCY RESPONSE OPERATIONS PERSONNEL	As required for specific areas of the response	Training as outlined in Section Q.2.5.8 below [see OSHA Pub 3172 and 29 CFR 1910.120(q)(11) for additional information]
9 - SPILL MANAGEMENT TEAM PERSONNEL	Designated Personnel	See Tables Q-16 – Q-36

Note: OSHA establishes training by type of responder, not by course, e.g., Hazardous Materials Technicians and Specialists would take the same 24-hr course, but the Specialist must have more in-depth knowledge (presumably gained by experience or other training). All personnel (except skilled support and specialist employees) must have ANNUAL refresher training or demonstration of competency (no minimum number of hours are stated

Q.2.4.1 Training Information

The Navy Safety and Environmental Training Center (NAVSAFENVTRACEN) is the training lead for Navy response personnel. The center's training catalog provides a complete listing of Navy response training courses. Available courses, including class dates, locations, personnel size, etc. can be found at:

http://www.public.navy.mil/NAVSAFECEN/navsafenvtracen/Pages/CourseScheduleV2.aspx

Navy response training courses available from NAVSAFENVTRACEN include:

- OHS Spill Response Tabletop Exercise (A-493-2501)
- Facility Response Team Three Day Training (A-493-0013)
- Facility Response Team Five Day Training (A-493-0012)
- Hazardous Substance Incident Response Management Training (A-493-0077)

Course information, purpose, scope, and prerequisites can be downloaded at:

http://www.public.navy.mil/NAVSAFECEN/navsafenvtracen/Documents/CoursePurposeScopePrereq.pdf

HAZWOPER training for response personnel is provided by the Navy Civil Engineer Corps. Officer School (CECOS). Information on their "HAZWOPER for Uncontrolled Hazardous Waste Site Worker" and refresher courses can be found at:

http://www.netc.navy.mil/centers/csfe/cecos/Courses.htm#tab2

Contractor personnel can obtain training from other qualified sources.

Q.2.5 OSHA Responder Category

Q.2.5.1 Oil Spill First Responder – Awareness Level

First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. Training at this level provides personnel the capability to provide command and control, rescue, extinguishment and containment actions based on the conditions present. It also provides ability to identify and recognize types of hazardous substances and the risks associated with them.

As a minimum, security forces assigned to duties that require direct response to HAZMAT incidents (i.e., installation entry controllers, mobile patrols and flight supervisors), in order to secure the scene, require First Responder Awareness level training. Security forces dispatchers will receive First Responder Awareness level training.

As per OSHA guidelines found in OSHA Booklet 3172, personnel receiving this training must be able to:

- Understand the hazards of oil and the risks in a spill.

- Understand what happens during an emergency involving spilled oil.
- Recognize the presence of oil or related hazardous materials in an emergency.
- Identify hazardous substances, if possible (e.g., appearance, smell, monitoring equipment, testing).
- Understand individual role in employer's emergency response plan.
- Recognize when help is needed and when to request assistance from the response team.

Q.2.5.2 Oil Spill First Responder – Operation Level

This level provides training for personnel who respond to releases or potential releases of OHS as part of an initial response to the incident for the purpose of protecting nearby persons, the environment or property from the effects of the release. First responders at the operational level are expected to respond in a defensive fashion to control the release from a safe distance and to keep it from spreading. They must know how to select and use proper personal protective equipment and know how to implement basic decontamination procedures. Personnel required to perform defensive tasks within the hot zones of an incident are required to be trained, at a minimum, to the Operations level. Operations level trained personnel are not allowed to perform any task determined to be offensive as defined by OSHA or EPA.

As per OSHA guidelines found in OSHA Booklet 3172, personnel receiving this training must be able to:

- Understand the hazards of oil and the risks in a spill.
- Understand what happens during an emergency involving spilled oil.
- Recognize the presence of oil or related hazardous materials in an emergency.
- Identify hazardous substances, if possible (e.g., appearance, smell, monitoring equipment).
- Understand individual role in employer's emergency response plan.
- Recognize when help is needed and when to request assistance from the response team.
- Know basic hazard and risk assessment techniques.
- Know how to select and use proper personal protective equipment necessary for the first responder operation level.
- Understand basic hazardous materials terms.
- Know how to perform basic control, containment, and/ or confinement operations within the capabilities of the resources and available personal protective equipment.
- Know how to implement basic decontamination procedures.
- Understand the relevant standard operating and termination procedures.

Q.2.5.3 Hazardous Materials Technician Level

Individuals who respond to releases or potential releases for the purpose of controlling the release must be trained to this level. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch, or otherwise stop the release of a hazardous substance. Personnel required to perform offensive tasks at an incident are required to be trained, at a minimum, to the Technician level.

As per OSHA guidelines found in OSHA Booklet 3172, personnel receiving this training must be able to:

- Understand the hazards of oil and the risks in a spill.
- Understand what happens during an emergency involving spilled oil.

- Recognize the presence of oil or related hazardous materials in an emergency.
- Identify hazardous substances, if possible (e.g., appearance, smell, monitoring equipment).
- Understand individual role in employer's emergency response plan.
- Recognize when help is needed and when to request assistance from the response team.
- Know basic hazard and risk assessment techniques.
- Understand basic hazardous materials terms.
- Know how to perform basic control, containment, and/ or confinement operations within the capabilities of the resources and available personal protective equipment.
- Know how to implement basic decontamination procedures.
- Understand the relevant standard operating and termination procedures.
- Know how to implement the employer's emergency response plan.
- Know how to use field survey instruments and equipment to classify, identify, and verify known and unknown materials.
- Be able to function within an assigned role in the Incident Command System.
- Know how to select and use proper specialized personal protective equipment provided to the hazardous materials technician.
- Understand and be able to apply hazard and risk assessment techniques.
- Be able to perform advanced control, containment, and/or confinement operations within the capabilities of the resources and available personal protective equipment.
- Understand and implement decontamination procedures.
- Understand terminology and behavior of chemicals and their toxic effects.

Q.2.5.4 Hazardous Materials Specialist Level

Individuals who respond with and provide support to hazardous materials technicians must be trained to this level. Their duties parallel those of the hazardous materials technician, however, those duties require a more directed or specific knowledge of the various substances they may be called upon to contain.

For example, hazmat specialist personnel may supplement the installation OHS response entry into the hot or warm zone for the purpose of monitoring, detecting or sampling. For this purpose, they will be considered part of the OHS response team in the position of specialist. PPE will be selected, approved, and provided at the same level of protection as the OHS response team, using the OHS response team protocols and team equipment, to include respiratory protection for which they have been appropriately trained, fit-tested, and exercised in.

As per OSHA guidelines found in OSHA Booklet 3172, personnel receiving this training must be able to:

- Understand the hazards of oil and the risks in a spill.
- Understand what happens during an emergency involving spilled oil.
- Recognize the presence of oil or related hazardous materials in an emergency.
- Identify hazardous substances, if possible (e.g., appearance, smell, monitoring equipment).
- Understand individual role in employer's emergency response plan.
- Recognize when help is needed and when to request assistance from the response team.
- Know basic hazard and risk assessment techniques.
- Know how to select and use proper personal protective equipment necessary for the first responder operation level.

- Understand basic hazardous materials terms.
- Know how to perform basic control, containment, and/ or confinement operations within the capabilities of the resources and available personal protective equipment.
- Know how to implement basic decontamination procedures.
- Understand the relevant standard operating and termination procedures.
- Know how to implement the employer's emergency response plan.
- Know how to use field survey instruments and equipment to classify, identify, and verify known and unknown materials.
- Be able to function within an assigned role in the Incident Command System.
- Know how to select and use proper specialized personal protective equipment provided to the hazardous materials technician.
- Understand and be able to apply hazard and risk assessment techniques.
- Be able to perform advanced control, containment, and/or confinement operations within the capabilities of the resources and available personal protective equipment.
- Understand and implement decontamination procedures.
- Understand termination procedures.
- Understand terminology and behavior of chemicals and their toxic effects.
- Know how to use advanced survey instruments and equipment to classify, identify, and verify known and unknown materials.
- Understand in-depth hazard and risk techniques.
- Be able to determine and implement decontamination procedures.
- Know how to implement the local emergency response plan.
- Know the state emergency response plan.
- Be able to develop a site safety and control plan.
- Understand chemical, radiological, and toxicological terminology and behavior.
- Be able to select and use proper specialized chemical personal protective equipment provided to the hazardous materials specialist.
- Be able to perform specialized control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available.

Q.2.5.5 Incident Commander

Personnel who will assume control of the incident scene beyond the first responder operations level are trained to this level. The OHS IC or designated representative would also act as the site liaison with federal, state, local and other government authorities in regards to site activities.

Senior fire officials may be expected to assume command of an OHS incident.

As per OSHA guidelines found in OSHA Booklet 3172, personnel receiving this training must be able to:

- Understand the hazards of oil and the risks in a spill.
- Understand what happens during an emergency involving spilled oil.
- Recognize the presence of oil or related hazardous materials in an emergency.
- Identify hazardous substances, if possible (e.g., appearance, smell, monitoring equipment).
- Understand individual role in employer's emergency response plan.
- Recognize when help is needed and when to request assistance from the response team.
- Know basic hazard and risk assessment techniques.

- Know how to select and use proper personal protective equipment necessary for the first responder operation level.
- Understand basic hazardous materials terms.
- Know how to perform basic control, containment, and/ or confinement operations within the capabilities of the resources and available personal protective equipment.
- Know how to implement basic decontamination procedures.
- Understand the relevant standard operating and termination procedures.
- Know and be able to implement the employer's incident command system.
- Know how to implement the employer's emergency response plan.
- Know and understand the hazards and risks associated with employees working in personal protective clothing.
- Know how to implement the local emergency response plan.
- Know the state emergency response plan.
- Know and understand the importance of decontamination procedures.

Q.2.5.6 Skilled Support Personnel

As discussed in 29 CFR 1910.120(q)(4), skilled support personnel are, "(p)ersonnel, not necessarily an employer's own employees, who are skilled in the operation of certain equipment, such as mechanized earth moving or digging equipment or crane and hoisting equipment, and who are needed temporarily to perform immediate emergency support work that cannot reasonably be performed in a timely fashion by an employer's own employees, and who will be or may be exposed to the hazards at an emergency response scene." As per this cite, these personnel are not required to meet the training required in these regulations for the employer's regular employees; but they must receive an initial briefing at the site prior to their participation in any emergency response. The initial briefing shall include instruction in the below topics.

- Purpose of visit or duties to be performed.
- Site personnel, chain-of-command, and communications procedures.
- Chemical/physical hazards involved and signs and symptoms of exposure.
- Emergency alarm system, escape routes, and places of refuge.
- Appropriate contamination control procedures, personal protective equipment, decontamination, and other control measures provided.

All other appropriate safety and health precautions provided to the employer's own employees shall be used to assure the safety and health of these personnel.

Note: Employees who are routinely expected to perform emergency procedures as part of their job responsibilities will be considered part of a HAZMAT team and will need to be trained in accordance with 29 CFR 1910.120 (q)(6). [OSHA's Directive CPL-02-02-073]

Q.2.5.7 Specialist Employee

As discussed in 29 CFR 1910.120(q)(5), specialist employees are those, "who, in the course of their regular job duties, work with and are trained in the hazards of specific hazardous substances and are called upon to provide technical advice or assistance at the oil spill incident to the Incident Commander." They must receive the below briefing and demonstrate competency in the area of their specialization annually.

- Purpose of visit or duties to be performed.

- Site personnel, chain-of-command, and communications procedures.
- Chemical/physical hazards involved and signs and symptoms of exposure.
- Emergency alarm system, escape routes, and places of refuge.
- Appropriate contamination control procedures, personal protective equipment, decontamination, and other control measures provided.

Q.2.5.8 Post-Emergency Response Operations

As discussed in 29 CFR 1910.120(q)(11), "upon completion of the emergency response, if it is determined that it is necessary to remove hazardous substances, health hazards, and materials contaminated with them (such as contaminated soil or other elements of the natural environment) from the site of the incident, the employer conducting the cleanup shall comply with one of the following."

- If the employer is a contractor, then the training must meet all of the requirements of 29 CFR 1910.120 paragraphs (b) through (o).
- If the employer is the Navy, the employees are Navy or Navy Civilian personnel, and the site is on Naval property, then the employees must have completed the training requirements of the following: 29 CFR 1910.38(a); 1910.134; 1910.1200, and other appropriate safety and health training made necessary by the tasks that they are expected to perform such as personal protective equipment and decontamination procedures. All equipment to be used in the performance of the cleanup work shall be in serviceable condition and shall have been inspected prior to use.

OSHA Booklet 3172 provides four exposure categories for post-emergency response workers. These categories depend on exposure probability. Refer to OSHA Booklet 3172 for additional information.

Q.2.6 Volunteer Training

Change 6 to the Hawaii Area Contingency Plan dated 02 March 2010 identified training requirements for public-interest volunteers in Section 2200. The Area Committee has determined that if conditions described in OSHA Instruction CPI-2-2.51 (dated 05NOV90) are met, then reduced training time (at least 4 hours) or equivalent training certification covering the above items may be substituted for the 24-hour training requirement for these volunteers. Additional information may be found in Section 2200 of the Hawaii Area Contingency Plan.

Note that current Navy policy is not to have volunteers assist in a spill response.

Q.2.7 Oil Handling Personnel Training and Discharge Prevention Briefings

Per 40 CFR 112.7 (f)(1) all oil-handling personnel must be trained in the following: operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and the contents of the facility SPCC plan (CNRHI SPCC Plan).

Discharge prevention briefings (40 CFR 112.7 (f)(3)) must be conducted for all oil-handling personnel at least once a year to assure adequate understanding of the facility SPCC plan. Such briefings must highlight and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures.

Q.2.8 Suggested Training Elements for COMNAVREG HI Spill Response Teams

As per Table Q-15, spill response team members should be trained through Level 3. In addition, spill response team members shall demonstrate knowledge of the following:

- Notification procedures and requirements for facility owners or operators, internal response organizations, federal and state agencies; and contracted OHS OSROs, and the information required for those organizations.
- Communication system used for the notifications.
- Information on the petroleum products stored, used, or transferred by facility, including familiarity with the MSDS, special handling procedures, health and safety hazards, and spill and fire fighting procedures.
- Facility personnel responsibilities and procedures for use of facility equipment that may be available to mitigate or prevent a POL discharge.
- Drill and exercise to meet the federal requirements.
- The Area Contingency Plan (ACP) for the area in which the facility is located.
- The National Contingency Plan (NCP).
- Roles and responsibilities of federal and state agencies in pollution response.
- OSHA requirements for worker health and safety (29 CFR 1910.120).
- Procedures to follow in the event of discharge, potential discharge, or emergency involving the following equipment or scenarios:
  - Tank overfill.
  - Tank rupture.
  - Piping or pipeline rupture.
  - Piping or pipeline leak, both under pressure and not under pressure, if applicable.
  - Explosion or fire.
  - Equipment failure.
  - Failure of secondary containment system.
- The operational capabilities of the contracted OSRO to respond to the following:
  - Average most probable discharge (small discharge).
  - Maximum most probable discharge (medium discharge).
  - Worst-case discharge.
- General responsibilities and authorities of the qualified individual as described in the ICP and company response organization.
- The organizational structure that will be used to manage the response actions, including the following:
  - Command and control.
  - Public information.
  - Safety.
  - Liaison with government agencies.
  - Spill response operations.
  - Planning.
  - Logistics support.
  - Finance.

Personnel who will be working on the water in boats to deploy the booms and clean up the OHS spill will need the following additional training:

- Safe boat handling procedures.
- Boom deployment training.

Personnel assigned to water safety, rescue, and boat fire fighting will need the following additional training:

- Safe boat handling procedures.
- Basic water safety rescue course.
- Basic fire extinguisher training.
- Towing procedures for disabled boats.

Spill response team leaders and specific members of SMT require specialized training to be able to provide leadership, and technical assistance to other members of the emergency response organization. These identified personnel will be trained to Level 4.

Q.2.9 Suggested Training Elements for SMT Members

Personnel should be trained as SMT members and shall demonstrate knowledge of the following as appropriate to their duties and responsibilities:

- Notification procedures and requirements for facility owners or operators, internal response organizations, federal and state agencies, and contracted OHS spill removal organizations and information required for those organizations.
- Communication systems used for the notifications.
- Information on the petroleum products transferred, stored, or used by the facility, including familiarity with the MSDS, special handling procedures, health and safety hazards, spill, and fire fighting procedures.
- Facility personnel responsibilities and procedures for use of facility equipment that may be carried to mitigate an OHS discharge/release.
- The operational capabilities of the contracted OSROs to respond to the following:
  - Average most probable discharge (small discharge);
  - Maximum most probable discharge (medium discharge); and,
  - Worst-case discharge.
- Responsibilities and authority of the qualified individual as described in the facility response plan and company response organization.
- The organizational structure that will be used to manage the response actions, including the following:
  - Command and control;
  - Public information;
  - Safety;
  - Liaison with government agencies;
  - Spill response operations;
  - Planning;
  - Logistics support; and,
  - Finance.
- The responsibilities and duties of the spill management team member within the organizational structure, in accordance with designated job responsibilities.
- The training procedures as described in the response plan for members of the spill management team.
- The drill and exercise program to meet the federal and state regulations as required by Oil Pollution Act of 1990 (OPA 90).
- Procedures for the post discharge review of the plan to evaluate and validate its effectiveness.

- The National Contingency Plan.
- Roles and responsibilities of federal and state agencies in pollution response.
- Available response resources.
- Contracting and ordering procedures to acquire OSRO resources, in accordance with designated job responsibilities.
- Basic information on spill operations and OHS spill clean-up technology including the following:
  - OHS containment;
  - OSH recovery methods and devices;
  - Equipment limitations and uses;
  - Shoreline clean-up and protection;
  - Spill trajectory analysis;
  - Use of dispersants, in-situ burning, bioremediation; and,
  - Waste storage and disposal considerations.
- Hazard recognition and evaluation.
- Site safety and security procedures.
- OSHA requirements for worker health and safety (29 CFR 1910.120).
- Incident Command System and concepts for operating under a Unified Command.
- Public affairs, as applicable to designated job responsibilities.
- Crisis management, as applicable to designated job responsibilities.
- Personnel management, as applicable to designated job responsibilities.
- Emergency petroleum product transfer procedures, as applicable to designated job responsibilities.
- Sensitive biological areas, as applicable to designated job responsibilities.
- Procedures for directing the deployment and use of spill response equipment, as applicable to designated job responsibilities.

Q.2.10 Training for Qualified Individuals

All QIs must be trained to Level 5 per 29 CFR 1910.120 (q)(6)(v). This level of training will be given to personnel who will assume control of the incident beyond the first responder awareness level. They will receive at least 24 hours of training equal to the first responder operations level and in addition, have competency and be so certified by the base, in the following areas:

- Know and be able to implement the Incident Command System.
- Know how to implement the Emergency Response Plan.
- Know and understand the hazards and risks associated with employees working in chemical protective clothing.
- Know how to implement the Local Emergency Response Plan.
- Be familiar with the State Emergency Response Plan and of the Federal Regional Response Team.
- Know and understand the importance of decontamination procedures.

The following training performance elements are required for qualified individuals.

1. Be able to analyze a OHS discharge/release incident to determine the magnitude of the problem by:
   - Collecting and interpreting hazard and response information from printed resources, technical resources, computer databases, and monitoring equipment.

- Estimating the potential outcomes within the endangered area of a OHS discharge/release incident.
- Performing OHS spill trajectory analyses and identifying sensitive biological areas.

2. Plan a response within the capabilities of facility and contracted personnel, personal protective equipment, and control equipment by identifying the following:
   - Response objectives and potential action options consistent with the ICP.
   - Procedures the facility personnel may use to mitigate or prevent any discharge/release or a substantial threat of a discharge/release of OHS resulting from operational activities associated transfers and storage.
   - Operational capabilities of the contracted OSROs to respond to the average most probable discharge (small discharge); maximum most probable discharge (medium discharge); and worst-case discharge.
   - Responsibilities and duties of each spill management team member within the organizational structure.
   - Available response resources identified in the ICP.
   - Approving the level of PPE for a given action option.
   - Developing an action plan consistent with the ICP and capabilities of personnel and equipment.

3. Implement a response to favorably change the outcomes by:
   - Implementing an incident management system (Incident Command System).
   - Identifying the contracting and ordering procedures to acquire spill removal organization resources identified in the response plan.
   - Directing facility and contracted resources according to the developed action plan and ICP.
   - Providing a focal point for information transfer to the media and local officials.

4. Evaluate the progress of the planned response to ensure that response objectives are being met safely, effectively, and efficiently and adjust the action plan by:
   - Evaluating the progress of the action plan.
   - Identifying the role of the qualified individual in the post discharge review of the plan to evaluate and validate its effectiveness.
   - Reporting and documenting the incident.
   - Conducting a critique and correcting deficiencies noted.

5. Demonstrate knowledge of the following:
   - EPA Region 9 and USCG District 14 organizational structures (administrative, enforcement, and response).
   - Notification procedures and requirements for facility owners or operators; internal response organizations; federal and state agencies; and contracted OSROs and the information required for those organizations.
   - Communication system used for the notifications.
   - Information on the petroleum products transferred, stored, or used by the facility, including familiarity with the material safety data sheets, special handling procedures, health and safety hazards, spill and fire fighting procedures.
   - Procedures the facility personnel may use to mitigate or prevent any discharge or a substantial threat of a discharge of OHS resulting from facility operational activities associated with petroleum product transfers, storage, or use.

- Facility personnel responsibilities and procedures for use of facility equipment on-hand to mitigate a OHS discharge/release.
- Operational capabilities of the contracted OSROs to respond to the following:
  - Average most probable discharge (small discharge);
  - Maximum most probable discharge (medium discharge); and,
  - Worst-case discharge.
- Responsibilities and authorities of the QI as described in the facility response plan and company response organization.
- The organizational structure that will be used to manage the response actions, including the following:
  - Command and control;
  - Public information;
  - Safety;
  - Liaison with government agencies;
  - Spill response operations;
  - Planning;
  - Logistics support; and,
  - Finance.
- Responsibilities and duties of each spill management team member within the organizational structure.
- Drill and exercise program to meet federal and state regulations as required under OPA.
- The role of the QI in the post discharge review of the plan to evaluate and validate its effectiveness.
- ACP(s) for the area(s) in which the facility is located.
- The NCP.
- Roles and responsibilities of federal and state agencies in pollution response.
- Available response resources identified in ICP.
- Contracting and ordering procedures to acquire spill removal organization resources identified in the ICP.
- OSHA requirements for worker health and safety (29 CFR 1910.120).
- Incident Command System.
- Public affairs.
- Crisis management.
- OHS spill trajectory analyses.
- Sensitive biological areas.

The QI can attend commercially available courses and adapt the knowledge gained from the generic courses to meet facility-specific requirements.

Q.2.11 Training Resources for Navy On-Scene Coordinator Representative

Tab 3 of this plan provides a comprehensive listing of training resources for the Navy On-Scene Coordinator Representative.

Q.2.12 Training For Contracted Personnel

Contractors working in areas associated with OHS are responsible for training their personnel in spill response and reporting procedures. The contract administrator is responsible for providing these contractors with a summary of spill response and reporting procedures.

Designated Navy or Navy civilian personnel working with the contract administrator must ensure that all contracted OSROs are properly trained before operating at a facility discharge. Adequate documentation that establishes that the following training (both federal and state) is being provided as necessary to meet initial and annual refresher training requirements for their personnel must be obtained.

- Hazardous Waste General Site Worker [29 CFR 1910.120(e)(3)]
- Hazardous Waste Management and Supervisory Training [29 CFR 1910.120(e)(4)]
- Hazardous Materials First Responder Awareness Level Training [29 CFR 1910.120(q)(6)(i)]
- Hazardous Materials First Responder Operations Level Training [29 CFR 1910.120(q)(6)(ii)]
- Hazardous Materials Technician Level Training [29 CFR 1910.120(q)(6)(iii)]
- Hazardous Materials Specialist Level Training [29 CFR 1910.120(q)(6)(iv)]
- Hazardous Materials On-Scene Incident Commander Training [29 CFR 1910.120(q)(6)(v)]
- Post-Emergency Response Training [29 CFR 1910.120(q)(11)]
- Hazard Communication Training [29 CFR 1910.1200]
- Confined Space Training [29 CFR 1910.146]
- First Aid and CPR Training [29 CFR 1910.151]
- Water Craft Operations Training
- POL Recovery and Cleanup on Surface Waters Training
- Heavy Equipment Training
- Hazardous Waste Management Training [40 CFR 262.34 & 265.16]

Q.2.13 Response Training Courses

Q.2.13.1 Facility Response Team

This is a specialized course in on-water response operations. It is a 40-hour course appropriate for Facility Response Team personnel who want specialized training in on-the-water response only. The course is designated as NAVSAFENVTRACEN A-493-0012 and is taught at various locations and times.

Q.2.13.2 Hazardous Substance Incident Response Management

This basic course is for all responders. It is equivalent to OSHA Hazardous Materials Technician 24-hour training requirement. The course is appropriate for all Navy responders, and is mandatory for facility response team personnel. The course is designated as NAVSAFENVTRACEN A-493-0077, and is taught at various locations and times.

Q.2.14 Trainers

All trainers who teach any spill response training shall have satisfactorily completed a course for instructing the subject they are expected to teach. Alternatively, they shall have the training and/or academic credentials and instructional experience necessary to demonstrate competent instructional skills and a good command of the subject matter of the courses they are to teach. If training is contracted out, the training coordinator, working through Navy Contracting, will ensure that the training performance elements listed in this subsection are adequately covered in any training program purchased, and instructors are qualified to conduct the training according to 29 CFR 1910.120(q)(7).

Members of the hazardous materials emergency planning team should assist environmental management in evaluating the training and the contractor's instructors. As part of the training, the contracted training organization will include a written examination at the end of the training session to demonstrate that students have the knowledge necessary to perform their roles during an OHS discharge/release. As part of the training, the contracted training organization will conduct an exercise to evaluate the proficiency of facility personnel to implement their portion of the ICP. The exercise will be formally evaluated using the training performance criteria listed in Section Q.1.

Q.2.15 Training Documentation

Because of the large number of personnel requiring spill response training, documentation in this ICP is impractical. Each OHS participating organization documents its training and certifies employee competency according to applicable federal, state, and local laws. Organizations should use individual training records for training documentation. Training documentation for civilians is accomplished according to applicable COMNAVREG HI instructions.

Q.3 ICS TRAINING GUIDELINES

The United States Coast Guard (USCG) has developed a set of voluntary training guidelines for oil pollution responders. The guidelines contain the recommended training subject areas for personnel involved in oil spill response and cleanup. The training is divided into two categories: one for non-supervisory operation personnel and the other for supervisory operational personnel. The intent of the training guideline document is for professional trainers to use the USCG guidelines to develop specific lesson plans on the subject areas listed in the knowledge column of the guidelines.

The USCG guidelines have been combined with the job description for each response person to determine what training is recommended for that person to carry out his/her duties. Utilizing the above guidelines, the following should be incorporated into the training that is given to the Fire Department and Facility Response Team personnel.

The following tables describe ICS positions that may be filled by response personnel based upon the need of the incident.

TABLE Q-16: INCIDENT COMMANDER AND DEPUTY INCIDENT COMMANDER		
Task Description	**Have Knowledge In**	**Skill**
Notify appropriate authorities and alert key personnel according to response plan	• Facility plan • Notification of authorities • Cleanup resources • How and when to mobilize resources	• Demonstrate practical activation of plan
Initiate response	• Baseline survey techniques and requirements • Contracting procedures • Salvage/mitigation • Liability issues • Equipment uses and limitations • Funding sources • Natural resource damage assessment • Statutory/regulatory requirements	• Identify and coordinate immediate response activities
Assess size, product, source, and magnitude of spill	• Metric/US conversions • Estimating spill volumes • Physical oil types and API ratings • Basic physical chemistry of oil and petroleum products	• Estimate spill sizes • Determine spill source • Convert metric units to US units • Assess potential political/economic, social significance of a spill • Identify spilled product
Hazard recognition	• Marine Safety Data Sheets • Basic toxicology • Fire and explosion hazards • Physical hazards, such as: - Slip, trip, fall - Heat stress - Vehicular hazards • Sampling instruments and techniques • Site characterization and analysis • Boom deployment • Small boat operations • Skimmer operations • Vacuum truck operations	• Identify accident potential • Identify potential threat to personnel and the environment
Identify and prioritize resources at risk	• Shoreline types • Relative sensitivity of coastal types • Sensitivity mapping • Local geography • Local oceanography • Local infrastructure	• Identify protection priorities • Identify cleanup priorities
Spill trajectory forecasting	• Influence of sea and weather conditions on oil and properties and slick behavior/spread rate • Estimating spill size • Trajectory model interpretation	• Use data to predict speed and direction of oil movement
Assess potential for recontamination	• Location of remaining oil in the environment or in the source • Trajectory modeling • Final survey techniques	• Use spill projection models • Determine whether cleanup should be continued or terminated
Establish command post	• Site selection consideration: - Infrastructure - Logistics concerns - Future expansion	• Select appropriate command post site • Provide for logistics
Management of operational response activities	• Use and limitations of pollution control equipment/techniques • Logistics concerns - Personnel - Equipment - Infrastructure	• Direct and supervise: - Securing source - Chemical/biological treatment methods
Conduct briefings	• Briefing techniques	• Conduct briefings for: - Senior officers - Subordinates - Community - Media

TABLE Q-16: INCIDENT COMMANDER AND DEPUTY INCIDENT COMMANDER		
Task Description	**Have Knowledge In**	**Skill**
Conduct analysis to determine if response should be continued, suspended, or terminated with appropriate agencies	• Effort/benefit analysis - Effort: manpower, equipment, and time requirements, environmental damage, area use interference - Benefits: aesthetic benefits, environmental, economical, social water use benefits, address public pressures/concerns	• Rank the different criteria • Use effort/benefit analysis method
Personnel management	• Team leadership • Time management • Stress management • Delegations methods	• Identify/define/assign tasks & expectations • Monitor results
Conduct review of the response	• Review response activities	• Conduct an effective and productive team review of response
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE Q-17: OPERATIONS SECTION CHIEF		
Task Description	**Have Knowledge In**	**Skill**
Prepare incident reports	• Preparing Standard Spill Reporting Forms	
Gather and verify information	• Operation and construction of various pollution sources, such as: - Vessels - Pipelines - Storage tanks - Truck fill rack - Rail car fill stands • Using chart and tide tables • Plotting skills • Basic meteorology • Local sensitivities - Economic - Social - Environmental	• Demonstrate ability to gather supporting data to initiate an appropriate response.
Assess size, product, source, and magnitude of spill	• Metric/US conversions • Estimating spill volumes • Physical oil types and API ratings • Basic physical chemistry of oil and petroleum products	• Estimate spill sizes • Determine spill source • Convert metric units to US units • Assess potential political/economic, social significance of a spill • Identify spilled product
Hazard recognition	• Marine Safety Data Sheets • Basic toxicology • Fire and explosion hazards • Physical hazards, such as: - Slip, trip, fall - Heat stress - Vehicular hazards • Sampling instruments and techniques • Site characterization and analysis • Boom deployment • Small boat operations • Skimmer operations • Vacuum truck operations	• Identify potential threat to personnel and the environment. • Identify accident potential

TABLE Q-17: OPERATIONS SECTION CHIEF		
Task Description	**Have Knowledge In**	**Skill**
Identify and prioritize resources at risk	• Shoreline types • Relative sensitivity of coastal types • Sensitivity mapping • Local geography • Local oceanography • Local infrastructure	• Identify protection priorities • Identify cleanup priorities
Spill trajectory forecasting	• Influence of sea and weather conditions on oil and properties and slick behavior/spread rate • Estimating spill size • Trajectory model interpretation	• Use data to predict speed and direction of oil movement
Identify resources required to respond	• Use and limitations of: - Dispersants - Tracking systems - Booms - Skimmers - Pumps - Portable storage - Chemical barriers - Sorbents - Bioremediation - Communications equipment - Shoreline cleanup equipment - In-situ-burning	• Selection of proper equipment for the given circumstances • Determine personnel resources needed • Determine surveillance requirements
Conduct briefings	• Briefing techniques	• Conduct briefings for: - Incident Commander/Command Staff - Subordinates - Community - Media
Assess potential for recontamination	• Location of remaining oil in the environment or in the source • Trajectory modeling • Final survey technique	• Use spill projection models • Determine whether cleanup should be continued or terminated
Shut down field operations	• Updated inventory and location of equipment and personnel • Procedures to terminate operations	• Describe how the operations should be terminated in and orderly manner
Provide information documentation and evidence to final operations report	• Daily report/chronological report • Maps, charts, or diagrams • Message traffic, telex, radio logs, fax • Shoreline survey evaluation form • Photographic documentation	• Conduct and effective and productive team review of response
Personnel management	• Team leadership • Time management • Stress management • Delegations methods	• Identify/define/assign tasks & expectations • Monitor results
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE Q-18: RECOVERY/PROTECTION UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Resource Protection	• Deploy deflection and/or containment boom • Deploy sorbent materials • Construct dikes and/or dams • Report on the effectiveness of booming/diking arrangements • Identify protection resource needs, such as: - Boom types - Boom lengths - Mooring systems - Anchor buoy and lights - Vessel support equipment	• Boom deployment • On shore recovery and containment techniques
Assist in initial assessment of spill and potential impacts	• Type and volume of spill sources • General description of causes of spills • Spill volume determination • Oil types • Proximity to shoreline • Potential impacts on resources • Effects on flora and fauna • Persistence of an oil type on shoreline • Public response pressures	• Recognize oil types and behavior • Determine slick trajectory • Predict fate and consequences
Hazard recognition	• Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards	• Identify properties and hazards associated with the spilled oil or product
Assess sea and weather conditions	• Influence of sea and weather conditions on oil properties and slick behavior • Boating safety • Implications of sea state and wind speed on response operations	• Recognize limitations of response equipment • Use data to predict speed and direction of slick transport, fate, and behavior
Identify and stop discharge at the source	• Causes of spills • Options to stop oil/product flow	• Assist in selection control measures
Identify response priorities and select counter measures	• Description of cleanup phases and hardware alternatives • Response steps: stopping, monitoring confinement, deflection, removal, storage, disposal • Planning and logistics: timing, resource utilization, safety, incident command structure • Protection priorities • Spill control options • Deployment requirements	• Prioritize sensitivity, identify protection zones • Review merits and disadvantages of spill control alternatives • Assist in determining best response methodology
Response cleanup requirements on an ongoing basis	• Operational efficiency of equipment and alternative resources • Changing oil properties and environmental factors • New information	• Apply changing data to the selection of cleanup equipment and to the choice of response effect locations to optimize operations
Take samples from source and slick	• Legal sampling methods • Properties of oils (e.g., specific gravity, viscosity, pour point, flash point, solubility)	• Demonstrate knowledge of all types, grades, physical, and chemical properties of oils
Forecast slick transport and spreading	• Effect of oil properties, sea state and weather on spread rate and transport • Spill volume as a function of slick area, thickness, and appearance • Trajectory modeling • Implications to countermeasures operations	• Estimate spill volume and direction of movement

TABLE Q-18: RECOVERY/PROTECTION UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Identify the effect of weathering on response operations, hazards, and impacts	• Weathering processes: evaporations, dissolution, emulsification, biodegradation, sedimentation • Effect of weather, sea state, and oil type on weathering • Fire hazards • Implications to countermeasures operations	• Assess effect of environmental conditions on oil and product
Implement safety procedures	• Safety checklist for response operations • Safe work practices: cleanup equipment, petroleum products, site • Personal protective clothing and equipment • Capability of personnel; length of shift, level of training	• Recognize need for and properly use personnel protective clothing and equipment • Prevent unsafe worker performance
Take appropriate site security measures	• Implement site security and access restrictions	• Use safety equipment • Ensure security of work site
Assess transportation needs	• Ongoing transportation needs of all cleanup phases	• Determine transportation requirements
Choose appropriate response vessels	• Capabilities of available small boats • Safe deployment and operation of boats • Navigation of small boats • Effects of environmental factors on vessel operations	• Select appropriate means of transportation • Operate vessels safely and effectively
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response
Select appropriate boom	• Main uses of boom: containment, deflection, and protection • Boom components and structure • Types of commercial and improvised booms: skirt, fence, sorbent, etc. • Selection criteria for offshore and near shore uses • Boom failure mechanisms and solutions: entrainment, drainage, splash over, boom submergence, and planning • Response time • Safety warnings for spills of gasoline or other low flash point products • Site specific considerations: wetland damage at low tide, mooring to existing structures, location of nearby amenities or sensitive areas	• Select boom upon based upon consideration of location, oil type, and environmental factors
Deploy boom	• Deployment equipment and safety requirements • Selecting boom for response: dependence upon sea state and application • Typical deployment configurations for containment and deflection • Determination of boom angle • Vessel selection • Preparation and inspection • Towing: tow line length, attachment to the tow post • Mooring: anchor size and number, length of mooring line, mooring arrangement • Safety checklist for operations	• Deploy and moor booms to safely and effectively concentrate oil for recovery to protect resources and to deflect slicks
Retrieve boom	• Recover, clean, disassemble, and store equipment	• Safely recover booms without damaging • Clean and store boom

TABLE Q-18: RECOVERY/PROTECTION UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Select appropriate skimmer	• Skimming principles and types: weir, oleophilic, suction, other	• Select appropriate skimmer for intended application
Operate skimmers	• Basic engine types, fuel needs, controls, lube and hydraulic systems, fittings and connections • Operational difficulties: breakdown, debris • Safety considerations	• Start, operate, and shutdown skimmer • Monitor for optimum performance and evaluate need to change skimmer type • Trouble shoot minor problems
Equipment maintenance	• Cleaning, disassembly, and storage • Check and repair equipment	• Remove oil and debris, repair broken or worn parts, and store skimmer in "ready to use" condition
Select sorbents	• Characteristics • Sorbent types and effectiveness	• Select effective sorbents
Use sorbents	• Application of effective sorbent to spill conditions	• Apply, recover, reuse, dispose of sorbents effectively
Identify appropriate conditions for conducting bioremediation	• Principle of process, agents, and application methods • Limitations and advantages	• Determine applicability of bioremediation to oil cleanup
Assist in selection of appropriate shoreline cleanup techniques	• Methods and required equipment: natural, mechanical, manual, flushing • Cleanup alternatives versus environmental sensitivities • Habitat disturbance from cleanup operations • Changing conditions: seasonal, diurnal, tidal • Practical considerations: access, disposal	• Assess factors dictating shoreline response • Assist in selection of appropriate cleanup methods
Clean up shoreline	• Safety considerations: tides, equipment, animals, physical hazards • Careful and efficient execution of response	• Identification of safety hazards and implementation of proper precautions
Categorize and quantify collected oily wastes	• Oily liquids and solids generated during cleanup	• Determine factors affecting operation of transfer equipment
Select pumps, conveyors, and other oily waste transfer equipment	• Transfer options and mechanical principles • Pumps: centrifugal, loge, gear, intermeshing screw, vane, flexible impeller, screw, auger, progressing cavity, piston, diaphragm • Other: air conveyor, vacuum truck, portable vacuum unit • Capabilities of transfer equipment: oil viscosity, pour point, debris, abrasive, portability, emulsification, cold weather operations, ease of repair and handling • Lightering operations	• Determine suitable means to transfer materials
Safely operate waste oil transfer equipment	• Preparation, operation, and disconnection of equipment • Use of controls • Safety considerations	• Safely operate pumps, conveyors, and other equipment • Troubleshoot minor problems
Store and dispose of oily waste materials generated by cleanup	• Land and water based storage options: pit, prefabricated kit, towable tank, drums, trucks (tank, vacuum, dump, pickup), barges (tank, deck, hopper), vessels (workboat, skimmer, supply boat, tanker), plastic bags and tubing, and spent boom • Factors for selection of storage sites (environmental and regulatory)	• Assist in the selection of storage sites and options • Set up and use storage facilities
Segregate and minimize waste	• Segregation of materials • Waste reduction practices: reuse, oil/water separation, minimal collection of non-oiled material, minimal formation of waste water	• Sort materials to facilitate storage and disposal • Separate and recycle waste materials

TABLE Q-18: RECOVERY/PROTECTION UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Facilitate disposal of collected materials	• Disposal options: reprocessing, recycling, land filling, stabilization, burning, incineration, bioremediation, land farming • Capabilities of equipment and techniques • Selection of disposal options: environmental, regulatory, access, security • On site disposal for remote locations • Safety, fire control equipment	• Assist in the selection of disposal sites and options • Operate on site disposal methods • Provide feedstock for disposal units
Restore equipment to pre-spill conditions	• Cleaning requirements and methods • Waste water collection • Equipment maintenance and storage	• Perform equipment restoration activities
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-19: EMERGENCY OPERATIONS UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Hazard recognition	• Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards	• Identify properties and hazards associated with the spilled oil or product
Identify and stop discharge at source	• Causes of spills • Options to stop oil/product flow	• Assist in selection control measures
Identify response priorities and select counter measures	• Description of cleanup phases and hardware alternatives • Response steps: stopping, monitoring confinement, deflection, removal, storage, disposal • Planning and logistics: timing, resource utilization, safety, incident command structure • Protection priorities • Spill control options • Deployment requirements	• Prioritize sensitivity, identify protection zones • Review merits and disadvantages of spill control alternatives • Assist in determining best response methodology
Implement safety procedures	• Safety checklist for response operations • Safe work practices: equipment cleanup, petroleum products, site • Personal protective clothing and equipment • Capability of personnel; length of shift, level of training	• Recognize need for and properly use personnel protective clothing and equipment • Prevent unsafe worker performance
Take appropriate site security measures	• Implement site security and access restrictions	• Use safety equipment • Ensure security of work site
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols/use	• Communicate effectively to facilitate response
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-20: AIR OPERATIONS UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Assist in initial assessment of spill and potential impacts	• Type and volume of spill sources • General description of causes of spills • Spill volume determination • Oil types • Proximity to shoreline • Potential impacts on resources • Effects on flora and fauna • Persistence of an oil type on shoreline • Public response pressures	• Recognize oil types and behavior • Determine slick trajectory • Predict fate and consequences
Hazard recognition	• Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards	• Identify properties and hazards associated with the spilled oil or product
Assess sea and weather conditions	• Influence of sea and weather conditions on oil properties and slick behavior • Boating safety • Implications of sea state and wind speed on response operations	• Recognize limitations of response equipment • Use data to predict speed and direction of slick transport, fate, and behavior
Forecast slick transport and spreading	• Effect of oil properties, sea state and weather on spread rate and transport • Spill volume as a function of slick area, thickness, and appearance • Trajectory modeling • Implications to countermeasures operations	• Estimate spill volume and direction of movement
Identify the effect of weathering on response operations, hazards, and impacts	• Weathering processes: evaporations, dissolution, emulsification, biodegradation, sedimentation • Effect of weather, sea state, and oil type on weathering • Fire hazards • Implications to countermeasures operations	• Assess effect of environmental conditions on oil and product
Implement safety procedures	• Safety checklist for response operations • Safe work practices: cleanup equipment, petroleum products, site • Personal protective clothing and equipment • Capability of personnel; length of shift, level of training	• Recognize need for and properly use personnel protective clothing and equipment • Prevent unsafe worker performance
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-21: WILDLIFE UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Resource Protection	• Deploy deflection and/or containment boom • Deploy sorbent materials • Construct dikes and/or dams • Report on the effectiveness of booming/diking arrangements • Identify protection resource needs, such as: - Boom types - Boom lengths - Mooring systems - Anchor buoy and lights - Vessel support equipment	• Boom deployment • On shore recovery and containment techniques
Hazard recognition	• Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards	• Identify properties and hazards associated with the spilled oil or product
Assist in initial assessment of spill and potential impacts	• Type and volume of spill sources • General description of causes of spills • Spill volume determination • Oil types • Proximity to shoreline • Potential impacts on resources • Effects on flora and fauna • Persistence of an oil type on shoreline • Public response pressures	• Recognize oil types and behavior • Determine slick trajectory • Predict fate and consequences
Assess sea and weather conditions	• Influence of sea and weather conditions on oil properties and slick behavior • Boating safety • Implications of sea state and wind speed on response operations	• Recognize limitations of response equipment • Use data to predict speed and direction of slick transport, fate, and behavior
Identify response priorities and select counter measures	• Description of cleanup phases and hardware alternatives • Response steps: stopping, monitoring confinement, deflection, removal, storage, disposal • Planning and logistics: timing, resource utilization, safety, incident command structure • Protection priorities • Spill control options • Deployment requirements	• Prioritize sensitivity, identify protection zones • Review merits and disadvantages of spill control alternatives • Assist in determining best response methodology
Response cleanup requirements on an ongoing basis	• Operational efficiency of equipment and alternative resources • Changing oil properties and environmental factors • New information	• Apply changing data to the selection of cleanup equipment and to the choice of response effect locations to optimize operations
Implement safety procedures	• Safety checklist for response operations • Safe work practices: cleanup equipment, petroleum products, site • Personal protective clothing and equipment • Capability of personnel; length of shift, level of training	• Recognize need for and properly use personnel protective clothing and equipment • Prevent unsafe worker performance
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response

TABLE Q-21: WILDLIFE UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Identify appropriate conditions for conducting bioremediation	• Principle of process, agents, and application methods • Limitations and advantages	• Determine applicability of bioremediation to oil cleanup
Assist in selection of appropriate shoreline cleanup techniques	• Methods and required equipment: natural, mechanical, manual, flushing • Cleanup alternatives vs. environmental sensitivities • Habitat disturbance from cleanup operations • Changing conditions: seasonal, diurnal, tidal • Practical considerations: access, disposal	• Assess factors dictating shoreline response • Assist in selection of appropriate cleanup methods
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-22: SITE MANAGEMENT UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Hazard recognition	• Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards	• Identify properties and hazards associated with the spilled oil or product
Implement safety procedures	• Safety checklist for response operations • Safe work practices: cleanup equipment, petroleum products, site • Personal protective clothing and equipment • Capability of personnel; length of shift, level of training	• Recognize need for and properly use personnel protective clothing and equipment • Prevent unsafe worker performance
Take appropriate site security measures	• Implement site security and access restrictions	• Use safety equipment • Ensure security of work site
Assess transportation needs	• Ongoing transportation needs of **ALL** cleanup phases	• Determine transportation requirements
Choose appropriate response vessels	• Capabilities of available small boats • Safe deployment and operation of boats • Navigation of small boats • Effects of environmental factors on vessel operations	• Select appropriate means of transportation • Operate vessels safely and effectively
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response
Store and dispose of oily waste materials generated by cleanup	• Land and water based storage options: pit, prefabricated kit, towable tank, drums, trucks (tank, vacuum, dump, pickup), barges (tank, deck, hopper), vessels (workboat, skimmer, supply boat, tanker), plastic bags and tubing, and spent boom • Factors for selection of storage sites (environmental and regulatory)	• Assist in the selection of storage sites and options • Set up and use storage facilities
Segregate and minimize waste	• Segregation of materials • Waste reduction practices: reuse, oil/water separation, minimal collection of non-oiled material, minimal formation of waste water	• Sort materials to facilitate storage and disposal • Separate and recycle waste materials

TABLE Q-22: SITE MANAGEMENT UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Facilitate disposal of collected materials	• Disposal options: reprocessing, recycling, land filling, stabilization, burning, incineration, bioremediation, land farming • Capabilities of equipment and techniques • Selection of disposal options: environmental, regulatory, access, security • On site disposal for remote locations • Safety, fire control equipment	• Assist in the selection of disposal sites and options • Operate on site disposal methods • Provide feedstock for disposal units
Restore equipment to pre-spill conditions	• Cleaning requirements and methods • Waste water collection • Equipment maintenance and storage	• Perform equipment restoration activities
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-23: PLANNING SECTION CHIEF		
Task Description	**Have Knowledge In**	**Skill**
Prepare response action plan	• Elements of a viable response plan - Time available - Resources available - Containment plan - Protection/deflection plan - Oil recovery plan - Temporary storage plan - Disposal plan - Dispersant application plan - Site safety plan - Equipment deployment plan - Personnel protect equipment - Plan adjustment mechanisms	• Prepare and brief plan
Conduct briefings	• Briefing techniques	• Conduct briefings for: - Senior officers - Subordinates - Community - Media
Spill trajectory forecasting	• Influence of sea and weather conditions on oil properties and slick behavior/spread rate • Estimating spill size • Trajectory modeling	• Use data to predict speed and direction of oil movement
Personnel management	• Team leadership • Time management • Stress management • Delegations methods	• Identify/define/assign tasks & expectations • Monitor results
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE Q-24: STRATEGY AND TACTICS PLANNING UNIT LEADER AND TEAM MEMBERS		
Task Description	**Have Knowledge In**	**Skill**
Assist in preparation of response action plan	• Elements of a tactical response plan - Time available - Resources available - Containment plan - Protection/deflection plan - Oil recovery plan - Temporary storage plan - Disposal plan - Dispersant application plan - Equipment deployment plan - Plan adjustment mechanisms	• Assist in Preparation of plans
Spill trajectory forecasting	• Influence of sea and weather conditions on oil properties and slick behavior/spread rate • Estimating spill size • Trajectory modeling	• Use data to predict speed and direction of oil movement
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE Q-25: HEALTH AND SAFETY PLANNING UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Prepare health & safety plan	• Elements of a plan • Resources available • Spilled oil/product hazard evaluation • Physical site hazards • Personal protect equipment	• Prepare and brief plan
Implement safety procedures	• Safety checklist for response operations • Safe work practices: cleanup equipment, petroleum products, sites • Personal protective clothing and equipment • Capability of personnel: length of shift, level of training, physical exposures	• Recognize need for and properly select personal protective clothing and equipment • Prevent unsafe worker performance
Ensure provision of first aid and access to medical facilities	• Safety risks of petroleum identified • Effects of exposure from: inhalation, dermal contact, ingestion • Safety risks and handling guidelines for equipment • Safe boating practices and guidelines • First aid • MSDS	• Facilitate care of injured personnel • Prevent self injury
Conduct safety briefings	• Briefing techniques	• Conduct briefings for: - Senior officers - Subordinates - Community - Media
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE Q-26: NATURAL RESOURCES PLANNING UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Assist in preparation of response action plan	• Elements of a response plan - Time available - Resources available - Containment plan - Protection/deflection plan - Oil recovery plan - Temporary storage plan - Disposal plan - Dispersant application plan - Equipment deployment plan - Plan adjustment mechanisms	• Assist in Preparation of plans
Resource Protection	• Deploy deflection and/or containment boom • Deploy sorbent materials • Construct dikes and/or dams • Report on the effectiveness of booming/diking arrangements • Identify protection resource needs, such as: - Boom types - Boom lengths - Mooring systems - Anchor buoy and lights - Vessel support equipment	• Boom deployment • On shore recovery and containment techniques
Assist in initial assessment of spill and potential impacts	• Type and volume of spill sources • General description of causes of spills • Spill volume determination • Oil types • Proximity to shoreline • Potential impacts on resources • Effects on flora and fauna • Persistence of an oil type on shoreline • Public response pressures	• Recognize oil types and behavior • Determine slick trajectory • Predict fate and consequences
Hazard recognition	• Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards	• Identify properties and hazards associated with the spilled oil or product
Assess sea and weather conditions	• Influence of sea and weather conditions on oil properties and slick behavior • Boating safety • Implications of sea state and wind speed on response operations	• Recognize limitations of response equipment • Use data to predict speed and direction of slick transport, fate, and behavior
Identify response priorities and select counter measures	• Description of cleanup phases and hardware alternatives • Response steps: stopping, monitoring confinement, deflection, removal, storage, disposal • Planning and logistics: timing, resource utilization, safety, incident command structure • Protection priorities • Spill control options • Deployment requirements	• Prioritize sensitivity, identify protection zones • Review merits and disadvantages of spill control alternatives • Assist in determining best response methodology
Response cleanup requirements on an ongoing basis	• Operational efficiency of equipment and alternative resources • Changing oil properties and environmental factors • New information	• Apply changing data to the selection of cleanup equipment and to the choice of response effect locations to optimize operations
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response

TABLE Q-26: NATURAL RESOURCES PLANNING UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Identify appropriate conditions for conducting bioremediation	• Principle of process, agents, and application methods • Limitations and advantages	• Determine applicability of bioremediation to oil cleanup
Assist in selection of appropriate shoreline cleanup techniques	• Methods and required equipment: natural, mechanical, manual, flushing • Cleanup alternatives vs. environmental sensitivities • Habitat disturbance from cleanup operations • Changing conditions: seasonal, diurnal, tidal • Practical considerations: access, disposal	• Assess factors dictating shoreline response • Assist in selection of appropriate cleanup methods
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-27: DEMOBILIZATION PLANNING UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Prepare demobilization action plan	• Elements of a viable response plan - Timing of completion of work unit - Resources on scene - Plan adjustment mechanisms	• Prepare and brief plan
Conduct briefings	• Briefing techniques	• Conduct briefings for: - Senior officers - Subordinates - Community - Media
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE Q-28: FINANCE SECTION CHIEF		
Task Description	**Have Knowledge In**	**Skill**
Maintain contracting records	• Contract agreements • Market rates • Purchase order system • Basic Ordering Agreements • Change order agreements • Accounting procedures	• Establish log keeping procedures for: - Contractors - Subcontractors - Leased equipment - Consumable - Personnel
Establish claims office	• Claims procedures • Regulatory requirements	• Organize claims office • Delegate claims responsibility
Coordinate subcontracted services	• Contracting procedures • Basic ordering agreements • Market rates • Daily work sheets	• Assess need for subcontracted services • Execute contracts • Define role of subcontractors in overall response organization • Monitor work
Conduct briefings	• Briefing techniques	• Conduct briefings for: - Senior officers - Subordinates - Community - Media

TABLE Q-28: FINANCE SECTION CHIEF		
Task Description	**Have Knowledge In**	**Skill**
Verify/certify costs	• Reasons for cost documentation • Liability, cost recovery • Daily log procedures • Equipment cost report • Manpower forms • Invoices for contract services • Personnel activity sheets • Daily worksheets • Travel claims • Accident claims	• Present a plan for filing and record maintenance • Consolidate records and produce reports of expenditures by category
Provide final cost documentation report	• Cost document procedures • Report writing techniques • Coding structure	• Construct a simple coding structure for the response • Produce final cost report
Personnel management	• Team leadership • Time management • Stress management • Delegations methods	• Identify/define/assign tasks & expectations • Monitor results

TABLE Q-29: CONTRACT BRANCH LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Maintain contracting records	• Contract agreements • Market rates • Purchase order system • Basic Ordering Agreements • Change order agreements • Accounting procedures	• Establish log keeping procedures for: - Contractors - Subcontractors - Leased equipment - Consumable - Personnel
Coordinate subcontracted services	• Contracting procedures • Basic ordering agreements • Market rates • Daily work sheets	• Assess need for subcontracted services • Execute contracts • Define role of subcontractors in overall response organization • Monitor work
Verify/certify costs	• Reasons for cost documentation • Liability, cost recovery • Daily log procedures • Equipment cost report • Manpower forms • Invoices for contract services • Personnel activity sheets • Daily worksheets • Travel claims • Accident claims	• Present a plan for filing and record maintenance • Consolidate records and produce reports of expenditures by category
Provide final cost documentation report	• Cost document procedures • Report writing techniques • Coding structure	• Construct a simple coding structure for the response • Produce final cost report
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-30: CLAIMS BRANCH LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Establish claims office	• Claims procedures • Regulatory requirements	• Organize claims office • Delegate claims responsibility
Verify/certify costs	• Reasons for cost documentation • Liability, cost recovery • Daily log procedures • Equipment cost report • Manpower forms • Invoices for contract services • Personnel activity sheets • Daily worksheets • Travel claims • Accident claims	• Present a plan for filing and record maintenance • Consolidate records and produce reports of expenditures by category
Provide final cost documentation report	• Cost document procedures • Report writing techniques • Coding structure	• Construct a simple coding structure for the response • Produce final cost report
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-31: LOGISTICS SECTION CHIEF		
Task Description	**Have Knowledge In**	**Skill**
Identify resources	• Location of additional resources • Means to obtain resources • Regional agreements • Basis ordering agreements • Negotiations • Contracting procedures	• Locate and acquire additional resources
Shut down field operations	• Updated inventory and location of equipment and personnel • Procedures to terminate operations	• Describe how the operations should be terminated in an orderly manner
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills
Personnel management	• Team leadership • Time management • Stress management • Delegations methods	• Identify/define/assign tasks & expectations • Monitor results

TABLE Q-32: SUPPORT UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Identify resources	• Location of additional resources • Means to obtain resources • Regional agreements • Basis ordering agreements • Negotiations • Contracting procedures	• Locate and acquire additional resources
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response
Assess transport needs	• Ongoing transportation needs for **ALL** cleanup phases	• Determine transportation requirements
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE Q-33: COMMUNICATIONS UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Develop communications network	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Develop effective communications network to facilitate response
Participate in debriefing	• Technical problems and solutions	• Suggest improved response methods

TABLE Q-34: PERSONNEL UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Identify personnel resources	• Location of additional personnel resources • Means to obtain personnel resources • Negotiations • Contracting procedures	• Locate and acquire additional personnel resources
Document assignment of personnel	• Personnel assignment and status reports	• Develop and utilize a personnel locator system and track the assignment and location of personnel
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response
Assess transport needs	• Ongoing transportation needs for personnel cleanup phases	• Determine transportation requirements
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE Q-35: SERVICE UNIT LEADER AND TEAM MEMBER		
Task Description	**Have Knowledge In**	**Skill**
Provide for emergency and routine medical services	• Identify medical resources and logistics support needs • Report medical unit needs	• Manage/coordinate medical resources
Provide food and berthing services	• Catering service agreements • Establishing kitchens, galleys, canteens • Drinking water sources • Motel/hotel contracts • Identify berthing quarters, barracks vessels, camping gear, personal hygiene equipment, and restroom facilities	• Develop living/berthing/messing facilities • Report the status of berthing units
Use of communications equipment	• Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use	• Communicate effectively to facilitate response
Make recommendations for improved preparedness	• Familiarity with existing contingency plan	• Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

Q.4 Discharge Prevention Meetings Log

The following log (or similar) should be maintained to document working meetings on discharge prevention (see Section Q.2.7). This log is kept with the COMNAVREG HI SPCC plan.

TABLE Q-36: DISCHARGE PREVENTION MEETING LOG		
Date:		
Attendees:		
Meeting Topics:		
Subject/Issue Identified	**Required Action**	**Implementation Date**
Name of Responsible Official:		
Signature of Responsible Official:		

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX R
SITE SAFETY AND HEALTH

R.1 PURPOSE

The safety and health of response and support personnel involved in an emergency response incident is of primary concern. This appendix on health and safety provides a general framework for the protection of oil spill response workers' health and safety and complies with the requirements of state and federal laws.

The information contained in this appendix should be used as a guide by the Safety Officer for preparing and implementing worker health and safety protection measures in order to maximize safety and allow critical oil spill response activities to proceed. Specific site control and emergency response procedures must be developed using forms provided in this outline or other forms developed for this activity. Other procedures for activities such as confined space entry or hot work will require additional controls in order to fulfill the regulatory requirements. The Safety Officer must identify these and other health and safety and regulatory matters. Once identified, the Safety Officer will need to take appropriate action to address those safety issues or regulatory requirements.

R.2 MEDICAL MONITORING

All persons who will be exposed or will have the potential to be exposed to hazardous substances will take part in a medical monitoring program that meets the requirements of 29 CFR 1910.120(f). In general, medical monitoring will be conducted for workers as follows:

- Workers who have the potential to be exposed to hazardous substances at or above the PEL.
- Workers whose duties require them to wear a respirator for more than 30 days/year.
- Workers who are believed to have been exposed to hazardous substances or who exhibit symptoms of exposure.

R.3 RECORDS AND REPORTS

Both state and federal regulations require employers to prepare and maintain records of occupational injuries and illnesses.

R.4 HEALTH HAZARDS

Health hazards must be identified in the Site Safety Plan. The following is a list of typical hazards that may be involved during an oil/hazardous substance spill response.

R.4.1 Primary Chemical Hazards

The following table lists typical petroleum products that are transported to and used at Joint Base Pearl Harbor Hickam (JBPHH).

TABLE R-1: PERMISSIBLE EXPOSURE LIMITS OF PRODUCTS STORED OR USED ON JBPHH		
Product	**TWA [1] (Time-Weighted Average)**	**STEL [1] (Short Term Exposure Limit)**
JP-5 (jet fuel)	42 ppm	120 ppm
F-24 (jet fuel)	44 ppm	120 ppm
DFM (diesel fuel marine)	40 ppm	112 ppm
DFO (diesel fuel oil)	15 ppm	75 ppm
MOGAS (unleaded gasoline)	300 ppm	500 ppm

Notes:
1. Information for JP-5, F-24, and DFM are recommendations found in "Permissible Exposure Levels for Select Military Fuel Vapors," National Academy Press, Washington DC (1996). Information for DFO and MOGAS are from American Council of Governmental Hygienists TLV publications.

The Material Safety Data Sheets (MSDS) for all products used at JBPHH must be on file in each work area for every hazardous chemical substance used, stored, or handled within that work area. Availability can be through paper copies or electronic access. A master copy will also be kept in the Safety Office.

New substances that come in without an MSDS MUST NOT be introduced into the work area until an MSDS is obtained. OSHA requires a copy of the most current MSDS. On-line computer services may not be updated frequently, and, therefore, MSDS copies obtained from them may not be current or valid.

JP-5 (jet fuel)

JP-5 is a kerosene-based light petroleum distillate with additives that include naphthalene, anti-oxidants, corrosion inhibitors, and metal deactivators. It does not have any anti-static additive. Naphthalene is a potential irritant to eyes, skin, and lungs. After prolonged or repeated exposure, it could cause changes to the blood, eyes, and kidney. Aspirating this product into the lungs can cause chemical pneumonia, and can be fatal. Health studies have shown that petroleum hydrocarbons pose potential human health risks that may vary from person to person.

As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized. Exposures to high concentrations may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

F-24 (jet fuel)

F-24 is a kerosene-based light petroleum distillate with additives that include anti-oxidants, anti-static compounds, corrosion inhibitors, and metal deactivators. Health studies have shown that petroleum hydrocarbons pose potential human health risks that may vary from person to person. As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized. Exposures to high concentrations may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

Diesel Fuel Marine

Diesel fuels are complex mixtures of alkanes, cycloalkanes and aromatic hydrocarbons. Marine diesel fuels also contain heavy residues from distillation and thermal cracking operations. Aspiration of liquid into the lungs may cause extensive pulmonary edema (dry land drowning). Prolonged or repeated skin contact will remove skin oils leading to irritation and/or dermatitis.

High vapor concentrations are irritating to the eyes and lungs, and may cause headaches, dizziness, and unconsciousness.

Diesel Fuel Oil

Diesel fuel is a combustible liquid obtained from the middle distillate in petroleum separation. It is composed chiefly of aliphatic, olefinic, cyclo-paraffinic, and aromatic hydrocarbons and appropriate additives. Excessive inhalation of aerosol or mist can cause respiratory tract irritation, dizziness, and loss of coordination. Systemic effects from ingestion include gastrointestinal irritation, vomiting, and in severe cases central nervous system depression progressing to coma or death. Aspiration of liquid into the lungs may cause extensive pulmonary edema (dry land drowning). Prolonged or repeated skin contact will remove skin oils leading to irritation and/or dermatitis. High vapor concentrations are irritating to the eyes and lungs and may cause headaches, dizziness, and unconsciousness.

Gasoline (unleaded)

Gasoline is a mixture of hydrocarbons, including aliphatic hydrocarbons, aromatic hydrocarbons, a variety of branched and unsaturated hydrocarbons, and additives. Extremely high levels of exposure could produce conditions such as dizziness, coma, collapse, and death. Exposure to non-lethal doses is usually followed by complete recovery, although cases of permanent brain damage following massive exposure have been reported.

Corrosive Liquids

Sulfuric acid (also called battery acid or electrolyte acid) and sodium hydroxide are corrosive liquids. These liquids are extremely corrosive to all body tissues! They cause severe burns to eyes and skin and inhaling the vapors causes' severe lung tissue damage. Atmospheres of corrosive acid mists require level personal protection equipment because the acid will burn any exposed skin or tissue. Chlorine gas vapors also form a corrosive liquid, hydrochloric acid, when it contacts the moisture of the eyes and lungs. Sulfuric acid is extremely reactive with water.

Batteries

Lithium and Magnesium Batteries: Lithium and magnesium batteries may give off gas that can cause severe injury or death if inhaled. These gases form corrosive liquids in contact with water. Battery fires produce irritating, corrosive, and toxic gases.

Ni-Cad Batteries: Ni-Cad radio batteries may produce toxic vapors. Ni-Cad battery fires produce irritating, corrosive, and toxic gases. In contact with water, these gases form corrosive liquids.

R.4.2 Secondary Chemical Hazard Identification

Oil and hazardous substance spill responses require the use of a wide variety of chemicals and materials which may singularly or in conjunction with the site work conditions create various hazards to site workers. Several of these hazards are identified in Table R-2.

TABLE R-2: SECONDARY CHEMICAL HAZARDS		
Hazard Description	**Recommended Protective Equipment**	**Conditions Under Which Exposure May Occur**
Diesel and Gasoline Engine Exhaust. Exposure to diesel or engine exhaust may promote inhalation of hydrocarbons, carbon monoxide and particulates. Exposure may irritate eyes and mucous membranes.	Monitor CO and O_2 levels, ventilate area, and use half-mask respirator with organic and particulate filters.	Diesel and gasoline exhaust exposure may occur in poorly ventilated areas in the vicinity of internal combustion equipment. It may also occur in sheltered outdoor areas on calm days or during temperature inversion conditions.
Low Oxygen Levels. Confined or restricted space atmospheres may be dangerous to life and health if O_2 levels are below 19.5% (oxygen deficient) or greater than 23.5% (oxygen enriched)	Monitor O_2 levels and ventilate area. Do not enter O_2 deficient atmosphere without a confined space entry permit and supervision from the Safety Officer. Supplied air Personal Protective Equipment (PPE) is required. Safe O_2 levels are between 19.5%-23.5%.	Poorly ventilated areas in the vicinity of oxygen consuming materials or equipment. This includes waste undergoing biological degradation or fuel powered equipment in confined or restricted spaces (e.g., tanks).
High Carbon Monoxide Levels. Carbon monoxide is a colorless and odorless gas, slightly less dense than air and is toxic by inhalation. Carbon monoxide is also highly flammable. (Lower Explosive Limit (LEL) = 12%; Upper Explosive Limit (UEL) = 75% by volume in air)	Monitor CO, and ventilate area. Use of supplied air PPE is required. Do Not enter high CO atmosphere without a confined space entry permit and supervision from Safety Officer. Safe CO levels are less than 50 ppm TWA.	Poorly ventilated areas in the vicinity of internal combustion engines. Acetylene welding, industrial heating equipment and processes involving incomplete combustion may also create this hazard.
Other Spill Response Specialty Agents. Due to the varied nature of oil spill cleanup operations, numerous specialty chemicals in solid, liquid, and gaseous phases may be used or stored in work areas.	Obtain and review MSDSs for all products. Verify safety precautions and PPE needs. Obtain any required respirator, skin, eye, and splash protection.	Exposure to these materials in poorly ventilated areas or in open areas may occur if workers are unaware of the chemicals' toxic or physical properties.
Particulates. Particulates may cause irritation to lungs, eyes, and mucous membranes. Particulates may also have toxic effects (e.g., lead, asbestos, cadmium, and silica).	Use half-mask respirator with particulate filter and appropriate cartridges. Use other PPE for eye and skin protection as needed.	Use powdered or granular oil absorbent (diatomaceous earth, vermiculite, etc.) or other specialty products where particles become airborne and enter the breathing zone of personnel. Wind carried silts, and other dusts may also be a factor.
Biological Nutrients. Inhalation of vapors, mists, and particulates or skin contact with nutrients used for biological treatment may result in irritation to lungs, eyes, and mucous membranes. Dermal absorption is also possible.	Obtain and review MSDS for the specific product. Verify safety precautions and PPE needs. Obtain required respirator, skin, eye, and splash protection.	Use of nutrients (fertilizers) in a spill cleanup effort may create potential exposures during spray application or other distribution and mixing process.
Dispersant. Inhalation of vapors or mists or skin contact may result in irritation to lungs, eyes, and mucous membranes. Dermal absorption is also possible.	Obtain and review MSDS for specific product. Personnel involved in handling or applying dispersant will be provided specific training.	Application of dispersant during the initial spill event may expose workers to respiratory and dermal hazards.
Confined Spaces. Inadequate ventilation coupled with limited egress creates potentially hazardous situations for workers. Oxygen deficient, toxic or flammable atmospheres may exist in these areas. All OSHA procedures regarding confined space entry will be followed.	Monitor CO, O_2, toxic, and flammable gas levels, and ventilate area. Do not enter a confined space without a confined space entry permit and supervision from the Safety Officer. Safe O_2 levels = 19.5% to 23.5%; flammable gas limits = less than 10% LEL; toxic limits = less than ½ PEL or Threshold Limit Value (TLV) - whichever is the lower value.	Confined spaces may be encountered on vessels, inside tanks, inside buildings, on drill rigs, in sumps, in ditches, etc. Product vapors or other emissions resulting from response operations may intensify this hazard.
Flammable Atmosphere. A flammable gas, vapor, mist, or dust when mixed with air may create a flammable or explosive condition. Volatile vapors or gases will generally be of a sufficient quantity during the initial few hours of a spill to cause a flammable atmosphere.	Conduct flammable gas and oxygen monitoring prior to starting any work. Purge or inert atmospheres when possible. Obtain hot work permits prior to starting any cutting or welding. Safe flammable limits are less than 10% of the Lower Explosive Limit.	Flammable conditions may exist during the initial phase of a spill or at any time in areas where flammable dusts or vapors may concentrate. Holds of vessels and fueling areas are prime locations to find flammable atmospheres.

Subjecting response personnel to the hazards identified above can be avoided though the use of the proper personal protective equipment (PPE) and through proper monitoring and supervision by health and safety personnel. The following paragraphs briefly discuss proper procedures associated with some of the secondary hazards.

Hazardous Conditions

The hazards associated with the contaminants listed in the above table are best controlled through early detection, use of PPE, implementation of engineering controls, or by avoiding the hazard. Using common sense and understanding the Health and Safety Plan can accomplish early detection.

Confined Space Entry

Entry into confined spaces (spaces with restricted egress and potentially hazardous atmospheres) will be conducted under the direct supervision of the Safety Officer and through the use of a confined space entry permit. Confined spaces may be oxygen deficient or have flammable or toxic atmospheres. Confined space entry will be permitted only if the parameters listed in the above table are within acceptable limits.

R.4.3 Physical Hazards

Physical hazards associated with oil spill cleanup operations are varied and the associated hazards depend upon the site-specific conditions, cleanup operations, and the type of equipment being used. Severe environmental and weather conditions, complex transportation and logistical requirements, long work hours, and intensive labor needs contribute to the high susceptibility of oil spill workers to physical hazards. Table R-3 summarizes some of the physical hazards associated with spill cleanup operations.

TABLE R-3: GENERAL PHYSICAL HAZARDS

Hazard Description	Hazard Treatment Guidance	Hazard Abatement Technique
Back Injuries. The requirement to mobilize and use great quantities of equipment during the oil spill response creates high probability of back injuries. Slips, trips, and falls contribute to back injuries.	Remove worker from the work area to prevent further stress on the worker's back. If necessary, stabilize the victim in a prone position with a backboard to prevent additional injury. Seek medical attention.	Lift objects correctly. Obtain assistance from co-workers. Use mechanical devices to reduce lifting effort. Do back and stretching exercises prior to lifting objects. Bend the legs when lifting instead of bending from the waist.
Electric Shock. Electric equipment operated at greater than 12 volts, used inlet or conductive areas, or damaged equipment can produce a severe electrical shock.	Remove victim from contact with energized parts. Administer CPR and first aid as necessary. Obtain medical assistance.	Use intrinsically safe equipment or ground fault interrupter circuits to prevent shock.
Eye Injuries. An oil spill response may expose workers to numerous eye hazards, including those resulting from chemical exposure, equipment hazards, open flames, and impacts from particulates or other foreign bodies.	If chemicals have contacted a worker's eye, flush eye with water immediately. If particulate is in the eye, flush eye with water. If an object is imbedded in the eye, **do not** attempt to remove it. Cover the affected eye to prevent further irritation and seek medical assistance.	Use appropriate eye protection such as safety glasses, goggles, and face shields. Avoid exposure to vapors, mists, fumes, and dusts.
Heat Stress. Heat stress may occur when a worker is exposed to elevated temperature conditions. Examples of when this may occur include worker suited in protective clothing that limits cooling of the individual and worker subjected to high ambient temperatures.	Move victim to cool, shaded location. Cool victim quickly by wrapping in wet towels. Treat victim for shock. Seek medical assistance immediately.	Taking frequent breaks to cool down and consuming large amounts of liquids may avoid heat stress. PPE can be fitted with cooling equipment. Ventilation may be used to assist with cooling. New site workers must acclimate themselves to the site conditions.

TABLE R-3: GENERAL PHYSICAL HAZARDS		
Hazard Description	**Hazard Treatment Guidance**	**Hazard Abatement Technique**
Handling of Hand Tools and Spill Response Equipment. Tools used in cleanup operations such as shovels, picks, axes, etc. can inflict injury to adjacent workers if adequate distance is not maintained. Improper use of tools may also cause back injuries. Sorbents, containment booms, and waste materials can be heavy and awkward and handling and moving them may cause back injuries.	If injured, treat with first aid and seek medical assistance.	Team leaders must provide orientation for workers to familiarize them with the equipment that is being used. Use hand tools in a manner that will limit physical stress. Take frequent breaks to limit fatigue. Allow water to drain or remove ice from equipment prior to moving it. Use mechanical devices to handle heavy materials.
Hypothermia. Hypothermia is the lowering of the body temperature resulting from exposure to the elements. Hypothermia will induce death if not treated properly. Symptoms include shivering, loss of lucidity, loss of coordination, confusion, and cold skin temperature. Hypothermia will occur rapidly when immersed in cold water.	Prevent additional heat loss and warm victim by any means available. Remove any wet clothing; add heat by placing warm items next to the victim's body. Do not give alcoholic beverages to victim. Seek medical assistance.	Dressing appropriately for weather conditions and regulating body temperature during work activities can avoid hypothermia. Establishing a system to visually monitor workers for hypothermia warning signs will assist early detection. Avoid situation where clothes become wet such as from rain or ocean spray. Avoid excess heat loss through wind exposure.
In Situ Burning. In situ burning will present physical fire hazards as well as particulate hazards, visibility problems, and heated gas hazards resulting from the combustion of oil and oily debris.	Determine weather conditions and select escape route from plume of burn area. Contact other vessels for assistance and exit burn area as rapidly as possible.	Adhere to burn safety plans, obtain frequent weather forecasts, and stay upwind. Refer to tide and current predictions to assist in burn area avoidance.
Noise Injuries. Sound sources that generate noise greater than 85 decibels include aircraft, outboard engines, generators, compressors, heaters, and heavy equipment. Noises that are greater than 85 decibels may cause permanent damage to hearing.	Monitor noise levels. Remove affected worker from duties that have high noise exposure potential. Provide worker with additional hearing protection equipment. Seek medical assistance as necessary.	Workers should use ear protection equipment or avoid high noise areas.
Site Illumination. Response operations during conditions of poor visibility or darkness may create dangerous or unhealthy conditions for response workers.	Provide substantial amounts of lighting and generator equipment. Personal headlamps and vehicle lighting may be used as supplemental lighting.	Provide adequate lighting. Use headlamps, portable lighting, and equipment lights to illuminate work sites.
Slip, Trip, Fall. Oil spill responders work in places where poor footing and lighting creates slip, trip, and fall hazards.	Survey responders for possible unknown injuries. If injured, treat with first aid and seek medical attention.	Provide proper illumination in work areas. Keep work areas free of excess clutter. Move cautiously in work areas and use non-slip soles on footwear. Attempt to recognize and avoid or control hazards in the work area. Conduct hazard awareness briefings.
Specialty or Heavy Equipment. Mechanical equipment may have exposed moving parts, generate heat capable of causing burns, or generate high pressure liquids or gases which may injure workers. Movement of heavy equipment may cause injuries to personnel.	Perform first aid; seek medical attention immediately.	Read all operating guide manuals. Be aware of any moving parts that may cause injury. Avoid direct exposure to heat or pressure generated by equipment. Wear appropriate PPE to limit possible injury. Install backup alarms on heavy equipment. Ensure all guards are in place.
Vehicle, Aircraft, or Vessel Accidents. Response efforts will in many cases require response personnel to travel by various modes of transportation. The emergency nature of the response may expose worker to marginally safe traveling conditions.	Be aware of your position at all times and know the locations of safe refuges along your intended travel route. Notify the Incident Command Post if an accident occurs and what assistance is required.	During all vehicle, aircraft, or vessel travel, workers will adhere to all established travel safety procedures. This includes fastening seat belts, maintaining communications, and wearing or having easy access to safety equipment such as life vests and survival gear.

TABLE R-3: GENERAL PHYSICAL HAZARDS		
Hazard Description	**Hazard Treatment Guidance**	**Hazard Abatement Technique**
Weather. Sudden changes in weather conditions may jeopardize the safety of responders. Ocean storm, high winds, dramatic temperature changes, or fog can all pose a serious threat.	If caught in severe weather, consider options carefully. Evacuation of work site may be necessary.	Obtain daily weather forecasts and updates as available. Preplan work site evacuation plans for worst-case scenarios. Workers should bring extra clothing and emergency survival gear. Communications with the Incident Command Center must be maintained in order to coordinate evacuation or to receive support.
Wildlife. Spill workers may encounter a wide variety of wildlife during response activities. Some of the wildlife may be capable of inflicting injuries to or killing response personnel.	Treat injuries with standard first aid methods. Treat victim for shock. Seek medical assistance as necessary.	Wildlife protection procedures will be established for each specific spill event.
Worker Exhaustion. Spill response activities often involve strenuous tasks and long work hours. Symptoms of exhaustion include loss of concentration, increased frequency of slips, trips, and falls, and worker complaints of cramping and pain. Work exhaustion often manifests itself in other hazards such as accidents and back injuries.	Supervisors must closely observe workers for signs of exhaustion. Once an exhausted worker is identified, he shall be assigned to a less stressful task or removed from labor duties entirely until recovered. Seek medical assistance as necessary.	Close observation by supervisors and use of the buddy system will be used to detect and prevent worker exhaustion. Frequent breaks along with consumption of high-energy foods and liquids will also decrease the likelihood of exhaustion.

R.5 INITIAL RESPONSE ACTIONS

R.5.1 Emergency Safety and Response Plan

The Emergency Safety and Response Plan (Form SSP-A, Tab 5) should be used by the Initial IC to determine the hazards at the spill site. This assessment must be made before any response effort can be undertaken. When the response effort is to be initiated, an Initial Site Safety Plan (Form SSP-B, Tab 5), should be used to identify the spilled substance, the level of PPE needed, type of monitoring to be used, and other pertinent response information.

R.5.2 Site Security

The Initial IC must evaluate the seriousness of the situation and determine the level of health or safety risk to response personnel or the public in general and notify the FIC as soon as possible. If the situation requires security, MPD should be contacted. If the situation requires evacuations, establishing roadblocks, and limiting access to response areas, local law enforcement officials should be contacted.

R.5.3 Surface Terrain and Meteorology

The direction and velocity of prevailing winds and the proximity of the spill to possible sources of ignition, such as running equipment, must be immediately addressed. All potential ignition sources must be kept upwind of the spill or secured immediately. Some flammable vapors may be heavier than air and travel for long distances along the surface or settle in low-lying areas.

R.5.4 Confined Space Entry Procedures

Confined spaces have restricted entries and exits and have potentially hazardous atmospheres. Permits are required for entering the following types of confined spaces:

- Contains or has potential to contain a hazardous atmosphere
- Contains a material that has the potential for engulfing an entrant
- Has an internal configuration that can trap or asphyxiate an entrant because of inwardly converging walls or a floor which slopes downward and tapers to a smaller cross-section
- Contains any other recognized serious safety or health hazard

The Safety Officer directly supervises the confined space entry permit system. The Safety Officer supplies the confined space entry permits. Personnel who enter into confined spaces will be under the direct supervision of the Safety Officer.

R.6 MONITORING PLAN

A hazard evaluation procedure must be established and implemented by a trained individual in order to establish safe work practices, level of personal protective equipment, and other control procedures before any personnel are committed to spill response activities. At a minimum, the flammability of the vapors and the oxygen levels must be evaluated throughout the spill site. These levels should continue to be evaluated periodically throughout the work shift to detect changes in airborne hazards that may result from response activities or changing weather conditions. The Exposure Monitoring Plan (Form SSP-E, Tab 5) and the Air Monitoring Log (Form SSP-E1, Tab 5) should both be used to develop a monitoring plan.

R.7 SAFETY AND HEALTH PROGRAM

The Safety Officer should develop and implement a written safety and health program for all JBPHH response personnel. This program is designed to identify, evaluate, and control safety and health hazards for emergency response during oil and hazardous substance spill response operations. The written safety and health program should include the following:

- JBPHH response organization
- A generic safety and health plan
- JBPHH training program
- A description of the JBPHH medical surveillance program

The JBPHH written safety and health program should be available to any contractor or subcontractor (or their representative) who will be involved in spill response operations, JBPHH employees, JBPHH employee designated representatives, OSHA personnel, and to personnel of other federal, state, or local agencies with regulatory authority over the spill response.

R.7.1 Site Safety Plan

The Site Safety Plan must address the safety and health hazards of each phase of the response operation including the requirements and procedures for employee protection. The Site Safety Plan should include the following:

- A safety and health risk and/or hazard analysis for each response task and operation. The risk/hazard analysis will include the following:
    - Location and approximate size of the response area.
    - Description and duration of the response activities to be performed.
    - Site topography and accessibility by air and roads.
    - Safety and health hazards expected to be encountered.
    - Exposure routes of expected contaminants and other risks, such as potential skin absorption and irritation, potential eye irritation, and concentrations that are immediately dangerous to life and health (IDLH).
    - Present status and capabilities of emergency response teams that would provide assistance to response personnel in the event of an emergency.
    - Health hazards involved or expected from contaminants present and their chemical and physical properties.
- Personal protective equipment to be used by employees during each of the response operations. The requirement for personal protective equipment will be based on the results of the preliminary site evaluation and the guidance provided in the JBPHH written safety and health program.
- Employee training requirements to assure compliance with the OSHA requirements. The training program section of the JBPHH written safety and health program should be used as guidance in preparation of this section.
- Medical surveillance requirements to ensure compliance with the OSHA requirements. The medical surveillance program section of the JBPHH written safety and health program should be used as guidance in preparation of this section.
- A schedule for and the types of air monitoring to be conducted for IDLH conditions, combustible gases, and other conditions that may cause death or serious harm.
- Methods of maintenance and calibration of monitoring and sampling equipment to be used.
- A schedule for and the types of environmental sampling techniques and instruments to be used.
- A site control program for protecting employees involved in response operations. The site control program will include a site map, an indication of the work zones, a description of the "buddy" system, site communications, emergency alert signals, standard operating procedures, or safe work practices, and identification of the nearest medical assistance.
- Standard operating procedures must minimize personnel and equipment contact with spill substances.
- Decontamination procedures must be developed that cover all phases of response operations. These procedures must be communicated to all response personnel and implemented before any response employees or equipment enters areas where they can be potentially exposed.
- An emergency response plan that is a separate section of the Site Safety Plan must be developed that covers:
    - Pre-emergency planning, personnel roles, lines of authority, and communication.
    - Emergency recognition and prevention, safe distances, and places of refuge.
    - Site security and control evacuation routes and procedures.
    - Decontamination procedures (procedures that are not covered by the Site Safety Plan).
    - Emergency medical treatment and first aid.
    - Emergency alerting and response procedures.
    - Personal protective equipment and emergency equipment.
    - Response area topography, layout, and prevailing weather conditions.
    - Procedures for reporting incident to local, state, and federal governmental agencies.

- A section covering the critique of a response and follow-up.
- Confined space entry procedures.
- A procedure for handling, labeling, and transporting drums and containers of recovered oil and oil-contaminated debris.

R.7.2 Safety Briefing

The Site Safety Plan must provide for daily safety briefings that will be conducted prior to the start of work each day. The briefings will cover safety and health items that have changed or new information that has been obtained. These briefings will be used as a means to ensure that all response personnel have received updated information concerning the Site Safety Plan.

R.7.3 Audits

The Operations Section division/branch supervisors must conduct safety and health audits. The audits will be used to determine the effectiveness of the Site Safety Plan and to determine if additional procedures are needed to protect response personnel. The results of each audit will be forwarded to the Industrial Hygienist Unit Leader, the Documentation Unit Leader, the Operations Section Chief, and the Incident Commander.

R.7.4 COMNAVREG HI Site Safety and Health Plan

The COMNAVREG HI Site Safety and Health Plan is designed for Navy Region Hawaii first responders and post-emergency personnel involved with oil and hazardous substance (OHS) releases. The Site-Specific Safety and Health Plan can be found in Tab 5 of this plan. See Section R.13 for more details.

R.7.5 Site/Sector Organization Record Sheet

The Site/Sector Recorder maintains an up-to-date, comprehensive, organization record. When relieved, the Recorder provides the incident's documentation officer with the site organization record/log and assists the relief in starting a new organization record. The Recorder also accounts for all personnel logged into the area. All persons wishing to enter the work area (including the exclusion and contamination reduction zones) must subscribe to a site safety plan, be adequately trained in hazardous waste site safety, and be adequately trained for their work assignment.

Table R-4 provides a form for Site/Sector Recorders, including a field team (e.g. oil recovery team, bioremediation team, water wash team) identification section.

TABLE R-4: SITE/SECTOR ORGANIZATION RECORD SHEET					
Site/Sector Name					
Recorder's Name					
Start Date/Time		Stop Date/Time			
Title	Printed Name	Time In	Time Out	Time In	Time Out
Supervisor:					
Site/Sector Safety:					
Security:					
EMT/First Aid:					
Other Reps:					
Field Team Name:					
Field Team Name:					

Use Continuation Sheet if additional room is needed.

R.8 PPE LEVELS OF PROTECTION

R.8.1 Level D Ensemble

Level D PPE refers to work conducted without respiratory protection. This level should be used only when the atmosphere contains no known or suspected airborne chemical or radiological contaminants and oxygen concentrations are between 19.5% and 23%. There is no respiratory protection requirement for Level D due to the nature. Level D protective clothing provides a low level of skin protection. It is used when there is no potential for contact with hazardous levels of chemicals or radiological contamination.

Table R-5 identifies the clothing requirements for Level D.

TABLE R-5: LEVEL D PPE ENSEMBLE
Cloth coveralls (including modest clothing under coveralls such as shorts and a T-shirt) • OPTION: long sleeved coveralls (in areas where poisonous plants are located) • OPTION: short sleeved coveralls (during heat stress alert) • OPTION: street clothing may be worn by supervisory personnel, technicians, specialists who are not exposed to liquid oil, high pressure wash sprays, or contamination.
Chemical-resistant steel toe and shank safety boots with textured bottoms • OPTION: rubber boots (in designated snake areas) • OPTION: deck shoes with textured soles (for boat operations)
Chemical-resistant gloves (as needed) • OPTION: leather gloves (if not in contact with oil)
Chemical-resistant rain pants (as needed) • OPTION: disposable if oiling is light
Chemical-resistant rain jacket and hood (as needed) • OPTION: disposable if oiling is light
Chemical-resistant apron (as needed) • OPTION: disposable if oiling is light
Hard hat (all personnel in designated areas)
Safety glasses (as required by Site Safety Officer) • OPTION: with tinted lenses (as required for sunlight)
Optional items (as necessary) • Personal Flotation Device **(PFD)** (all personnel on or near water) • Cold-weather gear/resistant clothing (if necessary) • Hearing protection (in noisy areas) • Insect repellent (in designated mosquito or tick areas) • Sunscreen (as needed for sunlight) • Quart bottle to carry fluids (during heat stress alerts) • Whistle (in designated areas)
NOTES: 1) "AS NEEDED" means to use when and in such a way so as to prevent significant skin contact with oil.

R.8.2 Level C Ensemble

Level C PPE is worn when the criteria for using air-purifying respirators are met, and a lesser level of skin protection is needed. Level C respiratory protection includes an air-purifying respirator, full-face or half-mask, cartridge- or canister-equipped. Level C protective clothing provides a moderate level of skin protection. It is used when the potential exists for contact with chemicals and/or radiologically contaminated materials, but when protection from liquids (chemical and/or radioactive) is not required. It is used when potential vapors, fumes, gases, or dusts are not suspected of containing levels of chemicals harmful to skin or capable of being absorbed through the skin. This class of protective clothing is appropriate for most routine radiological work activities.

Table R-6 identifies the clothing requirements for Level C.

TABLE R-6: LEVEL C PPE ENSEMBLE
Cloth coveralls (including modest clothing under coveralls such as shorts and a T-shirt)
Chemical-resistant rain pants • OPTION: one-piece chemical-resistant suit • OPTION: disposable if oiling or contamination is light
Chemical-resistant rain jacket with hood • OPTION: one-piece chemical-resistant suit • OPTION: disposable if oiling or contamination is light
Gloves • Chemical-resistant outer gloves rated for contaminant ○ OPTION: Abrasion-resistant chemical-resistant or leather gloves can be worn over the chemical-resistant gloves for work that could puncture or tear chemical-resistant outer gloves • Inner gloves of light weight PVC or latex rubber
Chemical-resistant steel toe and shank safety boots with textured bottoms • OPTION: outer disposable booties
Respiratory protection: • Full-face respirator or half-mask respirator • Cartridges: ○ Organic vapor cartridge ○ Paint spray combination cartridge ○ Dust, fume, mists cartridge ○ Other cartridges (as applicable)
Additional eye or face protection • Goggles (not required with full-face respirator) • Safety glasses (not required with full-face respirator) ○ OPTION: with tinted lenses (as required for sunlight) • Face-shield if splash hazard exists (not required with full-face respirator)
Hard hat (all personnel in designated areas)
Optional items (as necessary) • PFD (all personnel on or near water) • Cold-weather gear/protective clothing (if necessary) • Cooling unit/system • Hearing protection (in noisy areas) • Insect repellent (in designated mosquito or tick areas) • Sunscreen (as needed for sunlight) • Whistle (in designated areas)

R.8.3 Level B Ensemble

Level B PPE is worn when the highest level of respiratory protection is needed, but a lesser level of skin protection is needed. Level B respiratory protection is positive pressure, full face-piece self-contained breathing apparatus (SCBA) or a positive pressure supplied air respirator (with escape bottle for immediately dangerous to life or health (IDLH) or potential IDLH atmosphere). Level B protective clothing provides a high level of skin protection. It is used when the potential exists for contact with chemicals and/or radiologically contaminated liquids that could saturate/penetrate cloth coveralls (e.g., immersion or inundation of contaminants). Also, potential vapors, fumes, gases, or dusts containing levels of chemicals harmful to skin or capable of being absorbed through the skin are not anticipated. This class of protection is acceptable for radiological work activities categorized as “High” involving pressurized or large volume liquids, or closed system breach.

Table R-7 identifies the clothing requirements for Level B.

TABLE R-7: LEVEL B PPE ENSEMBLE
Cloth coveralls (including modest clothing under coveralls such as shorts and a T-shirt)
Hooded one-piece, chemical-resistant outer suit • OPTION: chemical-resistant rain jacket with hood and chemical-resistant rain pants • OPTION: disposable outer one piece suit worn over chemical-resistant outer suit
Gloves • Chemical-resistant outer gloves rated for contaminant taped to outer suit ○ OPTION: Abrasion-resistant chemical-resistant or leather gloves can be worn over the chemical-resistant gloves for work that could puncture or tear chemical-resistant outer gloves • Inner chemical-resistant light-weight gloves
Chemical-resistant steel toe and shank safety boots with textured bottoms taped to outer suit • OPTION: outer disposable booties taped to suit
Respiratory protection: • Positive pressure, full-face piece SCBA • Positive pressure, full-face supplied-air respirator with escape positive pressure SCBA
Corrective eye wear • If necessary, must be compatible with respirator face piece ○ OPTION: with tinted lenses (as required for sunlight) • Contacts are not recommended • Face-shield if splash hazard exists (not required with full-face respirator)
Hard hat (all personnel in designated areas)
Optional items (as necessary) • PFD (all personnel on or near water) • Cold-weather gear/protective clothing (if necessary) • Cooling unit/system • Hearing protection (in noisy areas) • Insect repellent (in designated mosquito or tick areas) • Sunscreen (as needed for sunlight) • Whistle (in designated areas)

R.8.4 Level A Ensemble

Level A PPE is worn when the highest level of respiratory, skin, and eye protection is needed. Level A respiratory protection is positive pressure, full face-piece SCBA or positive pressure supplied air respirator (with escape bottle for IDLH or potential IDLH atmosphere). Protective clothing provides maximum skin protection. It is used when the potential exists for splash or immersion by chemicals and/or radiologically contaminated liquids, or for exposure to vapors, fumes, gases, or particulates that are harmful to skin or capable of being absorbed through the skin. This class of protection is acceptable for radiological work activities categorized as “High” involving pressurized, large volume liquids, or closed system breach.

Table R-8 identifies the clothing requirements for Level A.

TABLE R-8: LEVEL A PPE ENSEMBLE
Cloth coveralls (including modest clothing under coveralls such as shorts and a T-shirt)
Totally encapsulating, non-permeable, chemical-resistant suit
Gloves • Disposable abrasion-resistant chemical-resistant or leather gloves can be worn over the chemical-resistant gloves integral to the suit for work that could puncture or tear chemical-resistant outer gloves • Inner chemical-resistant gloves of light weight PVC or latex rubber
Chemical-resistant steel toe and shank safety boots with textured bottoms (depending on suit construction, worn over or under suit boot) • OPTION: outer disposable chemical-resistant booties taped to suit
Respiratory protection: • Positive pressure, full-face piece SCBA • Positive pressure, full-face supplied-air respirator with escape positive pressure SCBA
Corrective eye wear • If necessary, must be compatible with respirator face piece ○ OPTION: with tinted lenses (as required for sunlight) • Contacts are not recommended
Hard hat (under suit)
Optional items (as necessary) • Cold-weather gear/protective clothing (if necessary) • Cooling unit/system • 2-way radio communicator • Hearing protection (in noisy areas) • Insect repellent (in designated mosquito or tick areas) • Sunscreen (as needed for sunlight) • Whistle (in designated areas)

R.9 GENERAL SIGNS/SYMPTOMS THAT INDICATE POTENTIAL TOXIC EXPOSURES

- Sudden weight loss or change in appetite,
- Unusual fatigue or new sleeping difficulties,
- Unusual irritability,
- Skin rashes/allergies/sores,
- Hearing loss,
- Vision loss/problems,
- Changes in sense of smell,
- Shortness of breath/asthma/cough or sputum production,
- Chest pains,
- Nausea/vomiting/diarrhea/constipation,
- Weakness/tremors,
- Headaches,
- Personality changes.

R.10 MANIFESTATIONS OF TOXIC EFFECTS TO VARIOUS TARGET ORGANS

Table R-9 provides some information on the potential toxic effects exposure to certain hazardous substances can have on unprotected personnel.

TABLE R-9: POTENTIAL TOXIC EFFECTS TO BODY ORGANS FROM OVER-EXPOSURE		
Organ	**Toxic Effect**	**Caused By**
Skin	Dermatitis, chloracne, skin cancer	Hydrocarbon solvents, chlorinated hydrocarbons (PCB), soap, dioxane, alcohols
Respiratory System	Acute pulmonary edema, pneumonitis, asthma, lung cancer	Dusts, fumes, and vapors
Cardiovascular System	Arrhythmia, angina	Carbon monoxide, hydrogen sulfide, organophosphates, glues/glue solvents, temperature extremes
Gastrointestinal System	Abdominal pain, nausea, vomiting, diarrhea, bloody stools, hepatic (liver) necrosis, hepatic cancer, hepatic fibrosis	Hydrocarbon solvents, halogenated hydrocarbons, organic solvents, petroleum products, organophosphates, and corrosives
Genitourinary System	Chronic renal disease, bladder cancer	Halogenated hydrocarbons
Nervous System	Headache, convulsions, coma, peripheral neuropathy	Carbon monoxide, organophosphates, organic solvents
Auditory System	Temporary and permanent hearing loss or shift	Loud noises
Opthalmic System	Eye irritation, cataracts	Petroleum products, UV radiation
Hematological System	Anemia, bleeding disorder, leukemia	Benzene

In all cases, consult the MSDS and other accepted reference texts for specific information on each hazardous material. Use this information as a general guideline, and supplement it with more detailed data.

R.11 HEAT STRESS INFORMATION FROM NIOSH 86-112 HEALTH

R.11.1 Safety Problems

Safety problems are common to hot environments, as heat tends to promote accidents due to slippery objects from sweaty palms, dizziness, or the visual distortions from fogged safety glasses.

The frequency of accidents, in general, appears to be higher in hot environments than in more moderate environmental conditions. Working in a hot environment lowers the mental alertness and physical performance of an individual. Increased body temperature and physical discomfort promote irritability, and other emotional states that can cause workers to overlook safety procedures or to divert attention from hazardous tasks.

R.11.2 Health Problems

Excessive exposure to a hot work environment can bring about a variety of heat-induced disorders.

Heat Stroke

Heat stroke is the most serious health problem associated with working in a hot environment. It occurs when the body's temperature regulatory system fails and sweating becomes inadequate. A heat stroke victim's skin is hot, usually dry, red or spotted. Body temperature is generally 105°F or higher, and the victim can be mentally confused, delirious, convulsive, or unconscious. Any person showing symptoms of heat stroke requires immediate hospitalization. First aid, including removing the victim to a cool area, thoroughly soaking the clothing with water, and

vigorously fanning the body, should be administered immediately. Further treatment at a medical facility should include the continuation of the cooling process and the monitoring of complications that often accompany heat stroke. Early recognition and treatment of heat stroke are the only means of preventing permanent brain damage or death.

Heat Exhaustion

Heat exhaustion includes several clinical disorders having symptoms that may resemble the early symptoms of heat stroke. Heat exhaustion is caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt. A worker suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated.
In most cases, treatment involves resting the victim in a cool place and administering plenty of liquids. Victims with mild cases of heat exhaustion generally recover quickly. Those with severe cases may require extended care. There are no known permanent effects.

Caution - Persons With Heart Problems Or Those On A "Low Sodium" Diet Who Work In Hot Environments Should Consult A Physician About Potential Health Problems.

Heat Cramps

Heat cramps are painful spasms of the muscles that can occur during times of extreme sweating without adequate replacement of the body's salt. The drinking of large quantities of water tends to dilute the body's fluids, while the body continues to lose salt. Shortly thereafter, low salt level in the muscles can cause painful cramps. The affected muscles may be part of the arms, legs, or abdomen, but tired muscles (those used in performing the work) are generally the ones most susceptible. Cramps may occur during or after work hours and may be relieved by ingesting salted liquids.

Caution - Persons With Heart Problems Or Those On A "Low Sodium" Diet Who Work In Hot Environments Should Consult A Physician About Potential Health Problems.

Fainting

A worker who is not accustomed to hot environments and who stands immobile in the heat can faint. Due to the body's attempts to control internal temperature enlarged blood vessels in the skin and lower body may pool blood rather than return it to the heart to be pumped to the brain. Upon lying down, the worker should soon recover. Keeping active and moving around, should prevent blood from pooling, and the patient can avoid further fainting.

Heat Rash

Heat rash is likely to occur in hot, humid environments where heat is not readily evaporated from the surface of the skin, leaving the skin wet most of the time. Sweat ducts become clogged, and a skin rash can develop. When the rash is extensive or complicated by infection, heat rash can be very uncomfortable and may reduce a worker's performance. The worker can prevent this condition by resting in a cool place part of each day and by regularly bathing and drying the skin.

Transient Heat Fatigue

Transient heat fatigue refers to the temporary state of discomfort and mental or psychological strain arising from prolonged heat exposure. Workers unaccustomed to the heat are particularly

susceptible and can suffer to varying degrees, including a decline in task performance, coordination, alertness, and vigilance. The severity of transient heat fatigue can be lessened by a period of gradual adjustment to the hot environment (heat acclimatization).

R.11.3 Preparing for Work in the Heat

One of the best ways to reduce heat stress in workers is to minimize heat in the work place. However, there are some work environments where heat is difficult to control, such as outdoors where workers exposed to various weather conditions.

Humans, to a large extent, are capable of adjusting to the heat. Adjusting to heat under normal circumstances usually takes five to seven days, during which time the body will undergo a series of changes that will make continued exposure to heat more endurable.

Gradual exposure to heat gives the body time to become accustomed to higher environmental temperatures. Heat disorders in general are more likely to occur among workers who have not been given time to adjust to working in the heat or among workers who have been away from hot environments or who have gotten accustomed to lower temperatures. Hot weather conditions of the summer are likely to affect the worker who is not acclimatized to heat. Likewise, heat in the work environment can affect workers who return to work after a leisurely vacation or extended illness. Under such circumstances, the worker should be allowed to acclimate to the hot environment.

Heat stress depends, in part, on the amount of heat the worker's body produces while a job is being performed. The amount of heat produced during hard, steady work is much higher than that produced during intermittent or light work. One way of reducing the potential for heat stress is to make the job less strenuous or lessen its duration by providing adequate rest time.

R.11.4 Number and Duration of Exposures

Rather than be exposed to heat for extended periods of time during the course of a job, workers should, wherever possible, be permitted to distribute the workload evenly over the day and incorporate work-rest cycles. Work-rest cycles give the body an opportunity to get rid of excess heat, slow down the production of internal body heat, and provide greater blood flow to the skin. Workers employed outdoors are especially subject to weather changes. A hot spell or a rise in humidity can create overly stressful conditions.

Rest Areas

Providing cool rest areas in hot work environments considerably reduces the stress of working in those environments. Rest areas should be as close to the work area as possible and provide shade. Individual work periods should not be lengthened in favor of prolonged rest periods. Shorter but frequent work-rest cycles are the greatest benefit to the worker.

Drinking Water

In the course of a day's work in the heat, a worker may produce as much as two to three gallons of sweat. Because so many heat disorders involve excessive dehydration of the body, it is essential that water intake during the workday be about equal to the amount of sweat produced. Most workers exposed to hot conditions drink fewer fluids than needed due to an insufficient thirst drive. A worker, therefore, should not depend on thirst to signal when and how much to drink. Instead, the worker should drink five to seven ounces of fluids every 15 to 20 minutes to

replenish the necessary fluids in the body. There is no optimum temperature of drinking water, but most people tend not to drink warm or very cold fluids as readily as they will cool ones. Whatever the temperature of the water, it must be palatable and readily available. Individual drinking cups should be provided. Never use a common drinking cup.

Heat acclimatized workers lose much less salt in their sweat than do workers who are not adjusted to the heat. The average American diet contains sufficient salt for acclimatized workers even when sweat production is high. If, for some reason, salt replacement is required, the best way to compensate for the loss is to add a little extra salt to food. Salt tablets SHOULD NOT be used.

Caution - Persons With Heart Problems Or Those On A "Low Sodium" Diet Who Work In Hot Environments Should Consult A Physician About Potential Health Problems.

Protective Clothing

Clothing inhibits the transfer of heat between the body and the surrounding environment. Therefore, in hot jobs where the air temperature is lower than skin temperature, wearing excessive clothing reduces the body's ability to lose heat to the air. When air temperature is higher than skin temperature, however clothing can help to prevent the transfer of heat from the air to the body. The advantage of wearing additional clothes, however, may be nullified if the clothes interfere with the evaporation of sweat (such as rain slickers or chemical protective clothing).

R.12 BULK LIQUID CARGOES THAT CONTAIN BENZENE

This is a partial list of products (and their assigned CHRIS codes in parentheses) that contain benzene. The exact volumes will vary among manufacturers and batches. Benzene vapor concentrations that may be produced by these products will also vary from mixture to mixture, depending on the chemical properties and volume percentages of the different components.

- Benzene (BNZ)
- Benzene hydrocarbon mixtures containing 10% or more benzene (BHB)
- Benzene hydrocarbon mixtures with acetylene (BHA)
- Benzene, toluene, xylene mixtures (BTX)
- C-5 mixture (15% or more benzene, isoprene, 1,3-pentadiene (CFX)
- Coal tar (COR)
- Coal tar pitch (CTP)
- Coal tar naphtha (NCT)
- Coal tar: see "oil" coat tar (OCT)
- Cyclopentadiene, styrene, benzene mixtures (CSB)
- Gas oil (GOC)
- Gasoline: aromatic (GAR)
- Gasoline: automotive (GAT)
- Gasoline: aviator (GAV)
- Gasoline: pyrolysis (greater than 5% benzene) (GPY)
- Gasoline: straight run (GSR)
- Gasoline: blending stock reformats (GRF)
- Jet fuel: JP-4 (JPF)...similar to Commercial Jet B
- Jet fuel: JP-5 (JPV)...similar to Commercial Jet A

- Naphtha: see "coal tar naphtha" (NCT)
- Naphtha: solvent (NSV)
- Naphtha: stoddard solvent (NSS)
- Naphtha: VM&R (75% naphtha) (NVM)
- Naphtha: see "petroleum naphtha (TPN)"
- Oil: crude oil (OIL)
- Oil: coal tar (OCT)
- Petroleum naphtha (PTN)
- White spirit (WSP)
- White spirit (low 15-20% aromatic) (WSL)

Some Trade Name Products That May Contain Benzene:

- "Butadiene, Benzene Mix"
- "Coke Oven Light Oil"
- "Coal Tar Light Oil"
- "Depentanized Aromatic Stream"
- "Dripolene"
- "Ethylene Dichloridebcrude"
- "Hytrol D"
- "Light Aromatics Containing Benzene"
- "Naphtha Cracking Fraction"
- "Petroleum Hydrocarbon Polymers"
- "Phenol (And Cresol Mixtures With 5% Benzene Or More)"
- "Raffinate"

R.13 COMNAVREG HAWAII SITE SPECIFIC SAFETY AND HEALTH PLAN

R.13.1 Purpose

The COMNAVREG HI Site-Specific Safety and Health Plan is designed for Navy Region Hawaii first responders and post-emergency personnel involved with oil and hazardous substance (OHS) releases. It is compatible with the Incident Command System (ICS) and is intended to meet the requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard per Title 29, Code of Federal Regulations, Part 1910.120. The Site-Specific Safety and Health Plan can be found in Tab 5 of this plan.

R.13.2 Overview and Form Preparation

The Safety Officer is responsible for ensuring that the response and recovery operations are done safely. This is done through site characterization, identifying work processes and potential physical and health hazards associated with them, developing appropriate and feasible hazard abatement measures, conducting oversight inspections of the work to ensure that the abatement measures are effective and are being followed, and monitoring the work site for changing conditions. These tasks are documented in the site specific safety and health plan, which is required per HAZWOPER 29 CFR 1910.120(b)(4).

During the initial stages of an emergency response, Form SSP-A, Emergency Site Safety and Response Plan, is prepared by the Site Safety Officer for the responding unit. The Safety Officer initially addresses the hazards involved in the response (initial site characterization). Appropriate hazard abatement measures, including use of engineering and administrative controls, are then identified for each hazard. When such controls cannot be implemented, personal protective equipment (PPE) is identified. Form SSP-G, Decontamination Plan, need not be completed for the emergency response phase if Form SSP-A is used. As additional resources become available, the Region Incident Management Team (RIMT) Safety Officer will assume the responsibility for monitoring the work and updating Form SSP-A.

When the operation proceeds into the post-emergency phase (e.g., the oil on the water has been removed and shoreline contamination cleanup operations has begun), the Safety Officer prepares Form SSP-B, Post-Emergency Site Safety Plan. The other forms SSP-C through SSP-G and the appropriate SSP Attachments are also prepared by the Safety Officer. These documents make up the incident site specific safety and health plan and are a part of the Incident Action Plan (IAP). As conditions change and as work processes and job functions are added or completed, the Safety Officer amends the site safety plan, which is then made a part of the IAP and distributed to all work sites. See Tab 5 of this plan for all Site Safety Forms referenced in this section.

HAZWOPER, per 29 CFR 1910.120(b)(iv) requires periodic inspections to be conducted of the work processes to ensure that the site safety and health plan is effective and is being executed properly. The Safety Officer is responsible for carrying out these inspections, which should be unannounced. The frequency of these inspections is determined by the Safety Officer. Any deficiencies are recorded on Forms SSP-K and SSP-L. Note that Form SSP-L only focuses on the OSHA requirements regarding drums discovered as part of the response and recovery phases. It is not intended to be used for an inspection for compliance with EPA (hazardous waste, spill prevention, water pollution, etc.) or US Department of Transportation hazardous materials regulations. Other RIMT work units that are responsible for compliance with these requirements, such as the Environmental Unit, should conduct those inspections using their own forms.

In some situations, it may be necessary to prepare separate site safety plans for different operations. For example, an incident may require a large and complex decontamination facility to clean boats, heavy equipment or thousands of feet of boom. Because the specific hazards and work processes involved are different from shoreline clean-up, the Safety Officer may decide to prepare Forms SSP-B through SSP-G specific to that operation and location. That site safety plan would be attached to the ICS Form 204, Assignment List, for the decontamination unit.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX S
RESERVED

PAGE INTENTIONALLY LEFT BLANK

APPENDIX T
BASIC ORDERING AGREEMENT GUIDANCE DOCUMENT

T.1 GENERAL

In addition to spill response assets available from local Navy sources, the COMNAVREG HI NOSC Rep has access to Oil Spill Response Organizations (OSROs) through the Basic Ordering Agreement (BOA), pre-negotiated with the USCG.

T.2 PROCEDURES

Table T-1 below describes the procedures to activate an OSRO using a USCG BOA.

TABLE T-1: PROCEDURES FOR UTILIZING A USCG BOA

Environmental Unit Shall:	Action Completed:
1. Ensure initial emergency start-up fund of $25,000 is available for initial activiation of BOA (Annually)	
2. Identify the emergency services required. Information required: • Substance spilled • Source of spill • Estimated quantity • Location • Threat of spreading • Potentially affected facilities/populations/resources • Estimated equipment requirements • Estimated manpower requirements • Estimated dollar amount • Communication equipment requirements	
3. Coordinate the above information and the desire to utilize the USCG BOA with the NOSC Rep	
4. The NOSC Rep will ensure that all other options to clean up or mitigate the spill have been considered including: • Use of neighboring Navy activity response forces • Use of local indefinite quantity contract • Use of sole-source contract up to local contracting officer's sole source authority • Agreements with local response organizations	
5. Develop written determination to utilize the USCG BOA and declare the site an emergency	
6. NOSC Rep will issue an authorization to proceed to the BOA contractor not to exceed the amount of funds pre-reserved for immediate use	
7. Ensure that an established BOA contractor list of personnel is forwarded to the command post for passes as needed to access site	
8. The BOA contractor will start mobilization and work not to exceed the amount of funds permitted in the authorization to proceed	
9. If estimated cost of emergency services exceeds start-up fund amount in Step 1, NOSC Rep obtains promise to pay authorization or funding document from Responsible Party for the estimated additional cost. NOSC Rep will forward the promise to pay or funding document to the NAVFAC Pacific EV4 Contracting Officer's Representative (COR). NAVFAC Financial Management (FM) is notified at this stage. (Note: the process for award of services exceeding initial start-up funding is estimated to take 5-6 days)	
10. NAVFAC Pacific EV4 contracting officer's representative (COR) will develop the following for procurement of emergency services under the BOA: • Scope of Work for the required emergency services, • Estimated period of time it will take to complete • Estimated cost for the BOA contractor. The BOA contractor may be solicited for recommendations about equipment, materials, and manpower	

T.3 USCG BOA CONTRACTORS

Table T-2 below provides a list of USCG BOA contractors.

TABLE T-2: USCG BOA CONTRACTORS

USCG BOA Contractor [1]	Day Phone	BOA # / MOD	Response Time	Capability
Pacific Environmental Company (PENCO)	545-5195 (Day) 524-2307 (Fax)	HSCG84-15-A-H00001	< 12 hr	Can provide on-water containment and recovery and on-land cleanup capabilities.
National Response Corporation (NRC) [2]	631-224-9141	-	< 12 hr	Can provide on-water containment and recovery, on-land cleanup capabilities, and dispersant coverage (including dispersant aircraft).

Notes

[1]The NOSC Rep can activate a BOA contractor using the procedures outlined in this appendix.

[2]The NOSC Rep can also access the services of the National Response Corporation by going through U.S. Navy SUPSALV.

Addresses:

- Pacific Environmental Company (PENCO), 65 N. Nimitz Hwy, Pier 14, Honolulu, HI 96817
- National Response Corporation (NRC) 3500 Sunrise Highway, Suite 200, Building 200, Great River, NY 11739

T.4 CONTRACTS, MEMORANDUM OF UNDERSTANDINGS, INTERAGENCY AGREEMENTS, AND OTHER AGREEMENTS FOR SUPPORT

The following is a description of the contracts, Memorandum of Understandings, Interagency Agreements, and other agreements that COMNAVREG HI, or the Navy maintains with various entities.

Description

- Memorandum of Understanding between Navy Region Hawaii and the City and County of Honolulu for mutual aid in firefighting, emergency services, and hazardous material incident response management
- Memorandum of Understanding - Navy Use of United States Coast Guard Basic Ordering Agreements for Response to Oil and Hazardous Substance Spill Incidents
- Pacific Environmental Company (PENCO) Award/Contract

Note: See the NOSC Rep for a complete listings of contracts, MOUs, MOA's, interagency agreements, and other support agreements.

APPENDIX U
COMNAVREG HAWAII SPILL MANAGEMENT TEAM

U.1 SPILL MANAGEMENT TEAM ROSTER

Table U-1 can be used to fill out the COMNAVREG HI Spill Management Team (SMT) Roster.

TABLE U-1: COMNAVREG HAWAII SPILL MANAGEMENT TEAM ROSTER

Position	Last Name	First Name

Note: See the NOSC Rep for the latest Spill Management Team roster.

PAGE INTENTIONALLY LEFT BLANK

U.2 INCIDENT COMMAND ORGANIZATION CHART

Figure U-1 is an example of how the COMNAVREG HI SMT will organize into an Incident Command.

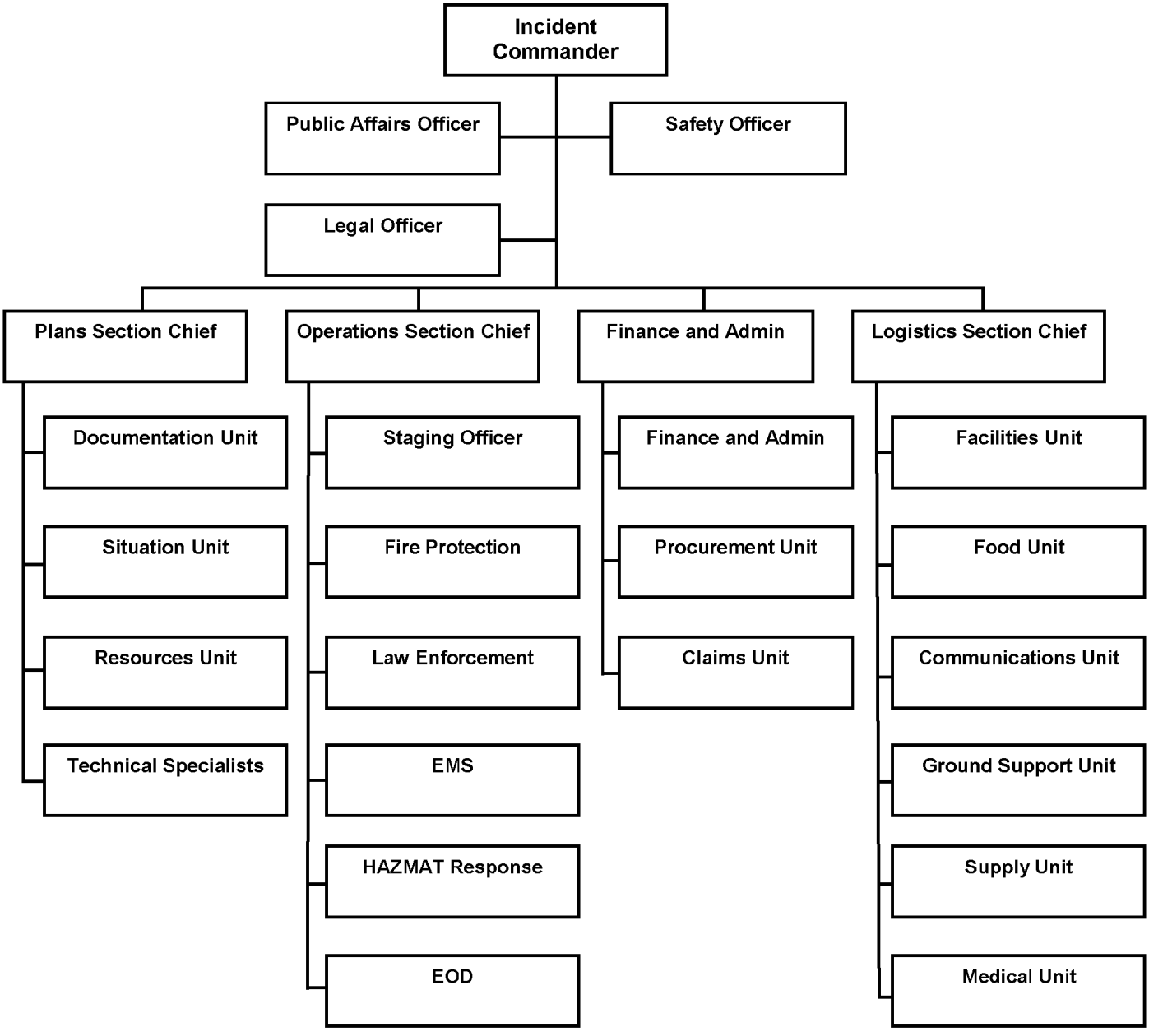


FIGURE U-1: INCIDENT COMMAND ORGANIZATION CHART

PAGE INTENTIONALLY LEFT BLANK

APPENDIX V
ACRONYMS & GLOSSARY

V.1 ACRONYMS

The following is a list of acronyms associated with this plan.

	Acronym	Definition
A	AC	Area Committee
	ACOS	Assistant Chief of Staff
	ACP	Area Contingency Plan
	ANSI	American National Standards Institute
	AOBD	Air Operations Branch Director
	AOR	Area of Responsibility
	API	American Petroleum Institute
	APWO	Assistant Public Works Officer
	AST	Aboveground Storage Tank
	ASGS	Air Support Group Supervisor
	ATGS	Air Tactical Group Supervisor
	AREP	Agency Representative
B	BCMG	Base Manager
	BMP	Best Management Practice
	BOA	Basic Ordering Agreement
C	CAA	Clean Air Act
	CDO	Command Duty Officer
	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
	CERCLIS	CERCLA Information System
	CFR	Code of Federal Regulations
	CHRIS	Chemical Hazards Response Information System
	CISM	Critical Incident Stress Management
	CLMS	Claims Specialist
	CNO	Chief of Naval Operations
	CO	Commanding Officer
	COE	Corps of Engineers (U.S. Army)
	COFR	Certificate of Financial Responsibility
	COML	Communications Unit Leader
	COMNAVBASE	Commander Naval Base
	COMNAVREG	Commander Navy Region
	COMP	Compensation/Claims Unit Leader
	CONUS	Continental United States
	COST	Cost Unit Leader
	COTP	Captain of the Port
	CWA	Clean Water Act

	Acronym	Definition
	CZM	Coastal Zone Management
D	DESC	Defense Energy Support Center
	DFM	Diesel Fuel, Marine
	DHHS	Department of Health and Human Services
	DIVS	Division/Group Supervisor
	DLA	Defense Logistics Agency
	DMOB	Demobilization Unit Leader
	DOC	Department of Commerce
	DOCL	Documentation Unit Leader
	DOD	Department of Defense
	DOE	Department of Energy
	DOI	Department of the Interior
	DOJ	Department of Justice
	DOL	Department of Labor
	DON	Department of the Navy
	DOS	Department of State
	DOT	Department of Transportation
	DPRO	Display Processor
	DRAT	District Response Advisory Team
	DRG	District Response Group (USCG)
	DRMO	Defense Reutilization and Marketing Office
E	EEZ	Exclusive Economic Zone
	EFA	Engineering Field Activity (of NAVFAC)
	EFD	Engineering Field Division (of NAVFAC)
	EHM	Extremely Hazardous Material
	ENLV	Environmental Unit Leader
	EO	Executive Order
	EOC	Emergency Operations Center
	EPA	Environmental Protection Agency
	EPCRA	Emergency Planning and Community Right-to-Know Act
	ERAP	Emergency Response Action Plan
	EQPM	Equipment Manager
	EQTR	Equipment Time Recorder
	ERT	Environmental Response Team
	ESI	Environmental Sensitivity Index
	ESA	Endangered Species Act
F	FACL	Facility Unit Leader
	FDUL	Food Unit Leader
	FEMA	Federal Emergency Management Agency
	FFA	Federal Facility Agreement
	FFD	Federal Fire Department

	Acronym	Definition
	FIC	Facility Incident Commander
	FLCPH	Fleet Logistics Center Pearl Harbor
	FOBS	Field Observer
	FORFAC	Fuel Oil Reclamation Facility
	FOSC	Federal On-Scene Coordinator
	FQI	Facility Qualified Individual
	FR	Federal Register
	FRERP	Federal Radiological Emergency Response Plan
	FRP	Facility Response Plan
	FRT	Facility Response Team
	FSC	Finance Section Chief
	FWPCA	Federal Water Pollution Control Act
	FWS	Fish and Wildlife Service
	FY	Fiscal Year
	FYDP	Future Years Defense Plan
G	GSA	General Services Administration
	GSUL	Ground Support Unit Leader
	HAR	Hawaii Administrative Rule
	HAZMAT	Hazardous Material
H	HCP	Habitat Conservation Plan
	HM	Hazardous Material
	HS	Hazardous Substance
	HW	Hazardous Waste
	IAP	Incident Action Plan
	IC	Incident Commander
	ICS	Incident Command System
	ICP	Integrated Contingency Plan
I	IFO	Intermediate Fuel Oil
	IMO	International Maritime Organization
	INCM	Incident Dispatcher
	INJR	Injury Specialist
	INTO	Intelligence Officer
	IR	Installation Restoration (program)
	JAG	Judge Advocate General
J	JBPHH	Joint Base Pearl Harbor-Hickam
	JIC	Joint Information Center
	JP	Jet Petroleum
L	LEPC	Local Emergency Planning Committee
	LNO	Liaison Officer

	Acronym	Definition
	LSC	Logistics Section Chief
M	MARAD	Maritime Administration
	MARPOL	International Convention for the Prevention of Pollution from Ships
	MBTA	Migratory Bird Treaty Act
	MEDL	Medical Unit Leader
	MGO	Marine Gas Oil
	MMPA	Marine Mammal Protection Act
	MMS	Minerals Management Service
	MOA	Memorandum of Agreement
	MOU	Memorandum of Understanding
	MSC	Military Sealift Command
	MSDS	Material Safety Data Sheet
	MSO	Marine Safety Office
	MSRC	Marine Spill Response Corporation
	MTR	Marine Transportation Related
N	NAGPRA	Native American Graves Protection and Repatriation Act
	NAVFAC	Naval Facilities Engineering Command
	NAVPETOFF	Naval Petroleum Office
	NAVSUP	Navy Supply Systems Command
	NCP	National Oil and Hazardous Substances Pollution Contingency Plan
	NFESC	Naval Facilities Engineering Service Center
	NMFS	National Marine Fisheries Service
	NIOSH	National Institute for Occupational Safety and Health
	NOAA	National Oceanic and Atmospheric Administration
	NOSC	Navy On-Scene Coordinator
	NOTAM	Notice to Airmen
	NPDES	National Pollutant Discharge Elimination System
	NPF	National Pollution Fund
	NPRM	Notice of Proposed Rulemaking
	NPS	National Park Service
	NRC	National Response Center (USCG)
	NRC	National Response Corporation
	NRDA	Natural Resource Damage Assessment
	NRDAR	Natural Resource Damage Assessment and Restoration Representatives
	NRS	National Response System
	NRT	National Response Team
	NSCC	National Scheduling Coordinating Committee
	NSF	National Strike Force (USCG)

	Acronym	Definition
	NSFCC	National Strike Force Coordination Center (USCG - Elizabeth City, NC)
	NTR	Non-Transportation Related
	NVIC	Navigation and Inspection Circular (USCG)
	NWCF	Navy Working Capital Funded
O	OHS	Oil and Hazardous Substances
	OIC	Officer in Charge
	OPA 90	Oil Pollution Act of 1990 (Public Law 101-380 of 18 Aug 90)
	OPBD	Operations Branch Director
	OPCON	Operational Control
	OPREP	Operational Report
	ORDM	Ordering Manager
	OSC	On-Scene Coordinator
	OSC	Operations Section Chief
	OSRO	Oil Spill Removal Organization (classified by USCG)
	OSRV	Oil Spill Response Vessel
	OSHA	Occupational Safety and Health Administration
P	PA	Pollution Abatement (funds)
	PA	Programmatic Agreement
	PAO	Public Affairs Office
	PHMSA	Pipeline and Hazardous Materials Safety Administration
	PIAT	Public Information Assist Team
	PIO	Public Information Officer
	PLA	Plain Language Address (Navy jargon)
	POC	Point of Contact
	POL	Petroleum-Oil-Lubricant
	PPE	Personal Protective Equipment
	PREP	Preparedness-for-Response Exercise Program (USCG)
	PROC	Procurement Unit Leader
	PSC	Planning Section Chief
	PTRC	Personnel Time Recorder
Q	QI	Qualified Individual
R	RA	Regional Administrator (EPA)
	RAR	Resources-at-Risk
	RCDM	Receiving and Distribution Manager
	RCP	Regional Contingency Plan
	RCRA	Resource Conservation and Recovery Act
	REHB	Responder Rehabilitation Manager
	RESL	Resource Unit Leader
	RIC	Regional Incident Commander

	Acronym	Definition
	ROC	Regional Operations Center
	RP	Responsible Party
	RPM	Remedial Project Manager
	RQ	Reportable Quantity (of hazardous substances)
	RQI	Regional Qualified Individual
	RRC	Regional Response Center
	RRT	Regional Response Team
	RT	Response Technologies
S	SAR	Search and Rescue
	SARA	Superfund Amendments and Reauthorization Act of 1986
	SCAT	Shoreline Cleanup Assessment Teams
	SCKN	Status/Check-In Recorders
	SDWA	Safe Drinking Water Act of 1986
	SECDEF	Secretary of Defense
	SECM	Security Manager
	SECNAV	Secretary of the Navy
	SERC	State Emergency Response Commission
	SHPO	State Historical Preservation Officers
	SI	Surface Impoundment
	SIC	Standard Industrial Classification (codes)
	SITL	Situation Unit Leader
	SMC	Mission Coordinator
	SMT	Spill Management Team
	SOFR	Safety Officer
	SONS	Spill of National Significance
	SOSC	State On-Scene Coordinator
	SPCC	Spill Prevention, Control, and Countermeasures (plan)
	SPUL	Supply Unit Leader
	SSC	Scientific Support Coordinator (NOAA)
	STAM	Staging Area Managers
	STCR	Shore-side Operations
	STVE	Strike Team Leader for Vessels
	SUBD	Support Branch Director
	SUPSALV	Supervisor of Salvage (Navy)
	SVBD	Service Branch Director
	SWDA	Solid Waste Disposal Act
T	TFLD	Task Force Leaders
	TFR	Temporary Flight Restriction
	THSP	Technical Specialists
	TIME	Time Unit Leader
	TSCA	Toxic Substance Control Act
	TYCOM	Type Commander

	Acronym	Definition
U	UCS	Unified Command System
	UIC	Uniform Identification Code
	USACE	U.S. Army Corps of Engineers
	USCG	U.S. Coast Guard
	USDA	U.S. Department of Agriculture
	USFWS	U.S. Fish and Wildlife Service
	USNPS	U.S. National Park Service
	UST	Underground Storage Tank
V	VESS	Vessel Support Unit Leader
	VOSS	Vessel of Opportunity System
	VRP	Vessel Response Plan

V.2 GLOSSARY

The following are definitions of terms and phrases used in this plan. The definitions conform to those provided in the applicable regulations and Navy guidance and policy documents.

Definitions

Adverse Weather: The weather conditions that make it difficult for response equipment and personnel to cleanup or remove spilled oil. These weather conditions will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, icy conditions, temperatures, weather-related visibility, and currents within the U.S. Coast Guard Captain of the Port zone in which the systems or equipment are intended to function.

The weather conditions considered by the operator in identifying the response systems and equipment to be deployed in accordance with a response plan, including wave height, ice, temperature, visibility, and currents within the inland or Coastal Response Zone (as defined in the National Contingency Plan [40 CFR 300]) in which those systems or equipment are intended to function.

Alteration: Any work on a tank or related equipment involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of a tank.

Branch: An organization that has functional geographic responsibility for a major segment of the incident operation, e.g., the Transportation Branch of the Logistics Section. The branch level is organizationally between the section and division/group.

Breakout Tank: A tank used to:
Relieve surges in an oil pipeline system or,
Receive and store oil transported by a pipeline for re-injection and continued transportation by pipeline.

Captain of the Port (COTP) Zone: A zone specified in 33 CFR part 3 and, where applicable, the seaward extension of that zone to the outer boundary of the Exclusive Economic Zone (EEZ).

Coastal Zone: All United States waters subject to the tide, United States waters of the Great Lakes and Lake Champlain, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the National Contingency Plan, and the land surface or land substrate ground waters, and ambient air proximal to those waters. (The term "coastal zone" delineates an area of federal responsibility for response action.

Precise boundaries are determined by agreement between the Environmental Protection Agency and the U.S. Coast Guard and are

Definitions

identified in Federal Regional Contingency Plans and Area Contingency Plans).

Compensable Values: The values that humans have for services provided by resources including, but not limited to, commercial, ecological, special significance, and passive uses.

Complex Facility: A facility possessing a combination of transportation-related and non-transportation-related components that are subject to their jurisdiction of more than one Federal agency under section 311 (j) of the Clean Water Act.

Contracts or Other Approved Means: A written contractual agreement with a response contractor that identifies and ensures the availability of the necessary personnel or equipment within appropriate response times

A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times

Active membership in a local or regional oil spill removal organization that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the specified geographic areas; or other specific arrangements approved by the EPA Regional Administrator upon request of the owner or operator.

Damages: The amount calculated to compensate for injury to, destruction of, loss or use of natural resources, including the reasonable costs of assessing or determining the damage, which shall be recoverable by the United States, state, Indian tribe, or a foreign trustee.

Discharge:

Average Most Probable: [USCG] A discharge of the lesser of 50 barrels or one percent of the volume of the worst-case discharge.

Maximum Most Probable: [USCG] A discharge of the lesser of 1,200 barrels or ten percent of the volume of a worst-case discharge.

Small Spill: [EPA] Any spill volume less than or equal to 2,100 gallons but not to exceed the calculated worst-case discharge.

Medium Spill: [EPA] Any spill volume greater than a small spill but equal to or less than 36,000 gallons, ten percent of the capacity of the largest above ground storage tank, or the worst-case discharge, whichever is less.

Worst-Case:

Definitions

[EPA] For an onshore non-transportation-related facility, the largest foreseeable discharge in adverse weather conditions, based on the factors described in Appendix D to 40 CFR part 112.

[PHMSA] The largest foreseeable discharge of oil, including a discharge from fire or explosion in adverse weather conditions. This volume will be determined by each pipeline operator for each response zone and is determined as follows:

The pipeline's maximum release in time expressed in hours, plus the maximum shutdown response time in hours (based on historic discharge data or in the absence of such data, the operator's best estimate) multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest line drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or

The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventive action taken; or

If the response zone contains one or more tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system adjusted for the capacity of the secondary containment system, expressed in barrels.

[USCG] For an onshore facility and deepwater port, the largest foreseeable discharge in adverse weather conditions meeting the following requirements:

The loss of the entire capacity of all in-line and breakout tank(s) needed for the continuous operation of the pipelines used for the purposes of handling or transporting oil, in bulk to or from a vessel regardless of the presence of secondary containment; plus

The discharge from all piping carrying oil between the marine transfer manifold and the non-transportation-related portion of the facility. The discharge from each pipe is calculated as follows: The maximum time to discover the release from the pipe in hours, plus the maximum time to shut down flow from the pipe in hours (based on historic discharge data or the best estimate in the absence of historic discharge data for the facility) multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum relief valve setting or maximum system pressure when relief valves are not provided) plus the total line drainage volume expressed in barrels for the pipe between the marine manifold and the non-transportation-related portion of the facility; and

Definitions

	For a mobile facility, the loss of the entire contents of the container in which the oil is stored or transported.
Environmentally Sensitive Area:	An area of environmental importance which is in or adjacent to navigable waters.
Exclusive Economic Zone (EEZ):	The zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.
Facility Incident Commander (FIC):	The individual who is responsible for the management of incident operations up to the limits of the facility to respond. Under the Navy FIC and Facility Qualified Individual will be designated the same person.
Facility Qualified Individual (FQI):	The English-speaking representative of the facility (base), located in the United States, available on a 24-hour basis, with full authority to: Activate and contract with required oil spill removal organization(s); activate personnel and equipment maintained by the operator; act as liaison with the OSC; and obligate any funds required to carry out all required or directed oil spill activities. Under Navy policy, the FQI and FIC will be the same person.
Facility that could reasonably be expected to cause significant and substantial harm:	[EPA] Any facility that has the potential to cause substantial harm as determined by the EPA Regional Administrator considers the following additional factors: • Proximity to environmental areas of concern defined in 40 CFR 112, Appendix C • Frequency of past spills • Proximity to navigable waters • Age of oil storage tanks • Other facility-specific and region-specific impacts on public health. [PHMSA] Any pipeline that is greater than 6-inches in outside nominal diameter, greater than 10 miles in length, and the line section: • Has experienced a release greater than 1,000 barrels within the previous five years • Has experienced two or more reportable releases, as defined in 49 CFR 195.50, within the previous five years, • Contains any electric resistance welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under 49 CFR 195 406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe: • Is located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes; or • Is located within a one-mile radius of potentially affected environmentally sensitive areas and could reasonably be expected to reach these areas.

Definitions

	[USCG] Any marine transportation-related facility (including piping and any structures that are used for the transfer of oil between a vessel and the facility) classified as a "significant and substantial harm" facility under 33 CFR 154.1015 (c) including a facility specifically designated by the COTP under 33 CFR 154.1016(a).
Facility that could reasonably be expected to cause substantial harm:	[EPA] A facility that transfers oil over water to or from vessels and has a total storage capacity greater than or equal to 42,000 gallons; or A facility with a total oil storage capacity greater than or equal to one million gallons and one of the following is true: • The facility does not have secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground storage tank within each storage area; • The facility is located at a distance (as calculated using the appropriate formula in 40 CFR 112 Attachment C-III or an alternative formula considered acceptable by the Regional Administrator such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments as defined in 40 CFR 112 Appendix C; • The facility is located at a distance as calculated using the appropriate formula in 40 CFR 112 Attachment C-III or an alternative formula considered acceptable by the Regional Administrator such that a discharge from the facility would shut down a public drinking water intake; or • The facility has had a reportable spill in an amount greater than or equal to 10,000 gallons within the last five years. [PHMSA] Not defined. [USCG] Any marine transportation-related facility classified as a "substantial harm" facility under 33 CFR 154.1015(b) including a facility specifically designated by the COTP under 33 CFR 154.1016(a).
Federal On-Scene Coordinator (FOSC):	The Federal Official designated by the Administrator of the EPA or by the Commandant of the USCG to coordinate and direct federal response under subpart D of the National Contingency Plan (40 CFR part 300). The DOD is designated as the FOSC for all DOD hazardous substance spill response.
Group:	A functional division (e.g., security, search and rescue).
High Volume Area:	An area where an oil pipeline having a nominal outside diameter of 20 inches or more crosses a major river or other navigable water, which, because of the velocity of the river flow and vessel traffic on the river, would require a more rapid response in case of a worst-case discharge or substantial threat of such a discharge. Appendix B to 49 CFR part 194 contains a list of some of the high volume areas in the United States.
Incident Action Plan (IAP):	The plan, which is initially prepared at the first staff meeting after an oil spill occurs, that contains the general control objectives reflecting the overall

Definitions

	strategy, and specific action plans for the next operational period. When complete, the incident action plan will have a number of attachments.
Incident Command System (ICS):	A system for controlling personnel, facilities, equipment, and communications during emergency response. The system is designed to begin developing from the time an incident occurs until the requirement for management and operations no longer exists. This system can be utilized for any type or size emergency, ranging from a minor spill to a major emergency response. It also allows for the timely combination of resources from different agencies/contractors.
Injury:	A measurable adverse change, either long or short term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge of oil.
Inland Area:	The area shoreward of the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, the area shore ward of the lines of demarcation (COLREG lines) defined in 33 CFR §§ 80.740 through 80.850. The inland area does not include the Great Lakes.
Inland Zone:	The environment inland of the coastal zone excluding the Great Lakes, Lake Champlain, and specified ports and harbors on inland rivers. (The term inland zone delineates an area of federal responsibilities for response actions. Precise boundaries are determined by agreements between the Environmental Protection Agency and U.S. Coast Guard and are identified in the Federal Regional Contingency Plans.)
Line Section:	A continuous run of pipe that is contained between adjacent pressure pump stations, between a pressure pump station and a terminal or breakout tank, between a pressure pump station and a block valve, or between adjacent block valves.
Major River:	A river that because of its velocity and vessel traffic would require a more rapid response in case of a worst-case discharge. For a list of rivers see "Rolling Rivers, An Encyclopedia of America's Rivers," Richard A Bartlett, Editor, McGraw-Hill Book Company, 1984.
Marine Transportation-Related Facility (MTR):	Any offshore facility or segment of a complex regulated under section 311(j) of the Federal Water Pollution Control Act (FWPCA) by two or more federal agencies including piping and any structure used or intended to be used to transfer oil to or from a vessel, subject to regulation under 33 CFR. For a facility or segment of a complex regulated by two or more federal agencies under Section 311(j) of the FWPCA, the marine transportation-related portion of the complex extends from the facility oil transfer system's connection with the vessel to the first valve inside the secondary containment surrounding tanks in the non-transportation-related portion of the facility or, in the absence of secondary containment, to the valve or manifold adjacent to the tanks comprising the non-transportation-related portion of the facility, unless another location has otherwise been agreed to by the COTP and the appropriate federal official.

Definitions

Maximum Extent Practicable:	[Non-transportation-related facility] The limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst-case discharges from onshore non-transportation-related facilities in adverse weather. The appropriate limitations for such planning are available technology and the practical and technical limits on an individual facility owner or operator. [Transportation-related facility] The planned capability to respond to a worst-case discharge in adverse weather, as contained in a response plan that meets the criteria in 33 CFR or in a specific plan approved by the cognizant COTP. [Pipeline] The limits of available technology and the practical and technical limits on a pipeline operator in planning the response resources required to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst-case discharge from a pipeline in adverse weather.
Natural Resource Damage Assessment (NRDA):	The process by which trustees determine if a resource has been injured and the loss associated with that injury, in order to effect restoration.
Natural resources:	Land, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the exclusive economic zone), and state or local government or Indian tribe or foreign government.
Navigable Waters:	The waters of the United States, including the territorial sea and such waters which are used for recreation and waters from which fish or shell fish are taken and sold in interstate or foreign commerce.
Navy On-Scene Coordinator (NOSC):	The NOSC is the Navy official predesignated to coordinate Navy OHS pollution contingency planning and direct Navy OHS pollution response efforts in a preassigned area. Shoreside NOSCs are normally the numbered fleet commanders who direct fleet operations within assigned ocean areas. The NOSC is the Federal OSC for Navy HS releases. The NOSC will act as the QI and incident commander for spills outside areas assigned to FICs, and as incident commander for spills beyond the capability of a FIC.
Nearshore Area:	The area extending seaward 12 miles from the boundary lines defined in 46 CFR part 7, except in the Gulf of Mexico. In the Gulf of Mexico, the area extending seaward 12 miles from the line of demarcation (COLREG lines) as defined in 33 CFR §§ 80.740 through 80.850.
Non-Petroleum Oil:	

Definitions

	Oil of any kind that is not petroleum-based. This category includes, but is not limited to, animal and vegetable oils.
NTR Facility	Non-Transportation Related Facility
Ocean:	The offshore area and nearshore area as defined in 33 CFR.
Offshore Area:	The area beyond 12 nautical miles measured from the boundary lines defined in 46 CFR part 7 seaward to 50 nautical miles, except in the Gulf of Mexico. In the Gulf of Mexico, the area beyond 12 nautical miles of the line of demarcation (COLREG lines) defined in 33 CFR §§ 80.740 through 80.850 of this chapter extending seaward to 50 nautical miles.
Oil:	Oil of any kind or in any form, including, but not limited to, petroleum oil, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredge spoil.
Oil Groups:	
Non-Persistent:	A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions: • At least 50% of which by volume, distilled at a temperature of 340 degrees C (645 degrees F); and • At least 95% of which by volume, distilled at a temperature of 370 degrees C (700 degrees F).
Persistent Oil:	A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of 33 CFR subpart F, persistent oils are further classified based on specific gravity as follows: (1) Group II - specific gravity less than 0.85 (2) Group III - specific gravity between 0.85 and less than 0.95 (3) Group IV - specific gravity from 0.95 to and including 1.00 (4) Group V - specific gravity greater than 1.00
Oil Spill Removal Organization (OSRO):	An entity that provides response resources.
Onshore Oil Pipeline Facilities:	New and existing pipe, right-of-ways, and any equipment, facility, or building used in the transportation of oil located in, on, or under any land within the United States other than submerged land.
Operating Area:	Geographic location(s), such as rivers and canals, inland, Great Lakes, or offshore, in which a facility is handling, storing or transporting oil.
Operating Environment:	Rivers and canals, inland, Great Lakes, or ocean. These terms are used to define the conditions in which response equipment is designed to function.
Operating in Compliance with The Plan:	Operating in compliance with the provisions of 33 CFR Subpart F which include, ensuring the availability of the response resources by contract or other approved means, and conducting the necessary training and drills.

Definitions

Operator:	A person who owns or operates onshore oil pipeline facilities.
Passive Use Values:	The values placed on resources that are not normally associated with a monetary value, such as, an endangered species, migratory birds, national parks, etc.
Pipeline:	All parts of an onshore pipeline facility through which oil moves, including but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks.
Regional Qualified Individual (RQI):	The English speaking representative of the region (the Navy On-Scene Coordinator), located in the United States, available on a 24-hour basis, with full authority to: • Activate and contract with required oil spill removal organization(s) • Activate personnel and equipment maintained by the operator • Act as liaison with the OSC • Obligate any funds required to carry out all required or directed oil spill activities. • Under Navy policy, the RQI and the NOSC are the same person.
Repair:	Any work necessary to maintain or restore a tank or related equipment to a condition suitable for safe operation.
Response Activities:	The containment and removal of all oil and/or hazardous substances from the land, water, and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to the public health or welfare or the environment.
Response Area:	The inland zone or coastal zone, as defined in this plan.
Response Plan:	The operator's Core Plan and the Response Zone appendices for responding to the maximum extent practicable, to a worst-case discharge of oil and/or hazardous substances, or the substantial threat of such a discharge.
Response Resources:	The personnel, equipment, supplies, and other capabilities necessary to perform the response activities identified in a response plan.
Response Zone:	A geographic area either along a length of pipeline or including multiple pipelines, containing one or more adjacent line sections, for which the operator must plan for the deployment of, and provide, spill response capabilities. The size of the zone is determined by the operator after considering available capability, resources, and geographic characteristics.
Rivers and Canals:	

Definitions

	A body of water confined within the inland area, including the intracoastal waterways and other waterways artificially created for navigation, that has a project depth of 12 feet or less.
Specified Minimum Yield Strength:	The minimum yield strength, expressed in pounds per square inch, prescribed by the specification under which the material is purchased from the manufacturer.
Spill Management Team:	The personnel identified in the organizational structure to manage response plan implementation.
Stress Level:	The level of tangential or hoop stress, usually expressed as a percentage of specified minimum yield strength.
Substantial Threat of a Discharge:	Any incident or condition involving a facility that may create a risk for discharge of oil. Such incidents include, but are not limited to, storage tank or piping failures, above ground or underground tank or pipeline leaks, fires, explosions, flooding, spills contained within the facility, or other similar occurrences.
Unit:	The organizational element having functional responsibility for a specific incident planning, logistic, or finance activity.

PAGE INTENTIONALLY LEFT BLANK

APPENDIX W
PLAN REVIEW AND UPDATE

W.1 PLAN REVIEWS

The COMNAVREG HI ICP will be reviewed at least annually. The review shall incorporate any changes in the listing of economically important or environmentally sensitive areas identified in the Hawaii ACP. The review shall also ensure consistency between this response plan and the National OHS Pollution Contingency Plan (NCP). Table W-1 lists the NOSC Rep's responsibilities in reviewing and updating the plan.

TABLE W-1: NOSC REPRESENTATIVES RESPONSIBILITIES

- Ensure plan is reviewed and updated as specified in this appendix.
- The review will occur within one month of the anniversary date of the EPA and/or USCG COTP approval of the plan, as appropriate.
- After the review, if changes are needed, a plan amendment will be submitted to the respective regulatory agency for review or approval. See Section W.2 for a list of changes that would trigger a plan amendment.
- If no changes are needed, the respective regulatory agency will be notified in writing and a copy of the notification letter placed in the front of each copy of the ICP and appropriately noted in the Record of Periodic Review (Table W-2).
- Any required changes will be entered in the plan and noted in the Record of Changes (see beginning of plan).
- Recommended changes to the plan as a result of response exercises and actual response to spills will be incorporated into the plan
- Revisions and plan changes will be distributed to plan holders.
- Training will be coordinated to ensure that appropriate response personnel are familiar with revised plan and plan changes, i.e., COMNAVREG Spill Management Team.

W.2 PLAN AMENDMENTS AND UPDATES

Revisions or plan amendments will be made to the COMNAVREG HI ICP and submitted to the respective regulatory agency for review and/or approval whenever there is:

- A change in the facilities configuration that significantly affects the information included in the response plan.
- A change in the type of oil group (persistent or non-persistent) handled or stored that affects the required response resources.

- A change in the capabilities of the emergency response team or the name and/or capabilities of the oil spill removal organization.
- A change in the emergency response procedures.
- A change in the facility's geographic area of responsibilities.
- A change in the NCP or the Hawaii ACP that has significant impact on plan implementation.
- Any other changes that significantly affect the implementation of the plan, e.g., as a result of lessons learned from a response drill or an actual response.

W.3 AMENDMENT SUBMITTAL

Amended sections of the plan will be forwarded to regulatory agencies and plan holders, as necessary, by the COMNAVREG HI NOSC Rep. Questions concerning updates and amendments to this plan should be forwarded to:

James D. Saul
COMNAVREG HI NOSC Representative
NAVFAC HI, Code EV13
Building X-1, 400 Marshall Road
JBPHH, HI 96860-3114
Phone: 473-4689
Cell: 864-2463 (24/7)

W.4 RECORD OF PERIODIC REVIEW/CHANGES

Table W-2 will be used to Record Periodic Reviews and Updates. Any amendments to the plan must be recording in the Record of Change at the beginning of the plan.

TABLE W-2: RECORD OF PERIODIC REVIEW		
Reviewed By	**Date Reviewed**	**Remarks**

TABLE W-2: RECORD OF PERIODIC REVIEW		
Reviewed By	**Date Reviewed**	**Remarks**

TAB 1 – OIL CONTAINMENT AND RECOVERY METHODS

Table of Contents

The Basics 1
Containing Oil 1
Oil Recovery 11
Storage and Separation 17
Estimating Oil Spill Movement and Volume 17

Tables

Table A Estimating Oil Volume on Water 17

Figures

Figure A Land Spill Procedures 2
Figure B Clearing Oil from under Piers with Boom and Water Jets 4
Figure C Boom Type 5
Figure D Boom Oil Loss Failure Modes 6
Figure E River Procedures 7
Figure F Coastal Area Procedures 9
Figure G Confined Harbor Spill Procedures 10
Figure H U.S. Coast Guard Inland Water Navigation Rules 11
Figure I Drainage Outfall Procedures 13
Figure J Skimmer Types 14
Figure K Harbor Open Water Procedures with Medium Skimmer 15
Figure L Decanting 16

PAGE INTENTIONALLY LEFT BLANK

TAB 1 - OIL CONTAINMENT AND RECOVERY METHODS

The Basics

This appendix describes the methods used to contain and recover spilled oil. The information in this appendix was excerpted from references such as "NAVFAC P-908, Oil Spill Control for Inland Waters and Harbors," and the International Tanker Owners Pollution Federation (ITOPF) Technical Papers. See Appendix E for listings of available response equipment including those described in this appendix. Points to remember when planning or executing oil spill cleanup include:

- Practice with your equipment before a spill, or be sure to have experienced personnel on-scene as equipment operators.
- The most effective tool for insuring against oil spill contamination is to take steps to eliminate the spill potential. This requires constant attention to ships maintenance, engineering surveys, personnel training, and common sense.
- Keep assigned response equipment maintained and operational. If the equipment is damaged or determined to be inadequate, contact the NOSC Rep for required support until equipment inventory is adequate. Maintaining an operational state of readiness requires that maintenance be performed as required and that preventative maintenance (PMS) is performed when required.
- There is no one "right" approach to spill cleanup. In some cases, a spill may require a combination of booms, several types of skimmers, sorbents, earth moving equipment, as well as dispersants. While in others, a minimum of mechanical equipment is necessary and the cleanup becomes labor intensive.

Containing Oil

a) No matter how simple the spill appears to be, it is always difficult to adequately contain spilled oil. Response to a spill involves making allowances for worst case situations concerning weather, current, wind, rain, equipment failures, or more oil.

b) Available Materials. The most expeditious method of containing spilled oil is by using available materials. These can include, but are not limited to:

- Earth - For land spills the use of soil as well as other materials that can be handled by heavy equipment or hand shovels can be a very effective temporary dam.
- Plastic sheeting, clay, or other impervious barriers can be used in conjunction with other materials to make barriers nonporous to oil. An effective alternative to building a raised dike is to dig a hole in a low point to be used as a sump pit from which the oil can be pumped. As with the spill site itself, quickly block storm drains as well as other free paths to waterways prior to using any artificial dikes. Figure A shows a collection pit and earth dikes being used for a land spill.
- Effective floating booms can be built from available materials including: lumber, poles, oil drums, small boats, and floating air-filled fire hoses. Flexible materials may also be used in conjunction with other booms to fill the gaps between the sections. Floating materials however, cannot be expected to perform well in any current, wind, or waves.

c. Air Bubble Barriers. Commercially available bubble barriers, unless permanently installed, are time consuming and expensive to set up and therefore should be avoided for emergency response.

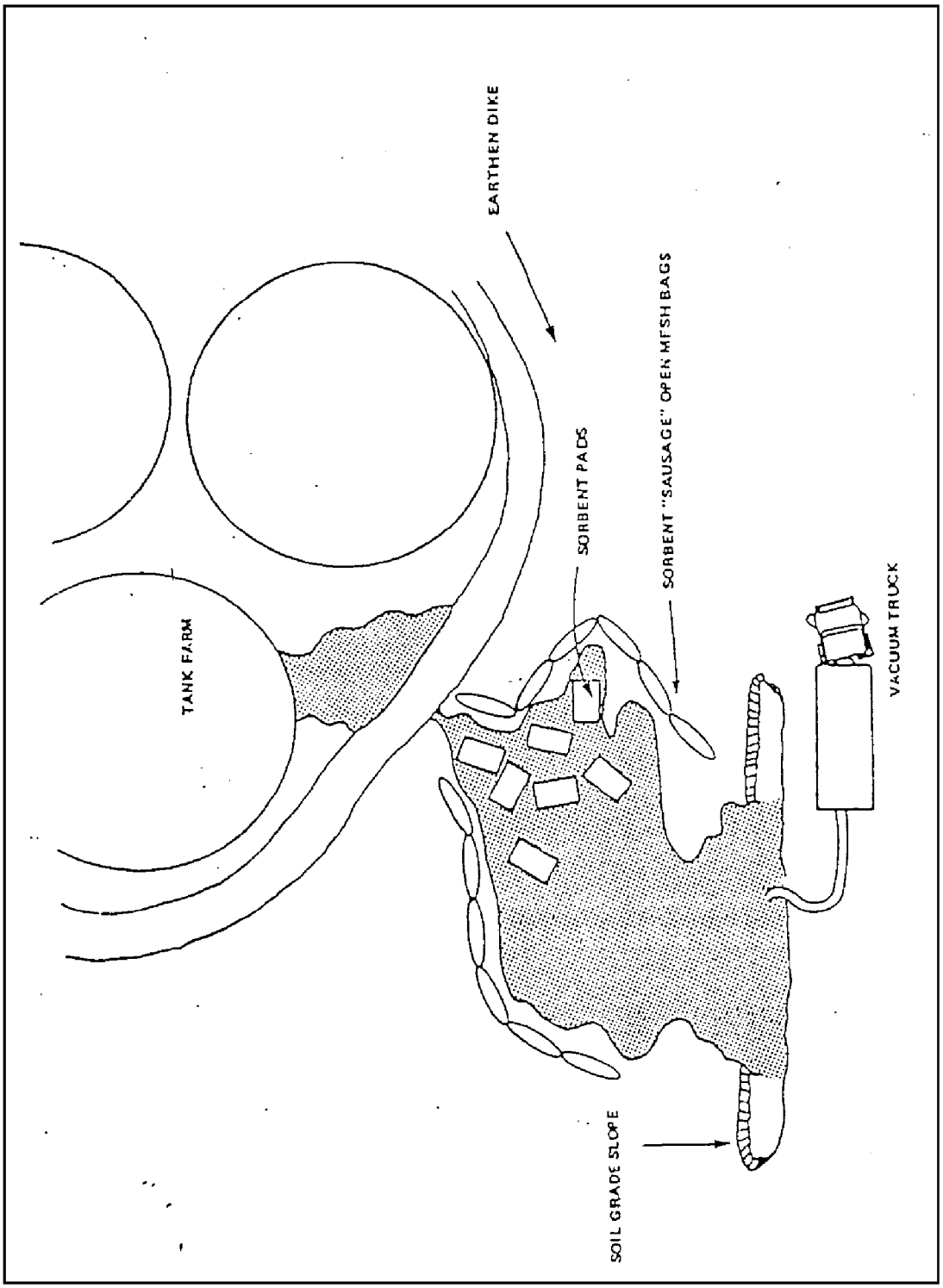


Figure A - Land Spill Procedures

d. Fire Hose Water Streams. Oil can be contained and moved very effectively by using any available water hose. Household variety garden hoses can be used in calm waters. However, fire hoses with stream nozzles, 1-1/2 inch diameter or more are most effective. Water nozzles are most effective when used as follows:

- Point the water stream into the water as close to vertical as possible while not hitting the floating oil. It is the rising air bubbles around the water impact area that creates a water current and thereby moves the oil. A fire hose kept stationary can clear a 100 sq. ft. area of spilled oil. By increasing the number of hoses and/or water pressure a larger area can be treated and cleared.
- Fire hoses can be used as shown in Figure B to clear oil from under piers or other confined areas.
- On board ships, fire hoses can be made available quickly and are often the most practical oil containment barrier.

e. Boat Wash. Propeller wash from small boats and tugs can be used to clear a confined area of oil or move oil to a collection point.

f. Oil Containment Boom. Proper planning for oil spills will ensure that the NOSC Rep has adequate lengths of oil containment boom available and in good repair suitable for the water borne oil spills. Usually, different types of boom are used under varying conditions. There are several different types of booms available depending on manufacturer and its intended use. The most common booms in use are fence type with centerline flotation and flexible curtain as shown in Figure C. Flotation usually consists of fixed foam or plastic floats, and air-filled floats are used in some heavy duty and collapsible booms to save storage space.

The two types of boom which are provided by NAVFAC are described below:

1) Permanent Boom is positioned in the water and is used for extended deployment. They are used primarily in high spill risk areas that experience a low ship-operating tempo such as fueling piers and carrier berths.
2) Boom Systems Class I, II, and III are oil barriers that are normally stored in protective enclosures out of the water and are usually deployed during fueling operations or during spill response. A boom system consists of an above-water freeboard, a below-water skirt, attached floats, ballast, and tension-carrying members.

Booms are incorporated into a system concept; each system consists of typically 500 linear feet of boom (ten 50-foot lengths).

Limits of Use. Oil booms are limited by the conditions under which they can contain the oil. Figure D shows various ways in which booms can fail to contain oil. Booms cannot hold oil well in a one-knot or greater current. Oil will splash over the top of a boom when driven by wind and waves.

Use in Current. Figure E shows boom deployed at an angle to the current that reduces the normal velocity to the boom to be less than one knot. The boom is placed to direct the oil to a section of the river where there is the least current force. Direct observation of the current will indicate where that point actually is.

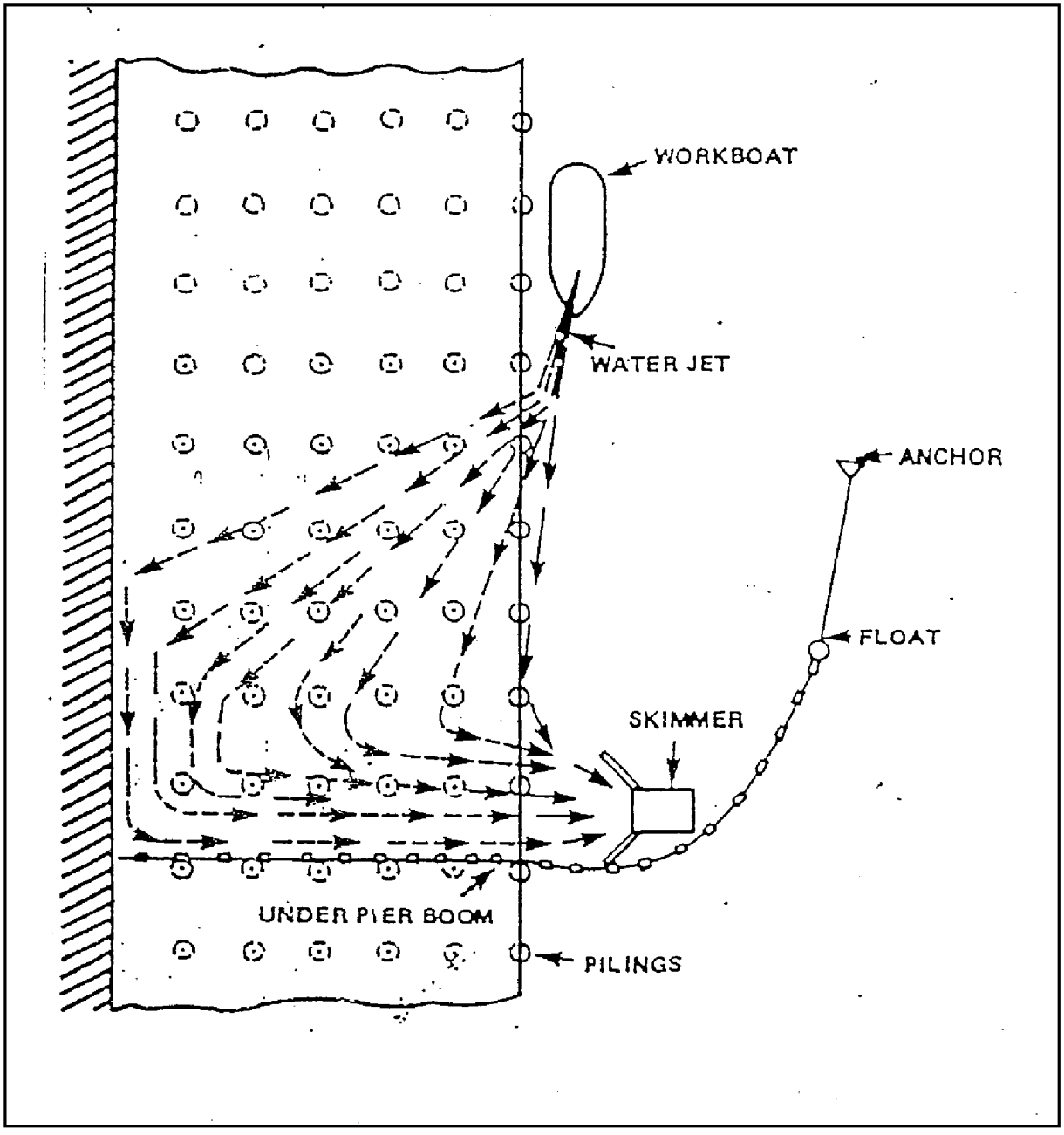


Figure B - Clearing Oil from Under Piers with Boom and Water Jets

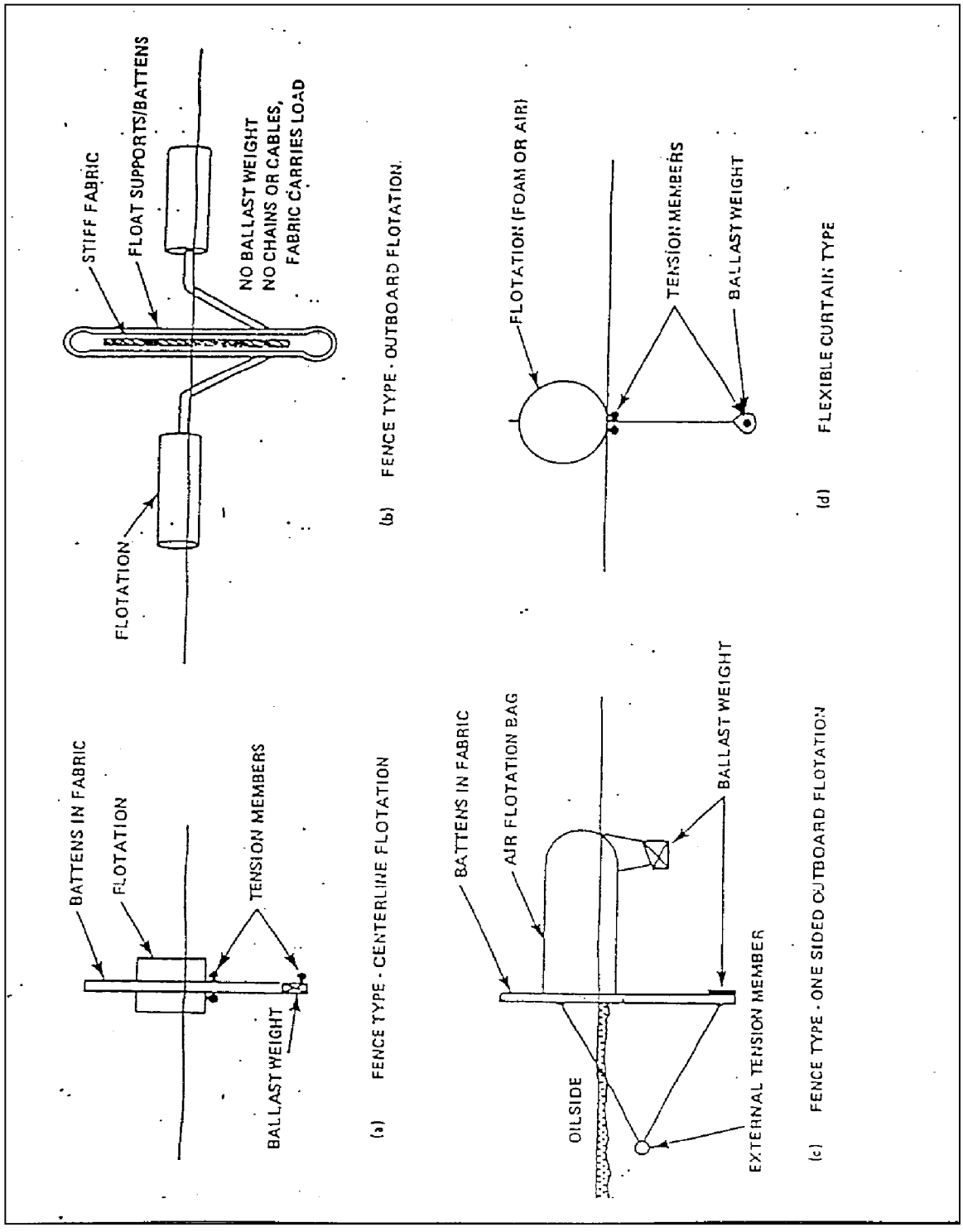


Figure C - Boom Type

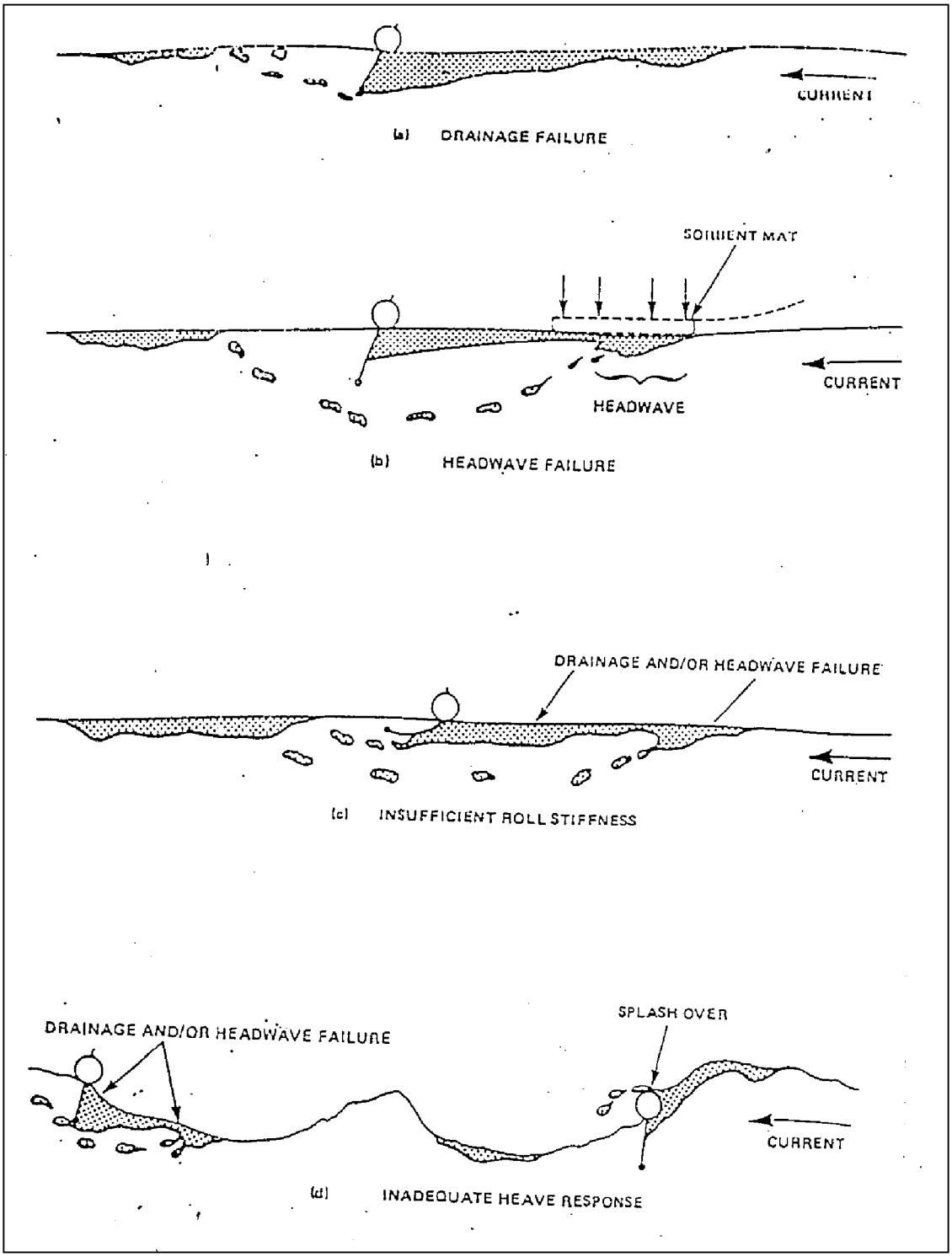


Figure D - Boom Oil Loss Failure Modes

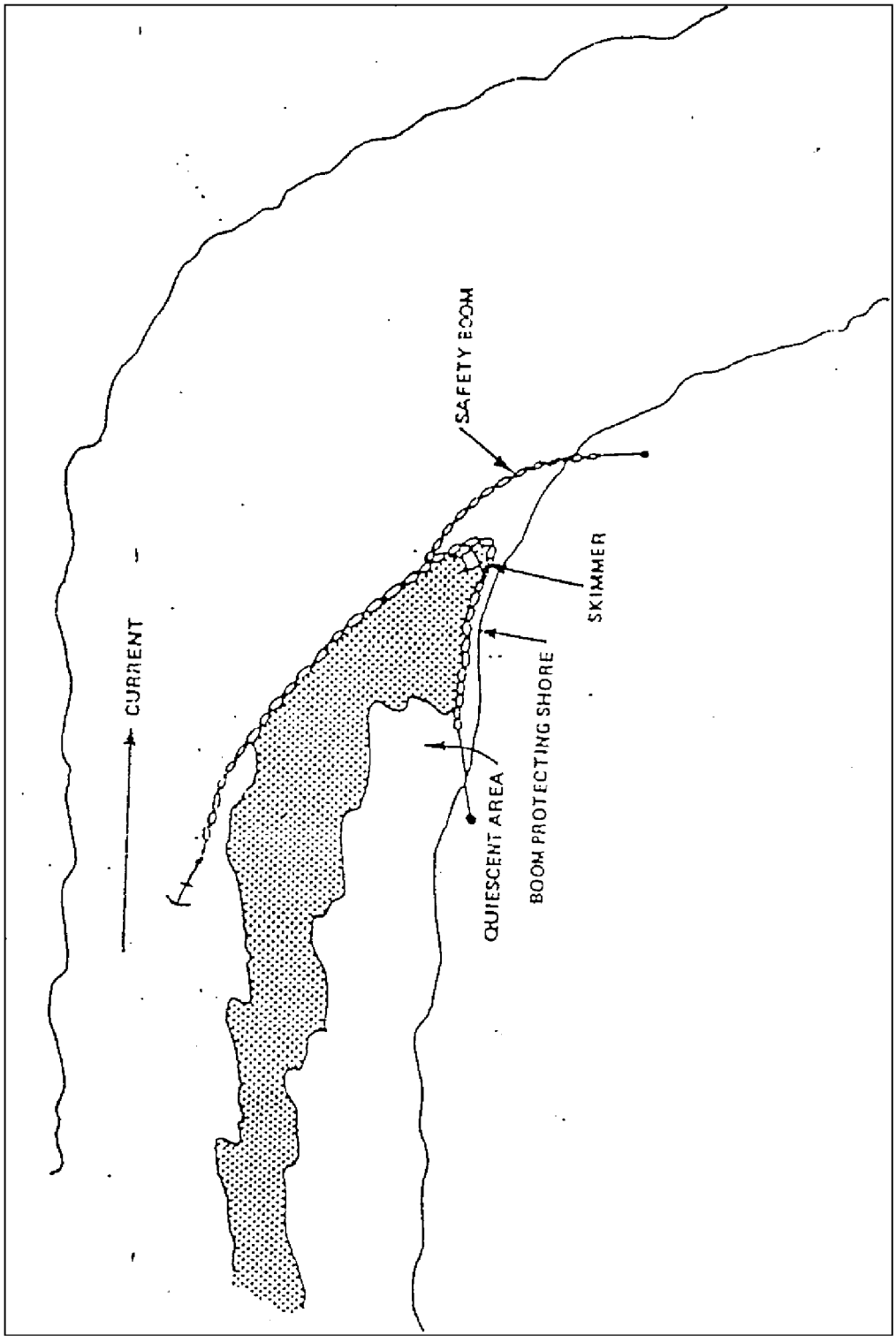


Figure E - River Procedures

Anchoring. Regardless of the boom placement, it is always under a water current load. Booms must be secured in several places by anchors, however under conditions of swift current or a suspicious bottom holding capacity, the use of multiple anchors is required. Mooring buoys which are large enough to prevent the boom from being dragged underwater and support the anchor line shall be used. The use of two or more available booms, set in series, will ensure that escaping oil is contaminated or directed to the collection area.

A boom mooring system is used to moor deployable boom in open water. For the system to be effective, the following conditions must apply: 1) water less than 100 feet deep; 2) sandy bottom; 3) current less than one knot; and 4) wind under 25 knots. Each system contains various mooring lines, a 75-pound anchor, 12 feet of chain link, a spring buoy (500-pound buoyancy rated), and a crown buoy (lOO-pound buoyancy rated).

Diversion. Booms should be set quickly to divert the oil and protect sensitive areas. Sensitive areas are discussed in Appendix N and booming strategies to protect them are shown in Appendix M, Figure M-3. See Figure F for an example of how diverting booms are set.

Tending. Since booms need almost constant tending to clear debris, reset anchors, and repair damage, a crew with a small boat should be assigned 24 hours a day to ensure that the deployed booms are effective. Utility Boats are used to tow oil-containment boom to the spill site and tend them once they are in place.

Cleaning. Booms become coated with oil during the course of an operation and will require cleaning. A cleaning area should be set aside with the proper equipment available, where equipment can be cleaned without any further contamination of the area. See "NAVFAC P-908, Oil Spill Control for Inland Waters and Harbors" for some suggestions on cleaning areas.

Use with Sorbents. Sorbents can be used along with booms to contain and collect oil. Sheet or boom sorbents can be placed in the pocket of a boom to recover thin oil slicks. Sheet sorbents can be placed ahead of a slick to contain the leading edge as shown in Figure G.

Lighting. If boom is used in a channel or near boat traffic, marker lights must be set. If crossing the channel, set a flashing amber light every 30 feet with two vertical red lights at each end or to mark openings in the boom for boat traffic. Advise local harbor authorities of the location of the boom. If not in a channel, use enough lights to show the general direction of the boom.

For further guidance, see Figure H or the latest issue of the U.S. Inland Navigation Rules 88.15 "Lights on Dredge Pipelines". Substitute any available light if amber or red are not immediately available.

Sweeping. Towing an oil boom to sweep an oil spill area is difficult unless the proper boats, boom, and trained crews are available and a place has been designated to store the collected oil.

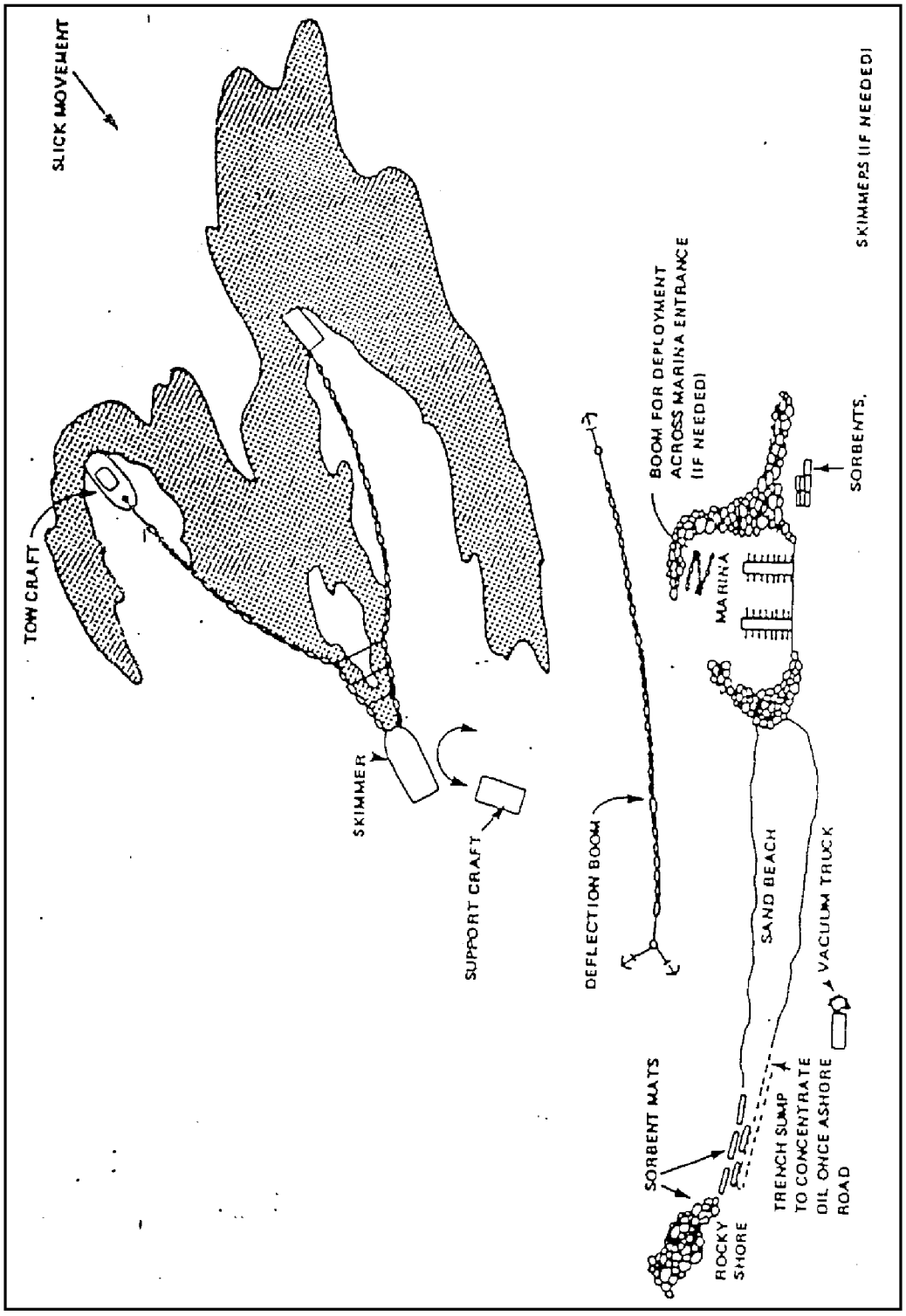


Figure F - Coastal Area Procedures

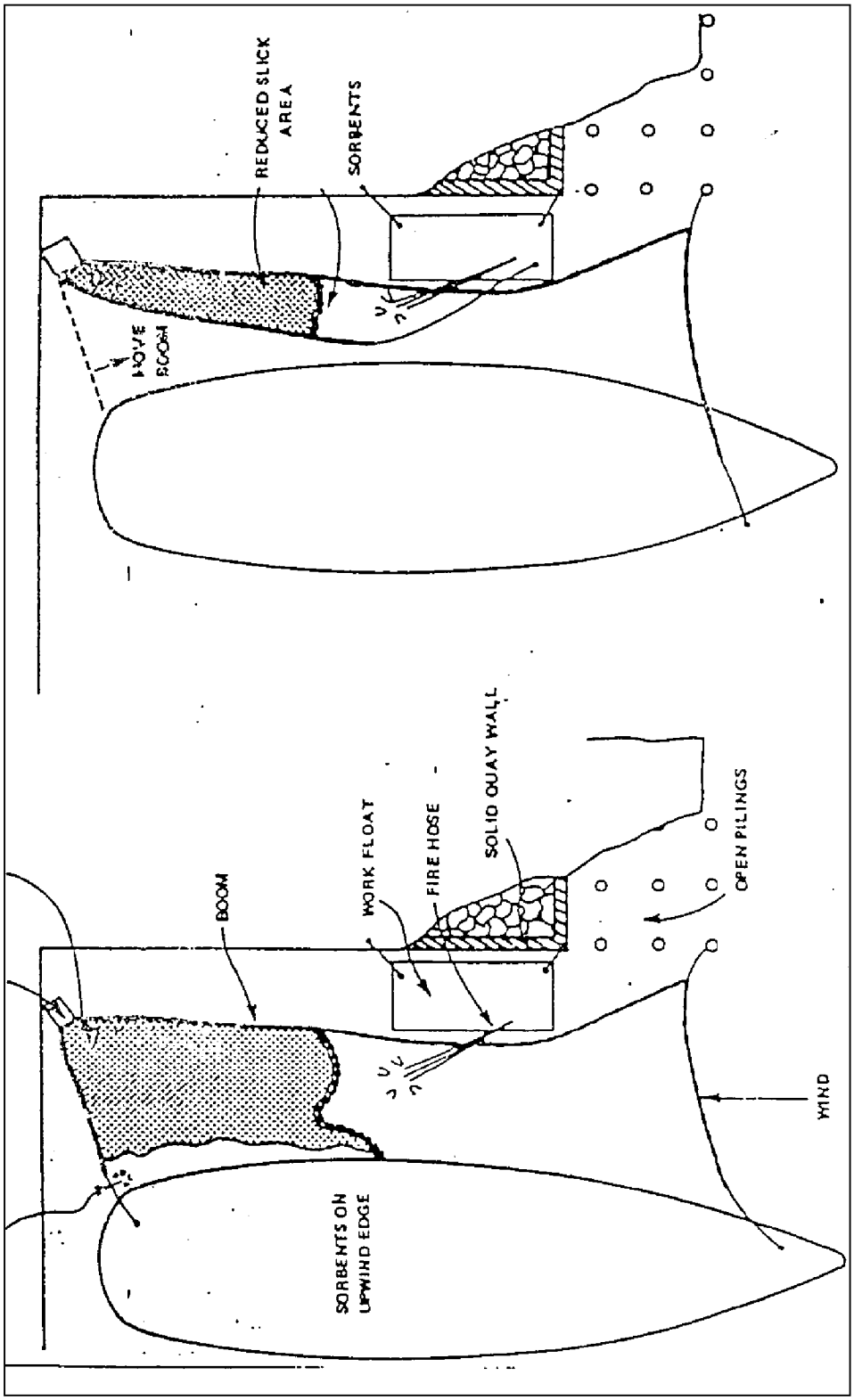


Figure G - Confined Harbor Spill Procedures

INLAND

88.15 Lights on dredge pipelines.

Dredge pipelines that are floating or supported on trestles shall display the following lights at night and in periods of restricted visibility.

(a) One row of yellow lights. The lights must be:

1. Flashing 50 to 70 times per minute,
2. Visible all around the horizon,
3. Visible for at least 2 miles on a clear dark night,
4. Not less than 1 and not more than 3.5 meters above the water,
5. Approximately equally spaced, and
6. Not more than 10 meters apart where the pipeline crosses a navigable channel. Where the pipeline does not cross a navigable channel the lights must be sufficient in number to clearly show the pipeline's length and course.

(b) Two red lights at each end of the pipeline, including the ends in a channel where the pipeline is separated to allow vessels to pass (whether open or closed). The lights must be:

1. Visible all around the horizon, and
2. Visible for at least 2 miles on a clear dark night, and
3. One meter apart in a vertical line with the lower light at the same height above the water as the flashing yellow light.

Figure H - U.S. Coast Guard Inland Water Navigation Rules

Oil Recovery

There are many ways to recover oil from the surface of the water. However, it may also be necessary to dig up contaminated soil and pump oil out of collection pits. It is not always necessary to have specialized skimmers or other equipment; many cleanup functions can be completed using common implements such as:

- Buckets. A team with buckets or other small containers can pick up large quantities of oil in the same amount of time that a pump or skimmer system can be delivered and ready.
- Shovels. Hand shovels and forks can pick up contaminated oil-soaked earth and sand. Remember that vehicles can get stuck on beaches, so keep individual collected loads light.

Beach Cleanup. The biggest part of a cleanup effort is often on the shoreline. This requires organization and the support of hand laborers. "NAVFAC P-908, Oil Spill Control for Inland Waters and Harbors" and the ITOPF Technical Papers discuss organizing beach cleanup and equipment.

Pumps. Oil can be pumped out of recovery pits with hand or power driven pumps.

- Use positive displacement pumps with screened suctions. Diaphragm pumps are often the most available and are simple to use. Only positive displacement pumps should be used when moving collected oil to limit further emulsification of the oil with water.

- Pumps can be used to skim oil floating on water. Make a wire skimmer by putting the suction hose in a bucket or similar container to skim only the top layer of oil if water is underneath.
- Eductors can also be used to pump oil if there is sufficient storage to settle out water from the recovered oil and water mixture. Some fixed emulsification will occur which will increase disposal problems of oily waste.
- Vacuum trucks may be available. These are large mobile tanks that can suck up oil or other liquids without pumps. They are very useful in recovering oil from sumps or confined pier areas.

Sorbents. Most spills will need some sorbents, either as the primary recovery method, final cleanup of sheens or for chronic spills and runoff. Sorbents include a variety of materials such as polypropylene fabric, rags, straw, and other available materials.

- Sorbents should always be used in fabric sheets or in contained bags. Bagged sorbent pillows can be used in manholes or in pits as shown in Figure I.
- Since loose sorbents in water are difficult to contain and pick up, their use is discouraged. However, loose sorbents should be used for land spills.
- Some of the better polypropylene melt-blown sorbents can recover as much as 10 times their weight in oil.
- When handling the oil soaked sorbents, bear in mind that they are as hazardous as the liquid they contain. Sorbents must be disposed of properly. Some types can be incinerated if approved locally, while other oils can be squeezed or drained out. Plastic bags are usually never strong enough to hold much soaked sorbent. Metal cans or other leak-tight containers are more suitable.

Skimmers. An oil skimmer (See Figure J) is a device intended to sweep oil off the surface of water. It is difficult, in any but the best of conditions, to skim significant quantities of oil from the surface of the water because the two fluids are similar.

There are as many skimmer types as there are inventors of skimmers but most are a variation of methods shown in Figure K. Some skimmers are better for only light oils and can clog in heavy oil or debris, while others are better in debris and can pump heavy oil. Therefore, the selection of the proper type skimmer is crucial to the success of the recovery. Experienced operators can provide advice on the suitability of the equipment to the spill. Points to remember when operating skimmers include:

- Storage. A skimmer is only as effective as its onboard storage or receiving barge or tank. Don't request a skimmer unless arrangements have been made to offload collected oil.
- Operators. Experienced crews are needed even for a small skimmer. Operations are also limited by daylight, as it is difficult to see oil even with night lighting.
- Seaworthiness. Skimmers usually cannot be operated in moderate or rough sea conditions. A skimmer must be able to survive and keep its operators safe in poor conditions, or be able to be quickly recovered onto a larger vessel or to shore. Many skimmers are not designed to leave a calm harbor.
- Sweeping. Sweeping with skimmer and booms is shown in Figure L. Sweeping oil is a difficult operation and should be attempted only by experienced crews with good equipment. Skimmers should mostly be used in fixed locations with oil directed to the skimmer by booms and hoses.

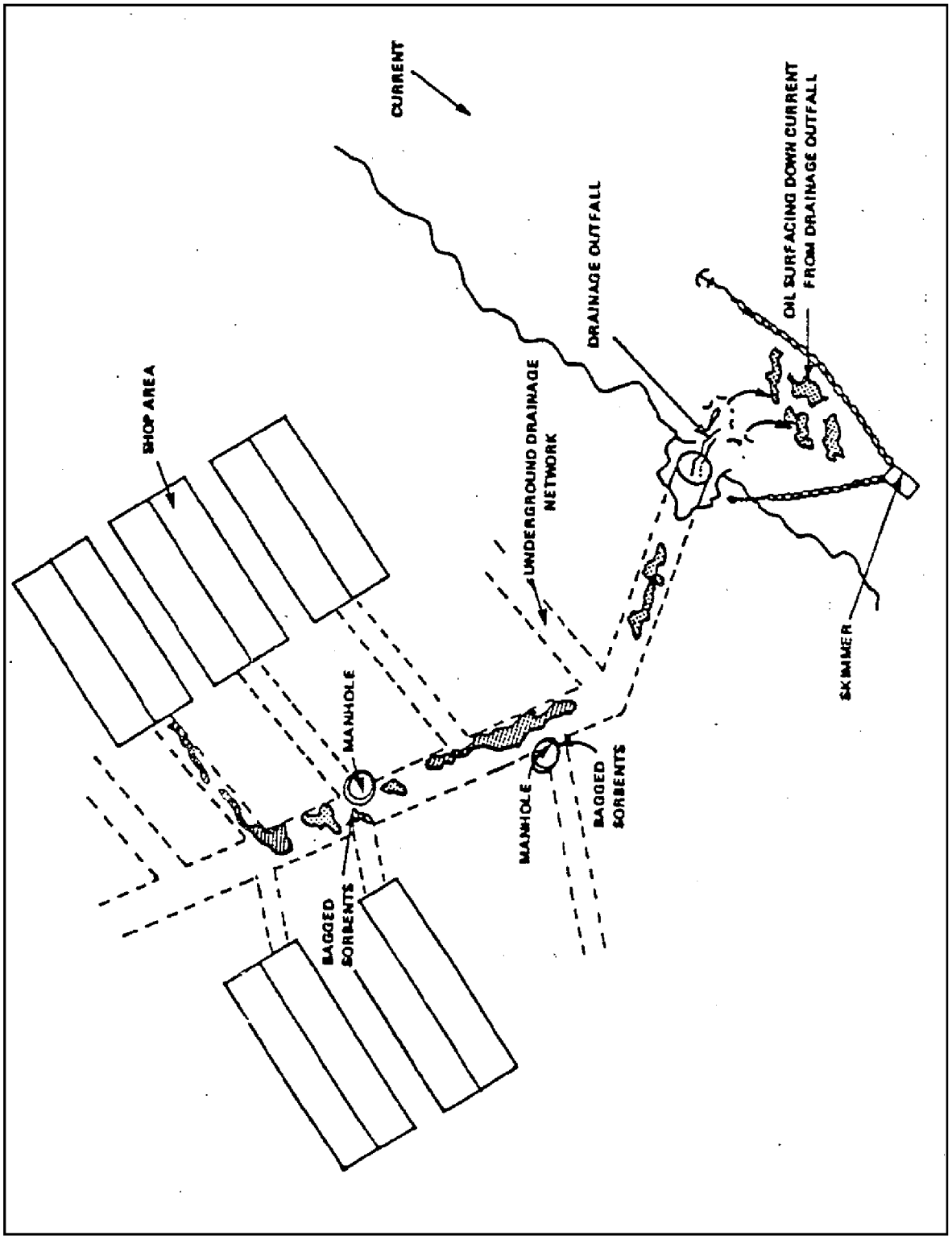


Figure I - Drainage Outfall Procedures

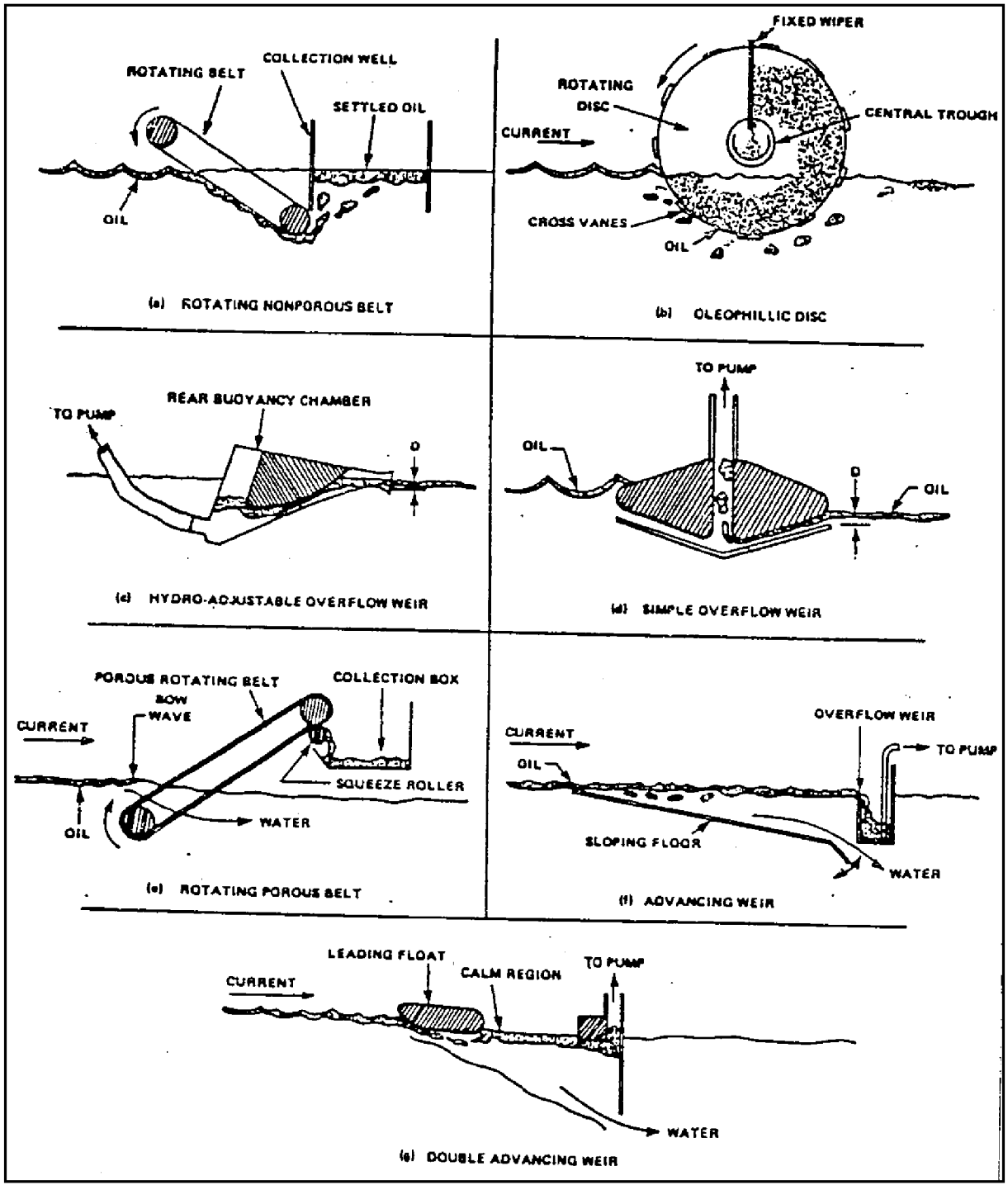


Figure J - Skimmer Types

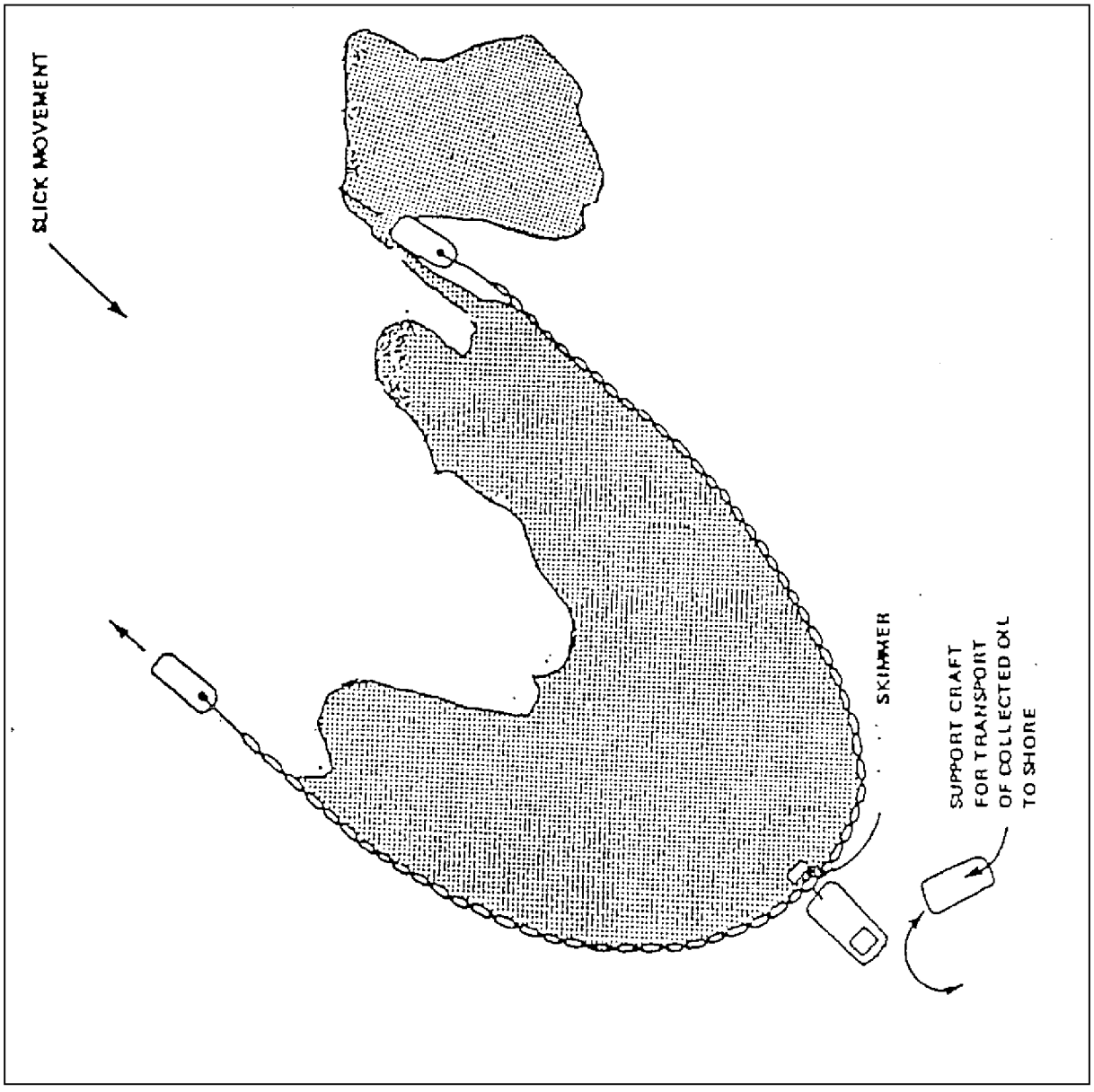


Figure K - Harbor Open Water Procedures with Medium Skimmer

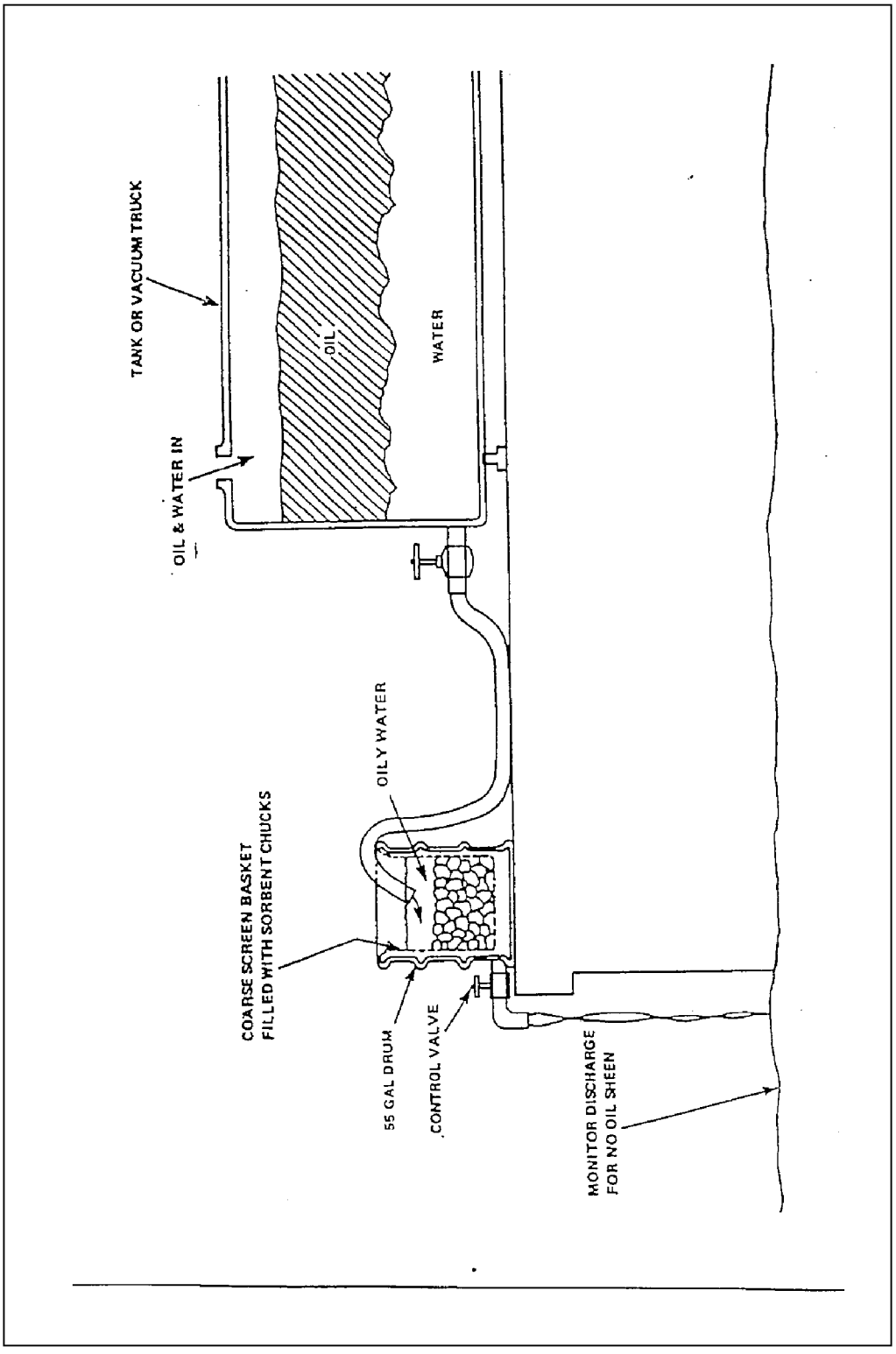


Figure L - Decanting

Storage and Separation

Temporary oil storage is discussed in Appendix E, Table E-6. Sufficient storage volume and access is needed to support all skimming operations. Storage tanks can be used to settle oil and water mixtures, water can then be decanted to concentrate the oil and reduce disposal volumes.

Oil Storage systems available from NAVFAC includes two types of Ships Waste Offload Barges (SWOBs), one handles oily waste while the other handles shipboard sewage waste. Each is essentially a floating waste oil tank, 106 feet long and 26 feet wide, with a storage capacity of 75,000 gallons. A diesel generator onboard the barge supplies power to two electrically driven 150 GPM offloading pumps. Four 50-foot lengths of 2-1/2 inch hose with hose handling equipment are provided with each barge.

Decanting is the process of allowing a recovered solution to remain in a container for a period of time to allow the natural separation to take place. To assure that the water output from the decant is safe to dispose of pass the settled water through a secondary container to catch any oil which might be carried with the decanted water. Decant is normally done as close to the recovery site as possible to avoid contaminating clean areas. See Figure L for a suggested arrangement for water decanting.

Estimating Oil Spill Movement and Volume

Oil slicks move under the influence of wind and current. Wind is a prominent factor on open water. A slick usually moves at a speed of 2-4 percent of the wind velocity and, in the northern hemisphere, slightly to the right of the direction in which the wind is blowing. In the absence of wind, and in places such as rivers, currents will control the slick's movement.

A rough estimate of the volume of oil on the water can be made from the appearance of the slick. The information in Table A can be used to roughly estimate spill quantity.

TABLE A: ESTIMATING OIL VOLUME ON WATER

Standard Term	Gallons Of Oil Per Square Mile	Appearance
Barely visible	0 - 25	Barely visible under favorable light
Silvery	50	Silvery sheen
Faint Colors	100	Slightly colored sheen
Brightly colored	200	Slightly colored bands
Dull	600	Dull brown
Dark	1,300	Dark brown

NOAA

PAGE INTENTIONALLY LEFT BLANK

TAB 2 - RESPONSE PERMITS AND CONSULTATIONS

Table of Contents

Response Permits and Consultations 1
Response Permits and Consultations Tracking Sheet..... 5

PAGE INTENTIONALLY LEFT BLANK

RESPONSE PERMITS AND CONSULTATIONS						
Permit Name/ Consultation	**Agency**	**When Required**	**Purpose Of Permit**	**Equivalent Standard**	**Additional Information**	**Application Form**
Consultation for use of Dispersants	Oceana Regional Response Team	Use of dispersants in unapproved areas (waters <60 ft deep)	Federal On-Scene Coordinator must get pre-approval for the use of dispersants in non-approved waters.	NA	http://www.oceaniarrt.org/go/doc/3911/1039647/	NA
Work on Structures in Navigable Waters, Section 10 Permits	U.S. Army Corps of Engineers (USACE)	Projects in, over, or under U.S. navigable waters	Maintains and protects navigation in U.S. waters. Authorized under Section 10 of the Rivers & Harbors Act. Any project that creates an obstruction or alteration in, over, or under navigable U.S. waters. Includes construction and maintenance of piers, pilings, wharfs, and bulkheads.	NA	https://www.fema.gov/clean-water-act-1948-amended-1966-1972-section-10-rivers-harbors-act-1899	http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/ObtainaPermit.aspx
Discharge Dredged or Fill Material, Section 404 Permit	USACE	Discharge of dredge or fill material into U.S. waters	If you plan to discharge dredged or fill material into the waters of the United States, including wetlands.	Also may need CZM, National Historic Preservation Act, Endangered Species Act. Tribal Trust Issues, and National Environmental Policy Act.	https://www.epa.gov/cwa-404	http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/ObtainaPermit.aspx
NPDES Discharge Permit	Environmental Protection Agency (EPA)	Construction activities that have potential stormwater discharge to surface water	Protects and maintains water quality and prevents and minimizes sediment, chemicals and other pollutants from entering surface or ground waters. Construction activities that disturb one or more acres of land and have potential stormwater or storm drain discharge to surface water.	Permit may be issued after an operation occurs but ONLY if directed by contact person. Emergency Permits are always expedited.	https://www.epa.gov/npdes	https://eha-cloud.doh.hawaii.gov/epermit/Home/d2db3b27-3fc7-43fc-91cf-bf31c765dc75
Resource Conservation and Recovery Act (RCRA)	EPA 40 CFR 260-279	Generation, transportation or disposal of hazardous waste	All waste must be manifested, labeled, and transported safely to a facility that is in compliance with EPA regulations	NA	https://www.epa.gov/rcra/resource-conservation-and-recovery-act-rcra-overview	NA
Consultation on Cultural Resources, Section 106 of the National Historic Preservation Act	Department of Interior (DOI)	Federal projects that effect historic properties	Federal agencies must take into account the effect a project may have on historic properties. It allows interested parties an opportunity to comment on the potential impact projects may have on significant archaeological or historic sites. The main purpose for the establishment of the Section 106 review process is to minimize potential harm and damage to historic properties.	NA	http://www.nps.gov/tribes/National_Section_106.htm	NA

RESPONSE PERMITS AND CONSULTATIONS						
Permit Name/ Consultation	**Agency**	**When Required**	**Purpose Of Permit**	**Equivalent Standard**	**Additional Information**	**Application Form**
Native American Graves Protection and Repatriation Act (NAGPRA)	DOI - National Park Service (NPS)	Operations on federal property that results in the inadvertent discovery of native Hawaiian burial sites	NAGPRA provides a process which Federal agencies to return certain Native American cultural items (human remains, funerary objects, sacred objects, or objects of cultural patrimony) to lineal descendants, and culturally affiliated Indian tribes and Native Hawaiian organizations. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of cultural items on Federal and tribal lands, and penalties for noncompliance and illegal trafficking.	NA	http://www.nps.gov/NAGPRA/	NA
National Park Special Use Purpose	DOI - NPS	Special activities taking place within a National Park	Required for activities that provide a benefit to an individual, group, or organization, rather than the public at large and for activities that require some degree of management by the National Park Service in order to protect park resources and the public interest.	NA	http://www.fs.fed.us/specialuses/index.shtml	http://www.fs.fed.us/specialuses/special_app_process.shtml
Migratory Bird Treaty Act. (MBTA) Rehabilitation Permit	DOI - Fish and Wildlife Service (FWS)	Rehabilitation of migratory birds	Authorization to take, transport and temporarily possess sick, injured, and orphaned migratory birds with the goal of releasing them back to the wild.	NA	https://www.fws.gov/permits/faqs/Rehab%20Permit%20Fact%20Sheet.pdf	https://www.fws.gov/forms/3-200-10b.pdf
MBTA Rehabilitation Permit Incident Specific Authorization	DOI - FWS	Rehabilitation of oiled migratory birds	MBTA Rehabilitation Permit requires permit holder to obtain specific authorization from FOSC and FWS to work on each oil spill incident.	NA	http://www.fws.gov/forms/3-200-10b.pdf	http://www.fws.gov/forms/3-200-10b.pdf
MBTA Rehabilitation Permit Incident Specific Authorization	DOI - FWS	Recover dead oiled birds	Spill specific authorization is required to remove dead oiled birds at each oil spill incident.	NA	http://www.fws.gov/forms/3-200-10b.pdf	http://www.fws.gov/forms/3-200-10b.pdf
MBTA Special Purpose Salvage Permit	DOI - FWS	Research/scientific study or education	Authorization to possess or collect dead migratory birds, nests, eggs and parts from the wild that you had no part in the killing or death thereof, for wildlife conservation education purposes.	NA	http://www.fws.gov/forms/3-200-10a.pdf	http://www.fws.gov/forms/3-200-10a.pdf
MBTA Scientific Collecting Permit	DOI - FWS	Research or scientific study	Authorization to collect, transport or possess migratory birds, their parts, nests, or eggs for scientific research or educational purposes.	NA	http://www.fws.gov/forms/3-200-7.pdf	http://www.fws.gov/forms/3-200-7.pdf

RESPONSE PERMITS AND CONSULTATIONS						
Permit Name/ Consultation	**Agency**	**When Required**	**Purpose Of Permit**	**Equivalent Standard**	**Additional Information**	**Application Form**
Marine Mammal Protection Act (MMPA) Permits	National Marine Fisheries Service (NMFS) - Office of Protected Resources	"Take" of marine mammals	The MMPA generally prohibits take" of marine mammals in U.S. waters by any person and by U.S. citizens in international waters. NOAA Fisheries can authorize take for the following activities: Scientific research enhancing the survival or recovery of a marine mammal species or stock commercial and educational photography first-time import for public display capture of wild marine mammals for public display incidental take during commercial fishing operations and incidental take during non-fishery commercial activities. "	NA	http://www.nmfs.noaa.gov/pr/laws/mmpa/	http://www.nmfs.noaa.gov/pr/permits/mmpa_permits.html
NMFS Endangered Species Act Permits	NMFS Office of Protected Resources	"Take" of an endangered or threatened species	Required for any activity resulting in the "take" of an endangered or threatened species, whether or not deliberate. Two types: Permits for scientific research or to enhance the propagation and survival of the species, and Permits for taking species incidental to (not the purpose of) an otherwise lawful activity. The latter must be accompanied by a Conservation Plan (CP), often referred to as a Habitat Conservation Plan (HCP).	NA	http://www.nmfs.noaa.gov/pr/laws/esa/	http://www.nmfs.noaa.gov/pr/permits/ESA_permits.html
Endangered Species Act Section 7 Consultations	NMFS and the U.S. Fish and Wildlife Service (USFWS)	If response actions may affect endangered or threatened species	Federal agencies involved in oil spill response in the U.S. are required to comply with several environmental compliance laws. Where a Federal agency is operating in a way that may affect endangered species in the area, Section 7 of the Endangered Species Act (ESA) requires the agency to "consult" with the two Federal agencies responsible for protecting those species and habitats the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS).	NA	https://www.fws.gov/midwest/endangered/section7/section7.html	Resources: https://www.nrt.org/Main/Resources.aspx?ResourceType=ESA%20MOA&ResourceSection=2
STATE PERMIT/CONSULTATION						
Cross Connection/ Backflow Preventions Permit	Hawaii Department of Health HAR Title 11; Chap. 21	Connecting non-potable process to drinking water system.	When connecting non-potable process to drinking water system. Usually requires backflow preventer to be installed.	CNRHINST 11330.2C Must contact FFD Fire Prevention for permission to hook up to fire hydrant.	http://health.hawaii.gov/oppd/files/2015/06/11-21.pdf	http://www.boardofwatersupply.com/customer-service/permits-and-applications

RESPONSE PERMITS AND CONSULTATIONS						
Permit Name/ Consultation	**Agency**	**When Required**	**Purpose Of Permit**	**Equivalent Standard**	**Additional Information**	**Application Form**
Coastal Zone Management Permit	Hawaii Coastal Zone Management Program	Operations within the coastal zone.	Per 2007 agreement w State, oil spill and hazardous substance waste cleanup is a de minimis activity and does not require CZM review if BMPs are followed.		http://planning.hawaii.gov/czm/	http://planning.hawaii.gov/czm/special-management-area-permits/
Noise Permit of Variance	Hawaii Department of Health HAR Title 11; Chap. 46	When noise from equipment / operations exceeds state limits, especially for night work.	Defines the maximum permissible sound levels, and provides for the prevention, control, and abatement of noise pollution in the state from stationary noise sources and industrial activities.	OPNAVINST 5090.1D requires compliance with State and local noise ordinances.	http://health.hawaii.gov/irhb/noiseforms/	http://health.hawaii.gov/irhb/files/2013/07/noisevarapp.pdf
Air Emissions - Non-covered Source Permit	Hawaii Department of Health HAR Title 11; Chap. 60.1-62	Operations requiring the use of fossil fuel machinery, e.g. emergency generators.	Air Pollution Control Permit is required prior to construction, reconstructing, modifying or operating a stationary air pollution source or air pollution control equipment.	NA	http://health.hawaii.gov/cab/permit-application-forms/	http://health.hawaii.gov/cab/files/2013/05/nsp_all_initial.pdf
Demolition Notification	Hawaii Department of Health HAR Title 11; Chap. 501	Required for major structural demolition of buildings containing asbestos.	Requirements for the processing, handling, and disposal of asbestos-containing material. Protect the general public by minimizing the release of asbestos fibers when facilities that contain asbestos-containing materials are demolished or renovated.	40 CFR 61, Subpart M	http://health.hawaii.gov/irhb/asbforms/	http://health.hawaii.gov/irhb/files/2013/07/asbestosnotification.pdf
NAVY PERMITS/CONSULTATION						
Excavation Work on JBPHH	NAVFAC HI	Excavation of contaminated soil.	Consult with the Assistant Public Works Officer (APWO) before excavating any contaminated soil.	NA	APWO (808) 448-2701 Emergency/Service Desk (808) 449-3100	NA

RESPONSE PERMIT AND CONSULTATION TRACKING SHEET							
Permit Name/ Consultation	Agency	Waiver Received/Date	Timeframe/Cost	Expiration Date	Point Of Contact (Name, Phone, Email)	Permit Conditions	Notes

PAGE INTENTIONALLY LEFT BLANK

TAB 3 - NOSC REPRESENTATIVE TRAINING RESOURCES

PAGE INTENTIONALLY LEFT BLANK

TAB 3 - NOSC REPRESENTATIVE TRAINING RESOURCES

- **Attend Facility Response Team (FRT) courses at naval installations in your assigned Navy Region**
- **Attend Table Top Exercises (TTX) provided by the Naval Safety & Environmental Training Center (NAVSAFENVTRACEN):** *Information available at http://www.public.navy.mil/navsafecen/navsafenvtracen/Pages/index.aspx*
- **CNIC Regional Operations Center (ROC) Training:** *Register with your local ROC POC*
- **Department of Transportation (DOT) Hazardous Materials Training:** *http://www.phmsa.dot.gov/hazmat/outreach-training/training-modules*
- **Incident Command System (ICS)-005 An Introduction to Hazardous Materials:** *Register at https://training.fema.gov/is/courseoverview.aspx?code=is-5.a*
- **ICS-075 Military Resources in Emergency Management:** *Register at https://training.fema.gov/is/courseoverview.aspx?code=is-75*
- **ICS-100 Introduction to Incident Command System:** *Register at https://training.fema.gov/nims/*
- **ICS-200 ICS for Single Resources and Initial Action Incidents:** *Register at https://training.fema.gov/nims/*
- **ICS-230d Fundamentals of Emergency Management:** *Register at https://training.fema.gov/is/courseoverview.aspx?code=is-230.d*
- **ICS-300 Intermediate ICS for Expanding Incidents:** *Register at https://training.fema.gov/nims/*
- **ICS-301 Radiological Emergency Response:** *Register at https://training.fema.gov/is/courseoverview.aspx?code=is-301*
- **ICS-400 Advanced ICS Command and General Staff - Complex Incidents:** *Register at https://training.fema.gov/nims/*
- **ICS-410 Advanced Incident Commander Training:** *https://training.fema.gov/emiweb/is/icsresource/trainingmaterials.htm*
- **ICS-546 Continuity of Operations (COOP) Awareness Course:** *Register at https://training.fema.gov/is/courseoverview.aspx?code=IS-546.a*
- **ICS-547a Introduction to Continuity of Operations:** *Register at https://training.fema.gov/is/courseoverview.aspx?code=is-547.a*
- **ICS-700 National Incident Management System (NIMS) An Introduction:** *Register at https://training.fema.gov/nims/*
- **ICS-701 NIMS Multiagency Coordination System (MACS):** *Register at https://training.fema.gov/nims/*
- **ICS-702 NIMS Public Information Systems:** *Register at https://training.fema.gov/nims/*
- **ICS-703 NIMS Resource Management:** *Register at https://training.fema.gov/nims/*
- **ICS-775 Emergency Operations Center (EOC) Management and Operations:** *Register at https://training.fema.gov/nims/*
- **ICS-800a National Response Plan (NRP) An Introduction:** *Register at https://training.fema.gov/nims/*
- **ICS-800b National Response Framework, An Introduction:** *Register at https://training.fema.gov/is/courseoverview.aspx?code=IS-800.b*
- **ICS-836 Nuclear/Radiological Incident Annex:** *Register at https://training.fema.gov/is/courseoverview.aspx?code=IS-836*
- **National Oceanic and Atmospheric Administration (NOAA) Aerial Observation of Oil Spills:** *Information at http://response.restoration.noaa.gov/training-and-education/training/workshops/aerial-observation-training.html*
- **NOAA Science of Oil Spills:** *Register at http://response.restoration.noaa.gov/sos_application*

- **NOAA Scientific Support Coordinator (SSC):** *Information on how the SSC may support the FOSC and NOSC Rep at http://response.restoration.noaa.gov/sites/default/files/FOSC_Guide_2015.pdf*
- **National Oil Spill Response Research & Renewable Energy Test Facility OHMSETT Oil Spill Recovery Technician (OSRT) Course:** *Register at http://www.ohmsett.com/training.html*
- **National Spill Control School (NSCS) Oil Spill Response Strategies & Tactics:** *Register at http://www.nscs.tamucc.edu/oilspillcourses/index.html*
- **Natural Resources Damage Assessment (NRDA):** *Register at https://training.fws.gov/NCTCWeb/catalog/CourseSearch.aspx*
- **Occupational Safety Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) 40 Hour or 8 Hour Update:** *Register online at CECOS (tuition is centrally funded)*
- **Participate in multi-agency joint exercises with Area Committee(s) within your assigned Navy Region**
- **Shoreline Cleanup and Assessment Technique (SCAT):** *Register at http://response.restoration.noaa.gov/training-and-education/training/workshops/scat-training-application-form.html*
- **Training/Awareness of various NOAA software tools:** *http://response.restoration.noaa.gov/oil-and-chemical-spills and http://response.restoration.noaa.gov/environmental-restoration*
- **United States Coast Guard (USCG) On-Scene Coordinator Crisis Management Course:** *To register for the course send Mr. Larry Brooks of USCG Training Center Yorktown an email at: Lawrence.M.Brooks@uscg.mil. Larry maintains a waiting list and coordinates with the Coast Guard headquarters' staff for final candidates about 8 weeks prior to the start of the course. If you have any questions or require additional information, you can contact Larry at (757) 856-2710 or send him an email.*

NOSC REPRESENTATIVE - TRAINING MATRIX		
Course Or Training	**Frequency**	**Registration Information**
HAZWOPER 40 Hour Training	Once	Register online at CECOS (tuition is centrally funded)
HAZWOPER 8 Hour Refresher Training	Annually	Register online at CECOS (tuition is centrally funded)
Facility Response Team (FRT) Training	See Schedule	Attend at naval installations in your region
Table Top Exercises (TTX)	See Schedule	http://www.public.navy.mil/navsafecen/navsafenvtracen/Pages/index.aspx
ICS-100 Introduction to Incident Command System	Once	https://training.fema.gov/nims/
ICS-200 ICS for Single Resources and Initial Action Incidents	Once	https://training.fema.gov/nims/
ICS-300 Intermediate ICS for Expanding Incidents	Once	Coordinated by local Emergency Management Agencies, please contact them directly for course offerings in your area. Contact information for State or Territorial Emergency Management Agencies can be found at https://training.fema.gov/programs/aps/stolist.aspx
ICS-400 Advanced ICS Command and General Staff - Complex Incidents	Once	Coordinated by local Emergency Management Agencies, please contact them directly for course offerings in your area. Contact information for State or Territorial Emergency Management Agencies can be found at https://training.fema.gov/programs/aps/stolist.aspx

NOSC REPRESENTATIVE - TRAINING MATRIX		
Course Or Training	**Frequency**	**Registration Information**
ICS-700 National Incident Management System (NIMS) An Introduction	Once	https://training.fema.gov/nims/
ICS-800a National Response Plan (NRP) An Introduction	Once	https://training.fema.gov/nims/
ICS-800b National Response Framework, An Introduction	Once	https://training.fema.gov/is/courseoverview.aspx?code=IS-800.b
CNIC Regional Operations Center (ROC) Training	Once	Register with your local ROC POC
Incident Command System (ICS)-005 An Introduction to Hazardous Materials	Once	https://training.fema.gov/is/courseoverview.aspx?code=is-75
Department of Transportation (DOT) Hazardous Materials Training	Every 3 Years	http://www.phmsa.dot.gov/hazmat/outreach-training/training-modules
Participate in multi-agency joint exercises with Area Committee(s) within your assigned Navy Region	As Scheduled If Available	Attend Area Committees in your AOR for more information and scheduling
United States Coast Guard (USCG) On-Scene Coordinator Crisis Management Course	Once	To register for the course send Mr. Larry Brooks of USCG Training Center Yorktown an email at: Lawrence.M.Brooks@uscg.mil. Larry maintains a waiting list and coordinates with the Coast Guard headquarters' staff for final candidates about 8 weeks prior to the start of the course. If you have any questions or require additional information, you can contact Larry at (757) 856-2710 or send him an email. (LANT OHS PM POC will coordinate)
Training/Awareness of various NOAA software tools	Once	http://response.restoration.noaa.gov/oil-and-chemical-spills *and* http://response.restoration.noaa.gov/environmental-restoration
NOAA Scientific Support Coordinator (SSC)	Once	Information on how the SSC may support the FOSC and NOSC Rep at http://response.restoration.noaa.gov/sites/default/files/FOSC_Guide_2015.pdf
Shoreline Cleanup and Assessment Technique (SCAT)	Once	http://response.restoration.noaa.gov/training-and-education/training/workshops/scat-training-application-form.html
NOAA Science of Oil Spills	Once	http://response.restoration.noaa.gov/sos_application
Natural Resources Damage Assessment (NRDA)	Once	https://training.fws.gov/NCTCWeb/catalog/CourseSearch.aspx

NOSC REPRESENTATIVE - TRAINING MATRIX		
Course Or Training	**Frequency**	**Registration Information**
National Oceanic and Atmospheric Administration (NOAA) Aerial Observation of Oil Spills	Once	http://response.restoration.noaa.gov/training-and-education/training/workshops/aerial-observation-training.html
ICS-230d Fundamentals of Emergency Management	Once	https://training.fema.gov/is/courseoverview.aspx?code=is-230.d
ICS-410 Advanced Incident Commander Training	Once	https://training.fema.gov/emiweb/is/icsresource/trainingmaterials.htm
ICS-075 Military Resources in Emergency Management	Once	https://training.fema.gov/is/courseoverview.aspx?code=is-75
ICS-301 Radiological Emergency Response	Once	https://training.fema.gov/is/courseoverview.aspx?code=is-301
ICS-546 Continuity of Operations (COOP) Awareness Course	Once	https://training.fema.gov/is/courseoverview.aspx?code=IS-546.a
ICS-547a Introduction to Continuity of Operations	Once	https://training.fema.gov/is/courseoverview.aspx?code=is-547.a
ICS-701 NIMS Multiagency Coordination System	Once	https://training.fema.gov/nims/
ICS-702 NIMS Public Information Systems	Once	https://training.fema.gov/nims/
ICS-703 NIMS Resource Management	Once	https://training.fema.gov/nims/
ICS-775 Emergency Operations Center (EOC) Management and Operations	Once	https://training.fema.gov/nims/
ICS-836 Nuclear/ Radiological Incident Annex	Once	https://training.fema.gov/is/courseoverview.aspx?code=IS-836
National Spill Control School (NSCS) Oil Spill Response Strategies & Tactics	Once	http://www.nscs.tamucc.edu/oilspillcourses/index.html
National Oil Spill Response Research & Renewable Energy Test Facility OHMSETT Oil Spill Recovery Technician (OSRT) Course	Once	http://www.ohmsett.com/training.html

TAB 4 - PHONE AND RESOURCE DIRECTORY

PAGE INTENTIONALY LEFT BLANK

PHONE DIRECTORY

Section 5070 of the Hawaii Area Contingency Plan (Change 6.2), dated October 2015, provides a phone directory of personnel and resources within the Hawaiian Islands that may be used during an OHS spill response.

THIS PAGE INTENTIONALLY LEFT BLANK

Section 5070 - Personnel and Information Resources

This is a listing of possible sources of trained personnel that can be used during a pollution response.

U.S. Coast Guard Sector Honolulu

Sector Honolulu Command Center 24 Hours ..... **(808) 842-2600**

Commander
U.S. Coast Guard
Sector Honolulu
400 Sand Island Parkway
Honolulu, Hawaii 96819

Police Departments

Federal

Federal Bureau of Investigation ..... (808) 566-4300
Marshal Service ..... (808) 541-3000
Armed Forces Police ..... (808) 438-7105

State Of Hawaii

Harbor Police ..... (808) 587-2006
Sheriff ..... 24 hours (808) 586-1352

All Islands *EMERGENCY* ONLY *911*
Hawaii (Big Island) *Hilo* ..... (808) 935-3311
Kauai *Lihue* ..... (808) 241-1711
Lanai *Lanai City* ..... (808) 565-6428
Maui *Wailuku* ..... (808) 244-6400
Molokai *Kaunakakai* ..... (808) 553-5355
Oahu *Honolulu* ..... (808) 529-3111

Fire Departments

Federal

Federal Fire Dept. ..... (808) 471-7117
Hickam A.F.B. ..... (808) 449-7117

All Islands *EMERGENCY ONLY* *911*
Hawaii (Big Island) *Hilo* ..... (808) 961-8336
Hilo Airport (808) 934-5831
Kona Airport (808) 327-9503
Kauai *Lihue* ..... (808) 241-4980
Lihue Airport (808) 246-1420
Lanai *Lanai City* ..... (808) 565-7474
Lanai Airport (808) 565-6611
Maui *Wailuku* ..... (808) 270-7561
Kahului Airport (808) 872-3841
Kapalua Airport (808) 669-0228

Molokai *Kaunakakai* ..... (808) 553-5601
Molokai Airport (808) 567-6008
Oahu *Honolulu* ..... (808) 523-4411

Hospitals

Hawaii (Big Island)
Hilo Medical Center ..... (808) 974-4700
Kau Hospital ..... (808) 928-2050
Kohala Hospital ..... (808) 889-6211
Kona Community Hospital ..... (808) 322-9311
North Hawaii Community Hospital ..... (808) 885-4444

Kauai
West Kauai Medical Center/KVHM ..... (808) 338-9431
Wilcox Memorial Hospital ..... (808) 245-1100

Lanai
Lanai Community Hospital ..... (808) 565-6411

Maui
Hana Community Health Center ..... (808) 248-8294
Kula Hospital ..... (808) 878-1221
Maui Memorial Medical Center ..... (808) 244-9056
Urgent Care Maui Kihei ..... (808) 879-7781
Healthcare Center ..... (808) 667-9721

Molokai
Molokai General Hospital ..... (808) 553-5331

Oahu
Castle Medical Center ..... (808) 263-5500
Hawaii Medical Center West ..... (808) 678-7000
Hawaii Medical Center East ..... (808) 547-6011
Hawaii State Hospital ..... (808) 247-2191
Kahuku Medical Center ..... (808) 293-9221
Kaiser Permanente Moanalua Medical Center ..... (808) 432-0000
Kapiolani Medical Center ..... (808) 983-6000
Kapiolani Medical Center Pali Momi ..... (808) 486-6000
Kuakini Medical Center ..... (808) 536-2236
Queens Medical Center ..... (808) 538-9011
Straub Clinic & Hospital ..... (808) 522-4000
Tripler Army Medical Center ..... (808) 433-6661
Wahiawa General Hospital ..... (808) 621-8411

Marine Pilots

Hawaii Pilots Association *–pier 19* ..... (808) 532-7233

Salvage and Dive Companies

American Marine Corp *–pier 14* ..... (808) 545-5190
Pacific Diving Industries Inc ..... (808) 833-1831
Sea Engineering Inc *–pier 21* ..... (808) 536-3603
Uaukewai Diving Salvaging & Fishing Inc *–pier 21* ..... (808) 522-1007

Towing Companies

American Marine dba American Workboats *-pier 14* ..... (808) 545-5190
Hawaiian Interisland Towing *-pier 21* ..... (808) 522-1005
Hawaiian Marine Lines ..... (808) 524-6644
Hawaiian Tug & Barge ..... (808) 543-9311
24hour dispatch (808) 543-9325
Healy Tibbitts Builders, Inc ..... (808) 487-3664
Matson Navigation Company ..... (808) 848-1211
Pacific Environmental Corp. ..... (808) 545-5195
Tow Boat Service & Mgmt. ..... (808) 522-1000
Ops *-pier 21* (808) 522-1006
afterhours (808) 216-2340
Matson Navigation Company ..... (808) 848-1211
Sause Ocean Towing ..... (808) 521-5082

State & CountyAgencies

Hawaii Emergency Management Agency (HI-EMA) ..... (808) 733-4300
Civil Defense -Hawaii (Big Island) ..... (808) 935-0031
-Kauai ..... (808) 241-1800
-Maui, Molokai, Lanai ..... (808) 270-7285
City & County of Honolulu Department of Emergency
Management (DEM) ..... Front Office (808) 723-8960
During Emergencies/Events/EOC (808) 723-8962
Department of Health Hazard Evaluation & Emergency Response ..... (808) 586-4249

Laboratories

Brewer Environmental ..... (808) 532-7400
Emet Environmental Services ..... (808) 671-8383

Environmental Interest Groups

Greenpeace ..... (808) 263-4388
Hawaii Audubon Society ..... (808) 528-1432
Nature Conservancy ..... (808) 537-4508
Sierra Club ..... (808) 538-6616

Airports and Aircraft Rentals

Airports

Hawaii (Big Island) -Hilo International ..... (808) 934-5801
-Kona International ..... (808) 327-9520
-Waimea-Kohala ..... (808) 887-8126

Kauai –Lihue ..... (808) 246-1400
Lanai -Lanai City ..... (808)565-6757
Maui -Kahului ..... (808) 872-3830
-Kapalua ..... (808) 669-0623
-Hana ..... (808) 248-8208
Molokai -Kaunakakai ..... (808) 567-6140
-Kalaupapa ..... (808) 567-6331
Oahu -Honolulu International 24hours ..... (808) 836-6411
-Kalaeloa Barbers Point ..... (808) 682-6422

Aircraft Rentals

Big Island Air ..... (808) 329-4868
Maui Aviators ..... (808) 871-6990

Vehicle Rental Companies

Car Rentals

Advantage Rent A Car ..... (800) 777-5500
Alamo Rent A Car ..... (800) 327-9633
Avis Rent A Car ..... (800) 321-3712
Budget ..... (800) 527-0700
Dollar Rent-A-Car ..... (800) 800-4000
Enterprise Rent-A-Car ..... (800) 736-8222
Hertz Rent A Car ..... (800) 654-3131
National Car Rental ..... (800) 227-7368
Thrifty Car Rental ..... (800) 367-5238

Truck Rentals

Penske Truck Rental ..... (808) 848-0844
Ryder Truck Rental ..... (808) 833-0700
U-Haul Co ..... (808) 836-0977
United Truck Rental, Inc. ..... (808) 834-6488

NOAA Weather Service - *Hawaii* ..... (808) 973-5286

Media

Newspapers

Hawaii (Big Island)

Hawaii Tribune Herald ..... (808) 935-6621
Kohala Mountain News ..... (808) 889-6909
West Hawaii Today ..... (808) 329-9311

Kauai

Garden Island,The & Kauai Beach Press ..... (808) 245-3681

Maui

Haleakala Times Inc ..... (808) 579-8020
Lahaina News ..... (808) 667-7866

Maui Bulletin,The ..... (808) 249-6868
Maui News ..... (808) 244-3981
Maui Weekly ..... (808) 875-1700

Molokai

Molokai Dispatch,The ..... (808) 552-2781

Oahu

Advertiser Honolulu,The ..... (808) 525-8000
Honolulu Star-Bulletin & Midweek ..... (808) 529-4700
Honolulu Weekly,The ..... (808) 528-1475
Hawaii Hochi ..... (808) 845-2255

Television

KGMB-9 *CBS* ..... (808) 973-5462
KHET-10 & 11 *PBS* ..... (808) 973-1000
KHNL-8 *NBC* & KFVE-5 ..... (808) 847-3246
KHON-2 *FOX* ..... (808) 591-2222
KITV-4 *ABC* ..... (808) 535-0400

Radio

Hawaii (Big Island) *Pacific Radio Group* ..... (808) 961-0651
(KAPA KIPA KISS KKON KLUA KAGB KAOY KHWI KPVS)

Kauai

KONG *Radio Group* **(KQNC KSRF KSHK KUAI)**... (808) 245-9527
Coast FM ..... (808) 245-9844
KFMN ..... (808) 246-1197
KKCR ..... (808) 826-7774

Maui

Pacific Radio Group ..... (808) 877-5566
(KPOA KJMP KJKS KLHI KMVI KNUI)
Mana'o Radio **KEAO** ..... (808) 244-2032
KONI ..... (808) 875-8866

Oahu

KSSK KHVH KIKI KHBZ KDNN ..... (808) 550-9200
Cox Radio, Inc **(KCCN KINE KRTR** KKEA KXME) (808) 275-1000
Hawaii Public Radio **(KHPR KKUA** KANO KIPO) ... (808) 955-8821
Salem Media **(KGU KAIM KHNR KHCM)** ..... (808) 533-0065

Volunteer Organizations

American Red Cross ..... (808) 734-2101
Civil Air Patrol ..... (808) 836-3417
Salvation Army ..... (808) 988-2136

Fishing Fleets

United Fishing Agency ..... (808) 536-2148

This Page Intentionally Blank

RESOURCE DIRECTORY

Section 5000 (Logistics) of the Hawaii Area Contingency Plan (Change 6.2), dated October 2015, provides a comprehensive listing of oil spill response equipment located in the Hawaiian Islands. Equipment listings are organized by Island and include equipment owned and operated by Oil Spill Response Organizations (OSRO's), Spill Response Cooperatives, and Federal Government sources (USCG and Navy Supervisor of Salvage).

Types of equipment identified include:

- Aircraft
- Boom, Harbor
- Boom, Ocean
- Boom Reels and Support Gear
- Chemical Detection Equipment
- Communications Equipment
- Compressors, Air
- Dispersants & Support Gear
- Fire and Salvage Equipment
- Generators
- Heavy Equipment (tractors, backhoes, etc.)
- Hydraulic Power unit
- Lights, Portable
- Miscellaneous Equipment
- Oil/Water Separator
- Personal Safety Equipment
- Pump, Oil or Water
- Pump, Water Only
- Pump Supplies
- Skimmers
- Sorbents
- Storage
- Trained HAZWOPER Personnel
- Underwater Equipment
- Vacuum Trucks/Trailers
- Vehicles
- Vessel, 50' or less
- Vessel, 50' plus
- Viscous Oil Pumping System (VOPS)
- Wildlife Care Supplies

Equipment lists are sorted by island:

- Island of Hawaii
- Island of Maui
- Island of Lanai
- Island of Molokai
- Island of Kauai
- Island of Oahu

PAGE INTENTIONALY LEFT BLANK

Island of Hawaii

Equip: **Absorbent Boom** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of 8" sorbent boom

Equip: **Absorbent Boom** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of 8" Sorbent Boom

Equip: **Absorbent Boom** **Quantity:** 1 **Storage Capacity:**
Owner: Honolulu Fire Dept **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of Sorbent Boom

Equip: **Absorbent Boom** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: 1 response trailer with various sorbent pads and boom

Equip: **Absorbent Pads** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of sorbent pads

Equip: **Absorbent Pads** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of sorbent sweeps

Equip: **Absorbent Pads** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of Sorbent Pads

Island of Hawaii

Equip: **Absorbent Pads** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of Sorbent Sweeps

Equip: **Absorbent Pads** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of 24" Viscous Sweep (Pom Poms on a rope)/Drag net

Equip: **Absorbent Sweep** **Quantity:** 50 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: IIilo **D-Rated Capacity:**
Boom Length:
Additional Info: Viscous sweep/drag net (bale)

Equip: **Absorbent Sweep** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of 24" Viscous Sweep (Pom Poms on a rope) drag net

Equip: **Boom Reels & Support** **Quantity:** 10 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: 33 lb danforth anchors with 150' of line & floats.

Equip: **Boom Reels & Support** **Quantity:** 11 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: 22 lb danforth anchors with 150' of line & floats.

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: Spectrum Trailer, with 1000' of Acme boom

Island of Hawaii

Equip: **Boom, Harbor** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: Container with 1000' of 8" x 12"boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: Spectrum trailer with 1000' of Acme boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length: 1600 ft
Additional Info: One container with 1600 of 8" x 12" boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length: 3000 ft
Additional Info: 20" Simplex Boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length: 400 ft
Additional Info: Qualitech Boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length: 2000 ft
Additional Info: Slickbar 24" Fence boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Kona **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: 1000' of harbor boom per response trailer with anchoring and support gear

Island of Hawaii

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length: 1980 ft
Additional Info: 67" EFC Sea Sentry II Boom

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Acme Floating API Separator

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Versitek API floating oil water separator

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Versitek API oil water separator

Equip: **Personal Safety** **Quantity:** 18 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Site Package - 12 person

Equip: **Personal Safety** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Medium workvest pack 30 sets

Equip: **Personal Safety** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Large Shade Station

Island of Hawaii

Equip: **Personal Safety** **Quantity:** 6 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Boat Package - 4 person

Equip: **Personal Safety** **Quantity:** 75 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: PPE overpack - 50 person

Equip: **Personal Safety** **Quantity:** 18 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Site Package - 12 person

Equip: **Personal Safety** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Medium workvest pack 30 sets

Equip: **Personal Safety** **Quantity:** 6 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Boat Package - 4 person

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:** 133 bbls
Boom Length:
Additional Info: 2" Double diaphragm pump w/25' hose

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: 2" Double Diaphragm pump w/25' hose

Island of Hawaii

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: 2" Homelite gas diaphragm powered pump

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Diesel powered PHP

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Diesel powered PHP

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:** 133 bbls
Boom Length:
Additional Info: 2" Double diaphragm pump w/25' hose

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Skimpak model 4200 with wand

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Kaiser AG Oleo Skimmer Model 3 with 2" kamlok fittings

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Skim Pack Model 4200

Island of Hawaii

Equip: **Skimmers** Quantity: 1 Storage Capacity:
Owner: Marine Spill Response Corp Vessel Length:
Storage Site: Hilo D-Rated Capacity: 3017
Boom Length:
Additional Info: Desmi Ocean weir skimming system

Equip: **Skimmers** Quantity: 4 Storage Capacity:
Owner: Marine Spill Response Corp Vessel Length:
Storage Site: Hilo D-Rated Capacity: 3620
Boom Length:
Additional Info: Queensboro Skimming System

Equip: **Storage** Quantity: 1 Storage Capacity: 2000 gal
Owner: Clean Islands Council Vessel Length:
Storage Site: IHilo D-Rated Capacity:
Boom Length:
Additional Info: 2000 gallon Fastank

Equip: **Storage** Quantity: 1 Storage Capacity: 2500 gal
Owner: Clean Islands Council Vessel Length:
Storage Site: Hilo D-Rated Capacity:
Boom Length:
Additional Info: 2500 gallon Quicktank w/hood

Equip: **Storage** Quantity: 1 Storage Capacity: 2400 gal
Owner: Clean Islands Council Vessel Length:
Storage Site: Hilo D-Rated Capacity:
Boom Length:
Additional Info: 2400 gallon Fastank

Equip: **Storage** Quantity: 1 Storage Capacity: 1321 gal
Owner: Clean Islands Council Vessel Length:
Storage Site: Hilo D-Rated Capacity:
Boom Length:
Additional Info: 1321 gallon -- 5 CU/M RO-tank towable storage bladder

Equip: **Storage** Quantity: 1 Storage Capacity: 2500 gal
Owner: Clean Islands Council Vessel Length:
Storage Site: Kawaihae D-Rated Capacity:
Boom Length:
Additional Info: 2500 gallon Quicktank w/hood

Island of Hawaii

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2000 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: 2000 gallon Fastank

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 1321 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: 1321 gallon -- 5 CU/M RO-tank towable storage bladder

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2400 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: 2400 gallon Fastank

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 3000 bbls
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Towable Storage Bladders

Equip: **Storage** **Quantity:** 2 **Storage Capacity:** 500 bbls
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Towable Storage Bladders

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 57 bbls
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: 57 bbls Fastank

Equip: **Storage** **Quantity:** 2 **Storage Capacity:** 7200 gal
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Two 3,600 gal. portable tanks

Island of Hawaii

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Chevrolet 2500 P/U Truck

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: John Deer 6 wheel ATV

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 21 ft
Storage Site: IIilo **D-Rated Capacity:**
Boom Length:
Additional Info: 21 ft Munson with 140 HP outboard, VHF, sweep arms for oil recovery

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 14 ft
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: 14 ft Aluminum John Boat with oars

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 10 ft
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Skiff 10' aluminum John Boat with oars

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 14 ft
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: 14 ft Newshore Boom Boat w/15hp OB motor

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 16.5 ft
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: 16.5 ft Boston Whaler with O/B

Island of Hawaii

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 8 ft
Storage Site: Kawaihae **D-Rated Capacity:**
Boom Length:
Additional Info: Skiff 8' fiberglass under pier skiff w/paddles

Equip: **Vessel, 50' or less** **Quantity:** 3 **Storage Capacity:** 400 bbls
Owner: Marine Spill Response Corp **Vessel Length:** 44 ft
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Shallow water barge (SBS)

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:** 400 bbls
Owner: Marine Spill Response Corp **Vessel Length:** 44 ft
Storage Site: IHilo **D-Rated Capacity:**
Boom Length:
Additional Info: Shallow water barge with propulsion and crane

Equip: **Vessel, 50' or less** **Quantity:** 3 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:** 28 ft
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Aluminum vessel on trailers/Shallow water push

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: USCG Sector Honolulu **Vessel Length:** 110 ft
Storage Site: Hilo **D-Rated Capacity:**
Boom Length:
Additional Info: Patrol Boat USCGC

Island of Maui

Equip: **Absorbent Boom** **Quantity:** 75 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 75 bales of Viscous Sweep (Pom Poms on a rope) (Minimum 50)

Equip: **Absorbent Pads** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 30 sorbent pad bales (Minimum 10)

Equip: **Absorbent Pads** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 30 bales of sorbent sweeps (Minimum 10)

Equip: **Absorbent Pads** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 30 bales of 8" sorbent boom (Minimum 10)

Equip: **Absorbent Pads** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 1 response trailer with various sorbent pads and boom

Equip: **Boom Reels & Support** **Quantity:** 6 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 22 lb Danforth anchors with 150 ft of anchor rope, 100 ft crown pennants with floats.

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: 1000 ft of 8" x 12" Harbor Boom in boat house

Island of Maui

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length: 1200 ft
Additional Info: One container with 1200 ft of 24" Slick Bar Boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length: 1200 ft
Additional Info: One trailer with 1200' of Acme harbor boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length: 600 ft
Additional Info: 600' of harbor boom in response trailer with anchoring and support gear

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: Versitech API Floating Oil Water Separator

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: Acme floating API separator

Equip: **Personal Safety** **Quantity:** 6 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Boat package - 4 personnel

Equip: **Personal Safety** **Quantity:** 75 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: PPR overpack - 50 person

Island of Maui

Equip: **Personal Safety** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: Medium workvest pack 30 sets

Equip: **Personal Safety** **Quantity:** 18 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: PPE site package - 4 personnel

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: 2" Diesel Powered Peristaltic Hose Pump (PHP)

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:** 228 bbls
Boom Length:
Additional Info: 2" Homelite Gas Powered Diaphram

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:** 133 bbls
Boom Length:
Additional Info: 2" Double Diaphragm pump w/25' hose

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Kaiser AG Oleo Model 3 Skimmer with 2" kamlok fittings.

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Skimpak Model 4200 with wand

Island of Maui

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 1320 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: Approximately 1320 us gal - 5cu/m Ro-tank towable storage bladder (TSB)

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2500 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 2500 gallon Quick Tank w/ hood

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2000 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 2000 gallon Fastank

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2400 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 2400 gallon Portable Fastank

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 5000 gal
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: One 5,000 gal tank

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 10 ft
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 10 ft Aluminum John Boat with oars under pier skiff

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 17 ft
Storage Site: Kahului **D-Rated Capacity:**
Boom Length:
Additional Info: 17 ft Boom Boat with O/B

Island of Maui

Equip: **Vessel, 50' or less** **Quantity:** * **Storage Capacity:**
Owner: USCG Sector Honolulu **Vessel Length:**
Storage Site: Station Maui **D-Rated Capacity:**
Boom Length:
Additional Info: Small Boats (various sizes)

This Page Intentionally Blank

Island of Kauai

Equip: **Absorbent Boom** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: Viscous Sweep/drag net (bales)

Equip: **Absorbent Boom** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of 8" Sorbent Boom

Equip: **Absorbent Boom** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: 8" Sorbent Boom (bales)

Equip: **Absorbent Boom** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: Viscous Sweep/drag net (bales)

Equip: **Absorbent Boom** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: 1 response trailer with various sorbent pads and boom

Equip: **Absorbent Pads** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of Sorbent Pads

Equip: **Absorbent Pads** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of Sorbent Sweeps

Island of Kauai

Equip: **Absorbent Pads** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of Sorbent Pads

Equip: **Absorbent Pads** **Quantity:** 20 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: Bale of Sorbent Sweeps

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: One Container with 1000' of 8" x 12" harbor boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: Boom trailer w/1000' Acme Harbor Boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: One Response Trailer with 1000' of 8" x 12" Acme harbor boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: One Container with 1000' of 8" x 12" harbor boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Barking Sands **D-Rated Capacity:**
Boom Length: 2700 ft
Additional Info: 2,700' of 18" barrier boom located at PMRF Barking Sands

Island of Kauai

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: 1000' of harbor boom in response trailer with anchoring and support gear

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: Versitek API separator

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: Versitek API separator

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: Acme Floating separator

Equip: **Personal Safety** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: Medium workvest pack - 30 sets

Equip: **Personal Safety** **Quantity:** 6 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Boat package - 4 person

Equip: **Personal Safety** **Quantity:** 75 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: PPE overpack - 50 person

Island of Kauai

Equip: **Personal Safety** **Quantity:** 18 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: PPE site package - 12 person

Equip: **Personal Safety** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: Medium workvest pack - 30 sets

Equip: **Personal Safety** **Quantity:** **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:** 228 bbls
Boom Length:
Additional Info: 2" Gas diaphragm pump

Equip: **Personal Safety** **Quantity:** 6 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Boat package - 4 person

Equip: **Personal Safety** **Quantity:** 18 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: PPE site package - 12 person

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: 2" Diesel Peristaltic Hose Pump (PHP)

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:** 228 bbls
Boom Length:
Additional Info: 2" Gas Diaphragm pump

Island of Kauai

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: 2" Diesel Peristaltic Hose Pump (PHP)

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:** 133bbls
Boom Length:
Additional Info: 2" Double Diaphragm pump w/25' hose

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Skimpak model 4200 with wand

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Skimpak Model 4200

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Kaiser AG Oela Model 3 skimmer

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2400 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: 2400 gallon Fastank

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2000 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: 2000 gallon Fastank

Island of Kauai

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2500 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: 2500 gallon Quick Tank w/hood

Equip: **Storage** **Quantity:** **Storage Capacity:** 2000 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: 2000 gallon Fastank

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 1321 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: 1321 gallon RO-Tank Towable storage bladder (TSB)

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2500 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: 2500 gallon Quick Tank w/hood

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2400 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Port Allen **D-Rated Capacity:**
Boom Length:
Additional Info: 2400 gallon Fastank

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 1321 gal
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Nawiliwili **D-Rated Capacity:**
Boom Length:
Additional Info: 1321 gallon RO-Tank Towable storage bladder (TSB)

Equip: **Vacuum** **Quantity:** 1 **Storage Capacity:** 2000 gal
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Barking Sands **D-Rated Capacity:**
Boom Length:
Additional Info: Located at PMRF Barking Sounds

Island of Kauai

Equip: **Vehicles** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Nawiliwili D-Rated Capacity:
Boom Length:
Additional Info: 2001 Dodge 2500 P/U Truck

Equip: **Vessel, 50' or less** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length: 8 ft
Storage Site: Nawiliwili D-Rated Capacity:
Boom Length:
Additional Info: 8 ft fiberglass under pier skiff with paddles

Equip: **Vessel, 50' or less** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length: 17 ft
Storage Site: Nawiliwili D-Rated Capacity:
Boom Length:
Additional Info: 17 ft McKee boom boat with 88 HP OB motor & trailer

Equip: **Vessel, 50' or less** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length: 8 ft
Storage Site: Port Allen D-Rated Capacity:
Boom Length:
Additional Info: 8 ft under pier skiff with paddles

Equip: **Vessel, 50' or less** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length: 17 ft
Storage Site: Port Allen D-Rated Capacity:
Boom Length:
Additional Info: 17 ft McKee boom boat with 90 HP OB motor & trailer

Equip: **Vessel, 50' or less** Quantity: 1 Storage Capacity:
Owner: COMNAVBASE Pearl Harbor Vessel Length: 19 ft
Storage Site: Barking Sands D-Rated Capacity:
Boom Length:
Additional Info: 19' utility boat located at PMRF Barking Sounds

Equip: **Vessel, 50' or less** Quantity: * Storage Capacity:
Owner: USCG Sector Honolulu Vessel Length:
Storage Site: Nawiliwili D-Rated Capacity:
Boom Length:
Additional Info: Patrol Boats (various sizes)

This Page Intentionally Blank

Island of Oahu

Equip: **Absorbent Boom** **Quantity:** 10 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 10 bales of various sizes of sorbent boom.

Equip: **Absorbent Boom** **Quantity:** 4 **Storage Capacity:**
Owner: Philip Services **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 4 bales of absorbent boom

Equip: **Absorbent Boom** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 1 response trailer with various sorbent pads and boom

Equip: **Absorbent Boom** **Quantity:** **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Various types of sorbent materials

Equip: **Absorbent Pads** **Quantity:** 10 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 10 Bales of Sorbent Pads

Equip: **Absorbent Pads** **Quantity:** va **Storage Capacity:**
Owner: Honolulu Fire Dept HAZMAT Team **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Dry Absorbent, asorvant socks, booms, pads, and soda ash (spill trailer)

Equip: **Aircraft** **Quantity:** 2 **Storage Capacity:**
Owner: Honolulu Fire Dept **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2 Helicopter (1 response, 1 on standby)

Island of Oahu

Equip: **Aircraft** **Quantity:** * **Storage Capacity:**
Owner: USCG D14(dr) **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: HC-130 Long Range Surveillance Aircraft equipped with UHF, VHF, FM and HF radios

Equip: **Aircraft** **Quantity:** * **Storage Capacity:**
Owner: USCG D14(dr) **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Helicopter HH-65 Short Range Recovery Aircraft. Sling load average 500 lbs with 1,000 lbs possible depending on distance. With UH, VHF, FM and HF

Equip: **Boom Reels & Support** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 40 ft Aluminum Sweep Arms with 2" plumbed spray arms & nozzles: Used with skimmers on CIC Oil Spill Recovery Boat

Equip: **Boom Reels & Support** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Two spare 40 ft VOSS sweep arms with associated troil boom.

Equip: **Boom Reels & Support** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Vikoma 25' x 50' Washdown Containment Pool for equipment cleanup with air bottle for inflation

Equip: **Boom Reels & Support** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Pier 30 **D-Rated Capacity:**
Boom Length: 1600 ft
Additional Info: 240 VAC electrically powered boom reel with 1600 ft of 8"x12" harbor Boom, wind and unwind, remote control switch. Pier 30

Equip: **Boom Reels & Support** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Pier 35 **D-Rated Capacity:**
Boom Length: 600 ft
Additional Info: 240 VAC electrically powered boom reel 600 ft of 8"x12" harbor boom, wind and unwind, remote control switch

Island of Oahu

Equip: **Boom Reels & Support** **Quantity:** 35 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 35 boom anchoring systems

Equip: **Boom Reels & Support** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Boom Mooring System

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: Container w/1000 ft Harbor Boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length: 400 ft
Additional Info: Container w/400' Slickbar Boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: Container w/1000' Harbor Boom (MCBH Kaneohe)

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 100 ft
Additional Info: 100 ft Troilboom Oil Curtain for Skimmers

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 900 ft
Additional Info: 20" boom on 240 VAC powered Boom Reel

Island of Oahu

Equip: **Boom, Harbor** **Quantity:** 5 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 5000 ft
Additional Info: Emergency Response Boom trailer with 1000' of 8" x 12" boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 2000 ft
Additional Info: 40 ft Trailer on Chassis with 2000 ft of 8" x 12" boom (Spill Center)

Equip: **Boom, Harbor** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Kahe PP **D-Rated Capacity:**
Boom Length: 2000 ft
Additional Info: 45 ft High Cube Trailer and Chassis with 1000 ft of 18" x 24" solid core Acme Boom (Kahe Power Plant)

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length: 2000 ft
Additional Info: 2,000' of 18" barrier boom located at NAVMAG Lualualei

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length: 3000 ft
Additional Info: 3,000' of 18" barrier boom located at FISC Pearl

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length: 8000 ft
Additional Info: 8,000' of 24" barrier boom located at FISC Pearl

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length: 14000
Additional Info: 14,000' of 24" barrier boom located at NAVSTA Pearl

Island of Oahu

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: 1000' of 18" barrier boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: 1000' of 18" barrier boom located at NAVSTA Pearl

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length: 3000 ft
Additional Info: 3,000' of 24" barrier boom located at NAVMAG Lualualei

Equip: **Boom, Harbor** **Quantity:** 4 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 2400 ft
Additional Info: 600 ft roll pack (on each barge)

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length: 8000 ft
Additional Info: Slickbar 24" Fence Boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 350 ft
Additional Info: Qualitech Boom

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 9900 ft
Additional Info: 18" Acme Nearshore Boom @PIER51

Island of Oahu

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: Philip Services **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length: 750 ft
Additional Info: 18" boom

Equip: **Boom, Harbor** **Quantity:** 10 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 5000 ft
Additional Info: 10 Boxes (500 ft each) of foam filled boom on Sand Island. Part of VOSS. Total length is 5000 ft

Equip: **Boom, Harbor** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: 1000' of harbor boom in response trailer with anchoring and support gear

Equip: **Boom, Ocean** **Quantity:** 11 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 6580 ft
Additional Info: 400 ft to 800 ft (various sizes) Roto-Packs of 42" Expandi Boom and Cover, hydraulically operated

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 500 ft
Additional Info: 43" Troilboom

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 600 ft
Additional Info: Inflatable Ocean Boom Oil Stop 42" Auto Boom "J-shape" pack

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 1000 ft
Additional Info: 1000 ft Inflatable Ocean Boom Vikoma Hi-Sprint -containerized PA

Island of Oahu

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu OSRV **D-Rated Capacity:**
Boom Length: 160 ft
Additional Info: EFC 76" Inflatable Ocean Boom "U" shapes (OSRV)

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu OSRV **D-Rated Capacity:**
Boom Length: 1200 ft
Additional Info: Hyde/Ro-Boom "J-shape" Inflatable Ocean Boom (OSRV)

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu OSRV **D-Rated Capacity:**
Boom Length: 850 ft
Additional Info: Foss/HI Sprint Inflatable Ocean Boom "J-shape" (OSRV)

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 2000 ft
Additional Info: Texa Boom

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 3850 ft
Additional Info: 67" EFC Sea Sentry II Boom on the OSRV Hawaii Responder

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 7260 ft
Additional Info: 67" EFC Sea Sentry II Boom

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 1216 ft
Additional Info: Vikoma 52" Boom on the Barge MSRC 400

Island of Oahu

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length: 500 ft
Additional Info: Fire Boom and 400' guide

Equip: **Boom, Ocean** **Quantity:** 6 **Storage Capacity:**
Owner: National Response Corp **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length: 12000
Additional Info: Container on trailer with 42" rigid boom + anchoring/support gear

Equip: **Boom, Ocean** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length: 1980 ft
Additional Info: 42" boom in a van

Equip: **Chemical Detection** **Quantity:** va **Storage Capacity:**
Owner: Honolulu Fire Dept HAZMAT Team **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Detection Devices: Draeger Tubes, GasTeck, AIM, HazCat, Radiological Monitoring Kit, Binoculars, Area RAE, HAZMAT ID

Equip: **Communications** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Helicopter Communications Package

Equip: **Communications** **Quantity:** 3 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 6 watt ICOM handheld VHF Marine Band radios with extra batteries and AC/DC charges.

Equip: **Communications** **Quantity:** **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 25 Watt ICOM handheld VHF Marine Band radio with extra batteries & AC/DC chargers

Island of Oahu

Equip: **Communications** **Quantity:** 3 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Spare cellular phones with extra batteries and charger.

Equip: **Communications** **Quantity:** 1 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: One field command post van

Equip: **Communications** **Quantity:** 1 **Storage Capacity:**
Owner: Honolulu Fire Dept HAZMAT Team **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: ACU 1000 Mobile Gateway (communication patching)

Equip: **Communications** **Quantity:** 30 **Storage Capacity:**
Owner: Honolulu Fire Dept HAZMAT Team **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Macom 800 mhz Radio

Equip: **Communications** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Standard Horizon Hand-held Radios VHF @PIER21

Equip: **Communications** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Mobile Command Post Trailer with generator

Equip: **Communications** **Quantity:** 8 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Portable radios with VHF & UHF

Island of Oahu

Equip: **Communications** **Quantity:** * **Storage Capacity:**
Owner: USCG Sector Honolulu **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: VHF Radios & Satellite phones

Equip: **Compressors, Air** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 5 cfm Electric Compressor @PIER14

Equip: **Compressors, Air** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 15 cfm Gasoline Compressor @PIER14

Equip: **Compressors, Air** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 265 cfm Diesel @PIER14

Equip: **Compressors, Air** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 185 cfm Diesel Compressor @PIER14

Equip: **Dispersants & Support** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: ADDSPAK metering trailer, pump trailer, and runway sweeper (Kalaeloa)

Equip: **Dispersants & Support** **Quantity:** 1 **Storage Capacity:** 242 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Simplex model 6801 240 gal dispersant airborne spray application bucket

Island of Oahu

Equip: **Dispersants & Support** Quantity: Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 25 " Plumbed Sprayer Nozzle for gasoline powered dispersant sprayer pump

Equip: **Dispersants & Support** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Fluorometer Kit (NRDA)

Equip: **Dispersants & Support** Quantity: 2 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Spare 25 ft plumbed sprayer nozzles for use with the gasoline engine powered dispersant sprayer pump.

Equip: **Fire & Salvage** Quantity: va Storage Capacity:
Owner: Honolulu Fire Dept Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Resuscitator, Trauma Kit, Ambulance Bag, Spare Oxygen Bottles

Equip: **Fire & Salvage** Quantity: va Storage Capacity:
Owner: Honolulu Fire Dept Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Entry Tools: Crowbars, Bolt Cutters, Wrecking Bar, and Hydraulic Jack (rescue team)

Equip: **Fire & Salvage** Quantity: va Storage Capacity:
Owner: Honolulu Fire Dept HAZMAT Team Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Spill and Leak Tools, A&B Chlorine Kit, Overpack drums

Equip: **Fire & Salvage** Quantity: 1 Storage Capacity:
Owner: K-SEA Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 350-400 Amp DC Welder @PIER21

Island of Oahu

Equip: **Fire & Salvage** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 125 ton Salvage Winch on 120 ft Supply Boat NOHO @PIER21

Equip: **Fire & Salvage** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 1" Suction Hose @PIER14

Equip: **Fire & Salvage** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2" Suction Hose @PIER14

Equip: **Fire & Salvage** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Welding Machine @PIER14

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 3KW Onan Generator (Diesel)

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Honda EU2000i Generator

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 75KW Cummins/Kohler Generator (Diesel)

Island of Oahu

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 5.5 K Northstar gasoline powered Honda Generator

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Honda 10.5 K Generator

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 50KW Onan Generator

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 5 KW Generator @PIER21

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 5.0 KW Generator @PIER14

Equip: **Generators** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 20.0 KW Generator @PIER33

Equip: **Heavy Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 6000 lb capacity 240 VAC Davit with 14 ft boom and accessories

Island of Oahu

Equip: **Heavy Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Forklift 4,000 lb @PIER21

Equip: **Heavy Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Boom Truck 1985 Double Axle Boom Truck with 20 ft bed with 14-ton crane @PIER21

Equip: **Heavy Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 15-ton Crane on 185ft NUNUI @PIER14

Equip: **Heavy Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Forklift, 6,000 lb @PIER21

Equip: **Heavy Equipment** **Quantity:** 7 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Flatbed Trailers (qty 1- 35 ft, qty 5 - 42 ft, qty 1 - 48 ft)

Equip: **Heavy Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: USCG Pacific Strike Team **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 42 ft Flatbed Trailer

Equip: **Heavy Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Crane 15 tons

Island of Oahu

Equip: **Heavy Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Winch 125 ton salvage winch on 120'supply boat

Equip: **Hydraulic Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: ASI GT 185 Hydraulic Unit with Double Control Panels

Equip: **Hydraulic Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Hydraulic and Air Compressor Power Pack @PIER21

Equip: **Hydraulic Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: USCG Pacific Strike Team **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 1" Diameter Hydraulic Hose

Equip: **Hydraulic Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: USCG Pacific Strike Team **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Hydraulic Coolers

Equip: **Hydraulic Power Unit** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Subsystem of the VOSS used to run the pumps and the skimmers.

Equip: **Lights, Portable** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Lightstand trailer w/Onan Generator

Island of Oahu

Equip: **Lights, Portable** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Twin Light Tower mounted on Trailer, powered by Onan Diesel 3 KW Generator25 Gl fuel tank, two(2) 1000 watt light towers, two(2)120 VAC

Equip: **Lights, Portable** **Quantity:** va **Storage Capacity:**
Owner: Honolulu Fire Dept **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Portable Flood Lights

Equip: **Miscellaneous** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Hot water production unit

Equip: **Miscellaneous** **Quantity:** va **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Decon Pools, Decon Stations, Zone Control Stations

Equip: **Miscellaneous** **Quantity:** va **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Beach tool/rake package (qty 45), Flat shovel package (qty 25), Tarball Fork package (qty 15),

Equip: **Miscellaneous** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: ASI 16TSO Hydraulic powerpack boom recovery system

Equip: **Miscellaneous** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Texaboom washdown containment pool equipment decon

Island of Oahu

Equip: **Miscellaneous** Quantity: 2 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 55 Gallon drum sorbent ringer systems.

Equip: **Miscellaneous** Quantity: 3 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Exclusion Zone Control Package. This pkg includes exclusion zone perimeter tape (12,000 ft), one portable ID center complete with Polaroid camera,

Equip: **Miscellaneous** Quantity: 4 Storage Capacity:
Owner: Honolulu Fire Dept HAZMAT Team Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Full decon stations: pools, liners, portable showers, brushes, etc.

Equip: **Miscellaneous** Quantity: 2 Storage Capacity:
Owner: Honolulu Fire Dept HAZMAT Team Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Weather Stations

Equip: **Miscellaneous** Quantity: 2 Storage Capacity:
Owner: Marine Spill Response Corp Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Diesel powered high-pressure washers

Equip: **Miscellaneous** Quantity: 1 Storage Capacity:
Owner: Marine Spill Response Corp Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Diesel powered high-pressure steam cleaner

Equip: **Miscellaneous** Quantity: 1 Storage Capacity:
Owner: Pacific Environmental Corp Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Pressure Washer @PIER14

Island of Oahu

Equip: **Miscellaneous** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Steam Cleaner @PIER14

Equip: **Miscellaneous** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 88 HP OB motor @PIER14

Equip: **Miscellaneous** **Quantity:** **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Griphoist with Wire/Rigging Box (In CONEX Box)

Equip: **Miscellaneous** **Quantity:** **Storage Capacity:**
Owner: USCG Pacific Strike Team **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Air Deliverable Anti-Pollution System Type III (ADAPTS)

Equip: **Miscellaneous** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Boarding kits

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2500 gal skid mounted ASI fiberglass Sepa (Kalaeloa)

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Floating Oil/Water Separator with 6 Ft Curtain & Ballast

Island of Oahu

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 55 gl Hard Wall Oil/Water Separator with 2" nozzles

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 4,000 gl Oil/Water Separator Tank with filter

Equip: **Oil/Water Separator** **Quantity:** 3 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Versitek floating API separator.

Equip: **Oil/Water Separator** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 800 gl Oil/Water Separator Trailer @PIER33

Equip: **Personal Safety** **Quantity:** 6 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Boat Package - 4 Person

Equip: **Personal Safety** **Quantity:** 30 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Medium workvest pack 30 sets

Equip: **Personal Safety** **Quantity:** 18 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Site Package - 12 Person

Island of Oahu

Equip: **Personal Safety** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Personnel Decontamination Stations including segregated entrance and exit pathways, information signs, texa-tank and three pool decontamination stations.

Equip: **Personal Safety** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: First Aid Station. Including a sun shade tent, cot, first aid kit, eye wash and water stations.

Equip: **Personal Safety** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: IIeat Stress Stations. Each has a sun shade tent, water stations, information signs, rest benches to allow for resting.

Equip: **Personal Safety** **Quantity:** 100 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Large workvest pack 50 sets

Equip: **Personal Safety** **Quantity:** 300 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Overpack - 50 person

Equip: **Personal Safety** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: IIonolulu **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Hat Pack w/30 hats each package

Equip: **Personal Safety** **Quantity:** 6 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu OSRV **D-Rated Capacity:**
Boom Length:
Additional Info: PPE Boat Package - 4 person (OSRV)

Island of Oahu

Equip: **Personal Safety** Quantity: 100 Storage Capacity:
Owner: Honolulu Fire Dept Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Structural Fire Fighting Equipment (HFD Storeroom)

Equip: **Personal Safety** Quantity: 200 Storage Capacity:
Owner: Honolulu Fire Dept HAZMAT Team Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Tyvek Suits/powder and vapor (Training Bureau)

Equip: **Personal Safety** Quantity: 200 Storage Capacity:
Owner: Honolulu Fire Dept HAZMAT Team Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: PVC Level B Suits (HFD Storeroom)

Equip: **Personal Safety** Quantity: 20 Storage Capacity:
Owner: Honolulu Fire Dept HAZMAT Team Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Level A Suits (HFD Storeroom)

Equip: **Personal Safety** Quantity: Storage Capacity:
Owner: USCG D14 DRAT Vessel Length:
Storage Site: Sector Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Paris of Yellow Rain Gear (#2 Stack PAC in Storage Cage)

Equip: **Personal Safety** Quantity: Storage Capacity:
Owner: USCG D14 DRAT Vessel Length:
Storage Site: Sector Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Personal Floatation Devices (PFD) (#2 Stack PAC in Storage Cage)

Equip: **Personnel, Other** Quantity: * Storage Capacity:
Owner: USCG D14 Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Coast Guard Reserve & Auxiliary Personnel

Island of Oahu

Equip: **Personnel, Other** **Quantity:** * **Storage Capacity:**
Owner: USCG Sector Honolulu **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Coast Guard Reserve & Auxiliary Personnel

Equip: **Personnel, Trained** **Quantity:** 20 **Storage Capacity:**
Owner: Honolulu Fire Dept HAZMAT Team **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 20 Haz-Techs on duty 24hr's a day.

Equip: **Personnel, Trained** **Quantity:** 13 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Initial Team Members who will respond within 2 hours

Equip: **Personnel, Trained** **Quantity:** 23 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2 Resp. Mgr., 4 Supervisors, 8 Operators, & 9 Gen. workers. @PIER14

Equip: **Personnel, Trained** **Quantity:** 33 **Storage Capacity:**
Owner: Philip Services **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 33 Full time employees

Equip: **Pump Supplies** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Sector Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 4" Suction Hose for Pump Float

Equip: **Pump Supplies** **Quantity:** 1 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Sector Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 6" Discharge Hose (In CONEX Box)

Island of Oahu

Equip: **Pump Supplies** Quantity: 1 Storage Capacity:
Owner: USCG Pacific Strike Team Vessel Length:
Storage Site: Pearl Harbor D-Rated Capacity:
Boom Length:
Additional Info: Barge Mooring Lines for Float Pump

Equip: **Pump Supplies** Quantity: 1 Storage Capacity:
Owner: USCG Pacific Strike Team Vessel Length:
Storage Site: Pearl Harbor D-Rated Capacity:
Boom Length:
Additional Info: VOPS Repair Kit

Equip: **Pump, oil or water** Quantity: 2 Storage Capacity:
Owner: American Marine Corp Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 4" 400gpm pump @PIER13

Equip: **Pump, oil or water** Quantity: 1 Storage Capacity:
Owner: American Marine Corp Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 8" 1000gpm pump @PIER13

Equip: **Pump, Oil or Water** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Barbers Point D-Rated Capacity: 754 bbls
Boom Length:
Additional Info: Diesel powered PHP

Equip: **Pump, Oil or Water** Quantity: 2 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 1371 bbls
Boom Length:
Additional Info: 3" Double Pneumatic diaphragm pumps with kamlok fittings and hoses, cp fittings for air hook up.

Equip: **Pump, Oil or Water** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: ACME floating circulation pump with 6" discharge, 3hp

Island of Oahu

Equip: **Pump, Oil or Water** **Quantity:** 3 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 133 bbls
Boom Length:
Additional Info: 2" Double diaphragm pump w/25' hose

Equip: **Pump, Oil or Water** **Quantity:** 4 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Diesel powered portable peristaltic hose pump (PHP)

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 1508 bbls
Boom Length:
Additional Info: Honda centrifugal pump with hoses and fittings

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 228 bbls
Boom Length:
Additional Info: 2" Gasoline engine diaphragm pump

Equip: **Pump, Oil or Water** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 4680 bbls
Boom Length:
Additional Info: DOP 160 Pump Package

Equip: **Pump, Oil or Water** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: ACME washdown pumps 3hp, with 1.5" hoses

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 15408 bbls
Boom Length:
Additional Info: DOP 250 Pump package

Island of Oahu

Equip: **Pump, Oil or Water** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: Diesel America Centrifugal Pump

Equip: **Pump, Oil or Water** Quantity: 1 Storage Capacity:
Owner: K-SEA Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 1" Pneumatic Pump with 1,000 ft hose @PIER21

Equip: **Pump, Oil or Water** Quantity: 1 Storage Capacity:
Owner: K-SEA Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 3" Salvage Pump @PIER21

Equip: **Pump, Oil or Water** Quantity: 1 Storage Capacity:
Owner: K-SEA Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 4" Salvage Pump @PIER21

Equip: **Pump, Oil or Water** Quantity: 1 Storage Capacity:
Owner: Marine Spill Response Corp Vessel Length:
Storage Site: Barbers Point D-Rated Capacity: 3017 bbls
Boom Length:
Additional Info: DOP-250 pumping system

Equip: **Pump, Oil or Water** Quantity: 1 Storage Capacity:
Owner: Marine Spill Response Corp Vessel Length:
Storage Site: Honolulu D-Rated Capacity:
Boom Length:
Additional Info: 3" diameter trash pump systems

Equip: **Pump, Oil or Water** Quantity: 2 Storage Capacity:
Owner: Marine Spill Response Corp Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 3040 bbls
Boom Length:
Additional Info: DOP-250 pumping system on the Barge MSRC 400

Island of Oahu

Equip: **Pump, Oil or Water** **Quantity:** 3 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: CCN 150 pumping system (2 on the BARGE 400) (1 on MSRC Responder)

Equip: **Pump, Oil or Water** **Quantity:** 2 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 3040 bbls
Boom Length:
Additional Info: DOP-250 pumping system on Shallow water barge 71 & 67

Equip: **Pump, Oil or Water** **Quantity:** 4 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 3" diameter centrifugal pump systems

Equip: **Pump, Oil or Water** **Quantity:** 3 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 3" diameter diaphragm pump systems

Equip: **Pump, Oil or Water** **Quantity:** 6 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2" Air Double Diaphragm Pump @PIER14

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2" Trash Pump @PIER14

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Deism 250 with power pack @PIER14

Island of Oahu

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 1" Air Diaphragm Pump @PIER14

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: MPC 6" submersible 2,500 GPM hydraulic with power pack @PIER14

Equip: **Pump, Oil or Water** **Quantity:** 2 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 3" Air Double Diaphragm Pump @PIER14

Equip: **Pump, Oil or Water** **Quantity:** 2 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Kvaerner Eureka CCN-150-5C submersible pump (subsystem of the VOSS)

Equip: **Pump, Oil or Water** **Quantity:** **Storage Capacity:**
Owner: USCG Pacific Strike Team **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: ADAPTS (Pumping System), Type III #20029-1 with pallet

Equip: **Pump, Oil or Water** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Pump System with POL 6" Submersible

Equip: **Pump, Water Only** **Quantity:** 4 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2" Electric Submersible Pump @PIER14

Island of Oahu

Equip: **Pump, Water Only** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Pump system with pole. 6" submersible

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Kaiser AG Oela Model 3

Equip: **Skimmers** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Skim Pack Model 4200

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 500 bbls
Boom Length:
Additional Info: Wolsap GTX 500, wier skimmer

Equip: **Skimmers** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Harbor Fastpack Recovery packages, Each package includes a 110 gpm diesel powered peristaltic pump, douglas engineering model 4200 skim pack with

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 3420 bbls
Boom Length:
Additional Info: Aquacat RBS 10 Brush & Disc w/ trailer (MCBH Kaneohe)

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 54 bbls
Boom Length:
Additional Info: Slickbar Slurp Wier skimmer

Island of Oahu

Equip: **Skimmers** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 301 bbls
Boom Length:
Additional Info: Mini-walosep weir type skimmer with 11 hp hydraulic power pack hoses and accessories.

Equip: **Skimmers** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 129 bbls
Boom Length:
Additional Info: "Oil mop Inc." OMI 1-4D mop wringer with 100 mop, spare parts and accessories.

Equip: **Skimmers** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 240 bbls
Boom Length:
Additional Info: "Oil Mop Inc." OMI 11-4D mop wringer with 200' mop, spare parts and accessories.

Equip: **Skimmers** Quantity: 2 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 754 bbls
Boom Length:
Additional Info: Kaiser AG Oleo Model 3 skimmers with 2" kamlok fittings. Name plate rating equal to pump. 110gpm

Equip: **Skimmers** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 1963 bbls
Boom Length:
Additional Info: GT 185 Ocean skimmers with control panels

Equip: **Skimmers** Quantity: 1 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 7321bbls
Boom Length:
Additional Info: Lori 4 brush side mounted skimmer

Equip: **Skimmers** Quantity: 3 Storage Capacity:
Owner: Clean Islands Council Vessel Length:
Storage Site: Honolulu D-Rated Capacity: 754 bbls
Boom Length:
Additional Info: Skimpak model 4200 with wand

Island of Oahu

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Kahe PP **D-Rated Capacity:** 754 bbls
Boom Length:
Additional Info: Vikoma Mini Fast Flow Skimmer (Kahe Power Plant)

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Kahe PP **D-Rated Capacity:** 154 bbls
Boom Length:
Additional Info: Oil Mop OMI 11-4D trailer mounted skimmer (Kahe Power Plant)

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu OSRV **D-Rated Capacity:** 1963 bbls
Boom Length:
Additional Info: GT 185 Ocean Skimmer (OSRV)

Equip: **Skimmers** **Quantity:** 2 **Storage Capacity:** 3000 gal
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:** 2058 bbls
Boom Length:
Additional Info: Two DIP 3001 skimmers located at NAVSTA Pearl

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:** 1000 gal
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:** 137 bbls
Boom Length:
Additional Info: One Rapid Response Skimmer located at NAVSTA Pearl

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 15840 bbls
Boom Length:
Additional Info: Stress I Skimming System

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 10567 bbls
Boom Length:
Additional Info: Transrec 350 disc skimmer on the OSRV Hawaii Responder

Island of Oahu

Equip: **Skimmers** **Quantity:** 2 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 3000 bbls
Boom Length:
Additional Info: Walosep W-4 skimming system

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 1351 bbls
Boom Length:
Additional Info: GT-185 Weir skimmer on the Barge MSRC 400

Equip: **Skimmers** **Quantity:** 3 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 2715 bbls
Boom Length:
Additional Info: Queensboro Skimming System

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 5657 bbls
Boom Length:
Additional Info: Vikoma 3 weir skimming system

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 466 bbls
Boom Length:
Additional Info: Skim Pak 4200 @PIER14

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 617 bbls
Boom Length:
Additional Info: OPD Swiss OLEO @PIER14

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 13 bbls
Boom Length:
Additional Info: 48" Elastec Drum Skimmer @PIER14

Island of Oahu

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 260 bbls
Boom Length:
Additional Info: Skim Pak 2200 @PIER14

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 1851 bbls
Boom Length:
Additional Info: 24" T5 Disc Skimmer @PIER14

Equip: **Skimmers** **Quantity:** 2 **Storage Capacity:**
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** 3017 bbls
Boom Length:
Additional Info: 2 Desmi 250 skimmers, skimming capacity is D-rated (subsystem of the VOSS).
Only one power pack for 2 skimmers. 2 would double recovery rate.

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Small Skimmer

Equip: **Skimmers** **Quantity:** 2 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:** 36 ft
Storage Site: Pearl Harbor **D-Rated Capacity:** 1200 bbls
Boom Length:
Additional Info: 36ft aluminum hull skimming vsl with Marco class V

Equip: **Skimmers** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:** 600 bbls
Boom Length:
Additional Info: Marco class VI

Equip: **Sorbents** **Quantity:** 10 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 10 bales sorbent sweep

Island of Oahu

Equip: **Sorbents** **Quantity:** 75 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 75 bales Viscous sweep/drag net

Equip: **Sorbents** **Quantity:** 260 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 20' container for sorbent sweep 260 bales (MCBH Kaneohe)

Equip: **Sorbents** **Quantity:** 13 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 13 bales Sorbent sweep (OSRV Response Van)

Equip: **Sorbents** **Quantity:** 10 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 10 bales 8" Sorbent boom (OSRV Response Van)

Equip: **Sorbents** **Quantity:** 12 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 12 bales Sorbent pads (OSRV Response Van)

Equip: **Sorbents** **Quantity:** 13 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 13 boxes of Viscous sweep/drag net (OSRV Response Van)

Equip: **Sorbents** **Quantity:** 70 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Kahe PP **D-Rated Capacity:**
Boom Length:
Additional Info: 40' container w/Pom-Poms (Kahe Power Plant)

Island of Oahu

Equip: **Storage** **Quantity:** 2 **Storage Capacity:** 2500 gals
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 2500 gallon Quicktank w/hood

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2400 gals
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 2400 gallon Fast Tank

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 1000 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 1000 gl Oil Bladder with 2" Kamloks & Ball Valve on down end

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 500 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 500 gl Texaboom Oil Bladder with 2" hose fittings

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2400 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Fastank with 2400 gl capacity with aluminum frame set up

Equip: **Storage** **Quantity:** 4 **Storage Capacity:** 5283 gals
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 1,321 gallon Ro-Tank - TSB

Equip: **Storage** **Quantity:** 2 **Storage Capacity:** 600 bbls
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 300 bbl Canflex TSB

Island of Oahu

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 2500 gals
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2500 gallon Quicktank w/ hood

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 1000 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: floating oil bladder with 2" kamloks and ball valve on down end.

Equip: **Storage** **Quantity:** 2 **Storage Capacity:** 500 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Texasboom brand oil bladder with 2" hose fittings.

Equip: **Storage** **Quantity:** 4 **Storage Capacity:** 2400 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Fastank 2400 US gal capacity with easy aluminum frame set up.

Equip: **Storage** **Quantity:** 5 **Storage Capacity:** 100000 gal
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Five 20,000 gal military storage bladders

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 1250 gals
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 1250 gallon Canflex TSB

Equip: **Storage** **Quantity:** 7 **Storage Capacity:** 525000 gal
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Located at NAVSTA Pearl

Island of Oahu

Equip: **Storage** **Quantity:** 8 **Storage Capacity:** 4000 gal
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 500 gallon bladders @PIER21

Equip: **Storage** **Quantity:** 4 **Storage Capacity:** 500 bbls
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Towable Storage Bladders

Equip: **Storage** **Quantity:** 15 **Storage Capacity:** 75000 gal
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 5,000 gal. tanks @PIER33

Equip: **Storage** **Quantity:** 2 **Storage Capacity:** 100 gal
Owner: USCG D14 DRAT **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 2, 50 gallon fuel bladders

Equip: **Storage** **Quantity:** 1 **Storage Capacity:** 26000 gal
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 26,000 gl Oil Storage Bladder

Equip: **Storage** **Quantity:** 2 **Storage Capacity:** 26000 gal
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 26K Oil storage bladder

Equip: **Underwater Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Brocco Underwater Cutting Rings @PIER21

Island of Oahu

Equip: **Underwater Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Hot Tap System

Equip: **Underwater Equipment** **Quantity:** 100 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Lift bags

Equip: **Underwater Equipment** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Hot tap system

Equip: **Vacuum** **Quantity:** 1 **Storage Capacity:** 2000 gal
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Located at NAVSTA Pearl

Equip: **Vacuum** **Quantity:** 4 **Storage Capacity:** 8000 gal
Owner: COMNAVBASE Pearl Harbor **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Located at PWC Pearl

Equip: **Vacuum** **Quantity:** 2 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: tractor trailer @PIER14

Equip: **Vacuum** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: vac tanker 120bbls @PIER14

Island of Oahu

Equip: **Vacuum** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: vac truck 60bbls @pier14

Equip: **Vacuum** **Quantity:** 3 **Storage Capacity:** 15000 gal
Owner: Philip Services **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Vac-trucks (Ford, Kenworth, Peterbilt) 3000 gal capacity each

Equip: **Vacuum** **Quantity:** 3 **Storage Capacity:** 7500 gal
Owner: Philip Services **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: International Vac-truck - 2500 gal capacity each

Equip: **Vacuum** **Quantity:** 3 **Storage Capacity:** 15000 gal
Owner: Philip Services **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Tanktruck (MTM, IMB, Presvac) 5000 gal capacity each

Equip: **Vacuum** **Quantity:** 1 **Storage Capacity:** 1800 gal
Owner: Philip Services **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: GMC - Vac-truck

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Peterbuilt Tractor w/flatbed trailer

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Dodge Durango

Island of Oahu

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** **Boom Length:** 1000 ft
Additional Info: Emergency response boom trailer, with 2" ball hitch carrying 1000ft of 8"x12" harbor boom, 4 anchor systems.

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** **Boom Length:**
Additional Info: 2006 GMC W4500 flatbed stake truck

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** **Boom Length:**
Additional Info: Van Cattaway With Grumann Chassis, 2" ball & hitch, electrical outlet for trailer towing, Davit with hand

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu OSRV **D-Rated Capacity:** **Boom Length:**
Additional Info: 2006 Chevy Response Van (Skiff, viscous sweep, sorbent sweep, boom, & pads)

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu OSRV **D-Rated Capacity:** **Boom Length:**
Additional Info: Silverado Response P/U Truck

Equip: **Vehicles** **Quantity:** 2 **Storage Capacity:**
Owner: Honolulu Fire Dept HAZMAT Team **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** **Boom Length:**
Additional Info: 2 hazmat trucks on duty with the personnel

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:** **Boom Length:**
Additional Info: 1-ton Pick-up Truck @PIER21

Island of Oahu

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 30,000lb CAT forklift

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Trinity RV mobile command post.

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 15,000lb Cap. forklift

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: F250 Ford Pickup Truck

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Semi tractor truck

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: F350 Ford Steakbed Truck

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 4-Wheel Drive Pick-up Truck @PIER14

Island of Oahu

Equip: **Vehicles** **Quantity:** 4 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Small Pick-up Truck @PIER14

Equip: **Vehicles** **Quantity:** 2 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Flat-bed Truck @PIER14

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Cargo Van @PIER14

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Rigging van

Equip: **Vehicles** **Quantity:** 2 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Vans

Equip: **Vehicles** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 20' Comms/Field command post van

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 21 ft
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: 21 ft Boston Whaler with twin O/B (Barbers Point)

Island of Oahu

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Marco Platform with35 HP OB manual start with 6 gl fuel can & trailer

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 17 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 17 ft Mckee craft w/140HP O/B "Mars"

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 10 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 10 ft Under pier skiff with oars

Equip: **Vessel, 50' or less** **Quantity:** 2 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 8 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 8 ft Rowing Skiff with paddles

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 14 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 14 ft Aluminum ATEC 1460

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 24 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 24 ft Fast Response Boom Boat "Jupiter"

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 9 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 9 ft Under pier skiff w/paddles (Response Van)

Island of Oahu

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 21 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 21 ft Boston Whaler w/twin 70HP O/B "ex-Heco"

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 14 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 14 ft Aluminum ATEC 1448

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 13 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 13.5 ft Boston Whaler w/twin 70HP O/B "Hermes"

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 17 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 17 ft Mckee craft w/90HP Evinrude "Kahu"

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 17 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: 17 ft Mckee craft w/outboard "Port Allen"

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 9 ft
Storage Site: Honolulu Kahe PP **D-Rated Capacity:**
Boom Length:
Additional Info: 9 ft Boston Whaler w/8 hp O/B (Kahe Power Plant)

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 9 ft
Storage Site: Honolulu Kahe PP **D-Rated Capacity:**
Boom Length:
Additional Info: 9 ft under pier skiff with 4 hp O/B (Kahe Power Plant)

Island of Oahu

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:** 10 ft
Storage Site: Honolulu OSRV **D-Rated Capacity:**
Boom Length:
Additional Info: 10 ft Avon boat boom tender (OSRV)

Equip: **Vessel, 50' or less** **Quantity:** 9 **Storage Capacity:**
Owner: COMNAVBASE Pearl Harbor **Vessel Length:** 19 ft
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Nine 19' utility boats located at NAVSTA Pearl

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: NOKE 800 HP Workboat @PIER21

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:** 36 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: M/V Nakue @PIER21

Equip: **Vessel, 50' or less** **Quantity:** 2 **Storage Capacity:** 400 bbls
Owner: Marine Spill Response Corp **Vessel Length:** 44 ft
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Shallow water barge (SBS) with propulsion and crane

Equip: **Vessel, 50' or less** **Quantity:** 2 **Storage Capacity:** 400 bbls
Owner: Marine Spill Response Corp **Vessel Length:** 44 ft
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Shallow water barge (SBS)

Equip: **Vessel, 50' or less** **Quantity:** 2 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:** 28 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Aluminum vsl on trailers/shallow water push

Island of Oahu

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Marine Spill Response Corp **Vessel Length:** 27 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Rigid Hull Inflatable on the Barge MSRC 400

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:** 12 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Livingston 25hp @PIER14

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:** 17 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Boston Whaler 88hp @PIER14

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:** 20 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Boston Whaler 120hp trailer @PIER33

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Pacific Environmental Corp **Vessel Length:** 21 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Radin twin 140hp @PIER14

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: Philip Services **Vessel Length:** 21 ft
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Bayliner

Equip: **Vessel, 50' or less** **Quantity:** 3 **Storage Capacity:**
Owner: Philip Services **Vessel Length:** 14 ft
Storage Site: Barbers Point **D-Rated Capacity:**
Boom Length:
Additional Info: Aluminum skiffs

Island of Oahu

Equip: **Vessel, 50' or less** **Quantity:** * **Storage Capacity:**
Owner: USCG Sector Honolulu **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Rigid Hull Inflateables (various sizes)

Equip: **Vessel, 50' or less** **Quantity:** * **Storage Capacity:**
Owner: USCG Sector Honolulu **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Utility Boats (Standard CG Search and Rescue Boat various sizes)

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Utility Boat

Equip: **Vessel, 50' or less** **Quantity:** 2 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:** 24 ft
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 24 FT Boom handling boot with 25hp outboard

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:** 19 ft
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 19' Rigid hull inflatable

Equip: **Vessel, 50' or less** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:** 18 ft
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 18' Rigid hull inflatable

Equip: **Vessel, 50' or less** **Quantity:** 3 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 800 HP Workboat

Island of Oahu

Equip: **Vessel, 50' or less** **Quantity:** 4 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: Tugs up to 4,000 hp

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: American Marine Corp **Vessel Length:** 79 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: tugboat AMERICAN EMERALD 1400hp @PIER13

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: American Marine Corp **Vessel Length:** 160 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: AMC160 (160'x50') 100 ton crane barge @PEARL HARBOR

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:** 15000 gal
Owner: American Marine Corp **Vessel Length:** 96 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Tugboat AMERICAN ISLANDER 1,000hp, 600gpm fire pump @PIER13

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: American Marine Corp **Vessel Length:** 100 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: tugboat AMERICAN CONTENDER 400hp @PIER13

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:** 2262 bbls
Owner: Clean Islands Council **Vessel Length:** 111 ft
Storage Site: Honolulu OSRV **D-Rated Capacity:**
Boom Length:
Additional Info: CLEAN ISLANDS: Oil Spill Recovery Vessel (OSRV)

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: Honolulu Fire Dept **Vessel Length:** 110 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Fireboat Moku Ahi, 4 man crew, 1900' of hose (various sizes) & qty 5 - 200lb cylinders of CO2 at pier 15

Island of Oahu

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:** 115 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: M/V Na'ina 1,560hp supply boat @PIER21

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:** 185 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: M/V Nunui 15 ton crane 4,000hp @PIER14

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:** 65 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: M/V Nene 800hp tractor tug (SPM) @PIER21

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: K-SEA **Vessel Length:** 120 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: M/V NOHO 1300 HP Twin Engine Supply Boat @PIER21 (with 4,000 gl oil/water separator, salvage winch 125 ton capacity with 2,000 ft X 1.5" cable

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:** 14000 bbls
Owner: Marine Spill Response Corp **Vessel Length:** 208 ft
Storage Site: Honolulu **D-Rated Capacity:** 10500 bbls
Boom Length:
Additional Info: OSRV Hawaii Responder

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:** 40000 bbls
Owner: Marine Spill Response Corp **Vessel Length:** 208 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: MSRC 400 40,000 bl Barge

Equip: **Vessel, 50' plus** **Quantity:** * **Storage Capacity:**
Owner: USCG D14(dr) **Vessel Length:** 180 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: USCGC Buoy Tenders, VOSS Capable

Island of Oahu

Equip: **Vessel, 50' plus** **Quantity:** * **Storage Capacity:**
Owner: USCG Pacific Area **Vessel Length:** 378 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: USCGC Cutters

Equip: **Vessel, 50' plus** **Quantity:** * **Storage Capacity:**
Owner: USCG Sector Honolulu **Vessel Length:** 110 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Patrol Boats

Equip: **Vessel, 50' plus** **Quantity:** * **Storage Capacity:**
Owner: USCG Sector Honolulu **Vessel Length:** 87 ft
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Patrol Boats

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:** 118 ft
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 118ft Supply boat

Equip: **Vessel, 50' plus** **Quantity:** 2 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:**
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: USS Safeguard & USS Salvor salvage vessels.

Equip: **Vessel, 50' plus** **Quantity:** 1 **Storage Capacity:**
Owner: USN SUPSALV **Vessel Length:** 120 ft
Storage Site: Pearl Harbor **D-Rated Capacity:**
Boom Length:
Additional Info: 120ft Supply boat

Equip: **Wildlife Care Supplies** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu **D-Rated Capacity:**
Boom Length:
Additional Info: Bird Wash water unit

Island of Oahu

Equip: **Wildlife Care Supplies** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Kahe PP **D-Rated Capacity:**
Boom Length:
Additional Info: 24' containerized Bird Triage/stab. Unit (Kahe Power Plant)

Equip: **Wildlife Care Supplies** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Kahe PP **D-Rated Capacity:**
Boom Length:
Additional Info: 20' containerized oiled wildlife support unit (Kahe Power Plant)

Equip: **Wildlife Care Supplies** **Quantity:** 1 **Storage Capacity:**
Owner: Clean Islands Council **Vessel Length:**
Storage Site: Honolulu Kahe PP **D-Rated Capacity:**
Boom Length:
Additional Info: 40' oiled wildlife food preparation unit (Kahe Power Plant)

TAB 5 - FORMS

NOTE: ALL FORMS IN THIS TAB ARE LOCATED ON THE CD VERSION OF THIS PLAN

TABLE OF CONTENTS

1 - Incident Command System Forms

Incident Action Plan Cover Sheet
ICS 201 Incident Briefing - Map Sketch
ICS 201-2 Incident Briefing - Current Actions & Initial Site Assessment
ICS 201-3 Incident Briefing - Organization Chart
ICS 201-4 Incident Briefing - Local Resources Summary
ICS 202 Incident Action Plan - Incident Objectives/Response Priorities
ICS 203 Incident Action Plan - Organization Assignment List
ICS 204 Incident Action Plan - Division/Group Assignment List
ICS 204-2 Incident Action Plan - Task Force/Strike Team Personnel
ICS 205 Incident Action Plan - Incident Radio Communications Plan
ICS 205-1 Incident Action Plan - ICS Positions/Phone Numbers
ICS 206 Incident Action Plan - Medical Plan
ICS 207 Organizational Chart
ICS 209 Situation Status Summary
ICS 210-1 Field Resources Status & Demobilization Request
ICS 211 Check In/Out Log
ICS 213 General Message
ICS 214 Unit Log
ICS 214-1 Unit Log Continuation
ICS 215 Operational Planning Summary
ICS 215-1 Operational Planning Work Sheet
ICS 220 Air Operations Summary
ICS 223 Health and Safety Message
ICS 224 Incident Action Plan - Environmental Unit Summary Sheet
ICS 230 Incident Schedule Of Meetings
ICS 231 Meeting Description
Site Safety Analysis
General Plan
Shoreline Assessment Form

Shoreline Survey Evaluation Form

Sensitive Sites/Response Actions

2 - Incident Command System Forms (USCG)

IAP Cover Sheet Incident Action Plan Cover Sheet

ICS 201	Incident Briefing
ICS 202	Incident Objectives
ICS 203	Organization Assignment List
ICS 204	Assignment List
ICS 204a	Assignment List Attachment
ICS 205	Incident Radio Communications Plan
ICS 205a	Communications List
ICS 206	Medical Plan
ICS-207	Incident Organizational Chart
ICS 209	Incident Status Summary
ICS 210	Status Change
ICS 211	Check-In List
ICS 213	General Message
ICS 213	RR Resource Request Message
ICS-214	Unit Log
ICS 215	Operational Planning Worksheet
ICS 215a	Incident Action Plan Safety Analysis
ICS-216	Radio Requirements Worksheet
ICS 217	Radio Frequency Assignment Worksheet
ICS 218	Support Vehicle Inventory
ICS 219-2	Hand Crews Green T-Card
ICS 219-4	Helicopter Blue T-Card
ICS 219-6	Aircraft Orange T-Card
ICS 219-7	Dozers Yellow T-Card
ICS 220	Air Operations Summary
ICS-221	Demobilization Checkout
ICS-225	Incident Personnel Performance Rating
ICS-230	Daily Meeting Schedule
ICS-232	Resources at Risk Summary
ICS-232a	ACP Site Index

ICS-233 Incident Open Action Tracker
ICS-234 Work Analysis Matrix
ICS-235 Facility Needs Assessment Worksheet

3 - Example Incident Command System Plans

Example Communications Plan
Example Demobilization Plan 1
Example Demobilization Plan 2
Example Disposal Plan
Example Documentation Plan
Example Incident Action Plan 1
Example Incident Action Plan 2
Example Medical Plan

4 - Site Safety and Health Plan ICS-208-Uscg

Table of Forms
SSP-A - Emergency Safety & Response Plan
SSP-B - Site Safety Plan
SSP-C - Site Map
SSP-D - Emergency Response Plan
SSP-E - Exposure Monitoring Plan
SSP-E (1) - Air Monitoring Log
SSP-F - Personal Protective Equipment
SSP-G - Decontamination
SSP-H - Site Safety Enforcement Log
SSP-I - Worker Acknowledgement Form
SSP-J - Form A Compliance Checklist
SSP-K - Form B Compliance Checklist
SSP-L - Drum Compliance Checklist
SSP Attach 1 - Benzene Health Hazards
SSP Attach 2 - Hydrogen Sulfide
SSP Attach 3 - General Signs & Symptoms of Toxic Exposure
SSP Attach 4 - Heat Stress
SSP Attach 5 - Small Boat Safety
SSP Attach 6 - Vehicle Safety

SSP Attach 7 - Insect Bite & Sting
SSP Attach 8 - Animal Hazards

1 - INCIDENT COMMAND SYSTEM FORMS (COMNAVREG HI)

This tab contains ICS forms that were developed for COMNAVREG HI. The forms in this tab are also located on the CD-ROM version of the COMNAVREG HI ICP. Forms are also available from the Navy On-Scene Coordinator Office, Building 150, basement.

PAGE INTENTIONALLY LEFT BLANK

General Plan

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

TIME

1. NOTIFICATION													
2. RESPONSE INTITIATION													
3. SITE CHARACTERIZATION, FORECASTS, & ANALYSIS													
4. SITE SAFETY													
5. SITE SECURITY													
6. SOURCE STABLIZATION, SALAVAGE													
7. SURVEILLANCE													
8. ON WATER RECOVER AND CONTAINMENT													
9. SENSITIVE AREAS													
10. ALTERNATE RESPONSE TECH.													
11. SHORELINE PROTECTION/RECOVERY													
12. WILDLIFE PROTECTION													
13. LOGISTICS SUPPORT													
14. RESPONSE ORGANIZATIONS													
15. COMMUNICATIONS													
16. PUBLIC INFORMATION													
17. FINANCIAL MANAGEMENT													
18. NRDA AND CLAIMS													
19. HAZWOPER TRAINING													
20. INFORMATION MGMT													
21. RESTORATION													
22. WASTE MANAGEMENT													
23. DEMOBILIZATION													

Reset Form

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Incident Action Plan Cover Sheet

Purpose. An Incident Action Plan documents the actions developed by the Incident Commander, Command and General Staffs during the Planning Meeting. When all attachments are included, the plan specifies the control objectives, tactics to meet the objectives, resources, organization, communications plan, medical plan, safety plan and other appropriate information for use in tactical operations.

INCIDENT ACTION PLAN

1. Incident Action Plan Cover Sheet
2. Response Objectives (ICS 202)
3. Organization List (ICS 203)
4. Assignment List (ICS 204)
5. Radio Communications Plan (ICS 205)
6. Medical Plan (ICS 206)
7. Site Safety Plan
8. Incident Map(s) (present situation and future trajectories/plans)
9. Other forms as needed for tactical response

Preparation. The Incident Action Plan is completed following each formal planning meeting conducted by the Incident Commander. The plan must be approved by the Incident Commander prior to distribution.

Distribution. The Incident Action Plan will be reproduced and provided to all supervisory personnel at the Section, branch, Division/Group and Unit Leaders levels.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **APPROVED BY.** If there is a single command, then the Incident Commander or NOSC will sign. If there is a unified command, have each member sign.

4. **WEATHER FORCASE, TIDES, SUNRISE, SUNSET FOR OPERATIONAL PERIOD.** "Wind Speed" should be expressed in either knots or miles per hour. "Wind Direction" should be expressed in degrees Fahrenheit. "Visibility" refers to the distance a person can see clearly in any direction, and should be expressed in feet or miles, without regard to a specific reference point or direction. "Wave Height" refers to seas, not swell, and should be expressed in feet or meters. "Wave Direction" should be expressed as a direction toward a compass point or degree. "Current Speed" refers to surface currents and should be expressed in either knows or miles per hour. "Current Direction" should be expressed as a direction toward a compass point or degree. "Water Temperature" should be expressed in degrees Fahrenheit.

PAGE INTENTIONALLY LEFT BLANK

INCIDENT ACTION PLAN COVER SHEET

1. **INCIDENT NAME:** _____
2. **DATE PREPARED:** _____
3. **OPERATIONAL PERIOD COVERED BY PLAN:**

   Start Time/Date: _____ Figure M-2A NAVAL SHIPYARD **End Time/Date:** _____ UST MAP
4. **APPROVED BY:** Federal: _____

   State: _____

   NOSC: _____

5. Attachments (Check if attached)

- ☐ Incident Objectives (ICS 202)
- ☐ Organization Assignment (ICS 203)
- ☐ Assignment List (ICS 204)
- ☐ Communications Plan (ICS 205)
- ☐ Medical Plan (ICS 206)
- ☐ Situation Status Summary (ICS 209)
- ☐ Environmental Summary (ICS 224)
- ☐ Incident Map(s)
- ☐ Site Safety Plan
- ☐ Traffic Plan
- ☐ Air Operations
- ☐ _____
- ☐ _____

6. Weather Forecast, Tides, Sunrise, Sunset for Operational Period

Wind Speed: _____ Wind Direction: _____

Temperature: _____ Visibility: _____

Wave Height: _____ Wave Direction: _____

Current Speed: _____ Water Temperature: _____

	Time	Level	Time	Level		Time
High Tide	_____	_____	_____	_____	Sunrise:	_____
Low Tide:	_____	_____	_____	_____	Sunset:	_____

Reset Form

N02398

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Incident Briefing (ICS 201)

Purpose. The Incident Briefing form provides the Incident Commander with basic information regarding the incident situation and the resources allocated to the incident. It also serves as a permanent record of the initial response to the incident.

Preparation. The briefing form is prepared by the initial Incident Commander for presentation the to the relieving Incident Commander along with a more detailed oral briefing.

Distribution. After the initial briefing to the Incident Commander and general staff members, the Incident Briefing is duplicated and distributed to the Command Staff, Section Chiefs, Branch Directors, Division/Group Supervisors, and appropriate Planning and Logistics Section Unit Leaders. The sketch map and summary of current action portions of the form are given to the Situation Unit while the Current Organization and Resources Summary sections are given to the Resources Unit.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **DATE AND TIME PREPARED.** Enter the date prepared (e.g. 8/11/1999). Enter the time prepared (e.g. 1530).

3. **MAP SKETCH.** The Map Sketch is designed to provide a visual orientation on the area(s) and/or structure(s) affected or threatened by the incident. Show the Area of Operations, incident site, overflight results, trajectories, impacted shorelines or other graphics depicting situation and resources responding to the incident, including the boundaries of Branch and Divisions and the locations of Groups.

4. **PREPARED BY.** Write down the name and the ICS position of the person who prepared the ICS 201 document.

5. **SUMMARY OF CURRENT ACTIONS.** Enter the strategy and tactics used on the incident and note any specific problem areas.

6. **ORGANIZATIONAL CHART.** Enter the names of individuals assigned to each position. Modify the chart as necessary. If the operation covers more than one shift, write down the names of each shift. Divide the names with a slash mark (i.e., "/").

   Planning Section: List the Technical Specialists and their expertise.
   Operations Section: List the alpha designator for each Division or Group and provide the names of the supervisors (e.g. Branch 1: Division/Group "A") on the continuation form.

7. **RESOURCES SUMMARY.** List each major resource, strike team, and/or task force ordered. Resources ordered are either in transit or on-scene. If in transit, write down the estimated time of arrival (ETA). On-scene resources are usually "available" (in a staging area) or "assigned" to a division or group. For resources in a staging area, write down the location of the area under the "Location/Assignment" column. Cost estimate to be completed by the Finance Section.

Note: Additional pages may be added to the ICS 201 if needed.

PAGE INTENTIONALLY LEFT BLANK

Incident Briefing

ICS 201
Page 1 of 4

Incident Name:	Date Prepared:	Time Prepared:
Map Sketch		
Prepared By	ICS Position	

Reset Form

N02402

Exhibit N-6N

Incident Briefing

ICS 201

Summary of Current Actions and Initial Site Assessment

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	
Safe Approach Possible? ○ Yes ○ No		
Injuries: ○ Yes ○ No	Description of Injuries:	
Spill Location:		
Type of Substance:		
Source of Spill: (Valve, break in line, rupture, truck, and/or vessel)		
Estimated Spill Volume:	Estimated Spill Rate:	
Weather:	Wind Speed:	Wind Direction:
Cause: (Unknown, accident, sabotage, corrosion and/or other)		

Current Situation Narrative: (Brief)

Direction of oil movement _____

Description of contaminated area _____

Proximity to sensitive areas _____

Equipment involved

Response Action Taken:

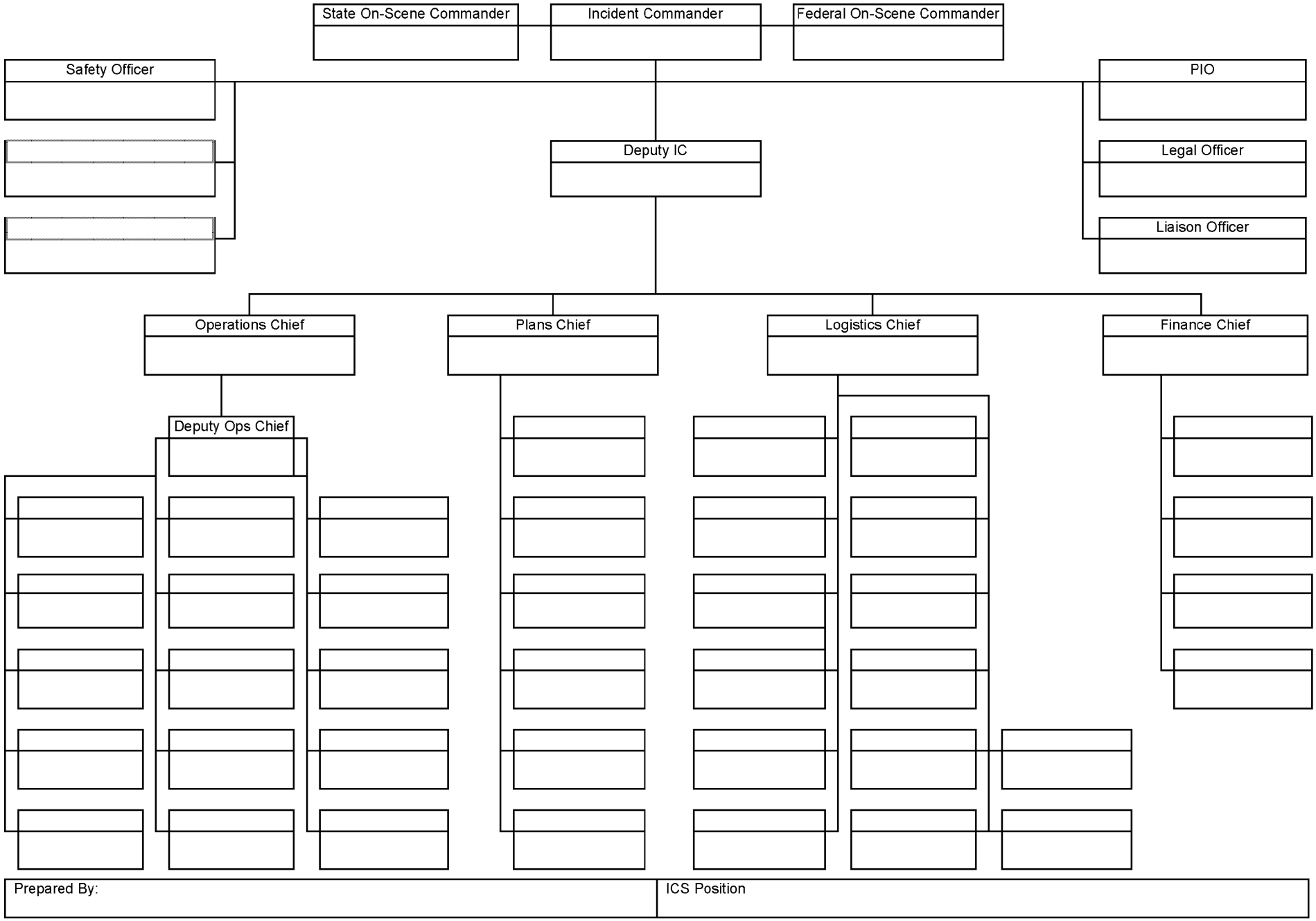
Prepared By:	ICS Position:

Reset Form

N02403

Exhibit N-6N

Organization Chart



Prepared By:	ICS Position

Reset Form

Incident Briefing

ICS 201
Page 4 of 4
Local Resources Summary

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Local Resources Ordered/Source	Quantity	On Scene (X)	ETA Day/Hour	Current Location/Assignment

Cost Estimate: Personnel: _____ Equipment: _____ Other: _____

Prepared By:	ICS Position

Reset Form

N02405

Exhibit N-6N

ICS Forms Instructions

Incident Objectives/Response Priorities (ICS 202)

Purpose. Describes the basic incident strategy, control objectives, and provides weather, tide, and current information and safety considerations for use during the next operational period.

Preparation. The Incident Objectives Form is completed by the Planning Section following each formal Planning Meeting conducted in preparation for the Incident Action Plan.

Distribution. The Incident Objectives From will be reproduced with the IAP and provided to all supervisory personnel at the Section, branch, Division/Group and Unit Leaders levels.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **OVERALL OBJECTIVES.** Objectives should be clear, concise statements that define what the objectives are for managing the response. The overall incident objectives usually apply for the duration of the incident.

4. **OBJECTIVES FOR SPECIFIED OPERATIONAL PERIOD.** Define what the Emergency Management Team is working to make happen or prevent from happening during the operational period identified. There are two types of objectives: strategic and tactical. Strategic objectives are broad statements that provide general guidance to response personnel (e.g. maximize the protection of sensitive resource areas). Tactical objectives are more specific statements that generally apply to a specific field assignment for a specific Division or Group (e.g., prevent oil from entering inlet XYZ and impacting sensitive area ABC). Each objective should be numbered in a consecutive fashion (i.e. 1,2,3).

5. **WEATHER FORECAST FOR OPERATIONAL PERIOD.** Enter the weather forecast or attached a weather sheet with the observed or predicted weather.

6. **GENERAL SAFETY MESSAGE.** Enter the information of known safety hazards and specific precautions to be observed during this operational period. If available, a safety message should or safety plan should be referenced and attached.

7. **PREPARED BY.** Enter the name of the Planning Section Chief completing the form.

Note: The ICS 202, Incident Objectives, serves as part of the IAP which is not considered complete until attachments are included. The IAP must be approved by the Incident Commander, Federal On-scene Coordinator and State On-scene Coordinator.

PAGE INTENTIONALLY LEFT BLANK

Incident Action Plan

ICS 202
Incident Objectives/Response Priorities

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Overall Objectives For The Incident (Include Alternatives)

Objectives for specified Operational Period (Include Alternatives)

Weather Forecast for Operational Period

General Safety Message

Prepared By:	ICS Position: **Planning Section Chief**

N02408

Reset Form

Exhibit N-UN

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Organization Assignment List (ICS 203)

Purpose. The Organization Assignment List provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit. It is used to complete the Incident Organization Chart (ICS Form 207) which is posted on the Incident Command Post display.

Preparation. The Assignment List is prepared and maintained by the Resources Unit under the direction of the Planning Section Chief.

Distribution. The Organization Assignment List is duplicated and included in the Incident Action Plan.

The Organization Assignment List will be revised when the number of personnel assigned to the incident increases or decreases or a change in assignments occur.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **ASSIGNMENTS.** Enter the names of personnel staffing each of the listed positions. Use at least the first initial and last name. Use an additional page if more than three branches are activated. If there is a shift change, divide the names with a slash mark (i.e., "/").

4. **PREPARED BY.** Enter the name of the Resources Unit member preparing the form. Attach the form to the Incident Action Plan.

PAGE INTENTIONALLY LEFT BLANK

Incident Action Plan

ICS 203
Organizational Assignment List

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Incident Commander & Staff

Position	Name
Incident Commander(s)	
Deputy	
Security Officer	
Safety Officer	
Public Information Officer	
Liaison Officer	
Legal Officer	

Agency Representative

Agency	Name

Planning Section

Position	Name
Chief	
Deputy	
Resources Unit	
Situation Unit	
Environmental Unit Leader	
Documentation Unit	
Technical Specialists	

Logistics Section

Position	Name
Chief	
Deputy	

Support Branch

Director	
Supply Unit	
Ground Support Unit	

Service Branch

Director	
Communications Unit	
Medical Unit	
Facilities/Food Unit	
Personnel Unit	

Operations Section

Position	Name
Chief	
Deputy	

Branch 1 Divisions/Groups

Branch Director		
Deputy		
Division (A-E)	Group (1-5)	Supervisor/Task Force Leader
Staging Area Manager		

Branch II Divisons/Groups

Branch Director		
Deputy		
Division (A-E)	Group (1-5)	Superivsor/Task Force Leader
Staging Area Manager		

Branch III Divisions/Groups

Branch Director		
Deputy		
Divison (A-E)	Group (1-5)	Supervisor/Task Force Leader
Staging Area Manager		

Air Operations

Air Operations Branch Director	
Air Attack Supervisor	
Air Support Supervisor	
Helicopter Coordinator	
Airborne Dispersants Coordinator	

Finance Section

Position	Name
Chief	
Deputy	
Contracts Unit	
Claims/Insurance Unit	
Cost Unit	

Prepared By:	ICS Position: **Resource Unit Leader**
Approved By:	ICS Position: **Planning Section Chief**

N02412

Reset Form

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Division/Group Assignment List (ICS 204, 204-1 and 204-2)

Purpose. The Division/Group Assignment List is used to inform the Operations Section personnel of incident assignments. Once the assignments are agreed upon by the Incident Commander and the Command Staff, the assignment information is given to the appropriate Units/Divisions/Groups.

Preparation. The Assignment List is normally prepared by the Resouce Unit using gudance from the Response Objectives (ICS Form 202), the Operational Planning Worksheet (ICS Form 215) and Operations Section Chief. The Assignment List must be approved by the Planning Section Chief. When approved, it is included in the Incident Action Plan.

Distribution. The Assignment List is duplicated and included in the Incident Action Plan. In some cases, assignments may be communicated via radio.

Note: A separate sheet is used for each Division or Group.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **DIVISON/GROUP.** The "Division" designation is used for resources that are assigned to work in a specific geographic area. The "Group" designation is used for resources that are assigned to a function that crosses Division boundaries. Each Division and Group needs an alpha letter designation (i.e., A, B, C, etc.) Alpha letters should be assigned in a consecutive fashion irrespective of whether the letter is assigned to a Division or a Group.

4. **RESOURCES ASSIGNED THIS PERIOD.** Enter number of personnel or quantity of the item listed (e.g., 2-each or 1,000 feet). Resources can be listed as a single resources (e.g. Oil Spill Response Vessel) or a Strike Team when resources of the same kind and type are grouped together (e.g., three Oils pill Response Vessels), or a Task Force when resouces of a different kind and type are grouped together (e.g., three Oil Spill Response Vessls and one barge). Each Strike Team and Task Force formed should be accorded a discreet numeric designator (i.e., 1,2,3, etc.) to distinguish it from all other Strike Teams and Task Forces.

5. **ETA/ETD.** Provide the Estimated Time of Arrival (ETA) or Estimated Time of Departure (ETD)

6. **LOCATION.** Identify the location where the resource is assigned to (e.g. Middle Loch).

7. **ASSIGNMENTS.** Provide a statement of the tactical objectives to be achieved within the operational period. Include any special instructions for individual resources working within the Division.

8. **HEALTH & SAFETY INSTRUCTIONS.** Identify any safety problems or specific precautions to be exercised or other important information. Provide information on the types of Personal Protective Equipment (PPE) required.

- PFD: Personal Flotation Devise (Yes or No)
- Worksuit: Level A, B, C, or D
- Respirator: Check box which applies
- Glasses: Protective glasses required (Yes or No)
- Hard Hat: Hard Hat required (Yes or No)
- Footwear: Footwear required (Yes or No). Describe what type of footwear is required (e.g. Steel Toe Shoes)

9. **PREPARED/APPROVED BY.** The Division/Group Assignment List is usually prepared by the Resource Unit Leader and approved by the Planning Section Chief.

Incident Action Plan

ICS 204
Division/Group Assignment List

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	
Division: (Alpha/Numeric Designation)	Group: (Alpha/Numeric Designation)	ˆ Air OPS ˆ Near Shore ˆ Offshore ˆ Onshore ˆOn Land

Operation Personnel Assigned This Period

Operations Chief:	Division/Group Leader:
Branch Director:	Location Assigned:

Resources Assigned This Period (Task Force and Strike Teams)

Task Force/Strike Team/ Major Equipment	Quantity	POC	Radio Freq./Phone No.	ETD	ETA	Location

N02416

Exhibit N-6N

Incident Action Plan

ICS 204
Division/Group Assignment List

Assignment

Health & Safety Instructions

PPE Required					
PFD (Y/N):	Worksuit (Level):	Respirator: ○1/2 ○Full ○C **BA**	Glasses (Y/N):	Hard Hat (Y/N):	Footwear (Y/N):
Description:					

Division/Group Communication Summary

Task Force	Command	Frequency	Tactical	Frequency	System	Repeater

Prepared By:		ICS Position: Resource Unit Leader
Approved By:	Date/Time Approved:	ICS Position: Planning Section Chief

Reset Form

N02417

Exhibit N-6N

Incident Action Plan

ICS 204-2
Task Force/Strike Teams Personnel

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	
Division: (Alpha/Numeric Designation)	Group: (Alpha/Numeric Designation)	❒ Air Ops ❒ Nearshore ❒ Offshore ❒ Onshore ❒ On Land

Operation Personnel Assigned This Period

Operations Chief:	Division/Group Leader:
Branch Director:	Location Assigned:

Resources Assigned This Period (Task Force and Strike Teams)

Personnel						
Task Force Strike Team	Name	Badge No.	Transportation Needed Yes	Transportation Needed No	Drop Off/Pick-Up Time	Pick-Up/Drop Off Time

Prepared By:	ICS Position: Resource Unit Leader

Reset Form

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Incident Radio Communications Plan (ICS 205 and 205-1)

Purpose. The Incident Radio Communications Plan provides in one location, information on all radio frequency assignments for each operational period. The plan is a summary of information obtained from the Radio Requirement Worksheet (ICS Form 216) and the Radio Frequency Assignment Worksheet (ICS Form 217)

Preparation. The Incident Radio Communications Plan is prepared by the Communications Unit Leader and given to the Planning Section Chief.

Distribution. The Radio Communications Plan is duplicated and given to all recipients of the Incident Action Plan including the Incident Communication Center. Information from the plan is normally placed on the appropriate Assignment List(s) (ICS Form 204).

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **ASSIGNMENT.** Enter the ICS organization assigned to each of the designated frequencies (e.g. Branch I, Division A).

4. **FUNCTION.** Enter the ICS command function each channel number is assigned (i.e., command staff, support, tactical division, and ground-to-air).

5. **SYSTEM.** This is the Basic Radio Channel Utilization System/Cache. Enter the radio cache system(s) assigned and used on the incident (e.g. Boise Cache, FIREMARS, Region 5 Emergency Cache, etc.)

6. **CHANNEL/FREQUENCY.** Enter the radio frequency tone number assigned to each specified function (e.g., 153.400)

7. **DESIGNATED CHECK-IN TIME.** Enter the time the channel/frequency is required to check-in with the Incident Communications Center for a radio check.

8. **REMARKS.** This section should include narrative information regarding special situations.

9. **APPROVED BY.** Enter the name of the Communications Unit Leader approving the form. Attach the form to the Incident Action Plan.

10. **ICS 205-1.** Enter all telephones, cellular phones, and faxes to be used. In the Phone column, use "T" for telephone, "C" for cellular, "P" for pager.

PAGE INTENTIONALLY LEFT BLANK

Incident Action Plan

ICS 205
Incident Radio Communications Plan

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Basic Radio Channel Utilization

Assignment	Function	System	Channel/Frequency	Designated Check-in Time	Remarks

Approved By:	Date/Time Approved:	ICS Position: **Communications Unit Leader**

Reset Form

Incident Action Plan

ICS 205-1
ICS Positions/Phone Numbers

Position	Name	Phone	Fax	Current Location
Incident Commander				
Deputy IC				
Safety Officer				
Security Officer				
PIO				
Legal Officer				
Liaison Officer				
Operations Section Chief				
Deputy Operations Chief				
Air Operations Manager				
Staging Area Manager				
Task Force No. Leader				
Planning Section Chief				
Situation Unit Leader				
Environment Unit Leader				
Resource Unit Leader				
Documentation Leader				
Technical Specialist				
Logistics Section Chief				
Communication Leader				
Supply Unit Leader				
Medical Unit Leader				
Facilities/Food Unit Leader				
Ground Support Leader				
Personnel Unit Leader				
Finance Section Chief				
Time/Cost Unit Leader				
Claims Unit Leader				
Contracts Unit Leader				

Approved By:	Date/Time Approved:	ICS Position: Communications Unit Leader

Reset Form

ICS Forms Instructions

Medical Plan (ICS 206)

Purpose. The Medical Plan provides information on incident medical aid stations, transportation services, hospitals and medical emergency procedures.

Preparation. The Medical Plan is prepared by the Medical Unit Leader and reviewed by the Safety Officer.

Distribution. The Medical Plan may be an attachment to the Response Objectives Form (ICS 202), or information from the plan pertaining to incident medical aid stations and medical emergency procedures may be taken from the plan and placed on the Assignment List (ICS Form 204) .

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **INCIDENT MEDICAL AID STATIONS.** Enter name and location of the incident medical aid stations (e.g., West Loch Staging Area, Pearl City Peninsula Camp Ground) and indicate if paramedics or emergency medical technicians, are located at the site by entering a "x" in the appropriate box.

4. **TRANSPORTATION.** List the name and address of ambulance services. Provide the phone number and indicate if the ambulance company has paramedics, emergency medical technicians, or air transportation by entering a "x" in the appropriate box.

5. **HOSPITALS.** List hospitals which could serve this incident. Enter the hospital name, address, travel time by air and ground from the incident to the hospital, phone number, and enter "Y" for yes and "N" for no to indicate whether the hospital has a burn center and/or helipad.

6. **MEDICAL EMERGENCY PROCEDURES.** Note any special emergency instructions for use by incident personnel.

7. **PREPARED BY.** Enter the name of the Medical Unit Leader preparing the form.

8. **APPROVED BY.** Enter the name of the Safety Officer who must review the plan.

PAGE INTENTIONALLY LEFT BLANK

Incident Action Plan

ICS 206
Medical Plan

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Incident Medical Aid Stations

Medical Aid Station	Telephone/Radio	Location	EMT (x)	Paramedics (x)

Transportation (Assigned/Standby Ambulance Services)

Name	Telephone/Radio	Address	Ground (x)	Air (x)	EMT (x)	Paramedics (x)

Ambulance Services In Addition to Above

Name	Telephone/Radio	Location	EMT (x)	Paramedics (x)

Hospitals

Name	Telephone/Radio	Address	Travel Time		Helipad (Y/N)	Burn Center (Y/N)
			Ground	Air		
					Yes	Yes
					Yes	Yes
					Yes	Yes
					Yes	Yes
					Yes	Yes
					Yes	Yes

Medical Emergency Procedures

Prepared By:	ICS Position: **Medical Unit Leader**
Reviewed By:	ICS Position: **Safety Officer**

Reset Form

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Organization Chart (ICS 207)

Purpose. The Incident Organization Chart is used to indicate what ICS organizational elements are currently activated and the names of personnel staffing each position. The attached chart is an example of the kind of Organizational Chart used in the ICS. Personnel responsible for managing organizations positions would be listed in each box as appropriate.

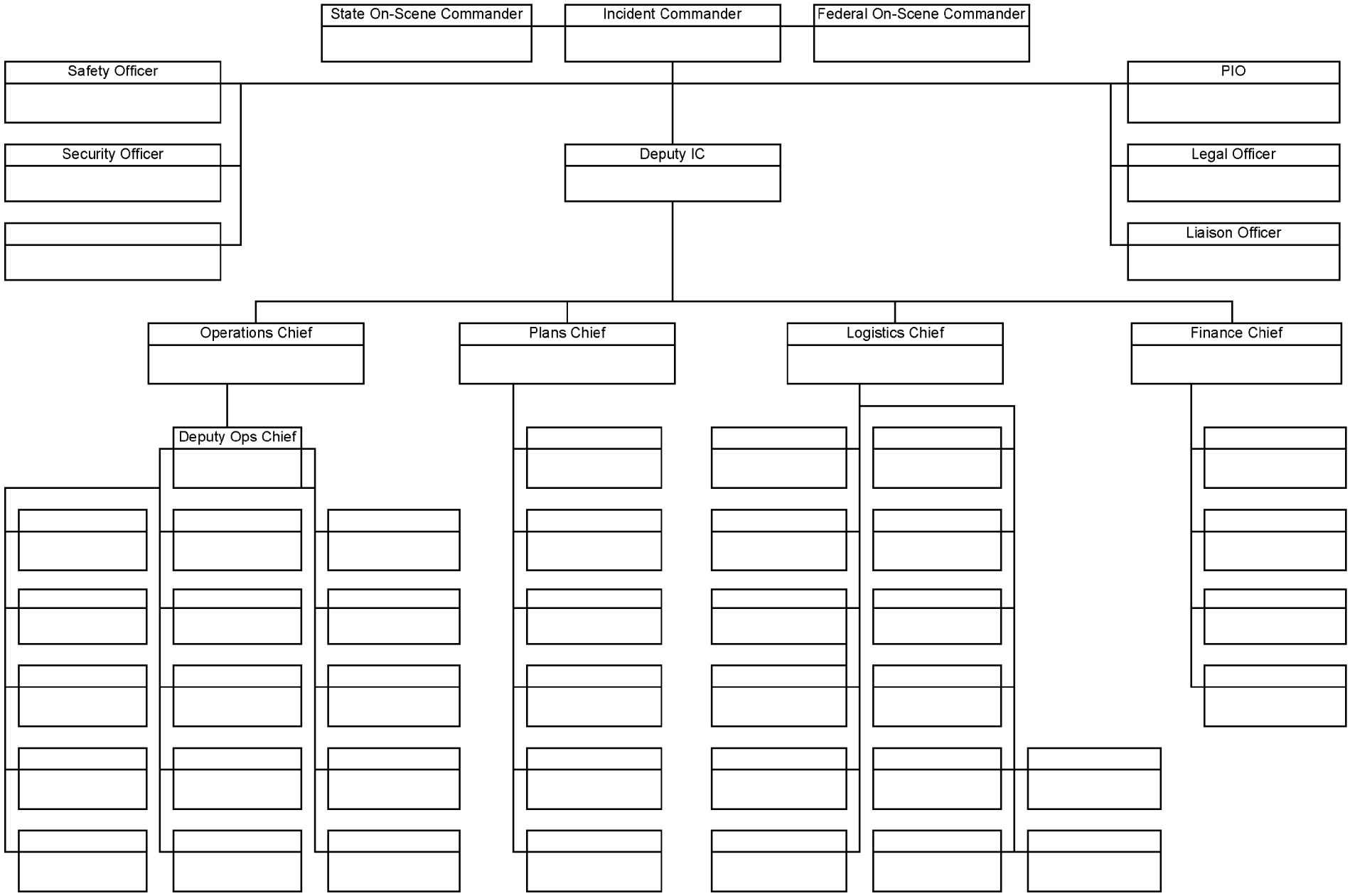
Preparation. The organization chart is prepared by the Resources Unit and posted along with other displays at the Incident Command Post. A chart is completed for each operational period and updated when organizational changes occur.

Distribution. When completed, the chart is posted on the display board located at the Incident Command Post.

PAGE INTENTIONALLY LEFT BLANK

ICS 207
Organization Chart

Incident Name:	Date Prepared:	Time Prepared:	Operational Period Date: From: To:	Operational Period Time: From: To:



Reset Form

N02430

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Situation Status Summary (ICS 209)

Purpose. The Situation Status Summary serves the following purposes:

- It is used by the Situation Unit personnel for posting information on the Status Boards.
- When duplicated and provided to Command Staff members, it provides them with basic information for use in planning for the next operational period.
- It provides information to the Public Affairs Officer for preparation of media releases.
- It summarizes and provides a progress report on the emergency response operations. A statistical summary of the major equipment and personnel resources committed to source control and/or emergency response operations in helping to understand the magnitude of the response effort, and whether it is growing, remaining the same, or decreasing since the previous Situation Status Summary.

Preparation. The Situation Status Summary is prepared by the Situation Unit. Resources information should be obtained from the Resource Unit. It is scheduled for presentation to the Planning Section Chief and other General Staff members prior to each Planning Meeting and may be required at more frequent intervals by the Incident Commander or Planning Section Chief.

Distribution. When completed, the form is duplicated and copies are distributed to the Command Staff, all Section Chiefs, Planning Section Unit Leaders, and the Joint Information Center. It is also posted on a status board located at the Incident Command Post.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **OIL STATUS.** Enter the estimated amounts in barrels, gallons or pounds. Total: Add the amount from the previous Situation Status Summary to the estimated total of the last 12 hours.

4. **OFFSHORE EQUIPMENT RESOURCES.** Enter which types are deployed, how many are enroute and the number available in the staging area.

5. PREPARED BY. The Situation Status Summary is prepared by the Situation Unit with assistance from the Resource Unit.

PAGE INTENTIONALLY LEFT BLANK

ICS 209
Situation Status Summary

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Incident Commander		Cause:
Location		
Spiller		
Incident Start Date/Time		

Oil Status (Estimated)			
Disposition	Previous Total +	Last 12 Hr. =	Total
Total Oil Lost			0.00
Recovered Liquids			0.00
Evaporation			0.00
Natural Dispersion			0.00
Chemical Dispersion			0.00
Burned			0.00
Uncontained			0.00
OnShore			0.00
Offshore			0.00

Offshore Equipment Resources					
Type	Previous	Last 12 Hr	Total	Enroute	Available
Boom Deployed (Field)			0.00		
Pressure Washers			0.00		
Vacuum Trucks			0.00		
Bioremediation (Sq. ft.)			0.00		
Booms (Total Feet)			0.00		
Snare Boom (Total Feet)			0.00		
Skimmers (Total)			0.00		
Vessels/Boats (Total)			0.00		
			0.00		
			0.00		
			0.00		
			0.00		
			0.00		
			0.00		
			0.00		

Waste Management (List Quantities in BBLS or Gals or Lbs)			
Type	Recovered	Stored	Disposed
Oil			
Oily Liquids			
Liquids			
Oily Soilds			
Solids			

Manpower Resources			
Organization	No. of Personnel	Organization	No. of Personnel
Federal (Non-Navy)		Others	
State			
Navy			
Contractors			

Shoreline Impacts			
Degree of Oiling	Miles Affected	Miles Cleaned	Miles Remaining
Light			
Medium			
Heavy			
Total			

Meteorology Forecast: Next Operational Period	
Wind Direction & Speed	
Temperature	
High Tide/Time	
Low Tide/Time	

Wildlife						
Cause	Captured	Cleaned	Released	DOA	Euthanized	Other
Hawaiian Duck						
Hawaiian Coot						
Moor Hen						
Hawaiian Green Sea Turtle						
Humpback Whale						
Hawaiian Monk Seal						
Hawaiian Stilt						

Prepared By:	ICS Position: Situation Unit

Rest Form

N02434

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Field Resource Status & Demobilization Request (ICS 210-1)

Purpose. The Field Resource Status & Demobilization Request is used by the Resource Unit to record status and location information on resources.

Preparation. The information to be placed on the form may be obtained from several sources including but not limited to:

ICS Briefing (ICS 201)
Check-in List (ICS 211)
Status Change Card (ICS 210)

Distribution. Information is displayed on the status boards at the Incident Command Center. All demobilization requests will be distributed to the Demobilization Unit.

Note: A separate sheet is used for each Division or Group.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **DIVISON/GROUP.** The “Division” designation is used for resources that are assigned to work in a specific geographic area. The “Group” designation is used for resources that are assigned to a function that crosses Division boundaries. Each Division and Group needs an alpha letter designation (i.e., A, B, C, etc.) Alpha letters should be assigned in a consecutive fashion irrespective of whether the letter is assigned to a Division or a Group.

4. **RESOURCES ASSIGNED THIS PERIOD.** Resources can be listed as a single resources (e.g. Oil Spill Response Vessel) or grouped together by kind (e.g., vessels, skimmers, boom, etc.).

5. **STATUS.** The status of all activated resources should be recorded on a regular basis. Resources that have been activated but have not checked in at the incident scene are in an "En Route" status. Resources in an "En Route" status should be noted by writing down the estimated time the resource is scheduled to arrive at its check-in destination. Activated resources that have checked in at the incident scene and are working on a task are in an "Assigned" status. "Available" are activated resources that have checked in at the incident scene and are in a staging area awaiting an assignment. All activated resources that have checked in at the incident scene and are not in an "Assigned" or "Available" status should be considered "Out-of-Service". Resources no longer required should be considered "Demobilized".

6. **PREPARED/APPROVED BY.** The Field Resource Status & Demobilization Request is prepared and approved by the Planning Unit.

PAGE INTENTIONALLY LEFT BLANK

ICS 210-1
Field Resource Status & Demobilization Request

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

General Information

Branch Number:	Division Number:	Group Number:	Task Force:	Strike Team:

Resources

Item	Status[1]					Comments
	ER (ETA)	AS (x)	AV (x)	OOS (x)	DM (x)	
A.						
B.						
C.						
D.						
E.						
F.						
G.						
H.						
I.						
J.						
K.						
L.						
M.						
N.						

Sketch[2]

Prepared By:	ICS Position:
Approved By:	ICS Position:

Notes: 1. Key: ER - En Route; AS = Assigned; AV = Staged/Available; OOS = Out-of-Service; DM = De-Mob
2. On sketch show geography, North arrow, resource location, wind and current speed/direction at the time of report. Use separate page if necessary.

Reset Form

N02438

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Check In/Out Log (ICS 211)

Purpose. Personnel and equipment arriving at the incident can check in and out at various incident locations. Check-in/out consists of reporting specific information which is recorded on the form.

Preparation. The Check-in/out log is initiated at a number of incident locations including staging areas, base camps, helibases, and ICP. Managers at these locations record the information and give it to the Resources Unit as soon as possible.

Distribution. Check-in/out logs are provided to both the Resources Unit and the Finance Section. The Resources Unit maintains a master list of all equipment and personnel that have reported to the incident.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **Check-in/out Location.** Indicate where the resource or person is checking in/out.

4. **Name.** List all personnel including overhead personnel at the location. Also list the category (e.g., supervisor, equipment operator, laborer).

5. **Equipment/Supplies.** Quantity ("Qty") refers to the number (e.g. 3-each) or amount (e.g. 100 feet) of the item listed in the "Equipment/Supplies" column. "Kind" refers to what a resouce is (e.g. vessel, boom, skimmer, etc.) and "type" refers to the capabilities of a resource (e.g. Oil Response Vessel, GT-185 Skimmer, etc.)

6. **Vehicle No.** List the equipment's vehicle number or other identifying identification number.

7. **Time In.** Refers to the time that a listed resource checks in at the incident scene.

8. **Time Out.** Refers to the time that a listed resource is demobilized or checks out of the incident scene.

PAGE INTENTIONALLY LEFT BLANK

ICS 211
Check In/Out Log

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	
Check-in Location:	Shift:	

Name	Equipment/Supplies (Kind/Type)	Qty	Vehicle No.	Time In	Time Out

Reset Form

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

General Message (ICS 213)

Purpose. The General Message form is used by:

1. Incident dispatchers to record incoming messages which cannot be orally transmitted to the intended recipients.
2. Command Post and other incident personnel to transmit messages to the Incident Communications Center for transmission via radio or telephone to the addressee.
3. Incident personnel to send any message or notification to incident personnel which requires hard-copy delivery.
4.

Preparation. The General Message form may be initiated by incident dispatchers and any other personnel on an incident.

Distribution. Upon completion, the General Message may be:

1. Hand carried to the addressee.
2. Hand carried to the incident Communications Center for transmission.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **TO.** Indicate Unit/Person the General Message is intended for. Be specific.

3. **FROM.** Indicate the appropriate designation and location of sender.

4. **ACTION REQUIRED.** Check the appropriate box. Indicate the date/time (e.g. 8/11/99 @ 1530) the action is required if the urgent box is checked.

5. **MESSAGE.** The test of the message being sent should be written down in the space provided. Try to be as concise as possible.

6. **REPLY.** This section is intended to be used by the Unit/Person who is responding to the message. Record signature and position of person replying.

`

PAGE INTENTIONALLY LEFT BLANK

ICS 213
General Message

Incident Name:	Date Prepared:	Time Prepared:
To:	ICS Position:	
From:	ICS Position:	

☐ Information Only

☐ Action Required: ☐ Urgent; Action Required by: _____ ☐ As Soon as Possible

Message

Signature:	Date:	Time:

Reply

Signature:	ICS Position	Date:	Time:

N02446

Reset Form

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Unit Log (ICS 214)

Purpose. The Unit Log is used to record details of unit activity including specialized team activity (e.g. Strike Team). The file of these logs provides a basic reference from which to extract information for inclusion in any after-action report.

Preparation. A Unit Log is initiated and maintained by Command Staff members, Division/Group Supervisors, Strike Team/Task Force Leaders, and Unit Leaders. Completed logs are forwarded to supervisors who provide copies to the Documentation Unit.

Distribution. The Documentation Unit maintains a file of all Unit Logs. It is necessary that one copy of each log be submitted to the Documentation Unit.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **UNIT NAME/DESIGNATOR.** Enter the title of the organizational unit or resource designator (e.g., Facilities Unit, Safety Officer, Strike Team).

4. **UNIT LEADER.** Enter the name of the individual in charge of the Unit.

5. **PERSONNEL ROSTER ASSIGNED.** List the names, position, and home base of each member assigned to the unit during the operational period.

6. **ACTIVITY LOG.** Enter the time and briefly describe each significant occurrence or event (e.g., task assignments, task completions, injuries, difficulties encountered, etc.)

7. **PREPARED/APPROVED BY.** Enter the name and ICS position of the person approving the log. Provide the log to the immediate supervisor, at the end of each operational period.

PAGE INTENTIONALLY LEFT BLANK

ICS 214
Unit Log

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	
Unit Name/Designator:	Unit Leader (Name & Position):	

Personnel Roster Assigned

Name	ICS Position	Home Base

Activity

Time	Major Events

Prepared/Approved By:	ICS Position:

Reset Form

ICS 214-1
Unit Log Continuation

Unit Name:	Unit Leader:	Date Prepared:

Activity Log (Continued)

Time	Major Events

Page: Of:

Reset Form

N02451

Exhibit N-6N

ICS Forms Instructions

Operational Planning Summary (ICS 215)

Purpose. The purpose of this form is to communicate the decisions made during the Planning Meeting concerning resource assignments to the Resource Unit. The Worksheet is used by the Resource Unit to complete Assignment Lists and by the Logistics Section Chief for ordering resources for the incident.

Preparation. The form is initiated by the Incident Commander and General Staff at each Planning Meeting. It is recommended that the format be drawn on the wipe board, and when decisions are reached, the information is recorded on the form.

Distribution. When the division work assignments and accompanying resource allocations are agreed to, the form is distributed to the Resource Unit to assist in the preparation of the Assignment Lists (ICS Form 204). The Planning Section will use a copy of this worksheet for preparing requests for resources required for the next operational period.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **DIVISION/GROUP OR OTHER LOCATION.** To help organize tactical response operations, resources are typically assigned to either a Division or a Group. The "Division" designation is used for resources that are assigned to work in a specific geographic area. The "Group" designation is used for resources that are assigned to a function that crosses Division boundaries. Each Division and Group needs an alpha letter designation (i.e., A, B, C, etc.) to distinguish it from all other Divisions and Groups.

4. **WORK ASSIGNMENTS.** Briefly describe what the work assignment is (e.g. Shoreline Clean-up by Fox 12 of Ford Island, Oil debris removal under Mike 3 Pier, etc.).

5. **EQUIPMENT.** Complete the headings, both for kind and type which are appropriate to the incident (e.g. engines, crew, etc.). Enter the number required in the "REQ" column, and the number of resources available in the "Have" column.

6. **REPORTING LOCATION.** Enter the specific location the "Needed" resources are to report for the work assignments.

7. **ARRIVAL TIME.** Enter the time the resources are requested to arrive at the reporting location (e.g. 1530).

8. **PREPARED BY.** Enter the name of person completing the form.

9. **APPROVED BY.** Enter the name of person approving the form.

PAGE INTENTIONALLY LEFT BLANK

Incident Action Plan

ICS 215
Operational Planning Summary

Incident Name:	Date Prepared:	Time Prepared:	Operational Period Date: From: To:	Operational Period Time: From: To:

Division/Group Or Other Location	Work Assignments		Equipment																			Personnel				Reporting Location	Requested Arrival Time
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
		Req.																									
		Have																									
		Need																									
Total Resources Required:			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Prepared By: (Name & Position)
Total Resources on Hand:			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Resources Needed:			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Prepared By:	ICS Position:	Approved By:	ICS Position:

Note: this page is a summary of the 215-1 worksheets.

N02454

Exhibit 14 (N)

Reset Form

ICS 215-1
Operational Planning Work Sheet

Incident Name:	Date Prepared	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Resources Required

R: Required
H: Have
N: Need

	Division: / Task Force: / Task Force:	Division: / Task Force:	Division: / Task Force:	Diviison: / Task Force:	
	Assignment:	Assignment:	Assignment:	Assignment:	Assignment:
	Reporting Location:	Reporting Location:	Reporting Location:	Reporting Location:	**Totals** Reporting Location:
	Reporting Time:	**Reporting Time:**	**Reporting Time:**	**Reporting Time:**	**Reporting Time:**

1 **Personnel**	R	H	N	R	N	H	N	R	H	N	R	H	N	
Laborers														
Operators														
HW Handlers														

2 **Backhoes**														
JD450 w/Hoe														
Rubber Tire Hoe														
235/245 Backhoe														

Resources Required

Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Diviison:	Task Force:

Totals

	R	H	N	R	H	N	R	H	N	R	H	N	R	H	N	
3 Dozers																
D6																
D8/9																
4 Loaders																
930 w/Forks & Bucket																
966/980/988 w/Forks & Bucket																
977 Truck Loader																
5 Cranes																
18-40 Ton Rubber Tire Crane																
6 Trenchers																
Ditchwitch																

Resources Required

Totals

Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Diviison:	Task Force:

7 Trucks	R	H	N	R	H	N	R	H	N	R	H	N	R	H	N	
Truck Tractor																
45-48' Float																
50-75 Ton Lowboy																
Flatbed																
Rollback																
End Dump																
Fire Truck																
Fuel Truck																
Vacuum Truck																
Water Truck																

8 Boats																
26' Utility																
Boom Platform																
Tugboat																

Resources Required

	Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Diviison:	Totals / Task Force:
9 ATV's	R H N	R H N	R H N	R H N	R H N	R H N	R H N	R H N	R H N	
Truck Bombadier										
4-Wheeler										
10 Pallets										
Small Tools										
Ice										
Helicopter Slings										
Emergency Shelter										
Protective Clothing										
Decon										

Resources Required

	Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Diviison:	Totals / Task Force:
11 Skimmers	R H N	R H N	R H N	R H N	R H N	R H N	R H N	R H N	R H N	R H N
Dip 3001										
Rapid Response										
Fuel YON										
Oil SWOB										
128 Storage										
55 Gal. Drum										
1000/3000 Fold-A-Tank										
7000 Modu Tank										
2400 Fast Tank										
10,000 Tanker										
Bladder										

Resources Required

Totals

Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Division:	Task Force:	Diviison:	Task Force:

13 Sorbents	R	H	N	R	H	N	R	H	N	R	H	N	R	H	N	
Pads (Carton)																
Rolls (Roll)																
Boom (Bundle)																

14 Misc.																
Lite Tower/Generator																
Air Pump																
Helicopter																
Pumps																
Hose																

Prepared By:	ICS Position:
Approved By:	ICS Position:

Reset Form

N02460

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

AIR OPERATIONS SUMMARY (ICS FORM 220-OS)

Purpose. The Air Operations Summary provides the Air Operations Branch with the number, type, location, and specific assignments of aircraft.

Preparation. The summary is completed by the Operations Section Chief or the Air Operations Branch Director during each Planning Meeting. General air resource assignment information is obtained from the Operational Planning Worksheet (ICS form 215-OS). Specific designators of the air resources assigned to the incident are provided by the Air and Fixed-Wing Support Groups.

Distribution. After the summary is completed by Air Operations personnel (except item 11), the form is given to the Air Support Group Supervisor, who completes the form by indicating the designators of the helicopters and fixed-wing aircraft assigned missions during the specified operational period. This information is provided to Air Operations personnel who, in turn, give the information to the Resources Unit. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Distribution	Check the block and enter the time and date when ICS form 220-OS and attachments were sent to all fixed-wing bases and helibases supporting the incident.
4.	Personnel and Communications	List the names of those assigned to each position, and the air-air and air-ground frequencies to be used.
5.	Remarks	Enter the special instructions or information, including safety notes, hazards, and priorities for Air Operations personnel.
6.	Location/Function	Enter the assigned location and function of the aircraft.
7.	Assignment	Enter the scope of work the aircraft is assigned to complete.
8.	Fixed Wing	Indicate the number and type of fixed-wing aircraft available for this Location / Function.
9.	Helicopters	Indicate the number and type of helicopters available for this Location / Function.
10.	Time	Indicate when aircraft will be available for use and when operations commence (use 24 hour clock).
11.	Aircraft Assigned	Enter the designators of the aircraft assigned. Gather information from Resources Unit, helibases, and fixed-wing bases.
12.	Operating Base	Enter the base (helibase, helispot, fixed-wing base) from which each air resource is expected to initiate operations.
13.	Totals	Enter the total number of fixed-wing and helicopter aircraft assigned to the incident in the Number columns. Enter the total number of each type of aircraft assigned in the Type columns.
14.	Air Operations Support Equipment	List the designators and location of other support resources assigned to Air Operations.
15.	Prepared By	Enter name and title of the person preparing the form.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date / Time) From: To:	AIR OPERATIONS SUMMARY ICS 220-OS

3. Distribution

☐ Fixed-Wing Bases _____ ☐ Helibase _____

4. Personnel and Communications

	Air Operations Director	Air / Air Frequency	Air / Ground Frequency
Air Operations Director			
Air Tactical Supervisor			
Air Support Supervisor			
Helicopter Coordinator			
Fixed-Wing Coordinator			

5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities)

6. Location / Function	7. Assignment	8. Fixed-Wing		9. Helicopter		10. Time		11. Aircraft Assigned	12. Operating Base
		NO.	TYPE	NO.	TYPE	Available	Commence		
	13. TOTALS								

14. Air Operation Support Equipment

15. Prepared by **Date / Time**

UST MAP

Figure M-2A
NAVAL SHIPYARD

AIR OPERATIONS SUMMARY June 2000 ICS 220-OS

Electronic version: NOAA 1.0 June 1, 2000

Reset Form

N02464

Exhibit N-6N

NAVY0006555

PAGE INTENTIONALLY LEFT BLANK

ICS 223
Health and Safety Message

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Major Hazards and Risks:

Narrative:

Prepared By:	Company Name:	ICS Position: **Safety Officer**

Reset Form

N02466

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

Incident Action Plan

ICS 224
Environmental Unit Summary Sheet

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Area Environmental Data:

Priorities for Mitigating Environmental and Cultural Impacts:

Wildlife Assessments and Rehabilitation:

Permits: (Dispersants, Burning, and/or Other

Waste Management:

Other Environmental Concerns:

Logistical Support Needs:

Prepared By:	ICS Position: Environmental Unit
Approved By:	ICS Poisiton: Planning Section Chief

N02468

Reset Form

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Schedule of Meetings (ICS 230)

Purpose. The Incident Schedule of Meetings is used to record daily scheduled meeting activities for information purposes.

Preparation. The Schedule of Meetings chart is prepared by the Situation Unit and coordinated through the Incident Command for each Operational Period or as needed.

Distribution. When completed, the Situation Unit Leader will duplicate the schedule and post a copy on the display board located at the Incident Command Post. Distribution will be made to the Command Staff, Section Chiefs, Branch Directors, Division/Group Supervisors, and appropriate Unit Leaders

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **MEETING.** Identify the type of meeting (e.g. Planning, Tactics, etc.).

4. **ATTENDEES.** List all sections that should attend the meeting.

5. **LOCATION.** Clearly identify the building location and room number where the meeting will be held.

PAGE INTENTIONALLY LEFT BLANK

ICS 230
Incident Schedule of Meetings

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Time	Meeting	Attendees	Location
0000			
0100			
0200			
0300			
0400			
0500			
0600			
0700			
0800			
0900			
1000			
1100			
1200			
1300			
1400			
1500			
1600			
1700			
1800			
1900			
2000			
2100			
2200			
2300			
2400			

Prepared By:	ICS Position: **Situation Status Unit**

Reset Form

N02472

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

ICS Forms Instructions

Meeting Description (ICS 231)

Purpose. The Meeting Description form is used to provide more detailed information concerning the attendees and agenda for a particular meeting.

Preparation. The Meeting Description is prepared by the person facilitating the meeting and coordinated through the Incident Command for each Operational Period or as needed.

Distribution. After coordination with the Incident Command, the Situation Unit Leader will add the meeting to the Daily Meeting Schedule and post a copy of the Meeting Description at the command post and distribute it to appropriate staff upon request.

1. **INCIDENT NAME.** The name of an incident should be determined by the Incident Commander. Whenever possible, the name of the incident should refer to the geographic area or place where the incident occurs. The name should remain the same for the duration of response operations.

2. **OPERATIONAL PERIOD.** Each operational period should have a clearly defined beginning and end. Enter the Operational Period Date (e.g. 8/11/1999). Enter the Operational Period Time (e.g. 1530).

3. **MEETING NAME.** Enter the name from the Daily Meeting Schedule (ICS 230).

4. **MEETING DATE AND TIME.** Enter the date of the meeting (e.g. 8/11/1999) and time of the meeting (e.g. 1530).

5. **MEETING LOCATION.** Enter the building and room number where the meeting will be held. If outside of the command, enter the area (e.g. Hickam Officer's Club).

6. **WHO SHOULD ATTEND.** Enter the names of those who should attend the meeting.

7. **AGENDA OUTLINE.** List the issues/concerns that are to be addressed at the meeting.

8. **PREPARED BY.** Enter the name and title of the person preparing the form.

PAGE INTENTIONALLY LEFT BLANK

ICS 231
Meeting Description

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

Meeting Name

Meeting Date | Meeting Time

Meeting Location (Bldg No., Room No.)

Who Should Attend

Agenda Outline

Prepared By:	ICS Position:

Reset Form

PAGE INTENTIONALLY LEFT BLANK

Sensitive Sites / Response Actions

Priority	Site ID	Site Description	Assignment	Action	Status

PAGE INTENTIONALLY LEFT BLANK

SHORELINE ASSESSMENT FORM

GEN

Segment Name: Date:

Segment ID: Time From: To:

Surveyed from: ☐ Foot ☐ Boat ☐ Helicopter ☐ Overlook

Weather: ☐ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow

TEAM

Team No.

Name:	For:	Name:	For:
Name:	For:	Name:	For:
Name:	For:	Name:	For:

Shoreline Type(s) Present: Check all that apply. Also, check whether Primary or Secondary shoreline type.

1A	Rocky Cliffs	☐ Y	☐ N	☐ P	☐ S	6B	Riprap	☐ Y	☐ N	☐ P	☐ S
1B	Exposed Man-made Struct.	☐ Y	☐ N	☐ P	☐ S	7	Exposed Tidal Flats	☐ Y	☐ N	☐ P	☐ S
2	Wave-cut Platforms	☐ Y	☐ N	☐ P	☐ S	8A	Sheltered Rocky Shores	☐ Y	☐ N	☐ P	☐ S
3	Fine-grained Sand Beach	☐ Y	☐ N	☐ P	☐ S	8B	Sheltered Man-made Struct.	☐ Y	☐ N	☐ P	☐ S
4	Med. to Coarse Sand Beach	☐ Y	☐ N	☐ P	☐ S	9	Sheltered Tidal Flats	☐ Y	☐ N	☐ P	☐ S
5	Mixed Sand & Gravel Beach	☐ Y	☐ N	☐ P	☐ S	10	Wetlands	☐ Y	☐ N	☐ P	☐ S
6A	Gravel Beach	☐ Y	☐ N	☐ P	☐ S		Other _____	☐ Y	☐ N	☐ P	☐ S

Wave Exposure: ☐ Low ☐ Medium ☐ High

Debris Oiled? ☐ Y ☐ N Type _____ Volume _____

Segment Length: _____ (m) _____ (ft) Percent of Segment Oiled: 0.00% %

Oil Present in which Tidal Zone? ☐ Supra ☐ Upper ☐ Mid ☐ Lower ☐ Substrate

Overall Degree of Oiling: ☐ None ☐ Very Light ☐ Light ☐ Moderate ☐ Heavy

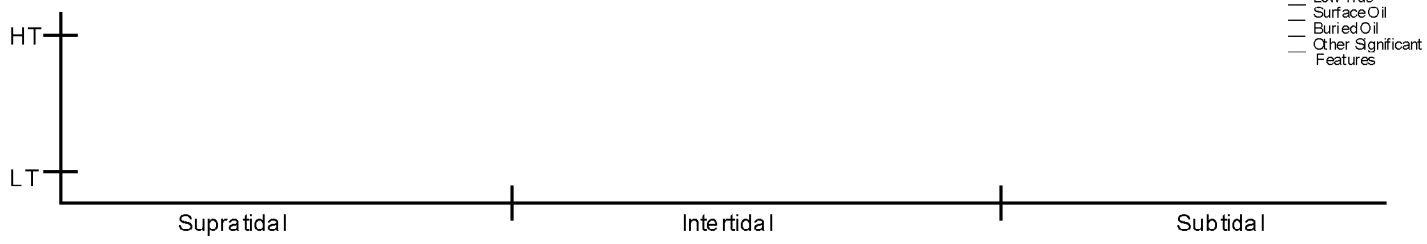
Please choose one item under each heading below. Summarize for entire segment or subsegment.

Oil Band Width (m) or (ft)	Surface Oil Cover (within the oiled band)	Surface Oil Thickness	Surface Oil Type	Sediment Penetration	Sediment Burial
☐ <0.3 m ☐ <1 ft	☐ <1 %	☐ Film ☐	☐ Fresh Liquid	☐ <1 cm	Clean Layer
☐ 0.3-1 m ☐ 1-3 ft	☐ 1-10 %	☐ Stain	☐ Mousse	☐ 1-5 cm	_____ cm
☐ 1-3 m ☐ 3-10 ft	☐ 11-50 %	☐ Coat	☐ Tarballs	☐ 5-10 cm	Oiled Layer
☐ >3 m ☐ >10 ft	☐ 51-90 %	☐ Cover	☐ Patties	☐ >10 cm	_____ cm
		☐ Pooled	☐ Asphalt Pavement		

Environmental Issues? ☐ Y ☐ N Cultural Issues? ☐ Y ☐ N Recreational Issues? ☐ Y ☐ N

Cleanup Recommendation / Specific Constraints

Cross-Section Sketch



Show:
- High Tide
- Low Tide
- Surface Oil
- Buried Oil
- Other Significant Features

Reset Form

N02480

Exhibit N-6N

SHORELINE ASSESSMENT FORM for _____ Spill

Page: ____ of ____

GEN	Segment Name: _____	Date: _____
	Segment ID: _____	Time: _____ to _____
	Surveyed from: ☐ Foot ☐ Boat ☐ Helicopter ☐ Ovelook Weather: ☐ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow	

TEAM	Team No.			
	Name:	for:	Name:	for:
	Name:	for:	Name:	for:
	Name:	for:	Name:	for:

LAND	Shoreline/Sediment Types:		
	Wave Exposure: ☐ Low ☐ Medium ☐ High	Total Segment Length: ____ m	Length Surveyed: ____ m
	Location Description:		
	Access Restrictions:		

Description of oiling conditions

Oil Length - Width - Type/Thickness - Substrate Type - Oiled Debris

SURFACE OIL:

SUBSURFACE OIL:

Extent - Thickness Clean - Thickness Oiled - Intertidal Location - Sediment Type - Oil Description - Burial - Penetration

Segment-specific considerations for cleanup operations

Environmental - Cultural - Degree of Recreational Use

CLEANUP RECOMMENDATIONS

N02481

Reset Form

Exhibit 11-61

SHORELINE SURVEY EVALUATION FORM

1 GEN

Segment Name: _____ Segment ID: _____ Survey Date: _____ Survey Time: _____ (use military time) to _____

Surveyed from: ☐ Foot ☐ Boat ☐ Helicopter Weather: ☐ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow

2 TEAM

Team No.	Operations:
OG:	State: for:
ECO:	Federal: for:
ARCH:	Land Manager: for:

3 SHORE

Overall Classification for UITZ - select one

Bedrock: ☐ Cliff ☐ Platform
Manmade: ☐ Permeable ☐ Impermeable
Marsh/Wetlands ☐

Sediment Beach: ☐ Boulder-Cobble ☐ Sand ☐ Pebble-Cobble ☐ Sand-Gravel

Sediment Flat: ☐ Boulder-Cobble ☐ Sand ☐ Pebble-Cobble ☐ Sand-Gravel

Secondary Shore Type: Backshore Type:

4 LAND

Geomorphology

Slope: Low 0.00% % Med. 0.00% % High 0.00% % Vert. 0.00% % Wave Exposure:

Estimated Segment Length: Total Estimated Length Surveyed:

Access Restrictions:

5 OIL

Oil Category Width:

Wide _____ m Very Narrow _____ m
Medium _____ m No Oil _____ m
Narrow _____ m Unsurveyed _____ m

Total Pavement: _____ sq.m by _____ cm
Patties/Tarballs _____ bags Oiled Debris? ☐ Yes ☐ No
Debris/Amount: Logs _____ Vegetation _____ Trash _____ Other _____

6 SURFACE OIL

LOC	AREA LENGTH m	AREA WIDTH m	ZONE SU	ZONE UI	ZONE MI	ZONE LI	DIST	THICKNESS PO	THICKNESS CV	THICKNESS CT	THICKNESS ST	THICKNESS FL	TYPE FR	TYPE MS	TYPE TB	TYPE PT	TYPE TC	TYPE SR	TYPE AP	TYPE NO	SHORELINE SEDIMENT TYPE

7 SUBSURFACE

NO.	TRENCHES SU	TRENCHES UI	TRENCHES MI	TRENCHES LI	TRENCH DEPTH cm	OILED ZONE cm	SUBSURFACE OIL OP	SUBSURFACE OIL PP	SUBSURFACE OIL OR	SUBSURFACE OIL OF	SUBSURFACE OIL TR	SUBSURFACE OIL NO	WATER TABLE cm	SHEEN COLOR	SURFACE - SUBSURFACE SEDIMENTS	CLEAN BELOW Y/N

8 COMMENTS

PAGE INTENTIONALLY LEFT BLANK

SHORELINE ASSESSMENT FORM for _____ Spill Page: ____ of ____

TRANSECT: _____ Distribution (DIST): C = 100-91%; B = 90-51%; P = 50-11%; S = 10-1%; T = , 1% Photo Roll # _____ Frames _____

SUBSURFACE	NO.	TRENCHES SU	UI	MI	LI	TRENCH DEPTH cm	OILED ZONE cm	SUBSURFACE OIL OP	PP	OR	OF	TR	NO	WATER TABLE cm	SHEEN COLOR	SURFACE - SUBSURFACE SEDIMENTS	CLEAN BELOW Y/N

TRANSECT: _____ Distribution (DIST): C = 100-91%; B = 90-51%; P = 50-11%; S = 10-1%; T = , 1% Photo Roll # _____ Frames _____

SUBSURFACE	NO.	TRENCHES SU	UI	MI	LI	TRENCH DEPTH cm	OILED ZONE cm	SUBSURFACE OIL OP	PP	OR	OF	TR	NO	WATER TABLE cm	SHEEN COLOR	SURFACE - SUBSURFACE SEDIMENTS	CLEAN BELOW Y/N

TRANSECT: _____ Distribution (DIST): C = 100-91%; B = 90-51%; P = 50-11%; S = 10-1%; T = , 1% Photo Roll # _____ Frames _____

SUBSURFACE	NO.	TRENCHES SU	UI	MI	LI	TRENCH DEPTH cm	OILED ZONE cm	SUBSURFACE OIL OP	PP	OR	OF	TR	NO	WATER TABLE cm	SHEEN COLOR	SURFACE - SUBSURFACE SEDIMENTS	CLEAN BELOW Y/N

N02484

Reset Form

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

Site Safety Analysis

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

1. Wind Direction Across Incident: ☐ Towards Your Position ☐ Away From Your Position

2. Are people Injured or trapped? Injured ☐ Yes ☐ No Trapped ☐ Yes ☐ No

3. Are people involved as unorganized observers or involved in rescue attempts? Observers ☐ Yes ☐ No Rescuers ☐ Yes ☐ No

4. Are there any immediate signs of potential hazards:

   a. Electrical line down or overhead? ☐ Yes ☐ No

   b. Unidentified liquid, or solid products visible? ☐ Yes ☐ No

   c. Colored vapors visible? ☐ Yes ☐ No

   d. Smells which are not natural noted? ☐ Yes ☐ No

   e. Fire, sparks nearby, sources of ignition present? ☐ Yes ☐ No

   f. Holes, caverns, deep ditches, fast moving water, cliffs nearby? ☐ Yes ☐ No

   g. Is local traffic a potential problem? ☐ Yes ☐ No

   h. Signs, placards or color codes indicating danger? ☐ Yes ☐ No

   i. Spill zone ☐ Dry ☐ Yes ☐ No

5. As you approach the scene from the upwind side, do you note a change in status of any of the above? ☐ Yes ☐ No

6. Have you established control of the area involved in the incident? ☐ Yes ☐ No

7. Have you determined the necessity for any of the following:

   a. Security? ☐ Yes ☐ No

   b. Hazardous material identified. Being monitored? ☐ Yes ☐ No

   c. Protective gear and to what level of protection? _____ ☐ Yes ☐ No

   d. Site for decontamination center? ☐ Yes ☐ No

   e. Site for command center? ☐ Yes ☐ No

   f. Safety equipment you will need to eliminate the problems? ☐ Yes ☐ No

   g. Placement of the warning sign? (I.e., benzene, no smoking, etc.) ☐ Yes ☐ No

   h. Number of personnel needed to control the situation? _____ ☐ Yes ☐ No

8. Entry Objectives:	Description:
9. a. Decon Equipment and Materials Required:	Description:

b. Emergency Decon Instructions:

c. Personal Protective Equipment:

- ☐ A. To be selected when greatest level of skin, respiratory, and eye protection is needed.
- ☐ B. To be selected when highest level of respiratory protection is needed, but lesser level of skin protection is needed. (SCBA)
- ☐ C. To be selected when concentrations and types of airborne substances are known and the criteria for using air purifying respirators are met.
- ☐ D. To be selected when the atmosphere contains no known hazard; and work functions preclude splashes, immersion, or potential for unexpected inhalation of or contact with hazardous levels of any chemicals.

Site Safety Analysis

Incident Name:	Date Prepared:	Time Prepared:
Operational Period Date: From: To:	Operational Period Time: From: To:	

10. Emergency Escape Route:	Description:
11. a. Sampling Equipment Listed:	(Combustible gas indicator, O_2 monitor, colonmetric tubes (type) HNU/OVA, etc.)
b. Sample Frequency:	(Indicate continuous, hourly, daily, other)
12, Personal Monitoring:	(Describe any personal sampling programs being carried out on site personnel)
13. Medical Monitoring:	(Describe procedures in effect, i.e., monitoring body temperature, body weight, pulse rate, etc.)

14. Remarks

1. Before entering a potentially hazardous work environment, IT MUST BE EVALUATED BY A COMPETENT PERSON to establish safe work practices, personal protective equipment, and other control procedures. As a minimum lower explosive limit (LEL). Oxygen and Benzene levels must be evaluated.

2. Spill cleanup areas shall be controlled as "regulated areas." If Benzene vapors are or may be expected to equal the action level of .5ppm. then the area must be posted with the following warning:

Danger
Benzene Cancer Hazard
Flammable - No Smoking
Authorized Personnel Only
Respirator Required

Prepared By:	Company Name:	ICS Position: On-Site Safety Unit Leader
Approved By:	Company Name:	ICS Position:

Reset form

N02487

Exhibit N-6N

2 - INCIDENT COMMAND SYSTEM FORMS (USCG)

This tab contains the latest USCG ICS forms. The forms in this tab are also located on the CD-ROM version of the COMNAVREG HI ICP. Forms are also available from the Navy On-Scene Coordinator Office, Building 150, basement.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period to be covered by IAP (Date/Time) From: To:	CG IAP COVER SHEET

3. Approved by Incident Commander(s):

ORG	NAME

INCIDENT ACTION PLAN

The items checked below are included in this Incident Action Plan:

- ☐ ICS 202-CG (Response Objectives)
- ☐ ICS 203-CG (Organization List) – OR – ICS 207-CG (Organization Chart)
- ☐ ICS 204-CGs (Assignment Lists)
  One Copy each of any ICS 204-CG attachments:
- ☐ ICS 205-CG (Communications Plan)
- ☐ ICS 206-CG (Medical Plan)
- ☐ ICS 208-CG (Site Safety Plan) or Note SSP Location _____
- ☐ Map/Chart
- ☐ Weather forecast / Tides/Currents

Other Attachments

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

4. Prepared by: **Date/Time**

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

3. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines, or other graphics depicting situational and response status)

4. Current Situation:

N02492

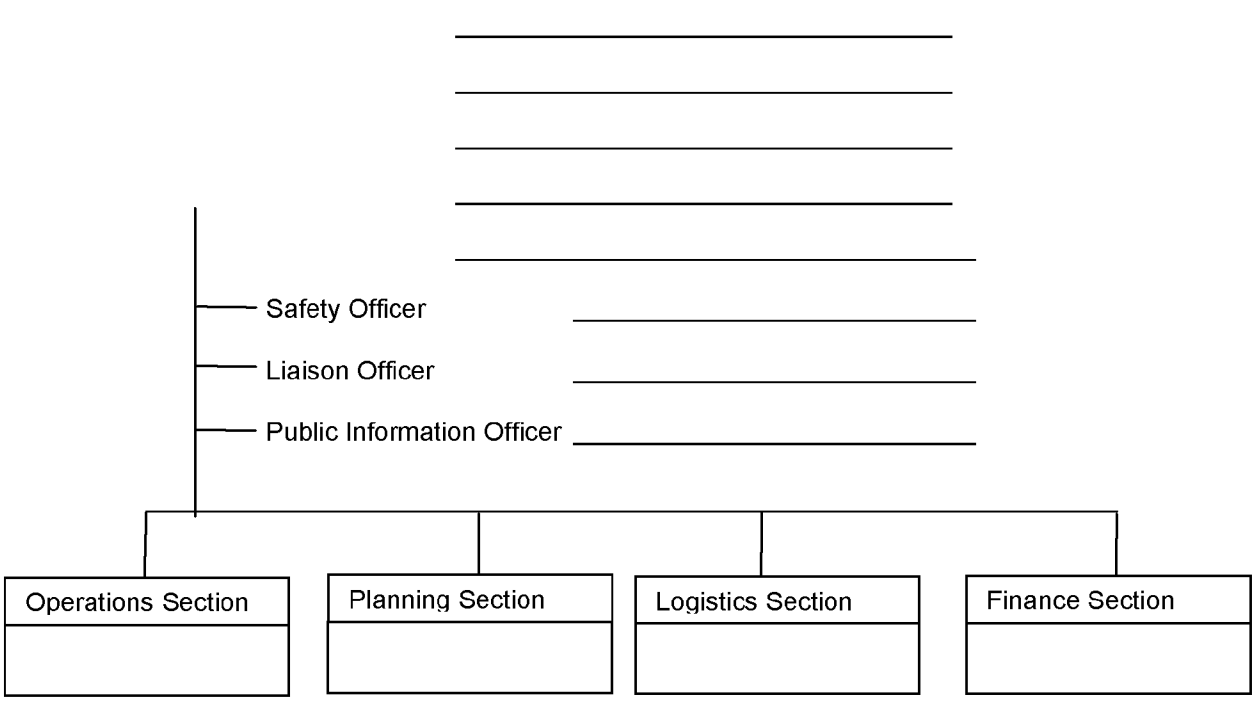
Exhibit N-6N

1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

5. Initial Response Objectives, Current Actions, Planned Actions	

1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

6. Current Organization (fill in additional appropriate organization)



1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

7. Resources Summary

Resource	Resource Identifier	Date Time Ordered	ETA	On-Scene (X)	NOTES: (Location/Assignment/Status)

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT OBJECTIVES ICS 202-CG

3. Objective(s)

4. Operational Period Command Emphasis (Safety Message, Priorities, Key Decisions/Directions)

Approved Site Safety Plan Located at:

5. Prepared by: (Planning Section Chief) **Date/Time**

INCIDENT OBJECTIVES (ICS 202-CG)

Purpose. The Incident Objectives form describes the basic incident strategy, control objectives, command emphasis/priorities, and safety considerations for use during the next operational period.

Preparation. The Incident Objectives form is completed by the Planning Section following each Command and General Staff Meeting conducted in preparing the Incident Action Plan.

Distribution. The Incident Objectives form will be reproduced with the IAP and given to all supervisory personnel at the Section, Branch, Division/Group, and Unit levels. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Objective(s)	Enter clear, concise statements of the objectives for managing the response. These objectives are for the incident response for this operational period and for the duration of the incident. Include alternatives.
4.	Operational Period Command Emphasis	Enter clear, concise statements for safety message, priorities, and key command emphasis/decisions/directions. Enter information such as known safety hazards and specific precautions to be observed during this operational period. If available, a safety message should be referenced and attached. At the bottom of this box, enter the location where approved Site Safety Plan is available for review.
	Site Safety Plan	Note location of the approved Site Safety Plan.
5.	Prepared By	Enter the name of the Planning Section Chief completing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

NOTE: ICS 202-CG, Incident Objectives, serves as part of the Incident Action Plan (IAP)

1. Incident Name	2. Operational Period (Date/Time) From: To:	ORGANIZATION ASSIGNMENT LIST ICS 203-CG

3. Incident Commander(s) and Staff

Agency	IC	Deputy

Safety Officer:	
Information Officer:	
Liaison Officer:	

4. Agency Representatives

Agency	Name

5. PLANNING/INTEL SECTION

Chief	
Deputy	
Resources Unit	
Situation Unit	
Environmental Unit	
Documentation Unit	
Demobilization Unit	
Technical Specialists	

6. LOGISTICS SECTION

Chief	
Deputy	
a. Support Branch	
Director	
Supply Unit	
Facilities Unit	
Vessel Support Unit	
Ground Support Unit	
b. Service Branch	
Director	
Communications Unit	
Medical Unit	
Food Unit	

7. OPERATION SECTION

Chief		
Deputy		
Deputy		
Staging Area Manager		
Staging Area Manager		
Staging Area Manager		
a. Branch – Division Groups		
Branch Director		
Deputy		
Division Group		
Division Group		
Division Group		
Division/Group		
Division/Group		
b. Branch – Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
c. Branch – Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
d. Air Operations Branch		
Air Operations Br. Dir		
Helicopter Coordinator		

8. FINANCE/ADMINISTRATION SECTION

Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation/Claims Unit	
Cost Unit	

9. Prepared By: (Resources Unit) **Date/Time**

ORGANIZATION ASSIGNMENT LIST (ICS 203-CG) Instructions for filling out the form

Purpose. The Organization Assignment List provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit. It is used to complete the Incident Organization Chart (ICS form 207-CG) which is posted on the Incident Command Post display. An actual organization will be event-specific. **Not all positions need to be filled.** The size of the organization is dependent on the magnitude of the incident and can be expanded or contracted as necessary.

Preparation. The Resources Unit prepares and maintains this list under the direction of the Planning Section Chief.

Note: Depending on the incident, the Intelligence and Information function may be organized in several ways: 1) within the Command Staff as the Intelligence Officer; 2) As an Intelligence Unit in Planning Section; 3) As an Intelligence Branch or Group in the Operations Section; 4) as a separate General Staff Intelligence Section; and 5) as an Intelligence Technical Specialist. The incident will drive the need for the Intelligence and Information function and where it is located in the ICS organization structure. The Intelligence and information function is described in significant detail in NIMS and in the Coast Guard Incident Management Handbook (IMH).

Distribution. The Organization Assignment List is duplicated and attached to the Incident Objectives form (ICS 202-CG) and given to all recipients of the Incident Action Plan. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Incident Commander and Staff	Enter the names of the Incident Commander and Staff. Use at least the first initial and last name.
4.	Agency Representative	Enter the agency names and the names of their representatives. Use at least the first initial and last name.
5. thru 8.	Section	Enter the name of personnel staffing each of the listed positions. Use at least the first initial and last name. For Units, indicate Unit Leader and for Divisions/ Groups indicate Division/Group Supervisor. Use an additional page if more than three branches are activated. If there is a shift change during the specified operational period, list both names, separated by a slash.
9.	Prepared By	Enter the name and position of the person completing the form
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	ASSIGNMENT LIST ATTACHMENT ICS 204a-CG
3. Branch	4. Division/Group	
5. Strike Team/Task Force/Resource (Identifier)	6. Leader	7. Assignment Location

8. Work Assignment Special Instructions, Special Equipment/Supplies Needed for Assignment, Special Environmental Considerations, Special Site Specific Safety Considerations

Approved Site Safety Plan Located at:

9. Other Attachments (as needed)

☐ Map/Chart ☐ Weather Forecast/Tides/Currents ☐ _____

☐ _____ ☐ _____ ☐ _____

10. Prepared by: Date/Time	11. Reviewed by (PSC): Date/Time	12. Reviewed by (OSC): Date/Time

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date/Time) From: To:	Assignment List ICS 204-CG
3. Branch	4. Division/Group/Staging	

5. Operations Personnel Name Affiliation Contact # (s)

Operations Section Chief: _____

Branch Director: _____

Division/Group Supervisor/STAM: _____

6. Resources Assigned "X" indicates 204a attachment with additional instructions

Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# Of Persons	Reporting Info/Notes/Remarks	☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐

7. Work Assignments

8. Special Instructions

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager	

Emergency Communications

Medical _____ Evacuation _____ Other _____

10. Prepared by: Date/Time	11. Reviewed by (PSC): Date/Time	12. Reviewed by (OSC): Date/Time

ASSIGNMENT LIST (ICS 204-CG)

Purpose. The Assignment List(s) informs Division and Group supervisors of incident assignments. Once the Unified Command and General Staff agree to the assignments, the assignment information is given to the appropriate Divisions and Groups.

Preparation. The Assignment List is normally prepared by the Resources Unit, using guidance from the Incident Objectives (ICS 202-CG), Operational Planning Worksheet (ICS 215-CG), and the Operations Section Chief. The Assignment List must be approved by the Planning Section Chief and Operations Section Chief. When approved, it is included as part of the Incident Action Plan (IAP). Specific instructions for specific resources may be entered on an ICS 204a-CG for dissemination to the field. A separate sheet is used for each Division or Group. The identification letter of the Division is entered in the form title. Also enter the number (roman numeral) assigned to the Branch.

Special Note. The Assignment List, ICS 204-CG submits assignments at the level of Divisions and Groups. The Assignment List Attachment, ICS 204a-CG shows more specific assignment information, if needed. The need for an ICS 204a-CG is determined by the Planning and Operations Section Chiefs during the Operational Planning Worksheet (ICS 215-CG) development.

Distribution. The Assignment List is duplicated and attached to the Incident Objectives and given to all recipients of the Incident Action Plan. In some cases, assignments may be communicated via radio/telephone/fax. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Branch	Enter the Branch designator.
4.	Division/Group/Staging	Enter the Division/Group/Staging designator.
5.	Operations Personnel	Enter the name of the Operations Chief, applicable Branch Director, and Division Supervisor.
6.	Resources Assigned	Each line in this field may have a separate Assignment List Attachment (ICS 204a-CG). Enter the following information about the resources assigned to Division or Group for this period:
	Identifier	List identifier
	Leader	Leader name
	Contact Information	Primary means of contacting this person (e.g., radio, phone, pager, etc.). Be sure to include area code when listing a phone number.
	# Of Persons	Total number of personnel for the strike team, task force, or single resource assigned.
	Reporting Info/Notes/ Remarks	Special notes or directions, specific to this strike team, task force, or single resource. Enter an "X" check if an Assignment List Attachment (ICS 204a-CG) will be prepared and attached. The Planning and Operations Section Chiefs determine the need for an ICS 204a-CG during the Operational Planning Worksheet (ICS 215-CG) development.
7.	Work Assignment	Provide a statement of the tactical objectives to be achieved within the operational period by personnel assigned to this Division or Group.
8.	Special Instructions	Enter a statement noting any safety problems, specific precautions to be exercised, or other important information.
9.	Communications	Enter specific communications information (including emergency numbers) for this division /group. If radios are being used, enter function (command, tactical, support, etc.), frequency, system, and channel from the Incident Radio Communications Plan (ICS 205-CG). Note: Phone numbers should include area code.
10.	Prepared By	Enter the name of the person completing the form, normally the Resources Unit Leader.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).
11.	Reviewed by (PSC)	
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).
12.	Reviewed by (OSC)	Enter the name of the operations person reviewing the form, normally the Operations Section Chief.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date / Time) From: To:	COMMUNICATIONS LIST ICS 205A-CG

3. Basic Local Communications Information

Assignment	Name	Method(s) of contact (radio frequency, phone, pager, cell #(s), etc.)

4. Prepared by: (Communications Unit) **Date / Time**

COMMUNICATIONS LIST ICS 205a-CG (Rev. 07/04)

COMMUNICATIONS LIST (ICS 205a-CG)

Special Note. This optional form is used in conjunction with the Incident Radio Communications Plan, ICS 205-CG. Whereas the ICS 205-CG is used to provide information on all radio frequencies down to the Division/Group level, the Communications List, ICS 205a-CG, lists methods of contact for personnel assigned to the incident (radio frequencies, phone numbers, pager numbers, etc.), and functions as an incident directory.

Purpose. The Communications List records methods of contact for personnel on scene.

Preparation. The Communications List can be filled out during check-in and is maintained and distributed by Communications Unit personnel.

Distribution. The Communications List is distributed within the ICS and posted, as necessary. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Basic Local Comms Information	Enter the communications methods assigned and used for each assignment.
	Assignment	Enter the ICS Organizational assignment.
	Name	Enter the name of the contact person for the assignment.
	Method(s) of contact	Enter the radio frequency, telephone number(s), etc. for each assignment.
4.	Prepared By	Enter the name of the Communications Unit Leader preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date / Time) From: To:	INCIDENT RADIO COMMUNICATIONS PLAN ICS 205-CG

3. BASIC RADIO CHANNEL USE

SYSTEM / CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS

4. Prepared by: (Communications Unit) **Date / Time**

INCIDENT RADIO COMMUNICATIONS PLAN ICS 205-CG (Rev.07/04)

INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205-CG)

Special Note. This form, ICS 205-CG, is used to provide, in one location, information on all radio frequency assignments down to the Division/Group level for each operational period; whereas, the Communications List, ICS 205a-CG is used to list methods of contact for personnel assigned to the incident (radio frequencies, phone numbers, pager numbers, etc.).

Purpose. The Incident Radio Communications Plan is a summary of information obtained from the Radio Requirements Worksheet (ICS 216) and the Radio Frequency Assignment Worksheet (ICS 217). Information from the Radio Communications Plan on frequency assignments is normally noted on the appropriate Assignment List (ICS 204-CG).

Preparation. The Incident Radio Communications Plan is prepared by the Communications Unit Leader and given to the Planning Section Chief. Detailed instructions on the preparation of this form may be found in ICS Publication 223-5, Communications Unit Position Manual.

Distribution. The Incident Radio Communications Plan is duplicated and given to all recipients of the Incident Objectives form, including the Incident Communications Center. Information from the plan is placed on Assignment Lists. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Basic Radio Channel	Enter the following information about radio channel use:
	System	Radio cache system(s) assigned and used on the incident.
	Channel	Radio channel numbers assigned.
	Function	Function each channel is assigned (e.g., command, support, division tactical, and ground-to-air).
	Frequency	Radio frequency tone number assigned to each specified function (e.g., 153.400)
	Assignment	ICS organization assigned to each of the designated frequencies (e.g., Branch I, Division A).
	Remarks	This section should include narrative information regarding special situations.
4.	Prepared By	Enter the name of the Communications Unit Leader preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date / Time) From: To:	MEDICAL PLAN ICS 206-CG

3. Medical Aid Stations

Name	Location	Contact #	Paramedics On site (Y/N)

4. Transportation

Ambulance Service	Address	Contact #	Paramedics On board (Y/N)

5. Hospitals

Hospital Name	Address	Contact #	Travel Time		Burn Ctr?	Heli-Pad?
			Air	Ground		

6. Special Medical Emergency Procedures

7. Prepared by: (Medical Unit Leader) Date/Time	8. Reviewed by: (Safety Officer) Date/Time

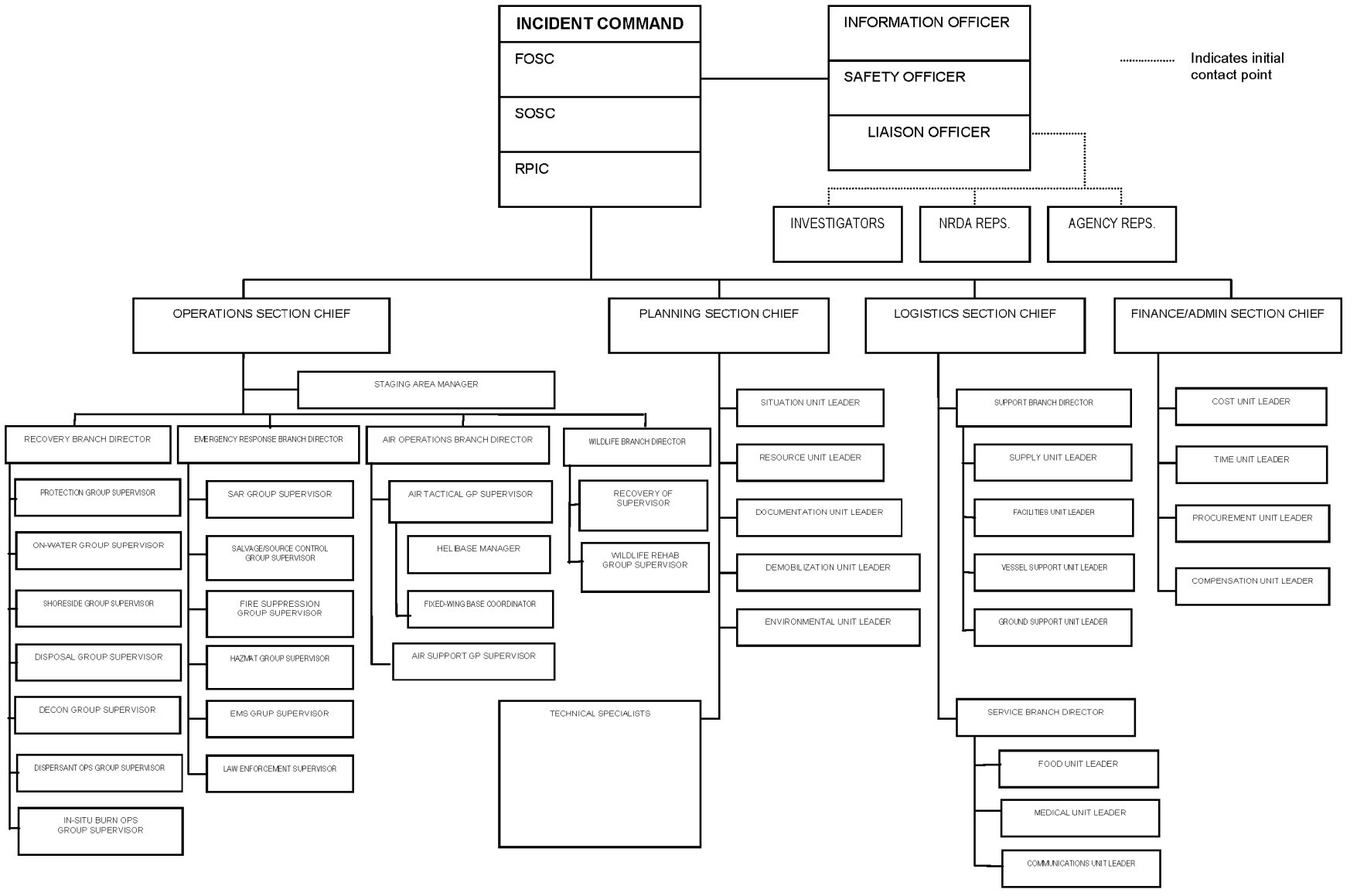
MEDICAL PLAN (ICS 206-CG)

Purpose. The Medical Plan provides information on incident medical aid stations, transportation services, hospitals, and medical emergency procedures.

Preparation. The Medical Plan is prepared by the Medical Unit Leader and reviewed by the Safety Officer.
Distribution. The Medical Plan may be attached to the Incident Objectives (ICS 202-CG), or information from the plan pertaining to incident medical aid stations and medical emergency procedures may be taken from the plan and noted on the Assignment List (ICS 204-CG) or on the Assignment List Attachment (ICS 204a-CG). All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Medical Aid Stations	Enter name, location, and telephone number of the medical aid station(s) (e.g., Cajon Staging Area, Cajon Camp Ground) and indicate if paramedics are located at the site.
4.	Transportation	List name and address of ambulance services. Provide phone number and indicate if ambulance company has paramedics.
5.	Hospitals	List hospitals that could serve this incident. Enter hospital name, address, phone number, the travel time by air and ground from the incident to the hospital, and indicate if the hospital has a burn center and/or a helipad.
6.	Medical Emergency Procedures	Note any special emergency instructions for use by incident personnel.
7.	Prepared By Date/Time	Enter the name of the Medical Unit Leader preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).
8.	Reviewed By Date/Time	Enter the name of the Safety Officer who must review the plan. Enter date (month, day, year) and time reviewed (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT ORGANIZATION CHART ICS 207-CG



ICS-207-CG (Rev. 09/04)

N02510

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date / Time) From: To: Time of Report	INCIDENT STATUS SUMMARY ICS 209-CG

3. Type of Incident

☐	Oil Spill	☐	HAZMAT	☐	AMIO
☐	SAR/Major SART	☐	SI/Terrorism	☐	Natural Disaster
☐	Marine Disaster	☐	Civil Disturbance	☐	Military Outload
☐	Planned Event	☐	Maritime HLS/Prevention	☐	

4. Situation Summary as of Time of Report:

5. Future Outlook/Goals/Needs/Issues:

6. Safety Status/Personnel Casualty Summary

	Since Last Report	Adjustments To Previous Op Period	Total
Responder Injury			
Responder Death			
Public Missing (Active Search)			
Public Missing (Presumed Lost)			
Public Uninjured			
Public Injured			
Public Dead			
Total Public Involved			

7. Property Damage Summary

Vessel	$
Cargo	$
Facility	$
Other	$

8. Attachments with clarifying information

☐	Oil/HAZMAT	☐	SAR/LE	☐	
☐		☐		☐	
☐	Marine Disaster	☐	Civil Disturbance	☐	Military Outload

9. Equipment Resources					
Kind	Notes	# Ordered	# Available	# Assigned	# Out of Service
USCG Assets					
Aircraft – Helo					
Aircraft – Fixed Wing					
Vessels – USCG Cutter					
Vessels – Boat					
Vehicles – Car					
Vehicles – Truck					
Pollution Equip – VOSS/SORS					
Pollution Equip – Portable Storage					
Pollution Equip – Boom					
Non-CG/Other Assets					
Aircraft – Helo					
Aircraft – Fixed Wing					
Vessels – SAR/LE Boat					
Vessels – Work/Crew Boat					
Vessels – Tug/Tow Boat					
Vessels – Pilot Boat					
Vessels – Deck Barge					
Vessels –					
Vehicles – Car					
Vehicles – Ambulance					
Vehicles – Truck					
Vehicles – Fire/Rescue/HAZMAT					
Vehicles – Vac/Tank Truck					
Vehicles –					
Pollution Equip – Skimmers					
Pollution Equip – Tank Vsl/ Barge					
Pollution Equip – Portable Storage					
Pollution Equip – OSRV					
Pollution Equip – Boom					
Pollution Equip –					

10. Personnel Resources	
Agency	**Total # of People**
USCG	
DHS (other than USCG)	
NOAA	
FBI	
DOD (USN Supsalv, CST, etc.)	
DOI (US Fish & Wildlife, Nat Parks, BLM, etc.)	
RP	
State	
Local	
Total Personnel Resources Used From all Organizations:	

11. Prepared by:	Date/Time Prepared:

1. Incident Name	2. Operational Period (Date / Time) From: To: Time of Report	ICS 209-CG OIL/HAZMAT ATTACHMENT

3. HAZMAT/Oil Spill Status (Estimated, in gallons)

Common Name(s):

UN Number:	☐ Secured ☐ Unsecured
CAS Number:	Remaining Potential (bbl):
	Rate of Spillage (bbl/hr):

	Adjustments To Previous Operational Period	Since Last Report	Total
Volume Spilled/Released			
Mass Balance - HAZMAT/Oil Budget			
Recovered HAZMAT/Oil			
Evaporation/Airborne			
Natural Dispersion			
Chemical Dispersion			
Burned			
Floating, Contained			
Floating, Uncontained			
Onshore			
Total HAZMAT/Oil accounted for:	N/A	N/A	

Comments:

4. HAZMAT/Oil Waste Management (Estimated, Since Last Report)

	Recovered	Disposed	Stored
HAZMAT/Oil (bbl)			
Oily Liquids (bbl)			
Liquids (bbl)			
Oily Solids (tons)			
Solids (tons)			

Comments:

5. HAZMAT/Oil Shoreline Impacts (Estimated in miles)

Degree of Impact	Affected	Cleaned	To Be Cleaned
Light			
Medium			
Heavy			
Total			

Comments:

6. HAZMAT/Oil Wildlife Impacts (Since Last Report)

					Died in Facility	
Type of Wildlife	Captured	Cleaned	Released	DOA	Euthanized	Other
Birds						
Mammals						
Reptiles						
Fish						
Total						

Comments:

7. Prepared by:	Date/Time Prepared:

1. Incident Name	2. Operational Period (Date / Time) From: To: Time of Report	ICS 209-CG SAR/LE ATTACHMENT

3. Evacuation Status

	Since Last Report	Adjustments To Previous Operational Period	Total
Total to be Evacuated			
Number Evacuated			

4. Migrant Interdiction Status

	Since Last Report	Adjustments To Previous Op Period	Total
Vessels Interdicted			
Migrants Interdicted at Sea			
Migrants Interdicted Ashore			
Injured			
MEDEVAC'd			
Deaths			
Migrants Repatriated			

5. Sorties/Patrols Summary (List of Sorties Since Last Report)

Air	Since Last Report	Total
Number of Sorties/Patrols		
Area Covered (square miles)		
Total Time On-Scene (In Hours)		
Surface	Since Last Report	Total
Number of Sorties/Patrols		
Area Covered (square miles)		
Total Time On-Scene (In Hours)		

6. Use of Force Summary

Category	Since Last Report	Total
III - Soft Empty Hand Control		
IV - Hard Empty Hand Control		
V - Intermediate Weapons		
VI - Deadly Force		
VSL - Force to Stop Vessel from Cutter/Boat		
A/C - Force to Stop Vessel From Aircraft		
Arrests		
Seizures		
Deaths		

7. Operational Controls Summary

Currently In Force

Type	Initiating Unit	Initiated Date	Activity #

Removed Since Last Report

Type	Initiating Unit	Initiated Date	Date Removed	Activity #

18. Prepared by:	Date/Time Prepared:

INCIDENT STATUS SUMMARY (ICS FORM 209-CG)

Purpose. The Status Summary:
1. Is used by Situation Unit personnel for posting information on Status Boards or attaching as a file to the MISLE Case.
2. Is duplicated and provided to Command Staff members, giving them basic information for planning for the next operational period.
3. Provides information to the Information Officer for preparing news media releases.
4. Summarizes incident information for local and off-site coordination/operations centers.

Preparation. The Situation Unit prepares the Status Summary. Resources information should be obtained from the Resources Unit. It may be scheduled for presentation to the Planning Section Chief and other General Staff members prior to each Planning Meeting and may be required at more frequent intervals by the Unified Command or Planning Section Chief. Suggested sources of information are noted in brackets.
Note: The values on the ICS form 209-CG are the **best available estimates at the Time of Report** (Item # 2 on form). This form is usually in high demand and should be filled out early and often. A suggested source within the ICS organization is noted in brackets [ ] at the top right of each section of the form. **All fields need not be completed in order to distribute the form**.

Distribution. When completed, the form is duplicated and copies are distributed to the Unified Command and staff, and all Section Chiefs, Planning Section Unit Leaders, and the Joint Information Center. It is also posted on a status board located at the ICP. All completed original forms MUST be given to the Documentation Unit.

How to Save and Use the Word Template Form:
The 209 template (.dot file) can be edited to match most incident situations and can be saved into the Word template directory. Open the blank 209 (ICS 209 CG.dot) – do not add any content. Save the blank in the Templates directory. Create a new 209 from File>new picking the 209 template. Type in the file to add any desired content and use "save as" to save the work using a new file name. The file will automatically become a .doc file.

Comments: Please send comments/corrections about this form to the ICS Program Manager, Ms. Kristy Plourde, email: kplourde@tcyorktown.uscg.mil

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Period Covered by Report	Enter the date and time interval for which the report applies. Use 24-hour clock for all times.
	Time of Report	Enter time for which this information applies. Enter the Time (24-hour clock) the form was prepared.
3.	Type of Incident	Indicate (check box) and/or fill-in the type of incident(s).
4.	Situation Summary	Summary of current situation at time of report.
5.	Future Outlook	This section is for the IC/UC to discuss/project their future outlook, goals, requirements, needs and issues.
6.	Safety Status/Personnel Casualty	This information pertains to responders and assisted public personnel. Indicate the number of serious injuries, death, and missing. Values entered in the column labeled since Last Report are from the start of the

		Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
7.	Property Damage	Enter estimated dollar values for each item, if known.
8.	Attachments	Indicate (check box) and/or fill-in the attachment(s) the help further clarify the incident status.
9.	Equipment Resources	Indicate the number of each type of resource in each status category. There are blank lines below each general type of resource for additional equipment.
	Ordered	Ordered but not yet arrived/available.
	Available	Arrived on scene, stored in staging, not assigned to any task, available for use.
	Assigned	Assigned to a specific task.
	Out of Service	Not working and not assigned to any task (e.g., skimmer being repaired, boom broken, personnel off-duty for rest).
10.	Personnel Resources	Indicate, by agency, the numbers of personnel assigned. There are blank lines for additional personnel, as needed.
11.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.

OIL/HAZMAT ATTACHMENT

1.	Incident Name	Enter the name assigned to the incident.
2.	Period Covered by Report	Enter the date and time interval for which the report applies. Use 24-hour clock for all times.
	Time of Report	Enter time for which this information applies. Enter the Time (24-hour clock) the form was prepared.
3.	Spill Status	This information is only tracked if there is spilled HAZMAT or Oil. Enter Common Name(s) of the released substance or spilled oil (i.e. Ethyl Alcohol/Ethanol or No. 2 Fuel Oil/Light Fuel Oil). Enter UN number and CAS Registry number, if known. Indicate whether the spill source is secured or unsecured (check box) and estimate the remaining potential and the rate of spillage discharge or release. Enter the estimated amounts in barrels for each category. Values entered in the column labeled Since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
	Mass Balance	This information is only tracked if there is spilled HAZMAT or Oil whether recovered, evaporated, dispersed, burned, floating, or on shore. The total of these estimates should approximate the total volume spilled, discharged, or released. Values for evaporation, dispersion, etc. can be obtained from the Environmental Unit and/or the Scientific Support Coordinator (SSC).
4.	Waste Management	This information is only tracked if there is spilled HAZMAT or Oil. Enter the estimated amounts in barrels or tons for each category. Total HAZMAT/ Oil (bbl) is the sum of the estimate of HAZMAT/oil in oily

		liquids and HAZAMT/oil in oily solids, and is the value to be entered under "Recovered HAZMAT/Oil" in Item 4.
5.	Shoreline Impacts	This information is only tracked if there is spilled HAZMAT or Oil. Enter the total miles in each category for each degree of oiling. Definitions for Light, Medium, and Heavy oiling can be obtained from the EUL/SSC and should be consistent throughout the incident.
6.	Wildlife Impacts	This information is only tracked after an animal is captured. Indicate the actual number of oiled wildlife in each category. Use numbers in parentheses to indicate the subtotal of threatened / endangered species included in the numbers given.
7.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.

SAR/LE ATTACHMENT

1.	Incident Name	Enter the name assigned to the incident.
2.	Period Covered by Report	Enter the date and time interval for which the report applies. Use 24-hour clock for all times.
	Time of Report	Enter time for which this information applies. Enter the Time (24-hour clock) the form was prepared.
3.	Evacuation Status	This information is only tracked if the incident involves evacuation of personnel. Values entered in the column labeled Since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
4.	Migrant Interdiction Status	This information is only tracked if the incident involves Migrant Interdiction. Values entered in the column labeled Since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
5.	Sorties/Patrols	This information is only tracked if the incident involves sorties tracked in MISLE Incident Management Activity. List Sorties since last report both Air and Surface. Values entered in the column labeled since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
6.	Use of Force	This information is only tracked if the incident involves Use of Force activities. Values entered in the column labeled since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
7.	Operational Controls	This information is only tracked if the incident involves Operational Control activities initiated, in force and removed.
8.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date / Time) From: To:	STATUS CHANGE ICS 210-OS

3. Personnel / Resource Name or I.D.

4. New Status

☐ Available / Staged ☐ Assigned _____ ☐ Out of Service

5. FROM Location or Status	6. TO Location or Status

7. Time of Location / Status Change

8. Comments

9. Prepared by: **Date / Time**

10. Processed by: (Resource Unit) **Date / Time**

Electronic version: NOAA 1.0 June 1, 2000

STATUS CHANGE (ICS FORM 210-OS)

Purpose. The Status Change form is used to record status change information received on resources assigned to the incident.

Preparation. The form is completed by radio/telephone operators who receive status change information from individual resources, Task Forces, Strike Teams, and Division/Group Supervisors. Status information could also be reported by Staging Area and Helibase Managers or fixed-wing facilities.

Distribution. The original is given to the Resources Unit, and the Communications Unit retains a second copy. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Personnel/Resource Name or I.D.	Enter the Personnel/Resource Name or Identifier.
4.	New Status	Check the new status of the personnel or resource.
5.	FROM Location or Status	Enter the location or status from which the resource is changing.
6.	TO Location or Status	Enter the location or status to which the resource is changing.
7.	Time of Location / Status Change	Enter time of change (24-hour clock).
8.	Comments	Use this area for other information.
9.	Prepared By Date/Time	Enter name and title of the person preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).
10.	Processed by Resources Unit Date/Time	Enter name and title of the person in the Resources Unit processing the form. Enter date (month, day, year) and time processed (24-hour clock).

CHECK-IN LIST	1. INCIDENT NAME:	2. CHECK-IN LOCATION:	3. DATE/TIME:

CHECK-IN INFORMATION

4. LIST PERSONNEL (OVERHEAD) BY AGENCY NAME – OR LIST EQUIPEMENT BY THE FOLLOWING FORMAT:
S=Supplies H=Helicopter
O=Overhead VL=Vessels
E=Equipment C=Crew
A=Aircraft VH=Vehicle

AGENCY	RESOURCE IDENTIFIER	KIND	5. ORDER/ NUMBER	6. DATE/TIME CHECK-IN	7. LEADER'S NAME	8. TOTAL NO. PERSONNEL	9. INCIDENT CONTACT INFORMATION	10. INCIDENT LODGING INFO/CONTACT INFO	11. HOME UNIT	12. METHOD OF TRAVEL	13. INCIDENT ASSIGNMENT	14. SENT TO RESTAT TIME/INT

15. ICS 211-CG PAGE _____ of _____

16. PREPARED BY (Name and Position) USE BACK FOR REMARKS OR COMMENTS

PAGE INTENTIONALLY LEFT BLANK

GENERAL MESSAGE		
TO:	POSITION:	
FROM:	POSITION:	
SUBJECT:	DATE:	TIME:
MESSAGE:		
SIGNATURE:	POSITION:	
REPLY:		
DATE:	TIME:	SIGNATURE/POSITION:

ICS 213 NFES 1336

N02524

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

Resource Request Message

Purpose: The 213RR CG is used by all incident personnel to request tactical and non-tactical resources.

ICS-213 RR CG (2/07)

Requestor

1. Incident Name:
2. Date/Time:
3. Resource Request Number:

4. ORDER Note: Use additional forms when requesting different resource sources of supply

a. Qty	b. Kind	c. Type	d. Priority U or R	e. Detailed item description (vital characteristics, brand, specs, experience, etc.) and, if applicable, purpose/use, diagrams, and other info.	f. Requested Reporting Location:	f. Requested Reporting Date/Time:	g. Order # (LSC)	h. ETA (LSC)	i. Cost

5. Suggested source(s) of supply - POC phone number if known and suitable subtitutes:

6. Requestor Position and Signature: Date/Time:

7. Section Chief/Command Staff Approval: Date/Time:

Plans

8. RESL - check box (a) if request is for tactical or personnel resources. Then note availability in box 8.b or 8.c.

a. ☐ b. ☐ Resources available as noted in block 12

c. ☐ Resources not available

9. RESL Review/Signature: Date/Time:

Logistics

10. Requisition/Purchase Order #:

11. Supplier Name/Phone/Fax/Email:

12. Notes:

13. Logistics Section Signature: Data/Time:

14. Order placed by (check box): ☐ SPUL ☐ PROC ☐ OTHER _____

Finance

15. Reply/Comments from Finance:

16. Finance Section Signature: Date/Time:

Full instructions on back page. Requestor fills in blocks 1-5, except # 3 & # 4.g-i (shaded area), signs block 6 (do not forget position), gets appropriate Section Chief or Command Staff approval in block 7, and keeps yellow copy (bottom). If applicable, RESL reviews if resource available, signs block 9 and keeps blue copy. Logistics fills in block 4.g and h, and blocks 10-13, and keeps orange copy. Orderer (LSC or FSC) fills in block 4.i. Finance fills in blocks 15 - 16 and keeps green copy. Pink copy is returned to RESL for tactical/personnel or requestor for non-tactical. White copy goes to DOCL.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date/Time) From: To:	UNIT LOG ICS 214-CG
3. Unit Name/Designators	4. Unit Leader (Name and ICS Position)	

5. Personnel Assigned

NAME	ICS POSITION	HOME BASE

6. Activity Log (Continue on Reverse)

TIME	MAJOR EVENTS

7. Prepared by: **Date/Time**

1. Incident Name	2. Operational Period (Date/Time) From: To:	UNIT LOG (CONT.) ICS 214-CG

6. Activity Log (Continue on Reverse)

TIME	MAJOR EVENTS

7. Prepared by: **Date/Time:**

UNIT LOG (ICS FORM 214-CG)

Purpose. The Unit Log records details of unit activity, including strike team activity or individual activity. These logs provide the basic reference from which to extract information for inclusion in any after-action report.

Preparation. A Unit Log is initiated and maintained by Command Staff members, Division/Group Supervisors, Air Operations Groups, Strike Team/Task Force Leaders, and Unit Leaders. Completed logs are submitted to supervisors who forward them to the Documentation Unit.

Distribution. The Documentation Unit maintains a file of all Unit Logs. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Check-In Location	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Unit Name/Designators	Enter the title of the organizational unit or resource designator (e.g., Facilities Unit, Safety Officer, Strike Team).
4.	Unit Leader	Enter the name and ICS Position of the individual in charge of the Unit.
5.	Personnel Assigned	List the name, position, and home base of each member assigned to the unit during the operational period.
6.	Activity Log	Enter the time and briefly describe each significant occurrence or event (e.g., task assignments, task completions, injuries, difficulties encountered, etc.)
7.	Prepared By	Enter name and title of the person completing the log. Provide log to immediate supervisor, at the end of each operational period.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

PAGE INTENTIONALLY LEFT BLANK

INCIDENT ACTION PLAN SAFETY ANALYSIS

1. Incident Name	2. Date/Time Prepared

3. DIVISION/ GROUP/ OTHER LOCATION	4. Work Assignments	5. Gain		6. HAZARDS												7. CONTROLS										8. ORM			
																										SEVERITY	PROBABILITY	EXPOSURE	GAR
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											

ICS-215A-CG (rev 6/06)	Operational Risk Management Key	Scale	1	2	3	4	5	Gar Scale	#	1-19	20-39	40-59	60-79	80-100	9. Prepared by (Name and Position)
		Severity	Slight	Minimal	Signif-icant	Major	Catas-trophic		Risk	Slight	Possible	Substantial	High	Very High	
		Probability	Remote	Un-likely	50/50	>50	Very Likely		Color	Green	Amber	Red	Red	Red	
		Exposure	Below Avg	Avg	Above Avg	Great	N/A		Action	Possibly Acceptable	Attention Needed	Correction Required	Immediate Correction	Discontinue/ Stop	

N02532

Exhibit N-6N

INCIDENT ACTION PLAN SAFETY ANALYSIS (ICS-215A-CG (rev 6/06))
Instructions for filling out the form

Purpose: The purpose of this worksheet is to aid the Safety Officer in completing an operational risk assessment to prioritize hazards and develop appropriate controls.

Preparation: During the Incident Action Planning cycle where the Operations Section Chief (OSC) is preparing for the tactics meeting, the Safety Officer works alongside the OSC and completes the Incident Action Plan Safety Analysis. This sheet mirrors the ICS 215 form. Work assignments are listed along with associated hazards. A calculation is made that determines what level of risk each work assignment poses. For those assignments having significant risk, controls are developed for safeguarding responders. The net risk is evaluated against the gain. The Incident Commander should be alerted to all safety hazards that receive an amber or red GAR rating after controls have been established.

Distribution: The Operational Hazard Worksheet is attached to the Incident Site Safety Plan and is distributed according to the instruction for Site Safety Plans.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) and time prepared.
3	Division/Group	Enter the Branch, Division or Group title in abbreviated form.
4	Work Assignment	List the work assignment for each Branch, Division or Group.
5	Gain	Check the gain that is achieved when the work assignment is accomplished.
6	Hazards	Using the IAP Safety Analysis Aid (page 2), list the type of hazards likely to be encountered for the work assignment. Place a check mark in the box below the hazard.
7	Controls	Using the IAP Safety Analysis Aid (page 2), list the type of controls likely to be used for addressing the hazards listed. Place a check mark in the box below the control.
8	GAR	Using the "Key", assign a number from 1 to 5 based on the level of severity, probability and exposure. Multiply all numbers together to get a total. Enter this number into the total column. Gar means **G**reen, **A**mber, **R**ed. Using the GAR scale on the bottom of the sheet, assign a color, risk level or action phrase in this block.
9	Prepared by	Enter the name of the person who completed this worksheet.

ICS-215A-CG INCIDENT ACTION PLAN SAFETY ANALYSIS AID

HAZARDS:

Physical	Chemical/Biological	Human
• Slipping	• Explosion	• Violence
• Tripping	• Flammable	• Poor Lifting
• Fall	• Air Reactive	• Repetition
• Overhead	• Water Reactive	• Excessive Force
• Heat Stress	• Chem Reactive	• Poor posture
• Cold Stress	• Alpha Rad	• Awkward motion
• Electrical	• Beta Rad	• Fatigue
• Blunt Objects	• Gamma Rad	• Poor hygiene
• Sharp Objects	• X Rad	• Illness
• Noise	• Bio-weapon	• Alcohol/Drugs
• Vehicle	• Chem-weapon	• Over crowding
• Fire	• Irritant	• Poor comms
• Sun/UV Glare	• Asphyxiant	• Noise interference
• Sun Burn	• Oxidizer	• Smoking
• Moving Pinch Points	• Carcinogen	• Driving
• Unguarded Machinery	• Corrosive	**Animal/Plant**
• Lightning	• Cryogenic	• Bites/Stings
• Drowning	• Toxic	• Poison
• Engulfment	• Biomed/pathogen	• Thorns/burrs
• Limited Egress/Access	• Particulates	• Swarms
	• Fumes (weld etc.)	• Disease
	• O2 Deficiency	• Feces/Coliforms

CONTROLS:

Types of Engineering Controls:

• Barriers	• Shields	• Dams
• Capping	• Covering	• Fencing
• Terminating	• Shutting	• Blocking
• Chocks	• Enclosures	• Diverters
• Flanging	• Guarding	• Substitution
• Anchoring	• Ventilation	• Blowing
• Scaffolding	• Grounding	• Substitution
• Bonding	• Insulation	• Lighting
• Locks, Tags	• Kill-switches	• Shut-off valves
• Taglines	• Circuit Breakers	• Process change
• Plugging, patching	• Sealing	• Absorbers

Types of Administrative Controls:

• Reduced work duration	• Worker rotation	• Safety plans
• Training	• Safety briefs	• Relief personnel
• Maintenance	• Drinking fluids	• Work/rest periods
• Good housekeeping	• Roving security	• Signs
• Warning lights	• Alarms	• Break areas
• Pre-inspections	• Field checks	• Buddy system
• Line of sight comms	• Comms schedule	• Equipt staging
• Load shifting	• Hazard marking	• Placarding
• Labeling	• Hand signals	• Safety observers
• Fendering	• Work plans	• Replenish fluids
• Handcarts/trolleys	• Fire extinguishers	• Drum bulking
• Eye Wash Station	• Hand washers	• Showers

Types of Personal Protective Equipment Controls:

• Hard hats	• Steel-toed shoes	• Safety glasses
• Safety goggles	• Face shields	• Hearing Protection
• Life jacket	• Fall arrests	• SCBA
• APRs	• Chemical suits	• Flash suits
• Fire resistant suits	• Work gloves	• Chemical gloves
• Sun glasses	• Sun-block	• Life rings
• Eye wash stations	• Night vision	• Thermal protection
• Dry/wet suits	• Hand warmers	• Wind breaker coat
• Knee pads	• Over garments	• Coveralls
• Booties	• Cooling vests	• Chap lip protection
• Hats for warming	• Gloves (warmth)	• Clothing (warmth)

N02534

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

OPERATIONAL PLANNING WORKSHEET

1.INCIDENT NAME

2. DATE & TIME PREPARED

3. OPERATIONAL PERIOD (DATE & TIME)

4. DIVISION/ GROUP/ OTHER LOCATION	5. WORK ASSIGNMENTS	6. KINDS OF RESOURCES	7. OVERHEAD	8. SPECIAL EQUIPMENT & SUPPLIES	9. REPORTING LOCATION	10. REQUESTED ARRIVAL TIME
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				

ICS 215 USCG 12-02	11. TOTAL RESOURCES REQUIRED	14. PREPARED BY (NAME & POSITION)
	12. TOTAL RESOURCES ON HAND	
	13. TOTAL RESOURCES NEEDED	

N02536

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

RADIO REQUIREMENTS WORKSHEET	1. Incident Name	2. Date	3. Time
4. Branch	5. Agency	6. Operational Period	7. Tactical Frequency

8. Division/Group			Division/Group			Division/Group			Division/Group		
Agency			Agency			Agency			Agency		
9. Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements

Page 1 of	10. Prepared by (Name and Position)

PAGE INTENTIONALLY LEFT BLANK

RADIO FREQUENCY ASSIGNMENT WORKSHEET

1. INCIDENT NAME	2. DATE	3. OPERATIONAL PERIOD (DATE/TIME)

5. RADIO DATA: SOURCE	FUNCTION	CH#	FREQUENCY	4. INCIDENT ORGANIZATION: BRANCH	DIVISION	DIVISION	DIVISION	BRANCH	DIVISION	DIVISION	DIVISION	BRANCH	DIVISION	DIVISION	DIVISION	INCIDENT COMMANDER	SAFETY OFFICER	OPERATIONS SECTION CHIEF	AIR OPERATIONS	AIR TACTICAL GROUP SUPERVISOR	PLANNING SECTION CHIEF	GROUND SUPPORT UNIT	BASE UNIT								COMM. CENTER	TOTAL BY REQ.
6. AGENCY ID.		CH#	FREQUENCY																													
7. TOTAL RADIOS REQUIRED																																

8. PREPARED BY (NAME/POSITION)

217 ICS (1/99) NFES 1340

N02540

Exhibit N-6N

RADIO FREQUENCY ASSIGNMENT WORKSHEET (ICS FORM 217)

Purpose. The Radio Frequency Assignment Worksheet is used by the Communications Unit Leader to assist in determining frequency allocations.

Preparation. Cache radio frequencies available to the incident are listed on the form. Major agency frequencies assigned to the incident should be added to the bottom of the worksheet.

Distribution. The worksheet, prepared by the Communications Unit, is for internal use.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Date	Enter date prepared (e.g., 09/17/1996).
3.	Operational Period	Enter the time interval for which the assignment applies (e.g., 9/17/96-0600 to 9/18/96-0600).
4.	Incident Organization	List frequencies allocated for each channel for each organizational element activated, record the number of radios required to perform the designated function on the specified frequency.
5.	Radio Data	For each radio cache and frequency assigned, record the associated function. Functional assignments are: a. Command b. Support c. Division tactical d. Ground-to-air
6.	Agency	List the frequencies for each major agency assigned to the incident. Also list the function and channel number assigned.
7.	Total Radios Required	Totals for each row and column are calculated automatically. This provides the number of radios required by each organizational unit and the number of radios using each available frequency.
8.	Prepared By	Enter the name and position of the person completing the worksheet.

SUPPORT VEHICLE INVENTORY (USE SEPARATE SHEET FOR EACH VEHICLE CATEGORY)	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

VEHICLE INFORMATION

a. TYPE	b. MAKE	c. CAPACITY/SIZE	d. AGENCY/OWNER	e. I.D. NO.	f. LOCATION	g. RELEASE TIME

218 ICS 8-78	PAGE	5. PREPARED BY (GROUND SUPPORT UNIT)

SUPPORT VEHICLE INVENTORY (ICS FORM 218)

Purpose. The Support Vehicle Inventory form provides an inventory of all transportation and support vehicles assigned to the incident. The information is used by the Ground Support Unit to maintain a record of the types and locations of vehicles on the incident. The Resources Unit uses the information to initiate and maintain status/resources information on these resources.

Preparation. The form is prepared by Ground Support Unit personnel at intervals specified by the Ground Support Unit Leader.

Distribution. Initial inventory information recorded on the form should be given to the Resources Unit. Subsequent changes to the status or location of transportation and support vehicles should be provided to the Resources Unit immediately.

NOTE:
a. The Ground Support Unit Leader may prefer to use separate sheets for each type of support vehicle (e.g., buses, pickups, and food tenders).
b. More than one line may be used to record information on each vehicle. If this is done, separate individual vehicle entries with a heavy line.
c. Several pages may be used. When this occurs, number the pages consecutively (in the number box at bottom of form).

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Date Prepared	Enter date prepared (e.g., 09/17/1996).
3.	Time Prepared	Enter time prepared (e.g., 1530).
4.	Vehicle Information	Record the following vehicle information:
	Type	a. Specific vehicle type (e.g., bus, stakeside, etc.).
	Make	b. Vehicle manufacturer name (e.g., GMC, International).
	Capacity/Size	c. Vehicle capacity / size (e.g., 30-person bus, 3/4 ton truck).
	Owner	d. Owner of vehicle (agency or private owner).
	ID Number	e. Serial or other identification number.
	Location	f. Location of vehicle.
	Release Time	g. Time vehicle is released from incident.
5.	Prepared By	Enter name of the person completing the form.

GREEN CARD STOCK (CREW)

AGENCY	ST	KIND	TYPE	I.D. NO./NAME

ORDER/REQUEST NO.	DATE/TIME CHECK IN

HOME BASE

DEPARTURE POINT

LEADER NAME

CREW ID NO./NAME (FOR STRIKE TEAMS)

NO. PERSONNEL	MANIFEST	WEIGHT

METHOD OF TRAVEL

OTHER

DESTINATION POINT	ETA

TRANSPORTATION NEEDS

OTHER

ORDERED DATE/TIME	CONFIRMED DATE/TIME

REMARKS

ICS 219-2 (Rev. 4/82) CREW NFES 1344

AGENCY	ST	TF	KIND	TYPE	I.D. NO./NAME

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

Electronic version: NOAA 1.0 June 1, 2000

ICS 219_2 HANDCREWS
GREEN COLORED CARD

Purpose. Resource Status Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel. The Resource Status Cards provide a visual display of the status and location of resources assigned to the incident.

Preparation. Information to be placed on the cards may be obtained from several sources including but not limited to:

1. ICS Briefing (ICS Form 201)
2. Check-In List (ICS Form 211)
3. Status Change Card (ICS Form 210)
4. Agency supplied information

Detailed information on preparing status cards is found in Resources Unit Position Manual (ICS 221-3).

Distribution. The cards are displayed in resource status racks where they can be easily retrieved. Cards will be retained by the Resources Unit until demobilization. At demobilization all cards MUST be turned into the Documentation Unit.

Item Title	Instructions
Order/Request No.	Number assigned by dispatching agency.
Home Base	Location at which Handcrew is normally located.
Departure Point	Location from which Handcrew left to reach this incident.
Crew ID No./Name (for Strike Teams)	List commonly used names or numbers to identify the crews which make up the Strike Team.
No. Personnel	Total no. of personnel (including Leader) in Crew or Strike Team.
Manifest	Was a manifest prepared for the Crew/Strike Team?
Weight	Total weight (including equipment and personal belongings) of the Crew/Strike Team.
Destination Point	Next location to which Crew/Strike Team is being sent from the incident.
Method of Travel	Enter the appropriate method of travel (e.g., own, bus, air).
Transportation Needs	Enter the appropriate transportation needs (e.g., own, bus, air).
Status	Choose the appropriate entry from the pop-up menu. If the item is O/S (out-of-service), enter the ETR (estimated time of return) in the ETR field below the Status field.

BLUE CARD STOCK (HELICOPTER)

AGENCY	TYPE	MANUFACTURER NAME/NO.	I.D. NO.

ORDER/REQUEST NO.	DATE/TIME CHECK IN

HOME BASE

DEPARTURE POINT

PILOT NAME

DESTINATION POINT	ETA

REMARKS

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

ICS 219-4 (Rev. 4/82) HELICOPTER NFES 1346

AGENCY	TYPE	MANUFACTURER	I.D. NO.

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

NFES 1346

Electronic version: NOAA 1.0 June 1, 2000

ICS 219_4 HELICOPTER - BLUE COLORED CARD

Purpose. Resource Status Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel. The Resource Status Cards provide a visual display of the status and location of resources assigned to the incident.

Preparation. Information to be placed on the cards may be obtained from several sources including but not limited to:
1. ICS Briefing (ICS Form 201)
2. Check-In List (ICS Form 211)
3. Status Change Card (ICS Form 210)
4. Agency supplied information

Detailed information on preparing status cards is found in Resources Unit Position Manual (ICS 221-3).

Distribution. The cards are displayed in resource status racks where they can be easily retrieved. Cards will be retained by the Resources Unit until demobilization. At demobilization all cards MUST be turned into the Documentation Unit.

Item Title	Instructions
Order/Request No.	Number assigned by dispatching agency.
Home Base	Location at which helicopter is normally located.
Departure Point	Location from which helicopter left to reach this incident.
Destination Point	Next location to which helicopter is being sent from the incident.
Incident Location	Assigned location information on helicopters may be the same as other resources (e.g., Division A). However, location could also indicate a "general" working location (e.g., water-dropping in Branch 1; or Crew Transport – Wilson Staging Area).
Status	Choose the appropriate entry from the pop-up menu. If the item is O/S (out-of-service), enter the ETR (estimated time of return) in the ETR field below the Status field.
Manufacturer Name/No.	e.g., Bell 206

ORANGE CARD STOCK (AIRCRAFT)

AGENCY	TYPE	MANUFACTURER NAME/NO.	I.D. NO.

ORDER/REQUEST NO.	DATE/TIME CHECK IN

HOME BASE

DATE TIME RELEASED

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

ICS 219-6 (4/82) AIRCRAFT

AGENCY	TYPE	MANUFACTURER	I.D. NO.

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

NFES 1348

Electronic version: NOAA 1.0 June 1, 2000

ICS 219_6 AIRCRAFT - ORANGE COLORED CARD

Purpose. Resource Status Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel. The Resource Status Cards provide a visual display of the status and location of resources assigned to the incident.

Preparation. Information to be placed on the cards may be obtained from several sources including but not limited to:
1. ICS Briefing (ICS Form 201)
2. Check-In List (ICS Form 211)
3. Status Change Card (ICS Form 210)
4. Agency supplied information

Detailed information on preparing status cards is found in Resources Unit Position Manual (ICS 221-3).

Distribution. The cards are displayed in resource status racks where they can be easily retrieved. Cards will be retained by the Resources Unit until demobilization. At demobilization all cards MUST be turned into the Documentation Unit.

Item Title	Instructions
Order/Request No.	Number assigned by dispatching agency.
Home Base	Location at which aircraft is normally located.
Departure Point	Location from which aircraft left to reach this incident.
Destination Point	Next location to which aircraft is being sent from the incident.
Incident Location	Reflect the area of the incident to which aircraft is primarily assigned (e.g., Branch 1).
Status	Choose the appropriate entry from the pop-up menu. If the item is O/S (out-of-service), enter the ETR (estimated time of return) in the ETR field below the Status field.
Manufacturer Name/No.	e.g., Douglas DC-3

YELLOW CARD STOCK (DOZERS)

AGENCY	ST TF	KIND TYPE	I.D. NO.

ORDER/REQUEST NO.	DATE/TIME CHECK IN

HOME BASE

DEPARTURE POINT

LEADER NAME

RESOURCE ID. NO.S/NAMES

DESTINATION POINT	ETA

REMARKS

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

ICS 219-7 (Rev. 4/82) DOZERS NFES 1349

AGENCY	ST TF	KIND TYPE	I.D. NO./NAME

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

Electronic version: NOAA 1.0 June 1, 2000

ICS 219_7 DOZERS - YELLOW COLORED CARD

Purpose. Resource Status Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel. The Resource Status Cards provide a visual display of the status and location of resources assigned to the incident.

Preparation. Information to be placed on the cards may be obtained from several sources including but not limited to:
1. ICS Briefing (ICS Form 201)
2. Check-In List (ICS Form 211)
3. Status Change Card (ICS Form 210)
4. Agency supplied information

Detailed information on preparing status cards is found in Resources Unit Position Manual (ICS 221-3).

Distribution. The cards are displayed in resource status racks where they can be easily retrieved. Cards will be retained by the Resources Unit until demobilization. At demobilization all cards MUST be turned into the Documentation Unit.

Item Title	Instructions
Order/Request No.	Number assigned by dispatching agency.
Home Base	Location at which dozer is normally located.
Departure Point	Location from which dozer left to reach this incident.
Resource ID Numbers/Names	List dozer numbers and Operator names for dozers in Strike Teams. Show contractor name as appropriate.
Destination Point	Next location to which dozer is being sent from the incident.
Incident Location	Assigned location information on dozers may be the same as other resources (e.g., Division A). However, location could also indicate a "general" working location (e.g., Cajon Beach).
Status	Choose the appropriate entry from the pop-up menu. If the item is O/S (out-of-service), enter the ETR (estimated time of return) in the ETR field below the Status field.

1. Incident Name	2. Operational Period (Date / Time) From: To:	AIR OPERATIONS SUMMARY ICS 220-CG

3. Distribution

☐ Fixed-Wing Bases _____ ☐ Helibase _____

4. Personnel and Communications

	Air Operations Director	Air / Air Frequency	Air / Ground Frequency
Air Operations Director			
Air Tactical Supervisor			
Air Support Supervisor			
Helicopter Coordinator			
Fixed-Wing Coordinator			
____ ____		____	____

5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities)

6. Location / Function	7. Assignment	8. Fixed-Wing		9. Helicopter		10. Time		11. Aircraft Assigned	12. Operating Base
		NO.	TYPE	NO.	TYPE	Available	Commence		
	13. TOTALS								

14. Air Operation Support Equipment	15. Prepared by	Date / Time

AIR OPERATIONS SUMMARY (ICS 220-CG)

Purpose. The Air Operations Summary provides the Air Operations Branch with the number, type, location, and specific assignments of aircraft.

Preparation. The Operations Section Chief or the Air Operations Branch Director completes the summary during each Planning Meeting. General air resource assignment information is obtained from the Operational Planning Worksheet (ICS 215-CG). The Air and Fixed-Wing Support Groups provide specific designators of the air resources assigned to the incident.

Distribution. After the summary is completed by Air Operations personnel (except item 11), the form is given to the Air Support Group Supervisor, who completes the form by indicating the designators of the helicopters and fixed-wing aircraft assigned missions during the specified operational period. This information is provided to Air Operations personnel who, in turn, give the information to the Resources Unit. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Distribution	Check the block and enter the time and date when ICS 220-CG and attachments were sent to all fixed-wing bases and helibases supporting the incident.
4.	Personnel and Communications	List the names of those assigned to each position, and the air-air and air-ground frequencies to be used.
5.	Remarks	Enter the special instructions or information, including safety notes, hazards, and priorities for Air Operations personnel.
6.	Location/Function	Enter the assigned location and function of the aircraft.
7.	Assignment	Enter the scope of work the aircraft is assigned to complete.
8.	Fixed Wing	Indicate the number and type of fixed-wing aircraft available for this Location / Function.
9.	Helicopters	Indicate the number and type of helicopters available for this Location / Function.
10.	Time	Indicate when aircraft will be available for use and when operations commence (use 24 hour clock).
11.	Aircraft Assigned	Enter the designators of the aircraft assigned. Gather information from Resources Unit, helibases, and fixed-wing bases.
12.	Operating Base	Enter the base (helibase, helispot, fixed-wing base) from which each air resource is expected to initiate operations.
13.	Totals	Enter the total number of fixed-wing and helicopter aircraft assigned to the incident in the Number columns. Enter the total number of each type of aircraft assigned in the Type columns.
14.	Air Operations Support Equipment	List the designators and location of other support resources assigned to Air Operations.
15.	Prepared By Date/Time	Enter name and title of the person preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date / Time) From: To:	DEMOB. CHECK-OUT ICS 221-CG
3. Unit / Personnel Released	4. Release Date / Time	

5. Unit / Personnel

You and your resources have been released, subject to signoff from the following:
(Demob. Unit Leader "X" appropriate box(es))

Logistics Section

- ☐ Supply Unit _____
- ☐ Communications Unit _____
- ☐ Facilities Unit _____
- ☐ Ground Unit _____

Planning Section

- ☐ Documentation Unit _____

Finance / Admin. Section

- ☐ Time Unit _____

Other

- ☐ _____ _____
- ☐ _____ _____
- ☐ _____ _____

6. Remarks

_____

_____

_____

_____

7. Prepared by: **Date / Time**

DEMOB. CHECK-OUT ICS 221-CG (Rev.07/04)

DEMOB. CHECK-OUT (ICS 221-CG)

Purpose. This form provides the Planning Section information on resource releases from the incident.

Preparation. The Demobilization Unit Leader or the Planning Section initiates this form. The Demobilization Unit Leader completes the top portion of the form after the resource supervisor has given written notification that the resource is no longer needed.

Distribution. The individual resource will have the unit leader initial the appropriate box(es) in item 5 prior to release from the incident. After completion, the form is returned to the Demobilization Unit Leader or the Planning Section. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Strike Team / Unit / Personnel Released	Enter name of Strike Team, Unit or personnel being released.
4.	Release Date/Time	Enter date (month, day, year) and time (24-hour clock) of anticipated release.
5.	Strike Team / Unit / Personnel	Demobilization Unit Leader will enter an "X" in the box to the left of those units requiring check-out. Identified Unit Leaders are to initial to the right to indicate release. NOTE: Blank boxes are provided for any additional unit requirements as needed, (e.g., Safety Officer, Agency Rep., etc.)
6.	Remarks	Enter any additional information pertaining to demobilization or release (e.g., transportation needed, destination, etc.).
7.	Prepared By	Enter name and title of the person preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

INCIDENT PERSONNEL PERFORMANCE RATING ICS 225-CG	*INSTRUCTIONS:* The immediate job supervisor will prepare this form for each subordinate. It will be delivered to the planning section before the rater leaves the incident. Rating will be reviewed with the subordinate who will sign at the bottom.

THIS RATING IS TO BE USED ONLY FOR DETERMINING AN INDIVIDUAL'S PERFORMANCE ON AN INCIDENT/EVENT

1. Name:	2. Incident Name:
3. Home Unit *(address/phone):*	4. Location of Incident *(address):*

5. Position Assigned:	6. Date of Assignment: From: To:	7. Date Incident Started:	8. Incident Type:	9 Incident Kind (Oil/Hazmat Spill/SAR/Fire/Etc):

10. Evaluation

Rating Factors	N/A	1 - Unacceptable	2	3 – Met Standards	4	5 – Exceeded Expectations
Knowledge of the job/ Professional Competence: Ability to acquire, apply and share technical and administrative knowledge and skills associated with description of duties. (Includes operational aspects such as marine safety, seamanship, airmanship, SAR, etc., as appropriate.)	☐	Questionable competence and credibility. Operational or specialty expertise inadequate or lacking in key areas. Made little effort to grow professionally. Used knowledge as power against others or bluffed rather than acknowledging ignorance. Effectiveness reduced due to limited knowledge of own organizational role and customer needs. ☐	☐	Competent and credible authority on specialty or operational issues. Acquired and applied excellent operational or specialty expertise for assigned duties. Showed professional growth through education, training and professional reading. Shared knowledge and information with others clearly and simply. Understood own organizational role and customer needs. ☐	☐	Superior expertise; advice and actions showed great breadth and depth of knowledge. Remarkable grasp of complex issues, concepts, and situations. Rapidly developed professional growth beyond expectations. Vigorously conveyed knowledge, directly resulting in increased workplace productivity. Insightful knowledge of own role, customer needs, and value of work. ☐
Ability to obtain performance/results: Quality, quantity, timeliness and impact of work.	☐	Routine tasks accomplished with difficulty. Results often late or of poor quality. Work had a negative impact on department or unit. Maintained the status quo despite opportunities to improve. ☐	☐	Got the job done in all routine situations and in many unusual ones. Work was timely and of high quality; required same of subordinates. Results had a positive impact on IMT. Continuously improved services and organizational effectiveness. ☐	☐	Maintained optimal balance among quality, quantity, and timeliness of work. Quality of own and subordinates' work surpassed expectations. Results had a significant positive impact on the IMT. Established clearly effective systems of continuous improvement. ☐
Planning/Preparedness: Ability to anticipate, determine goals identify relevant information, set priorities and deadlines, and create a shared vision of the Incident Management Team	☐	Got caught by the unexpected; appeared to be controlled by events. Set vague or unrealistic goals. Used unreasonable criteria to set priorities and deadlines. Rarely had plan of action. Failed to focus on relevant information. ☐	☐	Consistently prepared. Set high but realistic goals. Used sound criteria to set priorities and deadlines. Used quality tools and processes to develop action plans. Identified key information. Kept supervisors and stakeholders informed. ☐	☐	Exceptional preparation. Always looked beyond immediate events or problems. Skillfully balanced competing demands. Developed strategies with contingency plans. Assessed all aspects of problems, including underlying issues and impact. ☐
Using Resources: Ability to manage time, materials, information, money, and people (i.e. all IMT components as well as external publics).	☐	Concentrated on unproductive activities or often overlooked critical demands. Failed to use people productively. Did not follow up. Mismanaged information, money or time. Used ineffective tools or left subordinates without means to accomplish tasks. Employed wasteful methods. ☐	☐	Effectively managed a variety of activities with available resources. Delegated, empowered, and followed up. Skilled time manager, budgeted own and subordinates' time productively. Ensured subordinates had adequate tools, materials, time and direction. Cost conscious, sought ways to cut waste. ☐	☐	Unusually skilled at bringing scarce resources to bear on the most critical of competing demands. Optimized productivity through effective delegation, empowerment, and follow-up control. Found ways to systematically reduce cost, eliminate waste, and improve efficiency. ☐
Adaptability/Attitude: Ability to maintain a positive attitude and modify work methods and priorities in response to new information, changing conditions, political realities, or unexpected obstacles.	☐	Unable to gauge effectiveness of work, recognize political realities, or make adjustments when needed. Maintained a poor outlook. Overlooked or screened out new information. Ineffective in ambiguous, complex, or pressured situations. ☐	☐	Receptive to change, new information, and technology. Effectively used benchmarks to improve performance and service. Monitored progress and changed course as required. Maintained a positive approach. Positively and effectively dealt with pressure and ambiguity. Facilitated smooth transitions. Adjusted direction to accommodate societal trends or political realities. ☐	☐	Rapidly assessed and confidently adjusted to changing conditions, political realities, new information and technology. Very skilled at using and responding to measurement indicators. Championed organizational improvements. Effectively and encouragingly dealt with extremely complex situations. Turned pressure and ambiguity into constructive forces for change ☐
Communication Skills: Ability to speak effectively and listen to understand. Ability to express facts and ideas clearly and convincingly.	☐	Unable to effectively articulate ideas and facts; lacked preparation, confidence, or logic. Used inappropriate language or rambled. Nervous or distracting mannerisms detracted from message. Failed to listen carefully or was too argumentative. Written material frequently unclear, verbose, or poorly organized. Seldom proofread. ☐	☐	Effectively expressed ideas and facts in individual and group situations; non-verbal actions consistent with spoken message. Communicated to people at all levels to ensure understanding. Listened carefully for intended message as well as spoken words. Written material clear, concise, and logically organized. Proofread conscientously. ☐	☐	Clearly articulated and promoted ideas before a wide range of audiences; accomplished speaker in both formal and extemporaneous situations. Adept at presenting complex or sensitive issues. Active listener; remarkable ability to listen with open mind and identify key issues. Clearly and persuasively expressed complex or controversial material, directly contributing to stated objectives. ☐
Ability to work on a team: Ability to manage, lead and participate in teams, encourage cooperation, and develop esprit de corps.	☐	Used teams ineffectively or at wrong times. Conflicts mismanaged or often left unresolved, resulting in decreased team effectiveness. Excluded team members from vital information. Stifled group discussions or did not contribute productively. Inhibited cross functional cooperation to the detriment of unit or service goals. ☐	☐	Skillfully used teams to increase unit effectiveness, quality, and service. Resolved or managed group conflict, enhanced cooperation, and involved team members in decision process. Valued team participant. Effectively negotiated work across functional boundaries to enhance support of broader mutual goals. ☐	☐	Insightful use of teams raised unit productivity beyond expectations. Inspired high level of esprit de corps, even in difficult situations. Major contributor to team effort. Established relationships and networks across a broad range of people and groups, raising accomplishments of mutual goals to a remarkable level. ☐

Rating Factors	N/A	1 - Unacceptable	2	3 – Met Standards	4	5 – Exceeded Expectations
Consideration for personnel/team welfare: Ability to consider and respond to others *personal* needs, capabilities, and achievements; support for and application of work-life concepts and skills.	☐	Seldom recognized or responded to needs of people; left outside resources untapped despite apparent need. Ignorance of individuals capabilities increased chance of failure. Seldom recognized or rewarded deserving subordinates or other IMT members. ☐	☐	Cared for people. Recognized and responded to their needs; referred to outside resources as appropriate. Considered individuals' capabilities to maximize opportunities for success. Consistently recognized and rewarded deserving subordinates or other IMT members. ☐	☐	Always accessible. Enhanced overall quality of life. Actively contributed to achieving balance among IMT requirements, professional and personal responsibilities. Strong advocate for subordinates; ensured appropriate and timely recognition, both formal and informal. ☐
Directing Others: Ability to influence or direct others in accomplishing tasks or missions.	☐	Showed difficulty in directing or influencing others. Low or unclear work standards reduced productivity. Failed to hold subordinates accountable for shoddy work or irresponsible actions. Unwilling to delegate authority to increase efficiency of task accomplishment. ☐	☐	A leader who earned others' support and commitment. Set high work standards; clearly articulated job requirements, expectations and measurement criteria; held subordinates accountable. When appropriate, delegated authority to those directly responsible for the task. ☐	☐	An inspirational leader who motivated others to achieve results not normally attainable. Won people over rather than imposing will. Clearly articulated vision; empowered subordinates to set goals and objectives to accomplish tasks. Modified leadership styles to best meet challenging situations. ☐
Judgment/Decisions under stress: Ability to make sound decisions and provide valid recommendations by using facts, experience, political acumen, common sense, risk assessment, and analytical thought.	☐	Decisions often displayed poor analysis. Failed to make necessary decisions, or jumped to conclusions without considering facts, alternatives, and impact. Did not effectively weigh risk, cost, and time considerations. Unconcerned with political drivers on organization. ☐	☐	Demonstrated analytical thought and common sense in making decisions. Used facts, data, and experience, and considered the impact of alternatives and political realities. Weighed risk, cost and time considerations. Made sound decisions promptly with the best available information. ☐	☐	Combined keen analytical thought, an understanding of political processes, and insight to make appropriate decisions. Focused on the key issues and the most relevant information. Did the right thing at the right time. Actions indicated awareness of impact of decisions on others. Not afraid to take reasonable risks to achieve positive results. ☐
Initiative Ability to originate and act on new ideas, pursue opportunities to learn and develop, and seek responsibility without guidance and supervision.	☐	Postponed needed action. Implemented or supported improvements only when directed to do so. Showed little interest in career development. Feasible improvements in methods, services, or products went unexplored. ☐	☐	Championed improvement through new ideas, methods, and practices; self-starter. Anticipated problems and took prompt action to avoid or resolve them. Sought opportunities for own career development. Pursued productivity gains and enhanced mission performance by applying new ideas and methods. ☐	☐	Aggressively sought out additional responsibility. A self-learner. Made worthwhile ideas and practices work when others might have given up. Extremely innovative. Optimized use of new ideas and methods to improve work processes, decision-making, and service delivery. ☐
Physical ability for the job: Ability to invest in the IMT's future by caring for the physical health, and emotional well-being of self and others.	☐	Failed to meet minimum standards of sobriety. Tolerated or condoned others' alcohol abuse. Seldom considered subordinates' health and well-being. Unwilling or unable to recognize and manage stress despite apparent need. ☐	☐	Committed to health and well-being of self and subordinates. Enhanced personal performance through activities supporting physical and emotional well-being. Recognized and managed stress effectively. ☐	☐	Remarkable vitality, enthusiasm, alertness and energy. Consistently contributed at high levels of activity. Optimized personal performance through involvement in activities which supported physical and emotional well-being. Monitored and helped others deal with stress, enhance health and well-being. ☐
Adherence to Safety: Ability to invest in the IMT's future by caring for the safety of self and others	☐	Failed to adequately identify and protect personnel from safety hazards. ☐	☐	Ensured that safe operating procedures were followed. ☐	☐	Demonstrated a significant commitment towards safety of personnel. ☐
Other *(specify:)*	☐	☐	☐	☐	☐	☐

11 Remarks:

12 Rated Person *(signature)* This rating has been discussed with me.	13 Date:

14 Rated By *(signature/print name):*	15 Supervisor Home Unit *(address/phone):*	16 Supervisor Position:	17 Date:

INCIDENT PERSONNEL PERFORMANCE RATING (ICS 225-CG) – Rev 9/06

Purpose. The Incident Personnel Performance Rating gives supervisors the opportunity to evaluate subordinates on incident assignments. THIS RATING IS TO BE USED ONLY FOR DETERMINING AN INDIVIDUAL'S PERFORMANCE ON AN INCIDENT/EVENT.

Preparation. The Incident Personnel Performance Rating is normally prepared by the supervisor for each subordinate, using the evaluation standard given in the form. It will be delivered to the planning section before the rater leaves the incident. Rating will be reviewed with the subordinate who will sign at the bottom.

Distribution. The Incident Personnel Performance Rating is duplicated a copy is given to the subordinate and supervisor. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Name	Enter the name of the person being evaluated.
2.	Incident Name	Enter the name assigned to the incident.
3.	Home Unit	Enter the address and phone number of the home unit of the person being evaluated.
4.	Location of Incident	Enter the address/location of the incident.
5.	Position Assigned	Enter the position assigned for the purpose of this evaluation.
6.	Date of Assignment	Enter the date of assignment.
7.	Date Incident Started	Enter the date the incident started.
8.	Type of Incident	Enter the Type (size) of the incident: Type 1, 2, 3, 4 or 5.
9.	Kind of Incident	Enter the kind of incident: Oil/Hazmat Spill, SAR, Fire, etc.
10.	Evaluation	Enter X under the appropriate rating for each category listed using the definitions given.
	Not Applicable	not observed.
	1 - Unacceptable	Deficient. Does not meet minimum requirements of the individual element. DEFICIENCIES/IMPROVEMENTS NEEDED MUST BE IDENTIFIED IN REMARKS.
	2 - Needs to improve	Meets some or most of the requirements of the individual element. IDENTIFY IMPROVEMENT NEEDED IN REMARKS.
	3 - Met Standards	Satisfactory. Employee meets all requirements of the individual element.
	4 - Fully successful	Employee meets all requirements and exceeds one or several of the requirements of the individual element.
	5 - Exceeded Expectations	Superior. Employee consistently exceeds the performance requirements.
11.	Remarks	Provide remarks/comments for ratings given. **Comments required for *unsatisfactory* and *needs to improve* ratings.**
12.	Rated Person Signature	Rated Person's signature.
13.	Date	Enter date (month, day, year) rated person signed performance rating.
14.	Rated By	Signature and printed name of supervisor/person giving the performance rating.
15.	Supervisor Home Unit	Enter address/phone of supervisor.
16.	Supervisor Position	Enter the position the supervisor held.
17.	Date	Enter date (month, day, year) supervisor signed the performance rating.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date/Time) From: To:	DAILY MEETING SCHEDULE ICS 230-CG

3. Meeting Schedule (Commonly-held meetings are included)

Date/ Time	Meeting Name	Purpose	Attendees	Location
	Unified Command Objectives Meeting	Review/ identify objectives for the next operational period.	Unified Command members	
	Command & General Staff Meeting	IC/UC gives direction to Command & General staff including incident objectives and priorities	IC/UC, Command & General Staff	
	Tactics Meeting	Develop/Review primary and alternate Strategies to meet Incident Objectives for the next Operational Period.	PSC, OSC, LSC, RESL & SITL	
	Planning Meeting	Review status and finalize strategies and assignments to meet Incident Objectives for the next Operational Period.	Determined by the IC/UC	
	Operations Briefing	Present IAP and assignments to the Supervisors / Leaders for the next Operational Period.	IC/UC, Command & General Staff, Branch Directors, Div/Gru Sups., Task Force/Strike Team Leaders and Unit Leaders	

4. Prepared by: (Situation Unit Leader) **Date/Time**

DAILY MEETING SCHEDULE ICS 230-CG (Rev.07/04)

DAILY MEETING SCHEDULE (ICS 230-CG)

Purpose. The Daily Meeting Schedule records information about the daily scheduled meeting activities.

Preparation. This form is prepared by the Situation Unit Leader and coordinated through the Unified Command for each operational period or as needed. Commonly-held meetings are already included in the form. Additional meetings, as needed, can be entered onto the form in the spaces provided. Time and location for each meeting must be entered. If any of these standard meetings are not scheduled, they should be crossed out on the form.

Distribution. After coordination with the Unified Command, the Situation Unit Leader will duplicate the schedule and post a copy at the Situation Status Board and distribute to the Command Staff, Section Chiefs, and appropriate Unit Leaders. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Meeting Schedule	For each scheduled meeting, enter the date/time, meeting name, purpose, attendees, and location. Note: Commonly-held meetings are included in the form. Additional meetings, as needed, can be entered onto the form in the spaces provided. Time and location for each meeting must be entered. If any of the standard meetings are not scheduled, they should be deleted from the form (normally the Situation Unit Leader).
4.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	ACP Site Index ICS 232a-CG

3. Index to ACP/GRP sites shown on Situation Map

Site #	Priority	Site Name and/or Physical Location	Action	Status

Note: This form is designed to be posted next to the situation map. Use additional sheets, as needed.

4. Prepared by: **Date/Time**

ACP SITE INDEX (ICS 232a-CG)

Special Note. This optional form is designed to be a key to the site numbers or site names shown on the Situation Map. The information on priorities for environmentally-sensitive areas and archaeo-cultural and socio-economic issues from the ICS 232-CG may be transferred to ICS 232a-CG, which provides more information on the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) site numbers or names shown on the Situation Map.

Purpose. If used, this form is posted next to the Situation Map, providing a key to the ACP/GRP sites shown on the map.

Preparation. The Situation Unit personnel responsible for the Situation Map prepare this form, using ICS 232-CG prepared by the Environmental Unit.

Distribution. This form is posted next to the Situation Map and copies of this form should accompany any distributed copies of the Situation Map. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Index to ACP/GRP sites	Enter site information from the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or other sources specific to this incident.
	Site Number	Can come from an Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or can be created during an incident.
	Priority	Priority specific to this incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Action	Actions to be taken for designated protection and collection strategies or for other sites identified specifically for this incident.
	Status	Status of site action implementation (e.g., scheduled, in progress, completed).
4.	Prepared By	Enter name and title of the person preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	RESOURCES AT RISK SUMMARY ICS 232-CG

3. Environmentally-Sensitive Areas and Wildlife Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues

Narrative

4. Archaeo-cultural and Socio-economic Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues

Narrative

5. Prepared by: (Environmental Unit Leader) **Date/Time**

RESOURCES AT RISK SUMMARY ICS 232-CG (Rev.07/04)

RESOURCES AT RISK SUMMARY (ICS 232-CG)

Purpose. The Resources at Risk Summary provides information about sites in the incident area which are sensitive due to environmental, archaeo-cultural, or socio-economic resources at risk, and identifies incident-specific priorities and issues. The information recorded here may be transferred to ICS 232a-CG, which acts as a key to the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) site numbers shown on the Situation Map.

Preparation. The Environmental Unit Leader, with input from resource trustees, will complete this form for each operational period. It should be updated prior to the Planning Meeting.

Distribution. This form must be forwarded to the Planning Section Chief for possible inclusion in the IAP. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Env- Sensitive Area & Wildlife Issues	
	Site Number	Enter site number. Can come from Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or can be created during an incident.
	Priority	Priority specific to this incident. Can come from an ACP/GRP or can be created during an incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Site Issues	Environmental concerns associated with this site and season.
	Narrative	Use the Narrative section to clarify any issues.
4.	Archaeo-cultural and Socio-economic Issues	
	Site Number	Enter site number. Can come from an ACP/GRP or can be created during an incident.
	Priority	Priority specific to this incident. Can come from an ACP/GRP or can be created during an incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Site Issues	Archaeo-cultural or socio-economic concerns associated with this site and season.
	Narrative	Use the Narrative section to clarify any issues.
5.	Prepared By	Enter name and title of the person preparing the form (normally the Environmental Unit Leader).
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name					INCIDENT OPEN ACTION TRACKER ICS 233-CG		
2. No.	3. Item	4. For/POC	5. POC Briefed	6. Start Date	7. Status	8. Target Date	9. Actual Date
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
37							

Open Actions Tracker (ICS 233-CG)

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	No.	Enter number of task in sequential order (1, 2, 3, …).
3.	Item	Enter short descriptive of the task.
4.	For/POC	Enter responsible section/person.
5.	Briefed to POC	When the tasker has been briefed to the POC after initially assigned, an "X" is placed in the brief column. This was to ensure that taskers identified outsie of the POC's presence (during UC Meeting for example) were assigned the to identified POC.
6.	Start Date	Enter the date the tasker was initially assigned under "Start Date."
7.	Status	Enter status of item. This includes things like: "Awaiting LE Gear", "Update needed", "Awaiting Feedback". When the item is completed, the word "completed" is entered and if working in MS Excel, the task is cut and pasted into the worksheet labeled "COMPLETED."
8.	Target Date	Target date is another way of saying deadline. When the target date is one day away, the block turns yellow. When it is overdue it turns red. When it is yellow, it serves as a reminder to the UC that the target date needs to be changed or the responsible section needs to complete the task.
9.	Actual Date	The block to the right of the Target Date (Actual Date) will always have today's date. It is merely the formula "=today()" inserted into the cell.

NOTE: In order to ensure the red and yellow reminders work for new tasks, the user simply copies a task line, inserts it into the worksheet and overtypes the new task information.

		WORK ANALYSIS MATRIX ICS 234-CG
1. Incident Name	2. Operational Period From: To:	

3. Operation's Objectives DESIRED OUTCOME	4. Optional Strategies HOW	5. Tactics/Work Assignments WHO, WHAT, WHERE, WHEN

6. Prepared by: (Operations Section Chief)	7. Date/Time:

PAGE INTENTIONALLY LEFT BLANK

Exhibit N-6N

FACILITY NEEDS ASSESSMENT WORKSHEET ICS-235-CG (Rev 5/06)

1.INCIDENT NAME

2. LOCATION	3. FACILITIES	4. Requirements	# Expected Personnel	Internal/Building Workspace Sq Ft (80 sq ft/pers)	Wall Space Linear Sq Ft	Multi-Purpose Mtg Rm Sq Ft (20 sq ft/pers + display space)	External/Outside Laydown Sq Ft	Parking Space Sq Ft (120 sq ft/vehicle x 1.4 circulation factor)	Climate Control (HVAC) needed -	Toilet Rooms	Work Tables	Conf Table	Chairs	Telephones	Speaker Phone	Fax Machines	Power Outlets	Comp Workstations	Printers	Chart Printer/ChartPro	Video Projectors	Copy Machines	Paper Shredders				
ICP	Unified Command	REQ																									
	Liaison Officer & Agency Reps	REQ																									
	Safety Officer	REQ																									
	Public Information Officer	REQ																									
	Planning Section	REQ																									
	Operations Section	REQ																									
	Logistics Section	REQ																									
	Finance/Admin Section	REQ																									
	Common Areas	REQ																									
Base	Base	REQ																									
		REQ																									
JIC	JIC	REQ																									
		REQ																									
Staging		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									

5. Prepared By:

6. Date/Time Prepared:

N02570

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period to be covered by IAP (Date/Time) From: To:	CG IAP COVER SHEET

3. Approved by Incident Commander(s):

ORG	NAME

INCIDENT ACTION PLAN

The items checked below are included in this Incident Action Plan:

- ☐ ICS 202-CG (Response Objectives)
- ☐ ICS 203-CG (Organization List) – OR – ICS 207-CG (Organization Chart)
- ☐ ICS 204-CGs (Assignment Lists)
  One Copy each of any ICS 204-CG attachments:
- ☐ ICS 205-CG (Communications Plan)
- ☐ ICS 206-CG (Medical Plan)
- ☐ ICS 208-CG (Site Safety Plan) or Note SSP Location _____
- ☐ Map/Chart
- ☐ Weather forecast / Tides/Currents

Other Attachments

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

4. Prepared by: **Date/Time**

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

3. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines, or other graphics depicting situational and response status)

4. Current Situation:

N02574

Exhibit N-6N

1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

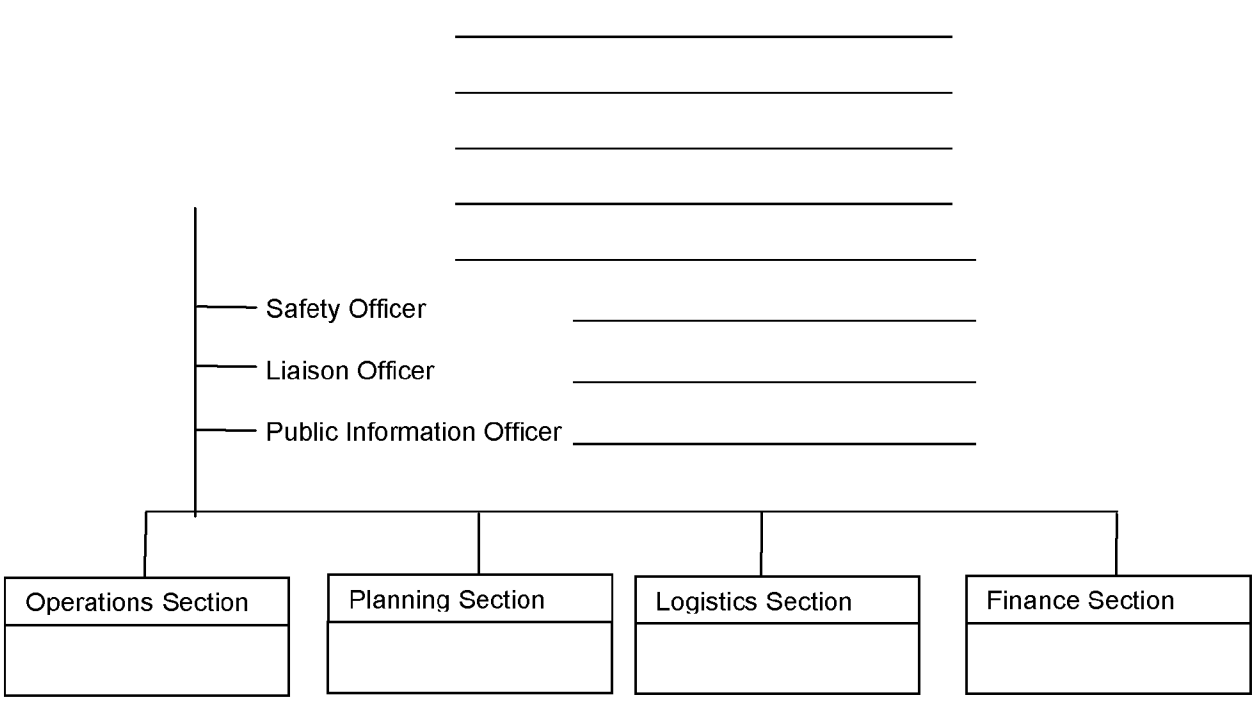
5. Initial Response Objectives, Current Actions, Planned Actions

N02575

Exhibit N-6N

1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

6. Current Organization (fill in additional appropriate organization)



1. Incident Name	2. Prepared by: (name) Date: Time:	INCIDENT BRIEFING ICS 201-CG

7. Resources Summary

Resource	Resource Identifier	Date Time Ordered	ETA	On-Scene (X)	NOTES: (Location/Assignment/Status)

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT OBJECTIVES ICS 202-CG

3. Objective(s)

4. Operational Period Command Emphasis (Safety Message, Priorities, Key Decisions/Directions)

Approved Site Safety Plan Located at:

5. Prepared by: (Planning Section Chief) **Date/Time**

INCIDENT OBJECTIVES (ICS 202-CG)

Purpose. The Incident Objectives form describes the basic incident strategy, control objectives, command emphasis/priorities, and safety considerations for use during the next operational period.

Preparation. The Incident Objectives form is completed by the Planning Section following each Command and General Staff Meeting conducted in preparing the Incident Action Plan.

Distribution. The Incident Objectives form will be reproduced with the IAP and given to all supervisory personnel at the Section, Branch, Division/Group, and Unit levels. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Objective(s)	Enter clear, concise statements of the objectives for managing the response. These objectives are for the incident response for this operational period and for the duration of the incident. Include alternatives.
4.	Operational Period Command Emphasis	Enter clear, concise statements for safety message, priorities, and key command emphasis/decisions/directions. Enter information such as known safety hazards and specific precautions to be observed during this operational period. If available, a safety message should be referenced and attached. At the bottom of this box, enter the location where approved Site Safety Plan is available for review.
	Site Safety Plan	Note location of the approved Site Safety Plan.
5.	Prepared By	Enter the name of the Planning Section Chief completing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

NOTE: ICS 202-CG, Incident Objectives, serves as part of the Incident Action Plan (IAP)

1. Incident Name	2. Operational Period (Date/Time) From: To:	ORGANIZATION ASSIGNMENT LIST ICS 203-CG

3. Incident Commander(s) and Staff

Agency	IC	Deputy

Safety Officer:	
Information Officer:	
Liaison Officer:	

4. Agency Representatives

Agency	Name

5. PLANNING/INTEL SECTION

Chief	
Deputy	
Resources Unit	
Situation Unit	
Environmental Unit	
Documentation Unit	
Demobilization Unit	
Technical Specialists	

6. LOGISTICS SECTION

Chief	
Deputy	
a. Support Branch	
Director	
Supply Unit	
Facilities Unit	
Vessel Support Unit	
Ground Support Unit	
b. Service Branch	
Director	
Communications Unit	
Medical Unit	
Food Unit	

7. OPERATION SECTION

Chief		
Deputy		
Deputy		
Staging Area Manager		
Staging Area Manager		
Staging Area Manager		
a. Branch – Division Groups		
Branch Director		
Deputy		
Division Group		
Division Group		
Division Group		
Division/Group		
Division/Group		
b. Branch – Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
c. Branch – Division/Groups		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
d. Air Operations Branch		
Air Operations Br. Dir		
Helicopter Coordinator		

8. FINANCE/ADMINISTRATION SECTION

Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation/Claims Unit	
Cost Unit	

9. Prepared By: (Resources Unit) **Date/Time**

ORGANIZATION ASSIGNMENT LIST (ICS 203-CG) Instructions for filling out the form

Purpose. The Organization Assignment List provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit. It is used to complete the Incident Organization Chart (ICS form 207-CG) which is posted on the Incident Command Post display. An actual organization will be event-specific. **Not all positions need to be filled.** The size of the organization is dependent on the magnitude of the incident and can be expanded or contracted as necessary.

Preparation. The Resources Unit prepares and maintains this list under the direction of the Planning Section Chief.

Note: Depending on the incident, the Intelligence and Information function may be organized in several ways: 1) within the Command Staff as the Intelligence Officer; 2) As an Intelligence Unit in Planning Section; 3) As an Intelligence Branch or Group in the Operations Section; 4) as a separate General Staff Intelligence Section; and 5) as an Intelligence Technical Specialist. The incident will drive the need for the Intelligence and Information function and where it is located in the ICS organization structure. The Intelligence and information function is described in significant detail in NIMS and in the Coast Guard Incident Management Handbook (IMH).

Distribution. The Organization Assignment List is duplicated and attached to the Incident Objectives form (ICS 202-CG) and given to all recipients of the Incident Action Plan. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Incident Commander and Staff	Enter the names of the Incident Commander and Staff. Use at least the first initial and last name.
4.	Agency Representative	Enter the agency names and the names of their representatives. Use at least the first initial and last name.
5. thru 8.	Section	Enter the name of personnel staffing each of the listed positions. Use at least the first initial and last name. For Units, indicate Unit Leader and for Divisions/ Groups indicate Division/Group Supervisor. Use an additional page if more than three branches are activated. If there is a shift change during the specified operational period, list both names, separated by a slash.
9.	Prepared By	Enter the name and position of the person completing the form
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	Assignment List ICS 204-CG
3. Branch	4. Division/Group/Staging	

5. Operations Personnel Name Affiliation Contact # (s)

Operations Section Chief: _____

Branch Director: _____

Division/Group Supervisor/STAM: _____

6. Resources Assigned "X" indicates 204a attachment with additional instructions

Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# Of Persons	Reporting Info/Notes/Remarks	☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐
					☐

7. Work Assignments

8. Special Instructions

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager	

Emergency Communications

Medical _____ Evacuation _____ Other _____

10. Prepared by: Date/Time	11. Reviewed by (PSC): Date/Time	12. Reviewed by (OSC): Date/Time

ASSIGNMENT LIST (ICS 204-CG)

Purpose. The Assignment List(s) informs Division and Group supervisors of incident assignments. Once the Unified Command and General Staff agree to the assignments, the assignment information is given to the appropriate Divisions and Groups.

Preparation. The Assignment List is normally prepared by the Resources Unit, using guidance from the Incident Objectives (ICS 202-CG), Operational Planning Worksheet (ICS 215-CG), and the Operations Section Chief. The Assignment List must be approved by the Planning Section Chief and Operations Section Chief. When approved, it is included as part of the Incident Action Plan (IAP). Specific instructions for specific resources may be entered on an ICS 204a-CG for dissemination to the field. A separate sheet is used for each Division or Group. The identification letter of the Division is entered in the form title. Also enter the number (roman numeral) assigned to the Branch.

Special Note. The Assignment List, ICS 204-CG submits assignments at the level of Divisions and Groups. The Assignment List Attachment, ICS 204a-CG shows more specific assignment information, if needed. The need for an ICS 204a-CG is determined by the Planning and Operations Section Chiefs during the Operational Planning Worksheet (ICS 215-CG) development.

Distribution. The Assignment List is duplicated and attached to the Incident Objectives and given to all recipients of the Incident Action Plan. In some cases, assignments may be communicated via radio/telephone/fax. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Branch	Enter the Branch designator.
4.	Division/Group/Staging	Enter the Division/Group/Staging designator.
5.	Operations Personnel	Enter the name of the Operations Chief, applicable Branch Director, and Division Supervisor.
6.	Resources Assigned	Each line in this field may have a separate Assignment List Attachment (ICS 204a-CG). Enter the following information about the resources assigned to Division or Group for this period:
	Identifier	List identifier
	Leader	Leader name
	Contact Information	Primary means of contacting this person (e.g., radio, phone, pager, etc.). Be sure to include area code when listing a phone number.
	# Of Persons	Total number of personnel for the strike team, task force, or single resource assigned.
	Reporting Info/Notes/ Remarks	Special notes or directions, specific to this strike team, task force, or single resource. Enter an "X" check if an Assignment List Attachment (ICS 204a-CG) will be prepared and attached. The Planning and Operations Section Chiefs determine the need for an ICS 204a-CG during the Operational Planning Worksheet (ICS 215-CG) development.
7.	Work Assignment	Provide a statement of the tactical objectives to be achieved within the operational period by personnel assigned to this Division or Group.
8.	Special Instructions	Enter a statement noting any safety problems, specific precautions to be exercised, or other important information.
9.	Communications	Enter specific communications information (including emergency numbers) for this division /group. If radios are being used, enter function (command, tactical, support, etc.), frequency, system, and channel from the Incident Radio Communications Plan (ICS 205-CG). Note: Phone numbers should include area code.
10.	Prepared By	Enter the name of the person completing the form, normally the Resources Unit Leader.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).
11.	Reviewed by (PSC)	
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).
12.	Reviewed by (OSC)	Enter the name of the operations person reviewing the form, normally the Operations Section Chief.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	ASSIGNMENT LIST ATTACHMENT ICS 204a-CG
3. Branch	4. Division/Group	
5. Strike Team/Task Force/Resource (Identifier)	6. Leader	7. Assignment Location

8. Work Assignment Special Instructions, Special Equipment/Supplies Needed for Assignment, Special Environmental Considerations, Special Site Specific Safety Considerations

Approved Site Safety Plan Located at:

9. Other Attachments (as needed)

☐ Map/Chart ☐ Weather Forecast/Tides/Currents ☐ _____

☐ _____ ☐ _____ ☐ _____

10. Prepared by: Date/Time	11. Reviewed by (PSC): Date/Time	12. Reviewed by (OSC): Date/Time

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date / Time) From: To:	INCIDENT RADIO COMMUNICATIONS PLAN ICS 205-CG

3. BASIC RADIO CHANNEL USE

SYSTEM / CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS

4. Prepared by: (Communications Unit) **Date / Time**

INCIDENT RADIO COMMUNICATIONS PLAN ICS 205-CG (Rev.07/04)

INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205-CG)

Special Note. This form, ICS 205-CG, is used to provide, in one location, information on all radio frequency assignments down to the Division/Group level for each operational period; whereas, the Communications List, ICS 205a-CG is used to list methods of contact for personnel assigned to the incident (radio frequencies, phone numbers, pager numbers, etc.).

Purpose. The Incident Radio Communications Plan is a summary of information obtained from the Radio Requirements Worksheet (ICS 216) and the Radio Frequency Assignment Worksheet (ICS 217). Information from the Radio Communications Plan on frequency assignments is normally noted on the appropriate Assignment List (ICS 204-CG).

Preparation. The Incident Radio Communications Plan is prepared by the Communications Unit Leader and given to the Planning Section Chief. Detailed instructions on the preparation of this form may be found in ICS Publication 223-5, Communications Unit Position Manual.

Distribution. The Incident Radio Communications Plan is duplicated and given to all recipients of the Incident Objectives form, including the Incident Communications Center. Information from the plan is placed on Assignment Lists. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Basic Radio Channel	Enter the following information about radio channel use:
	System	Radio cache system(s) assigned and used on the incident.
	Channel	Radio channel numbers assigned.
	Function	Function each channel is assigned (e.g., command, support, division tactical, and ground-to-air).
	Frequency	Radio frequency tone number assigned to each specified function (e.g., 153.400)
	Assignment	ICS organization assigned to each of the designated frequencies (e.g., Branch I, Division A).
	Remarks	This section should include narrative information regarding special situations.
4.	Prepared By	Enter the name of the Communications Unit Leader preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date / Time) From: To:	COMMUNICATIONS LIST ICS 205A-CG

3. Basic Local Communications Information

Assignment	Name	Method(s) of contact (radio frequency, phone, pager, cell #(s), etc.)

4. Prepared by: (Communications Unit) **Date / Time**

COMMUNICATIONS LIST ICS 205a-CG (Rev. 07/04)

COMMUNICATIONS LIST (ICS 205a-CG)

Special Note. This optional form is used in conjunction with the Incident Radio Communications Plan, ICS 205-CG. Whereas the ICS 205-CG is used to provide information on all radio frequencies down to the Division/Group level, the Communications List, ICS 205a-CG, lists methods of contact for personnel assigned to the incident (radio frequencies, phone numbers, pager numbers, etc.), and functions as an incident directory.

Purpose. The Communications List records methods of contact for personnel on scene.

Preparation. The Communications List can be filled out during check-in and is maintained and distributed by Communications Unit personnel.

Distribution. The Communications List is distributed within the ICS and posted, as necessary. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Basic Local Comms Information	Enter the communications methods assigned and used for each assignment.
	Assignment	Enter the ICS Organizational assignment.
	Name	Enter the name of the contact person for the assignment.
	Method(s) of contact	Enter the radio frequency, telephone number(s), etc. for each assignment.
4.	Prepared By	Enter the name of the Communications Unit Leader preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date / Time) From: To:	MEDICAL PLAN ICS 206-CG

3. Medical Aid Stations

Name	Location	Contact #	Paramedics On site (Y/N)

4. Transportation

Ambulance Service	Address	Contact #	Paramedics On board (Y/N)

5. Hospitals

Hospital Name	Address	Contact #	Travel Time		Burn Ctr?	Heli-Pad?
			Air	Ground		

6. Special Medical Emergency Procedures

7. Prepared by: (Medical Unit Leader) Date/Time	8. Reviewed by: (Safety Officer) Date/Time

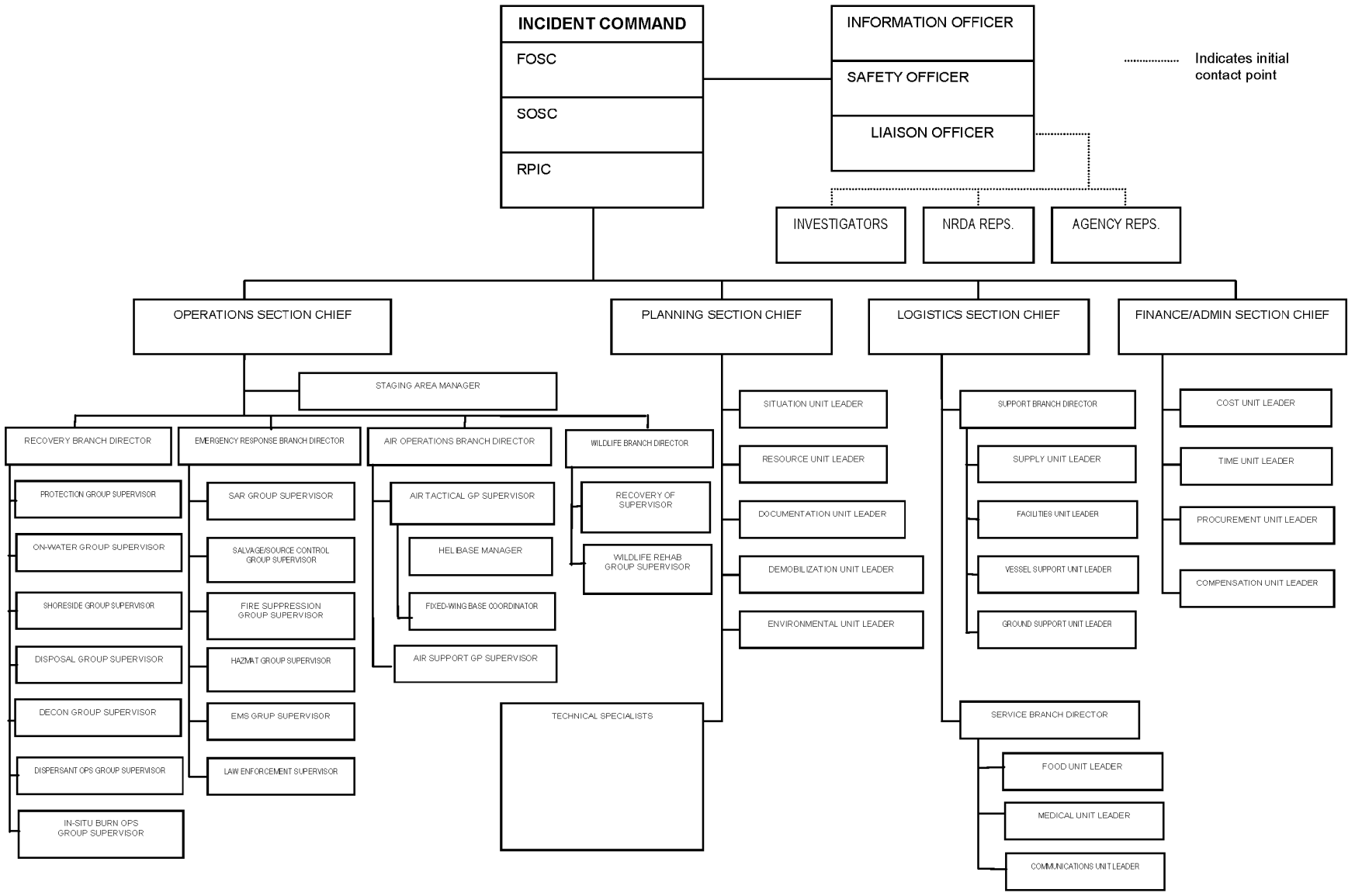
MEDICAL PLAN (ICS 206-CG)

Purpose. The Medical Plan provides information on incident medical aid stations, transportation services, hospitals, and medical emergency procedures.

Preparation. The Medical Plan is prepared by the Medical Unit Leader and reviewed by the Safety Officer.
Distribution. The Medical Plan may be attached to the Incident Objectives (ICS 202-CG), or information from the plan pertaining to incident medical aid stations and medical emergency procedures may be taken from the plan and noted on the Assignment List (ICS 204-CG) or on the Assignment List Attachment (ICS 204a-CG). All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Medical Aid Stations	Enter name, location, and telephone number of the medical aid station(s) (e.g., Cajon Staging Area, Cajon Camp Ground) and indicate if paramedics are located at the site.
4.	Transportation	List name and address of ambulance services. Provide phone number and indicate if ambulance company has paramedics.
5.	Hospitals	List hospitals that could serve this incident. Enter hospital name, address, phone number, the travel time by air and ground from the incident to the hospital, and indicate if the hospital has a burn center and/or a helipad.
6.	Medical Emergency Procedures	Note any special emergency instructions for use by incident personnel.
7.	Prepared By Date/Time	Enter the name of the Medical Unit Leader preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).
8.	Reviewed By Date/Time	Enter the name of the Safety Officer who must review the plan. Enter date (month, day, year) and time reviewed (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT ORGANIZATION CHART ICS 207-CG



ICS-207-CG (Rev. 09/04)

N02592

Exhibit N-6N

NAVY0006683

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date / Time) From: To: Time of Report	INCIDENT STATUS SUMMARY ICS 209-CG

3. Type of Incident

☐	Oil Spill	☐	HAZMAT	☐	AMIO
☐	SAR/Major SART	☐	SI/Terrorism	☐	Natural Disaster
☐	Marine Disaster	☐	Civil Disturbance	☐	Military Outload
☐	Planned Event	☐	Maritime HLS/Prevention	☐	

4. Situation Summary as of Time of Report:

5. Future Outlook/Goals/Needs/Issues:

6. Safety Status/Personnel Casualty Summary

	Since Last Report	Adjustments To Previous Op Period	Total
Responder Injury			
Responder Death			
Public Missing (Active Search)			
Public Missing (Presumed Lost)			
Public Uninjured			
Public Injured			
Public Dead			
Total Public Involved			

7. Property Damage Summary

Vessel	$
Cargo	$
Facility	$
Other	$

8. Attachments with clarifying information

☐	Oil/HAZMAT	☐	SAR/LE	☐	
☐		☐		☐	
☐	Marine Disaster	☐	Civil Disturbance	☐	Military Outload

9. Equipment Resources					
Kind	Notes	# Ordered	# Available	# Assigned	# Out of Service
USCG Assets					
Aircraft – Helo					
Aircraft – Fixed Wing					
Vessels – USCG Cutter					
Vessels – Boat					
Vehicles – Car					
Vehicles – Truck					
Pollution Equip – VOSS/SORS					
Pollution Equip – Portable Storage					
Pollution Equip – Boom					
Non-CG/Other Assets					
Aircraft – Helo					
Aircraft – Fixed Wing					
Vessels – SAR/LE Boat					
Vessels – Work/Crew Boat					
Vessels – Tug/Tow Boat					
Vessels – Pilot Boat					
Vessels – Deck Barge					
Vessels –					
Vehicles – Car					
Vehicles – Ambulance					
Vehicles – Truck					
Vehicles – Fire/Rescue/HAZMAT					
Vehicles – Vac/Tank Truck					
Vehicles –					
Pollution Equip – Skimmers					
Pollution Equip – Tank Vsl/ Barge					
Pollution Equip – Portable Storage					
Pollution Equip – OSRV					
Pollution Equip – Boom					
Pollution Equip –					

10. Personnel Resources	
Agency	**Total # of People**
USCG	
DHS (other than USCG)	
NOAA	
FBI	
DOD (USN Supsalv, CST, etc.)	
DOI (US Fish & Wildlife, Nat Parks, BLM, etc.)	
RP	
State	
Local	
Total Personnel Resources Used From all Organizations:	

11. Prepared by:	Date/Time Prepared:

1. Incident Name	2. Operational Period (Date / Time) From: To: Time of Report	ICS 209-CG OIL/HAZMAT ATTACHMENT

3. HAZMAT/Oil Spill Status (Estimated, in gallons)

Common Name(s):

UN Number:	☐ Secured ☐ Unsecured
CAS Number:	Remaining Potential (bbl):
	Rate of Spillage (bbl/hr):

	Adjustments To Previous Operational Period	Since Last Report	Total
Volume Spilled/Released			
Mass Balance - HAZMAT/Oil Budget			
Recovered HAZMAT/Oil			
Evaporation/Airborne			
Natural Dispersion			
Chemical Dispersion			
Burned			
Floating, Contained			
Floating, Uncontained			
Onshore			
Total HAZMAT/Oil accounted for:	N/A	N/A	

Comments:

4. HAZMAT/Oil Waste Management (Estimated, Since Last Report)

	Recovered	Disposed	Stored
HAZMAT/Oil (bbl)			
Oily Liquids (bbl)			
Liquids (bbl)			
Oily Solids (tons)			
Solids (tons)			

Comments:

5. HAZMAT/Oil Shoreline Impacts (Estimated in miles)

Degree of Impact	Affected	Cleaned	To Be Cleaned
Light			
Medium			
Heavy			
Total			

Comments:

6. HAZMAT/Oil Wildlife Impacts (Since Last Report)

					Died in Facility	
Type of Wildlife	Captured	Cleaned	Released	DOA	Euthanized	Other
Birds						
Mammals						
Reptiles						
Fish						
Total						

Comments:

7. Prepared by:	Date/Time Prepared:

1. Incident Name	2. Operational Period (Date / Time) From: To: Time of Report	ICS 209-CG SAR/LE ATTACHMENT

3. Evacuation Status

	Since Last Report	Adjustments To Previous Operational Period	Total
Total to be Evacuated			
Number Evacuated			

4. Migrant Interdiction Status

	Since Last Report	Adjustments To Previous Op Period	Total
Vessels Interdicted			
Migrants Interdicted at Sea			
Migrants Interdicted Ashore			
Injured			
MEDEVAC'd			
Deaths			
Migrants Repatriated			

5. Sorties/Patrols Summary (List of Sorties Since Last Report)

Air	Since Last Report	Total
Number of Sorties/Patrols		
Area Covered (square miles)		
Total Time On-Scene (In Hours)		
Surface	Since Last Report	Total
Number of Sorties/Patrols		
Area Covered (square miles)		
Total Time On-Scene (In Hours)		

6. Use of Force Summary

Category	Since Last Report	Total
III - Soft Empty Hand Control		
IV - Hard Empty Hand Control		
V - Intermediate Weapons		
VI - Deadly Force		
VSL - Force to Stop Vessel from Cutter/Boat		
A/C - Force to Stop Vessel From Aircraft		
Arrests		
Seizures		
Deaths		

7. Operational Controls Summary

Currently In Force

Type	Initiating Unit	Initiated Date	Activity #

Removed Since Last Report

Type	Initiating Unit	Initiated Date	Date Removed	Activity #

18. Prepared by:	Date/Time Prepared:

INCIDENT STATUS SUMMARY (ICS FORM 209-CG)

Purpose. The Status Summary:
1. Is used by Situation Unit personnel for posting information on Status Boards or attaching as a file to the MISLE Case.
2. Is duplicated and provided to Command Staff members, giving them basic information for planning for the next operational period.
3. Provides information to the Information Officer for preparing news media releases.
4. Summarizes incident information for local and off-site coordination/operations centers.

Preparation. The Situation Unit prepares the Status Summary. Resources information should be obtained from the Resources Unit. It may be scheduled for presentation to the Planning Section Chief and other General Staff members prior to each Planning Meeting and may be required at more frequent intervals by the Unified Command or Planning Section Chief. Suggested sources of information are noted in brackets.
Note: The values on the ICS form 209-CG are the **best available estimates at the Time of Report** (Item # 2 on form). This form is usually in high demand and should be filled out early and often. A suggested source within the ICS organization is noted in brackets [ ] at the top right of each section of the form. **All fields need not be completed in order to distribute the form**.

Distribution. When completed, the form is duplicated and copies are distributed to the Unified Command and staff, and all Section Chiefs, Planning Section Unit Leaders, and the Joint Information Center. It is also posted on a status board located at the ICP. All completed original forms MUST be given to the Documentation Unit.

How to Save and Use the Word Template Form:
The 209 template (.dot file) can be edited to match most incident situations and can be saved into the Word template directory. Open the blank 209 (ICS 209 CG.dot) – do not add any content. Save the blank in the Templates directory. Create a new 209 from File>new picking the 209 template. Type in the file to add any desired content and use "save as" to save the work using a new file name. The file will automatically become a .doc file.

Comments: Please send comments/corrections about this form to the ICS Program Manager, Ms. Kristy Plourde, email: kplourde@tcyorktown.uscg.mil

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Period Covered by Report	Enter the date and time interval for which the report applies. Use 24-hour clock for all times.
	Time of Report	Enter time for which this information applies. Enter the Time (24-hour clock) the form was prepared.
3.	Type of Incident	Indicate (check box) and/or fill-in the type of incident(s).
4.	Situation Summary	Summary of current situation at time of report.
5.	Future Outlook	This section is for the IC/UC to discuss/project their future outlook, goals, requirements, needs and issues.
6.	Safety Status/Personnel Casualty	This information pertains to responders and assisted public personnel. Indicate the number of serious injuries, death, and missing. Values entered in the column labeled since Last Report are from the start of the

		Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
7.	Property Damage	Enter estimated dollar values for each item, if known.
8.	Attachments	Indicate (check box) and/or fill-in the attachment(s) the help further clarify the incident status.
9.	Equipment Resources	Indicate the number of each type of resource in each status category. There are blank lines below each general type of resource for additional equipment.
	Ordered	Ordered but not yet arrived/available.
	Available	Arrived on scene, stored in staging, not assigned to any task, available for use.
	Assigned	Assigned to a specific task.
	Out of Service	Not working and not assigned to any task (e.g., skimmer being repaired, boom broken, personnel off-duty for rest).
10.	Personnel Resources	Indicate, by agency, the numbers of personnel assigned. There are blank lines for additional personnel, as needed.
11.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.

OIL/HAZMAT ATTACHMENT

1.	Incident Name	Enter the name assigned to the incident.
2.	Period Covered by Report	Enter the date and time interval for which the report applies. Use 24-hour clock for all times.
	Time of Report	Enter time for which this information applies. Enter the Time (24-hour clock) the form was prepared.
3.	Spill Status	This information is only tracked if there is spilled HAZMAT or Oil. Enter Common Name(s) of the released substance or spilled oil (i.e. Ethyl Alcohol/Ethanol or No. 2 Fuel Oil/Light Fuel Oil). Enter UN number and CAS Registry number, if known. Indicate whether the spill source is secured or unsecured (check box) and estimate the remaining potential and the rate of spillage discharge or release. Enter the estimated amounts in barrels for each category. Values entered in the column labeled Since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
	Mass Balance	This information is only tracked if there is spilled HAZMAT or Oil whether recovered, evaporated, dispersed, burned, floating, or on shore. The total of these estimates should approximate the total volume spilled, discharged, or released. Values for evaporation, dispersion, etc. can be obtained from the Environmental Unit and/or the Scientific Support Coordinator (SSC).
4.	Waste Management	This information is only tracked if there is spilled HAZMAT or Oil. Enter the estimated amounts in barrels or tons for each category. Total HAZMAT/ Oil (bbl) is the sum of the estimate of HAZMAT/oil in oily

		liquids and HAZAMT/oil in oily solids, and is the value to be entered under "Recovered HAZMAT/Oil" in Item 4.
5.	Shoreline Impacts	This information is only tracked if there is spilled HAZMAT or Oil. Enter the total miles in each category for each degree of oiling. Definitions for Light, Medium, and Heavy oiling can be obtained from the EUL/SSC and should be consistent throughout the incident.
6.	Wildlife Impacts	This information is only tracked after an animal is captured. Indicate the actual number of oiled wildlife in each category. Use numbers in parentheses to indicate the subtotal of threatened / endangered species included in the numbers given.
7.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.

SAR/LE ATTACHMENT

1.	Incident Name	Enter the name assigned to the incident.
2.	Period Covered by Report	Enter the date and time interval for which the report applies. Use 24-hour clock for all times.
	Time of Report	Enter time for which this information applies. Enter the Time (24-hour clock) the form was prepared.
3.	Evacuation Status	This information is only tracked if the incident involves evacuation of personnel. Values entered in the column labeled Since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
4.	Migrant Interdiction Status	This information is only tracked if the incident involves Migrant Interdiction. Values entered in the column labeled Since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
5.	Sorties/Patrols	This information is only tracked if the incident involves sorties tracked in MISLE Incident Management Activity. List Sorties since last report both Air and Surface. Values entered in the column labeled since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
6.	Use of Force	This information is only tracked if the incident involves Use of Force activities. Values entered in the column labeled since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
7.	Operational Controls	This information is only tracked if the incident involves Operational Control activities initiated, in force and removed.
8.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date / Time) From: To:	STATUS CHANGE ICS 210-OS

3. Personnel / Resource Name or I.D.

4. New Status

☐ Available / Staged ☐ Assigned _____ ☐ Out of Service

5. FROM Location or Status	6. TO Location or Status

7. Time of Location / Status Change

8. Comments

9. Prepared by: **Date / Time**

10. Processed by: (Resource Unit) **Date / Time**

Electronic version: NOAA 1.0 June 1, 2000

STATUS CHANGE (ICS FORM 210-OS)

Purpose. The Status Change form is used to record status change information received on resources assigned to the incident.

Preparation. The form is completed by radio/telephone operators who receive status change information from individual resources, Task Forces, Strike Teams, and Division/Group Supervisors. Status information could also be reported by Staging Area and Helibase Managers or fixed-wing facilities.

Distribution. The original is given to the Resources Unit, and the Communications Unit retains a second copy. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Personnel/Resource Name or I.D.	Enter the Personnel/Resource Name or Identifier.
4.	New Status	Check the new status of the personnel or resource.
5.	FROM Location or Status	Enter the location or status from which the resource is changing.
6.	TO Location or Status	Enter the location or status to which the resource is changing.
7.	Time of Location / Status Change	Enter time of change (24-hour clock).
8.	Comments	Use this area for other information.
9.	Prepared By Date/Time	Enter name and title of the person preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).
10.	Processed by Resources Unit Date/Time	Enter name and title of the person in the Resources Unit processing the form. Enter date (month, day, year) and time processed (24-hour clock).

CHECK-IN LIST	1. INCIDENT NAME:	2. CHECK-IN LOCATION:	3. DATE/TIME:

CHECK-IN INFORMATION

4. LIST PERSONNEL (OVERHEAD) BY AGENCY NAME – OR LIST EQUIPEMENT BY THE FOLLOWING FORMAT:
S=Supplies H=Helicopter
O=Overhead VL=Vessels
E=Equipment C=Crew
A=Aircraft VH=Vehicle

AGENCY	RESOURCE IDENTIFIER	KIND	5. ORDER/ NUMBER	6. DATE/TIME CHECK-IN	7. LEADER'S NAME	8. TOTAL NO. PERSONNEL	9. INCIDENT CONTACT INFORMATION	10. INCIDENT LODGING INFO/CONTACT INFO	11. HOME UNIT	12. METHOD OF TRAVEL	13. INCIDENT ASSIGNMENT	14. SENT TO RESTAT TIME/INT

15. ICS 211-CG PAGE _____ of _____

16. PREPARED BY (Name and Position) USE BACK FOR REMARKS OR COMMENTS

PAGE INTENTIONALLY LEFT BLANK

GENERAL MESSAGE		
TO:	POSITION:	
FROM:	POSITION:	
SUBJECT:	DATE:	TIME:
MESSAGE:		
SIGNATURE:	POSITION:	
REPLY:		
DATE:	TIME:	SIGNATURE/POSITION:

ICS 213 NFES 1336

N02606

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

Resource Request Message

Purpose: The 213RR CG is used by all incident personnel to request tactical and non-tactical resources.

ICS-213 RR CG (2/07)

Requestor

1. Incident Name:
2. Date/Time:
3. Resource Request Number:

4. ORDER Note: Use additional forms when requesting different resource sources of supply

a. Qty	b. Kind	c. Type	d. Priority U or R	e. Detailed item description (vital characteristics, brand, specs, experience, etc.) and, if applicable, purpose/use, diagrams, and other info.	f. Requested Reporting Location:	f. Requested Reporting Date/Time:	g. Order # (LSC)	h. ETA (LSC)	i. Cost

5. Suggested source(s) of supply - POC phone number if known and suitable subtitutes:

6. Requestor Position and Signature: Date/Time:

7. Section Chief/Command Staff Approval: Date/Time:

Plans

8. RESL - check box (a) if request is for tactical or personnel resources. Then note availability in box 8.b or 8.c.

a. ☐ b. ☐ Resources available as noted in block 12

c. ☐ Resources not available

9. RESL Review/Signature: Date/Time:

Logistics

10. Requisition/Purchase Order #:

11. Supplier Name/Phone/Fax/Email:

12. Notes:

13. Logistics Section Signature: Data/Time:

14. Order placed by (check box): ☐ SPUL ☐ PROC ☐ OTHER _____

Finance

15. Reply/Comments from Finance:

16. Finance Section Signature: Date/Time:

Full instructions on back page. Requestor fills in blocks 1-5, except # 3 & # 4.g-i (shaded area), signs block 6 (do not forget position), gets appropriate Section Chief or Command Staff approval in block 7, and keeps yellow copy (bottom). If applicable, RESL reviews if resource available, signs block 9 and keeps blue copy. Logistics fills in block 4.g and h, and blocks 10-13, and keeps orange copy. Orderer (LSC or FSC) fills in block 4.i. Finance fills in blocks 15 - 16 and keeps green copy. Pink copy is returned to RESL for tactical/personnel or requestor for non-tactical. White copy goes to DOCL.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date/Time) From: To:	UNIT LOG ICS 214-CG
3. Unit Name/Designators	4. Unit Leader (Name and ICS Position)	

5. Personnel Assigned

NAME	ICS POSITION	HOME BASE

6. Activity Log (Continue on Reverse)

TIME	MAJOR EVENTS

7. Prepared by: **Date/Time**

1. Incident Name	2. Operational Period (Date/Time) From: To:	UNIT LOG (CONT.) ICS 214-CG

6. Activity Log (Continue on Reverse)

TIME	MAJOR EVENTS

7. Prepared by: **Date/Time:**

UNIT LOG (ICS FORM 214-CG)

Purpose. The Unit Log records details of unit activity, including strike team activity or individual activity. These logs provide the basic reference from which to extract information for inclusion in any after-action report.

Preparation. A Unit Log is initiated and maintained by Command Staff members, Division/Group Supervisors, Air Operations Groups, Strike Team/Task Force Leaders, and Unit Leaders. Completed logs are submitted to supervisors who forward them to the Documentation Unit.

Distribution. The Documentation Unit maintains a file of all Unit Logs. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Check-In Location	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Unit Name/Designators	Enter the title of the organizational unit or resource designator (e.g., Facilities Unit, Safety Officer, Strike Team).
4.	Unit Leader	Enter the name and ICS Position of the individual in charge of the Unit.
5.	Personnel Assigned	List the name, position, and home base of each member assigned to the unit during the operational period.
6.	Activity Log	Enter the time and briefly describe each significant occurrence or event (e.g., task assignments, task completions, injuries, difficulties encountered, etc.)
7.	Prepared By	Enter name and title of the person completing the log. Provide log to immediate supervisor, at the end of each operational period.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

PAGE INTENTIONALLY LEFT BLANK

OPERATIONAL PLANNING WORKSHEET

1.INCIDENT NAME

2. DATE & TIME PREPARED

3. OPERATIONAL PERIOD (DATE & TIME)

4. DIVISION/ GROUP/ OTHER LOCATION	5. WORK ASSIGNMENTS	6. KINDS OF RESOURCES	7. OVERHEAD	8. SPECIAL EQUIPMENT & SUPPLIES	9. REPORTING LOCATION	10. REQUESTED ARRIVAL TIME
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				
		REQ				
		HAVE				
		NEED				

ICS 215 USCG 12-02	11. TOTAL RESOURCES REQUIRED	14. PREPARED BY (NAME & POSITION)
	12. TOTAL RESOURCES ON HAND	
	13. TOTAL RESOURCES NEEDED	

N02614

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

INCIDENT ACTION PLAN SAFETY ANALYSIS

1. Incident Name	2. Date/Time Prepared

3. DIVISION/ GROUP/ OTHER LOCATION	4. Work Assignments	5. Gain		6. HAZARDS												7. CONTROLS										8. ORM			
																										SEVERITY	PROBABILITY	EXPOSURE	GAR
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											
		Human Health		Check												Check													
		Security																											
		Environment																											
		Economy																											

ICS-215A-CG (rev 6/06)	Operational Risk Management Key	Scale	1	2	3	4	5	Gar Scale	#	1-19	20-39	40-59	60-79	80-100	9. Prepared by (Name and Position)
		Severity	Slight	Minimal	Signif-icant	Major	Catas-trophic		Risk	Slight	Possible	Substantial	High	Very High	
		Probability	Remote	Un-likely	50/50	>50	Very Likely		Color	Green	Amber	Red	Red	Red	
		Exposure	Below Avg	Avg	Above Avg	Great	N/A		Action	Possibly Acceptable	Attention Needed	Correction Required	Immediate Correction	Discontinue/ Stop	

N02616

Exhibit N-6N

NAVY0006707

INCIDENT ACTION PLAN SAFETY ANALYSIS (ICS-215A-CG (rev 6/06))
Instructions for filling out the form

Purpose: The purpose of this worksheet is to aid the Safety Officer in completing an operational risk assessment to prioritize hazards and develop appropriate controls.

Preparation: During the Incident Action Planning cycle where the Operations Section Chief (OSC) is preparing for the tactics meeting, the Safety Officer works alongside the OSC and completes the Incident Action Plan Safety Analysis. This sheet mirrors the ICS 215 form. Work assignments are listed along with associated hazards. A calculation is made that determines what level of risk each work assignment poses. For those assignments having significant risk, controls are developed for safeguarding responders. The net risk is evaluated against the gain. The Incident Commander should be alerted to all safety hazards that receive an amber or red GAR rating after controls have been established.

Distribution: The Operational Hazard Worksheet is attached to the Incident Site Safety Plan and is distributed according to the instruction for Site Safety Plans.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) and time prepared.
3	Division/Group	Enter the Branch, Division or Group title in abbreviated form.
4	Work Assignment	List the work assignment for each Branch, Division or Group.
5	Gain	Check the gain that is achieved when the work assignment is accomplished.
6	Hazards	Using the IAP Safety Analysis Aid (page 2), list the type of hazards likely to be encountered for the work assignment. Place a check mark in the box below the hazard.
7	Controls	Using the IAP Safety Analysis Aid (page 2), list the type of controls likely to be used for addressing the hazards listed. Place a check mark in the box below the control.
8	GAR	Using the "Key", assign a number from 1 to 5 based on the level of severity, probability and exposure. Multiply all numbers together to get a total. Enter this number into the total column. Gar means **G**reen, **A**mber, **R**ed. Using the GAR scale on the bottom of the sheet, assign a color, risk level or action phrase in this block.
9	Prepared by	Enter the name of the person who completed this worksheet.

ICS-215A-CG INCIDENT ACTION PLAN SAFETY ANALYSIS AID

HAZARDS:

Physical	Chemical/Biological	Human
• Slipping	• Explosion	• Violence
• Tripping	• Flammable	• Poor Lifting
• Fall	• Air Reactive	• Repetition
• Overhead	• Water Reactive	• Excessive Force
• Heat Stress	• Chem Reactive	• Poor posture
• Cold Stress	• Alpha Rad	• Awkward motion
• Electrical	• Beta Rad	• Fatigue
• Blunt Objects	• Gamma Rad	• Poor hygiene
• Sharp Objects	• X Rad	• Illness
• Noise	• Bio-weapon	• Alcohol/Drugs
• Vehicle	• Chem-weapon	• Over crowding
• Fire	• Irritant	• Poor comms
• Sun/UV Glare	• Asphyxiant	• Noise interference
• Sun Burn	• Oxidizer	• Smoking
• Moving Pinch Points	• Carcinogen	• Driving
• Unguarded Machinery	• Corrosive	**Animal/Plant**
• Lightning	• Cryogenic	• Bites/Stings
• Drowning	• Toxic	• Poison
• Engulfment	• Biomed/pathogen	• Thorns/burrs
• Limited Egress/Access	• Particulates	• Swarms
	• Fumes (weld etc.)	• Disease
	• O2 Deficiency	• Feces/Coliforms

CONTROLS:

Types of Engineering Controls:

• Barriers	• Shields	• Dams
• Capping	• Covering	• Fencing
• Terminating	• Shutting	• Blocking
• Chocks	• Enclosures	• Diverters
• Flanging	• Guarding	• Substitution
• Anchoring	• Ventilation	• Blowing
• Scaffolding	• Grounding	• Substitution
• Bonding	• Insulation	• Lighting
• Locks, Tags	• Kill-switches	• Shut-off valves
• Taglines	• Circuit Breakers	• Process change
• Plugging, patching	• Sealing	• Absorbers

Types of Administrative Controls:

• Reduced work duration	• Worker rotation	• Safety plans
• Training	• Safety briefs	• Relief personnel
• Maintenance	• Drinking fluids	• Work/rest periods
• Good housekeeping	• Roving security	• Signs
• Warning lights	• Alarms	• Break areas
• Pre-inspections	• Field checks	• Buddy system
• Line of sight comms	• Comms schedule	• Equipt staging
• Load shifting	• Hazard marking	• Placarding
• Labeling	• Hand signals	• Safety observers
• Fendering	• Work plans	• Replenish fluids
• Handcarts/trolleys	• Fire extinguishers	• Drum bulking
• Eye Wash Station	• Hand washers	• Showers

Types of Personal Protective Equipment Controls:

• Hard hats	• Steel-toed shoes	• Safety glasses
• Safety goggles	• Face shields	• Hearing Protection
• Life jacket	• Fall arrests	• SCBA
• APRs	• Chemical suits	• Flash suits
• Fire resistant suits	• Work gloves	• Chemical gloves
• Sun glasses	• Sun-block	• Life rings
• Eye wash stations	• Night vision	• Thermal protection
• Dry/wet suits	• Hand warmers	• Wind breaker coat
• Knee pads	• Over garments	• Coveralls
• Booties	• Cooling vests	• Chap lip protection
• Hats for warming	• Gloves (warmth)	• Clothing (warmth)

N02618

Exhibit N-6N

PAGE INTENTIONALLY LEFT BLANK

RADIO REQUIREMENTS WORKSHEET	1. Incident Name	2. Date	3. Time

4. Branch	5. Agency	6. Operational Period	7. Tactical Frequency

8. Division/Group	Division/Group	Division/Group	Division/Group
Agency	Agency	Agency	Agency

9. Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements

Page 1 of	10. Prepared by (Name and Position)

PAGE INTENTIONALLY LEFT BLANK

RADIO FREQUENCY ASSIGNMENT WORKSHEET

1. INCIDENT NAME	2. DATE	3. OPERATIONAL PERIOD (DATE/TIME)

5. RADIO DATA: SOURCE	FUNCTION	CH#	FREQUENCY	4. INCIDENT ORGANIZATION: BRANCH	DIVISION	DIVISION	DIVISION	BRANCH	DIVISION	DIVISION	DIVISION	BRANCH	DIVISION	DIVISION	DIVISION	INCIDENT COMMANDER	SAFETY OFFICER	OPERATIONS SECTION CHIEF	AIR OPERATIONS	AIR TACTICAL GROUP SUPERVISOR	PLANNING SECTION CHIEF	GROUND SUPPORT UNIT	BASE UNIT								COMM. CENTER	TOTAL BY REQ.
6. AGENCY ID.		CH#	FREQUENCY																													
7. TOTAL RADIOS REQUIRED																																

8. PREPARED BY (NAME/POSITION)

217 ICS (1/99) NFES 1340

N02622

Exhibit N-6N

RADIO FREQUENCY ASSIGNMENT WORKSHEET (ICS FORM 217)

Purpose. The Radio Frequency Assignment Worksheet is used by the Communications Unit Leader to assist in determining frequency allocations.

Preparation. Cache radio frequencies available to the incident are listed on the form. Major agency frequencies assigned to the incident should be added to the bottom of the worksheet.

Distribution. The worksheet, prepared by the Communications Unit, is for internal use.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Date	Enter date prepared (e.g., 09/17/1996).
3.	Operational Period	Enter the time interval for which the assignment applies (e.g., 9/17/96-0600 to 9/18/96-0600).
4.	Incident Organization	List frequencies allocated for each channel for each organizational element activated, record the number of radios required to perform the designated function on the specified frequency.
5.	Radio Data	For each radio cache and frequency assigned, record the associated function. Functional assignments are: a. Command b. Support c. Division tactical d. Ground-to-air
6.	Agency	List the frequencies for each major agency assigned to the incident. Also list the function and channel number assigned.
7.	Total Radios Required	Totals for each row and column are calculated automatically. This provides the number of radios required by each organizational unit and the number of radios using each available frequency.
8.	Prepared By	Enter the name and position of the person completing the worksheet.

SUPPORT VEHICLE INVENTORY (USE SEPARATE SHEET FOR EACH VEHICLE CATEGORY)	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

VEHICLE INFORMATION

a. TYPE	b. MAKE	c. CAPACITY/SIZE	d. AGENCY/OWNER	e. I.D. NO.	f. LOCATION	g. RELEASE TIME

218 ICS 8-78	PAGE	5. PREPARED BY (GROUND SUPPORT UNIT)

NFES 1341

Electronic version: NOAA 1.0 June 1, 2000

SUPPORT VEHICLE INVENTORY (ICS FORM 218)

Purpose. The Support Vehicle Inventory form provides an inventory of all transportation and support vehicles assigned to the incident. The information is used by the Ground Support Unit to maintain a record of the types and locations of vehicles on the incident. The Resources Unit uses the information to initiate and maintain status/resources information on these resources.

Preparation. The form is prepared by Ground Support Unit personnel at intervals specified by the Ground Support Unit Leader.

Distribution. Initial inventory information recorded on the form should be given to the Resources Unit. Subsequent changes to the status or location of transportation and support vehicles should be provided to the Resources Unit immediately.

NOTE:
a. The Ground Support Unit Leader may prefer to use separate sheets for each type of support vehicle (e.g., buses, pickups, and food tenders).
b. More than one line may be used to record information on each vehicle. If this is done, separate individual vehicle entries with a heavy line.
c. Several pages may be used. When this occurs, number the pages consecutively (in the number box at bottom of form).

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Date Prepared	Enter date prepared (e.g., 09/17/1996).
3.	Time Prepared	Enter time prepared (e.g., 1530).
4.	Vehicle Information	Record the following vehicle information:
	Type	a. Specific vehicle type (e.g., bus, stakeside, etc.).
	Make	b. Vehicle manufacturer name (e.g., GMC, International).
	Capacity/Size	c. Vehicle capacity / size (e.g., 30-person bus, 3/4 ton truck).
	Owner	d. Owner of vehicle (agency or private owner).
	ID Number	e. Serial or other identification number.
	Location	f. Location of vehicle.
	Release Time	g. Time vehicle is released from incident.
5.	Prepared By	Enter name of the person completing the form.

GREEN CARD STOCK (CREW)

AGENCY	ST	KIND	TYPE	I.D. NO./NAME

ORDER/REQUEST NO.	DATE/TIME CHECK IN

HOME BASE

DEPARTURE POINT

LEADER NAME

CREW ID NO./NAME (FOR STRIKE TEAMS)

NO. PERSONNEL	MANIFEST	WEIGHT

METHOD OF TRAVEL

OTHER

DESTINATION POINT	ETA

TRANSPORTATION NEEDS

OTHER

ORDERED DATE/TIME	CONFIRMED DATE/TIME

REMARKS

ICS 219-2 (Rev. 4/82) CREW NFES 1344

AGENCY	ST	TF	KIND	TYPE	I.D. NO./NAME

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

Electronic version: NOAA 1.0 June 1, 2000

ICS 219_2 HANDCREWS
GREEN COLORED CARD

Purpose. Resource Status Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel. The Resource Status Cards provide a visual display of the status and location of resources assigned to the incident.

Preparation. Information to be placed on the cards may be obtained from several sources including but not limited to:

1. ICS Briefing (ICS Form 201)
2. Check-In List (ICS Form 211)
3. Status Change Card (ICS Form 210)
4. Agency supplied information

Detailed information on preparing status cards is found in Resources Unit Position Manual (ICS 221-3).

Distribution. The cards are displayed in resource status racks where they can be easily retrieved. Cards will be retained by the Resources Unit until demobilization. At demobilization all cards MUST be turned into the Documentation Unit.

Item Title	Instructions
Order/Request No.	Number assigned by dispatching agency.
Home Base	Location at which Handcrew is normally located.
Departure Point	Location from which Handcrew left to reach this incident.
Crew ID No./Name (for Strike Teams)	List commonly used names or numbers to identify the crews which make up the Strike Team.
No. Personnel	Total no. of personnel (including Leader) in Crew or Strike Team.
Manifest	Was a manifest prepared for the Crew/Strike Team?
Weight	Total weight (including equipment and personal belongings) of the Crew/Strike Team.
Destination Point	Next location to which Crew/Strike Team is being sent from the incident.
Method of Travel	Enter the appropriate method of travel (e.g., own, bus, air).
Transportation Needs	Enter the appropriate transportation needs (e.g., own, bus, air).
Status	Choose the appropriate entry from the pop-up menu. If the item is O/S (out-of-service), enter the ETR (estimated time of return) in the ETR field below the Status field.

BLUE CARD STOCK (HELICOPTER)

AGENCY	TYPE	MANUFACTURER NAME/NO.	I.D. NO.

ORDER/REQUEST NO.	DATE/TIME CHECK IN

HOME BASE

DEPARTURE POINT

PILOT NAME

DESTINATION POINT	ETA

REMARKS

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

ICS 219-4 (Rev. 4/82) HELICOPTER NFES 1346

AGENCY	TYPE	MANUFACTURER	I.D. NO.

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

NFES 1346

Electronic version: NOAA 1.0 June 1, 2000

ICS 219_4 HELICOPTER - BLUE COLORED CARD

Purpose. Resource Status Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel. The Resource Status Cards provide a visual display of the status and location of resources assigned to the incident.

Preparation. Information to be placed on the cards may be obtained from several sources including but not limited to:
1. ICS Briefing (ICS Form 201)
2. Check-In List (ICS Form 211)
3. Status Change Card (ICS Form 210)
4. Agency supplied information

Detailed information on preparing status cards is found in Resources Unit Position Manual (ICS 221-3).

Distribution. The cards are displayed in resource status racks where they can be easily retrieved. Cards will be retained by the Resources Unit until demobilization. At demobilization all cards MUST be turned into the Documentation Unit.

Item Title	Instructions
Order/Request No.	Number assigned by dispatching agency.
Home Base	Location at which helicopter is normally located.
Departure Point	Location from which helicopter left to reach this incident.
Destination Point	Next location to which helicopter is being sent from the incident.
Incident Location	Assigned location information on helicopters may be the same as other resources (e.g., Division A). However, location could also indicate a "general" working location (e.g., water-dropping in Branch 1; or Crew Transport – Wilson Staging Area).
Status	Choose the appropriate entry from the pop-up menu. If the item is O/S (out-of-service), enter the ETR (estimated time of return) in the ETR field below the Status field.
Manufacturer Name/No.	e.g., Bell 206

ORANGE CARD STOCK (AIRCRAFT)

AGENCY	TYPE	MANUFACTURER NAME/NO.	I.D. NO.

ORDER/REQUEST NO.	DATE/TIME CHECK IN

HOME BASE

DATE TIME RELEASED

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

ICS 219-6 (4/82) AIRCRAFT

AGENCY	TYPE	MANUFACTURER	I.D. NO.

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

INCIDENT LOCATION	TIME

STATUS

ETR

NOTE

NFES 1348

Electronic version: NOAA 1.0 June 1, 2000

ICS 219_6 AIRCRAFT - ORANGE COLORED CARD

Purpose. Resource Status Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel. The Resource Status Cards provide a visual display of the status and location of resources assigned to the incident.

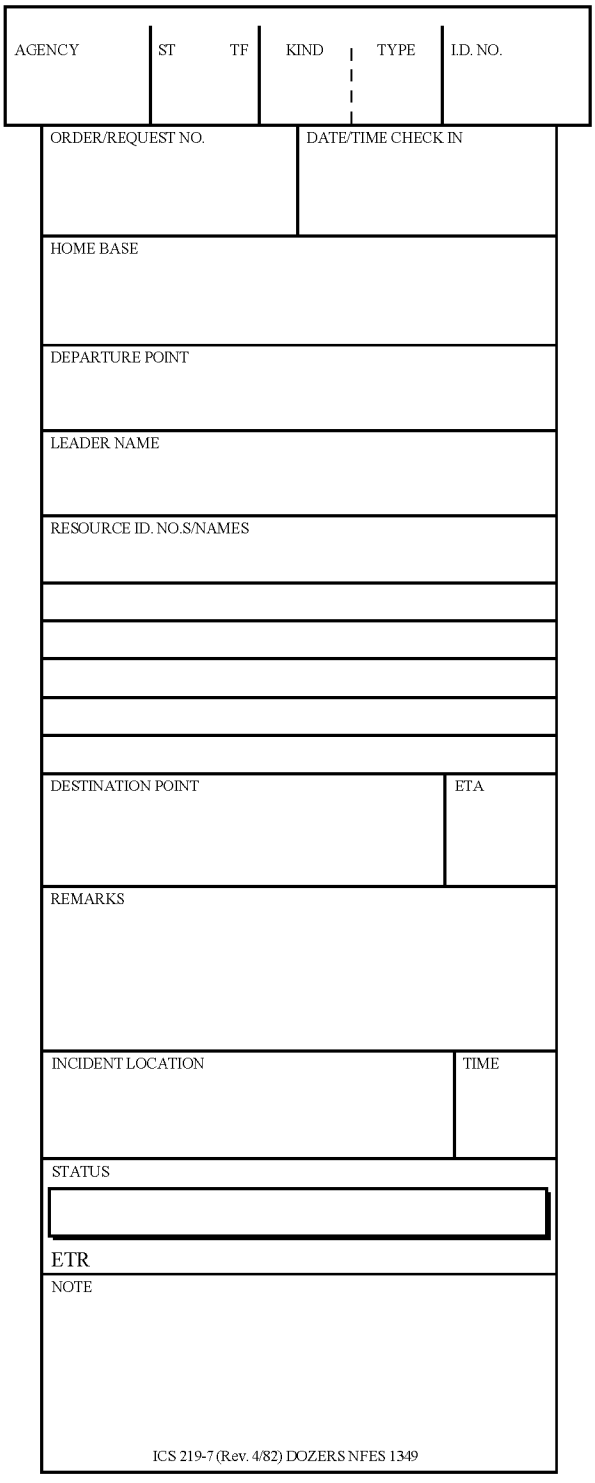
Preparation. Information to be placed on the cards may be obtained from several sources including but not limited to:
1. ICS Briefing (ICS Form 201)
2. Check-In List (ICS Form 211)
3. Status Change Card (ICS Form 210)
4. Agency supplied information

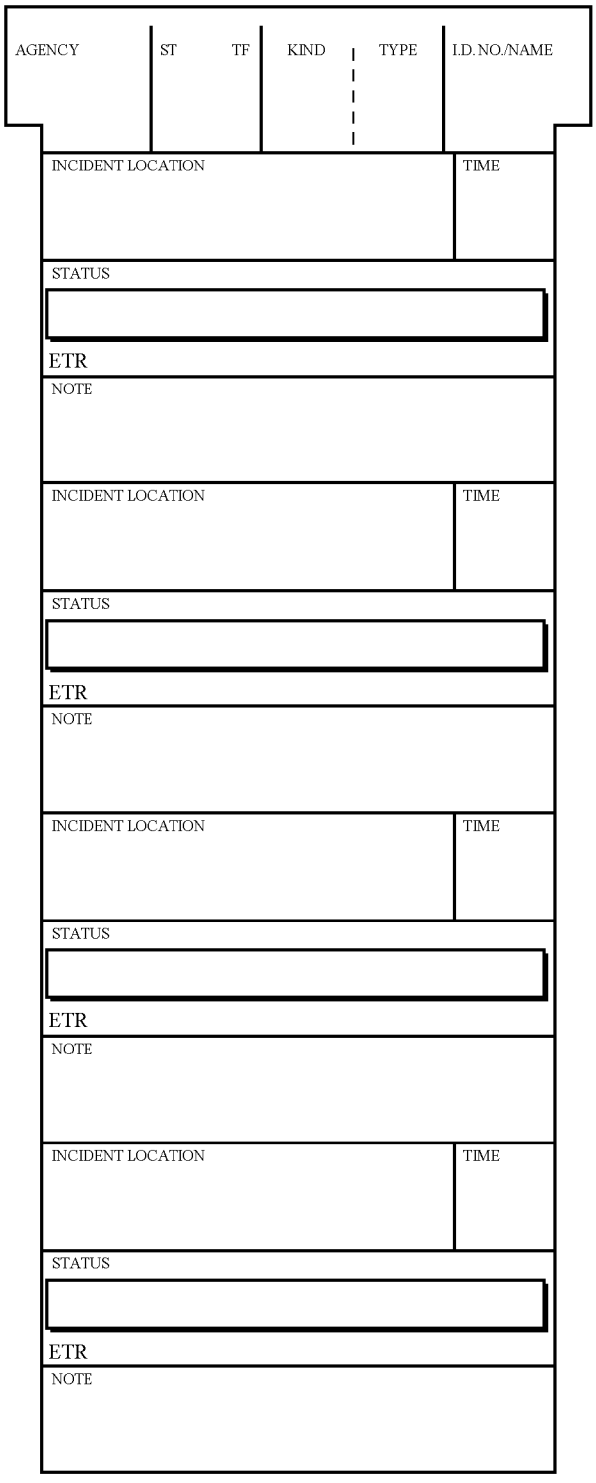
Detailed information on preparing status cards is found in Resources Unit Position Manual (ICS 221-3).

Distribution. The cards are displayed in resource status racks where they can be easily retrieved. Cards will be retained by the Resources Unit until demobilization. At demobilization all cards MUST be turned into the Documentation Unit.

Item Title	Instructions
Order/Request No.	Number assigned by dispatching agency.
Home Base	Location at which aircraft is normally located.
Departure Point	Location from which aircraft left to reach this incident.
Destination Point	Next location to which aircraft is being sent from the incident.
Incident Location	Reflect the area of the incident to which aircraft is primarily assigned (e.g., Branch 1).
Status	Choose the appropriate entry from the pop-up menu. If the item is O/S (out-of-service), enter the ETR (estimated time of return) in the ETR field below the Status field.
Manufacturer Name/No.	e.g., Douglas DC-3

YELLOW CARD STOCK (DOZERS)





Electronic version: NOAA 1.0 June 1, 2000

ICS 219_7 DOZERS - YELLOW COLORED CARD

Purpose. Resource Status Cards are used by the Resources Unit to record status and location information on resources, transportation, and support vehicles and personnel. The Resource Status Cards provide a visual display of the status and location of resources assigned to the incident.

Preparation. Information to be placed on the cards may be obtained from several sources including but not limited to:
1. ICS Briefing (ICS Form 201)
2. Check-In List (ICS Form 211)
3. Status Change Card (ICS Form 210)
4. Agency supplied information

Detailed information on preparing status cards is found in Resources Unit Position Manual (ICS 221-3).

Distribution. The cards are displayed in resource status racks where they can be easily retrieved. Cards will be retained by the Resources Unit until demobilization. At demobilization all cards MUST be turned into the Documentation Unit.

Item Title	Instructions
Order/Request No.	Number assigned by dispatching agency.
Home Base	Location at which dozer is normally located.
Departure Point	Location from which dozer left to reach this incident.
Resource ID Numbers/Names	List dozer numbers and Operator names for dozers in Strike Teams. Show contractor name as appropriate.
Destination Point	Next location to which dozer is being sent from the incident.
Incident Location	Assigned location information on dozers may be the same as other resources (e.g., Division A). However, location could also indicate a "general" working location (e.g., Cajon Beach).
Status	Choose the appropriate entry from the pop-up menu. If the item is O/S (out-of-service), enter the ETR (estimated time of return) in the ETR field below the Status field.

1. Incident Name	2. Operational Period (Date / Time) From: To:	AIR OPERATIONS SUMMARY ICS 220-CG

3. Distribution

☐ Fixed-Wing Bases _____ ☐ Helibase _____

4. Personnel and Communications

	Air Operations Director	Air / Air Frequency	Air / Ground Frequency
Air Operations Director			
Air Tactical Supervisor			
Air Support Supervisor			
Helicopter Coordinator			
Fixed-Wing Coordinator			
____ ____		____	____

5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities)

6. Location / Function	7. Assignment	8. Fixed-Wing		9. Helicopter		10. Time		11. Aircraft Assigned	12. Operating Base
		NO.	TYPE	NO.	TYPE	Available	Commence		
	13. TOTALS								

14. Air Operation Support Equipment	15. Prepared by	Date / Time

AIR OPERATIONS SUMMARY (ICS 220-CG)

Purpose. The Air Operations Summary provides the Air Operations Branch with the number, type, location, and specific assignments of aircraft.

Preparation. The Operations Section Chief or the Air Operations Branch Director completes the summary during each Planning Meeting. General air resource assignment information is obtained from the Operational Planning Worksheet (ICS 215-CG). The Air and Fixed-Wing Support Groups provide specific designators of the air resources assigned to the incident.

Distribution. After the summary is completed by Air Operations personnel (except item 11), the form is given to the Air Support Group Supervisor, who completes the form by indicating the designators of the helicopters and fixed-wing aircraft assigned missions during the specified operational period. This information is provided to Air Operations personnel who, in turn, give the information to the Resources Unit. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Distribution	Check the block and enter the time and date when ICS 220-CG and attachments were sent to all fixed-wing bases and helibases supporting the incident.
4.	Personnel and Communications	List the names of those assigned to each position, and the air-air and air-ground frequencies to be used.
5.	Remarks	Enter the special instructions or information, including safety notes, hazards, and priorities for Air Operations personnel.
6.	Location/Function	Enter the assigned location and function of the aircraft.
7.	Assignment	Enter the scope of work the aircraft is assigned to complete.
8.	Fixed Wing	Indicate the number and type of fixed-wing aircraft available for this Location / Function.
9.	Helicopters	Indicate the number and type of helicopters available for this Location / Function.
10.	Time	Indicate when aircraft will be available for use and when operations commence (use 24 hour clock).
11.	Aircraft Assigned	Enter the designators of the aircraft assigned. Gather information from Resources Unit, helibases, and fixed-wing bases.
12.	Operating Base	Enter the base (helibase, helispot, fixed-wing base) from which each air resource is expected to initiate operations.
13.	Totals	Enter the total number of fixed-wing and helicopter aircraft assigned to the incident in the Number columns. Enter the total number of each type of aircraft assigned in the Type columns.
14.	Air Operations Support Equipment	List the designators and location of other support resources assigned to Air Operations.
15.	Prepared By Date/Time	Enter name and title of the person preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date / Time) From: To:	DEMOB. CHECK-OUT ICS 221-CG
3. Unit / Personnel Released	4. Release Date / Time	

5. Unit / Personnel

You and your resources have been released, subject to signoff from the following:
(Demob. Unit Leader "X" appropriate box(es))

Logistics Section

- ☐ Supply Unit _____
- ☐ Communications Unit _____
- ☐ Facilities Unit _____
- ☐ Ground Unit _____

Planning Section

- ☐ Documentation Unit _____

Finance / Admin. Section

- ☐ Time Unit _____

Other

- ☐ _____ _____
- ☐ _____ _____
- ☐ _____ _____

6. Remarks

_____

_____

_____

_____

7. Prepared by: **Date / Time**

DEMOB. CHECK-OUT ICS 221-CG (Rev.07/04)

DEMOB. CHECK-OUT (ICS 221-CG)

Purpose. This form provides the Planning Section information on resource releases from the incident.

Preparation. The Demobilization Unit Leader or the Planning Section initiates this form. The Demobilization Unit Leader completes the top portion of the form after the resource supervisor has given written notification that the resource is no longer needed.

Distribution. The individual resource will have the unit leader initial the appropriate box(es) in item 5 prior to release from the incident. After completion, the form is returned to the Demobilization Unit Leader or the Planning Section. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Strike Team / Unit / Personnel Released	Enter name of Strike Team, Unit or personnel being released.
4.	Release Date/Time	Enter date (month, day, year) and time (24-hour clock) of anticipated release.
5.	Strike Team / Unit / Personnel	Demobilization Unit Leader will enter an "X" in the box to the left of those units requiring check-out. Identified Unit Leaders are to initial to the right to indicate release. NOTE: Blank boxes are provided for any additional unit requirements as needed, (e.g., Safety Officer, Agency Rep., etc.)
6.	Remarks	Enter any additional information pertaining to demobilization or release (e.g., transportation needed, destination, etc.).
7.	Prepared By	Enter name and title of the person preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

INCIDENT PERSONNEL PERFORMANCE RATING ICS 225-CG	*INSTRUCTIONS:* The immediate job supervisor will prepare this form for each subordinate. It will be delivered to the planning section before the rater leaves the incident. Rating will be reviewed with the subordinate who will sign at the bottom.

THIS RATING IS TO BE USED ONLY FOR DETERMINING AN INDIVIDUAL'S PERFORMANCE ON AN INCIDENT/EVENT

1. Name:	2. Incident Name:
3. Home Unit *(address/phone):*	4. Location of Incident *(address):*

5. Position Assigned:	6. Date of Assignment: From: To:	7. Date Incident Started:	8. Incident Type:	9 Incident Kind (Oil/Hazmat Spill/SAR/Fire/Etc):

10. Evaluation

Rating Factors	N/A	1 - Unacceptable	2	3 – Met Standards	4	5 – Exceeded Expectations
Knowledge of the job/ Professional Competence: Ability to acquire, apply and share technical and administrative knowledge and skills associated with description of duties. (Includes operational aspects such as marine safety, seamanship, airmanship, SAR, etc., as appropriate.)	☐	Questionable competence and credibility. Operational or specialty expertise inadequate or lacking in key areas. Made little effort to grow professionally. Used knowledge as power against others or bluffed rather than acknowledging ignorance. Effectiveness reduced due to limited knowledge of own organizational role and customer needs. ☐	☐	Competent and credible authority on specialty or operational issues. Acquired and applied excellent operational or specialty expertise for assigned duties. Showed professional growth through education, training and professional reading. Shared knowledge and information with others clearly and simply. Understood own organizational role and customer needs. ☐	☐	Superior expertise; advice and actions showed great breadth and depth of knowledge. Remarkable grasp of complex issues, concepts, and situations. Rapidly developed professional growth beyond expectations. Vigorously conveyed knowledge, directly resulting in increased workplace productivity. Insightful knowledge of own role, customer needs, and value of work. ☐
Ability to obtain performance/results: Quality, quantity, timeliness and impact of work.	☐	Routine tasks accomplished with difficulty. Results often late or of poor quality. Work had a negative impact on department or unit. Maintained the status quo despite opportunities to improve. ☐	☐	Got the job done in all routine situations and in many unusual ones. Work was timely and of high quality; required same of subordinates. Results had a positive impact on IMT. Continuously improved services and organizational effectiveness. ☐	☐	Maintained optimal balance among quality, quantity, and timeliness of work. Quality of own and subordinates' work surpassed expectations. Results had a significant positive impact on the IMT. Established clearly effective systems of continuous improvement. ☐
Planning/Preparedness: Ability to anticipate, determine goals identify relevant information, set priorities and deadlines, and create a shared vision of the Incident Management Team	☐	Got caught by the unexpected; appeared to be controlled by events. Set vague or unrealistic goals. Used unreasonable criteria to set priorities and deadlines. Rarely had plan of action. Failed to focus on relevant information. ☐	☐	Consistently prepared. Set high but realistic goals. Used sound criteria to set priorities and deadlines. Used quality tools and processes to develop action plans. Identified key information. Kept supervisors and stakeholders informed. ☐	☐	Exceptional preparation. Always looked beyond immediate events or problems. Skillfully balanced competing demands. Developed strategies with contingency plans. Assessed all aspects of problems, including underlying issues and impact. ☐
Using Resources: Ability to manage time, materials, information, money, and people (i.e. all IMT components as well as external publics).	☐	Concentrated on unproductive activities or often overlooked critical demands. Failed to use people productively. Did not follow up. Mismanaged information, money or time. Used ineffective tools or left subordinates without means to accomplish tasks. Employed wasteful methods. ☐	☐	Effectively managed a variety of activities with available resources. Delegated, empowered, and followed up. Skilled time manager, budgeted own and subordinates' time productively. Ensured subordinates had adequate tools, materials, time and direction. Cost conscious, sought ways to cut waste. ☐	☐	Unusually skilled at bringing scarce resources to bear on the most critical of competing demands. Optimized productivity through effective delegation, empowerment, and follow-up control. Found ways to systematically reduce cost, eliminate waste, and improve efficiency. ☐
Adaptability/Attitude: Ability to maintain a positive attitude and modify work methods and priorities in response to new information, changing conditions, political realities, or unexpected obstacles.	☐	Unable to gauge effectiveness of work, recognize political realities, or make adjustments when needed. Maintained a poor outlook. Overlooked or screened out new information. Ineffective in ambiguous, complex, or pressured situations. ☐	☐	Receptive to change, new information, and technology. Effectively used benchmarks to improve performance and service. Monitored progress and changed course as required. Maintained a positive approach. Positively and effectively dealt with pressure and ambiguity. Facilitated smooth transitions. Adjusted direction to accommodate societal trends or political realities. ☐	☐	Rapidly assessed and confidently adjusted to changing conditions, political realities, new information and technology. Very skilled at using and responding to measurement indicators. Championed organizational improvements. Effectively and encouragingly dealt with extremely complex situations. Turned pressure and ambiguity into constructive forces for change ☐
Communication Skills: Ability to speak effectively and listen to understand. Ability to express facts and ideas clearly and convincingly.	☐	Unable to effectively articulate ideas and facts; lacked preparation, confidence, or logic. Used inappropriate language or rambled. Nervous or distracting mannerisms detracted from message. Failed to listen carefully or was too argumentative. Written material frequently unclear, verbose, or poorly organized. Seldom proofread. ☐	☐	Effectively expressed ideas and facts in individual and group situations; non-verbal actions consistent with spoken message. Communicated to people at all levels to ensure understanding. Listened carefully for intended message as well as spoken words. Written material clear, concise, and logically organized. Proofread conscientiously. ☐	☐	Clearly articulated and promoted ideas before a wide range of audiences; accomplished speaker in both formal and extemporaneous situations. Adept at presenting complex or sensitive issues. Active listener; remarkable ability to listen with open mind and identify key issues. Clearly and persuasively expressed complex or controversial material, directly contributing to stated objectives. ☐
Ability to work on a team: Ability to manage, lead and participate in teams, encourage cooperation, and develop esprit de corps.	☐	Used teams ineffectively or at wrong times. Conflicts mismanaged or often left unresolved, resulting in decreased team effectiveness. Excluded team members from vital information. Stifled group discussions or did not contribute productively. Inhibited cross functional cooperation to the detriment of unit or service goals. ☐	☐	Skillfully used teams to increase unit effectiveness, quality, and service. Resolved or managed group conflict, enhanced cooperation, and involved team members in decision process. Valued team participant. Effectively negotiated work across functional boundaries to enhance support of broader mutual goals. ☐	☐	Insightful use of teams raised unit productivity beyond expectations. Inspired high level of esprit de corps, even in difficult situations. Major contributor to team effort. Established relationships and networks across a broad range of people and groups, raising accomplishments of mutual goals to a remarkable level. ☐

Rating Factors	N/A	1 - Unacceptable	2	3 – Met Standards	4	5 – Exceeded Expectations
Consideration for personnel/team welfare: Ability to consider and respond to others *personal* needs, capabilities, and achievements; support for and application of work-life concepts and skills.	☐	Seldom recognized or responded to needs of people; left outside resources untapped despite apparent need. Ignorance of individuals capabilities increased chance of failure. Seldom recognized or rewarded deserving subordinates or other IMT members. ☐	☐	Cared for people. Recognized and responded to their needs; referred to outside resources as appropriate. Considered individuals' capabilities to maximize opportunities for success. Consistently recognized and rewarded deserving subordinates or other IMT members. ☐	☐	Always accessible. Enhanced overall quality of life. Actively contributed to achieving balance among IMT requirements, professional and personal responsibilities. Strong advocate for subordinates; ensured appropriate and timely recognition, both formal and informal. ☐
Directing Others: Ability to influence or direct others in accomplishing tasks or missions.	☐	Showed difficulty in directing or influencing others. Low or unclear work standards reduced productivity. Failed to hold subordinates accountable for shoddy work or irresponsible actions. Unwilling to delegate authority to increase efficiency of task accomplishment. ☐	☐	A leader who earned others' support and commitment. Set high work standards; clearly articulated job requirements, expectations and measurement criteria; held subordinates accountable. When appropriate, delegated authority to those directly responsible for the task. ☐	☐	An inspirational leader who motivated others to achieve results not normally attainable. Won people over rather than imposing will. Clearly articulated vision; empowered subordinates to set goals and objectives to accomplish tasks. Modified leadership styles to best meet challenging situations. ☐
Judgment/Decisions under stress: Ability to make sound decisions and provide valid recommendations by using facts, experience, political acumen, common sense, risk assessment, and analytical thought.	☐	Decisions often displayed poor analysis. Failed to make necessary decisions, or jumped to conclusions without considering facts, alternatives, and impact. Did not effectively weigh risk, cost, and time considerations. Unconcerned with political drivers on organization. ☐	☐	Demonstrated analytical thought and common sense in making decisions. Used facts, data, and experience, and considered the impact of alternatives and political realities. Weighed risk, cost and time considerations. Made sound decisions promptly with the best available information. ☐	☐	Combined keen analytical thought, an understanding of political processes, and insight to make appropriate decisions. Focused on the key issues and the most relevant information. Did the right thing at the right time. Actions indicated awareness of impact of decisions on others. Not afraid to take reasonable risks to achieve positive results. ☐
Initiative Ability to originate and act on new ideas, pursue opportunities to learn and develop, and seek responsibility without guidance and supervision.	☐	Postponed needed action. Implemented or supported improvements only when directed to do so. Showed little interest in career development. Feasible improvements in methods, services, or products went unexplored. ☐	☐	Championed improvement through new ideas, methods, and practices; self-starter. Anticipated problems and took prompt action to avoid or resolve them. Sought opportunities for own career development. Pursued productivity gains and enhanced mission performance by applying new ideas and methods. ☐	☐	Aggressively sought out additional responsibility. A self-learner. Made worthwhile ideas and practices work when others might have given up. Extremely innovative. Optimized use of new ideas and methods to improve work processes, decision-making, and service delivery. ☐
Physical ability for the job: Ability to invest in the IMT's future by caring for the physical health, and emotional well-being of self and others.	☐	Failed to meet minimum standards of sobriety. Tolerated or condoned others' alcohol abuse. Seldom considered subordinates' health and well-being. Unwilling or unable to recognize and manage stress despite apparent need. ☐	☐	Committed to health and well-being of self and subordinates. Enhanced personal performance through activities supporting physical and emotional well-being. Recognized and managed stress effectively. ☐	☐	Remarkable vitality, enthusiasm, alertness and energy. Consistently contributed at high levels of activity. Optimized personal performance through involvement in activities which supported physical and emotional well-being. Monitored and helped others deal with stress, enhance health and well-being. ☐
Adherence to Safety: Ability to invest in the IMT's future by caring for the safety of self and others	☐	Failed to adequately identify and protect personnel from safety hazards. ☐	☐	Ensured that safe operating procedures were followed. ☐	☐	Demonstrated a significant commitment towards safety of personnel. ☐
Other *(specify:)*	☐	☐	☐	☐	☐	☐

11 Remarks:

12 Rated Person *(signature)* This rating has been discussed with me.	13 Date:

14 Rated By *(signature/print name):*	15 Supervisor Home Unit *(address/phone):*	16 Supervisor Position:	17 Date:

INCIDENT PERSONNEL PERFORMANCE RATING (ICS 225-CG) – Rev 9/06

Purpose. The Incident Personnel Performance Rating gives supervisors the opportunity to evaluate subordinates on incident assignments. THIS RATING IS TO BE USED ONLY FOR DETERMINING AN INDIVIDUAL'S PERFORMANCE ON AN INCIDENT/EVENT.

Preparation. The Incident Personnel Performance Rating is normally prepared by the supervisor for each subordinate, using the evaluation standard given in the form. It will be delivered to the planning section before the rater leaves the incident. Rating will be reviewed with the subordinate who will sign at the bottom.

Distribution. The Incident Personnel Performance Rating is duplicated a copy is given to the subordinate and supervisor. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Name	Enter the name of the person being evaluated.
2.	Incident Name	Enter the name assigned to the incident.
3.	Home Unit	Enter the address and phone number of the home unit of the person being evaluated.
4.	Location of Incident	Enter the address/location of the incident.
5.	Position Assigned	Enter the position assigned for the purpose of this evaluation.
6.	Date of Assignment	Enter the date of assignment.
7.	Date Incident Started	Enter the date the incident started.
8.	Type of Incident	Enter the Type (size) of the incident: Type 1, 2, 3, 4 or 5.
9.	Kind of Incident	Enter the kind of incident: Oil/Hazmat Spill, SAR, Fire, etc.
10.	Evaluation	Enter X under the appropriate rating for each category listed using the definitions given.
	Not Applicable	not observed.
	1 - Unacceptable	Deficient. Does not meet minimum requirements of the individual element. DEFICIENCIES/IMPROVEMENTS NEEDED MUST BE IDENTIFIED IN REMARKS.
	2 - Needs to improve	Meets some or most of the requirements of the individual element. IDENTIFY IMPROVEMENT NEEDED IN REMARKS.
	3 - Met Standards	Satisfactory. Employee meets all requirements of the individual element.
	4 - Fully successful	Employee meets all requirements and exceeds one or several of the requirements of the individual element.
	5 - Exceeded Expectations	Superior. Employee consistently exceeds the performance requirements.
11.	Remarks	Provide remarks/comments for ratings given. **Comments required for *unsatisfactory* and *needs to improve* ratings.**
12.	Rated Person Signature	Rated Person's signature.
13.	Date	Enter date (month, day, year) rated person signed performance rating.
14.	Rated By	Signature and printed name of supervisor/person giving the performance rating.
15.	Supervisor Home Unit	Enter address/phone of supervisor.
16.	Supervisor Position	Enter the position the supervisor held.
17.	Date	Enter date (month, day, year) supervisor signed the performance rating.

PAGE INTENTIONALLY LEFT BLANK

1. Incident Name	2. Operational Period (Date/Time) From: To:	DAILY MEETING SCHEDULE ICS 230-CG

3. Meeting Schedule (Commonly-held meetings are included)

Date/ Time	Meeting Name	Purpose	Attendees	Location
	Unified Command Objectives Meeting	Review/ identify objectives for the next operational period.	Unified Command members	
	Command & General Staff Meeting	IC/UC gives direction to Command & General staff including incident objectives and priorities	IC/UC, Command & General Staff	
	Tactics Meeting	Develop/Review primary and alternate Strategies to meet Incident Objectives for the next Operational Period.	PSC, OSC, LSC, RESL & SITL	
	Planning Meeting	Review status and finalize strategies and assignments to meet Incident Objectives for the next Operational Period.	Determined by the IC/UC	
	Operations Briefing	Present IAP and assignments to the Supervisors / Leaders for the next Operational Period.	IC/UC, Command & General Staff, Branch Directors, Div/Gru Sups., Task Force/Strike Team Leaders and Unit Leaders	

4. Prepared by: (Situation Unit Leader) **Date/Time**

DAILY MEETING SCHEDULE ICS 230-CG (Rev.07/04)

DAILY MEETING SCHEDULE (ICS 230-CG)

Purpose. The Daily Meeting Schedule records information about the daily scheduled meeting activities.

Preparation. This form is prepared by the Situation Unit Leader and coordinated through the Unified Command for each operational period or as needed. Commonly-held meetings are already included in the form. Additional meetings, as needed, can be entered onto the form in the spaces provided. Time and location for each meeting must be entered. If any of these standard meetings are not scheduled, they should be crossed out on the form.

Distribution. After coordination with the Unified Command, the Situation Unit Leader will duplicate the schedule and post a copy at the Situation Status Board and distribute to the Command Staff, Section Chiefs, and appropriate Unit Leaders. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Meeting Schedule	For each scheduled meeting, enter the date/time, meeting name, purpose, attendees, and location. Note: Commonly-held meetings are included in the form. Additional meetings, as needed, can be entered onto the form in the spaces provided. Time and location for each meeting must be entered. If any of the standard meetings are not scheduled, they should be deleted from the form (normally the Situation Unit Leader).
4.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	RESOURCES AT RISK SUMMARY ICS 232-CG

3. Environmentally-Sensitive Areas and Wildlife Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues

Narrative

4. Archaeo-cultural and Socio-economic Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues

Narrative

5. Prepared by: (Environmental Unit Leader) **Date/Time**

RESOURCES AT RISK SUMMARY ICS 232-CG (Rev.07/04)

RESOURCES AT RISK SUMMARY (ICS 232-CG)

Purpose. The Resources at Risk Summary provides information about sites in the incident area which are sensitive due to environmental, archaeo-cultural, or socio-economic resources at risk, and identifies incident-specific priorities and issues. The information recorded here may be transferred to ICS 232a-CG, which acts as a key to the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) site numbers shown on the Situation Map.

Preparation. The Environmental Unit Leader, with input from resource trustees, will complete this form for each operational period. It should be updated prior to the Planning Meeting.

Distribution. This form must be forwarded to the Planning Section Chief for possible inclusion in the IAP. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Env- Sensitive Area & Wildlife Issues	
	Site Number	Enter site number. Can come from Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or can be created during an incident.
	Priority	Priority specific to this incident. Can come from an ACP/GRP or can be created during an incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Site Issues	Environmental concerns associated with this site and season.
	Narrative	Use the Narrative section to clarify any issues.
4.	Archaeo-cultural and Socio-economic Issues	
	Site Number	Enter site number. Can come from an ACP/GRP or can be created during an incident.
	Priority	Priority specific to this incident. Can come from an ACP/GRP or can be created during an incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Site Issues	Archaeo-cultural or socio-economic concerns associated with this site and season.
	Narrative	Use the Narrative section to clarify any issues.
5.	Prepared By	Enter name and title of the person preparing the form (normally the Environmental Unit Leader).
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date/Time) From: To:	ACP Site Index ICS 232a-CG

3. Index to ACP/GRP sites shown on Situation Map

Site #	Priority	Site Name and/or Physical Location	Action	Status

Note: This form is designed to be posted next to the situation map. Use additional sheets, as needed.

4. Prepared by: **Date/Time**

ACP SITE INDEX (ICS 232a-CG)

Special Note. This optional form is designed to be a key to the site numbers or site names shown on the Situation Map. The information on priorities for environmentally-sensitive areas and archaeo-cultural and socio-economic issues from the ICS 232-CG may be transferred to ICS 232a-CG, which provides more information on the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) site numbers or names shown on the Situation Map.

Purpose. If used, this form is posted next to the Situation Map, providing a key to the ACP/GRP sites shown on the map.

Preparation. The Situation Unit personnel responsible for the Situation Map prepare this form, using ICS 232-CG prepared by the Environmental Unit.

Distribution. This form is posted next to the Situation Map and copies of this form should accompany any distributed copies of the Situation Map. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Index to ACP/GRP sites	Enter site information from the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or other sources specific to this incident.
	Site Number	Can come from an Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or can be created during an incident.
	Priority	Priority specific to this incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Action	Actions to be taken for designated protection and collection strategies or for other sites identified specifically for this incident.
	Status	Status of site action implementation (e.g., scheduled, in progress, completed).
4.	Prepared By	Enter name and title of the person preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name		INCIDENT OPEN ACTION TRACKER ICS 233-CG					
2. No.	3. Item	4. For/POC	5. POC Briefed	6. Start Date	7. Status	8. Target Date	9. Actual Date
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
37							

Open Actions Tracker (ICS 233-CG)

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	No.	Enter number of task in sequential order (1, 2, 3, …).
3.	Item	Enter short descriptive of the task.
4.	For/POC	Enter responsible section/person.
5.	Briefed to POC	When the tasker has been briefed to the POC after initially assigned, an "X" is placed in the brief column. This was to ensure that taskers identified outsie of the POC's presence (during UC Meeting for example) were assigned the to identified POC.
6.	Start Date	Enter the date the tasker was initially assigned under "Start Date."
7.	Status	Enter status of item. This includes things like: "Awaiting LE Gear", "Update needed", "Awaiting Feedback". When the item is completed, the word "completed" is entered and if working in MS Excel, the task is cut and pasted into the worksheet labeled "COMPLETED."
8.	Target Date	Target date is another way of saying deadline. When the target date is one day away, the block turns yellow. When it is overdue it turns red. When it is yellow, it serves as a reminder to the UC that the target date needs to be changed or the responsible section needs to complete the task.
9.	Actual Date	The block to the right of the Target Date (Actual Date) will always have today's date. It is merely the formula "=today()" inserted into the cell.

NOTE: In order to ensure the red and yellow reminders work for new tasks, the user simply copies a task line, inserts it into the worksheet and overtypes the new task information.

		WORK ANALYSIS MATRIX ICS 234-CG
1. Incident Name	2. Operational Period From: To:	

3. Operation's Objectives DESIRED OUTCOME	4. Optional Strategies HOW	5. Tactics/Work Assignments WHO, WHAT, WHERE, WHEN

6. Prepared by: (Operations Section Chief)	7. Date/Time:

PAGE INTENTIONALLY LEFT BLANK

Exhibit N-6N

FACILITY NEEDS ASSESSMENT WORKSHEET ICS-235-CG (Rev 5/06)

1.INCIDENT NAME

2. LOCATION	3. FACILITIES	4. Requirements	# Expected Personnel	Internal/Building Workspace Sq Ft (80 sq ft/pers)	Wall Space Linear Sq Ft	Multi-Purpose Mtg Rm Sq Ft (20 sq ft/pers + display space)	External/Outside Laydown Sq Ft	Parking Space Sq Ft (120 sq ft/vehicle x 1.4 circulation factor)	Climate Control (HVAC) needed -	Toilet Rooms	Work Tables	Conf Table	Chairs	Telephones	Speaker Phone	Fax Machines	Power Outlets	Comp Workstations	Printers	Chart Printer/ChartPro	Video Projectors	Copy Machines	Paper Shredders				
ICP	Unified Command	REQ																									
	Liaison Officer & Agency Reps	REQ																									
	Safety Officer	REQ																									
	Public Information Officer	REQ																									
	Planning Section	REQ																									
	Operations Section	REQ																									
	Logistics Section	REQ																									
	Finance/Admin Section	REQ																									
	Common Areas	REQ																									
Base	Base	REQ																									
		REQ																									
JIC	JIC	REQ																									
		REQ																									
Staging		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									
		REQ																									

5. Prepared By:

6. Date/Time Prepared:

N02652

PAGE INTENTIONALLY LEFT BLANK

3 - EXAMPLE INCIDENT COMMAND SYSTEM PLANS

This tab contains ICS plans from real responses. The purpose for having these example ICS plans is to provide guidance in developing similar plans during a large scale response.

The following example ICS plans are provided in this tab:

- Example Communications Plan
- Example Demobilization Plan 1
- Example Demobilization Plan 2
- Example Disposal Plan
- Example Documentation Plan
- Example Incident Action Plan 1
- Example Incident Action Plan 2
- Example Medical Plan

PAGE INTENTIONALY LEFT BLANK

EXAMPLE COMUNICATION PLAN

PAGE INTENTIONALY LEFT BLANK

INCIDENT RADIO COMMUNICATIONS PLAN	1. INCIDENT NAME	2. DATE/TIME PREPARED	3. OPERATIONAL PERIOD (DATE/TIME)
	Norwegian Star	26 Feb 02/2000	27 Feb - 28 Feb From 0600 To 0600

4. BASIC RADIO CHANNEL UTILIZATION

SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS
Group Honolulu	23A	Unit check-in	VHF FM 157.15	SRU check-in	All surface and air SRUs check in with CG Group Honolulu on this freq.
FAA HIA Tower	twr	Air safety	(V)118.1(U)257.8	Air units	Sequencing / Safety for inbound air traffic at triage unit 1 (HIA)
FAA Kalealoa Tower	twr	Air safety	(V)132.6(U)340.2	Air units	Sequencing / Safety for inbound air traffic at triage unit 2 (BARBPT)
On Scene Commander - air	23A	On-scene coord	VHF FM 157.15	On-scene coord	On-scene coordination tasking and safety for airborne SRUs/operations
On-Scene Commander - surf	23A	On-scene coord	VHF FM 157.15	On-scene coord	On-scene coordination tasking and safety for surface SRUs/operations
Civil Defense command	TX	Shoreside ops	VHF FM 155.715	Shoreside units	All civil units shoreside Call 733-4300 for alternate frequencies.
Alternate Onscene freq:					
(V)157.05(ch23A) (U)381.8					
(HF)5696 or 8983					

ICS 205 (oil) 7/94	5. PREPARED BY (COMMUNICATIONS UNIT)

N02658

Exhibit N-6N

EXAMPLE DEMOBILIZATION PLAN 1

PAGE INTENTIONALY LEFT BLANK

DEMOBILIZATION PLAN

FOR THE HURRICANE GEORGES INCIDENT

I. GENERAL INFORMATION

The Logistics Section (Supply Unit) will arrange for ground transportation of released personnel to local airports (New Orleans, Gulfport, or Mobile) and also make air transportation reservations. Logistics will also arrange for staging and/or housing of resources prior to departure, when necessary. Logistics will make arrangements for other ground transportation needs

Resources on this incident come from widely scattered locations, and long travel times may be involved. These general guidelines will be followed:

A. No person will be released prior to obtaining a minimum of eight (8) hours rest, unless specially approved by the Incident Commander or his designee.

B. All resources must be able to arrive at their home base prior to 2200 hours.

C. While driving back to their home unit, no shift shall exceed twelve (12) hours with no more than eight (8) hours of actual driving.

II. RELEASE PRIORITIES

A. The following are the Release Priorities:

1. Local Cooperators
2. Local NPS employees
3. Out-of-Region Resources
4. Regional Resources

III. RELEASE PROCEDURES

A. Section Chiefs:

1. Planning Section will assume that resources are working their full 21-day assigmnet. For early demobilization Section Chiefs will submit their lists of surplus resources to the Planning Section a minimum of 24 hours prior to their anticipated demobilization.

2. Have the authority to approve the tentative release lists for submission to the Planning Section.

3. Released resources that want to take annual leave after an incident assignment of 21 days, prior to return to home units must have leave approval from the home unit supervisor. The time unit must be notified in order to document leave on time sheet.

4. Released resources may be entitled to administrative leave upon return to home units subject to approval from the home unit supervisor. The incident management team will make every effort to schedule work according to established work/rest guidelines and rest/recuperation guidelines (1 full day R& R in every 14-day assignment, 2 full days in very 21-day assignment). However when this is not possible at the incident, the Incident Commander will make a recommendation regarding these needs to the home unit

B. Upon submission of tentative release lists by Section Chiefs, the Planning Section will inform the Supply Unit that they are surplus to the Incident.

C. The Planning Section will prepare the Demobilization Checkout (ICS 221) and manifests for crews when the Florida and Southern Interagency Coordination Center has approved final release and Logistics (Ordering Manger) has made travel arrangements.

D. The surplus personnel will take the Demobilization Checkout (ICS 221) to:

1. Logistics Section (for return of supply items)
2. Logistics (for return of communications equipment)
3. Logistics (for closeout of housing arrangements)
4. Logistics (for arrangement of Ground Support)
5. Administration/Finance (for completion of time)
6. Planning Section (LAST)

E. National Forests in Florida IA Dispatch Center (Tallahassee) will advise he employees' Home Unit, through channels, of the Estimated Time of Arrival of the released resource.

IV. DIRECTORY

AAA Travel	(St. Petersburg)	800-868-0184
FAX		717-826-2279
24-hour		800-225-2690

N Fs IN FLORIDA IA DISPATCH CENTER (Tallahassee)	850 -580-6410
FAX	850-580-6885
Director- Don Price	
Dispatcher Eva, Evelyn	

SOUTHERN AREA COORDINATION CENTER	770-458-2464
(Atlanta)	
NPS Representative-Pat Boucher	

GEORGES INCIDENT COMMAND POST
(Davis Bayou Unit)

Planning Section (Demob)	228-872-8087
Logistics Section	228-872-8861
Supply Unit	228-872-8861

PREPARED: _____ _____
PLANNING SECTION CHIEF DATE

CONCURRED: _____ _____
LOGISTICS SECTION CHIEF DATE

APPROVED: _____ _____
INCIDENT COMMANDER DATE

EXAMPLE DEMOBILIZATION PLAN 2

PAGE INTENTIONALY LEFT BLANK

DEMOBILIZATION PLAN

FRIDLEY INCIDENT

GALLATON NATIONAL FOREST

STEVE FRYE, INCIDENT COMMANDER

Prepared by: Mary Lovejoy 8/26/01
Mary Lovejoy, Resource Unit Leader

Recommended: Jeff Scussel 8/26/01
Jeff Scussel, Planning Section Chief

Recommended: Ruth L Lewis 8/26/01
Ruth Lewis, Logistics Section Chief

Recommended: Jack Kirkendall 8-27-01
Jack Kirkendall, Operation Section Chief

Recommended: Bertalee Mottern 8/26/01
Bertalee Mottern, Finance Section Chief

Approved by: Stephen L. Frye 8/26/01
Steve Frye, Incident Commander

Reviewed by: Tony Percival 8/26/01
Tony Percival, Bozeman Expanded Dispatch

H. Local and private resources will be released directly from camp. They must go through the DMOB process, and Dispatch will be notified of their ETD's and ETA's by the DMOB Unit.

I. To prevent delays and work overload, notify DMOB as soon as possible that excess resources will be released. DMOB will notify Finance, Logistics, and Dispatch as soon as possible.

J. Notify incident personnel by posting tentative releases at least 24 hours in advance.

K. Remember that Performance ratings are required for: Trainees, outstanding or deficient performance, and personnel requesting evaluation.

L. Emergency DMOB's will be facilitated by the DMOB unit on a priority basis.

2. **RESPONSIBILITIES**:

Incident Commander:

Establish release priorities
Review and approve the DMOB Plan

Section Chiefs:

Identify surplus resources, indicate their availability for reassignment, prioritize, and submit the list to the DMOB Unit. Use a General Message (ICS 213) Form and list: names and descriptions of resources excess to your needs, desired date and time of release, home base or airport to be transported to.
Assign personnel in unit to sign checkout sheets for resources going through that unit in the DMOB process.

Logistics:

Facilities: Ensure that all sleeping and work areas are cleaned before personnel are released.

Supply: Ensure that all nonexpendable property has been returned or accounted for before release. Resupply if necessary.

Ground Support:
Ensure that there will be adequate ground support resources during the DMOB process. Ensure that drivers know exactly where resources are to be delivered. Ensure equipment inspections are complete before departure.

All oversize vehicles must have appropriate permits to comply with state vehicle codes and state road department and highway patrol specs.

Communications:
Ensure that all communications equipment has been returned or accounted for.

Food:
Ensure that there will be adequate meals for those being released and for those remaining in camp. Double lunch crews when appropriate.

Crew leader or individuals will take the DMOB Checkout Form (ICS-221) to:

Supply Unit Leader
Communications Unit Leader
Ground Support Unit Leader
Time Unit Leader
DMOB Unit Leader
Facilities Unit Leader
Security

DMOB will enter actual release date and time and ETA at the final destination on the ICS-221 and notify Dispatch of the resource's ETD and ETA.

Documentation Unit will collect and file performance evaluations, and ensure that released personnel receive a copy of their evaluation.

A. RELEASE OF RESOURCES NEEDING AIR TRANSPORT:

1. Incident Command Post originates release orders and submits them to Dispatch to coordinate arrangements.
2. Release orders contain the following information:
   a. Original Request Number
   b. Names and numbers of personnel
   c. Home base or airport to be transported to
   d. Time available for release from ICP
   e. Whether transportation is available from base camp
3. Utilize commercial air service where practical to transport miscellaneous overhead.

B. RELEASE OF RESOURCES WITH THEIR OWN TRANSPORTATION:

1. Base camp originates tentative release orders at least 24 hours ahead of planned departure from base camp, and submits them to expanded dispatch.
2. Base camp notifies Expanded Dispatch of ATD from base camp and ETA at home unit. Dispatch notifies home unit of ATD and ETA.
3. Ground transported crews are released from base camp within ½ hour of ATD shown on release order, or a re-notification must be made.

5. TRAVEL INFORMATION

All non-local resources will have at least 8 hours of rest prior to being released from the incident. Crews traveling on commercial aircraft will be given time to shower and dress in clean clothes.

All resources will meet any agency-specific requirements on hours of travel per day or other travel restrictions.

Any heavy equipment operators or owners must have appropriate permits and follow any limitation on the movement of their equipment on public highways.

EXAMPLE DISPOSAL PLAN

PAGE INTENTIONALY LEFT BLANK

ICS Form 204 **OILY WASTE DISPOSAL PLAN** 23-May-01
18:00 hrs

Incident Name: **Ehime Maru Recovery**
Common Contents and Field Assignments all Phases

Originating Section: PLANNING - ENVIRONMENTAL Branch: Shoreline

Operational Period:				
	beginning	1-Aug-01	0600 hrs	Wednesday
	ending	3-Nov-01	0600 hrs	Sunday
	duration	93 days		

(* Subject to change based on recovery operation accomplishments)

Safey Message: All work is to be performed with consideration for Heat Stress Reduction issues. The Site Safety and Health and Medical plans must be prior to work.

Group: Disposal Supervisor: Steve Christiansen
USCG Rep: As assigned.

LIQUID WASTES

1. All liquid waste collected from applicable locations shall be analyzed to determine the nature of the chemical makeup of the contaminant for documentation purposes and to determine proper disposal procedures
2. All liquid collectate is to be quantified either by weight or volume prior to disposal.
3. Disposal shall be in accordance with all Federal and State Regulations. Navy Public Works Center Pearl Harbor will disposal of all oil/fuel and hazardous waste. Local hazardous waste disposal companies will be used for disposal only if needed.

SOLID WASTES INCLUDING OILY BOOMS/ABSORBENT PADS/POM-POMS

1. All solid wastes collected from applicable locations shall be analyzed to determine the nature of the chemical makeup of the contaminant for documentation purposes and to determine proper disposal. (Note: liquid analyzed from the same source may apply)
2. Separate all waste streams keeping like materials together - and apart from other waste types.
3. Field storage of oily sorbents shall be in lined roll-off open top containers or similar holder in accordance with all Federal and State Regulations.
4. All solid waste material collected is to be quantified by weight or volume prior to disposal. The liquid content volume recovered in sorbents should be estimated for documentation.
5. Sorbent materials are to be removed from the roll off (or similar) containers only on to visqueen-lined designated storage areas. Establish a moisture removal area directly adjacent to the designated storage areas. Remove excess moisture by squeezing, wringing or other agreed upon method. Cut material into <3 foot lengths and remove and all metal. Processed sorbents are to be disposed of at H-power.
6. The roll off containers will be staged at the EDDM Facility or Victory Docks.

EXAMPLE DOCUMENTATION PLAN

PAGE INTENTIONALY LEFT BLANK

Spill Management
Documentation Unit Leader

Plans and Proposals

Personnel:

3 permanent member of the Spill Management Team

3-7 temporary personnel (depending on breadth of emergency response; need personnel for all shifts)

2 copy technicians - minimal training in Spill Management forms
1 messenger/runner – minimal training in Spill Management forms
1 fax technician – minimal training in Spill Management forms
1 file clerk – minimal training in Spill Management/computer skills

Personnel will be available 24/7 for copying and faxing of documents and other paperwork for the Command

Space requirements:

1 15x20 (minimum) area cordoned off for documentation near the Command. Need a separate locked storage area.

Requirements:
- 4 telephone connections (2 fax; 2 telephone lines)
- 2 high speed internet connections
- wiring/plugs for copiers, fax machines, computers
- adequate lighting

Supplies	**Quantity**
BLANK ICS FORMS (ALL)	50 each
cell phones	2
copy paper	reams (3 sizes; 81/2x11 (4 cases) , 11x14 (2 reams), 11x17 (2 reams)
toner/ color printer supplies	
floppy disks	5 boxes
CDROMs, writeable	5 boxes
CDROM label maker software	1
CDROM labels	1 box
videotapes	6
hanging file folders for filing cabinet	3 dozen
flat file folders	2 boxes
hanging file folders (wall mount)	1
expandable file folders	5
envelopes – 81/2x11	50
clip boards	2
phone message book	1
white out	6 bottles
2" – 3 ring binders	1 dozen
cardboard boxes (standard government storage boxes)	3 dozen
poster board	20 sheets

post-it notes (all sizes)	2 packages each
81/2x11 plastic sign holders	6
stamps – date/time and 'archive copy"	2
three hole punch	1
scotch tape	2 rolls
masking tape	2 rolls
staplers	3

pencils, pens, markers, markers to write on erasable board
work board (erasable) – job assignments, meetings, document pickup schedule
plastic storage boxes 3

PORTABLE EQUIPMENT

2 fax machines (with separate telephone lines, see above)
2 digital cameras
1 video camera with tripod
1 videotape player
1 laptop computer with CD reader/writer/CD burner (with Windows Office Suite & other appropriate software installed; internet connect)
1 desktop computer/monitor/keyboard/mouse/CD reader/writer/CD burner (with Windows Office Suite & other appropriate software installed; internet connect)
2 copiers b/w
1 color copier
1 b/w printer
1 color printer
2 folding tables (6x3)
1 - 3 drawer file cabinet
1 desk
chairs as necessary
1 step ladder – 5'
generator/fuel to provide 110V service for up to 8 hrs (this would probably be acquired by logistics, since if power goes out, documentation may be the least of our worries)
1 – 4' open face bookcase

Internal Operating Procedures for documentation personnel:

Step 1:

- Find out what Incident Commander's expectations are for documentation
- Find out what Planning Section Chief's expectations are for documentation
- Determine legal's expectations for documentation:
    - how they want information arranged each day
    - how often (if at all) they want to see the information
    - how often they want information collected
    - how many copies they must have
    - do they want all originals or will accept a signed "copy". (CREATE CHECKLIST FOR THIS ACTIVITY ONCE NEEDS ARE DETERMINED)

Step 2:

- Remind Incident Commander that ALL paperwork and electronic files (scrap paper, forms, photographs, overflight photos, videos, electronic files) must eventually find it's way to documentation

- Documentation will arrange to pick up paper documents or download files and email for archiving

- DO NOT THROW AWAY PAPER, PICTURES, NOTES, MAPS, T-CARDS OR DELETE ANY ELECTRONIC FILES INCLUDING EMAILS

- Remind Incident Commander that unit logs will be collected at the end of each operational period – a runner will pick up logs, make a copy for documentation and return logs to appropriate Section

Step 3:

- Set up documentation storage boxes in each ICS Section (and "as needed") with signs reminding personnel to leave paperwork in box when finished with it, and before leaving the area/room

- Documentation WILL collection all documents, forms, handwritten notes, T-cards, fields logs, maps, mylar overlays, electronic files. Do not discard or throw away anything

Step 4:

Document Collection Procedures:

- Each Section and the Command Staff will have a documentation storage box strategically placed for document submission and collection. A sign nearby will remind personnel to place documents in the box
- Boxes will be placed nearby to the entrance/exits
- Boxes will be placed nearby to field command post by the ? representative
- Box contents will be collected by documentation on an "as time permits" basis
- Documents which will be collected at the end of each Operational Period
    - Unit logs
    - Incident Action Plan Update (Prepared by Planning Section Chief)

Copying And Fax Procedures:

- Personnel available 24/7 for copying and faxing
- Personnel will make copies of documents for you and will make an archive copy
- Personnel will make copies of incoming and outgoing faxes for you and will make an archive copy

Photographs

- Photographs will be taken on an hourly basis of the Situational Information (situation board(s), maps, forms

Videotapes

- Videotapes will be taken at the Incident briefing, otherwise on an "as needed" basis or at request of IC

Computer Files and Emails

- Before demobilization of any SMT member, electronic documents which are created or received, including emails created or received, will be provided to documentation.

- The SMT member shall notify documentation that files need to be downloaded
    - Laptops can be brought to documentation file download and saving
    - Documentation will download and save desktop computer files

Consultations

ATTORNEYS; provide guidance on:

- what additional documents they want gathered (other than required ones)
- how they want documents organized (crucial element) daily as well as for final turnover
    - suggestions:
        - ICS Section
        - Chronologically
        - Form number

- Establish document requests (internal and external requests)
- established FOIA procedures

Operations Section Chief

- ensure that field paperwork is submitted promptly

FUTURE PLANNING ACTIVITIES

CREATE

Status work board for documentation unit

CREATE FORMS

- Job description for documentation personnel (DONE; see Documentation box)
- CheckList of forms for which each Section Chief is responsible for documentation personnel to use
- Forms notebook which displays each form and explains it's purpose; note if it's dynamic or static
- Forms display area (put them on a handy wall) for ease of identification by documentation personnel
- Form which highlights missing forms for the Incident Commander

CREATE CHECK SHEETS

- Check sheet for runners/observers to pick up documents
    - include types of documents
    - title of person who should supply the document
    - note the approximate timeframe for document pickups (include all Unit logs and IAP)

- Check sheet for copier personnel
- include the name/number of each form

- number of copies needed
- list the title of persons who need copies
- put the copy in a box or file it

- Check sheet of forms which should be submitted daily by each Section Chief

    - best used by documentation unit leader to check off forms handed in during Incident Command meetings

- Check sheet for daily review of documents collected (list of documents that should be collected)

- Completeness of paper/forms/documents
- document collation
- organization of all forms

Planning Notes:

- Supply requests go through the Section Chief for approval and then they can be walked directly to the Supply Unit Leader

- Create a job description for a " Correspondence Officer" who is a hybrid of technical expert and political speak. Handles official requests from White House, Congress, State officials, foreign governments, etc. – send to Ken and Barry

- Call Coast Guard to see if I can get a copy of their checklist for supplies and equipment.

EXAMPLE INCIDENT ACTION PLAN (IAP) 1

PAGE INTENTIONALY LEFT BLANK

OBJECTIVES ICS 202	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED
	OIL SPILL	6-19-95	0300

4. OPERATIONAL PERIOD (Date/Time) MONDAY 6-19-95 (0600) - TUESDAY 6-20-95 (0600)

5. OVERALL INCIDENT OBJECTIVE:

(1) STABILIZE VESSEL
(2) PROTECT ENV. SENSITIVE AREAS
(3) KEEP OIL FROM REACHING SHORELINE
(4) MONITOR CONTAMINANT LEVELS

6. OBJECTIVES FOR THIS OPERATIONAL PERIOD:

(1) LIGHTERING VESSEL CARGO
(2) DEPLOY BOOM AT NORTHSHORE & ECOLOGICAL RESERVE
(3) DEPLOY BOOM AROUND VESSEL
(4) CONTAIN AND SKIM OIL ON WATER
(5) SET UP CHEMICAL MONITORS ON VESSEL AND IN IMPACTED AREAS

7. WEATHER FORECAST FOR OPERATIONAL PERIOD

SEE ATTACHED "NOAA FORECAST"

8. GENERAL/SAFETY MESSAGE

* RESPONDERS MUST USE PROPER PROTECTIVE EQUIPMENT.
* BE AWARE OF HAZARDS ASSOCIATED WITH AN UNSTABLE PLATFORM.
* PROTECT FROM SUNBURN & DEHYDRATION.
* ALL CONTAMINATED EQUIPMENT & PERSONNEL NEED TO BE DE-CONTAMINATED BEFORE LEAVING WORK SITE.

9. ATTACHMENTS (✓ IF ATTACHED)

- [x] ORGANIZATION LIST (ICS 203)
- [x] ASSIGNMENT LISTS (ICS 204)
- [x] COMMUNICATIONS PLAN (ICS 205)
- [x] MEDICAL PLAN (ICS 206)
- [x] INCIDENT MAP
- [ ] TRAFFIC PLAN
- [ ] _____
- [ ] _____
- [ ] _____

ICS 202 5-94	10. PREPARED BY (Planning Section Chief)	11. APPROVED BY (Incident Commander)
	BOB JONES	JANE THOMAS

ORGANIZATION ASSIGNMENT LIST — ICS 203

1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED
OIL SPILL	6-19-95	0300

4. OPERATIONAL PERIOD (DATE/TIME): 6/19 (0600) - 6/20 (0600)

POSITION	NAME
5. INCIDENT COMMANDER AND STAFF	
INCIDENT COMMANDER	JAMIE THOMAS
DEPUTY (S)	TIM ADAMS / JEFF JONES
SAFETY OFFICER	TRISH HANLEY
INFORMATION OFFICER	MARIA LOPEZ
LIAISON OFFICER	BILL SELF
6. AGENCY REPRESENTATIVES	
AGENCY / NAME	
SO	FRED WARD
FIRE	MIKE COLLAN
HEALTH	RICHARD SHARKE
7. PLANNING SECTION	
CHIEF	BOB JONES
DEPUTY	
RESOURCES UNIT	VIRGINIA KAMMAR
SITUATION UNIT	GLEN BARNES
DOCUMENTATION UNIT	
DEMOBILIZATION UNIT	
TECHNICAL SPECIALISTS	
NOAA WEATHER	JIM MORRIS
8. LOGISTICS SECTION	
CHIEF	BECKY MACK
DEPUTY	
a. SUPPORT BRANCH	
DIRECTOR	
DEPUTY	
SUPPLY UNIT	JOHN TURNER
FACILITIES UNIT	
~~GROUND~~ SUPPORT UNIT / VESSEL	KEN GRAFF
b. SERVICE BRANCH	
DIRECTOR	
DEPUTY	
COMMUNICATIONS UNIT	VINCE ANDERSON
MEDICAL UNIT	HELEN TROM
FOOD UNIT	

9. OPERATIONS SECTION		
CHIEF		RAY TRYGAR
DEPUTY (S)		A. TILLER / M. GAVES
a. ~~BRANCH~~ I - DIVISIONS/GROUPS		
BRANCH DIRECTOR		
DEPUTY		
DIVISION/~~GROUP~~	A	TOM TSHOMA
DIVISION/~~GROUP~~		
~~DIVISION~~/GROUP	P&R	CAMACK CARTER
~~DIVISION~~/GROUP	VESSEL	GREG MARIS
~~DIVISION~~/GROUP		
b. BRANCH II - DIVISIONS/GROUPS		
BRANCH DIRECTOR		
DEPUTY		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		
c. BRANCH III - DIVISIONS/GROUPS		
BRANCH DIRECTOR		
DEPUTY		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		
d. AIR OPERATIONS BRANCH		
AIR OPERATIONS BR. DIR.		
DEPUTY		
AIR TACTICAL SUPERVISOR		
AIR SUPPORT SUPERVISOR		
HELICOPTER COORDINATOR		
AIR TANKER/ FIXED WING COORDINATOR		
10. FINANCE/ADMINISTRATION SECTION		
CHIEF		RON MINNICH
DEPUTY		
TIME UNIT		
PROCUREMENT UNIT		
COMPENSATION/CLAIMS UNIT		
COST UNIT		

PREPARED BY (RESOURCES UNIT)

N02682

Exhibit N-6N

1. BRANCH	2. DIVISION/~~GROUP~~	ASSIGNMENT LIST	ICS 204 (5-94)
—	A (NORTH SHORE)		

3. INCIDENT NAME: OIL SPILL

4. OPERATIONAL PERIOD: DATE 6/19 - 6/20; TIME 0600 - 0600

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF: RAY TRYGAR — DIVISION/GROUP SUPERVISOR: TOM TSUDANA

BRANCH DIRECTOR: — AIR TACTICAL SUPERVISOR:

6. RESOURCES ASSIGNED THIS PERIOD

RESOURCE DESIGNATOR	LEADER	NUMBER PERSONS	TRANS. NEEDED	DROP OFF PT./TIME	PICK UP PT./TIME
FOSS ENV TIF #1	TOM GRANT	300+			
CCC CREW #4	MOLLY RINGER	18	CREW BUS	BLUFF PT.	" "
CCC CREW #5	KIM BOLEN	17	CREW BUS	TULMONT	" "

7. CONTROL ASSIGNMENT (S)

DEPLOY HARD BOOM & ABSORBANT AT NORTHSHORE & ECOLOGICAL RESERVE.

8. SPECIAL INSTRUCTIONS/SAFETY MESSAGE

BE AWARE & AVOID NESTING AREAS FOR "LEAST TERNS".

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION		FREQ.	SYSTEM	CHAN.	FUNCTION		FREQ.	SYSTEM	CHAN.
COMMAND	LOCAL	XXX.XXX	F#6	14	SUPPORT	LOCAL	XXX.XXX	F#6	001
	REPEAT	XXX.XXX	USCG	A		REPEAT			
DIV/GROUP TACTICAL		XXX.XXX	F#6	17	GROUND TO AIR				

PREPARED BY (RESOURCE UNIT LEADER)	APPROVED BY (PLANNING SECTION CHIEF)	DATE	TIME
VIRGINIA KAMMER	BOB JONES	6/19/95	0300

1. BRANCH	2. ~~DIVISION~~/GROUP	ASSIGNMENT LIST	ICS 204 (5-94)
—	PROTECTION & RECOVERY		

3. INCIDENT NAME	4. OPERATIONAL PERIOD
OIL SPILL	DATE 6/19 - 6/20 TIME 0600 - 0600

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF RAY TRYGAR — ~~DIVISION~~/GROUP SUPERVISOR CANDACE CARTER

BRANCH DIRECTOR _____ — AIR TACTICAL SUPERVISOR _____

6. RESOURCES ASSIGNED THIS PERIOD

RESOURCE DESIGNATOR	LEADER	NUMBER PERSONS	TRANS. NEEDED	DROP OFF PT./TIME	PICK UP PT./TIME
MSRC TIF "ALPHA"	FRANK MEEF	50			
VOSS 101	CLINT WALKER	15			

7. CONTROL ASSIGNMENT (S)

* DEPLOY BOOM AROUND VESSEL.
* CONTAIN & SKIM OIL ON WATER.

8. SPECIAL INSTRUCTIONS/SAFETY MESSAGE

* BE ALERT TO OTHER VESSELS IN AREA.
* ALL RESPONDERS WILL WEAR PFDs.

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION		FREQ.	SYSTEM	CHAN.	FUNCTION		FREQ.	SYSTEM	CHAN.
COMMAND	LOCAL	XXX.XXX	F/G	14	SUPPORT	LOCAL	XXX.XXX	F/G	001
	REPEAT	XXX.XXX	USCG	A		REPEAT			
DIV/GROUP TACTICAL		XXX.XXX	USCG	CC	GROUND TO AIR				

PREPARED BY (RESOURCE UNIT LEADER)	APPROVED BY (PLANNING SECTION CHIEF)	DATE	TIME
VIRGINIA KAMMER	BOB JONES	6/19/95	0300

1. BRANCH	2. ~~DIVISION~~/GROUP	ASSIGNMENT LIST	ICS 204 (5-94)
—	VESSEL		

3. INCIDENT NAME: OIL SPILL

4. OPERATIONAL PERIOD
DATE 6/19 - 6/20
TIME 0600 - 0600

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF RAY TRYGAR
DIVISION/GROUP SUPERVISOR GREG MORRIS
BRANCH DIRECTOR
AIR TACTICAL SUPERVISOR

6. RESOURCES ASSIGNED THIS PERIOD

RESOURCE DESIGNATOR	LEADER	NUMBER PERSONS	TRANS. NEEDED	DROP OFF PT./TIME	PICK UP PT./TIME
CROWLEY #1	ED MILLER	6			
CROWLEY #2	DON MILLER	8			
TUG 1300	TAYNA DEUNE	3			

7. CONTROL ASSIGNMENT (S)

* LIGHTER VESSEL CARGO.
* KEEP VESSEL FROM SINKING.

8. SPECIAL INSTRUCTIONS/SAFETY MESSAGE

* ANTICIPATE SHIFTING OF VESSEL DURING CARGO OFFLOAD.
* SCBA'S WILL BE USED WHILE IN CONFINE SPACE.

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION		FREQ.	SYSTEM	CHAN.	FUNCTION		FREQ.	SYSTEM	CHAN.
COMMAND	LOCAL	XXX.XXX	F&G	14	SUPPORT	LOCAL	XXX.XXX	F&G	001
	REPEAT	XXX.XXX	USCG	A		REPEAT			
DIV/GROUP TACTICAL		XXX.XXX	USCG	BB	GROUND TO AIR				

PREPARED BY (RESOURCE UNIT LEADER)	APPROVED BY (PLANNING SECTION CHIEF)	DATE	TIME
VIRGINIA KAMMER	BOB JONES	6/19/95	0300

INCIDENT RADIO COMMUNICATIONS PLAN

1. INCIDENT NAME	2. DATE / TIME PREPARED	3. OPERATIONAL PERIOD DATE / TIME
OIL SPILL	6/19/95 0300	6/19 - 6/20 (0600 - 0600)

4. BASIC RADIO CHANNEL UTILIZATION

SYSTEM / CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS
FFG	14	COMMAND	XXX. XXX	COMMAND (DIRECT)	NOT TO USED FOR TACTICAL DIRECTION. CAN BE USED FOR EMERGENCY.
USCG	A	COMMAND	XXX. XXX	COMMAND (REPEATER)	NOT TO USE FOR TACTICAL DIRECTION. CAN BE USED FOR EMERGENCY.
FFG	001	SUPPORT	XXX. XXX	LOGISTICS / INCIDENT BASE	
FFG	19	TACTICAL	XXX. XXX	DIVISION A (FRONT RUNNER)	
USCG	BB	TACTICAL	XXX. XXX	VESSEL GROUP	FREQUENCY CAN NOT TRANSMIT INSIDE VESSEL.
USCG	CC	TACTICAL	XXX. XXX	PROTECTION & RECOVERY GROUP	

ICS 205 5-94

5. PREPARED BY (COMMUNICATIONS UNIT)

VINCE ANDERSON

APR-10-2000 09:40 CDF V HERNANDEZ 9093206395 P.14

MEDICAL PLAN	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED	
	OIL SPILL	6/19/95	0300	6/19 - 6/20 (0600 - 0600)

INCIDENT MEDICAL AID STATIONS

MEDICAL AID STATIONS	LOCATION	PARAMEDICS YES	PARAMEDICS NO
OIL SPILL BASE	LIFE GUARD STATION #1		X

6. TRANSPORTATION

A. AMBULANCE SERVICES

NAME	ADDRESS	PHONE	PARAMEDICS YES	PARAMEDICS NO
SEARS AMBULANCE	210 WEST OCEAN, LONG BEACH	(310) 222-9999	X	

B. INCIDENT AMBULANCES

NAME	LOCATION	PARAMEDICS YES	PARAMEDICS NO
SEARS AMBULANCE 101	OIL SPILL BASE		X
SEARS AMBULANCE 102	OIL SPILL STAGING	X	
LIFE FLIGHT 412	OIL SPILL HELIBASE	X	

7. HOSPITALS

NAME	ADDRESS	TRAVEL TIME AIR	TRAVEL TIME GRND	PHONE	HELIPAD YES	HELIPAD NO	BURN CENTER YES	BURN CENTER NO
LONG BEACH MEMORIAL	100 "G" STREET	5 mi.	20 MIN	(310) 111-1011	X			X
	LONG BEACH							
	(THOMAS 100 A-3) PAGE							

8. MEDICAL EMERGENCY PROCEDURES

F&G CHANNEL #14 OR USCG CHANNEL "A" WILL BE USED TO ADVISE OF MEDICAL EMERGENCY. CONTACT POINT WILL BE "OIL SPILL OPERATIONS"/TACTICAL.

* LIFE THREATENING MEDICAL - MEDIVAC USING LIFE FLIGHT 412

* NON-LIFE THREATENING - GROUND TRANSPORT ONLY

ICS 206 5-94 | 9. PREPARED BY (MEDICAL UNIT LEADER) | 10. REVIEWED BY (SAFETY OFFICER) TOM HANLEY

TOTAL P.15

N02687

Exhibit N-6N

NAVY0006778

EXAMPLE INCIDENT ACTION PLAN (IAP) 2

PAGE INTENTIONALY LEFT BLANK

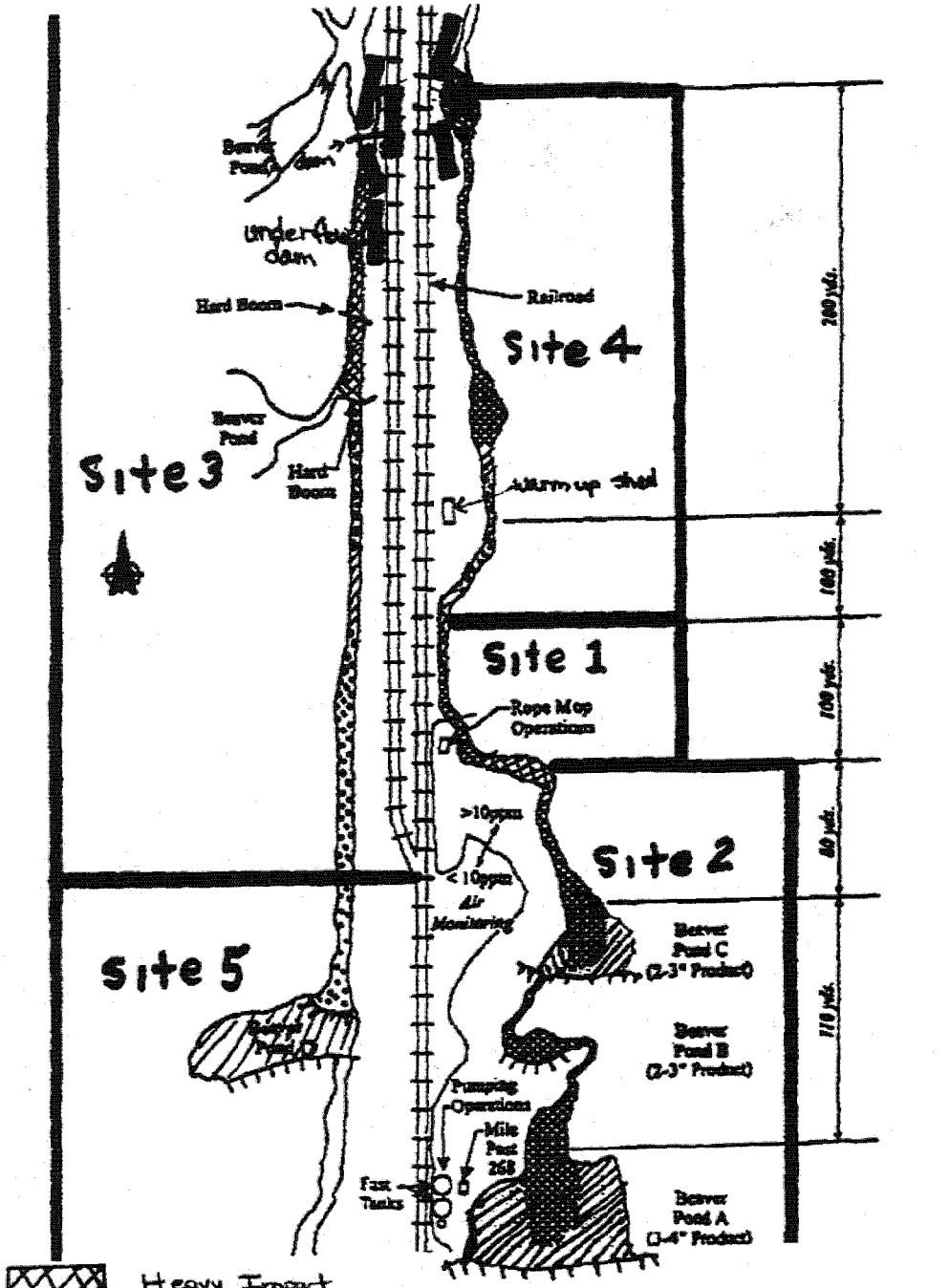
Alaska Railroad Corporation
Canyon Derailment Incident
Incident Date 10/31/99

Incident Action Plan effective: 0600 11/12/99 to 0600 11/17/99

Original signed at 11:00 am at ARRC General Office Building

Approvals:

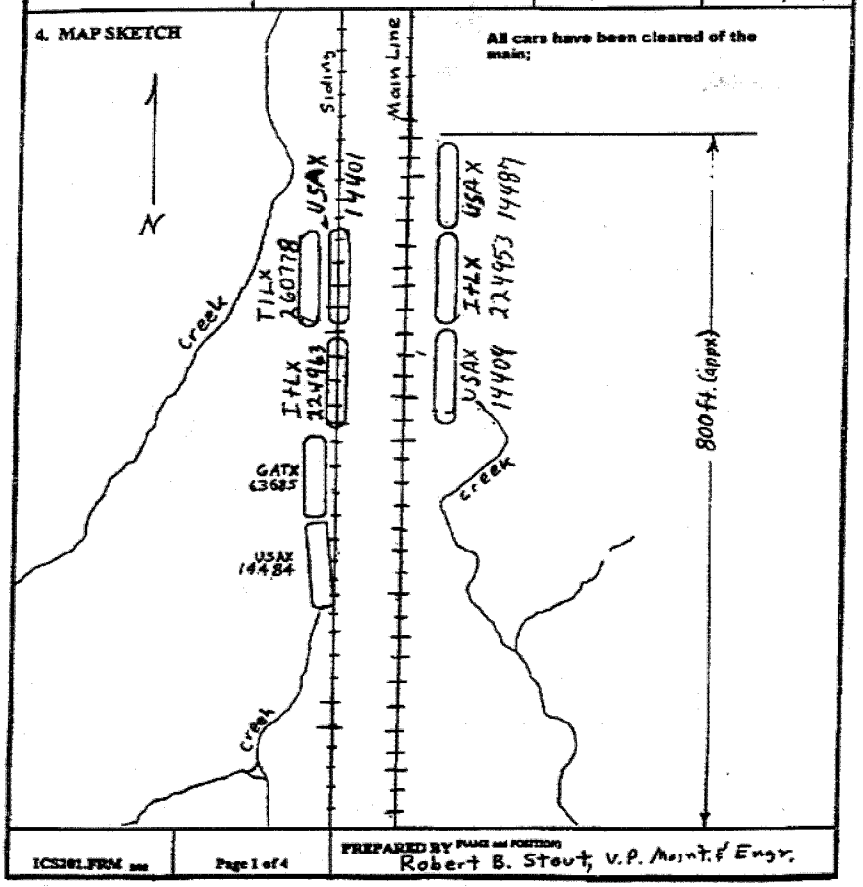
George Erickson	Carl Lautenberger	Brad Hahn
ARRC	FOSC	SOSC


Site 4
Site 3
Site 1
Site 2
Site 5
Railroad
Hard Boom
Warm up shed
Rope Mop Operations
>10ppm
<10ppm
Air Monitoring
Beaver Pond C
(2-3" Product)
Beaver Pond B
(2-3" Product)
Pumping Operations
Mile Post 268
Frac Tanks
Beaver Pond A
(3-4" Product)
100 yds.
100 yds.
100 yds.
60 yds.
110 yds.
Heavy Impact
Moderate Impact / Heavy Sheening
Light Impact / Light Sheening
Revised: 11/5/99

SPILL NUMBER: Correct, Validated ICS204 LC NUMBER:

ICS201-FRM INCIDENT BRIEFING	1. INCIDENT NAME M.P. 268 Derailment	2. DATE PREPARED 01/04 Nov. 99	3. TIME PREPARED 1735 PM

4. MAP SKETCH



ICS201.FRM rev	Page 1 of 4	PREPARED BY (NAME and POSITION) Robert B. Stout, V.P. Maint. & Engr.

SPILL NUMBER: LC NUMBER:

REVISED 1400 11041999

INCIDENT OBJECTIVES

5 days: 0600 11/12 to 0600 11/17

Objective 1: Safety

Maintain Site Safety

Concerns: fatigue, cold weather, rail operations resuming in canyon corridor

Maintain and update comprehensive site safety plan

- -- Continue with three safety meetings daily
- -- Conduct daily rail safety meetings aboard RDC on way to site
- -- Distribute consolidated site safety plan

Provide RWP (Roadway Work and Protection) training for all personnel on site

Objective 2: Protection

Protect Indian River and prevent downstream contamination

Short Term

-- Monitor weir at bridge and replace sorbent boom as necessary

-- Assess extent of downstream contamination on both sides of track and take necessary precautionary booming and protection measures

Long Term

-- develop winter containment plan to prevent offsite migration of oil

Objective 3: Cleanup

Continue Cleanup Operations with primary objective of removal and melting of contaminated snow and ice. Continue free product recovery in locations where open water can be maintained.

Objective 4: Waste Management

Implement Waste Management Plan

- --- Oily waste, sorbents, and PPE
- --- Recovered oil and water
- --- Solid Waste
- --- Human Waste

Objective 5: Lightering and Removal of Derailed Tank Cars

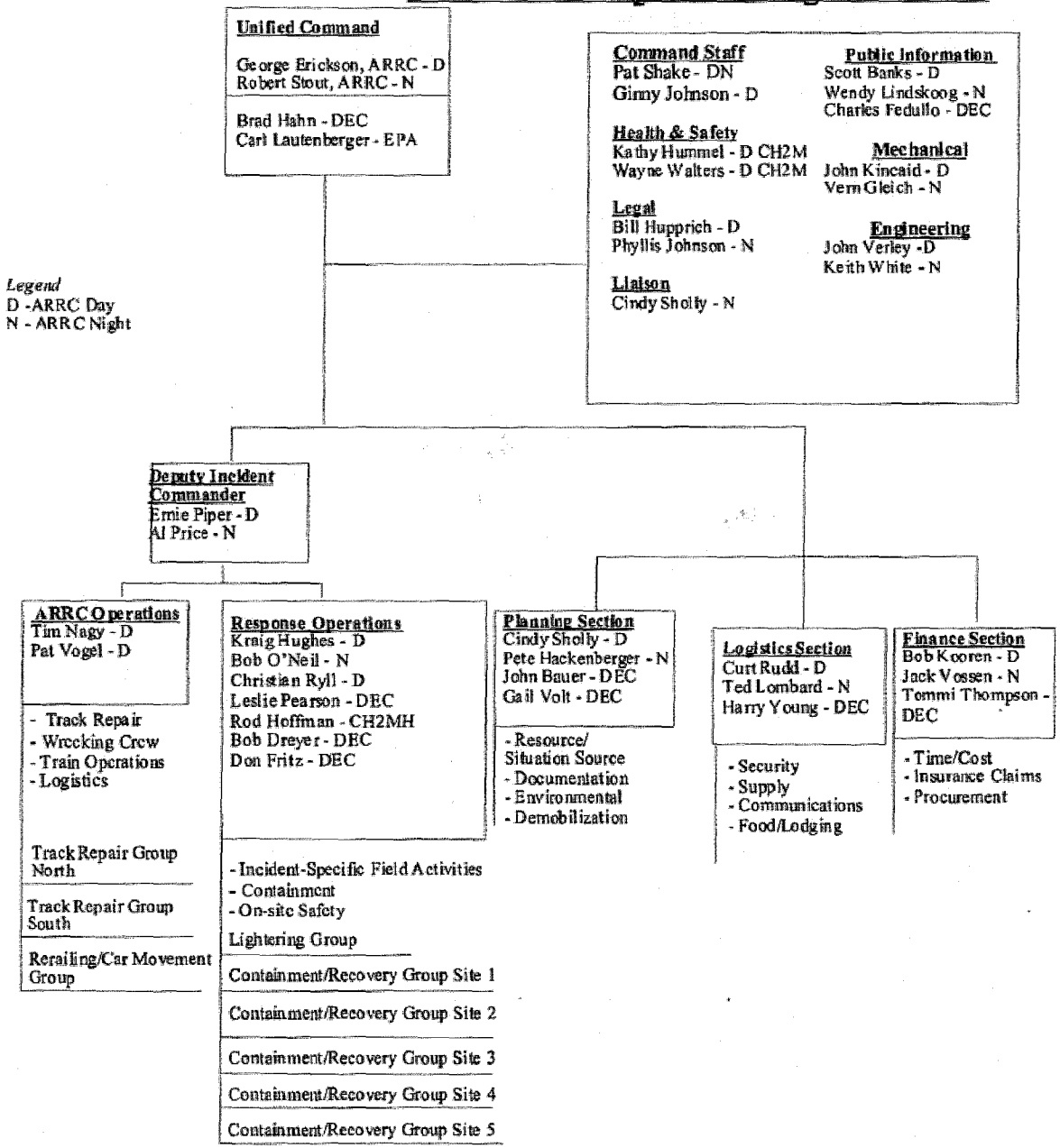
- — Safety Plan
- — Fuel Containment and Recovery Contingency Plan
- — Lighter fuel
- — Lift and transport tank cars off-site

Objective 6: Demobilization

Demobilization of extra gear on-site

ICS 202 (Incident Objectives)

Incident Response Organization



Revised: November 10, 1999

N02694

Exhibit N-6N

NAVY0006785

NOVEMBER 12-17 1999
REVISED - RDC OPERATING SCHEDULE
TALKEETNA TO CANYON

Beginning: 11/12/99

Trip #1

DEPART TALKEETNA	7:00 AM
ARRIVE CANYON	8:30 AM
DEPART CANYON	9:00 AM
ARRIVE TALKEETNA	10:30 AM

Trip #2

DEPART TALKEETNA	11:00 AM
ARRIVE CANYON	12:30 PM
DEPART CANYON	1:00 PM
ARRIVE TALKEETNA	2:30 PM

Trip #3

DEPART TALKEETNA	3:00 PM
ARRIVE CANYON	4:30 PM
DEPART CANYON	5:00 PM
RIVE TALKEETNA	6:30 PM

Note: the times shown are subject to change dependent on traffic in and out of Canyon derailment site.

1. INCIDENT NAME ARRC Canyon Derailment Mile 268.8	2. DIV/GROUP ARRC	ASSIGNMENT LIST - ICS 204 Page 1 of 2
3. Containment/Recovery - Site 1 - 5 Entire site, included vacuum truck, skimming, absorbent, and containment.		OPERATIONAL PERIOD DATE: 11/12/99 to 11/17/99 TIME: 0600 to 0600

5. OPERATIONS PERSONNEL ***Day Operations***

Operations Chief: Christian Ryll

Group Supervisor: Rod Hoffman, CH2M Hill

6. RESOURCES ASSIGNED THIS PERIOD

Strike Team/Task Force, etc. Leader	No. Pers.	Drop off	Pick Up
Penco Work Crew	5		
CCI Work Crew	16		
CH2M Hill Work Crew	5		
ARRC Work Crew	11		
Diaphragm pump	3		
5/8" JABSCO Dewatering pumps w/150' hose	2		
;ales of absorbent pad	16		
Boxes of 20 absorbent pom-poms	2		
Drum skimmers	2		
Rope skimmers	3		
2,500 gallon Fast Tanks	4		

7. OPERATIONAL INSTRUCTIONS:

Remove Jet A fuel from water in the vicinity of East and West Creeks from the derailment site south. Contain and protect waterway including maintenance of absorbent boom. Pump recovered product into storage tank cars and fast tank.

PREPARED BY: ARRC	APPROVED BY	DATE/TIME 11/11/99

1. INCIDENT NAME	2. DIV/GROUP	ASSIGNMENT LIST - ICS -204
ARRC Canyon Derailment Mile 268.8	ARRC	Page 2 of 2

3. Containment/Recovery - Site 1 - 5	OPERATIONAL PERIOD
Entire site, included vacuum truck, skimming, absorbent, rope mop and containment.	DATE: 11/12/99 to 11/17/99 TIME: 0600 to 0600

5. OPERATIONS PERSONNEL *Day Shift*

Operations Chief: Christian Ryll

Group Supervisor: Rod Hoffman, CH2M Hill

6. RESOURCES ASSIGNED THIS PERIOD

Strike Team/Task Force, etc. Leader	No. Pers.	Drop off	Pick Up
Skim Pak weir skimmers	2		
4" sorbent booms	400'		
5" sorbent booms	100'		
8" sorbent booms	400'		
8" containment boom	800'		
2" suction hose	300'		
2" discharge hose	1,000'		
Supersucker Truck	2		
Empty railroad tankcar	1		
16" Chainsaw	2		
16' Boat	1		

7. OPERATIONAL INSTRUCTIONS:

Remove Jet A fuel from water in the vicinity of East and West Creeks from the derailment site south. Contain and protect waterway including maintenance of absorbent boom. Pump recovered product into storage tank cars and fast tank.

PREPARED BY: ARRC	APPROVED BY	DATE/TIME 11/11/99

1. INCIDENT NAME ARRC Canyon Derailment Mile 268.8	2. DIV/GROUP ARRC	ASSIGNMENT LIST - ICS -204
3. Containment/Recovery - Site 1 - 5 Night Maintenance		OPERATIONAL PERIOD DATE: 11/12/99 to 11/17/99 TIME: 0600 to 0600

5. OPERATIONS PERSONNEL *Night Operations*

Operations Chief: Mike Huls

Group Supervisor: Dave Hodgen, CH2M Hill

6. RESOURCES ASSIGNED THIS PERIOD

Strike Team/Task Force, etc. Leader	No. Pers.	Drop off	Pick Up
ARRC Work Crew	3		
CCI Work Crew	4		
Homer Steam Unit	1		
See ICS 204 Day Operation (Oversee steam generation ops.)			

7. OPERATIONAL INSTRUCTIONS:

Maintain site and equipment during limited night operations.

PREPARED BY: ARRC	APPROVED BY	DATE/TIME: 11/11/99

INCIDENT RADIO COMMUNICATIONS PLAN			1. INCIDENT NAME	2. DATE/TIME PREPARED
4. BASIC RADIO CHANNEL UTILIZATION			Canyon	11/10/99 0800
System/Cache	Channel	Function	Frequency	Assignment
ARRC	1	Train Control/Dispatch	164.6250	ARRC
ARRC	2	ARRC Dispatch Repeater	165.3375/164.6250	Railbelt
ARRC	9	Hurricane Area Radio Telephone	171.3625/165.3125	ARRC Hurricane
ARRC	10	Talkeetna Area Radio Telephone	171.3375/166.2250	ARRC Talkeetna
ARRC	12	DEC Coordination	161.4750	DEC
ARRC	13	Maintenance of Way	161.5050	ARRC MOW
ARRC	14	Maintenance of Way	161.5350	ARRC MOW
ARRC	15	Maintenance of Way	161.5650	ARRC MOW
ARRC	3	ARRC Command Center		
ERA		Air Operations Channel	1299	
ARRC		Iridium Satellite Phone		011-8816-3104-9214
CH2MH		Iridium Satellite Phone		011-8816-3103-2574
CH2MH		Iridium Satellite Phone		011-8816-3103-2536

205 ICS	5. PREPARED BY (Communications Unit)
2-96	ARRC

MEDICAL PLAN	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED	4. OPERATIONAL PERIOD
	Canyon MP 268.8 Derail			1/12/99 to 11/17/99

5. INCIDENT MEDICAL AID STATIONS AND AMBULANCES

MEDICAL AID STATION	LOCATION	PARAMEDIC	
2 EMTs	1 EMT per 12 hour shift, at derailment site beginning with 0130 RDC	yes	
Sunshine Comm Health Center	Mile 4.5 Talkeetna Spur Road 733-2273		
	9-6 pm M-F, 9am - 5pm Sat 733-2348 after hours		

7. HOSPITALS

NAME	ADDRESS	TRAVEL TIME		PHONE	HELIPAD		BURN CENTER	
		AIR	GROUND		YES	NO	YES	
Providence Hospital	3200 Providence Dr	1	2.5		X		X	

8. MEDICAL EMERGENCY PROCEDURE

1 EMT will be on site for day 12 hour shift. EMT on-call for night operations, contact information posted in On-Site Command Center. EMTs are

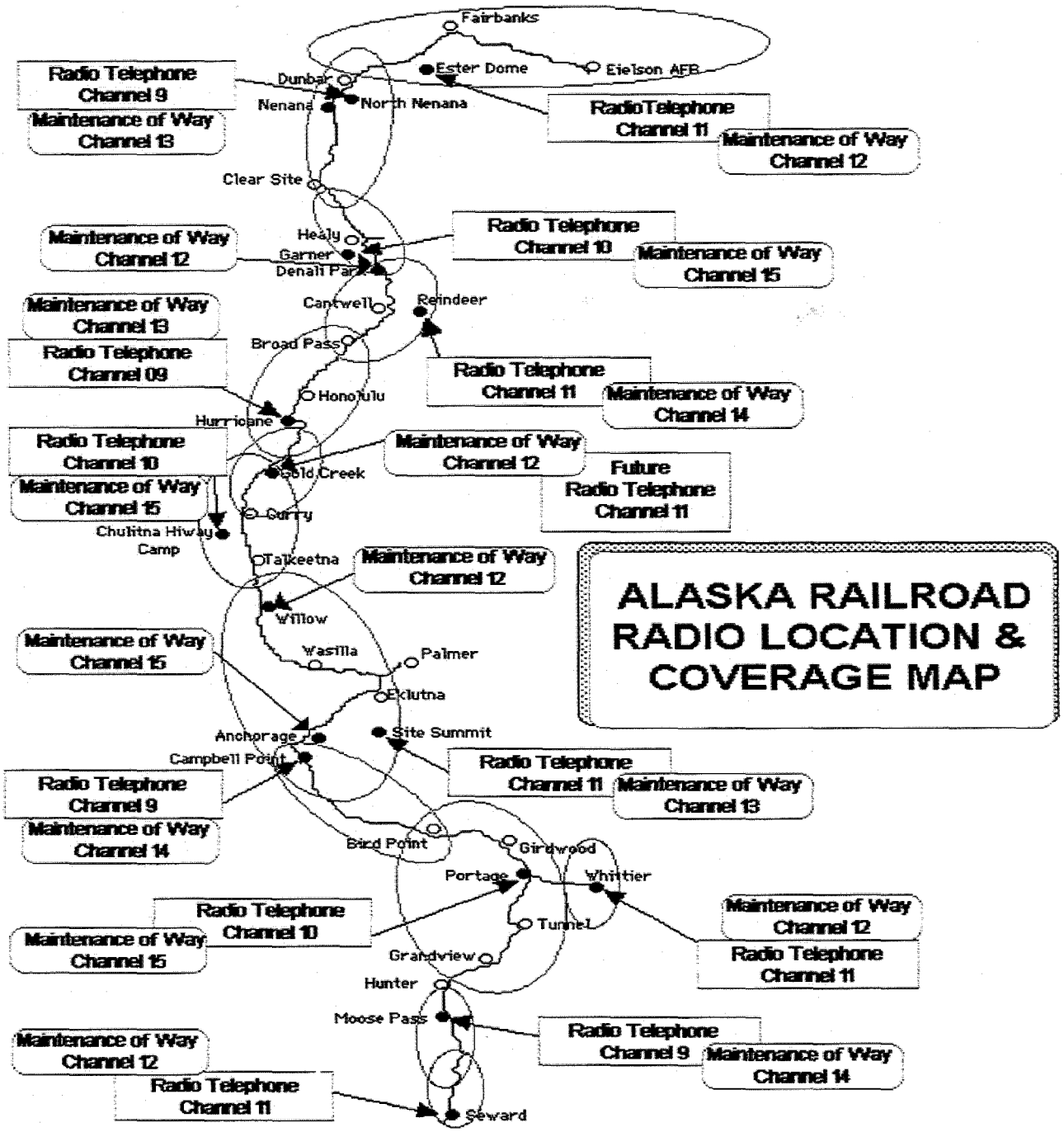
on contract from Mat-Su Borough.

Talkeetna Fire/Safety Department with equipment

CPR Trained Personnel

Large Medical Kit on site

ICS206.FRM 2-96	9. PREPARED BY (MEDICAL UNIT LEADER)	10. REVIEWED BY (SAFETY OFFICER)


Fairbanks
Ester Dome
Eielson AFB
Radio Telephone Channel 9
Maintenance of Way Channel 13
Dunbar
Nenana
North Nenana
RadioTelephone Channel 11
Maintenance of Way Channel 12
Clear Site
Maintenance of Way Channel 12
Healy
Garner
Denali Park
Radio Telephone Channel 10
Maintenance of Way Channel 15
Maintenance of Way Channel 13
Cantwell
Reindeer
Broad Pass
Radio Telephone Channel 09
Radio Telephone Channel 11
Maintenance of Way Channel 14
Honolulu
Hurricane
Radio Telephone Channel 10
Maintenance of Way Channel 12
Gold Creek
Future Radio Telephone Channel 11
Maintenance of Way Channel 15
Curry
Chulitna Hiway Camp
Talkeetna
Maintenance of Way Channel 12
ALASKA RAILROAD RADIO LOCATION & COVERAGE MAP
Willow
Maintenance of Way Channel 15
Wasilla
Palmer
Eklutna
Anchorage
Site Summit
Campbell Point
Radio Telephone Channel 11
Maintenance of Way Channel 13
Radio Telephone Channel 9
Maintenance of Way Channel 14
Bird Point
Girdwood
Portage
Whittier
Radio Telephone Channel 10
Maintenance of Way Channel 15
Tunnel
Maintenance of Way Channel 12
Radio Telephone Channel 11
Grandview
Hunter
Moose Pass
Radio Telephone Channel 9
Maintenance of Way Channel 14
Maintenance of Way Channel 12
Radio Telephone Channel 11
Seward

ENVIRONMENTAL UNIT SUMMARY - ICS224

cident Name: Canyon Derailment	Date Prepared: 11/11/99	Operational Period Date	Time
Incident Location: MP268	Start:	11/12/99	11/17/99
	End:	0600	0600

AREA ENVIRONMENTAL DATA:

Water samples gathered (CH2M Hill 11/2/99)

PRIORITIES FOR MITIGATING ENVIRONMENTAL AND CULTURAL IMPACTS:

Implement Cultural Resources Policy (attached)

WILDLIFE ASSESSMENTS AND REHABILITATION:

1 dead - 2 ½" silver salmon

PERMITS (Dispersants, Burning, and/or other):

None required or anticipated this period.

ASTE MANAGEMENT:

refer to Waste Management Plan (revised 11-10-99)

OTHER ENVIRONMENTAL CONCERNS:

LOGISTICAL SUPPORT NEEDS:

Prepared By: ARRC	**ICS Position:**	**Date:** 11/11/99

ICS 224
3/6/98

Alaska Railroad
Canyon Derailment Spill Cleanup
Cultural Resource Policy

The Alaska Historic Preservation Act declares the State of Alaska's policy regarding cultural resources as follows:

> *to preserve and protect the historic, prehistoric and archaeological resources of Alaska from loss, desecration and destruction so that the scientific, historic and cultural heritage embodied in these resources may pass undiminished to future generations.*

The Unified Command of the Canyon Derailment cleanup strongly supports this policy, and will ensure compliance with state and federal laws protecting cultural resources. The oil spill response includes a program which will ensure that cultural resource sites are properly identified and protected during cleanup operations. Response personnel play a key role in this program by being aware of their responsibilities under State and Federal law, and by dealing with sites properly when they are encountered. Whenever personnel encounter or discover an archaeological site or artifact, they are required to:

1. **Leave** cultural materials in place at the site of discovery, and mark their location.
2. **Stop** cleanup work in the vicinity surrounding the site.
3. **Inform** the Unified Command's archaeologist Chris Wooley (563-3202) immediately.

The Alaska Historic Preservation Act prohibits collecting or tampering with protected cultural resources, including artifacts, fossils, human skeletal remains, and other items of antiquity, and violation of the act is a crime. In addition, federal concern for cultural resources is expressed in a number of laws and regulations, violation of which may result in fines and imprisonment.

All oil spill response personnel (employees and their contractors) must comply with this Cultural Resource Policy:

Anyone found vandalizing, moving, or taking away cultural materials will be subject to disciplinary actions up to and including immediate dismissal from their work, and an incident report may be filed with law enforcement authorities, requesting prosecution under applicable law.

EXAMPLE MEDICAL PLAN

PAGE INTENTIONALY LEFT BLANK

MEDICAL PLAN	1. INCIDENT NAME	2. Date Prepared	3. Time Prepared	4. OPERATIONAL PERIOD
	Norwegian Star	26FEB02	2000	27 FEB - 28 FEB 0600-0600

5. INCIDENT MEDICAL AID STATIONS

MEDICAL AID STATIONS	LOCATION	PARAMEDICS YES	PARAMEDICS NO
Triage unit 1, State Civil Defense/State EMS	South ramp, HIA	X	
Triage unit 2, state Civil Defense/State EMS	CG Air Station, Barbers PT	X	

6. TRANSPORTATION

A. AMBULANCE SERVICES

NAME	ADDRESS	PHONE	PARAMEDICS YES	PARAMEDICS NO
American Medical Response		531-0477	X	
Tripler AMC		433-1000	X	

B. INCIDENT AMBULANCES

NAME	LOCATION	PARAMEDICS YES	PARAMEDICS NO
N/A			

7. HOSPITALS

NAME	ADDRESS	TRAVEL TIME AIR	TRAVEL TIME GRND	PHONE	HELIPAD YES	HELIPAD NO	DECON CENTER YES	DECON CENTER NO
Queens Med Ctr	1301 Punchbowl	5 m	15 m	538-9011	X		X	
Kaiser Perm	2288 Moanalua Rd	5 m	20 m	834-5333	X			X
Tripler AMC	Jarrett White Rd	5 m	20 m	433-1000	X			X

8. MEDICAL EMERGENCY PROCEDURES

Minor injuries will be treated at triage site Medical Aid Station. Injuries will be evaluated by triage unit personnel. Serious life threatening injuries will be transported immediately to hospital by ambulance or MAST helicopter as appropriate.

Injuries to search and rescue/response personnel shall be reported immediately to the Safety Officer.

ICS-206 (oil) 7/94	9. PREPARED BY (MEDICAL UNIT LEADER)	10. REVIEWED BY (SAFETY OFFICER)

4 - SITE SAFETY AND HEALTH PLAN ICS-208 (USCG)

This tab contains the USCG Incident Command System compatible Site Safety and Health Plan (ICS-208). The forms contained in this tab are also located on the CD-ROM version of the COMNAVREG HI ICP. Forms are also available from the Navy On-Scene Coordinator Office, Building 150, basement.

PAGE INTENTIONALLY LEFT BLANK

Site Safety and Health Plan ICS-208-CG (rev 9/06)

Incident Name: _____ **Date/Time Prepared: _____ Operational Period: _____**

Purpose. The ICS Compatible Site Safety and Health Plan is designed for safety and health personnel that use the Incident Command System (ICS). It is compatible with ICS and is intended to meet the requirements of the Hazardous Waste Operations and Emergency Response regulation (Title 29, Code of Federal Regulations, Part 1910.120). The plan avoids the duplication found between many other site safety plans and certain ICS forms. It is also in a format familiar to users of ICS. Although primarily designed for oil and chemical spills, the plan can be used for all hazard situations.

Questions on the document should be addressed to the Coast Guard Office of Incident Management and Preparedness (G-RPP).

Table of Forms

FORM NAME	FORM #	USE	REQUIRED	OPTIONAL	ATTACHED
Emergency Safety and Response Plan	A	Emergency response phase (uncontrolled)	X		
Site Safety Plan	B	Post-emergency phase (stabilized, cleanup)	X		
Site Map	C	Post-emergency phase map of site and hazards	X		
Emergency Response Plan	D	Part of Form B, to address emergencies	X		
Exposure Monitoring Plan	E	Exposure monitoring Plan to monitor exposure	X		
Air Monitoring Log	E-1	To log air monitoring data	X*		
Personal Protective Equipment	F	To document PPE equipment and procedures	X*		
Decontamination	G	To document decon equipment and procedures	X*		
Site Safety Enforcement Log	H	To use in enforcing safety on site		X	
Worker Acknowledgement Form	I	To document workers receiving briefings		X	
Form A Compliance Checklist	J	To assist in ensuring HAZWOPER compliance		X	
Form B Compliance Checklist	K	To assist in ensuring HAZWOPER compliance		X	
Drum Compliance Checklist	L	To assist in ensuring HAZWOPER compliance		X	
Other:					

* *Required only if function or equipment is used during a response*

This Page Intentionally Left Blank

EMERGENCY SAFETY and RESPONSE PLAN	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Attachments: **Attach MSDS for each Chemical:**
5. Organization IC/UC:	Safety: Div/Group Supv:	Entry Team:	Backup Team:	Decon Team:

6.a. Physical Hazards and Protection	6.b. Confined Space ☐ Noise ☐ Heat Stress ☐ Cold Stress ☐ Electrical ☐ Animal/Plant/Insect ☐ Ergonomic ☐ Ionizing Rad ☐ Slips/Trips/Falls ☐ Struck by ☐ Water ☐ Violence ☐ Excavation ☐ Biomedical waste and/or needles ☐ Fatigue ☐ Other (specify)

6.c. Tasks & Controls	6d Entry Permit	6.e. Ventilate	6f. Hearing Protection	6g. Shoes (type)	6.h. Hard Hats	6i. Clothing (cold wx)	6j. Life Jacket	6l. Work/ Rest (hrs)	6.m. Fluids (amt/time)	6.n. Signs & Barricade	6.p. Fall Protect	6.q. Post Guards	6.r. Flash Protect	6.s. Work Gloves	6.t. Other

7.a. Agent	7.b. Hazards		7.c. Target Organs	7.d. Exposure Routes	7.f. PPE	7.g. Type of PPE
	Explosive ☐ Flammable ☐ Reactive ☐ Biomedical ☐ Toxic ☐	Radioactive ☐ Carcinogen ☐ Oxidizer ☐ Corrosive ☐ Specify Other: ☐	Eyes ☐ Nose ☐ Skin ☐ Ears ☐ Central Nervous System ☐ Respiratory ☐ Throat ☐ Lungs ☐ Heart ☐ Liver ☐ Kidney ☐ Blood ☐ Lungs ☐ Circulatory ☐ Gastrointestinal ☐ Bone ☐ Other Specify: ☐	Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	Face Shield ☐ Eyes ☐ Gloves ☐ Inner Suit ☐ Splash Suit ☐ Level A Suit ☐ SCBA ☐ APR ☐ SAR ☐ Cartridges ☐ Fire Resistance ☐	

8. Instruments:	8.a. Action Levels	8.b. Chemical Name(s):	8.c. LEL/UEL %	8.d. Odor Thresh Ppm	8.e. Ceiling/ IDLH	8.f. STEL/TLV	8.g. Flash Pt/ Ignition Pt (F or C)	8.h. Vapor Pressure (mm)	8.i. Vapor Density	8.j. Specific Gravity	8.l. Boiling Pt F or C
O2 ☐											
CGI ☐											
Radiation ☐											
Total HCs ☐											
Colorimetric ☐											
Thermal ☐											
Other ☐											

EMERGENCY SAFETY and RESPONSE PLAN (Cont)	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Attachments: **Attach MSDS for each Chemical**

9. Decontamination:				
Instrument Drop Off ☐	Suit Wash ☐	Bottle Exchange ☐	SCBA/Mask Rinse ☐	Intervening Steps ☐ Specify:
Outer Boots/Glove Removal ☐	Decon Agent: Water ☐	Outer Suit Removal ☐	Inner Glove Removal ☐	
Suit/Gloves/Boot Disposal ☐	Other ☐	Inner Suit Removal ☐	Work Clothes Removal ☐	
	Specify:	SCBA/Mask Removal ☐	Body Shower ☐	

10. Site Map. Include: Work Zones, Locations of Hazards, Security Perimeter, Places of Refuge, Decontamination Line, Evacuation Routes, Assembly Point, Direction of North
☐ Attached, ☐ Drawn Below:

11.a. Potential Emergencies:	11.b. Evacuation Alarms:	11.c Emergency Prevention and Evacuation Procedures:
Fire ☐	Horn ☐ # Blasts ☐	Safe Distance:
Explosion ☐	Bells ☐ #Rings ☐	
Other ☐	Radio Code ☐	
	Other:	

12. a. Communications: Radio ☐ Phone ☐ Other ☐	12.b. Command #:	12.c. Tactical #:	12.d. Entry #:
13.a. Site Security: Personnel Assigned	13.b. Procedures:		13.c. Equipment:
14.a. Emergency Medical: Personnel Assigned	14.b. Procedures:		14.c Equipment:
15. Prepared by:	16. Date/Time Briefed:		**ICS-208-CG SSP-A Page 2. (rev 9/06):** Page _____ of _____

EMERGENCY SAFETY AND RESPONSE PLAN (ICS-208-CG SSP-A)

Purpose: The Emergency Safety and Response Plan provides the Safety Officer and ICS personnel a plan for safeguarding personnel during the initial emergency phase of the response. *It is only used during the emergency phase of the response, which is defined as a situation involving an uncontrolled release.* It is also intended to meet the requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation, Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer or his/her designated staff starts the Emergency Site Safety and Response Plan. They initially address the hazards common to all operations involved in the response (initial site characterization). Outside support organizations must be contacted to ensure the plan is consistent with other plans (local, state, other federal plans). Form ICS-208-CG SSP-G need not be completed if this form is used. When the operation proceeds into the post-emergency phase (site stabilized and cleanup operations begun) forms ICS-208-CG SSP-B and ICS-208-CG SSP-G should be used. For large incidents, the Emergency Site Safety and Response Plan complements the Incident Action Plan. For smaller incidents, the Emergency Site Safety and Response Plan complements ICS-201.

Distribution: The Emergency Safety and Response Plan completed by the Safety Officer is forwarded to the Planning Section Chief. Copies are made and attached to the Assignment List(s) (ICS Form 204). The Operations Section Chief, Directors, Supervisors or Leaders get a copy of the plan. They must ensure it is available on site for all personnel to review. The Safety Officer is responsible for ensuring that the Emergency Site Safety and Response Plan properly addresses the hazards of the operation. The Safety Officer accomplishes this through on site enforcement and feedback to the operational units.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Attachments	Enter attachments. Material Safety Data Sheets are mandatory under 1910.120. Safe Work Practices may also be attached.
5	Organization	List the personnel responsible for these positions. IC and Safety Officer are mandatory.
6	Physical Hazards & Protection	Check off the physical hazards at the site. Identify the major tasks involved in the response (skimming, lightering, overpacking, etc.). Check off the controls that would be used to safeguard workers from the physical hazards for each major task.
7	Chemical/Agent	List the chemicals involved in the response. Chemicals may be listed numerically. Check off the hazards, potential health effects, pathway of dispersion, and exposure route of the chemical. Numbers corresponding to the chemical may be entered into the check blocks to differentiate. Check off the PPE to be used. Identify the type of PPE selected (for example: gloves: butyl rubber).
8	Instruments	Indicate the instruments being used for monitoring. List the action levels adjacent to the instruments being used. Identify the chemicals being monitored (2). List the physical parameters of the chemicals. Use a separate form for additional chemicals monitored.

EMERGENCY SAFETY AND RESPONSE PLAN (FORM ICS-208-CG SSP-A) (Instructions Continued)

9	Decontamination	Check off the decontamination steps to be used. Numbers may be entered to indicate the preferred sequence. Identify any intervening steps necessary on the form or in a separate attachment.
10	Site Map	Draw a rough site map. Ensure all the information listed is identified on the map.
11	Potential Emergencies	Identify any potential emergencies that may occur. If none, so state. Check off the appropriate alarms that may be used. Identify emergency prevention and evacuation procedures in the space provided or on a separate attached sheet.
12	Communications	Indicate type of site communications (phone, radio). Indicate phone numbers or frequencies for the command, tactical and entry functions.
13	Site Security	Identify the personnel assigned. Identify security procedures in the space provided or on a separate attached sheet. Identify the equipment needed to support security operations.
14.	Emergency Medical	Identify the personnel assigned. Identify emergency medical procedures in the space provided or on a separate attached sheet. Identify the equipment needed to support security operations.
15.	Prepared by:	Enter the name and position of the person completing the worksheet.
16.	Date/time briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SITE SAFETY PLAN (SSP) HAZARD ID/EVAL/CONTROL	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. Site Accessibility Land☐ Water☐ Air ☐ Comments:	8. For Emergencies Contact:	9. Attachments: **Attach MSDS for each Chemical**

10.a. Job Task/Activity	10.b. Hazards* ⇨	10.c. Potential Injury & Health Effects	10.d. Exposure Routes	10.e. Controls: Engineering, Administrative, PPE
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	

11. Prepared By:	12. Date/Time Briefed:	***HAZARD LIST**: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, & Diving	**ICS-208-CG SSP-B (rev 9/06):** Page _____ of _____

SITE SAFETY PLAN (FORM ICS-208-CG SSP-B)

Purpose: The Site Safety Plan provides the Safety Officer and ICS personnel a plan for safeguarding personnel during the post-emergency phase of an incident. The post-emergency phase is when the situation is stabilized and cleanup operations have begun. ICS-208-CG SSP-B is intended to meet the requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation, Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer or his/her designated staff starts the Site Safety Plan. They initially address the hazards common to all operations involved in the response (initial site characterization). The plan is then reproduced and as a minimum sent to ICS Group/Division Supervisors. They amend it according to unique job or on-scene hazards with support from the Safety Officer and/or his/her staff (detailed site characterization). The plan is continuously updated to address changing conditions. During the first hours of the response, where most response functions are in the emergency phase, the Safety Officer may chose to use the Emergency Safety and Response Plan (ICS-208-CG SSP-A) in place of the Site Safety Plan. For large incidents, ICS-208-CG SSP-B compliments the Incident Action Plan (IAP). For smaller incidents, ICS-208-CG SSP-B compliments ICS Form 201. The Safety Officer is encouraged to use the HAZWOPER Compliance Checklist (Form ICS-208-CG SSP-K) to ensure the IAP and the 201 address the requirements and all other pertinent ICS forms (203, 205, 206, etc.) are completed.

Distribution: The initial Site Safety Plan completed by the Safety Officer is forwarded to the Planning Section Chief. Copies are made and attached to the Assignment List(s) (ICS Form 204). The Operations Section Chief, Directors, Supervisors or Leaders get a copy and make on site amendments specific to their operation. They must also ensure it is available on site for all personnel to review. The Safety Officer provides personnel from his/her staff to assist in the detailed site characterization. The Safety Officer is responsible for ensuring that the Site Safety Plan for each assignment properly addresses the hazards of the assignment. The Safety Officer must ensure that the safety plans on site are consistent. The Safety Officer accomplishes this through on site enforcement and feedback to the operational units.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Group/Division Supv Strike Team/TF Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Site Accessibility	Check the block(s) if the site is accessible by land, water, air, etc.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Attachments	Enter attachments. Material Safety Data Sheets are mandatory under 1910.120. Safe Work Practices may also be attached.
10	Job/Task Activity	Enter Job/Task & Activities, list hazards, list potential injury and health effects, check exposure routes and identify controls. If more detail is needed for controls, provided attachments.
11	Prepared by	Enter the name and position of the person completing the worksheet.
12	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: SITE MAP	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. Site Accessibility Land☐ Water☐ Air ☐ Comments:	8. For Emergencies Contact:	9. Include: - Work Zones - Locations of Hazards - Security Perimeter - Places of Refuge - Decontamination Line - Evacuation Routes
10. Sketch of Site: ☐ Attached. ☐ Drawn Here				
11. Prepared By:	12. Date/Time Briefed:	**HAZARD LIST**: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, & Diving		**ICS-208-CG SSP-C (rev 9/06):** Page _____ of _____

SITE MAP FOR SITE SAFETY PLAN (ICS-208-CG SSP-C)

Purpose: The Site Map for the Site Safety Plan is required by Title 29 Code of Federal Regulations Part 1910.120. It provides in 1 place a visual description of the site which can help ICS personnel locate hazards, identify evacuation routes and places of refuge.

Preparation: The Site Map for the Site Safety Plan can be completed by the Safety Officer, his/her staff or by ICS field personnel (Group Supervisors, Task Force/Strike Team Leaders) working at a site with unique and specific hazards. One or several maps may be developed, depending on the size of the incident and the uniqueness of the hazards. The key is to ensure that the workers using the map(s) can clearly identify the work zones, locations of hazards, evacuation routes and places of refuge.

Distribution: This form must be located with the Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Site Accessibility	Check the block(s) if the site is accessible by land, water, air, etc.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Include	Ensure the map includes the listed items provided in this block.
10	Sketch of Site	Sketch of site for work. May attach map or chart.
10	Prepared by	Enter the name and position of the person completing the worksheet.
11	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: EMERGENCY RESPONSE PLAN	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Attachments: **INCLUDE ICS FORM 206 and EMT Medical Response Procedures**
9. Emergency Alarm (sound and location)	10. Backup Alarm (sound and location)	11. Emergency Hand Signals	12. Emergency Personal Protective Equipment Required:	

13. Emergency Notification Procedures	14. Places of Refuge (also see site map form 208B)	15. Emergency Decon and Evacuation Steps	16. Site Security Measures

17. Prepared By:	18. Date/Time Briefed:	**HAZARD LIST**: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, & Diving	**ICS-208-CG SSP-D (rev 9/06)** Page _____ of _____

EMERGENCY RESPONSE PLAN (ICS-208-CG SSP-D)

Purpose: The Emergency Response Plan provides information on measures to be taken in the event of an emergency. It is used in conjunction with the Site Safety Plan (Form ICS-208-CG SSP-B). It is also required by Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer, his/her staff member or the Site Supervisor/Leader prepares the Emergency Response Plan. A copy of the Medical Plan (ICS Form 206) must always be attached to this form.

Distribution: This form must be located with Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Attachments	Enter attachments. ICS Form 206 must be included.
9	Emergency Alarm	Enter a description of the sound of the emergency alarm and it's location.
10	Backup Alarm	Enter a description of the sound of the emergency alarm and it's location.
11	Emergency Hand Signals	Enter the emergency hand signals to be used.
12	Emergency Personal Protective Equipment Required	Enter the emergency personal protective equipment that may be needed in the event of an emergency.
13	Emergency Notification Procedures	Enter the procedures for notifying the appropriate personnel and organizations in the event of an emergency.
14	Places of Refuge	Enter by name the place of refuge personnel can go to in the event of an emergency.
15	Emergency Decon & Evacuation Steps	Enter emergency decontamination steps and evacuation procedures.
16	Site Security Measures	Enter site security measures needed for emergencies.
17	Prepared by	Enter the name and position of the person completing the worksheet.
18	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: Exposure Monitoring Plan	1. Incident Name	2. Date/Time Prepared:	3. Operational Period:	4. Safety Officer (Method of Contact):

5. Specific Task/Operation	6. Survey Location	7. Survey Date/Time	8. Monitoring Methodology	9. Direct-Reading Instrument	10. Air Sampling	11. Hazard(s) to Monitor	12. Monitoring Duration	13. Reasons to Monitor	14. Laboratory Support for Analysis
			☐ Personal Breathing Zone ☐ Area Air Monitoring ☐ Dermal Exposure Monitoring ☐ Biological Monitoring: ☐ Blood ☐ Urine ☐ Other ☐ Obtain bulk samples ☐ Other:	Model: Manufacturer: Last Mfr Calibration Date:	Sampling/Analysis Method: Collecting Media: ☐ Charcoal Tube ☐ Silica Gel ☐ 37 mm MCE Filter ☐ 37 mm PVC Filter ☐ Other:_____			☐ Regulatory Compliance ☐ Assess current PPE adequacy ☐ Validate engineering controls ☐ Monitor IDLH Conditions ☐ Other_____	
			☐ Personal Breathing Zone ☐ Area Air Monitoring ☐ Dermal Exposure Monitoring ☐ Biological Monitoring: ☐ Blood ☐ Urine ☐ Other ☐ Obtain bulk samples ☐ Other:	Model: Manufacturer: Last Mfr Calibration Date:	Sampling/Analysis Method: Collecting Media: ☐ Charcoal Tube ☐ Silica Gel ☐ 37 mm MCE Filter ☐ 37 mm PVC Filter ☐ Other:_____			☐ Regulatory Compliance ☐ Assess current PPE adequacy ☐ Validate engineering controls ☐ Monitor IDLH Conditions ☐ Other_____	
			☐ Personal Breathing Zone ☐ Area Air Monitoring ☐ Dermal Exposure Monitoring ☐ Biological Monitoring: ☐ Blood ☐ Urine ☐ Other ☐ Obtain bulk samples ☐ Other:	Model: Manufacturer: Last Mfr Calibration Date:	Sampling/Analysis Method: Collecting Media: ☐ Charcoal Tube ☐ Silica Gel ☐ 37 mm MCE Filter ☐ 37 mm PVC Filter ☐ Other:_____			☐ Regulatory Compliance ☐ Assess current PPE adequacy ☐ Validate engineering controls ☐ Monitor IDLH Conditions ☐ Other_____	
			☐ Personal Breathing Zone ☐ Area Air Monitoring ☐ Dermal Exposure Monitoring ☐ Biological Monitoring: ☐ Blood ☐ Urine ☐ Other ☐ Obtain bulk samples ☐ Other:	Model: Manufacturer: Last Mfr Calibration Date:	Sampling/Analysis Method: Collecting Media: ☐ Charcoal Tube ☐ Silica Gel ☐ 37 mm MCE Filter ☐ 37 mm PVC Filter ☐ Other:_____			☐ Regulatory Compliance ☐ Assess current PPE adequacy ☐ Validate engineering controls ☐ Monitor IDLH Conditions ☐ Other_____	
			☐ Personal Breathing Zone ☐ Area Air Monitoring ☐ Dermal Exposure Monitoring ☐ Biological Monitoring: ☐ Blood ☐ Urine ☐ Other ☐ Obtain bulk samples ☐ Other:	Model: Manufacturer: Last Mfr Calibration Date:	Sampling/Analysis Method: Collecting Media: ☐ Charcoal Tube ☐ Silica Gel ☐ 37 mm MCE Filter ☐ 37 mm PVC Filter ☐ Other:_____			☐ Regulatory Compliance ☐ Assess current PPE adequacy ☐ Validate engineering controls ☐ Monitor IDLH Conditions ☐ Other_____	

15. Prepared By:	16. Date/Time Briefed:	**HAZARD LIST**: Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, & Eye Burning
18. Safety Officer Review:	Reporting: Monitoring results shall be logged in the ICS-208-CG SSP-E-1 form (Air Monitoring Log) and attached as part of a current Site Safety Plan and Incident Action Plan. Significant Exposures shall be immediately addressed to the IC and General Staff for immediate correction.	**ICS-208-CG SSP-E (rev 9/06)** Page _____ of _____

N02721

Exhibit N-6N

EXPOSURE MONITORING PLAN (FORM ICS-208-CG SSP-E)

Purpose: The Exposure Monitoring Plan provides plan of monitoring conducted during an incident. The plan is a supplement to the Site Safety Plan (ICS-208-CG SSP-B). It is only required when performing monitoring operations.

Preparation: The Safety Officer, his/her staff member or the Site Supervisor/Leader prepares the Exposure Monitoring Plan. If there is a decision not to monitor during a response, the reasons must be stated clearly in the Site Safety Plan (ICS-208-CG SSP-B).

Distribution: This form must be located with Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Specific Task / Operation	Enter specific task or operation.
6	Survey Location	Enter the location to be monitored.
7	Survey Date/Time	Enter the date/time for the monitoring teams to survey.
8	Monitoring Methodology	Enter/Check the monitoring method to be used.
9	Direct-Reading Instrument	Enter the instrument model, manufacturer, last calibration date.
10	Air Sampling	Enter Air Sampling analysis method
11	Hazards to Monitor	Enter the hazards to monitor
12	Monitoring Duration	Enter duration of monitoring
13	Reasons to Monitor	Enter Reasons to Monitor
14	Laboratory Support for Analysis	Enter Laboratory Support needed for analysis of samples
15	Prepared by	Enter the name and position of the person completing the worksheet.
16	Date/Time Briefed	Enter the date/time the document was briefed to the appropriate workers and by whom.
17	Safety Officer Review	The Safety Officer must review and sign the form.

CG ICS SSP: AIR MONITORING LOG	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)	
5. Site Location	6. Hazards of Concern	7. Action Levels (include references):		8. Weather: Temperature: Precipitation: Wind: Relative Humidity: Cloud Cover:	
9.a. Instrument, ID Number Calibrated? Indicate below.	9.b. Monitoring Person Name(s)	9.c. Results (units)	9.d. Location	9.f. Time	9.g. Interferences and Comments
10. Safety Officer Review:		Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, & Eye Burning			**ICS-208-CG SSP-E-1 (rev 9/06):** Page _____ of _____

DAILY AIR MONITORING LOG (FORM ICS-208-CG SSP-E-1)

Purpose: The Exposure Monitoring Log provides documentation of air monitoring conducted during a spill. The log is a supplement to the Site Safety Plan (ICS-208-CG SSP-B). It is only required when performing air monitoring operations. The information used from the log can help update the Site Safety Plan.

Preparation: Persons conducting monitoring complete the Daily Air Monitoring Log. Normally these are air monitoring units under the Site Safety Officer. If there is a decision not to monitor during a spill, the reasons must be stated clearly in the Site Safety Plan (ICS-208-CG SSP-B).

Distribution: The Daily Air Monitoring Log when completed is copied and forwarded to the Site Safety Officer who must review and sign the form. The original form must be available on site, readily available and briefed to all impacted ICS personnel.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Location & size of site	Enter the geographical location of the site and the approximate square area.
6	Hazards of Concern	Enter the hazards being monitored.
7	Action Levels	Enter the action levels/readings for the monitoring teams.
8	Weather	Enter weather information. Ensure units of measure are listed.
9	Air Monitoring Data	Enter the instrument type and number, persons monitoring, results with appropriate units, location of reading, time of reading and interferences and comments.
10	Safety Officer Review	The Safety Officer must review and sign the form.

CG ICS SSP: PERSONAL PROTECTIVE EQUIPMENT	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. Hazards Addressed:		8. For Emergencies Contact:

9. Equipment:				10. References Consulted:

11. Inspection Procedures:	12. Donning Procedures:	13. Doffing Procedures:	14. Limitations and Precautions (include maximum stay time in PPE):

15. Prepared By:	16. Date/Time Briefed:	Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, Eye Burning	**ICS-208-CG SSP-F: (Rev 9/06)** Page _____ of _____

N02725

Exhibit N-6N

PERSONAL PROTECTIVE EQUIPMENT (ICS-208-CG SSP-F)

Purpose: The Personal Protective Equipment form is a list of personal protective equipment to be used in operations. The listing of personal protective equipment is required by Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Personal Protective Equipment form is completed by the Site Safety Officer, or his/her staff. Personal protective equipment common to all ICS Operations personnel is addressed first. Jobs with unique personal protective equipment requirements (fall protection) are addressed next. When the form is delivered on site, the ICS Director, Supervisor, or Leader may amend the list to ensure personnel are adequately protected from job hazards. It must be completed prior to the onset of any operations, unless addressed elsewhere by Standard Operating Procedures.

Distribution: This form must be located with Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Hazard(s) Addressed:	Enter the hazards that need to be safeguarded.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Equipment	List the equipment needed to address the hazards. If pre-designed Safe Work Practices are used, indicate here and attach to form.
10	References consulted	List the references used in making the selection for PPE.
11	Inspection Procedures	Enter the procedures for inspecting the Personal Protective Equipment prior to donning. If pre-designed Safe Work Practices are used, indicate here and attach to form.
12	Donning Procedures	Enter the procedures for putting on the PPE. If pre-designed Safe Work Practices are used, indicate here and attach to form.
13	Doffing Procedures	Enter the information for removing the PPE. If pre-designed Safe Work Practices are used, indicate here and attach to form.
14	Limitations and Precautions	List the limitations and precautions when using PPE. Include the maximum time to be inside the PPE, Heat Stress concerns, psychomotor skill detraction and other factors.
15	Prepared by	Enter the name and position of the person completing the worksheet.
16	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: DECONTAMINATION	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Hazard(s) Addressed:

9. Equipment:				10. References Consulted:

11. Contamination Avoidance Practices:	12. Decon Diagram: ☐ Attached, ☐ Drawn below	13. Decon Steps

14. Prepared By:	15. Date/Time Briefed:	Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, Eye Burning	**ICS-208-CG SSP-G (rev 9/06):** Page _____ of _____

N02727

Exhibit N-6N

DECONTAMINATION (ICS-208-CG SSP-G)

Purpose: The Decontamination form provides information on how workers can avoid contamination and how to get decontaminated. It is a supplemental form to the Site Safety Plan.

Preparation: The Decontamination Form can be completed by the Site Safety Officer, a member of his/her staff or by the Group/Division Supervisor, Task Force/Strike Team Leader on the site

Distribution: This form must be located with Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Hazard(s) Addressed:	Enter the hazards that need to be safeguarded.
9	Equipment	Enter the decontamination equipment needed for the site. If pre-designed Safe Work Practices are used, indicate here and attach to this form.
10	References consulted	List the references used in making the selection for PPE.
11	Contamination Avoidance Practices	Enter procedures for personnel to avoid contamination. If pre-designed Safe Work Practices are used, indicate here and attach to form.
12	Decon Diagram	Draw a diagram for the decontamination operation. If pre-designed Safe Work Practices are used, indicate here and attach to form.
13	Decon Steps	List the decontamination steps.
14	Prepared by	Enter the name and position of the person completing the worksheet.
15	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: ENFORCEMENT LOG	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)	
5. Supervisor/Leader	6. For Emergencies Contact:			7. Attachments:	
8.a. Job Task/Activity	8.b. Hazards	8.c. Deficiency	8.d. Action Taken	8.e. Safety Plan Amended?	8.f. Signature of Supervisor/Leader
9. Prepared By:	10. Date/Time Briefed:	**HAZARD LIST**: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, & Diving			**ICS-208-CG SSP-H (rev 9/06):** Page _____ of _____

SITE SAFETY ENFORCEMENT LOG (ICS-208-CG SSP-H)

Purpose: The Site Safety Plan Enforcement Log is used to help enforce safety during an incident.

Preparation: The Safety Officer and/or his/her staff complete the Site Safety Plan Enforcement Log. The log is completed as Safety personnel are on scene reviewing the site. It should be completed at a minimum once per day. The number of enforcement logs to be completed depends on the size of the incident. Enough should be completed to ensure that site safety is being adequately enforced.

Distribution: The Site Safety Plan enforcement log when completed is delivered to the Safety Officer. The Safety Officer can use the form to amend the Site Safety Plan (ICS-208-CG SSP-A or B).

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
7	Attachments	List any attached supporting documentation.
8 a	Job/Task Activity	Enter only those Job Task/activities for which a deficiency is noted.
8 b	Hazards	Enter the hazard not being sufficiently addressed.
8 c	Deficiency	Enter the deficiency.
8 d	Action Taken	Enter the corrective action taken to address the deficiency.
8 e	Safety Plan Amended?	Enter whether the on site safety plan was amended.
8 f	Signature of Supervisor/Leader	Ensure the Supervisor/Leader signs the form to acknowledge the deficiency.
9	Prepared by	Enter the name and position of the person completing the worksheet.
10	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP WORKER ACKNOWLEDGEMENT FORM	1. Incident Name	2. Site Location:	3. Attachments:	
4. Type of Briefing	5. Presented By:		6. Date Presented	7. Time Presented
Safety Plan/Emergency Response Plan ☐ Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
8.a. Worker Name (Print)	8.b. Signature*		8.c. Date	8.d. Time
* *By signing this document, I am stating that I have read and fully understand the plan and/or information provided to me.*		**ICS-208-CG SSP-I (rev 9/06): Worker Acknowledgement** Page _____ of _____		

WORKER ACKNOWLEDGEMENT FORM (ICS-208-CG SSP-I)

Purpose: The Worker Acknowledgement form is used to document workers who have received safety briefings.

Preparation: Those personnel responsible for conducting safety briefings complete this form initially. Once the briefings are completed, workers who were briefed print their name, sign, date and indicate the time of the briefing.

Distribution: This form is returned to the Safety Officer or designated representative at the end of each operational period.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Site Location	Indicate the location where the briefings are held.
3	Attachments	Indicate any attachments used as part of the briefings.
4	Type of briefing	Check the block next to the type of briefing.
5	Presented by	Enter the name of the person conducting the briefing.
6	Date Presented	Enter the date of the briefing.
7	Time Presented	Enter the time of the briefing.
8	Worker Name, Signature, Date and Time	Workers receiving the briefing print their name, sign, date and enter the time they acknowledge the briefing.

CG ICS SSP: Emergency Safety & Response Plan 1910.120 Compliance Checklist (Form A)	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Site Supervisor/Leader	5. Location of Site

6.a. Cite: 1910.120	6.b. Requirement(sections that duplicate or explain are omitted)	6.c. ICS Form	6.d. Check	6.e. Comments
(**q**)(1)	Is the plan in writing?	SSP-A	☐	
(1)	Is the plan available for inspection by employees?	N/A	☐	Performance based
(**q**)(2)(i)	Does the plan address pre-emergency planning and coordination?	SSP-A	☐	
(ii)	Does it address personnel roles?	SSP-A	☐	
(ii)	Does it address lines of authority?	SSP-A	☐	
(ii)	Does it address communications?	SSP-A	☐	
(iii)	Does it address emergency recognition?	SSP-A	☐	
(iii)	Does it address emergency prevention?	SSP-A	☐	
(iv)	Does it identify safe distances?	SSP-A	☐	
(iv)	Does it address places of refuge?	SSP-A	☐	
(v)	Does it address site security and control?	SSP-A	☐	
(vi)	Does it identify evacuation routes?	SSP-A	☐	
(vi)	Does it identify evacuation procedures?	SSP-A	☐	
(vii)	Does it address decontamination?	SSP-A	☐	
(viii)	Does it address medical treatment and first aid?	SSP-A	☐	
(ix)	Does it address emergency alerting procedures?	SSP-A	☐	
(ix)	Does it address emergency response procedures	SSP-A	☐	
(x)	Was the response critiqued?	N/A	☐	Performance based
(xi)	Does it identify Personal Protection Equipment?	SSP-A	☐	
(xi)	Does it identify emergency equipment?	SSP-A	☐	
(**q**)(3)(ii)	All the hazardous substances identified to the extent possible?	N/A	☐	Performance based
(ii)	All the hazardous conditions identified to the extent possible?	N/A	☐	Performance based
(ii)	Was site analysis addressed?	N/A	☐	Performance based
(ii)	Were engineering controls addressed?	N/A	☐	Performance based
(ii)	Were exposure limits addressed?	N/A	☐	Performance based
(ii)	Were hazardous substance handling procedures addressed?	N/A	☐	Performance based
(iii)	Is the PPE appropriate for the hazards identified?	N/A	☐	Performance based
(iv)	Is respiratory protection worn when inhalation hazards present?	N/A	☐	Performance based
(v)	Is the buddy system used in the hazard zone?	N/A	☐	Performance based
(vi)	Are backup personnel on standby?	N/A	☐	Performance based
(vi)	Are advanced first aid support personnel standing by?	N/A	☐	Performance based
(vii)	Has the ICS designated safety official been identified?	SSP-A	☐	
(vii)	Has the Safety Official evaluated the hazards?	N/A	☐	Performance based
(viii)	Can the Safety Official communicate with IC immediately?	N/A	☐	Performance based
(ix)	Are appropriate decontamination procedures implemented?	N/A	☐	Performance based

Emergency Safety & Response Plan Compliance Checklist Form A (ICS-208-CG SSP-J)

Purpose: The Emergency Safety and Response Plan 1910.120 Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response. It also identifies how form ICS-208-CG SSP-J can be used to satisfy the HAZWOPER requirements. This checklist is an optional form.

Preparation: The Emergency Safety and Response Plan 1910.120 Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (ICS-208-CG SSP-H). Many of the requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The Safety Officer should maintain The Emergency Safety and Response Plan (ERP) 1910.120 Compliance Checklist.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
5	Location of Site	Enter the site location.
6 a	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
6 b	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
6 c	ICS Form	Lists those requirements covered by ICS-208-CG SSP-A.
6 d	Check Block	Enter the check if the site satisfies the requirement.
6 f	Comments	This provides additional information on the requirement. The user may also enter comments.
7	Prepared by	Enter the name and position of the person completing the worksheet.

CG ICS SSP: 1910.120 COMPLIANCE CHECKLIST (Form B)	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Site Supervisor/Leader	5. Location of Site

6.a. Cite: 1910.120	6.b. Requirement(sections that duplicate or explain are omitted)	6.c. ICS Form	6.d. Check	6.e. Comments
1910.120 (**b**)(1)(ii)(A)	Organizational structure?	203	☐	
(B)	Comprehensive workplan?	IAP	☐	Incident Action Plan
(C)	Site Safety Plan?	SSP-B	☐	
(D)	Safety and health training program?	N/A	☐	Responsibility of each employer
(E)	Medical surveillance program?	N/A	☐	Responsibility of each employer
(F)	Employer SOPs?	N/A	☐	Responsibility of each employer
(G)	Written program related to site activities?	N/A	☐	
(**b**)(1)(iii)	Site excavation meets shored or slope requirements in 1926?	N/A	☐	
(**b**)(2)(i)(D)	Lines of communication?	201 203 205	☐	
(**b**)3(iv)	Training addressed?	N/A	☐	Responsibility of each employer
(v)-(vi)	Information and medical monitoring addressed?	N/A	☐	Responsibility of each employer
(**b**)4(i)	Site Safety Plan kept on site?	N/A	☐	
(ii)(A)	Safety and health hazard analysis conducted?	N/A	☐	
(B)	Properly trained employees assigned to right jobs?	N/A	☐	
(C)	Personnel Protective Equipment issues addressed?	SSP-F	☐	
(E)	Frequency and types of air monitoring addressed?	SSP-E	☐	
(F)	Site control measures in place?	SSP-B	☐	
(G)	Decontamination procedures in place?	SSP-G	☐	
(H)	Emergency Response Plan in place?	SSP-D	☐	
(I)	Confined space entry procedures?	SSP-B	☐	
(J)	Spill containment program	SSP-B	☐	
(iii)	Pre-entry briefings conducted?	SSP-I	☐	
(iv)	Site Safety Plan effectiveness evaluated?	SSP-H	☐	
(**c**)(1)	Site characterization done?	N/A	☐	
(**c**)(2)	Preliminary evaluation done by qualified person?	N/A	☐	
(**c**)(3)	Hazard identification performed?	SSP-B	☐	
(**c**)(4)(i)	Location and size of site identified?	SSP-B	☐	
(ii)	Response activities, job tasks identified?	SSP-B	☐	
(iii)	Duration of tasks identified?	SSP-B	☐	Operational period
(iv)	Site topography and accessibility addressed?	SSP-C	☐	
(v)	Health and safety hazards addressed?	SSP-B	☐	
(vi)	Dispersion pathways addressed?	SSP-B	☐	
(vii)	Status and capabilities of medical emergency response teams?	206	☐	
(**c**)(5)(i)(iv)	Chemical protective clothing addressed and properly selected?	SSP-F	☐	
(ii)	Respiratory protection addressed?	SSP-B and F	☐	
(iii)	Level B used for unknowns?	N/A	☐	

CG ICS SSP: 1910.120 COMPLIANCE CHECKLIST Form B (cont)	1. Incident Name	2. Date/Time Prepared	3. Operational Period		
6.a. Cite: 1910.120	6.b. Requirement(sections that duplicate or explain are omitted)		6.c. ICS Form	6.d. Check	6.e. Comments
1910.120 (**c**)(6)(i)	Monitoring for ionization conducted?		SSP-E	☐	
(ii)	Monitoring conducted for IDLH conditions?		SSP-E	☐	
(iii)	Personnel looking out for dangers of IDLH environments?		N/A	☐	
(iv)	Ongoing air monitoring program in place?		SSP-E	☐	
(**c**)(7)	Employees informed of potential hazard occurrence?		SSP-B	☐	
(**c**)(8)	Properties of each chemical made aware to employees?		SSP-B	☐	
(**d**)(1)	Appropriate site control procedures in place?		IAP, SSP-B	☐	
(**d**)(2)	Site control program developed during planning stages?		IAP, SSP-B	☐	
(**d**)(3)	Site map, work zones, alarms, communications addressed?		IAP, SSP-B	☐	
(**g**)(1)(i)	Engineering, admin controls considered?		SSP-B	☐	
(iii)	Personnel not rotated to reduce exposures?		N/A	☐	
(**g**)(5)(i)	PPE selection criteria part of employer's program?		N/A	☐	Responsibility of employer
(ii)	PPE use and limitations identified?		SSP-F	☐	
(iii)	Work mission duration identified?		SSP-F	☐	
(iv)	PPE properly maintained and stored?		N/A	☐	Responsibility of employer
(vi)	Are employees properly trained and fitted with PPE?		N/A	☐	Responsibility of employer
(vii)	Are donning and doffing procedures identified?		SSP-F	☐	
(viii)	Are inspection procedures properly identified?		SSP-F	☐	
(ix)	Is a PPE evaluation program in place?		SSP-F	☐	
(**h**) (3)	Periodic monitoring conducted?		SSP-E	☐	
(**k**)(2)(i)	Have decontamination procedures been established?		SSP-G	☐	
(ii)	Are procedures in place for contamination avoidance?		SSP-G	☐	
(iii)	Is personal clothing properly deconned prior to leaving the site?		SSP-G	☐	
(iv)	Are decontamination deficiencies identified and corrected?		SSP-H	☐	
(**k**)(3)	Are decontamination lines in the proper location?		SSP-C	☐	
(**k**)(4)	Are solutions/equipment used in decon properly disposed of?		N/A	☐	
(**k**)(6)	Is protective clothing and equipment properly secured?		N/A	☐	
(**k**)(7)	If cleaning facilities are used, are they aware of the hazards?		N/A	☐	
(**k**)(8)	Have showers and change rooms provided, if necessary?		N/A	☐	
(**l**)(1)(iii)	Are provisions for reporting emergencies identified?		SSP-D	☐	
(iv)	Are safe distances and places of refuge identified?		SSP-B and C	☐	
(v)	Site security and control addressed in emergencies?		SSP-D	☐	
(vi)	Evacuation routes and procedures identified?		SSP-D	☐	
(vii)	Emergency decontamination procedures developed?		SSP-D	☐	
(ix)	Emergency alerting and response procedures identified?		SSP-D	☐	
(x)	Response teams critiqued and followup performed?		SSP-H	☐	
(xi)	Emergency PPE and equipment available?		SSP-D	☐	

CG ICS SSP: 1910.120 COMPLIANCE CHECKLIST Form B (cont)	1. Incident Name	2. Date/Time Prepared	3. Operational Period		
6.a. Cite:	6.b. Requirement(sections that duplicate or explain are omitted)		6.c. ICS Form	6.d. Check	6.e. Comments
1910.120 (l)(3)(i)	Emergency notification procedures identified?		SSP-D	☐	
(ii)	Emergency response plan separate from Site Safety Plan?		SSP-D	☐	
(iii)	Emergency response plan compatible with other plans?		SSP-D	☐	
(iv)	Emergency response plan rehearsed regularly?		SSP-D	☐	
(v)	Emergency response plan maintained and kept current?		SSP-H	☐	
1910.165 (b)(2)	Can alarms be seen/heard above ambient light and noise levels?		N/A	☐	
(b)(3)	Are alarms distinct and recognizable?		N/A	☐	
(b)(4)	Are employees aware of the alarms and are they accessible?		SSP-D	☐	
(b)(5)	Are emergency phone numbers, radio frequencies clearly posted?		206	☐	
(b)(6)	Signaling devices in place where there are 10 or more workers?		IAP	☐	
(c)(1)	Are alarms like steam whistles, air horns being used?		IAP	☐	
(d)(3)	Are backup alarms available?		IAP	☐	
(m)	Are areas adequately illuminated?		IAP	☐	
(n)(1)(i)	Is an adequate supply of potable water available?		IAP	☐	
(ii)	Are drinking water containers equipped with a tap?		IAP	☐	
(iii)	Are drinking water containers clearly marked?		IAP	☐	
(iv)	Is a drinking cup receptacle available and clearly marked?		IAP	☐	
(n)(2)(i)	Are non-potable water containers clearly marked?		IAP	☐	
(n)(3)(i)	Are their sufficient toilets available?		IAP	☐	
(n)(4)	Have food handling issues been addressed?		IAP	☐	
(n)(6)	Have adequate wash facilities been provided outside hazard zone?		IAP	☐	
(n)(7)	If response is greater than 6 months, have showers been provided?		IAP	☐	
7. Prepared By:		**ICS-208-CG SSP-K (rev 9/06): Page 3.** Page _____ of _____			

HAZWOPER 1910.120 COMPLIANCE CHECKLIST FORM B (ICS-208-CG SSP-K)

Purpose: The HAZWOPER 1910.120 Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response. It also identifies how other ICS forms can be used to satisfy the HAZWOPER requirements. This is an optional form.

Preparation: The HAZWOPER 1910.120 Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (ICS-208-CG SSP-H). The Site Safety Plan Forms (A-G) best meet some of the requirements. The Incident Action Plan is suited to address other requirements, and the Safety Officer should ensure the IAP addresses them. Other requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The HAZWOPER 1910.120 Compliance Checklist should be maintained by the Safety Officer.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
5	Location of Site	Enter the site location.
6.a.	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
6.b.	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
6.c.	ICS Form	Lists those ICS Forms that cover the requirement. **IAP designations means it should be covered in IAP, it does not guarantee it is covered. The Safety Officer must ensure this.**
6.d.	Check Block	Enter the check if the site satisfies the requirement.
6.e.	Comments	This provides information on where else the requirement may be met. The user may also enter comments.
7	Prepared by	Enter the name and position of the person completing the worksheet.

CG ICS SSP: 1910.120 DRUM COMPLIANCE CHECKSHEET	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Note: tanks and vaults should also be treated in the same manner as described below [1910.120(j)(9)]. Many can also pose confined space hazards.

9.a. Cite: 1910.120 (Cites that duplicate or explain requirements are omitted)	9.b. Requirement	9.c. Check	9.d. Comments
(j)(1)(ii)	Drums meet DOT, OSHA, EPA regs for waste they contain, including shipment?	☐	
(iii)	Drums inspected and integrity ensured prior to movement?	☐	
(iii)	Or drums moved to an accessible location (staging area) prior to movement?	☐	
(iv)	Unlabelled drums treated as unknown until properly identified and labeled?	☐	
(v)	Site activities organized to minimize drum handling?	☐	
(vi)	Employers properly warned about the hazards of moving and handling drums?	☐	
(vii)	Suitable overpack drums are available for addressing leaking and ruptured drums?	☐	
(viii)	Leaking materials from drums properly contained?	☐	
(ix)	Are drums that cannot be moved, emptied of contents with transfer equipment?	☐	
(x)	Are suspect buried drums surveyed with underground detection system?	☐	
(xi)	Are soil and covering material above buried drums removed with caution?	☐	
(xii)	Is the proper extinguishing equipment on scene to control incipient fires?	☐	
(j)(2)(i)	Are airlines on supplied air systems protected from leaking drums?	☐	
(ii)	Are employees at a safe distance, using remote equipment, when handling explosive drums?	☐	
(iii)	Are explosive shields in plane to protect workers opening explosive drums?	☐	
(iv)	Is response equipment positioned behind shields when shields are used?	☐	
(v)	Are non-sparking tools used in flammable or potentially flammable atmospheres?	☐	
(vi)	Are drums under extreme pressure opened slowly & workers protected by shields/distance?	☐	
(vii)	Are workers prohibited from standing and working on drums?	☐	
(j)(3)	Is the drum handling equipment positioned and operated to minimize sources of ignition?	☐	
(j)(5)(i)	For shock sensitive drums, have all non-essential employees been evacuated?	☐	
(ii)	For shock sensitive drums: is handling equipment provided with shields to protect workers?	☐	
(iii)	Are alarms that announce start/finish of explosive drum handling actions in place?	☐	
(iv)	Are continuous communications in place between the drum handling site & command post?	☐	
(v)	Are drums under pressure properly controlled for prior to handling?	☐	
(vi)	Are drums containing packaged laboratory wastes treated as shock sensitive?	☐	
(j)(6)(i)	Are lab packs opened by trained and experienced personnel?	☐	
(ii)	Are lab packs showing crystallization treated as shock sensitive?	☐	
(j)(8)(ii-iii)	Are drum staging areas manageable with marked access and egress?	☐	
(iv)	Is bulking of drums conducted only after drum contents have been properly identified?	☐	

10. Prepared By:	**Form SSP-L (rev 9/06)** Page _____ of _____

HAZWOPER 1910.120 DRUM COMPLIANCE CHECKLIST (ICS-208-CG SSP-L)

Purpose: The HAZWOPER 1910.120 Drum Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response whenever drums are encountered during an incident. This is an optional form.

Preparation: The HAZWOPER 1910.120 Drum Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (ICS-208-CG SSP-H). The Site Safety Plan Forms (A-G) best meet some of the requirements. Other requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The HAZWOPER 1910.120 Drum Compliance Checklist should be maintained by the Safety Officer.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Note	Tanks and vaults should also be treated in the same manner as described in the checklist (1910.120((j)(9)).
9.a.	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
9.b.	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
9.c.	Check Block	Enter the check if the site satisfies the requirement.
9.d.	Comments	This provides information on where else the requirement may be met. The user may also enter comments.
10	Prepared by	Enter the name and position of the person completing the worksheet.

1. Hazard: **Products Containing Benzene**	2. Division / Groups / Units Affected:	3. Job Tasks Involving Hazard:

Medical Condition	Action Level	Reference	Signs, Symptoms & Potential Health Effects	Exposure Route	Controls: Engineering, Administrative, PPE	Medical Response
Cancer			Bone marrow depression, Abnormal blood counts, Cancer of the blood (leukemia), incapacitating illness & death	[X] Inhalation [X] Absorption [ ] Ingestion [ ] Injection	- Avoid Contact - Avoid confined & tight spaces - Keep upwind - Air monitoring - Chem resistance clothing - Respirators > PEL	- Test blood & urine for phenol
Dermatitis			Reddening of the skin, benzene is a suspected skin carcinogen	[ ] Inhalation [X] Absorption [ ] Ingestion [ ] Injection	- Avoid Contact - Keep upwind - Wear chemical resistance gloves & clothing - Wash frequently	- Wash skin & exposed areas with soap and water
Eye Irritation			Red eyes, tearing eyes, blurry vision	[ ] Inhalation [X] Absorption [ ] Ingestion [ ] Injection	- Avoid Contact - Keep upwind - Wear safety glasses - High splash zone, wear chemical resistance goggles	- Flush eyes with water
Central Nervous System Effect			Giddiness, headache, nausea, staggered gait, fatigue	[X] Inhalation [X] Absorption [ ] Ingestion [ ] Injection	- Avoid contact, & confined/tight spaces - Keep upwind - Air monitoring - Chem resistance clothing - Respirators > PEL	- Test blood & urine for phenol
Respiratory Irritant			Irritation of nose, throat and lungs	[X] Inhalation [X] Absorption [ ] Ingestion [ ] Injection	- Avoid confined & tight spaces - Keep upwind - Air monitoring - Chem resistance clothing - Respirators > PEL	- Test blood & urine for phenol

PAGE INTENTIONALLY LEFT BLANK

1. Hazard: **Products Containing Hydrogen Sulfide (H_2S)**	2. Division / Groups / Units Affected:	3. Job Tasks Involving Hazard:

Medical Condition	Action Level	Reference	Signs, Symptoms & Potential Health Effects	Exposure Route	Controls: Engineering, Administrative, PPE	Medical Response
Chemical asphyxiation	**Note: H2S has poor warning properties**		Headache, dizziness, fatigue, staggered gait, giddiness	[X] Inhalation [ ] Absorption [ ] Ingestion [ ] Injection	- Avoid Ccontact - Avoid confined & tight spaces - Keep upwind - Air monitoring - SCBA if > PEL	
Diarrhea			Runny or loose stool	[X] Inhalation [ ] Absorption [ ] Ingestion [ ] Injection	- Avoid contact - Wash frequently - Avoid confined & tight spaces - Keep upwind - Air monitoring - SCBA if > PEL	- If ingested, induce vomiting, drink large volumes of water
Respiratory Paralysis			Difficulty breathing, fatigue, strong signs of weakness	[X] Inhalation [ ] Absorption [ ] Ingestion [ ] Injection	- Avoid contact - Wash frequently - Avoid confined & tight spaces - Keep upwind - Air monitoring - SCBA if > PEL	- Provide support respiration where needed
Chemical Burns			Severe burning of skin, eyes and other external organs	[X] Inhalation [X] Absorption [ ] Ingestion [ ] Injection	- Avoid contact - Wash frequently - Avoid areas > 10% LEL - Keep upwind - Air monitoring - Chem protective clothing - SCBAs if > PEL	- Treat for burns as appropriate
Central Nervous System Depression			Headache, dizziness, fatigue, staggered gait, giddiness	[X] Inhalation [ ] Absorption [ ] Ingestion [ ] Injection	- Avoid confined & tight spaces - Keep upwind - Air monitoring - SCBA if > PEL	- Remove from site

PAGE INTENTIONALLY LEFT BLANK

1. Hazard: **General Signs & Symptoms of Toxic Exposure**	2. Division / Groups / Units Affected:	3. Job Tasks Involving Hazard:

Signs and Symptoms	
Nausea, vomiting, dizziness	Hearing loss
Weakness, tremors	Vision loss or problems
Headaches	Dilated or pinpoint pupils
Stomach pains	Changes in sense of smell
Diarrhea	Personality changes
Shortness of breath, asthma, cough, wheeze, excess sputum, blood in sputum	Sudden weight loss or change in appetite
Chest pains	Unusual fatigue or sleeping difficulties
Dizziness, difficulty maintaining balance	Unusual irritability
Skin rashes / allergies / sores	

Action to be Taken
1. Remove person and others from site and take to medical / first aid for evaluation
2. Report symptoms to supervisor
3. Report incident to safety officer and request site characterization
4. Evaluate potential sources

PAGE INTENTIONALLY LEFT BLANK

1. Hazard: **Heat Stress**	2. Division / Groups / Units Affected:	3. Job Tasks Involving Hazard:

Medical Condition	Action Level	Reference	Signs, Symptoms & Potential Health Effects	Medical Response
Heat Stroke		NIOSH: Working in Hot Environments	- Skin is hot - Skin is dry - Skin is red and spotted - Body Temp: 105 or greater - Mental confusion - Convulsions - Unconscious	- Get EMT assistance immediately - Remove victim to cool, shaded area - Soak clothing w/water - Fan body to increase cooling
Heat Exhaustion		NIOSH: Working in Hot Environments	- Extreme weakness - Giddiness, headache - Nausea, vomiting - Skin is clammy & moist - Complexion is pale / flushed - Body Temp: normal to slightly elevated	- Notify EMT - Rest victim in cool, shaded place - Have victim drink plenty of water
Heat Cramps		NIOSH: Working in Hot Environments	- Painful spasms of muscles - Profuse sweating	- Remove victim from site - Ensure victim drinks plenty of water and replaces electrolytes
Fainting		NIOSH: Working in Hot Environments	- Victim faints due to lack of blood to the brain	- Remove victim to cool, shaded area - Ensure victim drinks plenty of water - Ensure victim is not sedentary in direct heat
Heat Rash		NIOSH: Working in Hot Environments	- Skin rash - Experience of prickly heat	- Remove victim to cool place - Ensure victim drinks plenty of water

Engineering, Administrative, PPE Controls:
- Acclimatize workers
- Avoid direct sun
- Wear long sleeve cotton shirts and wide brimmed hats
- Institute work/rest regimens
- Provide cool rest areas
- Drink 5-7 ounces water every 15-20 minutes. Do not exceed 1 to 1-1/2 quarts per hour and 12 quarts per day.
- Consider drinking diluted electrolyte replacement liquids for extreme heat situations
- Consider cooling garments, ice or gel pack vests
- Use heat stress monitors
- Use canopies or other shelter
- Provide cooling fans, misters
- Minimize exposure for workers with illnesses and excessive weight

PAGE INTENTIONALLY LEFT BLANK

1. Hazard: **Small Boat Safety**	2. Small boat unit assignment:	3. Site Supervisors:

Activity	**Safe Working Practices**	**Checked ([X])**
Pre-boarding	Receive safety briefing from boat crew operators	[ ]
	Receive emergency extrication briefing	[ ]
	Know location of emergency equipment	[ ]
	Ensure operator knows how to contact emergency services	[ ]
	Ensure operator has good comms with coordinating vessels & shore units	[ ]
	Ensure comms schedule with parent unit is understood	[ ]
	Ensure distress signals are available for day & night operations (3 per shift)	[ ]
	Ensure qualified operators are running the boats	[ ]
	Ensure appropriate number of CG approved Type I & II personal flotation devices	[ ]
	Confirm location of safe seating from boat operator	[ ]
	Ensure portable fuel tanks are full prior to boarding	[ ]
	Keep all sources of ignition away from fueling area	[ ]
	Ensure boat does not exceed safe load capacity (personnel & equipment)	[ ]
	Ensure proper footwear for maintaining adequate boat deck contact	[ ]
	Ensure equipment on boat is distributed evenly for vessel stability	[ ]
	Ensure at least 2 people are operating the boat	[ ]
	Ensure sun protection is available (glasses and sun screen)	[ ]
	Ensure adequate food & water is available for duration of operation	[ ]
	Ensure first aid kits, fire extinguishers, alternate means of propulsion	[ ]
	Ensure adequate fenders, anchors and mooring lines are available	[ ]
Boat Operations	Remain seated whenever possible. Keep low in the boat.	[ ]
	Ensure boat is able to maintain direct contact visually or by radio	[ ]
	Avoid anchoring the boat by the stern	[ ]
Boat Mooring and Egress	Keep hands & feet away from pinch points between boat & dock	[ ]
	Stay clear of lines being used for mooring	[ ]
	Do not disembark with bulky or heavy equipment; get assistance	[ ]
	If not assisting in the mooring operation, remain seated until lines are tied	[ ]

PAGE INTENTIONALLY LEFT BLANK

1. Hazard: **Vehicle Operations**	2. Vehicle unit assignment:	3. Site Supervisors:

Activity	Safe Working Practices	Checked ([X])
Before driving	Ensure operator is properly licensed and trained for type of vehicle being used	[ ]
	Ensure tires are properly inflated and have sufficient tread	[ ]
	Ensure spare tire is in good condition	[ ]
	Locate tire changing equipment	[ ]
	Ensure front hood and trunk lid are secured	[ ]
	Locate emergency road kit	[ ]
	Check headlights, brake, emergency, turn signals and parking lights	[ ]
	Check engine oil, brake fluid, windshield washer and coolant levels	[ ]
	Adjust side mirrors	[ ]
	Adjust review mirrors	[ ]
	Ensure horn is in working order	[ ]
	Ensure seat belts fasten and not damaged	[ ]
	Ensure sunglasses are available	[ ]
	Locate operating switches for lights, wipers, temperature control, defroster	[ ]
	Ensure adequate directions to destination are available	[ ]
	Check to ensure driving route is safe, e.g., not flooded or blocked	[ ]
	Ensure adequate fuel (keep at least half full during emergencies)	[ ]
	Ensure fuel filler cap is in place & tightly secured	[ ]
Vehicle Operations	After ignition, look for warning lights.	[ ]
	Test braking system, including emergency brake	[ ]
	Obey all traffic signs and speed limits	[ ]
	Do not drive if hearing, sight or appendages are impaired	[ ]
	Drive defensively; always be observant of other drivers, pedestrians, etc.	[ ]
	Do not overload vehicle with equipment or materials beyond rated capacity	[ ]
	Do not drive if tired, on medication or under influence of alcohol	[ ]
	Monitor traffic reports for accidents, weather and construction	[ ]
	Ensure operator and passengers wear seatbelts	
		[ ]
Other Precautions		[ ]
		[ ]

PAGE INTENTIONALLY LEFT BLANK

1. Hazard: **Insect Bite & Sting Hazards**	2. Division / Groups / Units Affected:	3. Job Tasks Involving Hazard:

Insect	Signs, Symptoms & Potential Health Effects	Medical Treatment
Bee, Wasp, Yellow jacket	Person wihtout allergy to bee stings: - Swelling, pain and redness at point of the sting Allergic person: - Swollen throat or tongue - Difficult breathing or swallowing - Sudden drop in blood pressure - Severe itching, hives, acute redness, swelling - Stomach cramps, nausea, or diarrhea - Reduced consciousness, shock	Person wihtout allergy to bee stings - Remove stinger without pinching or squeezing - Use cold pack to reduce swelling, use pad between skin and pack Allergic person: - Request **immediate** medical assistance for allergic persons; fatal reaction (anaphylaxis) could occur within one to two minutes of being stung - Keep wounded area below heart to slow spread of venom
Black Widow Spider	- Initially, only slight local swelling will be noticed - Intense pain will occur one to three hours after bite and continue for up to 48 hours - Severe abdominal pain and rigidity in abdominal muscles - Chest tightness, breathing difficulty - Pain in soles of feet - Nausea, vomiting - Profuse sweating or swollen eyelids	- Wash wound with soap & water - Request **immediate** medical assistance
Brown Recluse Spider	- No immediate pain or initial sharp sting, but severe pain will occur six to eight hours later - Severe redness - Center blisher with red circle around bite - Chills, fever, sweating - For allergic persons, can lead to coma and death in rare cases	- Wash wound with soap & water - Request **immediate** medical assistance - Use cold pack to reduce swelling, use pad between skin and pack
Centipede	- Pain, swelling and redness in area of the bite	- Wash wound with soap & water - Use cold pack to reduce swelling, use pad between skin and pack
Scorpion	- Immediate intense pain but minimal swelling and redness in area of the sting - Numbness and tingling at sting area may occur - For allergic persons, can lead to coma and death in rare cases	- Wash wound with soap & water - Use cold pack to reduce swelling, use pad between skin and pack

Control methods:
- Recon area prior to work and identify nests & habitats
- Identify as hazard areas & place on SSP-C, Site Map
- Identify persons with insect allergies & restrict them from entering hazard areas where necessary
- Provide insect repellent
- Encourage long sleeves & pants if practical
- Conduct bite inspection during breaks and prior to departing site
- Obtain emergency insect bite kits

PAGE INTENTIONALLY LEFT BLANK

1. Hazard: **Animal Hazards**	2. Division / Groups / Units Affected:	3. Job Tasks Involving Hazard:

Hazard Type	Potential Sources	Signs, Symptoms & Potential Health Effects	Control	Medical Treatment
Mammal bites	Dogs, cats, mongoose, mice, rats	-Pain & tenderness of wound -Redness, swelling -If left untreated and becomes infected, pus forms under the skin -Red streaks around wound -Swollen lymph nodes in arm pits, groin & neck	- Recon area prior to work & identify nests & habitats - Identify animals & any unusual behavior - Relocate animals if necessary using wildlife experts	- Get medical attention ASAP to address infection - Ensure tetanus shot is updated - Interview individual to determine appearance/disposition of animal - Control serious bleeding; apply pressure using gauze pad, tourniquets are inadvisable - Wash before touching wound - Wear nitrile gloves when treating victim - Wash wounds that are not bleeding heavily

Marine animal stings, bites	<u>*Group I*</u>
	Jellyfish,
	Portuguese Man-o-war
	Anemones
	Corals
	Hydras
	
	<u>*Group II*</u>
	Urchins,
	Cone Shells,
	Stingrays,
	Spiny fish
		- Pain & tenderness of wound
		- Wheals, or raised welts, may be visible for jellyfish stings
		- Redness, heat, swelling
		- Puss under the skin indicates infection
		- Red streaks around wound
		
		Sensitive Individuals
		- Severe pain
		- Infections & tetanus may develop
		- Allergic reactions in certain individuals:
		  - Fatigue, weakness
		  - Shock, paralysis
		  - Respiratory arrest and death
			- Recon area prior to work & identify nests & habitats
			- Place locations on SSP-C, Site Map
			- Outfit workers with protective clothing for water activities and to prevent bites
				<u>*General*</u>
				- Wash wound with soap and water
				- Get medical attention ASAP to address infection
				- Ensure tetanus shot is updated
				- Interview individual to determine appearance of animal
				- Control serious bleeding
				
				<u>*Group I*</u>
				- Do not rub or scratch affected area
				- Sprinkle alcohol on affected area, follow with meat tenderizer or talcum if available (denatures toxin)
				
				<u>*Group II*</u>
				- Soak in very warm water for 30 minutes
				- Do not use very hot water
				- For sea urchin puncture wounds, use tweezers to remove spines imbedded in skin

PAGE INTENTIONALLY LEFT BLANK