

Waste Management Plan

Response Actions for Aqueous Film Forming Foam Release
at Adit 6 of the Red Hill Bulk Fuel Storage Facility
Joint Base Pearl Harbor-Hickam

Naval Facilities Engineering Systems Command Hawaii
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1.0 INTRODUCTION

This Waste Management Plan has been prepared in support of response actions for a release of Aqueous Film Forming Foam (AFFF) at Adit 6 of the Red Hill Bulk Fuel Storage Facility (RHBFSF).

2.0 IDENTIFICATION OF WASTE STREAMS

Below is a list of the potential waste streams from the response actions.

- AFFF Concentrate
- Contaminated Soil
- Contaminated Concrete
- Contaminated Asphalt
- Water / Rinsate with AFFF
- Absorbents
- Personal Protective Equipment

3.0 WASTE MANAGEMENT

Waste will be stored in a secured area to prevent access to unauthorized personnel.

- Waste will be properly accumulated in appropriate containers.
- Containers will be in good condition and compatible with waste.
- Different waste types will be segregated whenever feasible.
- Containers with incompatible waste will be separated from other containers.
- Containers with liquid waste will be placed on spill pallets or in secondary containment berms.
- Containers will be closed at all times except when adding waste.
- Containers will be marked/labeled with words describing its contents.
- Bulk waste may be placed on lined areas with cover and containment berms to prevent migration of contamination of potential concern to the environment.
- Waste will not be accumulated near storm drains, culverts, streams or navigable waters.
- Emergency preparedness, response and notification procedures in Section 5.0 will be followed.

4.0 WASTE DETERMINATION AND DISPOSAL

Waste determination will be made by using generator knowledge (e.g., Safety Data Sheet) and/or laboratory analysis (e.g., TCLP, PCB, etc.).

- Sampling will be performed in accordance with the DOH HEER Office Technical Guidance Manual.
- Analytical testing will be performed at a laboratory with appropriate accreditation.
- Prior to transportation for offsite disposal, waste will be packaged, marked and labeled in accordance with applicable U.S. Department of Transportation regulations.
- Transportation vehicles will be placarded, if applicable.
- Transporters and designated facilities with proper approval/permit will be used.
- Transportation of waste to the designated facility will be documented and tracked via appropriate shipping paper / manifest.

5.0 EMERGENCY PREPAREDNESS

Emergency preparedness is necessary to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of oil and hazardous substances to air, soil, or surface water.

TO REPORT AN EMERGENCY, CALL 911 (Regional Dispatch Center)

(An emergency is any incident (e.g., oil and hazardous substance spill/release, fire, explosion, other) that could threaten human health or the environment)

Be Prepared to Provide the Following Information:

1. Location of Emergency
2. Type of Emergency: Spill/Release, Fire, Explosion, Other
3. Type of Hazardous Substance
4. Source of Spill: Drum, Equipment, etc.
5. Quantity or Area of Spill
6. Date and Time of Spill
7. Spill Direction
8. Immediate threats to human health, safety, or environment
9. Your Name and Phone Number

In the event of a fire, explosion, or release of oil and/or hazardous substances which could threaten human health or the environment, personnel shall call the JBPHH Regional Dispatch Center (RDC) by dialing 911. The 911 operator will then route the call to the RDC. The JBPHH RDC is staffed 24 hours a day, and the NAVFAC HI Command Duty Officer (808-347-8289) is also available 24 hours a day.

Upon receiving notification of an emergency, the RDC, in consultation with the Emergency Coordinator, and/or Command Duty Officer, will dispatch the appropriate emergency response personnel. Depending on the nature of the emergency, the emergency response personnel may include medical, security, and firefighting support.

EMERGENCY COORDINATOR

An emergency coordinator is a designated individual on the generator's premises or on call, available to respond to an emergency by reaching the facility within a short period of time with the responsibility for coordinating all emergency measures and implementing the necessary emergency response procedures.

PRIMARY:

Joint Base Pearl Harbor-Hickam Qualified Individual (QI)
Naval Facilities Engineering Systems Command, Hawaii
400 Marshall Road
Joint Base Pearl Harbor Hickam, Hawaii, 96860
(808) 864-2463 (24 hours)

ALTERNATES:

Navy Region Hawaii Naval On-Scene Coordinator (NOSC) Representative
Navy Region Hawaii
850 Ticonderoga Street
Joint Base Pearl Harbor Hickam, Hawaii, 96860-5101
(808) 630-3292 (24 hours)

NAVFAC Hawaii Command Duty Officer (CDO)
Naval Facilities Engineering Systems Command, Hawaii
400 Marshall Road
Joint Base Pearl Harbor Hickam, Hawaii, 96860
(808) 347-8289 (24 hours)

The primary duties of the Emergency Coordinator are to:

1. Coordinate with Regional Dispatch Center personnel in requesting support as required from the following:
 - a. Federal Fire Department for fire, hazardous material response, and other assistance
 - b. JBPHH Security Forces for security issues
 - c. JBPHH Spill Response Personnel
 - d. NAVFAC HI / JBPHH / Navy Region Hawaii Safety
 - e. JBPHH Qualified Individual(QI)
 - f. Navy Region Hawaii Naval On-Scene Coordinator (NOSC)
 - g. JBPHH / NAVFAC HI Environmental
 - h. Other activity personnel as required such as specific points of contact for affected facilities
 - i. Other Emergency Organizations as required
2. Notify JBPHH Commander/Deputy Commander as required

MUTUAL AGREEMENTS

In the event of an emergency, any of the following organizations may provide immediate police, fire department, and medical support:

Federal Fire Department
City and County of Honolulu Fire Department
Joint Base Pearl Harbor-Hickam Security
Honolulu Police Department
Honolulu Emergency Medical Services Division

JBPHH has existing Mutual Aid Agreements with the non-federal organizations listed above. Any of the agencies listed above can be contacted via the Regional Dispatch Center by dialing 911.

Emergency Organizations		
Emergency	Organization	Telephone
Injury/Chemical Exposure	Pearl Harbor Ambulance Service	(808) 471-7117 or 911 if on government telephone
	Pearl Harbor Makalapa Medical Clinic (1253 Makalapa Road)	(808) 471-1880
	Shipyards Medical Naval Health Clinic (490 Central Avenue)	(808) 474-0625
	15 th Medical Group Hickam Clinic (755 Scott Circle)	(808) 448-6000
	Tripler Army Medical Center (1 Jarrett White Road)	(808) 433-6661/6662
Fire/Explosion	Federal Fire Department	(808) 471-7117 or 911 if on government telephone
	JBPHH Security	(808) 471-7114
Spill on Land or Water	Federal Fire Department	(808) 471-7117 or 911 if on government telephone
	NAVFAC HI Command Duty Officer (CDO)	(808) 347-8289
	Joint Base Pearl Harbor-Hickam Qualified Individual	(808) 864-2463 (24 hours)
	Navy Region Hawaii Naval On-Scene Coordinator (NOSC) Representative	(808) 630-3292 (24 hours)
	U.S. Coast Guard Primary: Honolulu Section Pollution Response Secondary: District 14 Command Center	(808) 842-2600 (808) 535-3333
Natural Disaster	Civil Defense	(808) 733-4300
If Release, Fire, or Explosion Threatens Human Health or the Environment	National Response Center	(800) 424-8802 (24 hours)
	Hawaii Department of Health, Hazard Evaluation and Emergency Response (HEER) Office	(808) 586-4249 or (808) 247-2191 (24 hours)
Upon Implementation of the Contingency Plan	Hawaii Department of Health/SERC	(808) 586-4249 or (808) 247-2191 (24 hours)
	Oahu Civil Defense, City and County of Honolulu/LEPC	(808) 733-4300

EMERGENCY EQUIPMENT

Emergency equipment will be readily available and functional in the event of an emergency.

Communications and Alarm Systems

In the event of an emergency, warnings to nearby people shall be given through mass phone messaging, radios, intercom system, air horns, car horns, bull horns, smoke/fire alarms, and/or shout outs as necessary. External communications shall be available through office phone, cellular phone, or two-way radios.

Portable Fire Extinguishers and Spill Control Equipment

At a minimum, fire extinguishers shall be positioned. Containers of liquid shall be stored on spill containment with 110% of the volume capacity of the single largest container. Spill containment pallets or berms shall be empty and clean with no signs of spills. Appropriate spill kits shall be staged and stocked with supplies, tools and personal protective equipment.

Water at Adequate Volume and Pressure

Nearby fire hydrants provide adequate volume and water pressure. Federal Fire Department (Fed Fire) will identify the location of the nearest fire hydrant connection.

EMERGENCY PREVENTION PROCEDURES

Waste Characterization / Segregation of Incompatible Waste

To prevent chemical reactions, explosions, and/or spills, waste shall be compatible with the containers it is stored in, incompatible wastes shall not be placed in the same container, and containers of incompatible wastes shall be separated. Incompatible liquid wastes shall be stored on separate spill containment. The site manager shall conduct periodic inspections to ensure that waste is identified, labeled and properly segregated and stored in proper containers and on the necessary spill containment.

Spill Prevention

Containers of waste shall be kept closed except when adding or removing waste. Funnels shall be removed when not in use or funnel and/or container is secured so as not to provide a spill hazard. Containers of liquids shall be stored on spill containment with 110% of the volume capacity of the single largest container. Spill containment pallets or berms shall be empty and clean with no signs of spills. Appropriate spill kits shall be staged and stocked with supplies, tools and personal protective equipment. The site manager shall conduct periodic inspections to ensure that proper spill prevention measures are implemented.

Prevention of Fires and Explosions

Take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including, but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks, spontaneous ignition, and radiant heat.

Staging and Maintenance of Emergency Equipment

Emergency Equipment shall be staged at the site with proper aisle space access, and be periodically operated/inspected/maintained to ensure proper operation.

Evacuation Plan

The site manager shall train on-site personnel on the appropriate alarms notifying personnel of an evacuation and train on the appropriate evacuation and emergency notification procedure. An appropriate evacuation procedure may typically be exiting the site and mustering at a pre-determined location as would be the case for a fire within the building or building complex. If necessary, the site manager shall post a map showing the evacuation routes. Maps showing fire exit routes are typically posted throughout buildings and can be modified to show the site evacuation routes.

EMERGENCY RESPONSE PROCEDURES

EVACUATION PROCEDURE

Any person who detects an imminent or actual fire, explosion, or any other unplanned sudden or non- sudden release of oil or hazardous substance or constituents shall immediately sound a vocal and/or audible warning and/or telephonic warning to endangered personnel. If site evacuation is required, a continuous, uninterrupted audible alarm (e.g. air horn, bull horn, vehicle horn, etc.) shall be sounded for approximately 10 seconds. Voice and personal contact may also be used to initiate evacuation if practical. A fire alarm may be activated if necessary. Once an alarm is sounded, all personnel shall shut down operations and assemble at the muster point. After an evacuation occurs, all persons shall be accounted for by the site supervisors and emergency coordinator or designee.

EMERGENCY PROCEDURES

Initial Emergency Response

Whenever there is an imminent or actual emergency situation, the Emergency Coordinator (or his designee when on call) must immediately activate internal facility alarms or communication systems, where applicable, to notify all facility personnel. The Emergency Coordinator must also notify appropriate state or local agencies with designated response roles if their help is needed.

The Regional Dispatch Center, in consultation with the Emergency Coordinator, will request the appropriate on-base offices or teams to aid in the emergency response. This includes, but is not limited to:

- a. Federal Fire Department for fire, hazardous material response, and other assistance
- b. JBPHH Security Forces for security issues
- c. NAVFAC HI / JBPHH Spill Response Personnel
- d. NAVFAC HI JBPHH / Navy Region Hawaii Safety
- e. NAVFAC HI Environmental
- f. Other activity personnel as required

Identification of Hazardous Materials Released

The Emergency Coordinator and Response Team must immediately identify the hazardous materials released, exact source, amount, and areal extent of any released materials through knowledge of the waste process or container contents, waste manifests, Safety Data Sheets, observation, facility records, and chemical analysis.

Assessment of Hazards to Human Health or the Environment

Concurrently, the Emergency Coordinator and Response Team must assess possible hazards to human health or the environment due to direct and indirect effects of the release, fire or explosion. An indirect effect could be any toxic or irritating gases that are generated by a fire or any release to surface water of chemical agents used to control a fire or prevent an explosion. The following criteria should be considered:

- The nature and magnitude of the explosion, fire or release
- Weather (for example, wind direction and speed) and other conditions at the time of the explosion, fire or release
- The possibility that the explosion, fire or release may result in the spreading of additional explosions, fires or releases
- The possible threat to human health and/or the environment from an explosion, fire or release

Reporting of Possible Hazards Outside of the Installation

If the Emergency Coordinator and Response Team determine that the installation has had a release, fire or explosion which could threaten human health or the environment outside the installation, the Emergency Coordinator shall notify appropriate local authorities and help them to determine whether local areas should be evacuated. The Emergency Coordinator must coordinate to immediately notify the Hawaii Department of Health, Hazard Evaluation and Emergency Response (HEER) Office, Coast Guard, and/or National Response Center. The report must include:

- Name and telephone number of the reporter
- Name and address of the generator
- Time and type of incident (for example, release, fire and/or explosion)
- Name and quantity of material(s) involved, to the extent known
- The extent of injuries, if any
- The possible hazards to human health, or the environment outside the facility

Procedures to Prevent Explosions, Fires and Releases

The Emergency Coordinator and Response Team must take all reasonable measures necessary to ensure that explosions, fires and releases do not occur, recur, or spread. These measures include stopping operations, collecting and containing released hazardous substance, and removing or isolating containers of incompatible waste. Identification and characterization of released hazardous substance and contaminants remaining at the site must be conducted in order to determine whether there are any incompatible wastes that can pose a threat.

Storage and Treatment of Released Hazardous Substance

Immediately following an incident, the Emergency Coordinator and Response Team will make arrangements for the proper treatment and/or disposal of recovered waste, waste residues, and any contaminated materials.

Restoration of Emergency Equipment

All Emergency Equipment shall be cleaned, repaired and/or replaced as necessary before operations are resumed.

NOTIFICATION OF INCIDENT / REQUIRED REPORT

Record the time, date and details of the incident and submit a written report to the State of Hawaii Department of Health. This written report must include the following:

- Name, address, and telephone number of the generator
- Date, time, and type of incident (for example, release, fire and/or explosion)
- Name and quantity of material(s) involved
- The extent of injuries, if any
- An assessment of actual or potential hazards to human health or the environment, where applicable
- Estimated quantity and disposition of recovered material that resulted from the incident.