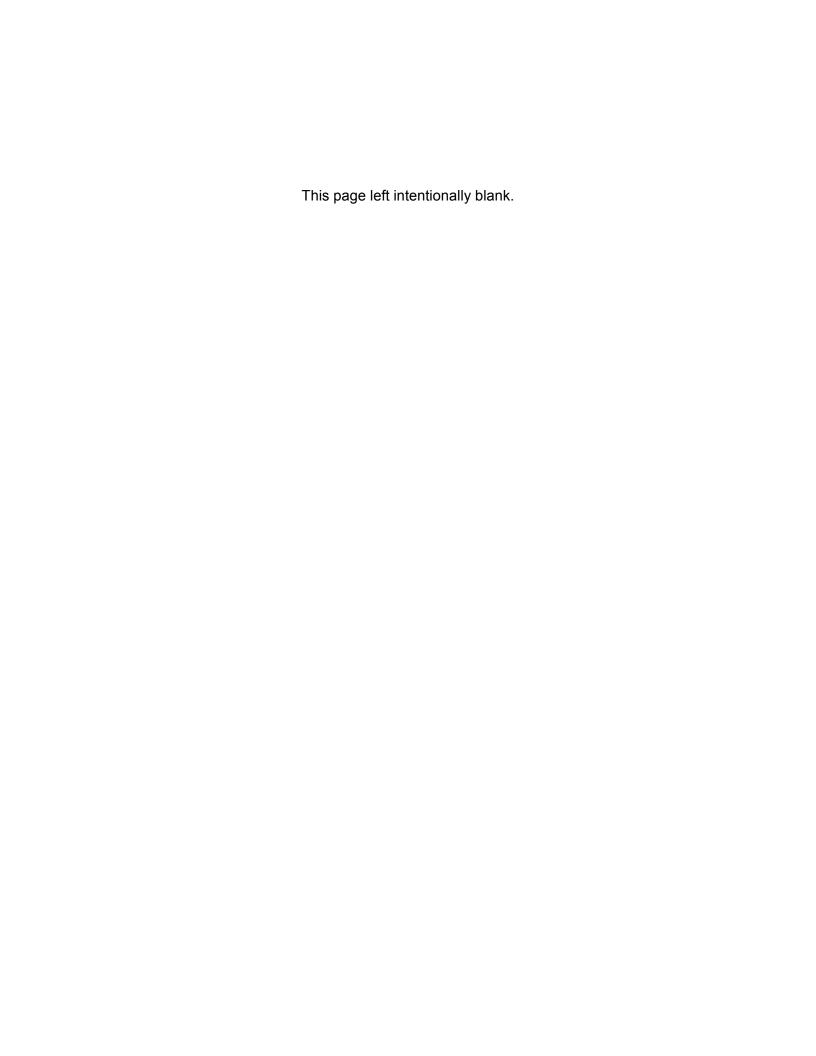
### REPORT TO THE TWENTY-SECOND LEGISLATURE STATE OF HAWAII 2004

PURSUANT TO CHAPTERS 128D AND 128E, HAWAII REVISED STATUTES
REQUIRING THE DEPARTMENT OF HEALTH TO REPORT
ENVIRONMENTAL RESPONSE LAW AND HAWAII COMMUNITY RIGHT TO
KNOW ACT FINANCIAL AND ENVIRONMENTAL SITE INFORMATION
AND PURSUANT TO ACT 200, SESSION LAWS OF HAWAII, 2003,
TO REPORT THE REVENUES AND EXPENDITURES OF THE
ENVIRONMENTAL RESPONSE REVOLVING FUND FOR FISCAL YEAR 2003

PREPARED BY: STATE OF HAWAII DEPARTMENT OF HEALTH DECEMBER 2003



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## **GLOSSARY OF ABBREVIATIONS AND ACRONYMS**

| Α                                    | Addressed as part of an existing NPL site                             |  |  |  |  |
|--------------------------------------|---|--|--|--|--|
| ABW                                  | Air Base Wing   |  |  |  |  |
| ACE                                  | Army Corps of Engineers   |  |  |  |  |
| ADDS                                 | Airborne Dispersant Delivery System                                   |  |  |  |  |
| AFFES Army Air Force Exchange System |   |  |  |  |  |
| AFS                                  | Air Force Station   |  |  |  |  |
| AOC                                  | Area of Concern   |  |  |  |  |
| ARPP                                 | Accidental Release Prevention Program                                 |  |  |  |  |
| As                                   | Arsenic   |  |  |  |  |
| AST                                  | Above-ground Storage Tank   |  |  |  |  |
| AVGAS                                | Aviation gas  |  |  |  |  |
| AWQC                                 | Ambient water quality criteria  |  |  |  |  |
| BF                                   | Brownfields   |  |  |  |  |
| bgs                                  | Below Ground Surface  |  |  |  |  |
| BRAC                                 | Base Closure and Realignment Commission                               |  |  |  |  |
| CA                                   | Cooperative Agreement   |  |  |  |  |
| CAA                                  | Clean Air Act   |  |  |  |  |
| CAB                                  | Clean Air Branch  |  |  |  |  |
| CCA                                  | Copper Chromium Arsenate  |  |  |  |  |
| CDC                                  | Centers for Disease Control   |  |  |  |  |
| CEPPO                                | (EPA) Chemical Emergency Preparedness and Prevention Office           |  |  |  |  |
| CERCLA                               | Comprehensive Environmental Response Compensation and Liability Act   |  |  |  |  |
| CFR                                  | Code of Federal Regulations   |  |  |  |  |
| CIC                                  | Clean Islands Council   |  |  |  |  |
| CIP                                  | Campbell Industrial Park  |  |  |  |  |
| CLEAN                                | Campbell Local Emergency Action Network                               |  |  |  |  |
| CNN                                  | Cable News Network  |  |  |  |  |
| COC                                  | Contaminants of Concern   |  |  |  |  |
| COE                                  | Corps. of Engineers (United States Army)                              |  |  |  |  |
| CST                                  | Civil Support Team  |  |  |  |  |
| CWB                                  | Clean Water Branch  |  |  |  |  |
| D                                    | Deferred to RCRA  |  |  |  |  |
| D/DBPR                               | Disinfectant/Disinfection By-Products Rule                            |  |  |  |  |
| DAGS                                 | Department of Accounting and General Services                         |  |  |  |  |
| DBEDT                                | Department of Business, Economic Development, and Tourism             |  |  |  |  |
| DDT                                  | Dichlorodiphenyl trichloroethane                                      |  |  |  |  |
| DERP                                 | Defense Environmental Restoration Program                             |  |  |  |  |
| DERP-FUDS                            | Defense Environmental Restoration Program Formerly Used Defense Sites |  |  |  |  |
| DIY                                  | Do-It-Yourself  |  |  |  |  |
| -                                    |   |  |  |  |  |

| DLNR   | Department of Land and Natural Resources                |  |  |  |  |  |  |
|--------|---|--|--|--|--|--|--|
| DOD    | Department of Defense                                   |  |  |  |  |  |  |
| DOE    | Department of Education                                 |  |  |  |  |  |  |
| DOH    | Department of Health                                    |  |  |  |  |  |  |
| DPSA   | Data Processing Systems Analyst                         |  |  |  |  |  |  |
| DS     | Discovery   |  |  |  |  |  |  |
| DS1    | Discovery (Initial)                                     |  |  |  |  |  |  |
| DS2    | Discovery (Extended)                                    |  |  |  |  |  |  |
| DSMOA  | Department of Defense/State Memorandum of Agreement     |  |  |  |  |  |  |
| EDR    | Environmental Data Registry                             |  |  |  |  |  |  |
| EE/CA  | Engineering Evaluation/Corrective Action                |  |  |  |  |  |  |
| EHA    | Environmental Health Administration                     |  |  |  |  |  |  |
| EHS    | Environmental Health Specialist                         |  |  |  |  |  |  |
| EMD    | Environmental Management Division                       |  |  |  |  |  |  |
| EPA    | (United States) Environmental Protection Agency         |  |  |  |  |  |  |
| EPCRA  | Emergency Planning and Community Right-To-Know Act      |  |  |  |  |  |  |
| EPO    | Environmental Planning Office                           |  |  |  |  |  |  |
| EP&R   | Emergency Preparedness and Response (Section)           |  |  |  |  |  |  |
| ERA    | Environmental Response Agreement                        |  |  |  |  |  |  |
| ERRF   | Environmental Response Revolving Fund                   |  |  |  |  |  |  |
| ES     | Expanded Site Inspections                               |  |  |  |  |  |  |
| ES1    | Expanded Site Inspections (Initial)                     |  |  |  |  |  |  |
| ES2    | Expanded Site Inspections (Extended)                    |  |  |  |  |  |  |
| FAMIS  | Financial Accounting Management Information System      |  |  |  |  |  |  |
| FDA    | (United States) Food and Drug Administration            |  |  |  |  |  |  |
| FEMA   | Federal Emergency Management Agency                     |  |  |  |  |  |  |
| FITS   | Facility Identification Template for States             |  |  |  |  |  |  |
| FOSC   | Federal On-Scene Coordinator                            |  |  |  |  |  |  |
| FOST   | Finding of Suitability for Transfer                     |  |  |  |  |  |  |
| FRS    | Facility Registry System                                |  |  |  |  |  |  |
| FS     | Feasibility Study                                       |  |  |  |  |  |  |
| FUDS   | Formerly Used Defense Sites                             |  |  |  |  |  |  |
| FY     | Fiscal Year   |  |  |  |  |  |  |
| G      | Recommended for HRS Scoring                             |  |  |  |  |  |  |
| GAC    | Granulated Activated Carbon                             |  |  |  |  |  |  |
| GIS    | Geographic Information System                           |  |  |  |  |  |  |
| HAFB   | Hickam Air Force Base                                   |  |  |  |  |  |  |
| HAR    | Hawaii Administrative Rule                              |  |  |  |  |  |  |
| HAZMAT | Hazardous Material                                      |  |  |  |  |  |  |
| HCDA   | Hawaii Community Development Authority                  |  |  |  |  |  |  |
| HCDCH  | Housing and Community Development Corporation of Hawaii |  |  |  |  |  |  |
| HDOH   | Hawaii Department of Health                             |  |  |  |  |  |  |
| HEER   | Hazard Evaluation and Emergency Response (Office)0      |  |  |  |  |  |  |

| HEPCRA  | Hawaii Emergency Planning and Community Right-To-Know Act  |  |  |  |  |  |  |
|---------|--|--|--|--|--|--|--|
| HERL    | Hawaii's Environmental Response Law                        |  |  |  |  |  |  |
| Hg      | Mercury  |  |  |  |  |  |  |
| HIARNG  | Hawaii Army National Guard                                 |  |  |  |  |  |  |
| HMEP    | Hazardous Materials Emergency Preparedness                 |  |  |  |  |  |  |
| HR      | Hazard Ranking   |  |  |  |  |  |  |
| HR1     | Hazard Ranking (Initial)                                   |  |  |  |  |  |  |
| HRS     | Hawaii Revised Statute                                     |  |  |  |  |  |  |
| HSERC   | Hawaii State Emergency Response Commission                 |  |  |  |  |  |  |
| HTH     | "Health" (used as a FAMIS designation)                     |  |  |  |  |  |  |
| ICS     | Incident Command System                                    |  |  |  |  |  |  |
| IDOP    | Iwilei District Operating Partners                         |  |  |  |  |  |  |
| IDPP    | Iwilei District Participating Partners                     |  |  |  |  |  |  |
| IESWTR  | Interim Enhanced Surface Water Treatment Rule              |  |  |  |  |  |  |
| IRA     | Interim Remedial Action                                    |  |  |  |  |  |  |
| IRP     | Installation Restoration Program                           |  |  |  |  |  |  |
| ISST    | Initial Site Screening Team                                |  |  |  |  |  |  |
| LAN/WAN | Local Area Network/Wide Area Network                       |  |  |  |  |  |  |
| LEPC    | Local Emergency Planning Committee                         |  |  |  |  |  |  |
| LLC     | Limited Liability Company                                  |  |  |  |  |  |  |
| LOC     | Letter of Completion                                       |  |  |  |  |  |  |
| LTM     | Long Term Monitoring                                       |  |  |  |  |  |  |
| MAP     | Statewide Management Action Plan                           |  |  |  |  |  |  |
| MBE/WBE | Minority Business Enterprises/Women's Business Enterprises |  |  |  |  |  |  |
| MOA     | Memorandum of Agreement                                    |  |  |  |  |  |  |
| MOU     | Memorandum of Understanding                                |  |  |  |  |  |  |
| MPX     | Multi-phase Extraction                                     |  |  |  |  |  |  |
| NAS     | Naval Air Station  |  |  |  |  |  |  |
| NASTTPO | National Association of SARA Title Three Program Officials |  |  |  |  |  |  |
| NCP     | National Contingency Plan                                  |  |  |  |  |  |  |
| NCTAMS  | Naval Computer and Telecommunications Area Master Station  |  |  |  |  |  |  |
| NEX     | Naval Exchange   |  |  |  |  |  |  |
| NFA     | No Further Action  |  |  |  |  |  |  |
| NFRAP   | No Further Response Actions Planned                        |  |  |  |  |  |  |
| NIOSH   | National Institute for Occupational Safety and Health      |  |  |  |  |  |  |
| NMFS    | National Marine Fisheries Service                          |  |  |  |  |  |  |
| NOAA    | National Oceanic and Atmospheric Administration            |  |  |  |  |  |  |
| NPL     | National Priority List                                     |  |  |  |  |  |  |
| NRDA    | Natural Resources Damage Assessment                        |  |  |  |  |  |  |
| NRTF    | Naval Radio Transmitting Facility                          |  |  |  |  |  |  |
| NSA     | National Security Agency                                   |  |  |  |  |  |  |
| OPA     | Oil Pollution Act  |  |  |  |  |  |  |
| OPA 90  | Oil Pollution Act of 1990                                  |  |  |  |  |  |  |
|         | · ·  |  |  |  |  |  |  |

| OSC     | On Scene Coordinator   |  |  |  |  |  |
|---------|--|--|--|--|--|--|
| OSHA    | Occupational Health and Safety Administration                            |  |  |  |  |  |
| OU      | Operable Unit  |  |  |  |  |  |
| PA      | Preliminary Assessment   |  |  |  |  |  |
| PA/SI   | Preliminary Assessment/Site Inspection                                   |  |  |  |  |  |
| PA1     | Preliminary Assessment (Initial)   |  |  |  |  |  |
| PA1/SI1 | Preliminary Assessment (Initial)/Site Inspection (Initial)               |  |  |  |  |  |
| PAH     | Polycyclic Aromatic Hydrocarbons; also, Polynuclear Aromatic Hydrocarbon |  |  |  |  |  |
| Pb      | Lead   |  |  |  |  |  |
| PCB     | Polychlorinated biphenyls  |  |  |  |  |  |
| PEL     | Permissible Exposure Limit   |  |  |  |  |  |
| PHIN    | Public Health Information Network  |  |  |  |  |  |
| PIO     | Public Information Officer   |  |  |  |  |  |
| POD     | Pacific Ocean Division   |  |  |  |  |  |
| POL     | Petroleum Oil and Lubricant  |  |  |  |  |  |
| PRC     | Polluted Runoff Control  |  |  |  |  |  |
| PRG     | Preliminary Remedial Goals   |  |  |  |  |  |
| PRP     | Potential Responsible Parties  |  |  |  |  |  |
| QMP     | Quality Management Plan  |  |  |  |  |  |
| RA      | Remedial Assessment  |  |  |  |  |  |
| RAB     | Restoration Advisory Board   |  |  |  |  |  |
| RAM     | Remedial Action Memorandum   |  |  |  |  |  |
| RCRA    | Resource Conservation and Recovery Act                                   |  |  |  |  |  |
| RI      | Remedial Investigation   |  |  |  |  |  |
| RI/FS   | Remedial Investigation/Feasibility Study                                 |  |  |  |  |  |
| RMP     | Risk Management Program  |  |  |  |  |  |
| ROD     | Record of Decision   |  |  |  |  |  |
| RP      | Responsible Party  |  |  |  |  |  |
| RPM     | Remedial Project Manager   |  |  |  |  |  |
| SAP     | Site Assessment and Prioritization; also, Sampling and Analysis Plan     |  |  |  |  |  |
| SCP     | State Contingency Plan   |  |  |  |  |  |
| SDAR    | Site Discovery, Assessment, and Remediation (Section)                    |  |  |  |  |  |
| SDWA    | Safe Drinking Water Act  |  |  |  |  |  |
| SDWB    | Safe Drinking Water Branch   |  |  |  |  |  |
| SERC    | State Emergency Response Commission                                      |  |  |  |  |  |
| SHWB    | Solid and Hazardous Waste Branch   |  |  |  |  |  |
| SI      | Site Inspection  |  |  |  |  |  |
| SI1     | Site Inspection (Initial)  |  |  |  |  |  |
| SI2     | Site Inspection (Extended)   |  |  |  |  |  |
| SLH     | Session Laws of Hawaii   |  |  |  |  |  |
| SOSC    | Sate On Scene Coordinator  |  |  |  |  |  |
| SOW     | Statement of Work  |  |  |  |  |  |
| SVOC    | Semi-volatile Organic Compound   |  |  |  |  |  |

| SWTR     | Surface Water Treatment Rule   |
|----------|--|
| TAMC     | Tripler Army Medical Center  |
| TCE      | Trichloroethylene  |
| TCP      | Trichloropropane   |
| TCRA     | Time-Critical Removal Action   |
| TGM      | Technical Guidance Manual  |
| TPH      | Total Petroleum Hydrocarbons   |
| TPH-D    | Total Petroleum Hydrocarbons as diesel   |
| TPH-O    | Total Petroleum Hydrocarbons as oil  |
| TSA      | Targeted Site Assessment   |
| UCS      | Unified Command System   |
| UIC      | Underground Injection Control  |
| USACE    | United States Army Corps of Engineers  |
| USAF     | United States Air Force  |
| USDW     | Underground Sources of Drinking Water  |
| USEPA    | United States Environmental Protection Agency  |
| UST      | Underground Storage Tank   |
| UXO      | Unexploded Ordinance   |
| VCC      | Video Conferencing Center  |
| VCP      | Voluntary Cleanup Program  |
| VOC      | Volatile Organic Compound  |
| VOG, Vog | Volcanic Fog   |
| VRP      | Voluntary Response Program   |
| WBE      | Women's Business Enterprises   |
| WIC      | Women, Infants and Children (Services Branch of the Family Health Services Division) |
| WMD      | Weapons of Mass Destruction  |

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### **EXECUTIVE SUMMARY**

### HAZARD EVALUATION AND EMERGENCY RESPONSE OFFICE FISCAL YEAR 2003 REPORT

This report, prepared by the State of Hawaii Department of Health (DOH), Environmental Health Administration (EHA), Hazard Evaluation and Emergency Response (HEER) Office, complies with the requirements of Chapters 128D and 128E, HRS, that require the DOH to prepare an annual report to the State Legislature. This report also complies with Act 200, SLH 2003 that requires the DOH to submit a report on all revenues and expenditures from the DOH Environmental Response Revolving Fund (ERRF) for State Fiscal Year (FY) 2003 (July 1, 2002 to June 30, 2003).

During FY 2003, five Environmental Health Administration (EHA) programs received ERRF funding. They are the Hazardous Evaluation and Emergency Response (HEER) Office, Solid and Hazardous Waste Branch (SHWB), Safe Drinking Water Branch (SDWB), Clean Water Branch (CWB), and the Environmental Management Division (EMD).

ERRF funding was also provided for two special environmental projects during FY 2003. Pursuant to Section 158 of Act 259, SLH 2001, Governor Lingle approved the transfer from the DOH ERRF to the Department of Land and Natural Resources (DLNR) for the Lake Wilson *Salvinia molesta* removal. Also, in FY 2003, a portion of the HEER Office ERRF funding was transferred to the Solid and Hazardous Waste Branch for the Mercury Reduction Project.

#### I. Annual Reporting Requirements

<u>Chapter 128D, HRS, Environmental Response Law</u>, requires the DOH to submit to the legislature an annual report to address the following:

- 1. An annual budget to implement remedial action plans requiring funding by the Environmental Response Revolving Fund (ERRF).
- 2. A listing to identify sites eligible for remedial action under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), including a statement as to any appropriation that may be necessary to pay the State's share of the plan.
- 3. The Department shall publish and revise, at least annually, a listing of the sites subject to Chapter 128D and any de minimus settlements made under this chapter.

The above requirement to provide an annual budget to implement remedial action is addressed in Section 4, <u>HEER Office Budget and Expenditures</u>, of this report. The above requirement to

address listed sites is presented in Section 3, <u>State Priority List</u>; Appendix A <u>Environmental Health Administration Hazard Evaluation and Emergency Response Office Site List</u>; and Appendix B, <u>Environmental Health Administration Hazard Evaluation and Emergency Response Office Release Notification Log</u>. There were no de minimus settlements during FY 2003.

Chapter 128E, HRS, Hawaii Emergency Planning and Community Right-To-Know Act (HEPCRA), requires that the DOH establish an account called the local emergency response planning committees' account within the ERRF for the purpose of administration and oversight of the Hawaii Emergency Planning and Community Right-To-Know Act (HEPCRA). An owner or operator of a facility that stores, uses, or manufactures any hazardous substance, or extremely hazardous substance, above defined thresholds is required under HEPCRA to file a notification of such activity and to pay a "Tier II" filing fee. The fees are collected at the HEER Office and deposited into the ERRF. The HEPCRA requires the DOH to submit to the legislature an annual report of the following:

The amount of Tier II filing fees collected annually for use by the Local Emergency Planning Committees (LEPCs) and deposited into the Environmental Response Revolving Fund (ERRF) during FY 2003, the amount collected to date for FY 2004 and the amount to be collected in FY 2005.

The above requirement is addressed in Section 2.1.2.2, <u>Hawaii Emergency Planning and</u> Community Right-To-Know Act Tier II Filing Fees.

Act 200, SLH 2003 Executive Budget, requires the DOH to submit a report on all revenues and expenditures from the Environmental Response Revolving Fund (ERRF) to the legislature no later than twenty days prior to the convening of the 2004 and 2005 regular sessions. The ERRF revenue, budget, and expenditures data is presented in Section 5, Environmental Response Revolving Fund Funding, Programs, and Projects.

#### II. Overview of HEER Office Functions and Activities

The Hazard Evaluation and Emergency Response (HEER) Office implements and maintains the environmental response programs for planning for, responding to, and preventing releases of hazardous substances into the environment, and protecting the natural resources of the State of Hawaii. The functions for the HEER Office are defined in Chapter 128D, HRS, Chapter 128E, HRS, The federal Comprehensive Environmental Response Compensation, and Liability Act (CERCLA), the Emergency Planning and Community Right-to-Know Act (EPCRA), and the Oil Pollution Act (OPA) of 1990. In general, the function of the HEER Office is to provide state leadership in addressing all aspects of releases of hazardous substances and/or petroleum into the environment. The office evaluates the actual or potential impacts such releases may have on the public, environment, and natural resources, and mitigates them as needed. This work includes preventing, planning for, assessment of, and responding to hazardous substance and oil releases, or risk of releases.

The office works closely with State Civil Defense, first responders, and other federal, state, county, and local agencies to strengthen the state's ability to respond to public health and environmental health emergencies. The HEER Office also coordinates statewide planning activities to prepare for and respond to chemical and oil spills in the environment.

The office is comprised of three operating sections, each addressing an important aspect of its mission: 1) Emergency Preparedness and Response; 2) Site Discovery, Assessment and Remediation; and 3) Hazard Evaluation. The HEER Office is staffed with professionals able to conduct emergency response activities, formulate response plans, assess chemical risks, evaluate the extent of chemical contamination, and oversee removal and remediation activities.

The Emergency Preparedness and Response (EP&R) Section is responsible for planning and preparing for, and responding to hazardous substance releases which may cause an <u>immediate and substantial threat</u> to human health or the environment. The EP&R section's State On-Scene Coordinators (SOSCs) represent the State of Hawaii whenever there is an oil or hazardous material spill. They respond to and supervise any removal operations to eliminate chemical or oil threats that are deemed immediately dangerous to the public and the environment. The SOSCs are back-up personnel to the first responder HAZMAT teams. During FY 2003, the EP&R team was actively involved in emergency responder training exercises to meet requirements for readiness during chemical releases to the environment and weapons of mass destruction threats.

The Site Discovery, Assessment, and Remediation (SDAR) Section is responsible for assessing the relative <u>near-term or long-term threat</u> of sites contaminated with hazardous substances, and for the oversight and implementation of response actions at sites with suspected and confirmed releases of hazardous substances, including petroleum. Project oversight is provided to military facilities subject to the Department of Defense/State Memorandum of Agreement (DSMOA), state and county owned sites, and to civilian sites undergoing cleanup activities. The SDAR Section response and remedial work is performed by Remedial Project Managers (RPMs) assigned to the Preliminary Assessment/Site Inspection Program, State Response and Remedial Program, Voluntary Response Program, and Brownfields Program. During FY 2003, large projects of interest included the Honolulu Harbor cleanup project, and site inspection and sampling work performed at former sugar mill sites on Kauai, Oahu, Maui, and Hawaii.

The Hazard Evaluation Section is responsible for providing toxicological assistance to all programs in the Environmental Health Administration (EHA), as well as the public. It conducts toxicological assessments of chemical threats to human health, establishes appropriate cleanup level for chemical contamination, assists the public with information concerning the health effects of chemicals, and recommends site cleanup priority for workload purposes. During FY 2003 the Hazard Evaluation Section provided risk assessment support in public heath studies such as the (volcanic fog) Vog Health Assessment and Fish Mercury studies. Ecological risk assessment support was provided to over fifty contaminated sites, the Solid and Hazardous Waste Branch (SHWB), Clean Water Branch (CWB), Environmental Planning Office (EPO), and the University of Hawaii. Contributions to several significant issues were addressed during the reporting period including issues surrounding the placement of dredge material from

the Ala Wai Canal onto the property controlled by the Honolulu Airport, and the Waipahu Incinerator and Landfill lead issues.

Funding to the HEER Office includes allocations in the State general fund budget, ERRF appropriated funds, and operating allocations for four federal grants. The combined total operating budget and expenditures for the HEER Office is presented in Section 4.

Details of the HEER Office FY 2003 activities are presented in Sections 1 and 2. Section 3 provides a list of sites listed on the U.S. EPA National Priority List, sites eligible for listing under CERCLA, sites managed under the Voluntary Response and Brownfields Programs, and military installations managed under the DSMOA Program. The <a href="Environmental Health">Environmental Health</a> Administration Hazard Evaluation and Emergency Response Office Site List of prioritized sites is found in Appendix A. The <a href="Environmental Health Administration Hazard Evaluation and Emergency Response Office Release Notification Log">Environmental Health Administration Hazard Evaluation and Emergency Response Office Release Notification Log</a> identifying emergency response actions for FY 2003 is found in Appendix B.

### III. HEER Office Priority Areas for Program Improvements

During FY 2003, the HEER Office concentrated on further improving its programs and enhancing its capacities in the following priority areas:

- Improve enforcement of Chapters 128D and 128E, HRS.
- Improve emergency response preparedness.
- Improve oversight and response to contaminated sites.
- Develop and improve usage of the Voluntary Response and Brownfields Programs.
- Develop a Hawaii Chemical Accident Release Prevention Program.
- Improve office operations, policy and administration.

In FY 2004 the HEER Office will continue to improve in these areas and build its capacity to order, enforce, and oversee cleanups of contaminated sites and recover costs wherever possible. The complexity of many of the large and long term contamination clean up projects already underway will continue to depend upon people highly specialized in the areas of toxicology, risk assessment, and the environmental sciences. So far, the ability to recruit people who are specialized and experienced in these areas on a permanent basis has been difficult. The office has consequently limited the level of effort to primarily high-risk environmental issues.

HEER Office will also concentrate informational technology efforts to further enhance release and site database documentation capabilities. As the office develops capabilities for the office database to function within an Internet platform, the database capabilities will expand to sharing geographically defined environmental site information.

The HEER Office ecological and human health risk assessment project collaborations with other Environmental Health Administration (EHA) programs and community groups has shown that

analysis of the impact of environmental contaminants on human heath is a required area for capabilities development. The office will be defining ways to enhance these data analysis capabilities.

Starting in FY 2004 the U.S. Environmental Protection Agency will begin shifting the focus of the federal site cleanup grants from the Superfund grant program to the State Response Program grant. The EPA State Response Program grant will be emphasizing the use of funding for cleaning up Hawaii's Voluntary Response Program and Brownfields Redevelopment Program sites

The HEER Office will continue to work with the Department of Business, Economic Development, and Tourism (DBEDT) and Department of Land and Natural Resources (DLNR) to define potential Brownfields sites, and also encourage greater public agency and private interest utilization of incentive programs such as the State Voluntary Response Program and the Brownfields' program in order to return contaminated properties to productive economic use.

Another major challenge ahead will be keeping up with rapidly changing threats in the area of terrorism and weapons of mass destruction. This challenge will be met in opportunities for the Emergency Preparedness and Response (EP&R) and Hazard Evaluation staff to participate in workshops and training exercises designed for the emergency responder and threat analysis community.

Finally, the HEER Office continues to be concerned that appropriate funds may not be available in the Emergency Response Revolving Fund (ERRF) in the event of a major chemical or petroleum release. The ERRF receives funds from court settlements, fines, penalties, and revenues from the five cents per barrel tax on imported petroleum products sold in the state. The original purpose and a prime continuing purpose of the ERRF is to have immediate sufficient fiscal resources available without utilizing or depending on the general fund for chemical and petroleum related emergency and long-term remediation activities. In recent years, ERRF funds have been used to balance the budget and looked at as a possible source of funding for other environmental projects. If adequate ERRF funds are not available to respond to and clean up a major chemical or petroleum spill, the Department of Health may have to seek after-the-fact general funds through a special appropriation to the legislature. This would defeat the purpose to which the ERRF was originally established.

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## 1 THE HEER OFFICE

### 1.1 Authorities

The HEER Office operates under various environmental authorities. The primary state enabling legislation is Chapter 128D, HRS, "Environmental Response Law" or commonly referred to as Hawaii's Environmental Response Law (HERL) and Chapter 128E, HRS, "Hawaii Emergency Planning and Community Right-to-Know Act" (HEPCRA). HERL is modeled after the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and HEPCRA is modeled after the federal Emergency Planning and Community Right-To-Know Act (EPCRA). However, unlike CERCLA, HERL defines hazardous substances to include oil. For oil spill planning, preparedness and response, the HEER Office becomes involved under the authority of the Oil Pollution Act of 1990 (OPA 90). The following tables list the legal authorities under which the HEER Office operates.

#### STATE LAWS/RULES (Hawaii Revised Statutes – HRS)

| STATE LAW  | STATE REGULATIONS   |
|--|---|
| Hawaii Revised Statutes (HRS)  | Hawaii Administrative Rules (HAR)                                     |
| Chapter 128D, HRS  | Title 11, Chapter 451, HAR  |
| "Hawaii Environmental Response Law" (HERL)   | "State Contingency Plan" (SCP)  |
| Chapter 321, HRS<br>"Department of Health"   | Title 11, Chapter 5, HAR "Environmentally-Related Illness and Injury" |
| Chapter 128E, HRS<br>"Hawaii Emergency Planning and<br>Community Right-to-Know Act" (HEPCRA) |   |

#### FEDERAL LAWS (Code of Federal Regulations – CFR)

| FEDERAL LAW National Code of Federal Register (CFR)                                       | FEDERAL REGULATIONS National Contingency Plan (NCP)    |
|---|--|
| Comprehensive Environmental<br>Response, Compensation & Liability<br>Act (CERCLA), 40 CFR | 40 CFR, Part 300,<br>"National Contingency Plan" (NCP) |
| Emergency Planning and Community<br>Right-to Know Act, (EPCRA), 40 CFR                    | 40 CFR, Part 302,<br>"National Contingency Plan" (NCP) |
| Clean Air Act (CAA), Section 112(r) "Risk Management Program" (RMP)                       | 40 CFR, Part 302,<br>"National Contingency Plan" (NCP) |
| 40 CFR, Part 300,<br>"Oil Pollution Act of 1990" (OPA 90)                                 | 40 CFR, Part 300,<br>"National Contingency Plan" (NCP) |

## 1.2 Program Mission and Objectives

#### 1.2.1 Mission

To protect human health, public welfare, and the environment through enforcing environmental laws, and to provide state leadership, support and partnership in preventing, planning for, responding to, eliminating, and mitigating releases or threats of releases of hazardous substances, pollutants, or contaminants including oil.

Specific program actions are:

- 1. Prepare for and respond in a timely and effective manner to releases of hazardous substances and oil into the environment.
- 2. Prepare and respond to all media related (air, land and water) releases, including non-routine state working hours (off-hours).
- 3. Locate, investigate, and assist in the cleanup of lands with prior releases of hazardous substances, pollutants or contaminants.
- 4. Prevent harmful releases of oil and hazardous substances into the environment.
- 5. Evaluate the risks associated with releases of chemicals into the environment and other environmental risks to public health and the ecosystem.

### 1.2.2 Objectives

The following are the HEER office objectives:

#### Objective A: <u>Environmental Release Response</u>

- A-1: Improve the preparedness of federal, state, and local entities to respond to releases of petroleum and hazardous materials into the environment utilizing risk-based management principles and effective partnerships.
- A-2: Integrate the Department of Health's response and cleanup programs utilizing risk-based management principles and effective partnerships.
- A-3: Enhance and improve capabilities to identify and assess hazardous substance and petroleum-contaminated sites.
- A-4: Enhance and improve capabilities to clean up hazardous and petroleum waste sites.

#### Objective B: Environmental Contamination Prevention

- B-1: Implement an oil spill prevention program in Hawaii.
- B-2: Implement a Pipeline Safety Program.
- B-3: Implement a Clean Air Act (CAA) Section 112(r) Risk Management Program.
- B-4: Implement a Hawaii Emergency Planning and Community Right-to-Know Act (HEPCRA) Inspection Program.

#### Objective C: Statewide Risk Assessment Support

C-1: Maintain an ongoing core of qualified environmental technical experts.

## 1.3 Operating Plan

During FY 2003, the HEER Office concentrated on improving its oversight and response capabilities, such as to the area-wide contamination in the Honolulu Harbor area. The FY 2003 Operating Plan priorities were:

- Improve enforcement of Chapters 128D and 128E, HRS.
- Improve emergency response preparedness.
- Improve oversight and response to contaminated sites.
- Develop and improve usage of the Voluntary Response Program (VRP) and Brownfields Programs.
- Improve office operations, policy and administration.
- Develop a Hawaii Chemical Accident Release Prevention Program.

## 1.4 Notable Accomplishments by Priorities

## 1.4.1 Improve Enforcement of Chapters 128D and 128E, HRS

#### Legal Support/Enforcement

A fully funded Deputy Attorney General continued to spend two days a week at the HEER Office. Legal support was solicited by the HEER Office to provide staff with assistance and legal resources regarding investigation, enforcement, response, and cost recovery activities resulting from the accidental and/or intentional releases of hazardous chemicals, including oil and various petroleum constituents. Upon request, the Deputy Attorney General scheduled consultations with HEER staff to discuss overall and site-specific legal issues.

Issues of concern to the HEER Office related to cost recovery for expenditures from the ERRF include:

- Cost recovery during enforcement.
- Recovering expended response funds from the responsible parties.
- Issues concerning closure of federal facilities.
- State agencies as responsible parties.
- Transfer of closed federal facilities to other state agencies.
- Brownfields redevelopment of State lands.
- Voluntary Response Program.
- Cleaning up State priority listed sites.

The Deputy Attorney General also supported the HEER staff in FY 2003 by providing consultation, discussion and/or resolve to issues regarding:

Advice and/or counsel regarding legislation, procurement, subpoena, order, contract, agreement, memorandum of agreement (MOA), settlement, lawsuit, cost recovery, property access, record review, confidential material, natural resource damage assessment, rehabilitation and recovery, and emergency response and remedial activities.

Finally, the Deputy Attorney General provided support to the State On-Scene Coordinators and remedial staff on issues specific to priority sites, in particular, the negotiations on the cleanup of Honolulu Harbor.

The initial Honolulu Harbor agreement included coordinating fifteen organizations with approximately thirty representatives, including the major oil companies and the State Department of Transportation that are operating or were operating in the Honolulu Harbor areawide contamination site. A second agreement was developed and executed for the current lwilei operating companies to provide the State and EPA with assurance that no further releases are occurring and a prevention program is in place to prevent any additional contamination in the area.

## 1.4.2 <u>Improve Emergency Response Preparedness</u>

Preparedness training for emergency response actions is a vital community effort involving federal, state, and local agencies and commissions, and private industry. The Emergency Preparedness and Response (EP&R) Section of the HEER Office, in partnership with the U.S. Coast Guard, EPA, and industry, continued to play an active role in designing, planning, and conducting a wide range of oil and hazardous materials (HAZMAT) training and preparedness training exercises for emergency response actions.

A State On Scene Coordinator (SOSC) is assigned as a Duty Officer and takes calls after hours, on weekends, and holidays to ensure 24-hour coverage of incidents occurring around the state. Many times, SOSC's are dispatched to public complaints before the involvement of other

responding agencies. This may lead to referrals internal to DOH agencies such as the Clean Air, Clean Water, and Solid and Hazardous Waste Branches. Referrals may also be made to county, state, and federal agencies including Civil Defense, Homeland Security, Police Vice and Criminal Divisions, State Agriculture, Department of Land and Natural Resources, the Attorney General office, Food and Drug Administration, Occupational Health and Safety Administration, U.S. Coast Guard, U.S. Customs, and the U.S. Postal Service.

HEER Office SOSCs have continued their involvement with a task force under the lead of the US Attorneys office and EPA Criminal Investigation Division by providing information and support for investigations, particularly when intentional releases of hazardous substances are perpetrated as a means of disposal. Many referrals involve criminal issues including fugitive dumping and releases, illegal drugs, clandestine drug laboratories (clan labs), illegal importations and distribution, fraud, and misapplications and misuse of chemicals and pesticides. Requests for incidence assistance from local responders may also involve additional investigation by SOSCs to locate responsible parties for civil and criminal action.

During FY 2003 the EP&R Section continued to develop expertise by participating in exercises and various task forces in the areas identified in the following list. Details of the HEER Office FY 2003 emergency preparedness exercises and activities can be found in Section 2.1.

- Chemical and Bio-Terrorism
- Pollution Exercise Participation
- Campbell Local Emergency Action Network (CLEAN)
- Airborne Dispersant Delivery System (ADDS)
- Hawaii Pipeline Corrosion Control Coordinating Committee
- Four Counties' Used Oil Collection Programs
- Environmental Crimes Task Force
- Oiled Wildlife Response Program

The HEER Office Emergency Preparedness and Response Section also provides the State Emergency Response Commission (SERC) with administrative support, and Local Emergency Planning Committee's (LEPCs) (Hawaii, Oahu, Kauai, and Maui) with technical assistance. The SERC is chaired by the DOH Deputy Director for Environmental Health to establish policy for statewide emergency response, review Local Emergency Planning Committee's (LEPC) Emergency Response Plans, and develop statewide response plans.

## 1.4.3 Improve Oversight and Response to Contaminated Sites

#### **Oversight**

During FY 2003 a considerable amount of the Site Discovery, Assessment, and Remediation (SDAR) Section effort focused on DOH policy and planning for the HEER Office programs. Budgets and project efforts were reviewed and developed for Defense State Memorandum Of Agreement (DSMOA), Formerly Utilized Defense Sites (FUDS), Preliminary Assessment/Site Inspection (PA/SI), Voluntary Response Program, and Brownfields projects.

A very high degree of success was achieved in the Voluntary Response Program (VRP), the Brownfields projects and the PA/SI Team. New hires in the VRP made a significant difference in comprehensive planning and managing the available funds that resulted in several significant successes. The successes of the VRP and the Brownfields projects are exemplary for achievement of goals with additional qualified staff. Projects with private owners as well as other Hawaii state agencies were successful in moving contaminated sites from idle land to properties that are being developed and re-entered into the tax base. The PA/SI effort continues to effectively identify, rank, and evaluate Hawaii sites that could potentially present a risk with regard to on-site contamination. Coordination with EPA Region 9 and Hawaii property owners have also successively addressed contaminated soils at several sugar mills that are no longer in operation.

Efforts to address the work load in the SDAR include an effort in developing relationships with local non-profit agencies and Universities to identify students that might serve internships with DOH. To supplement current staffing levels, the HEER Office has contracted with technical support contractors for environmental investigation document review and data interpretation. In one instance, the HEER Office reached an agreement with other agencies such as the National Oceanic Atmospheric Administration (NOAA) to collaborate with the HEER Office to enhance the HEER Office database capabilities.

The FUDS Program has taken a renewed interest resulting in a higher level of activity between the DOH, EPA, and the U.S. Army Corps. of Engineers (COE). Oversight for the evaluation of sites in Hawaii will include the active participation of the review of documents produced by the COE for the evaluation of cleanup of the FUDS in Hawaii.

#### **Response Contracts**

Chapter 128D, Hawaii Environmental Response Law (HERL), of the Hawaii Revised Statutes (HRS), specifically mandates the Department of Health (DOH) to undertake response actions whenever any hazardous substance, pollutant and/or contaminant, including oil, are released or there is a substantial threat of a release into the environment that may present a substantial threat to the public health, and welfare, or to the environment. To assist in the implementation of the requirements of Chapter 128D, HERL, Hazard Evaluation and Emergency Response (HEER) Office solicited the qualifications of several environmental companies. After an extensive evaluation, three companies were selected in FY 2002.

A time-critical emergency environmental response contract was awarded to the Pacific Environmental Corporation (PENCO) and the non-emergency environmental response contracts were awarded to AMEC Earth & Environmental, Inc. and to The Environmental Company, Inc (TEC). Both AMEC and TEC have been tasked, using contracts, for the review of documents pertaining to new and former releases as well as to address questions of overall risk at high visibility sites under investigation.

### 1.4.4 <u>Develop and Improve Usage of the Voluntary Response</u> and <u>Brownfields Programs</u>

### 1.4.4.1 Voluntary Response Program (VRP)

Hawaii's Voluntary Response Program (VRP) was established by statute in 1997 (Chapter 128D, Part II, HRS). The VRP encourages voluntary cleanup of contaminated properties. Under the law, DOH has the authority to grant prospective purchasers or developers an exemption from future liability if cleanup is performed to DOH specifications under the program. Past, current, or future property owners can participate in this program, but exemptions from liability can only be given to future purchasers or tenants. Completion of the voluntary cleanup action is accompanied by a Letter of Completion, issued by the DOH, and noted on the property deed. Over the past year, Letters of Completion have been issued to Castle and Cooke, Ross Trust, and Aiea Sugar Mill.

With regard to resources, the program added two new members in May and June bringing the total VRP staff to three. With these new staff members, the program has been able to increase the overall capacity for new projects. Program development and outreach efforts have been increased and the number of VRP sites was increased from eleven to thirteen projects, with more applications expected as the State's economic outlook improves.

#### 1.4.4.2 Brownfields (BF) Program

In 2001, the Department of Business, Economic Development and Tourism (DBEDT), with the assistance of the Department of Health, began the implementation of a Brownfields (BF) Pilot Assessment grant of \$200,000 from EPA. This project developed an inventory of potential Brownfields sites that are owned by state and county agencies, including redevelopment agencies. Stakeholder agencies and community organizations have been involved in prioritizing these sites and have identified the top six sites which will be eligible to receive environmental site assessment in FY 2002/2003 with available grant funds. The group further prioritized the top twenty-five sites that could receive assessments and possibly, cleanup funds in the future. This grant is administered and coordinated by DBEDT, and the HEER Office provides technical support by conducting the targeted environmental site assessments. During FY 2003, the HEER Office continued focusing on the promotion and coordination of a comprehensive Hawaii State Brownfields Initiative in coordination with EPA Region IX and DBEDT.

The HEER Office has been assisting DBEDT with its work under a U.S. Environmental Protection Agency (USEPA) Brownfields Pilot Demonstration Grant by conducting three environmental site assessments at high priority state-owned Brownfields properties. The projects are for: 1) a mixed-use development in Anahola, Kauai, 2) a senior residential project by Housing and Community Development Corporation of Hawaii (HCDCH) in Iwilei, and 3) a potential re-development at the HCDCH Kuhio Park Terrace housing complex.

### 1.4.5 Improve Office Operations, Policy and Administration

#### 1.4.5.1 Management

The HEER Office Manager encourages the section supervisors to be self-directed. This allows the section supervisors to focus their efforts precisely on their respective areas of responsibility. Overall office policies and procedures foster integration and cooperation among sections as well as other department offices.

#### 1.4.5.2 2003 Legislative Session

During FY 2003, the HEER Office did not have any legislation passed by the 2002 Legislature to implement.

During the 2003 Legislature (January-May 2003), the HEER Office tracked the following legislation until their enactment:

 HCR 182, HD1, Requesting the Departments of Labor and Industrial Relations and Health to Conduct a Study Relating to the Occupational and Health Risks of County Refuse Collection Workers.

Requesting the Department of Labor and Industrial Relations and the Department of Health to conduct a study relating to the occupational and health risks of county refuse collection workers, and to compare the occupational risks associated with county refuse collection workers with those of other county occupations including firefighters and police officers, and finally to recommend whether county refuse collection workers should enjoy the same retirement preferences as those other county occupations.

G.M. 381, Advisory Committee on Pesticides

Proposed the appointment of Dr. Barbara A. Brooks, PhD, to the Advisory Committee on Pesticides, for a term to expire 6/30/07. Dr. Brooks is a toxicologist working in the Hazard Evaluation and Emergency Response Office of the Department of Health.

Act 200, SLH 2003, State Budget

Section 18 of the State Budget provided that the Environmental Health Administration (HTH 849), shall submit a report on all revenues and expenditures from the Environmental Response Revolving Fund; provided further that this report shall be submitted to the legislature no later than twenty days prior to the convening of the 2004 and 2005 regular sessions.

The office also, tracked the unsuccessful attempt by the Environmental Health Administration to establish and fund an Environmental Information Specialist position. The information specialist was needed to assist the Department of Health's Public Information Officer (PIO) and to allow the PIO to have a more effective presence in environmental incidences and matters.

#### 1.4.5.3 Planning Section

The Planning Section is involved in many diverse office operations and serves to support the entire office with long-term planning, program development, financial, data management, logistical, and legislative expertise. The planning section maintains personnel with both practical and scientific educational backgrounds. Office-wide planning, program development and data management are foremost in this section's support of office operations. Staff working in this section, play an important role serving office-wide in the coordination and support of the legal, administrative, legislative, and technical documentations necessary for implementation of Chapter 128D, Environmental Response Law and other related mandates. Documents generated and/or coordinated through the Planning Section in FY 2003 include:

- The 2003 Annual Report to the Legislature to comply with Chapters 128D and 128E.
- The Federal Combined Superfund Grant.
- The federally funded State Response Program Grant.
- Status and financial reporting for the four programs receiving federal funds through the Combined Superfund Grant.
- Reporting of HEER Office purchases from Hawaii's minority owned and/or women owned Business Enterprises.
- The HEER Office Annual Expenditure Plan; and
- Updates to the HEER Strategic Plans.

A major goal of the Planning Section is to assist the other sections, and to have in place regulations, policies, guidelines and procedures for responding to releases of hazardous substances, pollutants or contaminants.

The Planning section is responsible for identifying resource and training needs to ensure that all HEER staff has the capabilities to function in the protection of human health and the environment.

#### 1.4.5.4 Data Management

The Hazard Evaluation and Emergency Response (HEER) Office maintains three major categories of information in its consolidated database:

- Site List Records of State Superfund cleanup sites; and
- Releases Records of the chemical spills reported;
- HEPCRA

  Records of chemical facilities reporting under the Hawaii Emergency
  Planning and Community Right-to-Know Act (HEPCRA).

This data is maintained in a Microsoft Access database on the Environmental Health Administration's local area network (LAN). Each record in the database corresponds to a physical file. The database is used routinely for file retrieval. In addition, the database is used

in tracking workflow throughout the office, in particular contaminated site handoff between separate HEER Office sections.

#### **Data Integration**

The HEER Office physical site files containing HEPCRA, Site List, and Release information have been reconciled with the consolidated index (with the exception of Military sites). The consolidated index conforms to Facility Identification Template for States (FITS), One-Stop, Facility Registry System (FRS), and the Environmental Data Registry (EDR). This index forms the basis for integrating HEER records with related records in the Solid and Hazardous Waste Branch, a current project for FY 2003. As part of the data reconciliation effort, HEER posted their records to the EPA's FRS website. Now anyone checking the federal website for information about a Facility/Site will see an indication if the State of Hawaii has additional information regarding that site.

#### **Data Quality**

The HEER Office continues to increase the precision with which we define sites within our office. We have crosschecked, standardized and added to geographic identifiers for those sites. In consolidating separate categories of information for a site at a well-defined location, we have added value to those records, making it easier to visualize the history and status of the site and to make comparisons to and links with other data layers. The HEER Office complies with the requirements and protocols for data quality, work processes, and computer hardware and software as defined by the Draft Environmental Health Administration (EHA) Quality Management Plan (QMP).

#### **Site List Database Development**

The HEER database is now used to track site status within the HEER Office. This additional capability is being used to allocate personnel resources.

#### **Website Capability**

An ongoing challenge is the expansion of website capabilities. We are developing the HEER database to function within an Internet platform. This will give the HEER Office the ability to exchange information and technology worldwide. The database in an Internet platform will lend itself well to sharing geographic information.

### 1.4.6 Develop a Chemical Accident Release Prevention Program

The State of Hawaii through the Hazardous Evaluation & Emergency Response Office has taken on the responsibility of obtaining delegation from EPA to implement the Clean Air Act, Section 112(r), Accidental Release Prevention Program (ARPP). The focus of the ARPP is prevention and preparedness through the detection and prevention of accidental releases of hazardous chemicals into the ambient air that could cause harm to the public and the environment. Risk management plans (RMPs) are prepared by facilities regulated under this program and form the basis for preparedness and prevention of accidental releases.

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During FY 2001, an environmental health specialist was hired into the Risk Management Program (RMP) Coordinator position that was created by the 1999 Legislature. In FY 2002 the State Deputy Attorney General supporting the program ruled that the RMP Coordinator may not do any field inspections without specific legal authorization. In order to satisfy this requirement, the RMP Coordinator has been working with the EPA to define a Memorandum of Understanding (MOU) and authorization agreement. EPA approval of the MOU, authorization agreement, and letter certification of authority to perform RMP inspection activities is pending.

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## 2 FY 2003 HEER OFFICE ACTIVITIES

The Hazardous Evaluation and Emergency Response (HEER) Office serves the people of the State of Hawaii by addressing all aspects of releases of hazardous substances including oil into the environment. Our work includes preventing, planning for, and responding to hazardous substance releases or risks of releases. The HEER Office accomplishes this mission by addressing contaminated sites with the highest risk to human health and the environment first, preventing contamination rather than cleaning up after the fact, and basing decisions on sound scientific principles and common sense.

The office is comprised of three operating sections, each addressing an important aspect of its mission. The implementing sections are organized as follows: 1) Emergency Preparedness and Response; 2) Site Discovery, Assessment and Remediation; and 3) Hazard Evaluation.

## 2.1 <u>Emergency Preparedness and Response</u>

The HEER Office Emergency Preparedness and Response (EP&R) Section is responsible for planning and preparing for, and responding to hazardous substance releases which may cause an immediate and substantial threat to human health or the environment. An overview of the significant HEER Office preparedness and response activities is presented in the following sections.

### 2.1.1 Emergency Preparedness Activities

The EP&R Section developed expertise and participated in training exercises and various task forces in partnership with the U.S. Coast Guard, EPA, and industry. Additionally, EP&R Section continues to play an active role in designing, planning, and conducting a wide range of oil and hazardous materials (HAZMAT) training and preparedness training exercises for emergency response actions.

#### 2.1.1.1 Pollution Exercise Participation

In FY 2003, the DOH continued to play an active role in designing, planning, and conducting a wide range of oil and hazardous materials (HAZMAT) training exercises modeled after the nationally recognized Incident Command System (ICS) objectives. The ICS is recognized nationally and is the directive used in all response efforts. In Hawaii, the ICS protocol is used to establish a Unified Command System (UCS). The UCS brings the DOH, U.S. Coast Guard, and representatives of the Responsible Party together for emergency response actions. The UCS is the ICS national response directive for the State and enables effective USC decision-making to serve the particular best interests of each participating party.

In the UCS, either the U.S. Coast Guard Captain of Port, or an Environmental Protection Agency (EPA) OSC is the designated Federal On-Scene Coordinator (FOSC) by presidential directive, and can thereby provide the State with Federal monetary and technical resources necessary for oil related or hazardous substance related emergencies of national priority.

The State DOH works hand-in-hand with the FOSC once a Unified Command System (UCS) has been initiated. The State On-Scene Coordinators (SOSCs) are instrumental in making determinations necessary to address priority issues concerning the State of Hawaii. There are four designated SOSCs in the State of Hawaii, employed by the DOH and staffed within the HEER Office.

The SOSCs represent the State under the directive of the Governor of the State of Hawaii. Under the UCS, the SOSCs are responsible for bringing about or initiating measures that provide the best State resources and manpower available at any moment to respond to the release of hazardous chemicals, including oil and it's constituents. The SOSCs have the authority to act on behalf of the State for the Governor as mandated in Chapter 128D (Environmental Response Law) to bring about expedient and effective response to protect human health and the environment.

In FY 2003, SOSCs participated in tabletop and deployment exercises conducted by CHEVRON, TESORO, TOSCO and HECO. These exercises test and challenge the capabilities of all participating responders in the State and are the basis by which the Incident Command System operates.

The DOH, in partnership with the U.S. Coast Guard, EPA, and industry, held regular training and workshops on response operations throughout the year. Many of these exercises were used to evaluate the response capabilities of other important response agencies in the State such as the police and fire departments, County HAZMAT, and the Civil Defense. The preparedness for emergency response to oil or chemical releases is tested and improvements to plans and equipment are made based on these exercises.

#### 2.1.1.2 Campbell Local Emergency Action Network (CLEAN)

The Campbell Local Emergency Action Network (CLEAN) was developed in 1997 by businesses in the James Campbell Industrial Park (CIP) to address emergency planning issues, including public health and safety, for the CIP and surrounding community. The DOH HEER Office has participated in this effort and is highly supportive of their activities. An Emergency Management Plan for the CIP currently in use provides guidance and information to emergency response personnel, local residents, and businesses based on local conditions and specific CIP hazards. Community involvement has been present throughout the planning process. A special task force has been working to improve the overall effectiveness of the warning /notification system, to achieve increased public awareness and protection in and around CIP, and to provide public education on appropriate responses to the warning-notification in the event of an emergency. CLEAN has procured Sentinel Alert Radios for CIP and public facilities, including schools in the area to enhance notification of a chemical release. This year, the CLEAN organization was active in community outreach and participated in the Makakilo Emergency Preparedness Fair. During FY 2003 a key project was working with the State Department of Education (DOE) to provide "Shelter In Place" training and upgrade school communications for Public Schools in the area.

#### 2.1.1.3 Airborne Dispersant Delivery System (ADDS)

In April 1999, Governor Cayetano signed a Memorandum of Agreement (MOA) with Rear Admiral J.J. McClelland, Commander of the Coast Guard's Fourteenth District and with the Clean Islands Council (oil industry spill response co-op). Under the MOA, the Coast Guard will use one of its four C-130 aircraft at Barbers Point Air Station to fly the State owned Airborne Dispersant Delivery System (ADDS) to a spill site for usage. The Clean Islands Council (CIC) maintains the ADDS and trains personnel for immediate use of the system in the event of an oil spill. This oil spill response capability allows the State and the Coast Guard to utilize chemical dispersant to fight offshore oil spills. The ability to use chemical dispersant greatly enhances the State's oil spill response capability for combating oil spills in the Hawaiian Island chain, including locations distant from Honolulu. It is critical that this capability is made available immediately after an oil spill occurs to be most effective in keeping the oil from reaching Hawaii's beaches. Dependency on mainland aircraft would delay operations for several days.

The State purchased the ADDS with funds from the Environmental Response Revolving Fund. The Coast Guard, HEER Office, and Clean Islands Council (CIC) execute an airborne dispersant delivery system drill, annually. This partnership is an added deterrent against the devastating impact that a large oil spill could have on Hawaii. The value of having a Dispersant capability available was demonstrated when a release occurred at the TESORO Single Point Mooring. Dispersant was applied and prevented the slick from potentially impacting the shores of Kauai, as occurred with previous spills.

During FY 2003 the ADDS trailer was upgraded to provide for a over-the-road capability. This will reduce the time required to load the aircraft.

### 2.1.1.4 Hawaii Pipeline Corrosion Control Coordinating Committee

This Hawaii Pipeline Corrosion Control Coordinating Committee was formed within the DOH for administrative purposes for two years in compliance with Act 148, SLH 1997. Act 148 SLH 1997 was to sunset on June 30, 1999; however, the pipeline operators continue to meet quarterly to promote pipeline safety. A depository for pipeline maps has been established with the intention that the information be placed into the planned Environmental (GIS). The committee acts as a forum to share information and technology. A database has been generated to facilitate cathodic protection testing and interference mitigation of pipelines.

Note: The State Department of Transportation's Office of Pipeline Safety provided training for pipeline operators.

#### 2.1.1.5 Four Counties' Used Oil Collection Programs

The HEER Office budgeted \$200,000 in FY 2003 for the DOH's Solid and Hazardous Waste Branch (SHWB) Hazardous Waste Section to use for waste oil and hazardous waste education and outreach and to provide the four counties with funds for their Residential "Do It Yourself" Used Oil collection programs. These funds cover a portion of the cost for the operation of the collection centers on the neighbor islands and the provision of "Oil Eater Boxes" to residents on

Oahu. Technical guidance on the best management practices regarding used motor oil is also provided to recreational boaters and other small generators as part of the SHWB Hazardous Waste Section program.

#### 2.1.1.6 Chemical and Bio-Terrorism

The increasing concern for acts of terrorism have required more involvement and coordination of effort by the State SOSCs with County HAZMAT units, and other state and federal agencies. Training with HAZMAT and the Civil Support Team (CST) of the State Department of Defense along with the State DOH Laboratory Division and University of Hawaii Laboratory is strengthening our capability to deal with acts of terrorism.

#### 2.1.1.7 Environmental Crimes Task Force

The HEER Office State On-Scene Coordinators (SOSCs) have continued their role with the task force under the lead of the US Attorneys office and EPA Criminal Investigation Division. The EPA has hired a local person to be the Honolulu Resident Agent. The SOSCs continue to provide information and support for investigations, particularly when intentional releases of hazardous substances are perpetrated as a means of disposal. Several of these criminal releases have cross-jurisdictional issues with Federal facilities. The HEER Office laboratory contract for rapid identification of unknown chemicals not only aids in emergency response but also in determining if a crime has been committed. A current project underway at the HEER Office is intended to link the laboratory and investigator resources in a network, both for environmental crime use and for Weapons of Mass Destruction (WMD), and clandestine drug lab activities.

#### 2.1.1.8 Oiled Wildlife Response Program

The purpose of having an Oiled Wildlife Response Program is to provide rehabilitation for wildlife harmed by an oil release. The HEER Office continued to support preparedness efforts for the protection of wildlife in the event of an oil spill. The Department of Land and Natural Resources (DLNR) was authorized \$75,000 funding from the Environmental Response Revolving Fund (ERRF) for a veterinarian to manage a wildlife response and to conduct necessary rehabilitation projects. Each year, additional equipment is obtained for a portable response facility. Training is conducted annually for personnel in wildlife capture, cleaning, and recovery.

# 2.1.2 <u>Hawaii Emergency Planning and Community Right-To-Know Act (HEPCRA)</u>

Under SARA Title III Section 301(a), Establishment of State Emergency Response Commissions, the Governor appoints the Hawaii State Emergency Response Commission (HSERC). The HSERC is responsible for establishing local emergency planning districts, as well as appointing, supervising, and coordinating the activities of local emergency planning committees (LEPC).

The EP&R section also collects and assesses Tier II reports submitted annually by all businesses that handle large volumes of hazardous chemicals and extremely hazardous substances, as required by Chapter 128E, HRS: Hawaii Emergency Planning and Community Right-to-Know Act (HEPCRA).

#### 2.1.2.1 <u>Hawaii State Emergency Response Commission (HSERC)</u>

The HEER Office provides administrative support to the State Emergency Response Commission (SERC). The SERC is chaired by the DOH Deputy Director for Environmental Health and establishes policy for statewide emergency responses, reviews Local Emergency Planning Committee's (LEPC) Emergency Response Plans, and develops statewide response plans.

At the HSERC meeting held on May 23, 2002, the Tier II funds of \$37,022 were approved by the HSERC membership. The funds were approved and disbursed to each LEPC for operational expenses in the following manner: a base of \$5,000 and the balance on the percentage of Tier II funds collected in each emergency planning district for the 2000 calendar year. The following is the distribution to the nearest dollar:

| Honolulu | \$<br>12,558 |
|----------|--------------|
| Hawaii   | \$<br>9,409  |
| Maui     | \$<br>7,979  |
| Kauai    | \$<br>7,076  |

At the HSERC meeting held on September 17, 2002, members approved the distribution of the US Department of Transportation (DOT), Hazardous Materials Emergency Preparedness (HMEP) Planning Grant funds (\$43,006), and the HSERC matching funds (\$10,752) to the LEPCs. The total amount of \$53,758 was allocated to update the LEPC emergency plans for FY 2003 in the following manner:

| Honolulu | \$<br>20,000 |
|----------|--------------|
| Hawaii   | \$<br>14,200 |
| Kauai    | \$<br>10,058 |
| Maui     | \$<br>9,500  |

Members from the Honolulu, Kauai, and Hawaii County LEPCs and the HSERC attended the Millennium 2000 HazMat Explo in December 2-6, 2002 in Las Vegas, Nevada. The conference provided a forum for hazardous materials training in industrial, medical, radiological, LEPC, first responder, and environmental disciplines. The event was initiated in response to State Emergency Response Commission and LEPC members' requests for a conference that would provide training in solutions to problems specifically posed by hazardous materials. Many different federal organizations such as the Federal Emergency Management Agency (FEMA), National Fire Protection Association, U.S. Coast Guard Pacific Strike Team, U.S. Environmental Protection Agency (EPA), as well as Clark County Local Emergency Planning Committee of the State of Nevada sponsored the event.

The National Association of SARA Title Three Program Officials (NASTTPO) held its Mid-Year Conference at the Explo conference. Some of the highlights were:

- DOT Hazardous Materials Emergency Response Program funding levels for training and planning for FY 04 should remain at similar levels.
- The FBI recommended the Cable News Network (CNN) keep abreast in terrorist related information. Too much information on potential threats from Afghan detainees was probably released to the public, thus making the public largely indifferent to the alerts.
- The computer-based Hazmat/Weapons of Mass Destruction (WMD) curriculum for Awareness/Operations training should be completed later this autumn. This will allow for distance-based inter-active training for first responders.
- LEPCs were encouraged to get involved in Homeland Security issues as a means of gaining federal grants.
- EPA Region 9 described their program to survey site security of facilities reporting under the Risk Management Program.

Members of the Honolulu LEPC also attended the annual meeting of the National Association of SARA Title Three Program Officials (NASTTPO) and Hazardous Materials Emergency Preparedness (HMEP) Grants Conference that was held in Oklahoma City, Oklahoma, during April 21-25, 2003. This meeting provided a setting for interaction and the sharing of ideas, problems, and solutions with other people responsible for implementing the Emergency Planning and Community Right to Know Act (EPCRA). NASTTPO works with other organizations and federal, state, tribal, and local agencies with an interest in EPCRA and keeps its members informed about issues, legislation, and regulatory developments affecting EPCRA. The NASTTPO also studies EPCRA issues, and comments on federal proposals such as DOT, EPA, FEMA, and Occupational Health and Safety Administration (OSHA) draft rules; issues papers produced by such federal agencies; and budget actions which affect implementation of EPCRA. Some of the highlights of the conference were:

- Funding for the HMEP Grant Program should remain at the same level (\$13M) for FY 2004. This is the only federal program providing funding to HSERC/LEPCs.
- The proposed OSHA rule requiring escape hoods for Hazwoper facilities was a topic.
- The EPA is requiring water facilities serving communities with a population greater than 100,000 to conduct vulnerability assessments and to prepare an emergency response plan.
- The Sooner Spring Bio-Terrorism exercise conducted in Oklahoma was a topic. Four cities in Okalahoma were involved in the largest bio-terrorism field exercise conducted in the U.S. The exercise presumed an airborne release of pneumonic plague at McAlester, Oklahoma, where over 13,000 simulated doses of medication were given to community members via drive-thru and walk-in distribution centers. The presenter noted that the cell phone system was over-loaded and radios were the only reliable means of communication.
- The EPA Chemical Emergency Preparedness and Prevention Office (CEPPO) now includes an emergency response and the oil spill program. The Chemical Site Security program will fall under the Department of Homeland Security.

Exercises conducted by the National Security Agency (NSA) clearly show that the U.S. is vulnerable to cyber attacks. There were 32,434 attacks against U.S. interests in 2002.

At the HSERC meeting held on May 29, 2003, the Tier II funds of \$66,947 were approved by the HSERC membership for disbursement to each LEPC. The funds will be used for FY 2004 operational expenses in the following manner: a base of \$5,000 and the balance on the percentage of Tier II funds collected in each emergency planning district. The following is the distribution to the nearest dollar:

Honolulu \$ 26,831 Hawaii \$ 16,595 Maui \$ 12,793 Kauai \$ 10,728

HSERC members also approved the distribution of US DOT HMEP Planning Grant funds (\$43,006) and the HSERC matching funds (\$10,752). The total of \$53,758 was allocated in the following manner:

Honolulu \$ 20,000 Hawaii \$ 14,000 Maui \$ 9,500 Kauai \$ 10,258

# 2.1.2.2 <u>Hawaii Emergency Planning and Community Right-To-Know Act Tier II Filing Fees</u>

The deadline for owners and operators of facilities submitting Hawaii Emergency Planning and Community Right to Know Act (HEPCRA) Tier II filing fees for reporting year 2002 (calendar year 2002) is March 1, 2003 (FY 2003). Commonly, a greater amount of the filing fees collected by the HEER Office are submitted in February, just prior to the collection due date.

The following identifies the (1) amount of Tier II filing fees collected for use by the Local Emergency Planning Committees (LEPCs) and deposited into the Environmental Response Revolving Fund (ERRF) during FY 2003, (2) the amount collected to date for FY 2004, and (3) the amount to be collected in FY 2005.

FY 2000 \$ 69,300 FY 2001 \$ 53,800 FY 2002 \$ 72,100 FY 2003 \$ 79,400 for 2002 reporting year FY 2004 \$ 3,500 as of September 2003 end of FY 2003 The Tier II filing fees have been, or are being distributed as noted below to the Local Emergency Planning Committees, after deductions for the Hawaii State Emergency Response Commission (HSERC) operating expenses.

FY 2001 \$ 60,000 FY 2002 \$ 53,352 FY 2003 \$ 37,022 FY 2004 \$ 66,947

Fees collected for fiscal years 2004 and 2005 should remain constant at about the \$75,000 level.

# 2.1.3 <u>Clean Air Act (CAA) 112(e) Accidental Release Prevention</u> <u>Program</u>

The HEER Office EP&R section staff implements the Clean Air Act (CAA) Accidental Release Prevention Program (ARPP) Risk Management Program (RMP) which audits Risk Management Plans prepared by all facilities that handles or utilizes threshold quantities of chemicals listed in the Clean Air Act (CAA) 112(r) Regulated Chemical for Accidental Release Prevention List. These facilities will be inspected to verify the accuracy of their Risk Management Plans to prevent any releases of these regulated chemicals.

As of FY 2003 twenty-one RMP plans have been reviewed. Pending EPA approval to perform RMP site inspections, the RMP Coordinator has been reviewing and inputting Tier II facilities' information into the HEER database with the prospect of identifying additional sites regulated under the ARPP.

### 2.1.4 Emergency Response Significant Site Summaries

The HEER Office Emergency Preparedness and Response Section (EP&R) State On-Scene Coordinators (SOSC) are responsible for planning and preparing for, and responding to releases of a hazardous substance and/or oil that may cause immediate and substantial threat to human health or the environment. The SOSCs have been trained to enter hazardous atmospheres in self containing breathing apparatus and various types of personal protective equipment. As back-up personnel to first responder County HAZMAT teams, SOSCs are on 24-hour call.

During FY 2003, the HEER Office received 403 notifications of which 358 were directly concerned with the release of hazardous chemicals or oil spills. Of the 358 notifications reported, 71 required a site visit by a State On-Scene-Coordinator (SOSC) and/or a major off-scene coordination and response effort. During FY 2002 there were 490 notifications with 40 sites requiring on-scene or off-scene coordination. Notable among the spill responses during FY 2003 include the following:

- Honolulu Harbor Area-wide Contamination
- Hilo Bayfront Soccer Fields
- Vessel Groundings
- Environmental Crimes

In addition to the notable spill responses, <u>Environmental Health Administration Hazard</u> <u>Evaluation and Emergency Response Office Release Notification Log</u> in Appendix B contains a listing of all notifications received during the fiscal year. Many of these notifications were for small spills that were resolved in less than one day.

#### 2.1.4.1 Honolulu Harbor Area-wide Contamination

The Iwilei District Operating Partners (IDOP) have continued to focus on preventing the release of the existing area wide petroleum contamination into the Honolulu Harbor and the waters of the State. The Hawaii Department of Health HEER Office has continued the oversight of source control, containment, response activities, and pipeline mapping. The Environmental Protection Agency (EPA) Federal On-Scene Coordinators (FOSCs) are assisting in this State lead joint project.

The IDOP is a group of organizations that is currently negotiating a voluntary agreement with the DOH to define responsibilities for prevention of releases in the Iwilei area. This agreement will augment the current voluntary agreement between the Iwilei District Participating Partners (IDPP) and the DOH to control releases, delineate the extent of contamination, remove sources, and remediate the Iwilei area.

The FY 2003 emergency response issues for the Honolulu Harbor area included seepage of petroleum hydrocarbons from the Pier 26 bulkhead into the harbor, and Pier 32 seepage onto the pier at the old Pauley/Shell asphalt plant. The Pier 26 seepage was patched and the IDPP has plans to excavate the area to find and remove the source. At the close of FY 2003 the Pier 32 seepage was being cleaned up, and plans to investigate the source were underway.

Also during FY 2003, the Nimitz Highway corridor in the area of Pacific and Sumner streets was in the process of being excavated for a Board of Water Supply new water main and street resurfacing project. During construction contamination was encountered. The contaminated area was partially excavated by the contractor, and was mapped and referred to the IDPP. The project and mapping continues for FY 2004.

The HEER Office will continue to provide oversight of the prevention and cleanup activities. The work will entail the evaluation of current facilities and the control and elimination of future releases. It is envisioned that the area wide remediation effort will require staff time for several more years.

#### 2.1.4.2 <u>Hilo Bayfront Soccer Fields</u>

In November 2001, contaminated soil from an old gasification plant was deposited onto the Hilo Bayfront soccer fields via the Alenaio Stream Flood Control Channel. Contractors removed approximately 70 cubic feet of tar like fuel residue from the stream bank. The tar and the soil contaminated with polycyclic aromatic hydrocarbons (PAH) removed from the fields was disposed of as a non-hazardous waste. Following removal activities, the fields were capped with clean soil by Hawaii County.

The flood also wiped out monitoring wells that had been constructed to assess the impact of the buried tar on groundwater. These wells were restored by the County and FEMA.

Currently a berm located at the Northern end of the site contains approximately three thousand cubic yards of buried tar left by the Army Corps of Engineers during construction of a scour pond for the channel. Samples taken from the new wells show no significant impact to groundwater.

In an effort to find an on-island solution, the HEER Office has asked the EPA to assist in determining the environmental impact of the tar, as well as alternatives for its removal. There have been many of these old cooking gas manufacturing plants on the West Coast, and the EPA has been involved with cleaning up most of them. Pending the EPA's review of the site's historical documents and recommendations, the berm will then be thoroughly sampled.

### 2.1.4.3 Vessel Groundings

On November 28, 2002 the 60 feet steel hull fishing vessel, "Kolea", grounded off Diamond Head Light House releasing 1000 gallons of diesel fuel. Weather, and the fact the vessel was located in the surf line, prevented removal of the vessel until December 1. The vessel was towed offshore and scuttled in 300 feet of water.

On January 4, 2003 the motor vessel "Messenger of Peace" grounded on the reef off Maui in waters of the Humpback Whale Marine Sanctuary with 1000 gallons of diesel fuel on board. The owner had no insurance and was unable to pay for removal of the vessel. The Coast Guard transferred the fuel from the vessel and a National Oceanic and Atmospheric Administration (NOAA) contractor removed the vessel from the Marine Sanctuary for off shore disposal.

#### 2.1.4.4 Illegal Dumping on All Islands

The HEER Office continually receives reports of drums and containers abandoned on the sides of the road and in remote places. Historically, drums that have been "abandoned" typically contain hazardous waste and/or petroleum, used cooking oil and grease trap waste, and are often been leaking. The HEER Office and Environmental Crimes Task Force is working to coordinate law enforcement and response efforts to mitigate the problem.

## 2.2 Hazard Evaluation

The HEER Office Hazard Evaluation Section provides ecological and human health risk assessment support, conducts toxicological assessments of chemical threats to human health, establishes appropriate cleanup levels for chemical contamination, and assists the public with information concerning the health effects of chemicals. In FY 2003, the staff provided risk assessment support and responded to a diversity of inquiries concerning potential health hazards. These inquiries included questions regarding heavy metals (i.e. mercury, lead, arsenic), pesticides, indoor/outdoor air quality, and other illnesses potentially related to the environment. HEER continues to provide information to private citizens, businesses, schools, other State and local agencies, as well as directly to the Director of Health and the Deputy Director for Environmental Health.

### 2.2.1 Ecological Risk Assessment

The Ecological Risk Assessor's work focused on review of ecological risk assessment reports and other supporting material including data sets, and program and project management activities. Additionally, in FY 2003, the purchase of new software broadened the possibilities for data analysis using correlation and regression techniques, and descriptions of data distributions used in risk assessments.

The two highest priorities for ecological risk assessment activities include: 1) the development of standards specific to Hawaii's environmental conditions and its unique biological communities, and 2) providing support for the day to day activities of project managers who are involved in the identification of contaminated sites, their assessment of remediation approaches, and the cleanup of these sites for the short and long term protection of the State's ecological resources. The following provides a summary of the ecological risk assessment activities.

#### 1. Ecological risk assessment

During FY 2003 five ecological risk assessments were reviewed; three for military sites, one for a private site, and one responding to a requests from both the DOH Solid and Hazardous Waste and Clean Water branches and reporting on potential impacts by operations at Hilo power plant. A draft report of the impact of sedimentation to coral reefs was also reviewed to assist the Department of Land and Natural Resources (DLNR) in the preparation of testimony to the DLNR Board.

#### 2. Program Management support and site reviews

The ecological risk assessor was involved with the discussion of sites with project managers, principal responsible parties (RPs) and their support contractors. Discussions for 49 sites ranged from contamination sources, distribution, levels, and potential impact to the environment. Site discussions sometimes required the review of site specific documentation while other sites required the gathering of information and interpretation of the data collected.

The review of specific site related documents numbered 15 including military and private ownership. These reviews generally evaluated questions about adequacy of sampling for ecological risk assessment purposes in terms of numbers and distribution across the site, and the interpretation of the sample data and proposals made by the principal Responsible Party (RP). Several site visits were conducted to local sites where it was necessary to make the connection between the written material and the physical locations of the site.

#### 3. Development of standards

Development of standards efforts focused on the identification and evaluation of data for aquatic and terrestrial receptors specific to Hawaii. Potential impact to the Hawaiian environment is best protected by the use of standards specific to the island environment and the specific geologic conditions found in Hawaii. While procedures developed in mainland settings have relevance to Hawaii for general processes (biological and

toxicological), the unique species present in Hawaii requires special consideration for the receptor species and the particular tests used to evaluate potential environmental impact.

#### 4. DOH support outside the HEER Office

Ecological risk assessment support was provided to outside DOH branches and the University of Hawaii. Assistance was provided to the DOH Solid and Hazardous Waste Branch (SHWB) in the review of documents, contract development support for site sampling criteria, data analysis, and presentations made at public hearings and meetings.

Document and data reviews were performed to support SHWB and Clean Water Branch (CWB) permit renewals at the Hilo power plant. Reviews included study of the potential impact of incinerator ash for two large operations, and potential impact of heated effluents to coral reefs and terrestrial environments.

Ecological risk assessment support was provided to the Environmental Planning Office (EPO) and the University of Hawaii for two fish studies. The reviews included evaluation of the fish species that would best represent the question being addressed, and, comparison of proposed sampling techniques to state requirements and good practices.

### 2.2.2 Public Health Studies

The following provides an overview of two pubic health studies performed in FY 2003.

## 2.2.2.1 <u>VOG Health Assessment Study. An Assessment of the Health</u> <u>Effects from Exposure to Volcanic Emissions</u>

The Vog (volcanic fog) study is entitled, "An Assessment of the Health Effects from Exposure to Volcanic Emissions (formerly: Hilo Asthma Pilot Study)." This study involves an evaluation of health risk issues that may be attributable to volcanic fog or "Vog" exposure on the island of Hawaii. This study is an effort to help individuals with respiratory sensitivity.

The staff at the HEER office continues to oversee and coordinate the Centers for Disease Control (CDC) research grant on the Vog study. Dr. Jon-Pierre Michaud is the contractor at the University of Hawaii at Hilo who is conducting this study.

The original goal of the CDC funded grant was to study the acute (short-term) respiratory effects of Vog exposure on asthmatic school children in Hilo. To date, no significant association has been found between mild to moderate Vog exposure and changes in lung function. This may be due to the fact that Vog exposures were low during the months that health data were collected.

A refocusing of the grant study has shifted the investigation to evaluate the health effects of Vog exposure in adults at the Hawaii Volcanoes National Park where relatively high exposures are expected. The purpose has been to capture one or more Vog exposure event(s) while simultaneously measuring air quality.

To assess air quality, sulfur dioxide and fine (sub-micron) aerosols were measured. In addition, lung function and respiratory symptoms were monitored during these events. Each subject

served as their own control and their daily health status measures were examined for associations with naturally occurring changes in Vog exposure conditions over several months.

In April 2003, a non-competing continuation grant application was submitted to the CDC for the Vog project in the amount of \$120,000 for the CDC year-06 grant award (September 30, 2003 through September 29, 2004). CDC approved this grant award in July 2003. The subcontractor's projected completion date is December 2004.

#### 2.2.2.2 Fish Mercury Study

Eating fish containing harmful levels of methyl mercury is of particular concern to pregnant women. Women who regularly consume these fish can injure the developing nervous system of their unborn child or their child who is nursing. Young children especially under the age of five who eat these fish can have adverse effects as well. This is because the developing nervous system of the baby and young child is more sensitive to the harmful effects of methyl mercury than the more fully developed nervous system of an older child or adult.

In an effort to evaluate the risk of consuming mercury (methyl mercury) in locally caught fish, the HEER office collected fish tissue samples of fish caught off the coast of Hawaii. The samples were collected for predetermined size ranges from the United Fishing Agency, Ltd. in Honolulu. Analysis of the samples was contracted to certified analytical laboratories.

During the period from April 2002 to January 2003 the office collected 180 fish fillet samples in nine locally caught fish species to test for the presence of mercury. Twenty samples were collected from each of the nine fish species. The fish species sampled were bigeye tuna, yellowfin tuna, albacore, striped marlin, Pacific blue marlin, mahimahi, aku, ono, and opah.

To determine the size range to be sampled, the average size range (biomass) landed in Hawaii for bigeye tuna, yellowfin tuna, albacore, striped marlin, the Pacific blue marlin, and mahimahi was evaluated from the 1997 through 2000 data gathered from the National Marine Fisheries Service (NMFS) of the National Oceanic and Atmospheric Administration (NOAA).

Marlin was added to the fish sampling because the 1991 fish mercury data collected by the Hawaii DOH Food and Drug Branch showed marlin to have a lot of variability and the mercury concentrations were elevated. Aku, ono, and opah were sampled, as these are popular fish consumed by the local people of Hawaii.

Preliminary data analysis (weight and concentration) and data analyses (correlations and regressions) summaries (charts) were completed by the office's ecological risk assessor in preparation to writing an internal report.

The preliminary study results were shared with the Women Infants and Children (WIC) Services Branch of the Family Health Services Division. The WIC program developed a brochure entitled, "A Local Guide to Eating Fish Safely for Pregnant Women, Nursing Mothers, and Young Children." The brochure may be found at <a href="https://www.hawaii.gov/doh">www.hawaii.gov/doh</a>. The fish advisory guide is not intended to discourage pregnant women and young children from eating fish, but will provide a guide to eating fish that are low in contaminants such as methyl mercury.

The next phase of the fish study will be to collect fish samples at the retail market level.

# 2.2.3 Reporting of Pesticide and Heavy Metal Poisoning to the HEER Office

As stated in the Hawaii Administrative Rules (HAR) Title 11, Department of Health Chapter 5, Environmentally-Related Illness and Injury Reporting Law, the Hawaii DOH has made the abnormal lab results for pesticides (i.e. organophosphates and carbamates) and elevated lab results for heavy metals (i.e. lead, cadmium, mercury and arsenic) reportable conditions. That is, physicians and laboratory directors are required to report cases, or suspected cases, of pesticide or heavy metal poisoning in human blood and urine samples. Since many physicians may not be aware of this law, an agreement was made with local laboratory directors for them to provide lab results that show the presence of pesticide or heavy metals to the HEER office. The data from these lab reports will be used to increase the present knowledge and understanding of pesticide and heavy metals exposure to individuals and the magnitude of the problem in Hawaii.

In the past, all laboratory reports have been received in hard copy. The HEER Office is presently coordinating with the Epidemiology Branch to receive the reports electronically from the reporting laboratories. It is hoped that having the information available in an electronic form will help the HEER Office to summarize the data in a manner that furthers this project. This includes raising physician awareness of the pesticide or heavy metal exposure problem, and raising physician awareness of the need to report such exposures. This also includes gaining a better understanding of preventing pesticide or heavy metal exposure in the future.

Furthermore, the electronic Environmentally-Related Illness and Injury reports will be entered and stored in a new computerized data base that will be designed to be compatible with the Public Health Information Network (PHIN). The PHIN is a nationwide project of the U.S. Centers for Disease Control (CDC) whose goal is to interconnect all of the disease surveillance systems in the United States on the Federal and State levels. By pooling or combining Hawaii's and other states' illness reports, trends and patterns will be easier to notice, particularly among rare diseases.

## 2.2.4 Significant Hazard Evaluation Section Project Summaries

The following provides a summary of additional significant project activities performed in FY 2003.

1. Review of specific human health risk assessments

HEER toxicologists reviewed risk assessment documents for remedial investigations conducted by private parties, and state and federal agencies, as listed in the following:

- a. Costco's Iwilei Store
- b. 825 Kapiolani Boulevard
- c. Gasco in Iwilei
- d. Aiea Sugar Mill
- e. Sand Island Wastewater Treatment Plant

- f. Puunene Armory Site, Maui, before it could be converted into a community center where soil testing found that no pesticides were spilled by former crop sprayers
- g. U.H. Medical School site in Kakaako, where unusually high barium contamination in soil was found possibly from past tenants' use of barium carbonate rodenticide
- h. Waiehu Kou Phase 3 Hawaiian Home Lands housing, Maui, on land formerly cultivated in sugar cane and macadamia nuts
- i. Waimanalo Gulch Sanitary Landfill expansion
- 2. Copper Chromium Arsenate (CCA) treated lumber at DOE locations

Wolmanized lumber which has been treated with chromium copper arsenate (CCA) is ubiquitous in the islands, having been used to construct government and school buildings, houses, and playground equipment (for example, Barbers Point Playground). Arsenic is a proven human cancer agent, and there is a possible risk to children's health from direct contact with public playground equipment made of arsenic-treated wood or with arsenic-contaminated soil beneath the equipment due to the leaching of arsenic out of CCA-treated wood by rainwater. The Departments of Education (DOE) and Accounting and General Services (DAGS) are trying to determine which public buildings might have this problem.

During this fiscal year, the Department of Accounting and General Services (DAGS) became aware of an additional health and disposal problem involving deteriorating ceilings in a few older schools which are made of canec, a material which was made from pressed sugar-cane stalks, with arsenic added to prevent attack by termites and mildew.

3. Metallic lead in upcountry Maui drinking water

The Maui communities of Makawao (population 33,000), upper Kula (population 4800), and lower Kula (population 3000) have a drinking water supply which corrodes and leaches lead out of old plumbing and fixtures. Consequently, lead in the area's drinking water has exceeded the level regulated under the EPA Lead and Copper Rule which is implemented by the Hawaii Department of Health (DOH) Safe Drinking Water Branch (SDWB).

In order to comply with the U.S. EPA and the DOH SDWB, the Maui Board of Water Supply added corrosion-control chemicals, either zinc phosphate or plain phosphate, to the local water system.

Following the addition of the zinc phosphate or plain phosphate to the water system, the public has complained of itching or irritated skin. Considering the known and irreparable damage of lead exposure to children, the complaint of occasional itching and skin irritation has become secondary.

A HEER Office toxicologist has been answering the public's concern by providing medical facts on the harmless and beneficial properties of phosphate, which is one of the two main ingredients of bones as well as the foundation of the body's energy system.

#### 4. Possible chemical air pollution affecting Hawaiians in Keaukaha, Hilo, Hawaii

Various health complaints including respiratory problems and headaches among residents of Keaukaha, a Hawaiian Home Lands neighborhood between Hilo Airport and Hilo Harbor, have led to speculation about an environmental cause to the health problems. Letters have been written from that community to the Governor and to Congressman Ed Case, who sent letters to the U.S. Environmental Protection Agency and the U.S. Department of Health and Human Services. The federal agencies and the Hawaii DOH will work together in assessing the community's environmental pollution. This issue overlaps into the next fiscal year.

#### 5. Mold in indoor environments, statewide

The fallout continued from last year's newspaper and magazine articles on "toxic mold" which alarmed the public and led to the highly visible closing of a tower at a large Waikiki hotel. HEER again fielded dozens of calls and letters from homeowners and renters who were concerned about possible asthma, memory loss, and dizziness from growths of fungus and mildew. The DOH Indoor Air Office also received dozens more.

#### 6. Coqui frogs on Maui and Hawaii

The infestation of noisy and possibly ecologically damaging Puerto Rican coqui frogs continued from last year. HEER consulted with the state Department of Agriculture's (DOA) Pesticides Branch, which used a citric acid and water solution to try to stop the spread of the frogs to other islands.

#### 7. Lake Wilson, Oahu

A noxious waterweed, *Salvinia molesta*, bloomed on Lake Wilson. The Department of Land and Natural Resources (DLNR) spraying crews were provided with a chemical mixture for use to kill the waterweed. The DLNR workers were concerned that they were not given adequate information about the chemicals used and asked a HEER Office toxicologist for impartial advice and assurance from the DOH. Information was provided to the workers that mixture of Aquamaster, a mildly toxic glyphosate weed killer, and Turf Mark, a harmless marking dye was used.

#### 8. Protests against roadside weed killing, Kauai

A group of private citizens on Kauai is claiming that the County Department of Transportation's application of RoundUp herbicide, used to kill roadside weeds, is the major contributor to their illnesses. They have called and written letters to the state Department of Agriculture's Pesticides Branch, the HEER office toxicologist, the Governor, and the U.S. EPA who licensed and permitted the weed killer to be sold in the United States. The issue has also featured in at least two local newspaper articles. To date, no licensed physicians or veterinarians have confirmed their claims.

#### 9. Air quality at Campbell Industrial Park, Oahu

HEER evaluated the DOH Clean Air Branch (CAB) Annual Summary of Air Quality Data for the Campbell Industrial Park (CIP) Area, 2002. The CAB used this evaluation in their annual air quality report for the CIP area.

#### 10. Dredging of the Ala Wai Canal, Oahu

HEER assisted the DOH Solid and Hazardous Waste Branch (SHWB) on review of human health risks associated with disposal of dredged spoils from the Ala Wai Canal at the Honolulu Airport reef runway. The assessment reported that no health risks are expected for disposal of the dredged materials at the runway.

#### 11. Waipahu Incinerator, Oahu

An environmental risk assessment document for the Waipahu Incinerator and Landfill submitted to the DOH Solid and Hazardous Waste Branch (SHWB) was reviewed by the HEER office. The incinerator and landfill issues were addressed by preparing summaries based on specific information and summary data from samples collect by a DOH support contractor.

High levels of lead were found in ash or dust on the landfill and incinerator site. The risk assessment evaluated the health risks to workers and people living or playing offsite from exposure to ash or dust. The assessment indicated that given current land use, the incinerator and landfill does not pose a risk. The HEER office concurred with the conclusions of the risk assessment.

#### 12. Vibrio Vulnificus, Ahalanui Pond, Hawaii

The HEER Office assisted the Clean Water Branch (CAB) in an investigation of a *vibrio vulnificus* infection from the Ahalanui Pond on the Big Island. Sampling of the pond by the Water Resources Research Center at the University of Hawaii found elevated levels of total vibrio compared to open coastal waters. The HEER office assisted the Director's office in preparing a letter to the County of Hawaii recommending that warning signs be posted at the pond.

#### 13. U.S. Department of Defense (DOD) chemical and biological testing, Hawaii

At the request of the Mayor on Hawaii, information was provided to the County on chemical and biological weapons testing on the island of Hawaii. In the 1960s, the U.S. Department of Defense (DOD) conducted eight land-based tests. The quantities released varied from a few ounces to 500 pounds. The agents released included *Bacillus globigii*, *Serratia marcescens*, *E. Coli*, sarin gas, BZ (3-quinuclindinyl benzilate), methyl acetoacetate, and zinc cadmium sulfide. After reviewing the results of the testing, the HEER office and an epidemiologist from the DOH Epidemiology Branch concluded that no adverse health or environmental impacts are expected from the testing.

# 2.2.5 <u>Committees, Advisory Boards and Community Presentations</u>

The following is a summary of committee, advisory board, and community presentation activities for FY 2003.

1. Interstate Working Group on Chemical Terrorism

A HEER office toxicologist is Hawaii's representative on the voluntary Interstate Working Group on Chemical Terrorism, which is a collaboration of state, federal, and a few county government scientists and academic experts. The latest information and well-developed educational tools have been shared, so that all states are now equally well informed. However, from a national questionnaire which was generated within the group, no state is adequately prepared for a chemical terrorism incident.

2. The VOG (volcanic fog) Advisory Committee, Statewide

HEER continues to be an active member of the VOG Advisory Committee. This is a joint committee of federal, state, university, and community representatives. The discussion of ongoing technical projects and potential new research areas such as the Vog Health Assessment Study (section 2.4.2) are key areas of interest of the VOG Advisory Committee.

3. Disposal of Ala Wai Dredging Material, Honolulu

The issues surrounding the placement of dredge material from the Ali Wai Canal onto the property controlled by the Honolulu Airport were addressed in part by much discussion with DOH staff, a site visit, attending a public meeting, and preparing for and participating in a public hearing by answering questions from the public.

4. Contaminants in Fish, Vermont

A toxicologist attended the annual U.S. Environmental Protection Agency's meeting on Contaminants in Fish in Vermont. Much of the focus at the meeting was on mercury in fish, an area of interest to the HEER group.

5. Crisis and Emergency Risk Communication, Honolulu

A toxicologist attended a training session on Crisis and Emergency Risk Communication, in Honolulu. The session was sponsored by the Hawaii DOH and the U.S. Centers for Disease Control and Prevention.

6. Global Public Health Conference, Honolulu, Hawaii

A toxicologist made a presentation at the Global Public Health Conference, Collaborating for Quality of Life and Health in the Pacific, held in Honolulu, Hawaii. The title of the presentation was "Organochlorine Pesticides and Lead in Fish from the Ala Wai Canal.

First Annual Public Health Information Network Conference, Atlanta, Georgia

The U.S. Centers of Disease Control (CDC) has committed millions of dollars over the next few years toward the creation of a Public Health Information Network (PHIN), which will be a secure computer link among all the state and county health agencies, the National Institute for Occupational Safety and Health (NIOSH), and the CDC. Ultimately, the DOH could use health information from those federal agencies or from any other state, or this will be as if one big national department of health could conduct statistically powerful health studies of rare diseases, or react nationally to bio- or chemical terrorism incidents. A HEER Office toxicologist attended this conference along with the DOH's bio-terrorism coordinator and computer-systems supervisor.

8. National Bio-terrorism Exercise, Honolulu, Oahu

The U.S. Food and Drug Administration conducted a nationwide "tabletop" exercise in April 2003. The purpose of the exercise was to improve participating programs' ability to prepare for, manage, and respond to region-wide terrorism incidents involving the use of a chemical or biological agent to contaminate the food supply. The one-day exercise was conducted by U.S. Food and Drug Administration FDA faxing information in progressive bulletins regarding a mysterious illness caused by a contaminated food product. The HEER Office joined the Sanitation Branch, the Food and Drug Branch, and the State Laboratories Division in this exercise.

## 2.3 Site Discovery, Assessment, and Remediation

The HEER Office Site Discovery, Assessment, and Remediation (SDAR) Section State Remedial Project Managers are responsible for assessing the near and long-term relative threat of sites contaminated with hazardous substances and for the oversight and implementation of response actions at sites with suspected and confirmed releases of hazardous substances, including petroleum. Project oversight is provided to military facilities subject to the Department of Defense/State Memorandum of Agreement (DSMOA) and to civilian sites undergoing cleanup activities.

#### Responsibilities include:

- 1. Site Discovery Identifies all sites in the State of Hawaii jurisdiction that is contaminated or potentially contaminated.
- 2. Supports the U.S. Environmental Protection Agency (EPA) by conducting Preliminary Assessments (PA) and Site Inspections (SI) to determine which sites should be listed on the Superfund National Priority List (NPL).
- Assessment Coordinates the State's setting of assessment and clean-up priorities to identify and designate sites as low, medium or high priority or as a No-Further-Action (NFA) site.

- 4. Provides oversight and technical expertise to governmental agencies and private entities who conduct site investigation activities for defining the extent of contamination on individual properties.
- Remediation Provides oversight to potential responsible parties (PRPs) who are conducting response actions to insure that hazardous materials and contaminated sites are cleaned-up in a timely manner that is protective of human health and the environment.
- Brownfields Assisting State and private development efforts with the identification of sites that have low contamination and high potential for commercial development and overseeing that the cleanup meets State laws;
- 7. Voluntary Response Program Overseeing and assisting private parties with the voluntary cleanup of sites.
- 8. Cost Recovery Insuring the reimbursement of State expenditures and/or the payment of natural resource damages when appropriate.

# 2.3.1 <u>Department of Defense State Memorandum of Agreement (DSMOA)</u>

The Department of Defense continued to provide grant monies in support of the HEER Office Department of Defense/State Memorandum of Agreement (DSMOA) program in FY 2003. Program staff vacancies have influenced the progress of the Department of Defense sites. An employee was hired for the Air Force position and currently interviews are being conducted for the Geologist I and the Army project manager in the DSMOA program.

#### 2.3.1.1 Army Installation Significant Sites

Army Sites: These sites are being managed by the U.S. Army Corps of Engineers (ACE) with work being performed by contractors. Site work continues at many sites throughout the Islands. In addition to this work, other efforts are being performed at Formerly Used Defense Sites (FUDS) by the ACE under the oversight of DOH. In addition, several sites were included under the Base Closure and Realignment Commission (BRAC) with work continuing during FY 2003. These efforts are listed below with brief descriptions.

#### 1. Tripler Army Medical Center, Oahu

The Tripler Army Medical Center (TAMC) Landfill is located on the west side of the TAMC installation. The landfill was active from 1947 through 1974. Early landfill use was restricted to construction debris from the construction of TAMC. Later, the landfill was used to dispose of incinerated medical waste, laboratory wastes, maintenance waste, food waste, and construction and landscaping debris. Unspecified waste from Fort Shafter was also disposed in the landfill. The Army conducted a Preliminary Field Screening Investigation to determine the presence or absence of hazardous substance contamination from the landfill operation. The investigation found polynuclear aromatic hydrocarbons, pesticides, lead, and dioxin chemicals in the surface and subsurface soils

in the interior of the landfill. Monitoring wells were installed down to the basal groundwater aquifer and analysis results of the water found no chemical contamination. The remedial investigation (RI) conducted by the Army confirmed the levels of dioxin, polychlorinated biphenyls (PCBs) and pesticides in the surface soil, subsurface soil and sediment. The Army installed a cap over the landfill and a concrete drainage channel to handle the rainwater runoff from the landfill to address any human health risk posed by the contaminants.

#### Progress:

The Army did not perform any environmental work on the Tripler Army Medical Center Site during the state FY 2003.

#### 2. Fort Shafter, Oahu

#### Progress:

The Army completed the final work plan and sampling and analysis plan for the remedial investigation of several Fort Shafter Flats Sites.

#### 3. FUD Sites, Statewide

The Formerly Used Defense Sites (FUDS) Program is a massive national undertaking to identify hazardous-materials-contaminated properties which were formerly owned, leased, possessed, or operated by the Department of Defense (DOD) or its contractors prior to 1986, and which are no longer under the control of DOD (i.e., the land is public or privately owned). The inventory or properties are being evaluated for risk, and the properties will be cleaned up or otherwise cleared. The Army is the executive agent for the FUDS Program and the US Army Corps of Engineers (USACE) is the operational segment that manages and executes the Program. U.S. EPA under various environmental statutes (CERCLA, Resource Conservation and Recovery Act (RCRA), Safe Drinking Water Act (SDWA) can become involved in reviewing, compelling, or undertaking cleanups when imminent and substantial endangerment of the public health and the environment is threatened. Various other agencies may also have jurisdictional interests in the Program: Federal land and resource managers health risk managers, and State, Territorial, and tribal agencies. Community involvement in the process is important. Nationally there are over 9,000 FUDS properties; within Region 9 there are more than 2,000 of these, and of that number, about 600 are within the Pacific Ocean Division (POD), which includes the State of Hawaii. As of December 2002, there were 474 FUDS Projects within Hawaii (as of this date the inventory showed there were 377 eligible FUDS Properties in Hawaii).

The USACE contractor has prepared a Statewide Management Action Plan (MAP) for the Defense Environmental Restoration Program Formerly Used Defense Sites (DERP-FUDS) in Hawaii (2003). The purpose of the Statewide MAP is to provide a compilation of pertinent data and restoration activities for all active DERP-FUDS properties located within the state to allow meaningful involvement by regulators in the planning and prioritization process, determine the lead regulatory agency for each DERP-FUDS project, and develop a strategy for reaching property closure. In general, the Statewide

MAP summarizes the status of restoration programs for each property ion addition to the anticipated future actions to address environmental damage.

DOH has reviewed this document and provided comments to the USACE. High risk categorization for Hawaii sites includes seventeen sites: Waikoloa Maneuver Area – Waikola Village; Waikoloa Maneuver Area – Parker Ranch; Nansay Hawaii – Ouli; Nansay Hawaii – Puako; Firing Range and Camp; Heeia Combat Training Camp; Pali Training Camp; Gunnery Site; Offshore Waianae Sewage Outfall; Papohaku Ranchlands Subdivision; Kamaole Training Area; Hickam Military Air Field; Ahukini; Oahu Island Target; Pacific Jungle Training Camp; and Popoki Target Area.

Documents written by the USACE contractors for these sites will be reviewed by DOH in FY 2004 to certify that the evaluations will meet State laws and regulations.

#### 4. Maui Airport, Puunene, Maui

Progress:

The Army Corps of Engineers (ACE) completed an addendum to the work plan and sampling and analysis plan for the removal action of PCB contaminated soil and concrete at the transformer site.

#### 5. Waikoloa Maneuver Area, Waikoloa, Hawaii

Progress:

The Army Corps of Engineers completed the work plan for the removal action of cleaning up the unexploded ordinance (UXO) at the Waikoloa Maneuver Area site.

#### 2.3.1.2 Navy Installation Significant Sites

#### 1. Naval Computer and Telecommunications Area Master Station Pacific, Oahu

The Naval Computer and Telecommunications Area Master Station (NCTAMS), facility was placed on the National Priorities List (NPL) in May 1994. NCTAMS is composed of two sites, a Naval Radio Transmitting Facility (NRTF) at Lualualei, the main station, and a receiver site in Wahiawa. NCTAMS Wahiawa is located on the eastern side of the highest part of the Schofield Plateau and about one mile east of Whitmore Village. The Lualualei Naval Radio Transmitting Facility is located in Lualualei Valley and is contiguous with Naval Magazine Lualualei. Earlier site investigations detected polychlorinated biphenyls (PCB) contamination in the soil around electrical transformers. The investigation found out that maintenance technicians checking the transformer oil, which contained PCBs, were discarding the oil samples directly onto the ground around the transformers. In 1991, the Navy conducted a removal action by excavating the PCB contaminated soil around several of the transformers and sending it to the mainland for proper disposal. This site investigation identified 15 sites that require further investigation at NRTF Lualualei and NCTAMS Wahiawa. The Navy has completed the remedial investigation at the Old Wahiawa Landfill and the Building 6 Disposal Area. The Navy has also completed the removal action at the transformer sites at both NCTAMS facilities

by excavating PCB contaminated soil and storing it for treatment. The Navy has selected a vendor to accomplish the thermal desorption treatment of the PCB contaminated soil. Treatability tests of the thermal desorption treatment system have been completed. The Navy is in the process of selecting a contractor to perform the thermal desorption treatment of the PCB contaminated soil.

#### Progress:

- a. The Navy completed the Sampling and Analysis Plan for confirmation and verification sampling at nine sites at NCTAMS Wahiawa.
- b. The Action Memorandum for the Treatment /Disposal alternative for PCB contaminated soil was completed by the Navy.
- c. The Site Work Plan for the Thermal Desorption Treatment of PCB contaminated soil at the former Naval Air Station (NAS) Barbers Point was completed.
- d. The Navy completed the Work Plan for the Removal Action of PCB contaminated soil at Group B and C sites.
- e. The characterization and confirmation sampling plan for the Group B transformer sites PCB contaminated soil removal action was also completed by the Navy.
- f. The Navy conducted Restoration Advisory Board Meetings at the Wahiawa and Nanakuli Libraries.

#### 2. Pearl Harbor Naval Station, Oahu

#### Progress:

- a. The Navy completed the two addendums to the work plan for the removal action of the old aviation gas (AVGAS) pipeline on Ford Island.
- a. A supplemental RI report for the Building 593 and Halawa Landing Site was completed by the Navy.
- b. The Environmental Baseline Survey and Finding of Suitability to Lease for the Ford Island and Halawa Landing properties were completed.
- c. An Engineering Evaluation/Corrective Action EE/CA, Site Work Plan and Action Memorandum for the non-time critical removal action at five hazardous substance sites on Ford Island were completed by the Navy.
- d. The Navy also completed a removal action memorandum for the Inactive Petroleum Pipeline at Halawa Landing.
- e. The Ford Island final Remedial Investigation Report was published by the Navy.
- f. The Navy conducted two Restoration Advisory Board Meetings for the Pearl Harbor Naval Complex.

#### 3. Pearl Harbor Naval Public Works Center-Pearl City Peninsula Landfill, Oahu

The landfill is located on the north shore of Middle Loch and operated from 1965 until 1976. The site is currently capped with a two-foot thick layer of crushed basalt. An Investigation indicated the presence of dioxin, polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), trichloroethylene (TCE), and fuel products. The Navy completed a removal action, which involved repairing large cracks in the landfill cap, covering some black sand that was on the surface of the landfill and capping some asbestos material that was recently discovered on the border of the landfill. The Navy is presently accomplishing an ecological risk assessment on the Waiawa Unit National Wildlife Refuge, which is adjacent to the landfill. The Navy is also accomplishing long-term monitoring of the groundwater under the landfill.

#### Progress:

- a. The Navy completed the two Quarterly Long -Term Monitoring Reports for the Pearl City Peninsula Landfill.
- b. The NEX Gas Station fuel product recovery report was completed by the Navy with a total of 11,711 gallons of oil recovered at the site.

#### 4. Pearl Harbor Naval Shipyard Building 8, Oahu

Building 8 is located in the Naval Shipyard Industrial Area on the East Loch of Pearl Harbor. It served as a power plant, an equipment test facility and a pipefitting shop. Site investigations revealed that subsurface oil is accumulating within Building 8 sumps and other subsurface structures adjacent to the building. During heavy rainfall events, oil sheens in Pearl Harbor around Dry Dock No. 1, are suspected to be caused by oil migrating along the conduits of the Building 8 storm drain system and into Pearl Harbor. An oil plume up to several feet thick has been identified in the ground around Building 8. The Navy has installed an active extraction system to contain and extract the oil from the plume under the site.

#### 5. Pearl Harbor Naval Shipyard Oscar 2 Pier, Oahu

The Oscar 2 Pier is located on the western corner of the naval shipyard. The site is adjacent to Building No. 177, a power plant that is no longer in service. Black oil was noted on the northwest shore off the Oscar 2 Pier. The oil appears to be old residual fuel oil with a tar like viscosity much like the Navy Special Fuel Oil. Two permanent oil extraction wells, installed in the past to collect oil in the ground and prevent it from going into Pearl Harbor, are located near the site. To stop the release of oil presently going into Pearl Harbor, the Navy has decided to install a passive trench recovery system about 150 feet long along the shoreline at the site. The passive trench recovery system is the primary technique for recovering oil in the subsurface areas of the site.

#### Progress:

- a. Oil Product Recovery System Monitoring Reports for the Oscar 2 Pier and Building 8 sites were completed by the Navy. Both systems are working well with a total of 13,594 gallons of oil recovered from Oscar 2 Pier and 21,695 gallons from Building 8.
- b. The Navy completed a draft Work Plan and Sampling and Analysis Plan for the Subsurface Fuel Investigation for the Pearl Harbor Naval Shipyard and Lower Tank Farm Area.
- c. The draft Work Plan, and Sampling and Analysis Plan, for the Site Inspection at the Building 215 Equipment Wash-down Pad and Storm Drain System were also completed.

#### 6. Red Hill Oily Waste Disposal Pit, Oahu

This site was constructed in the early 1940's and is located within the Red Hill fuel tank farm area. An unlined pit located in the central portion of the site was used for the disposal of oily residues generated during periodic fuel tank cleaning operations and oily waste generated by leaks and drips from fuel piping systems associated with the Red Hill fuel storage tanks. The unlined pit was replaced with a stilling basin made of gunite and asphaltic-concrete in 1972. The Navy conducted a remedial investigation of the site and found petroleum hydrocarbon and polynuclear aromatic hydrocarbon (PAH) contamination in the subsurface soils where the old unlined pit was located and under the stilling basin. Petroleum hydrocarbon contamination was also found in the shallow groundwater system located under the stilling basin. Based on these results, the Navy conducted a removal action which involved removing the stilling basin and the petroleum contaminated soils under the stilling basin and where the old unlined pit was located. To determine whether the petroleum hydrocarbon contamination did infiltrate into the basal groundwater aguifer, the Navy has installed monitoring wells into the basal aguifer and sampled the basal groundwater. Analytical results have shown no contamination in the basal aquifer. However, soil samples taken on various areas of the site show some high levels of petroleum contamination. The Navy has completed the field work to further characterize the extent of petroleum contamination in the subsurface soils.

#### Progress:

- a. The Navy completed the draft Characterization Report for the TPH diesel release at the Above Ground Storage Tank Area at the Red Hill Oily Waste Disposal Pit.
- b. The Quarterly Oil Recovery Monitoring Report for the remedial assessment RA at the Hotel Pier Site was completed.
- c. The Navy completed the quarterly Oil Recovery Monitoring Report for the RA at the Magazine Loch and Quarry Loch sites.
- d. Draft Remediation Verification Reports were also completed for the Quarry Loch and Magazine Loch oil removal actions.

#### 7. Pearl Harbor Naval Magazine. Oahu

#### Progress:

- a. The Navy completed the work plan, removal action and remediation verification report for the excavation of PCB contaminated soil at the Transformer S127 and S61 sites at the Waikele Branch Naval Magazine Pearl Harbor.
- b. The State completed its review of the Remedial Investigation Report for the Waipio Peninsula Pesticide Mixing Area Site.
- c. The Navy completed a draft Finding of Suitability for Transfer FOST for the Lualualei Navy Access Road property to be transferred to the City and County of Honolulu.
- d. The Navy completed the remedial investigation sampling and published the Remedial Investigation report for Building 4 former pesticide shop at the Naval Magazine Lualualei Branch Facility.
- e. The site inspection (SI) sampling work was accomplished and the SI report for the Lualualei Branch Facility was completed.
- f. The Navy completed the non-time critical removal action work at the Building 13 Oil Change Rack, Small Arms Firing Range and Transformer S127 and S61 sites and published the Remedial Verification Report, Proposed Plan and Finding of Suitability to Lease documents for the sites.
- g. Work Plan Addendum #2 for the Site Investigation of UST 50/51 and Building 21 at the Waikele Branch Facility was completed by the Navy.

#### 8. Barbers Point Naval Air Station (NAS), Oahu

In 1993, the Base Closure and Realignment Commission placed NAS Barbers Point on the Base Realignment and Closure (BRAC) list. The base closed on July 2, 2000. The airport has been transferred to the State Department of Transportation. Other parcels are in the process of either being transferred or remediated first and then transferred. The Navy, the EPA, and the State of Hawaii make up the Barbers Point BRAC Cleanup Team. The Navy formed BRAC to make decisions on closure-related environmental issues. The Governor signed the Community Redevelopment Plan providing an overall reuse strategy for the conversion of the base to civilian use after its closure in 2000.

A Restoration Advisory Board (RAB) was established in 1994 to support community involvement in the environmental decision-making process. Cleanup of the Navy is being correlated with the strategy to make the sites usable in an expedited time. The Navy has completed a removal action by excavating lead and antimony contaminated soil from the former firing ranges. The Navy has also completed removal actions at the old Engine Test Cell Area, the Coral Sea Road Coral Pit, the Former Sewage Treatment Plant, the Southern Trap and Skeet Range, and the Hazardous Waste Accumulation Area #6. Plans are being developed to accomplish a cleanup of the Northern Trap and Skeet Range.

#### Progress:

- a. The Record of Decision was signed for the Coral Sea Road Coral Pit Site.
- b. The Navy completed the Long-term Monitoring Plan for the Consolidation Unit on the site.
- c. The Record of Closure for Underground Storage Tank/Above Ground Storage Tank (UST/AST) and Assessment of the Hydraulic Lifts at the National Guard Site was completed by the Navy.
- d. The Annual Groundwater Monitoring Report for the Barbers Point groundwater system was completed.
- e. The Navy completed a draft work plan for the continued monitoring of the regional groundwater system on Barbers Point.
- f. The Navy held a Base Closure Team meeting with EPA and the State and discussed the environmental work that was going on for several sites on the base.

#### 9. Pacific Missile Range Facility, Kauai

Progress:

The Navy completed a Technical Addendum to the Work Plan and Field Sampling and Analysis Plan for the Site Inspection to be accomplished at the Facility.

#### 10. Camp Smith, Oahu

Progress:

The Navy completed a revised Removal Site Evaluation Sampling and Analysis Plan for the Old Pistol Range site.

#### 2.3.1.3 Air Force Installation Significant Sites

The DOH oversight at Air Force (USAF) installations has been hampered by the lack of a project manager since March of 2002. While available staff have attempted to cover the necessary oversight events, much of this work has been on hold. Hiring of a Remedial Project Manager for USAF sites is a primary priority for the HEER Office. A major effort for the upcoming fiscal year will be to complete the review and oversight responsibility for the Air Force sites during the absence of the project manager.

Among the seven 15<sup>th</sup> Air Base Wing (15 ABW)-managed installations (six on Oahu and one on Kauai), more than 140 environmental projects are inventoried, including over 100 sites and over 40 areas of concern. The vast majority of the projects are located at two installations, Hickam AFB and Bellows Air Force Station (AFS). The USAF and its contractors have updated Management Action Plans (MAP) for major sites during FY 2003.

#### A. Bellows Air Force Station (AFS) Installation Restoration Program, Oahu

The Installation Restoration Program (IRP) at Bellows includes 20-IRP sites and 17 Areas of Concern (AOCs). Site investigation, sampling and remediation at Bellows AFS continues

#### 1. The Bellows Excess Land

Several acres of land at Bellows were declared excess and will be deeded to the State of Hawaii and the Navy. Over 1000 acres of land are proposed for transfer to the United States Navy for the Marine Corps in 2003. Other lands under transfer plans and were prioritized for site investigation and remediation.

#### 2. Underground Storage Tank sites on Excess Land at Bellows

Investigation and closure of the underground storage tank sites at the Bellows Excess land was completed. All of the underground storage tank (UST) Installation Restoration Program (IRP) sites received a no further action determination and were closed, except for the UST sites in Sherwood Forest recreation area. The site will be handed over to the formerly used defense sites (FUDS).

#### 3. <u>Underground Storage Tank Sites</u>

Investigation and closure of the underground storage tank sites at the Bellows Excess land was completed. All of the UST IRP sites were closed with no further action except for the UST sites in the Sherwood Forest recreation area. This area is considered outside the Bellows property boundary and the site will be handed over to the formerly used defense sites (FUDS). The decision documents for the UST IRP sites were signed by the Air Force and DOH. These UST sites include the Inoaole Stream USTs, Waimanalo Stream USTs, Fighter Housing USTs, Sub-depot USTs, and the Coastal Area recreational USTs.

#### 4. Landfills/Dump Sites

The USAF is reassessing options regarding Bellows' OU-1 primary landfill, and has ordered an Engineering Evaluation/Corrective Action (EE/CA) to update the June 2001 EE/CA. "The overall objective of the latest EE/CA is to expedite site characterization and remedial action at Bellows to facilitate the restoration of these sites."

The USAF has finalized a Pier Dump Site (LF24) Removal Site Evaluation Work Plan.

#### 5. Areas of Concern (AOC)

The USAF completed a Site Inspection (SI) work plan for AOCs 18, 20 and 21 (the WWII Dump, former Motor Pool Buildings, and a former Decontamination Facility) and completed the inspections. Final reports were delivered.

"No Further Response Actions Planned" NFRAP documents for several sites were drafted by the USAF and are undergoing review. These sites include AOC 20 – Former Motor Pool Facility, and Former Building 470 – Decontamination Building.

#### B. Hickam Air Force Base Installation Restoration Program (IRP), Oahu

Hickam Air Force Base (AFB) Installation Restoration Program (IRP) includes 42 IRP sites and 25 AOCs (including Fort Kamehameha sites). Site investigation, sampling and remediation at Hickam AFB are an ongoing process. Multiple areas of concern are subjects of on-going investigation.

#### 1. Base-Wide Projects

The USAF investigated potential PCB (polychlorinated biphenyls)-containing components base-wide and completed a Preliminary Assessment/Site Inspection report, resulting in recommendations for removal, cleanup and further investigation.

The USAF submitted Work Plans, and Reports, on Long Term Monitoring (LTM) for OT02 Runway 8L Interim Remedial Actions.

The USAF has completed a Work Plan for a Base-wide Ambient Metals Study.

#### 2. SS01 Subsurface Fuel Plume

For SS01, the USAF continues an Interim Remedial Action (IRA) near Vandenburg Blvd & Freedom Avenue, including operation of its multi-phase extraction (MPX) system. The USAF issued several operational and technical reports on the IRA and its MPX operation. Extraction of contaminants from the underlying groundwater continues to exceed expectations.

#### 3. Runway 8L Area, Hickam AFB

Institutional controls (restricting use/access to the affected areas) are in place, as are monitoring wells upgradient from Kumumauu Canal. The Long Term Monitoring (LTM) is performed annually in those groundwater monitoring wells to evaluate whether Constituents of Concern (COCs) are migrating off-site towards the Canal. Results of the 2003 monitoring rounds demonstrated no increase in the COCs. Annual monitoring will continue for the recommended period (total of five years).

Monitoring continues at OT02 (AEC Leach Field) with a final monitoring round due in 2005. Hickam Air Force Base HAFB expects to negotiate a Record of Decision (ROD) following completion and evaluation of the final monitoring results.

#### 4. Two Drainage Canals, the Manuwai and Kumumau Canals

The USAF completed a Remedial Investigation report for SD02, the Manuwai Canal. Surface water, sediments and aquatic organisms were tested for contaminants. While the low levels that were found are not considered an unacceptable risk to human or aquatic health, the USAF will continue its investigation into potential sources of the contamination in area SD02.

#### 5. John Rodgers Tank Farm

The John Rodgers Tank Farm spill site (SS13) is currently being monitored to document naturally occurring attenuation of the constituents of concern (COCs). Phytoremediation (cleanup of COCs in the root zone of selected plants) and soil land farming continue at this site.

#### 6. Par 3 Golf Course

For Par 3 Golf Course (SS15), limited petroleum product removal is planned, with monitored natural attenuation to continue.

#### 7. Landfills within the Runway 8L Out-Grant Area

Two landfills associated with Runway 8L are currently undergoing Remedial Investigation / Feasibility Studies to determine final closure strategies for these sites. For Landfill 14, remedial work at this site is substantially complete, currently awaiting a record of decision (ROD) for closure.

#### 8. Fuel Distribution Pipeline

All known abandoned petroleum oil and lubricant POL Pipeline on HAFB has been cleaned and either removed or abandoned-in-place. Confirmation sampling was completed during FY 2003.

#### 9. Mamala Bay Golf Course Landfill LF05

The USAF determined through a Remedial Investigation (RI) at LF05 that levels of contamination at this site present unacceptable risks to human health. Therefore, USAF prepared a Work Plan for a Feasibility Study (FS) to further define the contamination constituents and their extent in the soils and groundwater, followed by proposing and evaluating remedial action alternatives site-wide.

In 2002, during maintenance work at Mamala Bay golf course, bottles containing solvents were discovered. USAF drafted a Work Plan for removing those bottles as part of a Time-Critical Removal Action (TCRA). This work will be incorporated with the LF05 Feasibility Study and subsequent remedial actions.

#### C. Other Significant Air Force Sites

#### 1. Fort Kamehameha, Oahu

This property was received from the Army as part of a land trade for Wheeler Field. Several Areas of Concern (AOC's) are in the planning stage for evaluation in FY 2004

## 2. <u>Hickam POL Pipeline and Fuel Storage; including Kipapa Fuel Storage Annex</u> (FSA), Valve Pit #17 (VP17) and Waikakalaua Fuel Storage Annex, Oahu

The USAF has finalized a Remedial Investigation/Feasibility Study (RI/FS) for the POL Pipeline system's Mililani-area facilities (Kipapa, VP17 and Waikakalaua, above). As part of the ongoing public participation process, progress on the RI/FS was delivered in a Summary Report to the Central Oahu Restoration Advisory Board (RAB). Semiannual monitoring and annual reporting were completed for the POL Pipeline and Fuel Storage Annexes.

During this year's pipeline cleaning project, a spill occurred near Pearl City at Valve Pit 28 (VP28). Remediation activities continue at this site.

#### 3. Wheeler Army Airfield and (4.) Gulch Runway Dump, Oahu

This has been Army property now for several years, with no USAF activity to report.

#### 4. Kaena Point Satellite Tracking Station (STS), Oahu

At Kaena Point Satellite Tracking Station (STS), USAF completed draft documents during the year sufficient for DOH to subsequently issue decision letters concurring with the USAF's NFRAP decision for the following 3 locations within this installation: AOC EA04 Disposal Site Near Bldg 38, AOC EA07 Bldg 39 Drain Outfall, and AOC EA03 Cesspool.

#### 5. Kaala Air Force Station (AFS), Oahu

At Kaala AFS, USAF completed draft documents during the year sufficient for DOH to subsequently issue decision letters concurring with the USAF's NFRAP decision for the following 5 locations at this installation: AOC EA01 Ethylene Glycol Disposal Area; SS05 Drum Rack Outfall Area, SS06 Soil Near Building 20, SS07 Northeast Disposal Site and SS09 Section of Kaala Bog.

#### 6. Kokee AFS, Kauai

For Kokee AFS, USAF completed a draft document during the year sufficient for DOH to subsequently issue a decision letter concurring with the USAF's "No Further Remedial Action Planned" decision for the AOC EA02 Radar Shaft.

#### 7. Underground Storage Tank (UST) Sites, Statewide

The USAF has finalized a removal plan for numerous UST's at over 40 sites base-wide. The concentration of contaminants of concern (COC's) were below risk-based action levels in both soils and water at about 30 of these sites; concentrations exceed action levels at approximately 10 of these sites.

#### 2.3.1.4 Kaneohe Marine Corps. Base. Oahu

While a landfill and a fuel farm facility require further evaluation, work is not planned for the immediate future. At present, the Navy did not budget for any required work during the last fiscal year. The following is a list of planned cleanup activities.

- 1. Range Disposal Area, Assessment/Site Inspection (PA/SI), FY 2013
- 2. Fire Fighting Training Area, medium priority, Remedial Investigation/Feasibility Study (RI/FS), FY 2010
- 3. Ordinance Munitions Area, RI/FS, FY 2013
- 4. Fuel Farm Sludge Disposal, RI/FS, FY 2010
- 5. Above Ground Storage Tank (AST), RI/FS, FY 2006

# 2.3.2 <u>Preliminary Assessment/Site Inspection (PA/SI) Site</u> Summaries

The Preliminary Assessment/Site Inspection (PA/SI) Program within the HEER Office Site Discovery, Assessment and Remediation (SDAR) Section provides the basis for discovery, identification, and assessment for any contamination that has occurred in the state of Hawaii. The program's activities are supported by a cooperative agreement from EPA, and are consequently closely coordinated with the EPA.

Sites are identified by the notification process when a spill or release has occurred and once the immediate threat is abated, the site is transferred from the Emergency Response Section to the SDAR Section where the oversight process continues. Other possible means for identifying sites include categories of sites e.g., closed or abandoned sugar mills that are assessed for contaminants that were known or suspected to have been used. Recently, several sugar mills in the state have been identified and are being processed for PA/SI efforts.

#### 1. Waialua Sugar Company, Waialua, Oahu

The Waialua Sugar Mill closed operations in October of 1996. The mill and power plant were dismantled and shipped to Indonesia. Remaining structures at the mill site have been converted to coffee production and/or leased to small businesses and to individual farmers for diversified agriculture. The apparent problems associated with the Waialua Sugar Mill site are as follows:

Several areas of the mill are being investigated because of practices during the period of operations. There is potential for soil and groundwater contamination due to runoff from former pesticide mixing and loading sites and from equipment maintenance facilities. Contamination may have occurred at an inland landing strip formerly used for aerial application of herbicides and pesticides. A former waste-water settling basins across Kealohanui Street from the mill complex may contain residues and other potentially

contamination. There are several areas with stained soil in the area of the vehicle maintenance building, particularly near lubricant storage tanks and leaking drums.

The Waialua Sugar Company produced much of their power by burning waste oil. The waste oil was stored in above ground storage tanks (ASTs) at the site. This area is targeted for sampling based on a potential for leaks to have occurred from the ASTs.

Further sampling is planned for October, 2003 as a result of samples that resulted in elevated levels (above the residential USEPA Region 9 preliminary remedial goals PRGs) of dioxin (1.68 and 2.02 µg/kg) and arsenic (323 mg/kg and 599 mg/kg).

#### 2. Pioneer Mill Company, Lahaina, Maui

The Pioneer Mill Company, a wholly owned subsidiary of Amfac Corporation, ceased operations in September, 1999. The HEER Office is working with the Pioneer Mill Company's contractor in assessing the mill site for any hazardous material contamination from 150 years of sugar cane cultivation and processing. On a more immediate level, the HEER Office requested that dust control fences be erected along Mill Street and Kuhua Street, adjacent to the mill, to address resident's concerns of potentially contaminated soil blowing into their homes from the mill.

Sampling was conducted by EPA contractors in February, 2003 and a community meeting was held in conjunction with this effort. Results of the analyses show elevated levels of lead (Pb) in three locations and elevated level of arsenic (As) in one location. EPA reported that based on the result of this limited sampling the site does not pose a significant risk to human health and the environment, however, there is a need to further characterize the site to determine the full extent of contamination. DOH will oversee further work by Amfac for the site characterization, remediation and clean-up. Amfac has agreed to characterized the site, delineate the extent of contamination, cover the contaminated soil, and put warning signs around the mill to warn the public of the potential hazard and keep them from entering the area.

#### 3. Kauai Agricultural Research Center Agent Orange, Kapaa, Kauai

Between 1967 and 1968, the University of Hawaii in collaboration with Department of Army (Fort Detrick, Frederick, Maryland), conducted an experiment to assess the defoliation effects of various pesticides, including Agent Orange, on jungle vegetation on Kauai. This site includes three areas of contamination: the drum disposal area; the actual spray sites located at Waikoko Block, Hanahanapuni; and the Sam Thronas area. The areas were applied with different rates of Agent Orange and PCP, respectively, that were applied singly or in combination with other herbicides. The DOH Solid and Hazardous Waste Branch (SHWB) is overseeing the removal and disposal of drums at the drum disposal area.

Soil sampling was conducted in September 2001 to determine if foliar application of various pesticides is affecting soils in the area. Given the concentrations of contaminants detected, it appears that no further CERCLA actions are warranted.

#### 4. Kekaha Sugar Company, Ltd., Kekaha, Kauai

The site was divided into two areas; the Kekaha Herbicide Mixing Plant and Former Wood Treatment Plant and the Kekeha Sugar Mill.

#### a. Kekaha Herbicide Mixing Plant and Former Wood Treatment Plant:

The apparent problem of the site is the pesticide/herbicide contamination brought about by sugarcane productions and operations. These operations involved generation and storage of used oil, use of fungicide for wood treatment and seed treatment, accumulation of contaminated sediments in the settling pond, and the use of pesticides and herbicides in the mixing plant. Amfac Sugar Hawaii, Kauai, who owns Kekaha Sugar Company, Ltd. and Lihue Plantation Company, Ltd., hired Brewer Environmental Services (BES) to conduct clean-up and remediation of all areas of environmental concern. The BES Phase II Site Investigation from the analysis of the soil samples showed elevated levels of benzo(a)pyrene, benzo(a)anthracene, benzo(b) flouranthene, methylene chloride, and pentachlorophenol above the DOH-Tier I Action levels.

Soil sampling conducted by the HEER Office showed elevated levels of benzo(a)pyrene, arsenic (As) in the former wood treatment plant, elevated levels of dioxin, and As at the former herbicide mixing plant. The levels of benzo(a)pyrene, Arsenic and dioxin are above the USEPA Region 9 preliminary remedial goal (PRG) level for residential use. Based on HEER recommendation, Department of Land and Natural Resources (DLNR) placed warning signs around the contaminated area in August 2002 to warn the public of the hazard and restrict access to the site. DLNR is also working with environmental consultants to address the problem posed by uncontrolled dust and potential migration of soil due to runoff. HEER Office personnel reviewed and approved the proposal submitted by DLNR for the use of erosion control blanket to minimize soil erosion and exposure to dioxin in contaminated areas. A Site Inspection report is in progress.

#### b. Kekaha Sugar Mill:

The areas of potential sources of contamination in Kekaha Sugar Mill are the settling ponds, the seed dipping plant, the former transformer storage area inside the mill and other operations related to sugar cane production. The Environmental Company, Inc., the State of Hawaii environmental contractor was hired to conduct on-site sampling. The site scoping effort was conducted by EPA Region 9 personnel. The sampling effort is scheduled for July 2003 based on a revised plan.

#### 5. Lihue Plantation Company Ltd., Lihue, Kauai

This site is similar to Kekaha Sugar Company,. Ltd. The apparent problem of the site is the contamination brought about by sugarcane production. There are four sources of contamination; the herbicide mixing plant located at Hanamaulu; the seed dipping plant; the settling pond and areas around the Lihue Sugar Mill. Analyses of soil samples collected by Brewer Environmental Inc. in the former herbicide mixing plant showed elevated levels of DDT, chlordane, heptachlor and arsenic. A site reconnaissance was

completed in July of 2003 to determine the sampling locations. A preliminary scoring was completed by DOH and reported to EPA.

#### 6. Assessment of Sugar Mills along Hamakua Coast, Hawaii

A site reconnaissance effort was conducted in April 2003 at 11 former sugar mill sites along the Hamakua Coast on the Big Island. These sugar mill sites have been closed for more than 30 years. A sampling and analyses plan for 11 of these mills will be prepared to determine if these sites pose a threat to human health and the environment.

#### 7. Ka'u Agribusiness Herbicide Mixing Plant, Kau, Hawaii

A document submitted to Hawaii Department of Health (DOH) regarding arsenic investigation at Ka'u Agribusiness herbicide Mixing plant was reviewed. The investigation report failed to address the potential dioxin contamination at the site. Further soil sampling is justified because samples collected from other former herbicide mixing plants in Hawaii have shown elevated levels of dioxins/furans above residential and industrial PRG. A letter was issued to Ka'u Agricultural Business requiring further investigation for dioxin/furans before any remedial activities or soil control measures are implemented. Brewer responded and will submit a work plan in the early part of October, 2003. Site owners were notified that a site reconnaissance effort is planned for FY 2004.

#### 8. Ka'u Sugar Mill, Kau, Hawaii

The Ka'u Sugar Mill ended operations in March 1996. Most of the buildings were dismantled, and the PCB transformers were removed and shipped of to the mainland. The only buildings left on site are the warehouse, carpentry shop, and boiler room for the seed dip tank. Concrete foundations are all that remain of the other structures. The area where the hydro separator was located is now filled with soil, and an earth berm. There are two seed dipping tanks. A company from El Salvador bought most of the equipment.

The possible problems associated with the Ka'u Sugar Mill are as follows:

- Pesticide/herbicide contamination brought about by sugarcane production and operations, including onsite fertilizer storage and seed dipping tanks that may have impacted the soil throughout the Site
- b. Run-off of oils and solvents from vehicle maintenance and equipment, and
- c. Lead contamination from lead based paint along with lead and heavy metals from areas where used oil was stored.
- d. The transformers that were cleaned and removed contained PCBs.
- e. There are residents and workers within 200 feet of the mill.

The site owners were contacted and a site reconnaissance has been planned for FY 2004.

#### 9. Puna Sugar Mill, Keau, Hawaii

The Puna Sugar Mill closed its operations in 1984. The land was divided into two parcels. Hawaii Electric and Light Company (HELCO) bought one half, and the other is currently owned by Puna Sugar Mill, LLC. Space in this second half is rented out to different people. Some of the mill structures remain onsite.

Apparent problems associated with the Puna Sugar Mill site include:

- a. The pesticide/herbicide contamination brought about by sugarcane production and operations.
- b. The unknown sludge leaking from an above ground storage tank installed after the mill closed down.
- c. Possible contamination of lead and heavy metals occuring in the soil from used oil runoff and structural paint.
- d. HELCO workers are currently employed within 200 feet of the former mill.
- e. Two drinking water wells are located on the HELCO parcel of the former mill.

The HEER office contacted the owner of the Puna Sugar Mill, LLC parcel, and a PA effort was initiated for a site reconnaissance.

#### 10. Paia Sugar Mill, Paia, Maui

The Paia Sugar Mill closed its operations in September 2000. The warehouse and hydro separator have been dismantled. The rest of the sugar mill structures remain onsite, and include the mill, machine shop, cane truck shop, and boiling house. A Philippine based company bought and shipped some of the mill equipment to the Philippines. One tenant leases space in the machine shop. HC&S consolidated its sugar productions to its Puunene mill, where the cane seed dipping plant and pesticide storage operations were held for both mills.

Apparent problems associated with the Paia Sugar Mill site include:

- a. The petroleum contamination brought about by several fuel underground storage tanks (UST). Diesel, gasoline, and fuel oil #6 were some of the petroleum products used at the Paia sugar mill. There was a former service station located on the site.
- b. There is a transformer yard near the warehouse. Currently there are no records that the transformers contained PCB's, though no testing has been performed.
- c. Contamination of lead, heavy metals, and solvent may occur in the soil from used oil runoff.
- d. Residents, workers, and a school are located within one-quarter mile of the former Paia Sugar Mill, but greater than 200 feet.

- e. Paia Bay, which opens into the Pacific Ocean, is approximately one mile down gradient from the former Paia Sugar Mill.
- f. Paia Bay is a habitat for endangered animals as well as the Pacific Ocean, which is considered a fishery.

A site reconnaissance was conducted in April 2003. A PA is in progress with a sampling and analysis plan to be completed.

#### 11. Wailua Homestead Wells, Kapaa, Kauai

In 1999, mercury (Hg) was detected in Well A and Well B at the Wailua Homestead Wells in Kauai due to the Hg used in the pumps. The pumps were removed individually and placed on tarps on the ground adjacent to the wells. Hg leaked into the soil during the removal of the pumps. Brewer Environmental Systems was contracted to delineate the soil contamination around the two wells and the temporary pump storage area. Contaminated soil was excavated. The wells were put back in service, putting them through a granulated activated carbon GAC treatment facility. The HEER office contacted the Kauai Department of Water to discuss the Hg contamination found along the site boundaries. A sampling plan to delineate further contamination in the soil around the site, near the outfall and ditch was suggested to the Kauai officials.

#### 12. Kapaa Landfill, Kailua Oahu

The Kapaa Landfill is comprised of an active landfill area located adjacent to an abandoned basalt quarry, two inactive landfills located adjacent to and within the Kawainui Marsh, and a quarry waste site within Kawainui Marsh. The Kawainui Marsh covers more than 300 hectares and provides habitat to four federally listed endangered species. Groundwater depth ranges from 0.3 meters - 30 meters below the ground surface (bgs) and flows in an east to northeast direction, discharging from the landfill areas into Kawainui Marsh. It is not known if hazardous materials were deposited at the landfills. Available data for the site indicate levels of copper and zinc above their respective ambient water quality criteria (AWQC).

A field sampling was conducted in August 2001 to determine if leachate from the landfill is adversely impacting the marsh. Sediment and surface water samples were collected from the Kawainui Marsh and analyzed for volatile organic compounds VOCs, semi-volatile organic compounds (SVOCs), pesticides/PCBs, and metals. Analytical data for groundwater and leachate samples collected for landfill monitoring requirements will be reviewed to assess the likelihood of the landfill as the contaminant source. As such, sediment and surface water samples were also analyzed for various general chemistry parameters to facilitate this comparison. A field sampling for wet season is scheduled in January 2004.

#### 13. Kahului, Kanaha Pond Industrial Sites (East & West), Maui

The HEER Office completed sampling in the East Pond and West Pond sites as of August 2003. The subsequent report is being reviewed by the U.S. EPA Region 9 Superfund Office.

#### 14. Pearl City Waiawa Gulch, Pearl City, Oahu

The Waiawa Gulch was evaluated by the HEER Office using EPA's federal hazard ranking system and site investigation criteria. Lead was detected at a concentration of 4,371 mg/kg in a soil sample collected from the bank of Waiawa Stream, near a drainage outfall connected to a wash rack at the facility, a possible source of contamination in the area. An ecologist-microbiologist from EPA Region IX and HEER Office personnel conducted a site visit and stream walk in Waiawa Gulch in July 1998. Observations made during the stream walk indicate a reduction in aquatic macro fauna biodiversity. Site inspection (SI) sampling of surface water and sediments was conducted in December 2000.

Samples were analyzed for metals, semi-volatile organic compounds (SVOCs), PCBs (sediment only), and total petroleum hydrocarbons as diesel and motor oil (TPH-D and TPH-O, respectively). Analytical results indicate the presence of chromium and nickel at concentrations just above sediment screening criteria values. A few SVOCs were detected in the sediments of the stream near an auto recycling facility and the Hawaii Army National Guard (HIARNG). However, none of the concentrations exceeded the respective Permissible Exposure Limits (PELs), which are the higher of the sediment screening criteria values. Surface water analytical results indicate the presence of chromium and lead in one sample and possibly silver in another; no SVOCs were detected. TPH-O was detected in most of the sediment and surface water samples, particularly downstream of the auto recycling facility and HIARNG. Given the concentrations detected, it appears that no further CERCLA actions are warranted. However, data will be forwarded to the Clean Water Branch (CWB) of the Department of Health for their use. The SI report is scheduled to be submitted in the third quarter of 2004.

# 2.3.3 <u>Remedial Response and/or Remediation on State Listed</u> <u>Sites</u>

The HEER Office Site Discovery, Assessment, and Remediation (SDAR) Section has oversight responsibility for all sites identified through the spill/release notification system after an initial emergency response activity is completed. This section provides and overview of remedial response and/or remediation activities being performed on State listed sites.

#### 1. Honolulu Harbor, Oahu

The consortium of responsibilities parties, the Iwilei District Participating Parties (IDPP) have been conducting site assessment and response actions generally in the area of the Honolulu Harbor and in particular in the Iwilei District (District). These voluntary efforts have proceeded under the Environmental Response Agreement (ERA) (signed February 1, 2001) between the Iwilei District Participating Parties (IDPP) and the State of Hawaii Department of Health (DOH), Hazard Evaluation and Emergency Response Office (HEER). The ERA provides for site assessment work, response actions and remediation to address the effects of petroleum hydrocarbon releases in the Iwilei District under the Hawaii Environmental Response Law (Chapter 128 D, HRS, SCP, HAR 11-451). The IDPP group participants include:

- a. BHP Hawaii, Inc.,
- b. Castle & Cooke Properties, Inc.,
- c. Chevron U.S.A. Inc.,
- d. City Mill Company,
- e. DIL Trust,
- f. Hawaiian Electric Company, Inc.,
- g. Phillips Petroleum Company,
- h. Equilon Enterprises LLC dba Shell Oil Products U.S.,
- i. State of Hawaii Department of Transportation, Harbors Division,
- j. Texaco Downstream Properties, Inc.,
- k. Tosco Corporation,
- I. Union Oil Company of California,
- m. The Harry and Jeanette Weinberg Foundation (pending).

The scope of the oil contamination problem includes Iwilei, Kapalama, Sand Island and Downtown Districts as well as harbors and facilities on outer islands of the State that makes this project one of the largest, if not the largest ever confronting the DOH HEER Office. The Iwilei District covers approximately 315 acres. It contains 187 individual land parcels, with land uses ranging from industrial to commercial and does not include any residences or schools. The District includes major road systems, including the Nimitz Highway, and port facilities. The initial Honolulu Harbor effort was principally an emergency response. Because of the magnitude of the problem, Region 9 EPA On Scene Coordinators were involved with the initial response actions assisted by the HEER Office. Once the emergency nature of the problem was satisfied, the HEER Office personnel assumed direct control of the site and continue to direct occasional release incidences and the remediation efforts.

The association of the Iwilei District Participating Parties (IDPP) and the HEER Office immediately started cooperating and the IDPP produced a Scope of Work (SOW) that describes requirements for short-term responses, long-term remediation, and overall planning. The group submitted to DOH a Site Assessment and Prioritization (SAP) Report that provides the basis for planning and implementing environmental response actions in the first unit, the Iwilei District. The Iwilei District Participating Parties (IDPP) is conducting ongoing environmental response actions, including monitoring, subsurface barriers and hydrocarbon product and soil vapor extraction systems. The scope of the IDPP efforts suggest a considerable budget supports their proactive actions at this time. As part of the ERA, the IDPP has been supporting the DOH personnel time and effort at the rate of \$30,000 per quarter in reimbursable funds.

The IDPP has taken the lead to initiate efforts that include the division of the Iwilei District into three operable units (OUs) and to describe the steps needed to evaluate the necessary long-term remediation activities. The level of effort for this work is coordinated principally by the IDPP with DOH oversight. DOH, however, could not plan, organize, and maintain this level of effort without the IDPP cooperation with our present staffing. The IDPP has consistently exhibited a cooperative working relationship by providing the necessary contractors and budget to have an impact. Their overall planning routinely adheres to the DOH Technical Guidance Manual (TGM) in delineating the OUs based on risk prioritization of the different areas of the Iwilei District. Each OU incorporates different groups of parties with individual as well as joint liabilities for site assessment and remediation. This coordination effort would be a difficult problem for DOH to accomplish without the IDPP cooperation and participation. Both the IDPP and individual facility owners have undertaken response actions aimed at the removal of separate phase hydrocarbons or preventing its migration into Honolulu Harbor. While not all of these actions were emergencies, these activities are generally consistent with the emergency response assessment process in the HEER Office Technical Guidance Manual TGM. Concurrent with the response actions, site assessment activities have been conducted to further evaluate and define the extent of petroleum hydrocarbons in the District.

#### 2. GASCO, Honolulu, Oahu

The former Gas Company site is located on a four-acre parcel in lwilei, which is a part of the Honolulu Harbor district. The Gas Company processed heavy petroleum hydrocarbons to produce gas for domestic and industrial use on the island of Oahu from 1904-1988. The soil and groundwater at the site contains elevated levels of benzene and

other petroleum products. Proposed cleanup technologies at the site include soil vapor extraction, in-situ air sparging/bio-sparging and the introduction of oxygen to enhance biodegradation. Cleanup and monitoring at the site is expected to continue for several years.

#### 3. Kapalama Incinerator, Honolulu, Oahu

Lead is the primary contaminant in soil at 757 Kōkea Street in Honolulu, where the former Kapālama Incinerator operated from the 1940s to the 1970s. The City & County of Honolulu has completed an investigation of the extent of contamination on the incinerator property and is presently procuring a contractor to excavate and dispose of contaminated soil. The HEER Office is providing oversight for the cleanup.

#### 4. Pukoloa Wood Treating, a.k.a. Servco (2481 Pukoloa Street), Oahu

Arsenic, chromium, pentachlorophenol, and dioxins are present at 2841 Pūkōloa Street in Honolulu. The contamination appears to have resulted from past practices of a wood treating company located at the site from the 1960s to the 1980s. The Remedial Investigation report for the site is under development and should be completed in late 2003.

#### 5. Pahounui DP LLC (formerly the Flynn-Learner site), Oahu

The DOH approved the Remedial Investigation and Remedial Alternatives Analysis for the Pahounui DP LLC. site in December 2002. DOH prepared a draft Remedial Action Memorandum in which the tentatively proposed remedy is capping. A public notice of the draft remedial action memorandum RAM was published in June 2003 and remediation is presently underway.

#### 6. Aiea Stream, Aiea, Oahu

In March 2003, DOH directed Alexander & Baldwin to conduct sampling in and along Aiea Stream downstream of the old Aiea Sugar Mill. Elevated levels of lead were found in a vegetable garden plot near the streambed. Neighboring residents were informed of the results and advised to avoid contact with streambed soils and to avoid consuming vegetables grown in the streambed area. Additional investigations are planned.

#### 7. Del Monte, Kunia, Oahu

EPA finalized the Remedial Investigation/Feasibility Study (RI/FS) for the Del Monte National Priority List (NPL) site, drafted a Record of Decision for the site, and held a public meeting in June 2003 to receive public comments on the draft Record of Decision (ROD).

#### 8. Ewa Pesticide Mixing/Loading Area, Ewa, Oahu

DOH agreed with a proposal by Department of Land and Natural Resources (DLNR), the landowner, to install fugitive dust and erosion control measures at the site.

## 2.3.4 Voluntary Cleanup Program (VCP) and Brownfields (BF) Program

The EPA Superfund Voluntary Cleanup Program (VCP)/Brownfields (BF) Program grant funding supports two State of Hawaii cleanup programs: The Voluntary Response Program (VRP) and the Brownfields (BF) Program. A summary of activities for the two programs is presented in the following sections.

#### 2.3.4.1 Voluntary Response Program (VRP) Site Summaries

The Voluntary Response Program (VRP) encourages voluntary cleanup of contaminated properties. Under the law, DOH has the authority to grant prospective purchasers or developers an exemption from future liability if cleanup is performed to DOH specifications under the program. Past, current, or future property owners can participate in this program, but exemptions from liability can only be given to future purchasers or tenants. Completion of the voluntary cleanup action is accompanied by a Letter of Completion, issued by the Department of Health and noted on the property deed. Over the past year, Letters of Completion have been issued to Castle and Cooke, Ross Trust, and Aiea Sugar Mill.

Over the past fiscal year the number of VRP sites was increased from eleven to thirteen projects, with more applications expected as the economic outlook improves within the State. The following sites have signed a voluntary response agreement with the DOH and are paying the State for DOH oversight of their remedial activities.:

#### 1. Costco, Iwilei, Oahu

Costco entered the VRP Program in June 2001. The site is being remediated in two phases; 1) the warehouse site and 2) the gas station site. The warehouse site has completed remediation and is in a groundwater monitoring program. The gas station site is presently in the site characterization stage.

#### 2. Keeau Village Inn, W.H. Shipman, Ltd., Keeau, Hawaii

Entered the VRP in August 2003 to investigate a property for development of a motel.

#### 3. 283 Waiehu Beach Road, Wailuku, Maui

An 11,250 square foot site owned by Eugene Yee, formerly used by Maui Terminex International as a pest control operation base yard and office: Removal action completed, DOH is awaiting the confirmation sampling report.

#### 4. Maui Corn Mill Camp, Pukalani, Maui

Maui Land and Pineapple entered the VRP in August 2003 to investigate a property for commercial development.

#### 5. 1230 Kapiolani Boulevard, Oahu

A 6.2-acre site owned by Evershine X, a limited partnership, on the corner of Kapiolani Boulevard and Piikoi Street. The investigation is currently underway.

#### 6. A&B Properties (A&B Milltown), Inc. Waipahu, Oahu

A 40-acre industrial subdivision part of former Oahu Sugar Mill, Waipahu, Oahu. Currently evaluating alternatives for addressing contamination at the property.

#### 7. 819 Moowaa Street, Kapalama, Oahu

A one and one-half acre tract owned by Ross Trusts: Letter of Completion issued August 2002.

#### 8. 825 Kapiolani Boulevard, Oahu

A 0.9-acre site owned by LSDM Properties, LLC next to Flamingo Restaurant: The public participation phase is complete and the Letter of Completion is being drafted (October, 2003).

#### 9. 120 Sand Island Access Road, Oahu

This is a project proceeding under ownership of "Pahounui LLC." It is a 3-acre site formerly used by Flynn-Learner as a recycling and scrap metal facility. The investigation and public participation phases are complete and the remedial action has been initiated (September 30, 2003).

#### 10. Castle and Cooke Homes Managers Drive Project, Waipahu, Oahu

A 38-acre residential development on a site next to the Waipahu Sugar Mill formerly used for sugar cane cultivation and plantation residences. Cleanup is complete and a Letter of Completion (LOC) was issued July 2002.

#### 11. Bank of Hawaii Former Aiea Sugar Mill, Aiea, Oahu

A 15.6-acre site that was formerly the Aiea Sugar Mill site is being remediated in three phases. Phase I Letter of Completion issued November 2002. Phase II and Phase III remedial work plans will be reviewed (September 2003).

#### 12. Bank of Hawaii, Komohana Park, Kapolei, Oahu

Campbell Industrial Park project is presently on hold due to changes in ownership.

#### 13. Town Inn, K-Green Corporation, Honolulu, Oahu

Joined the Voluntary Response Program (VRP) in December 2002. The removal action is about commence.

#### 14. Home Depot, Iwilei, Oahu

Received a Letter of Completion in 1999. Monitoring of water and gas continue as required.

#### 2.3.4.2 Brownfields (BF) Program Site Summaries

The Brownfields Program supports , through grants, the assessment and eventual cleanup of contaminated sites for commercial development. During FY 2003, the DOH HEER Office continued focusing on the promotion and coordination of a comprehensive Hawaii State Brownfields Initiative in coordination with EPA Region IX and Department of Business, Economic Development and Tourism (DBEDT). The HEER Office has been assisting DBEDT with its work under a USEPA Brownfields Pilot Demonstration Grant by conducting three environmental site assessments at high priority state-owned Brownfields properties. The projects are for: 1) a mixed-use development in Anahola, Kauai, 2) a senior residential project by Housing and Community Development Corporation of Hawaii (HCDCH) in Iwilei, and 3) a potential redevelopment at the u Kuhio Park Terrace housing complex. A brief summary of the Brownfields site work is presented as follows:

#### 1. Anahola Project Faith, Kauai

The Anahola Homesteaders Council received an environmental assessment under the Brownfields Program. The site is slated for use as a multi-purpose facility consisting of commercial, cultural, educational, and health care and kupuna housing components. The site was formerly agricultural land used in the production of sugar cane. As a result of these activities, potential pesticide and metal soil contamination are the primary environmental concerns for the site. A Phase I and Phase II investigation is planned for this site. The sampling and analysis plan (SAP) was approved and completed in June 2003 and sampling was completed in July 2003. The final targeted site assessment report will be completed before the end of 2003.

#### 2. Iwilei Project Site, Oahu

Housing and Community Development Corporation of Hawaii (HCDCH) and Department of Accounting Services (DAGS) received an environmental assessment from Department of Business, Economic Development and Tourism (DBEDT) on a property located at the corner of North King Street and Iwilei Road. The sampling event was completed in July 2003 and the analysis of the data is underway.

#### 3. Kuhio Park Terrace, Oahu

The Housing and Community Development Corporation of Hawaii (HCDCH) received an environmental assessment from DBEDT for Kuhio Park Terrace, a public housing community. Elevated levels of dieldrin from application of pesticides were detected. HCDCH is applying for funds in HUD HOPE VI for the revitalization of Kuhio Park Terrace. The revitalization will replace the 641-unit project with a mixture of low and midrise apartments and single-family dwellings. A Preliminary Assessment was completed in June 2003. The SAP is in progress, however, DBEDT decided to temporary delay the actual sampling event until the further planning of the revitalization program is completed.

#### 4. Additional Sites

DOH is continuing to provide assistance to Hawaii Community Development Authority (HCDA) under a Brownfields Grant from USEPA. The DOH and EPA are presently reviewing previous sampling efforts at the Kaka'ako Unit 8 site to determine the data gaps that exist and how to fill them. The goal is to determine what environmental remediation is necessary to develop the property. USEPA will provide additional support for DOH to complete the environmental evaluations.

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## **3 STATE PRIORITY LIST**

## 3.1 HEER Office State Priority List

Chapter 128D, HRS, requires that the department publish a list of the sites with releases of hazardous substances for which the department has identified a responsible party, and the responsible party is in compliance, as determined by the department, with an order issued, or an enforceable agreement entered into. Chapter 128D also requires that sites eligible for remedial action under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) be identified, including a statement as to any appropriation that may be necessary to pay the State's share of the plan.

All of the site/facilities listed in the following sections have voluntarily entered into agreements to conduct site work such as preliminary assessment, site inspection, removal, or remedial action. Furthermore, the cost for investigation and/or cleanup of the sites is being assumed by the owner/operators of the sites.

The majority of cleanup sites on the State Priority List are identified through the spill/release "notification system" defined by the State Contingency Plan which requires that all spills and releases, both Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and non-CERCLA eligible (i.e. oil contaminated), are reported to the DOH. All reported spill/release sites are potential candidates for the State Site List. The remainder of sites identified are from referrals by other programs and the HEER Office's site discovery process.

The Environmental Health Administration Hazard Evaluation and Emergency Response Office Site List presented in Appendix A lists all of the sites through FY 2003 that have been determined by the HEER Office to need further assessment and possible removal or remedial action. These sites have gone through the Initial Site Screening Team (ISST) prioritization process based upon the criteria in the Hawaii State Contingency Plan, Chapter 11-451, Hawaii Administrative Rules. These sites have been determined to be high, medium, or low priority and are actively being worked on, or they will be addressed in the future.

## 3.1.1 Initial Site Screening Team (ISST) Site Prioritization

The Initial Site Screening Team (ISST), composed of members of the Site Discovery, Assessment and Remediation (SDAR) Section, has been screening suspected contaminated sites for the last six years. The ISST screening is one tool used by staff in the HEER Office to determine the potential risk to public health, and welfare, and environment, including natural resource damages, that may be posed by contamination or associated with exposure to the contamination.

Knowing the cleanup priority and complexity of the contamination aids staff in their determining the most appropriate and applicable cleanup technologies. Every site that comes to the ISST is screened and assigned a priority of either high, medium, low. A determination that, no further action (NFA) is necessary, may also be a decision made by the ISST.

Potential Responsible Parties (PRPs) connected with contaminated sites are notified by letter reporting the priority ranking of their sites. Sites eligible for further investigation under the CERCLA are assigned to personnel in the Preliminary Assessment/Site Inspection (PA/SI) group. Sites that are ranked medium or high priority by the ISST may be assigned to a State Remedial Project Manager (RPM). Low priority sites generally do not have site managers assigned to them at this time. However, sites that are <u>ineligible</u> under CERCLA may still be eligible for assessment under the State program. In addition, sites could be further evaluated by the Voluntary Response or Brownfields programs.

During FY 2003, the ISST completed the screening of seven sites with the following prioritizations: 0-high priority sites; 3-medium priority sites; 50-low priority sites; and 4-no further action (NFA) sites.

## 3.1.2 <u>Hawaii Sites Listed on the Federal National Priority List</u> (NPL)

There are currently three sites in Hawaii listed on EPA's National Priority List (NPL) for cleanup. Schofield Barracks, the fourth site, was de-listed on August 10, 2000.

- 1. Del Monte, Kunia, Oahu
- 2. Naval Computer and Telecommunication Area Master Station (NCTAMS), Oahu
- 3. Pearl Harbor Naval Complex, Oahu

# 3.1.3 <u>Hawaii Sites Eligible under the Comprehensive</u> <u>Environmental Response, Compensation and Liability Act</u> (CERCLA)

The following is a list of sites on the State Priority List that may be eligible for possible listing under CERCLA. Once a site has been identified as a CERCLA site, it may be added to the National Priority List and the EPA may manage the cleanup. Cleanup for sites listed below is currently being managed by the HEER Office Preliminary Assessment/Site Inspection (PA/SI) Program portion of the Site Discovery, Assessment and Remediation (SDAR) Section.

- 1. Ewa/Oahu Sugar Co., Waipio Peninsula (part of the Pearl Harbor NPL site), Oahu
- 1. Hamakua Coast, Assessment of Sugar Mills, Hawaii
- 2. Ka'u Agribusiness Herbicide Mixing Plant, Kau, Hawaii
- 3. Ka'u Sugar Mill, Kau, Hawaii
- 4. Kapaa Landfill, Kailua, Oahu
- 5. Kapaa Landfill, Kailua, Oahu
- 6. Kauai Agricultural Research Center-Agent Orange, Kapaa, Kauai

- 7. Kekaha Sugar Co. Ltd., Kekaha, Kauai
  - a. Kekaha Herbicide Mixing Plant and Former Wood Treatment Plant
  - b. Kekaha Sugar Mill
- 8. Lihue Plantation Company Ltd., Lihue, Kauai
- 9. Paia Sugar Mill, Maui
- 10. Pearl City, Waiawa Gulch, Pearl City, Oahu
- 11. Pioneer Mill Company, Lahaina, Maui
- 12. Puna Sugar Mill, Keau, Hawaii
- 13. Waialua Sugar Company, Waialua, Oahu
- 14. Wailua Homestead Wells, Kapaa, Kauai

### 3.1.4 State Listed Remedial Response and/or Remediation Sites

The following is a list of remedial response and/or remediation sites that have no imminent and substantial threat to human health and/or the environment. The cleanup of these sites is being managed by the Remedial Response Program of the HEER Office SDAR Section.

- 1. Aiea Stream, Aiea, Oahu
- 2. Del Monte, Kunia, Oahu
- 3. Ewa Pesticide Mixing/Loading Area, Ewa, Oahu
- 4. GASCO, Honolulu, Oahu
- 5. Honolulu Harbor, Oahu
- 6. Kapalama Incinerator, Honolulu, Oahu
- 7. Pahounui DP LLC (formerly the Flynn-Learner site), Honolulu, Oahu
- 8. Pukoloa Wood Treating, a.k.a. Servco (2481 Pukoloa Street), Honolulu, Oahu

### 3.1.5 Voluntary Response Program (VRP) Site List

The Voluntary Response Program (VRP) allows property owners and prospective purchasers to undertake a voluntary remedial action under the oversight of the Department of Health. At the completion of the response action, the DOH issues a Letter of Completion that exempts prospective purchasers and future owner/tenants from liability related to the contaminants addressed in the voluntary action. The applicant pays the DOH oversight fees as part of the review and approval of the voluntary actions. There are currently thirteen projects active in the VRP.

- 1. 120 Sand Island Access Road, Honolulu, Oahu
- 2. 283 Waiehu Beach Road, Wailuku, Maui
- 3. 819 Moowaa Street, Kapalama, Oahu
- 4. 825 Kapiolani Boulevard, Honolulu, Oahu
- 5. 1230 Kapiolani Boulevard, Honolulu, Oahu
- 6. A&B Properties, Inc., (A&B Milltown), Waipahu, Oahu
- 7. Bank of Hawaii Former Aiea Sugar Mill, Aiea, Oahu
- 8. Bank of Hawaii, Komohana Park, Kapolei, Oahu
- 9. Costco, Iwilei, Oahu
- 10. Home Depot, Iwilei, Oahu
- 11. Town Inn, K-Green Corporation, Honolulu, Oahu
- 12. Maui Corn Mill Camp, Pukalani, Maui
- 13. Keeau Village Inn, W.H. Shipman, Ltd., Keeau, Hawaii

### 3.1.6 Brownfields (BF) Redevelopment Program Site List

The DOH, through funding provided by the Environmental Protection Agency, Region 9 (EPA) provides no-cost, environmental site assessments to qualified public or non-profit community organizations. This process focuses on projects that have firm redevelopment plans and can demonstrate a strong commitment to facilitating the redevelopment. The list of Brownfields targeted site assessment projects is as follows.

- 1. Anahola Project Faith, Kauai
- 2. Iwilei Project Site, Oahu
- 3. Kaka'ako Unit 8, Oahu
- 4. Kuhio Park Terrace, Oahu

## 3.1.7 <u>Defense/State Memorandum of Agreement (DSMOA) Site</u> <u>List</u>

The HEER Office continues to provide oversight to all military site cleanups through the Department of Defense/State Memorandum of Agreement (DSMOA) grant. The military installations listed below are covered by the agreement.

#### **Army Installations**

- 1. Kunia Military Reservation, Oahu
- 2. Fort Shafter, Oahu
- 3. Schofield Barracks, Oahu
- 4. Tripler Army Medical Center, Oahu

#### **Navy Installations**

- 1. Barbers Point Naval Air Station, Oahu
- 2. Camp Smith, Oahu
- 3. Pacific Missile Range Facility, Kauai
- 4. Pearl Harbor Fleet Industrial Supply Center, Oahu
- 5. Lualualei Naval Magazine. Oahu
- 6. Pearl Harbor Naval Public Works Center, Oahu

- 7. Pearl Harbor Naval Shipyard, Oahu
- 8. Pearl Harbor Naval Station, Oahu

#### **Air Force Installations**

- 1. Bellows Air Force Station, Oahu
- 2. Hickam AFB, Oahu
- 3. Hickam POL Pipeline and Storage Area, Oahu
- 4. Kaala Air Force Station, Oahu
- 5. Kaena Point Satellite Tracking Station, Oahu
- 6. Kokee Air Force Station, Oahu
- 7. Wheeler Army Airfield, Oahu

#### **Formerly Used Defense Sites**

- 1. Heeia Combat Training Camp, Heeia, Oahu
- 2. Maui Airport, Puunene, Maui
- 3. Molokai Punakua Bombing and Papohaku Ranchland Target Areas, Molokai
- 4. Wiakoloa Maneuver Area, Waikoloa, Hawaii

## 3.2 Department of Health Release Notification Log

The <u>Environmental Health Administration Hazard Evaluation and Emergency Response Office</u> <u>Release Notification Log</u> presented in Appendix B contains a listing of all release notifications received during the fiscal year

During FY 2003, the HEER Office received 403 notifications of which 358 were directly concerned with the release of hazardous chemicals or oil spills. Of the 358 notifications reported, 71 required a site visit by a State On-Scene-Coordinator (SOSC) and/or a major off-scene coordination and response effort. Many of these notifications were for small spills that were resolved in less than one day.

## 4 HEER OFFICE BUDGET AND EXPENDITURES

This section presents the FY 2003 HEER Office report on budget and expenditures. The report includes the funding allocated in State Environmental Response Revolving Fund (ERRF) as well as the combined total operating budget in State General Funds appropriations and Federal funding allocations.

The federal fund data presented in this section have been adjusted to coincide with the State fiscal year as reflected in the Annual Operating Budget and the Financial Accounting Management Information System FAMIS Expenditure Report. The State FY 2003 extends from July 1, 2002 to June 30, 2003, while the Federal FY 2003 extends from October 1, 2002 to September 30, 2003.

## 4.1 HEER Office Budget Summary

The State FY 2003 combined total budget for both the State and Federal funding for the HEER Office was \$4,088,424.

During the State FY 2003, \$330,691 was appropriated in the State general fund budget for operations of the Emergency Preparedness and Response and the Hazard Evaluation sections of the HEER Office. The Emergency Preparedness and Response and the Hazard Evaluation sections of the HEER Office functions are concerned with hazardous materials, emergency responses and the assessment of chemical exposures on human health and are vitally important in protecting Hawaii's environment. These functions cannot be funded with the federal grant dollars currently received by the office.

In addition, the HEER Office had an operating allocation of \$2,848,450 from the State ERRF during State FY 2003. The HEER Office utilized the ERRF for two primary purposes: response and operations. The response budget of \$1,094,000 was primarily allocated for emergency response and the remedial contract services, which supplement its response capacity.

The operations budget of \$1,754,450 was allocated to conduct oil spill cleanups, enforce Chapter 128D, HRS, and fund the counties' used oil recycling programs. Funding for the recycling programs, though budgeted in the HEER Office, is managed and overseen by staff in the Solid and Hazardous Waste Branch (SHWB). The operating budget also funds equipment purchases and all HEER personnel funded by the ERRF.

In addition, the HEER Office received an operating allocation for four federal grants totaling \$909,283. Three of the grants were from the U.S. Environmental Protection Agency and one from the U.S. Department of Defense. These grants were very specific as to their designated usage and wherever possible, the Office utilized federal grant funds in lieu of state funds.



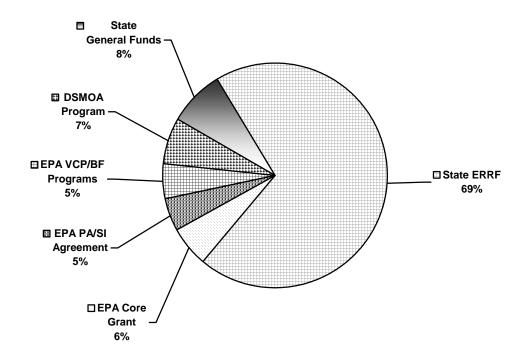


Table 1 FY 2003 HEER Office Funding Source and Budget

|    | Funding Source  | Budgeted<br>FY 2003 |
|----|---|---------------------|
| 1. | State General Funds   | 330,691             |
| 2. | State Revolving Funds (ERRF)  | 2,848,450           |
| 3. | EPA Superfund Core Grant  | 244,000             |
| 4. | EPA Superfund Preliminary Assessment/Site Inspection(PA/SI) Cooperative Agreement | 189,000             |
| 5. | EPA Superfund Voluntary Cleanup/Brownfields (VCP/BF) Programs                     | 204,444             |
| 6. | DOD/State Memorandum of Agreement (DSMOA) Program                                 | 271,839             |
|    | TOTAL STATE AND FEDERAL BUDGET:   | \$4,088,424         |

## 4.2 HEER Office Expenditures Summary

The HEER Office expended \$2,326,621 appropriated for the FY 2003 operating budget.

A total of \$358,518 in State General Funds was expended by the HEER Office, exceeding the \$330,691 budgeted for State FY 2003. Expenditures from the budgeted General Funds were vital for hazard evaluation, preparedness, and emergency response operations in the HEER Office. Chapter 128D, Environmental Response Law, established four SOSCs, funded with General Funds, located in the HEER Office, who have delegated authority under the Director of Health to act on behalf of the Governor to protect Hawaii's human health, welfare and environment. These functions cannot be funded with the federal grant dollars currently received by the office.

The HEER Office expended \$1,357,601 from the ERRF during State FY 2003. The HEER Office utilized the ERRF for four purposes: operations; response; personnel, and equipment purchases. The operations expenditure of \$375,335 was used to conduct oil spill cleanups; enforce Chapter 128D, HRS; and fund the counties' used oil recycling programs. The response expenditures of \$431,719 were used to conduct responses to releases or threats of releases of hazardous substances. The personnel expenditure was \$522,905.

The HEER Office expended \$610,502 of the \$909,283 Federal grants operating allocations during FY 2003: Superfund Core (\$242,488); Superfund Preliminary Investigation/Site Inspection (PA/SI) Cooperative Agreement (\$161,591); Superfund Voluntary Cleanup (VCP) and Brownfields (BF) Programs (\$106,740); and DOD/State Memorandum of Agreement (DSMOA) Program (\$99,683). The U.S. Environmental Protection Agency, Region IX provided the first three grants for the HEER Office and the fourth grant came from the U.S. Department of Defense. These grants were very specific as to their designated usage; however, wherever appropriate, the Office attempted to use federal grant funds in lieu of state funding.

**Chart 2 HEER Office Budget and Expenditures FY 2003** 

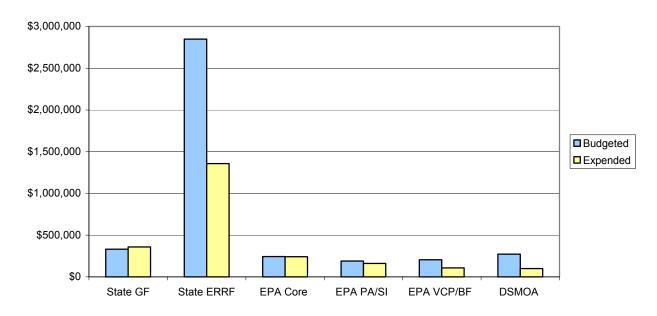


Table 2 FY 2003 HEER Office Funding Source and Expenditures

|    | Funding Source  | Expenditures FY 2003 |
|----|---|----------------------|
| 1. | State General Funds   | 358,518              |
| 2. | State Revolving Funds (ERRF)  | 1,357,601            |
| 3. | EPA Superfund Core Grant  | 242,488              |
| 4. | EPA Superfund Preliminary Assessment/Site Inspection(PA/SI) Cooperative Agreement | 161,591              |
| 5. | EPA Superfund Voluntary Cleanup/Brownfields (VCP/BF) Programs                     | 106,740              |
| 6. | DOD/State Memorandum of Agreement (DSMOA) Program                                 | 99,683               |
|    |   |                      |

**TOTAL STATE AND FEDERAL EXPENDITURES:** 

\$2,326,621

## 4.3 HEER Office Funding

## 4.3.1 HEER Office General Funds

General funds support the HEER Office Hazard Evaluation Section, as well as the Emergency Response and Preparedness Section. These functions are vitally important in protecting Hawaii's environment as these sections are concerned with hazardous materials, emergency responses and the assessment of chemical exposures on human health. These functions cannot be funded with the federal grant dollars currently received by the office.

**Table 3 HEER Office General Funds** 

|           |                  |   | Budgeted<br>FY 2003 | Expended FY 2003 |
|-----------|------------------|---|---------------------|------------------|
| A Funds   | 1<br>1<br>4<br>1 | Office Manager Epi Specialist IV, SR 22 Env. Health Spc. IV, SR 22 Env. Health Spc. III, SR 20 Clerk Typist, SR 8 |                     |                  |
|           | 8                | Subtotal  | 279,173             | 340,998          |
| B&C Funds |                  |   | 51,518              | 17,520           |
|           |                  | TOTAL GENERAL FUNDS:  | <b>\$330,691</b>    | \$358,518        |

### 4.3.2 <u>HEER Office Environmental Response Revolving Funds</u>

The Hazard Evaluation and Emergency Response (HEER) Office provides state leadership in addressing all aspects of releases of hazardous substances into the environment. This work includes preventing, planning for, and responding to hazardous substance and oil releases, or risk of releases. The office is comprised of three operating sections, each addressing an important aspect of its mission: 1) Emergency Preparedness and Response; 2) Site Discovery, Assessment and Remediation; and 3) Hazard Evaluation. The office works closely with State Civil Defense, first responders and other federal, state, county and local agencies to strengthen the state's ability to respond to public health and environmental health emergencies.

The three HEER Office sections utilized the ERRF for four purposes: operations; response; personnel, and equipment purchases.

Table 4 HEER Office Environmental Response Revolving Funds

|             |    |                                | Budgeted<br>FY 2003 | Expended FY 2003 |
|-------------|----|--------------------------------|---------------------|------------------|
| A Funds     | 1  | Epi Specialist III, SR 20      |                     |                  |
|             | 2  | Env. Health Spc. V, SR 24      |                     |                  |
|             | 1  | Clerk Typist II, SR 08         |                     |                  |
|             | 5  | Env Hlth Spc. IV, SR 22        |                     |                  |
|             | 1  | Toxicologist I, SR 26          |                     |                  |
| Temporary 1 |    | Toxicologist I, SR 26          |                     |                  |
| Temporary 1 |    | Eco Risk Assessor, SR 26       |                     |                  |
| Temporary 2 |    | Voluntary Cleanup Spc,<br>SR22 |                     |                  |
| 4           | 10 | Subtotal                       | 698,037             | 522,905          |
| B Funds     |    | Response                       | 1,094,000           | 431,431          |
|             |    | Operations                     | 1,056,413           | 363,677          |
|             |    | Subtotal                       | 2,150,413           | 795,108          |
| C Funds     |    |                                | -0-                 | 27,642           |
|             |    | TOTAL HEER:                    | \$2,848,450         | \$1,345,655      |

### 4.3.3 **HEER Office Federal Funds**

The Federal fund data presented in this section are adjusted to coincide with the State fiscal year (July 1 through June 30). The expenditures for Federal grants are derived based on the State fiscal year which includes the last quarter of Federal FY 2002 and the first three quarters of Federal FY 2003. Since federal grants are received in Hawaii based upon the federal year (October 1 through September 30), these numbers do not match exactly with the federal grant amounts recorded in the Federal Financial Status Report.

The following table presents a summary of the HEER Office Federal funding. Details for the EPA Superfund Grant (Core grant, Preliminary Assessment/Site Inspection (PA/SI) Cooperative Agreement, and Voluntary Cleanup Program/Brownfields Program grant), and Department of Defense/State Memorandum of Agreement (DSMOA) program grant are presented in the following sections.

**Table 5 HEER Office Federal Funding Summary** 

|                           |           | Budgeted<br>FY 2003 | Expended FY 2003 |
|---------------------------|-----------|---------------------|------------------|
| Superfund Core Grant      |           | 2000                | 2000             |
| A Funds                   |           | 117,739             | 143,731          |
| B&C Funds                 |           | 126,261             | 98,757           |
|                           | Subtotal  | 244,000             | 242,488          |
| Superfund PA/SI Agreement |           |                     |                  |
| A Funds                   |           | 132,260             | 108,588          |
| B&C Funds                 |           | 56,740              | 53,003           |
|                           | Subtotal  | 189,000             | 161,592          |
| Superfund VCP/BF Programs |           |                     |                  |
| B&C Funds                 | Subtotal  | 204,444             | 106,740          |
| DOD DSMOA Program         |           |                     |                  |
| A Funds                   |           | 213,724             | 76,683           |
| B Funds                   |           | 48,115              | 18,451           |
| C Funds                   |           | 10,000              | 4,549            |
|                           | Subtotal  | 271,839             | 99,683           |
| TOTAL FEDERA              | AL FUNDS: | \$909,283           | \$610,502        |

#### 4.3.3.1 EPA Superfund Core Grant

HEER Office Superfund Core grant funds are utilized for the state response program development. The Core program provides for non-specific activities to develop and enhance the base capabilities of State cleanup programs, promote meaningful participation in Superfund implementation, and build State program capabilities to meet CERCLA response requirements.

The HEER Office utilizes the Core funds for activities such as the following:

- 1. Preparation of technical manuals
- 2. Development of procurement procedures
- 3. Response agreement administration
- 4. Operation and maintenance capability development
- 5. Cost recovery program development
- 6. Training
- 7. Travel and meetings
- 8. General program management
- 9. Computer-based systems/accounting and data systems
- 10. Records management
- 11. Fiscal Planning
- 12. Auditing capabilities
- 13. Minority Business Enterprises/Women's Business Enterprises MBE/WBE program development
- 14. Voluntary Cleanup Program reforms
- 15. Brownfields Remediation and Redevelopment Program reforms

## **Table 6 HEER Office EPA Superfund Core Grant Funds**

|           |     |                       | Budgeted<br>FY 2003 | Expended FY 2003 |
|-----------|-----|-----------------------|---------------------|------------------|
| A Funds   | 1   | Planner V, SR-24      |                     |                  |
|           | 1   | EHS IV, SR-22         |                     |                  |
|           | _1_ | Secretary, SR-14      |                     |                  |
|           | 3   | Subtotal              | 117,739             | 143,731          |
| B&C Funds |     |                       | 126,261             | 98,757           |
|           |     | TOTAL SUPERFUND CORE: | \$244,000           | \$242,488        |

#### 4.3.3.2 HEER Office EPA Superfund PA/SI Cooperative Agreement

Since October 1989, Hawaii has entered into a Preliminary Assessment/Site Inspection (PA/SI) Cooperative Agreement (CA) with the EPA. A specificity for receiving the PA/SI partnership agreement between the State and the U.S. EPA Region IX is: <a href="https://doi.org/10.1016/jha.20

Table 7 HEER Office Preliminary Assessment/Site Inspection Cooperative Agreement Funds

|           |     |                             | Budgeted<br>FY 2003 | Expended<br>FY 2003 |
|-----------|-----|-----------------------------|---------------------|---------------------|
| A Funds   | 1   | Env. Health Spc. IV, SR-22  |                     |                     |
|           | 2   | Env. Health Spc. III, SR-20 |                     |                     |
|           | 0.5 | Clerk Typists II, SR-08     |                     |                     |
|           | 3.5 | Subtotal                    | 132,260             | 108,588             |
| B&C Funds |     |                             | 56,740              | 53,003              |
|           |     | TOTAL PA/SI:                | \$189,000           | \$161,591           |

## 4.3.3.3 <u>HEER Office EPA Superfund Voluntary Cleanup Program and Brownfields Redevelopment Grant</u>

The <u>Voluntary Cleanup Program</u> (VCP) grant is federal funding from the Environmental Protection Agency which is awarded to the State as a resource to encourage the voluntary cleanup of contaminated sites by developers and prospective purchasers. The VCP grant provides administrative and other non-site specific funds to operate the <u>Voluntary Response Program</u>. The federally available funds for VCP were \$102,444 in FY 2003.

The <u>Voluntary Response Program</u> (VRP) on the other hand, is an operating State program located in the HEER Office. Development of the VRP program continued during FY 2003 using predominately the federal VCP grant. Under the State VRP program, each site accepted into the program is required to deposit \$5,000 into the ERRF and maintain a balance of no less than \$1,000 in order to fund the DOH personnel providing oversight. This requires the State to track deposits and expenditures individually for each site admitted into the program for voluntary response and/or cleanup. The site specific/project specific voluntary response agreement with the State provides the participating parties with technical advice based on the latest technologies and a one on one working relationship with the project manager overseeing the cleanup actions.

The <u>Brownfields Program</u> is targeted at cleaning up abandoned hazardous waste sites and preparing them for economic redevelopment. The federally available funds for the Brownfields Redevelopment Program in FY 2003 was \$102,000.

## Table 8 HEER Office Voluntary Cleanup Program and Brownfields Program Funds

|           |    |                           | Budgeted<br>FY 2003 | Expended FY 2003 |
|-----------|----|---------------------------|---------------------|------------------|
| B&C Funds | *  | Voluntary Cleanup Program | 102,444             | 79,832           |
| B&C Funds | ** | Brownfields               | 102,000             | 26,908           |
|           |    | TOTAL VCP and BF:         | \$204,444           | \$106,740        |

- \* This portion of the Combined Superfund Federal Grant is awarded to the HEER Office as "B" funding, similar to those funds awarded in contractual agreements. The Grant dollars are to be used for non-site specific activities only. The grant was initially used to amend Chapter 128D, "Environmental Response Law" for the implementation of a State Voluntary Response Program (VRP). Although this Voluntary Cleanup Program grant award has a limited duration, EPA Region IX is continuing to provide these funds to the HEER Office supporting Hawaii's environmental cleanup agenda, through development of the State Voluntary Response program.
- \*\* This portion of the Combined Superfund Grant is awarded as a contract, "B" funding. The Brownfields dollars are awarded through the Department of Health, Hazard Evaluation and Emergency Response (HEER) Office to be used for pilot cleanup and redevelopment projects. Currently Department of Business, Economic Development and Tourism (DBEDT) is the selected recipient of the award in an effort to cleanup specifically selected State lands for redevelopment to stimulate economic growth.

## 4.3.3.4 <u>Department of Defense/State Memorandum of Agreement Program Grant</u>

The Department of Defense/State Memorandum of Agreement (DSMOA) program was established by the federal government to cover reimbursement of costs incurred by the state in providing oversight services to the Department of Defense (DOD) installations conducting environmental cleanup activities funded under the Defense Environmental Restoration Program (DERP). A 2-year Cooperative Agreement (CA) application was submitted in April 2002 and an approval was received to obtain reimbursement funding to cover FY 2003 and FY 2004 costs incurred by Hawaii in the DSMOA Program. The DSMOA funds are given to the State based on the State's request for advanced or reimbursement payment. If there is need for additional funding the Cooperative Agreement allows for the renegotiation for increased funding.

Table 9 HEER Office Department of Defense/State Memorandum of Agreement (DSMOA) Program Funds

|         |               |   | Budgeted<br>FY 2003 | Expended FY 2003 |
|---------|---------------|---|---------------------|------------------|
| A Funds | 1<br>3<br>0.5 | Geologist, SR 24<br>EHS IV, SR 22<br>Clerk Typist, SR 8 |                     |                  |
|         | 4.5           | Subtotal  | 213,724             | 76,683           |
| B Funds |               |   | 48,115              | 18,451           |
| C Funds |               |   | 10,000              | 4,549            |
|         |               | TOTAL DSMOA:  | \$271,839           | \$99,683         |

## **5 ERRF FUNDING, PROGRAMS, AND PROJECTS**

This section presents the FY 2003 report on all revenues and expenditures from the Environmental Response Revolving Fund (ERRF) pursuant to the requirements of Section 18 of ACT 200, SLH 2003. Section 18 of the State Budget provided that the Environmental Health Administration (HTH 849), shall submit a report on all revenues and expenditures from the Environmental Response Revolving Fund; provided further that this report shall be submitted to the legislature no later than twenty days before the convening of the 2004 and 2005 regular sessions.

## 5.1 Environmental Response Revolving Fund

The Environmental Response Revolving Fund (ERRF), established in Chapter 128D, HRS, is supported by a tax of five cents per barrel on petroleum sold in the State of Hawaii, fines and penalties for environmental violation, grants, legislative appropriations, and costs recovered from response actions. The fund shall be used to conduct removal or remedial actions consistent with Chapter 128D; the oil tax shall also be used:

- 1. For oil spill planning, prevention, preparedness, education, research, training, removal, and remediation; and
- 2. For direct support for county used oil recycling programs.
- 3. The fund may also be used to support environmental protection and natural resource protection programs; including but not limited to energy conservation and alternative energy development; and to address concerns related to air quality, global warming, clean water, polluted runoff, solid and hazardous waste, drinking water, and underground storage tanks (UST), including support for the UST program of the department and funding for the acquisition by the State of a soil remediation site and facility.

Currently, five programs within DOH have budgeted accounts for access to the ERRF: The Hazard Evaluation and Emergency Response Office (HEER), Solid and Hazardous Waste Branch (SHWB), the Safe Drinking Water Branch (SDWB), the Clean Water Branch (CWB), and the Environmental Management Division (EMD).

Two special cleanup projects also received ERRF funding during FY 2003. Funding was provided to the Department of Land and Natural Resources for the Salvinia molesta removal project and the DOH Solid and Hazardous Waste Branch for the Mercury Reduction Project.

The ERRF budget and expenditures for the five environmental programs and two special projects, and also the descriptive summaries of the usage of the funds, are presented in the following sections.

## **5.1.1 ERRF Revenues**

The following table presents the revenues collected as of June 30, 2003.

Table 10 ERRF Revenues

|    | Revenue Source                             | Revenues<br>FY 2003 |
|----|--|---------------------|
| 1. | Environmental Response Tax                 | 1,562,115           |
| 2. | Fees, Filing of Tier II Chemical Inventory | \$79,400            |
| 3. | Violations of Air Pollution                | 51,885              |
| 4. | Violations of Hazardous Waste              | 80,124              |
| 5. | Violations of Water Pollution              | 101,745             |
| 6. | Violations of Community Noise Control      | 2,950               |
|    | TOTAL ERRF REVENUES:                       | \$1,878,219         |

## 5.1.2 FY 2003 Environmental Management Division Budget Summary

During the State FY 2003, the HEER Office had an operating allocation of \$2,848,450 from the State ERRF. The HEER Office utilized the ERRF for two primary purposes: response and operations. The response budget of \$1,094,000 was primarily allocated for emergency response and the remedial contract services, which supplement its response capacity.

The operations budget of \$1,754,450 was allocated to conduct oil spill cleanups, enforce Chapter 128D, HRS, and fund the counties' used oil recycling programs. Funding for the recycling programs, though budgeted in the HEER Office, is managed and overseen by staff in the Solid and Hazardous Waste Branch. The HEER Office operating budget also funds equipment purchases and all HEER personnel funded by the ERRF.

Four other programs in the Environmental Health Administration (EHA) received funding from the ERRF. During FY 2003, the Solid and Hazardous Waste Branch (SHWB) had a budget of \$460,579, the Safe Drinking Water Branch (SDWB) had a budget of \$665,434, the Clean Water Branch (CWB) had a budget of \$255,106, and the Environmental Management Division (EMD) had a budget of \$45,264. A detailed description of function and operations of the SHWB, SDWB, CWB, and EMD are presented in Appendix A. A total of \$1,426,383 was allocated from the ERRF for the above four environmental programs.

Two special projects also received funding from the ERRF. The Department of Land and Natural Resources (DLNR) received a direct transfer of \$500,000 from the ERRF for the Lake Wilson *Salvinia molesta* removal project. The DOH Solid and Hazardous Waste Branch received a transfer from the HEER Office ERRF funds in the amount of \$138,950 for the Mercury Reduction Project.

## 5.1.3 FY 2003 Environmental Management Division Expenditure Summary

The State expended \$3,056,382 of \$4,335,887 allocated for appropriation to the FY 2003 ERRF operating budget.

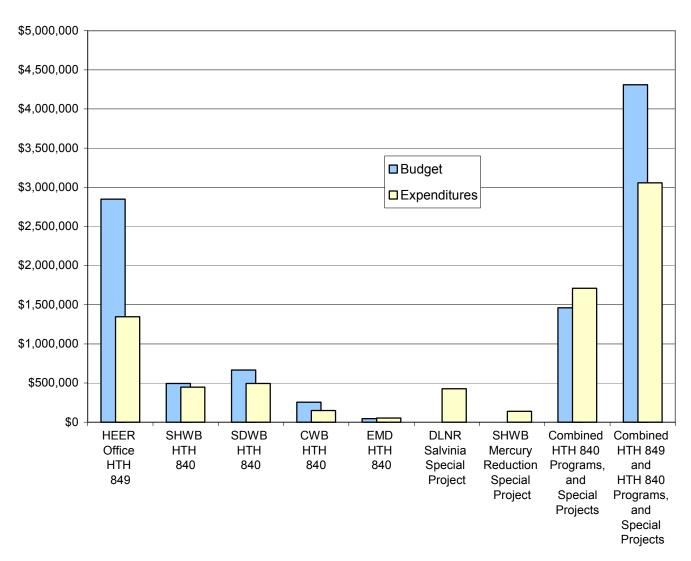
The HEER Office expended \$1,345,655 from the ERRF during State FY 2003. The HEER Office utilized the ERRF for four purposes: operations; response; personnel, and equipment purchases. The operations expenditure of \$363,677 was used to conduct oil spill cleanups; enforce Chapter 128D, HRS; and fund the counties' used oil recycling programs. The response expenditures of \$431,431 were used to conduct responses to releases or threats of releases of hazardous substances. The personnel expenditure was \$522,905.

The State also utilized \$1,144,881 of the ERRF to fund four HTH 840 budgeted environmental programs. The individual draw-downs from the ERRF were \$446,913 to the Solid and Hazardous Waste Branch; \$493,896 to the Safe Drinking Water Branch; \$150,000 to the Clean Water Branch; and \$54,072 to the Environmental Management Division.

The Department of Land and Natural Resources (DLNR) expended \$426,896 for the Lake Wilson *Salvinia molesta* removal project. The DOH Solid and Hazardous Waste Branch expended \$138,950 for the Mercury Reduction Project.

The chart below is a summary of expenditures for the five Environmental Health Administration (EHA) programs receiving funding from the ERRF and also to the DLNR and SHWB special projects. The details and narratives for the programs and projects budget and expenditures are presented in the following sections.

Chart 3 ERRF HTH 849 and HTH 840 Programs, and Special Projects
Budget and Expenditures Summary FY 2003



## 5.1.4 FY 2003 ERRF Budget and Expenditure Summary Tables

**Table 11 Environmental Response Revolving Fund Summary** 

|  |                          | Budgeted<br>FY 2003 | Expended FY 2003 |
|--|--------------------------|---------------------|------------------|
| HEER-HTH 849-FD                                |                          |                     |                  |
| A Funds  |                          | 698,037             | 522,905          |
| B Funds  |                          | 2,150,413           | 795,108          |
| C Funds  |                          | -0-                 | 27,642           |
|  | HEER Subtotal            | 2,848,450           | 1,345,655        |
| SHWB-HTH 840-FJ                                |                          |                     |                  |
| A Funds  |                          | 479,439             | 446,382          |
| B Funds  |                          | 15,000              | 531              |
|  | SHWB Subtotal            | 494,439             | 446,913          |
| SDWB-HTH 840-FH                                |                          |                     |                  |
| A Funds  |                          | 510,441             | 468,146          |
| B Funds  |                          | 154,993             | 25,750           |
|  | SDWB Subtotal            | 665,434             | 493,896          |
| CWB-HTH 840-FG                                 |                          |                     |                  |
| A Funds  |                          | 90,106              | -0-              |
| B Funds  |                          | 160,000             | 150,000          |
| C Funds  |                          | 5,000               | -0-              |
|  | CWB Subtotal             | 255,106             | 150,000          |
| EMD-HTH 840-FH                                 |                          |                     |                  |
| A Funds  |                          | 45,264              | 54,072           |
|  | EMD Subtotal             | 45,264              | 54,072           |
| <u>DLNR Salvinia Cleanup</u><br><u>Project</u> |                          |                     |                  |
| A Funds  |                          |                     | 84,905           |
| B Funds  |                          |                     | 341,991          |
|  | DLNR Salvinia Subtotal   |                     | 426,896          |
| SHWB Mercury<br>Reduction Project              |                          |                     | 400.050          |
| B Funds  | OLIMP Manager            |                     | 138,950          |
|  | SHWB Mercury<br>Subtotal |                     | 138,950          |
|  | TOTAL ERRF:              | \$4,308,693         | \$3,056,382      |

**Table 12 HEER Office Environmental Response Revolving Funds** 

|             |    |                                | Budgeted<br>FY 2003 | Expended FY 2003 |
|-------------|----|--------------------------------|---------------------|------------------|
| A Funds     | 1  | Epi Specialist III, SR 20      |                     |                  |
|             | 2  | Env. Health Spc. V, SR 24      |                     |                  |
|             | 1  | Clerk Typist II, SR 08         |                     |                  |
|             | 5  | Env Hith Spc. IV, SR 22        |                     |                  |
|             | 1  | Toxicologist I, SR 26          |                     |                  |
| Temporary 1 |    | Toxicologist I, SR 26          |                     |                  |
| Temporary 1 |    | Eco Risk Assessor, SR 26       |                     |                  |
| Temporary 2 |    | Voluntary Cleanup Spc,<br>SR22 |                     |                  |
| 4           | 10 | Subtotal                       | 698,037             | 522,905          |
| B Funds     |    | Response                       | 1,094,000           | 431,431          |
|             |    | Operations                     | 1,056,413           | 363,677          |
|             |    | Subtotal                       | 2,150,413           | 795,108          |
| C Funds     |    |                                | -0-                 | 27,642           |
|             |    | TOTAL HEER:                    | \$2,848,450         | \$1,345,655      |

**Table 13 Solid and Hazardous Waste Branch Revolving Funds** 

|         |    | _                                | Budgeted<br>FY 2003 | Expended FY 2003 |
|---------|----|----------------------------------|---------------------|------------------|
| A Funds | 1  | Environ. Engineer IV, SR 24 (SW) |                     |                  |
|         | 1  | EHS IV, SR 22 (HW)               |                     |                  |
|         | 1  | EHS IV, SR 22 (HW)               |                     |                  |
|         | 1  | EHS III, SR 20 (LUST)            |                     |                  |
|         | 1  | EHS IV, SR 22 (LUST)             |                     |                  |
|         | 1  | Geologist I, SR 24 (LUST)        |                     |                  |
|         | 1  | EHS III, SR 20 (UST)             |                     |                  |
|         | 1  | EHS III, SR 20 (UST)             |                     |                  |
|         | 1  | EHS IV, SR 22 (UST)              |                     |                  |
|         | 1  | Clerk Typist II, SR 08 (UST)     |                     |                  |
|         | 10 | Subtotal                         | 479,439             | 446,382          |
| B Funds |    |                                  | 15,000              | 531              |
| C Funds |    | <u>-</u>                         | -0-                 | -0-              |
|         |    | TOTAL SHWB:                      | \$494,439           | \$446,913        |

**Table 14 Safe Drinking Water Branch Revolving Funds** 

|         |                            |  | Budgeted<br>FY 2003 | Expended FY 2003 |
|---------|----------------------------|--|---------------------|------------------|
| A Funds | 3<br>1<br>2<br>1<br>1<br>2 | Env. Engineer IV Env. HIth Spec. III Clerk UIC Clerk DPSA UIC Geologist I UIC Geologist II |                     |                  |
|         | 11                         | Subtotal   | 510,441             | 468,146          |
| B Funds |                            |  | 154,993             | 25,750           |
|         |                            | TOTAL SDWB:  | \$665,434           | \$493,896        |

**Table 15 Clean Water Branch Revolving Funds** 

|         |                    |                     | Budgeted<br>FY 2003 | Expended FY 2003 |
|---------|--------------------|---------------------|---------------------|------------------|
| A Funds | 1 DPSA<br>1 Env. H | IV<br>Ilth Spec. IV |                     |                  |
|         | 2                  | Subtotal            | 91,106              | -0-              |
| B Funds |                    |                     | 160,000             | 150,000          |
| C Funds |                    |                     | 5,000               | -0-              |
|         |                    | TOTAL CWB:          | \$255,106           | \$150,000        |

**Table 16 Environmental Management Division Revolving Funds** 

|         |   |              | Budgeted<br>FY 2003 | Expended FY 2003 |
|---------|---|--------------|---------------------|------------------|
| A Funds | 1 | DPSA V, SR24 | 45,264              | 54,072           |
|         |   | TOTAL EMD:   | <b>\$45,264</b>     | \$54,072         |

Table 17 Department of Land and Natural Resources Lake Wilson Salvinia Molesta Removal Revolving Funds

|         |                                     | Budgeted<br>FY 2003 | Expended FY 2003 |
|---------|-------------------------------------|---------------------|------------------|
| A Funds | Dept. of Agriculture                |                     | 582              |
|         | Dept. of Transportation             |                     | 11,936           |
|         | Dept. of Land and Natural Resources |                     | 72,387           |
|         | Subtotal                            |                     | 84,905           |
| B Funds | Dept. of Agriculture                |                     | 1,417            |
|         | Dept. of Transportation             |                     | 44,703           |
|         | Dept. of Land and Natural Resources |                     | 295,871          |
|         | Subtotal                            |                     | 341,991          |
| C Funds |                                     |                     | -0-              |
|         | TOTAL DLNR Salvinia Molesta:        |                     | \$426,896        |

Table 18 Solid and Hazardous Waste Branch Mercury Recovery Project Revolving Funds

|         |                              | udgeted<br>TY 2003 | Expended FY 2003 |
|---------|------------------------------|--------------------|------------------|
| A Funds |                              |                    | -0-              |
| B Funds |                              |                    | 138,950          |
| C Funds |                              |                    | -0-              |
|         | TOTAL SHWB Mercury Recovery: |                    | <b>\$138,950</b> |

## 5.2 <u>Environmental Health Administration Programs</u> Receiving HTH 840 and 849 ERRF Funding

There are currently five Environmental Health Administration (EHA) programs receiving funding from the ERRF. They are the Hazard Evaluation and Emergency Response (HEER) Office, Solid & Hazardous Waste Branch (SHWB), the Safe Drinking Water Branch (SDWB), the Clean Water Branch (CWB), and the Environmental Management Division (EMD).

### 5.2.1 Hazard Evaluation and Emergency Response Office

The Hazardous Evaluation and Emergency Response (HEER) Office serves the people of the State of Hawaii by addressing all aspects of releases of hazardous substances including oil into the environment. Work includes preventing, planning for, and responding to hazardous substance releases or risks of releases. The HEER Office accomplishes this mission by addressing contaminated sites with the highest risk to human health and the environment first, preventing contamination rather than cleaning up after the fact, and basing decisions on sound scientific principles and common sense.

The following are highlights of the progress made in FY 2003:

- 1. The HEER State On-Scene-Coordinators (SOSC) staff trained in chemical terrorism and risk communication issues associated with chemical and biological terrorism.
- 2. The HEER Office environmental enforcement capabilities were strengthened to provide effective prevention of chemical spills. State and Federal agencies are working together to prosecute several environmental law violators.
- 3. A fish advisory was issued after the Hazard Evaluation section completed a Phase 1 study of methyl mercury in pelagic fish.
- 4. A new and expanded confidential surveillance tool was developed for physicians and hospitals to report results on potential chemical poisoning to the DOH.
- 5. Public outreach efforts increased. Managers and staff attended community meetings and presented results of environmental risk assessments to the public.
- 6. Site clean up highlights: Letters of completion were issued for three Voluntary Response Program (VRP) sites. Four new Brownfields projects were initiated. No-Further-Action decisions were issued for four private sites. Sampling efforts are underway to evaluate the extent of chemical contamination at eight former sugar mill sites. Significant guidance and oversight was provided to the City and State concerning the contamination issues at the Fishing Village.

7. SOSCs oversaw two vessel groundings. The 60 feet steel hull fishing vessel Kolea was grounded off Diamond Head and released 1,000 gallons of diesel fuel. The vessel was towed half a mile to sea where it was scuttled in 300 feet of water. The motor vessel Messenger of Peace was grounded on the reef off Maui with 1,000 gallons of diesel fuel on board. The State contractor removed the fuel from the vessel and towed it to sea for disposal.

### 5.2.2 Solid and Hazardous Waste Branch

The Environmental Response Revolving Fund provides support for the following program activities within the Solid and Hazardous Waste Branch (SHWB):

#### 5.2.2.1 <u>Used Oil Management and Recycling</u>

On March 13, 1999, amendments to the hazardous waste regulations became effective. Federal regulations promulgated from 1993 to 1998 were incorporated into the latest version. Most notable was the addition of the used oil regulations, Hawaii Administrative Rules (HAR) 11-279. The new used oil regulations combined federal regulations along with existing state regulations that were formerly under HAR 11-58.1, Solid Waste Management.

The Hazardous Waste Program is responsible for all aspects of used oil management. There are currently 33 new used oil transporter permits were issued. Three permit applications are being reviewed and awaiting issuance. Of the 33 transporters, approximately 9 are considered both a transporter and processor of used oil.

The number of used oil permits continue to increase as we identify more used oil handlers. These un-permitted handlers are usually identified during inspections conducted in conjunction with hazardous waste.

For various reasons, including greater awareness from the general public, there continues to be more used oil complaints for illegal dumping, on all islands. The used oil inspector, hazardous waste inspectors and solid waste inspectors have been working together to respond to the complaints. Oftentimes used oil, hazardous waste and solid waste are found at these complaint sites.

Along with the hazardous waste funded inspector positions, the hazardous waste/used oil inspector position was reallocated from an EHS level III to an EHS level IV.

In FY 2002 the hazardous waste planner rewrote the used oil contracts and awarded new contracts to the Kauai, Maui and Big Island counties to continue their Used Oil Do-It-Yourself (DIY) Collection Program. All three counties requested and received an increase in their grant funding. The increase will go towards adding more site collection areas, disposal of the used oil (both clean and contaminated oil), and providing greater education and outreach through various methods most appropriate for the counties. Honolulu County declined grant money for a DIYer UO Collection Program because of the availability of H-Power and the county's campaign to have DIYers use oil eater boxes.

The EHS IV Permit Writer, which is also supported by the oil fund, continues his oversight of contaminated facilities undergoing groundwater monitoring (Chevron Refinery, Tesoro Refinery, Hawaiian Western Steel and Chemwood). Facilities such as Midpac Lumber and Kauai Agriculture Research Center are also undergoing closures of contaminated sites. Makua Military Reservation continues to be a highly charged site. However, due to national defense Makua is once again being used as a live fire training ground. The Army has agreed that upon cessation of training, they will do a full-blown Environmental Impact Statement.

#### **5.2.2.2 Special Waste Management**

The Special Waste permitting engineer is responsible for permitting and monitoring activities over a wide range of special waste management facilities including petroleum contaminated soil (PCS) remediation facilities. Another major focus is the permitting and oversight of Auto Salvage facilities where a primary concern is the proper management of gasoline, oil and other automotive fluids removed from the vehicles. Currently the Engineer has responsibility for more than 40 permitted facilities, which deal directly or indirectly with oil related issues

#### 5.2.2.3 Management of Leaking Underground Storage Tank (LUST) Sites

The EHS III has an active caseload of 75 LUST sites at this time and provides project oversight to all remedial efforts of his cases. The EHS IV provides team unit leadership for four other EHS III staff and an additional 246 active LUST sites in the state of Hawaii. The EHS IV position has been vacant since June 2002.

#### 5.2.2.4 Inspection of Underground Storage Tank Facilities

From July 1, 2002 to September 30, 2003, the UST EHS IV reviewed and issued 4 permits for the installation and operation of new USTs at regulated UST facilities. A permit is required to install or operate an UST or tank system brought into use in Hawaii after the effective date of the State rules. The permit is issued for a term of 5 years. Once the permit is issued, the UST owner and operator has one year to install the tank or tank system and must notify the DOH at least 7 days before installation. After the tank is installed, the UST owner and operator must notify the DOH with 30 days using forms provided by the DOH.

The state's field citation program continues to conduct operational inspections at facilities with UST's and issue field citations as necessary. These inspections include review of release detection records, documents demonstrating evidence of financial responsibility, and spill and overfill prevention equipment and corrosion protection standards. The goal of these inspections is to prevent releases of petroleum and hazardous substances from UST systems and to minimize the volume of release if one does occur.

The field citation program are similar to a traffic ticket: they are issued for easily verifiable and correctable violations; they contain lower penalty amounts than traditional enforcement tools, they are usually issued in the field at the time of the inspection and the owner or operator must return to compliance and pay a penalty within 30 days of issuance of the citation.

The UST EHS IV tracked and reviewed the daily work activities of the EHS IIIs, maintains the database for the UST section, and is the Safety Coordinator for the Solid and Hazardous Waste Branch.

The UST EHS IIIs and EHS IV provided assistance to consultants and contractors who requested and reviewed UST facilities files. Timely review of facility files assists the banking, real estate and petroleum industry to complete transactions involving the sale or return of properties that were affected by petroleum releases.

#### 5.2.3 Safe Drinking Water Branch

The ERRF continued to support Safe Drinking Water Branch (SDWB) personnel and activities related to the protection of public health and drinking water quality through many activities during FY 2003. These funds were used to support activities with both direct and indirect drinking water protection benefits.

#### 5.2.3.1 Reassessment of State Standard for 1,2,3-trichloropropane

1,2,3-Trichloropropane (TCP) levels in those drinking water sources, which have been contaminated, continue to be relatively stable. The Honolulu Board of Water Supply and other water systems on Maui have spent significant resources to investigate treatment options, and install, operate and maintain treatment facilities to reduce the levels of TCP in their sources. The reassessment of the state standard for TCP was completed in early FY 2002. The Sapphire Group, Inc. completed its evaluation of current toxicological information concerning TCP, and presented its findings to the Department and the potentially affected water suppliers in December 2001. This evaluation recommended a reduction in the TCP standard from the current concentration of 0.8 micrograms per liter to 0.6 micrograms per liter.

This change was incorporated in our current rule revision package and taken to public hearing on October 31, 2002. Based on the comments received on this proposed change, the reduction in the TCP standard were adopted on November 30, 2002.

#### 5.2.3.2 <u>Lead and Copper Rule Administration</u>

Lead and copper concentrations in Hawaii's drinking water are regulated under state implementation of the federal Lead and Copper Rule. Administration of this rule is one of the responsibilities of the Safe Drinking Water Branch staff supported by the Environmental Response Revolving Fund ERRF.

The rule requires drinking water systems to collect and analyze "first flush" samples from kitchen or bathroom cold water taps in homes most likely to have elevated levels of lead or copper. These homes were typically built before 1982 with copper pipes and lead solder.

The number of samples collected is based on the population served by the systems and range from five to one hundred. Samples are collected on a routine schedule. Initially samples are collected every six month, then annually for two years, and then once every three years if the water is found to be not corrosive, and/or treatment is not required.

Action levels for lead or copper under the Lead and Copper Rule are exceeded when 10 percent of the samples are found to have a lead concentration greater than 15 micrograms per liter (parts per billion), or a copper concentration greater than 1.3 milligrams per liter (parts per million). In Hawaii, lead or copper levels in drinking water have been found to exceed action levels only when the water is from surface water, springs, or shallow wells, and it is due to the acidity of the water which in turn leaches out lead and/or copper from the plumbing fixtures. Fortunately, lead has never been detected in any ground or surface drinking water sources in Hawaii.

In FY 2003 both the Honomu and Peepeekeo water systems on Hawaii reduced copper concentrations to below the copper action level.

At the end of FY 2003, three water systems exceeded the lead or copper action levels. The lead action level was exceeded for the South Kohala water system on Hawaii, and the Kauai State Park water system. The copper action level was exceed for the Kukio Utility Company, a new water system on Hawaii.

The Safe Drinking Water Branch is also reviewing the Maui Department of Water program to reduce lead levels to below the action levels by using a corrosion inhibitor. An investigation is underway to see if there is any correlation between the corrosion inhibitor usage and cases of skin irritation that have been reported by people in the upcountry Maui area.

The South Kohala and the Kokee State Park water systems are expected to reduce the lead concentrations to below the lead action level in FY 2004. The copper action level at Kukio Utility Company water system was exceeded while using approved temporary drinking water sources. The system will switch to permanent water sources in FY 2004, and will be retesting the water for lead and copper.

# 5.2.3.3 <u>Development and Maintenance of Disinfectant/Disinfection By-Products Rule and Interim Enhanced Surface Water Treatment Rule</u>

The ERRF supports a staff person who was originally responsible for administration of the Surface Water Treatment Rule (SWTR) which was promulgated by EPA in 1991. This rule imposed treatment, monitoring, and reporting requirements on surface water systems for the removal or control of several microorganisms. Since that time, EPA has become aware of and concerned with additional microorganisms, which are more difficult to filter and are more resistant to conventional disinfections. In response, they have promulgated more stringent requirements for surface water systems in the form of the Interim Enhanced Surface Water Treatment Rule (IESWTR).

At the same time, EPA has recognized that the addition of disinfectants to water (primarily surface waters), which have "precursors", can generate by-products. Some of these by-products are thought to be harmful. In response, EPA has generated the Disinfectant/Disinfection By-Products Rule (D/DBPR) which seeks to limit the concentration of disinfectants added to drinking water as well as limit the presence of disinfections by-products in the water.

The D/DBPR and the IESWTR work together to increase public health protection by increasing protection from exposure to additional microbes in drinking water, while assuring that the disinfectant and disinfections by-product levels in the water are limited to safe levels.

The public hearing for these rules was held on October 31, 2002. Based on the testimonies received, these two new rules were integrated into to the state's drinking water regulations on November 30, 2002.

## 5.2.3.4 <u>Protection of Existing and Potential Underground Sources of Drinking Water (Hawaii Underground Injection Control Program)</u>

The Hawaii Underground Injection Control (UIC) Program is directly responsible for protecting existing and future underground sources of drinking water (USDW) from contamination by underground injection of waste fluids.

In the early 1980's, work to identify the important USDW areas was completed. This work was accomplished by the DOH and technical advisory committees from each county. The county water supply and public works agencies, the U.S. Geological Survey, the Department of Land and Natural Resources (DLNR), private business, and involved consultants were some of the major participants in the technical advisory committees.

Following the identification of the state's USDWs, an individual-permit system was implemented to control discharge quantities, effluent quality and injection practices. These permits identify operating conditions as well as monitoring and reporting requirements.

The ERRF currently supports a staff of three geologists and one clerk-typist who administer the entire program for over 800 facilities statewide. Each facility may involve multiple injection wells. Injection wells support many vital facilities including: municipal and private wastewater treatment plants, energy generation facilities, storm water runoff control, and many other functions. In addition to protection of USDWs and the environment, the UIC program makes underground injection possible as a wastewater disposal alternative in lieu of ocean outfalls.

Since December 1999, the UIC program has also been working closely with the EPA regarding EPA's federal rule to close all large-capacity cesspool injection wells in Hawaii, as well as nationwide, by April 2005.

#### 5.2.3.5 Certification of Operators of Public Water Systems

One way of protecting drinking water is to ensure that the staff working daily on the public water systems have sufficient training to do their duties properly. Congress felt so strongly about the need for state operator certification programs for public water systems that they authorized the EPA to withhold 20% of a state's capitalization grant beginning in 2001 if a state failed to achieve a certification program meeting minimum EPA criteria. In Hawaii, this would have equated to the loss of \$1.4 million in funds intended for low interest loans for public water system protection and improvements.

Hawaii's program consists of a five-member Board of Certification, appointed by the Governor, which meets to set policy, act on all applications for certification, assign continuing education units to training events, and more. The ERRF supports a staff of two, an environmental engineer and a clerk-typist. This staff compiles and maintains files on all existing certified operators, receives and prepares all applications for Board review, receives and processes all certification and testing fees, prepares the examinations, prepares all correspondence, conducts training, administers examinations, and tracks other state programs to see how they handle specific issues and more.

At the end of FY 2003, the program had 172 certified water treatment plant operators and 352 certified distribution system operators.

## 5.2.3.6 <u>Assistance to Owners and Users of Rainwater Catchment</u> Systems

Act 218 of 1997 authorized the Safe Drinking Water Branch (SDWB) of the Department to use ERRF monies to administer a subsidized lead and copper testing program and to lend technical assistance to owners and users of rainwater catchment systems. This approach is preferable to the development of regulations for these systems since regulating these systems would impose significant costs on the owners and users for the use of standardized materials and treatments which many owners could not afford and which may not solve all their contamination problems. At the same time, enforcing regulations placed on the catchment systems would require extensive additional staff and resources.

Each year, the Safe Drinking Water Branch receives many calls from people who use, own, or are about to use rainwater catchment to support their home needs. Some of these people have recognized problems such as dead animal(s) in their water storage tank, heavy algal growth, slimy buildup on the sides of their tank, and living organisms in the water. Others have had their water tested for bacteria and found severe contamination. Yet, others have experienced illness, which they suspect has been caused by the water from their system. In actuality, a high degree of vigilance and maintenance on the part of the owner or user of a rainwater catchment system is required in order to protect it from many forms of contamination.

During FY 2003 a request was received for funds to reprint the University of Hawaii, College of Tropical Agriculture and Human Resources brochure "Guidelines on Rainwater Catchment Systems for Hawaii". The department intends to provide funding for this reprinting during FY 2004.

#### 5.2.3.7 Capacity Development Program

Major strides were accomplished in the effort to assure that Hawaii public water systems achieve and maintain the technical, managerial, and financial capacity to comply with drinking water regulations. Two contracts were issued during FY 2002, which will help assure that more systems are able to meet capacity requirements. While the Environmental Response Revolving Fund supported the staff member who prepares and administers the contracts, the funding for the contracts comes from federal capitalization grant funds.

The first contract provides extensive training opportunities for managers, and water treatment plant and distribution system operators between 2001 and 2004. This contract was awarded to the Rural Community Assistance Corporation, and provides training for six managers, ten water treatment plant operators, and fourteen distribution system operators every six months on all the major islands.

The second contract provides five water systems with 200 hours of technical assistance to help them improve technical, managerial, and financial capacity. One water system on each of the five major islands is participating in this program. The water systems are Hawaiian Shores on Hawaii, Hana Water Resources on Maui, Kualapuu on Molokai, Dillingham ranch on Oahu, and Gay and Robinson on Kauai.

The state is also in the process of reviewing our rules to allow the Drinking Water State Revolving Loan program to provide low interest loans to privately owned public water systems.

#### 5.2.4 Clean Water Branch

The ERRF provides support for the following activities within the Clean Water Branch (CWB).

#### 5.2.4.1 Quality Assurance

The 2001 Legislature authorized an Environmental Health Specialist (EHS) position and a Data Processing Systems Analyst IV (DPSA) position for the CWB. The tasking for the EHS position will insure that monitoring data submitted by CWB permitted facilities meet acceptable standards for sampling, transportation, and reporting as required by DOH policies and under EPA rules. The DPSA position will perform tasks to integrate various federally required data systems, and provide technical support to the CWB staff in the areas of data recording and reporting. Recruitment for these positions was halted by the Governor's December 2002 freeze on hiring. The CWB is currently in the process of obtaining Governor's approval to fill the positions.

#### 5.2.4.2 Polluted Runoff Control

The 2001 Legislature authorized continued funding of contract funds to support the creation of three Conservation Specialists (CS) positions on the neighbor islands and Oahu. These positions assist the CWB's Polluted Runoff Control (PRC) program by providing technical assistance and oversight in the control of non-point source pollution resulting from activities in areas such as agriculture, urban, commercial, boating, and dealing with the general public. Due to the State's lengthy contract process, and the need to develop a scope of services that would add value to the program's mission, the FY 2002 contract was not awarded until the end of the fiscal year. The FY 2002 contract award was made to the Hawaii Association of Conservation Districts in June 2002 The contract is running concurrently with the FY 2003 award made to the University of Hawaii Sea Grant program in July 2002. The two contracts provide for six CS positions, with one each in Lihue, Kahului, Waimea, Hilo, Windward and Leeward Oahu. Both contracts are for one year.

#### 5.2.5 Environmental Management Division

The ERRF funds the Data Processing Systems Analyst computer network manager position for the Environmental Management Division. The network manager supports and maintains the Local Area Network/Wide Area Network LAN/WAN connections for the division. Responsibilities of this position include providing a reliable daily backup, ensuring users have access to their data files, and providing email and internet connectivity. The network manager is also working to improve and upgrade network servers and connections. During FY 2003, these projects included the upgrade of the proxy server and the mail server. In addition, the network manager coordinated the installation of a Video Conferencing Center VCC. The VCC will be used by all tenants in the Army Air Force Exchange System AFFES building located at 919 Ala Moana Boulevard.

#### 5.3 Special Projects Receiving ERRF Funding

During FY 2003 two special environmental projects received ERRF funding. The Department of Land and Natural Resources (DLNR) received funding for the Lake Wilson *Salvinia molesta* removal. Additionally, a portion of the HEER Office ERRF funding was transferred to the Solid and Hazardous Waste Branch for the Mercury Reduction Project.

# 5.3.1 <u>Department of Land and Natural Resources Lake Wilson</u> *Salvinia Molesta* Removal

On March 17, 2003, Governor Lingle approved the transfer of \$500,000, pursuant to Section 158 of Act 259, SLH 2001, from the Department of Health's Environmental Response Revolving Fund (ERRF) to the Department of Land and Natural Resources (DLNR) for the Lake Wilson *Salvinia molesta* removal. In addition, pursuant to Section 128D-4(e), HRS, the Governor also authorized the increase of the FY 2003 appropriation ceiling for the ERRF by \$1.7 million from \$4,019,727 to \$5,719,727, with the understanding that additional funds may be transferred to the DLNR subject to availability.

Salvinia molesta (Salvinia), also known as Giant Salvinia, is the world's worst aquatic weed species. It can double in numbers under ideal conditions in 2.2 days. This plant reproduces as portions break off, whereby if the plant is broken into several pieces, each piece will have the ability to grow into a new plant. Salvinia growth covers a water body blocking all sunlight from penetrating the infested water body, thus eliminating all of the submerged vegetation that is important to the survival of fish. Additionally, as the plants die and decay, they can cause a decrease in dissolved oxygen in the water body.

Lake Wilson (Lake) is a manmade freshwater reservoir in central Oahu covering approximately 300 acres and contains approximately 500 tons of various introduced species of fish. No native freshwater fish or invertebrate species reside in the Lake, but some migrate through it.

Salvinia was discovered in the Lake about four years ago during the removal of an infestation of water hyacinths and was controlled through routine maintenance by Department of Land and Natural Resources (DLNR), Division of Aquatic Resources (DAR). Around July-August 2002, DAR discovered that Salvinia seemed to be multiplying and stepped-up their control efforts. By

November 2002, most of the Salvinia was contained in the basin area (at the dam and spillway of the Lake) and the City & County of Honolulu (City) assisted in removal efforts using a frontend loader and dump trucks.

In December 2002, Salvinia within and just outside of the basin containment area exploded in growth and took DAR and City crews completely by surprise. By January 2003, Salvinia had covered approximately 90% of the Lake's surface water area (270 acres) and posed the threat of a massive fish kill and a potential public health disaster.

In early February, the Governor designated DLNR as the lead agency in addressing the infestation of Salvinia and deemed the infestation at the Lake a State priority. DLNR along with the help of others, developed a three-pronged short term action plan to combat the infestation as follows:

- 1. Establish three extraction sites using heavy equipment consisting of an excavator, front-end loaders and dump trucks with supporting services. Two to four boats with oil booms would be used to round-up the Salvinia and pull it towards the extraction sites. Initially, the State, City and the Military would provide their own manpower and resources to outfit their respective extraction site. Should additional resources become available and if suitable sites are located, one to two more extraction sites would be mobilized into operation. Landowners provided a disposal area (approximately 30 acres) in their fallow fields and will later mulch and compost the weed material for use on their planting fields.
- 2. Herbicide spraying of AquaMaster will be used to kill and/or retard the growth of Salvinia so that extraction activities can over-take the exponential growth rate of the weed. AquaMaster is an Environmental Protection Agency approved herbicide for use in aquatic environments. The herbicide is bio-degradable, has a short residual time and becomes inactive upon contact with soil. The active ingredient, glyphosate, is a common herbicide in products approved for use for home and garden weed control.
- 3. Last prong of the short-term plan is to solicit community support and volunteers to clear areas where the main extraction efforts cannot reach (e.g. along the edges of the Lake, between fallen tree branches, areas inaccessible by larger boats, etc.).

#### **Extraction Timetable:**

- Remove 2 acres of Salvinia per day per extraction site (State, City & Military).
- Goal: 6 acres of Salvinia removed per day.
- Approximate coverage of Lake = 90% or 270 acres
- Estimated time needed for removal = 45 "working days" or 9 weeks

The three major extraction sites were in operation 10 hours a day, 6 days a week from February 18 to April 15, 2003 at which time it was estimated that approximately 95% of the Lake had been cleared. Extraction continued in the harder to reach areas and along the edges of the Lake until early June 2003 when the Lake was re-opened for public use.

# 5.3.2 Solid and Hazardous Waste Branch Mercury Recovery Project

On December 2, 2002, the Deputy Director of Environmental Health and the Superintendent of the Department of Education signed a Memorandum of Agreement to establish a partnership between the DOH and the DOE in a Mercury Reduction project. The overall program included collecting mercury from schools, educating teachers, parents and students about the dangers of mercury, and using the schools as the collection points for household collections on the four major islands. The DOH also partnered with the Hawaii Dental Association to allow neighbor island dentists to participate in the household collections.

To facilitate effective collections, the DOH worked with the Hawaii Pharmacists Association to establish discounts on non-mercury replacements. Households participating in the collection received discount coupons redeemable at participating retailers on each island.

Below are the results from the collections.

- 1,288 pounds of mercury collected from DOE schools
- 1.500 thermometers collected from households
- 187 pounds of mercury from neighbor island dentist

The cost for the collection and disposal of the exchange program was approximately \$173,000. The ERRF contributed \$138,950 to the project. In comparison, the clean-up cost for 35 pounds of mercury in the Puuwai Momi housing project (in the Halawa area on Oahu) in 2001, cost the DOH approximately \$650,000.

# APPENDIX A FY 2003 DEPARTMENT OF HEALTH ENVIRONMENTAL HEALTH ADMINISTRATION HAZARD EVALUATION AND EMERGENCY RESPONSE OFFICE STATE PRIORITY LIST

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#### **APPPENDIX A:**

|        |              |  |                  | Activity Status |           |         |
|--------|--------------|--|------------------|-----------------|-----------|---------|
| sland  | Locality     | Site Name  | Priority Ranking | Type            | Date      | Result  |
| Hawaii | Captain Cook | Ataraxia Farms   |                  | ISST            | 1/20/2004 | Ongoing |
|        |              | MacFarms of Hawaii, IncUST Closure<br>89-406 Mamalahoa Hwy | NFA on 2/3/2000  | ISST            | 2/3/2000  | NFA     |
| ławaii | Hakalau      | Hakalau Seed Plant   |                  | Unreg UST       | 1/20/2004 | Ongoing |
| ławaii | Halaula      | Tannery Site - Hawi  | NFA on 4/15/1996 | ISST            | 4/15/1996 | NFA     |
| Hawaii | Hamakua      | Hamakua Sugar Company, IncHaina<br>Sugar Mill (Reports)    | Low on 4/3/1998  | Remedial        | 1/20/2004 | Ongoing |
| Hawaii | Hilo         | Army Aviation Support Facility #2 Building 619             |                  | DS1             | 5/1/1988  | Ongoing |
|        |              | Equilon Enterprises LLC-Hilo Terminal 661 Kalanianaole Ave |                  | ISST            | 1/20/2004 | Ongoing |
|        |              | Exempt UST Closure at Excelsior Dairy 458 Kekuanaoa St     |                  | Unreg UST       | 1/20/2004 | Ongoing |

|          |   |  | Activity Status  |   |                       |
|----------|---|--|--|---|-----------------------|
| Locality | Site Name   | Priority Ranking   | Type   | Date  | Result                |
| Hilo     | Facility Response Plan for BHP Petroleum<br>Americas Terminals Inc<br>595 Kalanianaole Ave    |  | ISST   | 1/20/2004   | Ongoing               |
|          | GTE Hawaiian Tel - Kawailani Central<br>Office (Hilo) Chlordane Release<br>440 W Kawailani St |  | ISST   | 1/20/2004   | Ongoing               |
|          | Hatada Bakery, Former<br>55 Kukuau St   | Medium on 6/4/1999   | Remedial   | 1/20/2004   | Ongoing               |
|          | Hawaii Pest Control<br>56 Wiwoole St  | High on 3/3/1997   | Remedial   | 5/29/2003   | Refer to SHWB         |
|          | HIANG GENERAL LYMAN FIELD   |  | Research   | 1/20/2004   | Ongoing               |
|          | HIANG HILO  |  | Research   | 1/20/2004   | Ongoing               |
|          | HIARNG-Keaukaha Military Reservation  |  | Research   | 1/20/2004   | Ongoing               |
|          | Hilo Arsenic Spill Site<br>33 Lilioukalani Ln   | NFA on 8/28/1997   | SI1  | 1/20/2004   | Ongoing               |
|          | Hilo Bay Front Soccer Field<br>Kamehameha Ave & Ponohawai St                                  |  | Remedial   | 2/27/2003   | Refer to HEER<br>EP&R |
|          | Hilo Landfill (HID000606582)<br>Leilani St  | Low on 3/26/1996   | Remedial   | 1/20/2004   | Ongoing               |
|          | Hilo Mechanical, Inc.<br>50 Holomua St  | NFA on 3/23/1995   | ISST   | 3/23/1995   | NFA                   |
|          | Hilo Quality Cleaners<br>865 Kinoole St   | NFA on 12/2/1996   | ISST   | 12/2/1996   | NFA                   |
|          |   | Hilo Facility Response Plan for BHP Petroleum Americas Terminals Inc 595 Kalanianaole Ave  GTE Hawaiian Tel - Kawailani Central Office (Hilo) Chlordane Release 440 W Kawailani St  Hatada Bakery, Former 55 Kukuau St  Hawaii Pest Control 56 Wiwoole St  HIANG GENERAL LYMAN FIELD  HIANG HILO  HIARNG-Keaukaha Military Reservation  Hilo Arsenic Spill Site 33 Lilioukalani Ln  Hilo Bay Front Soccer Field Kamehameha Ave & Ponohawai St  Hilo Landfill (HID000606582) Leilani St  Hilo Mechanical, Inc. 50 Holomua St  Hilo Quality Cleaners | Hilo Facility Response Plan for BHP Petroleum Americas Terminals Inc 595 Kalanianaole Ave  GTE Hawaiian Tel - Kawailani Central Office (Hilo) Chlordane Release 440 W Kawailani St  Hatada Bakery, Former 55 Kukuau St  Hawaii Pest Control High on 3/3/1997 56 Wiwoole St HIANG GENERAL LYMAN FIELD  HIANG HILO  HIARNG-Keaukaha Military Reservation  Hilo Arsenic Spill Site 33 Lilioukalani Ln  Hilo Bay Front Soccer Field Kamehameha Ave & Ponohawai St  Hilo Landfill (HID000606582) Leilani St Hilo Mechanical, Inc. 50 Holomua St Hilo Quality Cleaners  NFA on 12/2/1996 | Hilo Facility Response Plan for BHP Petroleum Americas Terminals Inc 595 Kalanianaole Ave  GTE Hawaiian Tel - Kawailani Central Office (Hilo) Chlordane Release 440 W Kawailani St  Hatada Bakery, Former Medium on 6/4/1999 Remedial 55 Kukuau St  Hawaii Pest Control High on 3/3/1997 Remedial 56 Wiwoole St  HIANG GENERAL LYMAN FIELD Research  HIANG HILO Research  HIARNG-Keaukaha Military Reservation Research  Hilo Arsenic Spill Site NFA on 8/28/1997 SI1 33 Lilioukalani Ln  Hilo Bay Front Soccer Field Kamehameha Ave & Ponohawai St  Hilo Landfill (HID000606582) Low on 3/26/1996 Remedial Leilani St  Hilo Mechanical, Inc. NFA on 3/23/1995 ISST  50 Holomua St  Hilo Quality Cleaners NFA on 12/2/1996 ISST | Locality   Site Name  |

|          |   |   | Activity Status  |  |   |
|----------|---|---|--|--|---|
| Locality | Site Name   | Priority Ranking  | Type   | Date   | Result  |
| Hilo     | Hilo Quality Washerette<br>210 Hoku St                              |   | ISST   | 1/20/2004  | Ongoing   |
|          | Hilo Soda Works Tank Closure<br>270 Kawili St                       | NFA on 7/15/1997  | ISST   | 7/15/1997  | NFA   |
|          | Hilo Terminal Chevron<br>666 Kalanianaole Ave                       |   | ISST   | 1/20/2004  | Ongoing   |
|          | Hilo Wood Treating, Inc.<br>66 Kukila St                            |   | Remedial   | 4/25/2002  | Refer to SHWB   |
|          | HPM Building Supply DBA-Hawaii Wood Protection, Inc.<br>150 Keaa St |   | ISST   | 1/20/2004  | Ongoing   |
|          | Kawailani Laundromat<br>511 W Kawailani St                          | Low on 9/8/1998   | Remedial   | 1/20/2004  | Ongoing   |
|          | Keaukaha Military Reservation Container<br>Disposal                 |   | Remedial   | 1/20/2004  | Ongoing   |
|          | KPUA Emergency Broadcast Radio Staion<br>58 Manaolana Pl            | NFA on 12/11/1997   | ISST   | 12/11/1997   | NFA   |
|          | KTA/Davies Property<br>500 Kalanianaole Hwy                         | Medium on 3/11/1999   | Remedial   | 1/20/2004  | Ongoing   |
|          | Laehala Street Dumping<br>Laehala St                                | NFA on 11/4/1998  | ISST   | 11/4/1998  | NFA   |
|          | Pohakuloa Training Center<br>Saddle Rd                              |   | Remedial   | 1/20/2004  | Ongoing   |
|          | Roberts Bakery Inc. Boiler UST Removal 374 Kinoole St               | NFA on 1/7/1997   | ISST   | 1/7/1997   | NFA   |
|          | -   | Hilo Quality Washerette 210 Hoku St  Hilo Soda Works Tank Closure 270 Kawili St  Hilo Terminal Chevron 666 Kalanianaole Ave  Hilo Wood Treating, Inc. 66 Kukila St  HPM Building Supply DBA-Hawaii Wood Protection, Inc. 150 Keaa St  Kawailani Laundromat 511 W Kawailani St  Keaukaha Military Reservation Container Disposal  KPUA Emergency Broadcast Radio Staion 58 Manaolana Pl  KTA/Davies Property 500 Kalanianaole Hwy  Laehala Street Dumping Laehala St Pohakuloa Training Center Saddle Rd  Roberts Bakery Inc. Boiler UST Removal | Hillo Washerette 210 Hoku St  Hillo Soda Works Tank Closure 270 Kawili St  Hillo Terminal Chevron 666 Kalanianaole Ave  Hillo Wood Treating, Inc. 66 Kukila St  HPM Building Supply DBA-Hawaii Wood Protection, Inc. 150 Keaa St  Kawailani Laundromat 511 W Kawailani St  Keaukaha Military Reservation Container Disposal  KPUA Emergency Broadcast Radio Staion 58 Manaolana Pl  KTA/Davies Property 500 Kalanianaole Hwy  Laehala Street Dumping Laehala St Pohakuloa Training Center Saddle Rd  Roberts Bakery Inc. Boiler UST Removal  NFA on 177/1997 | Hillo Quality Washerette 210 Hoku St  Hilo Soda Works Tank Closure 270 Kawili St  Hilo Terminal Chevron 666 Kalanianaole Ave  Hilo Wood Treating, Inc. 66 Kukila St  HPM Building Supply DBA-Hawaii Wood Protection, Inc. 150 Keaa St  Kawailani Laundromat 511 W Kawailani St  Keaukaha Military Reservation Container Disposal  KPUA Emergency Broadcast Radio Staion 58 Manaolana Pl  KTA/Davies Property 500 Kalanianaole Hwy  Laehala Street Dumping Laehala St Pohakuloa Training Center Saddle Rd Roberts Bakery Inc. Boiler UST Removal NFA on 1/7/1997 ISST | Locality   Site Name   Priority Ranking   Type   Date |

|        |  |   |                      | Activity Status    |           |          |
|--------|--|---|----------------------|--------------------|-----------|----------|
| sland  | Locality   | Site Name   | Priority Ranking     | Туре               | Date      | Result   |
| Hawaii | Hilo   | Sun Sun Lau Chop Suey House (Report)<br>1055 Kinoole St             | Low on 1/7/1997      | Remedial           | 1/20/2004 | Ongoing  |
|        | Tesoro Hawaii Corporation, Terminal<br>Department-701 Kalanianaole<br>701 Kalanianaole Ave |   | ISST                 | 1/20/2004          | Ongoing   |          |
|        |  | Texaco Hilo Sales Terminal<br>999 Kalanianaole Ave                  | Medium on 11/8/2000  | Remedial           | 1/20/2004 | Ongoing  |
|        |  | The Estate of Charles Shiroma (Reports)<br>916 Ainaola Dr           | NFA on 1/6/1999      | ISST               | 1/6/1999  | NFA      |
|        |  | TOSCO Corporation-Hilo Terminal (0276)<br>607 Kalanianaole Ave      |                      | ISST               | 1/20/2004 | Ongoing  |
|        |  | UH Hilo Pacific Aquaculture and Ocean Resources Center              |                      | Brownfields<br>TSA | 3/17/2003 | Complete |
|        |  | University of Hawaii-Hilo Auto Shop<br>200 W Kawili St              |                      | ISST               | 1/20/2004 | Ongoing  |
|        |  | USDA Forest Service PSW Experimental<br>Station<br>1643 Kilauea Ave | NFA on 4/15/1996     | ISST               | 4/15/1996 | NFA      |
|        |  | Waiakea Pond/Hawaii Cane Products Plant                             | Medium on 12/29/199! | Remedial           | 1/20/2004 | Ongoing  |
|        |  | Wailuku River Hydroelectric Project                                 |                      | ISST               | 1/20/2004 | Ongoing  |
|        |  | Wainaku Mill  | Low on 7/6/1995      | Remedial           | 1/20/2004 | Ongoing  |
|        |  | Western Auto Store Petroleum Release<br>141 Haili St                |                      | ISST               | 1/20/2004 | Ongoing  |

|             |  |  | Activity Status   |   |  |
|-------------|--|--|---|---|--|
| Locality    | Site Name  | Priority Ranking   | Type  | Date  | Result   |
| Hilo        | Young Brothers, Pier 2, Hilo   |  | ISST  | 1/20/2004   | Ongoing  |
| Honokaa     | DOH Honokaa<br>45-3380 Mamane St   | Low on 8/28/1997   | Remedial  | 1/20/2004   | Ongoing  |
| Kailua-Kona | Alamo Rent A Car, Keahole Airport<br>Keahole Airport Rd                                | Low on 1/12/1995   | Remedial  | 1/20/2004   | Ongoing  |
|             | Firestone Service Center<br>75-5629 Palani Rd  | NFA on 12/11/2001  | ISST  | 12/11/2001  | NFA  |
|             | Hawaiian Airlines - Kona Fuel Farm<br>Keahole Airport Rd                               | NFA on 6/4/1999  | Remedial  | 1/20/2004   | Ongoing  |
|             | Honokohau Industrial Park-Lower Boat Park<br>Soil Contamination<br>Queen Kaahumanu Hwy | Low on 7/3/2001  | Remedial  | 1/20/2004   | Ongoing  |
|             | Kailua-Kona Landfill   | NFA on 4/29/1996   | ES1   | 1/20/2004   | Ongoing  |
|             | Kona Airport Fire Training Area<br>73-200 Kupipi St                                    |  | ISST  | 1/20/2004   | Ongoing  |
|             | Pawai Street Oil/Diesel Minor Leak Low on 12/7/2001 Remedial 74-5603 Pawai St          | Remedial   | 1/20/2004   | Ongoing   |  |
|             | Snow White Linen, Former (Report)<br>75-5705 Kuakini Hwy                               | Low on 11/2/1998   | Remedial  | 1/20/2004   | Ongoing  |
|             | Tosco Bulk Plant #0316<br>74-5558 Kaiwi St   | Low on 1/18/2002   | Remedial  | 1/20/2004   | Ongoing  |
|             | Hilo<br>Honokaa  | Hilo Young Brothers, Pier 2, Hilo  Honokaa DOH Honokaa 45-3380 Mamane St  Kailua-Kona Alamo Rent A Car, Keahole Airport Keahole Airport Rd Firestone Service Center 75-5629 Palani Rd Hawaiian Airlines - Kona Fuel Farm Keahole Airport Rd Honokohau Industrial Park-Lower Boat Park Soil Contamination Queen Kaahumanu Hwy Kailua-Kona Landfill  Kona Airport Fire Training Area 73-200 Kupipi St Pawai Street Oil/Diesel Minor Leak 74-5603 Pawai St Snow White Linen, Former (Report) 75-5705 Kuakini Hwy Tosco Bulk Plant #0316 | Hilo Young Brothers, Pier 2, Hilo  Honokaa DOH Honokaa 45-3380 Mamane St  Kailua-Kona Alamo Rent A Car, Keahole Airport Low on 1/12/1995 Keahole Airport Rd  Firestone Service Center 75-5629 Palani Rd  Hawaiian Airlines - Kona Fuel Farm NFA on 6/4/1999 Keahole Airport Rd  Honokohau Industrial Park-Lower Boat Park Soil Contamination Queen Kaahumanu Hwy  Kailua-Kona Landfill NFA on 4/29/1996  Kona Airport Fire Training Area 73-200 Kupipi St  Pawai Street Oil/Diesel Minor Leak 74-5603 Pawai St  Snow White Linen, Former (Report) Low on 11/2/1998 75-5705 Kuakini Hwy  Tosco Bulk Plant #0316 Low on 1/18/2002 | Hilo Young Brothers, Pier 2, Hilo ISST  Honokaa DOH Honokaa 45-3380 Mamane St  Kailua-Kona Alamo Rent A Car, Keahole Airport Low on 1/12/1995 Remedial Keahole Airport Rd  Firestone Service Center 75-5629 Palani Rd  Hawaiian Airlines - Kona Fuel Farm NFA on 12/11/2001 ISST  Keahole Airport Rd  Honokohau Industrial Park-Lower Boat Park Soil Contamination Queen Kaahumanu Hwy  Kailua-Kona Landfill NFA on 4/29/1996 ES1  Kona Airport Fire Training Area 73-200 Kupipi St  Pawai Street Oil/Diesel Minor Leak Low on 12/7/2001 Remedial 74-5603 Pawai St  Snow White Linen, Former (Report) Low on 11/2/1998 Remedial 75-5705 Kuakini Hwy  Tosco Bulk Plant #0316 Low on 1/18/2002 Remedial | Hilo   Young Brothers, Pier 2, Hilo   ISST   1/20/2004 |

|        |              |   |                  | Activity Status |           |         |
|--------|--------------|---|------------------|-----------------|-----------|---------|
| sland  | Locality     | Site Name   | Priority Ranking | Type            | Date      | Result  |
| Hawaii | Kamaoa-Puueo | Hawaiian Home Lands-South Point   | NFA on 4/15/1996 | ISST            | 4/15/1996 | NFA     |
| Hawaii | Kamuela      | Kamuela Baseyard  |                  | ISST            | 1/20/2004 | Ongoing |
|        |              | TOSCO Kawaihae Terminal<br>1 Kawaihae Rd                                  |                  | ISST            | 1/20/2004 | Ongoing |
|        |              | Yamada & Sons Trucking Diesel Spill<br>Kawaihae Rd                        | NFA on 6/4/1999  | ISST            | 6/4/1999  | NFA     |
| ławaii | Kapoho       | Hawaii Geothermal Project   | NFA on 4/15/1996 | ISST            | 4/15/1996 | NFA     |
|        |              | Kapoho Scientific Observation Holes #1 and #2 Drilling Mud Toxicity Study |                  | ISST            | 1/20/2004 | Ongoing |
| lawaii | Kau          | Kahuku Ranch Stained Soils  |                  | Remedial        | 1/20/2004 | Ongoing |
| lawaii | Kawaihae     | Pioneer Lumber<br>Maluokalani St  |                  | ISST            | 1/20/2004 | Ongoing |
| Hawaii | Keaau        | Keaau VRP Site<br>Old Volcano Rd  |                  | VRP             | 1/20/2004 | Ongoing |
|        |              | Nakamura Sales & Service Site [Former]<br>16-541 Old Volcano Rd           | Low on 3/3/1999  | Remedial        | 1/20/2004 | Ongoing |

|        |             |   |                  |           | Activity Stat | us      |
|--------|-------------|---|------------------|-----------|---------------|---------|
| Island | Locality    | Site Name   | Priority Ranking | Type      | Date          | Result  |
| Hawaii | Keaau       | Puna Sugar Mill   |                  | PA1/SI1   | 1/20/2004     | Ongoing |
| Hawaii | Kealakekua  | KKON Emergency Broadcast Radio Station<br>Nani Kapuna Dr                | NFA on 3/23/1995 | ISST      | 3/23/1995     | NFA     |
|        |             | Napoopoo Beach Road TMK No. 8-2-05:31<br>Napoopoo Beach Rd              | NFA on 1/12/1995 | ISST      | 1/12/1995     | NFA     |
| Hawaii | Kukaiau     | Kukaiau Pump System   |                  | ISST      | 1/20/2004     | Ongoing |
| Hawaii | Laupahoehoe | Laupahoehoe High and Elementary School-<br>Building A<br>Kamehameha Hwy |                  | Unreg UST | 1/20/2004     | Ongoing |
| Hawaii | Mauna Kea   | Motorola Iolehaehae Diesel Generator Site                               | Low on 6/9/1998  | Remedial  | 1/20/2004     | Ongoing |
| Hawaii | Miolii      | Remote Location above Milolii   |                  | ISST      | 1/20/2004     | Ongoing |
| Hawaii | Naalehu     | Kawaihae Ranch Diesel USTs  |                  | ISST      | 1/20/2004     | Ongoing |
|        |             | Kawaihae Ranch Weedone Release  |                  | ISST      | 1/20/2004     | Ongoing |

|        |          |  |                     |          | Activity Stat | us      |
|--------|----------|--|---------------------|----------|---------------|---------|
| Island | Locality | Site Name  | Priority Ranking    | Type     | Date          | Result  |
| Hawaii | Naalehu  | Naalehu/Hawaii Petroleum Distributors<br>Tanker Diesel Spill<br>Waiohinu Hwy |                     | ISST     | 1/20/2004     | Ongoing |
| Hawaii | Ookala   | Ookala Sugar Mill Boiler UST (Report)<br>Old Mamalahoa Hwy                   | NFA on 3/4/1997     | ISST     | 3/4/1997      | NFA     |
| Hawaii | Paauilo  | Hamakua Sugar Company, Inc. Ookala<br>Fuel Station                           |                     | ISST     | 1/20/2004     | Ongoing |
|        |          | Hamakua Sugar Company, IncPaauilo  |                     | ISST     | 1/20/2004     | Ongoing |
| Hawaii | Pahala   | Ka'u Agribusiness, Herbicide Mixing Plant (HMP)                              | Medium on 1/24/2000 | Remedial | 1/20/2004     | Ongoing |
|        |          | Ka'u Sugar Mill  |                     | PA1/SI1  | 1/20/2004     | Ongoing |
| Hawaii | Pahoa    | Pahoa Beacon   |                     | ISST     | 1/20/2004     | Ongoing |
|        |          | Puna Geothermal Venture (HID984469536)<br>14-3860 Kapoho-Pahoa Rd            | NFA on 4/15/1996    | ISST     | 4/15/1996     | NFA     |
| Hawaii | Papaikou | Brewer Hilo Coast Processing Papaikou Mil<br>Oil Spill                       |                     | ISST     | 1/20/2004     | Ongoing |

|        |              |   |                  |                    | Activity Statu | ıs           |
|--------|--------------|---|------------------|--------------------|----------------|--------------|
| Island | Locality     | Site Name   | Priority Ranking | Type               | Date           | Result       |
| Hawaii | Pepeekeo     | Hilo Coast Processing (HID066259938)<br>1 Mill Rd | NFA on 4/12/1996 | ISST               | 4/12/1996      | NFA          |
|        |              | Hilo Coast Processing CoCoal Ash Site 1 Mill Rd   | NFA on 7/5/2001  | ISST               | 7/5/2001       | NFA          |
|        |              | Transformer from Case 19970814-1134<br>1 Mill Rd  |                  | ISST               | 1/20/2004      | Ongoing      |
| Hawaii | Puna         | Ahalanui Park Thermal Pond                        |                  | Risk<br>Assessment | 11/27/2002     | Refer to CWB |
| Hawaii | South Kohala | Hawaiian Electric Industries Lalamilo<br>Windfarm | Low on 9/8/1998  | Remedial           | 1/20/2004      | Ongoing      |
| Hawaii | Volcano      | Kilauea Military Reservation                      |                  | ISST               | 1/20/2004      | Ongoing      |
|        |              | Removal of 15,000-Gallon Aboveground Storage Tank | Low on 6/22/1999 | Remedial           | 1/20/2004      | Ongoing      |
|        |              | Removal of Electrical Equipment                   |                  | ISST               | 1/20/2004      | Ongoing      |
| Hawaii | Waiakea Uka  | Waiakea Uka Arsenic                               |                  | Risk<br>Assessment | 5/6/2002       | Complete     |

|           |               |   |                   | Activity Status |            |         |
|-----------|---------------|---|-------------------|-----------------|------------|---------|
| Island    | Locality      | Site Name   | Priority Ranking  | Type            | Date       | Result  |
| Hawaii    | Waikoloa      | Waikoloa Landfill   | NFA on 4/29/1996  | ISST            | 4/29/1996  | NFA     |
| Hawaii    | Waikoloaville | Hyatt Waikoloa<br>1 Waikoloa Beach Resort   |                   | ISST            | 1/20/2004  | Ongoing |
| Hawaii    | Waimea        | Waimea Landfill<br>Kawaihae/Kohala Hwy  | NFA on 10/29/1996 | ISST            | 10/29/1996 | NFA     |
| Hawaii    | Waiohinu      | Waiohinu Landfill<br>Hawaii Belt Rd & Kaulia Rd   | NFA on 4/29/1996  | ISST            | 4/29/1996  | NFA     |
| Kahoolawe | Kahoolawe     | Kahoolawe Island (HI6170090074)   |                   | DS1             | 3/3/1992   | Ongoing |
| Kauai     |               | Wailua Bay Reservoir  | NFA on 6/26/1997  | ISST            | 6/26/1997  | NFA     |
| Kauai     | Barking Sands | Kauai Test Facility (HID984469908)<br>1 Doe Trail   |                   | ISST            | 1/20/2004  | Ongoing |
| Kauai     | Eleele        | Kauai Electric-EMD Lube Oil Berm at Eleele<br>Port Allen Generation Station<br>4392 Waialo Rd |                   | ISST            | 1/20/2004  | Ongoing |
|           |               | Port Allen Generator Unit Number 5<br>4392 Waialo Rd  |                   | ISST            | 1/20/2004  | Ongoing |

|        |           |   |                   |          | Activity Stat | us      |
|--------|-----------|---|-------------------|----------|---------------|---------|
| Island | Locality  | Site Name   | Priority Ranking  | Type     | Date          | Result  |
| Kauai  | Hanalei   | Hanalei Landfill<br>5-3781 Kuhio Hwy                                    | NFA on 4/29/1996  | ISST     | 4/29/1996     | NFA     |
| Kauai  | Hanamaulu | Lihue Plantation Co., Ltd. Hanamaulu Truck<br>Shop                      |                   | PA1/SI1  | 1/20/2004     | Ongoing |
| Kauai  | Honolulu  | Nawiliwili Harbor Pier 3 Bollard Foundation<br>Construction<br>Waapa Rd | NFA on 7/6/1995   | ISST     | 7/6/1995      | NFA     |
| Kauai  | Караа     | 4-1532 Kuhio Hwy. Site Assessment<br>4-1532 Kuhio Hwy                   |                   | ISST     | 1/20/2004     | Ongoing |
|        |           | Coco Palms Resort USTs<br>4-241 Kuhio Hwy                               | NFA on 7/5/2001   | ISST     | 7/5/2001      | NFA     |
|        |           | Kapaa Landfill Opala Road<br>Opala Rd                                   |                   | ISST     | 1/20/2004     | Ongoing |
|        |           | Wailua Bay Resort Tank Removal<br>3-5920 Kuhio Hwy                      | NFA on 6/27/1997  | ISST     | 6/27/1997     | NFA     |
|        |           | Wailua Homestead Wells<br>Kiowai Pl                                     | High on 4/10/2000 | Remedial | 1/20/2004     | Ongoing |
| Kauai  | Kealia    | Waiakea Road Contaminated Soils<br>6890 Waiakea Rd                      |                   | ISST     | 1/20/2004     | Ongoing |

|        |          |  |                   | Activity Status |           |         |
|--------|----------|--|-------------------|-----------------|-----------|---------|
| Island | Locality | Site Name  | Priority Ranking  | Type            | Date      | Result  |
| Kauai  | Kekaha   | Amfac Kekaha Field 108 Leaking<br>Transformers                     | NFA on 7/15/1997  | ISST            | 7/15/1997 | NFA     |
|        |          | HIANG Kekaha<br>Kekaha Rd  |                   | Remedial        | 1/20/2004 | Ongoing |
|        |          | Kehaha Landfill (HID980370076)<br>6900 Kaumualii Hwy               | NFA on 4/29/1996  | ISST            | 4/29/1996 | NFA     |
|        |          | Kekaha Sugar Co., Ltd.<br>8315 Kekaha Rd                           | High on 11/8/2001 | SI1             | 1/20/2004 | Ongoing |
|        |          | Kekaha Sugar Co., Ltd. Former Wood<br>Treatment Plant              |                   | PA1/SI1         | 1/20/2004 | Ongoing |
|        |          | Kekaha Sugar Co., Ltd. Kekaha Sugar Mill                           |                   | PA1/SI1         | 1/20/2004 | Ongoing |
|        |          | Kekaha Sugar Co., Ltd. Seed Dipping Plant                          |                   | PA1/SI1         | 1/20/2004 | Ongoing |
|        |          | Kekaha Sugar Co., Ltd. Settling Pond                               |                   | PA1/SI1         | 1/20/2004 | Ongoing |
|        |          | Pacific Missile Range Facility<br>(HI6170024719)<br>W Kamualii Hwy | Low on 4/29/1996  | Remedial        | 1/20/2004 | Ongoing |
|        |          | Pacific Missile Range Facility DSMOA<br>W Kamualii Hwy             | Low on 8/1/1995   | Remedial        | 1/20/2004 | Ongoing |
| Kauai  | Kokee    | Kokee Landfill   | NFA on 4/29/1996  | ISST            | 4/29/1996 | NFA     |

|        |          |   |                     |           | Activity Stat | us      |
|--------|----------|---|---------------------|-----------|---------------|---------|
| Island | Locality | Site Name   | Priority Ranking    | Type      | Date          | Result  |
| Kauai  | Koloa    | Stouffer Poipu Beach Resort<br>2251 Poipu Rd                                |                     | Unreg UST | 1/20/2004     | Ongoing |
|        |          | Up to Date Cleaners<br>3145 Akau Rd   |                     | ISST      | 1/20/2004     | Ongoing |
| Kauai  | Lawai    | Lawai Valley Cannery PCB in Deep Well<br>3580 Lauoho Rd                     |                     | ISST      | 1/20/2004     | Ongoing |
| Kauai  | Lihue    | Elima Road Soil Stock Pile<br>3428 Elima Rd                                 |                     | ISST      | 1/20/2004     | Ongoing |
|        |          | Former Masterworks at Lihue Airport<br>3130 Ahukini Rd                      | Medium on 2/22/1999 | Remedial  | 1/20/2004     | Ongoing |
|        |          | GTE-Hawaiian Tel<br>4444 Rice St  | NFA on 3/3/1999     | ISST      | 3/3/1999      | NFA     |
|        |          | Halehaka Landfill<br>Halehaka Rd  | NFA on 4/29/1996    | ISST      | 4/29/1996     | NFA     |
|        |          | Kauai Hilton Beach Villas (Kauai Outrigger)-<br>USTL<br>4331 Kauai Beach Dr | NFA on 2/3/2000     | ISST      | 2/3/2000      | NFA     |
|        |          | Kauai Westin<br>3500 Rice St  |                     | Unreg UST | 1/20/2004     | Ongoing |
|        |          | Lihue Plantation Company, Ltd.<br>2940 Haleko Rd                            | High on 11/8/2001   | PA1/SI1   | 1/20/2004     | Ongoing |
|        |          | Nawiliwili Fuel DistributionTerminal<br>3145 Waapa Rd                       |                     | ISST      | 1/20/2004     | Ongoing |
|        |          |   |                     |           |               |         |

|        |            |  |                     | Activity Status    |           |         |
|--------|------------|--|---------------------|--------------------|-----------|---------|
| Island | Locality   | Site Name  | Priority Ranking    | Type               | Date      | Result  |
| Kauai  | Lihue      | Nawiliwili Harbor Pier 1 Fuel Contamination                                | Low on 2/12/1996    | Remedial           | 1/20/2004 | Ongoing |
|        |            | Nawiliwili Harbor Pier 2 Oil Spill   |                     | ISST               | 1/20/2004 | Ongoing |
|        |            | Project Faith<br>Kuihio Hwy  |                     | Brownfields<br>TSA | 1/20/2004 | Ongoing |
|        |            | The Lihue Plantation Co., Ltd. Lihue Sugar<br>Mill EPA ID No. HIN000905691 |                     | PA1/SI1            | 1/20/2004 | Ongoing |
|        |            | The Lihue Plantation Co., Ltd. Seed Dipping Plant                          |                     | PA1/SI1            | 1/20/2004 | Ongoing |
|        |            | The Lihue Plantation Co., Ltd. Settling Pond                               |                     | PA1/SI1            | 1/20/2004 | Ongoing |
| Kauai  | Port Allen | Port Allen Bulk Petroleum Storage Terminal<br>4350 Waialo Rd               |                     | ISST               | 1/20/2004 | Ongoing |
| Kauai  | Puhi       | Brewer Chem Corporation, Puhi<br>3-1480 Kaumualii Hwy                      | Medium on 11/2/1994 | Remedial           | 1/20/2004 | Ongoing |
| Kauai  | Wailua     | Coco Palms Sewer Pump Station 4511 Haleilio Rd                             | Medium on 3/21/1995 | Remedial           | 1/20/2004 | Ongoing |
|        |            | Kauai Agricultural Research Center (Agent Orange/Pesticide Sites)          | High on 10/8/1999   | PA1                | 1/20/2004 | Ongoing |

|            |            |  |                  |                    | Activity Stat | us       |
|------------|------------|--|------------------|--------------------|---------------|----------|
| Island     | Locality   | Site Name  | Priority Ranking | Type               | Date          | Result   |
| Kauai      | Waimea     | Borden Meadow Gold Dairy<br>9250 Kaumualii Hwy         | Low on 6/26/1997 | Remedial           | 1/20/2004     | Ongoing  |
|            |            | Former Downie's Unocal<br>9949 Waimea Rd               |                  | ISST               | 1/20/2004     | Ongoing  |
|            |            | Kauai Veterans Memorial Hospital<br>Waimea Canyon Rd   |                  | Risk<br>Assessment | 6/26/2002     | Complete |
|            |            | Kikiaola Beach   |                  | Archive            | 1/23/1996     | NFA      |
|            |            | Kokee Air Force Station (HI0570096487)<br>Kokee Rd     |                  | ISST               | 1/20/2004     | Ongoing  |
|            |            | Meadowgold Facility Waimea Kauai<br>9250 Kaumualii Hwy | Low on 9/17/1998 | Remedial           | 1/20/2004     | Ongoing  |
| Kure Atoll | Kure Atoll | Kure Atoll, U.S. Coast Guard                           |                  | SI1                | 1/20/2004     | Ongoing  |
| .anai      |            | Lanai Chemical Mixing Area                             | NFA on 3/25/1996 | ISST               | 3/25/1996     | NFA      |
|            |            | Lanai DDT Storage Tank Area                            | NFA on 3/25/1996 | ISST               | 3/25/1996     | NFA      |
|            |            | Lanai Drum Site No. 1                                  | NFA on 3/25/1996 | ISST               | 3/25/1996     | NFA      |
|            |            | Lanai Drum Site No. 2                                  | NFA on 3/26/1996 | ISST               | 3/26/1996     | NFA      |
|            |            | Lanai Drum Site No. 3                                  | NFA on 3/25/1996 | ISST               | 3/25/1996     | NFA      |
|            |            |  |                  |                    |               |          |

|        |            |  |                  | Activity Status |           |         |
|--------|------------|--|------------------|-----------------|-----------|---------|
| Island | Locality   | Site Name  | Priority Ranking | Type            | Date      | Result  |
| Lanai  |            | Lanai Dump Site  | NFA on 3/27/1996 | ISST            | 3/27/1996 | NFA     |
|        |            | Lanai Dump Site Palawi Basin                                   | NFA on 3/25/1996 | ISST            | 3/25/1996 | NFA     |
| Lanai  | Lanai      | Kaumalapau Harbor  |                  | ISST            | 1/20/2004 | Ongoing |
|        |            | Koele Lodge Diesel Spill                                       |                  | ISST            | 1/20/2004 | Ongoing |
| Lanai  | Lanai City | Dole Plantation (HID000626754)<br>Palawai St                   |                  | ISST            | 1/20/2004 | Ongoing |
|        |            | Lanai Company Manele Bay Golf Course<br>Development            |                  | ISST            | 1/20/2004 | Ongoing |
|        |            | Lanai Landfill<br>Kaumalapau Hwy                               | NFA on 4/29/1996 | ISST            | 4/29/1996 | NFA     |
|        |            | Manele Bay Boat Harbor Diesel Fuel Spill                       | NFA on 7/23/1999 | ISST            | 7/23/1999 | NFA     |
| Lanai  | Lihue      | Lihue Plantation Company, Ltd. Lihue<br>Herbicide Mixing Plant |                  | PA1/SI1         | 1/20/2004 | Ongoing |
| Maui   |            | A&B Parcel   |                  | Remedial        | 1/20/2004 | Ongoing |

|            |   |  |   | Activity Stat  | us  |
|------------|---|--|---|--|---|
| Locality   | Site Name   | Priority Ranking   | Type  | Date   | Result  |
| Haiku      | Maui Pesticide Haiku Site<br>148 W Kailua Rd              |  | Removal   | 1/20/1988  | Complete  |
|            | Maui Pesticide Pauwela Road Site<br>Haiku Rd & Pauwela Rd |  | Removal   | 1/20/1988  | Complete  |
| Haliimaile | Maui Land & Pineapple Co<br>870 Haliimaile Rd             |  | ISST  | 1/20/2004  | Ongoing   |
| Hana       | Hana Landfill   | NFA on 4/15/1996   | ISST  | 4/15/1996  | NFA   |
| Kaanapali  | Consolidated Metals, Inc.<br>1505 Kaanapali Pkwy          |  | Research  | 1/20/2004  | Ongoing   |
| Kahului    | 65 Kahului Beach Road<br>65 Kahului Beach Rd              | NFA on 6/25/1998   | ISST  | 6/25/1998  | NFA   |
|            | Alexander and Baldwin Dump Site<br>W Papa Ave             | Medium on 10/26/199!   | Remedial  | 1/20/2004  | Ongoing   |
|            | Bird Builders<br>Amala Pl                                 | Medium on 12/21/1994   | SI1   | 1/20/2004  | Ongoing   |
|            | Chevron Kahului Bulk Terminal<br>100 Hobron Ave           | Medium on 10/29/1990   | Remedial  | 1/20/2004  | Ongoing   |
|            | E & E Black Contractors<br>Amala Pl                       |  | ISST  | 1/20/2004  | Ongoing   |
|            | Haiku<br>Haliimaile<br>Hana<br>Kaanapali                  | Haiku Maui Pesticide Haiku Site 148 W Kailua Rd Maui Pesticide Pauwela Road Site Haiku Rd & Pauwela Rd  Haliimaile Maui Land & Pineapple Co 870 Haliimaile Rd  Hana Hana Landfill  Kaanapali Consolidated Metals, Inc. 1505 Kaanapali Pkwy  Kahului 65 Kahului Beach Road 65 Kahului Beach Rd Alexander and Baldwin Dump Site W Papa Ave Bird Builders Amala Pl Chevron Kahului Bulk Terminal 100 Hobron Ave E & E Black Contractors | Haiku Maui Pesticide Haiku Site 148 W Kailua Rd Maui Pesticide Pauwela Road Site Haiku Rd & Pauwela Rd  Haliimaile Maui Land & Pineapple Co 870 Haliimaile Rd  Hana Hana Landfill NFA on 4/15/1996  Kaanapali Consolidated Metals, Inc. 1505 Kaanapali Pkwy  Kahului 65 Kahului Beach Road 65 Kahului Beach Rd Alexander and Baldwin Dump Site W Papa Ave Bird Builders Amala Pl Chevron Kahului Bulk Terminal 100 Hobron Ave E & E Black Contractors | Haiku Maui Pesticide Haiku Site 148 W Kailua Rd Maui Pesticide Pauwela Road Site Haiku Rd & Pauwela Rd  Haliimaile Maui Land & Pineapple Co 870 Haliimaile Rd  Hana Hana Landfill NFA on 4/15/1996 ISST  Kaanapali Consolidated Metals, Inc. 1505 Kaanapali Pkwy  Kahului 65 Kahului Beach Road 65 Kahului Beach Rd Alexander and Baldwin Dump Site W Papa Ave Bird Builders Amala Pl Chevron Kahului Bulk Terminal 100 Hobron Ave E & E Black Contractors  Removal  Removal | LocalitySite NamePriority RankingTypeDateHaikuMaui Pesticide Haiku Site<br>148 W Kailua RdRemoval1/20/1988HaliimaileMaui Pesticide Pauwela Road Site<br>Haiku Rd & Pauwela RdRemoval1/20/1988HaliimaileMaui Land & Pineapple Co<br>870 Haliimaile RdISST1/20/2004HanaHana LandfillNFA on 4/15/1996ISST4/15/1996KaanapaliConsolidated Metals, Inc.<br>1505 Kaanapali PkwyResearch1/20/2004Kahului65 Kahului Beach Road<br>65 Kahului Beach RdNFA on 6/25/1998ISST6/25/1998Alexander and Baldwin Dump Site<br>W Papa AveMedium on 10/26/199!<br>W Papa AveRemedial1/20/2004Bird Builders<br>Amala Pl<br>Chevron Kahului Bulk Terminal<br>100 Hobron Ave<br>E & E Black ContractorsMedium on 10/29/199!<br>Medium on 10/29/199!Remedial1/20/2004 |

|          |  |   | Activity Status  |  |   |
|----------|--|---|--|--|---|
| Locality | Site Name  | Priority Ranking  | Type   | Date   | Result  |
| Kahului  | F & M Contractors, Inc.<br>Amala PI  |   | SI1  | 1/20/2004  | Ongoing   |
|          | Fong Construction Petroleum Hydrocarbon<br>Contamination<br>Hukiliki St              |   | ISST   | 1/20/2004  | Ongoing   |
|          | Hawaii Wood Preserving Co. (Osmose)<br>356 Hanakai St                                |   | ISST   | 1/20/2004  | Ongoing   |
|          | HIANG KAHULUI  |   | Research   | 1/20/2004  | Ongoing   |
|          | Hobron Avenue Area<br>Hobron Ave   |   | Remedial   | 1/20/2004  | Ongoing   |
|          | Kahului Wastewater Reclaimation Facility<br>30 Gallon Diesel Release<br>281 Amala Pl | NFA on 2/28/2001  | ISST   | 2/28/2001  | NFA   |
|          | Kanaha Pond Industrial East Site<br>Amala Pl   | NFA on 11/27/2001   | ISST   | 11/27/2001   | NFA   |
|          | Kanaha Pond Industrial Site  |   | DS1  | 3/18/1994  | NFA   |
|          | Kanaha Pond Industrial West Site<br>261 Amala Pl                                     | Medium on 9/8/1998  | SI1  | 1/20/2004  | Ongoing   |
|          | Kealia Pond Contaminants Survey  |   | Risk<br>Assessment   | 5/24/2000  | Complete  |
|          | King's Towing<br>Amala PI  |   | ISST   | 1/20/2004  | Ongoing   |
|          | Maui Business Park Oil Contamination 370 Dairy Rd                                    | Low on 2/16/1996  | Remedial   | 1/20/2004  | Ongoing   |
| •        |  | Kahului  F & M Contractors, Inc. Amala PI  Fong Construction Petroleum Hydrocarbon Contamination Hukiliki St  Hawaii Wood Preserving Co. (Osmose) 356 Hanakai St HIANG KAHULUI  Hobron Avenue Area Hobron Ave  Kahului Wastewater Reclaimation Facility 30 Gallon Diesel Release 281 Amala PI  Kanaha Pond Industrial East Site Amala PI  Kanaha Pond Industrial Site  Kanaha Pond Industrial West Site 261 Amala PI  Kealia Pond Contaminants Survey  King's Towing Amala PI  Maui Business Park Oil Contamination | Kahului F & M Contractors, Inc. Amala Pl  Fong Construction Petroleum Hydrocarbon Contamination Hukiliki St  Hawaii Wood Preserving Co. (Osmose) 356 Hanakai St HIANG KAHULUI  Hobron Avenue Area Hobron Ave  Kahului Wastewater Reclaimation Facility 30 Gallon Diesel Release 281 Amala Pl  Kanaha Pond Industrial East Site Amala Pl  Kanaha Pond Industrial Site  Kanaha Pond Industrial West Site 261 Amala Pl  Kealia Pond Contaminants Survey  King's Towing Amala Pl  Maui Business Park Oil Contamination  Low on 2/16/1996 | Kahului F & M Contractors, Inc. Amala PI  Fong Construction Petroleum Hydrocarbon Contamination Hukiliki St  Hawaii Wood Preserving Co. (Osmose) 356 Hanakai St  HIANG KAHULUI Research  Hobron Avenue Area Hobron Ave  Kahului Wastewater Reclaimation Facility 30 Gallon Diesel Release 281 Amala PI  Kanaha Pond Industrial East Site Amala PI  Kanaha Pond Industrial Site  Kanaha Pond Industrial Site  Kanaha Pond Industrial Site  Kanaha Pond Contaminants Survey  Kealia Pond Contaminants Survey  King's Towing Amala PI  Maui Business Park Oil Contamination  Low on 2/16/1996  Remedial | Locality   Site Name   Priority Ranking   Type   Date |

|               |          |  |                   |           | Activity Statu | ıs      |
|---------------|----------|--|-------------------|-----------|----------------|---------|
| sland         | Locality | Site Name  | Priority Ranking  | Type      | Date           | Result  |
| <i>l</i> laui | Kahului  | Maui Meat Facility-Former<br>601 2nd St                          | NFA on 12/11/1998 | Remedial  | 1/20/2004      | Ongoing |
|               |          | Maui Palms Hotel UST<br>150 Kaahumanu Ave                        | NFA on 11/22/1999 | ISST      | 11/22/1999     | NFA     |
|               |          | Maui Petroleum<br>Hobron Ave                                     |                   | Remedial  | 1/20/2004      | Ongoing |
|               |          | Maui Shell   |                   | Remedial  | 1/20/2004      | Ongoing |
|               |          | MCC-Lead Contamination from Washing Operations 310 Kaahumanu Ave | NFA on 4/4/2003   | ISST      | 4/4/2003       | NFA     |
|               |          | Opala Partners Diesel Release<br>221 Lalo Pl                     | NFA on 1/18/2002  | ISST      | 1/18/2002      | NFA     |
|               |          | Rainbow Hauling<br>Amala Pl                                      | Low on 12/21/1994 | Remedial  | 1/20/2004      | Ongoing |
|               |          | Rex Tire Diesel<br>1728 Kaahumanu Ave                            |                   | Unreg UST | 1/20/2004      | Ongoing |
|               |          | Sears Auto Center PCB Contamination 275 Kaahumanu Ave            |                   | ISST      | 1/20/2004      | Ongoing |
|               |          | Shell Kahului Bulk Terminal<br>60 Hobron Ave                     |                   | Remedial  | 1/20/2004      | Ongoing |
|               |          | Smile's Auto Specialists<br>Amala Pl                             |                   | ISST      | 1/20/2004      | Ongoing |
|               |          | Snow White Linen Solvent Contamination 312 Alamaha PI            |                   | ISST      | 1/20/2004      | Ongoing |
|               |          |  |                   |           |                |         |

|        |          |  |                    |           | Activity Statu | IS      |
|--------|----------|--|--------------------|-----------|----------------|---------|
| Island | Locality | Site Name  | Priority Ranking   | Type      | Date           | Result  |
| Maui   | Kahului  | TOSCO Bulk Plant Number 0323<br>76 Hobron Ave                                    | Medium on 3/2/1995 | Remedial  | 1/20/2004      | Ongoing |
|        |          | Vector Control Branch Maui<br>54 High St, 641 Mua St, Kahale Dr &<br>Palapala St | NFA on 4/25/1996   | ISST      | 4/25/1996      | NFA     |
|        |          | VIP Warehouse<br>74 Hobron Ave   |                    | Remedial  | 1/20/2004      | Ongoing |
|        |          | Waikapu Dump<br>Waikapu Rd   | NFA on 4/29/1996   | ISST      | 4/29/1996      | NFA     |
|        |          | Young Brothers Kahului<br>65 Wharf St  |                    | Unreg UST | 1/20/2004      | Ongoing |
| Maui   | Kihei    | Selland Construction, Inc., Kihei Base Yard<br>454 Ohukai Rd                     | Low on 7/6/1995    | Remedial  | 1/20/2004      | Ongoing |
| Maui   | Lahaina  | Lahaina Cannery Mall<br>1221 Honoapiilani Hwy                                    |                    | ISST      | 12/19/2003     | NFA     |
|        |          | Lahaina Waste Water Pump Station #4<br>Ala Moana St                              | NFA on 4/10/2000   | ISST      | 4/10/2000      | NFA     |
|        |          | Maui Disposal Company Ammonia Dumpin   |                    | ISST      | 1/20/2004      | Ongoing |
|        |          | Pioneer MillLahaina<br>380 Lahainaluna Rd  | High on 11/14/2001 | PA1/SI1   | 1/20/2004      | Ongoing |
|        |          | Royal Lahaina Resort UST Removal<br>2780 Kekaa Dr                                |                    | Unreg UST | 1/20/2004      | Ongoing |

|              |          |  |                  | Activity Status |           |         |
|--------------|----------|--|------------------|-----------------|-----------|---------|
| sland        | Locality | Site Name  | Priority Ranking | Type            | Date      | Result  |
| ⁄laui        | Maalaea  | Maalaea Power Plant<br>N Kihei Rd                            |                  | ISST            | 1/20/2004 | Ongoing |
| 1aui         | Makani   | Makani Landfill  | NFA on 4/15/1996 | ISST            | 4/15/1996 | NFA     |
| 1aui         | Makawao  | Maunaolu-Smith Well  |                  | ISST            | 1/20/2004 | Ongoing |
| Лаui         | Napili   | Napili Waste Water Pump Station #5<br>Lower Honoapiilani Hwy | NFA on 4/10/2000 | ISST            | 4/10/2000 | NFA     |
| 1aui         | Olowalu  | Olowalu Transfer Station (HID980497283)                      | NFA on 4/15/1996 | ISST            | 4/15/1996 | NFA     |
| <b>1</b> aui | Paia     | Paia Sugar Mill<br>Baldwin Ave                               |                  | PA1/SI1         | 1/20/2004 | Ongoing |
| ⁄laui        | Pukalani | Maui Corn Mill Camp VRP Site<br>Makawao Ave                  |                  | VRP             | 1/20/2004 | Ongoing |
| <i>M</i> aui | Puunene  | Cane Hauler Shop<br>Hansen Rd                                |                  | ISST            | 1/20/2004 | Ongoing |
|              |          | Haleakala ATCBI  | NFA on 4/8/1999  | ISST            | 4/8/1999  | NFA     |

|         |          |  |                   | Activity Status |            |         |
|---------|----------|--|-------------------|-----------------|------------|---------|
| Island  | Locality | Site Name  | Priority Ranking  | Type            | Date       | Result  |
| Maui    | Puunene  | Maui Wood Treating Co. Ltd.<br>Mokulele Hwy                    |                   | ISST            | 1/20/2004  | Ongoing |
|         |          | Puunene Airport Soil Contamination                             |                   | ISST            | 1/20/2004  | Ongoing |
| Maui    | Wailuku  | Maui Sandtorches<br>46 Ting Dr                                 | NFA on 4/15/1996  | ISST            | 4/15/1996  | NFA     |
|         |          | Organizational Maintenance Shop #3 (OMS #3)<br>260 S Market St |                   | Research        | 1/20/2004  | Ongoing |
|         |          | Valley Isle Motors Leaking UST<br>2026 Main St                 |                   | Unreg UST       | 1/20/2004  | Ongoing |
|         |          | Vineyard Street Tank Closure<br>2102 Vineyard St               | NFA on 12/11/1997 | ISST            | 12/11/1997 | NFA     |
|         |          | Waiale Ash Pile<br>Mahalani St                                 | High on 8/10/2000 | Remedial        | 1/20/2004  | Ongoing |
|         |          | Y. Hata & Company, Ltd.<br>Kahulu Beach Rd & Waiehu Beach Rd   |                   | ISST            | 1/20/2004  | Ongoing |
|         |          | Yee-Maui Terminix<br>283 Waiehu Beach Rd                       |                   | VRP             | 1/20/2004  | Ongoing |
| Molokai |          | Leaking Transformer  |                   | ISST            | 1/20/2004  | Ongoing |
|         |          | Molokai Oil  |                   | Research        | 1/20/2004  | Ongoing |

|         |            |   |                   | Activity Status |           |         |
|---------|------------|---|-------------------|-----------------|-----------|---------|
| Island  | Locality   | Site Name   | Priority Ranking  | Type            | Date      | Result  |
| Molokai | Kalamaula  | Kalamaula Landfill (HID980497192)<br>Hoawa Rd   | NFA on 3/11/1996  | ISST            | 3/11/1996 | NFA     |
| Molokai | Kalaupapa  | Kalaupapa Settlement Clean Up   |                   | Ongoing         | 1/20/2004 | Ongoing |
|         |            | Kalaupapa Settlement Drum Removal   |                   | ISST            | 1/20/2004 | Ongoing |
| Molokai | Kaunakakai | Ben Franklin Stores Property  | NFA on 4/13/1995  | ISST            | 4/13/1995 | NFA     |
|         |            | Hawaiian Eve Center<br>10 Mohala St   | Low on 10/14/1994 | Remedial        | 1/20/2004 | Ongoing |
|         |            | Island Petroleum, Inc.<br>Beach PI & Wharf Rd   |                   | ISST            | 1/20/2004 | Ongoing |
|         |            | Kaunakakai Petroleum Contaminated Area  |                   | ISST            | 1/20/2004 | Ongoing |
|         |            | Molokai Community Service Center<br>Kamehameha Hwy & Mohala St                            |                   | ISST            | 1/20/2004 | Ongoing |
|         |            | Molokai Ranch Kamehameha V Highway<br>and Mohala Street<br>Kamehameha V Hwy and Mohala St |                   | ISST            | 1/20/2004 | Ongoing |
|         |            | Molokai Ranch Yard, UST Removal<br>Wharf Rd   |                   | Unreg UST       | 1/20/2004 | Ongoing |
|         |            | Rawlin's Chevron Service<br>20 Maunaloa Hwy   |                   | ISST            | 1/20/2004 | Ongoing |

| Island  |          | Site Name  | Priority Ranking    | Activity Status |           |         |
|---------|----------|--|---------------------|-----------------|-----------|---------|
|         | Locality |  |                     | Type            | Date      | Result  |
| Molokai | Maunaloa | Molokai Ranch Maunaloa Landfill<br>(HID980497267)                                  | NFA on 4/29/1996    | ISST            | 4/29/1996 | NFA     |
| Molokai | Molokai  | Kualapuu Well 17   |                     | ISST            | 1/20/2004 | Ongoing |
| Oahu    | Aiea     | Aiea Heights Tanks<br>1294 Aiea Heights Dr   |                     | ISST            | 1/20/2004 | Ongoing |
|         |          | Aiea Stream<br>99-193 Aiea Heights Dr  |                     | Remedial        | 1/20/2004 | Ongoing |
|         |          | C&C Halawa Corporation Yard Petroleum<br>Release<br>Iwaena St                      |                     | ISST            | 1/20/2004 | Ongoing |
|         |          | Former Aiea Sugar Mill<br>99-193 Aiea Heights Dr                                   |                     | VRP             | 1/20/2004 | Ongoing |
|         |          | Grace Pacific Corporation<br>99-1300 Halawa Valley St                              |                     | ISST            | 1/20/2004 | Ongoing |
|         |          | Halawa Animal Quarantine Station<br>99-941 Halawa Valley St                        |                     | ISST            | 1/20/2004 | Ongoing |
|         |          | Hawaii Baking Company<br>98-736 Moanalua Lp  |                     | ISST            | 1/20/2004 | Ongoing |
|         |          | Hawaiian Sugar Planter's Association Kunia<br>Substation<br>99-193 Aiea Heights Dr | Medium on 1/29/1996 | Remedial        | 1/20/2004 | Ongoing |
|         |          | Hydraulic Hoist Removal<br>98-080 Kamehameha Hwy                                   |                     | ISST            | 1/20/2004 | Ongoing |

| Island | Locality      | Site Name   | Priority Ranking      | Activity Status |            |               |
|--------|---------------|---|-----------------------|-----------------|------------|---------------|
|        |               |   |                       | Type            | Date       | Result        |
| Oahu   | Aiea          | OIL RELEASE FROM UST DISCOVERED<br>DURING REMOVAL.<br>99-1100 Halawa Valley St  |                       | ISST            | 1/20/2004  | Ongoing       |
|        |               | Sears Facility #1578 at Pearlridge Mall<br>98-180 Kamehameha Hwy                | Low on 6/7/2000       | Remedial        | 1/20/2004  | Ongoing       |
| Oahu   | Aliamanu      | Aliamanu Military Reservation   |                       | DSMOA           | 1/20/2004  | Ongoing       |
|        |               | ALIAMANU RESIDENTIAL  |                       | Research        | 1/20/2004  | Ongoing       |
| Oahu   | Barbers Point | Barbers Point Harbor Contaminated Soil<br>Transfer (Kwajalein Causeway Project) | Refer to SHWB on 12/: | ISST            | 1/20/2004  | Refer to SHWB |
|        |               | Barbers Point Naval Air Station, Landfill                                       |                       | DSMOA           | 1/20/2004  | Ongoing       |
|        |               | Barbers Point Naval Air Station, NEX<br>Service Station                         | NFA on 11/20/1995     | ISST            | 11/20/1995 | NFA           |
|        |               | Barbers Point Naval Air Station, Ordy Pond                                      | Medium on 11/20/199   | Remedial        | 1/20/2004  | Ongoing       |
|        |               | Barbers Point Naval Air Station; Coral Pit,<br>Ordnance Pond, Sanitary Landfill | Medium on 7/6/1995    | Remedial        | 1/20/2004  | Ongoing       |
|        |               | Barbers Point Naval Air Station-Former<br>Sewage Treatment Plant                | Low on 1/29/1996      | Remedial        | 1/20/2004  | Ongoing       |

| Island |               | Site Name   | Priority Ranking   | Activity Status |           |               |
|--------|---------------|---|--------------------|-----------------|-----------|---------------|
|        | Locality      |   |                    | Type            | Date      | Result        |
| Oahu   | Barbers Point | Barbers Point Navy Public Works Center  |                    | ISST            | 1/20/2004 | Ongoing       |
| Oahu   | Ewa           | Ewa Sugar Mill/Oahu Sugar Co.<br>Renton Rd                                      |                    | ISST            | 1/20/2004 | Ongoing       |
| Oahu   | Ewa Beach     | Ala Kona Corporation<br>91-1205 Renton Rd                                       |                    | ISST            | 1/20/2004 | Ongoing       |
|        |               | Ewa Repair Shop/Tesoro (Fort Weaver<br>Road)<br>91-1669 Fort Weaver Rd          |                    | Remedial        | 3/19/2003 | Refer to SHWB |
|        |               | Ewa Sugar Mill/Oahu Sugar Co Coral<br>Wastepit                                  | NFA on 1/16/2001   | ISST            | 1/16/2001 | NFA           |
|        |               | Ewa Sugar Mill/Oahu Sugar Co Ewa<br>Sugar Mill<br>Renton Rd                     |                    | Remedial        | 1/20/2004 | Ongoing       |
|        |               | Ewa Sugar Mill/Oahu Sugar Co Fumigant<br>Storage Area<br>Renton Rd              | NFA on 8/10/2000   | ISST            | 8/10/2000 | NFA           |
|        |               | Ewa Sugar Mill/Oahu Sugar Co Pesticide<br>Mixing/Loading Site<br>Farrington Hwy | High on 10/17/2000 | Remedial        | 1/20/2004 | Ongoing       |
|        |               | Hawaii Raceway Park<br>91-201 Malakole St                                       | Low on 12/12/1995  | Remedial        | 1/20/2004 | Ongoing       |
|        |               | Jackson Construction Landfill<br>91-891 Hananui St                              | Low on 2/8/1996    | Remedial        | 1/20/2004 | Ongoing       |

|        |               |   |                     |           | Activity Stat | us      |
|--------|---------------|---|---------------------|-----------|---------------|---------|
| Island | Locality      | Site Name   | Priority Ranking    | Type      | Date          | Result  |
| Oahu   | Ewa Beach     | Kapolei Fuel Spill<br>Kamokila Blvd                     |                     | ISST      | 1/20/2004     | Ongoing |
|        |               | Kenai Industrial Park, beyond the property line         |                     | ISST      | 1/20/2004     | Ongoing |
|        |               | Leeward Auto Wreckers, Inc.<br>91-209 Kuhela St         | Medium on 2/12/1996 | Remedial  | 1/20/2004     | Ongoing |
|        |               | Pacific Concrete & Rock LDFL<br>91-402 Farrington Hwy   | NFA on 3/11/1996    | ISST      | 3/11/1996     | NFA     |
|        |               | Pepper Industries Inc.<br>91-294 Kauhi St               | NFA on 3/11/1996    | ISST      | 3/11/1996     | NFA     |
|        |               | Puu Palailai Landfill<br>91-402 Farrington Hwy          |                     | ISST      | 1/20/2004     | Ongoing |
|        |               | Valley Detroit Diesel<br>91-265 Kalaeloa Blvd           |                     | Unreg UST | 1/15/1993     | NFA     |
|        |               | Zippy's Parcel<br>91-1669 Fort Weaver Rd                | Low on 2/3/1999     | Remedial  | 1/20/2004     | Ongoing |
| Oahu   | Fort Shafter  | Fort Shafter<br>Funston Rd                              |                     | Remedial  | 1/20/2004     | Ongoing |
| Oahu   | Halawa Valley | Halawa Stream Channel Petroleum<br>Contamination<br>H-3 | NFA on 9/8/1998     | ISST      | 9/8/1998      | NFA     |

|       |                          |   |                     | Activity Status |           |          |
|-------|--------------------------|---|---------------------|-----------------|-----------|----------|
| sland | Locality                 | Site Name   | Priority Ranking    | Type            | Date      | Result   |
| Dahu  | Haleiwa                  | Former Haleiwa Canoe Club UST Closure<br>C St                           |                     | Unreg UST       | 1/20/2004 | Ongoing  |
|       |                          | Kawailoa Landfill<br>Kawailoa Rd  | NFA on 4/29/1996    | ISST            | 4/29/1996 | NFA      |
|       |                          | Waimea Valley Adventure Park<br>59-864 Kamehameha Hwy                   |                     | ISST            | 1/20/2004 | Ongoing  |
| Dahu  | Hauula                   | Hanakailio Beach<br>Hanakailio Beach                                    |                     | Removal         | 1/13/1989 | Complete |
| )ahu  | Hickam Air<br>Force Base | Aircraft Reclamation (Pharmacy Area) AOC KNMD-EA12                      | Medium on 4/15/1996 | Remedial        | 1/20/2004 | Ongoing  |
|       |                          | Battery Acid Neutralization Shop/Building 2002 (KNMD-EA05)              | Medium on 1/29/1996 | Remedial        | 1/20/2004 | Ongoing  |
|       |                          | Fort Kamehameha DSPL Site   |                     | DSMOA           | 1/20/2004 | Ongoing  |
|       |                          | Halemaka Street/Kuntz Avenue Motor Pool (AOC KNMD-EA58)                 | Low on 1/12/1996    | Remedial        | 1/20/2004 | Ongoing  |
|       |                          | Hickam AFB Leak to Fuel Pit Near Building<br>228<br>91-150 Hanua St (?) |                     | Research        | 1/20/2004 | Ongoing  |
|       |                          | Hickam Air Force Base   |                     | ISST            | 1/20/2004 | Ongoing  |
|       |                          | HICKAM POL PIPELINE   |                     | DSMOA           | 1/20/2004 | Ongoing  |

|                          | cality Site Name   |  | Activity Status   |   |  |
|--------------------------|--|--|---|---|--|
| Locality                 |  | Priority Ranking   | Type  | Date  | Result   |
| Hickam Air<br>Force Base | Industrial Waste Treatment and Disposal/Building 2016 (KNMD-EA09)    | Medium on 1/29/1996  | Remedial  | 1/20/2004   | Ongoing  |
|                          | Kipapa and Waikakalaua FSA and Hickam<br>POL                         | High on 11/9/1995  | Remedial  | 1/20/2004   | Ongoing  |
|                          | Kipapa Fuel Storage Annex  |  | DS1   | 10/26/1994  | Ongoing  |
|                          | Kumumauu Canal (KNMD-SD03)   | Medium on 11/20/199!   | Remedial  | 1/20/2004   | Ongoing  |
|                          | Kuntz Avenue Entrance Dump Area (AOC KNMD-EA39)<br>Kuntz Ave         | Low on 2/15/1996   | Remedial  | 1/20/2004   | Ongoing  |
|                          | Kuntz Avenue Entrance Salvage Yard (AOC KNMD-EA44)<br>Kuntz Ave      | Low on 2/15/1996   | Remedial  | 1/20/2004   | Ongoing  |
|                          | Leach Field, Industrial Waste Disposal AOC KNMD-EA38                 | Medium on 4/15/1996  | Remedial  | 1/20/2004   | Ongoing  |
|                          | Manuwai Canal Storm Drainage System (KNMD-SD02)                      | Medium on 11/9/1995  | Remedial  | 1/20/2004   | Ongoing  |
|                          | Motor Pool Storm Drain (KNMD-SD04)                                   | Medium on 11/20/199!   | Remedial  | 1/20/2004   | Ongoing  |
|                          | Old HIANG Area Contaminated Soils (KNMD-EA11)                        | Medium on 1/29/1996  | Remedial  | 1/20/2004   | Ongoing  |
|                          | Pesticide/Herbicide Vehicle Wash Area (near Building 1220) KNMD-EA08 | Low on 4/15/1996   | Remedial  | 1/20/2004   | Ongoing  |
|                          | Hickam Air   | Hickam Air Force Base  Industrial Waste Treatment and Disposal/Building 2016 (KNMD-EA09)  Kipapa and Waikakalaua FSA and Hickam POL  Kipapa Fuel Storage Annex  Kumumauu Canal (KNMD-SD03)  Kuntz Avenue Entrance Dump Area (AOC KNMD-EA39) Kuntz Ave  Kuntz Avenue Entrance Salvage Yard (AOC KNMD-EA44) Kuntz Ave  Leach Field, Industrial Waste Disposal AOC KNMD-EA38  Manuwai Canal Storm Drainage System (KNMD-SD02)  Motor Pool Storm Drain (KNMD-SD04)  Old HIANG Area Contaminated Soils (KNMD-EA11)  Pesticide/Herbicide Vehicle Wash Area | Hickam Air Force Base Industrial Waste Treatment and Disposal/Building 2016 (KNMD-EA09)  Kipapa and Waikakalaua FSA and Hickam POL  Kipapa Fuel Storage Annex  Kumumauu Canal (KNMD-SD03) Medium on 11/20/199!  Kuntz Avenue Entrance Dump Area (AOC KNMD-EA39) Kuntz Ave  Kuntz Avenue Entrance Salvage Yard (AOC KNMD-EA44) Kuntz Ave  Leach Field, Industrial Waste Disposal AOC KNMD-EA38  Manuwai Canal Storm Drainage System (KNMD-SD02)  Motor Pool Storm Drain (KNMD-SD04) Medium on 11/20/199!  Old HIANG Area Contaminated Soils Medium on 1/29/1996  (KNMD-EA11)  Pesticide/Herbicide Vehicle Wash Area Low on 4/15/1996 | Hickam Air Force Base Industrial Waste Treatment and Disposal/Building 2016 (KNMD-EA09)  Kipapa and Waikakalaua FSA and Hickam POL  Kipapa Fuel Storage Annex DS1  Kumumauu Canal (KNMD-SD03) Medium on 11/20/199! Remedial  Kuntz Avenue Entrance Dump Area (AOC KNMD-EA39)  Kuntz Ave  Kuntz Avenue Entrance Salvage Yard (AOC KNMD-EA44)  Kuntz Ave  Leach Field, Industrial Waste Disposal AOC KNMD-EA38  Manuwai Canal Storm Drainage System (KNMD-SD02)  Motor Pool Storm Drain (KNMD-SD04) Medium on 11/20/199! Remedial  Old HIANG Area Contaminated Soils (KNMD-EA11)  Pesticide/Herbicide Vehicle Wash Area Low on 4/15/1996 Remedial | Hickam Air Force Base   Industrial Waste Treatment and Disposal/Building 2016 (KNMD-EA09)   Medium on 1/29/1996   Remedial   1/20/2004 |

|        |                          |   |                     |          | Activity Stat | us      |
|--------|--------------------------|---|---------------------|----------|---------------|---------|
| Island | Locality                 | Site Name   | Priority Ranking    | Type     | Date          | Result  |
| Oahu   | Hickam Air<br>Force Base | Pesticide/Herbicide Vehicle Wash Rack<br>AOC KNMD-EA07                                    | Medium on 4/15/1996 | Remedial | 1/20/2004     | Ongoing |
|        |                          | Potential Landfill (Near LF14 and LF 15)<br>AOC KNMD-EA01                                 | NFA on 4/15/1996    | ISST     | 4/15/1996     | NFA     |
|        |                          | South Tributary to the Kumumau'u Canal KNMD-EA70  | Medium on 4/15/1996 | Remedial | 1/20/2004     | Ongoing |
|        |                          | ST31 1046B Tank<br>B St   |                     | ISST     | 1/20/2004     | Ongoing |
|        |                          | ST38-3318B Underground Storage Tank   |                     | ISST     | 1/20/2004     | Ongoing |
|        |                          | ST38-3318C Underground Storage Tank<br>adjacent to Bldg. 3318 Battery House<br>Hasebrouck |                     | ISST     | 1/20/2004     | Ongoing |
|        |                          | Transportation Squadron Contaminated Soi (KNMD-EA06)                                      | Medium on 1/29/1996 | Remedial | 1/20/2004     | Ongoing |
|        |                          | Tributary to Kumumau'u Canal, South of Old HIANG Area AOC KNMD-EA20                       | Medium on 4/15/1996 | Remedial | 1/20/2004     | Ongoing |
|        |                          | Waikakalaua Fuel Storage Annex  |                     | Remedial | 1/20/2004     | Ongoing |
|        |                          | Wash Racks/Building 2025 and Near<br>Building 1055 (KNMD-EA22)                            | Medium on 1/29/1996 | Remedial | 1/20/2004     | Ongoing |

| Locality |  |   |  | Activity Statu  | <u> </u>   |
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| Locality | Site Name  | Priority Ranking  | Type   | Date  | Result   |
| Honolulu | 1510A Frear Street<br>1510 Frear St                            |   | ISST   | 1/20/2004   | Ongoing  |
|          | 2147 Aoao Street UST Removal<br>2147 Aoao St                   |   | ISST   | 1/20/2004   | Ongoing  |
|          | 2319 Ala Wai Blvd<br>2319 Ala Wai Blvd                         | NFA on 3/11/1996  | ISST   | 3/11/1996   | NFA  |
|          | 373 North Nimitz Highway<br>373 N Nimitz Hwy                   |   | Remedial   | 1/20/2004   | Ongoing  |
|          | 420-470 North Nimitz Highway<br>420-470 N Nimitz Hwy           |   | Remedial   | 1/20/2004   | Ongoing  |
|          | 725 Kapiolani Boulevard<br>725 Kapiolani Blvd                  |   | ISST   | 1/20/2004   | Ongoing  |
|          | 837 Kawaiahao Street<br>837 Kawaiahao St                       |   | Unreg UST  | 1/20/2004   | Ongoing  |
|          | 85-225D Plantation Road<br>85-225 Plantation Rd                |   | ISST   | 1/20/2004   | Ongoing  |
|          | 861-869 North Nimitz Highway<br>861 N Nimitz Hwy               |   | Remedial   | 1/20/2004   | Ongoing  |
|          | ABC Disposal Company<br>2760 Kamehameha Hwy                    | NFA on 12/16/1994   | ISST   | 12/16/1994  | NFA  |
|          | ABC Store Underground Storage Tank<br>Removal<br>2546 Lemon Rd |   | Unreg UST  | 1/20/2004   | Ongoing  |
|          | Airport Group International, Incorp - Wiki<br>200 Rogers PI    |   | Remedial   | 1/20/2004   | Ongoing  |
|          | HOHOIUIU   | 2147 Aoao Street UST Removal 2147 Aoao St 2319 Ala Wai Blvd 2319 Ala Wai Blvd 373 North Nimitz Highway 373 N Nimitz Hwy  420-470 North Nimitz Highway 420-470 N Nimitz Hwy  725 Kapiolani Boulevard 725 Kapiolani Blvd 837 Kawaiahao Street 837 Kawaiahao St 85-225D Plantation Road 85-225 Plantation Rd 861-869 North Nimitz Highway 861 N Nimitz Hwy  ABC Disposal Company 2760 Kamehameha Hwy  ABC Store Underground Storage Tank Removal 2546 Lemon Rd  Airport Group International, Incorp - Wiki | 1510 Frear St 2147 Aoao Street UST Removal 2147 Aoao St 2319 Ala Wai Blvd 373 North Nimitz Highway 373 N Nimitz Hwy 420-470 North Nimitz Highway 420-470 N Nimitz Hwy 725 Kapiolani Boulevard 725 Kapiolani Blvd 837 Kawaiahao Street 837 Kawaiahao St 85-225D Plantation Road 85-225 Plantation Rd 861-869 North Nimitz Highway 861 N Nimitz Hwy  ABC Disposal Company 2760 Kamehameha Hwy  ABC Store Underground Storage Tank Removal 2546 Lemon Rd Airport Group International, Incorp - Wiki | 1510 Frear St  2147 Aoao Street UST Removal 2147 Aoao St 2319 Ala Wai Blvd 2319 Ala Wai Blvd 373 North Nimitz Highway 373 N Nimitz Hwy  420-470 North Nimitz Highway 420-470 N Nimitz Hwy  725 Kapiolani Boulevard 725 Kapiolani Blvd  837 Kawaiahao Street 837 Kawaiahao Street 837 Kawaiahao St 85-225D Plantation Road 85-225D Plantation Road 861-869 North Nimitz Highway 861 N Nimitz Hwy  ABC Disposal Company 2760 Kamehameha Hwy  ABC Store Underground Storage Tank Removal 2546 Lemon Rd  Airport Group International, Incorp - Wiki  Remedial | 1510 Frear St  2147 Aoao Street UST Removal 2147 Aoao St  2319 Ala Wai Blvd 2319 Ala Wai Blvd 373 North Nimitz Highway 373 N Nimitz Hwy  420-470 North Nimitz Highway 420-470 N Nimitz Hyw  725 Kapiolani Boulevard 725 Kapiolani Blvd 837 Kawaiahao Street 837 Kawaiahao St 85-225D Plantation Road 85-225D Plantation Rod 861-869 North Nimitz Highway 861 N Nimitz Hwy  ABC Disposal Company 2760 Kamehameha Hwy  ABC Store Underground Storage Tank Removal 2546 Lemon Rd  Airport Group International, Incorp - Wiki  RAN A on 3/11/1996 ISST 1/20/2004 Remedial 1/20/2004 ISST 1/20/2004 I |

|       |          |   |                      |           | Activity Stat | us      |
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| sland | Locality | Site Name   | Priority Ranking     | Type      | Date          | Result  |
| Dahu  | Honolulu | Ala Moana #2 WWPS<br>210 Keawe St                                   |                      | Remedial  | 1/20/2004     | Ongoing |
|       |          | Ala Wai Cove Condominium Apartments<br>509 University Ave           |                      | Unreg UST | 1/20/2004     | Ongoing |
|       |          | Ala Wai Golf Course Maintenance Yard,<br>Location "B"               |                      | Unreg UST | 1/20/2004     | Ongoing |
|       |          | 404 Kapahulu Ave  Allstate Industrial & Marine Cleaning, Inc.       |                      | Remedial  | 1/20/2004     | Ongoing |
|       |          | Aloha 7-Eleven Kalakaua<br>1323 Kalakaua Ave                        |                      | ISST      | 1/20/2004     | Ongoing |
|       |          | Aloha Motors<br>1777 Kapiolani Blvd                                 | NFA on 1/19/1995     | ISST      | 1/19/1995     | NFA     |
|       |          | Aloha Petroleum Terminal<br>739 N Nimitz Hwy                        |                      | Remedial  | 1/20/2004     | Ongoing |
|       |          | Aloha Tower Development<br>Nimitz Hwy                               | Medium on 12/15/199! | Remedial  | 1/20/2004     | Ongoing |
|       |          | Amelco Corporation<br>645 Halekauwila St                            | Low on 12/16/1994    | Remedial  | 1/20/2004     | Ongoing |
|       |          | American Linen (Youngs Laundry & Dry<br>Cleaning)<br>2771 Waiwai Lp | Low on 4/8/1999      | SI1       | 1/20/2004     | Ongoing |
|       |          | American Linen (Youngs Laundry & Dry<br>Cleaning)<br>2771 Waiwai Lp | Low on 4/8/1999      | Remedial  | 1/20/2004     | Ongoing |

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| sland | Locality | Site Name   | Priority Ranking    | Type      | Date           | Result  |
| Dahu  | Honolulu | American Pacific Transport, Inc. Tank<br>Removal<br>2635 Waiwai Lp  |                     | Unreg UST | 1/20/2004      | Ongoing |
|       |          | Anin-Piikoi Building Site<br>1012 Piikoi St                         |                     | Remedial  | 1/20/2004      | Ongoing |
|       |          | Atlas Electric Co.<br>1151 Mapunapuna St                            | NFA on 12/29/1995   | ISST      | 12/29/1995     | NFA     |
|       |          | BHP Gasco Benzene Site<br>432 Pacific St                            |                     | Remedial  | 1/20/2004      | Ongoing |
|       |          | BHP Pier 29<br>739 N Nimitz Hwy                                     | NFA on 6/26/1997    | Remedial  | 1/20/2004      | Ongoing |
|       |          | Bilger Hall Mercury in Storm Catchment                              |                     | ISST      | 1/20/2004      | Ongoing |
|       |          | Bilger Hall Sulfur Chloride Spill                                   |                     | ISST      | 1/20/2004      | Ongoing |
|       |          | BMW Dealership<br>777 Kapiolani Blvd                                | Low on 6/7/2000     | Remedial  | 1/20/2004      | Ongoing |
|       |          | Brewer Environmental Industries-Pacific<br>Street<br>311 Pacific St | Medium on 12/29/199 | Remedial  | 1/20/2004      | Ongoing |
|       |          | BTU Storage Tanks Pier 19   |                     | Remedial  | 1/20/2004      | Ongoing |
|       |          | Cartwright Neighborhood Park<br>Keeaumoku St & Matlock Ave          | Low on 11/22/1999   | Remedial  | 1/20/2004      | Ongoing |
|       |          | Century Aviation Inc.<br>98 Kapalulu PI                             | Medium on 3/9/2000  | Unreg UST | 1/20/2004      | Ongoing |
|       |          |   |                     |           |                |         |

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| sland | Locality | Site Name   | Priority Ranking | Type      | Date          | Result  |
| Oahu  | Honolulu | Chang-Chow Property North School Street<br>Underground Storage Tank Closure<br>2161 N School St |                  | Unreg UST | 1/20/2004     | Ongoing |
|       |          | Chevron 2002 Kalakaua<br>2002 Kalakaua Ave  | NFA on 10/1/1997 | ISST      | 10/1/1997     | NFA     |
|       |          | Chevron Honolulu Terminal Marine<br>777 N Nimitz Hwy  |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Chevron Honolulu Transportation Terminal<br>933 N Nimitz Hwy                                    |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Chevron Kapalama Northeast Parcel<br>1105 N Nimitz Hwy  |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Chevron Kapalama Southwest Parcel<br>1105 N Nimitz Hwy  |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Chevron Kapalama Terminal<br>1105 N Nimitz Hwy  |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Chevron Pier 35 Pipeline Release<br>965 N Nimitz Hwy  |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Chevron USA, Inc.<br>1001 Bishop St   |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Chuei Shokoh, Inc.<br>825 Kapiolani Blvd  |                  | VRP       | 1/20/2004     | Ongoing |
|       |          | Citizens Energy Services Pier 38  |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | City & County Wastewater Collection<br>System Maintenance Yard<br>98 Koula St                   | NFA on 7/9/2001  | ISST      | 7/9/2001      | NFA     |

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| sland | Locality | Site Name  | Priority Ranking  | Type               | Date           | Result   |
| Oahu  | Honolulu | City Mill Company, Ltd.<br>660 N Nimitz Hwy                    |                   | Remedial           | 1/20/2004      | Ongoing  |
|       |          | Coca-Cola Enterprises<br>949 Mapunapuna St                     |                   | Risk<br>Assessment | 3/21/2003      | Complete |
|       |          | Continental Auto Services 1918 Algaroba St                     | NFA on 10/8/1999  | ISST               | 10/8/1999      | NFA      |
|       |          | Cooke Street Lead Contamination<br>501 Cooke St                | Low on 11/15/1996 | Remedial           | 1/20/2004      | Ongoing  |
|       |          | Costco Gas Station<br>925 Dillingham Blvd                      |                   | Remedial           | 1/20/2004      | Ongoing  |
|       |          | Costco Iwilei<br>525 Alakawa St                                |                   | VRP                | 1/20/2004      | Ongoing  |
|       |          | Cutter Chevrolet Hydraulic Lift<br>1391 Kapiolani Blvd         |                   | ISST               | 1/20/2004      | Ongoing  |
|       |          | Cutter Dodge Dillingham<br>735 Dillingham Blvd                 |                   | Remedial           | 1/20/2004      | Ongoing  |
|       |          | Department of Transportation 727 Kakoi St                      | NFA on 4/15/1996  | ISST               | 4/15/1996      | NFA      |
|       |          | Diamond Head Crater Tunnel #6<br>3949 Diamond Head Rd          | NFA on 10/29/1996 | ISST               | 10/29/1996     | NFA      |
|       |          | Dillingham and Mokauea<br>Dillingham Blvd & Mokauea St         | Low on 10/29/1996 | Remedial           | 1/20/2004      | Ongoing  |
|       |          | Dillingham Boulevard Contaminated Soil<br>1199 Dillingham Blvd | Low on 7/23/1999  | Remedial           | 1/20/2004      | Ongoing  |
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| sland | Locality | Site Name  | Priority Ranking  | Type     | Date           | Result  |
| Dahu  | Honolulu | DiMauro Properties Kaihikapu Street<br>2855 Kaihikapu St                 |                   | ISST     | 1/20/2004      | Ongoing |
|       |          | DLNR Buried Drum Site<br>Sand Island Access Rd                           |                   | ISST     | 1/20/2004      | Ongoing |
|       |          | DOD US Army  |                   | Remedial | 1/20/2004      | Ongoing |
|       |          | Dole Cannery<br>801 Dillingham Blvd                                      | Low on 12/15/1995 | Remedial | 1/20/2004      | Ongoing |
|       |          | Domestic Commercial Fishing Village                                      |                   | Remedial | 1/20/2004      | Ongoing |
|       |          | East Honolulu Wastewater Treatment Plant (WWTP)<br>8480 Kalanianaole Hwy | NFA on 12/11/1998 | ISST     | 12/11/1998     | NFA     |
|       |          | Elliot Street Drainage Canal<br>Elliot St                                |                   | Remedial | 1/20/2004      | Ongoing |
|       |          | Equilon Enterprises LLC Honolulu Terminal 789 N Nimitz Hwy               |                   | Remedial | 1/20/2004      | Ongoing |
|       |          | Event Arena Construction Lower Campus Rd                                 |                   | ISST     | 1/20/2004      | Ongoing |
|       |          | Evershine X<br>1230 Kapiolani Blvd                                       |                   | VRP      | 1/20/2004      | Ongoing |
|       |          | Factory Street Lead<br>2003 N King St                                    |                   | ISST     | 1/20/2004      | Ongoing |
|       |          | Farrington High School<br>1564 N King St                                 | Low on 6/22/1995  | Remedial | 1/20/2004      | Ongoing |
|       |          |  |                   |          |                |         |

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| sland | Locality | Site Name  | Priority Ranking   | Type      | Date          | Result  |
| Oahu  | Honolulu | Flynn-Learner Property<br>120 Sand Island Access Rd  | High on 12/16/1994 | VRP       | 1/20/2004     | Ongoing |
|       |          | Former ARCO AM/PM #82111<br>2105 S King St           |                    | Unreg UST | 1/20/2004     | Ongoing |
|       |          | Former ARCO Hawaii Kai Station<br>6640 Hawaii Kai Dr |                    | Unreg UST | 1/20/2004     | Ongoing |
|       |          | Former Firing Ranges<br>Diamond Head Rd              |                    | ISST      | 1/20/2004     | Ongoing |
|       |          | Former Ziegler Steel Site<br>2919 Ualena St          | Low on 4/8/1999    | Remedial  | 1/20/2004     | Ongoing |
|       |          | Fort Ruger Transformer 33<br>Diamond Head Rd         |                    | ISST      | 1/20/2004     | Ongoing |
|       |          | Fred L. Waldron Feed Mill<br>701 N Nimitz Hwy        |                    | Remedial  | 1/20/2004     | Ongoing |
|       |          | Garlow Petroleum UST Release<br>707 Kakoi St         |                    | ISST      | 1/20/2004     | Ongoing |
|       |          | Gaspro Inc. HID980817712<br>2305 Kamehameha Hwy      | NFA on 2/5/1996    | ISST      | 2/5/1996      | NFA     |
|       |          | Gateway Park Explosion<br>2044 Kalakaua Ave          |                    | ISST      | 1/20/2004     | Ongoing |
|       |          | Glover Building<br>1046 Waimanu St                   |                    | ISST      | 1/20/2004     | Ongoing |
|       |          | GTE Base Yard Sump<br>3239 Ualena St                 |                    | ISST      | 1/20/2004     | Ongoing |
|       |          |  |                    |           |               |         |

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|-------|----------|---|--------------------|----------|----------------|---------|
| sland | Locality | Site Name   | Priority Ranking   | Type     | Date           | Result  |
| Dahu  | Honolulu | GTE Hawaiian Tel- Contaminated Soil<br>Alakawa St & Nimitz Hwy  |                    | ISST     | 1/20/2004      | Ongoing |
|       |          | GTE-Hawaiian Tel Employees Federal<br>Credit Union (HTEFCU)<br>1138 N King St   | Low on 4/8/1999    | Remedial | 1/20/2004      | Ongoing |
|       |          | Hagadone Printing Company Sand Island<br>2278 Hoonee PI   |                    | Remedial | 1/20/2004      | Ongoing |
|       |          | Haitsuka Brothers, Ltd.<br>50 Sand Island Access Rd   |                    | Remedial | 1/20/2004      | Ongoing |
|       |          | Hakim Properties, Inc.<br>861 N Nimitz Hwy  |                    | Remedial | 1/20/2004      | Ongoing |
|       |          | Hakuyosha Hawaii, Inc.<br>730 Sheridan St   |                    | ISST     | 1/20/2004      | Ongoing |
|       |          | Hall Mark Dry Cleaners<br>1470 Liliha St  | Low on 10/8/1998   | Remedial | 1/20/2004      | Ongoing |
|       |          | Harbor Court<br>66 Queen St   | NFA on 12/21/1994  | ISST     | 12/21/1994     | NFA     |
|       |          | Harry and Jeanette Weinberg Foundation 3660 Waialae Ave   |                    | Remedial | 1/20/2004      | Ongoing |
|       |          | Hawaii Convention Center<br>1801 Kalakaua Ave   |                    | ISST     | 1/20/2004      | Ongoing |
|       |          | Hawaii Fueling Facilities Corporation-Airport 3201 Aolele St  |                    | Remedial | 1/20/2004      | Ongoing |
|       |          | Hawaii Fueling Facilities Corporation-Pier 51A  | Medium on 3/1/2000 | Remedial | 1/20/2004      | Ongoing |
|       |          | 1801 Kalakaua Ave  Hawaii Fueling Facilities Corporation-Airport 3201 Aolele St  Hawaii Fueling Facilities Corporation-Pier | Medium on 3/1/2000 | Remedial | 1/20/2004      |         |

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| sland | Locality | Site Name  | Priority Ranking    | Type     | Date          | Result  |
| Dahu  | Honolulu | Hawaii Fueling Facilities Corporation-Sand<br>Island Access Road<br>6 Sand Island Access Rd        |                     | Remedial | 1/20/2004     | Ongoing |
|       |          | Hawaii Hall Renovation<br>Varney Circle  |                     | ISST     | 1/20/2004     | Ongoing |
|       |          | Hawaii Instrumentation & Controls, Inc 822 Halekauwila St  | NFA on 2/7/1997     | ISST     | 2/7/1997      | NFA     |
|       |          | Hawaii Job Corps Center<br>7600 Koko Head Park Rd  | Low on 8/25/1997    | Remedial | 1/20/2004     | Ongoing |
|       |          | Hawaii Kai 76 #5440 Hydraulic Hoist<br>Removal<br>234 Lunalilo Home Rd                             | NFA on 7/5/2001     | ISST     | 7/5/2001      | NFA     |
|       |          | Hawaii Meat<br>711 Middle St   |                     | ISST     | 1/20/2004     | Ongoing |
|       |          | Hawaii Mercury<br>Kalaloa St   |                     | ISST     | 1/20/2004     | Ongoing |
|       |          | Hawaii Metal Recycling Company Pier 35   | Medium on 7/28/1994 | Remedial | 1/20/2004     | Ongoing |
|       |          | Hawaii Stevedores<br>965 N Nimitz Hwy  |                     | Remedial | 1/20/2004     | Ongoing |
|       |          | Hawaii Transfer Company, Ltd. Pier 36  |                     | Remedial | 1/20/2004     | Ongoing |
|       |          | Hawaiian Bitumuls Paving & Precast<br>Company-Sand Island Access Road<br>248 Sand Island Access Rd |                     | Remedial | 1/20/2004     | Ongoing |

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| sland | Locality | Site Name  | Priority Ranking | Type      | Date          | Result  |
| Oahu  | Honolulu | Hawaiian Electric Company (HECO)-<br>Honolulu Generating Station<br>170 Ala Moana Blvd | Low on 3/11/1996 | Remedial  | 1/20/2004     | Ongoing |
|       |          | Hawaiian Electric Company (HECO)-Iwilei<br>Tank Yard<br>855 N Nimitz Hwy               |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Hawaiian Flour Mills<br>703 N Nimitz Hwy   |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Hawaiian Miso and Soy Co., Ltd<br>1714 Mary St   |                  | Unreg UST | 1/20/2004     | Ongoing |
|       |          | Hawaiian Tug & Barge Corporation 705 N Nimitz Hwy                                      |                  | Remedial  | 1/20/2004     | Ongoing |
|       |          | HCDA/UH Medical School<br>651 Ilalo St   |                  | ISST      | 1/20/2004     | Ongoing |
|       |          | HDC Properties Stained Soils<br>1015 Kapiolani Blvd                                    |                  | ISST      | 1/20/2004     | Ongoing |
|       |          | HECO Fuel Oil Pipeline Route State Energy<br>Corridor                                  |                  | ISST      | 1/20/2004     | Ongoing |
|       |          | Hertz Rent A Car, Vehicle Maintenance<br>Facility<br>414 Lele St                       | Low on 4/7/2000  | Remedial  | 1/20/2004     | Ongoing |
|       |          | Hobron Hotel<br>1744 Kaioo Dr  |                  | ISST      | 1/15/2004     | NFA     |
|       |          | Home Depot<br>421 Alakawa St   |                  | VRP       | 1/20/2004     | Ongoing |
|       |          |  |                  |           |               |         |

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|-------|----------|---|----------------------|--------------------|---------------|---------|
| sland | Locality | Site Name   | Priority Ranking     | Туре               | Date          | Result  |
| Oahu  | Honolulu | Honolulu Community College Gas Station<br>874 Dillingham Blvd | Low on 12/11/1997    | Remedial           | 1/20/2004     | Ongoing |
|       |          | Honolulu Harbor   |                      | Remedial           | 1/20/2004     | Ongoing |
|       |          | Honolulu Harbor Iwilei Unit                                   |                      | Remedial           | 1/20/2004     | Ongoing |
|       |          | Honolulu International Airport<br>300 Rodgers Blvd            | Medium on 2/23/1995  | Remedial           | 1/20/2004     | Ongoing |
|       |          | Honolulu Laundry<br>438 Kamakee St                            |                      | ISST               | 1/20/2004     | Ongoing |
|       |          | Honolulu Sake Brewery UST<br>2150 Booth Rd                    | NFA on 6/30/1997     | ISST               | 6/30/1997     | NFA     |
|       |          | Honolulu Shipyard, Inc.                                       | Medium on 10/29/1990 | Remedial           | 1/20/2004     | Ongoing |
|       |          | Honolulu Waterfront POL Relocation                            |                      | Remedial           | 1/20/2004     | Ongoing |
|       |          | Iolani School Petroleum<br>563 Kamoku St                      |                      | ISST               | 1/20/2004     | Ongoing |
|       |          | Island Movers, Inc.   |                      | Remedial           | 1/20/2004     | Ongoing |
|       |          | Iwilei Project Site<br>Iwilei Rd & N King St                  |                      | Brownfields<br>TSA | 1/20/2004     | Ongoing |
|       |          | JBL Hawaii, Limited<br>905 Kokea St                           |                      | Remedial           | 1/20/2004     | Ongoing |
|       |          | JTB Overseas Development Corporation 2270 Kalakaua Ave        |                      | Remedial           | 1/20/2004     | Ongoing |

|        |          |  |                  |                    | Activity Stat | us       |
|--------|----------|--|------------------|--------------------|---------------|----------|
| Island | Locality | Site Name  | Priority Ranking | Type               | Date          | Result   |
| Oahu   | Honolulu | Kakaako Brownfield Project-Unit 1<br>Koula St            |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Brownfield Project-Unit 10                       |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Brownfield Project-Unit 2<br>Koula St            |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Brownfield Project-Unit 3<br>160 Ahui St         |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Brownfield Project-Unit 4<br>Koula St            |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Brownfield Project-Unit 5<br>Ahui St             |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Brownfield Project-Unit 6<br>1011 Ala Moana Blvd |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Brownfield Project-Unit 7<br>Ahui St             |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Brownfield Project-Unit 8<br>Ahui St             |                  | Brownfields<br>DOH | 1/20/2004     | Ongoing  |
|        |          | Kakaako Brownfield Project-Unit 9                        |                  | Brownfields<br>DOH | 3/17/2003     | Complete |
|        |          | Kakaako Improvement District 3                           |                  | ISST               | 1/20/2004     | Ongoing  |
|        |          | Kakaako Improvement District 4                           |                  | ISST               | 1/20/2004     | Ongoing  |
|        |          | Kakaako Makai Brownfields/HCDA                           |                  | Brownfields<br>DOH | 3/17/2003     | Complete |

|       |          |  |                      |           | Activity Status |         |  |
|-------|----------|--|----------------------|-----------|-----------------|---------|--|
| sland | Locality | Site Name  | Priority Ranking     | Type      | Date            | Result  |  |
| Oahu  | Honolulu | Kalihi-Palama Bus Facility<br>811 Middle St  |                      | ISST      | 1/20/2004       | Ongoing |  |
|       |          | Kamehameha Homes Demolition  |                      | Research  | 1/20/2004       | Ongoing |  |
|       |          | Kamehameha Schools Rifle Range Lead<br>Contamination<br>1887 Makuakane St          |                      | ISST      | 1/20/2004       | Ongoing |  |
|       |          | Kapalama Incinerator<br>757 Kokea St   | Medium on 5/2/1997   | Remedial  | 1/20/2004       | Ongoing |  |
|       |          | Kapalama Military Reservation  |                      | Remedial  | 1/20/2004       | Ongoing |  |
|       |          | Kapalama Military Reservation South Oahu Location                                  |                      | ISST      | 1/20/2004       | Ongoing |  |
|       |          | Kapiolani Blvd. and Chapin Ln. Soil<br>Contamination<br>Chapin Ln & Kapiolani Blvd |                      | ISST      | 1/20/2004       | Ongoing |  |
|       |          | Kapiolani Medical Center for Women and<br>Children<br>1319 Punahou St              | NFA on 12/2/1996     | ISST      | 12/2/1996       | NFA     |  |
|       |          | Keehi Lagoon<br>Hoonee Pl  |                      | SI1       | 1/20/2004       | Ongoing |  |
|       |          | Keehi Lagoon Canoe Facility, Increment II<br>Hoonee PI                             | Medium on 11/26/1994 | Remedial  | 1/20/2004       | Ongoing |  |
|       |          | Kekaulike Diamond Head Block<br>Revitalization<br>163 N Hotel St                   |                      | Unreg UST | 1/20/2004       | Ongoing |  |

|          |   |  |   | Activity Stat  | us   |
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| Locality | Site Name   | Priority Ranking   | Туре  | Date   | Result   |
| Honolulu | Kewalo Basin-Tuna Packers<br>1011 Ala Moana Blvd                          |  | ISST  | 1/20/2004  | Ongoing  |
|          | Kewalo Incinerator<br>111 Ohe St  |  | ISST  | 1/20/2004  | Ongoing  |
|          | Kewalo Incinerator Landfill<br>111 Ohe St                                 | NFA on 1/12/1996   | ISST  | 1/12/1996  | NFA  |
|          | King Kalakaua Plaza Development<br>2080 Kalakaua St                       |  | ISST  | 1/20/2004  | Ongoing  |
|          | Koula Street Baseyard<br>160 Ahui St                                      | Medium on 8/8/1997   | Brownfields<br>DOH  | 3/17/2003  | Complete   |
|          | Kuhio Park Terrace, Units D1 and D2<br>Linapuni St                        |  | Brownfields<br>TSA  | 1/20/2004  | Ongoing  |
|          | Lance Goya's Chevron Service (Tom<br>Tomita's Chevron)<br>504 N School St |  | Remedial  | 1/20/2004  | Ongoing  |
|          | Like Like Plaza Petroleum Contamination<br>745 Keeaumoku St               | Low on 10/8/1999   | Remedial  | 1/20/2004  | Ongoing  |
|          | Liliha Civic Center<br>337 N King St                                      |  | Remedial  | 1/20/2004  | Ongoing  |
|          | Lockheed Air Terminal, Inc.<br>3071 Aolele St                             | Medium on 6/7/2000   | Remedial  | 1/20/2004  | Ongoing  |
|          | Longs Drug Stores Warehouse<br>2270 Hoonee Pl                             | Medium on 2/19/1998  | Remedial  | 1/20/2004  | Ongoing  |
|          | Lunalilo Home Facility<br>501 Kekauluohi St                               |  | Unreg UST   | 1/20/2004  | Ongoing  |
|          |   | Honolulu  Kewalo Basin-Tuna Packers 1011 Ala Moana Blvd  Kewalo Incinerator 111 Ohe St  Kewalo Incinerator Landfill 111 Ohe St  King Kalakaua Plaza Development 2080 Kalakaua St  Koula Street Baseyard 160 Ahui St  Kuhio Park Terrace, Units D1 and D2 Linapuni St  Lance Goya's Chevron Service (Tom Tomita's Chevron) 504 N School St  Like Like Plaza Petroleum Contamination 745 Keeaumoku St  Liliha Civic Center 337 N King St  Lockheed Air Terminal, Inc. 3071 Aolele St  Longs Drug Stores Warehouse 2270 Hoonee Pl  Lunalilo Home Facility | Honolulu Kewalo Basin-Tuna Packers 1011 Ala Moana Blvd  Kewalo Incinerator 111 Ohe St  Kewalo Incinerator Landfill 111 Ohe St  King Kalakaua Plaza Development 2080 Kalakaua St  Koula Street Basevard 160 Ahui St  Kuhio Park Terrace, Units D1 and D2 Linapuni St  Lance Goya's Chevron Service (Tom Tomita's Chevron) 504 N School St  Like Like Plaza Petroleum Contamination 745 Keeaumoku St  Liliha Civic Center 337 N King St  Lockheed Air Terminal, Inc. 3071 Aolele St  Longs Drug Stores Warehouse 2270 Hoonee Pl  Lunalilo Home Facility | Honolulu Kewalo Basin-Tuna Packers 1011 Ala Moana Blvd  Kewalo Incinerator 1111 Ohe St  Kewalo Incinerator Landfill 1111 Ohe St  King Kalakaua Plaza Development 2080 Kalakaua St  Koula Street Baseyard 160 Ahui St  Kuhio Park Terrace, Units D1 and D2 Linapuni St  Lance Goya's Chevron Service (Tom Tomita's Chevron) 504 N School St  Like Like Plaza Petroleum Contamination 745 Keeaumoku St  Lilliha Civic Center 337 N King St  Lockheed Air Terminal, Inc. 3071 Aolele St  Longs Drug Stores Warehouse 2270 Hoonee Pl Lunalilo Home Facility  NFA on 1/12/1996  ISST  ISST  ISST  Medium on 8/8/1997  Brownfields DOH  Remedial  Low on 10/8/1999  Remedial  Remedial  Remedial  Remedial  Remedial | Honolulu   Kewalo Basin-Tuna Packers   1011 Ala Moana Blvd   1011 Ala Moana Blvd   1011 Ala Moana Blvd   1011 Ala Moana Blvd   1120/2004   111 Ohe St   1120/2004   111 Ohe St   1120/2004   111 Ohe St   111 Ohe St   1120/2004   111 Ohe St   1120/2004   111 Ohe St   1120/2004 |

|       |          |   |                  |          | Activity Stat | us      |
|-------|----------|---|------------------|----------|---------------|---------|
| sland | Locality | Site Name   | Priority Ranking | Type     | Date          | Result  |
| Dahu  | Honolulu | Matson Navigation Company<br>Sand Island Access Rd  |                  | Remedial | 1/20/2004     | Ongoing |
|       |          | McCabe, Hamilton, & Renny Company, Ltd.<br>1130 N Nimitz Hwy                                      |                  | Remedial | 1/20/2004     | Ongoing |
|       |          | McDonald's Restaurant Soil & Groundwater<br>Contamination<br>2121 S King St                       |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | McKesson Drug Company/Sealmasters<br>80 Sand Island Access Rd                                     |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | Meadow Gold Ice Cream Plant Fuel Oil Spill<br>1418 Young St                                       | Low on 6/27/1997 | Remedial | 1/20/2004     | Ongoing |
|       |          | Mid Pacific Institute Unregulated UST 2445 Kaala St   |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | MidPac Lumber Co., Ltd<br>839 Ahua St   |                  | PA1/SI1  | 1/20/2004     | Ongoing |
|       |          | Mililani Town Landfill  | NFA on 4/29/1996 | ISST     | 4/29/1996     | NFA     |
|       |          | Miyazaki Service Station<br>351 Rodgers Blvd  |                  | Remedial | 1/20/2004     | Ongoing |
|       |          | Motor Imports<br>650 Kapiolani Blvd   | Low on 10/8/1999 | Remedial | 1/20/2004     | Ongoing |
|       |          | National Car Rental System, Inc. North<br>Nimitz Highway Oil Water Separator<br>3223 N Nimitz Hwy |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | Nestle USA<br>2828 Paa St   |                  | Remedial | 1/20/2004     | Ongoing |
|       |          |   |                  |          |               |         |

|          |   |   |  | Activity Stat  | us       |
|----------|---|---|--|--|----------|
| Locality | Site Name   | Priority Ranking  | Type   | Date   | Result   |
| Honolulu | New Office Lounge<br>1551 Kapiolani Blvd                            |   | Unreg UST  | 1/20/2004  | Ongoing  |
|          | Nimitz Highway Relief Sewer<br>1031 Nimitz Hwy                      |   | Remedial   | 1/20/2004  | Ongoing  |
|          | Oahu Cemetery<br>2162 Nuuanu Ave                                    |   | Unreg UST  | 1/20/2004  | Ongoing  |
|          | Occidental Chem Co<br>2660 Waiwai Lp                                | NFA on 3/11/1996  | ISST   | 3/11/1996  | NFA      |
|          | Oceanic Cable Vision Site 2669 Kilihau<br>Street<br>2669 Kilihau St |   | Unreg UST  | 1/20/2004  | Ongoing  |
|          | Old Monarch Building Supply Property 749 Mapunapuna St              |   | ISST   | 1/20/2004  | Ongoing  |
|          | One Archer Lane Petroleum Contamination 801 S King St               |   | ISST   | 1/20/2004  | Ongoing  |
|          | Pacific Marine & Supply Co., Ltd.                                   |   | Remedial   | 1/20/2004  | Ongoing  |
|          | Pacific Poultry<br>1804 Kanakanui St                                |   | Unreg UST  | 1/20/2004  | Ongoing  |
|          | Paradise Landscape Maintenance, Inc.<br>Trimble Rd                  |   | ISST   | 1/20/2004  | Ongoing  |
|          | Pauley Petroleum  | Medium on 7/28/1995   | Remedial   | 1/20/2004  | Ongoing  |
|          | Polynesian Hospitality 330 Pacific St                               |   | Remedial   | 1/20/2004  | Ongoing  |
| _        |   | Honolulu  New Office Lounge 1551 Kapiolani Blvd  Nimitz Highway Relief Sewer 1031 Nimitz Hwy  Oahu Cemetery 2162 Nuuanu Ave  Occidental Chem Co 2660 Waiwai Lp  Oceanic Cable Vision Site 2669 Kilihau Street 2669 Kilihau St  Old Monarch Building Supply Property 749 Mapunapuna St  One Archer Lane Petroleum Contamination 801 S King St  Pacific Marine & Supply Co., Ltd.  Pacific Poultry 1804 Kanakanui St  Paradise Landscape Maintenance, Inc. Trimble Rd  Pauley Petroleum  Polynesian Hospitality | Honolulu  New Office Lounge 1551 Kapiolani Blvd  Nimitz Highway Relief Sewer 1031 Nimitz Hwy  Oahu Cemetery 2162 Nuuanu Ave  Occidental Chem Co 2660 Waiwai Lp  Oceanic Cable Vision Site 2669 Kilihau Street 2669 Kilihau St  Old Monarch Building Supply Property 749 Mapunapuna St  One Archer Lane Petroleum Contamination 801 S King St  Pacific Marine & Supply Co., Ltd.  Pacific Poultry 1804 Kanakanui St  Paradise Landscape Maintenance, Inc. Trimble Rd  Pauley Petroleum  Medium on 7/28/1995 | Honolulu  New Office Lounge 1551 Kapiolani Blvd  Nimitz Highway Relief Sewer 1031 Nimitz Hwv  Oahu Cemetery 2162 Nuuanu Ave  Occidental Chem Co 2660 Waiwai Lp  Oceanic Cable Vision Site 2669 Kilihau Street 2669 Kilihau St  Old Monarch Building Supply Property 749 Mapunapuna St  One Archer Lane Petroleum Contamination 801 S King St  Pacific Marine & Supply Co., Ltd.  Pacific Poultry 1804 Kanakanui St  Paradise Landscape Maintenance, Inc. Trimble Rd  Pauley Petroleum  Medium on 7/28/1995  Remedial  Polynesian Hospitality  Remedial | Honolulu |

|       |          |   |                      | Activity Status |            |         |
|-------|----------|---|----------------------|-----------------|------------|---------|
| sland | Locality | Site Name   | Priority Ranking     | Type            | Date       | Result  |
| Oahu  | Honolulu | Prince Kuhio Hotel Report<br>2500 Kuhio Ave                                     |                      | Unreg UST       | 1/20/2004  | Ongoing |
|       |          | Proposed Mokuone Electrical Substation<br>1350 Sand Island Pkwy                 |                      | Remedial        | 1/20/2004  | Ongoing |
|       |          | Pukoloa Wood Treating Site (formerly<br>Servco Pacific Inc.)<br>2819 Pukoloa St | Medium on 11/15/1990 | Remedial        | 1/20/2004  | Ongoing |
|       |          | Queen Emmalani Tower<br>Queen St & South St                                     | Low on 4/29/1996     | Remedial        | 1/20/2004  | Ongoing |
|       |          | Reserve Housing Tower Soil Contamination 1141 Waimanu St                        | NFA on 10/25/1995    | ISST            | 10/25/1995 | NFA     |
|       |          | Roberts Hawaii<br>759 Kelikoi St  | Low on 11/15/1996    | Remedial        | 1/20/2004  | Ongoing |
|       |          | Roger's Repair Inc<br>1687 Kalakaua Ave   | NFA on 6/4/1999      | Remedial        | 1/20/2004  | Ongoing |
|       |          | Ross Trusts<br>819 Moowaa St  |                      | VRP             | 8/30/2002  | NFA     |
|       |          | Saint Francis Medical Center, Liliha Street<br>2230 Liliha St                   | Low on 6/17/1998     | Remedial        | 1/20/2004  | Ongoing |
|       |          | Sand Island Business Association Lot 023<br>AST<br>1020 Ulupono St              | NFA on 7/8/2002      | Remedial        | 1/20/2004  | Ongoing |
|       |          | Sause Brothers  |                      | Remedial        | 1/20/2004  | Ongoing |
|       |          | Schuman Carriage Hydraulic Fluid Release<br>1234 S Beratania St                 |                      | ISST            | 1/20/2004  | Ongoing |

|        |          |  |                      |          | Activity Stat | us            |
|--------|----------|--|----------------------|----------|---------------|---------------|
| Island | Locality | Site Name  | Priority Ranking     | Type     | Date          | Result        |
| Oahu   | Honolulu | Sea-Land Service<br>Sand Island Access Rd              |                      | Remedial | 1/20/2004     | Ongoing       |
|        |          | Servco Pacific, Inc. Kalihi<br>2101 Auiki St           |                      | Remedial | 1/20/2004     | Ongoing       |
|        |          | Shizuku Hamaoka Trust<br>3311 Sierra Dr                | Low on 7/3/2001      | Remedial | 1/20/2004     | Ongoing       |
|        |          | Sierra Shell Service Station<br>3562 Waialae Ave       |                      | ISST     | 1/20/2004     | Ongoing       |
|        |          | Sprint Lot<br>925 Dillingham Blvd                      |                      | Remedial | 1/20/2004     | Ongoing       |
|        |          | Stan Shinkawa Inc<br>2330 Kalakaua Ave                 | NFA on 3/25/1996     | ISST     | 3/25/1996     | NFA           |
|        |          | State Poultry Processors Facility<br>2132 Kaliawa St   | Low on 9/17/1998     | Remedial | 1/20/2004     | Ongoing       |
|        |          | Superblock Project<br>Keeaumoku St                     |                      | Remedial | 1/20/2004     | Ongoing       |
|        |          | Swift Adhesives & Coatings<br>2847 Awaawaloa St        | NFA on 3/25/1996     | ISST     | 3/25/1996     | NFA           |
|        |          | Symphony Park<br>Kapiolani Blvd & Ward Ave             | Medium on 12/16/1994 | Remedial | 1/20/2004     | Ongoing       |
|        |          | Takamiya Property<br>850 Moowaa St                     |                      | Remedial | 8/8/1994      | Refer to SHWB |
|        |          | Tesoro Hawaii Corporation, Terminal Department-Pier 34 |                      | Remedial | 1/20/2004     | Ongoing       |
|        |          |  |                      | kemediai | 1/20/2004     | Or            |

|          |  |  |  | Activity Stat   | IS   |  |
|----------|--|--|--|---|--|--|
| Locality | Site Name  | Priority Ranking   | Type   | Date  | Result   |  |
| Honolulu | Tesoro Hawaii Corporation, Terminal<br>Department-Sand Island<br>2 Sand Island Access Rd |  | Remedial   | 1/20/2004   | Ongoing  |  |
|          | The Pavillion<br>1925 Kalakaua Ave   |  | ISST   | 1/20/2004   | Ongoing  |  |
|          | Thoht Property<br>636 Laumaka St   | Low on 12/29/1995  | Remedial   | 1/20/2004   | Ongoing  |  |
|          | TOSCO Corporation-Honolulu Terminal<br>#0282<br>411 Pacific St                           |  | Remedial   | 1/20/2004   | Ongoing  |  |
|          | Towco - Sand Island<br>1350 Sand Island Pkwy   | Low on 12/21/1994  | Remedial   | 1/20/2004   | Ongoing  |  |
|          | Town Inn<br>248-258 N Beretania St   | Low on 3/2/1995  | VRP  | 1/20/2004   | Ongoing  |  |
|          | Town Inn<br>248-258 N Beretania St   | Low on 3/2/1995  | Remedial   | 1/20/2004   | Ongoing  |  |
|          | Travel Plaza Transportation, LLC<br>818 Pine St  |  | Remedial   | 1/20/2004   | Ongoing  |  |
|          | Tripler Army Medical Center 1 Jarrett White Rd   |  | Remedial   | 1/20/2004   | Ongoing  |  |
|          | Tripler Army Medical Center Building 224<br>Heating Oil Tank<br>1 Jarrett White Rd       |  | Unreg UST  | 1/20/2004   | Ongoing  |  |
|          | Tripler Army Medical Center, Building 125A<br>1 Jarrett White Rd                         | Low on 3/2/1995  | Remedial   | 1/20/2004   | Ongoing  |  |
|          | U.S. Coast Guard Base Honolulu<br>400 Sand Island Pkwy                                   |  | Remedial   | 1/20/2004   | Ongoing  |  |
| •        | -  | Honolulu  Tesoro Hawaii Corporation, Terminal Department-Sand Island 2 Sand Island Access Rd  The Pavillion 1925 Kalakaua Ave  Thoht Property 636 Laumaka St  TOSCO Corporation-Honolulu Terminal #0282 411 Pacific St  Towco - Sand Island 1350 Sand Island Pkwy  Town Inn 248-258 N Beretania St  Town Inn 248-258 N Beretania St  Travel Plaza Transportation, LLC 818 Pine St  Tripler Army Medical Center 1 Jarrett White Rd  Tripler Army Medical Center Building 224 Heating Oil Tank 1 Jarrett White Rd  Tripler Army Medical Center, Building 125A 1 Jarrett White Rd  U.S. Coast Guard Base Honolulu | Honolulu  Tesoro Hawaii Corporation, Terminal Department-Sand Island 2 Sand Island Access Rd  The Pavillion 1925 Kalakaua Ave  Thoht Property 636 Laumaka St  TOSCO Corporation-Honolulu Terminal #0282 411 Pacific St  Towco - Sand Island 1350 Sand Island Pkwy  Town Inn 248-258 N Beretania St  Town Inn 248-258 N Beretania St  Travel Plaza Transportation, LLC 818 Pine St  Tripler Army Medical Center 1 Jarrett White Rd  Tripler Army Medical Center Building 224 Heating Oil Tank 1 Jarrett White Rd  Tripler Army Medical Center, Building 125A 1 Jarrett White Rd  U.S. Coast Guard Base Honolulu | Honolulu Tesoro Hawaii Corporation, Terminal Department-Sand Island 2 Sand Island Access Rd  The Pavillion 1925 Kalakaua Ave  Thoht Property 636 Laumaka St  TOSCO Corporation-Honolulu Terminal #0282 411 Pacific St  Towco - Sand Island 1350 Sand Island Pkwy  Town Inn 248-258 N Beretania St  Town Inn 248-258 N Beretania St  Travel Plaza Transportation, LLC 818 Pine St  Tripler Army Medical Center 1 Jarrett White Rd  Tripler Army Medical Center Building 224 Heating Oil Tank 1 Jarrett White Rd  Tripler Army Medical Center, Building 125A 1 Jarrett White Rd  U.S. Coast Guard Base Honolulu  Remedial | Locality         Site Name         Priority Ranking         Type         Date           Honolulu         Tesoro Hawaii Corporation, Terminal Department-Sand Island 2 Sand Island Access Rd         Remedial         1/20/2004           The Pavillion 1925 Kalakaua Ave         ISST         1/20/2004           Thoht Property 636 Laumaka St         Low on 12/29/1995         Remedial         1/20/2004           TOSCO Corporation-Honolulu Terminal #0282 411 Pacific St         Remedial         1/20/2004           Towco - Sand Island 1350 Sand Island 1350 Sand Island Pkwy         Low on 12/21/1994         Remedial         1/20/2004           Town Inn 248-258 N Beretania St         Low on 3/2/1995         VRP         1/20/2004           Travel Plaza Transportation, LLC 818 Pine St         Low on 3/2/1995         Remedial         1/20/2004           Tripler Army Medical Center 1 Jarrett White Rd         Unreg UST         1/20/2004           Tripler Army Medical Center Building 224 Heating Oil Tank 1 Jarrett White Rd         Low on 3/2/1995         Remedial         1/20/2004           Tripler Army Medical Center, Building 125A 1 Jarrett White Rd         Low on 3/2/1995         Remedial         1/20/2004           Town Jarrett White Rd         Remedial         1/20/2004         Remedial         1/20/2004 |  |

|        |          |  |                   |           | Activity Stat | us       |
|--------|----------|--|-------------------|-----------|---------------|----------|
| Island | Locality | Site Name  | Priority Ranking  | Type      | Date          | Result   |
| Oahu   | Honolulu | Uaukewai Diving Salvage & Fishing, Inc.<br>Pier 21 Honolulu Harbor                     |                   | Remedial  | 1/20/2004     | Ongoing  |
|        |          | Underground Hoists Removal<br>744 Ala Moana Blvd                                       |                   | Unreg UST | 6/30/2003     | NFA      |
|        |          | University of Hawaii at Manoa Food<br>Science Technology Building<br>1920 Edmondson Rd |                   | Unreg UST | 1/20/2004     | Ongoing  |
|        |          | University of Hawaii, Lower Campus   |                   | ISST      | 1/20/2004     | Ongoing  |
|        |          | University of Hawaii, Manoa<br>2444 Dole St  |                   | ISST      | 1/20/2004     | Ongoing  |
|        |          | University of Hawaii, Marine Center<br>1 Sand Island Access Rd                         | Low on 10/29/1996 | Remedial  | 1/20/2004     | Ongoing  |
|        |          | USPS Vehicle Maintenance Facility<br>Hydraulic Fluid Spill<br>89 Sand Island Access Rd | Low on 6/4/1999   | Remedial  | 1/20/2004     | Ongoing  |
|        |          | Vector Control Branch<br>2611 Kilihau St   | NFA on 4/15/1996  | ISST      | 4/15/1996     | NFA      |
|        |          | Vermiculite of Hawaii<br>842 Mapunapuna St   |                   | PA1       | 1/20/2004     | Ongoing  |
|        |          | Vermiculite of Hawaii<br>842 Mapunapuna St   |                   | DS1       | 1/20/2004     | Complete |
|        |          | Von Hamm Textiles<br>546 Kaaahi St   |                   | Remedial  | 1/20/2004     | Ongoing  |
|        |          | Waikiki Bazaar<br>2174 Kalakaua Ave  |                   | Unreg UST | 1/20/2004     | Ongoing  |
|        |          |  |                   |           |               |          |

|        |           |   |                         | Activity Status |           |         |
|--------|-----------|---|-------------------------|-----------------|-----------|---------|
| Island | Locality  | Site Name   | <b>Priority Ranking</b> | Type            | Date      | Result  |
| Oahu   | Honolulu  | Waikiki Sand Villa II<br>250 Kaiulani Ave                           | Low on 6/15/1998        | Remedial        | 1/20/2004 | Ongoing |
|        |           | Weyerhaeuser<br>900 N Nimitz Hwy                                    |                         | Remedial        | 1/20/2004 | Ongoing |
|        |           | Wiliwili and King Streets Excavation<br>King St & Wiliwili St       |                         | ISST            | 1/20/2004 | Ongoing |
|        |           | Y. Hata Company, Ltd.<br>Cooke St & Ilalo St                        |                         | ISST            | 1/20/2004 | Ongoing |
|        |           | Yacht Harbor Towers Generator<br>1600 Ala Moana Blvd                | Low on 6/4/1999         | Remedial        | 1/20/2004 | Ongoing |
|        |           | Yee Hop Property<br>621 Middle St                                   |                         | ISST            | 1/20/2004 | Ongoing |
|        |           | Young Brothers, Ltd. Piers 24-28                                    |                         | Remedial        | 1/20/2004 | Ongoing |
|        |           | Young Brothers, Ltd. Piers 39, 40                                   |                         | Remedial        | 1/20/2004 | Ongoing |
|        |           | Zippy's 580 North Nimitz<br>550-580 N Nimitz Hwy                    |                         | Remedial        | 1/20/2004 | Ongoing |
| Oahu   | Hononlulu | Former General Tire Petroleum<br>Contamination<br>505 Waiakamilo Rd |                         | ISST            | 1/20/2004 | Ongoing |
| Oahu   | lwilei    | BHP Hawaii, Inc.  |                         | Remedial        | 1/20/2004 | Ongoing |

|        |             |  |                  |           | Activity Stat | us      |
|--------|-------------|--|------------------|-----------|---------------|---------|
| Island | Locality    | Site Name  | Priority Ranking | Type      | Date          | Result  |
| Oahu   | Iwilei      | DIL Trust  |                  | Remedial  | 1/20/2004     | Ongoing |
|        |             | Honolulu Harbor Iwilei   |                  | Remedial  | 1/20/2004     | Ongoing |
|        |             | Honolulu Harbor Iwilei Operating Parties                                   |                  | Remedial  | 1/20/2004     | Ongoing |
|        |             | State of Hawaii, Department of Transportation, Harbors Division Properties |                  | Remedial  | 1/20/2004     | Ongoing |
|        |             | Texaco Iwilei  |                  | Remedial  | 1/20/2004     | Ongoing |
| Oahu   | Kaaawa      | Chang UST Release<br>51-344 Kamehameha Hwy                                 |                  | Unreg UST | 1/20/2004     | Ongoing |
| Oahu   | Kaena Point | Kaena Point Satelite Tracking Station                                      |                  | ISST      | 1/20/2004     | Ongoing |
|        |             | Kaena Point STS  |                  | DSMOA     | 1/20/2004     | Ongoing |
| Oahu   | Kahuku      | Kahuku Sugar Mill<br>56-565 Kamehameha Hwy                                 |                  | VRP       | 1/20/2004     | Ongoing |
|        |             | Kahuku Training Area   |                  | DSMOA     | 1/20/2004     | Ongoing |
|        |             | Kahuku Wind Farm Soil Remediation  | NFA on 6/9/1998  | ISST      | 6/9/1998      | NFA     |

|       |          |  |                   | Activity Status |            |         |
|-------|----------|--|-------------------|-----------------|------------|---------|
| sland | Locality | Site Name  | Priority Ranking  | Type            | Date       | Result  |
| Dahu  | Kahuku   | Kahuku Wind Farm Transformer Leak  |                   | ISST            | 1/20/2004  | Ongoing |
|       |          | Punamano Air Force Station   |                   | DSMOA           | 1/20/2004  | Ongoing |
| Dahu  | Kailua   | Ameron Hawaii (HC&D) - Kapaa Quarry<br>909 Kalanianaole Hwy                      | NFA on 12/29/1995 | ISST            | 12/29/1995 | NFA     |
|       |          | Cesspool Closure<br>609 Kailua Rd  |                   | ISST            | 1/20/2004  | Ongoing |
|       |          | Exempt Underground Storage Tank at<br>Hookipa Cottage<br>42-477 Kalanianaole Hwy |                   | Unreg UST       | 1/20/2004  | Ongoing |
|       |          | Former Windward Volkswagen<br>725 Kailua Rd                                      |                   | Unreg UST       | 1/20/2004  | Ongoing |
|       |          | GTE Hawaiian Tel Kailua Baseyard<br>134 Hamakua Dr                               |                   | ISST            | 1/20/2004  | Ongoing |
|       |          | Honolulu Skeet Club  | Low on 3/25/1996  | Remedial        | 1/20/2004  | Ongoing |
|       |          | Kailua Corporation Yard<br>42-377 Kalanianaole Hwy                               |                   | ISST            | 1/20/2004  | Ongoing |
|       |          | Kaneohe Ranch<br>55 Kailuana Pl  |                   | Unreg UST       | 1/20/2004  | Ongoing |
|       |          | Kapaa Landfill Kapaa Quarry Road<br>Old Kapaa Quarry Rd                          | NFA on 4/29/1996  | ES1             | 1/20/2004  | Ongoing |
|       |          | Kawainui Marsh<br>Kapaa Quarry Rd  | NFA on 8/16/2000  | ISST            | 8/16/2000  | NFA     |

|        |          |   |                       | Activity Status |            |               |
|--------|----------|---|-----------------------|-----------------|------------|---------------|
| Island | Locality | Site Name   | Priority Ranking      | Type            | Date       | Result        |
| Oahu   | Kailua   | Malunui Avenue Oil Contamination<br>21 Malunui Ave          |                       | ISST            | 1/20/2004  | Ongoing       |
| Oahu   | Kakaako  | Kakaako Improvement District 2                              |                       | ISST            | 1/20/2004  | Ongoing       |
|        |          | Kakaako Improvement District 7<br>Kamakee St                |                       | ISST            | 1/20/2004  | Ongoing       |
|        |          | Kakaako Improvement District Program                        |                       | ISST            | 1/20/2004  | Ongoing       |
| Oahu   | Kalihi   | Texaco Kalihi   |                       | Remedial        | 1/20/2004  | Ongoing       |
| Oahu   | Kaneohe  | Camp H. M. Smith<br>Building 600                            | Medium on 4/15/1996   | Remedial        | 1/20/2004  | Ongoing       |
|        |          | Camp H.M. Smith UST CS-0-07<br>Building 600                 | NFA on 1/24/2000      | ISST            | 1/24/2000  | NFA           |
|        |          | Hawaii State Hospital Generator Building 34-710 Keaahala Rd | NFA on 11/14/2001     | ISST            | 11/14/2001 | NFA           |
|        |          | Hawaiian Memorial Park<br>45-425 Kamehameha Hwy             | Refer to SHWB on 1/2: | ISST            | 1/23/2001  | Refer to SHWB |
|        |          | MCAS Kaneohe LDFL   |                       | ES2             | 8/2/1996   | G             |
|        |          | MCBH Kaneohe Bay  |                       | Research        | 1/20/2004  | Ongoing       |

|        |          |  |                       |          | Activity Stat | us            |
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| Island | Locality | Site Name  | Priority Ranking      | Type     | Date          | Result        |
| Oahu   | Kaneohe  | MCBH Kaneohe, Building 1091 Oil Transfer<br>Area                     | Low on 11/20/1995     | Remedial | 1/20/2004     | Ongoing       |
|        |          | MCBH Kaneohe-Firebomb Mixing Area                                    | Medium on 12/27/199!  | Remedial | 1/20/2004     | Ongoing       |
|        |          | MCBH Kaneohe-Skeet Shooting Range                                    | Medium on 12/29/199!  | Remedial | 1/20/2004     | Ongoing       |
|        |          | Safeway Store #207 Kaneohe Bay<br>Sediments<br>46-065 Kamehameha Hwy |                       | ISST     | 1/20/2004     | Ongoing       |
|        |          | Safeway Store #207 PCB Release<br>46-065 Kamehameha Hwy              | NFA on 8/30/2001      | ISST     | 8/30/2001     | NFA           |
|        |          | Scott's Plating<br>45-212 Kaneohe Bay Dr                             |                       | SI1      | 1/20/2004     | Ongoing       |
|        |          | Texaco Service Station #61-100-0180 - UIC 47-515 Kamehameha Hwy      | Refer to SHWB on 3/4/ | ISST     | 3/4/1999      | Refer to SHWB |
|        |          | U.S. Coast Guard Omega Station                                       |                       | ISST     | 1/20/2004     | Ongoing       |
|        |          | Windward Nissan<br>46-275 Kahuhipa St                                | NFA on 4/10/2000      | ISST     | 4/10/2000     | NFA           |
| Oahu   | Kapalama | Chevron Kapalama Northwest Parcel<br>1105 N Nimitz Hwy               |                       | Remedial | 1/20/2004     | Ongoing       |
|        |          | KAPALAMA MILITARY RESIDENTIAL  |                       | DSMOA    | 1/20/2004     | Ongoing       |

|        |          |  |                      |          | Activity Stat | us                    |
|--------|----------|--|----------------------|----------|---------------|-----------------------|
| Island | Locality | Site Name  | Priority Ranking     | Type     | Date          | Result                |
| Oahu   | Kapolei  | Allegiance Healthcare Corporation 1009 Opule St                                |                      | ISST     | 1/20/2004     | Ongoing               |
|        |          | Ameron Concrete Pipe Fabrication Facility<br>91-059 Hanua St                   |                      | ISST     | 1/20/2004     | Ongoing               |
|        |          | Bank of Hawaii Campbell Industrial Park<br>Site<br>91-063 Malakole St          |                      | VRP      | 1/20/2004     | Ongoing               |
|        |          | Barbers Point Harbor   | Medium on 6/13/2000  | Remedial | 1/20/2004     | Ongoing               |
|        |          | Barbers Point Harbor Expansion   | Medium on 6/7/2000   | Remedial | 1/20/2004     | Ongoing               |
|        |          | Barbers Point Harbor Lead Contaminated Soil                                    |                      | ISST     | 1/20/2004     | Ongoing               |
|        |          | BEI Barbers Point Plant Sulfuric Acid Spill<br>91-291 Kaomi Lp                 |                      | Remedial | 2/27/2003     | Refer to HEEF<br>EP&R |
|        |          | BHP's LPG Pipeline Jacket Leak   | NFA on 8/28/1997     | ISST     | 8/28/1997     | NFA                   |
|        |          | Brewer Chemical Corporation<br>91-291 Kaomi Lp                                 | Low on 12/29/1995    | Remedial | 1/20/2004     | Ongoing               |
|        |          | Campbell Industrial Park 06/24/94<br>Administrative File<br>1001 Kamukila Blvd |                      | Research | 1/20/2004     | Ongoing               |
|        |          | Chemwood Treatment Co, Inc.<br>91-476 Komohana St                              |                      | ISST     | 1/20/2004     | Ongoing               |
|        |          | Chevron USA Hawaiian Refinery<br>91-480 Malakole St                            | Medium on 12/29/199! | Remedial | 1/20/2004     | Ongoing               |

|          |   |  | Activity Status  |  |  |  |
|----------|---|--|--|--|--|--|
| Locality | Site Name   | Priority Ranking   | Type   | Date   | Result   |  |
| Kapolei  | CoVan Warehouse<br>91-238 Kalaeloa Blvd   |  | ISST   | 1/20/2004  | Ongoing  |  |
|          | Cyprus Hawaiian Cement Corp<br>91-055 Kaomi Lp  | Low on 12/2/1996   | Remedial   | 1/20/2004  | Ongoing  |  |
|          | Deep Draft Harbor Pier 5 Crude Oil<br>Contamination                                       |  | ISST   | 1/20/2004  | Ongoing  |  |
|          | Earle M. Jorgensen<br>91-104 Kalaeloa Blvd  | NFA on 12/29/1995  | ISST   | 12/29/1995   | NFA  |  |
|          | Fred L. Waldron, Ltd<br>91-254 Olai St  | Low on 4/15/1996   | Remedial   | 1/20/2004  | Ongoing  |  |
|          | Grace Pacific Block Facility<br>91-205 Kalaeloa Blvd                                      |  | Remedial   | 1/20/2004  | Ongoing  |  |
|          | Hanua Street Fugitive Oil<br>Hanua St   |  | ISST   | 1/20/2004  | Ongoing  |  |
|          | Hanua Street Petroleum on Groundwater<br>91-209 Hanua St                                  | Medium on 1/24/2000  | Remedial   | 1/20/2004  | Ongoing  |  |
|          | Hawaii Metal Recycling Company<br>91-056 Hanua St   | High on 2/15/1996  | Remedial   | 1/20/2004  | Ongoing  |  |
|          | Hawaii Project Management<br>(HPM)/Hawaiian Western Steel, Inc. Beach<br>Dump<br>Kaomi Lp | Low on 6/27/1997   | Remedial   | 1/20/2004  | Ongoing  |  |
|          | Hawaiian Dredging (Komohana Park)<br>91-063 Malakole St                                   |  | VRP  | 1/20/2004  | Ongoing  |  |
| •        | <u> </u>  | CoVan Warehouse 91-238 Kalaeloa Blvd  Cyprus Hawaiian Cement Corp 91-055 Kaomi Lp  Deep Draft Harbor Pier 5 Crude Oil Contamination  Earle M. Jorgensen 91-104 Kalaeloa Blvd  Fred L. Waldron, Ltd 91-254 Olai St  Grace Pacific Block Facility 91-205 Kalaeloa Blvd  Hanua Street Fugitive Oil Hanua St  Hanua Street Petroleum on Groundwater 91-209 Hanua St  Hawaii Metal Recycling Company 91-056 Hanua St  Hawaii Project Management (HPM)/Hawaiian Western Steel, Inc. Beach Dump Kaomi Lp  Hawaiian Dredging (Komohana Park) | Kapolei  CoVan Warehouse 91-238 Kalaeloa Blvd  Cyprus Hawaiian Cement Corp 91-055 Kaomi Lp  Deep Draft Harbor Pier 5 Crude Oil Contamination  Earle M. Jorgensen 91-104 Kalaeloa Blvd  Fred L. Waldron, Ltd 91-254 Olai St  Grace Pacific Block Facility 91-205 Kalaeloa Blvd  Hanua Street Fugitive Oil Hanua St  Hawaii Metal Recycling Company 91-056 Hanua St  Hawaii Project Management (HPM)/Hawaiian Western Steel, Inc. Beach Dump Kaomi Lp  Hawaiian Dredging (Komohana Park) | Kapolei  CoVan Warehouse 91-238 Kalaeloa Blvd  Cyprus Hawaiian Cement Corp 91-055 Kaomi Lp  Deep Draft Harbor Pier 5 Crude Oil Contamination  Earle M. Jorgensen 91-104 Kalaeloa Blvd  Fred L. Waldron, Ltd 91-254 Olai St  Grace Pacific Block Facility 91-205 Kalaeloa Blvd  Hanua Street Fugitive Oil Hanua St  Hanua Street Petroleum on Groundwater 91-209 Hanua St  Hawaii Metal Recycling Company 91-056 Hanua St  Hawaii Project Management (HPM)/Hawaiian Western Steel, Inc. Beach Dump Kaomi Lp  Hawaiian Dredging (Komohana Park)  VRP | LocalitySite NamePriority RankingTypeDateKapoleiCoVan Warehouse<br>91-238 Kalaeloa BlvdISST1/20/2004Cyprus Hawaiian Cement Corp<br>91-055 Kaomi LpLow on 12/2/1996Remedial1/20/2004Deep Draft Harbor Pier 5 Crude Oil<br>ContaminationISST1/20/2004Earle M. Jorgensen<br>91-104 Kalaeloa BlvdNFA on 12/29/1995ISST12/29/1995Fred L. Waldron, Ltd<br>91-254 Olai StLow on 4/15/1996Remedial1/20/2004Grace Pacific Block Facility<br>91-205 Kalaeloa BlvdRemedial1/20/2004Hanua Street Fugitive Oil<br>Hanua StISST1/20/2004Hanua Street Petroleum on Groundwater<br>91-209 Hanua StMedium on 1/24/2000Remedial1/20/2004Hawaii Metal Recycling Company<br>91-056 Hanua StHigh on 2/15/1996Remedial1/20/2004Hawaii Project Management<br>(HPM)/Hawaiian Western Steel, Inc. Beach<br>Dump<br>Kaomi LpLow on 6/27/1997Remedial1/20/2004Hawaiian Dredging (Komohana Park)VRP1/20/2004 |  |

|       |          |   |                  |          | Activity Stat | us      |
|-------|----------|---|------------------|----------|---------------|---------|
| sland | Locality | Site Name   | Priority Ranking | Type     | Date          | Result  |
| Oahu  | Kapolei  | Hawaiian Electric CoKahe Generating<br>Station<br>92-200 Farrington Hwy     | NFA on 8/25/1997 | ISST     | 8/25/1997     | NFA     |
|       |          | Hawaiian Independent Refinery, Inc.<br>91-325 Komohana St                   |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | Hawaiian Meat Packers   |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | Hawaiian Refractories<br>220 Komohana St                                    |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | Hawaiian Western Steel Dump<br>Hanua St & Malakole Rd                       | Low on 6/26/1997 | Remedial | 1/20/2004     | Ongoing |
|       |          | Hawaiian Western Steel, Limited<br>91-150 Hanua St                          |                  | SI1      | 1/20/2004     | Ongoing |
|       |          | Honolulu Wood Treating Co. Ltd.<br>91-291 Hanua St                          | NFA on 2/8/1996  | ISST     | 2/8/1996      | NFA     |
|       |          | Industrial Technology Kauhi Street<br>91-313 Kauhi St                       |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | Kahe Generating Station Hydraulic Fluid<br>Release<br>92-200 Farrington Hwy | NFA on 6/23/1997 | ISST     | 6/23/1997     | NFA     |
|       |          | Kahe Generating Station Kerosene Release 92-200 Farrington Hwy              | NFA on 6/27/2002 | ISST     | 6/27/2002     | NFA     |
|       |          | Kalaeloa Cogeneration Plant<br>91-111 Kalaeloa Blvd                         |                  | ISST     | 1/20/2004     | Ongoing |
|       |          | Kapolei Medical Park Fort Barrette Rd & Farrington Hwy                      |                  | ISST     | 1/20/2004     | Ongoing |
|       |          |   |                  |          |               |         |

|        |          |   |                   |          | Activity Statu | IS      |
|--------|----------|---|-------------------|----------|----------------|---------|
| Island | Locality | Site Name   | Priority Ranking  | Type     | Date           | Result  |
| Oahu   | Kapolei  | Marisco, Ltd.<br>91-607 Malakole St   |                   | Research | 1/20/2004      | Ongoing |
|        |          | Precision Wood of Hawaii Inc.<br>91-476 Komohana St                                 |                   | ISST     | 1/20/2004      | Ongoing |
|        |          | Reynolds of Hawaii<br>91-320 Komohana St  | NFA on 12/24/1996 | ISST     | 12/24/1996     | NFA     |
|        |          | Tesoro Oil Spill NRDA/single buoy mooring<br>Barbers Point Harbor Oil Spill 8/24/98 |                   | NRDA     | 1/20/2004      | Ongoing |
|        |          | Texaco Barbers Point Sales Terminal<br>Gasoline Spill<br>91-119 Hanua St            |                   | ISST     | 1/20/2004      | Ongoing |
|        |          | Texaco Malakole Street Pipeline Excavation Malakole St                              | NFA on 10/8/1998  | ISST     | 10/8/1998      | NFA     |
|        |          | Texaco Terminal<br>91-119 Hanua St  |                   | ISST     | 1/20/2004      | Ongoing |
|        |          | Unitek Environmental Service, Inc.<br>91-125 Kaomi Lp                               | NFA on 4/15/1996  | ISST     | 4/15/1996      | NFA     |
| Oahu   | Kipapa   | Kipapa Ammo Storage Tunnels   |                   | Research | 1/20/2004      | Ongoing |
| Oahu   | Kuaaloa  | Kualoa Regional Park  |                   | Research | 1/20/2004      | Ongoing |

|        |           |  |                    |          | Activity Statu | IS      |
|--------|-----------|--|--------------------|----------|----------------|---------|
| Island | Locality  | Site Name  | Priority Ranking   | Type     | Date           | Result  |
| Oahu   | Kunia     | Central Oahu Wells   |                    | PA1      | 1/20/2004      | Ongoing |
|        |           | Del Monte Corp. (Oahu Plantation)<br>927 Luawai St               | High on 9/7/1995   | Remedial | 1/20/2004      | Ongoing |
|        |           | Endosulfan release Delmonte Fresh<br>Produce<br>94-1000 Kunia Rd |                    | ISST     | 1/20/2004      | Ongoing |
|        |           | Ewa Sugar Mill/Oahu Sugar Co Kunia<br>Staging Area               | Medium on 2/3/2000 | Remedial | 1/20/2004      | Ongoing |
|        |           | Kunia Field Station<br>Kunia Rd                                  | Medium on 2/2/1995 | Remedial | 1/20/2004      | Ongoing |
|        |           | Kunia Wells I<br>94-723 Kunia Rd                                 | NFA on 12/21/1994  | SI1      | 1/20/2004      | Ongoing |
|        |           | Kunia Wells II<br>94-700 Kunia Rd                                | NFA on 12/21/1994  | ISST     | 12/21/1994     | NFA     |
| Dahu   | Laie      | Laie Burger King Gasoline Fumes<br>55-510 Kamehameha Hwy         |                    | Archive  | 1/20/2004      | Ongoing |
|        |           | Laie Junkyard<br>55-164 Kamehameha Hwy                           | NFA on 2/23/1995   | ISST     | 2/23/1995      | NFA     |
| Dahu   | Lualualei | HECO-Mikilua Substation<br>Lualualei & Morser Rd                 |                    | ISST     | 1/20/2004      | Ongoing |
|        |           | NRTF Lualualei   |                    | Remedial | 1/20/2004      | Ongoing |

|       |          | cality Site Name   |                   | Activity Status    |            |          |
|-------|----------|--|-------------------|--------------------|------------|----------|
| sland | Locality |  | Priority Ranking  | Type               | Date       | Result   |
| Dahu  | Maile    | Kapiki Junk Yard<br>87-1683 Kapiki Rd                                |                   | ISST               | 1/20/2004  | Ongoing  |
| Dahu  | Maili    | Lot 129 Kaukamana Road   | NFA on 3/11/1996  | ISST               | 3/11/1996  | NFA      |
| Dahu  | Makaha   | Unocal Service Station, Former #5245<br>84-1114 Farrington Hwy       |                   | Risk<br>Assessment | 3/21/1994  | Complete |
| Dahu  | Makakilo | Grace Pacific Corporation - Makakilo Quarry<br>91-920 Farrington Hwy |                   | ISST               | 1/20/2004  | Ongoing  |
|       |          | Palehua Solar Observatory  |                   | DSMOA              | 1/20/2004  | Ongoing  |
| Dahu  | Makapuu  | Makapuu Fish Poisoning   |                   | Risk<br>Assessment | 1/20/2004  | Ongoing  |
| Dahu  | Mililani | Mililani Wells 1<br>95-1043 Ahikao St                                | NFA on 12/21/1994 | ISST               | 12/21/1994 | NFA      |
| Dahu  | Mokuleia | Crowbar Ranch<br>68-540 Farrington Hwy                               | NFA on 4/12/1996  | ISST               | 4/12/1996  | NFA      |
|       |          | Dillingham Military Reservation                                      |                   | Research           | 1/20/2004  | Ongoing  |

|        |            |  |                      | Activity Status |            |               |
|--------|------------|--|----------------------|-----------------|------------|---------------|
| Island | Locality   | Site Name  | Priority Ranking     | Type            | Date       | Result        |
| Oahu   | Mokuleia   | Hawaiian Bitumuls Paving & Precast<br>Company-Mokuleia<br>Farrington Hwy | NFA on 4/15/1996     | ISST            | 4/15/1996  | NFA           |
|        |            | Kaala AFS<br>Kamakahi St   |                      | ISST            | 1/20/2004  | Ongoing       |
|        |            | Kaala Air Force Station<br>Kamakahi St                                   |                      | DSMOA           | 1/20/2004  | Ongoing       |
| Oahu   | Nanakuli   | Hakimo Road Maile<br>Hakimo Rd   |                      | ISST            | 1/20/2004  | Ongoing       |
|        |            | Hakimo Road Open Dump<br>1107 Hakimo Rd                                  |                      | Remedial        | 1/20/2004  | Refer to SHWB |
|        |            | Kaiser Cement Corp. Waianae Pt<br>Lualaulei Access Rd                    |                      | ISST            | 1/20/2004  | Ongoing       |
|        |            | Texaco Service Station #61-100-0093<br>87-1942 Farrington Hwy            | Refer to SHWB on 10/ | ISST            | 10/15/1998 | Refer to SHWB |
| Oahu   | Nuuanu     | HECO Transformer 26127<br>2621 Pali Hwy                                  |                      | Research        | 1/20/2004  | Ongoing       |
| Oahu   | Open Ocean | Ehime Maru   |                      | Archive         | 1/20/2004  | Ongoing       |
| Oahu   | Pearl City | 2375 Akalakala St, engine oil dumping<br>2375 Akalakala St               |                      | ISST            | 1/20/2004  | Ongoing       |

|            |   |   | _   | Activity Statu   | JS  |
|------------|---|---|---|--|---|
| Locality   | Site Name   | Priority Ranking  | Type  | Date   | Result  |
| Pearl City | DRMO Manana Storage Area  | Medium on 3/2/1995  | Remedial  | 1/20/2004  | Ongoing   |
|            | Hawaiian Electric CoWaiau Generating<br>Station<br>475 Kamehameha Hwy       | NFA on 12/29/1995   | ISST  | 12/29/1995   | NFA   |
|            | Pearl City Fuel Annex<br>Lehua Ave  |   | DS1   | 6/1/1981   | Ongoing   |
|            | Pearl City Junction<br>Kamehameha Hwy                                       | Medium on 8/31/1995   | Remedial  | 1/20/2004  | Ongoing   |
|            | Pearl City Landfill<br>Waipuna Ave  |   | ISST  | 1/20/2004  | Ongoing   |
|            | Pearl City Peninsula  | Medium on 3/2/1995  | Remedial  | 1/20/2004  | Ongoing   |
|            | Pearl City Texaco<br>1099 Waimano Home Rd                                   | NFA on 9/8/1998   | ISST  | 9/8/1998   | NFA   |
|            | Pearl City Towing<br>794 Lehua Ave  |   | ISST  | 1/20/2004  | Ongoing   |
|            | Waiawa Gulch<br>Waihona St  | Medium on 11/20/199!  | PA1   | 1/20/2004  | Ongoing   |
|            | Waiawa Shaft<br>Waihona St  | NFA on 4/15/1996  | ISST  | 4/15/1996  | NFA   |
|            | Waimano Training School and Hospital<br>UST Removal<br>2201 Waimano Home Rd |   | Unreg UST   | 1/20/2004  | Ongoing   |
|            | Waiwa Stream Tributary, Pearl City<br>2nd St                                |   | ISST  | 1/20/2004  | Ongoing   |
|            |   | Pearl City  DRMO Manana Storage Area  Hawaiian Electric CoWaiau Generating Station 475 Kamehameha Hwy  Pearl City Fuel Annex Lehua Ave  Pearl City Junction Kamehameha Hwy  Pearl City Landfill Waipuna Ave  Pearl City Peninsula  Pearl City Texaco 1099 Waimano Home Rd  Pearl City Towing 794 Lehua Ave  Waiawa Gulch Waihona St  Waiawa Shaft Waihona St  Waimano Training School and Hospital UST Removal 2201 Waimano Home Rd  Waiwa Stream Tributary, Pearl City | Pearl City  DRMO Manana Storage Area  Medium on 3/2/1995  Hawaiian Electric CoWaiau Generating Station 475 Kamehameha Hwy  Pearl City Fuel Annex Lehua Ave  Pearl City Junction Kamehameha Hwy  Pearl City Landfill Waipuna Ave  Pearl City Peninsula  Medium on 8/31/1995  Medium on 8/31/1995  Medium on 3/2/1995  Medium on 3/2/1995  Pearl City Texaco 1099 Waimano Home Rd  Pearl City Towing 794 Lehua Ave  Waiawa Gulch Waihona St  Waiawa Shaft Wainona St  Waimano Training School and Hospital UST Removal 2201 Waimano Home Rd  Waiwa Stream Tributary, Pearl City | Pearl City DRMO Manana Storage Area Medium on 3/2/1995 Remedial  Hawaiian Electric CoWaiau Generating Station 475 Kamehameha Hwy  Pearl City Fuel Annex Lehua Ave  Pearl City Junction Medium on 8/31/1995 Remedial  Kamehameha Hwy  Pearl City Landfill Waipuna Ave  Pearl City Peninsula Medium on 3/2/1995 Remedial  Pearl City Texaco NFA on 9/8/1998 ISST  1099 Waimano Home Rd  Pearl City Towing 794 Lehua Ave  Waiawa Gulch Medium on 11/20/199! PA1  Waihona St  Waiwano Training School and Hospital UST Removal 2201 Waimano Home Rd  Waiwa Stream Tributary, Pearl City ISST | Pearl City         DRMO Manana Storage Area         Medium on 3/2/1995         Remedial         1/20/2004           Hawaiian Electric CoWaiau Generating Station         NFA on 12/29/1995         ISST         12/29/1995           Station         475 Kamehameha Hwy         DS1         6/1/1981           Pearl City Fuel Annex Lehua Ave         DS1         6/1/1981           Pearl City Junction Kamehameha Hwy         Medium on 8/31/1995         Remedial         1/20/2004           Pearl City Landfill Waipuna Ave         ISST         1/20/2004           Pearl City Peninsula         Medium on 3/2/1995         Remedial         1/20/2004           Pearl City Texaco         NFA on 9/8/1998         ISST         9/8/1998           1099 Waimano Home Rd         ISST         1/20/2004           Pearl City Towing 794 Lehua Ave         ISST         1/20/2004           Waiawa Gulch Waihona St         Medium on 11/20/1991         PA1         1/20/2004           Waiawa Shaft Waihona St         NFA on 4/15/1996         ISST         4/15/1996           Waimano Training School and Hospital UST Removal 2201 Waimano Home Rd         Unreg UST         1/20/2004           Waiwa Stream Tributary, Pearl City         ISST         1/20/2004 |

|       |              |  |                      |          | Activity Stat | us      |
|-------|--------------|--|----------------------|----------|---------------|---------|
| sland | Locality     | Site Name                                  | Priority Ranking     | Type     | Date          | Result  |
| Oahu  | Pearl City   | Waterfront Manor<br>96-023 Waiawa Rd       | Medium on 10/19/199! | Remedial | 1/20/2004     | Ongoing |
| Dahu  | Pearl Harbor | Aiea Laundry<br>Kaimakani St & Moanalua Rd | Medium on 3/17/2003  | Remedial | 1/20/2004     | Ongoing |
|       |              | Battery Acid Pit, Bldg. 394                | Medium on 3/30/1995  | Remedial | 1/20/2004     | Ongoing |
|       |              | Building 8                                 | Medium on 8/31/1995  | Remedial | 1/20/2004     | Ongoing |
|       |              | Ewa Junction Fuel Drumming Facility        | Medium on 3/30/1995  | Remedial | 1/20/2004     | Ongoing |
|       |              | Ford Island Landfill                       |                      | ISST     | 1/20/2004     | Ongoing |
|       |              | Hotel Pier Site                            |                      | DSMOA    | 1/20/2004     | Ongoing |
|       |              | Makalapa Pesticide Pit                     |                      | SI1      | 8/8/1990      | А       |
|       |              | Naval Submarine Base                       |                      | ISST     | 1/20/2004     | Ongoing |
|       |              | NAVBASE PEARL HARBOR                       |                      | DSMOA    | 1/20/2004     | Ongoing |
|       |              | NAVPWC PEARL HARBOR                        |                      | DSMOA    | 1/20/2004     | Ongoing |
|       |              | NAVSHIPYARD PEARL HARBOR                   |                      | DSMOA    | 1/20/2004     | Ongoing |
|       |              |  |                      |          |               |         |

|       |              |   |  |           | Activity Stat | us       |
|-------|--------------|---|--|-----------|---------------|----------|
| sland | Locality     | Site Name   | Priority Ranking   | Type      | Date          | Result   |
| Dahu  | Pearl Harbor | NAVSTATION PEARL HARBOR                               |  | DSMOA     | 1/20/2004     | Ongoing  |
|       |              | NAVSUPPLYCTR PEARL HARBOR                             |  | DSMOA     | 1/20/2004     | Ongoing  |
|       |              | Oscar 2 Pier  | Medium on 8/31/1995  | Remedial  | 1/20/2004     | Ongoing  |
|       |              | Pearl Harbor Kai Elementary School UST                |  | Unreg UST | 1/20/2004     | Ongoing  |
|       |              | Pearl Harbor Naval Base, Subsurface Oil               | ase, Subsurface Oil Medium on 3/17/2003 Remedial 1/20/2004 | Ongoing   |               |          |
|       |              | Pearl Harbor Naval Center, Fletragru<br>Firetest Area |  | ISST      | 1/20/2004     | Ongoing  |
|       |              | Pearl Harbor Naval Center, Makalapa Crater            |  | ISST      | 1/20/2004     | Ongoing  |
|       |              | Pearl Harbor Naval Complex                            |  | Remedial  | 1/20/2004     | Ongoing  |
|       |              | Pearl Harbor Naval Shipyard                           |  | DSMOA     | 1/20/2004     | Ongoing  |
|       |              | Pearl Harbor Naval Shipyard Building 68               |  | SI1       | 8/21/1989     | Α        |
|       |              | Pearl Harbor Naval Station                            |  | HR1       | 7/25/1991     | Complete |
|       |              | Pearl Harbor Naval Supply Center                      |  | SI2       | 7/28/1991     | Α        |
|       |              | Pearl Harbor Navy Public Works Center                 |  | SI2       | 7/28/1991     | Α        |
|       |              |   |  |           |               |          |

|        |                       | Activ   |                     | Activity Statu     | IS         |          |
|--------|-----------------------|---|---------------------|--------------------|------------|----------|
| Island | Locality              | Site Name   | Priority Ranking    | Type               | Date       | Result   |
| Oahu   | Pearl Harbor          | Pearl Harbor Sediment Study                                       | Medium on 3/2/1995  | Remedial           | 1/20/2004  | Ongoing  |
|        |                       | PWC Transformer Sites   |                     | ISST               | 1/20/2004  | Ongoing  |
|        |                       | Shore Intermediate Maintenance Activity                           |                     | ISST               | 1/20/2004  | Ongoing  |
|        |                       | U.S. Navy Exchange Laundry Facility<br>Kaimakani St & Moanalua Rd |                     | Remedial           | 1/20/2004  | Ongoing  |
|        |                       | USN Fleet Training Group<br>1430 South Ave                        |                     | ISST               | 1/20/2004  | Ongoing  |
| Oahu   | Punaluu               | Punaluu Wells II<br>Haleaha Rd                                    | NFA on 9/30/1995    | ISST               | 9/30/1995  | NFA      |
| Oahu   | Red Hill              | Red Hill Facility   | Medium on 3/18/2003 | Remedial           | 1/20/2004  | Ongoing  |
| Oahu   | Sand Island           | Sand Island Industrial Park                                       |                     | Remedial           | 1/20/2004  | Ongoing  |
|        |                       | Sand Island State Park Brownfields<br>1640 Sand Island Pkwy       |                     | Brownfields<br>TSA | 10/20/2000 | Complete |
| Oahu   | Schofield<br>Barracks | Schofield Barracks<br>Trible Rd                                   |                     | Remedial           | 1/20/2004  | Ongoing  |
|        |                       | Schofield Barracks Building 652, 649, 650                         |                     | ISST               | 1/20/2004  | Ongoing  |

|        |                       |   |                  |          | Activity Stat | us      |
|--------|-----------------------|---|------------------|----------|---------------|---------|
| Island | Locality              | Site Name   | Priority Ranking | Type     | Date          | Result  |
| Oahu   | Schofield<br>Barracks | Schofield Barracks Sanitary Landfill<br>Trible Rd                                   |                  | SI1      | 8/1/1982      | А       |
|        |                       | Schofield Barracks Site 26 Car Care<br>Trible Rd                                    |                  | DSMOA    | 1/20/2004     | Ongoing |
|        |                       | Schofield Barracks, NCO Academy,<br>Building 6055<br>Trible Rd                      | Low on 3/6/1995  | Remedial | 1/20/2004     | Ongoing |
| Oahu   | Wahiawa               | Kaukonahua Bridge<br>Kaukonahua Stream Rd & Wilikina Dr                             | NFA on 4/29/1996 | ISST     | 4/29/1996     | NFA     |
|        |                       | Naval Computer & Telecommunication Area<br>Master Station (NCTAMS)<br>500 Center St |                  | HR1      | 1/20/2004     | Ongoing |
|        |                       | Naval Computer & Telecommunication Area<br>Master Station (NCTAMS)<br>500 Center St |                  | Remedial | 1/20/2004     | Ongoing |
|        |                       | Naval Computer & Telecommunication Area<br>Master Station (NCTAMS)<br>500 Center St |                  | NP1      | 1/20/2004     | Ongoing |
|        |                       | NAVCAM  |                  | DSMOA    | 1/20/2004     | Ongoing |
|        |                       | Opana   |                  | DS1      | 5/1/1987      | Ongoing |
|        |                       | Silver Crest Elderly Housing<br>529 Pine St   | NFA on 2/22/1999 | ISST     | 2/22/1999     | NFA     |

|        |          |  |                     | Activity Status |           |                       |
|--------|----------|--|---------------------|-----------------|-----------|-----------------------|
| Island | Locality | Site Name  | Priority Ranking    | Type            | Date      | Result                |
| Oahu   | Waialua  | 68151 Au St, storm drain<br>68-151 Au St                           |                     | ISST            | 1/20/2004 | Ongoing               |
|        |          | Dillingham Airfield<br>Farrington Hwy                              |                     | ISST            | 1/20/2004 | Ongoing               |
|        |          | Mount Kaala Natural Area Reserve<br>68-350 Farrington Hwy          |                     | ISST            | 1/20/2004 | Ongoing               |
|        |          | Waialua Sugar Company, Inc.<br>Kealohanui St                       | High on 11/14/2001  | PA1/SI1         | 1/20/2004 | Ongoing               |
| Oahu   | Waianae  | 7 1/2-Acre Lot behind Waianae Mall                                 |                     | ISST            | 1/20/2004 | Ongoing               |
|        |          | 87-1641 Ulehawa Rd, Abandoned Pig Pen<br>87-1641 Ulehawa Rd        |                     | ISST            | 1/20/2004 | Ongoing               |
|        |          | Henry's Equipment Diesel Release<br>86-412 Lualualei Homestead Rd  |                     | ISST            | 1/20/2004 | Ongoing               |
|        |          | Industrial Technology Tire Pile<br>87-459 Mailiili Rd              | Medium on 6/11/1999 | Remedial        | 3/3/2003  | Refer to HEER<br>EP&R |
|        |          | Jaymer Inc<br>86-363 Hale Elua St                                  | NFA on 1/12/1996    | ISST            | 1/12/1996 | NFA                   |
|        |          | Larry's Chevron Service<br>86-038 Farrington Hwy                   |                     | ISST            | 1/20/2004 | Ongoing               |
|        |          | Leeward Petroleum Site #L-0837<br>85-723 Farrington Hwy            |                     | Unreg UST       | 1/20/2004 | Ongoing               |
|        |          | Maili Kai Emergency Access Road NFA on 12/24/2001 ISS<br>Hakimo Rd | ISST                | 12/24/2001      | NFA       |                       |

|        |  |   |                  |                    | Activity Statu | JS       |
|--------|--|---|------------------|--------------------|----------------|----------|
| Island | Locality   | Site Name   | Priority Ranking | Type               | Date           | Result   |
| Oahu   | Waianae  | Makua Military Reservation ORDN DISP                                  |                  | Remedial           | 1/20/2004      | Ongoing  |
|        |  | MAKUA MILITARY RESIDENTIAL  |                  | DSMOA              | 1/20/2004      | Ongoing  |
|        |  | Nanakuli Groundwater Contamination<br>Lualualei Access Rd & Paakea Rd |                  | ISST               | 1/20/2004      | Ongoing  |
|        |  | Naval Magazine Lualualei<br>3 Constellation St                        |                  | Remedial 1/20/2004 | 1/20/2004      | Ongoing  |
|        | P & S Sanitary Hauling Inc.<br>87-746 Farrington Hwy |   | NFA on 3/25/1996 | ISST               | 3/25/1996      | NFA      |
|        |  | Toledo Twin Pine Dairy NFA on 4/4/1996 ISST 85-443 Waianae Valley Rd  | 4/4/1996         | NFA                |                |          |
|        |  | Waianae Corporation Yard<br>86-220 Farrington Hwy                     |                  | Unreg UST          | 1/20/2004      | Ongoing  |
|        |  | Waianae Landfill<br>572 Waianae Valley Rd                             | NFA on 4/15/1996 | ISST               | 4/15/1996      | NFA      |
|        |  | Waianae Landfill Fire<br>86-348 Puhawai Rd                            |                  | ISST               | 1/20/2004      | Ongoing  |
| Oahu   | Waiau  | Chevron's Pipeline Oil Spill - Waiau 5/14/96<br>Kamehameha Hwy        |                  | NRDA               | 10/24/2002     | Complete |
| Oahu   | Waikakalaua  | Waikakalaua Ammo Storage Tunnels                                      |                  | Remedial           | 1/20/2004      | Ongoing  |

|        |  |   |                  |          | Activity Stat | us      |
|--------|--|---|------------------|----------|---------------|---------|
| Island | Locality                               | Site Name   | Priority Ranking | Туре     | Date          | Result  |
| Oahu   | Waimanalo                              | Bellows Air Force Station<br>220 Tinker Rd                                    |                  | Remedial | 1/20/2004     | Ongoing |
|        |  | Golden Melon Farms<br>Kulaiwi Rd  | NFA on 3/26/1996 | ISST     | 3/26/1996     | NFA     |
|        |  | Hawaiian Home Lands Waimanalo<br>Kauholokahiki St                             | NFA on 6/5/1997  | ISST     | 6/5/1997      | NFA     |
|        | Pahe Plantation<br>41-724 Kaulukanu Pl |   | NFA on 3/25/1996 | ISST     | 3/25/1996     | NFA     |
|        |  | University of Hawaii, Waimanalo<br>Experimental Farm                          |                  | Remedial | 1/20/2004     | Ongoing |
|        |  | Waimanalo Area-Wide Groundwater<br>Contamination<br>41-698 Ahiki St           |                  | Remedial | 1/20/2004     | Ongoing |
| Oahu   | Waipahu                                | ABC Chemical Corporation<br>94-131 Leowaena St                                | NFA on 2/18/1997 | ISST     | 2/18/1997     | NFA     |
|        |  | ABC Corporation Depot Road<br>Waipahu Depot St                                | NFA on 2/18/1997 | ISST     | 2/18/1997     | NFA     |
|        |  | Alexander and Baldwin Mill Town Diesel<br>Plume in Groundwater<br>Koaki St    |                  | VRP      | 1/20/2004     | Ongoing |
|        |  | Alexander and Baldwin Mill Town Lead<br>Contamination in Soil<br>Koaki St     | NFA on 7/29/2002 | ISST     | 7/29/2002     | NFA     |
|        |  | AMFAC Waipahu Sugar Chlorinated<br>Solvent Plume in Groundwater<br>Waipahu St |                  | Remedial | 1/20/2004     | Ongoing |

|       |          |   |                   | Activity Status |            |         |  |
|-------|----------|---|-------------------|-----------------|------------|---------|--|
| sland | Locality | Site Name   | Priority Ranking  | Type            | Date       | Result  |  |
| Dahu  | Waipahu  | AMFAC Waipahu Sugar Mill Machine Shop<br>Chlorinated Solvent in Soil<br>Waipahu St    |                   | ISST            | 1/20/2004  | Ongoing |  |
|       |          | Complete Auto Repair and Estimates<br>Hydraulic Lift Removal<br>94-875 Farrington Hwy |                   | Unreg UST       | 1/20/2004  | Ongoing |  |
|       |          | DRUMS ON A U-HAUL TRUCK DUMPED<br>94-500 Kamehameha Hwy                               |                   | ISST            | 1/20/2004  | Ongoing |  |
|       |          | Former Corey's Unocal<br>94-303 Waipahu St  | NFA on 4/7/2000   | ISST            | 4/7/2000   | NFA     |  |
|       |          | Managers Drive<br>Managers Dr   | High on 11/8/2000 | VRP             | 7/15/2002  | NFA     |  |
|       |          | Village Park  |                   | ISST            | 1/20/2004  | Ongoing |  |
|       |          | Waiawa Correctional Facility Tunnel UST<br>Removal<br>94-560 Kamehameha Hwy           |                   | ISST            | 1/20/2004  | Ongoing |  |
|       |          | Waipahu Ash Landfill<br>93-071 Waipahu Depot Rd                                       | NFA on 1/29/1996  | ISST            | 1/29/1996  | NFA     |  |
|       |          | Waipahu Fire Station<br>94-121 Leonui St  |                   | Unreg UST       | 1/20/2004  | Ongoing |  |
|       |          | Waipahu Wells<br>Cane Rd  | NFA on 12/21/1994 | ISST            | 12/21/1994 | NFA     |  |
|       |          | Waipio Heights Wells II<br>94-1014 Ka Uka Blvd  | NFA on 12/21/1994 | ISST            | 12/21/1994 | NFA     |  |
|       |          |   |                   |                 |            |         |  |

|        |                           |   |                  |          | Activity Stat | us      |
|--------|---------------------------|---|------------------|----------|---------------|---------|
| Island | Locality                  | Site Name   | Priority Ranking | Type     | Date          | Result  |
| Oahu   | Waipio                    | Ewa Sugar Mill/Oahu Sugar Co Waipio<br>Penninsula |                  | Remedial | 1/20/2004     | Ongoing |
| Oahu   | Wheeler Army<br>Air Field | Wheeler Air Force Base                            |                  | DSMOA    | 1/20/2004     | Ongoing |

# APPENDIX B FY 2003 DEPARTMENT OF HEALTH ENVIRONMENTAL HEALTH ADMINISTRATION HAZARD EVALUATION AND EMERGENCY RESPONSE OFFICE RELEASE NOTIFICATION LOG

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#### **APPENDIX B:**

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media              | Quantity     | Substance(s)         | Standard<br>Cause    | Result |
|--------|----------|--|--|--------------------|--------------|----------------------|----------------------|--------|
| Hawaii | Hakalau  | 20021210-1556<br>Hakalau Seed Plant<br>Hakalau Seed Plant<br>Diesel Release                                    | Unregulated UST Removal.   | Soil               |              | Unknown              | Leaking UST          | NFA    |
| Hawaii | Hilo     | 20030203-1130 Hawaii Electric Light Company Shipman Generating Station Lihiwai and Banyan Drive Lube oil spill | 50-100 gal of lube oil from one of lines contained in containment trench, (concrete), Sat 2/1/03.  | Within<br>Facility | 100 Gallons  | Lube Oil             | Equipment<br>Failure | NFA    |
| Hawaii | Hilo     | 20020701-1052<br>500 Kalanianaole Ave,<br>truck/car accident<br>500 Kalanianaole Ave,<br>truck accident        | Truck/car accident: fuel line ruptured. HFD responded; contained fuel. County Public Works cleaned up spilled fuel; contaminated soil removed. No impact to storm drains, streams, or ocean. | Soil               |              | Diesel Fuel          | Traffic<br>Accident  | NFA    |
| Hawaii | Hilo     | 20030508-0939 Tesoro Hawaii Corporation, Terminal Department-607 Kalanianaole DRILL Tesoro Hawaii Corporation  | Training DRILL Material released from a valve due to an unkiown cause.   | Soil               | 2100 Gallons | OIL, FUEL<br>NO. 2-D | Drill                | NFA    |
| Hawaii | Hilo     | 20030505-1537<br>Federal Express - Hilo<br>Hilo Airport Cargo Ramp   | Broken Hose from a loader  | Ramp<br>Area       |              | Hydraulic Oil        | Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media    | Quantity    | Substance(s)          | Standard<br>Cause    | Result          |
|--------|----------|---|---|----------|-------------|-----------------------|----------------------|-----------------|
| Hawaii | Hilo     | 20020727-1409<br>Hilo Bay Unknown Sheen<br>Hilo Bay Unknown<br>Sheen - #618055                                    | Caller reporting an unknown sheen of unknown quantity.  | Ocean    |             | Oil                   | Unknown              | NFA             |
| Hawaii | Hilo     | 20030602-1513<br>University of Hawaii-Hilo<br>Auto Shop<br>Petroleum Contaminated<br>Soil                         | Petroleulm contaminated soil discovered, 4/22/03, during excavation work at UH, adjacent to auto shop. Amount and source unknown.   | Soil     |             | Petroleum in soil     | Unknown              | Send to<br>ISST |
| Hawaii | Hilo     | 20030530-1412<br>Kuwaye Trucking<br>Kamehameha Ave<br>Solvent tote tank spill                                     | Tote tank fell off truck. Content unknown at this time, amount unknown. 5/31/03 written: Intersection of Keaa St. & Kam Hwy. 2 tote tank fell off truck bed, solvent spill along road side. Appx 400-500 gal. Solvent was Unitek 146 Solvent. |          | 550 Gallons | Unitek 146<br>Solvent | Traffic<br>Accident  | NFA             |
| Hawaii | Hilo     | 20030223-0000<br>Keaukaha<br>Industrial Park Air<br>Complaint   | Caller has concerns about air quality and man-made allergens potentially from industrial park.  |          |             |                       |                      | NFA             |
| Hawaii | Hilo     | 20030530-1551 Hawaii Electric Light Company Hill/Kanoelehua Operations Center HELCO pad-mounted transformer 15923 | Leak from transformer radiator valve.   | Concrete | 100 Gallons | Shell Diala<br>Oil    | Leaking-Over<br>Time | NFA             |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media           | Quantity | Substance(s)       | Standard<br>Cause    | Result          |
|--------|----------|--|---|-----------------|----------|--------------------|----------------------|-----------------|
| Hawaii | Hilo     | 20030416-1616<br>Kaumaha Substation<br>Kaumaha Substation  | Leak from rust-decayed transformer housing  | Soil            |          | Shell Diala<br>Oil | Leaking-Over<br>Time | NFA             |
| Hawaii | Hilo     | 20030131-1958<br>Hilo Bay, Pier 3<br>DRILL Tow Boat Services   | Training DRILL Tank on a barge overfilled, causing 200 barrels to spill into water.   | Ocean           | Barrels  | Naphtha            | Drill                | NFA             |
| Hawaii | Hilo     | 20030124-1155 Keaukaha Military Reservation Container Disposal Keaukaha Military Reservation Container | Old spill. Received sampling report but no initial notification.  | Soil            |          |                    |                      | Send to<br>ISST |
| Hawaii | Hilo     | 20030117-1212 Condominium Next to State Building White Oily Substance DRILL White Oily Substance       | Training DRILL Caller stated that people are pressure washing a building. White oily substance being released onto ground and into the river. Stated that fish are dying as a result of this release. | Soil &<br>Water |          | Unknown            | Drill                | NFA             |
| Hawaii | Hilo     | 20020904-0810<br>Hilo Main Harbor, Pier 3,<br>sheen<br>Hilo Main Harbor, Pier 3,<br>sheen              | The caller is reporting an unknown sheen sighting.  |                 |          |                    | Unknown              | NFA             |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media              | Quantity   | Substance(s)           | Standard<br>Cause    | Result |
|--------|----------|--|--|--------------------|------------|------------------------|----------------------|--------|
| Hawaii | Hilo     | 20020911-1300<br>Pohakuloa Training Area<br>Public Works Yard<br>Public Works Yard<br>Magnesium Hydroxide<br>Spill                   | PH Reading 12, container holding liquid tipped over. Corrosive liquid, 20 gals.  | Soil               | 20 Gallons | Magnesium<br>Hydroxide |                      | NFA    |
| Hawaii | Hilo     | 20021113-1345 Hawaii Electric Light Company Shipman Generating Station HELCO Shipman Gauge Line Oil Leak                             | Release of #6 Oil from gauge line in valve pit   | Within<br>Facility | 90 Gallons | Fuel Oil #6            | Equipment<br>Failure | NFA    |
| Hawaii | Hilo     | 20021113-1237 Hawaii Electric Light Company Shipman Generating Station Hawaii Electric Light Company (HELCO)/Lihiwai St & Banyon Dr. | Caller reported a release of #6 oil from line at terminal due to leak on gage line. Affected Medium: Other (2nd containment) | Other              |            | Fuel Oil #6            | Equipment<br>Failure | NFA    |
| Hawaii | Hilo     | 20021113-1024<br>Hilo Harbor<br>DRILL Hilo Harbor Pier 3   | Training DRILL Material released from barge (Pinto) , due to human error. DRILL DRILL  | Ocean              | 4 Barrels  | Diesel Fuel            | Drill                | NFA    |
| Hawaii | Hilo     | 20020810-0810<br>Hilo Bay, Pier 3<br>Hilo Bay, Pier 3 sheen  | The caller reported an unknown sheen sighting.   |                    | Sheen      |                        | Unknown              | NFA    |

| Island | Locality    | Case Number and<br>Site Identification   | Initial Incident   | Media             | Quantity     | Substance(s)       | Standard<br>Cause    | Result |
|--------|-------------|--|--|-------------------|--------------|--------------------|----------------------|--------|
| Hawaii | Kailua Kona | 20030530-0917<br>Area off Kailua-Kona<br>Sheen incident - Kailua<br>Kona                                 | Sheen reported in the water at the beach along the seawall.  | Ocean             |              |                    | Unknown              | NFA    |
| Hawaii | Kailua-Kona | 20030527-1132<br>Kailua-Kona Oil Sheen<br>Unknown Sheen Along<br>Seawall                                 | Unknown sheen reported in the water at the beach along seawall.  | Water             |              | Oil                | Unknown              | NFA    |
| Hawaii | Kailua-Kona | 20030324-1832<br>Luhia Street<br>Transformers<br>PCB Free transformer<br>spill                           | Transformer spill-PCB free.<br>2-3 phase bank transformer<br>on pole. 180 gals<br>transformer oil.   | Asphalt /<br>soil | 180 Gallons  | Oil                |                      | NFA    |
| Hawaii | Kailua-Kona | 20030213-1335 HELCO Transformer Orchid Isle Auto Center Leaking Padmount Transformer - NonPCB            | Non-PCB oil spill from padmount transformer. Spill noticed on 2/6/03 @ 1100 hours. Padmount replaced on 2/8/03. Amount unknown pending test results.                       | Soil              | > 25 Gallons | Shell Diala<br>Oil | Equipment<br>Failure | NFA    |
| Hawaii | Kamuela     | 20020716-1135<br>TOSCO Corporation-<br>Kawaihae Terminal<br>#0317<br>Kawaihae Harbor Oil<br>Primer Spill | Material released from a can<br>of primer due to harbor wake<br>knocked the platform and the<br>can was knocked into the<br>water spilling material.<br>Cleanup completed. | Water             | 0.5 Gallons  | Primer Oil         | Harbor wake          | NFA    |

| Island | Locality     | Case Number and<br>Site Identification  | Initial Incident   | Media | Quantity   | Substance(s)       | Standard<br>Cause    | Result |
|--------|--------------|---|--|-------|------------|--------------------|----------------------|--------|
| Hawaii | Kau          | 20030610-1122<br>Kahuku Ranch Island of<br>Hawaii<br>Kahuku Ranch Island of<br>Hawaii                           | Minor surface spills of oil (<25 gallons estimated) at the Kahuku Ranch, Kau District, Island of Hawaii.   | Soil  |            |                    |                      | NFA    |
| Hawaii | Kaumana City | 20030221-1620<br>Transformer #15531<br>HELCO pole-mounted<br>transformer #15531                                 | Leak from rust-decayed transformer housing. Incident did not require verbal notification, as the release was less than 25 gallons.                                       | Soil  | 20 Gallons | Shell Diala<br>Oil | Equipment<br>Failure | NFA    |
| Hawaii | Kawaihae     | 20030402-1042<br>Clean Island Council -<br>Drill Kawaihae Harbor<br>DRILL CIC/Conoco<br>Phillips Drill 641149   | Training DRILL Caller reported that due to a valve that was bumped from an IMO tank lube oil spilled into the Kawaihae Harbor which caused oil to leak. //Drill Report// | Water | 4 Barrels  |                    | Drill                | NFA    |
| Hawaii | Kawaihae     | 20020807-1315<br>Clean Island Council -<br>Drill Kawaihae Harbor<br>DRILL CIC Drill #<br>619242 Kawaihae Harbor | Training DRILL 15 barrels of diesel oil was released from a barge due to a broken hose. Drill Report.  | Ocean | 15 Barrels | Diesel Oil         | Drill                | NFA    |
| Hawaii | Kawaihae     | 20020912-0823 DRILL Conoco Phillips DRILL DRILL DRILL Kawaihea Harbor side pipeline unannouced                  | Training DRILL Facility harbor side pipeline 30 barrels low sulfur diesel. No further information will be forthcoming. Phone number given 479-1654.                      |       |            |                    | Drill                | NFA    |

| Island | Locality   | Case Number and<br>Site Identification   | Initial Incident  | Media | Quantity    | Substance(s)      | Standard<br>Cause               | Result |
|--------|------------|--|---|-------|-------------|-------------------|---------------------------------|--------|
| Hawaii | Kona       | 20030428-1325<br>Kailua-Kona Harbor<br>Slip J 23 5 gal diesel spill                                    | Diesel Fuel spilled into Kailua-<br>Kona Harbor from bilge of<br>fishing vessel, Fishnchips.  | Ocean |             | Diesel Oil        | Equipment<br>Failure            | NFA    |
| Hawaii | Kona       | 20030514-1040<br>Norweigen Cruise Line -<br>Kona Open Ocean<br>Norweigen Cruise Line<br>Norweigen Star | Small hydraulic leak from faulty piece of equipment on cruise ship  | Water |             | Hydraulic Oil     | Vessel-<br>Equipment<br>Failure | NFA    |
| Hawaii | Kona       | 20030425-1003<br>Kona International Airport<br>Jet Fuel Spill Release                                  | Jet fuel spill occurred during<br>transfer process and nozzle<br>was not secured properly.<br>Fire dept notified and clean<br>up in progress. | Lava  | 200 Gallons | Jet Fuel          | Transfer-<br>Operator           | NFA    |
| Hawaii | Kona       | 20030219-2051<br>Kona International Airport<br>United Airlines Flight 50                               | Jet fuel spill 750 gal. No<br>stormdrain entry. Bradley<br>Pacific refueling United<br>Airlines Flight 50.                                    |       | 750         | Jet Fuel          |                                 | NFA    |
| Hawaii | Open Ocean | 20020925-1209<br>Unknown Sheen 623952<br>Unknown Sheen 623952  | Caller reported sighting of unknown sheen North of the Big Island, Honokaa, HI. No further information available.                             | Water |             |                   | Unknown                         | NFA    |
| Hawaii | Port Allen | 20021119-1107<br>Clean Island Council -<br>Port Allen Harbor Drill<br>DRILL CIC Drill 629631           | Training DRILL Material released from barge due to overfilling of a vent.   | Ocean | 1 Barrels   | Diesel Fuel<br>#2 | Drill                           | NFA    |

| Island   | Locality           | Case Number and<br>Site Identification   | Initial Incident   | Media                        | Quantity   | Substance(s)       | Standard<br>Cause      | Result |
|----------|--------------------|--|--|------------------------------|------------|--------------------|------------------------|--------|
| Hawaii   | South Kohala       | 20021201-0948<br>HELCO Transformer<br>Puako Beach Road<br>HELCO pole-mount<br>transformers #23741<br>and 24411 | Pole guy anchor broke, causing pole to fall to the roadway. Impact caused two of the pole's three transformers to release their oil charges. 46 gallons represents the combined release from both transformers.  | Asphalt                      |            |                    | Equipment<br>Failure   | NFA    |
| Hawaii   | Waikoloa           | 20020914-1534<br>HELCO Transformer<br>7057<br>HELCO transformer #<br>7057                                      |  |                              |            |                    |                        | NFA    |
| Hawaii   | Waikoloa           | 20020917-1514<br>HELCO Transformer<br>7057<br>HELCO transformer<br>#7057                                       | Leak from broken connector (bushing) on top of transformer housing. Transformer fell while being transported by contractor on flatbed tractor-trailer truck. Released oil charge appx 15 gals. Impacted area: flatbed trailer, materials on trailer and soil | Soil,<br>truck,<br>materials | 15 Gallons | Shell Diala<br>Oil | Transporting equipment | NFA    |
| Johnston | Johnston<br>Island | 20030215-1205<br>Johnston Atoll, Pacific<br>Ocean<br>5 gallon oil spill  | Filling forward ballast tank with water, air vent overfilled with water and oil, releasing materials on deck and into water.   | Ocean                        | 5 Gallons  | Oil                |                        | NFA    |

| Island   | Locality     | Case Number and<br>Site Identification  | Initial Incident   | Media                | Quantity   | Substance(s)               | Standard<br>Cause      | Result           |
|----------|--------------|---|--|----------------------|------------|----------------------------|------------------------|------------------|
| Kahoolaw | e Honokanaia | 20030303-1130 Kahoolawe - Honokanaia Base Camp Spill Discovery of Contaminants at Base Camp | Report submitted on discovery of soil contaminants   | Soil                 |            |                            |                        | NFA              |
| Kauai    | Eleele       | 20021106-1405 Port Allen Terminal Kauai Commercial truck overfill                           | 57 gals of heavy ended diesel fuel washed down in bermed area, strip drain into collecting tank.   | Asphalt              | 57 Gallons | Diesel Fuel<br>High Sulfur | Operator Error         | NFA              |
| Kauai    | Eleele       | 20020923-1400<br>Kauai Electric, Port Allen<br>Generating Facility<br>Port Allen Release    | Common header sensor failed after material was switched from #3 tanker to #4, thus causing fuel, chevron high sulfur to overflow. Spill occurred on 9/22/02 @ 2100 hrs. Est. 50-75 gallons involved. | Concrete<br>and soil | 50 Gallons | High Sulfur<br>oil         | Equipment<br>Failure   | NFA              |
| Kauai    | Hanalei      | 20021115-0912<br>Anini Beach Cylinder<br>Compressed Cylinder                                | Unknown compressed gas cylinder 3 inches diameter, 1.5 ft long. Labled "hazardous substance", appears to be from Barking Sands (PMR).  |                      | 1          | Cylinder                   | Unsecured<br>Container | Refer to<br>USCG |
| Kauai    | Kapaa        | 20030220-1245<br>Nonou Well 9-1-C - 0321-<br>01<br>Waialua Houselots Well<br>91C            | Chlorine tank leak.  | Air                  |            | Chlorine                   | Equipment<br>Failure   | NFA              |

| Island | Locality    | Case Number and<br>Site Identification   | Initial Incident  | Media | Quantity     | Substance(s)             | Standard<br>Cause    | Result          |
|--------|-------------|--|---|-------|--------------|--------------------------|----------------------|-----------------|
| Kauai  | Lihue       | 20030422-1426<br>Elima Road Soil Stock<br>Pile<br>Elima Road Soil Stock<br>Pile  | Petroleum Contaminated Soil<br>Stock Pile.  |       |              | Petroleum<br>Hydrocarbon | Leaking UST          | Send to<br>ISST |
| Kauai  | Lihue       | 20030602-0812<br>Nawilwili Harbor Pier 1<br>Vegetable oil based<br>Hydraulic oil spill   | Due to hose failure a vegetable oil based hydraulic oil spilled into Nawiliwili Harbor from stern thruster on barge.  | Ocean |              | Vegetable Oil            | Equipment<br>Failure | NFA             |
| Kauai  | Nawiliwili  | 20020814-1315<br>Nawiliwili Harbor, Pier 2<br>Nawiliwili Harbor, Pier 2  | Diesel Fuel spilled into the nawiliwili Harbor from a fuel barge  |       |              | Diesel Fuel              | Vesssel-Spill        | NFA             |
| Kauai  | Princeville | 20020819-1525 Princeville Shopping Center-Foodland Back Parking Lot Princeville Shopping Center-Foodland Parking lot transformer spill | 30-40 gallons of padmount transformer mineral oil. 500 KVA. Total capacity unknown at this time. Contained the spill. Little on asphalt, some in dirt, none in storm drain. 9/3: 12.62 gallons spilled. | Soil  | 12.6 Gallons | Mineral Oil              | Traffic<br>Accident  | NFA             |
| Kauai  | Waimea      | 20030512-1541<br>Former Downie's Unocal<br>Former Downie's Unocal  |   | Soil  |              | Oil                      | Leaking-Over<br>Time | NFA             |
| Lanai  | Kaumalapau  | 20021024-1443<br>Kaumalapau Harbor<br>DRILL Diesel spill<br>Kaumalapau Harbor  | Training DRILL Oil spilled into Kaumalapau Harbor from overfilled tank on barge. DRILL DRILL  | Ocean | 5 Barrels    | Diesel Fuel              | Drill                | NFA             |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media | Quantity     | Substance(s)       | Standard<br>Cause    | Result           |
|--------|----------|--|--|-------|--------------|--------------------|----------------------|------------------|
| Maui   | Kahalui  | 20021103-1430<br>Kanaha Beach Dumping<br>Kanaha Beach Dumping                      | Illegal dumping of roofing tar   | Soil  |              | Roofing Tar        | Fugitive<br>Dumping  | NFA              |
| Maui   | Kahana   | 20030610-1610<br>Lot 29 & 30 Piina Place<br>Lot 29 & 30 Piina Place<br>transformer | Runaway forklift struck padmount transformer, causing rupture and fire.  | Soil  | > 25 Gallons | Shell Diala<br>Oil | Equipment<br>Failure | NFA              |
| Maui   | Kahului  | 20020923-2035<br>LOWES DEPARTMENT<br>STORE<br>Lowes Department Store               | Caller reported that store is doing remodeling which is causing strong odors in the store.   | Air   |              |                    | Unknown              | NFA              |
| Maui   | Kahului  | 20030418-1509 Formerly Master's Roofing Allegation of dumping                      | Allegation of dumping and excavation and covering up. Allegation that Master's Roofing formerly owned site and illegally buried roofing material; equipment on site (loader, excavation) | Soil  |              |                    |                      | Refer to<br>SHWB |
| Maui   | Kahului  | 20021107-1505<br>Kanaha Substation -<br>Hawaiian Electric<br>Kanaha Substation     | Transformer A released 100 gal- PCB 100-160 ppm . Transformer B released less than 100 gallons PCB 44 ppm  | Soil  |              |                    |                      | Send to<br>ISST  |

| Island | Locality    | Case Number and<br>Site Identification  | Initial Incident  | Media    | Quantity      | Substance(s)       | Standard<br>Cause    | Result |
|--------|-------------|---|---|----------|---------------|--------------------|----------------------|--------|
| Maui   | Kahului     | 20020826-1000<br>Young Brothers Kahului<br>Young Brothers Kahului                           | Valve broken on intermodal cargo tank (4800 gal total capacity) by forklift. Not all spilled, some containment by barge Kukahi. Occurred approx. 9:25-9:30 am. 500 gal entered water.                         | Ocean    | < 350 Gallons | Oil, Used          | Operator Error       | NFA    |
| Maui   | Kihei       | 20020715-1617<br>MECO pad-mount<br>transformer #7933<br>MECO pad-mount<br>transformer #7933 | Leak from rust-decayed transformer housing.   | Soil     |               |                    | Leaking-Over<br>Time | NFA    |
| Maui   | Kihei       | 20021112-1630<br>MECO Transformer<br>#12763<br>MECO Transformer<br>#12763                   | Written 11/12/02 leak of rust-<br>decayed transformer<br>housing. Concrete<br>transformer pad impacted, no<br>soil. Shell Diala insulating Oil<br>(non-PCB mineral oil), appx 2<br>gals.                      | Concrete | 2 Gallons     | Shell Diala<br>Oil | Equipment<br>Failure | NFA    |
| Maui   | Kihei, Maui | 20030104-<br>Messenger of Peace<br>Messenger of Peace<br>Vessel Grounding on<br>Maui        | Messenger of Peace private vessel grounded on Humpback Whale Sancturary, Kehei Maui. Coast Guard defueled. NOAA and DLNR paid for removal and scuttle. No hazardous substance or oil released to environment. | Ocean    |               |                    | Lost Anchor          | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media           | Quantity    | Substance(s) | Standard<br>Cause               | Result |
|--------|----------|--|---|-----------------|-------------|--------------|---------------------------------|--------|
| Maui   | Lahaina  | 20020703-0834<br>Lahaina Harbor Sheen<br>Sighting<br>Lahaina Harbor Unknow<br>Sheen      | Caller reported an unknown oil sheen of 15 ft by 10 ft.   | Ocean           |             | Oil          | Unknown                         | NFA    |
| Maui   | Lahaina  | 20030502-1943<br>2 miles south of Lahaina<br>Harbor<br>Lahaina Harbor - 2 miles<br>South | 3 crew members flipped over<br>an excursion craft for a cruise<br>liner, due to heavy swells.<br>The vessel washed ashore<br>with damage to the motor.<br>The caller stated that about 5<br>liters of diesel may have<br>entered the water. | Ocean           | 20 Liters   |              | Weather                         | NFA    |
| Maui   | Lahaina  | 20021127-1519<br>Norwegian Star<br>Norwegian Star Shaft<br>leak                          | Leaking propeller shaft. No significant leak observed by PENCO. Ship proceeded to Honolulu for repairs.   | Ocean           | 0.5 Gallons | Oil          | Vessel-<br>Equipment<br>Failure | NFA    |
| Maui   | Lahaina  | 20020922-0610<br>Lahaina Harbor<br>Oil near Lahaina Harbor                               | Caller discovered 2-3 big patches of oil near Lahaina Harbor. Caller believes that the oil may have come fro cruise ships in the area.  |                 |             |              | Unknown                         | NFA    |
| Maui   | Lahaina  | 20030120-1652<br>Mala Wharf<br>Mala Wharf  | Sailing vessel grounded.<br>Request owner's ID via HA<br>numbers.   | Ocean /<br>sand |             | None         | Vessel-<br>Grounding            | NFA    |

| Island | Locality             | Case Number and<br>Site Identification  | Initial Incident  | Media           | Quantity     | Substance(s)  | Standard<br>Cause    | Result          |
|--------|----------------------|---|---|-----------------|--------------|---------------|----------------------|-----------------|
| Maui   | Maalaea              | 20020730-1430 MECO-Maalaea Generating Station Maalaea Generating Station Fuel Supply Line Release   | Fuel Supply Line release.   |                 | 9800 Gallons | Diesel Fuel   |                      | Send to<br>ISST |
| Maui   | Makawao              | 20021012-0906<br>Makawao Mercury Spill<br>Makawao Mercury Spill                                     | Thermometer broke while immerising in pot of boiling water  |                 | 1 Ounces     | Mercury       | Operator Error       | NFA             |
| Maui   | Maui (East<br>Shore) | 20030519-1530<br>Waianapanapa State<br>Park<br>Waianapanapa tar balls                               | Tar balls washing ashore.   | Ocean /<br>each |              | Tar balls     | Unknown              | NFA             |
| Maui   | Puunene              | 20020919-1350<br>Hawaiian Commercial &<br>Sugar Company<br>Area adjacent to the<br>Cane Hauler Shop | Approximately forty gallons of hydraulic oil was released adjacent to the Cane Hauler Shop at the Puunene Sugar Mill. The spill was onto the hard-packed soil of an access road. A hydraulic hose on a front-end loader failed during routine operations. |                 | 40 Gallons   | Hydraulic Oil | Equipment<br>Failure | NFA             |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media             | Quantity | Substance(s) | Standard<br>Cause                   | Result          |
|--------|----------|---|--|-------------------|----------|--------------|-------------------------------------|-----------------|
| Maui   | Puunene  | 20030619-1035 Puunene Sugar Mill Cane Hauler Shop   | Cause of spill unknown. Could be from recently closed fuel dispensing/filtering sys or UST that was removed years ago. 2nd entry-Liz: excavating to install new USTs & hit impacted soil. Smells. Cover up excavation with plastic.Will bring in cont. | Soil              |          | Oil          | Leaking<br>UST/leaking<br>container | Send to<br>ISST |
| Maui   | Puunene  | 20020912-1600<br>Hawaiian Commercial &<br>Sugar Company<br>Hawaiian Commercial &<br>Sugar Company | Approx. 50 gallons of diesel fuel was released @ the cane hauler parking area near the Puunene Sugar Mill.   | Soil              |          | Diesel Fuel  | Operator Error                      | NFA             |
| Maui   | Puunene  | 20020929-1930<br>Hawaiian Commercial &<br>Sugar Company<br>Upper Division 5                       | The engine oil drain plug on one of the cane hauler tractors apparently vibrated loose during routine hauling operations. All of the oil contained in the engine was released.   | Asphalt           |          | Motor Oil    | Equipment<br>Failure                | NFA             |
| Maui   | Puunene  | 20020910-1546 Hawaiian Commercial & Sugar Company Hawaiian Commercial & Sugar Company Power Plant | Approx. 50 gallons of used oil was released adjacent to the tank farm at the Puunene Power Plant. The spill was to soil and concrete slab.   | Soil and concrete |          | Used oil     | Operator Error                      | NFA             |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media              | Quantity    | Substance(s)       | Standard<br>Cause    | Result |
|--------|----------|---|--|--------------------|-------------|--------------------|----------------------|--------|
| Maui   | Puunene  | 20020723-1055<br>Hawaiian Commercial &<br>Sugar Company<br>Shredding Mill 50 gallon<br>lube oil spill | Operator error; damage to shredding mill so operator was setting flowrate & set it too fast, releasing approx 50 gallons to concrete. Cleanup with bagasse (absorbents) and burn in boilers.   | Concrete           | 50 Gallons  | Oil<br>Lubricating | Operator Error       | NFA    |
| Maui   | Puunene  | 20021226-1644<br>Puunene Sugar Mill<br>Puunene Sugar Mill   | Approximately thirty gallons of diesel fuel was released from a service truck at the tractor repair shop at the Puunene Sugar Mill.  | Asphalt            |             |                    |                      | NFA    |
| Maui   | Puunene  | 20030422-1413 Puunene Sugar Mill Crane broke hydraulic line   | Unloading crane broke hydralic line.   |                    |             | Hydraulic Oil      | Equipment<br>Failure | NFA    |
| Maui   | Puunene  | 20030324-0800<br>Hawaiian Commercial &<br>Sugar Company<br>Puunene Sugar broken<br>hydraulic line     | Broken Hydraulic line-<br>unloading train- 11pm last<br>night. 150 gals on cement<br>slab and some to soil.  | Concrete<br>/ soil | 150 Gallons | Hydraulic Oil      |                      | NFA    |
| Maui   | Puunene  | 20021118-0907<br>Hawaiian Commercial &<br>Sugar Company<br>Hose break in Grinding<br>Mill             | Hose break in one of grinding mills, releasing 100 gals of hydraulic oil in basement of mill where water collection is collected. Water and oil mixture released onto fields. Sorbent pads in place, no release outside of facility, no rains. | Soil               | 100 Gallons | Hydraulic Oil      | Equipment<br>Failure | NFA    |

| Island  | Locality   | Case Number and<br>Site Identification  | Initial Incident  | Media    | Quantity    | Substance(s)          | Standard<br>Cause    | Result |
|---------|------------|---|---|----------|-------------|-----------------------|----------------------|--------|
| Maui    | Puunene    | 20021120-0726 Hawaiian Commercial & Sugar Company Puunene Power Plant's Turbo-generator Building        | Turbine oil released into basement of power plant turbo-generator building.   | Concrete | 300 Gallons | Turbine Oil           | Equipment<br>Failure | NFA    |
| Maui    | Puunene    | 20030325-0927<br>Puunene Sugar Mill<br>Used Oil Overflow Spill  | Used oil overflowed from oil/water separator tank   | Soil     | 125 Gallons | Used Oil              | Operator Error       | NFA    |
| Maui    | Wailuku    | 20020823-1327<br>Y Hata- Maui<br>Petroleum/Lead<br>Release, 200 Waiehu<br>Beach Rd.                     | Release into on-site concrete-<br>lined historic drainage trench<br>that has released onto<br>surrounding soils. Release<br>into historic cesspool @<br>former bldg structure site.<br>Release reported after<br>analytical report showed<br>petroleum substances. Site:<br>Former Y.Hata & |          |             |                       |                      | NFA    |
| Molokai | Kaunakakai | 20020730-1403<br>Clean Island Council -<br>Drill 618378<br>DRILL Clean Island<br>Council - Drill 618378 | Training DRILL Gas spilled into Kuanakai Harbor from transfer hose on barge due to gasket failure. Drill.   | Ocean    | 4 Barrels   | Gasoline,<br>Unleaded | Drill                | NFA    |
| Molokai | Kaunakakai | 20021106-1249<br>Kaunakakai Harbor, 2-D<br>Spill 628392<br>DRILL Kaunakakai<br>Harbor, 2-D Spill 628392 | Training DRILL Material release from barge (Pinto) due to tank on barge breaking open. DRILL DRILL  | Ocean    | 4 Barrels   | 2-D                   | Drill                | NFA    |

| Island  | Locality   | Case Number and<br>Site Identification   | Initial Incident  | Media              | Quantity     | Substance(s)          | Standard<br>Cause    | Result |
|---------|------------|--|---|--------------------|--------------|-----------------------|----------------------|--------|
| Molokai | Kaunakakai | 20030509-0838<br>Island Petroleum, Inc<br>(Kaunakakai Terminal)<br>Barge tranfer pinhole<br>leak in line | Barge tranferring High Sulfur Diesel has pinhole leak in pipeline. Pipe was starting to get wet, stop transfer. Written 5/13/03 Expansion joint on cargo line began dripping product out during transfer. Rust hole on expansion joint bracket. | Asphalt /<br>road  |              | High Sulfur<br>Diesel | Equipment<br>Failure | NFA    |
| Oahu    |            | 20021121-1210<br>HECO Transformer<br>#5987C<br>Hawaiian Electric<br>Transformer #5987C                   | Oil release from transformer.<br>Initial clean up done.   | Soil /<br>Concrete | > 25 Gallons | Transformer<br>Oil    | Leaking-Over<br>Time |        |
| Oahu    |            | 20020726-1254<br>H-1 Asbestos Bag<br>H-1 Asbestos Bag  | State road crew on scene. Hazmat 1 called for assistanceRespond to abandoned asbestos containing material. Bag retaped and goose necked. Removed by PENCO.  | Other              |              | Asbestos              | Fugitive<br>Dumping  | NFA    |
| Oahu    |            | 20020726-1254<br>H-1 Asbestos Bag<br>H-1 Asbestos Bag  | State road crew on scene. Hazmat 1 called for assistanceRespond to abandoned asbestos containing material. Bag retaped and goose necked. Removed by PENCO.  | Other              |              | Asbestos              | Fugitive<br>Dumping  | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media          | Quantity   | Substance(s)       | Standard<br>Cause    | Result          |
|--------|----------|--|---|----------------|------------|--------------------|----------------------|-----------------|
| Oahu   | Aiea     | 20020807-0723 Halawa Correctional Facility (Medium Security) Washing residue from furniture refurbishing into stormdrain | Alleged improper disposal of wastes. Refurbishing chairs: sand off old paint, prep it, and apply paint. Practice is to shoot water to clean up and it goes to a storm drain. There should be evidence of blue & white paint by storm drain. | Storm<br>Drain |            | Paint              | Runoff               | NFA             |
| Oahu   | Aiea     | 20020806-1130<br>HECO Transformer<br>39209<br>HECO Transformer #<br>39209 Spill  | 15 gallons of Shell Diala AX<br>Insulating Oil or equivalent<br>(non-PCB mineral oil) spilled<br>from Transformer #39209.<br>Quantity < 25 gallons bu not<br>remediated within 72 hours.  | Concrete       | 15 Gallons | Shell Diala<br>Oil | Equipment<br>Failure | NFA             |
| Oahu   | Aiea     | 20030603-1503<br>Shell Service Station<br>(Pearlridge Shell)<br>Two Hydraulic Hoist<br>removed                           | Removed 2 hydraulic hoist<br>from ground, (March '03). 1<br>non-detect, the other had<br>residual TPH oil.  | Soil           | 25 Gallons | Hydraulic Oil      | Unknown              | Send to<br>ISST |
| Oahu   | Aiea     | 20030118-1556<br>Ford Island<br>Ford Island Unknown<br>Sheen   | Unknown sheen discovered from unknown source.   | Ocean          |            |                    | Unknown              | NFA             |
| Oahu   | Ala Wai  | 20020921-1411<br>Ala Wai Harbor Sheen<br>Ala Wai Harbor Sheen  | Caller is reporting the discovery of a sheen of unknown origin on Ala Wai Harbor. Caller describes the material as black sludge.  |                | 3 Gallons  | Unknown            | Unknown              | NFA             |

| Island | Locality                    | Case Number and<br>Site Identification                                      | Initial Incident  | Media   | Quantity   | Substance(s)      | Standard<br>Cause   | Result |
|--------|-----------------------------|---|---|---------|------------|-------------------|---------------------|--------|
| Oahu   | Ala Wai                     | 20021202-1732<br>Ala Wai Harbor Sheen<br>Ala Wai Harbor Sheen<br>NRC 630668 | Oil sheen in Ala Wai coming from unknown pleasure craft.  | Water   |            | Oil               | Fugitive<br>Dumping | NFA    |
| Oahu   | Ala Wai                     | 20021202-1232<br>Ala Wai Harbor<br>Ala Wai Sheen                            | sheen from unknown pleasure craft   | Water   |            |                   | Fugitive<br>Dumping | NFA    |
| Oahu   | Ala Wai<br>Yacht Harbor     | 20030507-0952<br>Ala Wai Yacht Harbor<br>Unknown sheen 644297               | Unknown sheen in Ala Wai<br>Yatch Harbor.   | Ocean   |            | Unknown oil       | Unknown             | NFA    |
| Oahu   | Alewa Heights               | 20021101-1430<br>2355 Makanani Drive<br>2355 Makanani Dr. Odor<br>complaint | Complaintant stated Seal<br>Coat applied 10 separate<br>times to aggravate medical<br>condition of<br>complaintant(Howard<br>Gushiken). | Asphalt | 20 Gallons | Asphalt<br>Sealer | Maintanance         | NFA    |
| Oahu   | Campbell<br>Industrial Park | 20021205-1430<br>Kalaeloa Barge Harbor<br>(Drill)<br>DRILL 4 barrels spill  | Training DRILL Transfer hose ruptured causing Diesel fuel to spill into Kalaeloa Barge Harbor.  | Ocean   | 4 Barrels  | Diesel Fuel       | Drill               | NFA    |
| Oahu   | Campbell<br>Industrial Park | 20021105-1559<br>Kalaeloa Barge Harbor<br>(Drill)<br>DRILL 2-D spill        | Training DRILL Material released from terminal during loading operation. DRILL DRILL  | Ocean   | 2 Barrels  | 2-D               | Drill               | NFA    |

| Island | Locality          | Case Number and<br>Site Identification  | Initial Incident  | Media    | Quantity    | Substance(s) | Standard<br>Cause    | Result           |
|--------|-------------------|---|---|----------|-------------|--------------|----------------------|------------------|
| Oahu   | Diamond<br>Head   | 20030604-0826<br>Noela Street<br>Transformer 36968<br>Transformer 36968   | Padmount transformer, 36968, failed . Found empty. >25 gal .  | Concrete | 36 Gallons  | Mineral Oil  | Equipment<br>Failure | NFA              |
| Oahu   | Diamond<br>Head   | 20021128-0630<br>Kolea Grounding<br>Kolea Grounding   | Vessel grounding and fuel release   | Ocean    | 900 Gallons | Diesel Fuel  | Vessel-Spill         | NFA              |
| Oahu   | Drill             | 20020710-0750 DRILL CSX Enterprise collision with Norwegian Star DRILL CSX Enterprise collision with Norwegian Star | Training DRILL The CSX Enterprise has collided with the Norwegian Star causing a release of materials into the Pacific Ocean. The cause for the collision is unknown.                         | Ocean    |             |              | Drill                | NFA              |
| Oahu   | Enchanted<br>Lake | 20030218-1600<br>Kaelepulu Stream<br>behind Akuila Place<br>55 gal drum in stream                                   | Black plastic 55 gal drum<br>floating on stream and<br>stranded on island. Label<br>"acetic acid",<br>barnecles/oysters on side.  | Stream   |             | Empty drum   | Fugitive<br>Dumping  | NFA              |
| Oahu   | Ewa Beach         | 20020731-0930 Pohiko Street, solid waste & vector problem Pohiko Street, solid waste & vector problem               | Solid waste and vector problem. Children play on lot. Big empty lot with no maintenance, allegations of construction demolition debris dumping (dirt, wood, cement water). Mice being caught. |          |             |              |                      | Refer to<br>SHWB |

| Island | Locality     | Case Number and<br>Site Identification   | Initial Incident  | Media | Quantity    | Substance(s)          | Standard<br>Cause    | Result |
|--------|--------------|--|---|-------|-------------|-----------------------|----------------------|--------|
| Oahu   | Ewa Beach    | 20020927-0852<br>HECO Transformer 91-<br>032 Fort Weaver Road<br>Transformer91-032 Ft.<br>Weaver Rd. | Transformer failed (lost of fluid from rust holes). However, upon opening the transformer at the shop, transformer was empty. Transformer was replaced 9/20/02 and discovery of empty contents was 9/25/02. Non-PCB.              | Soil  | 260 Gallons | Transformer<br>Oil    |                      | NFA    |
| Oahu   | Ford Island  | 20020829-1250<br>Ford Island Pier<br>Ford Island Pier  | Pump Arizona Tour Boat #13<br>@ Ford Island Pier.   | Ocean | 0.25 Cups   | Bilge water           |                      | NFA    |
| Oahu   | Fort Shafter | 20030428-1410<br>Fort Shafter Flats<br>DPW Storage Yard<br>(West of B1598)                           | Open 5-gal pail found in DPW yard with water and oil. Surrounding soil darkened indicating oil probably overflowed as container filled with rainwater. Lab results of soil indicate presence of motor oil and trace amount diesel | Soil  | 5 Gallons   | Motor Oil &<br>Diesel |                      | NFA    |
| Oahu   | Fort Shafter | 20030528-1038 Fort Shafter Building 1362/1366 Transformer Leaking Building 1362/1366                 | Transformer found leaking, non -PCB label on transformer.   | Soil  |             | Transformer<br>Oil    | Equipment<br>Failure | NFA    |
| Oahu   | Fort Shafter | 20030428-1412<br>Fort Shafter Flats<br>Fort Shafter Flats  | Hydraulic oil dripping from pump. Someone removing pump, capstan motor and control stolen from truck  | Soil  |             |                       | Equipment<br>Failure | NFA    |

| Island | Locality   | Case Number and<br>Site Identification   | Initial Incident   | Media                         | Q | uantity    | Substance(s)                    | Standard<br>Cause                  | Result |
|--------|------------|--|--|-------------------------------|---|------------|---------------------------------|------------------------------------|--------|
| Oahu   | Haleiwa    | 20021128-1630<br>Kaunala St. Drug Lab-<br>Abandoned Drum<br>Kaunala St Drug Lab-<br>Abandoned Drum | After raid on drug lab, drum left in house by HPD, created exposure threat to occupants of residence.  | Drum or<br>Other<br>Container |   |            | N,N<br>Dimethyldode<br>cylamine | Clan Lab                           | NFA    |
| Oahu   | Hawaii Kai | 20020809-1130<br>HECO Transformer<br>48238<br>HECO Transformer<br>#48238 - 6311 Ookala<br>Place    | Transformer was struck by an automobile.   | Soil                          | > | 25 Gallons | Shell Diala<br>Oil              | Leaking-<br>Someone<br>Ran into It |        |
| Oahu   | Hawaii Kai | 20030218-0950<br>1077 Kalapaki Street<br>Leaking transformer<br>#36604 vault 3037                  | Leaking transformer >25 gal of oil, non PCB  | Concrete<br>/ soil            |   | 25 Gallons | Oil                             | Equipment<br>Failure               | NFA    |
| Oahu   | Heeia      | 20020905-1453<br>HEEIA PARK BUCKETS<br>& WAIKANE<br>Heeia Park Buckets and<br>Waikane              | Contractor responded to Heeia Park & Waikane to remove abandoned drums/buckets.  |                               |   |            |                                 | Fugitive<br>Dumping                | NFA    |
| Oahu   | Hickam AFB | 20030522-1312<br>Hickam AFB UST ST35<br>F-1808<br>Hickam AFB UST ST35<br>F-1808                    | Detected black stained soil w/ slight petroleum odor around the top of the UST & piping. Soil beneath the UST was black stained w/ moderate to strong petroleum odor (PIP = 850ppm). Spots of fuel oil were noted on the surface of the groundwater. | Soil &<br>Groundw<br>ater     |   |            | Heating Oil                     | Leaking UST                        | NFA    |

| Island | Locality                 | Case Number and<br>Site Identification  | Initial Incident  | Media                     | Quantity | Substance(s)  | Standard<br>Cause   | Result          |
|--------|--------------------------|---|---|---------------------------|----------|---------------|---------------------|-----------------|
| Oahu   | Hickam AFB               | 20030417-1419<br>Hickam AFB Kuntz St.<br>ST35 F-7-2105<br>Par 3 Golf Course, west<br>of 7th green | Analytical results from samples collected within the UST and piping excavations indicated low levels (below HDOH tier 1 action levels) of petroleum constituents. Confirmed Release Notification Form received 4/23/03. | Soil                      |          | Unknown       | Leaking UST         | NFA             |
| Oahu   | Hickam AFB               | 20020828-1246<br>JP-8 Fuel Release<br>JP-8 Fuel Release   | Pressure test on fuel line<br>failed. Excavation of soil<br>indicated fuel (JP-8). Clean<br>up in progress. Amount<br>suspected over 25 gallons.<br>Possible water table<br>impacted. Media: Soil,<br>groundwater       | Ground<br>water /<br>Soil |          | Jet Fuel JP-8 | Pipeline<br>Failure | NFA             |
| Oahu   | Hickam Air<br>Force Base | 20030327-0648<br>Hickam UST ST35 F-5-<br>2105<br>ST35 F-5-2105 600 gal<br>steel tank              | UST removal, black and gray stained soil with moderate hydrocarbon odor was detected along bottom and northern end of excavation.   | Soil                      |          | Fuel Oil      |                     | Send to<br>ISST |
| Oahu   | Hickam Air<br>Force Base | 20021004-1505<br>Hickam East of Bldg<br>1046<br>ST31 1046B Tank                                   | Drilling confirmation sample points found oil droplets and slight sheen on groundwater.   |                           |          | Oil           |                     | Send to<br>ISST |

| Island | Locality                 | Case Number and<br>Site Identification  | Initial Incident   | Media                 | Quantity       | Substance(s)  | Standard<br>Cause    | Result |
|--------|--------------------------|---|--|-----------------------|----------------|---------------|----------------------|--------|
| Oahu   | Hickam Air<br>Force Base | 20021113-1306<br>Lateral Control Pit #3,<br>Hickam AFB HI<br>Spill at Lateral Control<br>Pit #3, Hickam | Defueling operation were<br>performed and a "closed fuel<br>return line was left open after<br>defueling operations. Fuel<br>leaked from the open line   | Ground<br>water       |                |               | Equipment<br>Failure | NFA    |
| Oahu   | Hickam Air<br>Force Base | 20021016-1500<br>Hickam AFB Pipeline<br>Leak @ 962 2nd St.<br>Second St. pipeline break                 | Pipeline break   | Stream                | < 2400 Gallons | Jet Fuel JP-8 | Pipeline<br>Failure  | NFA    |
| Oahu   | Hickam Air<br>Force Base | 20030525-0656<br>Hickam Air Force Base<br>JP-8 5 gal spill 645986                                       | Fuel tank on 747 aircraft overflowed causing jet fuel to spill onto asphalt and concrete surface.  | Concrete<br>/ asphalt |                | Jet Fuel JP-8 | Equipment<br>Failure | NFA    |
| Oahu   | Hickam Air<br>Force Base | 20030502-1521<br>Hickam UST ST35 F-17-<br>2105<br>ST35 F-17-2105  | Detected black stained soil with moderate petroleum odor (PID = 185 ppm) around the fuel port. The soil beneath former UST was stained black with moderate petroleum odor (PID = 583 ppm). Contamination appears concentrated at Southern end of excavation. | Soil                  |                | Fuel Oil      |                      |        |
| Oahu   | Hickam Air<br>Force Base | 20030502-1520<br>Hickam UST ST35 F-22A<br>ST35 F-22A 1,000 steel<br>tank                                | Samples collected from UST<br>and piping excavations<br>detected low levels of<br>petroleum compounds (below<br>HDOH Tier1 action level)   | Soil                  |                | Fuel Oil      |                      |        |

| Island | Locality                 | Case Number and<br>Site Identification  | Initial Incident   | Media    | Quantity     | Substance(s)       | Standard<br>Cause      | Result |
|--------|--------------------------|---|--|----------|--------------|--------------------|------------------------|--------|
| Oahu   | Hickam Air<br>Force Base | 20030417-1421<br>Hickam UST ST35 F-21B<br>UST ST35 F-21B                            | During sampling of the floor of the south end of the Ust excavation soil with bluish gray staining and slight petroleum odor was detected. Samples were collected and submitted for laboratory analysis. Confirmed Release Notification Form received 4/23/03. | Soil     |              | Fuel Oil           | Leaking UST            | NFA    |
| Oahu   | Hickam Air<br>Force Base | 20021011-1515<br>Vandenberg Ave/Fox<br>Ave Fuel Spill<br>JP-8 Fuel Spill            | Labor excavating ground hit underground fuel line resulting in fuel spill.   | Soil     |              |                    | Maintanance            | NFA    |
| Oahu   | Hickam Air<br>Force Base | 20020729-1814<br>HECO Transformer<br>66880<br>HECO Transformer<br>#66880 Hickam AFB | Load tap changer failed causing heat and overpressure releasing Shell Diala AX Insulating Oil or equivalent (non-PCB mineral oil); approx. 120 gallons.  | Soil     | 120 Gallons  | Transformer<br>Oil | Equipment<br>Failure   | NFA    |
| Oahu   | Honolulu                 | 20021013-1651<br>Blaisdell sewage release<br>Blaisdell Sewage release               | Grease accumulation caused sewer to overflow. Cleaned and disinfected. Follow storm drain to Kewalo. All clear, no visible sewage outfall.   | Concrete | 1445 Gallons | Sewage             | Sewage Line<br>Failure | NFA    |
| Oahu   | Honolulu                 | 20030114-1511<br>Dick's Monsarrat<br>Service, Inc.<br>Hydraulic Hoist Fluid         | Soil samples were conducted during site cleanup for station closure and traces of hydraulic oil was found.   | Soil     |              |                    | Leaking-Over<br>Time   | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media    | Quantity   | Substance(s)       | Standard<br>Cause                     | Result |
|--------|----------|--|---|----------|------------|--------------------|---------------------------------------|--------|
| Oahu   | Honolulu | 20021015-1502<br>Evergreen Eagle Spill<br>Evergreen Eagle Spill                              | Damge to tow boom causing fluid leak.   | Concrete | 50 Gallons | Hydraulic<br>Fluid | Equipment<br>Failure                  | NFA    |
| Oahu   | Honolulu | 20021015-1503 Evergreen Eagle Spill Evergreen eagle north ramp hydraulic leak                | Broken hydraulic cylinder oil leak. Contractor clean up.  | Concrete | 50 Gallons | Hydraulic<br>Fluid | Hydraulic<br>Line Rupture             | NFA    |
| Oahu   | Honolulu | 20021016-1200<br>Honolulu Harbor<br>Material released from<br>hose                           | Material released from hose   | Concrete | 2 Gallons  | Diesel Fuel        | Operator Error                        | NFA    |
| Oahu   | Honolulu | 20020830-0819<br>Pier 27 Honolulu Harbor<br>Pier 26-27 sheen                                 | Someone steam cleaning barge at another pier. Sheen is coming to Pier 26-27.  | Ocean    | Sheen      |                    | Maintenance                           | NFA    |
| Oahu   | Honolulu | 20020903-1438<br>Kalanimoku Building<br>Kalanimoku Building<br>Suspicious Package            | Suspicious package reported   |          |            |                    | Suspected<br>Bioterrorism<br>Incident | NFA    |
| Oahu   | Honolulu | 20020826-1559<br>HECO Transformer<br>34970<br>HECO 400 Valkenburgh<br>St. Transformer #34970 | Shell Diala AX Insulating Oil or equivalent (non-PCB mineral oil); Approx. 5 gallons. Leal from rust-decayed housing. Less than 25 gallons, however cleanup period exceeded 72 hours. | Soil     | 5 Gallons  | Transformer<br>Oil | Equipment<br>Failure                  | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media              | Quantity    | Substance(s) | Standard<br>Cause    | Result |
|--------|----------|--|--|--------------------|-------------|--------------|----------------------|--------|
| Oahu   | Honolulu | 20021012-1335 Sand Island WWTP Peaked flow flushing operation                                  | While running a flushing operation, Two transfer pumps hit peak flow causing pump to overflow  | Within<br>Facility | 500 Gallons | sewage       | Maintanance          | NFA    |
| Oahu   | Honolulu | 20020826-0640<br>HECO Transformer<br>72709 (Vault 753)<br>HECO V753 72709<br>Transformer Spill | Transformer Spill: HECO crews excavated 1 tote box of contaminated soil and cordoned off area. | Concrete           |             | Oil          | Transformer<br>spill | NFA    |
| Oahu   | Honolulu | 20020923-0924<br>Honolulu Harbor Drum<br>Unknown<br>Honolulu Harbor Drum<br>Unknown            | Caller reported that a drum was found in the water. There was no release.                      | Water              |             |              | Fujitive<br>Dumping  | NFA    |
| Oahu   | Honolulu | 20020924-2023<br>Ala Wai Main Harbor<br>Sheen<br>Ala Wai Main Harbor<br>Sheen                  | Caller reported an unknown sheen, causing a strong odor. No additional information available.  | Water              |             |              | Unknown              | NFA    |
| Oahu   | Honolulu | 20030118-1710<br>Ala Wai - Small Boat<br>Harbor<br>Vessel on rocks                             | 40' sailing vessel on rocks.   | Ocean              |             | None         | Vessel-<br>Grounding | NFA    |
| Oahu   | Honolulu | 20030120-0951<br>Honolulu Harbor<br>Near USCG base   | 55 gal drum floating in harbor near USCG base.   | Lava               | 1 Drum (    | Unknown      | Unknown              | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media     | Quantity | Substance(s)  | Standard<br>Cause                | Result |
|--------|----------|---|--|-----------|----------|---------------|----------------------------------|--------|
| Oahu   | Honolulu | 20020927-0840 Honolulu International Airport Bottle found by patrolling squadron                        | Unattended bottle found by patrolling squadron, bagged, then dropped off at State Crash Fire Crew. State Fire call 911.                                      | Container |          |               | Unknown                          | NFA    |
| Oahu   | Honolulu | 20030120-1315<br>Ala Wai canal<br>Barge Hydraulic Oil leak  | Vegetable oil based hydraulic<br>oil leaked 10 gal in canal.<br>Valve partially cracked<br>caused leak not ruptured line.                                    | Ocean     |          | Hydraulic Oil | Equipment<br>Failure             | NFA    |
| Oahu   | Honolulu | 20020927-1325 Ilikai Hotel White substance in film canister under bed                                   | Film canister found under bed contained unknown white substance.   | Other     |          | Unknown       |                                  | NFA    |
| Oahu   | Honolulu | 20030121-1357<br>Ala Wai Boat Harbor,<br>500 Piers<br>Pierslip 501                                      | Boat sank, 63' sport fishing boat.   | Ocean     |          | Diesel Fuel   | Boat sank,<br>vessel<br>grounded | NFA    |
| Oahu   | Honolulu | 20030122-1412<br>Barge Pinto Fuel Spill<br>Drill 634822<br>DRILL Barge Pinto Fuel<br>Spill Drill 634822 | Training DRILL Fuel spill from an overfilled barge (Pinto) at Kalaeloa Harbor, releasing 10 barrels of diesel fuel overall and 3 barrels in the water. Drill | Ocean     |          |               | Drill                            | NFA    |
| Oahu   | Honolulu | 20030116-1622<br>Kapalama Military<br>Reservation<br>Pier 40 cylinder leaking<br>oil                    | Cylinder leaking oil, oil spill<br>2' x 2' size.   | Asphalt   |          | Oil           | Leaking<br>Container             | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media                    | Quantity   | Substance(s)  | Standard<br>Cause   | Result          |
|--------|----------|--|--|--------------------------|------------|---------------|---------------------|-----------------|
| Oahu   | Honolulu | 20020904-1448 Paradise Landscape Maintenance, Inc. Paradise Landscape Maintenance, Inc.              | Substance were stored in a trailer. The trailer burned and the substance were released from the product packaging and container. |                          |            | Hydraulic     | Fire                | Send to<br>ISST |
| Oahu   | Honolulu | 20021126-0031 Honolulu International Airport Gate 2 50 gal JP-8 fuel spill, plane ID HS-UTC          | Fuel spill from aircarft, cause is unknown.  | Storm<br>Drain           | 50 Gallons | Jet Fuel JP-8 | Unknown             | NFA             |
| Oahu   | Honolulu | 20020910-1435<br>Sand Island Bridge<br>DRILL Vessel collision<br>with bridge                         | Training DRILL Release of fuel from vessel due to collision with Sand Island Bridge. Ship lost control.                          | Ocean                    |            | Heavy Oil     | Drill               | NFA             |
| Oahu   | Honolulu | 20021125-1311<br>Abandoned Drums,<br>Keola Street<br>Abandoned Drums,<br>Keola Street                | Contractor responded for removal of abandoned drums.   | Other                    |            |               | Fugitive<br>Dumping | NFA             |
| Oahu   | Honolulu | 20030629-1240<br>HECO Transformers<br>46551, 46552, 46553<br>HECO Transformer<br>46551, 46552, 46553 | Release was the result of a vehicle accident to a termite damaged pole.  | Asphalt<br>&<br>Concrete | 25 Gallons | Trans Oil     | Traffic<br>Accident | NFA             |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media                    | Quantity    | Substance(s)  | Standard<br>Cause    | Result          |
|--------|----------|--|---|--------------------------|-------------|---------------|----------------------|-----------------|
| Oahu   | Honolulu | 20021114-1519 Hale Koa Hotel Excavating for Water Line                               | Caller reported of petroleum release during ground excavation for water line. Release occurred approx 1 week before notification as a result of lab sampling. Test indicated TPH oil/diesel present.  | Soil                     |             |               | Leaking-Over<br>Time |                 |
| Oahu   | Honolulu | 20020910-1435<br>Sand Island Bridge<br>DRILL Vessel collision<br>with bridge         | Training DRILL Release of fuel from vessel due to collision with Sand Island Bridge. Ship lost control.   | Ocean                    | 500 Barrels | Diesel Oil    | Drill                | NFA             |
| Oahu   | Honolulu | 20021113-1500<br>Underground Hoists<br>Underground Hoists<br>Removal                 | Property owned by<br>Kamehameha Schools.<br>Removal of 2 underground<br>hoists, 1 of 2 leaked. 3-5 yrs<br>of soil removed and<br>stockpiled on site. Ground<br>water is at 5 ft. and is tidally<br>influenced. Monitoring well to<br>be placed, formerly CONT | Soil,<br>groundwa<br>ter |             | Hydraulic Oil | Leaking-Over<br>Time | Send to<br>ISST |
| Oahu   | Honolulu | 20030123-1107<br>Matson leaking container<br>Container leaking on<br>deck 634870     | Container on board container ship is leaking on deck, no water release. Arrive on Monday 1/27/03.   | On board<br>ship         |             |               | Leaking<br>Container | NFA             |
| Oahu   | Honolulu | 20020910-0903 Phillips Honolulu Harbor Pier 34 DRILL Honolulu Harbor - Pier 34 DRILL | Training DRILL: 08:20 Diesel spill when flange gasket failed while fueling from Pier 34 to barge. DRILL   | Ocean                    | 25 Gallons  | Diesel Oil    | Drill                | NFA             |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media              | Quantity | Substance(s)  | Standard<br>Cause      | Result |
|--------|----------|--|--|--------------------|----------|---------------|------------------------|--------|
| Oahu   | Honolulu | 20021127-1512<br>HECO Transformer<br>45210<br>1551 Kalakaua Avenue                               | Release was caused by a leak from a pad-mount transformer struck in an auto accident. Althought the leaking transformer was replaced and petroleum impacted soil peripheral to the release has been removed, oil impacted soil remains under the transformer p | Soil               |          |               | Traffic<br>Accident    | NFA    |
| Oahu   | Honolulu | 20021017-1450<br>Pier 35 Honolulu Harbor<br>MSRC Hawaii<br>Responder vessel spill                | Hydraulic hose on crank<br>broke. Spill oil contained,<br>however, heavy rains caused<br>oil to escape into water.<br>Sheen observed.  | Ocean              | 1 Pints  | Hydraulic Oil | Equipment<br>Failure   | NFA    |
| Oahu   | Honolulu | 20020904-1525<br>Matson, Pier 52,<br>Honolulu Harbor<br>Matson, Pier 52,<br>Honolulu Harbor      | The caller reported a release of hypochlorite on board vessel from cargo. Ship to be docked 9/4/02 at Pier 53 at 11am.   | Air                |          | Hypochlorite  | Unsecured<br>Container | NFA    |
| Oahu   | Honolulu | 20030101-1255<br>Northwest Airlines, Inc.<br>Spill 5 gal JP-8                                    | Fuel tank on commercial aircraft was overfilled causing jet fuel to spill on concrete surface.   | Concrete           |          | JP8           | Operator Error         | NFA    |
| Oahu   | Honolulu | 20021109-0054 Honolulu International Airport, Y Concourse Hydraulic Oil spill between gate 15/16 | Hydraulic oil spill apron between gate 15/16, from tractor. Surface only, no storm drain. Happened @ 2130.   | Tarmac /<br>Runway |          | Oil           | Operator Error         | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media              | Quantity     | Substance(s)       | Standard<br>Cause    | Result |
|--------|----------|--|---|--------------------|--------------|--------------------|----------------------|--------|
| Oahu   | Honolulu | 20021128-1130<br>Enchanted Lakes/Kailua<br>Kahili St bridge Sheen                  | Sheen in drainage canal   | Stream             |              | Oil                | Fugitive<br>Dumping  | NFA    |
| Oahu   | Honolulu | 20021108-2230 Honolulu International Airport Gate 14 & 15 Aloha Airlines Oil spill | Discharge of oil from hydraulic line on tow tractor   | Concrete           | 10 Gallons   | Hydraulic Oil      | Equipment<br>Failure | NFA    |
| Oahu   | Honolulu | 20021108-1018<br>Matson Pier 52<br>Matson Pier 52                                  | Material released from vessel<br>due to unknown cause.<br>Vessel: SS Lurline #<br>549900. Vessell midway<br>between Los Angeles and<br>Honolulu. ETA Hnl Sunday<br>1145.  | Air                |              |                    | Unknown              | NFA    |
| Oahu   | Honolulu | 20021230-0851<br>Ala Wai, sheen between<br>F & G dock<br>G dock oil slick          | Observed oil slick in harbor and oil surrounding her boat.  | Ocean              |              | Oil                | Fugitive<br>Dumping  | NFA    |
| Oahu   | Honolulu | 20021231-0737<br>Nuuanu transformer<br>HECO pad-mount<br>transformer #48617        | Padmount transformer spill releasing 31 gal of non-PCB oil; no storm drains affected. Lost all contents (31 gal). **5/6/03 Updating reports, numbers different. Liz gave ok to change time from 0719 to 0737. HECO assigned their own number. | Soil /<br>concrete | > 25 Gallons | Shell Diala<br>Oil | Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media   | Quantity    | Substance(s) | Standard<br>Cause    | Result |
|--------|----------|---|---|---------|-------------|--------------|----------------------|--------|
| Oahu   | Honolulu | 20021104-1753<br>Kewalo Basin<br>Kewalo Sheen   | Unknown Sheen   | Ocean   |             |              | Unknown              | NFA    |
| Oahu   | Honolulu | 20021025-0855 Treaterator Between Golf and Lima Treaterator Between Golf and Lima Oil Trail                       | Oil trail from treaterrator,<br>crossing Golf and Lima<br>Runway, leading to Aloha<br>Hangar  | Asphalt | 3 Gallons   | Oil          | Equipment<br>Failure | NFA    |
| Oahu   | Honolulu | 20021126-1323<br>Island Oil & Supply Co.,<br>Inc Oil Spill<br>Dropped Load 2344<br>Pahounui Drive                 | Approx 175 gallons of motor oil fell off the rear of a flatbed truck PENCO responded to release and clean up was completed. 30 cases (12 qts ea) of 10W 30 engine oil involved. | Asphalt | 175 Gallons | Motor Oil    | Traffic<br>Accident  | NFA    |
| Oahu   | Honolulu | 20021017-1802<br>Ala Wai Marina<br>Ala Wai Marina Sheen<br>on Water   | Sheen on water  |         |             |              | Unknown              | NFA    |
| Oahu   | Honolulu | 20020815-1056<br>Clean Island Council<br>Drill - Honolulu Harbor<br>DRILL CIC # 620042<br>Honolulu Harbor Pier 30 | Training DRILL  | Ocean   | 5 Barrels   | Diesel Fuel  | Drill                | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media    | Quantity | Substance(s)       | Standard<br>Cause    | Result          |
|--------|----------|---|---|----------|----------|--------------------|----------------------|-----------------|
| Oahu   | Honolulu | 20030402-1320 Nimitz Highway Water Improvement Project Sumner to Queen Nimitz Hwy Water Improvement Project Probing | Unknown substance in soil discovered during trench working at project site. Soil considered contaminated and transported off site for future disposition. | Soil     |          | Oil                | Leaking-Over<br>Time | NFA             |
| Oahu   | Honolulu | 20030409-1016 Pacific Cruises Pacific Cruises   | Material released from a storage tank on vessel due to overfilling. Sludge tank overfilled.   | Ocean    |          | Oil, Waste         | Unknown              | NFA             |
| Oahu   | Honolulu | 20030408-1447 University of Hawaii, Lower Campus Lower campus Tennis Courts   | Transformer leaking. Found 4/4/03 (Friday), slow leak rate. "Non PCB" label on transformer.   | Concrete |          | Transformer<br>Oil | Equipment<br>Failure | Send to<br>ISST |
| Oahu   | Honolulu | 20030408-1016<br>Sand Island Bridge<br>DRILL Crude Oil Spill  | Training DRILL Materials released from vessel due to unknown cause. DRILL DRILL   | Ocean    |          |                    | Drill                | NFA             |
| Oahu   | Honolulu | 20030214-1057<br>Honolulu Harbor Sheen<br>Pier 9<br>Sheen Pier 9  | Sheen coming from pier 10.<br>Sheen 900 1,000 ft. Rainbow<br>in color.  | Ocean    |          |                    | Fugitive<br>Dumping  | NFA             |
| Oahu   | Honolulu | 20030621-1145<br>Honolulu Harbor<br>Unknown sheen 648614  | Unknown oil sheen.  | Ocean    |          |                    | Unknown              | NFA             |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media                     | Quantity    | Substance(s) | Standard<br>Cause   | Result           |
|--------|----------|--|--|---------------------------|-------------|--------------|---------------------|------------------|
| Oahu   | Honolulu | 20030406-0532<br>Honolulu International<br>Airport Hatch stand #4<br>Asia Pacific Airlines JP-1<br>spill | 20 gal discharge of jet fuel at<br>Honolulu International<br>Airport. Release occurred<br>during fueling operations of<br>727 aircraft.          | Tarmack                   | 20 Gallons  | Jet Fuel     | Unknown             | NFA              |
| Oahu   | Honolulu | 20030314-0900<br>Abandoned Drums,<br>Diamond Head<br>Abandoned Drums,<br>Diamond Head                    | 3 drums in parking lot across dog park.  | Soil                      | 3 Drum (    | Oil          | Fugitive<br>Dumping | NFA              |
| Oahu   | Honolulu | 20021209-0956 Pearl Harbor Fuel Spill Pier H3 Arm Usumacinta Mexican Naval Vessel                        | Written 12/09/02 Improper ships force valve lineup during fueling caused a tank to be over-pressurized resulting in release of fuel into harbor. | Ocean                     | 100 Gallons | Diesel Fuel  | Transfer-nos        | NFA              |
| Oahu   | Honolulu | 20020729-0945 Abandoned Drums at Hart Street Abandoned Drums at Hart Street                              | HEER SOSC responded to abandoned drums @ Hart Street and removal of five drums.  | Asphalt                   | 5 Drum (    |              | Fugitive<br>Dumping | NFA              |
| Oahu   | Honolulu | 20030331-1525 Budget Rent-A-Car #2106 Oil release from storage tank - overfilling                        | Material released from storage tank due to overfilling.  | Storm<br>Drain /<br>water |             | Oil          | Operator Error      | Refer to<br>IDPP |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media    | Quantity   | Substance(s) | Standard<br>Cause    | Result          |
|--------|----------|---|--|----------|------------|--------------|----------------------|-----------------|
| Oahu   | Honolulu | 20030328-2222<br>Ala Wai Yacht Harbor<br>600 row<br>Sheen near slip 657                                 | Unknown oil slick in Yacht Harbor.   | Ocean    |            | Oil          | Unknown              | NFA             |
| Oahu   | Honolulu | 20030516-1240<br>Honolulu Harbor Pier 30<br>DRILL 2 barrel diesel spill                                 | Training DRILL Vent overflow on vessel, releasing diesel fuel into water.            | Ocean    |            | Diesel Fuel  | Drill                | NFA             |
| Oahu   | Honolulu | 20020806-0824<br>3347 Hayden Street,<br>malathion smell<br>3347 Hayden Street,<br>malathion smell       | Malathion smell at 3347<br>Hayden St-Kapahulu.                                       |          |            | Malathion    |                      | Refer to<br>DOA |
| Oahu   | Honolulu | 20020805-1039<br>Unknown Sheen Ala Wai<br>Harbor 619005<br>Unknown Sheen Ala Wai<br>Harbor 619005       | Caller reporting an unknown sheen. Sheen located behind llikai Hotel.                | Water    |            |              | Fugitive<br>Dumping  | NFA             |
| Oahu   | Honolulu | 20030322-0330<br>Honolulu International<br>Airport Gate 19<br>Honolulu International<br>Airport Gate 19 | Surge in fuel line caused<br>material to spill from hose<br>and onto ramp, 20 gal.   | Concrete | 20 Gallons | Oil          | Process<br>Upset-nos | NFA             |
| Oahu   | Honolulu | 20030314-1700<br>Middle Street<br>Abandoned Drums<br>Middle Street<br>Abandoned Drums                   | Respond to abandoned drums at Middle Street for removal. Add to C & C Recovery list. | Other    |            | Oil          | Fugitive<br>Dumping  | NFA             |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media              | Quantity   | Substance(s)  | Standard<br>Cause    | Result |
|--------|----------|---|--|--------------------|------------|---------------|----------------------|--------|
| Oahu   | Honolulu | 20030404-1317<br>Matson Pier 51B<br>Lurline Voyage 505 -<br>leaking container                     | Lurline Voyage 505 inbound<br>to Honolulu. Discovered<br>leaking container on board.<br>Appears to be paint which is<br>one of listed items in<br>container.                 | Hatch<br>cover     |            | Paint         | Leaking<br>Container | NFA    |
| Oahu   | Honolulu | 20030506-1000<br>Matson Navigation<br>Company<br>Vessel - Chief Gadao                             | Unknown substance leaking from container. Could be 1 of 9 hazardous chemicals although characteristics of substance do not any of the 9 hazardous materials. Amount unknown. | Within<br>Facility |            |               | Leaking<br>Container | NFA    |
| Oahu   | Honolulu | 20030515-0752<br>Pier 32 Honolulu Harbor<br>Tracy Cherri II                                       | While bunkering, overfill went into bucket, spilled ino water and caused sheen. (.5 cup)   | Ocean              | 0.5 Cups   | Oil           | Operator Error       | NFA    |
| Oahu   | Honolulu | 20020723-0900<br>Sand Island, Area 4,<br>lube oil spill<br>Sand Island, Area 4,<br>lube oil spill | The caller stated that there was lube oil spilled into the water.  | Ocean              | 20 Gallons | Lube Oil      | Unknown              |        |
| Oahu   | Honolulu | 20030514-1043 Pacific Air Cargo Ruptured hydraulic line   | Material released from loader unit for aircraft's due to ruptured hydraulic line. No water impact.   | Asphalt            |            | Hydraulic Oil | Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media    | Quantity   | Substance(s) | Standard<br>Cause    | Result |
|--------|----------|---|---|----------|------------|--------------|----------------------|--------|
| Oahu   | Honolulu | 20030514-0848 Barge Pinto Fuel Spill Drill 634822 DRILL Barge Pinto Fuel Spill Drill 644942 | Training DRILL Materails released from a barge due to an over flow. DRILL///.   | Ocean    | 10 Gallons |              | Drill                | NFA    |
| Oahu   | Honolulu | 20030509-1058<br>Universal Fishing<br>Company<br>Fishing Vessel Robin                       | A discharged occurred from vessel in drydock. Product discharged and entered storm drain creating a sheen in the Keehi Lagoon.  | Water    | 1 Gallons  | Motor Oil    | Vessel-Spill         | NFA    |
| Oahu   | Honolulu | 20021208-1230 Honolulu International Airport Lufthansa Air Cargo landing spill              | Jet performing emergency landing spilled fuel on concrete surface, from left wing of commercial cargo aircraft.   | Concrete | 20 Gallons | Jet Fuel     | Equipment<br>Failure | NFA    |
| Oahu   | Honolulu | 20030508-0845<br>Harbor Village Parking<br>Lot<br>Harbor Village Parking<br>Lot             | While doing roadwork, DOT -<br>Highways removed<br>transformer. Indication of oil<br>leaking. Cleanup being done  | Concrete |            | Non PCB oil  |                      |        |
| Oahu   | Honolulu | 20030416-1239<br>Barge "Pinto"<br>DRILL Tank overflow in<br>Kaumalapau Harbor               | Training DRILL Tank<br>overflowed on ficitious brage<br>Pinto. 3 barrels of gasoline<br>released from vessel. 1-2<br>barrels entering Kaumalapau<br>Harbor. DRILL DRILL | Ocean    |            |              | Drill                | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media | Quantity   | Substance(s)         | Standard<br>Cause    | Result           |
|--------|----------|---|--|-------|------------|----------------------|----------------------|------------------|
| Oahu   | Honolulu | 20030506-1030<br>Matson Pier 52<br>Bycosin Additive Spill   | Matson reported fuel spill due to drum being knocked over on deck of vessell, Lurline, with approximately 4 oz going into the water. Penco contacted to conduct cleanup operation. | Water | 4 Ounces   | Bycosin<br>Addivtive | Operator Error       | NFA              |
| Oahu   | Honolulu | 20020720-0855<br>Hawaiian Tug & Barge<br>Corporation<br>Kahului Harbor Diesel<br>Oil Spill                            | Release of 2 gallons of diesel oil from vessel dut to unknown cause in Kaului Harbor, Maui.  | Ocean | 2 Gallons  | Diesel Oil           |                      |                  |
| Oahu   | Honolulu | 20030501-1110<br>Pier 60 Honolulu Harbor<br>Watermain break (3"<br>inch)  | Watermain break (3" in) puddles of water have sheen on top.  |       |            |                      | Runoff               | NFA              |
| Oahu   | Honolulu | 20030425-1442<br>Pier 35 Honolulu Harbor<br>Fudo Maru #5  | Lube oil spilled onto deck<br>and into Honolulu Harbor<br>from vent system on fishing<br>vessel. 10 gals on deck, 1<br>teaspoon into water.  | Ocean | 10 Gallons | Lubricating<br>Oil   | Equipment<br>Failure | NFA              |
| Oahu   | Honolulu | 20030424-1504 Nimitz Highway Water Improvement Project Sumner to Queen Nimitz Hwy Water Improvement Project Trenching | Petroleum in soil discovered during trench working at project site. Soil considered contaminated and transported off site for future disposition.                                  | Soil  |            | Oil                  | Leaking-Over<br>Time | Refer to<br>IDPP |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media          | Quantity   | Substance(s)       | Standard<br>Cause    | Result |
|--------|----------|---|---|----------------|------------|--------------------|----------------------|--------|
| Oahu   | Honolulu | 20030421-2130<br>HECO Transformer<br>66016<br>HECO Transformer<br>66016   | Non-PCB mineral oil release. Power line was struck by a falling tree, pulling pole to ground; transformer ruptured upon impact.   | Storm<br>Drain | 25 Gallons | Mineral Oil        | Equipment<br>Failure | NFA    |
| Oahu   | Honolulu | 20030421-1620<br>University of Hawai'i,<br>J.K.K. Look Laboratory<br>J.K.K. Look Laboratory,<br>oil from elctrical conduits | Closed UH Facility. Oil reported from pipes and electrical conduits   | Concrete       | 25 Gallons | Oil                | Vandalism            | NFA    |
| Oahu   | Honolulu | 20030611-1326<br>Honolulu Harbor Pier 10<br>DRILL M/V Namahoe 50<br>gal spill   | Training DRILL Cruise vessel's manifold broke during bunkering causing release of 50 gals of Bunker fuel into water. DRILL DRILL  | Ocean          |            | Fuel Oil #6        | Drill                | NFA    |
| Oahu   | Honolulu | 20020806-1129 HECO Transformers 39423 and 39424 HECO Transformer # 39423 & # 39424 Leak                                     | Approximately 6 gallons of Shell Diala AX Insulating Oil or equivalent (non-PCB mineral oil) leaked from two transformers. Quantity was < 25 gallons, but not remediated within 72 hours. Verbal notification was not required. | Other          | 6 Gallons  | Shell Diala<br>Oil | Equipment<br>Failure | NFA    |
| Oahu   | Honolulu | 20030516-1356<br>Hickam AFB UST ST35<br>F-20-2105<br>South Side of Building<br>2104   | Detected black stained soil with moderate petroleum odor beneath the UST. Contamination appears concentrated at the souther half of the excavation.   | Soil           |            | Heating Oil        | Leaking-Over<br>Time | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media    | Quantity   | Substance(s)       | Standard<br>Cause    | Result |
|--------|----------|---|--|----------|------------|--------------------|----------------------|--------|
| Oahu   | Honolulu | 20021210-2320 Honolulu International Airport, Runway 4 right General Electric Test Operations engine fire | Release of Hydraulic fluid from aircraft due to fire on #2 engine.   | Asphalt  | 5 Gallons  | Hydraulic<br>Fluid | Equipment<br>Failure | NFA    |
| Oahu   | Honolulu | 20020814-1821<br>Keehi Lagoon oil<br>pollution reported<br>Keehi Lagoon Unknown<br>Sheen                  | 150 yards by 25 yeards oil sheen reported.   | Ocean    |            |                    |                      |        |
| Oahu   | Honolulu | 20030215-1855<br>Bradley Pacific Avaiation<br>10 gal Jp-8 spill   | 10 gals spilled out of wing-tip of American Airlines plane. Cause unknown, fuel contained under wing.  | Concrete | 10 Gallons | Jp-8 fuel          | Transfer-nos         | NFA    |
| Oahu   | Honolulu | 20030528-1448 Coca-Cola Bottling Co. of Hawaii (Mapunapuna St) Coca Cola Carbon Dioxide Release           | National Response Center<br>notifiication of an allegation<br>that freon is being released<br>from facility on weekends and<br>holidays. Investigation<br>clarified that a carbon dioxide<br>release occurred on 5/26/03 | Air      |            | Carbon<br>Dioxide  | Maintanance          | NFA    |
| Oahu   | Honolulu | 20030203-1642 Ala Wai Canal Sunken Automobile Engine Ala Wai Canal Sunken Automobile Engine               | During dredging operation<br>the dredge struck the engine<br>of a sunken automobile<br>causing motor oil to spill into<br>the Ala Wai Canal.   | Water    | 5 Gallons  | Motor Oil          | Leaking-Over<br>Time | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media    | Quantity     | Substance(s)            | Standard<br>Cause    | Result |
|--------|----------|---|---|----------|--------------|-------------------------|----------------------|--------|
| Oahu   | Honolulu | 20020824-1155 Two oxygen tanks left out in the open Two oxygen tanks left out in the open | Caller states that neighbors moved out and left 2 oxygen tanks which appear to be full, out in the open, under the sun. Gaspro labels on the tanks.   |          |              |                         |                      | NFA    |
| Oahu   | Honolulu | 20030206-1533<br>Pier 10 and 11 Sheen<br>Pier 10 and 11 Sheen                             | The origin and cause of sheen is unknown - probably rain runoff.  |          |              |                         | Unkown               | NFA    |
| Oahu   | Honolulu | 20020805-1505 Domestic Commercial Fishing Village Air Monitoring at Hon. Hbr. FV          | Contractor met with M.Cripps and DOT personnel to take air sampling inside and outside of building. No methane detected.  | Air      |              | Rule out<br>explosivity |                      | NFA    |
| Oahu   | Honolulu | 20030217-0852<br>Honolulu International<br>Airport Gate 8<br>3 gal jet fuel spill         | Discharge of fuel due to malfunction in shut off valve.   | Concrete |              |                         | Equipment<br>Failure | NFA    |
| Oahu   | Honolulu | 20020815-1119 HECO-Makaloa Substation HECO Transformer 21707                              | HECO transformer leak reported. Leak noticed during routine maintenance. Amount unknown at present but estimate over reoprtable quantity. No storm drain or water table affected. Spill is contained. | Concrete | > 25 Gallons | Shell Diala<br>Oil      | Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media                         | Quantity  | Substance(s)   | Standard<br>Cause               | Result |
|--------|----------|---|--|-------------------------------|-----------|----------------|---------------------------------|--------|
| Oahu   | Honolulu | 20030529-1453<br>1918 Republican Street<br>Republican Street Drums  | 2 x 55 drums disposed or left<br>on side of road. Intact, not<br>leaking, upright, looks like<br>waste motor oil. One, half-<br>full, the other full.          | Drum or<br>Other<br>Container | 2 Drum (  | Oil            | Fugitive<br>Dumping             | NFA    |
| Oahu   | Honolulu | 20020702-1944<br>1125 Young Street,<br>broken thermometer<br>1125 Young Street,<br>broken thermometer                           | Broken thermometer.  | Soil                          |           | Mercury        | Operator Error                  | NFA    |
| Oahu   | Honolulu | 20030226-1749 HECO Retired-from- service underwater transmission cable HECO retired-from- service underwater transmission cable | Very small discharge<br>occurred during canal<br>dredging operations when<br>abandoned cable end was<br>excavated. Small sheen on<br>surface of Ala Wai Canal. | Ocean                         | < 1 Pints | Insulating Oil |                                 |        |
| Oahu   | Honolulu | 20030214-0943 Pier 10-13 Honolulu Harbor Oil Sheen Sighting   | Oil sheen sighted between<br>Pier 10-13. Cause most<br>likely due to heavy rain runoff.  | Water                         |           |                | Runoff                          | NFA    |
| Oahu   | Honolulu | 20030210-1415<br>USCG Cutter Kukui Fuel<br>Spill<br>USCG Cutter Kukui Fuel<br>Spill - Kaneohe Bay                               | Caller reported material released from hydraulic equipment on deck due to equipment failure.   | Water                         | 5 Gallons | Oil            | Vessel-<br>Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media              | Quantity    | Substance(s)        | Standard<br>Cause                | Result                      |
|--------|----------|---|---|--------------------|-------------|---------------------|----------------------------------|-----------------------------|
| Oahu   | Honolulu | 20030127-1953<br>HECO Transformer<br>31250<br>HECO Transformer No.<br>31250   | Oil spill from transformer leak<br>during internal overpressure<br>due to failure ("fault"), 3/4/03<br>Written;   | Within<br>Facility | 100 Gallons | Transformer<br>Oil  | Equipment<br>Failure             | NFA                         |
| Oahu   | Honolulu | 20021221-1804<br>Ala Wai, sheen between<br>F & G dock<br>G-Dock unknown sheen   | Unknown sheeen.   | Ocean              |             |                     | Unknown                          | NFA                         |
| Oahu   | Honolulu | 20030306-1418<br>Clean Island<br>Council/Tesoro Drill<br>DRILL CIC/Tesoro Drill<br>#638726                                  | Training DRILL Diesel fuel spilled into the Kalaeloa Barge Harbor from a transfer hose. DRILL//   | Water              | 2 Barrels   |                     | Drill                            | NFA                         |
| Oahu   | Honolulu | 20030305-1225 Teco Ocean Shipping Tug Boat Betty Wood Fuel Spill - Honolulu Harbor Pier 2B                                  | Reporting party stated that tug vessel fuel tank overflowed diesel fuel while it was getting refueled. This release spilled on the deck of the vessel and into the water. | Ocean              | 50 Gallons  | Diesel Oil          | Operator Error                   | NFA                         |
| Oahu   | Honolulu | 20020715-2030 American Marine Corp Facility- Pier 13, Honolulu Harbor American Marine Corporation- Pier 13, Honolulu Harbor | Fuel return line from the generator was opened to the wrong tank.   | Ocean              |             | Marine<br>Diesel #2 | Notification only/Operator error | Refer to<br>USCG on<br>site |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media | Quantity  | Substance(s)     | Standard<br>Cause   | Result          |
|--------|----------|---|---|-------|-----------|------------------|---------------------|-----------------|
| Oahu   | Honolulu | 20030304-2153<br>Uaukewai Diving<br>Salvage & Fishing, Inc<br>Nahiku Fuel Spill   | Material (diesel) released from a tug boat that was taking on water. During dewatering operations, material was pumped overboard.   | Water | 1 Gallons | Diesel Oil       | Operator Error      | NFA             |
| Oahu   | Honolulu | 20020807-1901<br>Keehi Lagoon Oil Sheen<br>Near F-1 Dock<br>Keehi Lagoon Oil Sheen<br>Near F-1 Dock                           | 30 ft by 2 ft oil sheen reported near F-1 Dock at Keehi Lagoon.   | Ocean |           | Oil              | Fugitive<br>Dumping | NFA             |
| Oahu   | Honolulu | 20020824-1111<br>1812 Lime Street, Apt 1-<br>Furniture spray-painting<br>1812 Lime Street, Apt 1-<br>Furniture spray-painting | Complainant reported that neighbor has been spraypainting furniture. Fumes are affecting the complainant. Prior complaint was on April 15, 2002 where a gentleman from CAB conducted an inspection. | Air   |           |                  |                     | Refer to<br>CAB |
| Oahu   | Honolulu | 20030227-1531<br>Clean Islands Council<br>Drill 638024<br>DRILL Clean Island<br>Council Drill 638024                          | Training DRILL A transfer hose failed causing diesel fuel to spill into the Kalaeloa Barge Harbor. Drill Report.  | Water |           |                  | Drill               | NFA             |
| Oahu   | Honolulu | 20030126-1730<br>Matson leaking container<br>Venting Liquid Oxygen<br>Un 1073   | Venting of tank of Liquid<br>Oxygen on board vessel.<br>Ship entering Honolulu<br>tomorrow.   | Air   |           | Liquid<br>Oxygen | Overfill            | NFA             |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media             | Quantity   | Substance(s)  | Standard<br>Cause    | Result |
|--------|----------|---|---|-------------------|------------|---------------|----------------------|--------|
| Oahu   | Honolulu | 20020823-1747 Honolulu International Airport, no notification from RP Honolulu Int'l Airport, no notification from RP | The caller reported that jet fuel spilled due to a cracked wing.  | Asphalt           | 35 Gallons | Jet Fuel JP-8 | Equipment<br>Failure | NFA    |
| Oahu   | Honolulu | 20030523-0900<br>University of Hawaii,<br>Marine Center<br>Used Oil Spill Release                                     | Salvage man was dismantling old equipment and some oil dripped on the ground.   | Soil              | 2 Gallons  | Oil           | Maintanance          | NFA    |
| Oahu   | Honolulu | 20020715-1930 Entrance Controls Hawaii, Inc. Entrance Controls Hawai'i, Inc. alleged releases                         | Complainant alleges illegal activities are being conducted at subject address; business is being conducted in a residential area. Trucks making deliveries and pickups of items(such as cylinders) have no signs indicating type of business. Spills observed |                   |            |               | False Report         | NFA    |
| Oahu   | Honolulu | 20030525-0624<br>Honolulu International<br>Airport<br>JP-1 (Kerosene) 5 gal<br>spill                                  | Materials released from aircraft due to unknown cause.  | Asphalt /<br>soil |            | JP-1          | Unknown              | NFA    |
| Oahu   | Honolulu | 20030604-0913<br>Barber Spring Harbor<br>Pier 5<br>Pier 5 sheen   | Sheen in harbor   | Ocean             |            |               |                      |        |

| Island | Locality                 | Case Number and<br>Site Identification  | Initial Incident  | Media           | Quantity   | Substance(s)  | Standard<br>Cause    | Result          |
|--------|--------------------------|---|---|-----------------|------------|---------------|----------------------|-----------------|
| Oahu   | Honolulu                 | 20030603-1146<br>Tug Naina Honolulu<br>Harbor Pier 21<br>Tug Naina                                    | Filling ballast to balance tug, 2 gal in water, 1 gal on deck, diesel.  | Ocean           |            | Diesel Fuel   | Equipment<br>Failure | NFA             |
| Oahu   | Honolulu                 | 20030302-2324<br>Northwest Airlines, Inc.<br>Black Oil at Hardstand 1<br>Bravo                        | A trail of black oil from some<br>material handling equipment<br>(loader) was discovered at<br>Hardstand 1 Bravo. | Concrete        |            | Oil           | Equipment<br>Failure | NFA             |
| Oahu   | Honolulu<br>Harbor       | 20030521-1023<br>Unknown Sheen 645633<br>Unknown Sheen at Berth<br>51 B                               | Unknown sheen sighting.   | Ocean           |            | Oil           | Unknown              | NFA             |
| Oahu   | Honolulu Intl<br>Airport | 20020704-1902<br>American Airlines, Gate<br>17 Fuel Spill<br>American Airlines, Gate<br>17 Fuel Spill | Fuel vented from the left wing onto the ramp. Jet fuel (JP-8). 10 gallons.  | Concrete        | 10 Gallons | Jet Fuel JP-8 | Operator Error       | NFA             |
| Oahu   | Kahuku                   | 20021108-0000<br>HECO Kahuku Windfarm<br>Kahuku Wind Farm<br>Transformer Leak                         |   |                 |            |               |                      | Send to<br>ISST |
| Oahu   | Kahuku                   | 20030309-1233<br>Turtle Bay Resort (Kui<br>Ilima)<br>Canister washed ashore                           | Canister washed ashore.<br>Smoking when not wet.  | Ocean /<br>soil |            |               | Unknown              | NFA             |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media | Quantity   | Substance(s)       | Standard<br>Cause    | Result          |
|--------|----------|--|--|-------|------------|--------------------|----------------------|-----------------|
| Oahu   | Kailua   | 20020824-1640 Kailua Beach feces washing on shore Kailua Beach feces washing on shore                    | Allegagtions f human feces,<br>spaced 20-30 feet apart<br>washing ashore   | Ocean |            | feces              | Unknown              | Refer to<br>DOA |
| Oahu   | Kailua   | 20020826-1558<br>HECO Transformers<br>32749 and 33098<br>HECO 1015 Aloa Place<br>Transformer Leak        | Shell Diala AX Insulated Oil or equivalent (non-PCB mineral oil) leak from transformers #32749 and #33098 due to rusted padmount tranformers. Less than 25 gallons, however, cleanup exceeded 72 hours.  |       | 10 Gallons | Transformer<br>Oil | Leaking-Over<br>Time | NFA             |
| Oahu   | Kailua   | 20030602-0830<br>103 Kahako Street, Apt.<br>B<br>103 Kahako Street, Apt.<br>B - Three 55-gallon<br>drums | Caller reported finding 3 x 55-gallon drums behind his property.   |       |            |                    |                      |                 |
| Oahu   | Kailua   | 20020805-1058<br>HECO Transformers<br>32749 and 33098<br>Transformer Leak, 1015<br>Aoloa Place, Kailua   | HECO letter of notification received informing of leaking pad-mount transformer. Notification provided due to cleanup effort has exceeded 72 hours. Impacted soil was removed. Soil test revealed that the soil under the transformer needs to be removed. | Soil  | 15 Gallons | Transformer<br>Oil | Equipment<br>Failure | NFA             |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media                         | Quantity   | Substance(s)             | Standard<br>Cause    | Result |
|--------|----------|---|--|-------------------------------|------------|--------------------------|----------------------|--------|
| Oahu   | Kailua   | 20021024-1300<br>Hooulu St Abandoned<br>Drum<br>Hooulu St Abandoned<br>Drum   | Abandoned drum on public street. City removed drum.  | Drum or<br>Other<br>Container | 45 Gallons | Concrete<br>Curing Agent | Fugitive<br>Dumping  | NFA    |
| Oahu   | Kalaeloa | 20020726-1212<br>CIC DRILL - KALAELOA<br>BARGE HARBOR<br>DRILL CIC Kalaeloa<br>Barge Harbor                         | Training DRILL   | Ocean                         | 8 Barrels  | Diesel Fuel              | Drill                | NFA    |
| Oahu   | Kalaeloa | 20020722-1137<br>CIC DRILL - KALAELOA<br>BARGE HARBOR<br>DRILL Pier 6 Kalaeloa<br>Barge Harbor diesel fuel<br>spill | Training DRILL   | Ocean                         | 5 Barrels  | Diesel Fuel              | Drill                | NFA    |
| Oahu   | Kalihi   | 20030415-1100<br>Abandoned Drums at<br>Mokauea Street<br>Abandoned Drums at<br>Mokauea Stree                        | HFD Hazmat on scene for abandoned drum. Hazcatof drum shows chlorinated solvent, drum full.Penco responded to Mokauea St for removal of abandoned drums.   |                               | 1 Drum (   | Paint Stripper           | Fugitive<br>Dumping  | NFA    |
| Oahu   | Kalihi   | 20021114-1009<br>HECO-Kalihi Substation<br>Hawaiian Electric<br>Company (HECO)-Kalihi<br>Substation                 | Caller reported transformer leak, non-PCB oil, at the Kalihi Substation. Affected area: gravel and soil within station. No storm drain affected. Estimated more than 25 gallons released. HECO substation transformer # 14228. | Other                         | 25 Gallons | Transformer<br>Oil       | Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media  | Quantity | Substance(s) | Standard<br>Cause   | Result |
|--------|----------|--|--|--------|----------|--------------|---------------------|--------|
| Oahu   | Kalihi   | 20030415-1100<br>Abandoned Drums at<br>Mokauea Street<br>Abandoned Drums at<br>Mokauea Stree | HFD Hazmat on scene for<br>abandoned drum. Hazcatof<br>drum shows chlorinated<br>solvent, drum full.Penco<br>responded to Mokauea St for<br>removal of abandoned drums.              |        | 1 Drum ( |              | Fugitive<br>Dumping | NFA    |
| Oahu   | Kaneohe  | 20020718-1045<br>Cylinder at Kualoa<br>Beach<br>Cylinder at Kualoa Beach                     | Contractor responded to cylinder @ Kualoa Beach. Removal and destruction at sea by PENCO.  | Ocean  |          | Acetylene    | Fugitive<br>Dumping | NFA    |
| Oahu   | Kaneohe  | 20020903-1613<br>Keaahala Road Diesel<br>Fuel<br>Keaahala Road Diesel<br>Fuel                | Diesel fuel discovered after<br>sample taken from runoff<br>near construction site at<br>Keaahala Road. Runoff<br>discovered 8/28/02.  | Stream |          | Diesel Fuel  | Unknown             | NFA    |
| Oahu   | Kaneohe  | 20030122-1354<br>Vault 46636<br>Vault 46636  | Changing transformer -<br>Cleanup crew to remove soil  | Soil   |          |              |                     |        |
| Oahu   | Kaneohe  | 20030206-1030<br>Care Home Facility<br>Care Home Facility                                    | Ann Pearl, care home facility, big tracter digging for past 3 days. Digging up corroded gas line on own property. How far away from residental stonewall must it be. Phone 247-8558. | Soil   |          |              |                     | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media   | Quantity          | Substance(s) | Standard<br>Cause    | Result |
|--------|----------|---|---|---------|-------------------|--------------|----------------------|--------|
| Oahu   | Kaneohe  | 20030108-0825  UH Research Facility  Landing Craft Sinking  | Craft sank at pierside  | Ocean   | 1E+0 Gallons<br>4 | bilge water  | Vessel-<br>Sinking   | NFA    |
| Oahu   | Kaneohe  | 20030218-0754<br>Namoku Place Kaneohe<br>Odor complaint and<br>milky substance on<br>stream                 | Odor complaint and milky substance on stream, (Kawa Stream), behind house lot.  | Stream  |                   |              |                      | NFA    |
| Oahu   | Kaneohe  | 20021231-1007<br>Kaneohe Bay Sheen<br>#633084<br>Kaneohe Bay Sheen<br>#633084                               | Caller reported an unknown sheen in the water.  | Water   |                   |              | Unknown              | NFA    |
| Oahu   | Kaneohe  | 20021219-1340<br>HECO Transformer<br>20439<br>HECO Transformer<br>20439 & Tank Trailer<br>B684              | While draining oil from transformer, tank trailer was inadvertently overfilled. Spill contained within facility.                          | Soil    | 40 Gallons        |              | Operator Error       | NFA    |
| Oahu   | Kaneohe  | 20021118-0850<br>Marine Corp Base<br>Kaneohe, Building 6088<br>Motor Oil release, bldg<br>6088 parking lot. | Frito Lay truck released 1/2 pint of motor oil on parking lot. No release to surface waters. Driver of truck had a spill kit and used it. | Asphalt | 0.5 Pints         | Motor Oil    | Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media | Quantity   | Substance(s)         | Standard<br>Cause   | Result |
|--------|----------|--|---|-------|------------|----------------------|---------------------|--------|
| Oahu   | Kapolei  | 20021203-1552<br>Kalaeloa Barge Harbor<br>DRILL Diesel fuel spill  | Training DRILL 4 barrels diesel in harbor   | Ocean | 4 Barrels  | Diesel Fuel          | Drill               | NFA    |
| Oahu   | Kapolei  | 20020911-1301<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Nitrogen Oxide Release<br>from Flare                          | Nitrogen Oxide Sulfur Dioxide<br>and Sulfur Trioxide released<br>from a flare during a<br>scheduled 4 day shutdown of<br>the acid plant.  | Air   |            | Nitrogen<br>dioxide  | Maintanance         | NFA    |
| Oahu   | Kapolei  | 20020723-1600<br>Tesoro 20" Black Oil<br>Pipeline Leak<br>Tesoro Pipeline Leak at<br>Komohana and Kalaeloa<br>Sts Intersection | 10 Barrels of Diesel oil from<br>hydrotesting pipeline leaked<br>at the SW corner of<br>Komohana and Kalaeloa<br>Streets.   | Soil  | 10 Barrels | Diesel Fuel          | Pipeline<br>Failure |        |
| Oahu   | Kapolei  | 20020911-1301<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Nitrogen Oxide Release<br>from Flare                          | Nitrogen Oxide Sulfur Dioxide<br>and Sulfur Trioxide released<br>from a flare during a<br>scheduled 4 day shutdown of<br>the acid plant.  | Air   |            | Sulfur<br>Dioxide    | Maintanance         | NFA    |
| Oahu   | Kapolei  | 20020828-1559 Hawaiian Electric Company (HECO)-Kahe Generating Station HECO Kahe Power Plant Chemical Spill                    | Impact damage of chemical lines resulted in the releas of Hydrochloric Acid (31.5%) (2 gallons/19 lbs) and Sodium Hypochlorite (12.5%) (2 gallons/20 lbs). Commingling of these two chemicals emitted a small amount (<1 lb) of chlorine gas. | Air   | 2 Gallons  | Hydrochloric<br>Acid |                     | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media          | Quantity    | Substance(s)          | Standard<br>Cause                                 | Result          |
|--------|----------|---|--|----------------|-------------|-----------------------|---|-----------------|
| Oahu   | Kapolei  | 20020924-0520<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Nitrogen Oxide Release                         | Nitrogen oxide released from<br>a flare due to upset with FCC<br>unit and crude unit Release<br>is greater than 10 pounds<br>and sulfur dioxide is greater<br>than 500 pounds. | Air            | 10 Pounds   | Nitrogen<br>Oxide     | Equipment<br>Failure                              | Refer to<br>CAB |
| Oahu   | Kapolei  | 20020911-1301<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Nitrogen Oxide Release<br>from Flare           | Nitrogen Oxide Sulfur Dioxide<br>and Sulfur Trioxide released<br>from a flare during a<br>scheduled 4 day shutdown of<br>the acid plant.                                       | Air            |             | Sulfur<br>Trioxide    | Maintanance                                       | NFA             |
| Oahu   | Kapolei  | 20020819-1612<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Acid Plant Shut Down<br>Sulfur Dioxide Release | 2,473 pounds of SO2 was released during Acid Plant shut down. EPCRA reportable quantity (500 pounds within 24 hour period)   | Air            | 2473 Pounds | Sulfur<br>Dioxide     | Equipment<br>Failure                              | NFA             |
| Oahu   | Kapolei  | 20021207-1925<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Acid Plant shut down                           | Plant shutdown @18:15, will<br>be down for 24-36. Acid gas<br>sent to flare, on going event.<br>Notification of CAB permit<br>exceedence.                                      | Air            |             | Air permit exceedence | Process<br>Upset-Power<br>Failure/Mainta<br>nence | NFA             |
| Oahu   | Kapolei  | 20020724-1325<br>Unitek Environmental<br>Services, Inc<br>50-gallon oil spill                                   | The cam lock on the hose failed allowing the hose to disconnect and oil to spill.  | bermed<br>area |             | Used oil              | Equipment<br>Failure                              | NFA             |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media              | Quantity    | Substance(s)                      | Standard<br>Cause                 | Result          |
|--------|----------|---|---|--------------------|-------------|-----------------------------------|-----------------------------------|-----------------|
| Oahu   | Kapolei  | 20021218-0820<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Chevron Bunker Crude<br>Pipeline Leak      | 30" line leak from off load<br>mooring to Tank 111. Leak<br>occurred on site. Not<br>detected because of<br>insulation jacket covering<br>pipe. Total of 11 barrels<br>reported.  | Soil               | 11 Barrels  | Crude Oil                         | Pipeline<br>Failure               | NFA             |
| Oahu   | Kapolei  | 20021213-0949 Unitek Environmental Services, Inc Unitek Spec Fuel Spill                                     | While transferring fuel from Tank to Tankard, fitting for hose broke. Clean up has been done.   | Concrete           | 500 Gallons | Spec Fuel                         | Transfer-<br>Equipment<br>Failure | NFA             |
| Oahu   | Kapolei  | 20020828-1559 Hawaiian Electric Company (HECO)-Kahe Generating Station HECO Kahe Power Plant Chemical Spill | Impact damage of chemical lines resulted in the releas of Hydrochloric Acid (31.5%) (2 gallons/19 lbs) and Sodium Hypochlorite (12.5%) (2 gallons/20 lbs). Commingling of these two chemicals emitted a small amount (<1 lb) of chlorine gas. | Air                | 2 Gallons   | Sodium<br>Hypochlorite<br>7 - 15% |                                   | NFA             |
| Oahu   | Kapolei  | 20030108-0802<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Acid plant shutdown                        | Mist precipitator malfunction caused acid plant to shutdown. Over permitted limit unknown.  | Air                | Pounds      | Sulfur<br>Dioxide                 | Equipment<br>Failure              | Refer to<br>CAB |
| Oahu   | Kapolei  | 20021127-1508<br>HECO Transformer<br>46851 (Vault 5603A)<br>HECO Transformer Vault<br>5603A #46851          | 35 gals of transformer oil, in process of cleanup. Non PCB, initial cleanup done.   | Concrete<br>/ soil | 35 Gallons  | Transformer<br>Oil                | Transformer<br>Failure            | NFA             |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media    | Q | Quantity   | Substance(s)           | Standard<br>Cause    | Result |
|--------|----------|--|---|----------|---|------------|------------------------|----------------------|--------|
| Oahu   | Kapolei  | 20020930-0845 Hawaiian Electric Company (HECO)-Kahe Generating Station Kahe Unit 3 Low Sulfur Fuel Oil release | Low sulfur fuel oil release about 2:00 am., >25 gals. Change burners that fire burners, steam valves did not close tightly. Written 12/4/02 Debris under burnerfront scavenging stream valve prevented it from fully closing. LSFO able to enter Cont. sosc | Concrete | > | 25 Gallons | Low sulfur<br>fuel oil | Equipment<br>Failure | NFA    |
| Oahu   | Kapolei  | 20030521-1450<br>Marisco, Ltd<br>Oily Gold color release   | Vessel releasing bilges into water all morning into harbor. Appear to be deballasting some type of tank. Oily material gold color.  | Ocean    |   |            | Not<br>Petroleum       | Vessel-Spill         | NFA    |
| Oahu   | Kapolei  | 20030515-0710<br>Kalaeloa Barge Harbor<br>DRILL Pinto 2-D spill  | Training DRILL Materials released from barge due to operator error. DRILL DRILL   | Ocean    |   |            | 2-D                    | Drill                | NFA    |
| Oahu   | Kapolei  | 20030106-1236 Tesoro Hawaii Corporation Refinery- Kapolei Tesoro Refinery                                      | Nitrogen Dioxide Release.<br>Unplanned maintenance of<br>the Hydrogen Generator<br>Unit. Unitl will be repaired   | Air      |   |            | Nitrogen<br>Dioxide    | Maintanance          | NFA    |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident  | Media          | Quantity    | Substance(s)           | Standard<br>Cause    | Result |
|--------|----------|--|---|----------------|-------------|------------------------|----------------------|--------|
| Oahu   | Kapolei  | 20030506-1142 Aloha Petroleum, Barbers Pt Sales Terminal (Formerly Texaco/Equilon) DRILL Fuel leaking from containment into street | Training DRILL 2100 gal fuel leaking from containment into street. Notified fire, 911, doing site assessment, vapors in area. Fire needs to lay foam. Zone control right now, until fire gives ok. **He said EPA region 10 was with them? Cont on SOSC report | Storm<br>Drain |             | Gasoline,<br>Unleaded  | Drill                | NFA    |
| Oahu   | Kapolei  | 20030107-1058 Barbers Point Harbor Pier 5 DRILL Barbers Point Harbor Pier 5  | Training DRILL Material released from vessel due to unknown causes. DRILL DRILL   | Ocean          | 0.5 Barrels | Fuel Oil               | Drill                | NFA    |
| Oahu   | Kapolei  | 20021016-1145<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Acid Plant's Air Blower<br>being repaired.                        | Acid Plant's main air blower is being repaired. Acid plant is down at 11:00 am. This is unscheduled maintenance. According to caller, in 1.1 hours, SO2 released would be > 500 lb, (reportable quantity)   | Air            | 500 Pounds  | Sulfur<br>Dioxide      | Equipment<br>Failure | NFA    |
| Oahu   | Kapolei  | 20021222-0710<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Blending and Shipping<br>area low sulfur oil spill                | Overflow portable tank. Written 1/21/03 In process of displacing a line into portable tank. Line displacemet volume was incorrect and excess volume overflowecd portable tank.  | Soil           |             | Low sulfur<br>fuel oil | Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media   | Quantity   | Substance(s)       | Standard<br>Cause     | Result |
|--------|----------|---|--|---------|------------|--------------------|-----------------------|--------|
| Oahu   | Kapolei  | 20030530-0916<br>Waimanalo Gulch<br>Sanitary Landfill<br>Waimanalo Gulch Landfill             | Caller stated that responsible party (Reno Treatment Center) is dumping blood contaminated bandages and various other hazardous materials from a local hospital into a local landfill. | Soil    |            |                    |                       |        |
| Oahu   | Kapolei  | 20030423-0936<br>Single Buoy Mooring<br>Maintenance on SPM 1<br>pint spill                    | Maintenance on Single point mooring, one (1) pint spill.   | Ocean   | 1 Pints    |                    | Maintanance           | NFA    |
| Oahu   | Kapolei  | 20030403-2032<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Acid Process Unit down       | Caller reported an Acid<br>Process Unit went down due<br>to equipment failure. Caused<br>material to flare. Caller<br>stated release still ongoing at<br>this time.                    | Air     |            | Sulfur<br>Compound | Equipment<br>Failure  | NFA    |
| Oahu   | Kapolei  | 20021002-1826<br>Tesoro Hawaii<br>Corporation Refinery-<br>Kapolei<br>Platform Diesel Release | Caller reported that while reinstalling a hose used at single point mooring, some fuel leaked into water. Caller also stated that area was approximately 1 mile offshore.              | Ocean   |            | Diesel Fuel        | Transfer-<br>Operator | NFA    |
| Oahu   | Kapolei  | 20021003-0955<br>Kalaeloa Blvd &<br>Malakole St.<br>Vechicle accident diesel<br>spill         | Vehicle accident involving tractor-trailor rig and Horizon truck. Fuel tank ruptured leaking diesel.   | Asphalt | 50 Gallons | Diesel Fuel        | Traffic<br>Accident   | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media    | Q | uantity    | Substance(s)              | Standard<br>Cause    | Result          |
|--------|----------|---|--|----------|---|------------|---------------------------|----------------------|-----------------|
| Oahu   | Kapolei  | 20021003-1120<br>Tesoro Hawaii<br>Corporation Refinery-<br>Kapolei<br>IFO Release                   | IFO released during bunker line hookup. Sheen observed. Cleanup completed.                 | Ocean    |   |            | Diesel Fuel<br>#2         | Maintanance          | NFA             |
| Oahu   | Kapolei  | 20030108-0802<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Acid plant shutdown                | Mist precipitator malfunction caused acid plant to shutdown. Over permitted limit unknown. | Air      |   | 10 Pounds  | Nitric Oxide              | Equipment<br>Failure | Refer to<br>CAB |
| Oahu   | Kapolei  | 20021220-0815<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Low Sulfur Diesel<br>pipeline leak | Pipeline leak of Low Sulfur<br>Diesel in blending and<br>shipping plant.                   | Concrete | < | 25 Gallons | Diesel Fuel<br>Low Sulfur | Pipeline<br>Failure  | NFA             |
| Oahu   | Kapolei  | 20021011-0905<br>Deep Draft Harbor<br>Sheen Sighting Pier 5<br>DRILL NRC 625798<br>DRILL DRILL      | Training DRILL Hose on barge split causing a spill in water.                               | Ocean    |   | 5 Barrels  | Diesel Fuel               | Drill                | NFA             |
| Oahu   | Kapolei  | 20030408-1653 Hawaii Medical Vitrification, Inc. Release of black sot                               | Over press of system, release black sot.   |          |   |            | Black Sot                 | Equipment<br>Failure | Refer to<br>CAB |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media | Quantity   | Substance(s)       | Standard<br>Cause    | Result           |
|--------|----------|---|--|-------|------------|--------------------|----------------------|------------------|
| Oahu   | Kapolei  | 20030117-1130<br>Clean Island Council<br>Drill 634359<br>DRILL Clean Island<br>Council Drill 634359                     | Training DRILL Material released from a pipeline due to an unknown cause.                  | Water | 8 Barrels  |                    | Drill                | NFA              |
| Oahu   | Kapolei  | 20030108-0802<br>Chevron USA Products<br>Co., Hawaii Refinery<br>Acid plant shutdown                                    | Mist precipitator malfunction caused acid plant to shutdown. Over permitted limit unknown. | Air   | Pounds     | SulfurTrioxid<br>e | Equipment<br>Failure | Refer to<br>CAB  |
| Oahu   | Kihei    | 20020723-0800 Friendly Charters, alleged dumping in Maalaea Harbor Friendly Charters, alleged dumping in Maalaea Harbor | The caller reported company dumps raw sewage and oil from vessels into the water.          | Ocean | 50 Gallons | raw sewage         |                      | NFA              |
| Oahu   | Lahaina  | 20021031-0925<br>Lahaina Harbor Gasoline<br>Spill<br>Lahaina Harbor gasoline<br>spill                                   | Boat sank, leaking gasoline.<br>Boat boomed and raised.                                    |       |            |                    | Vessel-Spill         | Refer to<br>USCG |
| Oahu   | Lahaina  | 20021224-1438<br>Lahaina Harbor Gasoline<br>Spill<br>Lahaina gasoline spill   | Boat Sank, leaking gasoline.<br>Boat boomed and raised.                                    | Ocean | 30 Gallons | Gasoline           | Vessel-<br>Sinking   | NFA              |

| Island | Locality  | Case Number and<br>Site Identification  | Initial Incident  | Media              | Quantity  | Substance(s)          | Standard<br>Cause   | Result           |
|--------|-----------|---|---|--------------------|-----------|-----------------------|---------------------|------------------|
| Oahu   | Laie      | 20030203-1115 BYU Campus Maintenance haz waste site BYU hazwaste shed fire                        | Fire in hazwaste storage facility   | Within<br>Facility |           |                       | Fire                | Refer to<br>SHWB |
| Oahu   | Laie      | 20020926-1824 Pounders Beach Fuel Release Pounders Beach Fuel Release                             | Caller reported filming company crew member pouring gas into fuel tank and spilled same into water. Area affected is a popular fishing and diving area.   | Ocean              |           | Gasoline              | Fugitive<br>Dumping | NFA              |
| Oahu   | Lualualei | 20030519-1059<br>HECO-Mikilua Substation<br>Oil Drums & Gas Can<br>Dumped on Property             | Caller reported that someone dumped 2 drums of oil and a gas can at the Mikilua Substation, 87-759 Paakea Rd 96792. One of the drums is leaking. Cleanup in progress. Items were later determined to be not on HECO property. | Soil               |           | Used oil              | Fugitive<br>Dumping | NFA              |
| Oahu   | Maili     | 20030626-1200<br>Abandoned Cooler<br>Mailiilii Rd.<br>Abandoned Cooler<br>Mailiilii Rd.           | Removal of cooler from Mailiilii Rd.  | Soil               | 1 Gallons | Oil                   | Fugitive<br>Dumping | NFA              |
| Oahu   | Maili     | 20030601-1500<br>Abandoned Drums<br>Mailiilii Rd Site B<br>Abandoned Drums<br>Mailiilii Rd Site B | Removal of abandoned drums.   | Soil               |           | Oil, Car<br>batteries | Fugitive<br>Dumping | NFA              |

| Island | Locality   | Case Number and<br>Site Identification   | Initial Incident   | Media   | Quantity   | Substance(s)          | Standard<br>Cause    | Result                   |
|--------|------------|--|--|---------|------------|-----------------------|----------------------|--------------------------|
| Oahu   | Maili      | 20030601-1303<br>Abandoned Drum Mailiilii<br>Rd Site A<br>Abandoned Drum Mailiilii<br>Rd Site A                | Removal of abandoned drum.   | Soil    |            | Oil, Car<br>batteries | Fugitive<br>Dumping  | NFA                      |
| Oahu   | Makakilo   | 20030106-1630 Palehua Street Mercury Release Mercury Release at Palehua Road                                   | Contractor respond and cleanup mercury release @ Palehua Road due to children playing.   | Soil    |            | Mercury               | Fugitive<br>Dumping  | NFA                      |
| Oahu   | Makakilo   | 20021127-1052<br>HECO Transformer 91-<br>1089 Namahoe Street<br>Transformer Release 91-<br>1089 Namahoe Street | Leak from rust-decayed transformer housing. Non PCB oil release. Amount first reported as greater than 25 gallons. Release was later determined to be approximately 8 gallons (non PCB transformer oil) during the cleanup effort. | Soil    | 25 Gallons | Transformer<br>Oil    | Leaking-Over<br>Time | NFA                      |
| Oahu   | Makakilo   | 20030321-1115<br>92-577 Makakilo Drive<br>Sewage spill 110 gals  | Sewage spill 110 gals. No storm drain, cause: plastic bags and rags in a 6" PVC pipe. CDD @ 2005.  | Soil    |            |                       |                      | Refer to<br>WWB          |
| Oahu   | Mapunapuna | 20030219-1530<br>Honolulu Airport Hotel  | Part of x-ray machine discovered in parking lot.   | Asphalt |            |                       | Fugitive<br>Dumping  | Refer<br>Noise &<br>Radi |
|        |            | Parts of x-ray machine in parking lot  |  |         |            |                       |                      |                          |

| Island | Locality                                      | Case Number and<br>Site Identification  | Initial Incident   | Media                      | Quantity   | Substance(s)       | Standard<br>Cause    | Result                   |
|--------|---|---|--|----------------------------|------------|--------------------|----------------------|--------------------------|
| Oahu   | Mililani                                      | 20030325-0830<br>Waimakua Drive<br>Transformer<br>Transformer spill                               | Transformer spill entered storm drain. Incident occurred 03/24/03 @ 10:35 pm. Cause: car accident.   | Storm<br>Drain             | 25 Gallons | Transformer<br>Oil | Traffic<br>Accident  | NFA                      |
| Oahu   | Mililani                                      | 20030418-1130<br>Longs Drugs Mililani<br>Market Place<br>Odor from battery for<br>computer system | Odor started about 8:00 am, led to evacuation at Longs. Hazmat 2 requested assistance.   | Air                        |            | Unknown            | Equipment<br>Failure | NFA                      |
| Oahu   | Mililani Town                                 | 20020702-1406<br>HECO Transformer<br>30793<br>HECO Transformer<br>#30793 - Mililani               | Transformer failed 7/1/02.<br>Shell Diala AX Insulating Oil<br>or equivalent. Approx 25<br>gallons. Total in transformer-<br>53 gallons. On ground, on<br>and under pad, non-PCB oil.<br>Dig up soil. No water or<br>stormdrain. | Soil                       | 25 Gallons | Transformer<br>Oil | Equipment<br>Failure | NFA                      |
| Oahu   | Near Reef<br>Runway at<br>Honolulu<br>Airport | 20020830-1721 Barge Releasing Brown Material Barge Releasing Brown Material                       | Caller reported that a brown material was releasing from a barge.  | Ocean                      |            |                    | Vessel-Spill         | NFA                      |
| Oahu   | Pauoa   | 20030418-0243<br>2485 Pacific Heights Rd<br>Sewage spill  | Sewage spill 1200 gals<br>entered Nuuanu Stream via<br>Storm drain. Signs posted,<br>cause: roots in an 8" pipe.   | Storm<br>Drain /<br>stream |            |                    |                      | Refer to<br>WWB &<br>CWB |

| Island | Locality     | Case Number and<br>Site Identification  | Initial Incident   | Media                                | Quantity   | Substance(s)       | Standard<br>Cause               | Result |
|--------|--------------|---|--|--------------------------------------|------------|--------------------|---------------------------------|--------|
| Oahu   | Pear City    | 20021120-0945<br>Abandoned Drums,<br>Pearl City Industrial Park<br>Abandoned Drums,<br>Pearl City Industrial Park | Contractor responded to abandoned perc drums at Pearl City Industrial Park.  |                                      |            |                    | Fugitive<br>Dumping             | NFA    |
| Oahu   | Pearl City   | 20021128-0651<br>HECO Transformer<br>53068<br>HECO Transformer<br>#53068  | Transformer oil spill resulted from vehicle accident.  | Asphalt<br>&<br>concrete<br>sidewalk | 23 Gallons | Shell Diala<br>Oil | Traffic<br>Accident             | NFA    |
| Oahu   | Pearl City   | 20021118-0845 Hawaiian Electric Company (HECO)- Waiau Generating Station Holding Tank Sheen                       | Oil sheen in holding pond after heavy rain   | Water                                |            | Oil                | Weather                         | NFA    |
| Oahu   | Pearl City   | 20030325-0831<br>HECO Transformers<br>51560-51562<br>Pole 16 Transformers<br>51560-51562                          | Automobile impact to a pole. Clean up being done. Open storm drain will need to be cleaned also. Three transformer bank. | Storm<br>Drain                       | 60 Gallons | Shell Diala<br>Oil | Traffic<br>Accident             | NFA    |
| Oahu   | Pearl Harbor | 20021204-1417<br>Naval Station Pearl<br>Harbor-Bishop PT.<br>Alpha 1 Piers spill                                  | Material released from steering unit on vessel due to equipment failure.   | Ocean                                | 1 Gallons  | Oil                | Vessel-<br>Equipment<br>Failure | NFA    |

| Island | Locality     | Case Number and<br>Site Identification   | Initial Incident   | Media | Quantity   | Substance(s)              | Standard<br>Cause               | Result |
|--------|--------------|--|--|-------|------------|---------------------------|---------------------------------|--------|
| Oahu   | Pearl Harbor | 20030620-1321<br>Naval Station Pearl<br>Harbor Bravo Pier 22<br>USS Anchorage 40 gal<br>F76 Diesel Marine fuel | Overboard pipe rusted, fuel seeping out, 40 gal of F76 Diesel Marine fuel. Leak has slowed to 1 pint every 2 hrs.                                | Ocean | 40 Gallons | F76 Diesel<br>Marine fuel | Equipment<br>Failure            | NFA    |
| Oahu   | Pearl Harbor | 20020801-1152<br>Pearl Harbor Naval<br>Station Fuel/ Oil Release<br>Pier 1 USS Port Royal<br>F76 Fuel Spill    | 15 gallons of F76 Fuel spilled into ocean at Pier 1 from USS Port Royal.   | Ocean | 15 Gallons | F76 Fuel                  | Vessel-<br>Equipment<br>Failure | NFA    |
| Oahu   | Pearl Harbor | 20020811-1024 Pearl Harbor Pier S-9 USS Louiville Bilge Water Spill at Pier S-9                                | 30 gallons released, 5 gallons entering ocean, of oily bilge water released from a bilge collection tank on the USS Louville due to overfilling. | Ocean |            | Bilge Water               |                                 |        |
| Oahu   | Pearl Harbor | 20030620-0816  Naval Station Pearl  Harbor Bravo Pier  Yankee 3  Unknown light sheen by  Yankee 3              | Unknown sheen sighted at 07:44. Too light, unrecoverable. Source unknown. Still investigating.   | Ocean |            | Oil                       | Unknown                         | NFA    |
| Oahu   | Pearl Harbor | 20020806-1040<br>Pearl Harbor Naval<br>Station Fuel/ Oil Release<br>Pearl Harbor Oily Waste<br>Spill           | One quart of oily waste released from a hose due to operator error into Pearl Harbor.  | Ocean | 1 Quarts   | Oily Waste                | Operator Error                  | NFA    |

| Island | Locality     | Case Number and<br>Site Identification  | Initial Incident   | Media | Quantity    | Substance(s)       | Standard<br>Cause              | Result |
|--------|--------------|---|--|-------|-------------|--------------------|--------------------------------|--------|
| Oahu   | Pearl Harbor | 20030408-1851<br>Rainbow Bay Marina<br>Vehicle into harbor -<br>release of gas            | Privately owned vehicle went into Pearl Harbor due to mechanical malfunction. Material released from vehicles's fuel tank (gas). Visible sheen, driver sustained no injuries. Stationed at Marine Corp Base. | Ocean |             | Gasoline           | Equipment<br>Failure           | NFA    |
| Oahu   | Pearl Harbor | 20030416-1505<br>USS Lake Erie CG70,<br>spill<br>USS Lake Erie Diesel<br>Fuel Spill #M-3  | Diesel fuel was released from<br>vessel during maintenance.<br>RP: Hawaii Marine<br>(contractor)   | Water | 0.5 Gallons | Diesel             | Operator Error                 | NFA    |
| Oahu   | Pearl Harbor | 20021209-1405<br>Pearl Harbor Naval<br>Station Pier B23<br>USS Port Royal Hull #<br>CG 73 | 12:30 oily water discharge,<br>35-40 gals discharged.<br>Boom around ship already,<br>oil skimmer (diesel fuel).   | Ocean | 35 Gallons  | Diesel Fuel        | Equipment<br>Failure           | NFA    |
| Oahu   | Pearl Harbor | 20030521-0928<br>Navy Base - Pearl Harbor<br>DRILL Navy Base - Pearl<br>Harbor            | Training DRILL Hotel pier<br>Navy Base - Ruptured fuel<br>hose *DRILL* *DRILL*<br>15,000 gallons - 50 gallons in<br>water  | Ocean |             |                    | Drill                          | NFA    |
| Oahu   | Pearl Harbor | 20021211-1514<br>Pier 22B Paint Spill<br>Pier 22B Paint Spill                             | Painting a vessel.   | Ocean | 1 Pints     | Haze Grey<br>Paint | Maintenance,<br>Operator Error | NFA    |

| Island | Locality     | Case Number and<br>Site Identification  | Initial Incident   | Media | Quantity  | Substance(s) | Standard<br>Cause    | Result |
|--------|--------------|---|--|-------|-----------|--------------|----------------------|--------|
| Oahu   | Pearl Harbor | 20030530-0915 Pearl Harbor Pier Bravo 24 and 25 Pier Bravo 24 and 25 - Pearl Harbor                     | Waste Oil spilled into the<br>Pearl Harbor from the bilge of<br>a military vessel  | Ocean |           |              |                      |        |
| Oahu   | Pearl Harbor | 20030512-1007<br>Rainbow Bay Marina<br>Unknown Sheen 1  | Unknown sheen in bay,<br>unknown source,   | Ocean |           | Unknown      | Fugitive<br>Dumping  | NFA    |
| Oahu   | Pearl Harbor | 20030526-1010<br>Naval Station Pearl<br>Harbor Pier- Hotel<br>USS Constellation at<br>Piers-Hotel 3 & 4 | Sheen in Pearl Harbor.   | Ocean |           | Unknown      | Unknown              | NFA    |
| Oahu   | Pearl Harbor | 20020712-1433<br>Pearl Harbor, Pier Y3<br>Pier Y3, Pearl Harbor<br>Fuel Hose Leak                       | Caller reporting a release of materal, No. 2-D oil due to a pinhole leak in a fuel hose.   | Ocean |           | No. 2-D oil  | Equipment<br>Failure | NFA    |
| Oahu   | Pearl Harbor | 20030521-0930<br>Hotel 3 F76 site<br>DRILL Hotel 3 F76 -<br>DRILL                                       | Training DRILL Ruptured fuel hose -15,000 gallons of Diesel Fuel - 50 gallons in water   | Ocean |           |              | Drill                | NFA    |
| Oahu   | Pearl Harbor | 20020718-2145<br>Naval Station Pearl<br>Harbor Sheen<br>Pier B-17 Sheen                                 | Heavy black oil in water. Too thick to be from a US Navy vessel. RIMPAC vessels returned and are in the vicinity. 2 gallon estimate. | Ocean | 2 Gallons | Oil          |                      |        |

| Island | Locality     | Case Number and<br>Site Identification  | Initial Incident  | Media | Quantity   | Substance(s) | Standard<br>Cause    | Result |
|--------|--------------|---|---|-------|------------|--------------|----------------------|--------|
| Oahu   | Pearl Harbor | 20030418-1843<br>USS Shiloh<br>Sheen Mike 1 Pier  | Chief Engineer of vessel reported a sheen of material was seen on the Starboard side of vessel by Harbor Patrol at apprx 1500. He arrived at vessel to inspect at apprx 1600, no sheen visible. | Ocean |            |              | Fugitive<br>Dumping  | NFA    |
| Oahu   | Pearl Harbor | 20030109-1050<br>Ford Island Bldg #44<br>Pearl Harbor<br>Bilge Spill, Vessel TB26                             | Material released from a small boat due to bilge pumping. Vessel Name: TB26. Booms applied, material contained, skimmer used, area secured.   | Water | 8 Gallons  |              | Equipment<br>Failure | NFA    |
| Oahu   | Pearl Harbor | 20021126-1654<br>Pearl Harbor Sheen<br>Pearl Harbor Sheen   | Unknown Sheen   | Ocean | 50 Gallons | Oil          | Leaking-Over<br>Time | NFA    |
| Oahu   | Pearl Harbor | 20020814-1818 USS Harpers Ferry Waste Oil Spill at Hotel Pier USS Harpers Ferry Waste Oil Spill at Hotel Pier | Waste Oil of unknown amount released from an overboard discharge by the USS Harpers Ferry.  | Ocean |            | Waste Oil    |                      |        |
| Oahu   | Pearl Harbor | 20020901-1756<br>Pearl Harbor Berth B-10<br>USS Port Royal Diesel<br>spill                                    | Defueling a fuel oil tank to<br>defueling barge, hose came<br>loose from barge releasing<br>material.   | Ocean | 2 Gallons  | Diesel Oil   | Equipment<br>Failure | NFA    |

| Island | Locality     | Case Number and<br>Site Identification  | Initial Incident   | Media | Quantity    | Substance(s)       | Standard<br>Cause    | Result |
|--------|--------------|---|--|-------|-------------|--------------------|----------------------|--------|
| Oahu   | Pearl Harbor | 20020831-1200<br>Pier K7 Pearl Harbor<br>USNS Bruce Heezen<br>Lubricating Oil spill               | Material spilled out of a naval vessel dute to transmission leak, 1 cup.   | Ocean | 1 Cups      | Lubricating<br>Oil | Equipment<br>Failure | NFA    |
| Oahu   | Pearl Harbor | 20021125-1359<br>Iroquois Point Lagoon<br>Iroquois Point Lagoon                                   | Unknown sheen sighting.<br>Booms & absorbents applied,<br>material contained. Sheen<br>too light to pick up. Doing<br>dive on the 27th.  | Water |             |                    | Unknown              | NFA    |
| Oahu   | Pearl Harbor | 20021011-0736<br>Ala Wai Boat Harbor 400<br>row<br>Sheen 400 row, B-C dock                        | Unknown sheen.   | canal |             |                    | Unknown              | NFA    |
| Oahu   | Pearl Harbor | 20021127-1414 Pearl Harbor Pier B23, Navy Base Petroleum Based Haze- Grain Paint Pier B23         | Release from vessel due to painting maintenance activity. 1.5 gal of paint.  | Ocean | 1.5 Gallons | Paint              | Maintanance          | NFA    |
| Oahu   | Pearl Harbor | 20030128-1542<br>Pearl Harbor Pier H 3<br>USS Sacramento JP-5<br>spill                            | Material released from fuel hose due to onboard maintenance, .5 oz.  | Ocean | 0.5 Ounces  | Jet Fuel JP-5      | Vessel-Spill         | NFA    |
| Oahu   | Pearl Harbor | 20030129-1557 Pearl Harbor Naval Shipyard, Pier Seirra 21 Anti-Corrosive oil spill from propellor | Oil spill 1 gal, while removing part from ships rudder. Oil contained with boom and absorbents pads. 2/18/03 written report: Less then .25 gal of lubricating oil entered water. | Lava  | 1 Gallons   | Lubricating<br>Oil | Vessel-Spill         | NFA    |

| Island | Locality     | Case Number and<br>Site Identification  | Initial Incident  | Media | Quantity     | Substance(s)  | Standard<br>Cause               | Result |
|--------|--------------|---|---|-------|--------------|---------------|---------------------------------|--------|
| Oahu   | Pearl Harbor | 20020823-1459 Pearl Harbor, Berth B3, unknown bubbles Pearl Harbor, Berth B3, unknown bubbles               | The caller is reporting unknown bubbles releasing from an underwater 4-foot PVC pipe.   |       |              |               |                                 |        |
| Oahu   | Pearl Harbor | 20021009-1157<br>Unknown black Oil Bravo<br>13<br>Unknown black Oil Bravo<br>13                             | Unknown black oil at pier, source unknown. Samples taken. First reported to Navy at 6:00 am.  | Ocean | 5 Gallons    | Black oil     | Unknown                         | NFA    |
| Oahu   | Pearl Harbor | 20020822-1647<br>Mike 4, Pearl Harbor<br>Mike 4, Pearl Harbor   | On scene operation team.<br>OSOT. P/U sheen.<br>Bilge/compensating water  | Ocean | 1 Gallons    | bilge water   |                                 |        |
| Oahu   | Pearl Harbor | 20030216-2229 Pearl Harbor Naval Shipyard, Pier Seirra 21 Hydraulic oil from broken pipe                    | Hydaulic oil spilled from<br>broken pipe on Navy vessel,<br>spilling material into water.<br>Written 3/4/03 amount<br>released was .01 gal. Part<br>Ops determined sheen too<br>thin for absorbent. | Ocean | 0.01 Gallons | Hydraulic Oil | Vessel-<br>Equipment<br>Failure | NFA    |
| Oahu   | Pearl Harbor | 20020822-1622<br>Naval Station Pearl<br>Harbor, oily residue<br>Naval Station Pearl<br>Harbor, oily residue | Caller reported a release of oil waste residue from a vessel due to operator error. Oil dissipate naturally. Release secured. Medium: Water   | Ocean |              | Oil           | Operator Error                  | NFA    |

| Island | Locality              | Case Number and<br>Site Identification  | Initial Incident  | Media | Quantity  | Substance(s)  | Standard<br>Cause     | Result                   |
|--------|-----------------------|---|---|-------|-----------|---------------|-----------------------|--------------------------|
| Oahu   | Pearl Harbor          | 20030206-1135<br>Naval Station Pearl<br>Harbor Bravo Pier 3<br>Sheen in harbor                      | Unknown sheen discovery in Pearl Harbor.  | Ocean |           | Oil           | Unknown               | NFA                      |
| Oahu   | Pearl Harbor          | 20021004-2341<br>Pearl Harbor Naval<br>Shipyard<br>S 1A PIER  | Material released from broken bag.  | Water |           | Hydraulic Oil | Unknown               | NFA                      |
| Oahu   | Punaluu               | 20030211-1300<br>Vehicle in Kahana Bay<br>Vehicle in Kahana Bay                                     | Stripped mini truck (Ford Ranger), no license plates. No sheen (only in the morning), reported. Rocky Bay area. | Ocean |           | Unknown       | Vandalism             | Refer<br>DOCARE          |
| Oahu   | Sand Island           | 20020716-1100 Sand Island State Recreation Area Sand Island State Recreation Area unknown substance | Unknown substance on<br>shore/in water during high<br>tide reported   | Ocean |           | Motor Oil     | Fugitive<br>Dumping   | Refer<br>DLNR<br>Boating |
| Oahu   | Schofield<br>Barracks | 20020829-1424<br>Schofield Barracks -<br>JOC Yard<br>Duck Road, Buildig 935                         | Plastic bucket cracked and leaked.  | Soil  | 4 Gallons | Oil, Used     | Storage-<br>Neglected | NFA                      |

| Island | Locality              | Case Number and Site Identification   | Initial Incident  | Media | Quantity | Substance(s) | Standard<br>Cause    | Result                 |
|--------|-----------------------|---|---|-------|----------|--------------|----------------------|------------------------|
| Oahu   | Schofield<br>Barracks | 20030117-1055<br>Schofield Barracks<br>Building 652, 649, 650<br>Fuel Spill Bldgs 652,<br>649, 650                        | Fuel spill discovered at contruction site at Schofield Barracks. Substance and quantity unknown at time of report.  | Soil  |          | Fuel         | Fugitive<br>Dumping  | Send to<br>ISST        |
| Oahu   | Schofield<br>Barracks | 20030320-1657<br>Kolekole Pass Hydraulic<br>Fuel Spill<br>Kolekole Pass Hydraulic<br>Fuel Spill                           | Fuel spill noticed from under bucket loader due to broken fuel line. Release date/time unknown, may be over a long period. Amount unknown, estimated less than reportable quantity. | Soil  |          |              | Equipment<br>Failure | NFA                    |
| Oahu   | Sunset                | 20021122-1630<br>Abandoned Drums,<br>Kaunala Place<br>Abandoned Drums,<br>Kaunala Place                                   | Contractor responded for removal of abandoned drums.  | Other |          |              | Fugitive<br>Dumping  | NFA                    |
| Oahu   | Sunset Beach          | 20021013-1620<br>Waialee drums<br>Waialee drums   | Drums stacked on property.<br>Empty. Tops open. Drums<br>used for jacking up houses.  |       |          |              |                      | NFA                    |
| Oahu   | Unknown               | 20030215-1152<br>Prank Caller<br>Asking sexual questions  | Prank caller asking sexual questions.   |       |          |              |                      | NFA                    |
| Oahu   | Unknown               | 20030215-0756<br>Chicken from Restaurant<br>Taste like oven cleaner<br>Chicken from Restaurant<br>Taste like oven cleaner | Chicken from restaurant tasted like oven cleaner.   |       |          | Unknown      |                      | Refer to<br>Sanitation |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident  | Media          | Quantity  | Substance(s)  | Standard<br>Cause         | Result           |
|--------|----------|---|---|----------------|-----------|---------------|---------------------------|------------------|
| Oahu   | Wahaiwa  | 20021011-1318 Ridgecrest Paint Removal Ridgecrest Paint Removal                                   | Removal of parking structure lines, using grinder and pressure washer caused paint debris to enter storm drain and spread around parking complex. Site cleaned up by owner. | Soil           | 1 Pounds  | Lead          | Maintanance               | NFA              |
| Oahu   | Wahiawa  | 20021013-2208<br>Wahiawa WWTP<br>Odor control unit turned<br>off                                  | Odor control unit turned off  |                |           |               | Operator Error            | NFA              |
| Oahu   | Wahiawa  | 20030525-1559<br>64-1700 Kamehameha<br>Highway<br>64-1700 Kamehameha<br>Highway - Asbestos Bag    | Report of a bag labeled "Asbestos"  |                |           |               | Unsecured<br>Container    | Refer to<br>SHWB |
| Oahu   | Wahiawa  | 20030528-1036 Helemano Military Reservation 154 Holo Kia Court Transformer Leaking Holo Kia Court | Transformer found leaking .   | Soil           |           |               |                           | NFA              |
| Oahu   | Wahiawa  | 20030219-1835<br>Schofield Barracks<br>Ahamaka Road<br>Hydraulic Oil entered<br>storm drain       | 5-7 gal release entered storm drain due to rain.  | Storm<br>Drain | 5 Gallons | Hydraulic Oil | Hydraulic<br>Line Rupture | NFA              |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media                                    | Quantity   | Substance(s)       | Standard<br>Cause                       | Result |
|--------|----------|--|--|--|------------|--------------------|---|--------|
| Oahu   | Wahiawa  | 20030328-1510<br>Schofield Barracks<br>Buildings T-674 & T-675<br>Spill Release - Bunker<br>Fuel         | Released caused by broken fuel line due to workers digging trench between buildings T-674 and 675.   | Soil                                     |            |                    | Equipment<br>Failure/Operat<br>or error | NFA    |
| Oahu   | Wahiawa  | 20030502-1522<br>Schofield Barracks Duck<br>Road<br>Abandoned vehicles end<br>of Duck Road               | Public owned vehicle leaking oil onto parking lot, less then 1 qt. More than 72 hrs.   | Asphalt /<br>soil                        |            | Motor Oil          | Equipment<br>Failure                    | NFA    |
| Oahu   | Wahiawa  | 20021231-1050<br>Schofield Barracks Duck<br>Road<br>Schofield Barracks<br>Diesel Spill 2805 Duck<br>Road | Diesel fuel spill occurred during refilling of truck.  | Within<br>Facility<br>(Concrete<br>Berm) | 30 Gallons | Diesel, DL-2       | Equipment<br>Failure                    | NFA    |
| Oahu   | Wahiawa  | 20030104-2215 HECO transformers on Kamehameha Highway HECO pole-mount transformers #68711- 68713         | Leak from transformers, damaged on impact when poles fell during high, gusty winds. On 1/4/03, the transformers were replaced, and free product was removed from the road surface. On 1/5/03, petroleum-impacted soil was removed and the site was restored. | Soil                                     | 32 Gallons | Shell Diala<br>Oil | Weather                                 |        |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media | Quantity   | Substance(s)    | Standard<br>Cause    | Result |
|--------|----------|---|--|-------|------------|-----------------|----------------------|--------|
| Oahu   | Wahiawa  | 20030116-1310 Mercury Release at N. Cane Street Mercury Release at N. Cane Street                       | Contractor respond and clean up of mercury release at N. Cane Street in Wahiawa. Appx 1' x 2' area affected HFD responding, HPD watched waited for PENCO crew; HFD left scenc. | Soil  |            | Mercury         | Fugitive<br>Dumping  | NFA    |
| Oahu   | Wahiawa  | 20030528-1037 Helemano Military Reservation O Pu Hue Court Transformer Leakeing O Pu Hue Court          | Transformer found leaking.   | Soil  |            | Trans oil       |                      | NFA    |
| Oahu   | Waiahole | 20021005-1125 Abandoned Paints, Waiahole Abandoned Paints, Waiahole                                     | Approximently 20 paint containers abandoned along roadside.  | Other |            | Oil based paint | Fugitive<br>Dumping  | NFA    |
| Oahu   | Waianae  | 20030626-1205<br>Abandoned Drum<br>Lualualei Homestead Rd.<br>Abandoned Drum<br>Lualualei Homestead Rd. | Removal of abandoned drum at Lualualei Homestead Rd.   | Soil  | 55 Gallons | Oil             | Fugitive<br>Dumping  | NFA    |
| Oahu   | Waianae  | 20021009-1540<br>Waianae WWTP<br>Treatment Plant<br>Malfunction   | Treatment Plant Malfunction.<br>Electirical Surge  |       |            |                 | Equipment<br>Failure | NFA    |

| Island | Locality | Case Number and<br>Site Identification  | Initial Incident   | Media | Quantity | Substance(s)       | Standard<br>Cause     | Result           |
|--------|----------|---|--|-------|----------|--------------------|-----------------------|------------------|
| Oahu   | Waianae  | 20020702-1358<br>Waianae Boat Harbor,<br>diesel oil sheen<br>Waianae Boat Harbor,<br>diesel oil sheen | A diesel fuel sheen was discovered in the Waianae Boat Harbor from an unknow origin. 100 yds by 100 yds sheen.   | Ocean |          | Diesel Oil         | Unknown               | NFA              |
| Oahu   | Waianae  | 20030617-0800<br>87-272 Maipalaoa Rd.<br>City Bank/Victorino<br>87272 Maipalaoa Rd.                   | Abandoned solid and haz waste on property. Property forclosed on by City Bank. Property manager is Ed Castro. Richard and Kanak Victorino still have access to property. | Soil  |          |                    | Storage-<br>Neglected | Refer to<br>SHWB |
| Oahu   | Waianae  | 20030206-1000<br>Waianae Abandoned<br>Paints<br>Waianae Abandoned<br>Paints                           | Penco responded to abandoned paints in Waianae.  |       |          | Paints             | Fugitive<br>Dumping   | NFA              |
| Oahu   | Waianae  | 20030523-1100<br>Waianae Valley Rd Sand<br>Blast Grit<br>Waianae Valley Rd Sand<br>Blast Grit         | Deliver sand blast grit(s) to analytical laboratory.   | Soil  |          | Possible<br>metals | None                  | NFA              |
| Oahu   | Waianae  | 20030521-1315 Paakea Road Abandoned Drums Removal of Abandoned Drums                                  | Respond to abandoned drums.  | Soil  |          | Oil                | Fugitive<br>Dumping   | NFA              |

| Island | Locality | Case Number and<br>Site Identification   | Initial Incident   | Media | Quantity   | Substance(s) | Standard<br>Cause   | Result                        |
|--------|----------|--|--|-------|------------|--------------|---------------------|-------------------------------|
| Oahu   | Waianae  | 20030304-0000<br>Hawaiian Homelands<br>Waianae<br>Dust in Area   | Letter received noting that there is dust in the area from construction.                         |       |            |              |                     | Refer to<br>CAB               |
| Oahu   | Waianae  | 20020718-1449 Unknow Sheen Pacific Ocean 2 Miles NW of Mt. Lahi Lahi Unknown Sheen Pacific Ocean 2 Miles NW of Mt. Lahi Lahi | Unknown sheen in Pacific<br>Ocean, 2 miles NW of Mt.<br>Lahi Lahi. One mile by .5<br>mile sheen. | Ocean |            |              | Unknown             |                               |
| Oahu   | Waianae  | 20020902-0816<br>Waianae Boat Harbor<br>Material released from<br>Northern Express   | Matrial being released from vessel due to unknown causes.  | Ocean |            | Unknown      | Unknown             | NFA                           |
| Oahu   | Waianae  | 20030505-1610<br>Pokai Bay<br>Abandoned Drums at<br>Pokai Bay Drive  | Respond to abandoned drum at Pokai Bay Drive. Drum washed ashore.                                | Other | 55 Gallons | oil          | Unknown             | NFA                           |
| Oahu   | Waianae  | 20030406-1532<br>Paakea Road Pig Farm  | Pig farm stinks.   | Air   |            |              | Unknown             | Refer to<br>Vector<br>Control |
|        |          | Smell from pig farm  |  |       |            |              |                     |                               |
| Oahu   | Waianae  | 20020726-1132<br>Waianae Boat Harbor<br>Sheen<br>Waianae Boat Harbor<br>Sheen 07/26/2002                                     | Anonymous caller reported sheen in water. Sheen odor: Diesel                                     | Ocean |            | Diesel Fuel  | Fugitive<br>Dumping | NFA                           |

| Island | Locality  | Case Number and<br>Site Identification   | Initial Incident   | Media | Quantity  | Substance(s) | Standard<br>Cause   | Result           |
|--------|-----------|--|--|-------|-----------|--------------|---------------------|------------------|
| Oahu   | Waianae   | 20020827-1415<br>87-381-E Kaukai Road<br>Alleged Ilegal dumping<br>87-381E Kaukai Road<br>Alleged Ilegal dumping | Allegations of fugitive dumping/illegal landfilling & waste disposal.  |       |           | Waste Oil    | Fugitive<br>Dumping | Refer to<br>SHWB |
| Oahu   | Waianae   | 20020715-1503<br>Waianae Boat Harbor<br>Sheen<br>Unknown Sheen Near<br>Pier A                                    | Caller reported of unknown sheen near Pier A.  | Water |           | Unknown Oil  | Unknown             | NFA              |
| Oahu   | Waikiki   | 20030610-0928<br>Ala Wai Canal Dredging<br>Dredging operation 155<br>gal drum                                    | Dredging operation pickup 1 x 55 drum. Approximately 1 gal of black liquid spilled out and floated on water. | Canal | 1 Gallons | Petroleum    | Fugitive<br>Dumping | NFA              |
| Oahu   | Wailuku   | 20030610-0804<br>Maalaea Harbor,<br>unknown sheen<br>Maalaea unknown<br>sheen 647003                             | Unknown sheen.   | Ocean |           | Unknown      | Unknown             | NFA              |
| Oahu   | Waimanalo | 20030612-2025<br>Waimanalo Propane<br>Cylinders<br>Waimanalo Propane<br>Cylinders                                | Removal of propane cylinders.  |       |           |              | Fugitive<br>Dumping | NFA              |
| Oahu   | Waimanalo | 20030612-2025<br>Waimanalo Propane<br>Cylinders<br>Waimanalo Propane<br>Cylinders                                | Removal of propane cylinders.  |       |           |              | Fugitive<br>Dumping | NFA              |

| Island | Locality  | Case Number and<br>Site Identification  | Initial Incident  | Media              | Quantity   | Substance(s)       | Standard<br>Cause    | Result           |
|--------|-----------|---|---|--------------------|------------|--------------------|----------------------|------------------|
| Oahu   | Waimanalo | 20020821-1852<br>Sea Life Park, release<br>from a jar<br>Sea Life Park, release<br>from a jar | The caller is reporting material released from a jar onto sea bird due to unknown causes.   |                    |            |                    |                      |                  |
| Oahu   | Waimanalo | 20030227-0939<br>Waimanalo, No evidence<br>of a spill<br>Waimanalo, No evidence<br>of a spill | No evidence of a spill.   |                    |            |                    |                      |                  |
| Oahu   | Waipahu   | 20030603-1828 Abandoned HCL Drum at Leonui Street Abandoned HCL Drum at Leonui Street         | Respond for removal of abandoned drum.  | Asphalt            | 55 Gallons | HCL Drum           | Fugitive<br>Dumping  | NFA              |
| Oahu   | Waipahu   | 20030612-0352<br>HECO Transformer<br>45731<br>Transformer 45731 spill                         | Rust-decayed transformer leaked oil to ground, soil surrounding and under the transformer's concrete pad. Spill was appx 32 gals.   | Concrete<br>/ soil |            | Shell Diala<br>Oil | Leaking-Over<br>Time | NFA              |
| Oahu   | Waipahu   | 20030327-0830<br>Ken's Cleaners<br>Ken's Cleaners drums<br>on sidewalk                        | Reported 6-7 x 55 gallon drums on sidewalk fronting entrance; 4 of those drums contain spent Perc (all have proper labels). Point of contact: Dai Choi, VP and plant manager. |                    |            |                    |                      | Refer to<br>SHWB |

| Island        | Locality      | Case Number and<br>Site Identification  | Initial Incident  | Media | Quantity | Substance(s)       | Standard<br>Cause   | Result |
|---------------|---------------|---|---|-------|----------|--------------------|---------------------|--------|
| Oahu          | Waipahu       | 20021117-1157<br>Abandoned Materials at<br>Poailani Circle<br>Abandoned Materials at<br>Poailani Circle | Contractor responded to abandoned materials at Poailani Circle for removal/disposal of the materials. | Other |          |                    | Fugitive<br>Dumping | NFA    |
| Open<br>Ocean | Pacific Ocean | 20020904-1626  Open Ocean Sheen 9 miles South of Kailua Bay   | Discovery of diesel fuel sheen in Pacific Ocean.  | Ocean |          |                    | Unknown             | NFA    |
| Open<br>Ocean | Pacific Ocean | 20021012-1334  Open Ocean Unknown sheen NRC 625916  | Sheen on water discovered at fueling dock.  | Ocean |          | Unknown            | Fugitive<br>Dumping | NFA    |
| Open<br>Ocean | Pacific Ocean | 20021006-1550  Open Ocean Brown Material Off Shoreline  | Caller reports brown material in ocean 100 yds off shoreline. Shoreline is rocky.                     | Ocean |          |                    | Unknown             | NFA    |
| Open<br>Ocean | Pacific Ocean | 20030609-1400  Open Ocean 200 gal Lubricating oil spillSS Matsonia                                      | Stern Tube Lube light oil spilled into Pacific Ocean from Stern Tube on Steam ship.                   | Ocean |          | Lubricating<br>Oil | Vessel-Spill        | NFA    |