



**UNITED STATES COAST GUARD
INTEGRATED SUPPORT COMMAND
HONOLULU, HAWAII**

**SPILL PREVENTION, CONTROL, AND
COUNTERMEASURES PLAN (SPCC)
AND CONTINGENCY PLAN**

FEBRUARY 2006



ISCHONOINST 5090.1C
MAR 15 2006

INTEGRATED SUPPORT COMMAND HONOLULU INSTRUCTION 5090.1C

Subj: SPILL PREVENTION, CONTROL, AND COUNTERMEASURES (SPCC) PLAN AND CONTINGENCY PLAN

Ref: (a) 40 Code of Federal Regulations 112.3(D)

1. PURPOSE. In accordance with Reference (a), this plan serves as the basis for pollution prevention planning, contingency planning and response actions for ISC Honolulu.
2. ACTION. Commanding Officers/Officers-in-Charge of ISC tenant commands and ISC Division Officers shall ensure familiarity and compliance with all the provisions of this Instruction.
3. DIRECTIVES AFFECTED. ISCHONOINST 5090.1B is cancelled.
4. DISCUSSION. ISC Honolulu is committed to a proactive environmental compliance program, which fully supports compliance with environmental laws and regulations. This SPCC Plan and Contingency Plan will serve as a tool for Coast Guard personnel to implement, maintain, and document spill prevention control measures and responses.
5. PROCEDURES. Follow the guidelines in Enclosure (1).
6. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. The use of the SPCC and Contingency Plans provide a proactive approach that will significantly reduce liabilities from oil and hazardous substance spills.
7. FORMS/REPORTS. None.

M. E. CUTTS

Encl: (1) Spill Prevention, Control, and Countermeasures (SPCC) Plan and Contingency Plan.

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ISC HONOLULU PHONE NUMBERS

<u>Title</u>	<u>Name</u>	<u>Number</u>
ISC Commanding Officer	Captain Matthew Cutts	(808) 842-2006
Primary IOSC	Richard Rickel	(808) 842-2908 (808) 222-6297(CEL)
Alternate IOSC	Derrick Law	(808) 842-2906 (808) 282-5622(CEL)
Officer of the Day	varies	(808) 226-4170(CEL)
ISC Security	varies	(808) 842-2970
Sector Honolulu	varies	(808) 842-2601

ACRONYMS

ANT	Aids-to-Navigation-Team
AST	Aboveground storage tank
CFR	Code of Federal Regulations
CERCLA	Comprehensive Environmental Response, Compensations, & Liability Act
ECO	Environmental Compliance Officer
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-know Act
ESU	Engineering Support Unit
HAR	Hawaii Administrative Rules
HAZCOM	Hazard Communications
HAZMINCEN	Hazardous Materials Minimization Center
HDOH	Hawaii Department of Health
HWF	Hazardous Waste Facility
ISC	Integrated Support Command
IOSC	Installation On-Scene Coordinator
NESU	Naval Engineering Support Unit
OOD	Officer Of the Day
OSHA	Occupational Safety and Health Administration
POL	Petroleum, oil, and lubricants
RQ	Reportable quantity
RCRA	Resource Conservation and Recovery Act
SPCC	Spill Prevention Control and Countermeasures
USCG	United States Coast Guard
UST	Underground storage tank

1.0 INTRODUCTION

This oil and hazardous substance Spill Prevention, Control, and Countermeasures Plan (SPCC) and Contingency Plan was developed for use by the United States Coast Guard personnel at the Integrated Support Command (ISC), Honolulu, Hawaii. The objectives of this plan are:

- 1) To identify locations and activities where the potential exists for harmful discharges to the environment of hazardous substances, hazardous wastes, or petroleum, oil, and lubricants (POL);
- 2) To establish a general spill prevention program and specific guidelines for facilities identified below;
- 3) To outline spill response procedures for personnel in identified activities.

This SPCC and Contingency Plan for the United States Coast Guard (USCG) Integrated Support Command Honolulu has been prepared to satisfy federal requirements. The purpose of the SPCC and Contingency Plan is to prevent oil or hazardous materials from entering navigable waterways of the United States. The format of this document is designed to satisfy regulatory requirements, and to serve as a tool for the USCG personnel to implement, maintain, and document spill prevention control measures and responses.

This document will be incorporated into ISC Honolulu operating procedures by using the Plan as a component of training for ISC personnel. The ISC Honolulu Environmental Branch will periodically review this Plan, perform a critical review, and make necessary amendments to the Plan at least every five years, or as storage and operating conditions change. See Appendix A for certification, posting, and updating requirements.

2.0 DESCRIPTION OF FACILITY

ISC Honolulu is an installation in the USCG Fourteenth District. ISC Honolulu consists of a contiguous 40.76-acre parcel located on the Honolulu Harbor side of Sand Island, Oahu, Hawaii. As shown in the Regional Location Map, Figure 2.0, the ISC facility is located directly across Honolulu Harbor from downtown Honolulu. Access to the ISC is via Nimitz Highway and Sand Island Access Road.

ISC Honolulu is home to, Sector Honolulu, Aids-To-Navigation Team (ANT), Electronics System Support Unit (ESU), Station Honolulu, Pacific Area Armory Detachment, a Marine Safety and Security Team and the Naval Engineering Support Unit (NESU). The installation is home port for two 378-foot cutters, two 225-foot buoy tenders, two 110-foot cutters, and numerous smaller vessels. Major activities on the ISC facility include a boathouse, support buildings, industrial facilities, a buoy sandblasting/repair yard, warehousing facilities, administration facilities, Base Exchange, an armory, barracks, and recreational facilities. A private security contractor continuously staffs the main gate.

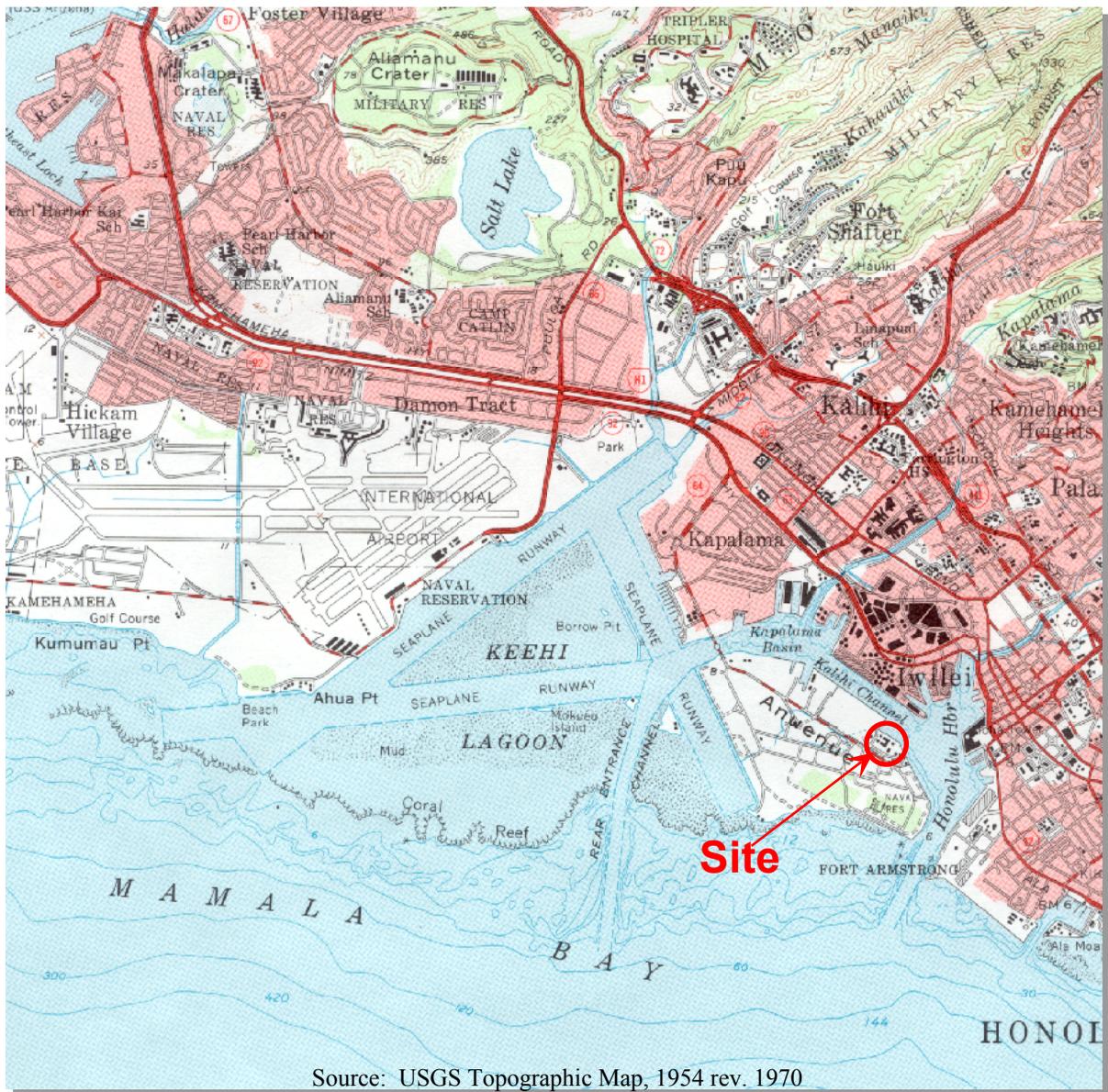
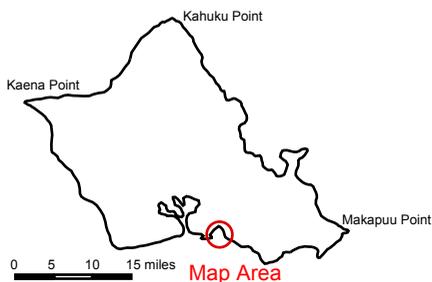


Figure 2.0 Regional Location Map



**SPCC& Contingency Plan
U.S. Coast Guard ISC
Honolulu, Hawaii**

February 2006
MNA Job No. 10273



**Myounghee Noh &
Associates, L.L.C.**

The ISC facility uses, stores, and accumulates oil at various locations and for various activities on the facility:

- To fuel vehicles and gas operated devices
- For emergency power generation
- As lubricants
- As used oil, or oil-contaminated material

Locations on the ISC facility where oil is stored in containers with a 55-gallon or greater capacity are summarized in Table 2.0

Table 2.0 Oil Storage Summary

Location	Activity	Type and Capacity of Oil	Secondary Containment or Equivalent
Station Honolulu Boathouse	Fueling small boats	Diesel, 2,000 gallon-AST	Dual wall tank
Station Honolulu Boathouse	Lubricants and used oil storage	New & used engine oil, 4 x 55-gallon drums	Containment pallet
Industrial Shop	Fueling small vehicles	Gasoline, 500-gallon AST Diesel, 500-gallon AST	Dual wall tank
Industrial Shop	Lubricants and used oil storage	New & used engine oil, 4 x 55-gallon drums	Containment pallet
Naval Engineering Support Unit	Emergency power generation	Diesel, 366-gallon integrated generator fuel tank	Integrated fuel tank
Operations & Administration	Emergency power generation	Diesel, 275-gallon AST	Dual wall tank
Emergency Generator Building	Emergency power generation	Diesel, 2,000-gallon AST	Secondary containment structure (concrete construction)
Compressor Building	Oily water from compressor	Oily water, 55-gallon drum	Containment pallet
Galley Waste Area	Used cooking oil storage	Used cooking oil, 55-gallon drum	Containment pallet

Location	Activity	Type and Capacity of Oil	Secondary Containment or Equivalent
Consolidated Supply Area (HWF)	Processing regulated wastes	Various materials as generated, 55-gallon drums	Containment pallet
Powerhouse #1	Permanently out of service	2,000-gallon AST	Secondary containment structure (concrete construction)
Exchange Gas Station	Fueling personally owned vehicles	Gasoline, 2 x 6,000-gallon USTs	USTs with leak detections, managed under State of Hawaii, UST Regulations
WPB Building	Admin, storage of small quantities of new and used oil/oily water	Up to 8 x 55-gallon drums	Containment pallet/ storage hutches
Marine Safety and Security Team (MSST) Building	Small boat maintenance, storage of small quantities of new and used oil	Up to 8 x 55-gallon drums	Containment pallets

The ISC topography is relatively level, and surface drainage is not well defined, resulting in localized puddling during heavy rainfall. Surface water drainage is facilitated through a system of storm drains that direct surface water from the interior of the ISC to outfalls in Honolulu Harbor. The ISC storm drainage system also conveys stormwater from off base facilities located on the opposite side of Sand Island Access Road. Figures 8.0, 9.0, and 10.0 show the Base layout and the current locations of bulk storage containers for oil and petroleum, flammable and hazardous material storage, and wastewater pump stations respectively. Honolulu Harbor is the navigable waterway under consideration in the preparation of this SPCC and Contingency Plan.

The USCG ISC Honolulu is a “Small Quantity Generator” of hazardous waste and has obtained EPA generator number HI8690390036 for hazardous waste generation. Storage at the Hazardous Waste Facility is temporary and does not exceed 180 days from the time of accumulation. Where possible, materials are transferred at the point of accumulation directly by a contractor. During the course of normal ISC operations, tenants, ISC, and Sector units generate various amounts of used lubricating oils, machine oils, hydraulic oils, solvents, paints, sandblasting grit, fluorescent tubes, and spent lead acid batteries.

3.0 ORGANIZATION COMPLIANCE

3.1 SPILL REPORTING

All USCG ISC Honolulu personnel and contractors must be trained to immediately report any suspected spills or releases of petroleum products and/or hazardous materials to the Installation On-scene Coordinator (IOSC) or another on-base emergency coordinator. Appropriate personnel shall be trained in the operation and maintenance of equipment to prevent discharges of oil and in all applicable pollution control laws, rules, and regulations.

3.2 PERSONNEL TRAINING

3.2.1 All Employees

All ISC Honolulu employees who could be exposed to hazardous materials during performance of their duties must be properly trained to comply with applicable regulations. All new employees must be trained within three months of employment. Prior to completion of training, the employee will not perform tasks involving the use of oil or hazardous materials unsupervised. Personnel shall be trained in the general procedures to prevent oil and or hazardous material discharges. Training shall include:

- Identification of areas where potential spills may occur
- Safe handling and precautions for preventing spills
- Response procedures including notification and reporting

3.2.2 Environmental Compliance Officers (ECO)

ISC Honolulu has implemented a quality assurance program to ensure that adequately trained personnel are available at all organizational levels. ISC Honolulu Division and Tenant units designate personnel to perform as primary and alternate Environmental Compliance Officers. ECOs receive and initial 28 hours of training and a yearly 12 hours of refresher training. ECOs are trained by the ISC Environmental Branch to:

- Maintain hazardous material storage areas in accordance with regulations and standard operating procedures
- Package and document small quantities of controlled wastes: oily rags, used absorbents, used oil
- Report spills to the ISC Environmental Branch
- Clean-up small quantity spills of oil or petroleum products
- Maintain records for materials and wastes
- Procure and manage hazardous products for individual units
- The HazMin Center is the point of issue for all flammable and hazardous materials used at the ISC, and only an ECO or Alternate ECO may receive those materials

- Maintain Material Safety Data Sheets for all hazardous materials

ECOs ensure the day-to-day management of individual unit's oil & petroleum, and hazardous materials. ECOs maintain inventory records and perform periodic inspection of storage areas, fuel tanks, and spill response materials.

3.3 REGULATORY COMPLIANCE AND APPLICABLE LAWS

The ISC Environmental Branch is responsible for ensuring the installation's compliance with applicable state and federal pollution control laws, regulations, and administrative requirements. The Environmental Branch ensures compliance by:

- Reviewing and maintaining required plans such as this SPCC plan
- Managing the ECO program
- Inspecting oil storage, and hazardous material storage areas
- Managing, and performing spill response and cleanup

3.3.1 Federal Regulations

Section 311 of the **Clean Water Act** addresses pollution from oil and hazardous substance release and directs the Environmental Protection Agency (EPA) to promulgate regulation regarding harmful discharges of oil and hazardous materials to the environment.

The **Oil Pollution Act** addresses contingency planning requirements for facilities to prevent and respond to harmful discharges of oil and hazardous materials.

The **Oil Pollution Prevention Regulation; 40 Code of Federal Regulations (CFR) 112**, addresses specific requirements and provisions for the preparation of SPCC plans.

Discharge of Oil 40 CFR 110 defines reporting requirements and responsibilities for discharges of oil into or on bodies of water.

Reportable quantities (RQs) of hazardous substances are detailed in **40 CFR 302**.

The EPA's regulations on the maintenance and operations of underground storage tanks are contained in **40 CFR 280**.

The Occupational Health and Safety Administration (OSHA) regulations contained in **29 CFR 1910.120** describe training requirements for personnel handling or responding to oil spills and/or other hazardous substances.

The **Comprehensive Environmental Response, Compensation, & Liability Act (CERCLA)**, also known as Superfund, contains a long list of hazardous substances and the reportable quantities which trigger reporting and cleanup.

Resource Conservation and Recovery Act (RCRA) describes a broad range of hazardous waste management requirements for generators and treatment, storage and disposal facilities.

Emergency Planning & Community Right-to-Know Act (EPCRA), requires communities to collect information from companies using/storing/producing chemicals in excess of “threshold planning quantities.” Federal installations fall under this requirement through Presidential Executive Order. This information is collected by the Hawaii Department of Health (HDOH) for use in emergency planning.

3.3.2 Hawaii Department of Health (HDOH) Regulations

The HDOH administers state regulations reflecting federal regulations with regard to the management of Underground Storage Tanks (UST), and in response to oil and hazardous substance spills.

Title 11-451 Hawaii Administrative Rules (HAR) “The State Contingency Plan” describes State requirements for response and notification for spills of oil and hazardous substances.

Title 11-281 HAR “Underground Storage Tanks” describes State of Hawaii requirements for operating and maintaining USTs. These requirements are described in two state documents:

The “**Technical Guidance Manual for Underground Storage Tank Closure and Release Response**” describes release response and notification requirements for discharges associated with USTs. “**Risk-Based Corrective Actions and Decision Making at Sites with Contaminated Soil and Groundwater**” provides state guidelines for developing corrective actions to UST discharges.

3.4 SPILL PREVENTION PROCEDURES

A copy of this plan is maintained at the ISC Environmental Branch and is available for reference to every ISC Honolulu employee. Site-specific portions of this plan are maintained at applicable storage sites. ECOs at each site will ensure that the plan is available to all personnel, and will conduct annual training with site personnel utilizing this plan. ISC Honolulu combines a centrally controlled training program, with regular inspections and maintenance to minimize the likelihood and severity of spills. General procedures for spill prevention are discussed in the following sections, and specific instructions for individual sites are included in their respective sections of this plan

3.4.1 Secondary Containment

Containers for the storage of oil and hazardous materials will be equipped with secondary containment, or equivalent protection as in the case of double walled aboveground

storage tanks. When secondary containment is not possible, a contingency plan to prevent a discharge and a strong commitment and an allocation of resources and personnel to prevent a discharge will be made (40 CFR 112.7). All bulk storage containers at the ISC Honolulu were equipped with secondary containment or equivalent protection at the date of publication of this plan.

3.4.2 Aboveground Storage Tanks (AST)

All aboveground storage tanks will have either 1) secondary containment capable of holding the entire contents of the largest tank within the containment area plus an additional ten percent to allow for rain; or 2) the tank will be of dual wall construction providing equivalent protection. Materials stored in tanks must be compatible with their construction and intended use. Tanks should be equipped with some form of leak detection. ASTs, including their associated fittings, piping, transfer lines and valves shall be periodically inspected for corrosion, material defects, and proper function. The ISC Environmental Branch will inspect ASTs storing Oil on a quarterly basis. A written record of inspections will be maintained for each AST for at least three (3) years, and shall be available from the Environmental Branch upon request. The Environmental Branch will schedule integrity testing for ASTs whenever significant repair or modification of function is required.

3.4.3 Drum Storage

New and used products and wastes are stored in 55 gallon and smaller drums throughout the installations. Generally only containers of 55 gallons or greater are required to have secondary containment; however, it is good practice to store a single wall container in secondary containment or on containment pallets where possible. New petroleum products are issued to units in containers of less than 25 gallons.

Drums must be clearly marked with their contents. Drums shall be in good material condition, and inspected regularly for defects and corrosion. Worn or damaged drums will be replaced immediately. Material shall be stored only in drums compatible with the material being stored. For storage of new or used petroleum products, only drums with top mounted bungs shall be used. Non-sparking tools shall be used to open and close drums. For used petroleum drums, a log shall be maintained indicating when material begins to accumulate in the drum, and every subsequent addition of material to the drum.

3.4.4 Filling and Handling Procedures

Caution should be taken at all times while handling petroleum, used oil, and hazardous materials or wastes to prevent a harmful discharge to the environment. Personnel should pay particular attention when handling or transferring products near bodies of water or drainage systems. Only those personnel, who are trained to properly handle POL or specific hazardous materials; and have had the appropriate Hazard Communication

(HAZCOM) briefing in accordance with OSHA guidelines shall handle the specific material.

When significant quantities of POL (greater than 55 gallons), in single or multiple transfers will occur, block all down gradient storm or drainage openings within a 50-foot radius, prior to beginning the transfer. Before beginning transfer operations, have adequate supplies of absorbents, booms, and pads readily available. Drains and openings may be blocked by attaching a cover or by dikes of absorbent booms. If a discharge does occur stop the transfer and source of the leak so it does not enter a waterway or drain.

3.4.4 Inspection Procedures

ISC Honolulu personnel will periodically inspect containers and storage areas. The ECO at the unit using or storing the material will perform the primary inspection, and the ISC Environmental Branch will perform periodic oversight inspections. An AST inspection form is included in Appendix B. Inspection records will be maintained for at least three (3) years. Items to be inspected and the frequency of inspection are listed in Table 3.4.4.

3.5 SECURITY

ISC Honolulu has security guards on duty 24 hours per day, year round. Access is restricted to ISC Honolulu personnel, tenants, contractors and authorized visitors.

Table 3.4. ISC Honolulu Inspection Schedule for Oil and Hazardous Material

Area	Inspection Items	ECO Inspection Frequency	ISC Environmental Branch Inspection Frequency
Station Honolulu Boathouse	1) AST and piping 2) Fuel dispenser 3) Drum storage area 4) Flammable lockers 5) Spill kits	Weekly*	Quarterly
Industrial Shop	1) ASTs and piping 2) Fuel dispenser 3) Drum storage area 4) Flammable lockers 5) Compressed gas cylinders 6) Spill kits	Weekly*	Quarterly
Naval Engineering Support Unit	1) Emergency generator 2) Flammable lockers 3) Compressed gas cylinders 4) Spill kits	Weekly*	Quarterly
Operations and Administration Building	1) AST and pipinmg	Inspection performed by Environmental Branch	Monthly
Emergency Generator Building	1) AST and piping 2) Spill kits	Weekly After every rainfall	Quarterly

Area	Inspection Items	ECO Inspection Frequency	ISC Environmental Branch Inspection Frequency
Compressor Building	1) Drum storage area	Weekly	Quarterly
Galley Waste Area	1) Drum storage area 2) Flammable lockers	Weekly	Quarterly
WPB Building	1) Drum storage area 2) Flammable lockers	Weekly	Quarterly
MSST Building	1) Drum storage area 2) Flammable lockers	Weekly	Quarterly
Consolidated Supply Facility (HazMin/HWF)	1) HazMin storage area 2) Hazardous Waste Facility 3) Spill kits	Inspection performed by Environmental Branch	Weekly
Powerhouse #1	1) AST-Out of service	Inspection performed by Environmental Branch	Quarterly
Gasoline Station	1) USTs 2) Fuel Dispensers	USTs are managed by the Coast Guard Exchange	Annually
Electrical Transformers	1) Transformers	Quarterly	Annually
Sandblasting Building	1) Blasting grit and paint dust storage area 2) Flammable lockers	Weekly	Quarterly
Paint Shop	1) Used paint storage area 2) Flammable lockers	Weekly	Quarterly
Aids to Navigation Team Building	1) Flammable lockers	Weekly	Quarterly
Pool Building	1) Chlorination materials	Weekly	Quarterly
Club 14	1) Flammable lockers	Weekly	Quarterly

Note: Facilities will be inspected by the Environmental Branch, subsequent, to major spills.
 *In addition, inspect prior to refueling.

4.0 SPILL RESPONSE AND REPORTING PROCEDURES

The USCG ISC Honolulu response organization consists of the Environmental Branch, Environmental Compliance Officers, and for a major spill, Sector Honolulu.

The Environmental Branch is staffed by two (2) emergency coordinators consisting of a primary Installation On-Scene Coordinator and one alternate. The IOSC is responsible for assisting ECOs with all spills. The IOSC supervises response, cleanup, and restoration activities. If a spill occurs the IOSC will:

- Supervise the ECOs spill response efforts
- Ensure spills are properly documented, and that the appropriate agencies are notified in the event of a reportable spill
- Request additional spill response resources, if needed, from the ISC Honolulu Commanding Officer and Sector Honolulu

- Determine the cause of the spill and the appropriate response to prevent future spills (Response may include additional training of personnel, maintenance, or revised operating procedures)
- Supervise the restoration of the spill site

Individuals discovering a spill should immediately report the spill to the ISC Honolulu Officer of the Day (OOD) by dialing (808) 226-4170(Cell). The OOD will contact the IOSC. In the event that the primary or alternate IOSC cannot be reached the OOD will contact Sector Honolulu at (808) 842-2601. Refer to Figure 4.0, ISC Honolulu Response Organization Flowchart, for spill response sequence and responsibilities.

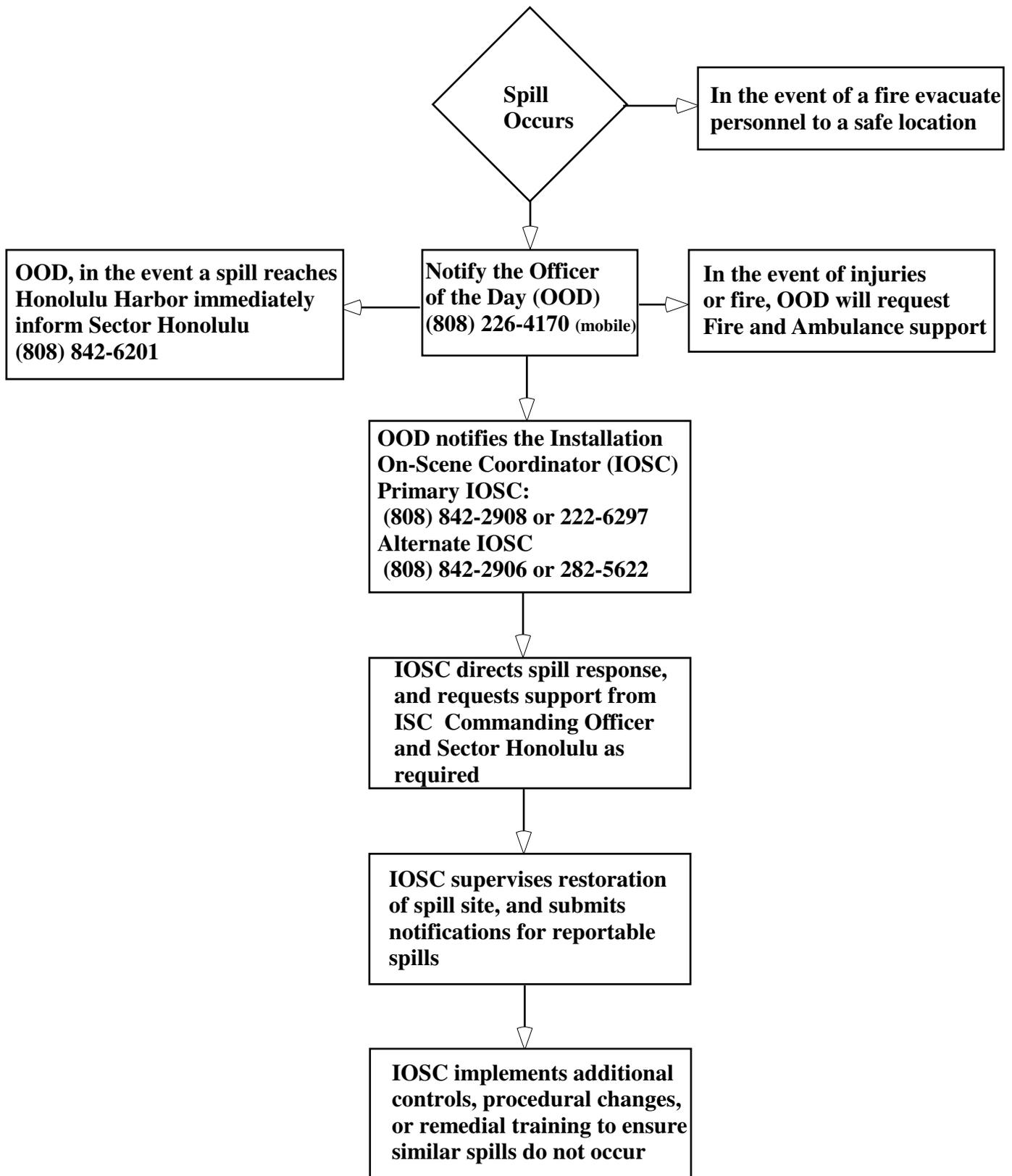
4.1 GENERAL SPILL RESPONSE

ECOs are responsible for responding to spills in their assigned area(s). ECOs will take actions, including notifying the IOSC, to minimize the severity and impact of spills. In the event of a fire, or imminent fire, evacuate all personnel to a safe location and do not attempt aggressive actions. Personnel without adequate training will not attempt to respond to spills. If the material spilled cannot be identified personnel will exit the area, block nearby drains with absorbent materials and wait for assistance from the IOSC. Individual units will report all spills to the Environmental Branch regardless of size. When responding to a controllable spill ECOs will use the following guidance.

Stop the source of the spill:

- Turn the container so the hole or leak is upright
- Package the container in an overpack or larger container
- Transfer the contents of the leaking container to an intact container
- Place the leaking container on a secondary containment pallet

Figure 4.0 ISC Honolulu Response Organization Flowchart



Prevent spills from reaching water:

- Block drainage openings, stormwater catch basins, or any access points to water
- Use absorbent materials from spill kits, or in unpaved area construct dikes from compacted soil

Begin cleanup as soon as safety allows:

- Oil over time will saturate soil and penetrate the ground surface; quick removal can reduce the total waste volume
- Spills of diesel or gasoline on asphalt can damage the asphalt; use absorbent materials to recover spills

4.2 REPORTING PROCEDURES

Individuals observing or encountering spills will notify the Officer of the Day. ECOs from individual units will report all spills that occur at their facility to the Environmental Branch during normal duty hours, and to the OOD after 5 p.m. and on weekends. The Environmental Branch will make the determination if outside agencies are required to be notified. For hazardous materials refer to Appendix E to determine if a reportable quantity has been discharged, and for oil refer to the guidance listed below.

HAWAII ADMINISTRATIVE RULES
Excerpt for Oil

11-451-6 Determination of reportable quantities

5) For oil:

- (A) Any amount of oil which when released into the environment causes a sheen to appear on surface water, or any navigable water of the State;
- (B) Any free product that appears on ground water;
- (C) Any amount of oil released to the environment greater than 25 gallons; and
- (D) Any amount of oil released to the environment which is less than 25 gallons, but which is not contained and remediated within 72 hours.

Table 4.2 Agency Contacts for Reportable Spills

Agency	Telephone	When to Call
Department of Health Office of Hazard Evaluation and Emergency Response	(808) 226-3793	Any discharge of oil, hazardous materials, or wastewater to Honolulu Harbor or other navigable waters. Any discharge of a Reportable Quantity in accordance with 40 CFR Part 302.4 (Appendix E)
Sector Honolulu	(808) 842-8601	Any discharge of oil, hazardous materials, or wastewater to Honolulu Harbor or other navigable waters.
National Response Center	(800) 442-8802	Any discharge of a Reportable Quantity in accordance with 40 CFR Part 302.4 (Appendix E)

5.0 CONTAINMENT STRUCTURE DRAINAGE

When storm water accumulates in a permanent or temporary containment area, the Environmental Branch will drain the water from the structure. Currently the only permanent containment structure requiring drainage is located at the Emergency Generator Building. The accumulated water must be inspected for oil or sheen. Before releasing water, any sheen, free product, or oily residue must be removed. Absorbent materials may be used to skim the water surface. Release the storm water only after inspection and cleaning, by opening the drain valve, and allow the water to discharge into the adjacent ground surface. The Environmental Branch will document all releases on the Storm Water Discharge Form included in Appendix B of this Plan.

6.0 SPILL RESPONSE EQUIPMENT

Spill Response equipment is maintained centrally by the Environmental Branch at the Hazardous Waste Facility, and at individual storage sites by unit ECOs. ECOs are responsible for ensuring that spill kits are adequately stocked with materials, and the Environmental Branch periodically inspects spill kits for compliance. Spill response materials at the Environmental Branch include:

<u>Quantity</u>	<u>Spill Response Material</u>
40 to 50	55-gallon drums
One (1)	75-gallon capacity drum overpack
Two (2)	75-gallon capacity containment pallets
Ten (10)	50 pound bags of absorbent material
Sixteen (16)	3 inch diameter by 48-inch absorbent socks

Three (3)	5 inch diameter by 10-inch length absorbent socks
Ten (10)	50-count bags of absorbent pads
Ten (10)	8-inch x 16-inch x 20-inch absorbent pillows
Fifty (50)	disposal bags

Spill kits at individual storage sites typically contain enough material to recover 15 to 25 gallon spills. Spill kits are located at:

- Station Honolulu Boathouse at the drum storage area and the dispenser pumps
- Industrial Shop at the vehicle maintenance area and the metal working area
- Naval Engineering Support Unit at the flammable storage area
- Emergency Generator Building at the entrance to the building
- Sandblasting Building at the flammable storage area
- Paint Shop Building at the storage area
- Coast Guard Exchange at the gasoline pump island

7.0 DISPOSAL OF RECOVERED MATERIALS

Spill response may generate considerable amounts of waste including waste petroleum products, used absorbent materials, or petroleum contaminated soil. These wastes will not be disposed of with general wastes. ECOs will coordinate with the Environmental Branch to ensure the proper handling, packaging, and transfer of waste. ECOs will ensure wastes generated during spill recovery are properly stored as generated, and do not become a secondary source of pollution.

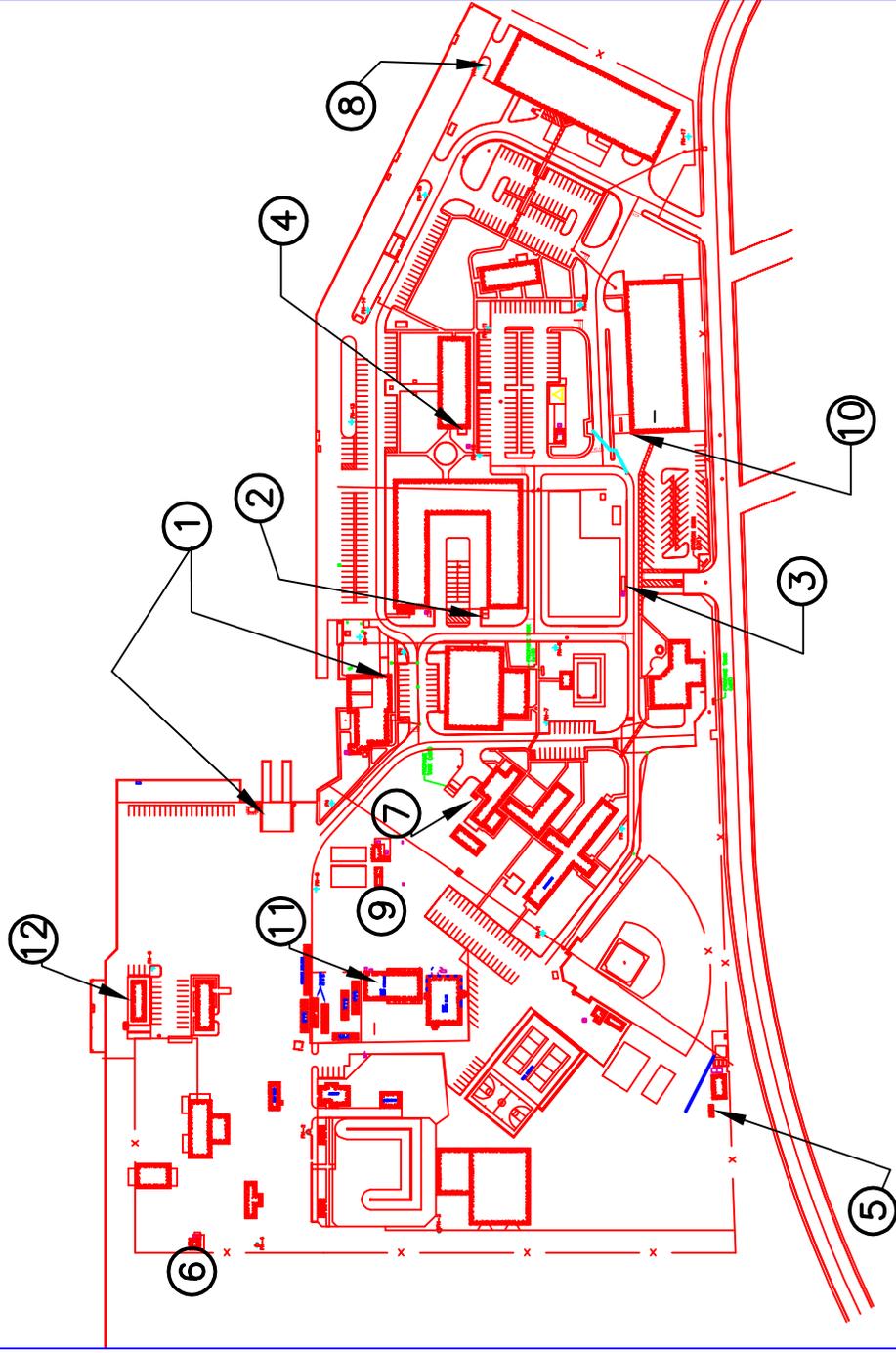
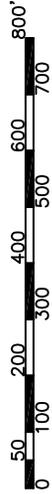
8.0 SPCC AND CONTINGENCY AREA PLANS

SPCC and Contingency Plans have been prepared for ISC Honolulu bulk storage containers, hazardous material storage areas, transformers, and wastewater pump stations. Provided in Section 8.0 are facility overview, site map, spill prevention, control, and countermeasures, spill contingency measures, spill response, evacuation plan, and fire safety information, for each facility listed below:

- 8.1 Station Honolulu Boathouse (2,000 gallon diesel AST, 55 gallon oil drums, flammable storage)
- 8.2 Industrial Shop (2- 500 gallon ASTs, 55 gallon oil and used oil drums, flammable storage)
- 8.3 Naval Engineering Support Unit (366 gallon integrated diesel tank in emergency generator, flammable storage)
- 8.4 Operations and Administration Building (275 gallon diesel AST)
- 8.5 Emergency Generator Building (2,000 gallon diesel AST with 275 gallon day tank)
- 8.6 Compressor Building (55 gallon oily water drum)
- 8.7 Galley Waste Area (55 gallon cooking oil, flammable storage lockers)
- 8.8 Consolidated Supply Area (55 gallon drums)
- 8.9 Patrol Boat Building (WPB), (55 gallon drums)
- 8.10 Marine Safety and Security Team Building (55 gallon drums, flammable storage)
- 8.9 Powerhouse #1 (2,000 gallon AST-no longer in service)
- 8.10 Gas Station (2-6,000 gallon gasoline USTs)
- 8.11 Oil Filled Electrical Transformers

BULK STORAGE CONTAINERS

- 1- STATION HONOLULU BOATHOUSE (FIGURE 8.1)
 - 2- INDUSTRIAL SHOP (FIGURE 8.2)
 - 3- NAVAL ENGINEERING SUPPORT UNIT (NESU) (FIGURE 8.3)
 - 4- OPERATIONS AND ADMINISTRATOR BUILDING (FIGURE 8.4)
 - 5- EMERGENCY GENERATOR BUILDING (FIGURE 8.5)
 - 6- COMPRESSOR BUILDING (FIGURE 8.6)
 - 7- GALLEY WASTE AREA (FIGURE 8.7)
 - 8- CONSOLIDATED SUPPLY AREA (FIGURE 8.8)
 - 9- POWERHOUSE #1, (PERMANENTLY OUT OF SERVICE) (FIGURE 8.9)
 - 11- MSST BOAT MAINTENANCE BUILDING (FIGURE 8.9)
 - 12- WPB SUPPORT BUILDING (FIGURE 8.10)
- USTs
- 10- GAS STATION (FIGURE 8.12)



8.1 STATION HONOLULU BOATHOUSE

8.1.1 Facility Overview

Storage Area:

The Station Honolulu Boathouse is located in Building 1236 (RPFN#-P31). The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.1. This building contains offices, shops, and two (2) boat slips. An oil drum storage area is located near the boat slips, and flammable lockers are located in storage rooms on the south side of the building. A 2,000 gallon diesel AST is located to the north of the building. The exterior ground surface is paved to the south and unpaved to the north. A boat slips run through the center of the building.



Quantity and Type Materials Stored:

- 2,000 gallons of diesel fuel in AST
- Up to four (4) 55 gallon drums of new or used oil
- Small quantities (less than 5 gallons) of lubricants, cleaners, paints, and fuel containers
- Assorted batteries

Estimated Quantity Of Material(s) Potentially Discharged:

- 1,000 gallons of diesel fuel or the complete contents of one tank from the delivery truck, while refilling the 2,000 gallon AST
- 5 to 25 gallons of diesel fuel to Honolulu Harbor while fueling a vessel
- 55 gallons of used oil to Honolulu Harbor while emptying the used oil drum, or emplacing a new drum in the oil storage containment

Containment Structures:

- 2,000 gallon dual wall tank
- 75 gallon capacity drum containment structure with dispensing well
- Flammable storage area, separate locked area with segregated flammable lockers

Spill Pathways:

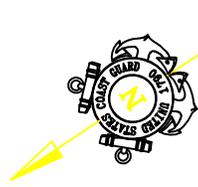
- Spill from or near the 2,000 gallon AST could enter Honolulu Harbor via the drainage openings in the waterside curbing;
- Spills from the oil storage area could enter Honolulu Harbor via the boat slips inside the boathouse

BULK CONTAINERS INFO

- 1- 2,000 GALLON DIESEL WALL AST WITH ASSOCIATED FUEL LINE, PUMP, AND DISPENSER
- 2- 4 X 55 GALLON USED OIL/NEW OIL ON SECONDARY CONTAINMENT PALLET (75 GALLON CAPACITY)

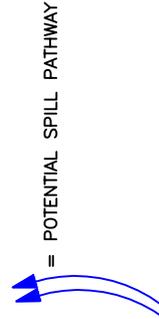
FLAMMABLE & HAZARDOUS MATERIALS

- 3- FLAMMABLE STORAGE ROOM. SMALL QUANTITY CONTAINERS (<25 GALLONS) OF CLEANERS, GASOLINE, AND SOLVENT STORED IN SEGREGATED LOCKERS

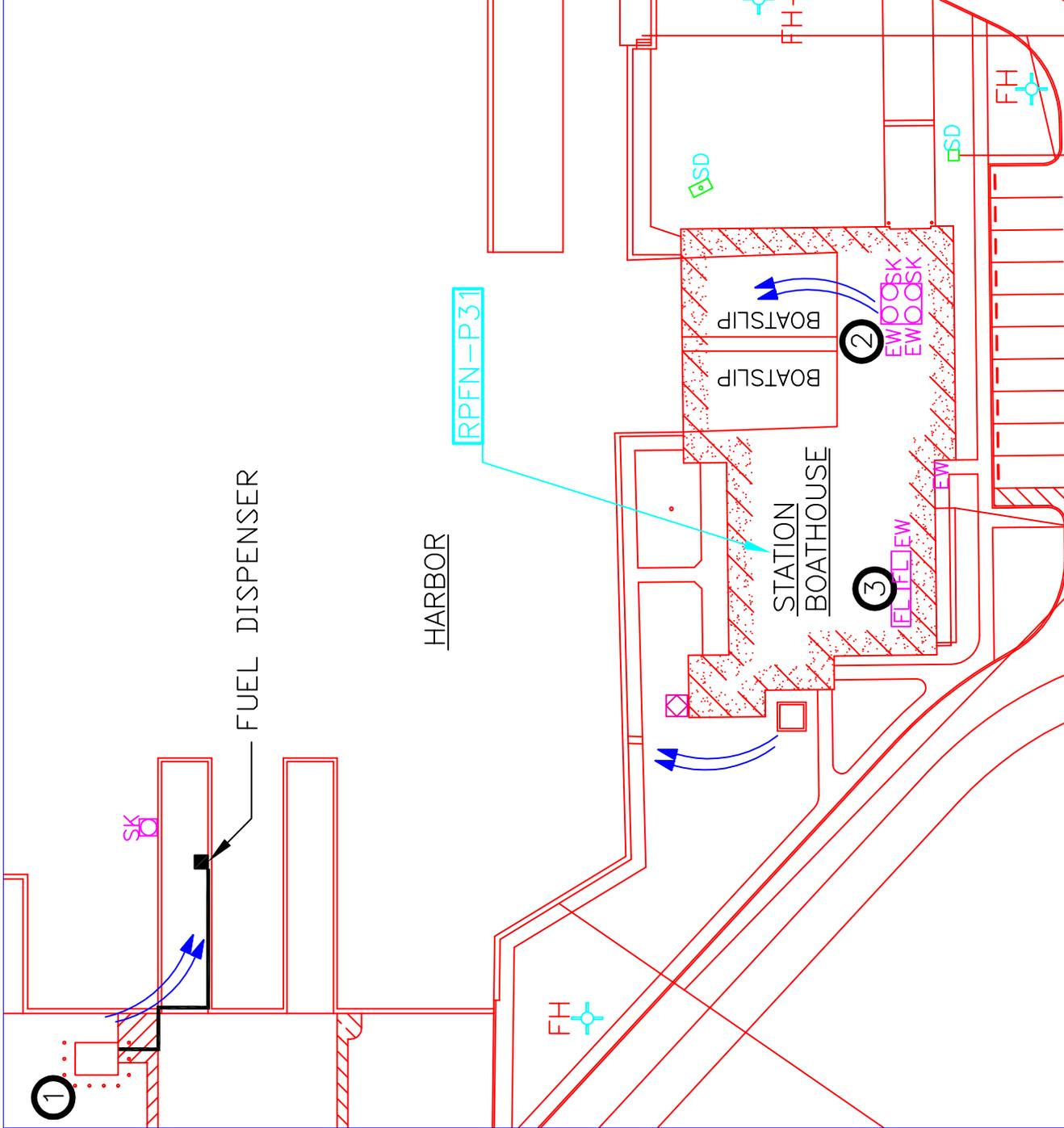


LEGEND

- EW = EYE WASH STATION
- SK = SPILL KIT LOCATION
- FL = FLAMMABLE LOCKER
- FH = FIRE HYDRANT
- SD = STORM DRAIN



= POTENTIAL SPILL PATHWAY



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Figure 8.1

Honolulu

Hawaii

Station Honolulu Boat House

8.1.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 2 individuals from the Boathouse will be appointed, and will attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials
- Train all personnel required to fuel small vessels and maintain a list of those personnel authorized to conduct fueling

Handling and Procedures

- All transfers to or from the 2,000 gallon AST will be observed by the ECO
- The drainage openings in the waterside curbing will be blocked when the AST is being filled
- All transfers to or from the used oil storage drum will be observed and recorded by the ECO
- Small spills on concrete surfaces will be cleaned up immediately

Inspection

AST Inspect the 2,000 gallon AST weekly for signs or corrosion, weathering, or leaks. Check ports, fittings, covers, and exposed surfaces. Inspect the piping from the tank to the fuel dispenser for leaks or damage. Check the fuel dispenser and hose assembly for damage, wear, or leaks. Check the surface underneath the dispenser for evidence of leaks or drips. Check the spill kit positioned by the dispenser to ensure that spill recovery materials are adequate.

Drum Storage Inspect the drum storage area weekly. Check drums for damage, rust, or leaks. Check the drum containment pallet for signs of wear, damage, or leaks.

Flammable and Hazardous Material Lockers Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the administrative office shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and OOD
- Before attempting cleanup actions identify the spilled material.
- If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. (For example, a drum may be rotated so the damaged side is face up.)
- Isolate the area of the spill with absorbent materials.

- If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

8.1.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170.

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.1.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spill kits are located at the drum storage area near the boat slips, and the fuel dispenser area near the AST. Spill kits are to be used for clean-up and containment of small spills. They are to be used for spills only and not for routine cleanups. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located within the building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

- Oil, paint or solvent spills occurring inside the Station Honolulu facility should be cleaned using oil/coolant/solvent spill kit absorbent materials.
- Corrosive spills should be cleaned using the acid/caustics spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then

responders will focus immediate action on containing and preventing spills from reaching water.

8.1.5 Evacuation Plan

Approximate number of persons working at site:	15-30
Primary evacuation assembly area:	Gymnasium
Secondary evacuation assembly area:	Galley

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops, the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe to do so. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and/or fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

8.1.6 Fire Safety Equipment

Equipment

As shown on Figure 8.1, the closest fire hydrant is located near the east corner of the facility. Tri-class fire extinguishers are available along the walls of the boat slip area.

8.2 INDUSTRIAL SHOP AND ENGINEERING SUPPORT UNIT

8.2.1 Facility Overview

Storage Area:

The Industrial Shop is located in Building 942 (RPFN#-N01). The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.2. This building contains offices and maintenance shops. Flammable and hazardous materials are stored in flammable lockers located along the center of the building, and in the vessel support shop and motor pool.



Quantity and Type Materials Stored:

- Diesel and gasoline in two (2), 500 gallon ASTs
- Up to four (4) 55 gallon drums of new or used oil
- Small quantities (less than 20 gallon container size) of paint, gasoline, and cleaners in flammable lockers
- 5-10 compressed gas cylinders (acetylene and oxygen)
- Assorted batteries

Estimated Quantity Of Material(s) Potentially Discharged:

- 500 gallons of diesel fuel or gasoline, or the contents of the largest single compartment on the delivery vehicles

Containment Structures:

- ASTs are dual wall construction
- 55-gallon drums are stored on a containment pallet with 75-gallon capacity, and located inside the motor pool shop
- Flammable and hazardous materials are stored in approved metal lockers when not in use

Spill Pathways:

Spills from the 500-gallon ASTs could reach the stormwater catch basin located approximately 40 feet to the north.

8.2.2 Spill Prevention Control and Countermeasures

Prevention Measures:

Training

- An individual from each branch located in the facility will be appointed, and will attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials
- Train all personnel permitted to use the fuel dispenser and maintain a list of those personnel authorized to conduct refueling

BULK CONTAINERS INFO

- 1- 500 GALLON ASTs X2
- 2- 55 GALLON USED AND NEW OIL

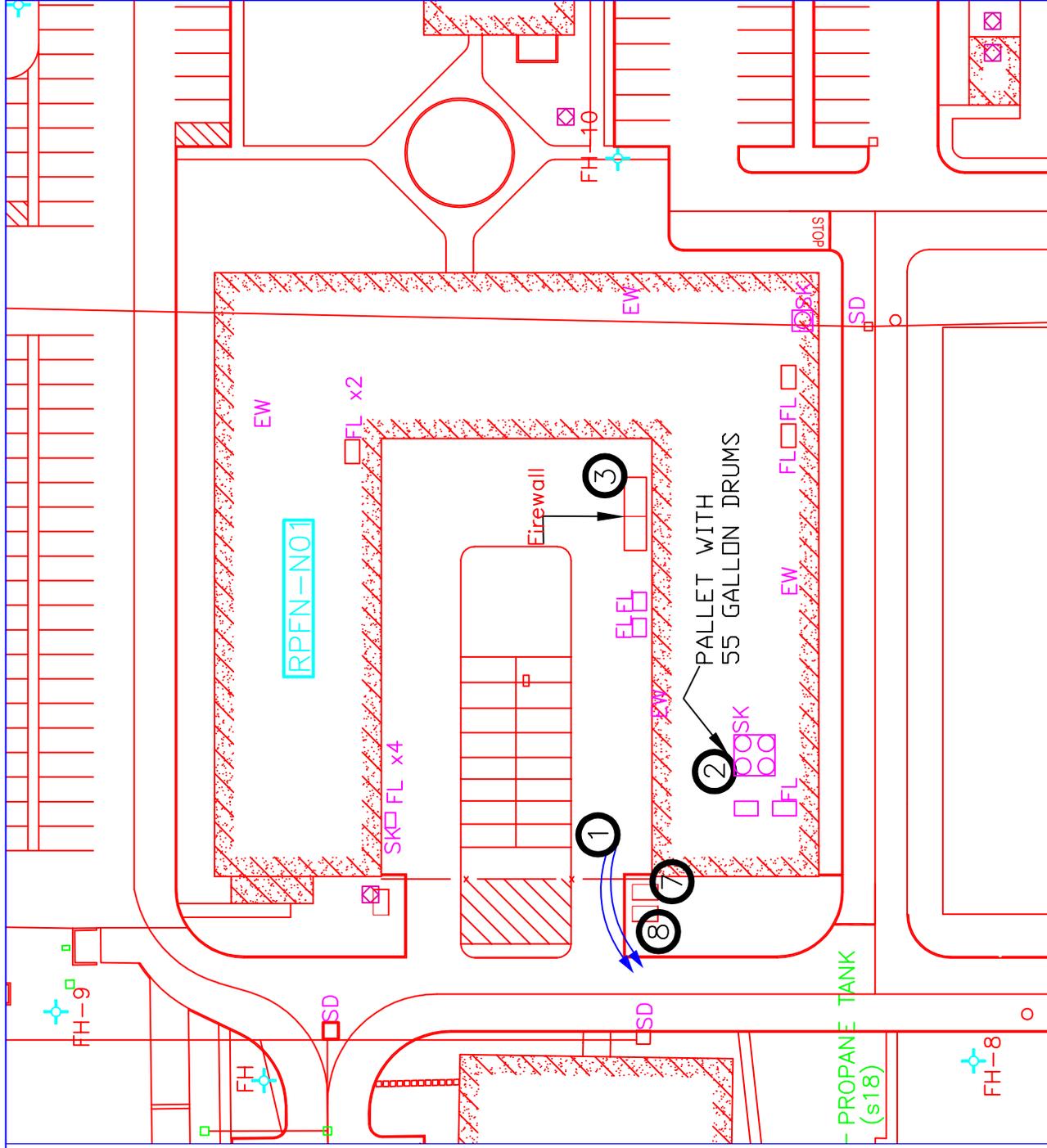
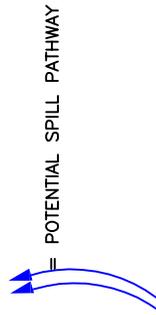
FLAMMABLE & HAZARDOUS MATERIALS

- 3- OXYGEN AND ACETYLENE CYLINDERS
- 4- PARTS WASHER
- 5- WASTE SOLVENT SATELLITE ACCUMULATION SITE
- 6- PAINT STORAGE
- 7- DIESEL
- 8- GAS



LEGEND

- SK = SPILL KIT LOCATION
- FL = FLAMMABLE LOCKER
- EW = EYE WASH
- AL = ACID LOCKER
- FH = FIRE HYDRANT
- SD = STORM DRAIN



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U.S.C.G. ISC SPCC Plan

Figure 8.2

Honolulu

Hawaii

Industrial Building

Handling and Procedures

- An ECO will observe fueling of the ASTs. When the ASTs are being fueled, block the stormwater catch basin down gradient from the ASTs, with a fixed cover or absorbent materials.
- Clean up small spills on concrete surfaces immediately.

Inspection

ASTs Inspect the 500 gallon ASTs weekly for signs or corrosion, weathering, or leaks. Check ports, fittings, covers, and exposed surfaces. Check the fuel dispenser and hose assembly for damage, wear, or leaks. Check the surface underneath the dispenser for evidence of leaks or drips. Record the tank inventory daily, and manually measure the contents weekly.

Drum Storage Inspect the drum storage area weekly. Check drums for damage, rust, or leaks. Check the drum containment pallet for signs of wear, damage, or leaks.

Flammable and Hazardous Material Lockers Inspect the flammable storage areas weekly. An inventory sheet posted on the locker or in the administrative office shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Compressed Gas Cylinders Inspect compressed gas cylinder areas weekly. Ensure all cylinders are returned to storage area when not in use. Cylinders must be securely fastened. Inspect cylinders for sign of wear, damage, and corrosion.

Spill Control Measures

- A. Report spills immediately to the Environmental Branch, and OOD.
- B. Before attempting cleanup actions identify the spilled material. If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- C. Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- D. Isolate the area of the spill with absorbent materials. If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

8.2.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.

- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).
-

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.2.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spills kits are located at the drum storage area in the motor pool shop, in the vessel support shop, and in the north west corner of the parking area. Spill kits are to be used for clean-up and containment of small spills. They are to be used for spills only and not for routine cleanups. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.

- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located within the building can be used.

- Oil, paint or solvent spills occurring inside the Industrial Building should be cleaned using oil/coolant/solvent spill kit absorbent materials.
- Corrosive spills should be cleaned using the acid/caustics spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available to complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.2.5 Evacuation Plan

Approximate number of persons working at site:	25-50
Primary evacuation assembly area:	Gymnasium
Secondary evacuation assembly area:	Galley

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.

5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

8.2.6 Fire Safety Equipment

Equipment

As shown on Figure 8.2, fire hydrants are located on the north east side of the building, and across Bottoms Avenue to the north. Tri-class fire extinguishers are available in all individual sections.

8.3 NAVAL ENGINEERING SUPPORT UNIT (NESU)

8.3.1 Facility Overview

Storage Area:

The Naval Engineering Support Unit (RPFN#-N02) is located near the main entrance to ISC Honolulu. The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.3. This building contains offices and shops. Flammable and hazardous materials are stored in a structure east of the building. An emergency generator with integrated fuel tank is located at the front (south east side facing entrance gate) of the building.

Quantity and Type Materials Stored:

- 366 gallons of diesel fuel in the emergency generator
- Small quantities (less than 20 gallon container size) of paint, gasoline, and cleaners in flammable lockers,
- Compressed gas cylinders 5-10
- Assorted batteries

Estimated Quantity Of Material(s) Potentially Discharged:

366 gallons of diesel fuel from the emergency generator

Containment Structures:

Flammable storage area, separate locked area with segregated flammable lockers

Spill Pathways:

Spills from the emergency generator would likely be contained by the street side curbing and would infiltrate into the soil at the base of the generator.

8.3.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 2 individuals from the NESU will be appointed, and will attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

- Refilling of the emergency generator will be observed by an ECO.
- Small spills on concrete surfaces will be cleaned up immediately.

BULK CONTAINERS INFO

1- 366 GALLON INTEGRATED DIESEL TANK IN EMERGENCY GENERATOR

FLAMMABLE & HAZARDOUS MATERIALS

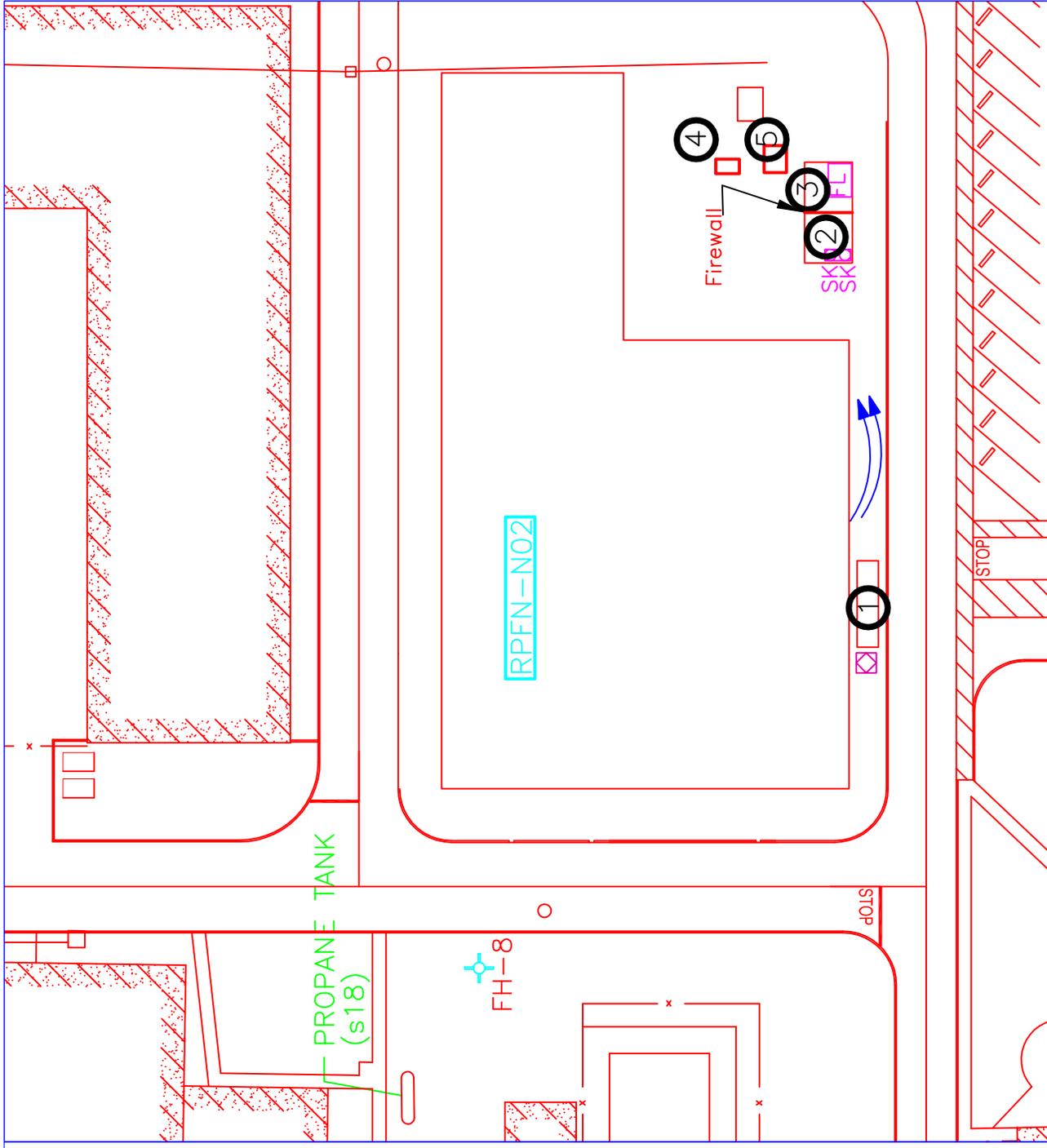
- 2- OXYGEN AND ACETYLENE CYLINDERS
- 3- FLAMMABLE LOCKER
- 4- ACID LOCKER
- 5- HOTCH



LEGEND

- EW = EYE WASH STATION
- SK = SPILL KIT LOCATION
- FL = FLAMMABLE LOCKER

 = POTENTIAL SPILL PATHWAY



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U.S.C.G. ISC SPCC Plan

Figure 8.3

Naval Engineering Support Unit

Honolulu

Hawaii

(NESU)

Inspection

Emergency Generator Inspect the generator weekly for signs of corrosion, weathering, or leaks. Check ports, fittings, covers, and exposed surfaces. Check the generator base for stains or other evidence of leaks.

Flammable and Hazardous Material Lockers Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the administrative office shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Compressed Gas Cylinders Inspect compressed gas cylinder areas weekly. Ensure all cylinders are returned to storage area when not in use. Cylinders must be securely fastened. Inspect cylinders for sign of wear, damage, and corrosion.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and OOD.
- Before attempting cleanup actions identify the spilled material.
- If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials.
- If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

8.3.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material

- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.3.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spills kits are located at the flammable storage area. Spill kits are to be used for clean-up and containment of small spills. They are to be used for spills only and not for routine cleanups. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved area should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located within the building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

- Oil, paint or solvent spills should be cleaned using oil/coolant/solvent spill kit absorbent materials.
- Corrosive spills should be cleaned using the acid/caustics spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.3.5 Evacuation Plan

Approximate number of persons working at site:	25-50
Primary evacuation assembly area:	Club 14
Secondary evacuation assembly area:	Gymnasium

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.

6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

8.3.6 Fire Safety Equipment

Equipment

The closest fire hydrant is located north of the facility near the swimming pool. Tri-class fire extinguishers are available inside the NESU building.

8.4 OPERATIONS AND ADMINISTRATION BUILDING

8.4.1 Facility Overview

Storage Area:

The Operations and Administration Building (RPFN#-K01) is located adjacent and to the east of the Industrial Building. The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.4. This building contains administrative offices. A 275-gallon diesel AST is located in an enclosure on the northwest side of the building, with a 25-gallon day tank located in the utility room of the building.



Quantity and Type Materials Stored:

- 275 gallons of diesel fuel in the AST
- 25 gallons of diesel fuel in the day tank

Estimated Quantity Of Material(s) Potentially Discharged:

275 gallons of diesel fuel

The contents of one tank from the delivery vehicle or 275 gallons of diesel fuel

Containment Structures:

The AST is of dual wall construction located in a concrete enclosure with the capacity to retain 1-5 gallons of spillage..

Spill Pathways:

Spills from or near the 275-gallon tank would likely pool near the enclosure and be absorbed into the ground.

8.4.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Handling and Procedures

Refilling of the AST will be observed by the Environmental Branch.

Inspection

AST The Environmental Branch will inspect the 275-gallon AST monthly for signs of corrosion, weathering, or leaks. Check ports, fittings, covers, and exposed surfaces. Check the surface underneath the dispenser for evidence of leaks or drips. Record the tank inventory daily, and manually measure the contents weekly.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and OOD.
- Before attempting cleanup actions identify the spilled material.
- If the material cannot be identified, isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.

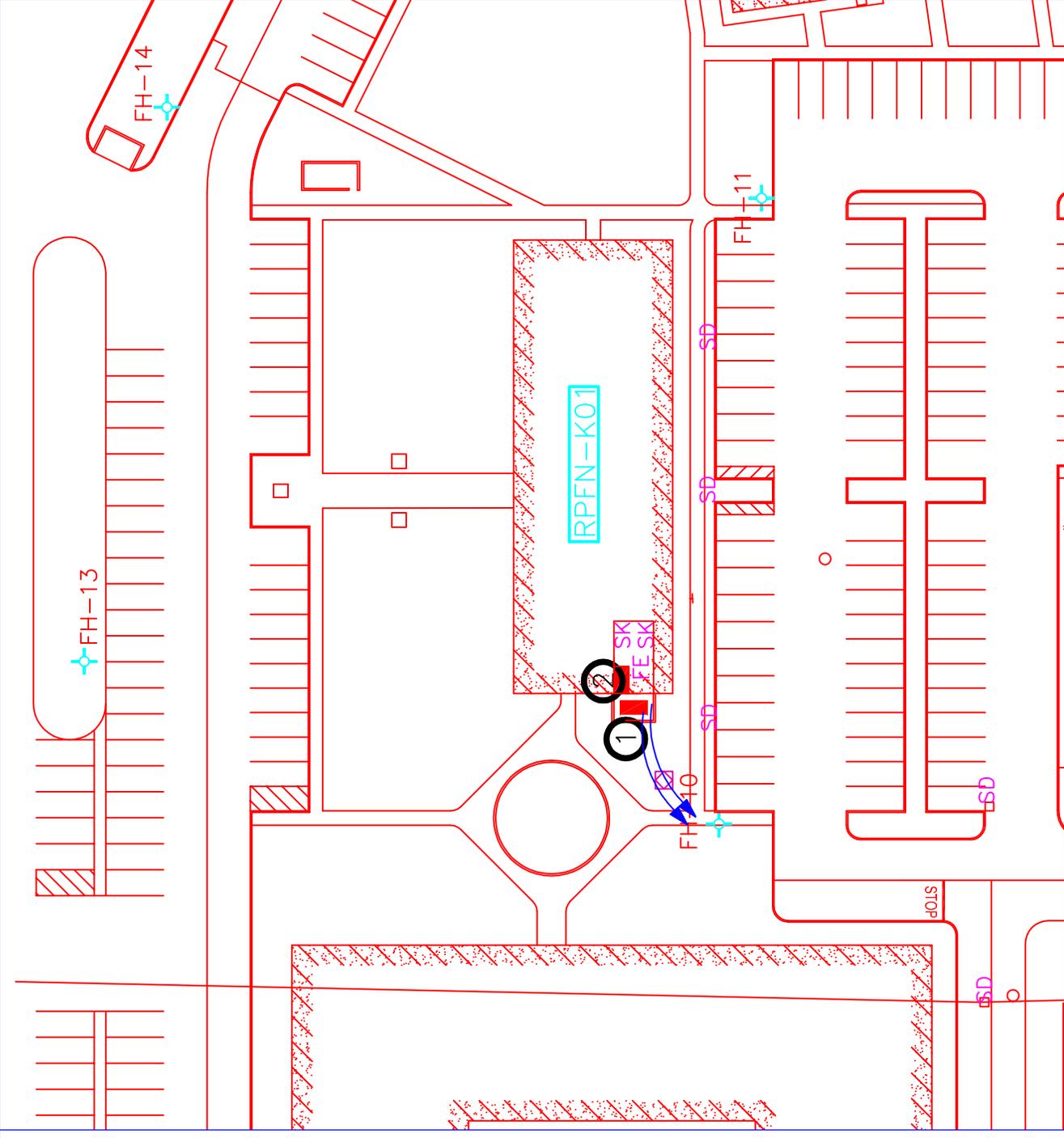
BULK CONTAINERS INFO

- ① - 250 GALLON DIESEL AST
- ② - 25 GALLON "DAY TANK"



LEGEND

- FE = FIRE EXTINGUISHER
- SK = SPILL KIT LOCATION
- FH = FIRE HYDRANT
- SD = STORM DRAIN



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U.S.C.G. ISC SPCC Plan

Figure 8.4

Honolulu

Hawaii

OPERATIONS AND ADMIN BLDG

8.4.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).
-

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.4.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Liquid spills occurring on paved area should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located within the building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.4.5 Evacuation Plan

Approximate number of persons working at site:	25-50
Primary evacuation assembly area:	Club 14
Secondary evacuation assembly area:	Gymnasium

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.

3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

8.4.6 Fire Equipment

Equipment

As shown on Figure 8.4, the closest fire hydrant is located near the north west corner of the facility. Tri-class fire extinguishers are available inside the facility.

8.5 EMERGENCY GENERATOR BUILDING

8.5.1 Facility Overview

Storage Area:

The Emergency Generator Building is located west of the ball field along the installation fence line. The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.5. The building contains the emergency generators and a day tank; the primary tank is located within a containment structure adjacent to the building.



Quantity and Type Materials Stored:

2,000 gallons of diesel fuel in the AST

Estimated Quantity Of Material(s) Potentially Discharged:

- 2,000 gallons of diesel fuel from the AST
- 2,000 gallons of diesel fuel or the largest single compartment of the diesel delivery truck

Containment Structures:

The AST is a single wall tank located inside of a concrete containment structure capable of holding the entire contents of the tank plus adequate freeboard. A supply and return line connect the tank to the generators inside.

Spill Pathways:

Spills from the 2,000 gallon tank would likely be contained within then secondary containment structure. Spills that occur outside of the containment would likely collect near the generator building and infiltrate into the unpaved soil. In the event large spills during heavy rain, diesel could potentially reach the storm water drain in the ball field approximately 100 feet north east of the building.

8.5.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Handling and Procedures

A representative of the ISC Environmental Branch will observe fueling of the AST.

Inspection

- The ISC Environmental Branch will inspect the AST monthly for signs or corrosion, weathering, or leaks. Check ports, fittings, covers, and exposed surfaces. Inspect the base of the enclosure for evidence of leaks.
- Inspect the secondary containment structure after every heavy rain.
- Inspect the day tank for evidence of leaks or corrosion.

BULK CONTAINERS INFO

- 1- 2,000 GALLON DIESEL AST
- 2- 75 GALLON "DAY TANK"

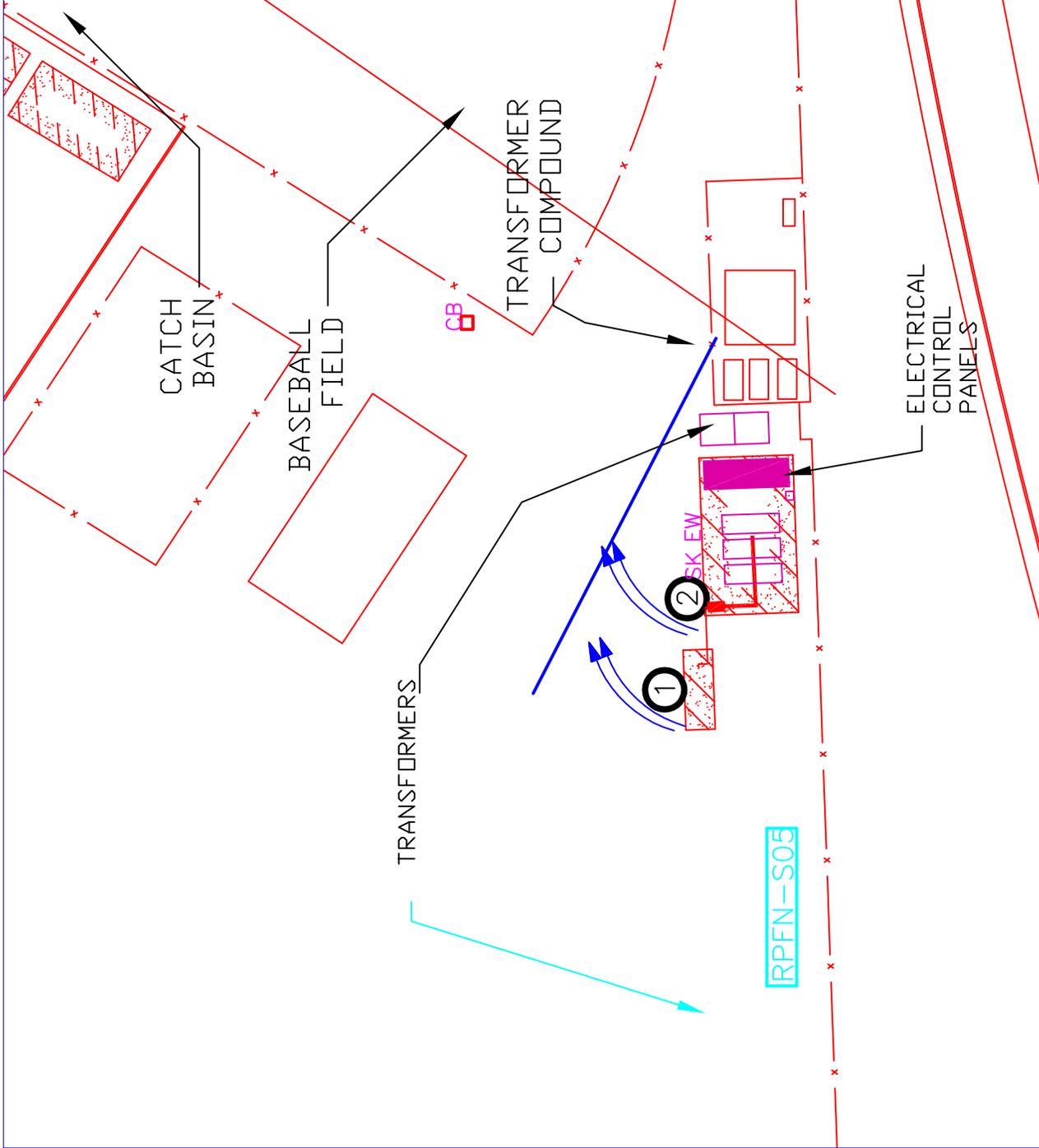
FLAMMABLE & HAZARDOUS MATERIALS



LEGEND

- EW = EYE WAS STATION
- SK = SPILL KIT LOCATION
- CB = CATCH BASIN

= POTENTIAL SPILL PATHWAY



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U.S.C.G. ISC SPCC Plan

Figure 8.5

Honolulu

Hawaii

Emergency Generator Building

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.
- Before attempting cleanup actions identify the spilled material, if the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.

8.5.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.5.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

A spill kit is located at the entrance to the Emergency Generator building. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Liquid spills occurring on paved area should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kit located at the building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.5.5 Evacuation Plan

Approximate number of persons working at site:	0 (50-100 Persons may be present during athletic events)
Primary evacuation assembly area:	Club 14
Secondary evacuation assembly area:	Gymnasium

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

8.5.6 Fire Equipment

Equipment

The closest fire hydrant is located near the northeast corner of ball field.

8.6 COMPRESSOR BUILDING

8.6.1 Facility Overview

Storage Area:

The Compressor Building (RPFN#-N10) is located near the fence line in the north west corner of the installation. The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.6. This building contains a compressor and is normally unoccupied. Oil water from the compressor is collected and temporarily stored in a 55-gallon drum positioned on a containment pallet inside the building.

Quantity and Type Materials Stored:

Up to four(4) - 55 gallons of oily-water in drums.

Estimated Quantity Of Material(s) Potentially Discharged:

Up to 55 gallons of oily-water

Containment Structures:

The storage drum is located on a containment pallet with a capacity of 75 gallons

Spill Pathways:

Spills from drum would be contained by the pallet

8.6.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Inspection

55 Gallon Drums: The Environmental Branch will inspect the drum storage area monthly. Check the drums and pallets for signs of leaks, damage, or wear.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials. If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

BULK CONTAINERS INFO

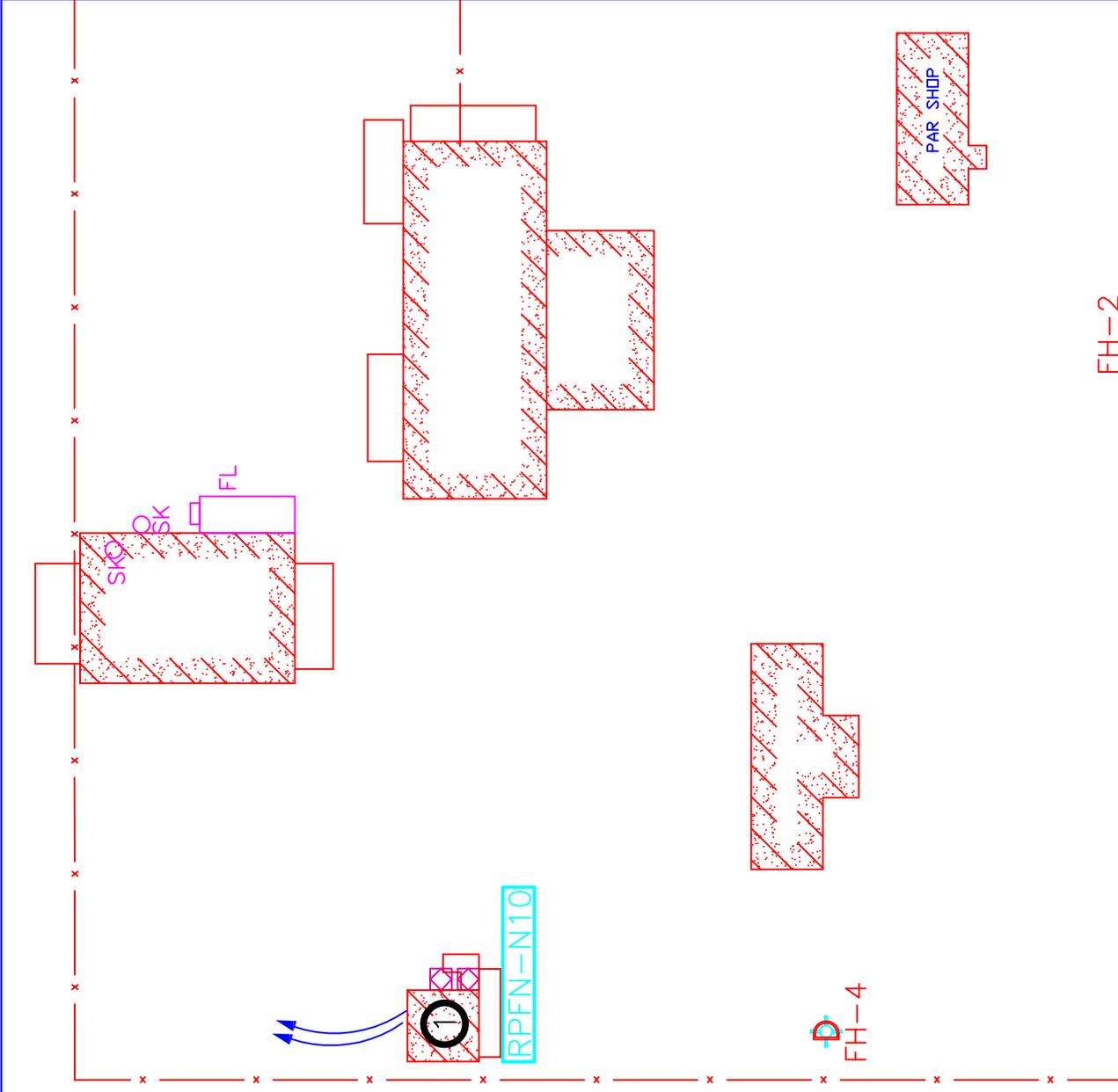
1- 55 GALLON DRUM OILY WATER



LEGEND

SK = SPILL KIT LOCATION
 FL = FLAMABLE LOCKER
 FH = FIRE HYDRANT

 = POTENTIAL SPILL PATHWAY



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U.S.C.G. ISC SPCC Plan

Figure 8.6

FH-2

Honolulu

Hawaii

Compressor Building

8.6.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.6.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. Spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.6.5 Evacuation Plan

The compressor building is an unoccupied facility. Nearby buildings and operations are unlikely to be effected by discharge from this building due to the composition and small quantity of material stored.

8.6.6 Fire Equipment

Equipment

The closest fire hydrant is located south of the building near the Sandblasting facility.

8.7 GALLEY WASTE AREA

8.7.1 Facility Overview

Storage Area:

The Galley is located in building 933 (RPFN-Q01), and the waste and hazardous material storage areas are located outside the north corner of the building. The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.7.

Quantity and Type Materials Stored:

- Used cooking oil in a 55-gallon drum, with containment hutch
- Small quantities (less than 5 gallon container size) of cleaners, and bleach in metal storage lockers

Estimated Quantity Of Material(s) Potentially Discharged:

Up to 55-gallons of used cooking oil

Containment Structures:

- The cooking oil drum is stored in a containment hutch with the capacity to hold the entire contents of the drum
- Hazardous materials are stored in metal storage lockers

Spill Pathways:

Spills from the cooking oil drum would likely be contained within the containment hutch. Any spills escaping the hutch would settle in the grassy depression north of the storage area.

8.7.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 2 individuals from the Galley will be appointed, and will attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

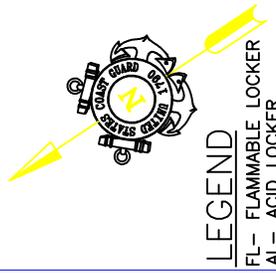
- Transfers to and from the used cooking oil drum will be performed by an ECO.
- Small spills on concrete surfaces will be cleaned up immediately.

BULK CONTAINERS INFO

1- 55 GALLON DRUM USED COOKING OIL

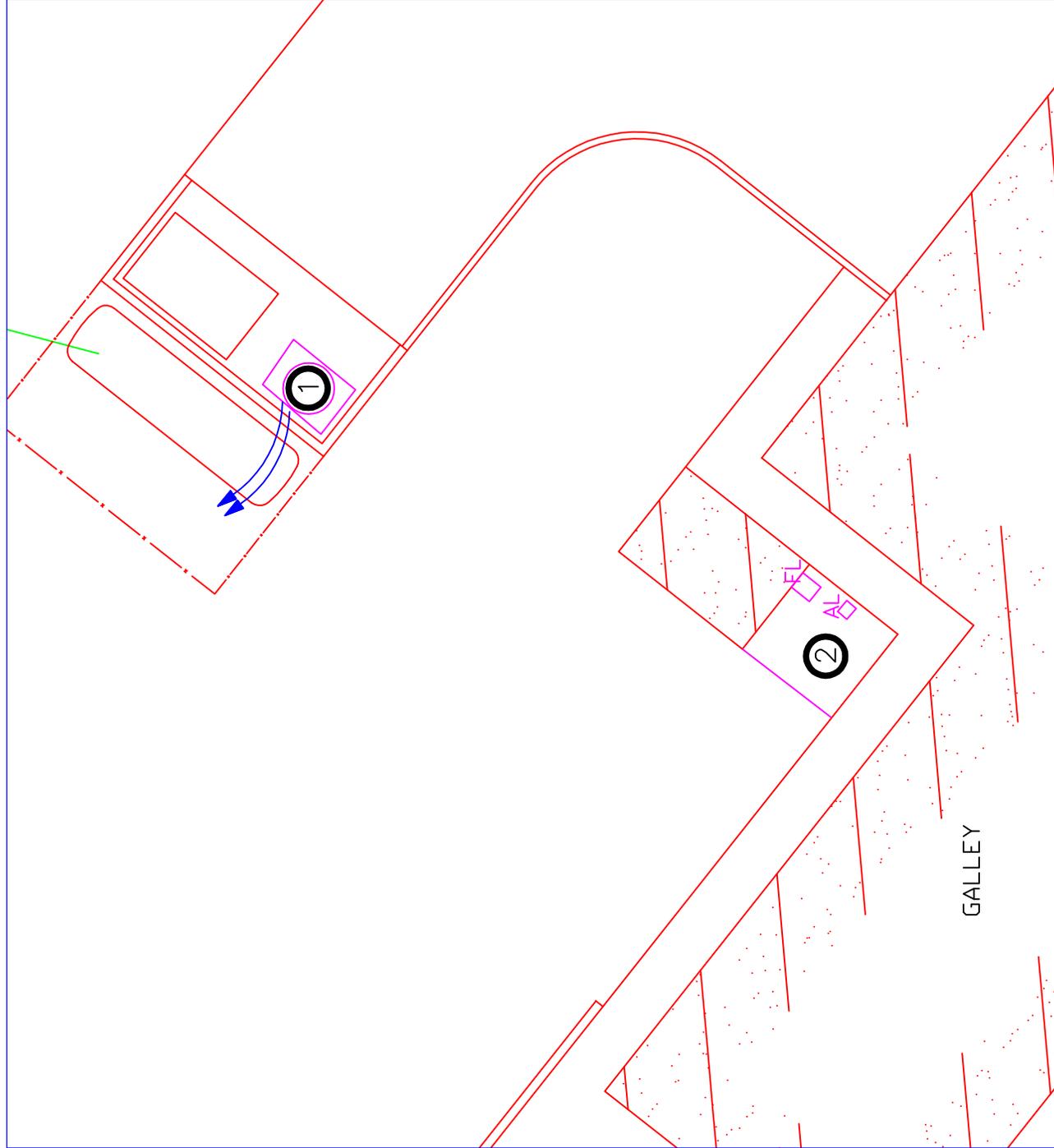
FLAMMABLE & HAZARDOUS MATERIALS

2- TWO FLAMMABLE LOCKERS



LEGEND

FL- FLAMMABLE LOCKER
AL- ACID LOCKER



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U.S.C.G. ISC SPCC Plan

Figure 8.7

Honolulu

Hawaii

Galley Waste Area

Inspection

Drum Storage Area Inspect the drum and hutch weekly for signs of damage, weathering or leaks.

Flammable and Hazardous Material Lockers Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the Galley Office shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.
- Before attempting cleanup actions identify the spilled material, if the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials. If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

8.7.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.7.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. Spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility. Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.7.5 Evacuation Plan

Approximate number of persons working at site:	15-25 (Greater during dining hours)
Primary evacuation assembly area:	Gymnasium
Secondary evacuation assembly area:	Club 14

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.

- Do not reenter the facility until instructed to do so.

8.7.6 Fire Equipment

Equipment

The closest fire hydrant is located northeast of the facility near the Gymnasium.

8.8 CONSOLIDATED SUPPLY AREA

8.8.1 Facility Overview

Storage Area:

The Consolidated Supply Area (RPFN#-K02) is located on the southeast corner of the installation. The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.8. The building houses the HazMin Center and the Hazardous Waste Facility. Both activities are managed by the ISC Environmental Branch.

All new hazardous or flammable products are issued from the HazMin center. Materials stored at the HazMin center include paints, lubricants, cleaners, bleach, and oils, and a complete inventory is available from the Environmental Branch. Materials are stored and issued in container sizes of 25 gallons or less. Materials are stored according to hazardous material compatibility. Reactive materials, oxidizers, and acids are stored in segregated metal storage lockers.

The Hazardous Waste Facility (HWF) receives small quantities of materials such as used absorbents, expired paint, and oily water. The HWF has segregated storage areas and containment pallets for temporary holding of wastes and materials until disposal is completed. Materials are removed from the HWF within 90 days of the initial accumulation date.

Quantity and Type Materials Stored:

- Oil, lubricants, cleaners, paints, bleaches, and other hazardous or flammable materials in containers of 25-gallons or less
- Variable quantities of used oil, batteries, used absorbents, and other waste materials as received. Used oil may be accumulated temporarily in 55 gallons drums at his facility.

Estimated Quantity Of Material(s) Potentially Discharged:

Up to 55-gallons of used oil or oil-water

Containment Structures:

- The HWF has a curbed storage area and numerous containment pallets with capacity of 75-gallons or greater. Spills in this area would be contained in the pallet or curbing.
- The HazMin storage room has curbing adequate to contain a spill from the single largest container in the room. Hazardous materials that require segregation are stored separately in appropriate metal storage lockers.

Spill Pathways:

Spills would be contained inside the facility.

BULK CONTAINERS INFO

1- HAZARDOUS WASTE FACILITY (55-GALLON DRUMS)

FLAMMABLE & HAZARDOUS MATERIALS

2- HAZMIN STORAGE
3- ADDITIONAL HAZMIN STORAGE

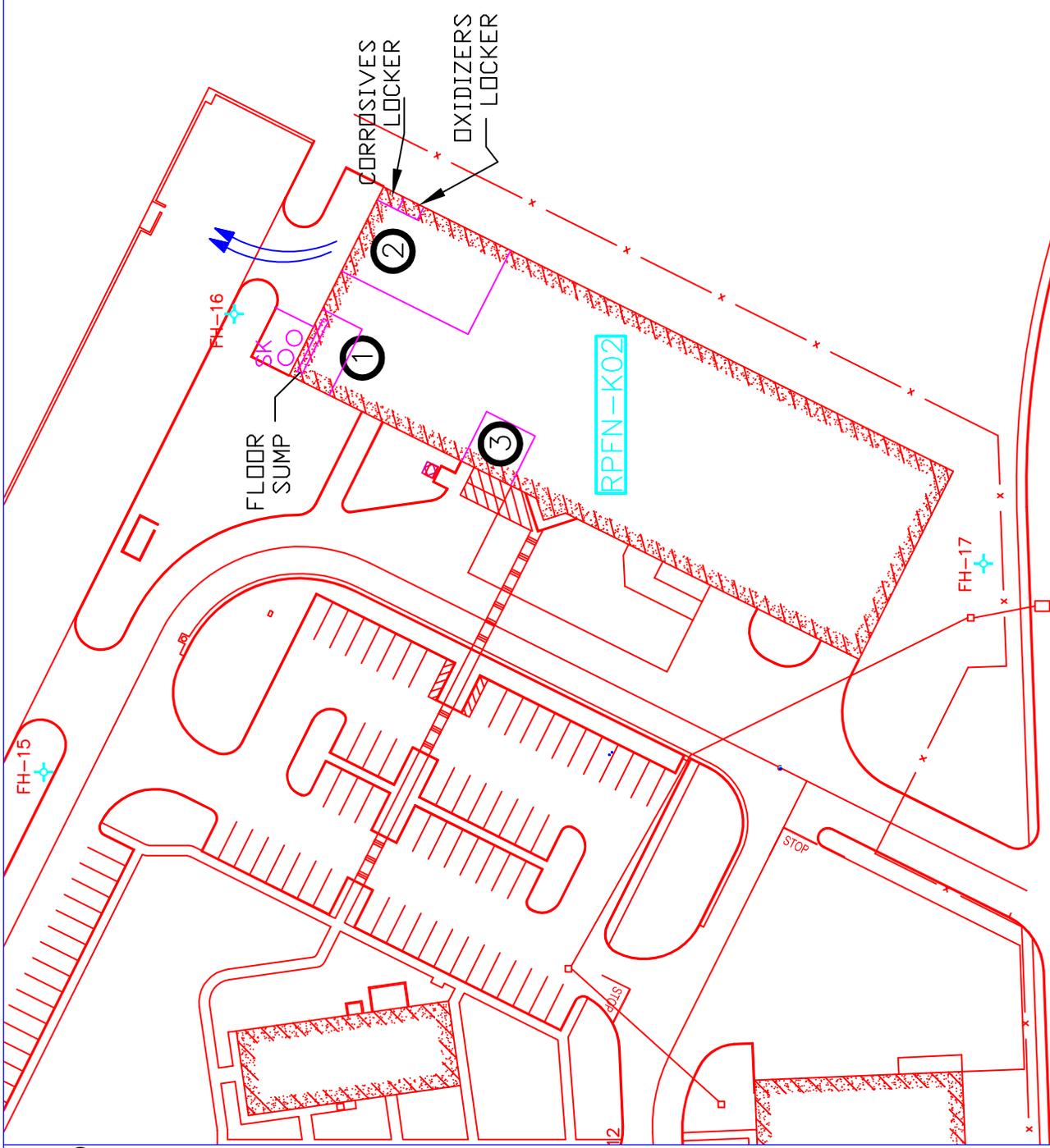


LEGEND

FH = FIRE HYDRANT
SK = SPILL KIT



= POTENTIAL SPILL PATHWAY



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U.S.C.G. ISC SPCC Plan

Figure 8.8

Honolulu

Hawaii

Consolidated Supply Area

8.8.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- The ISC Environmental Branch manages the HazMin and HWF facility
- Environmental Branch personnel must attend annual training for Hazardous Waste Operations and Emergency Response, Incident Command and Response, Hazardous Waste Facility Management, and hazardous wastes and material packaging, recovery, and documentation training.

Handling and Procedures

- All wastes accumulated at the HWF will be packaged properly and stored with secondary containment.
- Small spills on concrete surfaces will be cleaned up immediately.
- The HazMin center will only issue hazardous or flammable products to individuals appointed and trained as ECOs. Individuals must present their ECO card to receive materials.

Inspection

HWF Inspect the accumulation area weekly. Ensure all materials are packaged appropriately and containers are properly marked and in good condition.

HazMin Storage Area Inspect the storage area weekly. Ensure the inventory of materials is accurate and material safety data sheets are maintained for all hazardous materials stored. Verify materials are stored properly in accordance with segregation requirements. Check container condition and properly dispose of leaking or damaged containers. Check the storage area floor for indications of stains or leaks.

Spill Control Measures

- After duty hours report spills immediately to the OOD.
- Before attempting cleanup actions identify the spilled material.
- If the material cannot be identified isolate the area, evacuate personnel
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials. If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

8.8.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.8.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spills kits are located in the HWF. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located within the building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

- Oil, paint or solvents spills occurring inside the Station Honolulu facility should be cleaned using oil/coolant/solvent spill kit absorbent materials.
- Corrosive spills should be cleaned using the acid/caustics spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available to complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.8.5 Evacuation Plan

Approximate number of persons working at site:	10-25
Primary evacuation assembly area:	Exchange Parking Lot
Secondary evacuation assembly area:	Gymnasium

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

8.8.6 Fire Equipment

Equipment

The closest fire hydrant is located near the north corner of the facility. Tri-class fire extinguishers are located inside near the storage areas.

8.9 PATROL BOAT BUILDING (WPB)

8.9.1 Facility Overview

Storage Area:

The Patrol Boat Building (WPB) is located on the north-west corner of the ISC facility. The building houses administration and minor storage facilities for the Patrol Boats Assateague and Washington. The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.9. Flammable and hazardous materials are stored in flammable storage closets on the north side of the building, and the containment pallets and storage hutches for the 55-gallon drums are located adjacent to the building to the north.

Quantity and Type Materials Stored:

- Up to 8 55-gallon drums of new or used oil/oily water
- Small quantities (less than 20 gallon container size) of paint, gasoline, and cleaners in flammable lockers,

Estimated Quantity Of Material(s) Potentially Discharged:

55-gallons of oil or oily water

Containment Structures:

Flammable storage area, separate locked area with segregated flammable lockers
Containment pallets or storage hutches with at capacity to capture at least 75-gallons of spilled materials

Spill Pathways:

Spills from a 55-gallon drum would likely pool near the north side of the building on the asphalt surface.

8.9.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 2 individuals from the WPB will be appointed, and will attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

- Transfers to or from the 55-gallon container will be supervised by an ECO.
- Small spills on concrete surfaces will be cleaned up immediately.

BULK CONTAINERS INFO

1 - 8 x 55 GALLON DRUMS NEW AND USED OIL

FLAMMABLE & HAZARDOUS MATERIALS

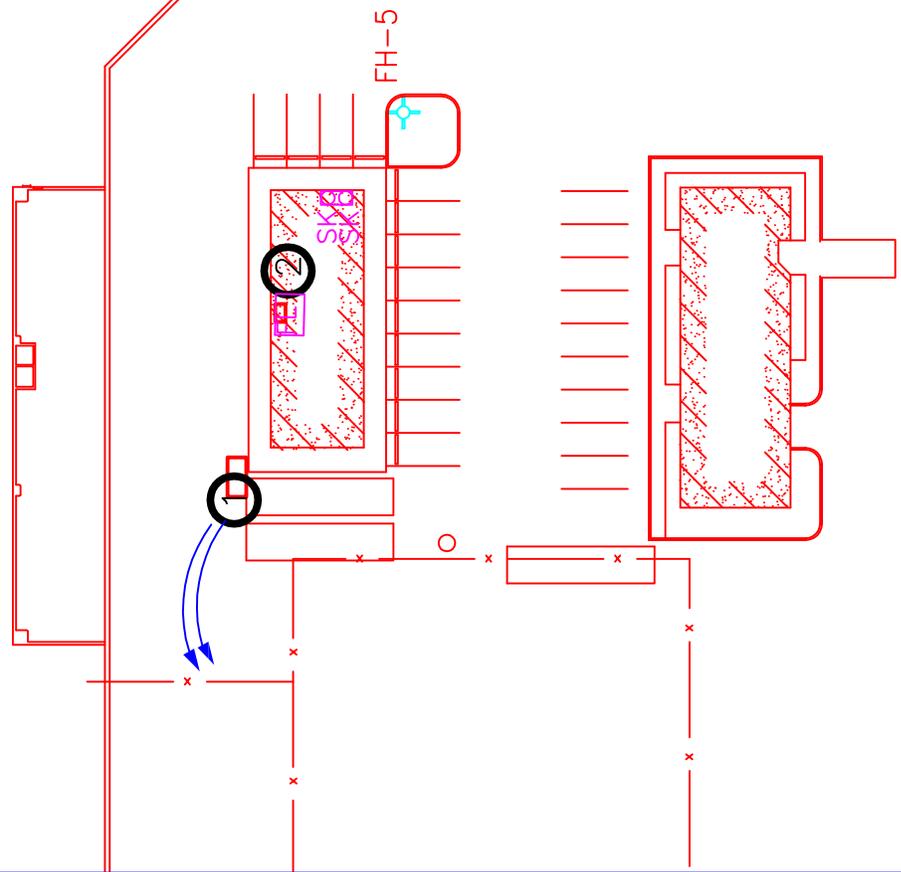
2 - FLAMMABLE STORAGE ROOM. SMALL QUANTITY CONTAINERS (<25 GALLONS) OF CLEANERS, GASOLINE, AND SOLVENT STORED IN SEGREGATED LOCKERS



LEGEND

- SK = SPILL KIT LOCATION
- FL = FLAMMABLE LOCKER
- FH = FIRE HYDRANT

= POTENTIAL SPILL PATHWAY



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U.S.C.G. ISC SPCC PLAN

Figure 8.9

Honolulu

Hawaii

WPB Support Building

Inspection

55-Gallon Drums Inspect the drums, pallets and hutches weekly for signs of damage, weathering or leaks.

Flammable and Hazardous Material Lockers Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the administrative office shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and OOD.
- Before attempting cleanup actions identify the spilled material.
- If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials.
- If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

8.9.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.9.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spills kits are located adjacent to the drum storage area. Spill kits are to be used for clean-up and containment of small spills. They are to be used for spills only and not for routine cleanups. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved area should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located at the WPB building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

- Oil, paint or solvent spills should be cleaned using oil/coolant/solvent spill kit absorbent materials.
- Corrosive spills should be cleaned using the acid/caustics spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.9.5 Evacuation Plan

Approximate number of persons working at site:	5-25
Primary evacuation assembly area:	Parking lot (east of the building)
Secondary evacuation assembly area:	Gymnasium

8. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
9. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
10. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
11. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
12. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.

13. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
14. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

8.9.6 Fire Safety Equipment

Equipment

The closest fire hydrant is located on the south corner of the building.

8.10 MARINE SAFETY AND SECURITY TEAM BUILDING (MSST)

8.10.1 Facility Overview

Storage Area:

The Marine Safety and Security Team Building (MSST) is located on the west central portion of the ISC facility near the tennis and basketball courts. The building is used to conduct maintenance on the MSST's small patrol vessels. The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.10. Flammable and hazardous materials are stored in flammable storage lockers, in the south-east corner north side of the building. Containment pallets and dispenser pallets hold up to 8-55 gallon drums of new or used oil, and are located adjacent to the flammable storage lockers.

Quantity and Type Materials Stored:

- Up to 8 55-gallon drums of new or used oil/oily water
- Small quantities (less than 20 gallon container size) of paint, gasoline, and cleaners in flammable lockers,

Estimated Quantity Of Material(s) Potentially Discharged:

55-gallons of oil

Containment Structures:

Flammable storage lockers

Containment pallets or storage hutches with at capacity to capture at least 75-gallons of spilled materials

Spill Pathways:

Spills from a 55-gallon drum would likely pool near the south-east corner of the building.

8.10.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 2 individuals from the MSST will be appointed, and will attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

- Transfers to or from the 55-gallon container will be supervised by an ECO.
- Small spills on concrete surfaces will be cleaned up immediately.

BULK CONTAINERS INFO

1- 8 X 55 GALLON USED OPII/NEW OIL ON SECONDARY CONTAINMENT PALLETS (75 GALLON CAPACITY)

FLAMMABLE & HAZARDOUS MATERIALS

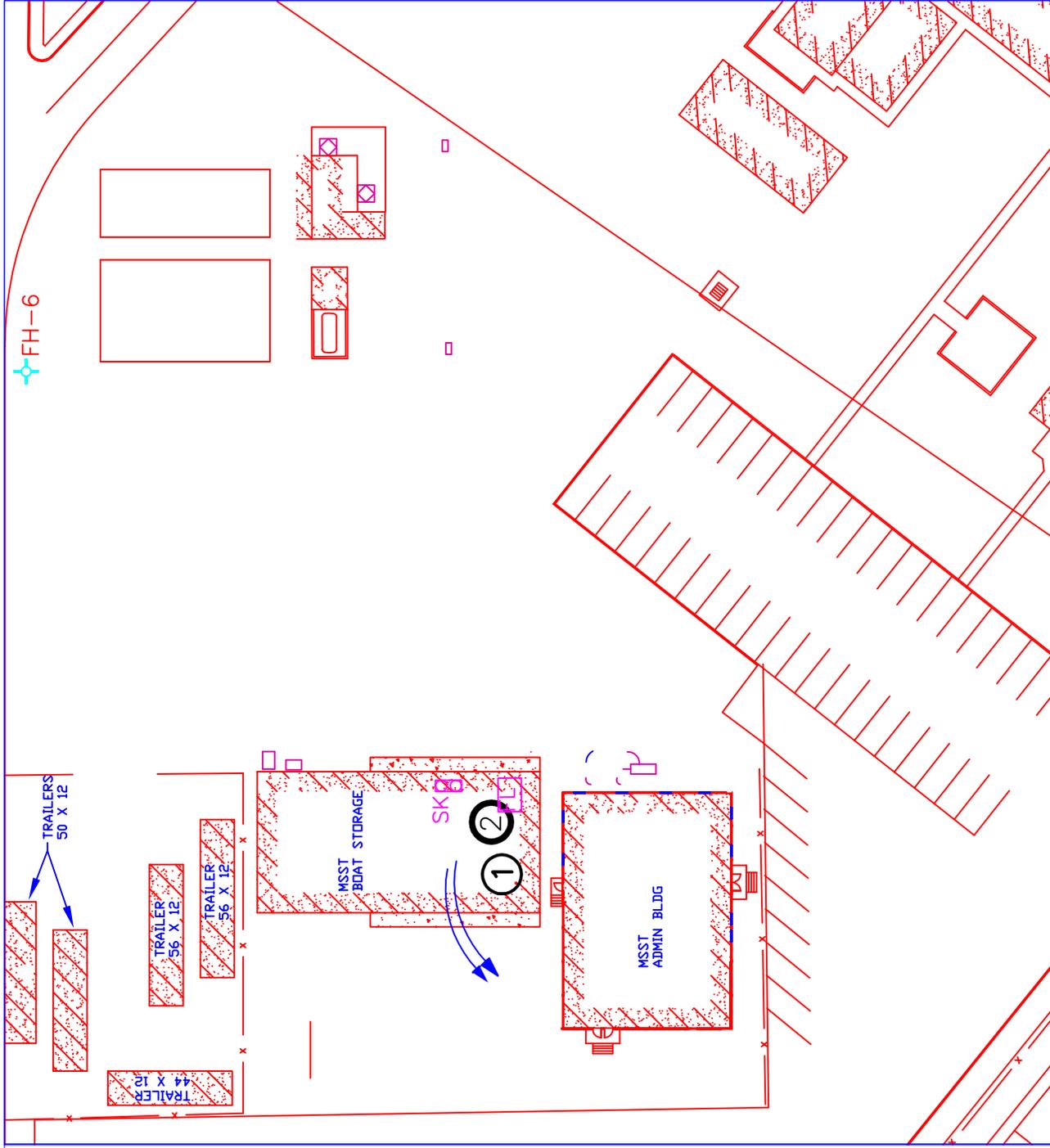
2- 3 X FLAMMABLE LOCKER



LEGEND

SK = SPILL KIT LOCATION
FL = FLAMMABLE LOCKER
FH = FIRE HYDRANT

— = POTENTIAL SPILL PATHWAY



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U.S.C.G. ISC SPCC Plan

Figure 8.10

Honolulu

Hawaii

MSST Boat Maintenance Building

Inspection

55-Gallon Drums Inspect the drums, pallets and hutches weekly for signs of damage, weathering or leaks.

Flammable and Hazardous Material Lockers Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the administrative office shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and OOD.
- Before attempting cleanup actions identify the spilled material.
- If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials.
- If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

8.10.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

8.10.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- A. Activate and direct facility response personnel to implement emergency response operations to protect life and property (The order of operations will depend on existing conditions and may be concurrent)
- B. Rescue any injured individuals without risking personal safety
- C. Secure the spill area from unauthorized personnel
- D. Stop the source and prevent spill from exiting the area or entering any nearby storm drains
- E. Avoid contact with liquid and fumes
- F. If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames
- G. If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department

Spill Response Equipment

Spills kits are located adjacent to the drum storage area. Spill kits are to be used for clean-up and containment of small spills. They are to be used for spills only and not for routine cleanups. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved area should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located at the WPB building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

- Oil, paint or solvent spills should be cleaned using oil/coolant/solvent spill kit absorbent materials.
- Corrosive spills should be cleaned using the acid/caustics spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

8.10.5 Evacuation Plan

Approximate number of persons working at site:	5-25
Primary evacuation assembly area:	Dining Facility
Secondary evacuation assembly area:	Gymnasium

15. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
16. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
17. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
18. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
19. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.

20. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
21. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

8.10.6 Fire Safety Equipment

Equipment

The closest fire hydrant is located to the south of the building, on the west side of the Barracks along Pritchard Street. Tri-class fire extinguishers are positioned throughout the building

8.11 POWERHOUSE

Storage Area:

The AST located at the Powerhouse is permanently out of service. This AST is included in this plan for identification only. The location of this AST is show on Figure 8.0.

8.12 GASOLINE STATION (Coast Guard Exchange)

Facility Overview

Storage Area:

The general location of this facility is shown on Figure 8.0, and a detail of this facility is shown on Figure 8.10. The Coast Guard Exchange sells gasoline to service members and their dependents. Gasoline is stored in two(2) underground storage tanks (UST) adjacent to the building. The USTs are equipped with leak detection and electronic inventory control systems. The Gasoline Station is not managed by the ISC; however, the Environmental Branch will assist with releases of gasoline should they occur.

EPA underground storage tank regulations (40 CFR 280) have specific requirements for the operation and maintenance of underground storage tanks containing petroleum and hazardous substances. The State of Hawaii Title 11-281 HAR "Underground Storage Tanks" describes State of Hawaii requirements for operating and maintaining USTs. In general, 11-281 HAR reflects or exceeds the requirements of the EPA. The USTs at the Coast Guard are operated under the provisions and requirements of 11-281 HAR. Inclusion of the USTs in this Plan is for purposes of identification.

Quantity and Type Materials Stored:

Two (2) underground storage tanks with 6,000 gallons of gasoline in each.

Estimated Quantity Of Material(s) Potentially Discharged:

2,000 gallons of gasoline or the contents of the single largest container of the delivery vehicle

Containment Structures and Spill Pathways

The fill ports for the USTs are located within a curbed area. Spills up to several hundred gallons would be held in this area provided the drainage openings are blocked. The curbed area is partially unpaved and released gasoline would be absorbed into the soil over time. Spills that escape the curbed area would travel via a drainage channel to a stormwater catch basin which ultimately discharges to Honolulu Harbor.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.
- Before attempting cleanup actions identify the spilled material. If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.

Spill Response Materials

A small spill kit is located by the fuel dispensers. The kit has adequate material to recover small spills that may occur while refueling vehicles.

BULK CONTAINERS INFO

1- 2 x 6,000-GALLONS GASOLINE UNDERGROUND STORAGE TANKS

FLAMMABLE & HAZARDOUS MATERIALS

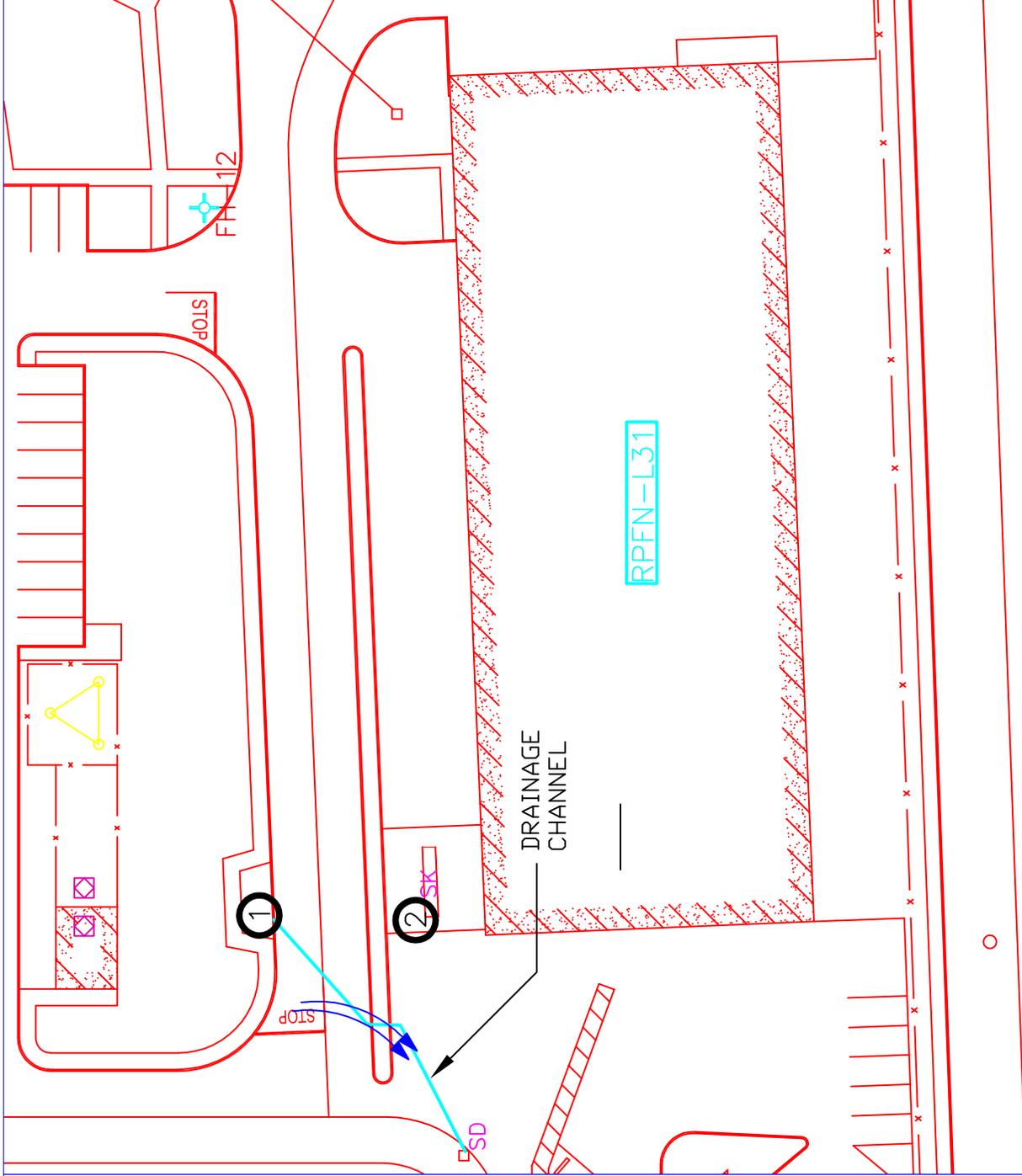
2- GAS STATION PUMP ISLAND



LEGEND

SP= SPILL KIT
SD= STORM DRAIN
FH = FIRE HYDRANT

= POTENTIAL SPILL PATHWAY



Myounghee Noh & Associates

U.S.C.G. ISC SPCC Plan

Figure 8.12

Honolulu

Hawaii

Gasoline Station

8.13 OIL FILLED ELECTRICAL TRANSFORMERS

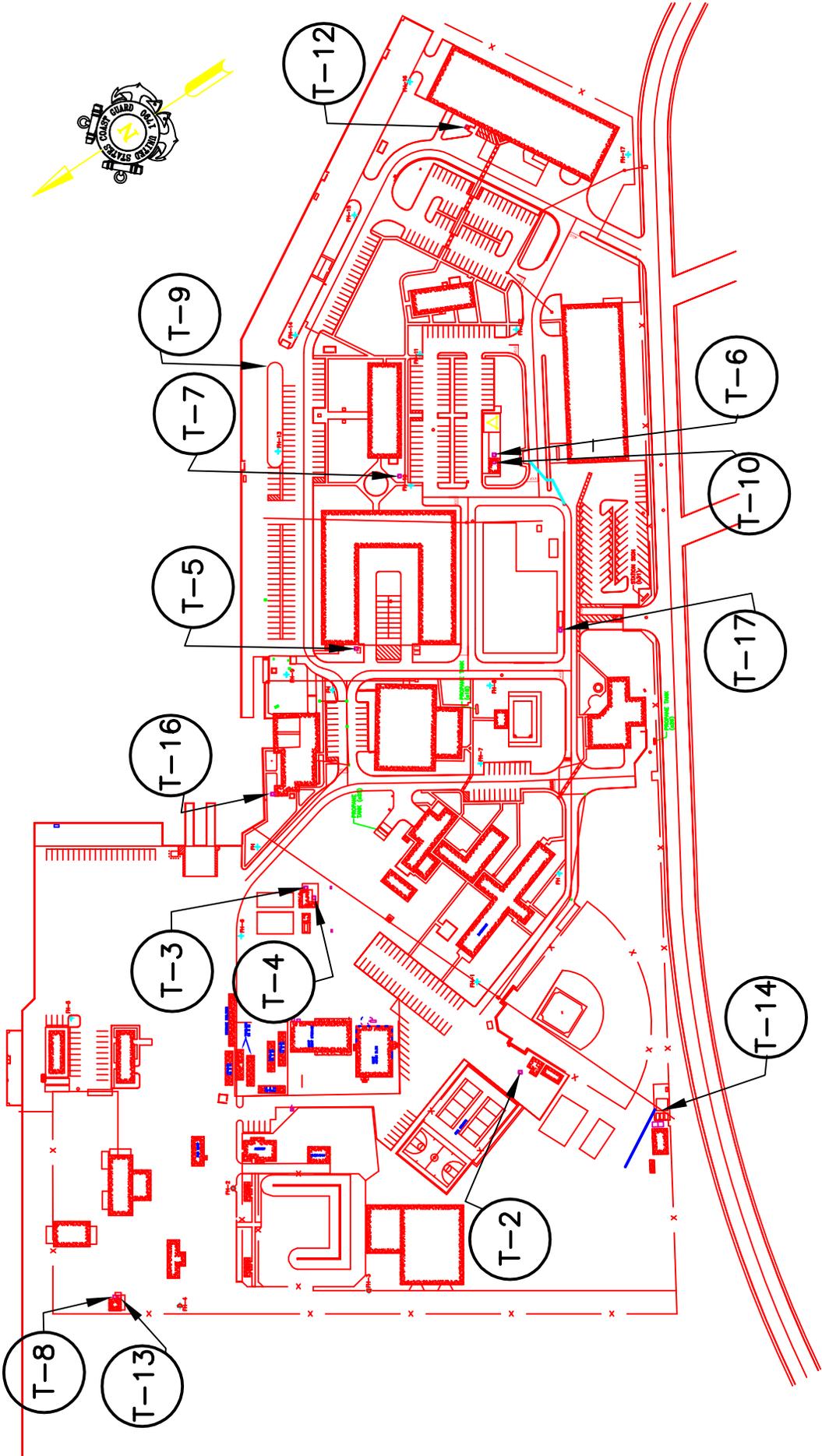
Overview

Oil cooled pad mounted electrical transformers are in use throughout ISC Honolulu. Transformers typically have a coolant capacity ranging from 75 to several hundred gallons. Transformers are cooled with a non-PCB (polychlorinated biphenyls) mineral oil solution. Periodic inspection of high voltage transformers are performed by the Electrical Maintenance section; however, maintenance tasks on the transformers are performed by HECO personnel. Transformer locations are presented in Figure 8.13. Detailed maps showing locations of individual transformers and photographs are presented in Appendix F.

Catastrophic failure and release of the full contents of a transformer is likely only in the event of a vehicular collision; however, most transformers are located away from roadways or are protected by collision obstacles.

Transformer inspections shall be performed annually by the Environmental Branch. The transformer housing will be checked for general condition, and the base and surrounding area of the transformer will be examined for indications of leaks.

When a leak is discovered at a transformer it shall be reported immediately. Before responding to leaks associated with transformers or electrical equipment, work shall be coordinated with the Electrical Maintenance section. No untrained personnel shall make any assumptions or take any actions at electrical facilities without the direct supervision of authorized electrical personnel.



Myounghee Noh & Associates

U.S.C.G. ISC SPPC PLAN

Figure 8.13

Honolulu

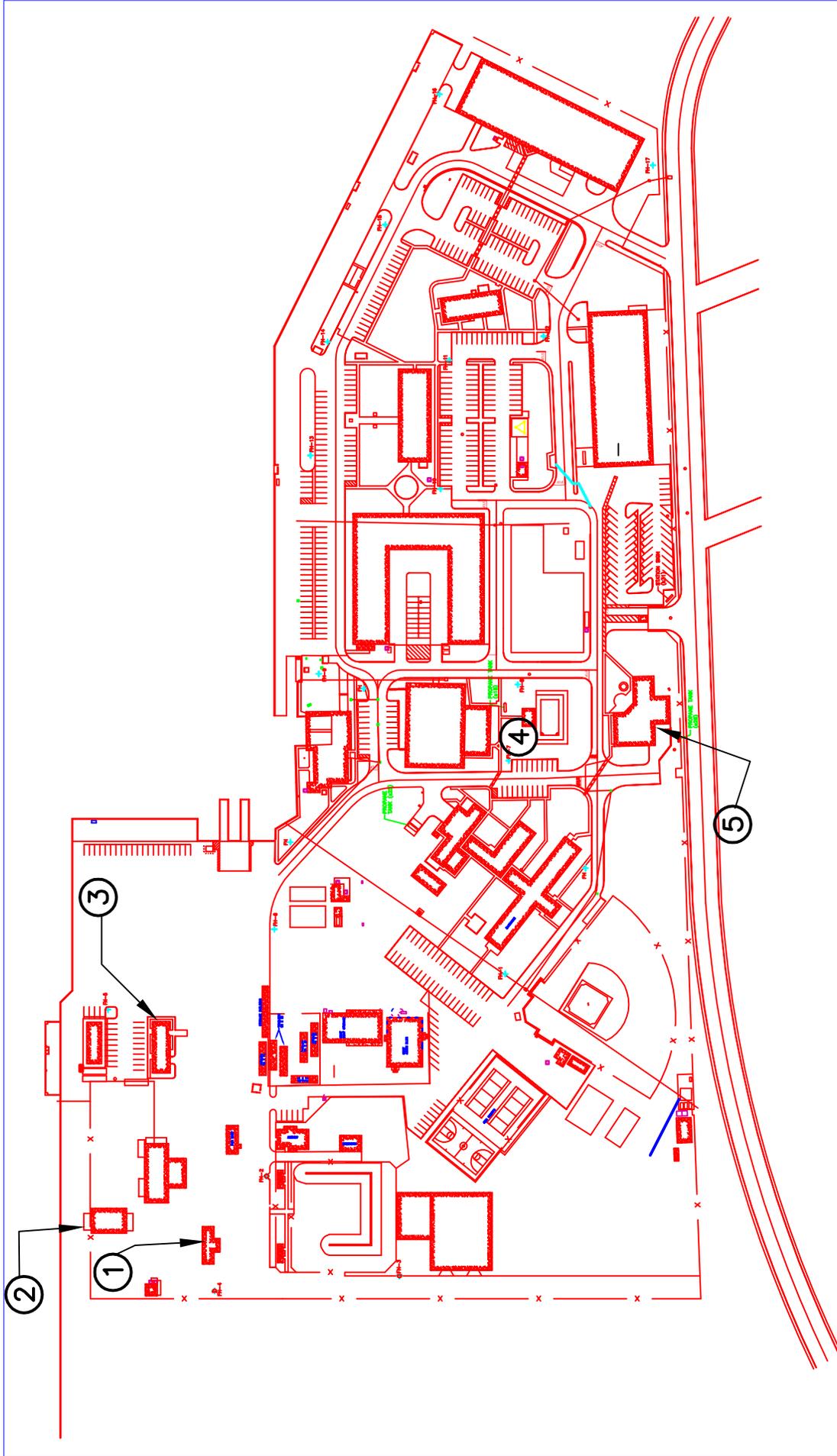
Hawaii

Transformer Locations

9.0 FACILITIES WITH FLAMMABLE OR HAZARDOUS MATERIAL STORAGE

Facilities identified in this section store and use small quantities (less than 25-gallon container size) of oils, paints, bleaches, and other flammable or hazardous materials. These facilities are not regulated under the provisions of 40 CFR 112 (SPCC), but will be managed with care to prevent harm to individuals or the environment. The locations of these facilities are shown on Figure 9.0. At least one person from each of these facilities will be appointed and attend the ECO training provided by the ISC Environmental Branch. Specific requirements for these facilities are listed in their individual sections. Facilities included in this section are:

- 9.1 Sandblast Building (Spent blasting grit, paint dust, flammable materials)
- 9.2 Paint Shop (Paint, flammable materials)
- 9.3 Aids to Navigation Team Building (Flammable materials)
- 9.4 Pool Building (Chlorination materials)
- 9.5 Club 14 (Flammable materials)



Myounghee Noh & Associates

U.S.C.G. ISC SPCC Plan

Figure 9.0

Honolulu

Hawaii

Flammable Storage

9.1 SANDBLAST BUILDING

9.1.1 Facility Overview

Storage Area:

The Sandblast facility is located in Building 19 (RPFN#-N11), and the general location of this facility is shown on Figure 9.0. Spent blasting grit and paint dust are temporarily accumulated at this facility. Spent blasting grit and paint dust are containerized automatically during the blasting process. Used materials are periodically transferred to the HWF for disposal. A flammable locker is used to store small quantities of oils, cleaners, and solvents used at the facility.

Quantity and Type Materials Stored:

- Up to 55 gallons of spent sandblasting grit
- Up to 20 gallons of paint dust
- Small quantities of hazardous materials

Estimated Quantity Of Material(s) Potentially Discharged:

- Up to 55 gallons of spent sandblasting grit
- Up to 20 gallons of paint dust
- Up to 5 gallons of solvent, or cleaners

Containment Structures:

- Flammable storage locker

9.1.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 1 individual will be appointed and attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

- Small spills on concrete surfaces will be cleaned up immediately.

Inspection

- **Drum Storage** Inspect the drums used to store spent blasting grit and paint dust weekly. Drums should be in good material condition and free of rust, or damage. Replace worn or damaged drums immediately.

- **Flammable and Hazardous Material Lockers** Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the administrative section shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.
- Before attempting cleanup actions identify the spilled material. If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Responders should assume paint dust and spent blasting grit contains lead. Only personnel with appropriate respirators, protective over garments, and proper training will be utilized to recover spills.

9.1.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).
-

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

9.1.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- Activate and direct facility response personnel to implement emergency response operations to protect life and property. The order of operations will depend on existing conditions and may be concurrent.
- Rescue any injured individuals without risking personal safety.
- Secure the spill area from unauthorized personnel.

- Stop source and prevent spill from exiting the area or entering any nearby storm drains.
- Avoid contact with liquid and fumes.
- If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames.
- If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department.

Spill Response Equipment

A spill kit is located next to the flammable storage locker. Spill kits are to be used for clean-up and containment of small spills. They are to be used for spills only and not for routine cleanups. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal
- Responders should assume paint dust and spent blasting grit contains lead. Only personnel with appropriate respirators, protective over garments, and proper training will be utilized to recover spills.

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located at the building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

- Oil, paint or solvent spills should be cleaned using oil/coolant/solvent spill kit absorbent materials.
- Corrosive spills should be cleaned using the acid/caustics spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

9.1.5 Evacuation Plan

Approximate number of persons working at site:	2
Primary evacuation assembly area:	Aid to Navigation Building
Secondary evacuation assembly area:	Gymnasium

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

9.1.6 Fire Safety Plan

Equipment

The closest fire hydrant is located near the west corner of the building. Tri-class fire extinguishers are available inside the building, and outside on the southwest wall.

Caution to Fire Fighting Personnel

Fires at this building are likely to create toxic vapors or fumes from the expended paint dust. Respiratory protection should be used when responding to emergencies at this facility. If water is used to extinguish a fire at this facility, run-off water should be contained and prevented from reaching stormwater catch basins.

9.2 PAINT SHOP

9.2.1 Facility Overview

Storage Area:

The Paint Shop is located in Building 1820 (RPFN#-N12), and the general location of this facility is shown on Figure 9.0. This building contains a painting area and a paint storage area. Flammable and hazardous materials are stored in lockers inside the building. Paints are stored in small containers (5 gallons or smaller). Waste paints are stored in drums, and positioned on secondary containment. Waste paints are periodically transferred to the HWF for disposal, and no more than 25-gallons will be accumulated at one time.

Quantity and Type Materials Stored:

- Up to 100 gallons of new paint in small containers
- Up to 25 gallons of waste paint in a 55-gallon drum
- Small quantities of solvents and cleaners in flammable lockers,

Estimated Quantity Of Material(s) Potentially Discharged:

- Up to 25 gallons of waste paint
- Up to 5 gallons of new paint

Containment Structures:

- Flammable storage area, separate locked area with segregated flammable lockers
- Waste paint hutch with 50-gallon containment capacity

Spill Pathways:

- Small spills that occur in the building should be contained on the building floor

9.2.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 2 individuals from the Paint Shop area will be appointed and attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

- Small spills on concrete surfaces will be cleaned up immediately.

Inspection

- **Paint Storage** Inspect the storage area weekly. Ensure all containers are in good condition
- **Flammable and Hazardous Material Lockers** Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the administrative office shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.
- **Waste Paint** Inspect the storage area weekly. Ensure hutch and drums are in good condition. No more than 25 gallons of waste paint may be accumulated at one time.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.
- Before attempting cleanup actions identify the spilled material, if the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials. If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

9.2.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill

- Describe the behavior of spilled material (reaction, fire)
 - Time when spill occurred
- All personnel except authorized response personnel should clear the area.

9.2.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- Activate and direct facility response personnel to implement emergency response operations to protect life and property. The order of operations will depend on existing conditions and may be concurrent.
- Rescue any injured individuals without risking personal safety.
- Secure the spill area from unauthorized personnel.
- Stop source and prevent spill from exiting the area or entering any nearby storm drains.
- Avoid contact with liquid and fumes.
- If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames.
- If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department.

Spill Response Equipment

Spills kits are located at the flammable storage area. Spill kits are to be used for clean-up and containment of small spills. They are to be used for spills only and not for routine cleanups. Additional spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. For small spills, the spill kits located within the

building can be used. Additional spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

- Oil, paint or solvents spills occurring inside the facility should be cleaned using oil/coolant/solvent spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu immediately. If the spill exceeds the resources available for complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

9.2.5 Evacuation Plan

Approximate number of persons working at site:	2
Primary evacuation assembly area:	Aids to Navigation Team Building
Secondary evacuation assembly area:	Gymnasium

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

9.2.6 Fire Equipment

Equipment

The closest fire hydrant is located near the west corner of the Sandblast facility. Fire extinguishers are located inside the building on the south wall.

9.3 AIDS TO NAVIGATION TEAM BUILDING (ANT)

9.3.1 Facility Overview

Storage Area:

The ANT building is located in the north corner of the facility, and the general location of this facility is shown on Figure 9.0. This building contains offices and shops. Flammable and hazardous materials are stored in flammable lockers located in segregated storage rooms on the northeast side of the building.

Quantity and Type Materials Stored:

- Small quantities (less than 20 gallon container size) of paint, gasoline, and cleaners in flammable lockers
- Assorted batteries

Estimated Quantity Of Material(s) Potentially Discharged:

- Less than 5 gallons of paint or gasoline

Containment Structures:

- Flammable storage area, separate locked area with segregated flammable lockers

Spill Pathways:

- Small spills would be contained within the storage lockers

9.3.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 2 individuals from the ANT will be appointed, and will attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

- Small spills on concrete surfaces will be cleaned up immediately.

Inspection

Flammable and Hazardous Material Lockers Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the administrative office shall

document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.
- Before attempting cleanup actions identify the spilled material. If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials. If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

9.3.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

9.3.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- Activate and direct facility response personnel to implement emergency response operations to protect life and property. The order of operations will depend on existing conditions and may be concurrent.
- Rescue any injured individuals without risking personal safety.
- Secure the spill area from unauthorized personnel.

- Stop source and prevent spill from exiting the area or entering any nearby storm drains.
- Avoid contact with liquid and fumes.
- If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames.
- If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department.

Spill Response Equipment

Spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. For minor spills, the emergency response personnel team can utilize available ISC Honolulu spill cleanup equipment. Spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility. Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

Major Spills

Major spills are large discharges (greater than 5 gallons) of oil or hazardous materials, and require additional resources or technical expertise to recover. Any spill, which cannot be readily and safely recovered by available personnel, should be classified as a major spill. For major spills, follow the Response Operations Plan and Evacuation Plan as applicable. For spills that may affect navigable waterways, contact Sector Honolulu

immediately. If the spill exceeds the resources available to complete recovery, then responders will focus immediate action on containing and preventing spills from reaching water.

9.3.5 Evacuation Plan

Approximate number of persons working at site:	10-15
Primary evacuation assembly area:	Gymnasium
Secondary evacuation assembly area:	Club 14

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

9.3.6 Fire Equipment

Equipment

The closest fire hydrant is located to the north east of the building. Tri-class fire extinguishers are available inside the ANT building.

9.4 POOL BUILDING

9.4.1 Facility Overview

Storage Area:

The swimming pool is adjacent to Building 537 (RPFN#-L62), and the general location of this facility is shown on Figure 9.0. Chlorination of the pool water is performed in a room on the south east side of the building. The materials for chlorination are all in solid form until mixed in the chlorinator.

Quantity and Type Materials Stored:

- 5 gallons of calcium hypochlorite (dry)
- 5 gallons of Trichloronuratic acid (dry)
- 5 gallons soda ash

Estimated Quantity Of Material(s) Potentially Discharged:

- Up to 5 gallons of chlorination material

Containment Structures:

- Chlorination materials are stored in a water proof locker

Spill Pathways:

- Spills from the containers would be contained within the chlorination room.

9.4.2 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least 1 individual will be appointed and attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

- Only properly trained individuals, wearing the appropriate protective equipment will perform chlorination
- Small spills on concrete surfaces will be cleaned up immediately.

Inspection

- Inspect chlorination materials storage weekly, containers will be properly labeled and in good material condition
- Insure chlorination storage area is kept dry, and containers are protected from excessive moisture

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.
- Before attempting cleanup actions identify the spilled material. If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill and prevent mixing with water.

9.4.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

9.4.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- Activate and direct facility response personnel to implement emergency response operations to protect life and property. The order of operations will depend on existing conditions and may be concurrent.
- Rescue any injured individuals without risking personal safety.
- Secure the spill area from unauthorized personnel.
- Stop source and prevent spill from exiting the area or entering any nearby storm drains.
- Avoid contact with liquid and fumes.
- If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames.

- If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department.

Spill Response Equipment

Spills response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Prevent spilled chlorination materials from mixing with water.
- Personnel recovering spilled chlorination materials must wear proper protective equipment. The chlorination materials may cause chemical burns to exposed skin, and may form irritating vapors when mixed with water. Refer to the material safety data sheets for specific recommendations and requirements.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. Spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility.

- Corrosive spills should be cleaned using the acid/caustics spill kit absorbent materials.
- Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

9.4.5 Evacuation Plan

Note: The materials at this location are insufficient to create conditions requiring evacuation.

Approximate number of persons working at site:	2-7 workers, 5-25 patrons (Personnel are in nearby structures; no personnel regularly occupy the Chlorination room)
Primary evacuation assembly area:	Gymnasium
Secondary evacuation assembly area:	Club 14

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.
3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

9.4.6 Fire Equipment

Equipment

The closest fire hydrant is located near the east corner of the building. Tri-class fire extinguishers are available in the gymnasium.

9.5 CLUB 14

9.5.1 Facility Overview

Storage Area:

Club 14 is located in Building 137 (RPFN#L01). The general location of this facility is shown on Figure 9.0. Club 14 serves lunch and dinner to ISC personnel, and hosts recreational activities. Small quantities (less than 1-gallon container size) of flammable and hazardous materials are stored in lockers outside the south side of the building.

Quantity and Type Materials Stored:

- Up to 1-gallon of cleaners, bleach, and paint

Estimated Quantity Of Material(s) Potentially Discharged:

- Up to 1-gallon of cleaners, bleach, and paint

Containment Structures:

- Flammable storage lockers

Spill Pathways:

- Spills from leaking container would likely be contained within the storage lockers

9.5.1 Spill Prevention Control and Countermeasures

Spill Prevention Measures:

Training

- At least one (1) individual from Club 14 will be appointed and attend the ECO training provided by the ISC Environmental Branch
- All individuals will be given annual training on initial actions for spills
- All individuals required to use petroleum or hazardous materials will be trained in the safe and proper use of those materials

Handling and Procedures

Small spills on concrete surfaces will be cleaned up immediately.

Inspection

Flammable and Hazardous Material Lockers Inspect the flammable storage area weekly. An inventory sheet posted on the locker or in the administrative office shall document all materials and containers stored in the lockers. Confirm storage compatibility issues with the ISC Environmental Branch.

Spill Control Measures

- Report spills immediately to the Environmental Branch, and the OOD.

- Before attempting cleanup actions identify the spilled material. If the material cannot be identified isolate the area, evacuate personnel, and wait for assistance and instructions from the ISC Environmental Branch.
- Stop the source of the spill if safe to do so. For example, a drum may be rotated so the damaged side is face up.
- Isolate the area of the spill with absorbent materials. If the spill is larger than available spill recovery materials then block openings where the spill may enter drains or water.

9.5.3 Spill Contingency Measures

IMMEDIATE EMERGENCY ACTION PLAN

In case of a spill, the first responder should follow the following instructions:

- Keep calm
- Clear the area to a safe distance from the spill.
- In case of fire or injury, use the nearest alarm box to call 911.
- Verbally spread the alarm. Pass the word.
- Rescue any injured individuals when possible without risking your safety.
- Immediately report the spill by the most expeditious means to your supervisor or contact the OOD at (808) 226-4170 (Cell).
-

Whenever possible, give the following information:

- Your name and telephone number
- Location of the spill (building name and/ or number)
- Number and type of injuries
- Identity and type and estimated quantity of spill material
- Identify the source of spill
- Describe the behavior of spilled material (reaction, fire)
- Time when spill occurred

All personnel except authorized response personnel should clear the area.

9.5.4 Spill Response Plan

When an emergency coordinator arrives at the spill area, the following actions are to be taken:

- Activate and direct facility response personnel to implement emergency response operations to protect life and property. The order of operations will depend on existing conditions and may be concurrent.
- Rescue any injured individuals without risking personal safety.
- Secure the spill area from unauthorized personnel.
- Stop source and prevent spill from exiting the area or entering any nearby storm drains.
- Avoid contact with liquid and fumes.
- If flammable vapors are present, restrict all sources of ignition such as smoking, internal combustion engines, or open flames.

- If a fire develops, utilize the proper equipment at hand to extinguish the fire, pending the arrival of the fire department.

Spill Response Equipment

Spill response materials are available from the Environmental Branch and are located in the Hazardous Waste Facility.

Containment and Cleanup Procedures

General Procedures

- Turn leaking containers upright to minimize leakage, and transfer substance to another container as soon as possible. Separate leaking from intact containers.
- Liquid spills occurring on paved areas should be contained and cleaned with absorbent materials.
- Use absorbent materials to dike nearby catch basins to prevent spills from entering storm drains.
- If spills percolate into the soil, contaminated soil should be removed at least 2 inches below the depth of the penetration.
- Spill residues, contaminated materials, and soil should be containerized for subsequent disposal

Minor Spills

Minor spills are small discharges (less than 5 gallons) of oil or hazardous materials to resilient surfaces (concrete floors, containers, hard-packed soil) that can be readily cleaned with available materials and cause no harm to personnel, the environment, or property. Spill response materials are available from the Environmental Branch and are located at the Hazardous Waste Facility. Transfer substance from the leaking containers to new containers or an overpack as soon as possible.

For disposal of recovered spills and spent absorbent materials, refer to Section 7.0 of this Plan.

9.5.5 Evacuation Plan

Note: The materials at this location are insufficient to create conditions requiring evacuation.

Approximate number of persons working at site:	2-5 (Greater during dining hours)
Primary evacuation assembly area:	Gymnasium
Secondary evacuation assembly area:	Exchange Parking Lot

1. Quickly determine the need to evacuate the building and implement the emergency evacuation procedures as required.
2. Toxic or flammable vapors being carried downwind may endanger personnel in adjacent areas. Alert downwind personnel as necessary.

3. If personnel are in the building when an emergency develops the emergency coordinator will determine if the facility needs to be evacuated.
4. When an evacuation is announced all personnel are to stop work, keep calm, think, avoid panic and exit the building.
5. Leave the facility and report to your designated assembly area, if it is safe. If it is unsafe, your supervisor or the emergency coordinator will select a new assembly area and you are to report there. Stay in your assigned safe area until instructed otherwise.
6. Each supervisor must conduct a “head count” and report to the emergency coordinator and or/fire chief when his/her employees have cleared the facility, and if anyone is missing.
7. The emergency coordinator and/or fire chief will notify the supervisors when it is safe to reenter the facility.

What Not to Do

- Do not delay evacuation of facility for any reason.
- Do not assist in fire control unless properly trained.
- After initial notification, do not use telephone system. The telephone system should be left open for emergency response personnel.
- Do not lock doors when vacating the facility. Emergency response personnel must have visual access to all facility areas to ensure that the facility is clear of personnel.
- Do not interfere with emergency operations. Keep out of the way and stay clear of the facility.
- Do not reenter the facility until instructed to do so.

9.5.6 Fire Equipment

Equipment

The closest fire hydrant is located to the north east near the swimming pool. Tri-class fire extinguishers are available inside Club 14.

10.0 WASTEWATER PUMP STATIONS

10.1 INTRODUCTION

Wastewater pumps move wastewater from the ships onboard storage, and from various building to the sanitary sewer system. Seven (7) pump stations are located on the ISC installation; their general location is shown on figure 10.0. The pumps are activated by gravimetric float switches in the pump chamber.

10.2 WASTEWATER HAZARDS

Emergencies associated with wastewater systems have the potential to result in personal injury to ISC personnel, hazards to the public's health and welfare, and environmental damage resulting from spillage of wastewater.

Wastewater spills from an overflowing pump station may expose members of the public to contaminated water or solid material through:

- Direct contact with wastewater
- Contact with diluted wastewater at down gradient location
- Contact with residual solids deposited as a result of a spill

Wastewater typically contains pathogenic organisms, which can be transmitted to those exposed. A wastewater spill to surface water may harm aquatic life in the immediate area. Wastewater spills may enter Honolulu Harbor directly or via stormwater outfalls.

10.3 PUMPING PROCEDURES

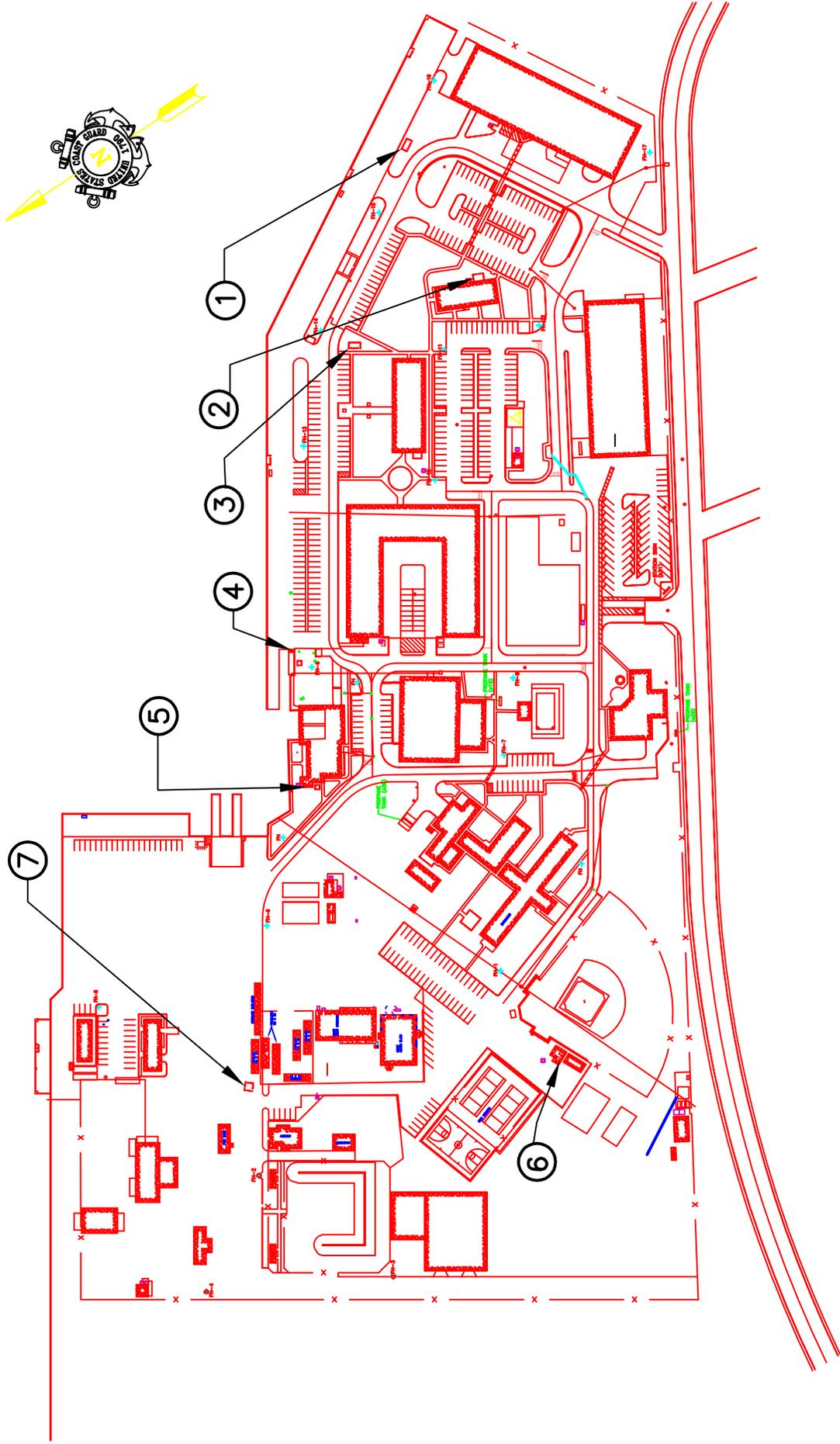
Ships personnel must coordinate with the ISC Engineering Division and the Environmental Branch prior to pumping wastewater. Pump stations must be observed by the ships personnel during transfers of wastewater. If a malfunction occurs during pumping the observer will signal the ship to stop pumping. The observer will notify Engineering and the Environmental Branch, and discontinue pumping, until the malfunction is resolved.

10.4 SPILL PROCEDURES

10.4.1 First Responder

In the event of a wastewater spill the first responder will:

- Notify the Officer of the Day (OOD) that a wastewater spill has occurred (The OOD will notify the Environmental Branch and the Engineering Section)
- State the location of the spill and if the wastewater is still discharging
- Alert personnel in the area and clear the area of personnel, out to at least 50 feet
- While remaining at least 50 feet from the wastewater spill continue to direct personnel, or vehicles away from the spill, remain at this position until relieved by the OOD or the Environmental Branch



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U.S.C.G. ISC SPCC PLAN

Figure 10.0

Honolulu

Hawaii

Wastewater Pumpstations

10.4.2 Officer of the Day

In the event of a wastewater spill the Officer of the Day will:

- Notify the Environmental Branch and the Engineering Division that a wastewater spill has occurred
- Dispatch personnel to isolate the site of the spill
- Direct ships to discontinue pumping wastewater until spill is resolved

10.4.3 Environmental Branch

In the event of a wastewater spill the Environmental Branch will:

1. Assume control of spill response
 - Isolate the area
 - Ensure individuals responding to spills have adequate protective clothing to prevent exposure to wastewater
2. Stop and control the spill
 - Prevent wastewater from entering Honolulu Harbor or stormwater catch basins
 - Ensure ships discontinue pumping wastewater
 - Berm the area and block storm drains
3. Assess the extent and volume of the spill
 - Determine total volume of wastewater discharged
 - Estimate volume of wastewater, if any, that has reached Honolulu Harbor
 - Determine potential exposures to personnel and the environment
4. Recover the spill
 - Absorbents may be used to recover low volume spills
 - Contract pump trucks to remove large quantities of wastewater
 - Disinfect the area if necessary

10.5 NOTIFICATIONS AND REPORTING

In the event of a wastewater discharge of 1,000 gallons, or any significant volume that enters Honolulu Harbor the Environmental Branch will report the discharge to the Hawaii Department of Health (HDOH), and Sector Honolulu.

DOH-Chief, Clean Water Branch (808) 586-4309 or after 5 pm Monday-Friday and weekends **Office of Hazard Evaluation and Emergency Response** (808) 226-3793

The Environmental Branch shall submit a written report of the details of the spill within (5) calendar days of the incident to the Director, Department of Health. The report shall include:

- Date, time, and location

- Volume of wastewater discharged
- The cause of the incident
- Cleanup efforts
- Remedial actions to prevent future incidents
- A summary of sampling data (if any)
- Public notifications if applicable.

10.6 SAMPLING

The Environmental Branch shall conduct bacterial sampling as soon as possible after a spill of 100 gallons or greater. The DOH may direct specific analyses to occur, and the location and duration of sampling.

10.7 PUBLIC NOTIFICATIONS

The Commanding Officer, ISC Honolulu, will make the determination at every sizable spill event if a press release should be submitted.

APPENDIX A. Plan Certification Posting and Updating Requirements

APPENDIX A. Plan Certification Posting and Updating Requirements

Certification and Updates

This SPCC plan was reviewed and certified by a Registered Professional Engineer (PE). The PE, after examination of the facility, and having good knowledge of the provisions of 40 CFR 112 certified that this plan has been prepared in accordance with good engineering practices (40 CFR 112). Amendments to this plan involving changes to bulk storage of petroleum or oil must be reviewed and certified by a PE as described above. This Plan shall be reviewed periodically, and must be recertified at least once every five (5) years or as required by the most recent publication or amendment to 40 CFR 112. The ISC may modify sections of this plan as follow without recertification by a PE:

- Telephone numbers and names and titles of responsible personnel
- Sections of this plan not pertaining to the bulk storage (less than 55 gallons) and handling of oil or petroleum (Sections 9 & 10)

The operating procedures and controls have been reviewed by the PE; however, it is the responsibility of ISC Honolulu to ensure the implementation and ongoing compliance with the requirements of this plan, and applicable regulations.

A copy of this Plan, in its entirety will be posted at:

- The Commander or his representative,
- The Environmental Branch
- Engineering
- Officer of the Day

A copy of this plan or the sections that apply will be maintained at individual locations discussed in the plan.

APPENDIX B. Forms

Aboveground Storage Tank

Inspections and Maintenance

The inspector will check the following items when inspecting an AST. The inspector will use the inspection checklist attached to this appendix to record his/her findings. The inspection checklist may be altered to accommodate additional information.

TANK SECURITY		Note:
1	Is the access to the AST controlled by fence, locked gate, or other method?	
2	Is the lighting for the area adequate for the facility?	
3	Are all fill ports and access hatches locked?	
4	Are storm water release valves closed and opened as appropriate?	
MARKINGS		Note:
1	Is the AST marked with standard legible labels, including the contents of the AST and warning labels?	
2	Are product lines connected to the AST clearly marked with direction of flow?	
STRUCTURAL		Note:
1	Check all surfaces of the tank body, foundation pad, containment structure, and foundation for ware or damage.	
2	If mounted on a concrete pad or platform, is the surface in good material condition, and free of cracks and defects?	
3	If within secondary containment, is the containment in good condition, and free of cracks or flaws that would allow contents to leave the containment, in the event of a release?	
4	Are there signs of damage, corrosion, or stains on the body of the tank?	
5	Are fill ports and access hatches in good mechanical condition?	
6	Are there signs of damage, corrosion, or mechanical wear at product line connections, exposed metal fittings, or other fittings?	
7	Check for corrosion on tank mounts. On hoop style fasteners for cylindrical tanks, check for corrosion between body of tank and the fasteners.	
HOUSEKEEPING		Note:
1	Is the area immediately surrounding the tank free of debris, overgrown vegetation, and clutter?	
2	Are there signs of spills on the ground around the tank, on the body of the tank, or within the containment of the tank?	
3	Is storm water regularly drained from containments?	
4	Is there debris or vegetation accumulated in the containment or around the tank?	
GAUGES AND INDICATORS		Note:
1	Does the level indicator gauge function? If a clock gauge used, is the table available to interpret reading?	
2	If equipped with an electronic leak detection system, when was the date of the last test?	
3	For dual wall tanks, is the interstitial leak detector present?	
SECONDARY CONTAINMENT		
1	Is secondary containment in the form of an enclosure or dual wall tank?	

2	Have any changes in material or operation impacted the efficacy of the secondary containment?	
3	If equipped with storm water release valves, does the valve operate correctly and close completely.	
RECORDS		Note:
1	Are fuel tanks gauged regularly, and inventories reconciled with delivery records?	
2	Are all deliveries observed and recorded?	
3	Are weekly checks performed and recorded at the unit level?	
FUEL DELIVERY AREA AND FILLING AREAS		Note:
1	Is there an adequate containment area for fuel deliveries?	
2	Where #1 is not practicable, is the delivery observed by unit personnel with access to spill recovery materials?	
3	Are nearby storm drains blocked, closed, or covered during fuel deliveries?	
4	Is the filling area curbed, trenched, or constructed to prevent fuel spills from reaching storm drains or waterways?	

Flammable and Hazardous Material Storage, Inspection Form	
Unit	
Inspecting ECO	
Date of Inspection	
Inspection Items	Observation (<i>Record deficiencies or status here</i>)
Check for material condition of all containers, arrange for disposal or replacement of damaged or leaking containers	
Check storage areas and surfaces for leaks or stains	
Ensure MSDSs are available for all hazardous materials	
Check expiration dates on hazardous products, expired products should be turned into the HAZMIN Center	
Check marking on all containers, containers with damaged or incorrect labels should be replaced or relabeled	
Check accumulation dates of used or waste materials, do not allow excessive amount to accumulate	
<i>Document additional items in this space, note items not corrected since previous inspection:</i>	

USCG ISC Honolulu Spill Notification Form

A. Reporter Information (to be completed by reporting unit/activity)

Name (Last, First, Middle) _____ Phone _____

Position _____ Unit name _____

Address _____

Time/Date OOD/Environmental Branch Notified _____

Location of Spill _____ Time of Spill _____ Date of Spill _____

Substance spilled _____ Amount Spilled _____ Duration of Spill _____

Media into which the release/spill occurred or is likely to occur:

Air Soil Ground Water Concrete Asphalt Stream Ocean Other: _____

Amount entered waterway _____ Number of injuries _____ Number of deaths _____ Number evacuated _____

Actual damage _____

Cause of spill _____

Detailed description of clean-up actions _____

Preventive actions to be taken _____

SUBMITTED BY:

Name/title/phone number

Signature

B. ISC Environmental Branch Information (to be completed by ISC Environmental Branch)

>CERCLA RQ (40CFR 117, 302) (Y/N)

HEERO Notification (808) 586-4249/after hrs 247-2191

EB staff _____

Notified at ___:___ on ___/___/_____

Report number _____

Written Notification to be submitted: (Y/N) by ___/___/_____

Person notified _____

LEPC Notification (808) 523-4121 (Honolulu)/Fax 524-3439

EB staff _____

Notified at ___:___ on ___/___/_____

Person notified _____

NRC Notification (800-424-8802)

EB staff _____

Notified at ___:___ on ___/___/_____

Report number _____

STORMWATER RELEASE FORM

TANK#			
BUILDING# STREET			
UNIT			
ECO NAME			
SIGNATURE			
DATE/TIME OF RELEASE			
Description	Yes	No	Comments
1. Was it necessary to release the water from the containment area?			
2. Was there a sheen on the water within the containment area?			
3. Was there discoloration of the water or other evidence that might suggest contamination?			
4. Was the water tested by a laboratory?			If yes, attach the analytical results.
5. Was the containment area properly secured after release was terminated?			

APPENDIX C Annual Spill Training and Rehearsals

APPENDIX C
ANNUAL SPILL TRAINING AND REHEARSAL

1. The ISC Honolulu Environmental Branch will simulate a spill event annually. The simulated spill shall be designed to provide a challenging scenario, and approximate a worst-case event.

Examples may include (but are not limited to):

- A large volume spill near a storm drain, leading to Honolulu Harbor;
- An overturned fuel truck.

2. The Environment Branch will schedule the event to allow ECOs to participate.

3. Training shall emphasize:

- Health and safety procedures when responding to releases;
- Analysis of the site;
- Preparation of an information summary of the spill;
- What was spilled?
- When did the spill occur?
- From what source;
- Quantity of material spilled;
- Probable organization responsible for the spill;
- What wildlife, municipal, industrial or agricultural facilities are endangered?

4. The participants in the exercise will practice preparing written reports of the simulated incident that will meet requirements of the U.S. Environmental Protection Agency and this plan. The Environmental Branch should report all information as required to outside agencies; however, be sure to announce at the beginning and end of reports that the notification is part of a drill and is not an actual spill report.

APPENDIX D Cross Reference for Model Plan

SPCC Cross Reference

This plan is organized with a general description of the facility, followed by a discussion of regulatory compliance, general spill control methods, employee training, and other general requirements of the plan. Individual site or locations within this facility that have bulk-storage containers are discussed in detail in Section 8.0 of this plan. In the table below major provisions or requirements of a spill control plan have been cross-referenced for reviewers of this plan.

SPCC Rule	Description of Section	Section in Plan
§ 112.7	General requirements for SPCC Plans for all facilities and all oil types.	1.0-4.0
§ 112.7(a)	General requirements; discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures.	1.0-4.0
§ 112.7(b)	Fault analysis.	Individual Container Sections
§ 112.7(c)	Secondary containment.	3.4 & Individual Sections
§ 112.7(d)	Contingency planning.	Individual Container Sections
§ 112.7(e)	Inspections, tests, and records.	3.4.4 & Appendix B
§ 112.7(f)	Employee training and discharge prevention procedures.	3.2
§ 112.7(g)	Security (excluding oil production facilities).	3.5
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§ 112.7(i)	Brittle fracture evaluation requirements.	No field constructed tanks
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APPENDIX E Reportable Quantities of Hazardous Materials

PART 302—DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION

Sec.

302.1 Applicability.

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302.4 Designation of hazardous substances.

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AUTHORITY: 42 U.S.C. 9602, 9603, and 9604; 33 U.S.C. 1321 and 1361.

SOURCE: 50 FR 13474, Apr. 4, 1985, unless otherwise noted.

§302.1 Applicability.

This regulation designates under section 102(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("the Act") those substances in the statutes referred to in section 101(14) of the Act, identifies reportable quantities for these substances, and sets forth the notification requirements for releases of these substances. This regulation also sets forth reportable quantities for hazardous substances designated under section 311(b)(2)(A) of the Clean Water Act.

§302.2 Abbreviations.

CASRN=Chemical Abstracts Service Registry Number

RCRA=Resource Conservation and Recovery Act of 1976, as amended

lb=pound

kg=kilogram

RQ=reportable quantity

§302.3 Definitions.

As used in this part, all terms shall have the meaning set forth below:

The Act, *CERCLA*, or *Superfund* means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Pub. L. 96-510);

Administrator means the Administrator of the United States Environmental Protection Agency ("EPA");

Consumer product shall have the meaning stated in 15 U.S.C. 2052;

Environment means (1) the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the ex-

clusive management authority of the United States under the Fishery Conservation and Management Act of 1976, and (2) any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States;

Facility means (1) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (2) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel;

Hazardous substance means any substance designated pursuant to 40 CFR part 302;

Hazardous waste shall have the meaning provided in 40 CFR 261.3;

Navigable waters or *navigable waters of the United States* means waters of the United States, including the territorial seas;

Offshore facility means any facility of any kind located in, on, or under, any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel;

Onshore facility means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under, any land or non-navigable waters within the United States;

Person means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, United States Government, State, municipality, commission, political subdivision of a State, or any interstate body;

Release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, but excludes (1) any release which results in exposure to persons solely within a workplace, with respect

to a claim which such persons may assert against the employer of such persons, (2) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine, (3) release of source, by-product, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of such Act, or for the purposes of section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978, and (4) the normal application of fertilizer;

Reportable quantity means that quantity, as set forth in this part, the release of which requires notification pursuant to this part;

United States include the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of the Northern Marianas, and any other territory or possession over which the United States has jurisdiction; and

Vessel means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water.

§ 302.4 Designation of hazardous substances.

(a) *Listed hazardous substances.* The elements and compounds and hazardous wastes appearing in table 302.4 are designated as hazardous substances under section 102(a) of the Act.

(b) *Unlisted hazardous substances.* A solid waste, as defined in 40 CFR 261.2, which is not excluded from regulation as a hazardous waste under 40 CFR 261.4(b), is a hazardous substance under section 101(14) of the Act if it exhibits any of the characteristics identified in 40 CFR 261.20 through 261.24.

NOTE: The numbers under the column headed "CASRN" are the Chemical Abstracts Service Registry Numbers for each hazardous substance. Other names by which each hazardous substance is identified in other statutes and their implementing regulations are provided in the "Regulatory Synonyms" column. The "Statutory RQ" column lists the RQs for hazardous substances established by section 102 of CERCLA. The "Statutory Code" column indicates the statutory source for designating each substance as a CERCLA hazardous substance: "1" indicates that the statutory source is section 311(b)(4) of the Clean Water Act, "2" indicates that the source is section 307(a) of the Clean Water Act, "3" indicates that the source is section 112 of the Clean Air Act, and "4" indicates that the source is RCRA section 3001. The "RCRA Waste Number" column provides the waste identification numbers assigned to various substances by RCRA regulations. The column headed "Category" lists the code letters "X," "A," "B," "C," and "D," which are associated with reportable quantities of 1, 10, 100, 1000, and 5000 pounds, respectively. The "Pounds (kg)" column provides the reportable quantity adjustment for each hazardous substance in pounds and kilograms.

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Acenaphthene	83329		1*	2		B	100 (45.4)
Acenaphthylene	208968		1*	2		D	5000 (2270)
Acetaldehyde	75070		1000	1,3,4	U001	C	1000 (454)
Acetaldehyde, chloro-	107200		1*	4	P023	C	1000 (454)
Acetaldehyde, trichloro-	75876		1*	4	U034	D	5000 (2270)
Acetamide	60355		1*	3		B	100 (45.4)
Acetamide, N-(aminothioxomethyl)-	591082	1-Acetyl-2-thiourea	1*	4	P002	C	1000 (454)
Acetamide, N-(4-ethoxyphenyl)-	62442	Phenacetin	1*	4	U187	B	100 (45.4)
Acetamide, 2-fluoro-	640197	Fluoroacetamide	1*	4	P057	B	100 (45.4)
Acetamide, N-9H-fluoren-2-yl-	53963	2-Acetylaminofluorene	1*	3,4	U005	X	1 (0.454)
Acetic acid	64197		1000	1		D	5000 (2270)
Acetic acid (2,4-dichlorophenoxy)-, salts & esters	94757	2,4-D Acid,	100	1,3,4	U240	B	100 (45.4)
Acetic acid, Lead(2+) salt	301042	2,4-D,salts and esters					
Acetic acid, thallium (1+) salt	563688	Lead acetate	5000	1,4	U144	A	10 (4.54)
Acetic acid, (2,4,5-trichlorophenoxy)	93765	Thallium(I) acetate	1*	4	U214	B	100 (45.4)
		2,4,5-T	100	1,4	U232	C	1000 (454)
		2,4,5-T acid					
Acetic acid, ethyl ester	141786	Ethyl acetate	1*	4	U112	D	5000 (2270)
Acetic acid, fluoro-, sodium salt	62748	Fluoroacetic acid, sodium salt	1*	4	P058	A	10 (4.54)
Acetic anhydride	108247		1000	1		D	5000 (2270)
Acetone	67641	2-Propanone	1*	4	U002	D	5000 (2270)
Acetone cyanohydrin	75865	Propanenitrile, 2-hydroxy-2-methyl-2-methylactonitrile.	10	1,4	P069	A	10 (4.54)
Acetonitrile	75058		1*	3,4	U003	D	5000 (2270)
Acetophenone	98862	Ethanone, 1-phenyl-	1*	3,4	U004	D	5000 (2270)
2-Acetylaminofluorene	53963	Acetamide, N-9H-fluoren-2-yl-	1*	3,4	U005	X	1 (0.454)
Acetyl bromide	506967		5000	1		D	5000 (2270)
Acetyl chloride	75365		5000	1,4	U006	D	5000 (2270)
1-Acetyl-2-thiourea	591082	Acetamide, N-(aminothioxomethyl)-	1*	4	P002	C	1000 (454)
Acrolein	107028	2-Propenal	1	1,2,3,4	P003	X	1 (0.454)
Acrylamide	79061	2-Propenamide	1*	3,4	U007	D	5000 (2270)
Acrylic acid	79107	2-Propenoic acid	1*	3,4	U008	D	5000 (2270)
Acrylonitrile	107131	2-Propenenitrile	100	1,2,3,4	U009	B	100 (45.4)
Adipic acid	124049		5000	1		D	5000 (2270)
Aldicarb	116063	Propanal, 2-methyl-2-(methylthio)-O-[(methylamino)carbonyl]oxime.	1*	4	P070	X	1 (0.454)
Aldrin	309002	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4beta,5alpha,8alpha,8beta)-.	1	1,2,4	P004	X	1 (0.454)
Allyl alcohol	107186	2-Propen-1-ol	100	1,4	P005	B	100 (45.4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Allyl chloride	107051	.....	1000	1,3		C	1000 (454)
Aluminum phosphide	20899738	.....	1*	4	P006	B	100 (45.4)
Aluminum sulfate	10043013	.....	5000	1		D	5000 (2270)
4-Aminobiphenyl	92671	.....	1*	3		X	1 (0.454)
5-(Aminomethyl)-3-isoxazolol	2763964	Muscimol 3(2H)-Isoxazolone, 5-(aminomethyl)-	1*	4	P007	C	1000 (454)
4-Aminopyridine	504245	4-Pyridinamine	1*	4	P008	C	1000 (454)
Amitrole	61825	1H-1,2,4-Triazol-3-amine	1*	4	U011	A	10 (4.54)
Ammonia	7664417	.....	100	1		B	100 (45.4)
Ammonium acetate	631618	.....	5000	1		D	5000 (2270)
Ammonium benzoate	1863634	.....	5000	1		D	5000 (2270)
Ammonium bicarbonate	1066337	.....	5000	1		D	5000 (2270)
Ammonium bichromate	7789095	.....	1000	1		A	10 (4.54)
Ammonium bifluoride	1341497	.....	5000	1		B	100 (45.4)
Ammonium disulfite	10192300	.....	5000	1		D	5000 (2270)
Ammonium carbamate	1111780	.....	5000	1		D	5000 (2270)
Ammonium carbonate	506876	.....	5000	1		D	5000 (2270)
Ammonium chloride	12125029	.....	5000	1		D	5000 (2270)
Ammonium chromate	7789889	.....	1000	1		A	10 (4.54)
Ammonium citrate, dibasic	3012655	.....	5000	1		D	5000 (2270)
Ammonium fluoroborate	13828630	.....	5000	1		D	5000 (2270)
Ammonium fluoride	12125018	.....	5000	1		B	100 (45.4)
Ammonium hydroxide	1336216	.....	1000	1		C	1000 (454)
Ammonium oxalate	6009707	.....	5000	1		D	5000 (2270)
Ammonium picrate	14258492	.....	1*	4	P009	A	10 (4.54)
Ammonium silicofluoride	131748	Phenol, 2,4,6-trinitro-, ammonium salt	1000	1		C	1000 (454)
Ammonium sulfamate	16919190	.....	5000	1		D	5000 (2270)
Ammonium sulfide	7773060	.....	5000	1		B	100 (45.4)
Ammonium sulfite	12135761	.....	5000	1		D	5000 (2270)
Ammonium tartrate	10196040	.....	5000	1		D	5000 (2270)
Ammonium thiocyanate	14307438	.....	5000	1		D	5000 (2270)
Ammonium vanadate	3164292	.....	5000	1		D	5000 (2270)
Amyl acetate	1762954	Vanadic acid, ammonium salt	1*	4	P119	C	1000 (454)
iso-Amyl acetate	7803556	.....	1000	1		D	5000 (2270)
sec-Amyl acetate	628637	.....	1000	1		D	5000 (2270)
tert-Amyl acetate	626380	.....	1000	1		D	5000 (2270)
Aniline	625161	.....	1000	1,3,4	U012	D	5000 (2270)
o-Anisidine	62533	Benzenamine	1*	3		B	100 (45.4)
Anthracene	90040	.....	1*	2		D	5000 (2270)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Arsenic oxide As ₂ O ₃	1303282	Arsenic pentoxide	5000	1,4	P011	X	1 (0.454)
Arsenic pentoxide	1303282	Arsenic oxide As ₂ O ₃	5000	1,4	P011	X	1 (0.454)
Arsenic trichloride	7784341	.....	5000	1	P012	X	1 (0.454)
Arsenic trioxide	1327533	.....	5000	1,4	P012	X	1 (0.454)
Arsenic trisulfide	1303339	.....	5000	1	P012	X	1 (0.454)
Arsine, diethyl-	692422	Diethylarsine	1*	4	P038	X	1 (0.454)
Arsinic acid, dimethyl-	75605	Diethylarsine	1*	4	P038	X	1 (0.454)
Arsinous dichloride, phenyl-	696286	.....	1*	4	P036	X	1 (0.454)
Asbestos †††	1332214	.....	1*	2,3	P036	X	1 (0.454)
Auramine	492808	Benzenamine, 4,4'-carbonyldiylbis (N,N-dimethyl)-	1*	4	U014	B	100 (45.4)
Azaserine	115026	L-Serine, diazoacetate (ester)	1*	4	U015	X	1 (0.454)
Azidine	151564	Ethyleneimine	1*	3,4	P054	X	1 (0.454)
Aziridine, 2-methyl-	75558	2-Methyl aziridine 1,2-Propyleneimine	1*	3,4	P067	X	1 (0.454)
Azrinol[2',3'-3,4]pyrrolo[1,2-a]indole-4,7-dione 6-amino-8-[[[amino-carbonyloxy]methyl]-1,1a,2,8,8a-hexahydro-8a-methoxy-5-methyl-11aS-(1aalpha,8beta,8alpha,8balpha)]-	50077	Mitomycin C	1*	4	U010	A	10 (4.54)
Barium cyanide	542621	.....	10	1,4	P013	A	10 (4.54)
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56495	3-Methylcholanthrene	1*	4	U157	A	10 (4.54)
Benz[j]acridine	228514	.....	1*	4	U016	B	100 (45.4)
Benzal chloride	98873	Benzene, dichloromethyl-	1*	4	U017	D	5000 (2270)
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propenyl)-	23950585	Benzol[j]anthracene	1*	4	U192	D	5000 (2270)
Benz[aj]anthracene	56553	1,2-Benzanthracene	1*	2,4	U018	A	10 (4.54)
1,2-Benzanthracene	56553	Benz[aj]anthracene	1*	2,4	U018	A	10 (4.54)
Benz[aj]anthracene, 7,12-dimethyl-	57976	Benzol[j]anthracene	1*	4	U094	X	1 (0.454)
Benzenamine	62533	7,12-Dimethylbenz[aj]anthracene	1000	1,3,4	U012	D	5000 (2270)
Benzenamine, 4,4'-carbonyldiylbis (N,N-dimethyl)-	492808	Aniline	1*	4	U014	B	100 (45.4)
Benzenamine, 4-chloro-	106478	Auramine	1*	4	P024	C	1000 (45.4)
Benzenamine, 4-chloro-2-methyl-, hydrochloride	3165933	p-Chloroaniline	1*	4	U049	B	100 (45.4)
Benzenamine, N,N-dimethyl-4-(phenylazo)-	60117	4-Chloro-o-toluidine, hydrochloride	1*	4	U093	A	10 (4.54)
Benzenamine, 2-methyl-	95534	Dimethyl aminoazobenzene	1*	3,4	U038	B	100 (45.4)
Benzenamine, 4-methyl-	106490	p-Dimethylaminoazobenzene	1*	3,4	U328	B	100 (45.4)
Benzenamine, 4,4'-methylenebis(2-chloro-	101144	o-Toluidine	1*	4	U353	B	100 (45.4)
Benzenamine, 2-methyl-, hydrochloride	636215	4,4'-Methylenebis(2-chloroaniline)	1*	3,4	U158	A	10 (4.54)
Benzenamine, 2-methyl-5-nitro-	99558	o-Toluidine hydrochloride	1*	4	U222	B	100 (45.4)
Benzenamine, 4-nitro-	100016	5-Nitro-o-toluidine	1*	4	U181	B	100 (45.4)
Benzene ^a	71432	p-Nitroaniline	1000	1,2,3,4	U109	D	5000 (2270)
Benzeneacetic acid, 4-chloro- α -(4-chlorophenyl)- α -hydroxy-, ethyl ester	510156	Chlorobenzilate	1*	3,4	U038	A	10 (4.54)

Benzene, 1-bromo-4-phenoxy-	101553	4-Bromophenyl phenyl ether	1*	2,4	U030	B	100 (45.4)
Benzenebutanoic acid, 4-bis(2-chloroethyl)amino]	305033	Chlorambucil	1*	4	U035	A	10 (4.54)
Benzene, chloro-	108907	Chlorobenzene	100	1,2,3,4	U037	B	100 (45.4)
Benzene, chloromethyl-	100447	Benzyl chloride	100	1,3,4	P028	B	100 (45.4)
Benzenediamine, ar-methyl-	95807	Toluenediamine	1*	3,4	U221	A	10 (4.54)
	496720	2,4-Toluene diamine					
	823405						
	25376458						
1,2-Benzenedicarboxylic acid, dioctyl ester	117840	Di-n-octyl phthalate	1*	2,4	U107	D	5000 (2270)
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117817	Bis(2-ethylhexyl)phthalate	1*	2,3,4	U028	B	100 (45.4)
		DEHP					
1,2-Benzenedicarboxylic acid, dibutyl ester	84742	Diethylhexyl phthalate	100	1,2,3,4	U069	A	10 (4.54)
		n-Butyl phthalate					
		Dibutyl phthalate					
		D-n-butyl phthalate					
1,2-Benzenedicarboxylic acid, diethyl ester	84662	Diethyl phthalate	1*	2,4	U088	C	1000 (454)
1,2-Benzenedicarboxylic acid, dimethyl ester	131113	Dimethyl phthalate	1*	2,3,4	U102	D	5000 (2270)
Benzene, 1,2-dichloro-	95501	o-Dichlorobenzene	100	1,2,4	U070	B	100 (45.4)
		1,2-Dichlorobenzene					
Benzene, 1,3-dichloro-	541731	m-Dichlorobenzene	1*	2,4	U071	B	100 (45.4)
		1,3-Dichlorobenzene					
Benzene, 1,4-dichloro-	106467	p-Dichlorobenzene	100	1,2,3,4	U072	B	100 (45.4)
		1,4-Dichlorobenzene					
Benzene, 1,1'-(2,2-dichloroethyldiene)bis[4-chloro-	72548	DDD	1	1,2,4	U060	X	1 (0.454)
		1,4-Dichlorobenzene					
		TDE					
		4,4' DDD					
Benzene, dichloromethyl-	98873	Benzal chloride	1*	4	U017	D	5000 (2270)
Benzene, 1,3-diiisocyanatomethyl-	91087	Toluene diisocyanate	1*	3,4	U223	B	100 (45.4)
	584849	2,4-Toluene diisocyanate					
	26471625						
Benzene, dimethyl-	1330207	Xylene	1000	1,3,4	U239	B	100 (45.4)
		Xylene (mixed)					
Benzene, m-dimethyl-	108383	Xylenes (isomers and mixture)	1*	3		C	1000 (454)
Benzene, o-dimethyl-	95476	m-Xylene	1*	3		C	1000 (454)
Benzene, p-dimethyl-	106423	o-Xylene	1*	3		B	100 (45.4)
1,3-Benzenediol	108463	Resorcinol	1000	1,4	U201	D	5000 (2270)
1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]-	51434	Epinephrine	1*	4	P042	C	1000 (454)
Benzeneethanamine, alpha, alpha-dimethyl-	122098	alpha, alpha-Dimethylphenethylamine	1*	4	P046	D	5000 (2270)
Benzene, hexachloro-	118741	Hexachlorobenzene	1*	2,3,4	U127	A	10 (4.54)
Benzene, hexahydro-	110827	Cyclohexane	1000	1,4	U056	C	1000 (454)
Benzene, hydroxy-	108952	Phenol	1000	1,2,3,4	U188	C	1000 (454)
Benzene, methyl-	108883	Toluene	1000	1,2,3,4	U220	C	1000 (454)
Benzene, 2-methyl-1,3-dinitro-	606202	2,6-Dinitrotoluene	1000	1,2,4	U106	B	100 (45.4)
Benzene, 1-methyl-2,4-dinitro-	112142	2,4-Dinitrotoluene	1000	1,2,3,4	U105	A	10 (4.54)
Benzene, (1-methylethyl)-	98828	Cumene	1*	3,4	U055	D	5000 (2270)
Benzene, nitro-	98953	Nitrobenzene	1000	1,2,3,4	U169	C	1000 (454)
Benzene, pentachloro-	608935	Pentachlorobenzene	1*	4	U183	A	10 (4.54)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Benzene, pentachloronitro-	82688	PCNB	1*	3,4	U185	B	100 (45.4)
Benzenesulfonic acid chloride	98099	Quintobenzene	1*	4	U020	B	100 (45.4)
Benzenesulfonyl chloride	98099	Benzenesulfonyl chloride	1*	4	U020	B	100 (45.4)
Benzene, 1,2,4,5-tetrachloro-	95943	Benzenesulfonic acid chloride	1*	4	U020	B	5000 (2270)
Benzenethiol	108985	1,2,4,5-Tetrachlorobenzene	1*	4	P014	D	100 (45.4)
Benzene, 1,1-(2,2,2-tri- chloroethylidene)bis(4-chloro-	50293	Thiophenol	1	1,2,4	U061	X	1 (0.454)
.....		DDT					
.....		4,4'DDT					
Benzene, 1,1-(2,2,2-trichloroethylidene) bis(4-methoxy-	72435	Methoxychlor	1	1,3,4	U247	X	1 (0.454)
Benzene, (trichloromethyl)-	98077	Benzotrithloride	1*	3,4	U023	A	10 (4.54)
Benzene, 1,3,5-trinitro-	99354	1,3,5-Trinitrobenzene	1*	4	U234	A	10 (4.54)
Benzidine	92875	[1,1'-Biphenyl]-4,4'-diamine	1*	2,3,4	U021	X	1 (0.454)
1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81072	Saccharin and salts	1*	4	U020	B	100 (45.4)
Benz[a]anthracene	56553	Benz[a]anthracene	1*	2,4	U018	A	10 (4.54)
.....		1,2-Benzanthracene					
Benz[b]fluoranthene	205992	.....	1*	2		X	1 (0.454)
Benz[k]fluoranthene	207089	.....	1*	2		D	5000 (2270)
Benz[j,k]fluorene	206440	Fluoranthene	1*	2,4	U120	B	100 (45.4)
1,3-Benzodioxol-4-ol, 2,2-dimethyl-, (Bendiocarb phenol)	22961826	.....	1*	4	U364	##	##
1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate (Bendiocarb)	22781233	.....	1*	4	U278	##	##
1,3-Benzodioxole, 5-(1-propenyl)-	120581	Isosafrole	1*	4	U141	B	100 (45.4)
1,3-Benzodioxole,5-(2-propenyl)-	94597	Safrole	1*	4	U203	B	100 (45.4)
1,3-Benzodioxole, 5-propyl-	94586	Dihydrosafrole	1*	4	U090	A	10 (4.54)
7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, (Carboturan phenol)	1563388	.....	1*	4	U367	##	##
Benzoic acid	68850	.....	5000	1		D	5000 (2270)
Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-	57647	.....	1*	4	P188	##	##
hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate .....		.....			
ester (1:1) (Physosigimine salicylate) .....		.....			
Benzonitrile	100470	Dibenz[a,h]pyrene	1000	1	U064	D	5000 (2270)
Benzo [s]pentaene	189559	.....	1*	4		A	10 (4.54)
Benz[ghi]perylene	191242	Warfarin, & salts, when present at concentra-	1*	2		D	5000 (2270)
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts,	81812	tions greater than 0.3%,	1*	4	P001	B	100 (45.4)
when present at concentrations greater than 0.3%		3,4-Benzopyrene					
Benz[al]pyrene	50328	.....	1*	2,4	U022	X	1 (0.454)
.....	50328	Benz[aj]pyrene	1*	2,4	U022	X	1 (0.454)
3,4-Benzopyrene	106514	2,5-Cyclohexadiene-1,4-dione	1*	3,4	U197	A	10 (4.54)
p-Benzquinone		Quinone					
Benzotrithloride	98077	Benzene, (trichloromethyl)-	1*	3,4	U023	A	10 (4.54)
Benzoyl chloride	98884	.....	1000	1		C	1000 (454)
1,2-Benzphenanthrene	218019	Chrysene	1*	2,4	U050	B	100 (45.4)

Chemical Name	100	1,3,4	P028	B	100 (45.4)
Benzyl chloride	100447	1*			100 (45.4)
BERYLLIUM AND COMPOUNDS	N.A.	2,3			**
Beryllium Compounds	N.A.	2,3			**
Beryllium chloride	7787475	1		X	1 (0.454)
Beryllium fluoride	7787497	5000		X	1 (0.454)
Beryllium nitrate	13597994	5000		X	1 (0.454)
Beryllium powder††	7787555	1			
alpha-BHC	7440417	1*	P015	A	10 (4.54)
beta-BHC	319846	1*	2	A	10 (4.54)
delta-BHC	319857	1*	2	X	1 (0.454)
gamma-BHC	319868	1*	2	X	1 (0.454)
	58899	1	1,2,3,4	X	1 (0.454)
2,2'-Bioxirane	1464535	1*	4	A	10 (4.54)
(1,1'-Biphenyl)-4,4'-diamine	92875	1*	2,4	X	1 (0.454)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-	91941	1*	2,4	X	1 (0.454)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethoxy-	119904	1*	4	B	100 (45.4)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethyl-	119937	1*	4	A	10 (4.54)
Biphenyl	92524	1*	3	B	100 (45.4)
Bis (2-chloroethyl) ether	111444	1*	2,4	A	10 (4.54)
Bis(2-chloroethoxy) methane	111911	1*	2,4	C	1000 (454)
Bis (2-ethylhexyl)phthalate	117817	1*	2,4	B	100 (45.4)
Bromoacetone	598312	1*	4	C	1000 (454)
Bromoforn	75252	1*	2,4	B	100 (45.4)
4-Bromophenyl phenyl ether	101553	1*	2,4	B	100 (45.4)
Brucine	357573	1*	4	B	100 (45.4)
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87683	1*	2,4	X	1 (0.454)
1,3-Butadiene	106990	1*	3	A	10 (4.54)
1-Butanamine, N-butyl-N-nitroso-	924163	1*	4	A	10 (4.54)
1-Butanol	71363	1*	4	D	5000 (2270)
2-Butanone	78933	1*	3,4	D	5000 (2270)
2-Butanone peroxide	1338234	1*	4	A	10 (4.54)
2-Butanone, 3,3-dimethyl-1-(methylthio)-, O[(methylamino)carbonyl] oxime.	39196184	1*	4	B	100 (45.4)
2-Butenal	123739	100	1,4	B	100 (45.4)
	4170303				
2-Butene, 1,4-dichloro-	764410	1*	4	X	1 (0.454)
2-Butenoic acid, 2-methyl-, 7[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7-tetrahydro-1H-pyrrolo[2,1-y] ester,	303344	1*	4	A	10 (4.54)
[1S]-1[alpha](Z),7'(Z)-3R',7aapbnal]-					
Butyl acetate	123864	5000	1	D	5000 (2270)
iso-Butyl acetate	110190				
sec-Butyl acetate	105464				

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		RCRA waste Number	Cat-egory	Final RQ Pounds (Kg)
			RQ	Code †			
tert-Butyl acetate	540885		1*	4	U031	D	5000 (2270)
n-Butyl alcohol	71363		1000	1		C	1000 (454)
Butylamine	109739						
iso-Butylamine	78819						
sec-Butylamine	513495						
	13952846						
tert-Butylamine	75649						
Butyl benzyl phthalate	85687	1,2-Benzenedicarboxylic acid, dibutyl ester	1*	2		B	100 (45.4)
n-Butyl phthalate	84742	Dibutyl phthalate	100	1,2,3,4	U069	A	10 (4.54)
		Di-n-butyl phthalate	5000	1		D	5000 (2270)
Butyric acid	107926						
iso-Butyric acid	79312		1*	4	U136	X	1 (0.454)
Cacodylic acid	75605	Arsinic acid, dimethyl-	1*	2		A	10 (4.54)
Cadmium ††	7440439		100	1		A	10 (4.54)
Cadmium acetate	543908						
CADMIUM AND COMPOUNDS	N.A.	Cadmium Compounds	1*	2,3		A	**
Cadmium Compounds	N.A.	CADMIUM AND COMPOUNDS	100	1		A	10 (4.54)
Cadmium bromide	7789426		1000	1		A	10 (4.54)
Cadmium chloride	10108642		1000	1		X	1 (0.454)
Calcium arsenate	7778441		1000	1		X	1 (0.454)
Calcium arsenite	52740166		1000	1		X	1 (0.454)
Calcium carbide	75207		5000	1		A	10 (4.54)
Calcium chromate	13765190	Chromic acid H ₂ CrO ₄ , calcium salt	1000	1,4	U032	A	1000 (454)
Calcium cyanamide	156627		1*	3		C	1000 (454)
Calcium cyanide	592018	Calcium cyanide Ca(CN) ₂	10	1,4	P021	A	10 (4.54)
Calcium cyanide Ca(CN) ₂	592018	Calcium cyanide	10	1,4	P021	A	10 (4.54)
Calcium dodecylbenzenesulfonate	26264062		1000	1		C	1000 (454)
Calcium hypochlorite	7778543		100	1		A	10 (4.54)
Camphene, octachloro-	8001352	Chlorinated camphene	1	1,2,3,4	P123	X	1 (0.454)
Capitan	133062	Toxaphene	10	1,3		A	10 (4.54)
Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl, methyl ester (Benomyl)	17804352		1*	4	U271	A	##
Carbamic acid, 1H-benzimidazol-2-yl, methyl ester (Carbendazim)	10605217		1*	4	U372	##	##
Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester (Barban)	101279		1*	4	U280	##	##
Carbamic acid, [(dibutylamino)thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzoluranyl ester (Carbosulfan)	55285148		1*	4	P189	##	##
Carbamic acid, dimethyl-, 1- [(dimethylamino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester (Dimeflan)	644644		1*	4	P191	##	##

Chemical Name	119380	51796	615532	1129415	23564058	122429	79447	111546	2303164	2303175	52888809	63252	1563662	75150	353504	6533739	75445	353504	79221	56235	463581	120809	75876	133904	305033	57749	N.A.	57749	57749	57749	N.A.	8001352			
Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester (isolan)																																			
Carbamic acid, ethyl ester																																			
Carbamic acid, methylnitroso-, ethyl ester																																			
Carbamic acid, methyl-, 3-methylphenyl ester (Metolcarb)																																			
Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester (Thiophanate-methyl)																																			
Carbamic acid, phenyl-, 1-methylethyl ester (Propham)																																			
Carbamic chloride, dimethyl-																																			
Carbamothioic acid, 1,2-ethanediybis, salts & esters																																			
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester																																			
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester (Triallate)																																			
Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester (Prosulfocarb)																																			
Carbaryl																																			
Carboluran																																			
Carbon disulfide																																			
Carbon oxyfluoride																																			
Carbonic acid, dithallium(1+) salt																																			
Carbonic dichloride																																			
Carbonic difluoride																																			
Carbonochloric acid, methyl ester																																			
Carbon tetrachloride																																			
Carbonyl sulfide																																			
Catechol																																			
Chloral																																			
Chloramben																																			
Chlorambucil																																			
Chlordane																																			
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES)																																			
Chlordane, alpha & gamma isomers																																			
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES)																																			
Chlorinated benzenes																																			
Chlorinated camphene																																			

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ	
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
CHLORINATED ETHANES	N.A.	.....	1*	2		**
CHLORINATED NAPHTHALENE	N.A.	.....	1*	2		**
CHLORINATED PHENOLS	N.A.	.....	1*	2		**
Chlorine	7782505	.....	10	1,3		
Chloromaphazine	494031	Naphthalenamine, N,N'-bis(2-chloroethyl)-	1*	4	U026	A
Chloroacetaldehyde	107200	Acetaldehyde, chloro-	1*	4	P023	B
Chloroacetic acid	79118	.....	1*	3		C
2-Chloroacetophenone	532274	.....	1*	3		B
CHLOROALKYL ETHERS	N.A.	.....	1*	2		**
p-Chloroaniline	106478	Benzenamine, 4-chloro-	1*	4	P024	C
Chlorobenzene	108907	Benzene, chloro-	100	1,2,3,4	U037	B
Chlorobenzilate	510156	Benzeneacetic acid, 4-chloro- <i>o</i> -(4-chlorophenyl)- <i>o</i> -hydroxy-, ethyl ester.	1*	3,4	U038	A
4-Chloro- <i>m</i> -cresol	59507	p-Chloro- <i>m</i> -cresol	1*	2,4	U039	D
p-Chloro- <i>m</i> -cresol	59507	Phenol, 4-chloro-3-methyl-	1*	2,4	U039	D
Chloroethane	75003	Phenol, 4-chloro-3-methyl-	1*	2,3		B
Chlorodibromomethane	124481	4-Chloro- <i>m</i> -cresol	1*	2		B
1-Chloro-2,3-epoxypropane	106898	Ethyl chloride	1000	1,3,4	U041	B
2-Chloroethyl vinyl ether	110758	Epichlorohydrin	1*	2,4	U042	C
Chloroform	67663	Oxirane, (chloromethyl)-	5000	1,2,3,4	U044	A
Chloromethane	74873	Ethene, 2-chloroethoxy-	1*	2,3,4	U045	B
Chloromethyl methyl ether	107302	Methane, trichloro-	1*	3,4	U046	A
beta-Chloronaphthalene	91587	Methyl chloride	1*	2,4	U047	D
2-Chloronaphthalene	91587	Methane, chloromethoxy-	1*	2,4	U048	B
2-Chlorophenol	95578	Naphthalene, 2-chloro-	1*	2,4	U048	B
o-Chlorophenol	95578	beta-Chloronaphthalene	1*	2,4	U048	B
4-Chlorophenyl phenyl ether	7005723	Naphthalene, 2-chloro-	1*	2,4	U048	B
1-(<i>o</i> -Chlorophenyl)thiourea	5344821	o-Chlorophenol	1*	2		D
Chloroprene	126998	Phenol, 2-chloro-	1*	4	P026	D
3-Chloropropionitrile	542767	2-Chlorophenol	1*	3		B
Chlorosulfonic acid	7790945	Thiourea, (2-chlorophenyl)-	1000	4	P027	C
4-Chloro- <i>o</i> -toluidine, hydrochloride	3165933	Propanenitrile, 3-chloro-	1*	1		C
		Benzenamine, 4-chloro-2-methyl-, hydrochloride.	1*	4	U049	B

Chlorpyrifos	2921882	.....	1	1	X	1 (0.454)
Chromic acetate	1066304	.....	1000	1	C	1000 (454)
Chromic acid	11115745	.....	1000	1	A	10 (4.54)
Chromic acid H ₂ CrO ₄ , calcium salt	7738945	.....	1000	1,4	A	10 (4.54)
Chromic sulfate	13765190	.....	1000	1	C	1000 (454)
Chromium††	10101538	.....	1*	2	D	5000 (2270)
CHROMIUM AND COMPOUNDS	7440473	.....	1*	2,3		**
Chromium Compounds	N.A.	.....	1*	2,3		**
Chromium chloride	10049055	.....	1000	1	C	1000 (454)
Chrysene	218019	.....	1	2,4	B	100 (45.4)
Cobalt compounds	N.A.	.....	1*	3		**
Cobaltous bromide	7789437	.....	1000	1	C	1000 (454)
Cobaltous formate	544183	.....	1000	1	C	1000 (454)
Cobaltous sulfamate	14017415	.....	1000	1	C	1000 (454)
Coke Oven Emissions	N.A.	.....	1*	3	X	1 (0.454)
Copper††	7440508	.....	1*	2	D	5000 (2270)
COPPER AND COMPOUNDS	N.A.	.....	1*	2		**
Copper cyanide	544923	.....	1*	4	A	10 (4.54)
Copper cyanide CuCN	544923	.....	1*	4	A	10 (4.54)
Cumaphos	56724	.....	10	1	A	10 (4.54)
Creosote	8001589	.....	1*	4	X	1 (0.454)
Cresols (isomers and mixture)	1319773	.....	1000	1,3,4	B	100 (45.4)
m-Cresol	108394	.....	1*	3	B	100 (45.4)
o-Cresol	95487	.....	1*	3	B	100 (45.4)
p-Cresol	106445	.....	1*	3	B	100 (45.4)
Cresylic acid (isomers and mixture)	1319773	.....	1000	1,3,4	B	100 (45.4)
m-Cresylic acid	108394	.....	1*	3	B	100 (45.4)
o-Cresylic acid	95487	.....	1*	3	B	100 (45.4)
p-Cresylic acid	106445	.....	1*	3	B	100 (45.4)
Crotonaldehyde	123739	.....	100	1,4	B	100 (45.4)
Cumene	4170303	.....	1*	3,4	D	5000 (2270)
Cupric acetate	98628	.....	100	1	B	100 (45.4)
Cupric acetoarsenite	142712	.....	100	1	X	1 (0.454)
Cupric chloride	12002038	.....	10	1	A	10 (4.54)
Cupric nitrate	7447394	.....	100	1	B	100 (45.4)
Cupric oxalate	3251238	.....	100	1	B	100 (45.4)
Cupric sulfate	5893663	.....	100	1	B	100 (45.4)
Cupric sulfate, ammoniated	7758987	.....	10	1	A	10 (4.54)
Cupric tartrate	10380297	.....	100	1	B	100 (45.4)
Cyanide Compounds	815827	.....	100	1	B	100 (45.4)
CYANIDES	N.A.	.....	1*	2,3		**
Cyanides (soluble salts and complexes) not otherwise specified	N.A.	.....	1*	2,3		**
Cyanogen	57125	.....	1*	4	A	10 (4.54)
Cyanogen bromide	460195	.....	1*	4	B	100 (45.4)
Cyanogen bromide (CN)Br	506683	.....	1*	4	C	1000 (454)
Cyanogen bromide (CN)Br	506683	.....	1*	4	C	1000 (454)
Cyanogen chloride	506774	.....	10	1,4	A	10 (4.54)
Cyanogen chloride (CN)Cl	506774	.....	10	1,4	A	10 (4.54)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Cyanogen chloride (CNCl)	506774	Cyanogen chloride	10	1,4	P033	A	10 (4.54)
2,5-Cyclohexadiene-1,4-dione	106514	p-Benzquinone	1*	3,4	U197	A	10 (4.54)
Cyclohexane	110827	Benzene, hexahydro-	1000	1,4	U056	C	1000 (454)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 α ,2 α ,3 β ,4 α ,5 α ,6 β)-	58899	γ -BHC Hexachlorocyclohexane (gamma isomer)	1	1,2,3,4	U129	X	1 (0.454)
Cyclohexanone	108941	Lindane (all isomers)	1*	4	U057	D	5000 (2270)
2-Cyclohexyl-4,6-dinitrophenol	131895	Phenol, 2-cyclohexyl-4,6-dinitro-	1*	4	P034	B	100 (45.4)
1,3-Cyclopentadiene, 1,2,3,4,5-hexachloro-	77474	Hexachlorocyclopentadiene	1	1,2,3,4	U130	A	10 (4.54)
Cyclophosphamide	50180	2H-1,3,2-Oxazaphosphorin-2-amine	1*	4	U058	A	10 (4.54)
2,4-D Acid	94757	N,N-bis(2-chloroethyl)tetrahydro-2-oxide Acetic acid, (2,4-dichlorophenoxy)-, salts & esters. 2,4-D, salts and esters	100	1,3,4	U240	B	100 (45.4)
2,4-D Ester	94111 94791 94804		100	1		B	100 (45.4)
2,4-D salts and esters	1320189 1928387 1928616 1929733 2971382 25168267 53467111 94757		100	1,3,4	U240	B	100 (45.4)
Daunomycin	20830813	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters. 2,4-D Acid 5,12-Naphthacenedione, 8-acetyl-10-[3-amino-pyranosyl]oxy]-7,8,9,10- tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)- Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- TDE 4,4' DDD	1*	4	U059	A	10 (4.54)
DDD	72548	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- TDE 4,4' DDD	1	1,2,4	U060	X	1 (0.454)
4,4' DDD	72548	1,1'-(2,2-dichloroethylidene)bis(4-chloro- DDD TDE	1	1,2,4	U060	X	1 (0.454)

DDE	72559	4,4'-DDE	1*	2,3	X	1 (0.454)
4,4'-DDE	72559	DDE	1*	2,3	X	1 (0.454)
DDE ^b	3547044	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	1*	3	D	5000 (2270)
DDT	50293	4,4'-DDT	1	1,2,4	X	1 (0.454)
	50293	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	1	1,2,4	X	1 (0.454)
4,4'-DDT	N.A.	DDT	1*	2	B	**
DDT AND METABOLITES	117817	1,2-Benzenedicarboxylic acid, bis(2-ethyl-hexyl) ester.	1*	2,3,4	B	100 (45.4)
DEHP	2303164	Bis(2-ethylhexyl)phthalate	1*	4	B	100 (45.4)
	333415	Diethylhexyl phthalate	1	1	X	1 (0.454)
Diallate	334883	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester.	1*	3	B	100 (45.4)
Diazinon	53703	Dibenz[a,h]anthracene	1*	2,4	X	1 (0.454)
Diazomethane	53703	1,2:5,6-Dibenzanthracene	1*	2,4	X	1 (0.454)
Dibenz[a,h]anthracene	53703	Dibenz[a,h]anthracene	1*	2,4	X	1 (0.454)
1,2:5,6-Dibenzanthracene	53703	Dibenz[a,h]anthracene	1*	2,4	X	1 (0.454)
Dibenzofuran	189559	Dibenzofuran	1*	4	X	1 (0.454)
Dibromofuran	132649	2,5:6-Dibenzanthracene	1*	4	A	10 (4.54)
1,2-Dibromo-3-chloropropane	96128	Benzof[st]pentaphene	1*	3	B	100 (45.4)
Dibromoethane	106934	Propane, 1,2-dibromo-3-chloro-	1*	3,4	X	1 (0.454)
	84742	Ethane, 1,2-dibromo-	1000	1,3,4	X	1 (0.454)
Dibutyl phthalate	84742	Ethylene dibromide	100	1,2,3,4	A	10 (4.54)
Di-n-butyl phthalate	84742	1,2-Benzenedicarboxylic acid, dibutyl ester	100	1,2,3,4	A	10 (4.54)
Dicamba	1918009	n-Butyl phthalate	100	1,2,3,4	A	10 (4.54)
Dichlobenil	1194656	1,2-Benzenedicarboxylic acid, dibutyl ester	100	1	C	1000 (454)
Dichlone	117806	n-Butyl phthalate	1000	1	B	100 (45.4)
Dichlorobenzene	25321226	Dibutyl phthalate	1	1	X	1 (0.454)
1,2-Dichlorobenzene	95501	Benzene, 1,2-dichloro- o-Dichlorobenzene	100	1	B	100 (45.4)
1,3-Dichlorobenzene	541731	Benzene, 1,3-dichloro m-Dichlorobenzene	1*	1,2,4	B	100 (45.4)
1,4-Dichlorobenzene	106467	Benzene, 1,4-dichloro- p-Dichlorobenzene	100	2,4	B	100 (45.4)
m-Dichlorobenzene	541731	Benzene, 1,3-dichloro 1,3-Dichlorobenzene	100	1,2,3,4	B	100 (45.4)
o-Dichlorobenzene	95501	Benzene, 1,2-dichloro 1,2-Dichlorobenzene	100	2,4	B	100 (45.4)
p-Dichlorobenzene	106467	Benzene, 1,4-dichloro- 1,4-Dichlorobenzene	100	1,2,3,4	B	100 (45.4)
DICHLOROBENZIDINE	N.A.	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-	1*	2	X	**
3,3'-Dichlorobenzidine	91941		*	2,3,4	D	1 (0.454)
Dichlorobromomethane	75274		1*	2	D	5000 (2270)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
1,4-Dichloro-2-butene	764410	2-Butene, 1,4-dichloro-	1*	4	U074	X	1 (0.454)
Dichlorodifluoromethane	75718	Methane, dichlorodifluoro-	1*	4	U075	D	5000 (2270)
1,1-Dichloroethane	75343	Ethane, 1,1-dichloro-	1*	2,3,4	U076	C	1000 (454)
		Ethylidene dichloride	5000	1,2,3,4	U077	B	100 (45.4)
1,2-Dichloroethane	107062	Ethane, 1,2-dichloro-	5000	1,2,3,4	U078	B	100 (45.4)
1,1-Dichloroethylene	75354	Ethene, 1,1-dichloro-	5000	1,2,3,4	U079	C	1000 (45.4)
		Vinylidene chloride	1*	2,4	U079	C	1000 (45.4)
1,2-Dichloroethylene	156605	Ethene, 1,2-dichloro- (E)	1*	2,3,4	U025	A	10 (4.54)
Dichloroethyl ether	111444	Bis(2-chloroethyl) ether	1*	2,4	U027	C	1000 (45.4)
Dichloroisopropyl ether	108601	Ethane, 1,1'-oxybis[2-chloro-	1*	2,4	U080	C	1000 (45.4)
Dichloromethane	75092	Propane, 2,2'-oxybis[2-chloro-	1*	2,3,4	U024	C	1000 (45.4)
		Methane, dichloro-	1*	2,4	P016	A	10 (4.54)
Dichloromethoxy ethane	111911	Methylene chloride	1*	3,4	U081	B	100 (45.4)
Dichloromethyl ether	542881	Bis(2-chloroethoxy) methane	1*	2,4	U082	B	100 (45.4)
		Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-	1*	2,4	P036	X	1 (0.454)
		Bis(chloromethyl) ether	5000	1		C	1000 (45.4)
2,4-Dichlorophenol	120832	Methane, oxybis(chloro-	5000	1,2,3,4,	U083	C	1000 (45.4)
2,6-Dichlorophenol	87650	Phenol, 2,4-dichloro-	5000	1		B	100 (45.4)
Dichlorophenylarsine	696286	Phenol, 2,6-dichloro-	5000	1		B	100 (45.4)
Dichloropropane	26638197	Arsonous dichloride, phenyl-	5000	1		C	1000 (45.4)
1,1-Dichloropropane	78999		5000	1		C	1000 (45.4)
1,3-Dichloropropane	142289	Propane, 1,2-dichloro-	5000	1,2,3,4,	U084	B	100 (45.4)
1,2-Dichloropropane	78875	Propylene dichloride	5000	1		B	100 (45.4)
Dichloropropane—Dichloropropene (mixture)	8003198		5000	1		B	100 (45.4)
Dichloropropene	26952238		5000	1		B	100 (45.4)
2,3-Dichloropropene	78886	1-Propene, 1,3-dichloro-	5000	1,2,3,4	U084	B	100 (45.4)
1,3-Dichloropropene	542756		5000	1		D	5000 (2270)
2,2-Dichloropropionic acid	75990		10	1,3		A	10 (4.54)
Dichlorvos	62737		5000	1		A	10 (4.54)
Dicofol	115322	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,	1	1,2,4	P037	X	1 (0.454)
Dieldrin	60571	3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-					
		(1aalpha,2beta,2aalpha,3beta,6beta,6alpha,7beta, 7aalpha)-					
1,2:3,4-Diepoxybutane	1464535	2,2'-Bioxirane	1*	4	U085	A	10 (4.54)
Diethanolamine	111422		1*	3		B	100 (45.4)
Diethylamine	109897		1000	1		B	100 (45.4)

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N,N-Diethylaniline	91667	1*	3		C	1000 (454)
Diethylarsine	692422	Arsine, diethyl-	1*	4	P038	X	1 (0,454)
1,4-Diethylenedioxiide	123911	1,4-Dioxane	1*	3,4	U108	B	100 (45,4)
1,4-Diethyleneoxide	123911	1,4-Diethyleneoxide	1*	3,4	U108	B	100 (45,4)
Diethylhexyl phthalate	117817	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester.	1*	2,3,4	U028	B	100 (45,4)
N,N'-Diethylhydrazine	1615801	Bis(2-ethylhexyl)phthalate DEHP	1*	4	U086	A	10 (4,54)
O,O-Diethyl S-methyl dithiophosphate	3288582	Hydrazine, 1,2-diethyl-	1*	4	U087	D	5000 (2270)
Diethyl-p-nitrophenyl phosphate	311455	Phosphorothioic acid, O,O-diethyl S-methyl ester.	1*	4	P041	B	100 (45,4)
Diethyl phthalate	84662	1,2-Benzenedicarboxylic acid, diethyl ester	1*	2,4	U088	C	1000 (454)
O,O-Diethyl O-pyrazinyl phosphorothioate	297972	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester.	1*	4	P040	B	100 (45,4)
Diethylstilbestrol	56531	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)	1*	4	U089	X	1 (0,454)
Diethyl sulfate	64675	1,3-Benzodioxole, 5-propyl-	1*	3	U090	A	10 (4,54)
Dihydrosoafrole	94586	Phosphorofluoridic acid, bis(1-methyl)ethyl ester.	1*	4	P043	B	100 (45,4)
Diisopropylfluorophosphate	55914	Aldrin	1	1,2,4	P004	X	1 (0,454)
1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-	465736	Isodrin	1*	4	P060	X	1 (0,454)
1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5abeta,8beta,8abeta)-	60571	Dieldrin	1	1,2,4	P037	X	1 (0,454)
1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,1,2beta,2alpha,3beta,6beta,6alpha,7beta,7aalpha)-	72208	Endrin	1	1,2,4	P051	X	1 (0,454)
3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1alpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-	60515	Phosphorothioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester.	1*	4	P044	A	10 (4,54)
3,3'-Dimethoxybenzidine	119904	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethoxy-	1*	3,4	U091	B	100 (45,4)
Dimethylamine	124403	Methanamine, N-methyl-	1000	1,4	U092	C	1000 (454)
Dimethyl aminoazobenzene	60117	Benzenamine, N,N-dimethyl-4-(phenylazo)-	1*	3,4	U093	A	10 (4,54)
p-Dimethylaminoazobenzene	60117	P-Dimethylaminoazobenzene	1*	3,4	U093	A	10 (4,54)
N,N-Dimethylaniline	121697	Dimethyl aminoazobenzene	1*	3,4	U093	A	10 (4,54)
7,12-Dimethylbenz[anthracene]	57976	Benz[anthracene, 7,12-dimethyl-	1*	3	U094	B	100 (45,4)
3,3'-Dimethylbenzidine	119937	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethyl-	1*	3,4	U095	X	1 (0,454)
alpha.alpha.-Dimethylbenzylhydroperoxide	80159	Hydroperoxide, 1-methyl-1-phenylethyl-	1*	4	U096	A	10 (4,54)
Dimethylcarbonyl chloride	79447	Carbamic chloride, dimethyl-	1*	3,4	U097	X	1 (0,454)
Dimethylformamide	68122	Hydrazine, 1,1-dimethyl-	1*	3	U098	B	100 (45,4)
1,1-Dimethylhydrazine	57147	Hydrazine, 1,2-dimethyl-	1*	3,4	U099	A	10 (4,54)
1,2-Dimethylhydrazine	540738	Benzenethanamine, alpha.alpha.-dimethyl-	1*	4	U099	X	1 (0,454)
alpha.alpha.-Dimethylphenethylamine	122098	Phenol, 2,4-dimethyl-	1*	4	P046	D	5000 (2270)
2,4-Dimethylphenol	105679		1*	2,4	U101	B	100 (45,4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Dimethyl phthalate	131113	1,2-Benzenedicarboxylic acid, dimethyl ester	1*	2,3,4	U102	D	5000 (2270)
Dimethyl sulfate	77781	Sulfuric acid, dimethyl ester	1*	3,4	U103	B	100 (45.4)
Dinitrobenzene (mixed)	25154545	.....	1000	1		B	100 (45.4)
m-Dinitrobenzene	99650	.....				
o-Dinitrobenzene	528290	.....				
p-Dinitrobenzene	100294	.....				
4,6-Dinitro-o-cresol, and salts	534521	Phenol, 2-methyl-4,6-dinitro-, & salts	1*	2,3,4	P047	A	10 (4.54)
Dinitrophenol	25550587	.....	1000	1		A	10 (4.54)
2,5-Dinitrophenol	329715	.....				
2,6-Dinitrophenol	573568	.....				
2,4-Dinitrophenol	51285	Phenol, 2,4-dinitro-	1000	1,2,3,4,	P048	A	10 (4.54)
Dinitrotoluene	25321146	.....	1000	1,2		A	10 (4.54)
3,4-Dinitrotoluene	610399	.....				
2,4-Dinitrotoluene	121142	Benzene, 1-methyl-2,4-dinitro-	1000	1,2,3,4	U105	A	10 (4.54)
2,6-Dinitrotoluene	606202	Benzene, 2-methyl-1,3-dinitro-	1000	1,2,4	U106	B	100 (45.4)
Dinoseb	88857	Phenol, 2-(1-methylpropyl)-4,6-dinitro	1*	4	P020	C	1000 (454)
Di-n-octyl phthalate	117840	1,2-Benzenedicarboxylic acid, dioctyl ester	1*	2,4	U107	D	5000 (2270)
1,4-Dioxane	123911	1,4-Diethylenedioxi- 1,4-Diethylenedioxi- Hydrazine, 1,2-diphenyl-	1*	3,4	U108	B	100 (45.4)
DIPHENYLHYDRAZINE	N.A.	.....	1*	2		**	
1,2-Diphenyl- hydrazine	122667	.....	1*	2,3,4	U109	A	10(4.54)
Diphosphoramide, octamethyl- Diphosphoric acid, tetraethyl ester	152169	Octamethylpyrophosphoramide	1*	4	P085	B	100 (45.4)
Dipropylamine	107493	Tetraethyl pyrophosphate	100	1,4	P111	A	10 (4.54)
Di-n-propylnitrosamine	142847	1-Propanamine, N-propyl-	1*	4	U110	D	5000 (2270)
Diquat	621647	1-Propanamine, N-nitroso-N-propyl-	1*	2,4	U111	A	10 (4.54)
.....	85007	.....	1000	1		C	1000 (454)
.....	2764729	.....				
Disulfoton	298044	Phosphorodithioic acid, o,o-diethyl S-[2- (ethylthio)ethyl]ester.	1	1,4	P039	X	1 (0.454)
Dithioburet	541537	Thiomidocarbonic diamide [(HG2KN) C(S)2NH	1*	4	P049	B	100 (45.4)
1,3-Dithiolane-2-carboxaldehyde, [(methylamino)carbonyl]oxime (Tirpate), 2,4-dimethyl-, O-	26419738	.....	1*	4	P185	##	##
Diuron	330541	.....	100	1		B	100 (45.4)
Dodecylbenzenesulfonic acid	27176870	.....	1000	1		C	1000 (454)
Endosulfan	115297	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide.	1	1,2,4	P050	X	1 (0.454)

alpha - Endosulfan	959988	.....	1*	2	X	1 (0.454)
beta - Endosulfan	33213659	.....	1*	2	X	1 (0.454)
ENDOSALFAN AND METABOLITES	N.A.	.....	1*	2	X	1 (0.454)
Endosulfan sulfate	1031078	.....	1*	2	X	1000 (454)
Endothall	145733	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	1*	4	C	1000 (454)
Endrin	72208	Endrin, & metabolites	1	1,2,4	X	1 (0.454)
		2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4:5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha, 2beta,2abeta,3alpha,6alpha, 6abeta,7beta, 7aalpha)-	1*	2	X	1 (0.454)
Endrin aldehyde	7421934	.....	1*	2	X	1 (0.454)
ENDRIN AND METABOLITES	N.A.	.....	1*	2	X	1 (0.454)
Endrin, & metabolites	72208	Endrin	1	1,2,4	X	1 (0.454)
Epichlorohydrin	106898	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4:5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha, 2beta,2abeta,3alpha,6alpha, 6abeta,7beta, 7aalpha)-	1000	1,3,4	B	100(45.4)
Epinephrine	51434	1-Chloro-2,3-epoxypropane Oxirane, (chloromethyl)-	1*	4	C	1000 (454)
		1,2-Benzenediol,4-[1-(hydroxy-2-(methylamino)ethyl)-	1*	3	B	100 (45.4)
1,2-Epoxybutane	106887	.....	1000	1,3,4	C	1000(454)
Ethanal	75070	Acetaldehyde	1*	3	B	100 (45.4)
Ethanimine, N-ethyl-N-nitroso-	55185	N-Nitrosodiethylamine	1*	4	X	1 (0.454)
1,2-Ethanediamine, N,N-dimethyl-N-(2-thienylmethyl)-	91805	Methapyrene	1*	4	D	5000 (2270)
Ethane, 1,2-dibromo	106934	Dibromoethane	1000	1,3,4	X	1(0.454)
Ethane, 1,1-dichloro	75343	Ethylene dibromide	1*	2,3,4	C	1000(454)
Ethane, 1,2-dichloro	107062	1,1-Dichloroethane	5000	1,2,3,4	B	100(45.4)
		Ethylidene dichloride	1*	4	B	100 (45.4)
Ethanedinitrile	460195	Ethylene dichloride	1*	2,3,4	B	100(45.4)
Ethane, hexachloro-	67721	Cyanogen	1*	4	B	100 (45.4)
Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-	111911	Hexachloroethane	1*	2,3,4	B	100(45.4)
Ethane, 1,1'-oxybis-	60297	Bis(2-chloroethoxy) methane	1*	2,4	C	1000 (454)
Ethane, 1,1'-oxybis[2-chloro-	111444	Dichloromethoxy ethane	1*	4	B	100 (45.4)
		Ethyl ether	1*	4	A	10(4.54)
		Bis(2-chloroethyl) ether	1*	2,3,4	A	10(4.54)
Ethane, penta-chloro-	76017	Dichloroethyl ether	1*	4	A	10 (4.54)
Ethane, 1,1,1,2-tetrachloro-	630206	Penta-chloroethane	1*	4	B	100 (45.4)
Ethane, 1,1,2,2-tetrachloro-	79345	1,1,1,2-Tetrachloroethane	1*	4	B	100 (45.4)
		1,1,2,2-Tetra-chloroethane	1*	2,3,4	B	100(45.4)
Ethanethioamide	62555	Thioacetamide	1*	4	A	10 (4.54)
Ethane, 1,1,1-trichloro-	71556	Methyl chloroform	1*	2,3,4	C	1000(454)
Ethane, 1,1,2-trichloro-	79005	1,1,1-Trichloroethane	1*	2,3,4	B	100(45.4)
		1,1,2-Trichloroethane	1*	2,3,4	B	100(45.4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Ethanimidithioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester (AZ213)	30558431		1*	4	U394		##
Ethanimidithioic acid, 2-(dimethylamino)-N-[[methylamino]carbonyloxy]-2-oxo-, methyl ester (Oxamyl)	23135220		1*	4	P194		##
Ethanimidithioic acid, N-[[methyl- amino]carbonyloxy]-, methyl ester	16752775	Methomyl	1*	4	P066	B	100 (45.4)
Ethanimidithioic acid, N,N'- [thiois(methylimino)carbonyloxy]bis-, dimethyl ester (Thiodicarb)	59669260		1*	4	U410		##
Ethanol, 2-ethoxy-	110805	Ethylene glycol monoethyl ether	1*	4	U359	C	1000 (454)
Ethanol, 2,2-(nitrosoimino)bis-	1116547	N-Nitrosodiethanolamine	1*	4	U173	X	1 (0.454)
Ethanol, 2,2'-oxybis-, dicarbamate (Diethylene glycol, dicarbamate)	5952261		1*	4	U395		##
Ethanone, 1-phenyl-	98862	Acetophenone	1*	3,4	U004	D	5000(2270)
Ethane, chloro-	75014	Vinyl chloride	1*	3,4	U043	X	1 (0.454)
Ethene, 2-chloroethoxy-	110758	2-Chloroethyl vinyl ether	1*	2,4	U042	C	1000 (454)
Ethene, 1,1-dichloro-	75354	1,1-Dichloroethylene	5000	1,2,3,4	U078	B	100(45.4)
Ethene, 1,2-dichloro- (E)	156605	Vinylidene chloride	1*	2,4	U079	C	1000 (454)
Ethene, tetrachloro-	127184	1,2-Dichloroethylene	1*	2,3,4	U210	B	100(45.4)
Ethene, trichloro-	79016	Tetrachloroethene	1000	1,2,3,4	U228	B	100(45.4)
Ethion	563122	Trichloroethene	10	1		A	10 (4.54)
Ethyl acetate	141786	Acetic acid, ethyl ester	1*	4	U112	D	5000 (2270)
Ethyl acrylate	140885	2-Propenoic acid, ethyl ester	1*	3,4	U113	C	1000(454)
Ethylbenzene	100414	Carbamic acid, ethyl ester	1000	1,2,3	U238	B	1000(454)
Ethyl carbamate	51796	Urethane	1*	3,4			100(45.4)
Ethyl chloride	75003	Chloroethane	1*	2,3	P101	B	100(45.4)
Ethyl cyanide	107120	Propanenitrile	1*	4	U114	A	10 (4.54)
Ethylenebis(dithiocarbamic acid, salts & esters)	111546	Carbamodithioic acid, 1,2-ethanedilybis, salts & esters.	1*	4		D	5000 (2270)
Ethylenediamine	107153		1000	1		D	5000 (2270)
Ethylenediamine-tetraacetic acid (EDTA)	60004		5000	1		D	5000 (2270)
Ethylene dibromide	106934	Dibromoethane	1000	1,3,4	U067	X	1(0.454)
Ethylene dichloride	107062	Ethane, 1,2-dibromo-	5000	1,2,3,4	U077	B	100(45.4)
Ethylene glycol	107211	Ethane, 1,2-dichloro-					
Ethylene glycol monoethyl ether	110805		1*	3		D	5000 (2270)
Ethylenimine	151564	Ethanol, 2-ethoxy-	1*	4	U359	C	1000 (454)
Ethylene oxide	75218	Aziridine	1*	3,4	P054	X	1(0.454)
		Oxirane	1*	3,4	U115	A	10(4.54)

Ethylenethiourea	96457	2-Imidazolidinethione	1*	3,4	U116	A	10 (4.54)
Ethyl ether	60297	Ethane, 1,1'-oxybis-	1*	4	U117	B	100 (45.4)
Ethylidene dichloride	75343	1,1-Dichloroethane	*	2,3,4	U076	C	1000 (454)
Ethyl methacrylate	97632	Ethane, 1,1-dichloro-	1*	4	U118	C	1000 (454)
Ethyl methanesulfonate	62500	2-Propanoic acid, 2-methyl-, ethyl ester	1*	4	U119	X	1 (0.454)
Famphur	52857	Methanesulfonic acid, ethyl ester	1*	4	P097	C	1000 (454)
Ferrous ammonium citrate	1185575	Phosphorothioic acid, O ₁ [4-(di- methylamino) sulfonyl] phenyl] O,O-dimethyl ester.	1000	1		C	1000 (454)
Ferrous ammonium oxalate	2944674		1000	1		C	1000 (454)
Ferrous chloride	55488874		1000	1		C	1000 (454)
Ferrous fluoride	7705080		100	1		B	100 (45.4)
Ferrous nitrate	7783508		1000	1		C	1000 (454)
Ferrous sulfate	10421484		1000	1		C	1000 (454)
Ferrous ammonium sulfate	10028225		1000	1		C	1000 (454)
Ferrous chloride	10045893		100	1		B	100 (45.4)
Ferrous sulfate	7758943		1000	1		C	1000 (454)
Ferrous sulfate	7720787		1000	1		C	1000 (454)
Ferrous sulfate	7782630		1000	1		C	1000 (454)
Fine mineral fibers	N.A.		1*	3		B	100 (45.4)
Fluoranthene	206440	Benzofluorene	1*	2,4	U120	D	5000 (2270)
Fluorene	86737		1*	2		A	10 (4.54)
Fluorine	7782414		1*	4	P056	B	100 (45.4)
Fluoroacetamide	640197	Acetamide, 2-fluoro-	1*	4	P058	A	10 (4.54)
Fluoroacetic acid, sodium salt	62748	Acetic acid, fluoro-, sodium salt	1*	4	P058	A	10 (4.54)
Formaldehyde	50000		1000	1,3,4	U122	B	100 (45.4)
Formic acid	64186		5000	1,4	U123	D	5000 (2270)
Fulminic acid, mercury(2+)salt	628864	Mercury fulminate	1*	4	P065	A	10 (4.54)
Fumaric acid	110178		5000	1		D	5000 (2270)
Furan	110009	Furfural	1*	4	U124	B	100 (45.4)
Furan, tetrahydro-	109999	Tetrahydrofuran	1*	4	U213	C	1000 (454)
2-Furancarboxaldehyde	98011	Furfural	1000	1,4	U125	D	5000 (2270)
2,5-Furandione	108316	Maleic anhydride	5000	1,3,4	U147	D	5000 (2270)
Furfural	98011	2-Furancarboxaldehyde	1000	1,4	U125	D	5000 (2270)
Furfuran	110009	Furan	1*	4	U124	B	100 (45.4)
Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	18883664	D-Glucose, 2-deoxy-2-[[methyl(mitrosoamino)- carbonyl]amino] Streptozotocin.	1*	4	U206	X	1 (0.454)
D-Glucose, 2-deoxy-2-[[methyl(mitrosoamino)- carbonyl]amino]-	18883664	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	1*	4	U206	X	1 (0.454)
Glycylaldehyde	765344	Streptozotocin	1*	4	U126	A	10 (4.54)
Glycol ethers ⁴	N.A.	Oxirane carboxaldehyde	1*	3		A	10 (4.54)
Guanidine, N-methyl-N'-nitro-N-nitroso-	70257	MNNG	1*	4	U163	A	10 (4.54)
Guthion	86500		1	1		X	1 (0.454)
HALOETHERS	N.A.		1*	2		X	1 (0.454)
HALOMETHANES	N.A.		1*	2		X	1 (0.454)
Heptachlor	76448	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7a-tetrahydro-	1	1,2,3,4	P059	X	1 (0.454)
HEPTACHLOR AND METABOLITES	N.A.		1*	2		X	1 (0.454)
Heptachlor epoxide	1024573		1*	2		X	1 (0.454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Hexachlorobenzene	118741	Benzene, hexachloro-	1*	2,3,4	U127	A	10 (4.54)
Hexachlorobutadiene	87683	1,3-Butadiene 1,1,2,3,4,4-hexachloro-	1*	2,3,4	U128	X	1 (0.454)
HEXACHLOROXYCLOHEXANE (all isomers)	608731	γ-BHC	1*	2			**
Hexachlorocyclohexane (gamma isomer)	58899	Cyclohexane, 1,2,3,4,5,6- hexachloro- (1α,2α,3β,4α,5α,6β)-	1	1,2,3,4	U129	X	1 (0.454)
Hexachlorocyclopentadiene	77474	Lindane (all isomers)	1	1,2,3,4	U130	A	10 (4.54)
Hexachloroethane	67721	1,3-Cyclopentadiene, 1,2,3,4,5-hexachloro-	1*	2,3,4	U131	B	100 (45.4)
Hexachlorophene	70304	Ethane, hexachloro-	1*	4	U132	B	100 (45.4)
Hexachloropropene	1888717	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	1*	4	U243	C	1000 (454)
Hexaethyl tetraphosphate	757584	1-Propene, 1,1,2,3,3,3-hexachloro-	1*	4	P062	B	100 (45.4)
Hexamethylene-1,6-diisocyanate	822060	Tetraphosphoric acid, hexaethyl ester	1*	3		B	100 (45.4)
Hexamethylphosphoramide	680319		1*	3		X	1 (0.454)
Hexane	110543		1*	3		D	5000 (2270)
Hexone	108101	Methyl isobutyl ketone	1*	3,4	U161	D	5000 (2270)
Hydrazine	302012	4-Methyl-2-pentanone	1*	3,4	U133	X	1 (0.454)
Hydrazine, 1,2-diethyl-	1615801	N,N-Diethylhydrazine	1*	4	U088	A	10 (4.54)
Hydrazine, 1,1-dimethyl-	57147	1,1-Dimethylhydrazine	1*	3,4	U098	A	10 (4.54)
Hydrazine, 1,2-dimethyl-	540738	1,2-Dimethylhydrazine	1*	4	U099	X	1 (0.454)
Hydrazine, 1,2-diphenyl-	122667	1,2-Diphenylhydrazine	1*	2,3,4	U109	A	10 (4.54)
Hydrazine, methyl-	60344	Methyl hydrazine	1*	3,4	P068	A	10 (4.54)
Hydrazinecarbohydrazide	79196	Thiosemicarbazide	1*	4	P116	B	100 (45.4)
Hydrochloric acid	7647010	Hydrogen chloride	5000	1,3		D	5000 (2270)
Hydrocyanic acid	74908	Hydrogen cyanide	10	1,4	P063	A	10 (4.54)
Hydrofluoric acid	7664393	Hydrogen fluoride	5000	1,3,4	U134	B	100 (45.4)
Hydrogen chloride	7647010	Hydrochloric acid	5000	1,3		D	5000 (2270)
Hydrogen cyanide	74908	Hydrocyanic acid	10	1,4	P063	A	10 (4.54)
Hydrogen fluoride	7664393	Hydrofluoric acid	5000	1,3,4	U134	B	100 (45.4)
Hydrogen phosphide	7803512	Phosphine	1	3,4	P096	B	100 (45.4)
Hydrogen sulfide	7783064	Hydrogen sulfide H ₂ S	100	1,4	U135	B	100 (45.4)
Hydrogen sulfide H ₂ S	7783064	Hydrogen sulfide	100	1,4	U135	B	100 (45.4)
Hydroperoxide, 1-methyl-1-phenylethyl-	80159	alpha, alpha-Dimethylbenzylhydroperoxide	1*	4	U096	B	10 (4.54)
Hydroquinone	123319		1*	3		B	100 (45.4)
2-Imidazolidinethione	96457	Ethylenethiourea	1*	3,4	U116	A	10 (4.54)
Indeno(1,2,3-c)pyrene	193395	1,10-(1,2-Phenylene)pyrene	1*	3,4	U137	B	100 (45.4)
Iodomethane	74884	Methane, iodo-	1*	2,4	U138	B	100 (45.4)
1,3-Isobenzofurandione	85449	Methyl iodide	1*	3,4	U190	D	5000 (2270)
		Phthalic anhydride	1*	3,4		D	5000 (2270)

Chemical Name	78831	465736	78591	78795	42504461	120581	2763964	143500	303344	7439921	301042	N.A.	N.A.	7784409	7645252	10102484	1335326	7758954	13814965	7783462	10101630	10099748	7446277	1072351	7428480	52652592	56189094	1335326	7446142	15739807	1314870	592870	58899					
isobutyl alcohol																																						
isodrin																																						
Isophorone																																						
Isoprene																																						
Isopropanolamine dodecylbenzenesulfonate																																						
Isosafrole																																						
3(2H)-Isoxazalone, 5-(aminomethyl)-																																						
Kepone																																						
Lasiocarpine																																						
Lead††																																						
Lead acetate																																						
LEAD AND COMPOUNDS																																						
Lead Compounds																																						
Lead arsenate																																						
Lead, bis(acetato-O)tetrahydroxytri-																																						
Lead chloride																																						
Lead fluoroborate																																						
Lead fluoride																																						
Lead iodide																																						
Lead nitrate																																						
Lead phosphate																																						
Lead stearate																																						
Lead subacetate																																						
Lead sulfate																																						
Lead sulfide																																						
Lead thiocyanate																																						
Lindane																																						

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code†	RCRA waste Number	Cat-egory	Pounds (Kg)
Lindane (all isomers)	58899	γ-BHC Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-, Hexachlorocyclohexane (gamma isomer) Lindane	1	1,2,3,4	U129	X	1 (0.454)
Lithium chromate	14307358		1000	1		A	10 (4.54)
Malathion	121755		10	1		B	100 (45.4)
Maleic acid	110167		5000	1		D	5000 (2270)
Maleic anhydride	108316		5000	1,3,4	U147	D	5000 (2270)
Maleic hydrazide	123331		1*	4	U148	D	5000 (2270)
Malononitrile	109773		1*	4	U149	C	1000 (454)
Manganese, bis(dimethylcarbamodithioato-S,S)-(Manganese dimethylthiocarbamate)	15339363		1*	4	P196		**
Manganese Compounds	N.A.		1*	3			**
MDI	101688	Methylene diphenyl diisocyanate	1*	3		D	5000 (2270)
Meiphtalan	148623	L-Phenylalanine, 4-[bis(2-chloroethyl) amino]	1*	4	U150	X	1 (0.454)
MEK	78933	2-Butanone Methyl ethyl ketone	1*	3,4	U159	D	5000 (2270)
Mercaptodimethur	2032657		100	1		A	10 (4.54)
Mercuric cyanide	592041		1	1		X	1 (0.454)
Mercuric nitrate	10045940		10	1		A	10 (4.54)
Mercuric sulfate	7783359		10	1		A	10 (4.54)
Mercuric thiocyanate	592858		10	1		A	10 (4.54)
Mercurous nitrate	10415755		10	1		A	10 (4.54)
	7782867		10	1		A	10 (4.54)
Mercury	7439976		1*	2,3,4	U151	X	1 (0.454)
MERCURY AND COMPOUNDS	N.A.	Mercury Compounds	1*	2,3		**	**
Mercury Compounds	N.A.	MERCURY AND COMPOUNDS	1*	2,3		**	**
Mercury, (acetate-O)phenyl-	62384	Phenylmercury acetate	1*	4	P092	B	100 (45.4)
Mercury fulminate	628864	Fulminic acid, mercury(2+)-salt	1*	4	P065	A	10 (4.54)
Methacrylonitrile	126987	2-Propenenitrile, 2-methyl-	1*	4	U152	C	1000 (454)
Methanamine, N-methyl-	124403	Dimethylamine	1000	1,4	U092	C	1000 (454)
Methanamine, N-methyl-N-nitroso-	62759	N-Nitrosodimethylamine	1*	2,3,4	P082	A	10 (4.54)
Methane, bromo-	74839	Bromomethane	1*	2,3,4	U029	C	1000 (454)
Methane, chloro-	74873	Methyl bromide Chloromethane	1*	2,3,4	U045	B	100 (45.4)
Methane, chloromethoxy-	107302	Methyl chloride	1*	3,4	U046	A	10 (4.54)
Methane, dibromo-	74953	Chloromethyl methyl ether Methylene bromide	1*	4	U068	C	1000 (454)

Methane, dichloro-	75092	Methylene chloride	1*	2,3,4	U080	C	1000 (454)
Methane, dichlorodifluoro-	75718	Dichloromethane	1*	4	U075	D	5000 (2270)
Methane, iodo-	74884	Dichlorodifluoromethane	1*	3,4	U138	B	100 (45.4)
Methane, isocyanato-	624839	Iodomethane	1*	3,4	P064	A	10 (4.54)
Methane, oxybis(chloro)-	542881	Methyl iodide	1*	3,4	P016	A	10 (4.54)
Methanesulfonyl chloride, trichloro-	594423	Bis(chloromethyl)ether	1*	4	P118	B	100 (45.4)
Methanesulfonic acid, ethyl ester	62500	Trichloromethanesulfonyl chloride	1*	4	U119	X	1 (0.454)
Methane, tetrachloro-	56235	Ethyl methanesulfonate	5000	1,2,3,4	U211	A	10 (4.54)
Methane, tetranitro-	509148	Carbon tetrachloride	1*	4	P112	A	10 (4.54)
Methane, tribromo-	75252	Tetra-nitromethane	1*	2,3,4	U225	B	100 (45.4)
Methane, trichloro-	67663	Bromoform	5000	1,2,3,4	U044	A	10 (4.54)
Methane, trichlorofluoro-	75694	Chloroform	1*	4	U121	D	5000 (2270)
Methanethiol	74931	Trichloromonofluoromethane	100	1,4	U153	B	100 (45.4)
Methanimidamide, N,N-dimethyl-N-[3- [[[(methylamino)carbonyloxy]phenyl]- (Formetanate hydrochloride)].	23422539	Methylmercaptan	1*	4	P198		##
Methanimidamide, N,N-dimethyl-N-[2-methyl-4- [[[(methylamino)carbonyloxy]phenyl]-(Formparanate)].	17702577	Thiomethanol	1*	4	P197		##
6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro- 1,5,5a,6,9,9a-hexahydro-, 3-oxide	115297	Endosulfan	1	1,2,4	P050	X	1 (0.454)
1,3,4-Metheno-2H-cyclobutal[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6,6- decachlorotetrahydro-	143500	Kepone	1	1,4	U142	X	1 (0.454)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a- hexahydro-	76448 57749	Heptachlor	1*	1,2,3,4	P059	X	1 (0.454)
Methanol	67561	Chlorane	1	1,2,3,4	U036	X	1 (0.454)
Methapyrene	91805	Chlorane, alpha & gamma isomers					
Methyl	16752775	CHLORDANE (TECHNICAL MIXTURE AND METABOLITES)	1*	3,4	U154	D	5000 (2270)
Methoxychlor	72435	Methyl alcohol	1*	4	U155	D	5000 (2270)
Methyl alcohol	67561	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl- N'-(2-thienylmethyl)-	1*	4	P066	B	100 (45.4)
2-Methyl aziridine	75558	Ethanimidothioic acid, N-[[[methyl- amino]carbonyloxy]-, methyl ester.	1	1,3,4	U247	X	1 (0.454)
Methyl bromide	74839	Benzene, 1,1'-(2,2,2-trichloroethyl- idene)bis[4- methoxy-	1*	3,4	U154	D	5000 (2270)
1-Methylbutadiene	504609	Methanol	1*	3,4	P067	X	1 (0.454)
Methyl chloride	74873	Aziridine, 2-methyl-	1*	3,4	U029	C	1000 (45.4)
Methyl chloroformate	79221	1,2-Propylenimine	1*	2,3,4	U186	B	100 (45.4)
		Bromomethane	1*	2,3,4	U045	B	100 (45.4)
		Methane, bromo-	1*	4	U156	C	1000 (45.4)
		1,3-Pentadiene	1*	2,3,4			
		Chloromethane	1*	4			
		Methane, chloro-	1*	4			
		Carbonochloridic acid, methyl ester	1*	4			
		Methyl chloroformate	1*	4			

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Methyl chloroform	71556	Ethane, 1,1,1-trichloro- 1,1,1-Trichloroethane	1*	2,3,4	U226	C	1000 (454)
Methyl chloroformate	79221	Carbonochloridic acid, methyl ester Methyl chlorocarbonate	1*	4	U156	C	1000 (454)
3-Methylcholanthrene	56495	Benz[<i>a</i>]aceanthrylene, 1,2-dihydro-3-methyl-	1*	4	U157	A	10 (4.54)
4,4'-Methylenebis(2-chloroaniline)	101144	Benzenamine, 4,4'-methylene-bis(2-chloro-	1*	3,4	U158	A	10 (4.54)
Methylene bromide	74953	Methane, dibromo-	1*	4	U068	C	1000 (454)
Methylene chloride	75092	Dichloromethane	1*	2,3,4	U080	C	1000 (454)
4,4'-Methylenedianiline	101779	Methane, dichloro-	1*	3		A	10 (4.54)
Methylene diphenyl diisocyanate	101688	MDI	1*	3		D	5000 (2270)
Methyl ethyl ketone	78933	2-Butanone	1*	3,4	U159	D	5000 (2270)
Methyl ethyl ketone peroxide	1338234	2-Butanone peroxide	1*	4	U160	A	10 (4.54)
Methyl hydrazine	60344	Hydrazine, methyl-	1*	3,4	P068	A	10 (4.54)
Methyl iodide	74884	Iodomethane	1*	3,4	U138	B	100 (45.4)
Methyl isobutyl ketone	108101	Methane, iodo- Hexone	1*	3,4	U161	D	5000 (2270)
Methyl isocyanate	624839	4-Methyl-2-pentanone	1*	3,4	P064	A	10 (4.54)
2-Methylacetonitrile	75865	Methane, isocyanato- Acetone cyanohydrin	10	1,4	P069	A	10 (4.54)
Methylmercaptan	74931	Propanenitrile, 2-hydroxy-2-methyl- Methanethiol	100	1,4	U153	B	100 (45.4)
Methyl methacrylate	80626	Thiomethanol	5000	1,3,4	U162	C	1000 (454)
Methyl parathion	298000	2-Propenoic acid, 2-methyl-, methyl ester Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	100	1,4	P071	B	100 (45.4)
4-Methyl-2-pentanone	108101	Hexone	1*	3,4	U161	D	5000 (2270)
Methyl tert-butyl ether	1634044	Methyl isobutyl ketone	1*	3		C	1000 (454)
Methylthiouracil	56042	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	1*	4	U164	A	10 (4.54)
Mevinphos	7786347	Azinolo[2',3':3,4]pyrrolo[1,2- <i>a</i>]indole-4,7-dione,6-amino-8-[[[amino-carbonyl]oxy]methyl]-	1	1		A	10 (4.54)
Mexacarbate	315184	1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1a <i>S</i> -(1 α alpa, 8beta, 8aalpa, 8balpha)]-	1000	1		C	1000 (454)
Mitomycin C	50077	Guandine, N-methyl-N'-nitro-N-nitroso-	1*	4	U010	A	10 (4.54)
MNNG	70257		1*	4	U163	A	10 (4.54)
Monoethylamine	75047		1000	1		B	100 (45.4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
p-Nitrophenol	100027	4-Nitrophenol	1000	1,2,3,4	U170	B	100 (45.4)
o-Nitrophenol	88755	Phenol, 4-nitro-	1000	1,2		B	100 (45.4)
p-Nitrophenol	100027	2-Nitrophenol	1000	1,2,4	U170	B	100 (45.4)
2-Nitrophenol	88755	4-Nitrophenol	1000	1,2		B	100 (45.4)
4-Nitrophenol	100027	o-Nitrophenol	1000	1,2,3,4	U170	B	100 (45.4)
NITROPHENOLS	N.A.	p-Nitrophenol	1*				**
2-Nitropropane	79469	Propane, 2-nitro	1*	3,4	U171	A	10 (4.54)
NITROSAMINES	N.A.		1*	2			**
N-Nitrosodi-n-butylamine	924163	1-Butanamine, N-butyl-N-nitroso-	1*	4	U172	A	10 (4.54)
N-Nitrosodietanolamine	1116547	Ethanol, 2,2-(nitrosoimino)bis-	1*	4	U173	X	1 (0.454)
N-Nitrosodimethylamine	55185	Ethanolamine, N-ethyl-N-nitroso-	1*	4	U174	X	1 (0.454)
N-Nitrosodiphenylamine	62759	Methanamine, N-methyl-N-nitroso-	1*	2,3,4	P082	A	10 (4.54)
N-Nitroso-N-ethylurea	86306		1*	2		B	100 (45.4)
N-Nitroso-N-methylurea	759739	Urea, N-ethyl-N-nitroso-	1*	4	U176	X	1 (0.454)
N-Nitroso-N-methylurethane	694935	Urea, N-methyl-N-nitroso	1*	3,4	U177	X	1 (0.454)
N-Nitrosomethylvinylamine	615532	Carbamic acid, methyl/nitroso-, ethyl ester	1*	4	U178	X	1 (0.454)
N-Nitrosomorpholine	4549400	Vinylamine, N-methyl-N-nitroso-	1*	4	P084	A	10 (4.54)
N-Nitrosopiperidine	59892		1*	3		X	1 (0.454)
N-Nitrosopyrrolidine	100754	Piperidine, 1-nitroso-	1*	4	U179	A	10 (4.54)
Nitrotoluene	930552	Pyrrolidine, 1-nitroso-	1*	4	U180	X	1 (0.454)
m-Nitrotoluene	1321126		1000	1		C	1000 (454)
o-Nitrotoluene	99081						
p-Nitrotoluene	88722						
5-Nitro-o-toluidine	99990	Benzenamine, 2-methyl-5-nitro-	1*	4	U181	B	100 (45.4)
Octamethylpyrophosphoramide	99558	Diphosphoramide, octamethyl-	1*	4	P085	B	100 (45.4)
Osmium oxide OsO ₄ (T-4)	152169	Osmium tetroxide	1*	4	P087	C	1000 (454)
Osmium tetroxide	20816120	Osmium oxide OsO ₄ (T-4)	1*	4	P087	C	1000 (454)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145733	Endothal	1*	4	P088	C	1000 (454)
1,2-Oxathiolane, 2,2-dioxide	1120714	1,3-Propane sultone	1*	3,4	U193	A	10 (4.54)
2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	50180	Cyclophosphamide	1*	4	U058	A	10 (4.54)
Oxirane	75218	Ethylene oxide	1*	3,4	U115	A	10 (4.54)
Oxirane-carboxaldehyde	765344	Glycidylaldehyde	1*	4	U126	A	10 (4.54)
Oxirane, (chloromethyl)-	106898	1-Chloro-2,3-epoxypropane	1000	1,3,4	U041	B	100 (45.4)
Paraldehyde	30525894	Epichlorohydrin	1000	1		C	1000 (454)
Paraldehyde	123637	1,3,5-Trioxane, 2,4,6-trimethyl-	1*	4	U182	C	1000 (454)

Parathion	56382	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester.	1	1,3,4	P089	A	10 (4.54)
PCBs	1336363	Aroclors	10	1,2,3		X	1 (0.454)
	12674112	POLYCHLORINATED BIPHENYLS	10	1,2,3		X	1 (0.454)
Aroclor 1016	11104282		10	1,2,3		X	1 (0.454)
Aroclor 1221	11141165		10	1,2,3		X	1 (0.454)
Aroclor 1232	53469219		10	1,2,3		X	1 (0.454)
Aroclor 1242	12672296		10	1,2,3		X	1 (0.454)
Aroclor 1248	11097691		10	1,2,3		X	1 (0.454)
Aroclor 1254	11096825		10	1,2,3		X	1 (0.454)
Aroclor 1260	82688	Benzene, pentachloronitro-Pentachloronitro-benzene	1*	3,4	U185	X	100 (45.4)
PCNB						B	
Pentachlorobenzene	608935	Quintobenzene	1*	4	U183	A	10 (4.54)
Pentachloroethane	76017	Benzene, pentachloro-	1*	4	U184	A	10 (4.54)
Pentachloronitrobenzene	82688	Ethane, pentachloro-	1*	3,4	U185	B	100 (45.4)
		PCNB					
Pentachlorophenol	87865	Quintobenzene	10	1,2,3,4	U242	A	10 (4.54)
1,3-Pentadiene	504609	Phenol, pentachloro-	1*	4	U186	B	100 (45.4)
Perchloroethylene	127184	1-Methylbutadiene	1*	2,3,4	U210	B	100 (45.4)
		Ethene, tetrachloro-					
		Tetrachloroethene					
		Tetrachloroethylene					
Phenacetin	62442	Acetamide, N-(4-ethoxyphenyl)-	1*	4	U187	B	100 (45.4)
Phenanthrene	85018		1*	2		D	5000 (2270)
Phenol	108952	Benzene, hydroxy-	1000	1,2,3,4	U188	C	1000 (45.4)
Phenol, 2-chloro-	95578	o-Chlorophenol	1*	2,4	U048	B	100 (45.4)
Phenol, 4-chloro-3-methyl-	59507	p-Chloro-m-cresol	1*	2,4	U039	D	5000 (2270)
Phenol, 2-cyclohexyl-4,6-dinitro-	131895	4-Chloro-m-cresol	1*	4	P034	B	100 (45.4)
Phenol, 2,4-dichloro-	120832	2-Cyclohexyl-4,6-dinitrophenol	1*	2,4	U081	B	100 (45.4)
Phenol, 2,6-dichloro-	87650	2,4-Dichlorophenol	1*	4	U082	B	100 (45.4)
Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)	56531	2,6-Dichlorophenol	1*	4	U089	X	1 (0.454)
Phenol, 2,4-dimethyl-	105679	Diethylstilbestrol	1*	2,4	U101	B	100 (45.4)
Phenol, 2,4-dinitro-	51285	2,4-Dimethylphenol	1000	1,2,3,4	P048	A	10 (4.54)
Phenol, methyl-	1319773	2,4-Dinitrophenol	1000	1,3,4	U052	B	100 (45.4)
		Cresols (isomers and mixture)					
		Cresylic acid (isomers and mixture)					
Phenol, 2-methyl-4,6-dinitro-, & salts	534521	4,6-Dinitro-o-cresol, and salts	1*	2,3,4	P047	A	10 (4.54)
Phenol, 2,2-methylenebis[3,4,6-trichloro-	70304	Hexachlorophene	1*	4	U132	B	100 (45.4)
Phenol, 3-(1-methylethyl)-, methyl carbamate (m-Cumenyl methylcarbamate)	64006		1*	4	P202		##
Phenol, 2-(1-methylpropyl)-4,6-dinitro	88857	Dinoseb	1*	4	P020	C	1000 (45.4)
Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate (Promecarb)	2631370		1*	4	P201		##
Phenol, 4-nitro-	100027	p-Nitrophenol	1000	1,2,3,4	U170	B	100 (45.4)
		4-Nitrophenol					
Phenol, pentachloro	87865	Pentachlorophenol	10	1,2,3,4	U242	A	10 (4.54)
Phenol, 2,3,4,6-tetrachloro-	58902	2,3,4,6-Tetrachlorophenol	1*	4	U212	A	10 (4.54)
Phenol, 2,4,5-trichloro-	95954	2,4,5-Trichlorophenol	10	1,3,4	U230	A	10 (4.54)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Phenol, 2,4,6-trichloro-.....	88062	2,4,6-Trichlorophenol	10	1,2,3,4	U231	A	10 (4.54)
Phenol, 2,4,6-trinitro-, ammonium salt	131748	Ammonium picrate	1*	4	P009	A	10 (4.54)
L-Phenylalanine, 4-bis(2-chloroethyl) amino[]	148823	Mephalan	1*	4	U150	X	1 (0.454)
p-Phenylenediamine	106503	.....	1*	3	.....	D	5000 (2270)
1,10-(1,2-Phenylene)pyrene	193395	Indeno(1,2,3-cd)pyrene	1*	2,4	U137	B	100 (45.4)
Phenylmercury acetate	62384	Mercury, (acetato-O)phenyl-	1*	4	P092	B	100 (45.4)
Phenylthiourea	103855	Thiourea, phenyl-	1*	4	P093	B	100 (45.4)
Phorate	298022	Phosphorodithioic acid, O,O-diethyl S- (ethylthio), methyl ester.	1*	4	P094	A	10 (4.54)
Phosgene	75445	Carbonic dichloride	5000	1,3,4	P095	A	10 (4.54)
Phosphine	7803512	Hydrogen phosphide	1*	3,4	P096	B	100 (45.4)
Phosphoric acid	7664382	.....	5000	1	.....	D	5000 (2270)
Phosphoric acid, diethyl 4-nitrophenyl ester	311455	Diethyl-p-nitrophenyl phosphite	1*	4	P041	B	100 (45.4)
Phosphoric acid, lead(2+) salt (2:3)	7446277	Lead phosphite	1*	4	U145	A	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester	298044	Disulfoton	1	1,4	P039	X	1 (0.454)
Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester	298022	Phorate	1*	4	P094	A	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288582	O,O-Diethyl S-methyl dithiophosphate	1*	4	U087	D	5000 (2270)
Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	60515	Dimethoate	1*	4	P044	A	10 (4.54)
Phosphorofluoridic acid, bis(1-methyl)ethyl ester	55914	Diisopropylfluorophosphate	1*	4	P043	B	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56382	Parathion	1	1,3,4	P089	A	10 (4.54)
Phosphorothioic acid, O-[4-(dimethylamino) sulfonyl]phenyl]O,O-di-methyl ester	52857	Famphur	1*	4	P097	C	1000 (454)
Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298000	Methyl parathion	100	1,4	P071	B	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-pyrazinyl phosphorothioate	297972	O,O-Diethyl O-pyrazinyl phosphorothioate	1*	4	P040	B	100 (45.4)
Phosphorus	7723140	.....	1	1,3	.....	X	1 (0.454)
Phosphorus oxide	10025873	Phosphorus sulfide	5000	1	.....	C	1000 (454)
Phosphorus pentasulfide	1314803	Phosphorus sulfide Sulfur phosphide	100	1,4	U189	B	100 (45.4)
Phosphorus sulfide	1314803	Phosphorus pentasulfide Sulfur phosphide	100	1,4	U189	B	100 (45.4)
Phosphorus trichloride	7719122	.....	5000	1	.....	C	1000 (454)
PHTHALATE ESTERS	N.A.	.....	1*	2	.....	**	.....
Phthalic anhydride	85449	1,3-isobenzofurandione	1*	3,4	U190	D	5000 (2270)
2-Picoline	109068	Pyridine, 2-methyl-	1*	4	U191	D	5000 (2270)
Piperidine, 1-nitroso-	100754	N-Nitrosopiperidine	1*	4	U179	A	10 (4.54)
Plumbane, tetraethyl-	78002	Tetraethyl lead	100	1,4	P110	A	10 (4.54)
POLYCHLORINATED BIPHENYLS	1336363	Aroclors	10	1,2,3	.....	X	1 (0.454)
Aroclor 1016	12674112	PCBs	10	1,2,3	.....	X	1 (0.454)
Aroclor 1221	11104282	.....	10	1,2,3	.....	X	1 (0.454)
Aroclor 1232	11141165	.....	10	1,2,3	.....	X	1 (0.454)
Aroclor 1242	53469219	.....	10	1,2,3	.....	X	1 (0.454)

Atroclor 1248	12672296	.....	10	1,2,3	X	1 (0.454)
Atroclor 1254	11097691	.....	10	1,2,3	X	1 (0.454)
Atroclor 1260	11096825	.....	10	1,2,3	X	1 (0.454)
Polycyclic Organic Matter ^e	N.A.	.....	1*	3		**
POLYNUCLEAR AROMATIC HYDROCARBONS	N.A.	.....	1*	2		**
Potassium arsenate	7784410	.....	1000	1	X	1 (0.454)
Potassium arsenite	10124502	.....	1000	1	X	1 (0.454)
Potassium bichromate	7778509	.....	1000	1	A	10 (4.54)
Potassium chromate	7789006	.....	1000	1	A	10 (4.54)
Potassium cyanide	151508	.....	10	1,4	A	10 (4.54)
Potassium cyanide K(CN)	151508	.....	10	1,4	A	10 (4.54)
Potassium hydroxide	1310583	.....	1000	1	C	1000 (454)
Potassium permanganate	7722647	.....	100	1	B	100 (45.4)
Potassium silver cyanide	506616	.....	1*	4	X	1 (0.454)
Pronamide	23950585	.....	1*	4	D	5000 (2270)
Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime	116063	.....	1*	4	X	1 (0.454)
1-Propanamine	107108	.....	1*	4	P070	5000 (2270)
1-Propanamine, N-propyl-	142847	.....	1*	4	D	5000 (2270)
1-Propanamine, N-nitroso-N-propyl-	621647	.....	1*	2,4	D	10 (4.54)
Propane, 2-nitro	79469	.....	1*	3,4	A	10 (4.54)
1,3-Propane sulfone	1120714	.....	1*	3,4	A	10 (4.54)
Propane, 1,2-dibromo-3-chloro	96128	.....	1*	3,4	X	1 (0.454)
Propane, 1,2-dichloro-	78875	.....	5000	1,2,3,4	C	1000 (454)
Propanedinitrile	109773	.....	1*	4	C	1000 (454)
Propanenitrile	107120	.....	1*	4	A	10 (4.54)
Propanenitrile, 3-chloro-	542767	.....	1*	4	C	1000 (454)
Propanenitrile, 2-hydroxy-2-methyl-	75865	.....	10	1,4	A	10 (4.54)
Propane, 2,2'-oxybis[2-chloro-	108601	.....	1*	2,4	C	1000 (454)
1,2,3-Propanetriol, trinitrate-	55630	.....	1*	4	A	10 (4.54)
1-Propanol, 2,3-dibromo-, phosphate (3:1)	126727	.....	1*	4	A	10 (4.54)
1-Propanol, 2-methyl-	78831	.....	1*	4	D	5000 (2270)
Propanal, 2-methyl-2-(methylsulfonyl)-, O-[(methylamino)carbonyl] oxime (Aldicarb sulfone)	1646884	.....	1*	4	D	#
2-Propanone	67641	.....	1*	4	D	5000 (2270)
2-Propanone, 1-bromo-	598312	.....	1*	4	C	1000 (454)
Propargile	2312358	.....	10	1	A	10 (4.54)
Propargyl alcohol	107197	.....	1*	4	C	1000 (454)
2-Propanal	107028	.....	1	1,2,3,4	X	1 (0.454)
2-Propanamide	79061	.....	1*	3,4	P003	5000 (2270)
1-Propene, 1,1,2,3,3,3-hexachloro-	1888717	.....	1*	4	D	1000 (454)
1-Propene, 1,3-dichloro-	542756	.....	5000	1,2,3,4	C	100 (45.4)
2-Propenenitrile	107131	.....	100	1,2,3,4	B	100 (45.4)
2-Propenenitrile, 2-methyl-	126987	.....	1*	4	C	1000 (454)
2-Propenoic acid	79107	.....	1*	3,4	D	5000 (2270)
2-Propenoic acid, ethyl ester	140885	.....	1*	3,4	C	1000 (454)
2-Propenoic acid, 2-methyl-, ethyl ester	97632	.....	1*	4	C	1000 (454)
2-Propenoic acid, 2-methyl-, methyl ester	80626	.....	5000	1,3,4	C	1000 (454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA Waste Number	Cat-egory	Pounds (Kg)
2-Propen-1-ol	107186	Allyl alcohol	100	1,4	P005	B	100 (45.4)
beta-Propiolactone	57578		1*	3		A	10 (4.54)
Propionaldehyde	123386		1*	3		C	1000 (454)
Propionic acid	79094		5000	1		D	5000 (2270)
Propionic acid, 2-(2,4,5-trichlorophenoxy)	93721	Silvex (2,4,5-TP) 2,4,5-TP acid	100	1,4	U233	B	100 (45.4)
Propionic anhydride	123626		5000	1		D	5000 (2270)
Propoxur (Baygon)	114261		1*	3		B	100 (45.4)
n-Propylamine	107108	1-Propanamine	1*	4	U194	D	5000 (2270)
Propylene dichloride	78875	1,2-Dichloropropane	5000	1,2,3,4	U083	C	1000 (454)
Propylene oxide	75569	Propane, 1,2-dichloro-	5000	1,3		B	100 (45.4)
1,2-Propylenimine	75558	Aziridine, 2-methyl-	1*	3,4	P067	X	1 (0.454)
2-Propyn-1-ol	107197	2-Methyl aziridine	1*	4	P102	C	1000 (454)
Pyrene	129000	Propargyl alcohol	1*	2		D	5000 (2270)
Pyrethrins	121211		1000	1		X	1 (0.545)
3,6-Pyridazinone, 1,2-dihydro-	8003347						
4-Pyridamine	123331	Maleic hydrazide	1*	4	U148	D	5000 (2270)
Pyridine	504245	4-Aminopyridine	1*	4	P008	C	1000 (454)
Pyridine, 2-methyl-	110861		1*	4	U196	C	1000 (454)
Pyridine, 3-(1-methyl-2-pyrrolidinyl), (S)-	109068	2-Picoline	1*	4	U191	D	5000 (2270)
2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	54115	Nicotine, & salts	1*	4	P075	B	100 (45.4)
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	66751	Uracil mustard	1*	4	U237	A	10 (4.54)
Pyrolidone, 1-nitroso-	56042	Methylthiouracil	1*	4	U164	A	10 (4.54)
Pyrolo[2,3-b] indol-5-ol, 1,2,3,3a,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-(Physostigmine)	930552	N-Nitrosopyrrolidine	1*	4	U180	X	1 (0.454)
Quinoline	57476		1*	4	P204	#	#
Quinone	91225	p-Benzoquinone	1000	1,3		D	5000 (2270)
Quintobenzene	106514	2,5-Cyclohexadiene-1,4-dione	1*	3,4	U197	A	10 (4.54)
	82688	Benzene, pentachloronitro	1*	3,4	U185	B	100(45.4)
		PCNB					
		Pentachloronitrobenzene					
RADIONUCLIDES	N.A.		1*	3			§
Radionuclides (including radon)	N.A.		1*	3			§

Reserpine	50555	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-	1*	4	U200	D	5000 (2270)
Resorcinol	108463	1,3-Benzenediol	1000	1,4	U201	D	5000 (2270)
Saccharin and salts	81072	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	1*	4	U202	B	100 (45.4)
Safrole	94597	1,3-Benzodioxole, 5-(2-propenyl)-	1*	4	U203	B	100 (45.4)
Selenous acid	7763008	Thallium selenite	1*	4	U204	A	10 (4.54)
Selenous acid, dithallium (1+) salt	12039520	Selenium Compounds	1*	4	P114	C	1000 (454)
Selenium ⁺⁺	7782492	SELENIUM COMPOUNDS	1*	2		B	100 (45.4)
SELENIUM AND COMPOUNDS	N.A.	Selenium dioxide	1*	2,3		**	**
Selenium Compounds	N.A.	Selenium oxide	1*	2,3		**	**
Selenium dioxide	7446084	Selenium sulfide	1000	1,4	U204	A	10 (4.54)
Selenium oxide	7446084	Selenium sulfide Se ₂	1000	1,4	U204	A	10 (4.54)
Selenium sulfide	7488564	Selenium sulfide	1*	4	U205	A	10 (4.54)
Selenium sulfide Se ₂	7488564	Selenium sulfide	1*	4	U205	A	10 (4.54)
Selenourea	630104	Azaserine	1*	4	P103	C	1000 (454)
L-Serine, diazoacetate (ester)	115026	Silver	1*	4	U015	X	1 (0.454)
Silver ⁺⁺	7440224	Silver cyanide Ag (CN)	1*	2		C	1000 (454)
SILVER AND COMPOUNDS	N.A.	Silver cyanide	1*	2		**	**
Silver cyanide	506649	Propionic acid, 2-(2,4,5-trichlorophenoxy)-	1*	4	P104	X	1 (0.454)
Silver cyanide Ag (CN)	506649	2,4,5-TP acid	1*	4	P104	X	1 (0.454)
Silver nitrate	7761888	Sodium cyanide Na(CN)	1	1		X	1 (0.454)
Silvex (2,4,5-TP)	93721	Sodium cyanide	100	1,4	U233	B	100 (45.4)
Sodium	7440235	Sodium cyanide Na(CN)	1000	1		A	10 (4.54)
Sodium arsenate	7631892	Sodium cyanide	1000	1		X	1 (0.454)
Sodium arsenite	7784465	Sodium cyanide	1000	1		X	1 (0.454)
Sodium azide	2662828	Sodium cyanide	1000	1		X	1 (0.454)
Sodium bichromate	10588019	Sodium cyanide Na(CN)	1*	4	P105	C	1000 (454)
Sodium bifluoride	1333831	Sodium cyanide	1000	1		A	10 (4.54)
Sodium bisulfite	7631905	Sodium cyanide	5000	1		B	100 (45.4)
Sodium chromate	7775113	Sodium cyanide	1000	1		D	5000 (2270)
Sodium cyanide	143339	Sodium cyanide Na(CN)	10	1,4	P106	A	10 (4.54)
Sodium cyanide Na(CN)	143339	Sodium cyanide	10	1,4	P106	A	10 (4.54)
Sodium dodecylbenzenesulfonate	25155300	Sodium cyanide	1000	1		A	10 (4.54)
Sodium fluoride	7681494	Sodium cyanide	1000	1		C	1000 (454)
Sodium hydrosulfide	16721805	Sodium cyanide	5000	1		C	1000 (454)
Sodium hydroxide	1310732	Sodium cyanide	1000	1		D	5000 (2270)
Sodium hypochlorite	7681529	Sodium cyanide	1000	1		C	1000 (454)
Sodium methylate	10022705	Sodium cyanide	100	1		B	100 (45.4)
Sodium nitrite	124414	Sodium cyanide	1000	1		C	1000 (454)
Sodium phosphate, dibasic	7632000	Sodium cyanide	100	1		B	100 (45.4)
	7558794	Sodium cyanide	5000	1		D	5000 (2270)
	10039324	Sodium cyanide	1000	1			
	10140655	Sodium cyanide	1000	1			

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Sodium phosphate, tribasic	7601549 7758294 7785844 10101890 10124568 10361894 10102188 7782823 18883664		5000	1		D	5000 (2270)
Sodium selenite			1000	1		B	100 (45.4)
Streptozotocin		D-Glucose, 2-deoxy-2-[[methyl(nitrosoamino)-carboxylamino]-, 2-deoxy-2-(3-methyl-3-nitrosoirido)-	1*	4	U206	X	1 (0.454)
Strontium chromate	7789062		1000	1		A	10 (4.54)
Strychnidin-10-one	57249	Strychnine, & salts	10	1,4	P108	A	10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy-	357573	Brucine	1*	4	P018	B	100 (45.4)
Strychnine, & salts	57249	Strychnidin-10-one	10	1,4	P108	A	10 (4.54)
Styrene	100425		1000	1,3		C	1000(454)
Styrene oxide	96093		1*	3		B	100 (45.4)
Sulfur monochloride	12771083		1000	1		C	1000 (454)
Sulfur phosphide	1314803	Phosphorus pentasulfide	100	1,4	U189	B	100 (45.4)
Sulfuric acid	7664839 8014957	Phosphorus sulfide	1000	1		C	1000 (454)
Sulfuric acid, dithallium (1+) salt	7446186 10031591	Thallium (I) sulfate	1000	1,4	P115	B	100 (45.4)
Sulfuric acid, dimethyl ester	77781		1*	3,4	U103	B	100(45.4)
2,4,5-T acid	93765	Acetic acid, (2,4,5-trichlorophenoxy)	100	1,4	U232	C	1000 (454)
2,4,5-T amines	2008460 1319728		100	1		D	5000 (2270)
2,4,5-T esters	3813147 6369966 6369977 93798 1928478 2545597 25168154 61792072 13560991 93765		100	1		C	1000 (454)
2,4,5-T salts		Acetic acid, (2,4,5-trichlorophenoxy)	100	1		C	1000 (454)
2,4,5-T		2,4,5-T acid	100	1,4	U232	C	1000 (454)

TCDD	2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016	1*	2,3	X	1 (0.454)
TDE	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-4,4'-DDD)	72548	1*	1,2,4	X	1 (0.454)
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95943	1*	4	D	5000 (2270)
2,3,7,8-Tetrachlorodibenzo-p-dioxin	TCDD	1746016	1*	2,3	X	1 (0.454)
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630206	1*	4	B	100 (45.4)
1,1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79345	1*	2,3,4	B	100(45.4)
Tetrachloroethene	Ethene, tetrachloro-	127184	1*	2,3,4	B	100(45.4)
Tetrachloroethylene	Perchloroethylene	127184	1*	2,3,4	B	100(45.4)
	Ethene, tetrachloro		1*	2,3,4	B	100(45.4)
	Perchloroethylene		1*	2,3,4	B	100(45.4)
2,3,4,6-Tetrachlorophenol	Tetrachloroethene	58902	1*	4	A	10 (4.54)
Tetraethyl lead	Phenol, 2,3,4,6-tetrachloro-	78002	100	1,4	A	10 (4.54)
Tetraethyl pyrophosphate	Plumbane, tetraethyl-	107493	100	1,4	A	10 (4.54)
Tetraethylthiopyrophosphate	Thiopyrophoric acid, tetraethyl ester	3689245	1*	4	B	100 (45.4)
Tetrahydrofuran	Furan, tetrahydro-	109999	1*	4	C	1000 (45.4)
Tetranitromethane	Methane, tetranitro-	509148	1*	4	A	10 (4.54)
Tetraphosphoric acid, hexaethyl ester	Hexaethyl tetraphosphate	757584	1*	4	B	100 (45.4)
Thalic oxide	Thallium oxide Tl ₂ O ₃	1314325	1*	4	B	100 (45.4)
Thallium††	Thallium oxide Tl ₂ O ₃	7440280	1*	2	C	1000 (45.4)
Thallium and compounds	N.A.		1*	2	C	1000 (45.4)
Thallium (I) acetate	Acetic acid, thallium(1+) salt	563688	1*	4	B	100 (45.4)
Thallium (I) carbonate	Carbonic acid, dithallium(1+) salt	6533739	1*	4	B	100 (45.4)
Thallium (I) chloride	Thallium chloride TlCl	7791120	1*	4	B	100 (45.4)
Thallium (I) nitrate	Thallium(I) chloride	7791120	1*	4	B	100 (45.4)
Thallium oxide Tl ₂ O ₃	Nitric acid, thallium(1+) salt	10102451	1*	4	B	100 (45.4)
Thallium selenite	Thalic oxide	1314325	1*	4	B	100 (45.4)
Thallium (I) sulfate	Selenous acid, dithallium(1+) salt	12039520	1*	4	C	1000 (45.4)
	Sulfuric acid, dithallium(1+) salt	7446186	1000	1,4	B	100 (45.4)
Thioacetamide	Ethanethioamide	62555	1*	4	A	10 (4.54)
Thiophosphoric acid, tetraethyl ester	Tetraethylthiopyrophosphate	3689245	1*	4	B	100 (45.4)
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-	39196184	1*	4	B	100 (45.4)
Thiomethanol	Dithiobutret	541537	1*	4	B	100 (45.4)
	Methanethiol	74931	100	1,4	B	100 (45.4)
	Methylmercaptan		100	1,4	B	100 (45.4)
Thioperoxydicarbonic diamide [(H ₂ N)C(S) 2NH	Thiram	137268	1*	4	A	10 (4.54)
	Benzenethiol	108985	1*	4	B	100 (45.4)
Thiosemicarbazide	Hydrazinecarbothioamide	79196	1*	4	B	100 (45.4)
Thiourea	Thiourea	62566	1*	4	A	10 (4.54)
Thiourea, (2-chlorophenyl)-	1-(o-Chlorophenyl)thiourea	5344821	1*	4	B	100 (45.4)
Thiourea, 1-naphthalenyl-	alpha-Naphthylthiourea	86884	1*	4	B	100 (45.4)
Thiourea, phenyl-	Phenylthiourea	103855	1*	4	B	100 (45.4)
Thiram	Thioperoxydicarbonic diamide [(H ₂ N)C(S) 2S ₂ , tetramethyl-	137268	1*	4	A	10 (4.54)
Titanium tetrachloride	Benzenethiol	7550450	1*	3	C	1000 (45.4)
Toluene	Toluene	108883	1000	1,2,3,4	C	1000(45.4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Toluenediamine	95807 496720 823405 25376458	Benzenediamine, ar-methyl- 2,4-Toluene diamine	1*	3,4	U221	A	10(4.54)
2,4-Toluene diamine	95807 496720 823405 25376458	Benzenediamine, ar-methyl- Toluenediamine	1*	3,4	U221	A	10(4.54)
Toluene diisocyanate	91087 584849 26471625	Benzene, 1,3-diisocyanatomethyl- 2,4-Toluene diisocyanate-	1*	3,4	U223	B	100 (45.4)
2,4-Toluene diisocyanate	91087 584849 26471625	Benzene, 1,3-diisocya-natomethyl- Toluene diisocyanate	1*	3,4	U223	B	100 (45.4)
o-Toluidine	95534	Benzenamine, 2-methyl-	1*	3,4	U328	B	100(45.4)
p-Toluidine	106490	Benzenamine, 4-methyl-	1*	4	U353	B	100 (45.4)
o-Toluidine hydrochloride	636215	Benzenamine, 2-methyl-, hydrochloride	1*	4	U222	B	100 (45.4)
Toxaphene	8001352	Camphene, octachloro-	1*	1,2,3,4	P123	X	1 (0.454)
2,4,5-TP acid	93721	Chlorinated camphene	100	1,4	U233	B	100 (45.4)
2,4,5-TP esters	32534955	Propionic acid, 2-(2,4,5-trichlorophenoxy)- Silvex (2,4,5-TP)	100	1		B	100 (45.4)
1H-1,2,4-Triazol-3-amine	61825	Amitrole	1*	4	U011	A	10 (4.54)
2,4,6-tribromophenol	118796		100	4	U408	B	100 (45.4)
Trichlorfon	52686		1000	1		B	100 (45.4)
1,2,4-Trichlorobenzene	120821		1*	2,3		B	100 (45.4)
1,1,1-Trichloroethane	71556	Ethane, 1,1,1-trichloro-	1*	2,3,4	U226	C	1000 (454)
1,1,2-Trichloroethane	79005	Methyl chloroform	1*	2,3,4	U227	B	100 (45.4)
Trichloroethene	79016	Ethene, trichloro-	1000	1,2,3,4	U228	B	100 (45.4)
Trichloroethylene	79016	Trichloroethylene	1000	1,2,3,4	U228	B	100 (45.4)
Trichloromethanesulfonyl chloride	594423	Trichloroethene	1*	4	P118	B	100 (45.4)
Trichloromonofluoromethane	75694	Methanesulfonyl chloride, trichloro-	1*	4	U121	D	5000 (2270)
Trichlorophenol	25167822	Methane, trichlorofluoro-	10	1		A	10 (4.54)
2,3,4-Trichlorophenol	15950660						
2,3,5-Trichlorophenol	933788						
2,3,6-Trichlorophenol	933755						
2,4,5-Trichlorophenol	95954						
2,4,6-Trichlorophenol	88062	Phenol, 2,4,5-trichloro- Phenol, 2,4,6-trichloro-	10 10	1,3,4 1,2,3,4	U230 U231	A A	10 (4.54) 10 (4.54)

3,4,5-Trichlorophenol	609198	Phenol, 2,4,5-trichloro-	10*	1,4	U230	A	10 (4.54)
2,4,5-Trichlorophenol	95954	Phenol, 2,4,6-trichloro-	10	1,2,4	U231	A	10 (4.54)
2,4,6-Trichlorophenol	88062	.....	1000	1		C	1000 (454)
Triethanolamine dodecylbenzenesulfonate	27323417	.....	5000	1,3		D	5000 (2270)
Triethylamine	121448	.....	1*	3		A	10 (4.54)
Trifluralin	1582098	.....	1000	1		B	100 (45.4)
Trimethylamine	75503	.....	1*	3		C	1000 (454)
2,2,4-Trimethylpentane	540841	Benzene, 1,3,5-trinitro-	1*	4	U234	A	10 (4.54)
1,3,5-Trinitrobenzene	99354	Paraldehyde	1*	4	U182	C	1000 (454)
1,3,5-Trioxane, 2,4,6-trimethyl-	123637	1-Propanol, 2,3-dibromo-, phosphate [(3:1).....	1*	4	U235	A	10 (4.54)
Tris(2,3-dibromopropyl) phosphate	126727	2,7-Naphthalenedisulfonic acid, 3,3'-3,3'-di-	1*	4	U236	A	10 (4.54)
Trypan blue	72571	methyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)bis(5-amino-4-hydroxy)-tetrasodium salt.	1*	4		B	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Corrosivity	N.A.	.....	1*	4	D002		
Unlisted Hazardous Wastes Characteristics:	N.A.	.....	1*	4			
Characteristic of Toxicity:	N.A.	.....	1*	4	D004	X	1 (0.454)
Arsenic (D004)	N.A.	.....	1*	4	D005	C	1,000 (454)
Barium (D005)	N.A.	.....	1000	1, 2, 3,	D018	A	10 (4.54)
Benzene (D018)	N.A.	.....		4			
Cadmium (D006)	N.A.	.....	1*	4	D006	A	10 (4.54)
Carbon tetrachloride (D019)	N.A.	.....	5,000	1, 2, 4	D019	A	10 (4.54)
Chlordane (D020)	N.A.	.....	1	1, 2, 4	D020	X	1 (0.454)
Chlorobenzene (D021)	N.A.	.....	100	1, 2, 4	D021	B	100 (45.4)
Chloroform (D022)	N.A.	.....	5,000	1, 2, 4	D022	A	10 (4.54)
Chromium (D007)	N.A.	.....	1*	4	D007	A	10 (4.54)
o-Cresol (D023)	N.A.	.....	1*	4	D023	B	100 (45.4)
m-Cresol (D024)	N.A.	.....	1*	4	D024	B	100 (45.4)
p-Cresol (D025)	N.A.	.....	1*	4	D025	B	100 (45.4)
Cresol (D026)	N.A.	.....	1*	4	D026	B	100 (45.4)
2,4-D (D016)	N.A.	.....	100	1, 4	D016	B	100 (45.4)
1,4-Dichlorobenzene (D027)	N.A.	.....	100	1, 2, 4	D027	B	100 (45.4)
1,2-Dichloroethane (D028)	N.A.	.....	5,000	1, 2, 4	D028	B	100 (45.4)
1,1-Dichloroethylene (D029)	N.A.	.....	5,000	1, 2, 4	D029	B	100 (45.4)
2,4-Dinitrotoluene (D030)	N.A.	.....	1,000	1, 2, 4	D030	A	10 (4.54)
Endrin (D012)	N.A.	.....	1	1, 4	D012	X	1 (0.454)
Heptachlor (and epoxide) (D031)	N.A.	.....	1	1, 2, 4	D031	X	1 (0.454)
Hexachlorobenzene (D032)	N.A.	.....	1*	2, 4	D032	A	10 (4.54)
Hexachlorobutadiene (D033)	N.A.	.....	1*	2, 4	D033	X	1 (0.454)
Hexachloroethane (D034)	N.A.	.....	1*	2, 4	D034	B	100 (45.4)
Lead (D008)	N.A.	.....	1*	4	D008	A	10 (4.54)
Lindane (D013)	N.A.	.....	1	1, 4	D013	X	1 (0.454)
Mercury (D009)	N.A.	.....	1*	4	D009	X	1 (0.454)
Methoxychlor (D014)	N.A.	.....	1	1, 4	D014	X	1 (0.454)
Methyl ethyl ketone (D035)	N.A.	.....	1*	4	D035	D	5,000 (2270)
Nitrobenzene (D036)	N.A.	.....	1,000	1, 2, 4	D036	C	1,000 (454)
Pentachlorophenol (D037)	N.A.	.....	10	1, 2, 4	D037	A	10 (4.54)
Pyridine (D038)	N.A.	.....	1*	4	D038	C	1,000 (454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
Selenium (D010)	N.A.	.....	1*	4	D010	A	10 (4.54)
Silver (D011)	N.A.	.....	1*	4	D011	X	1 (0.454)
Tetrachloroethylene (D039)	N.A.	.....	1*	2, 4	D039	B	100 (45.4)
Toxaphene (D015)	N.A.	.....	1	1, 4	D015	X	1 (0.454)
Trichloroethylene (D040)	N.A.	.....	1000	1, 2, 4	D040	B	100 (45.4)
2,4,5-Trichlorophenol (D041)	N.A.	.....	10	1, 4	D041	A	10 (4.54)
2,4,6-Trichlorophenol (D042)	N.A.	.....	10	1, 2, 4	D042	A	10 (4.54)
2,4,5-TP (D017)	N.A.	.....	100	1, 4	D017	B	100 (45.4)
Vinyl chloride (D043)	N.A.	.....	1*	2, 3, 4	D043	X	1 (0.454)
Unlisted Hazardous Wastes Characteristic of Ignitability	N.A.	.....	1*	4	D001	B	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Reactivity	N.A.	.....	1*	4	D003	B	100 (45.4)
Uracil mustard	66751	2,4-(1H,3H)-Pyrimidinone, 5-bis(2-chloroethyl)amino-.....	1*	4	U237	A	10 (4.54)
Uranyl acetate	541093	.....	5000	1		B	100 (45.4)
Uranyl nitrate	10102064 36478769	.....	5000	1		B	100 (45.4)
Urea, N-ethyl-N-nitroso-	759739	N-Nitroso-N-ethylurea	1*	4	U176	X	1 (0.454)
Urea, N-methyl-N-nitroso	694935	N-Nitroso-N-methylurea	1*	3, 4	U177	X	1 (0.454)
Urethane	51796	Carbamic acid, ethyl ester	1*	3, 4	U238	B	100 (45.4)
Vanadic acid, ammonium salt	7803556	Ammonium vanadate	1*	4	P119	C	1000 (454)
Vanadium oxide V ₂ O ₅	1314621	Vanadium pentoxide	1000	1, 4	P120	C	1000 (454)
Vanadium pentoxide	1314621	Vanadium oxide V ₂ O ₅	1000	1, 4	P120	C	1000 (454)
Vanadyl sulfate	27774136	.....	1000	1		C	1000 (454)
Vinyl acetate	108054	Vinyl acetate monomer	1000	1, 3		D	5000 (2270)
Vinyl acetate monomer	108054	Vinyl acetate	1000	1, 3		D	5000 (2270)
Vinylamine, N-methyl-N-nitroso-	4549400	N-Nitrosomethylvinylamine	1*	4	P084	A	10 (4.54)
Vinyl bromide	593602	.....	1*	3		B	100 (45.4)
Vinyl chloride	75014	Ethene, chloro-	1*	2, 3, 4	U043	X	1 (0.454)
Vinylidene chloride	75354	1,1-Dichloroethylene	5000	1, 2, 3, 4	U078	B	100 (45.4)
Warfarin, & salts, when present at concentrations greater than 0.3%	81812	Ethene, 1,1-dichloro-2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations greater than 0.3%	1*	4	P001	B	100 (45.4)
Xylene	1330207	Benzene, dimethyl-	1000	1, 3, 4	U239	B	100 (45.4)
m-Xylene	108383	Xylenes (mixed)	1*	3		C	1000 (454)
o-Xylene	95476	Xylenes (isomers and mixture)	1*	3		C	1000 (454)
p-Xylene	106423	Benzene, m-dimethyl-	1*	3		C	1000 (454)
		Benzene, o-dimethyl-	1*	3		C	1000 (454)
		Benzene, p-dimethyl-	1*	3		B	100 (45.4)

Xylene (mixed)	1330207	Benzene, dimethyl-	1000	1,3,4	U239	B	100 (45.4)
Xylenes (isomers and mixture)	1330207	Xylene (isomers and mixture)	1000	1,3,4	U239	B	100 (45.4)
Xylenol	1300716	Xylene (mixed)	1000	1	U200	C	1000 (454)
Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyloxy)-, methyl ester (3beta,16beta,17alpha,18beta,20alpha)-	50555	Reserpine	1*	4		D	5000 (2270)
Zinc	7440666	.....	1*	2		C	1000 (454)
Zinc	557346	.....	1*	2		C	**
ZINC AND COMPOUNDS	52628258	.....	1000	1		C	1000 (454)
Zinc acetate	14639975	.....	5000	1		C	1000 (454)
Zinc ammonium chloride	14639986	.....				
Zinc, bis(dimethylcarbamodithioato-S,S')-, (Ziram)	137304	.....	1*	4	P205	C	#
Zinc borate	1332076	.....	1000	1		C	1000 (454)
Zinc bromide	7699458	.....	5000	1		C	1000 (454)
Zinc carbonate	3486359	.....	1000	1		C	1000 (454)
Zinc chloride	7646857	.....	5000	1		C	1000 (454)
Zinc cyanide	557211	Zinc cyanide Zn(CN)2	10	1,4	P121	A	10 (4.54)
Zinc cyanide Zn(CN)2	557211	Zinc cyanide	10	1,4	P121	A	10 (4.54)
Zinc fluoride	7783495	.....	1000	1		C	1000 (454)
Zinc formate	557415	.....	1000	1		C	1000 (454)
Zinc hydrosulfite	7779864	.....	1000	1		C	1000 (454)
Zinc nitrate	7779886	.....	5000	1		C	1000 (454)
Zinc phenosulfonate	127822	.....	5000	1		D	5000 (2270)
Zinc phosphide	1314847	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10%	1000	1,4	P122	B	100 (45.4)
Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10%	1314847	Zinc phosphide	1000	1,4	P122	B	100 (45.4)
Zinc silicofluoride	16871719	.....	5000	1		D	5000 (2270)
Zinc sulfate	7733020	.....	1000	1		C	1000 (454)
Zirconium nitrate	13746899	.....	5000	1		D	5000 (2270)
Zirconium potassium fluoride	16923958	.....	5000	1		C	1000 (454)
Zirconium sulfate	14644612	.....	5000	1		D	5000 (2270)
Zirconium tetrachloride	10026116	.....	5000	1		D	5000 (2270)
F001 .....		.....	1*	4	F001	A	10 (4.54)
The following spent halogenated solvents used in degreasing: all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures							
(a) Tetrachloroethylene	127184	.....	1*	2,4	U210	B	100 (45.4)
(b) Trichloroethylene	79016	.....	1000	1,2,4	U228	B	100 (45.4)
(c) Methylene chloride	75092	.....	1*	2,4	U080	C	1000 (454)
(d) 1,1,1-Trichloroethane	71556	.....	1*	2,4	U226	C	1000 (454)
(e) Carbon tetrachloride	56235	.....	5000	1,2,4	U211	A	10 (4.54)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ
			RQ	Code †	
(f) Chlorinated fluorocarbons	N.A.		1*	4	D 5000 (2270) A 10 (4.54)
F002 The following spent halogenated solvents: all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures					
(a) Tetrachloroethylene	127184		1*	2,4	B 100 (45.4)
(b) Methylenedichloride	75092		1*	2,4	C 1000 (454)
(c) Trichloroethylene	79016		1000	1,2,4	B 100 (45.4)
(d) 1,1,1-Trichloroethane	71556		1*	2,4	C 1000 (454)
(e) Chlorobenzene	108907		100	1,2,4	B 100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane	76131		100	1,2,4	D 5000 (2270)
(g) o-Dichlorobenzene	95501		1*	4	B 100 (45.4)
(h) Trichlorofluoromethane	75694		1*	2,4	D 5000 (2270)
(i) 1,1,2-Trichloroethane	79005		1*	4	B 100 (45.4)
F003 The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:					
(a) Xylene	1330207				C 1000 (454)
(b) Acetone	67641				D 5000 (2270)
(c) Ethyl acetate	141786				D 5000 (2270)
(d) Ethylbenzene	100414				C 1000 (454)
(e) Ethyl ether	60297				B 100 (45.4)
(f) Methyl isobutyl ketone	108101				D 5000 (2270)
(g) n-Butyl alcohol	71363				D 5000 (2270)
(h) Cyclohexanone	108941				D 5000 (2270)
(i) Methanol	67561				D 5000 (2270)
F004 The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:					
(a) Cresols/Cresylic acid	1319773		1000	1,3,4	B 100(45.4)
(b) Nitrobenzene	98953		1000	1,2,4	C 1000 (454)
F005 The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:					
(a) Toluene	108883		1000	1,2,4	B 100 (45.4)
(b) Methyl ethyl ketone	78933		1*	4	C 1000 (454)
(c) Carbon disulfide	75150		5000	1,4	D 5000 (2270)
(d) Isobutanol	78831		1*	4	D 5000 (2270)
(e) Pyridine	110861		1*	4	C 1000 (454)

F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum, (2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbon steel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of aluminum.	1*	4	F006	A	10 (4.54)
F007	Spent cyanide plating bath solutions from electroplating operations.	1*	4	F007	A	10 (4.54)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	1*	4	F008	A	10 (4.54)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	1*	4	F009	A	10 (4.54)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	1*	4	F010	A	10 (4.54)
F011	Spent cyanide solution from salt bath pot cleaning from metal heat treating operations.	1*	4	F011	A	10 (4.54)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	1*	4	F012	A	10 (4.54)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	1	4	F019	A	10 (4.54)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol).	1*	4	F020	X	1 (0.454)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	1*	4	F021	X	1 (0.454)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	1*	4	F022	X	1 (0.454)
F023		1*	4	F023	X	1 (0.454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexa-chlorophene from highly purified 2,4,5-tri-chlorophenol.)			1*	4	F024	X	1 (0.454)
F024 Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent desiccants(sic), wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in § 261.32).			1*	4	F025	X	1 (0.454)
F025 Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.			1*	4	F026	X	1 (0.454)
F026 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.			1*	4	F027	X	1 (0.454)
F027 Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-tri-chlorophenol as the sole component.)			1*	4	F028	X	1 (0.454)
F028 Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.			1*	4	F032	X	1(0.454)

<p>Wastewaters (except those that have not come into contact with process residuals, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with §261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.</p>		1*	4	F034	X	1 (0.454)
<p>Wastewaters (except those that have not come into contact with process residuals, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.</p>		1*	4	F035	X	1 (0.454)
<p>Wastewaters (except those that have not come into contact with process residuals, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.</p>		1*	4	F037	X	1 (0.454)
<p>Petroleum refinery primary oil/water/solids separation sludge—Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in §261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.</p>		1*	4	F038	X	1 (0.454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Petroleum refinery secondary (emulsified) oil/water/solids separation sludge—Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks, and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from once-through non-contact cooling waters segregated for treatment from other process or oil cooling wastes, sludges and floats generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.			1*	4	K001	X	1 (0.454)
K001 Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.			1*	4	K002	A	10 (4.54)
K002 Wastewater treatment sludge from the production of chrome yellow and orange pigments.			1*	4	K003	A	10 (4.54)
K003 Wastewater treatment sludge from the production of molybdate orange pigments.			1*	4	K004	A	10 (4.54)
K004 Wastewater treatment sludge from the production of zinc yellow pigments.			1*	4	K005	A	10 (4.54)
K005 Wastewater treatment sludge from the production of chrome green pigments.			1*	4	K006	A	10 (4.54)
K006 Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).			1*	4	K007	A	10 (4.54)
K007 Wastewater treatment sludge from the production of iron blue pigments.			1*	4	K008	A	10 (4.54)
K008 Oven residue from the production of chrome oxide green pigments.			1*	4	K009	A	10 (4.54)

Distillation bottoms from the production of acetaldehyde from ethylene.	1*	4	K010	A	10 (4.54)
Distillation side cuts from the production of acetaldehyde from ethylene.	1*	4	K011	A	10 (4.54)
Bottom stream from the wastewater stripper in the production of acrylonitrile.	1*	4	K013	A	10 (4.54)
Bottom stream from the acetonitrile column in the production of acrylonitrile.	1*	4	K014	D	5000 (2270)
Bottoms from the acetonitrile purification column in the production of acrylonitrile.	1*	4	K015	A	10 (4.54)
Still bottoms from the distillation of benzyl chloride.	1*	4	K016	X	1 (0.454)
Heavy ends or distillation residues from the production of carbon tetrachloride.	1*	4	K017	A	10 (4.54)
Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	1*	4	K018	X	1 (0.454)
Heavy ends from the fractionation column in ethyl chloride production.	1*	4	K019	X	1 (0.454)
Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	1*	4	K020	X	1 (0.454)
Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	1*	4	K021	A	10 (4.54)
Aqueous spent antimony catalyst waste from fluoromethanes production.	1*	4	K022	X	1 (0.454)
Distillation bottom tars from the production of phenol/acetone from cumene.	1*	4	K023	D	5000 (2270)
Distillation light ends from the production of phthalic anhydride from naphthalene.	1*	4	K024	D	5000 (2270)
Distillation bottoms from the production of phthalic anhydride from naphthalene.	1*	4	K025	A	10 (4.54)
Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	1*	4	K026	C	1000 (454)
Stripping still tails from the production of methyl ethyl pyridines.	1*	4	K027	A	10 (4.54)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Centrifuge and distillation residues from toluene diisocyanate production.			1*	4	K028	X	1 (0.454)
K028 Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.			1*	4	K029	X	1 (0.454)
K029 Waste from the product steam stripper in the production of 1,1,1-trichloroethane.			1*	4	K030	X	1 (0.454)
K030 Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.			1*	4	K031	X	1 (0.454)
K031 By-product salts generated in the production of MSMA and cacodylic acid.			1*	4	K032	A	10 (4.54)
K032 Wastewater treatment sludge from the production of chlordane.			1*	4	K033	A	10 (4.54)
K033 Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.			1*	4	K034	A	10 (4.54)
K034 Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.			1*	4	K035	X	1 (0.454)
K035 Wastewater treatment sludges generated in the production of creosole.			1*	4	K036	X	1 (0.454)
K036 Still bottoms from toluene reclamation distillation in the production of disulfoton.			1*	4	K037	X	1 (0.454)
K037 Wastewater treatment sludges from the production of disulfoton.			1*	4	K038	A	10 (4.54)
K038 Wastewater from the washing and stripping of phosphate production.			1*	4	K039	A	10 (4.54)
K039 Filter cake from the filtration of diethylphosphorothioic acid in the production of phosphate.			1*	4	K040	A	10 (4.54)
K040 Wastewater treatment sludge from the production of phosphate.			1*	4	K041	X	1 (0.454)
K041 Wastewater treatment sludge from the production of toxaphene.			1*	4	K041	X	1 (0.454)

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K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	1*	4	K042	A	10 (4.54)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	1*	4	K043	A	10 (4.54)
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	1*	4	K044	A	10 (4.54)
K045	Spent carbon from the treatment of wastewater containing explosives.	1*	4	K045	A	10 (4.54)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	1*	4	K046	A	10 (4.54)
K047	Pink/red water from TNT operations.	1*	4	K047	A	10 (4.54)
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	1*	4	K048	A	10 (4.54)
K049	Stop oil emulsion solids from the petroleum refining industry.	1*	4	K049	A	10 (4.54)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	1*	4	K050	A	10 (4.54)
K051	API separator sludge from the petroleum refining industry.	1*	4	K051	A	10 (4.54)
K052	Tank bottoms (leaded) from the petroleum refining industry.	1*	4	K052	A	10 (4.54)
K060	Ammonia still lime sludge from coking operations.	1*	4	K060	X	1 (0.454)
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	1*	4	K061	A	10 (4.54)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	1*	4	K062	A	10 (4.54)
K064	Acid plant blowdown slurry/sludge resulting from thickening of blowdown slurry from primary copper production.	1*	4	K064	A	10 (4.54)
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	1*	4	K065	A	10 (4.54)
K066	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.	1*	4	K066	A	10 (4.54)
K069	Emission control dust/sludge from secondary lead smelting.	1*	4	K069	A	10 (4.54)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
K071 Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	1*	4	K071	X	1 (0.454)
K073 Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	1*	4	K073	A	10 (4.54)
K083 Distillation bottoms from aniline extraction.	1*	4	K083	B	100 (45.4)
K084 Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	1*	4	K084	X	1 (0.454)
K085 Distillation or fractionation column bottoms from the production of chlorobenzenes.	1*	4	K085	A	10 (4.54)
K086 Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.	1*	4	K086	A	10 (4.54)
K087 Decanter tank tar sludge from coking operations.	1*	4	K087	B	100 (45.4)
K088 Spent potliners from primary aluminum reduction.	1*	4	K088	A	10 (4.54)
K090 Emission control dust or sludge from ferrochromium/silicon production.	1*	4	K090	A	10 (4.54)
K091 Emission control dust or sludge from ferrochromium production.	1	4	K091	A	10 (4.54)
K093 Distillation light ends from the production of phthalic anhydride from ortho-xylene.	1*	4	K093	D	5000 (2270)
K094 Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	1*	4	K094	D	5000 (2270)
K095 Distillation bottoms from the production of 1,1,1-trichloroethane.	1*	4	K095	B	100 (45.4)
K096	1*	4	K096	B	100 (45.4)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Category	Pounds (Kg)
Product washwaters from the production of dinitrotoluene via nitration of toluene.			1*	4	K112	A	10 (4.54)
Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.			1*	4	K113	A	10 (4.54)
Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.			1*	4	K114	A	10 (4.54)
Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.			1*	4	K115	A	10 (4.54)
Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.			1*	4	K116	A	10 (4.54)
Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.			1*	4	K117	X	1 (0.454)
Wastewater from the reaction vent gas scrubber in the production of ethylene bromide via bromination of ethene.			1*	4	K118	X	1 (0.454)
Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide.			1*	4	K123	A	10 (4.54)
Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenedisithiocarbamic acid and its salts.			1*	4	K124	A	10 (4.54)
Reactor vent scrubber water from the production of ethylenedisithiocarbamic acid and its salts.			1*	4	K125	A	10 (4.54)
Filtration, evaporation, and centrifugation solids from the production of ethylenedisithiocarbamic acid and its salts.			1*	4	K126	A	10 (4.54)
Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenedisithiocarbamic acid and its salts.			100	4	K131	X	100 (45.4)

Wastewater from the reactor and spent sulfuric acid from the acid dryer in the production of methyl bromide.	1000	4	K132	X	1000 (454)
K132 Spent absorbent and wastewater solids from the production of methyl bromide.	1*	4	K136	X	1 (0.454)
K136 Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	1*	4	K140	B	# 100 (45.4)
K140 Floor sweepings, off-specification product and spent filter media from the production of 2,4,6-tribromophenol.	1*	4	K141	X	1 (0.454)
K141 Process related from the recovery of coal tar, including, but not limited to, tar collecting sump residues from the production of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations.).	1*	4	K142	X	1 (0.454)
K142 Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	1*	4	K143	X	1 (0.454)
K143 Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	1*	4	K144	X	1 (0.454)
K144 Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	1*	4	K145	X	1 (0.454)
K145 Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	1*	4	K147	X	1 (0.454)
K147 Tar storage tank residues from coal tar refining.	1*	4	K148	X	1 (0.454)
K148 Residues from coal tar distillation, including, but not limited to, still bottoms.	1*	4	K149	A	10 (4.54)
K149 Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. [This waste does not include still bottoms from the distillation of benzyl chloride].	1*	4	K150	A	10 (4.54)
K150 Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.					

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued
 [Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory		Final RQ		
			RQ	Code †	RCRA waste Number	Cat-egory	Pounds (Kg)
K151 Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.			1*	4	K151	A	10 (4.54)
K156 Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)			*1	4	K156		##
K157 Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)			*1	4	K157		##
K158 Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)			*1	4	K158		##
K159 Organics from the treatment of thiocarbamate wastes.			1*	4	K159		##
K161 Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust, and floor sweepings from the production of dithiocarbamate acids and their salts (This listing does not include K125 or K126.)			1*	4	K161		##
K169 ¹ Crude oil storage tank sediment from petroleum refining operations.			1*	4	K169	A	10(4.54)
K170 ¹ Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations.			1*	4	K170	X	1 (0.454)
K171 ¹ Spent hydrotreating catalyst from petroleum refining operations. (This listing does not include inert support media.)			1*	4	K171	X	1 (0.454)
K172 ¹ Spent hydrotreating catalyst from petroleum refining operations. (This listing does not include inert support media.)			1*	4	K172	X	1 (0.454)

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APPENDIX A TO § 302.4—SEQUENTIAL CAS REGISTRY NUMBER LIST OF CERCLA HAZARDOUS SUBSTANCES

APPENDIX A TO § 302.4—SEQUENTIAL CAS REGISTRY NUMBER LIST OF CERCLA HAZARDOUS SUBSTANCES—Continued

CASRN	Hazardous substance
50000	Formaldehyde.
50077	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,6-amino-8-[[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a, 8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalp,8balp)]- Mitomycin C.
50180	Cyclophosphamide. 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide.
50293	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- DDT'. 4,4'DDT.
50328	Benzo[a]pyrene. 3,4-Benzopyrene.
50555	Reserpine. Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3 ,4,5-trimethoxybenzoyl)oxy]-, methyl ester (3beta, 16beta,17alpha,18beta,20alpha)-.
51285	Phenol, 2,4-dinitro-. 2,4-Dinitrophenol.
51434	Epinephrine. 1,2-Benzenediol,4-[1-hydroxy-2-(methylamino) ethyl]-.
51796	Carbamic acid, ethyl ester. Ethyl carbamate. Urethane.
52686	Trichlorfon.
52857	Famphur. Phosphorothioic acid, O,[4-[(dimethyl- amino) sulfonyl]phenyl]O,O-dimethyl ester.
53703	Dibenz[a,h]anthracene. Dibenzo[a,h]anthracene. 1,2:5,6-Dibenzanthracene.
53963	Acetamide, N-9H-fluoren-2-yl-. 2-Acetylaminofluorene.
54115	Nicotine, & salts. Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-.
55185	Ethanamine, N-ethyl-N-nitroso-. N-Nitrosodiethylamine.
55630	Nitroglycerine. 1,2,3-Propanetriol, trinitrate-.
55914	Diisopropylfluorophosphate. Phosphorofluoric acid, bis(1-methyl- ethyl) ester.
56042	Methylthiouracil. 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-.
56235	Carbon tetrachloride. Methane, tetrachloro-.
56382	Parathion. Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester.
56495	Benz[]aceanthrylene, 1,2-dihydro-3-methyl-3-Methylcholanthrene.
56531	Diethylstilbestrol. Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E).
56553	Benz[a]anthracene. Benzo[a]anthracene. 1,2-Benzanthracene.
56724	Coumaphos.
57125	Cyanides (soluble salts and complexes) not otherwise specified.
57147	Hydrazine, 1,1-dimethyl-. 1,1-Dimethylhydrazine.
57249	Strychnidin-10-one. Strychnine, & salts.

CASRN	Hazardous substance
57476	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- (Physostigmine).
57647	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1) (Physostigmine salicylate).
57749	Chlordane. Chlordane, alpha & gamma isomers. CHLORDANE (TECHNICAL MIXTURE AND METABOLITES). 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-.
57976	1,2-Benzanthracene, 7,12-dimethyl-. 7,12-Dimethylbenz[a]anthracene.
58899	γ-BHC. Cyclohexane, 1,2,3,4,5,6-hexachloro (1α,2α,3β,4α,5α,6β)-. Hexachlorocyclohexane (gamma isomer). Lindane. Lindane (all isomers).
58902	Phenol, 2,3,4,6-tetrachloro-. 2,3,4,6-Tetrachlorophenol.
59507	p-Chloro-m-cresol. Phenol, 4-chloro-3-methyl-. 4-Chloro-m-cresol.
60004	Ethylenediamine-tetraacetic acid (EDTA).
60117	Benzenamine, N,N-dimethyl-4-(phenylazo)-. Dimethyl aminoazobenzene. p-Dimethylaminoazobenzene.
60297	Ethane, 1,1'-oxybis-. Ethyl ether.
60344	Hydrazine, methyl-. Methyl hydrazine.
60515	Dimethoate. Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester.
60571	Dieldrin. 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2, 2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalp,3beta,6beta, 6aalp,7beta, 7aalp)-.
61825	Amitrole. 1H-1,2,4-Triazol-3-amine.
62384	Mercury, (acetato-O)phenyl-. Phenylmercury acetate.
62442	Acetamide, N-(4-ethoxyphenyl)-. Phenacetin.
62500	Ethyl methanesulfonate. Methanesulfonic acid, ethyl ester.
62533	Aniline. Benzenamine.
62555	Ethanethioamide. Thioacetamide.
62566	Thiourea.
62737	Dichlorvos.
62748	Acetic acid, fluoro-, sodium salt. Fluoroacetic acid, sodium salt.
62759	Methanamine, N-methyl-N-nitroso-. N-Nitrosodimethylamine.
63252	Carbaryl.
64006	Phenol, 3-(1-methylethyl)-, methyl carbamate (m-Cumenyl methylcarbamate).
64186	Formic acid.
64197	Acetic acid.
65850	Benzoic acid.
66751	Uracil mustard.

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APPENDIX A TO § 302.4—SEQUENTIAL CAS
REGISTRY NUMBER LIST OF CERCLA HAZ-
ARDOUS SUBSTANCES—Continued

APPENDIX A TO § 302.4—SEQUENTIAL CAS
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ARDOUS SUBSTANCES—Continued

CASRN	Hazardous substance
	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl) amino]-.
67561	Methanol.
	Methyl alcohol.
67641	Acetone.
	2-Propanone.
67663	Chloroform.
	Methane, trichloro-.
67721	Ethane, hexachloro-.
	Hexachloroethane.
70257	Guanidine, N-methyl-N'-nitro-N-nitroso- MNNG.
70304	Hexachlorophene.
	Phenol, 2,2'-methylenebis[3,4,6-tri- chloro-.
71363	n-Butyl alcohol.
	1-Butanol.
71432	Benzene.
71556	Ethane, 1,1,1-trichloro-.
	Methyl chloroform.
	1,1,1-Trichloroethane.
72208	Endrin.
	Endrin, & metabolites.
	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a- octa-hydro-, (1aalpha,2beta,2abeta,3alpha,6alpha, 6abeta,7beta,7aalpha)-.
72435	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy-.
	Methoxychlor.
72548	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4- chloro-.
	DDD.
	TDE.
	4,4' DDD.
72559	DDE
	4,4'-DDE.
72571	Trypan blue.
	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-di- methyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5- amino-4-hydroxy)-tetrasodium salt.
74839	Bromomethane.
	Methane, bromo-.
	Methyl bromide.
74873	Chloromethane.
	Methane, chloro-.
	Methyl chloride.
74884	Iodomethane
	Methane, iodo-.
	Methyl iodide.
74895	Monomethylamine.
74908	Hydrocyanic acid.
	Hydrogen cyanide.
74931	Methanethiol.
	Methylmercaptan.
	Thiomethanol.
74953	Methane, dibromo-.
	Methylene bromide.
75003	Chloroethane.
	Ethyl chloride.
75014	Ethene, chloro-.
	Vinyl chloride.
75047	Monoethylamine.
75058	Acetonitrile.
75070	Acetaldehyde.
	Ethanal.
75092	Dichloromethane.
	Methane, dichloro-.
	Methylene chloride.
75150	Carbon disulfide.

CASRN	Hazardous substance
75207	Calcium carbide.
75218	Ethylene oxide.
	Oxirane.
75252	Bromoform.
	Methane, tribromo-.
75274	Dichlorobromomethane.
75343	Ethane, 1,1-dichloro-.
	Ethylidene dichloride.
	1,1-Dichloroethane.
75354	Ethene, 1,1-dichloro-.
	Vinylidene chloride.
	1,1-Dichloroethylene.
75365	Acetyl chloride.
75445	Carbonic dichloride.
	Phosgene.
75503	Trimethylamine.
75558	Aziridine, 2-methyl-.
	2-Methyl aziridine.
	1,2-Propylenimine.
75569	Propylene oxide.
75605	Arsinic acid, dimethyl-.
	Cacodylic acid.
75649	tert-Butylamine.
75694	Methane, trichlorofluoro-.
	Trichloromonofluoromethane.
75718	Dichlorodifluoromethane.
	Methane, dichlorodifluoro-.
75865	Acetone cyanohydrin.
	Propanenitrile, 2-hydroxy-2-methyl-.
	2-Methylacetonitrile.
75876	Acetaldehyde, trichloro-.
	Chloral.
75990	2,2-Dichloropropionic acid.
76017	Ethane, pentachloro-.
	Pentachloroethane.
76448	Heptachlor.
	4,7-Methano-1H-indene, 1,4,5,6,7,8,8- heptachloro-3a,4,7,7a-tetrahydro-.
77474	Hexachlorocyclopentadiene.
	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexa- chloro-.
77781	Dimethyl sulfate.
	Sulfuric acid, dimethyl ester.
78002	Plumbane, tetraethyl-.
	Tetraethyl lead.
78591	Isophorone.
78795	Isoprene.
78819	iso-Butylamine.
78831	Isobutyl alcohol.
	1-Propanol, 2-methyl-.
78875	Propane, 1,2-dichloro-.
	Propylene dichloride.
	1,2-Dichloropropane.
78886	2,3-Dichloropropene.
78933	2-Butanone.
	MEK.
	Methyl ethyl ketone.
78999	1,1-Dichloropropane.
79005	Ethane, 1,1,2-trichloro-.
	1,1,2-Trichloroethane.
79016	Ethene, trichloro-.
	Trichloroethene.
	Trichloroethylene-.
79061	Acrylamide.
	2-Propenamide.
79094	Propionic acid.
79107	Acrylic acid.
	2-Propenoic acid.
79196	Hydrazinecarbothioamide.
	Thiosemicarbazide.
79221	Carbonochloridic acid, methyl ester.

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ARDOUS SUBSTANCES—Continued

CASRN	Hazardous substance
	Methyl chlorocarbonate.
79312	Methyl chloroformate.
79345	iso-Butyric acid.
	Ethane, 1,1,2,2-tetrachloro-.
79447	1,1,2,2-Tetrachloroethane.
	Carbamic chloride, dimethyl-.
79469	Dimethylcarbonyl chloride.
	Propane, 2-nitro-.
80159	2-Nitropropane.
	alpha, alpha-Dimethylbenzylhydroperoxide.
80626	Hydroperoxide, 1-methyl-1-phenylethyl-.
	Methyl methacrylate.
81072	2-Propenoic acid, 2-methyl-, methyl ester.
	Saccharin and salts.
81812	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide.
	Warfarin, & salts, when present at concentra- tions greater than 0.3%.
	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1- phenyl -butyl)-, & salts, when present at con- centrations greater than 0.3%.
82688	Benzene, pentachloronitro-.
	PCNB.
	Pentachloronitrobenzene.
83329	Quintobenzene.
84662	Acenaphthene.
	Diethyl phthalate.
84742	1,2-Benzenedicarboxylic acid, diethyl ester.
	Di-n-butyl phthalate.
	Dibutyl phthalate.
	n-Butyl phthalate.
	1,2-Benzenedicarboxylic acid, dibutyl ester.
85007	Diquat.
85018	Phenanthrene.
85449	Phthalic anhydride.
	1,3-Isobenzofurandione.
85687	Butyl benzyl phthalate.
86306	N-Nitrosodiphenylamine.
86500	Guthion.
86737	Fluorene.
86884	alpha-Naphthylthiourea.
	Thiourea, 1-naphthalenyl-.
87650	Phenol, 2,6-dichloro-.
	2,6-Dichlorophenol.
87683	Hexachlorobutadiene.
	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-.
87865	Pentachlorophenol.
	Phenol, pentachloro-.
88062	Phenol, 2,4,6-trichloro-.
	2,4,6-Trichlorophenol.
88722	o-Nitrotoluene.
88755	o-Nitrophenol.
	2-Nitrophenol.
88857	Dinoseb.
	Phenol, 2-(1-methylpropyl)-4,6-dinitro.
91087	Benzene, 1,3-diisocyanatomethyl-.
	Toluene diisocyanate.
	2,4-Toluene diisocyanate.
91203	Naphthalene.
91225	Quinoline.
91587	beta-Chloronaphthalene.
	Naphthalene, 2-chloro-.
	2-Chloronaphthalene.
91598	beta-Naphthylamine.
	2-Naphthalenamine.
91805	Methapyrilene.
	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl- N'-(2-thienylmethyl)-.
91941	[1,1'-Biphenyl]-4,4'-diamine,3,3'dichloro-.
	3,3'-Dichlorobenzidine.
92875	Benzidine.

CASRN	Hazardous substance
	[1,1'-Biphenyl]-4,4'-diamine.
93721	Propionic acid, 2-(2,4,5-trichlorophenoxy)-.
	Silvex (2,4,5-TP).
	2,4,5-TP acid.
93765	Acetic acid, (2,4,5-trichlorophenoxy).
	2,4,5-T.
	2,4,5-T acid.
93798	2,4,5-T esters.
94111	2,4-D Ester.
94586	Dihydrosafrole.
	1,3-Benzodioxole, 5-propyl-.
94597	Safrole.
	1,3-Benzodioxole, 5-(2-propenyl)-.
94757	Acetic acid (2,4-dichlorophenoxy)-, salts & esters.
	2,4-D Acid.
	2,4-D, salts and esters.
94791	2,4-D Ester.
94804	2,4-D Ester.
95476	o-Benzene, dimethyl.
	o-Xylene.
95487	o-Cresol.
	o-Cresylic acid.
95501	Benzene, 1,2-dichloro-.
	o-Dichlorobenzene.
	1,2-Dichlorobenzene.
95534	Benzenamine, 2-methyl-.
	o-Toluidine.
95578	o-Chlorophenol.
	Phenol, 2-chloro-.
	2-Chlorophenol.
95807	Benzenediamine, ar-methyl-.
	Toluenediamine.
	2,4-Toluene diamine.
95943	Benzene, 1,2,4,5-tetrachloro-.
	1,2,4,5-Tetrachlorobenzene.
95954	Phenol, 2,4,5-trichloro-.
	2,4,5-Trichlorophenol.
96128	Propane, 1,2-dibromo-3-chloro-.
	1,2-Dibromo-3-chloropropane.
96184	1,2,3-Trichloropropane.
96457	Ethylenethiourea.
	2-Imidazolidinethione.
97632	Ethyl methacrylate.
	2-Propenoic acid, 2-methyl-, ethyl ester.
98011	Furfural.
	2-Furancarboxaldehyde.
98077	Benzene, (trichloromethyl)-.
	Benzotrichloride.
98099	Benzenesulfonic acid chloride.
	Benzenesulfonyl chloride.
98828	Benzene, (1-methylethyl)-.
	Cumene.
98862	Acetophenone.
	Ethanone, 1-phenyl-.
98873	Benzal chloride.
	Benzene, dichloromethyl-.
98884	Benzoyl chloride.
98953	Benzene, nitro-.
	Nitrobenzene.
99081	m-Nitrotoluene.
99354	Benzene, 1,3,5-trinitro-.
	1,3,5-Trinitrobenzene.
99558	Benzenamine, 2-methyl-5-nitro-.
	5-Nitro-o-toluidine.
99650	m-Dinitrobenzene.
99990	p-Nitrotoluene.
100016	Benzenamine, 4-nitro-.
	p-Nitroaniline.
100027	p-Nitrophenol.

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CASRN	Hazardous substance
	Phenol, 4-nitro-.
100254	4-Nitrophenol.
100414	p-Dinitrobenzene.
100425	Ethylbenzene.
100447	Styrene.
	Benzene, chloromethyl-.
	Benzyl chloride.
100470	Benzonitrile.
100754	N-Nitrosopiperidine.
	Piperidine, 1-nitroso-.
101144	Benzenamine, 4,4'-methylenebis(2-chloro-4,4'-Methylenebis(2-chloroaniline).
101279	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester (Barban).
101553	Benzene, 1-bromo-4-phenoxy-.
	4-Bromophenyl phenyl ether.
103855	Phenylthiourea.
	Thiourea, phenyl-.
105464	sec-Butyl acetate.
105679	Phenol, 2,4-dimethyl-.
106423	2,4-Dimethylphenol.
	p-Benzene, dimethyl.
	p-Xylene.
106445	p-Cresol.
	p-Cresylic acid.
106467	Benzene, 1,4-dichloro-.
	p-Dichlorobenzene.
	1,4-Dichlorobenzene.
106478	Benzenamine, 4-chloro-.
	p-Chloroaniline.
106490	Benzenamine, 4-methyl-.
	p-Toluidine.
106503	Phenylenediamine (para-isomer).
106514	p-Benzoquinone.
	2,5-Cyclohexadiene-1,4-dione.
	Quinone.
106898	1-Chloro-2,3-epoxypropane.
	Epichlorohydrin.
	Oxirane, (chloromethyl)-.
106934	Dibromoethane.
	Ethane, 1,2-dibromo-.
	Ethylene, dibromide.
107028	Acrolein.
	2-Propenal.
107051	Allyl chloride.
107062	Ethane, 1,2-dichloro-.
	Ethylene dichloride.
	1,2-Dichloroethane.
107108	n-Propylamine.
	1-Propanamine.
107120	Ethyl cyanide.
	Propanenitrile.
107131	Acrylonitrile.
	2-Propenenitrile.
107153	Ethylenediamine.
107186	Allyl alcohol.
	2-Propen-1-ol.
107197	Propargyl alcohol.
	2-Propyn-1-ol.
107200	Acetaldehyde, chloro-.
	Chloroacetaldehyde.
107302	Chloromethyl methyl ether.
	Methane, chloromethoxy-.
107493	Diphosphoric acid, tetraethyl ester.
	Tetraethyl pyrophosphate.
107926	Butyric acid.
108054	Vinyl acetate.
	Vinyl acetate monomer.
108101	Methyl isobutyl ketone.
	4-Methyl-2-pentanone.

CASRN	Hazardous substance
108247	Acetic anhydride.
108316	Maleic anhydride.
	2,5-Furandione.
108383	m-Benzene, dimethyl.
	m-Xylene.
108394	m-Cresol.
	m-Cresylic acid.
108463	Resorcinol.
	1,3-Benzenediol.
108601	Dichloroisopropyl ether.
	Propane, 2,2'-oxybis[2-chloro-.
108883	Benzene, methyl-.
	Toluene.
108907	Benzene, chloro-.
	Chlorobenzene.
108941	Cyclohexanone.
108952	Benzene, hydroxy-.
	Phenol.
108985	Benzenethiol.
	Thiophenol.
109068	Pyridine, 2-methyl-.
	2-Picoline.
109739	Butylamine.
109773	Malononitrile.
	Propanedinitrile.
109897	Diethylamine.
109999	Furan, tetrahydro-.
	Tetrahydrofuran.
110009	Furan.
	Furfuran.
110167	Maleic acid.
110178	Fumaric acid.
110190	iso-Butyl acetate.
110758	Ethene, 2-chloroethoxy-.
	2-Chloroethyl vinyl ether.
110805	Ethanol, 2-ethoxy-.
	Ethylene glycol monoethyl ether.
110827	Benzene, hexahydro-.
	Cyclohexane.
110861	Pyridine.
111444	Bis (2-chloroethyl) ether.
	Dichloroethyl ether.
	Ethane, 1,1'-oxybis[2-chloro-.
111546	Carbamodithioic acid, 1,2-ethanediybis, salts & esters.
	Ethylenebisdithiocarbamic acid, salts & esters.
111911	Bis(2-chloroethoxy) methane.
	Dichloromethoxy ethane.
	Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-.
115026	Azaserine.
	L-Serine, diazoacetate (ester).
115297	Endosulfan.
	6,9-Methano-2,4,3-benzodioxathiepin,
	6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide.
115322	Dicofol.
116063	Aldicarb.
	Propanal, 2-methyl-2-(methylthio)-, 0-[(methylamino)carbonyl]oxime.
117806	Dichlone.
117817	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester.
	Bis(2-ethylhexyl)phthalate.
	DEHP.
	Diethylhexyl phthalate.
117840	Di-n-octyl phthalate.
	1,2-Benzenedicarboxylic acid, dioctyl ester.
118741	Benzene, hexachloro-.
	Hexachlorobenzene.
118796	2,4,6-Tribromophenol

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CASRN	Hazardous substance
119380	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester (Isolan).
119904	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethoxy-, 3,3'-Dimethoxybenzidine.
119937	[1,1'Biphenyl]-4,4'-diamine,3,3'-dimethyl-, 3,3'-Dimethylbenzidine.
120127	Anthracene.
120581	Isosafrole.
120821	1,3-Benzodioxole, 5-)1-propenyl)-.
120832	1,2,4-Trichlorobenzene.
121142	Phenol, 2,4-dichloro-, 2,4-Dichlorophenol.
121211	Benzene, 1-methyl-2,4-dinitro-, 2,4-Dinitrotoluene.
121299	Pyrethrins.
121448	Pyrethrins.
121755	Triethylamine.
122098	Malathion.
122394	alpha, alpha-Dimethylphenethylamine.
122429	Benzeneethanamine, alpha, alpha-dimethyl-, Diphenylamine.
122667	Carbamic acid, phenyl-, 1-methylethyl ester (Propham).
123331	Hydrazine, 1,2-diphenyl-, 1,2-Diphenylhydrazine.
123626	Maleic hydrazide.
123637	3,6-Pyridazinedione, 1,2-dihydro-, Propionic anhydride.
123739	Paraldehyde.
123864	1,3,5-Trioxane, 2,4,6-trimethyl-, Crotonaldehyde.
123911	2-Butenal.
123922	Butyl acetate.
124049	1,4-Diethyleneoxide.
124403	1,4-Diethylenedioxiide.
124414	1,4-Dioxane.
124481	iso-Amyl acetate.
126727	Adipic acid.
126987	Dimethylamine.
126998	Methanamine, N-methyl-, Sodium methylate.
127184	Chlorodibromomethane.
127822	Tris(2,3-dibromopropyl) phosphate.
129000	1-Propanol, 2,3-dibromo-, phosphate (3:1).
130154	Methacrylonitrile.
131113	2-Propenenitrile, 2-methyl-, 2-Chloro-1,3-butadiene.
131748	Ethene, tetrachloro-, Perchloroethylene.
131895	Tetrachloroethylene.
133062	Zinc phenolsulfonate.
134327	Pyrene.
137268	1,4-Naphthalenedione.
137304	1,4-Naphthoquinone.
140885	Dimethyl phthalate.
	1,2-Benzenedicarboxylic acid, dimethyl ester.
	Ammonium picrate.
	Phenol, 2,4,6-trinitro-, ammonium salt.
	Phenol, 2-cyclohexyl-4,6-dinitro-, 2-Cyclohexyl-4,6-dinitrophenol.
	Captan.
	alpha-Naphthylamine.
	1-Naphthalenamine.
	Thioperoxydicarbonic diamide ((H2N)C(S))2S2, tetramethyl-, Thiram.
	Zinc, bis(dimethylcarbomodithioato-S,S')-, (Ziram).
	Ethyl acrylate.

CASRN	Hazardous substance
141786	2-Propenoic acid, ethyl ester.
142289	Acetic acid, ethyl ester.
142712	Ethyl acetate.
142847	1,3-Dichloropropane.
143339	Cupric acetate.
143500	Dipropylamine.
145733	1-Propanamine, N-propyl-, Sodium cyanide, Sodium cyanide Na(CN).
148823	Kepone.
151508	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-, Endothall.
151564	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid.
152169	L-Phenylalanine, 4-[bis(2-chloroethyl) amino].
156605	Melphalan.
189559	Potassium cyanide.
191242	Potassium cyanide K(CN).
193395	Aziridine.
205992	Ethyleneimine.
206440	Diphosphoramidate, octamethyl-, Octamethylpyrophosphoramidate.
207089	Ethene, 1,2-dichloro- (E).
208968	1,2-Dichloroethylene.
218019	Benzo [rst]pentaphene.
225514	Dibenz[a,i]pyrene.
297972	Benzo[ghi]perylene.
298000	Indeno(1,2,3-cd)pyrene.
298022	1,10-(1,2-Phenylene)pyrene.
298044	Benzo[b]fluoranthene.
300765	Benzo[j,k]fluorene.
301042	Fluoranthene.
302012	Benzo(k)fluoranthene.
303344	Acenaphthylene.
	Chrysene.
	1,2-Benzphenanthrene.
	Benz[c]acridine.
	O,O-Diethyl O-pyrazinyl phosphorothioate.
	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester.
	Methyl parathion.
	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester.
	Phorate.
	Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester.
	Disulfoton.
	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester.
	Naled.
	Acetic acid, lead(2+) salt.
	Lead acetate.
	Hydrazine.
	Lasiocarpine.
	2-Butenoic acid, 2-methyl-, 7[[2,3-dihydroxy-2-(1-methoxyethyl)-3-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-.
	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-.
	Chlorambucil.
	Aldrin.
	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1, 4,4a,5,8,8a-hexahydro-(1alpha,4 alpha,4beta,5alpha,8alpha,8beta)-.
	Diethyl-p-nitrophenyl phosphate.

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APPENDIX A TO § 302.4—SEQUENTIAL CAS
REGISTRY NUMBER LIST OF CERCLA HAZ-
ARDOUS SUBSTANCES—Continued

APPENDIX A TO § 302.4—SEQUENTIAL CAS
REGISTRY NUMBER LIST OF CERCLA HAZ-
ARDOUS SUBSTANCES—Continued

CASRN	Hazardous substance
	Phosphoric acid, diethyl 4-nitrophenyl ester.
315184	Mexacarbate.
319846	alpha—BHC.
319857	beta—BHC.
319868	delta—BHC.
329715	2,5-Dinitrophenol.
330541	Diuron.
333415	Diazinon.
353504	Carbon oxyfluoride. Carbonic difluoride.
357573	Brucine. Strychnidin-10-one, 2,3-dimethoxy-.
460195	Cyanogen. Ethanedinitrile.
465736	Isodrin. 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a-hexahydro (1alpha, 4alpha,4abeta,5beta,8beta,8abeta)-.
492808	Auramine. Benzenamine, 4,4'-carbonimidoylbis (N,N-dimethyl(N,N-D,methyl)-).
494031	Chlornaphazine. Naphthalenamine, N,N'-bis(2-chloro- ethyl)-.
496720	Benzenediamine, ar-methyl-. Toluenediamine. 2,4-Toluene diamine.
504245	4-Aminopyridine. 4-Pyridinamine.
504609	1-Methylbutadiene. 1,3-Pentadiene.
506616	Argentate(1-), bis(cyano-C)- ,potassium. Potassium silver cyanide.
506649	Silver cyanide. Silver cyanide Ag(CN).
506683	Cyanogen bromide. Cyanogen bromide (CN)Br.
506774	Cyanogen chloride. Cyanogen chloride (CN)Cl.
506876	Ammonium carbonate.
506967	Acetyl bromide.
509148	Methane, tetranitro-. Tetranitromethane.
510156	Benzenoacetic acid, 4-chloro- α - (4- chlorophenyl)- α -hydroxy-, ethyl ester. Chlorobenzilate.
513495	sec-Butylamine.
528290	o-Dinitrobenzene.
534521	4,6-Dinitro-o-cresol, and salts. Phenol, 2-methyl-4,6-dinitro-, & salts.
540738	Hydrazine, 1,2-dimethyl-. 1,2-Dimethylhydrazine.
540885	tert-Butyl acetate.
541093	Uranyl acetate.
541537	Dithiobiuret. Thioimidodicarbonic diamide [(H2N)C(S)]2NH.
541731	Benzene, 1,3-dichloro-. m-Dichlorobenzene. 1,3-Dichlorobenzene.
542621	Barium cyanide.
542756	1-Propene, 1,3-dichloro-. 1,3-Dichloropropene.
542767	Propanenitrile, 3-chloro-. 3-Chloropropionitrile.
542881	Bis(chloromethyl)ether. Dichloromethyl ether. Methane, oxybis(chloro)-.
543908	Cadmium acetate.
544183	Cobaltous formate.

CASRN	Hazardous substance
544923	Copper cyanide CuCN. Copper cyanide.
554847	m-Nitrophenol.
557197	Nickel cyanide. Nickel cyanide Ni(CN)2.
557211	Zinc cyanide. Zinc cyanide Zn(CN)2.
557346	Zinc acetate.
557415	Zinc formate.
563122	Ethion.
563688	Acetic acid, thallium(1+) salt. Thallium(I) acetate.
573568	2,6-Dinitrophenol.
584849	Benzene, 1,3-diisocyanatomethyl-. Toluene diisocyanate. 2,4-Toluene diisocyanate.
591082	Acetamide, N-(aminothioxomethyl)-. 1-Acetyl-2-thiourea.
592018	Calcium cyanide. Calcium cyanide Ca(CN)2.
592041	Mercuric cyanide.
592858	Mercuric thiocyanate.
592870	Lead thiocyanate.
594423	Methanesulfonyl chloride, trichloro-. Trichloromethanesulfonyl chloride.
598312	Bromoacetone. 2-Propanone, 1-bromo-.
606202	Benzene, 1-methyl-1,3-dinitro-. 2,6-Dinitrotoluene.
608731	HEXACHLOROCYCLOHEXANE (all isomers).
608935	Benzene, pentachloro-. Pentachlorobenzene.
609198	3,4,5-Trichlorophenol.
610399	3,4-Dinitrotoluene.
615532	Carbamic acid, methylnitroso-, ethyl ester. N-Nitroso-N-methylurethane.
616239	n-,2,3 Dichloropropanol.
621647	Di-n-propylnitrosamine. 1-Propanamine, N-nitroso-N-propyl-.
624839	Methane, isocyanato-. Methyl isocyanate.
625161	tert-Amyl acetate.
626380	sec-Amyl acetate.
628637	Amyl acetate.
628864	Fulminic acid, mercury(2+)salt. Mercury fulminate.
630104	Selenourea.
630206	Ethane, 1,1,1,2-tetrachloro-. 1,1,1,2-Tetrachloroethane.
631618	Ammonium acetate.
636215	Benzenamine, 2-methyl-, hydrochloride. o-Toluidine hydrochloride.
640197	Acetamide, 2-fluoro-. Fluoroacetamide.
644644	Carbamic acid, dimethyl-, 1- [[dimethylamino]carbonyl]-5-methyl-1H- pyrazol-3-yl ester (Dimetilan).
684935	N-Nitroso-N-methylurea. Urea, N-methyl-N-nitroso.
692422	Arsine, diethyl-. Diethylarsine.
696286	Arsonous dichloride, phenyl-. Dichlorophenylarsine.
757584	Hexaethyl tetraphosphate. Tetraphosphoric acid, hexaethyl ester.
759739	N-Nitroso-N-ethylurea. Urea, N-ethyl-N-nitroso-.
764410	1,4-Dichloro-2-butene. 2-Butene, 1,4-dichloro-.
765344	Glycidylaldehyde.

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APPENDIX A TO § 302.4—SEQUENTIAL CAS REGISTRY NUMBER LIST OF CERCLA HAZARDOUS SUBSTANCES—Continued

APPENDIX A TO § 302.4—SEQUENTIAL CAS REGISTRY NUMBER LIST OF CERCLA HAZARDOUS SUBSTANCES—Continued

CASRN	Hazardous substance
815827	Oxiranecarboxyaldehyde.
823405	Cupric tartrate. Benzenediamine, ar-methyl- Toluenediamine. 2,4-Toluene diamine.
924163	N-Nitrosodi-n-butylamine. 1-Butanamine, N-butyl-N-nitroso-.
930552	N-Nitrosopyrrolidine. Pyrrolidine, 1-nitroso-.
933755	2,3,6-Trichlorophenol.
933788	2,3,5-Trichlorophenol.
959988	alpha-Endosulfan.
1024573	Heptachlor epoxide.
1031078	Endosulfan sulfate.
1066304	Chromic acetate.
1066337	Ammonium bicarbonate.
1072351	Lead stearate.
1111780	Ammonium carbamate.
1116547	Ethanol, 2,2'-(nitrosoimino)bis- N-Nitrosodiethanolamine.
1120714	1,2-Oxathiolane, 2,2-dioxide. 1,3-Propane sultone.
1129415	Carbamic acid, methyl-, 3-methylphenyl ester (Metolcarb).
1185575	Ferric ammonium citrate.
1194656	Dichlobenil.
1300716	Xylenol.
1303282	Arsenic oxide As ₂ O ₅ . Arsenic pentoxide.
1303328	Arsenic disulfide.
1303339	Arsenic trisulfide.
1309644	Antimony trioxide.
1310583	Potassium hydroxide.
1310732	Sodium hydroxide.
1314325	Thallic oxide. Thallium oxide Tl ₂ O ₃ .
1314621	Vanadium oxide V ₂ O ₅ . Vanadium pentoxide.
1314803	Phosphorus pentasulfide. Phosphorus sulfide. Sulfur phosphide.
1314847	Zinc phosphide. Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10%.
1314870	Lead sulfide.
1319728	2,4,5-T amines.
1319773	Cresol(s). Cresylic acid. Phenol, methyl-.
1320189	2,4-D Ester.
1321126	Nitrotoluene.
1327522	Arsenic acid. Arsenic acid H ₃ AsO ₄ .
1327533	Arsenic oxide As ₂ O ₃ . Arsenic trioxide.
1330207	Benzene, dimethyl. Xylene (mixed).
1332076	Zinc borate.
1332214	Asbestos.
1333831	Sodium bifluoride.
1335326	Lead subacetate. Lead, bis(acetato-O)tetrahydroxytri.
1336216	Ammonium hydroxide.
1336363	Aroclors. PCBs. POLYCHLORINATED BIPHENYLS.
1338234	Methyl ethyl ketone peroxide. 2-Butanone peroxide.
1338245	Naphthenic acid.
1341497	Ammonium bifluoride.

CASRN	Hazardous substance
1464535	1,2:3,4-Diepoxybutane.
1563388	2,2'-Bioxirane. 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- (Carbofuran phenol).
1563662	Carbofuran.
1615801	Hydrazine, 1,2-diethyl- N,N'-Diethylhydrazine.
1646884	Propanal, 2-methyl-2-(methylsulfonyl)-, O- [(methylamino)carbonyl] oxime (Aldicarb sulfone).
1746016	TCDD. 2,3,7,8-Tetrachlorodibenzo-p-dioxin.
1762954	Ammonium thiocyanate.
1863634	Ammonium benzoate.
1888717	Hexachloropropene. 1-Propene, 1,1,2,3,3,3-hexachloro-.
1918009	Dicamba.
1928387	2,4-D Ester.
1928478	2,4,5-T esters.
1928616	2,4-D Ester.
1929733	2,4-D Ester.
2008460	2,4,5-T amines.
2032657	Mercaptodimethur.
2303164	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester. Diallate.
2303175	Carbamothioic acid, bis(1-methylethyl)-, S- (2,3,3-trichloro-2-propenyl) ester (Triallate).
2312358	Propargite.
2545597	2,4,5-T esters.
2631370	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate (Promecarb).
2763964	Muscimol. 3(2H)-Isoxazolone, 5-(aminomethyl)-. 5-(Aminomethyl)-3-isoxazolol.
2764729	Diquat
2921882	Chlorpyrifos.
2944674	Ferric ammonium oxalate.
2971382	2,4-D Ester.
3012655	Ammonium citrate, dibasic.
3164292	Ammonium tartrate.
3165933	Benzenamine, 4-chloro-2-methyl-, hydrochloride. 4-Chloro-o-toluidine, hydrochloride.
3251238	Cupric nitrate.
3288582	O,O-Diethyl S-methyl dithiophosphate. Phosphorodithioic acid, O,O-diethyl S-methyl ester.
3486359	Zinc carbonate.
3689245	Tetraethyldithiopyrophosphate. Thiodiphosphoric acid, tetraethyl ester.
3813147	2,4,5-T amines.
4170303	Crotonaldehyde. 2-Butenal.
4549400	N-Nitrosomethylvinylamine. Vinylamine, N-methyl-N-nitroso-.
5344821	Thiourea, (2-chlorophenyl)-. 1-(o-Chlorophenyl)thiourea.
5893663	Cupric oxalate.
5952261	Ethanol, 2,2'-oxybis-, dicarbamate (Diethylene glycol, dicarbamate).
5972736	Ammonium oxalate.
6009707	Ammonium oxalate.
6369966	2,4,5-T amines.
6369977	2,4,5-T amines.
6533739	Carbonic acid, dithallium(1+) salt. Thallium(I) carbonate.
7005723	4-Chlorophenyl phenyl ether.
7421934	Endrin aldehyde.
7428480	Lead stearate.

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APPENDIX A TO § 302.4—SEQUENTIAL CAS
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APPENDIX A TO § 302.4—SEQUENTIAL CAS
REGISTRY NUMBER LIST OF CERCLA HAZ-
ARDOUS SUBSTANCES—Continued

CASRN	Hazardous substance
7439921	Lead.
7439976	Mercury.
7440020	Nickel.
7440224	Silver.
7440235	Sodium.
7440280	Thallium.
7440360	Antimony.
7440382	Arsenic.
7440417	Beryllium powder.
7440439	Cadmium.
7440473	Chromium.
7440508	Copper.
7440666	Zinc.
7446084	Selenium dioxide.
	Selenium oxide.
7446142	Lead sulfate.
7446186	Sulfuric acid, dithallium(1+) salt.
	Thallium(I) sulfate.
7446277	Lead phosphate.
	Phosphoric acid, lead(2+) salt (2:3).
7447394	Cupric chloride.
7488564	Selenium sulfide.
	Selenium sulfide SeS2.
7558794	Sodium phosphate, dibasic.
7601549	Sodium phosphate, tribasic.
7631892	Sodium arsenate.
7631905	Sodium bisulfite.
7632000	Sodium nitrite.
7645252	Lead arsenate.
7646857	Zinc chloride.
7647010	Hydrochloric acid.
	Hydrogen chloride.
7647189	Antimony pentachloride.
7664382	Phosphoric acid.
7664393	Hydrofluoric acid.
	Hydrogen fluoride.
7664417	Ammonia.
7664939	Sulfuric acid.
7681494	Sodium fluoride.
7681529	Sodium hypochlorite.
7697372	Nitric acid.
7699458	Zinc bromide.
7705080	Ferric chloride.
7718549	Nickel chloride.
7719122	Phosphorus trichloride.
7720787	Ferrous sulfate.
7722647	Potassium permanganate.
7723140	Phosphorus.
7733020	Zinc sulfate.
7738945	Chromic acid.
7758294	Sodium phosphate, tribasic.
7758943	Ferrous chloride.
7758954	Lead chloride.
7758987	Cupric sulfate.
7761888	Silver nitrate.
7773060	Ammonium sulfamate.
7775113	Sodium chromate.
7778394	Arsenic acid.
	Arsenic acid H3AsO4.
7778441	Calcium arsenate.
7778509	Potassium bichromate.
7778543	Calcium hypochlorite.
7779864	Zinc hydrosulfite.
7779886	Zinc nitrate.
7782414	Fluorine.
7782492	Selenium.
7782505	Chlorine.
7782630	Ferrous sulfate.
7782823	Sodium selenite.
7782867	Mercurous nitrate.

CASRN	Hazardous substance
7783008	Selenious acid.
7783064	Hydrogen sulfide.
	Hydrogen sulfide H2S.
7783359	Mercuric sulfate.
7783462	Lead fluoride.
7783495	Zinc fluoride.
7783508	Ferric fluoride.
7783564	Antimony trifluoride.
7784341	Arsenic trichloride.
7784409	Lead arsenate.
7784410	Potassium arsenate.
7784465	Sodium arsenite.
7785844	Sodium phosphate, tribasic.
7786347	Meviphos.
7786814	Nickel sulfate.
7787475	Beryllium chloride.
7787497	Beryllium fluoride.
7787555	Beryllium nitrate.
7788989	Ammonium chromate.
7789006	Potassium chromate.
7789062	Strontium chromate.
7789095	Ammonium bichromate.
7789426	Cadmium bromide.
7789437	Cobaltous bromide.
7789619	Antimony tribromide.
7790945	Chlorosulfonic acid.
7791120	Thallium chloride TlCl.
	Thallium(I) chloride.
7803512	Hydrogen phosphide.
	Phosphine.
7803556	Ammonium vanadate.
	Vanadic acid, ammonium salt.
8001352	Camphene, octachloro-.
	Chlorinated camphene.
	Toxaphene.
8001589	Creosote.
8003198	Dichloropropane—Dichloropropene (mixture).
8003347	Pyrethrins.
8014957	Sulfuric acid.
10022705	Sodium hypochlorite.
10025873	Phosphorus oxychloride.
10025919	Antimony trichloride.
10026116	Zirconium tetrachloride.
10028225	Ferric sulfate.
10031591	Sulfuric acid, dithallium(1+) salt.
	Thallium(I) sulfate.
10039324	Sodium phosphate, dibasic.
10043013	Aluminum sulfate.
10045893	Ferrous ammonium sulfate.
10045940	Mercuric nitrate.
10049055	Chromous chloride.
10099748	Lead nitrate.
10101538	Chromic sulfate.
10101630	Lead iodide.
10101890	Sodium phosphate, tribasic.
10102064	Uranyl nitrate.
10102188	Sodium selenite.
10102439	Nitric oxide.
	Nitrogen oxide NO.
10102440	Nitrogen dioxide.
	Nitrogen oxide NO2.
10102451	Nitric acid, thallium(1+) salt.
	Thallium(I) nitrate.
10102484	Lead arsenate.
10108642	Cadmium chloride.
10124502	Potassium arsenite.
10124568	Sodium phosphate, tribasic.
10140655	Sodium phosphate, dibasic.
10192300	Ammonium bisulfite.
10196040	Ammonium sulfite.

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CASRN	Hazardous substance
10361894	Sodium phosphate, tribasic.
10380297	Cupric sulfate, ammoniated.
10415755	Mercurous nitrate.
10421484	Ferric nitrate.
10544726	Nitrogen dioxide. Nitrogen oxide NO2.
10588019	Sodium bichromate.
10605217	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester (Carbendazim).
11096825	Aroclor 1260. Aroclors. PCBs. POLYCHLORINATED BIPHENYLS.
11097691	Aroclor 1254. Aroclors. PCBs. POLYCHLORINATED BIPHENYLS.
11104282	Aroclor 1221. Aroclors. PCBs. POLYCHLORINATED BIPHENYLS.
11115745	Chromic acid.
11141165	Aroclor 1232. Aroclors. PCBs. POLYCHLORINATED BIPHENYLS.
12002038	Cupric acetoarsenite.
12039520	Selenious acid, dithallium(1+) salt. Thallium selenite.
12054487	Nickel hydroxide.
12125018	Ammonium fluoride.
12125029	Ammonium chloride.
12135761	Ammonium sulfide.
12672296	Aroclor 1248. Aroclors. PCBs. POLYCHLORINATED BIPHENYLS.
12674112	Aroclor 1016. Aroclors. PCBs. POLYCHLORINATED BIPHENYLS.
12771083	Sulfur monochloride.
13463393	Nickel carbonyl. Nickel carbonyl Ni(CO)4, (T-4)- 2,4,5-T salts.
13560991	Beryllium nitrate.
13597994	Zirconium nitrate.
13746899	Calcium chromate.
13765190	Chromic acid H2CrO4, calcium salt. Lead fluoborate.
13814965	Ammonium fluoborate.
13826830	sec-Butylamine.
13952846	Cobaltous sulfamate.
14017415	Nickel nitrate.
14216752	Ammonium oxalate.
14258492	Lithium chromate.
14307358	Ammonium tartrate.
14307438	Zinc ammonium chloride.
14639975	Zinc ammonium chloride.
14639986	Zinc ammonium chloride.
14644612	Zirconium sulfate.
15339363	Manganese, bis(dimethylcarbomodithioato-S,S')- (Manganese dimethyldithiocarbamate).
15699180	Nickel ammonium sulfate.
15739807	Lead sulfate.
15950660	2,3,4-Trichlorophenol.
16721805	Sodium hydrosulfide.
16752775	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester. Methomyl.

CASRN	Hazardous substance
16871719	Zinc silicofluoride.
16919190	Ammonium silicofluoride.
16923958	Zirconium potassium fluoride.
17702577	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[[(methylamino)carbonyl]oxy]phenyl]- (Formparanate).
17804352	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl, methyl ester (Benomyl).
18883664	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)carbonyl]amino]-, 2-deoxy-2-(3-methyl-3-nitrosoureido)-. Streptozotocin.
20816120	Osmium oxide OsO4 (T-4). Osmium tetroxide.
20830813	Daunomycin. 5,12-Naphthacenedione, 8-acetyl-10-[3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-.
20859738	Aluminum phosphide.
22781233	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate (Bendiocarb).
22961826	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, (Bendiocarb phenol).
23135220	Ethanimidothioic acid, 2-(dimethylamino)-N-[[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester (Oxamyl).
23422539	Methanimidamide, N,N-dimethyl-N'-[3-[[[(methylamino)carbonyl]oxy]phenyl]-, monohydrochloride (Formetanate hydrochloride).
23564058	Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester (Thiophanate-methyl).
23950585	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propenyl)-. Pronamide.
25154545	Dinitrobenzene (mixed).
25154556	Nitrophenol (mixed).
25155300	Sodium dodecylbenzenesulfonate.
25167822	Trichlorophenol.
25168154	2,4,5-T esters.
25168267	2,4-D Ester.
25321146	Dinitrotoluene.
25321226	Dichlorobenzene.
25376458	Benzenediamine, ar-methyl-. Toluenediamine. 2,4-Toluene diamine. Dinitrophenol.
25550587	Calcium dodecylbenzenesulfonate.
26264062	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[[[(methylamino)carbonyl]oxime (Tirpate).
26419738	Benzene, 1,3-diisocyanatomethyl-. Toluene diisocyanate. 2,4-Toluene diisocyanate.
26628228	Sodium azide.
26638197	Dichloropropane.
26952238	Dichloropropene.
27176870	Dodecylbenzenesulfonic acid.
27323417	Triethanolamine dodecylbenzene sulfonate.
27774136	Vanadyl sulfate.
28300745	Antimony potassium tartrate.
30525894	Paraformaldehyde.
30558431	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester (A2213).
32534955	2,4,5-TP esters.
33213659	beta - Endosulfan.
36478769	Uranyl nitrate.

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CASRN	Hazardous substance
37211055	Nickel chloride.
39196184	Thiofanox 2-Butanone, 3,3-dimethyl-1-(methylthio)-, O[(methylamino)carbonyl] oxime.
42504461	Isopropanolamine dodecylbenzenesulfonate.
52628258	Zinc ammonium chloride.
52652592	Lead stearate.
52740166	Calcium arsenite.
52888809	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester (Prosulfocarb).
53467111	2,4-D Ester.
53469219	Aroclor 1242 Aroclors. PCBs. POLYCHLORINATED BIPHENYLS.
55285148	Carbamic acid, [(dibutylamino)thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester (Carbosulfan).
55488874	Ferric ammonium oxalate.
56189094	Lead stearate.
59669260	Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, di-methyl ester (Thiodicarb).
61792072	2,4,5-T esters.

APPENDIX B TO § 302.4—RADIONUCLIDES

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Radionuclides®		1& (3.7E 10)
Actinium-224	89	100 (3.7E 12)
Actinium-225	89	1 (3.7E 10)
Actinium-226	89	10 (3.7E 11)
Actinium-227	89	0.001 (3.7E 7)
Actinium-228	89	10 (3.7E 11)
Aluminum-26	13	10 (3.7E 11)
Americium-237	95	1000 (3.7E 13)
Americium-238	95	100 (3.7E 12)
Americium-239	95	100 (3.7E 12)
Americium-240	95	10 (3.7E 11)
Americium-241	95	0.01 (3.7E 8)
Americium-242m	95	0.01 (3.7E 8)
Americium-242	95	100 (3.7E 12)
Americium-243	95	0.01 (3.7E 8)
Americium-244m	95	1000 (3.7E 13)
Americium-244	95	10 (3.7E 11)
Americium-245	95	1000 (3.7E 13)
Americium-246m	95	1000 (3.7E 13)
Americium-246	95	1000 (3.7E 13)
Antimony-115	51	1000 (3.7E 13)
Antimony-116m	51	100 (3.7E 12)
Antimony-116	51	1000 (3.7E 13)
Antimony-117	51	1000 (3.7E 13)
Antimony-118m	51	10 (3.7E 11)
Antimony-119	51	1000 (3.7E 13)
Antimony-120 (16 min)	51	1000 (3.7E 13)
Antimony-120 (5.76 day)	51	10 (3.7E 11)
Antimony-122	51	10 (3.7E 11)
Antimony-124m	51	1000 (3.7E 13)
Antimony-124	51	10 (3.7E 11)
Antimony-125	51	10 (3.7E 11)
Antimony-126m	51	1000 (3.7E 13)
Antimony-126	51	10 (3.7E 11)
Antimony-127	51	10 (3.7E 11)
Antimony-128 (10.4 min)	51	1000 (3.7E 13)
Antimony-128 (9.01 hr)	51	10 (3.7E 11)
Antimony-129	51	100 (3.7E 12)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Antimony-130	51	100 (3.7E 12)
Antimony-131	51	1000 (3.7E 13)
Argon-39	18	1000 (3.7E 13)
Argon-41	18	10 (3.7E 11)
Arsenic-69	33	1000 (3.7E 13)
Arsenic-70	33	100 (3.7E 12)
Arsenic-71	33	100 (3.7E 12)
Arsenic-72	33	10 (3.7E 11)
Arsenic-73	33	100 (3.7E 12)
Arsenic-74	33	10 (3.7E 11)
Arsenic-76	33	100 (3.7E 12)
Arsenic-77	33	1000 (3.7E 13)
Arsenic-78	33	100 (3.7E 12)
Astatine-207	85	100 (3.7E 12)
Astatine-211	85	100 (3.7E 12)
Barium-126	56	1000 (3.7E 13)
Barium-128	56	10 (3.7E 11)
Barium-131m	56	1000 (3.7E 13)
Barium-131	56	10 (3.7E 11)
Barium-133m	56	100 (3.7E 12)
Barium-133	56	10 (3.7E 11)
Barium-135m	56	1000 (3.7E 13)
Barium-139	56	1000 (3.7E 13)
Barium-140	56	10 (3.7E 11)
Barium-141	56	1000 (3.7E 13)
Barium-142	56	1000 (3.7E 13)
Berkelium-245	97	100 (3.7E 12)
Berkelium-246	97	10 (3.7E 11)
Berkelium-247	97	0.01 (3.7E 8)
Berkelium-249	97	1 (3.7E 10)
Berkelium-250	97	100 (3.7E 12)
Beryllium-7	4	100 (3.7E 12)
Beryllium-10	4	1 (3.7E 10)
Bismuth-200	83	100 (3.7E 12)
Bismuth-201	83	100 (3.7E 12)
Bismuth-202	83	1000 (3.7E 13)
Bismuth-203	83	10 (3.7E 11)
Bismuth-205	83	10 (3.7E 11)
Bismuth-206	83	10 (3.7E 11)
Bismuth-207	83	10 (3.7E 11)
Bismuth-210m	83	0.1 (3.7E 9)
Bismuth-210	83	10 (3.7E 11)
Bismuth-212	83	100 (3.7E 12)
Bismuth-213	83	100 (3.7E 12)
Bismuth-214	83	100 (3.7E 12)
Bromine-74m	35	100 (3.7E 12)
Bromine-74	35	100 (3.7E 12)
Bromine-75	35	100 (3.7E 12)
Bromine-76	35	10 (3.7E 11)
Bromine-77	35	100 (3.7E 12)
Bromine-80m	35	1000 (3.7E 13)
Bromine-80	35	1000 (3.7E 13)
Bromine-82	35	10 (3.7E 11)
Bromine-83	35	1000 (3.7E 13)
Bromine-84	35	100 (3.7E 12)
Cadmium-104	48	1000 (3.7E 13)
Cadmium-107	48	1000 (3.7E 13)
Cadmium-109	48	1 (3.7E 10)
Cadmium-113m	48	0.1 (3.7E 9)
Cadmium-113	48	0.1 (3.7E 9)
Cadmium-115m	48	10 (3.7E 11)
Cadmium-115	48	100 (3.7E 12)
Cadmium-117m	48	10 (3.7E 11)
Cadmium-117	48	100 (3.7E 12)
Calcium-41	20	10 (3.7E 11)
Calcium-45	20	10 (3.7E 11)
Calcium-47	20	10 (3.7E 11)
Californium-244	98	1000 (3.7E 13)
Californium-246	98	10 (3.7E 11)
Californium-248	98	0.1 (3.7E 9)

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Radionuclide	Atomic Number	Final RQ Ci (Bq)
Californium-249	98	0.01 (3.7E 8)
Californium-250	98	0.01 (3.7E 8)
Californium-251	98	0.01 (3.7E 8)
Californium-252	98	0.1 (3.7E 9)
Californium-253	98	10 (3.7E 11)
Californium-254	98	0.1 (3.7E 9)
Carbon-11	6	1000 (3.7E 13)
Carbon-14	6	10 (3.7E 11)
Cerium-134	58	10 (3.7E 11)
Cerium-135	58	10 (3.7E 11)
Cerium-137m	58	100 (3.7E 12)
Cerium-137	58	1000 (3.7E 13)
Cerium-139	58	100 (3.7E 12)
Cerium-141	58	10 (3.7E 11)
Cerium-143	58	100 (3.7E 12)
Cerium-144	58	1 (3.7E 10)
Cesium-125	55	1000 (3.7E 13)
Cesium-127	55	100 (3.7E 12)
Cesium-129	55	100 (3.7E 12)
Cesium-130	55	1000 (3.7E 13)
Cesium-131	55	1000 (3.7E 13)
Cesium-132	55	10 (3.7E 11)
Cesium-134m	55	1000 (3.7E 13)
Cesium-134	55	1 (3.7E 10)
Cesium-135m	55	100 (3.7E 12)
Cesium-135	55	10 (3.7E 11)
Cesium-136	55	10 (3.7E 11)
Cesium-137	55	1 (3.7E 10)
Cesium-138	55	100 (3.7E 12)
Chlorine-36	17	10 (3.7E 11)
Chlorine-38	17	100 (3.7E 12)
Chlorine-39	17	100 (3.7E 12)
Chromium-48	24	100 (3.7E 12)
Chromium-49	24	1000 (3.7E 13)
Chromium-51	24	1000 (3.7E 13)
Cobalt-55	27	10 (3.7E 11)
Cobalt-56	27	10 (3.7E 11)
Cobalt-57	27	100 (3.7E 12)
Cobalt-58m	27	1000 (3.7E 13)
Cobalt-58	27	10 (3.7E 11)
Cobalt-60m	27	1000 (3.7E 13)
Cobalt-60	27	10 (3.7E 11)
Cobalt-61	27	1000 (3.7E 13)
Cobalt-62m	27	1000 (3.7E 13)
Copper-60	29	100 (3.7E 12)
Copper-61	29	100 (3.7E 12)
Copper-64	29	1000 (3.7E 13)
Copper-67	29	100 (3.7E 12)
Curium-238	96	1000 (3.7E 13)
Curium-240	96	1 (3.7E 10)
Curium-241	96	10 (3.7E 11)
Curium-242	96	1 (3.7E 10)
Curium-243	96	0.01 (3.7E 8)
Curium-244	96	0.01 (3.7E 8)
Curium-245	96	0.01 (3.7E 8)
Curium-246	96	0.01 (3.7E 8)
Curium-247	96	0.01 (3.7E 8)
Curium-248	96	0.001 (3.7E 7)
Curium-249	96	1000 (3.7E 13)
Dysprosium-155	66	100 (3.7E 12)
Dysprosium-157	66	100 (3.7E 12)
Dysprosium-159	66	100 (3.7E 12)
Dysprosium-165	66	1000 (3.7E 13)
Dysprosium-166	66	10 (3.7E 11)
Einsteinium-250	99	10 (3.7E 11)
Einsteinium-251	99	1000 (3.7E 13)
Einsteinium-253	99	10 (3.7E 11)
Einsteinium-254m	99	1 (3.7E 10)
Einsteinium-254	99	0.1 (3.7E 9)
Erbium-161	68	100 (3.7E 12)

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Erbium-165	68	1000 (3.7E 13)
Erbium-169	68	100 (3.7E 12)
Erbium-171	68	100 (3.7E 12)
Erbium-172	68	10 (3.7E 11)
Europium-145	63	10 (3.7E 11)
Europium-146	63	10 (3.7E 11)
Europium-147	63	10 (3.7E 11)
Europium-148	63	10 (3.7E 11)
Europium-149	63	100 (3.7E 12)
Europium-150 (12.6 hr)	63	1000 (3.7E 13)
Europium-150 (34.2 yr)	63	10 (3.7E 11)
Europium-152m	63	100 (3.7E 12)
Europium-152	63	10 (3.7E 11)
Europium-154	63	10 (3.7E 11)
Europium-155	63	10 (3.7E 11)
Europium-156	63	10 (3.7E 11)
Europium-157	63	10 (3.7E 11)
Europium-158	63	1000 (3.7E 13)
Fermium-252	100	10 (3.7E 11)
Fermium-253	100	10 (3.7E 11)
Fermium-254	100	100 (3.7E 12)
Fermium-255	100	100 (3.7E 12)
Fermium-257	100	1 (3.7E 10)
Fluorine-18	9	1000 (3.7E 13)
Francium-222	87	100 (3.7E 12)
Francium-223	87	100 (3.7E 12)
Gadolinium-145	64	100 (3.7E 12)
Gadolinium-146	64	10 (3.7E 11)
Gadolinium-147	64	10 (3.7E 11)
Gadolinium-148	64	0.001 (3.7E 7)
Gadolinium-149	64	100 (3.7E 12)
Gadolinium-151	64	100 (3.7E 12)
Gadolinium-152	64	0.001 (3.7E 7)
Gadolinium-153	64	10 (3.7E 11)
Gadolinium-159	64	1000 (3.7E 13)
Gallium-65	31	1000 (3.7E 13)
Gallium-66	31	10 (3.7E 11)
Gallium-67	31	100 (3.7E 12)
Gallium-68	31	1000 (3.7E 13)
Gallium-70	31	1000 (3.7E 13)
Gallium-72	31	10 (3.7E 11)
Gallium-73	31	100 (3.7E 12)
Germanium-66	32	100 (3.7E 12)
Germanium-67	32	1000 (3.7E 13)
Germanium-68	32	10 (3.7E 11)
Germanium-69	32	10 (3.7E 11)
Germanium-71	32	1000 (3.7E 13)
Germanium-75	32	1000 (3.7E 13)
Germanium-77	32	10 (3.7E 11)
Germanium-78	32	1000 (3.7E 13)
Gold-193	79	100 (3.7E 12)
Gold-194	79	10 (3.7E 11)
Gold-195	79	100 (3.7E 12)
Gold-198m	79	10 (3.7E 11)
Gold-198	79	100 (3.7E 12)
Gold-199	79	100 (3.7E 12)
Gold-200m	79	10 (3.7E 11)
Gold-200	79	1000 (3.7E 13)
Gold-201	79	1000 (3.7E 13)
Hafnium-170	72	100 (3.7E 12)
Hafnium-172	72	1 (3.7E 10)
Hafnium-173	72	100 (3.7E 12)
Hafnium-175	72	100 (3.7E 12)
Hafnium-177m	72	1000 (3.7E 13)
Hafnium-178m	72	0.1 (3.7E 9)
Hafnium-179m	72	100 (3.7E 12)
Hafnium-180m	72	100 (3.7E 12)
Hafnium-181	72	10 (3.7E 11)
Hafnium-182m	72	100 (3.7E 12)
Hafnium-182	72	0.1 (3.7E 9)

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Radionuclide	Atomic Number	Final RQ Ci (Bq)
Hafnium-183	72	100 (3.7E 12)
Hafnium-184	72	100 (3.7E 12)
Holmium-155	67	1000 (3.7E 13)
Holmium-157	67	1000 (3.7E 13)
Holmium-159	67	1000 (3.7E 13)
Holmium-161	67	1000 (3.7E 13)
Holmium-162m	67	1000 (3.7E 13)
Holmium-162	67	1000 (3.7E 13)
Holmium-164m	67	1000 (3.7E 13)
Holmium-164	67	1000 (3.7E 13)
Holmium-166m	67	1 (3.7E 10)
Holmium-166	67	100 (3.7E 12)
Holmium-167	67	100 (3.7E 12)
Hydrogen-3	1	100 (3.7E 12)
Indium-109	49	100 (3.7E 12)
Indium-110 (69.1 min)	49	100 (3.7E 12)
Indium-110 (4.9 hr)	49	10 (3.7E 11)
Indium-111	49	100 (3.7E 12)
Indium-112	49	1000 (3.7E 13)
Indium-113m	49	1000 (3.7E 13)
Indium-114m	49	10 (3.7E 11)
Indium-115m	49	100 (3.7E 12)
Indium-115	49	0.1 (3.7E 9)
Indium-116m	49	100 (3.7E 12)
Indium-117m	49	100 (3.7E 12)
Indium-117	49	1000 (3.7E 13)
Indium-119m	49	1000 (3.7E 13)
Iodine-120m	53	100 (3.7E 12)
Iodine-120	53	10 (3.7E 11)
Iodine-121	53	100 (3.7E 12)
Iodine-123	53	10 (3.7E 11)
Iodine-124	53	0.1 (3.7E 9)
Iodine-125	53	0.01 (3.7E 8)
Iodine-126	53	0.01 (3.7E 8)
Iodine-128	53	1000 (3.7E 13)
Iodine-129	53	0.001 (3.7E 7)
Iodine-130	53	1 (3.7E 10)
Iodine-131	53	0.01 (3.7E 8)
Iodine-132m	53	10 (3.7E 11)
Iodine-132	53	10 (3.7E 11)
Iodine-133	53	0.1 (3.7E 9)
Iodine-134	53	100 (3.7E 12)
Iodine-135	53	10 (3.7E 11)
Iridium-182	77	1000 (3.7E 13)
Iridium-184	77	100 (3.7E 12)
Iridium-185	77	100 (3.7E 12)
Iridium-186	77	10 (3.7E 11)
Iridium-187	77	100 (3.7E 12)
Iridium-188	77	10 (3.7E 11)
Iridium-189	77	100 (3.7E 12)
Iridium-190m	77	1000 (3.7E 13)
Iridium-190	77	10 (3.7E 11)
Iridium-192m	77	100 (3.7E 12)
Iridium-192	77	10 (3.7E 11)
Iridium-194m	77	10 (3.7E 11)
Iridium-194	77	100 (3.7E 12)
Iridium-195m	77	100 (3.7E 12)
Iridium-195	77	1000 (3.7E 13)
Iron-52	26	100 (3.7E 12)
Iron-55	26	100 (3.7E 12)
Iron-59	26	10 (3.7E 11)
Iron-60	26	0.1 (3.7E 9)
Krypton-74	36	10 (3.7E 11)
Krypton-76	36	10 (3.7E 11)
Krypton-77	36	10 (3.7E 11)
Krypton-79	36	100 (3.7E 12)
Krypton-81	36	1000 (3.7E 13)
Krypton-83m	36	1000 (3.7E 13)
Krypton-85m	36	100 (3.7E 12)
Krypton-85	36	1000 (3.7E 13)

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Krypton-87	36	10 (3.7E 11)
Krypton-88	36	10 (3.7E 11)
Lanthanum-131	57	1000 (3.7E 13)
Lanthanum-132	57	100 (3.7E 12)
Lanthanum-135	57	1000 (3.7E 13)
Lanthanum-137	57	10 (3.7E 11)
Lanthanum-138	57	1 (3.7E 10)
Lanthanum-140	57	10 (3.7E 11)
Lanthanum-141	57	1000 (3.7E 13)
Lanthanum-142	57	100 (3.7E 12)
Lanthanum-143	57	1000 (3.7E 13)
Lead-195m	82	1000 (3.7E 13)
Lead-198	82	100 (3.7E 12)
Lead-199	82	100 (3.7E 12)
Lead-200	82	100 (3.7E 12)
Lead-201	82	100 (3.7E 12)
Lead-202m	82	10 (3.7E 11)
Lead-202	82	1 (3.7E 10)
Lead-203	82	100 (3.7E 12)
Lead-205	82	100 (3.7E 12)
Lead-209	82	1000 (3.7E 13)
Lead-210	82	0.01 (3.7E 8)
Lead-211	82	100 (3.7E 12)
Lead-212	82	10 (3.7E 11)
Lead-214	82	100 (3.7E 12)
Lutetium-169	71	10 (3.7E 11)
Lutetium-170	71	10 (3.7E 11)
Lutetium-171	71	10 (3.7E 11)
Lutetium-172	71	10 (3.7E 11)
Lutetium-173	71	100 (3.7E 12)
Lutetium-174m	71	10 (3.7E 11)
Lutetium-174	71	10 (3.7E 11)
Lutetium-176m	71	1000 (3.7E 13)
Lutetium-176	71	1 (3.7E 10)
Lutetium-177m	71	10 (3.7E 11)
Lutetium-177	71	100 (3.7E 12)
Lutetium-178m	71	1000 (3.7E 13)
Lutetium-178	71	1000 (3.7E 13)
Lutetium-179	71	1000 (3.7E 13)
Magnesium-28	12	10 (3.7E 11)
Manganese-51	25	1000 (3.7E 13)
Manganese-52m	25	1000 (3.7E 13)
Manganese-52	25	10 (3.7E 11)
Manganese-53	25	1000 (3.7E 13)
Manganese-54	25	10 (3.7E 11)
Manganese-56	25	100 (3.7E 12)
Mendelevium-257	101	100 (3.7E 12)
Mendelevium-258	101	1 (3.7E 10)
Mercury-193m	80	10 (3.7E 11)
Mercury-193	80	100 (3.7E 12)
Mercury-194	80	0.1 (3.7E 9)
Mercury-195m	80	100 (3.7E 12)
Mercury-195	80	100 (3.7E 12)
Mercury-197m	80	1000 (3.7E 13)
Mercury-197	80	1000 (3.7E 13)
Mercury-199m	80	1000 (3.7E 13)
Mercury-203	80	10 (3.7E 11)
Molybdenum-90	42	100 (3.7E 12)
Molybdenum-93m	42	10 (3.7E 11)
Molybdenum-93	42	100 (3.7E 12)
Molybdenum-99	42	100 (3.7E 12)
Molybdenum-101	42	1000 (3.7E 13)
Neodymium-136	60	1000 (3.7E 13)
Neodymium-138	60	1000 (3.7E 13)
Neodymium-139m	60	100 (3.7E 12)
Neodymium-139	60	1000 (3.7E 13)
Neodymium-141	60	1000 (3.7E 13)
Neodymium-147	60	10 (3.7E 11)
Neodymium-149	60	100 (3.7E 12)
Neodymium-151	60	1000 (3.7E 13)

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Radionuclide	Atomic Number	Final RQ Ci (Bq)
Neptunium-232	93	1000 (3.7E 13)
Neptunium-233	93	1000 (3.7E 13)
Neptunium-234	93	10 (3.7E 11)
Neptunium-235	93	1000 (3.7E 13)
Neptunium-236 (1.2 E 5 yr)	93	0.1 (3.7E 9)
Neptunium-236 (22.5 hr)	93	100 (3.7E 12)
Neptunium-237	93	0.01 (3.7E 8)
Neptunium-238	93	10 (3.7E 11)
Neptunium-239	93	100 (3.7E 12)
Neptunium-240	93	100 (3.7E 12)
Nickel-56	28	10 (3.7E 11)
Nickel-57	28	10 (3.7E 11)
Nickel-59	28	100 (3.7E 12)
Nickel-63	28	100 (3.7E 12)
Nickel-65	28	100 (3.7E 12)
Nickel-66	28	10 (3.7E 11)
Niobium-88	41	100 (3.7E 12)
Niobium-89 (66 min)	41	100 (3.7E 12)
Niobium-89 (122 min)	41	100 (3.7E 12)
Niobium-90	41	10 (3.7E 11)
Niobium-93m	41	100 (3.7E 12)
Niobium-94	41	10 (3.7E 11)
Niobium-95m	41	100 (3.7E 12)
Niobium-95	41	10 (3.7E 11)
Niobium-96	41	10 (3.7E 11)
Niobium-97	41	100 (3.7E 12)
Niobium-98	41	1000 (3.7E 13)
Osmium-180	76	1000 (3.7E 13)
Osmium-181	76	100 (3.7E 12)
Osmium-182	76	100 (3.7E 12)
Osmium-185	76	10 (3.7E 11)
Osmium-189m	76	1000 (3.7E 13)
Osmium-191m	76	1000 (3.7E 13)
Osmium-191	76	100 (3.7E 12)
Osmium-193	76	100 (3.7E 12)
Osmium-194	76	1 (3.7E 10)
Palladium-100	46	100 (3.7E 12)
Palladium-101	46	100 (3.7E 12)
Palladium-103	46	100 (3.7E 12)
Palladium-107	46	100 (3.7E 12)
Palladium-109	46	1000 (3.7E 13)
Phosphorus-32	15	0.1 (3.7E 9)
Phosphorus-33	15	1 (3.7E 10)
Platinum-186	78	100 (3.7E 12)
Platinum-188	78	100 (3.7E 12)
Platinum-189	78	100 (3.7E 12)
Platinum-191	78	100 (3.7E 12)
Platinum-193m	78	100 (3.7E 12)
Platinum-193	78	1000 (3.7E 13)
Platinum-195m	78	100 (3.7E 12)
Platinum-197m	78	1000 (3.7E 13)
Platinum-197	78	1000 (3.7E 13)
Platinum-199	78	1000 (3.7E 13)
Platinum-200	78	100 (3.7E 12)
Plutonium-234	94	1000 (3.7E 13)
Plutonium-235	94	1000 (3.7E 13)
Plutonium-236	94	0.1 (3.7E 9)
Plutonium-237	94	1000 (3.7E 13)
Plutonium-238	94	0.01 (3.7E 8)
Plutonium-239	94	0.01 (3.7E 8)
Plutonium-240	94	0.01 (3.7E 8)
Plutonium-241	94	1 (3.7E 10)
Plutonium-242	94	0.01 (3.7E 8)
Plutonium-243	94	1000 (3.7E 13)
Plutonium-244	94	0.01 (3.7E 8)
Plutonium-245	94	100 (3.7E 12)
Polonium-203	84	100 (3.7E 12)
Polonium-205	84	100 (3.7E 12)
Polonium-207	84	10 (3.7E 11)
Polonium-210	84	0.01 (3.7E 8)

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Potassium-40	19	1 (3.7E 10)
Potassium-42	19	100 (3.7E 12)
Potassium-43	19	10 (3.7E 11)
Potassium-44	19	100 (3.7E 12)
Potassium-45	19	1000 (3.7E 13)
Praseodymium-136	59	1000 (3.7E 13)
Praseodymium-137	59	1000 (3.7E 13)
Praseodymium-138m	59	100 (3.7E 12)
Praseodymium-139	59	1000 (3.7E 13)
Praseodymium-142m	59	1000 (3.7E 13)
Praseodymium-142	59	100 (3.7E 12)
Praseodymium-143	59	10 (3.7E 11)
Praseodymium-144	59	1000 (3.7E 13)
Praseodymium-145	59	1000 (3.7E 13)
Praseodymium-147	59	1000 (3.7E 13)
Promethium-141	61	1000 (3.7E 13)
Promethium-143	61	100 (3.7E 12)
Promethium-144	61	10 (3.7E 11)
Promethium-145	61	100 (3.7E 12)
Promethium-146	61	10 (3.7E 11)
Promethium-147	61	10 (3.7E 11)
Promethium-148m	61	10 (3.7E 11)
Promethium-148	61	10 (3.7E 11)
Promethium-149	61	100 (3.7E 12)
Promethium-150	61	100 (3.7E 12)
Promethium-151	61	100 (3.7E 12)
Protactinium-227	91	100 (3.7E 12)
Protactinium-228	91	10 (3.7E 11)
Protactinium-230	91	10 (3.7E 11)
Protactinium-231	91	0.01 (3.7E 8)
Protactinium-232	91	10 (3.7E 11)
Protactinium-233	91	100 (3.7E 12)
Protactinium-234	91	10 (3.7E 11)
Radium-223	88	1 (3.7E 10)
Radium-224	88	10 (3.7E 11)
Radium-225	88	1 (3.7E 10)
Radium-226 ϕ	88	0.1 (3.7E 9)
Radium-227	88	1000 (3.7E 13)
Radium-228	88	0.1 (3.7E 9)
Radon-220	86	0.1 (3.7E 9)
Radon-222	86	0.1 (3.7E 9)
Rhenium-177	75	1000 (3.7E 13)
Rhenium-178	75	1000 (3.7E 13)
Rhenium-181	75	100 (3.7E 12)
Rhenium-182 (12.7 hr)	75	10 (3.7E 11)
Rhenium-182 (64.0 hr)	75	10 (3.7E 11)
Rhenium-184m	75	10 (3.7E 11)
Rhenium-184	75	10 (3.7E 11)
Rhenium-186m	75	10 (3.7E 11)
Rhenium-186	75	100 (3.7E 12)
Rhenium-187	75	1000 (3.7E 13)
Rhenium-188m	75	1000 (3.7E 13)
Rhenium-188	75	1000 (3.7E 13)
Rhenium-189	75	1000 (3.7E 13)
Rhodium-99m	45	100 (3.7E 12)
Rhodium-99	45	10 (3.7E 11)
Rhodium-100	45	10 (3.7E 11)
Rhodium-101m	45	100 (3.7E 12)
Rhodium-101	45	10 (3.7E 11)
Rhodium-102m	45	10 (3.7E 11)
Rhodium-102	45	10 (3.7E 11)
Rhodium-103m	45	1000 (3.7E 13)
Rhodium-105	45	100 (3.7E 12)
Rhodium-106m	45	10 (3.7E 11)
Rhodium-107	45	1000 (3.7E 13)
Rubidium-79	37	1000 (3.7E 13)
Rubidium-81m	37	1000 (3.7E 13)
Rubidium-81	37	100 (3.7E 12)
Rubidium-82m	37	10 (3.7E 11)
Rubidium-83	37	10 (3.7E 11)

Environmental Protection Agency, EPA

§ 302.4

APPENDIX B TO § 302.4—RADIONUCLIDES—
Continued

APPENDIX B TO § 302.4—RADIONUCLIDES—
Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Rubidium-84	37	10 (3.7E 11)
Rubidium-86	37	10 (3.7E 11)
Rubidium-88	37	1000 (3.7E 13)
Rubidium-89	37	1000 (3.7E 13)
Rubidium-87	37	10 (3.7E 11)
Ruthenium-94	44	1000 (3.7E 13)
Ruthenium-97	44	100 (3.7E 12)
Ruthenium-103	44	10 (3.7E 11)
Ruthenium-105	44	100 (3.7E 12)
Ruthenium-106	44	1 (3.7E 10)
Samarium-141m	62	1000 (3.7E 13)
Samarium-141	62	1000 (3.7E 13)
Samarium-142	62	1000 (3.7E 13)
Samarium-145	62	100 (3.7E 12)
Samarium-146	62	0.01 (3.7E 8)
Samarium-147	62	0.01 (3.7E 8)
Samarium-151	62	10 (3.7E 11)
Samarium-153	62	100 (3.7E 12)
Samarium-155	62	1000 (3.7E 13)
Samarium-156	62	100 (3.7E 12)
Scandium-43	21	1000 (3.7E 13)
Scandium-44m	21	10 (3.7E 11)
Scandium-44	21	100 (3.7E 12)
Scandium-46	21	10 (3.7E 11)
Scandium-47	21	100 (3.7E 12)
Scandium-48	21	10 (3.7E 11)
Scandium-49	21	1000 (3.7E 13)
Selenium-70	34	1000 (3.7E 13)
Selenium-73m	34	100 (3.7E 12)
Selenium-73	34	10 (3.7E 11)
Selenium-75	34	10 (3.7E 11)
Selenium-79	34	10 (3.7E 11)
Selenium-81m	34	1000 (3.7E 13)
Selenium-81	34	1000 (3.7E 13)
Selenium-83	34	1000 (3.7E 13)
Silicon-31	14	1000 (3.7E 13)
Silicon-32	14	1 (3.7E 10)
Silver-102	47	100 (3.7E 12)
Silver-103	47	1000 (3.7E 13)
Silver-104m	47	1000 (3.7E 13)
Silver-104	47	1000 (3.7E 13)
Silver-105	47	10 (3.7E 11)
Silver-106m	47	10 (3.7E 11)
Silver-106	47	1000 (3.7E 13)
Silver-108m	47	10 (3.7E 11)
Silver-110m	47	10 (3.7E 11)
Silver-111	47	10 (3.7E 11)
Silver-112	47	100 (3.7E 12)
Silver-115	47	1000 (3.7E 13)
Sodium-22	11	10 (3.7E 11)
Sodium-24	11	10 (3.7E 11)
Strontium-80	38	100 (3.7E 12)
Strontium-81	38	1000 (3.7E 13)
Strontium-83	38	100 (3.7E 12)
Strontium-85m	38	1000 (3.7E 13)
Strontium-85	38	10 (3.7E 11)
Strontium-87m	38	100 (3.7E 12)
Strontium-89	38	10 (3.7E 11)
Strontium-90	38	0.1 (3.7E 9)
Strontium-91	38	10 (3.7E 11)
Strontium-92	38	100 (3.7E 12)
Sulfur-35	16	1 (3.7E 10)
Tantalum-172	73	100 (3.7E 12)
Tantalum-173	73	100 (3.7E 12)
Tantalum-174	73	100 (3.7E 12)
Tantalum-175	73	100 (3.7E 12)
Tantalum-176	73	10 (3.7E 11)
Tantalum-177	73	1000 (3.7E 13)
Tantalum-178	73	1000 (3.7E 13)
Tantalum-179	73	1000 (3.7E 13)

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Tantalum-180m	73	1000 (3.7E 13)
Tantalum-180	73	100 (3.7E 12)
Tantalum-182m	73	1000 (3.7E 13)
Tantalum-182	73	10 (3.7E 11)
Tantalum-183	73	100 (3.7E 12)
Tantalum-184	73	10 (3.7E 11)
Tantalum-185	73	1000 (3.7E 13)
Tantalum-186	73	1000 (3.7E 13)
Technetium-93m	43	1000 (3.7E 13)
Technetium-93	43	100 (3.7E 12)
Technetium-94m	43	100 (3.7E 12)
Technetium-94	43	10 (3.7E 11)
Technetium-96m	43	1000 (3.7E 13)
Technetium-96	43	10 (3.7E 11)
Technetium-97m	43	100 (3.7E 12)
Technetium-97	43	100 (3.7E 12)
Technetium-98	43	10 (3.7E 11)
Technetium-99m	43	100 (3.7E 12)
Technetium-99	43	10 (3.7E 11)
Technetium-101	43	1000 (3.7E 13)
Technetium-104	43	1000 (3.7E 13)
Tellurium-116	52	1000 (3.7E 13)
Tellurium-121m	52	10 (3.7E 11)
Tellurium-121	52	10 (3.7E 11)
Tellurium-123m	52	10 (3.7E 11)
Tellurium-123	52	10 (3.7E 11)
Tellurium-125m	52	10 (3.7E 11)
Tellurium-127m	52	10 (3.7E 11)
Tellurium-127	52	1000 (3.7E 13)
Tellurium-129m	52	10 (3.7E 11)
Tellurium-129	52	1000 (3.7E 13)
Tellurium-131m	52	10 (3.7E 11)
Tellurium-131	52	1000 (3.7E 13)
Tellurium-132	52	10 (3.7E 11)
Tellurium-133m	52	1000 (3.7E 13)
Tellurium-133	52	1000 (3.7E 13)
Tellurium-134	52	1000 (3.7E 13)
Terbium-147	65	100 (3.7E 12)
Terbium-149	65	100 (3.7E 12)
Terbium-150	65	100 (3.7E 12)
Terbium-151	65	10 (3.7E 11)
Terbium-153	65	100 (3.7E 12)
Terbium-154	65	10 (3.7E 11)
Terbium-155	65	100 (3.7E 12)
Terbium-156m (5.0 hr)	65	1000 (3.7E 13)
Terbium-156m (24.4 hr)	65	1000 (3.7E 13)
Terbium-156	65	10 (3.7E 11)
Terbium-157	65	100 (3.7E 12)
Terbium-158	65	10 (3.7E 11)
Terbium-160	65	10 (3.7E 11)
Terbium-161	65	100 (3.7E 12)
Thallium-194m	81	100 (3.7E 12)
Thallium-194	81	1000 (3.7E 13)
Thallium-195	81	100 (3.7E 12)
Thallium-197	81	100 (3.7E 12)
Thallium-198m	81	100 (3.7E 12)
Thallium-198	81	10 (3.7E 11)
Thallium-199	81	100 (3.7E 12)
Thallium-200	81	10 (3.7E 11)
Thallium-201	81	1000 (3.7E 13)
Thallium-202	81	10 (3.7E 11)
Thallium-204	81	10 (3.7E 11)
Thorium-226	90	100 (3.7E 12)
Thorium-227	90	1 (3.7E 10)
Thorium-228	90	0.01 (3.7E 8)
Thorium-229	90	0.001 (3.7E 7)
Thorium-230	90	0.01 (3.7E 8)
Thorium-231	90	100 (3.7E 12)
Thorium-232 ϕ	90	0.001 (3.7E 7)
Thorium-234	90	100 (3.7E 12)

§ 302.5

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APPENDIX B TO § 302.4—RADIONUCLIDES—
Continued

APPENDIX B TO § 302.4—RADIONUCLIDES—
Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Thulium-162	69	1000 (3.7E 13)
Thulium-166	69	10 (3.7E 11)
Thulium-167	69	100 (3.7E 12)
Thulium-170	69	10 (3.7E 11)
Thulium-171	69	100 (3.7E 12)
Thulium-172	69	100 (3.7E 12)
Thulium-173	69	100 (3.7E 12)
Thulium-175	69	1000 (3.7E 13)
Tin-110	50	100 (3.7E 12)
Tin-111	50	1000 (3.7E 13)
Tin-113	50	10 (3.7E 11)
Tin-117m	50	100 (3.7E 12)
Tin-119m	50	10 (3.7E 11)
Tin-121m	50	10 (3.7E 11)
Tin-121	50	1000 (3.7E 13)
Tin-123m	50	1000 (3.7E 13)
Tin-123	50	10 (3.7E 11)
Tin-125	50	10 (3.7E 11)
Tin-126	50	1 (3.7E 10)
Tin-127	50	100 (3.7E 12)
Tin-128	50	1000 (3.7E 13)
Titanium-44	22	1 (3.7E 10)
Titanium-45	22	1000 (3.7E 13)
Tungsten-176	74	1000 (3.7E 13)
Tungsten-177	74	100 (3.7E 12)
Tungsten-178	74	100 (3.7E 12)
Tungsten-179	74	1000 (3.7E 13)
Tungsten-181	74	100 (3.7E 12)
Tungsten-185	74	10 (3.7E 11)
Tungsten-187	74	100 (3.7E 12)
Tungsten-188	74	10 (3.7E 11)
Uranium-230	92	1 (3.7E 10)
Uranium-231	92	1000 (3.7E 13)
Uranium-232	92	0.01 (3.7E 8)
Uranium-233	92	0.1 (3.7E 9)
Uranium-234 [Ⓞ]	92	0.1 (3.7E 9)
Uranium-235 [Ⓞ]	92	0.1 (3.7E 9)
Uranium-236	92	0.1 (3.7E 9)
Uranium-237	92	100 (3.7E 12)
Uranium-238 [Ⓞ]	92	0.1 & (3.7E 9)
Uranium-239	92	1000 (3.7E 13)
Uranium-240	92	1000 (3.7E 13)
Vanadium-47	23	1000 (3.7E 13)
Vanadium-48	23	10 (3.7E 11)
Vanadium-49	23	1000 (3.7E 13)
Xenon-120	54	100 (3.7E 12)
Xenon-121	54	10 (3.7E 11)
Xenon-122	54	100 (3.7E 12)
Xenon-123	54	10 (3.7E 11)
Xenon-125	54	100 (3.7E 12)
Xenon-127	54	100 (3.7E 12)
Xenon-129m	54	1000 (3.7E 13)
Xenon-131m	54	1000 (3.7E 13)
Xenon-133m	54	1000 (3.7E 13)
Xenon-133	54	1000 (3.7E 13)
Xenon-135m	54	10 (3.7E 11)
Xenon-135	54	100 (3.7E 12)
Xenon-138	54	10 (3.7E 11)
Ytterbium-162	70	1000 (3.7E 13)
Ytterbium-166	70	10 (3.7E 11)
Ytterbium-167	70	1000 (3.7E 13)
Ytterbium-169	70	10 (3.7E 11)
Ytterbium-175	70	100 (3.7E 12)
Ytterbium-177	70	1000 (3.7E 13)
Ytterbium-178	70	1000 (3.7E 13)
Yttrium-86m	39	1000 (3.7E 13)
Yttrium-86	39	10 (3.7E 11)
Yttrium-87	39	10 (3.7E 11)
Yttrium-88	39	10 (3.7E 11)
Yttrium-90m	39	100 (3.7E 12)

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Yttrium-90	39	10 (3.7E 11)
Yttrium-91m	39	1000 (3.7E 13)
Yttrium-91	39	10 (3.7E 11)
Yttrium-92	39	100 (3.7E 12)
Yttrium-93	39	100 (3.7E 12)
Yttrium-94	39	1000 (3.7E 13)
Yttrium-95	39	1000 (3.7E 13)
Zinc-62	30	100 (3.7E 12)
Zinc-63	30	1000 (3.7E 13)
Zinc-65	30	10 (3.7E 11)
Zinc-69m	30	100 (3.7E 12)
Zinc-69	30	1000 (3.7E 13)
Zinc-71m	30	100 (3.7E 12)
Zinc-72	30	100 (3.7E 12)
Zirconium-86	40	100 (3.7E 12)
Zirconium-88	40	10 (3.7E 11)
Zirconium-89	40	100 (3.7E 12)
Zirconium-93	40	1 (3.7E 10)
Zirconium-95	40	10 (3.7E 11)
Zirconium-97	40	10 (3.7E 11)

Ci—Curie. The curie represents a rate of radioactive decay. One curie is the quantity of any radioactive nuclide which undergoes 3.7E 10 disintegrations per second.

Bq—Becquerel. The becquerel represents a rate of radioactive decay. One becquerel is the quantity of any radioactive nuclide which undergoes one disintegration per second. One curie is equal to 3.7E 10 becquerel.

[Ⓞ]—Final RQs for all radionuclides apply to chemical compounds containing the radionuclides and elemental forms regardless of the diameter of pieces of solid material.

&—The adjusted RQ of one curie applies to all radionuclides not otherwise listed. Whenever the RQs in table 302.4 and this appendix to the table are in conflict, the lowest RQ shall apply. For example, uranyl acetate and uranyl nitrate have adjusted RQs shown in table 302.4 of 100 pounds, equivalent to about one-tenth the RQ level for uranium-238 listed in this appendix.

E—Exponent to the base 10. For example, 1.3E 2 is equal to 130 while 1.3E 3 is equal to 1300.

m—Signifies a nuclear isomer which is a radionuclide in a higher energy metastable state relative to the parent isotope.

Ⓞ—Notification requirements for releases of mixtures or solutions of radionuclides can be found in §302.6(b) of this rule. Final RQs for the following four common radionuclide mixtures are provided: radium-226 in secular equilibrium with its daughters (0.053 curie); natural uranium (0.1 curie); natural uranium in secular equilibrium with its daughters (0.052 curie); and natural thorium in secular equilibrium with its daughters (0.011 curie).

[54 FR 33449, Aug. 14, 1989]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §302.4, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§302.5 Determination of reportable quantities.

(a) *Listed hazardous substances.* The quantity listed in the column “Final RQ” for each substance in table 302.4, or in appendix B to table 302.4, is the reportable quantity (RQ) for that substance. The RQs in table 302.4 are in units of pounds based on chemical toxicity, while the RQs in appendix B to table 302.4 are in units of curies based on radiation hazard. Whenever the RQs

in table 302.4 and appendix B to the table are in conflict, the lowest RQ shall apply.

(b) *Unlisted hazardous substances.* Unlisted hazardous substances designated by 40 CFR 302.4(b) have the reportable quantity of 100 pounds, except for those unlisted hazardous wastes which exhibit extraction procedure (EP) toxicity identified in 40 CFR 261.24. Unlisted hazardous wastes which exhibit EP toxicity have the reportable quantities listed in table 302.4 for the contaminant on which the characteristic of EP toxicity is based. The reportable quantity applies to the waste itself, not merely to the toxic contaminant. If an unlisted hazardous waste exhibits EP toxicity on the basis of more than one contaminant, the reportable quantity for that waste shall be the lowest of the reportable quantities listed in table 302.4 for those contaminants. If an unlisted hazardous waste exhibits the characteristic of EP toxicity and one or more of the other characteristics referenced in 40 CFR 302.4(b), the reportable quantity for that waste shall be the lowest of the applicable reportable quantities.

[51 FR 34547, Sept. 29, 1987, as amended at 54 FR 22538, May 24, 1989]

§ 302.6 Notification requirements.

(a) Any person in charge of a vessel or an offshore or an onshore facility shall, as soon as he has knowledge of any release (other than a federally permitted release or application of a pesticide) of a hazardous substance from such vessel or facility in a quantity equal to or exceeding the reportable quantity determined by this part in any 24-hour period, immediately notify the National Response Center ((800) 424-8802; in Washington, DC (202) 426-2675).

(b) Releases of mixtures or solutions (including hazardous waste streams) of

(1) Hazardous substances, except for radionuclides, are subject to the following notification requirements:

(i) If the quantity of all of the hazardous constituent(s) of the mixture or solution is known, notification is required where an RQ or more of any hazardous constituent is released;

(ii) If the quantity of one or more of the hazardous constituent(s) of the

mixture or solution is unknown, notification is required where the total amount of the mixture or solution released equals or exceeds the RQ for the hazardous constituent with the lowest RQ; or

(iii) For waste streams K169, K170, K171, and K172, knowledge of the quantity of all of the hazardous constituent(s) may be assumed, based on the following maximum observed constituent concentrations identified by EPA:

Waste	Constituent	Max ppm
K169	Benzene	220.0
	K170 Benzene	1.2
K170	Benzo (a) pyrene	230.0
	Dibenz (a,h) anthracene	49.0
	Benzo (a) anthracene	390.0
	Benzo (b) fluoranthene	110.0
	Benzo (k) fluoranthene	110.0
	3-Methylcholanthrene	27.0
	7,12-Dimethylbenz (a) anthracene	1,200.0
K171	Benzene	500.0
	Arsenic	1,600.0
K172	Benzene	100.0
	Arsenic	730.0

(2) Radionuclides are subject to this section's notification requirements only in the following circumstances:

(i) If the identity and quantity (in curies) of each radionuclide in a released mixture or solution is known, the ratio between the quantity released (in curies) and the RQ for the radionuclide must be determined for each radionuclide. The only such releases subject to this section's notification requirements are those in which the sum of the ratios for the radionuclides in the mixture or solution released is equal to or greater than one.

(ii) If the identity of each radionuclide in a released mixture or solution is known but the quantity released (in curies) of one or more of the radionuclides is unknown, the only such releases subject to this section's notification requirements are those in which the total quantity (in curies) of the mixture or solution released is equal to or greater than the lowest RQ of any individual radionuclide in the mixture or solution.

(iii) If the identity of one or more radionuclides in a released mixture or solution is unknown (or if the identity of a radionuclide released by itself is

unknown), the only such releases subject to this section's notification requirements are those in which the total quantity (in curies) released is equal to or greater than either one curie or the lowest RQ of any known individual radionuclide in the mixture or solution, whichever is lower.

(c) The following categories of releases are exempt from the notification requirements of this section:

(1) Releases of those radionuclides that occur naturally in the soil from land holdings such as parks, golf courses, or other large tracts of land.

(2) Releases of naturally occurring radionuclides from land disturbance activities, including farming, construction, and land disturbance incidental to extraction during mining activities, except that which occurs at uranium, phosphate, tin, zircon, hafnium, vanadium, monazite, and rare earth mines. Land disturbance incidental to extraction includes: land clearing; overburden removal and stockpiling; excavating, handling, transporting, and storing ores and other raw (not beneficiated or processed) materials; and replacing in mined-out areas coal ash, earthen materials from farming or construction, or overburden or other raw materials generated from the exempted mining activities.

(3) Releases of radionuclides from the dumping and transportation of coal and coal ash (including fly ash, bottom ash, and boiler slags), including the dumping and land spreading operations that occur during coal ash uses.

(4) Releases of radionuclides from piles of coal and coal ash, including fly ash, bottom ash, and boiler slags.

(d) Except for releases of radionuclides, notification of the release of an RQ of solid particles of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, or zinc is not required if the mean diameter of the particles released is larger than 100 micrometers (0.004 inches).

[50 FR 13474, Apr. 4, 1985, as amended at 54 FR 22538, May 24, 1989; 54 FR 33481, Aug. 14, 1989; 63 FR 13475, Mar. 19, 1998; 63 FR 42189, Aug. 6, 1998; 64 FR 13114, Mar. 17, 1999]

§ 302.7 Penalties.

(a) Any person—

(1) In charge of a vessel from which a hazardous substance is released, other than a federally permitted release, into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone,

(2) In charge of a vessel from which a hazardous substance is released, other than a federally permitted release, which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Fishery Conservation and Management Act of 1976), and who is otherwise subject to the jurisdiction of the United States at the time of the release, or

(3) In charge of a facility from which a hazardous substance is released, other than a federally permitted release, in a quantity equal to or greater than that reportable quantity determined under this part who fails to notify immediately the National Response Center as soon as he has knowledge of such release shall be subject to all of the sanctions, including criminal penalties, set forth in section 103 of the Act with respect to such failure to notify.

(b) Notification received pursuant to this section or information obtained by the exploitation of such notification shall not be used against any such person in any criminal case, except a prosecution for perjury or for giving a false statement.

(c) This section shall not apply to the application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act or to the handling and storage of such a pesticide product by an agricultural producer.

§ 302.8 Continuous releases.

(a) Except as provided in paragraph (c) of this section, no notification is required for any release of a hazardous substance that is, pursuant to the definitions in paragraph (b) of this section, continuous and stable in quantity and rate.

(b) *Definitions.* The following definitions apply to notification of continuous releases:

Continuous. A continuous release is a release that occurs without interruption or abatement or that is routine, anticipated, and intermittent and incidental to normal operations or treatment processes.

Normal range. The normal range of a release is all releases (in pounds or kilograms) of a hazardous substance reported or occurring over any 24-hour period under normal operating conditions during the preceding year. Only releases that are both continuous and stable in quantity and rate may be included in the normal range.

Routine. A routine release is a release that occurs during normal operating procedures or processes.

Stable in quantity and rate. A release that is stable in quantity and rate is a release that is predictable and regular in amount and rate of emission.

Statistically significant increase. A statistically significant increase in a release is an increase in the quantity of the hazardous substance released above the upper bound of the reported normal range of the release.

(c) *Notification.* The following notifications shall be given for any release qualifying for reduced reporting under this section:

- (1) Initial telephone notification;
- (2) Initial written notification within 30 days of the initial telephone notification;
- (3) Follow-up notification within 30 days of the first anniversary date of the initial written notification;
- (4) Notification of a change in the composition or source(s) of the release or in the other information submitted in the initial written notification of the release under paragraph (c)(2) of this section or the follow-up notification under paragraph (c)(3) of this section; and
- (5) Notification at such times as an increase in the quantity of the hazardous substance being released during any 24-hour period represents a statistically significant increase as defined in paragraph (b) of this section.

(d) *Initial telephone notification.* Prior to making an initial telephone notification of a continuous release, the person in charge of a facility or vessel must establish a sound basis for quali-

fying the release for reporting under CERCLA section 103(f)(2) by:

(1) Using release data, engineering estimates, knowledge of operating procedures, or best professional judgment to establish the continuity and stability of the release;

(2) Reporting the release to the National Response Center for a period sufficient to establish the continuity and stability of the release; or

(3) When a person in charge of the facility or vessel believes that a basis has been established to qualify the release for reduced reporting under this section, initial notification to the National Response Center shall be made by telephone. The person in charge must identify the notification as an initial continuous release notification report and provide the following information:

- (i) The name and location of the facility or vessel; and
- (ii) The name(s) and identity(ies) of the hazardous substance(s) being released.

(e) *Initial written notification.* Initial written notification of a continuous release shall be made to the appropriate EPA Regional Office for the geographical area where the releasing facility or vessel is located. (Note: In addition to the requirements of this part, releases of CERCLA hazardous substances are also subject to the provisions of SARA title III section 304, and EPA's implementing regulations codified at 40 CFR part 355, which require initial telephone and written notifications of continuous releases to be submitted to the appropriate State emergency response commission and local emergency planning committee.)

(1) Initial written notification to the appropriate EPA Regional Office shall occur within 30 days of the initial telephone notification to the National Response Center, and shall include, for each release for which reduced reporting as a continuous release is claimed, the following information:

- (i) The name of the facility or vessel; the location, including the latitude and longitude; the case number assigned by the National Response Center or the Environmental Protection Agency; the

Dun and Bradstreet number of the facility, if available; the port of registration of the vessel; the name and telephone number of the person in charge of the facility or vessel.

(ii) The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0-50 persons, 51-100 persons, 101-500 persons, 501-1,000 persons, more than 1,000 persons.

(iii) The identity and location of sensitive populations and ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands).

(iv) For each hazardous substance release claimed to qualify for reporting under CERCLA section 103(f)(2), the following information must be supplied:

(A) The name/identity of the hazardous substance; the Chemical Abstracts Service Registry Number for the substance (if available); and if the substance being released is a mixture, the components of the mixture and their approximate concentrations and quantities, by weight.

(B) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.

(C) The source(s) of the release (e.g., valves, pump seals, storage tank vents, stacks). If the release is from a stack, the stack height (in feet or meters).

(D) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.

(E) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.

(F) An estimate of the total annual amount that was released in the previous year (in pounds or kilograms).

(G) The environmental medium(a) affected by the release:

(1) If surface water, the name of the surface water body;

(2) If a stream, the stream order or average flowrate (in cubic feet/second) and designated use;

(3) If a lake, the surface area (in acres) and average depth (in feet or meters);

(4) If on or under ground, the location of public water supply wells within two miles.

(H) A signed statement that the hazardous substance release(s) described is(are) continuous and stable in quantity and rate under the definitions in paragraph (a) of this section and that all reported information is accurate and current to the best knowledge of the person in charge.

(f) *Follow-up notification.* Within 30 days of the first anniversary date of the initial written notification, the person in charge of the facility or vessel shall evaluate each hazardous substance release reported to verify and update the information submitted in the initial written notification. The follow-up notification shall include the following information:

(1) The name of the facility or vessel; the location, including the latitude and longitude; the case number assigned by the National Response Center or the Environmental Protection Agency; the Dun and Bradstreet number of the facility, if available; the port of registration of the vessel; the name and telephone number of the person in charge of the facility or vessel.

(2) The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0-50 persons, 51-100 persons, 101-500 persons, 501-1,000 persons, more than 1,000 persons.

(3) The identity and location of sensitive populations and ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands).

(4) For each hazardous substance release claimed to qualify for reporting under CERCLA section 103(f)(2), the following information shall be supplied:

(i) The name/identity of the hazardous substance; the Chemical Abstracts Service Registry Number for the substance (if available); and if the substance being released is a mixture, the components of the mixture and their approximate concentrations and quantities, by weight.

(ii) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.

(iii) The source(s) of the release (e.g., valves, pump seals, storage tank vents, stacks). If the release is from a stack, the stack height (in feet or meters).

(iv) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.

(v) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.

(vi) An estimate of the total annual amount that was released in the previous year (in pounds or kilograms).

(vii) The environmental medium(a) affected by the release:

(A) If surface water, the name of the surface water body;

(B) If a stream, the stream order or average flowrate (in cubic feet/second) and designated use;

(C) If a lake, the surface area (in acres) and average depth (in feet or meters);

(D) If on or under ground, the location of public water supply wells within two miles.

(viii) A signed statement that the hazardous substance release(s) is(are) continuous and stable in quantity and rate under the definitions in paragraph (a) of this section and that all reported information is accurate and current to the best knowledge of the person in charge.

(g) *Notification of changes in the release.* If there is a change in the release, notification of the change, not otherwise reported, shall be provided in the following manner:

(1) *Change in source or composition.* If there is any change in the composition or source(s) of the release, the release is a new release and must be qualified for reporting under this section by the submission of initial telephone notification and initial written notification in accordance with paragraphs (c) (1) and (2) of this section as soon as there is a sufficient basis for asserting that the release is continuous and stable in quantity and rate;

(2) *Change in the normal range.* If there is a change in the release such that the quantity of the release exceeds the upper bound of the reported normal range, the release must be reported as a statistically significant in-

crease in the release. If a change will result in a number of releases that exceed the upper bound of the normal range, the person in charge of a facility or vessel may modify the normal range by:

(i) Reporting at least one statistically significant increase report as required under paragraph (c)(7) of this section and, at the same time, informing the National Response Center of the change in the normal range; and

(ii) Submitting, within 30 days of the telephone notification, written notification to the appropriate EPA Regional Office describing the new normal range, the reason for the change, and the basis for stating that the release in the increased amount is continuous and stable in quantity and rate under the definitions in paragraph (b) of this section.

(3) *Changes in other reported information.* If there is a change in any information submitted in the initial written notification or the followup notification other than a change in the source, composition, or quantity of the release, the person in charge of the facility or vessel shall provide written notification of the change to the EPA Region for the geographical area where the facility or vessel is located, within 30 days of determining that the information submitted previously is no longer valid. Notification shall include the reason for the change, and the basis for stating that the release is continuous and stable under the changed conditions.

(4) Notification of changes shall include the case number assigned by the National Response Center or the Environmental Protection Agency and also the signed certification statement required at (c)(2)(xi) of this section.

(h) *Notification of a statistically significant increase in a release.* Notification of a statistically significant increase in a release shall be made to the National Response Center as soon as the person in charge of the facility or vessel has knowledge of the increase. The release must be identified as a statistically significant increase in a continuous release. A determination of whether an increase is a "statistically significant increase" shall be made based upon calculations or estimation procedures

that will identify releases that exceed the upper bound of the reported normal range.

(i) *Annual evaluation of releases.* Each hazardous substance release shall be evaluated annually to determine if changes have occurred in the information submitted in the initial written notification, the followup notification, and/or in a previous change notification.

(j) *Use of the SARA Title III section 313 form.* In lieu of an initial written report or a followup report, owners or operators of facilities subject to the requirements of SARA title III section 313 may submit to the appropriate EPA Regional Office for the geographical area where the facility is located, a copy of the Toxic Release Inventory form submitted under SARA Title III section 313 the previous July 1, provided that the following information is added:

(1) The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0-50 persons, 51-100 persons, 101-500 persons, 501-1,000 persons, more than 1,000 persons.

(2) The identity and location of sensitive populations and ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands).

(3) For each hazardous substance release claimed to qualify for reporting under CERCLA section 103(f)(2), the following information must be supplied:

(i) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.

(ii) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.

(iii) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.

(iv) A signed statement that the hazardous substance release(s) is(are) continuous and stable in quantity and rate under the definitions in paragraph (b) of this section and that all reported information is accurate and current to the best knowledge of the person in charge.

(k) *Documentation supporting notification.* Where necessary to satisfy the requirements of this section, the person in charge may rely on recent release data, engineering estimates, the operating history of the facility or vessel, or other relevant information to support notification. All supporting documents, materials, and other information shall be kept on file at the facility, or in the case of a vessel, at an office within the United States in either a port of call, a place of regular berthing, or the headquarters of the business operating the vessel. Supporting materials shall be kept on file for a period of one year and shall substantiate the reported normal range of releases, the basis for stating that the release is continuous and stable in quantity and rate, and the other information in the initial written report, the followup report, and the annual evaluations required under paragraphs (e), (f), and (i), respectively. Such information shall be made available to EPA upon request as necessary to enforce the requirements of this section.

(l) *Multiple concurrent releases.* Multiple concurrent releases of the same substance occurring at various locations with respect to contiguous plants or installations upon contiguous grounds that are under common ownership or control may be considered separately or added together in determining whether such releases constitute a continuous release or a statistically significant increase under the definitions in paragraph (b) of this section; whichever approach is elected for purposes of determining whether a release is continuous also must be used to determine a statistically significant increase in the release.

(m) *Penalties for failure to comply.* The reduced reporting requirements provided for under this section shall apply only so long as the person in charge complies fully with all requirements of paragraph (c) of this section. Failure to comply with respect to any release from the facility or vessel shall subject the person in charge to all of the reporting requirements of § 302.6 for each such release, to the penalties under § 302.7, and to any other applicable penalties provided for by law.

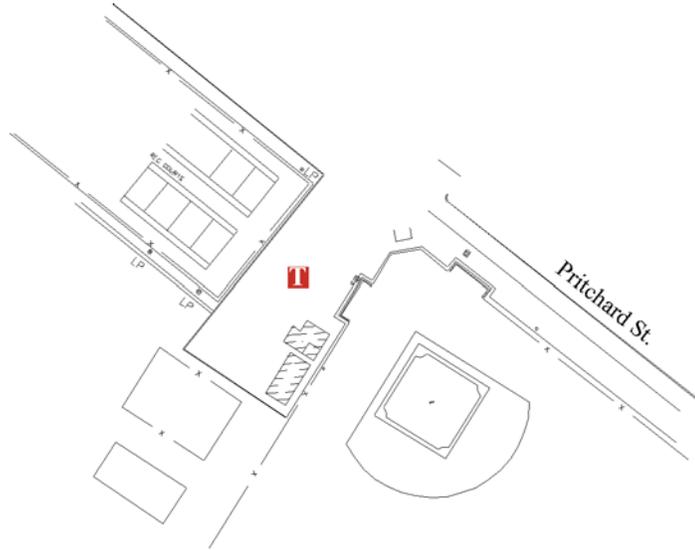
[55 FR 30185, July 24, 1990]

APPENDIX F Transformer Photographs and Locations

Location	Identifier/Manufacturer	Page
Baseball field	T2/None	2
Powerhouse, Bldg. 1231	T3/Pauwels Transformers	3
Powerhouse, Bldg. 1231	T4/ABB Distribution Transformer	4
Industrial Building, Bldg. 942	T5/Pauwels Transformers	5
Bldg. 645	T6/Pauwels Transformers	6
Administration/operations building	T7/GEC Alsthom	7
Compressor Building, Bldg. 1818	T8/Pauwels Transformers	8
Near Doghouse #1	T9/Square D	9
Bldg. 645	T10/None	10
Consolidated Supply Building	T12/GEC ALSTHOM	11
Powerhouse, Bldg. 1231	T13/Fayetteville Transformer	12
Emergency Generator Building	T14/Square D	13
Boathouse, Bldg. 1236	T16/GEC Alsthom	14
NESU, Bldg. 543	T17/None	15

T-2 Baseball Field

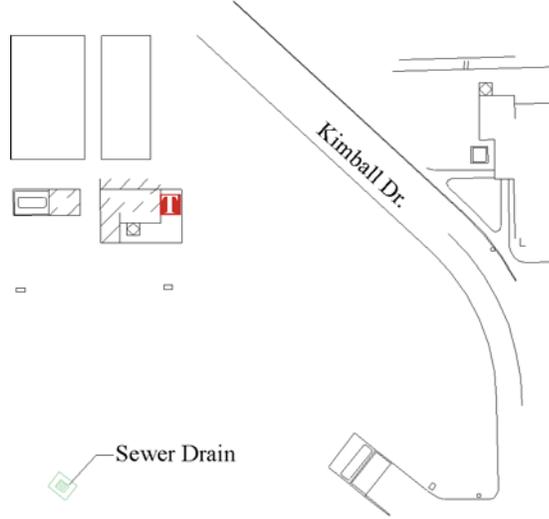
Location Map



Information	
ID #	T2
Manufacturer	Unknown
Capacity	145 gl.

T-3 Powerhouse, Bldg. 1231

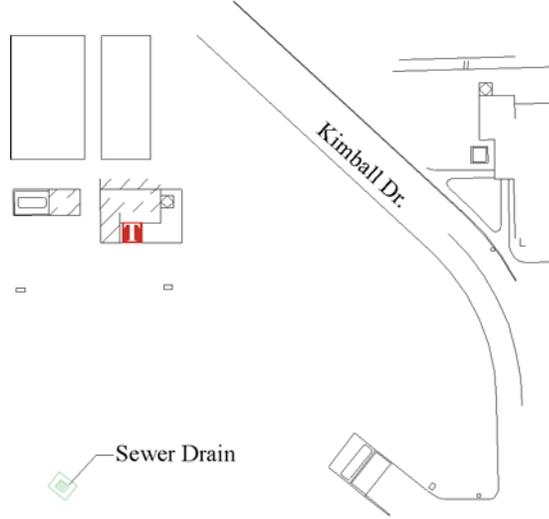
Location Map



Information	
ID #	T3
Manufacturer	Pauwels Transformers
Capacity	160 gl.

T-4 Powerhouse, Bldg. 1231

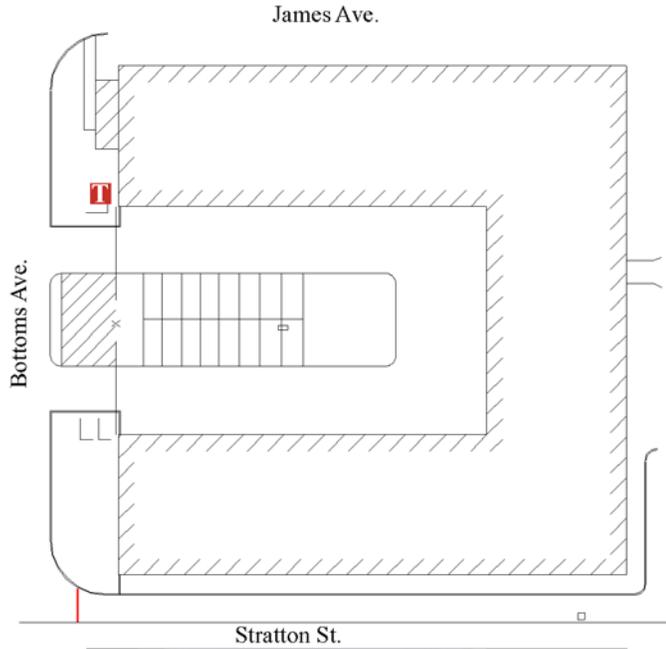
Location Map



Information	
ID #	T4
Manufacturer	ABB Distribution Transformer
Capacity	200 gl.

T-5 Industrial Building, Bldg. 942

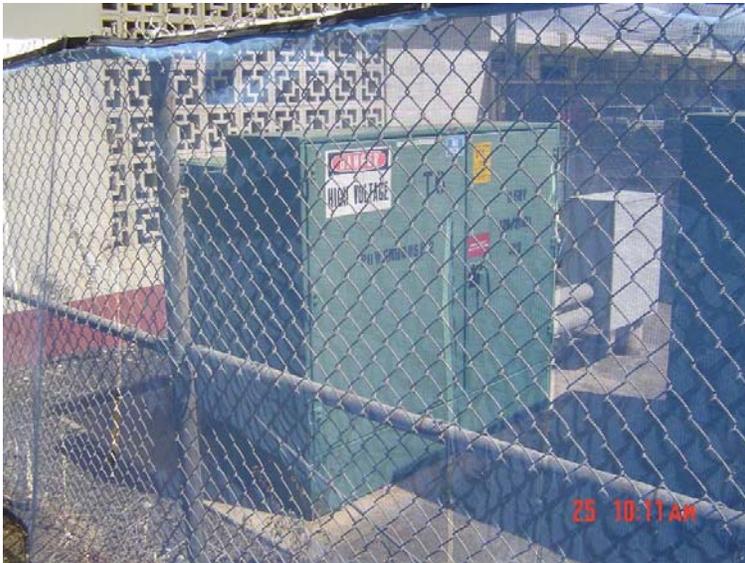
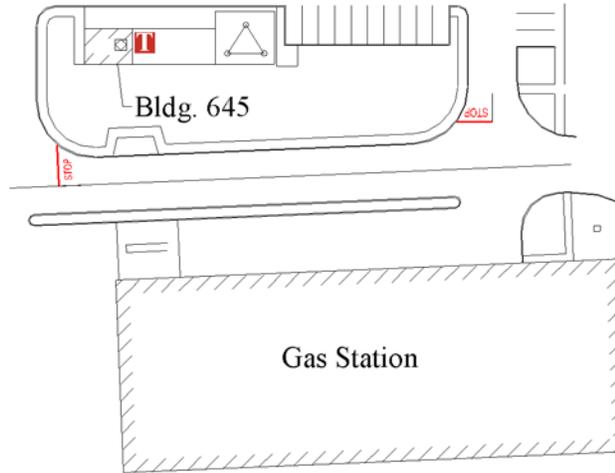
Location Map



Information	
ID #	T5
Manufacturer	Pauwels Transformers
Capacity	200 gl.

T-6 Bldg. 645

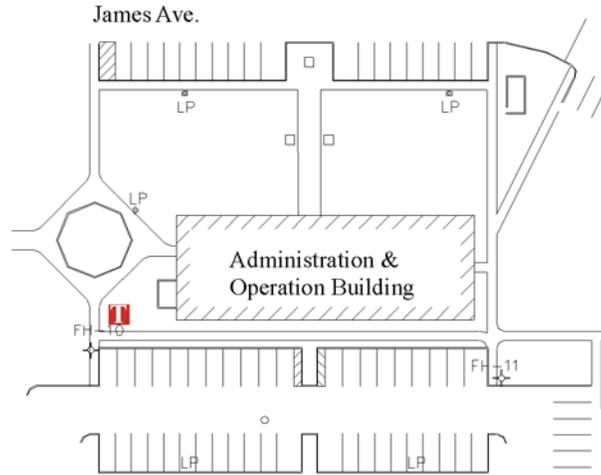
Location Map



Information	
ID #	T6
Manufacturer	Pauwels Transformers
Capacity	170 gl.

T-7 Administration and Operations Building

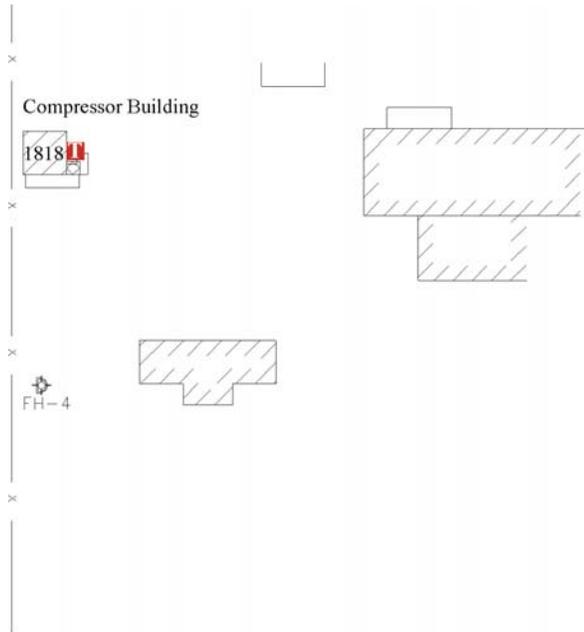
Location Map



Information	
ID #	T7
Manufacturer	GEC Alstom
Capacity	130 gl.v

T-8 Compressor Building, Bldg. 1818

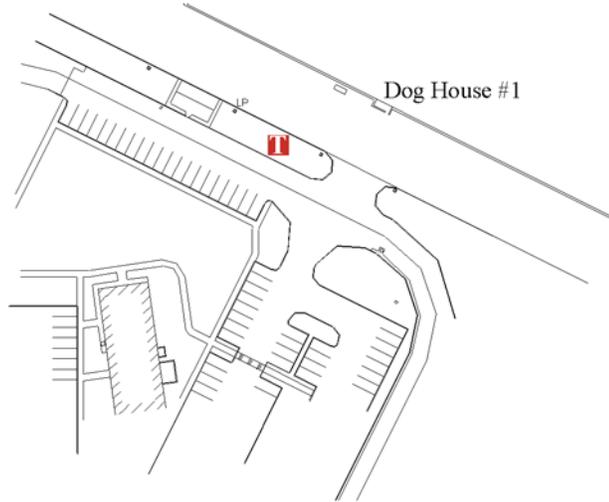
Location Map



Information	
ID #	T8
Manufacturer	Pauwels Transformers
Capacity	160

T-9 Near Dog House #1

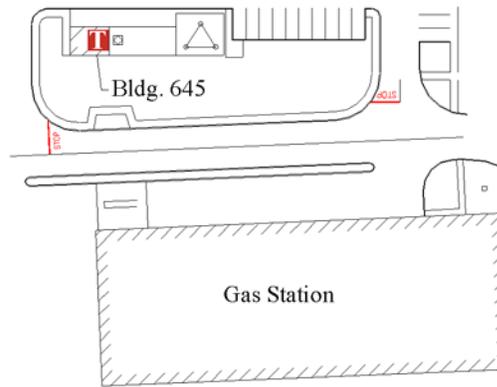
Location Map



Information	
ID #	T9
Manufacturer	Square D
Capacity	150 gl.

T-10 Bldg. 645

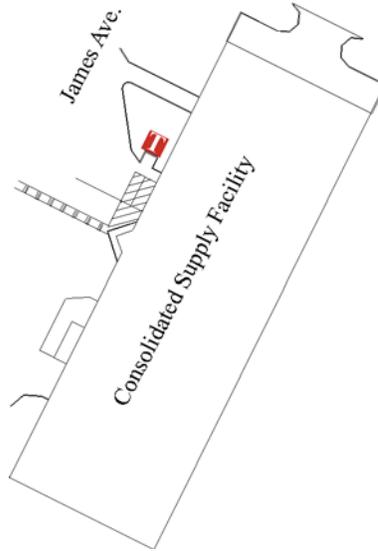
Location Map



Information	
ID #	T10
Manufacturer	none
Capacity	500 gl.

T-12 Consolidated Supply Building

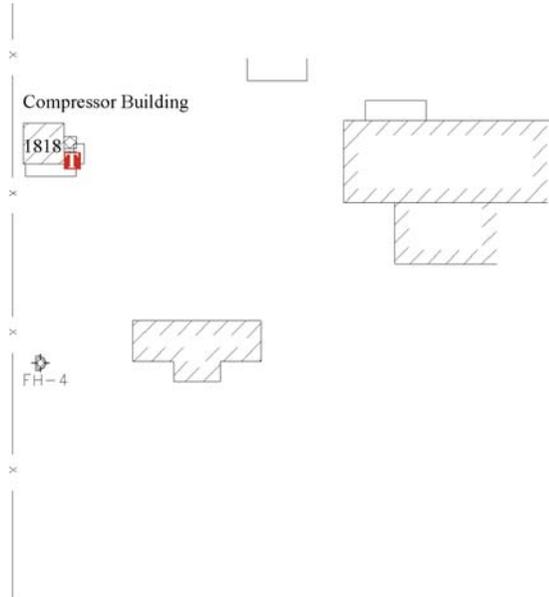
Location Map



Information	
ID #	T12
Manufacturer	GEC ALSTHOM
Capacity	120 gl.

T-13 Compressor Building, Bldg. 1818

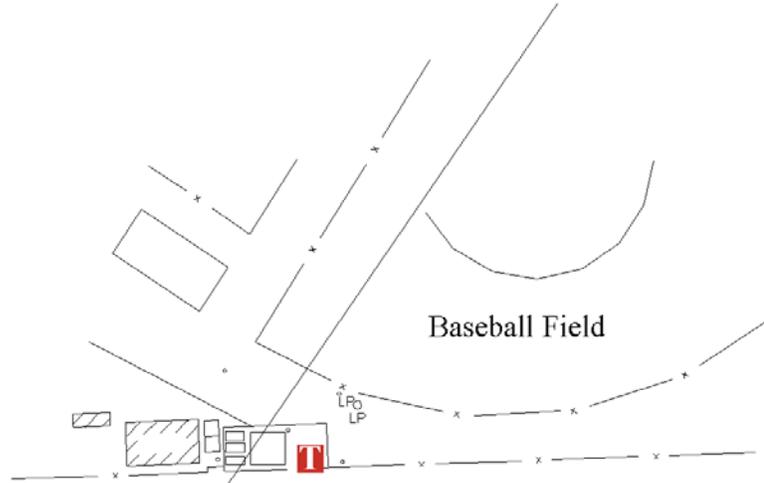
Location Map



Information	
ID #	T13
Manufacturer	Fayetteville Transformer
Capacity	100 gl.

T-14 Emergency Generator Building

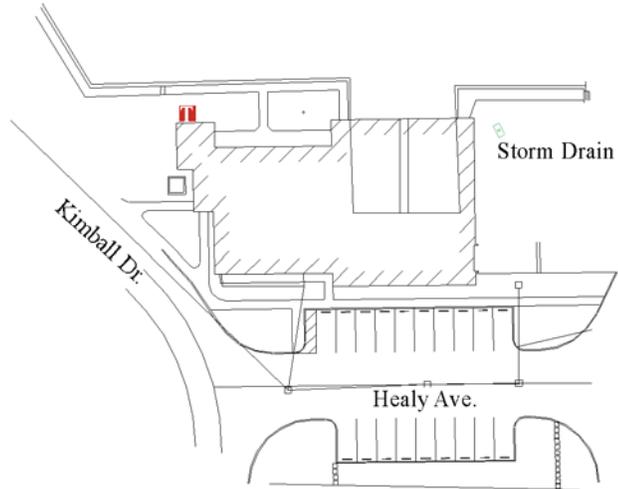
Location Map



Information	
ID #	T14
Manufacturer	Square D
Capacity	205 gl.

T-16 Boat house, Bldg. 1231

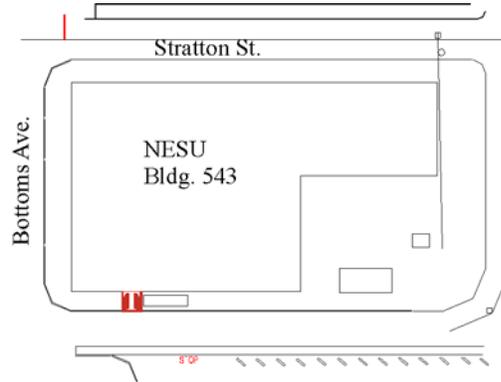
Location Map



Information	
ID #	T16
Manufacturer	GEC Alstom
Capacity	130 gl.

T-17 NESU, Bldg. 543

Location Map



Information	
ID #	T-17
Manufacturer	Unknown
Capacity	200