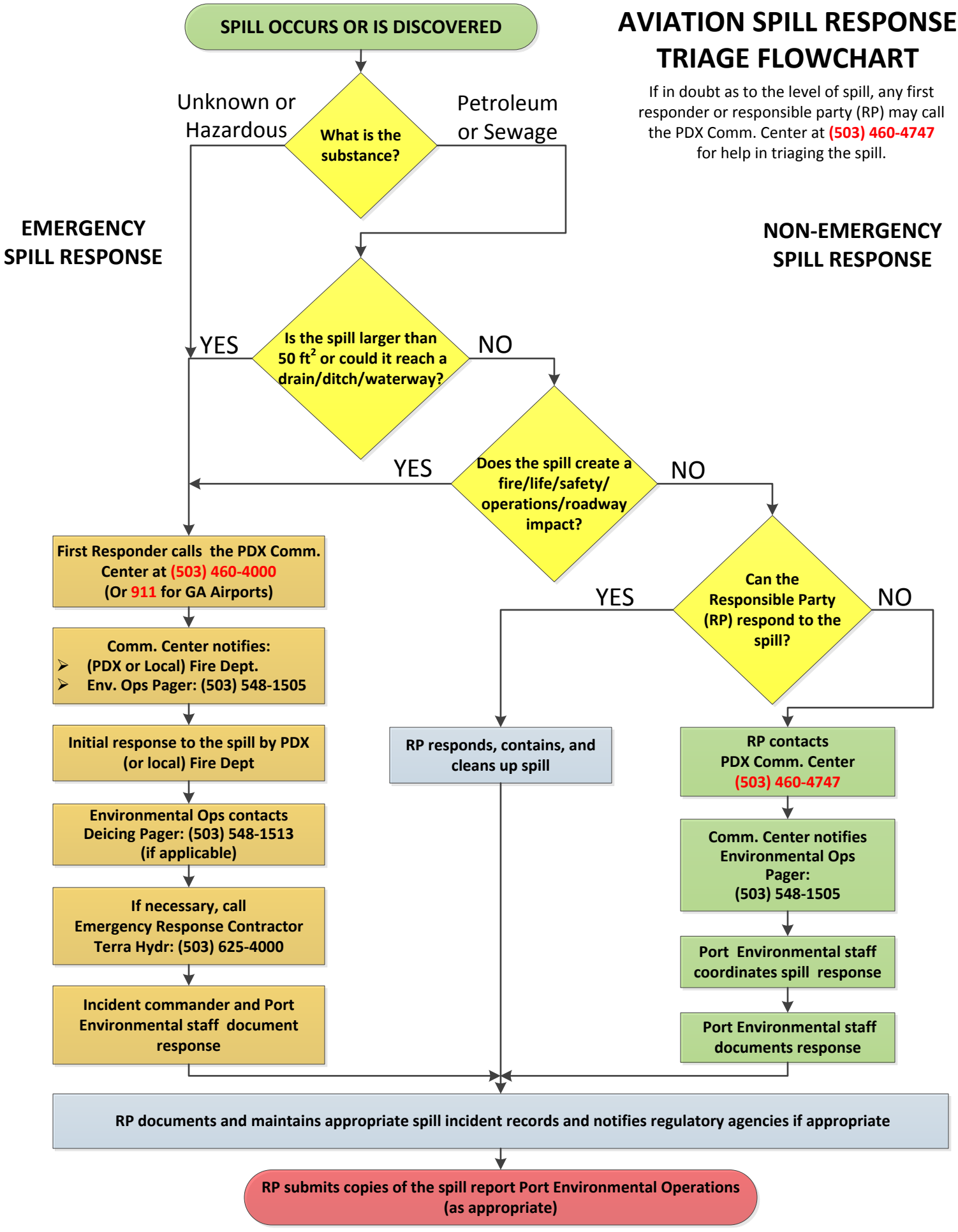
Spill Prevention, Control, and Countermeasures Plan Portland International Airport (PDX) Portland, Oregon

Prepared for:
Port of Portland

Revised March 17, 2015
1745-03

AVIATION SPILL RESPONSE TRIAGE FLOWCHART

If in doubt as to the level of spill, any first responder or responsible party (RP) may call the PDX Comm. Center at **(503) 460-4747** for help in triaging the spill.



Refer to the Work Instruction *Aviation Spill Response* <WI-AVI-WTR-003> and/or the *PDX Spill Response Procedures* posted in the Environmental Library on Navigator for additional information or contact Environmental Operations.

Updated 01-08-2015

Facility Information Page

Facility Name:		Portland International Airport (PDX)
Facility Sheet Address:	Airport	7000 NE Airport Way
	Maintenance Facility	7111 NE Alderwood Road
	Central Utility Plant	7320 NW Airport Way
	Fire Training Facility	NW Corner of Airfield
	PDX Fire Department	5250 NE Marine Drive
	Deicing Treatment Plant	10150 NE 33rd Drive
Facility Mailing Address:		PO Box 3529 Portland, OR 97208
Facility Phone Number: All Hours:		503-460-4000 (PDX Comm Center)
Owner/Operator Name:		Port of Portland
Owner/Operator Address:		PO Box 3529 Portland, Oregon 97208
Type of Facility:		Aviation
Latitude/Longitude:		45° 35' 11" / 122° 35' 09"
River Drainage Basin:		Columbia
Nearest Surface Water Body:		Columbia Slough
Distance:		<0.50 mile (approximate)

SPCC Plan Certification Page
Management Approval

This Spill Prevention, Control, and Countermeasure Plan for PDX is fully supported by the management of the Port of Portland. The Port of Portland will implement this Plan and amend it as needed due to expansions, modifications, and improvements at PDX. In addition, the management of the Port of Portland commits the manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Name: Mr. Phil Ralston
General Manager, Aviation Environmental and Safety

Signature: _____

Date: _____

Engineer Certification

The undersigned Registered Professional Engineer is familiar with the requirements of Part 112 of Title 40 of the Code of Federal Regulations (40 CFR part 112) and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR part 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility. [40 CFR 112.3(d)]

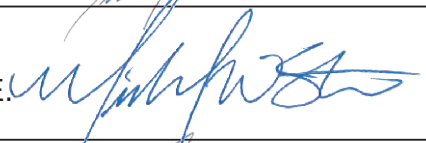
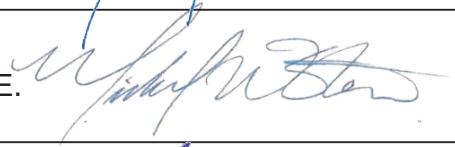
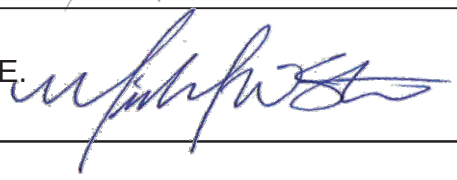
This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR part 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

Certifying Engineer: Michael W. Stevens, P.E.
State: Oregon
Registration Number: 17296

Signature: _____

Certification Date: _____

SPCC PLAN AMENDMENT LOG

Date	Reviewer	Signature	Revisions
8/23/2012	M. Stevens, P.E.		Addition of Tank 389
9/10/2013	M. Stevens, P.E.		Addition of Tanks 384 and 390 (Fuel Polishing System). Updated Figures.
6/19/2014	M. Stevens, P.E.		Addition of Tank 23 and replacement of CUP transformers. New Spill Plan (Appendix D).
3/17/2015	M. Stevens, P.E.		Addition of Elevator mechanical tanks and food waste tank.

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1.0 Introduction

1.1 Objectives and Scope of Plan

This plan outlines the procedures, methods, and equipment used for management of potential oil spills associated with oil storage owned and operated by the Port of Portland (Port) at the Portland International Airport (PDX) to comply with U.S. Environmental Protection Agency (EPA) oil spill prevention, control, and countermeasures (SPCC) standards, and to comply with inspection, reporting, training, and record keeping requirements. PDX is subject to the regulations specified in 40 CFR 112 due to the oil storage capacity of aboveground storage tanks and containers located at the Terminal, Maintenance Facility, Fire Department, Fire Training Facility, Deicing Treatment Plant, and Central Utility Plant. The hierarchical objectives of the SPCC Plans are as follows:

- PREVENT spill from occurring.
- PREPARE for a potential spill.
- RESPOND quickly and appropriately if a spill does occur.

The Portland International Airport Spill Response Procedures have been developed to establish roles, responsibilities, and appropriate actions in the event of a spill or accidental release of petroleum products or hazardous materials. A copy of the Spill Response Procedure is provided in Appendix D and is incorporated into this SPCC Plan.

1.2 Plan Content and Format

As required by the SPCC regulations, this Plan generally follows the format specified in 40 CFR 112.7. However, this Plan is designed to be "user friendly," easily implemented, and easily maintained. This Plan relies on "Tank/Area Data Sheets" that provide SPCC Plan compliance requirements and activities for each oil facility (tank, container, equipment or operation) at the facility. This approach allows PDX personnel to efficiently make Plan updates and to address program requirements for their particular area(s) of responsibility.

Section 2.0 of this Plan provides a description of the regulated oil facilities and the facility's general drainage characteristics. As required by 40 CFR 112.7(a)(1), Section 3.0 provides a discussion of PDX's conformance with the applicable SPCC regulations, but detailed technical and procedural information is referred to in the Appendices.

This Plan has been developed in accordance with the revised SPCC rules issued by the Environmental Protection Agency (EPA) on November 5, 2009. The Plan was also developed taking into consideration the SPCC Guidance for Regional Inspectors dated December 2, 2005.

1.3 Plan Review and Revision

This SPCC Plan is to be amended whenever there is a change in facility design, construction, operation, or maintenance procedure that materially affects the potential for an oil spill. Examples of changes that may require amendment of the Plan include the following:

- Commissioning or decommissioning tanks;
- Replacement, reconstruction, or installation of piping systems;
- Construction or demolition that might alter secondary containment structures; and
- Revision of standard operating or maintenance procedures.

This SPCC Plan is to be amended within 6 months of the change, and implemented within 6 months following preparation of the amendment.

In any case, this SPCC Plan will be reviewed and evaluated once every 5 years by the Spill Prevention Coordinator. The review will be documented. The SPCC Plan is to be amended within 6 months of the review, if required, and any changes are to be implemented within 6 months of the amendment.

All amendments to this SPCC Plan will be signed and certified by the Port of Portland. All technical amendments to this SPCC Plan will be reviewed and certified by a Professional Engineer.

In addition to the administrative requirements above, the Port of Portland will submit a report to the EPA Regional Administrator within 60 days if one of the following occurs:

1. A discharge of more than 1,000 gallons of an oil product into or upon navigable waters or adjoining shorelines in a single spill event.
2. A discharge of more than 42 gallons of an oil product into or upon navigable waters or adjoining shorelines in each of two spill events occurring within any 12-month period. The following information will be submitted:
    - Name of the facility.
    - Name(s) of the owner/operator of the facility.
    - Location of the facility.
    - Maximum storage or handling capacity of the facility and normally daily throughput.
    - The corrective actions and/or countermeasures taken, including an adequate description of the equipment, repairs and/or replacements.

- Adequate description of the facility, including maps, flow diagrams, and topographical maps, as appropriate.
- The cause(s) of such spill, including a failure analysis of system or subsystem in which the failure occurred.
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence.
- Such other information as the EPA Regional Administrator may reasonably require pertinent to the SPCC Plan or spill.

1.4 Location of SPCC Plan

In accordance with 40 CFR 112.3(e), a complete copy of this SPCC Plan is maintained at the facility. Copies are available in the administration building, Aviation Environmental Department (open 8:00 AM to 5:00 PM, Monday through Friday), in the PDX Communication Center (attended 24 hours a day), and the Maintenance Building in the Maintenance Operations Center (MOC). A copy of the plan will also be kept at the PDX Fire Department and Central Utility Plant.

1.5 Conformance with Applicable State and Local Requirements

This SPCC Plan (including the Spill Response Plan) was written to conform with 40 CFR part 112 (SPCC) requirements as well as other local, state, and federal requirements. Oil storage containers are registered and permitted as appropriate based on local Fire Marshall requirements.

1.6 Contracting and Expenditure Authority

The Port of Portland Administrative Policy (Numbers 7.1.11 [Disasters] and 7.2.3 [Contracting and Expenditure Authority]) sets the procedures and responsibilities for appropriate disaster response and expenditure of Port assets. In the event of a spill of a hazardous substance (including oil and oil products), the following expenditure provision applies:

The highest-ranking Port employee present or available during an emergency or a disaster is authorized to execute contracts in any reasonable amount to the extent the contracts are immediately necessary for the preservation of life, safety, or Port property. If the emergency so requires, work may be commenced under such contracts prior to the contract being reduced to writing, provided that a written contract is executed as soon as circumstances permit. Prior approval from the Port's emergency command center must be obtained before executing contracts necessary to allow the resumption of business operations, but not immediately necessary for the preservation of life, safety, or Port property.

2.0 Facility Description

The PDX facility comprises approximately 3,200 acres. A facility map is provided in Appendix A. The areas included in this SPCC Plan are the Maintenance Facility, Fire Training Facility, Fire Department, Central Utility Plant, Deicing Treatment Plant, and ancillary equipment around the Terminal building. These areas include oil storage that is owned and operated by the Port of Portland. Each of these areas is described below and facility diagrams are provided in Appendix B. Identification of the non-transportation-related oil facilities that are owned and operated by the Port of Portland were provided by Port personnel.

2.1 Maintenance Facility

The PDX Maintenance Facility is located at 7111 NE Alderwood Way. The facility includes offices, storage buildings, and several maintenance shops. A vehicle maintenance shop services Port-owned vehicles and includes vehicle bays, storage areas, offices, and an oil storage room. The vehicle maintenance shop has trench drains which block the flow of liquids into or out of the building exits. These drains flow to oil-water separators prior to being discharged to the sanitary sewer. Specific areas at the Maintenance Facility covered by this SPCC Plan include the following:

- Tank 357 — This double-walled aboveground storage tank (AST) is located in the Vehicle Maintenance Shop Oil Room. The tank has four compartments and holds hydraulic oil (250 gal.), gear oil (250 gal.), coolant oil (250 gal.), and motor oil (500 gal.)
- Tank 358 — This AST is located in the Vehicle Maintenance Shop Oil Room. The tank contains automatic transmission fluid and has a working capacity of 275 gallons.
- Tank 12 — This AST is located in the Vehicle Maintenance Shop Oil Room. The tank contains antifreeze and has a working capacity of 275 gallons.
- 55-gallon drums (up to 12) — These drums are stored in the Vehicle Maintenance Shop Oil Room and in the vehicle bays. The drums hold various petroleum or used petroleum products.
- 55-gallon drums (up to 6) — These drums are stored in the Hazardous Materials Storage Building located in the northwest corner of the Maintenance Facility. The drums contain various petroleum or used oil products. The Hazardous Materials Storage Building has trench drains which contain the flow of liquids at building exits. These drains reportedly flow to an oil-water separator and lift station that can pump spilled material to a large AST.
- Tank 279 — This double-walled AST contains diesel fuel for an emergency standby generator. Its working capacity is 500 gallons. The generator also has an ancillary 100-gallon day tank located in the generator room.
- Tank 273 — This double-walled AST located outside of the Maintenance Shop bays contains used oil. Its working capacity is 500 gallons.

Specific compliance requirements for these oil-containing facilities are described in Tank/Area Data Sheets located in Appendix F of this SPCC. The referenced tank identification numbers are assigned for internal Port use and may differ from reference numbers assigned by regulatory agencies or other authorities.

The Maintenance Facility also has three underground storage tanks (USTs) used to store fuel for vehicle refueling. The tanks supply fuel to a nearby fueling station located on the northern portion of the facility. The tanks consist of a 6,000-gallon UST containing unleaded fuel (Tank No. 1), a 6,000-gallon UST containing diesel (Tank No. 2), and a 10,000-gallon UST containing diesel (Tank No. 3). These tanks are included for identification purposes only. The revised SPCC rules (July 17, 2002) exempted completely buried tanks and piping from SPCC requirements provided they are subject to the UST requirements of 40 CFR Part 280 or a state program approved under Part 281. The State of Oregon currently implements an Underground Storage Tank program (OAR 340-150), which is approved under 40 CFR Part 281.

2.2 Fire Training Facility

The Fire Training Facility is located near the northwest corner of PDX (see Appendix B). The area is used by the PDX Fire Department and the Oregon Air National Guard to practice extinguishing live fires. The area consists of a burn area, three ASTs, oil-water separator facility, sprinkler system, and control panel. The burn area is lined, back-filled with gravel, contains fuel sprinklers, igniters, a fire suppression water drain and recycling system, and reburn pipe. Located approximately 200 feet west of the burn area are two 2,000-gallon ASTs (Tanks 22 and 23) containing jet fuel.

The tanks are housed inside a bermed concrete containment area of adequate size. Underground piping is reportedly steel with cathodic protection. Live fire training is currently conducted primarily using propane as a fuel source, and jet fuel is only used occasionally.

During fire-training exercises using jet fuel, the burn area is partially filled with water, then fuel from an AST is pumped into the contained burn area and ignited. Once the fire is extinguished, residual fuel and water are pumped to an oil-water separator where the fuel is skimmed off the top of the water. The separator water flows to one of two adjacent storage tanks. The water from the tanks is recycled back into the training facility. A tank located within a containment berm adjacent to the oil-water separator (Tank 24) is not currently in service (physically disconnected).

Specific compliance requirements for these oil-containing facilities are described in Tank/Area Data Sheets located in Appendix F of this SPCC.

2.3 Fire Department

The PDX Fire Department is located at 5250 NE Marine Drive. The PDX Fire Department is dedicated to servicing the PDX facility and limited adjacent areas. The Fire Department has one 2,000-gallon diesel AST

(Tank No. 272) on the west side of the building. This tank provides fuel for emergency vehicles and a nearby emergency generator. An oil-water separator is connected to the storm drain near the fueling area.

Specific compliance requirements for this tank are described in Tank/Area Data Sheets located in Appendix F of this SPCC.

2.4 Central Utility Plant

The Central Utility Plant (CUP) is located at 7320 NE Airport Way and serves as the primary source of power, heating, and cooling for PDX. Specific areas at the CUP covered by this SPCC Plan include the following:

- Tanks 282, 283, 284, and 285 – These tanks are 150 gallons each and serve as day tanks to emergency generators located in the generator room.

Specific compliance requirements for these oil-containing facilities are described in Tank/Area Data Sheets located in Appendix F of this SPCC. Oil-filled electrical equipment at the CUP (i.e., transformers) is discussed below in Section 2.7.

The CUP also has three USTs used to store fuel for boilers and emergency generators. The tanks consist of a 6,000-gallon UST (Tank No. 265, located on the west side of the CUP) and two 30,000-gallon USTs (No. 18 and No. 19, located on the north side of the CUP) containing diesel fuel. The 6,000-gallon tank is used to feed the four generator day tanks. The 30,000-gallon tanks are used to feed the main plant boilers and supply the 6,000-gallon tank. These tanks are included for identification purposes only and are not regulated by SPCC requirements, as previously discussed.

2.5 Deicing Treatment Plant

The Deicing Treatment Plant (DTP) building is located at 10150 NE 33rd Drive. The DTP consists of an Anaerobic Fluidized Bed Reactor that is used to treat deicing storm water runoff from the PDX aircraft and pavement deicing operations, keeping PDX in compliance with Federal, State, and local water quality regulations. The DTP has one 980-gallon diesel AST (Tank No. 389) on the east side of the building. This tank provides fuel for the associated emergency generator to maintain operation of the treatment facility in the event of a power outage.

Specific compliance requirements for these oil-containing facilities are described in Tank/Area Data Sheets located in Appendix F of this SPCC.

2.6 Main Terminal Equipment

Aside from the oil-filled electrical equipment located in the vicinity of the Main Terminal building (discussed in Section 2.5), oil storage around the Main Terminal includes a backup generator located on the north side of the C concourse. The generator includes one 500-gallon diesel storage tank (Tank 384). This tank provides fuel for the associated emergency generator to maintain operation of Concourse C in the event of a power outage.

Specific compliance requirements for these oil-containing facilities are described in Tank/Area Data Sheets located in Appendix F of this SPCC.

2.7 Oil-Filled Operational Equipment

The PDX facility includes oil-filled operational equipment including electrical equipment (non-PCB oil-filled regulators and transformers) and 24 hydraulically operated elevators. Instead of providing secondary containment for qualified oil-filled operational equipment, SPCC rules allow an owner or operator to prepare an oil spill contingency plan and a written commitment of manpower, equipment, and materials to quickly control and remove discharged oil. Such a plan must include an inspection or monitoring program for the equipment to detect a failure and/or discharge. An individual impracticability determination for this equipment is not required. Equipment is eligible for such consideration if the facility did not discharge from any oil-filled operational equipment: (1) more than 1,000 U.S. gallons of oil in a single discharge to navigable waters, or (2) discharge more than 42 U.S. gallons of oil in each of two discharges to navigable waters, within any 12-month period. The PDX facility meets these requirements and therefore the oil-filled equipment at the PDX facility is not subject to the sized secondary containment requirements. For reference, oil-filled electrical equipment at PDX includes the following:

Oil Regulators. These are six 165-gallon oil-filled electrical equipment units located in the Oil Regulator Room in the CUP.

Transformers. There are 16 transformers (non-PCB) located across the PDX facility. A summary of the transformers is listed in the table below.

Transformer ID	Location	Oil Capacity (gallons)
HBB5445-001T	CUP Courtyard	753
1359002345	CUP Courtyard	544
1359002346	CUP Courtyard	544
1359002365	CUP Courtyard	1,045
T2B	Terminal North bag tunnel rm. T1344B	204
T3B	Terminal North bag tunnel rm. T1344B	204
ET-E	Concourse E, at gate E-1 rm. T1550A	188
TE-A	Concourse E, East of gate E-1 rm. E1000	290
TE-B	Concourse E, East of gate E-1 rm. E1000	290
TDA	Concourse D, at gate D-9 rm. D1620	211
TDB	Concourse D, at gate D-9 rm. D1620	306
TCA	Concourse C, West at gate C-15 rm. C1080	481
TCB	Concourse C, West at gate C-15 rm. C1080	481
USM1	Concourse B, 1st floor room B1110A	240
P1-A	Parking structure 1st floor SW corner rm. P1205A	550
P-1	Parking structure 1st floor SW corner rm. P1205B	275

Of these units, the CUP oil regulators and eight of the PDX transformers (T2B, T3B, TDA, TDB, TCA, TCB, P1-A, and P1) are fully enclosed within facility buildings and have adequate containment provided by the building (and tertiary containment structures within the building) to prevent a release of oil from exiting the building and potentially reaching surface water. All of the interior-located oil-filled equipment is also located in areas that are frequently viewed by maintenance personnel and spills would be addressed quickly. The remaining transformers (HBB5445-001T, 1359002345, 1359002346, 1359002365, ET-E, TE-A, TE-B, and USM1) are included in the PDX monthly inspection program. The contingency spill plan covering this equipment is addressed by the Port's Spill Response Procedures plan included in Appendix D.

Elevator Equipment. A total of 24 hydraulically operated elevators are distributed across the main airport terminal and the concourses (including one at outlying air cargo building 8855). The elevators are used in both public spaces and controlled areas (for the movement of both people and freight), and are summarized in the table below:

Elevator ID	Location	Oil Capacity (gallons)
ELEVA03	A Concourse	171
ELEVB01	B Concourse	100
ELEVC06	C Concourse	165
ELEVCF08	C Concourse Freight Elevator	171
ELEVCF16	C Concourse Freight Elevator	180
ELEVC18	C Concourse	100
ELEVD01	D Concourse	180
ELEVDF02	D Concourse Freight Elevator	265
ELEVD03	D Concourse	160
ELEVD09	D Concourse	90
ELEVD10	D Concourse	100
ELEVD11	D Concourse	90
ELEVE01	E Concourse	80
ELEVE06	E Concourse	100
ELEVT01	North Terminal	110
ELEVT02	North Terminal	110
ELEVT03	South Terminal	110
ELEVT05	South Terminal	165
ELEVTF07	Terminal Freight Elevator	330
ELEVT08	A/B/C Checkpoint	220
ELEVT09	Main Terminal	115
ELEVT10	Light Rail	165
ELEVT29	North Terminal	110
BUILDING 8855	8855 NE Air Cargo Way	100

2.8 Mobile Tanks

PDX operates two mobile tanks (mounted on trucks) and one mobile fuel polishing system (mounted on a trailer). The truck IDs are 16232 and 17034 and the polishing system is identified as Tank 390. Both trucks house mobile fueling tanks with capacities of 100 gallons each. The fuel polishing trailer has a normal storage capacity of 110 gallons (greater while in use). These mobile units are stored in the Equipment Storage Building. Drains in the Equipment Storage Building are connected to a vault and containment storage tank.

Specific compliance requirements for these tanks are described in the Tank/Area Data Sheets located in Appendix F of this SPCC Plan.

2.9 Food Service Tanks

Restaurants located in the terminal food court and concourses have access to storage tanks used specifically for the storage of used vegetable oil (fry oil) pending disposal. These tanks are located outside of the terminal building (under cover) in the vicinity of the restaurants. Airport tenants generally own their respective food oil tanks, but the Port is responsible for a communal grease/oil collection vat located adjacent to the main terminal food court.

Several restaurants make use of the communal vat tank (which is manually loaded through a hatch in the tank lid) which is maintained in a loading dock that is under cover and has a drain that is connected to the sanitary sewer (no egress for spill liquids to the storm drain system). The contents of the vat are manually removed on a service schedule (or otherwise as needed) by a trained operator and transported off-site for recycling.

Specific compliance requirements for this tank are described in the Tank/Area Data Sheets located in Appendix F of this SPCC Plan.

2.10 Transfer Areas

The following bulk fuel or oil loading/unloading areas involving tank/tank truck transfers were identified as part of this SPCC Plan preparation:

- Unloading of the 500-gallon used oil AST at the Maintenance Facility (Tank 273)
- Loading of the 500-gallon diesel fuel AST at the Maintenance Facility (Tank 279)
- Loading of the Maintenance Facility Oil Room tanks (Tanks 357, 358, and 12)
- Loading of the 2,000-gallon jet fuel tank at the Fire Training Facility (Tank 22)
- Loading of the 2,000-gallon diesel fuel tank at the PDX Fire Department (Tank 272)

Other transfer operations occur at USTs located at the Maintenance Facility and Central Utility Plant. However, the revised SPCC rules exempt USTs from the SPCC program as they are regulated under a State program, in this case, OAR 340-150, which includes spill prevention requirements for transfer operations.

Procedures for tank loading and unloading, and vehicle refueling activities are located in Appendix E of this plan.

2.11 Facility Drainage

The PDX Storm Sewer System is shown on the drawings included in Appendix C. Area-specific drainage control features are described in the Tank/Area Data Sheets located in Appendix F. Runoff from PDX and

adjacent properties is contained within nine drainage areas encompassing an area of nearly 3,700 acres that generally flow south to the Columbia Slough via overland flow, drain pipes, detention facilities, pump stations, and open channels (shown in Appendix C). Runoff from Drainage Areas 1, 3, 5, 8, and 9 are routed directly to the Columbia Slough. Runoff from Drainage Areas 2, 4, 6, and 7 also discharge to the Columbia Slough; however, they are part of the managed runoff deicing system that is operated from November 1st through May 31st, based on weather conditions. Runoff from Drainage Area 1 will be collected as part of the deicing system enhancements scheduled to begin operation for the 2011-2012 deicing season.

A significant portion of PDX is underlain by moderately to highly permeable sandy dredge fill. Three quiescent ponds and two detention ponds are located to the south and west of the Air Trans Center and these ponds collect storm water runoff from three of the nine drainage basins at PDX (basins 2, 4, and 6). Sorbent booms are maintained in these ponds.

The maintenance facility is located in drainage basin 7 and discharges through two outfalls, 7A and 7B, to the McBride Slough, which leads to the Columbia Slough. Sorbent booms are in place at the outfalls to the McBride Slough as a means of preventing or reducing petroleum products from reaching the Columbia Slough. There are also sorbent booms in the basin 7 drainage vault located east of runway 28L. Trench drains around the fueling stations associated with the USTs at the maintenance facility drain through an oil-water separator equipped with an emergency shut-off valve prior to discharging to the storm drain system.

The CUP is located in drainage basin 6. Associated stormwater drains through the basin 6 detention and quiescent ponds before being pumped into the Columbia Slough. Sorbent and hard booms are in place in the quiescent pond to help prevent petroleum products from reaching the Columbia Slough.

The PDX Fire Department is located in drainage basin 1. A catch basin in the vicinity of the Fire Department fueling area (and the associated double-walled AST) drains through an oil-water separator prior to discharging to the storm drain system which discharges through outfall 1C to the SW Quad ditches and is then pumped by MCDD to the Columbia Slough.

The vicinity of the Fire Training Area does not include drainage structures (the nearest catch basin is more than 350 feet away from the storage tanks), and the majority of the surface in the area is unimproved and relatively flat so there is no reasonably likely potential for spills in this area to reach the storm sewer system, even in the case of a sudden catastrophic tank release.

3.0 Plan Requirements and Activities

3.1 Fault Analysis

As part of this SPCC Plan preparation, oil containing facilities were evaluated for their reasonable potential for failure. A description of this fault analysis is included for each oil facility as provided in the Tank/Area Data Sheets located in Appendix F. The facility also involves transfer operations as identified in Section 2.10; however, there are no loading "racks" present. The following fault analysis and containment strategy is appropriate for transfer operations.

Transfer operations occur over asphalt paved areas or with connection points inside concrete berms away from storm drains or water course. A release during a load/unload procedure can be characterized as follows:

- Truck loading rate is 150 gallons per minute (gpm).
- The reasonable expected source of a release is a ruptured hose connection.
- Because the transfer operations are supervised by an attendant, the reasonably expected time elapsed to identify the release is 30 seconds.
- The maximum expected volume of discharge would be 150 gpm x 0.5 min = 75 gallons.

Secondary containment for load/unload operations occurring over paved asphalt areas include placing properly designed storm drain covers over nearby storm drains. The location of storm drains can be identified in the field and on the facility drawings located in Appendix C. Further response actions to a spill in these areas include the deployment of the PDX Spill Response Procedures provided in Appendix D. A Tank Loading and Unloading Procedure and a Vehicle Refueling Procedure is Provided in Appendix E.

3.2 Containment

Oil facilities at PDX include containers, bulk storage tanks, oil-filled operational equipment (both electrical and mechanical), a food-oil (vegetable oil) tank, and airport mobile refuelers. As such, these facilities are subject to the general containment system requirements of 40 CFR Part 112.7(c) and the more specific secondary containment requirements of 40 CFR 112.8(c). The containment strategy for each regulated oil facility identified in this Plan is described on the Tank/Area Data Sheets located in Appendix F.

3.3 Brittle Failure Analysis

All PDX bulk storage containers are shop-built (no field-erected tanks) and therefore no brittle failure evaluation is required.

3.4 Inspections and Testing

The PDX facility includes shop-built aboveground tanks and portable containers which pose a minimal risk of internal corrosion and are not in contact with soil. As such, the PDX facility will perform monthly visual inspections in lieu of integrity testing per the Steel Tank Institutes SP001 Standard for Inspection of Aboveground Storage Tanks, Third Edition Issued July 2005. Pursuant to the SP001 Standard, the tanks and containers at the PDX facility are classified Category 1 ASTs or portable containers and qualify for periodic owner performed inspections. The SP001 inspection checklist items and frequency are summarized below:

Monthly Inspection Checklist Items:

- Tank Containment
- Leak Detection
- Tank Attachments and Appurtances

Other Conditions Annual Inspection Checklist Items:

- Tank Containment
- Tank Foundation and Supports
- Cathodic Protection
- Tank External Coating
- Tank Shell/Heads
- Tank Manways, Piping, and Equipment
- Tank Roof
- Insulated Tanks
- Level and Overfill Prevention
- Electrical Equipment Portable Container Monthly Checklist:
- Containment/Storage Area
- Leak Detection
- Container

3.5 Spill Response

Spill response procedures have been developed and implemented at the PDX facility. The procedures are documented in the "Port of Portland Portland International Airport Spill Response Procedures". A copy of these procedures is provided in Appendix D.

3.6 Recordkeeping

Records generated with this plan (spill notifications, inspection worksheets, repair records, and training records) are maintained for a minimum of 3 years. These records are filed in the SPCC records or in the facility operating records. Copies of this SPCC Plan are kept in the administration building, the PDX Communication Center, the Maintenance Building in the MOC, the PDX Fire Department, and the Central Utility Plant.

3.7 Training

Training is required for oil handling employees. These personnel at the facility will be trained in:

- The laws and regulations regarding spills, releases, and pollution control.
- The contents of the SPCC Plan.
- The operation and maintenance of equipment to prevent discharges.
- General facility operations.
- Known discharges or failures and malfunctioning components.
- Recently developed precautionary measures.

Spill prevention and response training will be conducted at least annually. Informal briefings will be held periodically through the year to update employees on changes in the regulations, laws, or in-house procedures. Training records will be maintained for a minimum of 3 years.

3.8 Security

To prevent a spill or release from being caused by accidental or unknown entry or vandalism, several security measures have been taken as noted below:

- Locking of direct outward flow valves in the closed position when non-operating or in standby.
- Adequate lighting for the detection of spills by both facility personnel and the general public.
- Aboveground storage tanks and related structures located in regular traffic areas are protected from potential vehicle contact with bollards or other barriers.

- Sufficient lighting and security are provided throughout the facility to allow for spill detection and the prevention and discovery of vandalism.
- PDX is fully fenced, and entrances are security controlled.

Area-specific security measures are identified in the Tank/Area Data Sheets located in Appendix F.

Appendix A

PDX Facility Map

Port of Portland

PORTLAND INTERNATIONAL AIRPORT
FACILITY MAP

1600 0 1600 3200
SCALE IN FEET

DATE: JAN 2011

PDX 2011-3000

DRAWING INTENDED FOR GRAPHICAL USE ONLY

Appendix B

Facility Drawings
(Spill Prevention Control and Countermeasure Plan)

Port of Portland

THE PORT OF PORTLAND COMMISSION
JIM CARTER - PRESIDENT
PAUL A. ROSENBAUM - VICE PRESIDENT
PETER BRAGDON - TREASURER
DIANA DAGGETT - SECRETARY
TOM CHAMBERLAIN
BRUCE HOLTE
ROBERT L. LEVY
LINDA M. PEARCE
TOM TSURUTA

BILL WYATT, EXECUTIVE DIRECTOR
TOM PETERSON, CHIEF ENGINEER
VINCE GRANATO, CHIEF OPERATING OFFICER

SHEET NO. DESCRIPTION

PORTLAND INTERNATIONAL AIRPORT

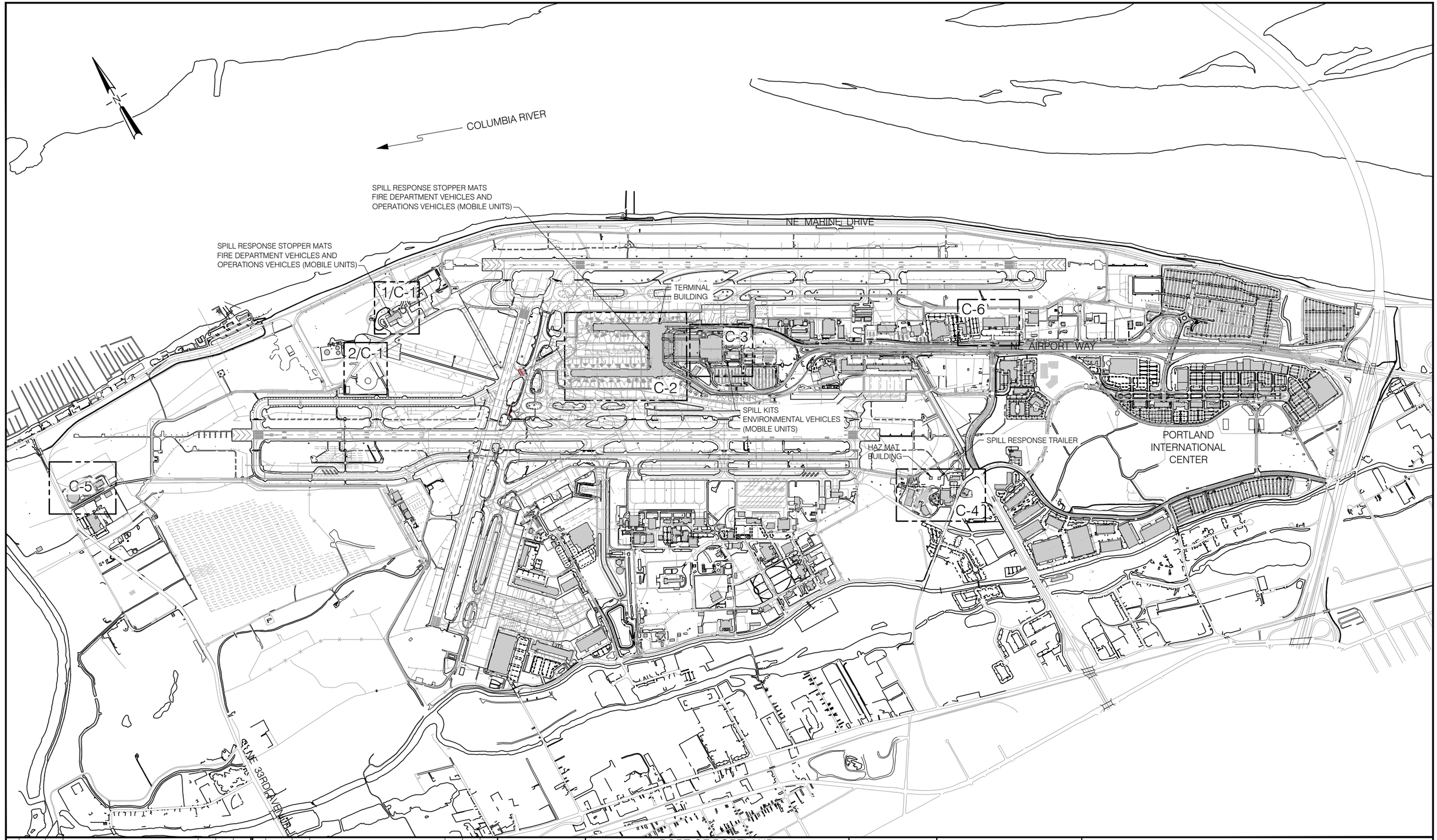
SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC)

DECEMBER 2014

DESIGN NO. _____ PROJECT MANAGER _____

PROJECT NO. 1174 DRAWING NO. PDX 2013-3093

PDX - SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC)



CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.

NO.	DATE	BY	REVISIONS	APPVD	CK'D

NO.	DATE	BY	REVISIONS	APPVD	CK'D

PORT OF PORTLAND
PORTLAND, OREGON

DESIGN NUMBER

1174
PROJECT NUMBER

DESIGNED BY	D. PETERSON
DRAWN BY	P. EBERT
CHECKED BY	D. PETERSON
DATE	DEC 2014
SCALE	1" = 800'

PORTLAND INTERNATIONAL AIRPORT

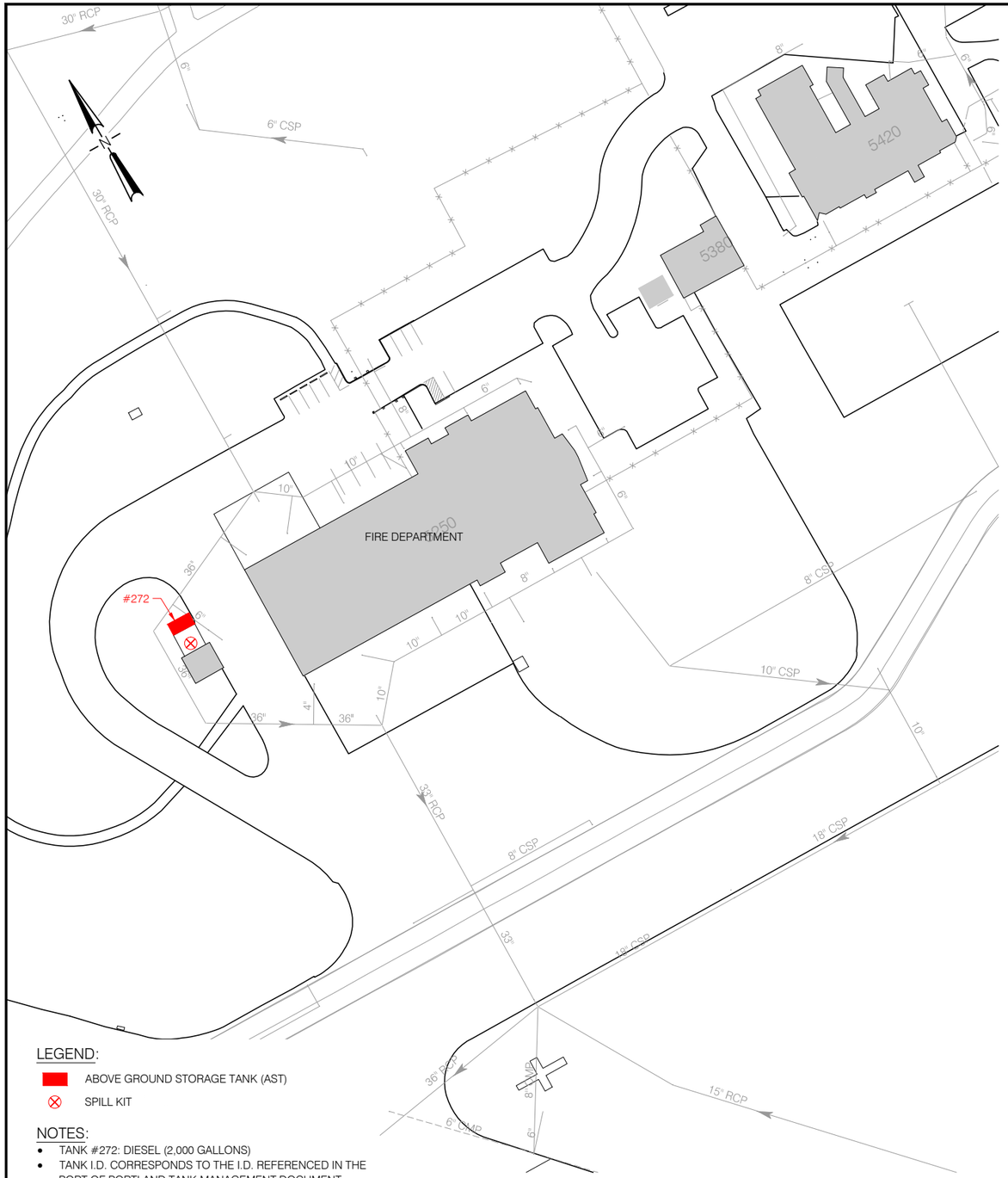
SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCC)
SITE PLAN AND SPILL RESPONSE LOCATIONS

SUBMITTED BY
PAT EBERT
CAD MANAGER

TYPE: MD | DRAWING NO.: PDX 2013-3093 1 / 7 (GI-1)

PRINTED: 2/18/2015 8:09:55 AM KHALM r:\maintainables\pdx\3093-spill prevention control and countermeasures\2014\sheets.dwg

DRAWING SCALE IS REDUCED 50% WHEN SHEET SIZE IS 11" x 17".



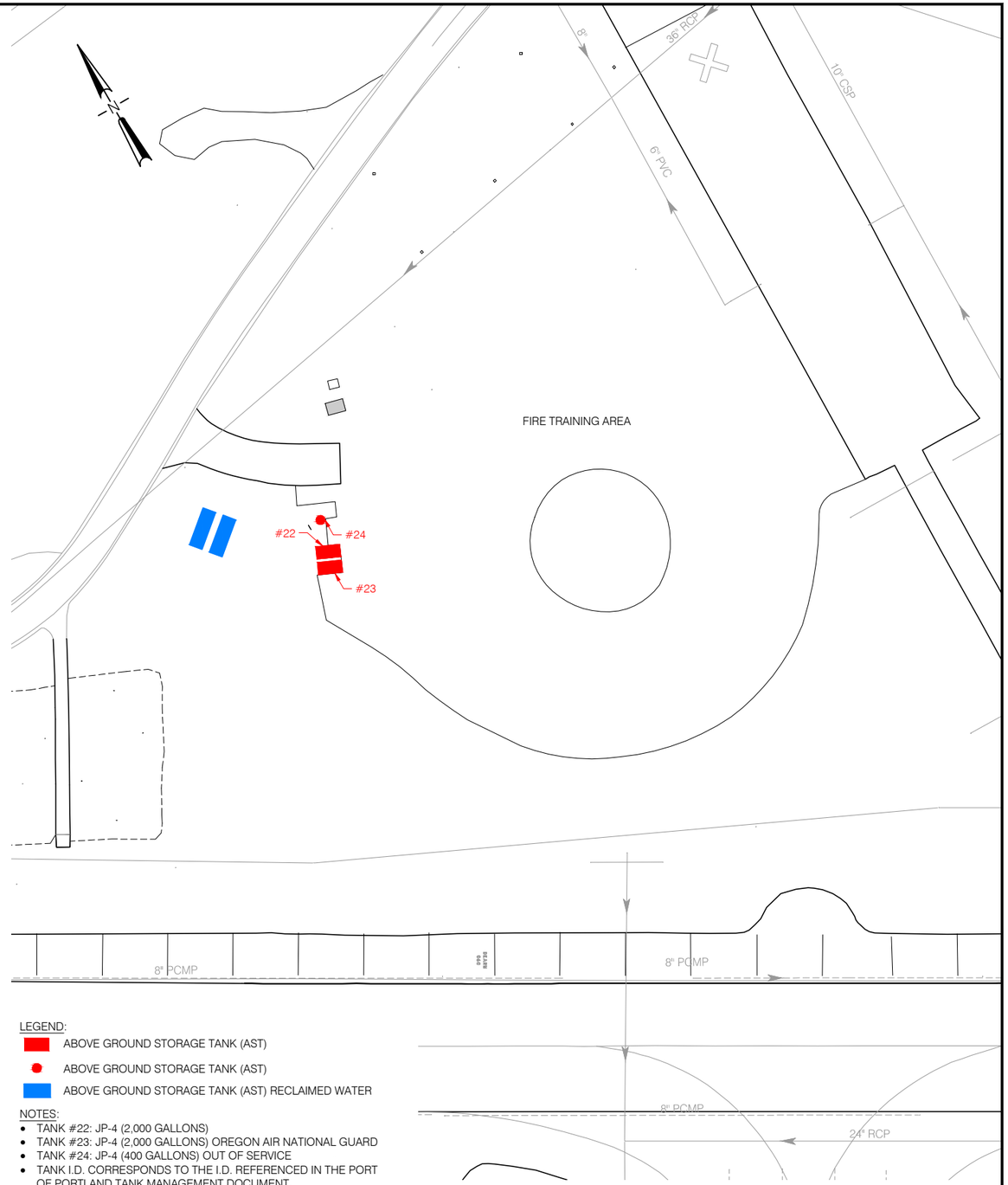
LEGEND:

- ABOVE GROUND STORAGE TANK (AST)
- SPILL KIT

NOTES:

- TANK #272: DIESEL (2,000 GALLONS)
- TANK I.D. CORRESPONDS TO THE I.D. REFERENCED IN THE PORT OF PORTLAND TANK MANAGEMENT DOCUMENT.

1 FIRE DEPARTMENT
SCALE: 1" = 50'



LEGEND:

- ABOVE GROUND STORAGE TANK (AST)
- ABOVE GROUND STORAGE TANK (AST)
- ABOVE GROUND STORAGE TANK (AST) RECLAIMED WATER

NOTES:

- TANK #22: JP-4 (2,000 GALLONS)
- TANK #23: JP-4 (2,000 GALLONS) OREGON AIR NATIONAL GUARD
- TANK #24: JP-4 (400 GALLONS) OUT OF SERVICE
- TANK I.D. CORRESPONDS TO THE I.D. REFERENCED IN THE PORT OF PORTLAND TANK MANAGEMENT DOCUMENT.

2 FIRE TRAINING AREA
SCALE: 1" = 50'

GRAPHIC SCALE - FOR REFERENCE ONLY
0 1/2" 1" 2"

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.

NO.	DATE	BY	REVISIONS	APPVD	CK'D
NO.	DATE	BY	REVISIONS	APPVD	CK'D

PORT OF PORTLAND
PORTLAND, OREGON

DESIGN NUMBER
1174
PROJECT NUMBER

DESIGNED BY	D. PETERSON
DRAWN BY	M. KHAL
CHECKED BY	D. SULLIVAN
DATE	DEC 2014
SCALE	1" = 50'

PORTLAND INTERNATIONAL AIRPORT

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCC)
FIRE DEPARTMENT AND FIRE TRAINING AREA

SUBMITTED BY
PAT EBERT
CAD MANAGER

TYPE: MD | DRAWING NO.: PDX 2013-3093 2/7 (C-1)

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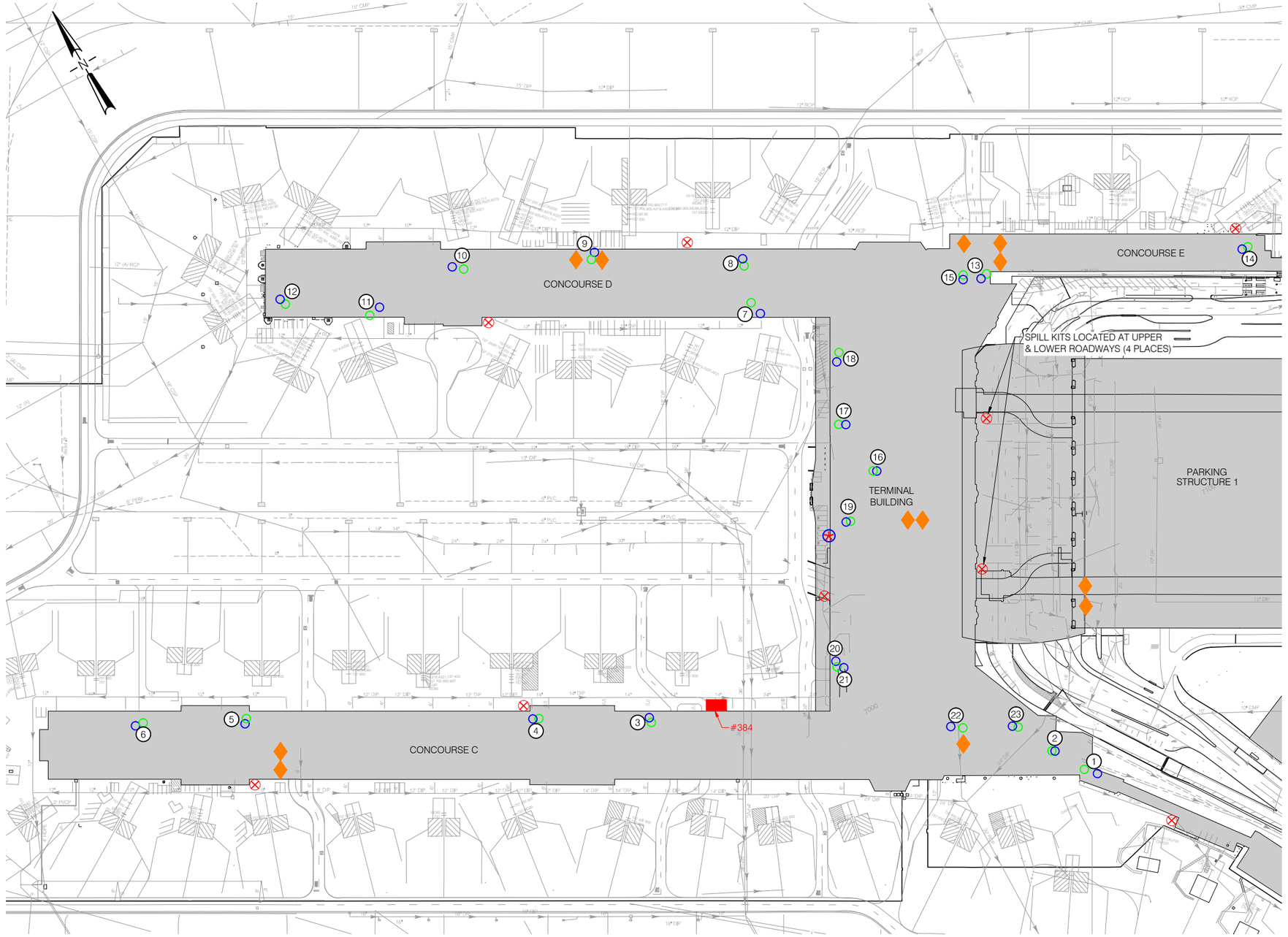

LEGEND:

- OIL FILLED ELECTRICAL EQUIPMENT
- SPILL KIT
- ABOVE GROUND STORAGE TANK (AST)
- GREASE COLLECTION VAT (250 GALLONS)
- ELEVATORS
- MECHANICAL ROOMS

MACHINE ROOM AND ELEVATOR LOCATIONS

NO.	ELEV. NO.	MACH. RM	TANK SIZE (GAL)
1	A03	B1426	171
2	B01	B1240	100
3	C06	C1220	165
4	CF08	C1162	171
5	CF16	C1056	180
6	C18	C1019	100
7	D01	D1028	180
8	DF02	D1063	265
9	D03	D1404	160
10	D09	D1632	90
11	D10	D3506	100
12	D11	D1660	90
13	E01	E3464	80
14	E06	E1464	100
15	E29	E2011	110
16	T01	T2441	110
17	T02	T1319	110
18	T03	T2345	110
19	T05	T1291	165
20	TF07	T1815	330
21	T08	T1815	220
22	T09	T1768	115
23	T10	T1744	165

NOTES:

TRANSFORMER LOCATION:	TRANSFORMER ID:	GAL.:
TERMINAL NORTH BAG TUNNEL ROOM	T1344B TRANSFORMER T2B	204
TERMINAL NORTH BAG TUNNEL ROOM	T1344B TRANSFORMER T3B	204
CONCOURSE E AT GATE E-1 ROOM	T1550A TRANSFORMER ET-E	188
CONCOURSE E EAST OF GATE E-1 ROOM	E1000 TRANSFORMER TE-A	290
CONCOURSE E EAST OF GATE E-1 ROOM	E1000 TRANSFORMER TE-B	290
CONCOURSE D AT GATE D-5 ROOM	D1620 TRANSFORMER TDA	211
CONCOURSE D AT GATE D-5 ROOM	D1620 TRANSFORMER TDB	306
CONCOURSE C WEST AT GATE C-15 ROOM	C1080 TRANSFORMER TCA	481
CONCOURSE C WEST AT GATE C-15 ROOM	C1080 TRANSFORMER TCB	481
CONCOURSE B 1st FLR. RM. B1110A TRANSFORMER	USM1	240
PARKING STRUCTURE 1st FLR. SW CORNER ROOM	P1205A TRANSFORMER P1-A	550
PARKING STRUCTURE 1st FLR. SW CORNER ROOM	P1205BT TRANSFORMER P-1	275
CONCOURSE C EAST OF C2 EMERGENCY DIESEL GENERATOR #384 (500 GALLONS)		

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.

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PORT OF PORTLAND
PORTLAND, OREGON

DESIGN NUMBER

1174
PROJECT NUMBER

DESIGNED BY D. PETERSON
DRAWN BY M. KHAL
CHECKED BY D. SULLIVAN
DATE DEC 2014
SCALE AS SHOWN

PORTLAND INTERNATIONAL AIRPORT

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCC)
TERMINAL BUILDING

SUBMITTED BY
PAT EBERT
CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3093 3/7 (C-2)

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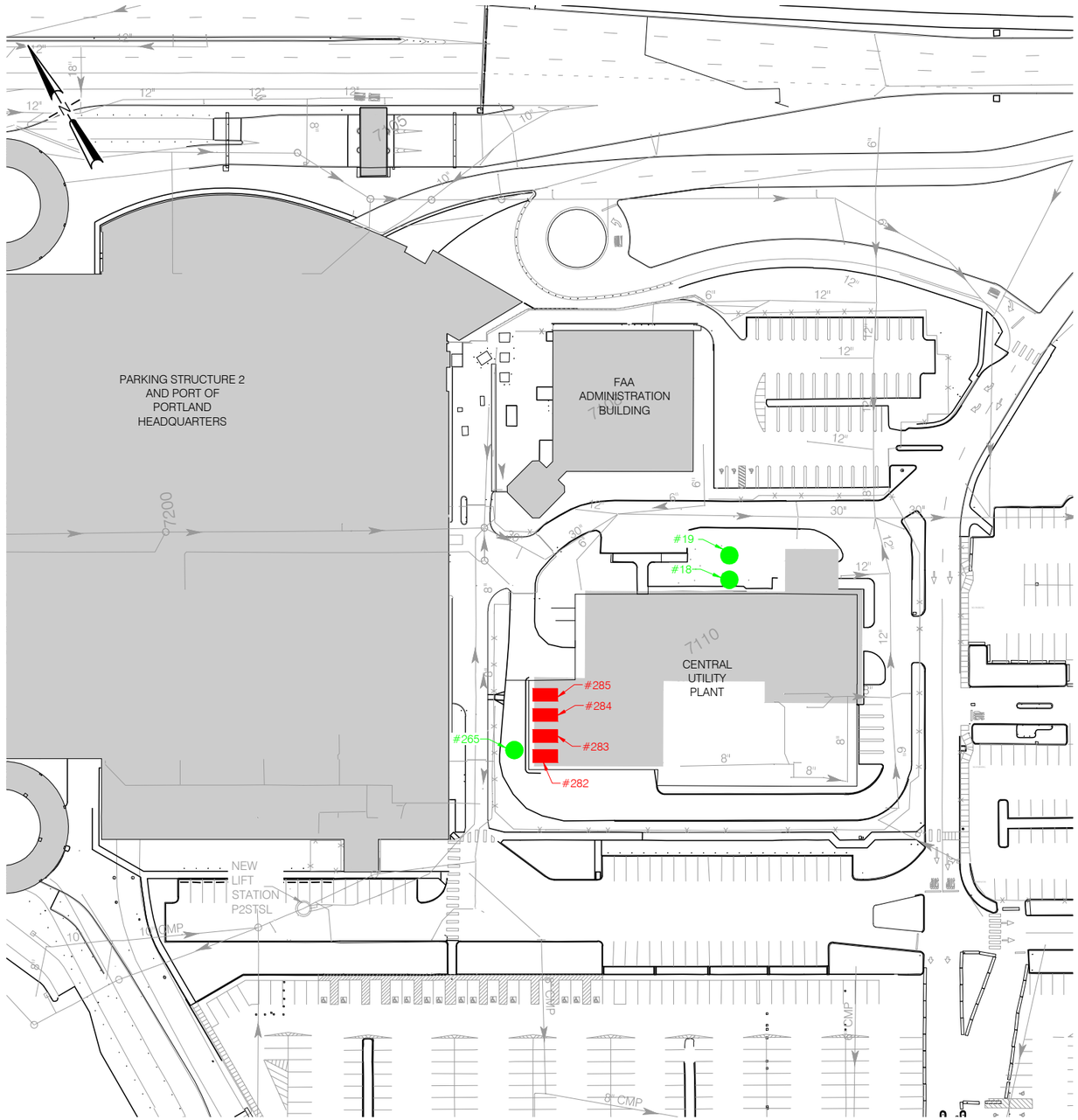
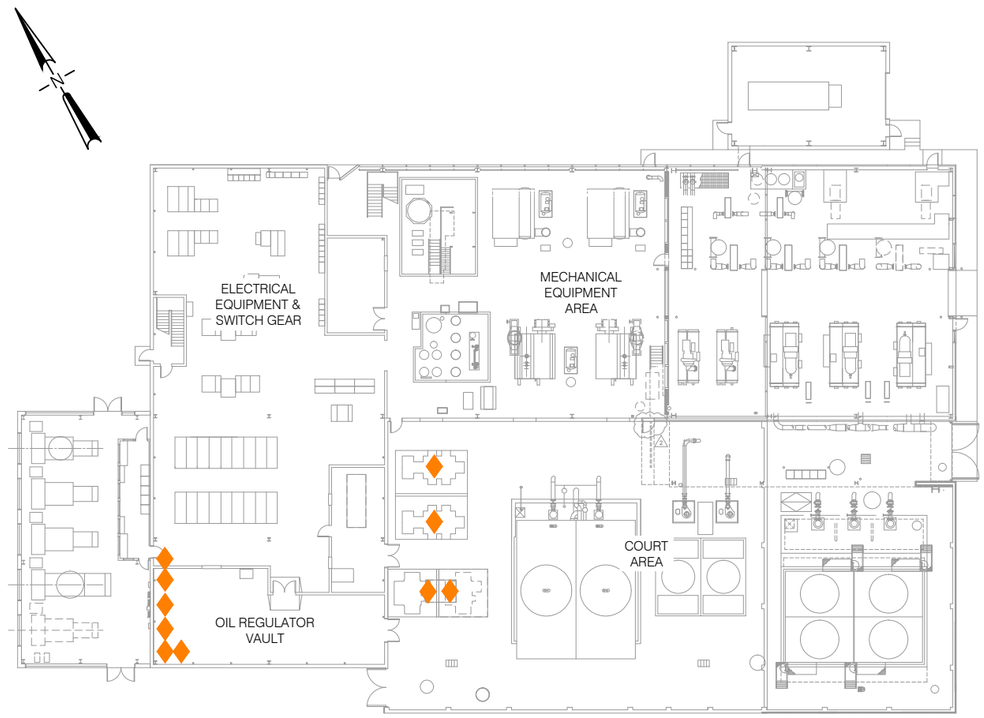


1 CENTRAL UTILITY PLANT
SCALE: 1" = 50'



2 CENTRAL UTILITY PLANT - INTERIOR
SCALE: N.T.S.

LEGEND:

- ABOVE GROUND STORAGE TANK (AST)
- UNDERGROUND STORAGE TANK (UST)
- OIL FILLED ELECTRICAL EQUIPMENT

NOTES:

- TANK #18: FUEL OIL #6 (30,000 GALLONS)
- TANK #19: FUEL OIL #6 (30,000 GALLONS)
- TANK #265: DIESEL (6,000 GALLONS)
- TANKS #282-285: DIESEL (150 GALLONS)
- 1st FLOOR OIL REGULATORS: 10R/28L EDGE LIGHT (165 GALLONS), 10R/28L CENTERLINE LIGHT (165 GALLONS), 10R/28R TOUCHDOWN ZONE LIGHT (165 GALLONS), 10L/28R EDGE LIGHT (178 GALLONS), 10L/28R CENTERLINE LIGHT (165 GALLONS), SPARE (160 GALLONS)
- COURTYARD TRANSFORMERS: TRANSFORMER #1359002345 (544 GALLONS), TRANSFORMER #1359002346 (544 GALLONS), TRANSFORMER #1359002365 (1045 GALLONS) TRANSFORMER #HBB5445-001T (753 GALLONS)

0 1/4" 1/2" 1" 2"
GRAPHIC SCALE - FOR REFERENCE ONLY

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NO.	DATE	BY	REVISIONS	APP'D	CK'D

PORT OF PORTLAND
PORTLAND, OREGON

DESIGN NUMBER
PROJECT NUMBER 1174

DESIGNED BY D. PETERSON
DRAWN BY M. KHAL
CHECKED BY D. SULLIVAN
DATE DEC 2014
SCALE AS SHOWN

PORTLAND INTERNATIONAL AIRPORT

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCC)
CENTRAL UTILITY PLANT (CUP)

SUBMITTED BY PAT EBERT, CAD MANAGER
TYPE MD
DRAWING NO. PDX 2013-3093 4/7 (C-3)

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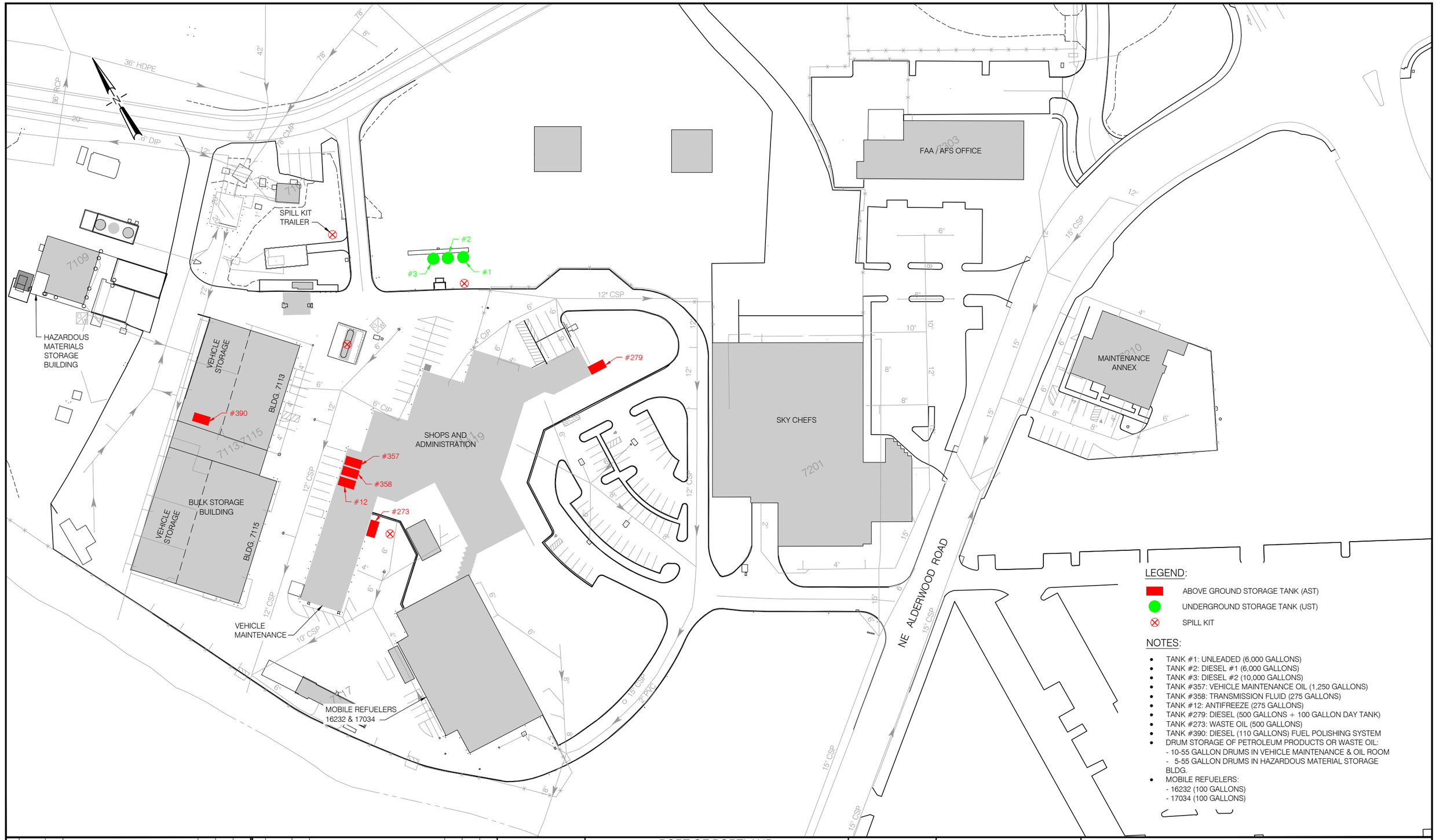

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.

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NO.	DATE	BY	REVISIONS	APP'D	CK'D

PORT OF PORTLAND
PORTLAND, OREGON

DESIGN NUMBER

1174
PROJECT NUMBER

DESIGNED BY D. PETERSON
DRAWN BY M. KHAL
CHECKED BY D. SULLIVAN
DATE DEC 2014
SCALE 1" = 50'

PORTLAND INTERNATIONAL AIRPORT

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCC) MAINTENANCE FACILITY

SUBMITTED BY
PAT EBERT
CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3093 5 / 7 (C-4)

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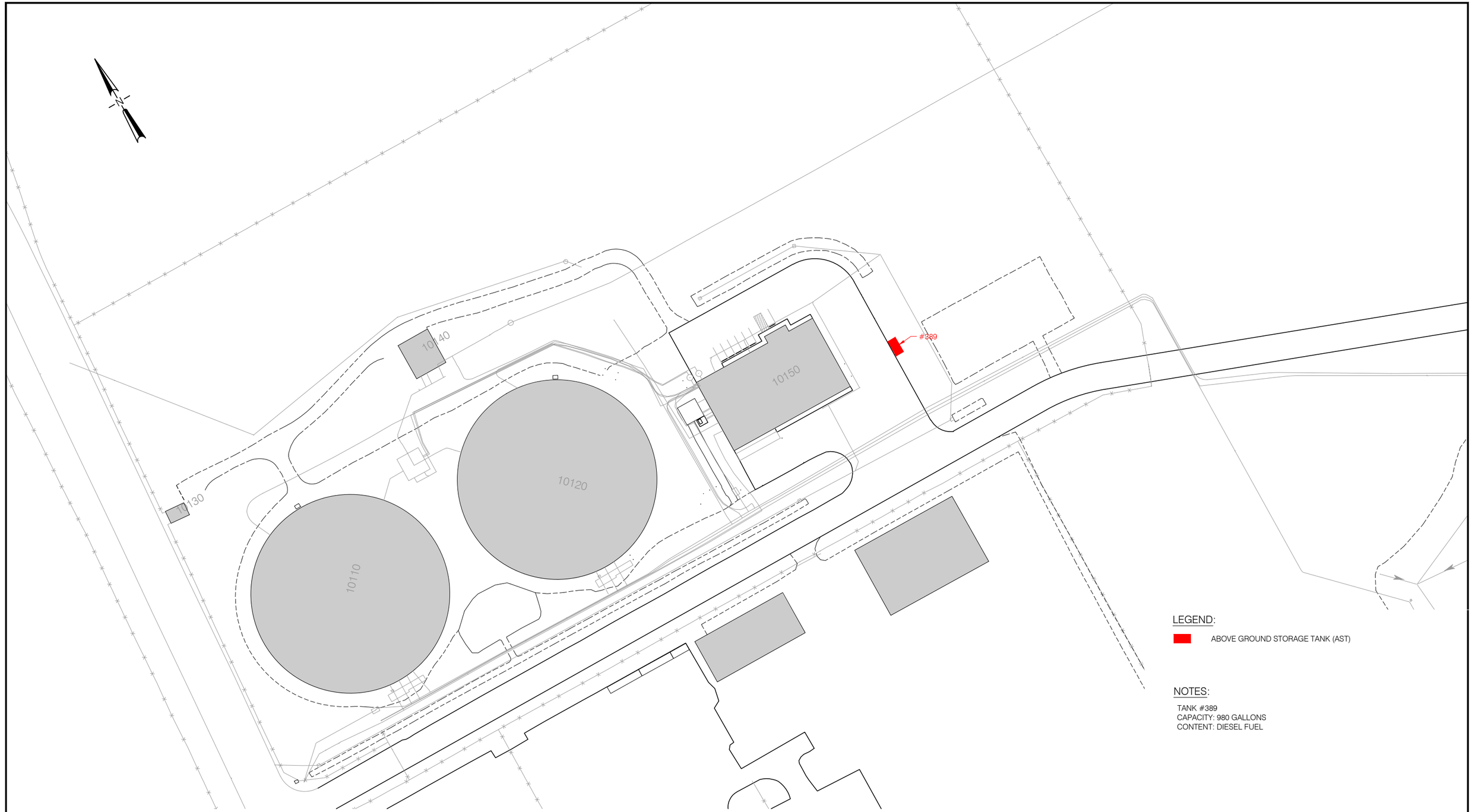

LEGEND:

ABOVE GROUND STORAGE TANK (AST)

NOTES:

TANK #389
CAPACITY: 980 GALLONS
CONTENT: DIESEL FUEL

0 1/4" 1/2" 1" 2"
GRAPHIC SCALE - FOR REFERENCE ONLY

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.

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NO.	DATE	BY	REVISIONS	APP'D	CK'D

PORT OF PORTLAND
PORTLAND, OREGON

DESIGN NUMBER

1174
PROJECT NUMBER

DESIGNED BY D. PETERSON
DRAWN BY M. KHAL
CHECKED BY D. SULLIVAN
DATE DEC 2014
SCALE 1" = 50'

PORTLAND INTERNATIONAL AIRPORT

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCC)
DEICING FACILITY

SUBMITTED BY
PAT EBERT
CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3093 6 / 7 (C-5)

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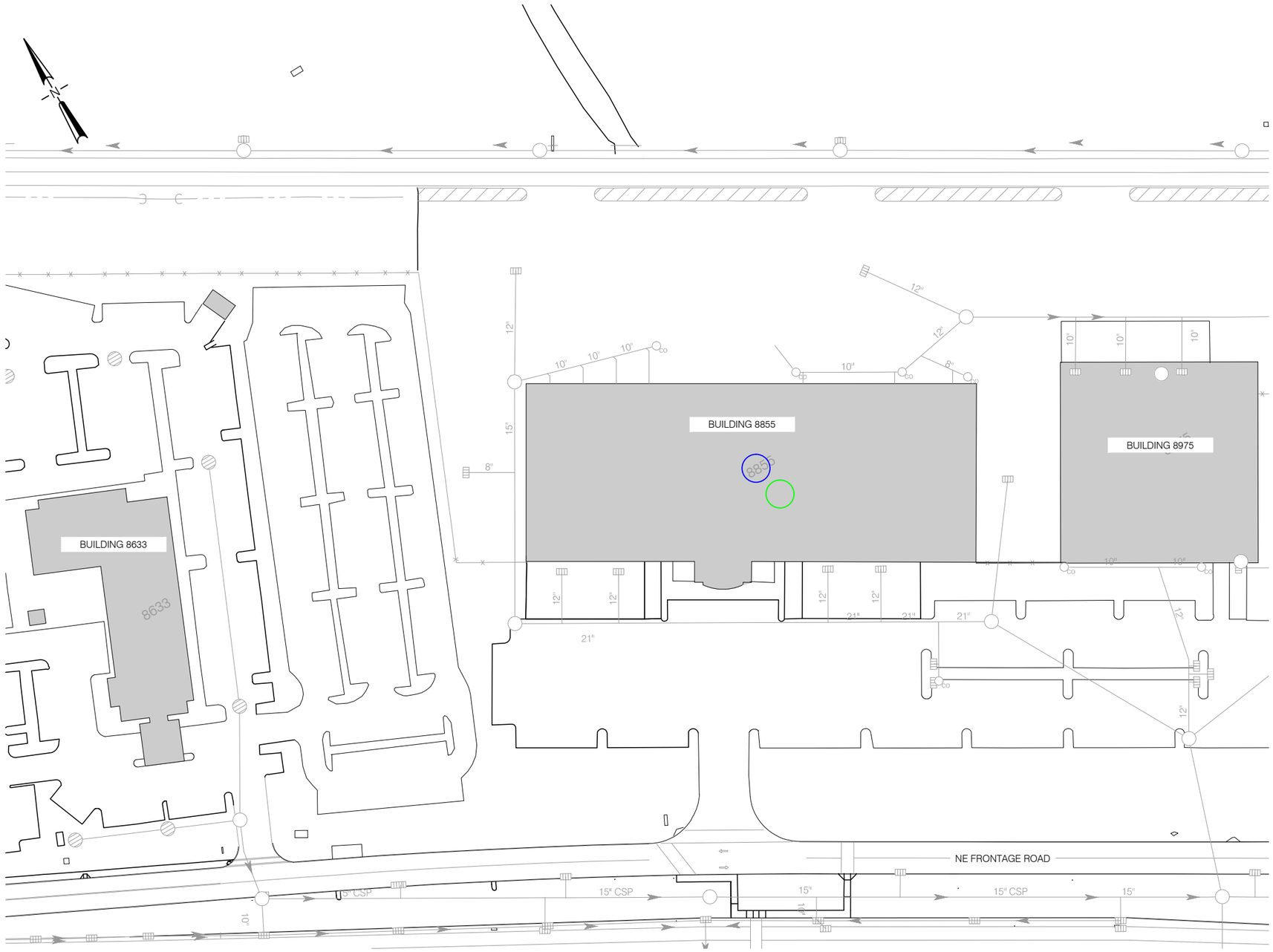
DRAWING SCALE IS REDUCED 50% WHEN SHEET SIZE IS 11" x 17".

GRAPHIC SCALE FOR REFERENCE ONLY
0 1/4" 1/2 1" 2"



1 CENTRAL UTILITY PLANT
SCALE: 1" = 50'

LEGEND:
- ELEVATORS
- MACHINE ROOMS

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.

NO.	DATE	BY	REVISIONS	APP'D	CK'D

PORT OF PORTLAND
PORTLAND, OREGON

DESIGN NUMBER: 1174
PROJECT NUMBER

DESIGNED BY	D. PETERSON
DRAWN BY	M. KHAL
CHECKED BY	D. SULLIVAN
DATE	DEC 2014
SCALE	AS SHOWN

PORTLAND INTERNATIONAL AIRPORT

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCC)
BUILDING 8855

SUBMITTED BY: PAT EBERT, CAD MANAGER

TYPE: MD | DRAWING NO.: PDX 2013-3093 7 / 7 (C-6)

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DRAWING SCALE IS REDUCED 50% WHEN SHEET SIZE IS 11" x 17".

Appendix C

Facility Drainage Maps
(PDX Storm Sewer System)

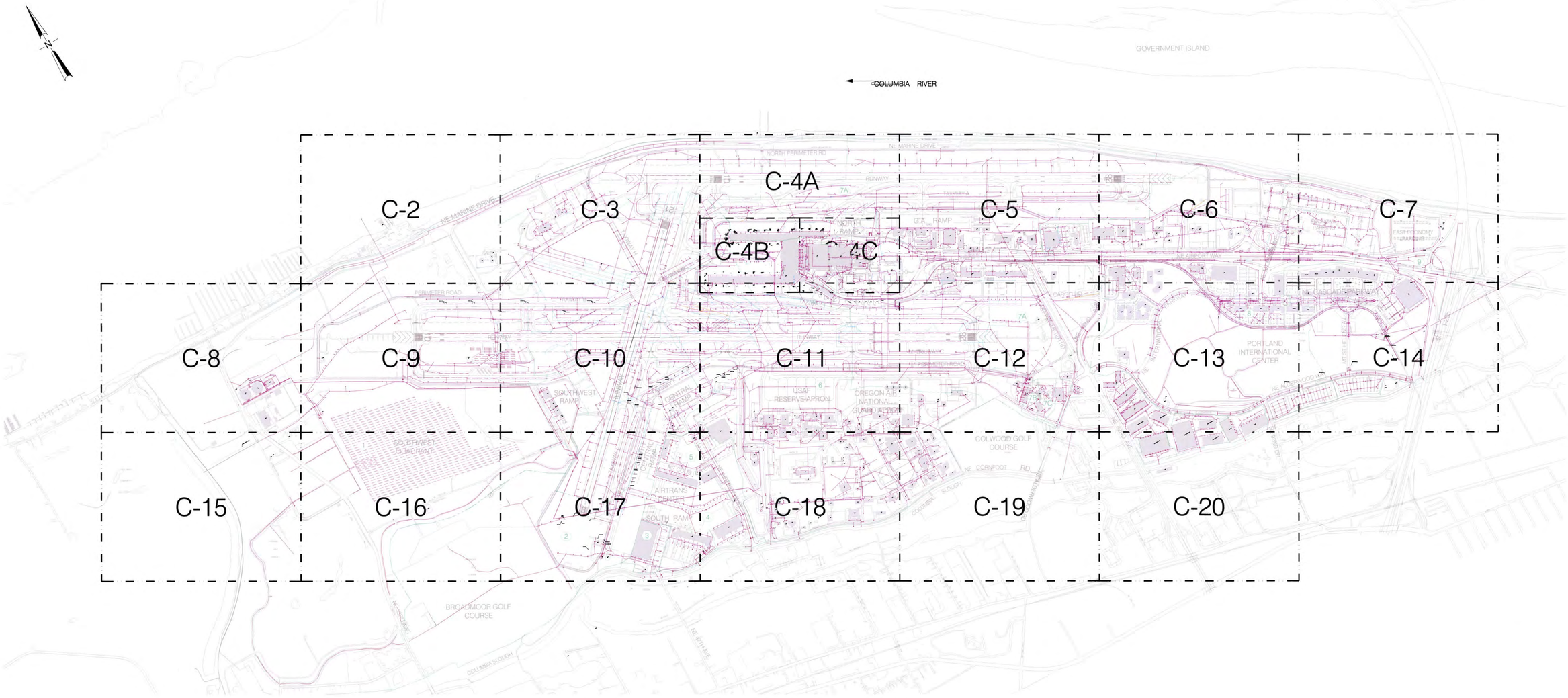
Port of Portland

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM

OCTOBER 2013

DESIGN NO. 2010Z144 PROJECT MANAGER
PROJECT NO. 1173 DRAWING NO. PDX 2013-3023
PDX - STORM SEWER SYSTEM



KEY PLAN AND LEGEND — 1 / C-1
SCALE: 1" = 800'

NOTES:

(U) DENOTES AN UNVERIFIED OBJECT THAT IS BELIEVED TO EXIST. UNVERIFIED IS DEFINED AS AN OBJECT THAT HAS NOT BEEN DOCUMENTED IN THE GEOGRAPHIC INFORMATION SYSTEM (GIS) AS BEING VERIFIED IN ANY OF THE FOLLOWING WAYS:
1. LOCATED
2. SURVEYED
3. FIELD OBSERVED
4. DIGITIZED FROM AN AERIAL IMAGE
5. LINKED BACK TO ANY DRAWING SETS IN THE TECHNICAL REFERENCE CENTER (TRC)

IF YOU HAVE ANY INFORMATION ABOUT THE UNVERIFIED OBJECT, PLEASE CONTACT THE ENGINEERING GIS DEPARTMENT.

ALL OTHER OBJECTS HAVE BEEN VERIFIED. VERIFIED IS DEFINED AS OBJECTS THAT HAVE ANY OR ALL OF THE FOLLOWING QUALIFICATIONS:

1. (AS) - THE AS-BUILT DRAWING HAS BEEN LINKED (IN THE GIS) TO THE OBJECT and/or
2. (SU) - THE OBJECT HAS BEEN LOCATED AND SURVEYED and/or
3. (RD) - THE RECORD DRAWING HAS BEEN LINKED (IN THE GIS) TO THE OBJECT and/or
4. (DC) - THE DESIGN/CONSTRUCTION DRAWING HAS BEEN LINKED (IN THE GIS) TO THE OBJECT and/or
5. (FO) - THE OBJECT HAS BEEN FIELD OBSERVED and/or
6. (AE) - THE OBJECT HAS BEEN DIGITIZED FROM A CURRENT AERIAL IMAGE

LEGEND:

SYMBOLS

- BREAK LINE
- LINE CAP
- CATCH BASIN & I.D. NUMBER
- CLEAN OUT
- CULVERT
- TRENCH DRAIN
- MANHOLE WITH SLOTTED GRATE & I.D. NUMBER
- MANHOLE & I.D. NUMBER
- MANHOLE - WATER QUALITY
- OIL/WATER SEPARATOR
- VAULT LID
- LIFT STATION
- OUTFALL
- STORM BASIN NUMBER

LINE TYPES

- 12" CMP — VERIFIED PART OF SYSTEM
- 12" CMP (A) — ABANDONED PART OF SYSTEM
- 12" CMP (U) — UNVERIFIED PART OF SYSTEM
- SUBTERRANEAN DRAINAGE (SUBDRAIN)
- CENTERLINE OF DITCH WITH HIGH POINT
- (OUT) 48" CMP (IN) — CULVERT END DESIGNATIONS
- STORM BASIN

NAMING CONVENTION

(U)	=	UNVERIFIED (SEE NOTE 1 FOR DEFINITION)
(A)	=	ABANDONED - BURIED OR PLATED AND PAVED OVER
CMP	=	CONCRETE METAL PIPE
PCMP	=	PERFORATED CORRUGATED METAL PIPE
CSP	=	CONCRETE SEWER PIPE
RCSP	=	REINFORCED CONCRETE STEEL PIPE
PVC	=	POLYVINYL CHLORIDE PIPE
DI	=	DUCTILE IRON PIPE
CISP	=	CAST IRON SOIL PIPE
CASP	=	CEMENT ASBESTOS SEWER PIPE
RCCP	=	REINFORCED CONCRETE CULVERT PIPE
CIDS	=	CAST IRON DOWN SPOUT
HDPE	=	HIGH DENSITY POLYETHYLENE

NO.	DATE	BY	REVISIONS	CKD	APPVD

NO.	DATE	BY	REVISIONS	CKD	APPVD

PORT OF PORTLAND
PORTLAND, OREGON

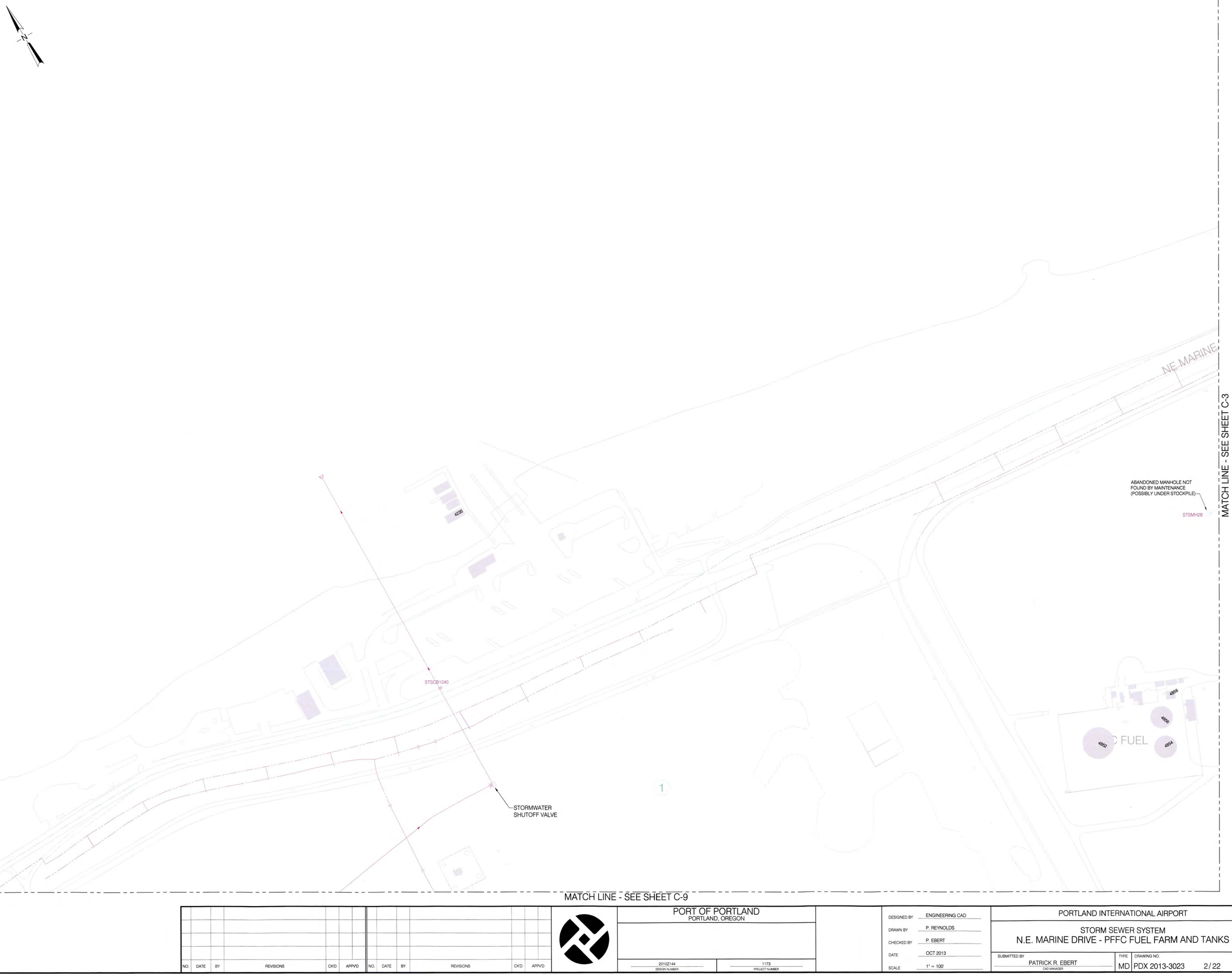
2010Z144 — DESIGN NUMBER
1173 — PROJECT NUMBER

DESIGNED BY: ENGINEERING CAD
DRAWN BY: P. REYNOLDS
CHECKED BY: P. EBERT
DATE: OCT 2013
SCALE: 1" = 800'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
KEY PLAN AND LEGEND

SUBMITTED BY: PATRICK R. EBERT, CAD MANAGER
TYPE: MD
DRAWING NO.: PDX 2013-3023 1/22 (C-1)



NO.	DATE	BY	REVISIONS	CK'D	APPV'D

NO.	DATE	BY	REVISIONS	CK'D	APPV'D

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER

1173 PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
N.E. MARINE DRIVE - PFFC FUEL FARM AND TANKS

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE: MD

DRAWING NO.: PDX 2013-3023 2/22 (C-2)

2
1"
1/2"
0
2/11/2015 9:35:25 AM DETMM r:\maintain\airport\3023-storm-sewer-system\2013\pdx3023-2013.dwg

NO.	DATE	BY	REVISIONS	CK'D	APPV'D	NO.	DATE	BY	REVISIONS	CK'D	APPV'D

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144
DESIGN NUMBER

1173
PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
NORTH END RUNWAY 3-21 - FIRE STATION

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE MD
DRAWING NO. PDX 2013-3023 3/22 (C-3)

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DETMM
9:12:17 AM
2/11/2015

NORTH PERIMETER RD.

STSCB1658
STSCB1659
STSCB1656
STSMH1869
38" CONCRETE LID
1
STSCB1657
STSMH1466
STSCB1193

RUN

TAXIWAY T
TAXIWAY A
NORTH RAMP

STSCB1841
STSCB1776
STSCB1663
STSCB1643
STSCB5149
STSMH1858
STSCB1810
STSMH1809
STSCB1569
STSCB874
STSCB875
STSCB878
STSCB879
STSCB883
STSMH138
STSMH176
STSMH1367
STSCB1385
STSMH105
STSCB1557

STSMH8172
STSMH8173
STSMH8191
STSMH8193

A6
7A
A5

STSMH169
STSMH8174
STSCB8254
STSCB9017
STSCB9018
STSMH419
CATCH BASIN NOT FOUND BY MAINTENANCE
STSCB289
STSMH143
STSCB5008

MANHOLE LABELED STSMH8192
STSMH482
MANHOLE LABELED STSMH8192
STSMH166
STSCB9046
STSCB847
STSCB846
STSMH483
STSCB9047
STSMH8194
STSCB635
STSMH974
STSMH563
STSCB9020
STSMH472
STSMH422
STSCB9019
STSMH8163
STSCB945
STSMH483
STSCB844

PS-A
STSMH142
STSCB842
STSCB841
STSCB5010
STSVLT9441
STSCB848
STSMH8163
STSCB141
750'
STSCB5005
STSMH151

MATCH LINE - SEE SHEET C-3

MATCH LINE - SEE SHEET C-5

SEE SHEET C-4B
FOR TERMINAL AREA DETAIL

SEE SHEET C-4C
FOR TERMINAL AREA DETAIL

MATCH LINE - SEE SHEET C-11

NO.	DATE	BY	REVISIONS	CK'D	APP'D

NO.	DATE	BY	REVISIONS	CK'D	APP'D

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER
1173 PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE OCT 2013
SCALE 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
WEST END RUNWAY 10L-28R - TAXIWAYS A5 TO A7

SUBMITTED BY PATRICK R. EBERT, CAD MANAGER
TYPE MD
DRAWING NO. PDX 2013-3023 4/22 (C-4A)

2" 1" 1/2" 0
2/11/2015 9:13:37 AM DETMM r:\maintainables\pdx3023-storm-sewer-system\2013\pdx3023-2013.dwg

MATCH LINE - SEE SHEET C-4A

MATCH LINE - SEE SHEET C-3

MATCH LINE - SEE SHEET C-4C

MATCH LINE - SEE SHEET C-11

STSMH100
STSMH1396
STSCB1299
STSCB1197
STSCB1393
STSCB1084
STSCB884
STSCB958
STSMH129
STSCB135
STSMH133
STSCB1656
STSCB1683
STSMH131
7A
737 300 400 700
757 800 900 A320
757 200 MD 80 90
757 300
STSMH1590
737 300 400 700
CRJ 200,700 900 A320,A319
MD88,MD90
737 800 900,A321
757 200
MD80
757 300
STSMH8320
STSMH1342
737 200 300,CRJ200
CRJ 700 800,A319,A320
737 800 900,A321,717
757 200
MD 80 90
767 300,757 300
CRJ 200,700,900,717
737 800,900,A319,A321,A320
MD 80 90
757 200
A319,737 700
737,A320
MD88,A321
757,MD90
STSMH1223
A319,A320
737 700
737 800 900
MD80,757
757 300
STSMH1071
A319
A320,MD80,737 700,E190
MD 82,83,737 800 900
757 200
757-900
757
STSMH8171
STSMH1108
STSMH8170
STSMH8162
STSMH1663
EMERGENCY SPILL
CONTAINMENT VALVE
CONTROL
STSCB1669
STSMH170
STSCB1670
EMERGENCY SPILL
CONTAINMENT VALVE
STSMH172
STSMH1672
STSVLT001102
STSMH174
STSMH1589
CONTROL VALVE
STSMH1318
STSMH1198
STSMH1091
STSCB1050
STSMH1046
STSMH1038
STSMH175
STSMH178
STSMH1633
STSCB1752
STSCB1767
STSCB1760
STSMH1652
STSMH1731
STSCB1604
STSCB1533
STSMH1529
STSCB1471
STSMH1468
STSMH1432
STSMH8259
STSCB5145
STSCB5144
STSCB5143
STSCB5142
STSMH8258
STSCB5141
STSCB5140
STSCB5139
STSCB5138
STSMH108
STSMH8261
STSCB5137
STSMH1295
STSCB1343
STSCB1284
STSCB1242
STSMH8260
STSCB1196
STSMH1178
STSMH1182
STSMH924
STSMH8386
STORM SEWER
FEATURES NOT
FOUND BY
MAINTENANCE
STSMH919
STSMH8384
STSCB9136
STSCB1024
STSCB1035
STSCB895
STSMH1028
STSMH1028
STSMH1025
STSMH1025
STSCB5097
STSCB5098
TUNNEL
6
STSMH1751
STSMH1688
STSMH1575
STSMH1867
737 800
737 700 800
A320
NO LABEL
E190,MD80
737 900
A319
A320
A318,A321,737 400
737 700 800 900
E190
MD80
A318 319 320
737,E190
MD 80 90
757 200
MD80
757 300
A318,A319,A320
737,E190
MD80
737
737 800
737
MD80
STSCB5136
STSMH8266
STSMH8265
STSMH8393
STSMH8262
STSMH8263
STSMH8264
STSMH1649
STSMH1551
STSMH1771
7000
STSCB971
STSCB896
STSCBxxx
STSMH1026
STSCB1534
STSMH1868
STSMH1772
STSMH1646
STSMH1519
STSMH8268
STSMH8267
STSMH1117
STSMH1098
STSMH8269
STSMH964
STSMH963
737 800
MD80
737
737 400 900
737 800
737 700
737 400 900
737 800
737 700
737 700,D400,CRJ
D400,CRJ
737
STSMH1763
STSMH1775
STSVLT5873
STSVLT8414
STSMH1689
STSMH1571

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER
1173 PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 50

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
TERMINAL AREA DETAIL - CONCOURSES C AND D

SUBMITTED BY	TYPE	DRAWING NO.	
PATRICK R. EBERT, CAD MANAGER	MD	PDX 2013-3023	5 / 22 (C-4B)

DETTMM r:\maintainables\pdx\3023-storm-sewer-system\2013\pdx3023-2013.dwg
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MATCH LINE - SEE SHEET C-4A

MATCH LINE - SEE SHEET C-4B

MATCH LINE - SEE SHEET 5

MATCH LINE - SEE SHEET C-11

NORTH RAMP

FLIGHTCRAFT

TRANSPORTATION PROVIDERS HOLDING AREA

EMPLOYEE PARKING

STSVLT001061

7505

7375

7105

7100

7200

7108

7A

7110

7102

7400

7280

6

STSCB601 STSCB665 STSMH588 STSCB517 STSCB942 STSCB943 STSCB539 STSMH527 STSCB531 (CATCH BASIN NOT FOUND BY MAINTENANCE)

A319 737 700 A320,E190 737 800 900 757 200

A319,A320 737,700,E190 MD80 737 800 900 757 200

A319,A320 737,E190 MD80,737 700 737 800 900 757 200 757 300

A319,A320 737,700 737,800,900 MD80 737 700 737 800 737 900 757 200 757 300 747 200 400

NO LABEL NO LABEL NO LABEL

120 CRJ

D8 120

D8,CRJ 120

STSVLT9438 STSMH540 STSCB557 STSCB544

STSMH335 STSCB339 STSCB301 STSCB216 STSMH163 STSCB169 STSCB165 STSMH137 STSCB 158

STSCB9266 STSMH8356 STSCB9265

CATCH BASIN NOT FOUND BY MAINTENANCE STSCB9312

STSVLT001026 STSVLT001028 STSVLT001027 STSCB 1463 STSVLT001007 STSCB175 STSCB176 STSMH136 STSCB210 STSMH 1114

STSCB5033

STSMH772 STSMH675 STSCB632 STSCB8405 STSMH580 STSCB575 STSCB808 STSCB713 STSCB1153 STSCB1158 STSCB1163 STSMH564 STSCB1152 STSCB1154 STSCB596 STSCB869 STSMH840 STSCB8404 STSCB9402 (STRUCTURE ID WAS STSCB705) STSCB662 STSCB774 STSCB826 STSCB809 STSCB698 STSMH765 STSCB859 STSMH867 STSMH817 STSCB746 STSMH787 STSCB756 STSMH719 STSCB833 STSMH782 STSCB9401 STSCB861 STSCB8402 (CATCH BASIN IN CURB) STSCB832 STSMH838 STSMH894 STSCB758 CATCH BASIN NOT FOUND BY MAINTENANCE

STSCB508 STSMH487 STSCB469 STSCB461 STSMH462 STSCB523 STSCB5128 STSCB463 STSCB411 STSMH535 STSCB5127 STSCB500 STSMH 536 STSMH486 STSMH539 STSMH543 STSCB436 STSMH548 STSMH549 STSMHxxxx STSMH541 STSMH1561 STSVLT554 STSCB1720 15" X 15" INLET WITH STRIP DRAIN

STSCB376 STSCB360 STSCB350 CATCH BASINS NOT FOUND BY MAINTENANCE STSCB1484 STSMH354 STSMH371 STSCB1495 STSMH334 STSCB8416 STSCB1718 STSCB1179 STSCB1178 STSMH375 STSCB1717 STSCB1176 CATCH BASIN NOT FOUND BY MAINTENANCE STSCB 298 STSMH276 STSCB1716 STSCB304

STSMH1124 STSMH1123 STSCB1480 STSCB1479 STSCB1464 STSCB1465 STSCB4967 CATCH BASINS NOT FOUND BY MAINTENANCE STSCB1487 STSCB1175 STSCB 1174 STSCB1169 STSCB1167 STSCB215 CATCH BASIN NOT FOUND BY MAINTENANCE STSCB1478 STSMH 1122 STSCB1166 STSMH547 STSCB1165 STSCB 1147 STSCB1476 STSMH1120 STSCB1475 STSMH 0001116 STSCB 1481 STSCB1466 STSCB1467 STSCB1468 STSCB4989 STSCB5050 STSCB1469 STSMH1119 STSCB1488 STSMH 1121 STSCB5090 STSMH554 STSCB215 STSCB1714 STSCB239 STSMH545 STSMH1164 STSCB1721 CATCH BASIN NOT FOUND BY MAINTENANCE STSCB1195 STSCB1483 STSVLT1039

STSCB 1723 STSCB 1722 STSCB240 STSMH219 STSCB242 STSMH220 STSCB5069 STSCB5058 STSCB191 STSMH5067 STSMH214 STSMH544 STSCB1721

STSVLT553 STSMH501 STSMH500 15" X 15" INLET WITH STRIP DRAIN STSCBxxxx STSCB351 STSCB250 STSMH499 STSMH344 STSMH248 STSMH217 STSCB205 STSMH1142 STSCB1725 STSMH357 STSMH 1559 STSMH209 CATCH BASIN NOT FOUND BY MAINTENANCE STSCB8409 CATCH BASINS NOT FOUND BY MAINTENANCE STSCB372 STSCB8408 CATCH BASIN NOT FOUND BY MAINTENANCE STSCB 1724 STSCB374 STSCB386 STSCB 1198 MANHOLE NOT FOUND BY MAINTENANCE STSCB1726 STSMH1563 STSCB394 STSCB445

STSCB235 STSCB270 STSCB202 STSMH208 STSCB195 STSCB328 STSCB271 STSCB238 STSCB211 STSMH207 STSCB197

STSMH1560 STSVLT555 STSMH5119 STSCB1713 STSMH502 STSCB1712 STSCB985 STSMH509 STSMH508 STSMH1562 STSMH505 STSCB1702 STSMH8312 STSCB1711 STSCB984 STSCB1709 STSCB1707 STSCB1708 STSCB358 STSMH507 STSCBxxxx STSCBxxxx CATCH BASIN NOT FOUND BY MAINTENANCE CATCH BASIN NOT FOUND BY MAINTENANCE STSCB499 STSCB982 STSCB9316 STSMH506 STSCB511

STSCB356 STSCB322 STSCB237 STSCB225 STSCB355 STSCB5115 STSCB187 STSMH127 STSCB146 STSMH4982 STSCB4983

STSCB9098 STSMH8241 STSCB446 STSCB9097 STSCB9099 STSCB448 STSCB477 STSCB5153 STSCB5155 STSCB379 STSVLT9298 STSCB4964

STSCB9299 STSCB5032 STSCB4990 STSCB5146 STSCB139 STSCB5078 STSCB4986

STSCB5071 STSCB5043 STSCB4975 FEATURES NOT FOUND BY MAINTENANCE STSCB4976 STSCB140 STSCB5004 STSCB4985

STSCB9142 STSVLT699 STSMH720 STSCB745 STSMH802 STSCB856 STSMH753 STSMH806 STSMH854 STSCB822 STSMH857 STSMH892 STSMH8403 (CATCH BASIN IN CURB) STSMH831 STSCB820 STSCB778 STSCB862 STSCB821 STSMH783 STSCB776 STSMH924 STSMH785 STSMH896 STSCB823 STSCB824 STSMH836 STSMH1887 STSCB779 STSCB9022 STSCB654 STSCB732 STSCB800 STSMH803 STSMH781 STSMH8274 STSCB676 STSCB671 STSCB8406 STSCB626 STSMH637 STSMH844 STSMH679 STSCB9021 STSCB612 STSMH613 STSCB1199 STSCB574 STSMH576 STSCB578 STSCB552 STSCB506 STSMH8273 D400,CRJ STSMH8245 D400,CRJ700 CRJ200 STSCB614 CB,D400 D400 STSMH627 737 800 900 737 400 737 700

MANHOLE NOT FOUND BY MAINTENANCE

MAINTENANCE RECORD NOT FOUND

STSCB561

PORT OF PORTLAND
PORTLAND, OREGON

NO.	DATE	BY	REVISIONS	CKD	APPVD

NO.	DATE	BY	REVISIONS	CKD	APPVD

2010Z144 DESIGN NUMBER

1173 PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE OCT 2013
SCALE 1" = 50'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
TERMINAL AREA DETAIL - PARKING GARAGE

SUBMITTED BY PATRICK R. EBERT, CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3023 6/22 (C-4C)

2/11/2015 9:15:38 AM DETTMM r:\maintainables\pdx\3023-storm-sewer-system\2013\pdx3023-2013.dwg

MATCH LINE - SEE SHEET C-4A

MATCH LINE - SEE SHEET C-6

MATCH LINE - SEE SHEET C-12

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144
DESIGN NUMBER

1173
PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE OCT 2013
SCALE 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
RUNWAY 10L-28R TAXIWAYS A4 TO A2 - SHERATON INN

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE MD
DRAWING NO. PDX 2013-3023 7/22 (C-5)

0 1/4" 1/2" 1" 2"
2/11/2015 9:16:10 AM DETTMM r:\maintainables\pdx\3023-storm-sewer-system\2013\pdx3023-2013.dwg

NORTH PERIMETER RD.

NE AIRPORT WAY (WEST BOUND)

NE AIRPORT WAY (EAST BOUND)

MATCH LINE - SEE SHEET C-5

MATCH LINE - SEE SHEET C-7

MATCH LINE - SEE SHEET C-13

STSMH1450 STSMH1451 STSMH1452 STSMH1453 STSCB1625 STSMH552

STSCB1628 STSMH1458 STSCB1629 STSCB1627

A1

8 7A 9 8855 8975 9009 9125 9235 9225 9115 9105 9445 9475 9555 9575 9721 9751 9658 7900 7700 9109 9301 9401 9739

STSCB5119 STSCB5122 STSCB5123 STSCB3851 STSMH118 STSCB3832 STSCB 3838 CB NOT FOUND BY MAINT. STSCB3877 STSCB3870 STSCB3856 STSCB3831 STSMH8335 STSCB3797 STSCB3888 STSMH3871 STSCB3849 STSCB3824 STSMH3835 STSCB3775 STSMH3892 STSMH8367 STSCB3901 STSCB3881 STSCB3816 STSMH3817 STSCB3771 STSCB3885 STSMH3868 STSMH3829 STSMH3825 STSMH3827 STSCB3785 STSMH3774 STSCB3760 (POSSIBLY PAVED OVER) STSMH3749 STSCB3753 STSCB3743 STSCB3735 STSCB3730 STSMH3722 (POSSIBLY PAVED OVER) STSCB3922 STSCB5108 STSVLT001012 STSMH3934 STSCB3981 STSCB3978 STSCB3943 STSCB3965 STSMH3956 STSCB3854 STSCB3855 STSCB3823 STSCB3828 STSMH8314 STSMH8315 STSMH8316 STSCB-A238 STSMH3762 STSCB3738 STSCB3727 STSCB3717 STSCB3709 STSCB3724 STSCB3732 STSMH3739 STSCB3745 STSCB3751 STSCB3773 STSCB3767 STSCB3757 STSCB3776 STSMH3788 STSCB3790 STSCB3813 STSCB3939 STSCB3882 STSCB3865 STSCB3846 STSMH3839 STSMH3844 STSCB3899 STSCB3952 STSCB3933 STSCB3966 STSCB3994 STSMH3930 STSCB3963 STSMH1445 STSMH4009 STSMH4001 (MANHOLE NOT FOUND BY MAINT) STSMH3996 STSMH4005 STSMH4011 STSCB4012 STSMH3967 STSCB4019 STSCB4013 STSMH117 STSMH171 STSCB5130 STSCB5131 STSCB5132 STSMH4026 STSMH4068 STSCB4080 STSCB4003 STSCB4064 STSCB4081 STSCB4076 STSMH4065 STSMH4027 STSCB4049 STSCB4047 (ROUND CATCH BASIN) STSCB4048 STSMH4052 STSCB4038 STSMH4037 STSCB4070 STSCB4071 ROUND CATCH BASIN ROUND CATCH BASIN ROUND CATCH BASIN

STSMH4092 STSCB4075 STSMH-A241 STSCB4035 STSCB4004 STSMH4046 STSCB4002 STSMH522 STSCB4097 STSCB4082 STSCB4058 STSCB1113 STSCB1115 STSCB1114 STSMH4073 STSCB1117 STSCB1119 STSCB1120 STSMH4095 STSCB1123 STSCB1124 STSMH5133 STSCB4057 STSCB1121 STSCB1122 STSCB8436 STSCB8437 STSCB8438 STSCB8439 STSMH5132 STSMH4094 STSCB4100 STSCB1190 STSCB8440 STSCB4099 STSMH4093 STSCB4090 STSCB4060 STSCB4079 STSCB4031 STSCB4053 STSMH4043 STSCB4030 STSMH4042 STSCB4028 STSMH4017 STSMH4040 STSCB4051 STSCB4054 STSCB4055 STSCB4056 STSCB3992 STSCB3964 STSMH4045 STSCB1101 STSCB1126 STSCB1128 STSCB1133 STSMH3958 STSCB1134 STSCB1135 STSMH3875 STSCB3861 STSCB3836 STSCB3815 STSCB3784 STSCB3772 STSCB3764 STSMH3754 STSCB3758 STSCB3746 STSCB3893 STSCB3945 STSCB3924 STSCB3860 STSMH3850 STSCB3890 STSCB3955 STSCB1118 STSCB3858 STSCB3833 STSCB3801 STSCB3802 STSCB3799 STSMH3778 STSCB3777 STSCB3765 STSCB3766 STSCB3756 STSCB3770 STSMH3755 STSCB3740 STSCB3741 STSCB3742 STSCB3726 STSCB3718 STSMH3719 STSCB3713 STSCB3701 STSCB3697 STSCB3692 STSMH3677 STSCB3674 STSCB3648 STSCB3643 STSCB3614 STSMH3676 STSCB3651 STSCB3800 STSCB3995 STSMH3720 STSCB3725 STSCB9100 STSCB9103 STSCB9102 STSMH8247 STSMH3707 STSCB9101 STSMH3716 STSCB3695 STSCB3688 STSCB3645 STSCB3640 STSCB3665 STSMH3675 STSMH3619 STSCB9127 STSCB9112 STSCB3606 STSCB9129 STSCB9128 STSMH8250 STSCB3691 STSCB9105 STSMH8248 STSCB9104 STSMH8181 STSCB9028 STSCB3679 STSCB3678 STSMH3673 STSMH8182 STSCB9108 STSCB3627 STSCB3635 STSMH8197 STSCB3638 STSCB3594 STSCB3595 STSCB3636 STSCB3858 STSCB9027 STSCB3613 STSCB3601 STSMH3596 STSCB3597 STSCB9107 STSMH3628 STSCB9011 STSCB9037 STSCB9051 STSCB9012 STSCB3641 STSMH3654 STSCB3632 STSCB3684 STSCB3706 STSMH3698 STSMH3666 STSCB3649 STSCB9133 STSMH3625 STSCB3603 STSCB9134 STSCB9135 STSMH3618 STSCB9132 STSMH3680 STSCB3696 STSCB3669 STSCB3668 STSMH3682 STSMH3699 STSCB3704 STSCB3705 STSCB3700 STSCB3685 STSCB3708 STSMH3731 STSCB3723 STSCB3639 STSCB3629 STSMH8256 STSCB9131 STSMH3621 STSCB3624 STSCB3615 STSMH8257 STSMH3617 STSCB3633 STSMH3667 STSCB3664 STSCB3634 STSMH8255 STSCB3622 STSCB3599 STSCB3661 STSMH3662 STSCB3656 STSCB3623 STSCB3612 STSCB3605 STSCB3616 STSCB3598 STSCB3652 STSCB3650 STSCB3593 9 WC

CATCH BASINS NOT FOUND BY MAINTENANCE

CATCH BASINS NOT FOUND BY MAINTENANCE

ABANDONED CATCH BASIN VISABLE PER MAINTENANCE

CATCH BASINS NOT FOUND BY MAINTENANCE

CATCH BASIN NOT FOUND BY MAINTENANCE

MH TO DATE

NO.	DATE	BY	REVISIONS	CK'D	APPV'D

NO.	DATE	BY	REVISIONS	CK'D	APPV'D

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER | 1173 PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE OCT 2013
SCALE 1" = 100'

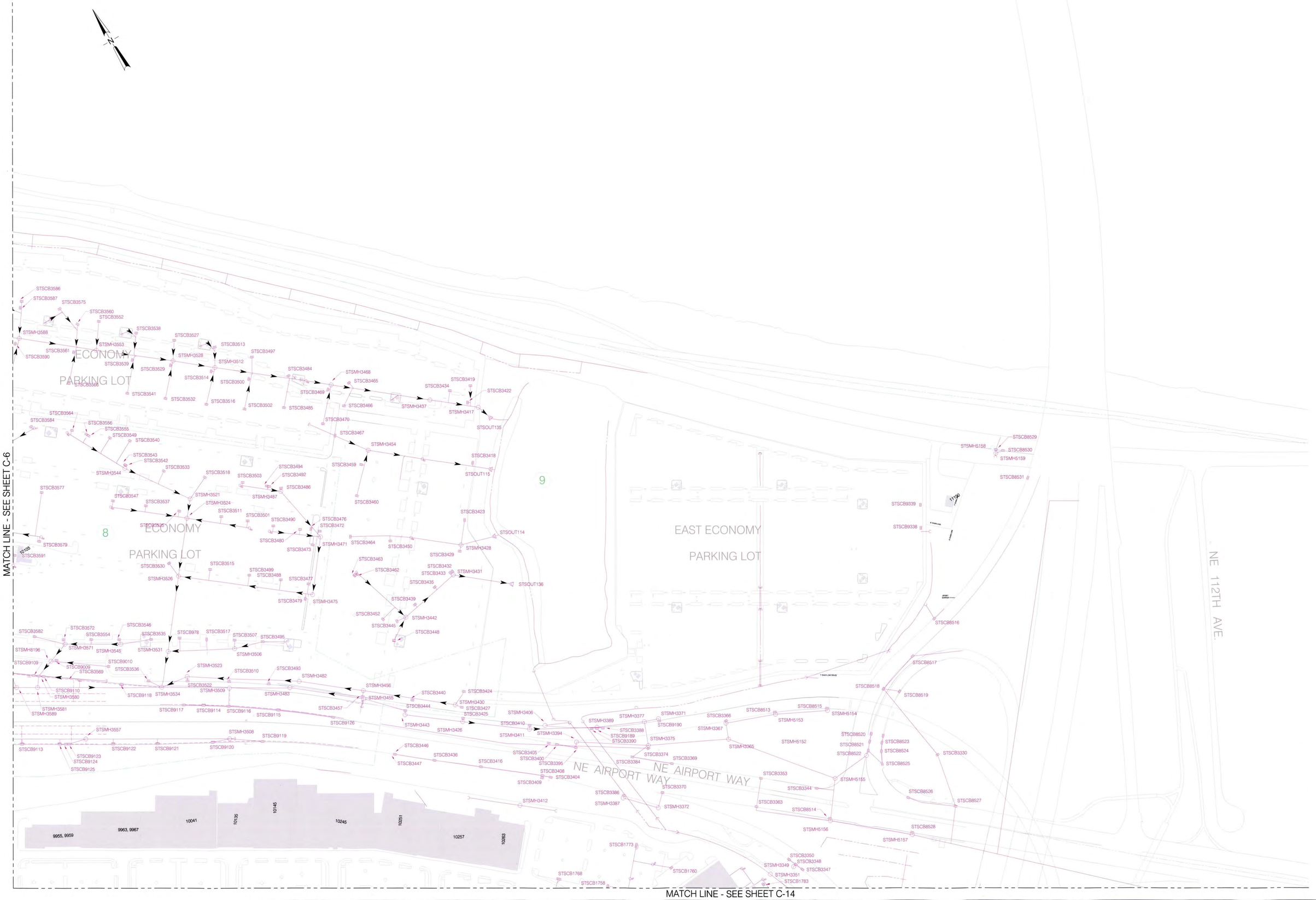
PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
EAST END RUNWAY 10L-28R - N.E. AIRPORT WAY

SUBMITTED BY PATRICK R. EBERT, CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3023 8/22 (C-6)

DETTMA r:\maintainables\pdx\3023-storm-sewer-system\2013\pdx3023-2013.dwg
9:16:44 AM
2/11/2015



NO.	DATE	BY	REVISIONS	CK'D	APPV'D

NO.	DATE	BY	REVISIONS	CK'D	APPV'D

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144	1173
DESIGN NUMBER	PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
N.E. AIRPORT WAY - ECONOMY PARKING LOTS

SUBMITTED BY	TYPE	DRAWING NO.		
PATRICK R. EBERT, CAD MANAGER	MD	PDX 2013-3023	9 / 22	(C-7)

DETMM r:\maintainables\pdx\3023-storm-sewer-system\2013\pdx3023-2013.dwg
9:17:21 AM
2/11/2015

MARINA

STSMH550

STSCB1185

STSCB1186

1

10140

10150

10120

10130

10110

10000

MATCH LINE - SEE SHEET C-9

MATCH LINE - SEE SHEET C-15

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 — DESIGN NUMBER
1173 — PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE OCT 2013
SCALE 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
O.N.G. ARMORY - N.E. 33RD AVENUE

SUBMITTED BY PATRICK R. EBERT, CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3023 10/22 (C-8)

2/11/2015 9:17:49 AM DETTMM r:\maintainables\pdx\3023-storm-sewer-system\2013\pdx3023-2013.dwg

MATCH LINE - SEE SHEET C-2

MATCH LINE - SEE SHEET C-8

MATCH LINE - SEE SHEET C-10

MATCH LINE - SEE SHEET C-16

NORTH PERIMETER ROAD

WEST PERIMETER RD

TAXIWAY B

RUNWAY

TAXIWAY C

WEST PERIMETER RD

B1

C1

1

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PS-N
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LCPF JOINT, TYP.
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STSMH997
STSCB5125
9605

PORT OF PORTLAND
PORTLAND, OREGON

NO.	DATE	BY	REVISIONS	CK'D	APPVD

NO.	DATE	BY	REVISIONS	CKD	APPVD

2010Z144 DESIGN NUMBER

1173 PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE OCT 2013
SCALE 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
WEST END RUNWAY 10R-28L - WEST PERIMETER ROAD

SUBMITTED BY PATRICK R. EBERT, CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3023 11/22 (C-9)

0 50' 100'
2/11/2015 9:16:16 AM DETTMM
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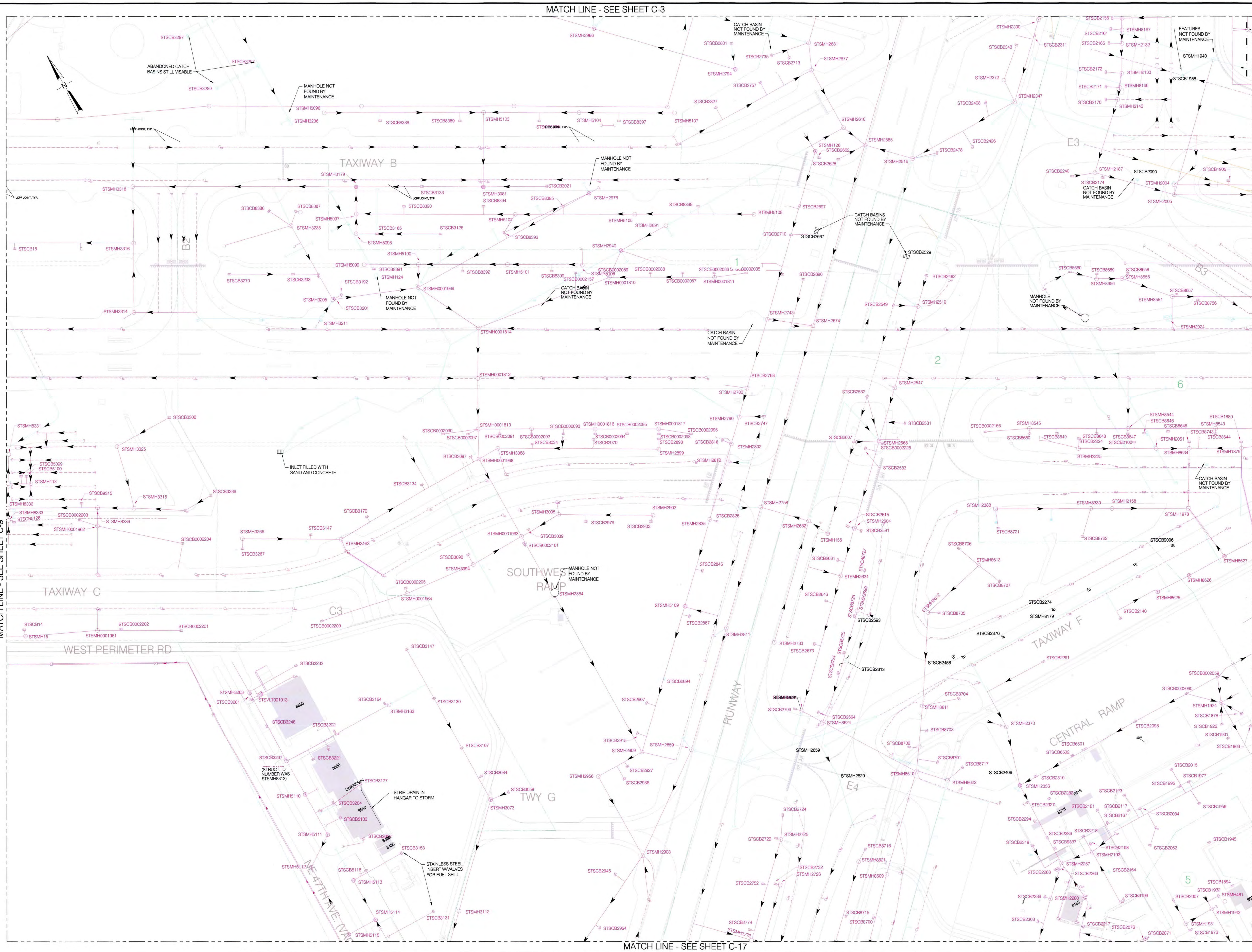
MATCH LINE - SEE SHEET C-3
MATCH LINE - SEE SHEET C-9
MATCH LINE - SEE SHEET C-11
MATCH LINE - SEE SHEET C-17
TAXIWAY B
TAXIWAY C
TAXIWAY F
WEST PERIMETER RD
SOUTHWEST RAMP
CENTRAL RAMP
RUNWAY
TWY G
NE 47TH AVE
E3
E4
C3
B2
MANHOLE NOT FOUND BY MAINTENANCE
CATCH BASIN NOT FOUND BY MAINTENANCE
CATCH BASINS NOT FOUND BY MAINTENANCE
FEATURES NOT FOUND BY MAINTENANCE
ABANDONED CATCH BASINS STILL VISABLE
INLET FILLED WITH SAND AND CONCRETE
STRIP DRAIN IN HANGAR TO STORM
STAINLESS STEEL INSERT W/VALVES FOR FUEL SPILL
(STRUCT. ID NUMBER WAS STSMH8313)

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144
DESIGN NUMBER

1173
PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
INTERSECTION OF RUNWAYS 10R-28L AND 3-21

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE	DRAWING NO.		
MD	PDX 2013-3023	12/22	(C-10)

MATCH LINE - SEE SHEET C-4B

MATCH LINE - SEE SHEET C-4C

MATCH LINE - SEE SHEET C-10

MATCH LINE - SEE SHEET C-12

MATCH LINE - SEE SHEET C-18

MANHOLES NOT FOUND BY MAINTENANCE

STORM FEATURES NOT FOUND BY MAINTENANCE

STORM FEATURES NOT FOUND BY MAINTENANCE

CONFINED SPACE #8375

PS-C

PS-L

CATCH BASIN NOT FOUND BY MAINTENANCE

MANHOLE NOT FOUND BY MAINTENANCE

STORM FEATURES NOT FOUND BY MAINTENANCE

MANHOLE NOT FOUND BY MAINTENANCE

STSCB154 CATCH BASINS NOT FOUND BY MAINTENANCE

CATCH BASINS NOT FOUND BY MAINTENANCE

MANHOLE NOT FOUND BY MAINTENANCE

TAXIWAY T

TAXIWAY B

TAXIWAY C

TAXIWAY J

RUNWAY

MILITARY PERIMETER ROAD

MILITARY PERIMETER RD

USAF RESERVE APRON

OREGON AIR NATIONAL GUARD APRON

HORIZON

B4

B5

B6

C5M

C6M

C6

5

6

7A

NO.	DATE	BY	REVISIONS	CKD	APPVD

NO.	DATE	BY	REVISIONS	CKD	APPVD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER

1173 PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
RUNWAY 10R-28L - TAXIWAYS B5 AND B6

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE: MD

DRAWING NO.: PDX 2013-3023 13/22 (C-11)

2/11/2015 9:19:21 AM DETMM r:\maintainables\pdx\3023-storm-sewer-system\2013\pdx3023-2013.dwg

MATCH LINE - SEE SHEET C-5

MATCH LINE - SEE SHEET C-11

MATCH LINE - SEE SHEET C-13

MATCH LINE - SEE SHEET C-19

SOUTHEAST RAMP

EAST PERIMETER RD

MILITARY PERIMETER RD

FLEMING

O'CONNOR WAY

PDX MAINT. COMPOUND

TO OIL/WATER SEPARATOR

CONFINED SPACE #4748 PER MAINTENANCE

MANHOLES NOT FOUND BY MAINTENANCE

CONNECTION POINT PER MAINTENANCE

CATCH BASIN NOT FOUND BY MAINTENANCE

STORM FEATURES NOT FOUND BY MAINTENANCE

CATCH BASIN NOT FOUND BY MAINTENANCE

MANHOLES NOT FOUND BY MAINTENANCE

TRENCH DRAIN IN VEHICLE BARN FLOWS TO THE OIL/WATER SEPARATOR-SANITARY SYSTEM

PS-E

7A 7B 7C 8 6 B8 C8

STSMH534 (CONFINED SPACE #5186)
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NO.	DATE	BY	REVISIONS	CK'D	APP'VD

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER
1173 PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
EAST END RUNWAY 10R-28L - MAINTENANCE BUILDING

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE: MD
DRAWING NO.: PDX 2013-3023 14/22 (C-12)

2/11/2015 9:19:54 AM DETMM r:\maintainables\pdx\3023-storm-sewer-system\2013\pdx3023-2013.dwg

0 50' 100'

NO.	DATE	BY	REVISIONS	CK'D	APPVD

NO.	DATE	BY	REVISIONS	CK'D	APPVD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144
DESIGN NUMBER

1173
PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
P.I.C. - TRAMMELL CROW

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE	DRAWING NO.		
MD	PDX 2013-3023	15/22	(C-13)

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9501 10001 10103 10205 10239 10080 9920 6402 6311 10100 15' 15'

CASCADES PARKWAY NE ALDERWOOD COLFAX ST. NE SIMPSON ST. NE 105TH INTERSTATE 205 205 RTLAND ATIONAL CENTER 9 PD PP&L SUBSTATION DETENTION POND

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER | 1173 PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
I-205 - P.I.C.

SUBMITTED BY PATRICK R. EBERT, CAD MANAGER | TYPE MD | DRAWING NO. PDX 2013-3023 16/22 (C-14)

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NO.	DATE	BY	REVISIONS	CK'D	APP'VD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER | 1173 PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE FEB 20010
SCALE 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
N.E. 33RD AVENUE

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3023 17/22 (C-15)

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N

STSOUT123

STSCB5117

NE 33RD DR.

NE ELROD RD.
(ACCESS ROAD)

3770

1

2

BROADMOOR GOLF COURSE

NO.	DATE	BY	REVISIONS	CK'D	APPV'D

NO.	DATE	BY	REVISIONS	CK'D	APPV'D

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER

1173 PROJECT NUMBER

DESIGNED BY	ENGINEERING CAD
DRAWN BY	P. REYNOLDS
CHECKED BY	P. EBERT
DATE	OCT 2013
SCALE	1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
N.E. ELROD ROAD AND N.E. 33RD AVENUE

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3023 18/22 (C-16)

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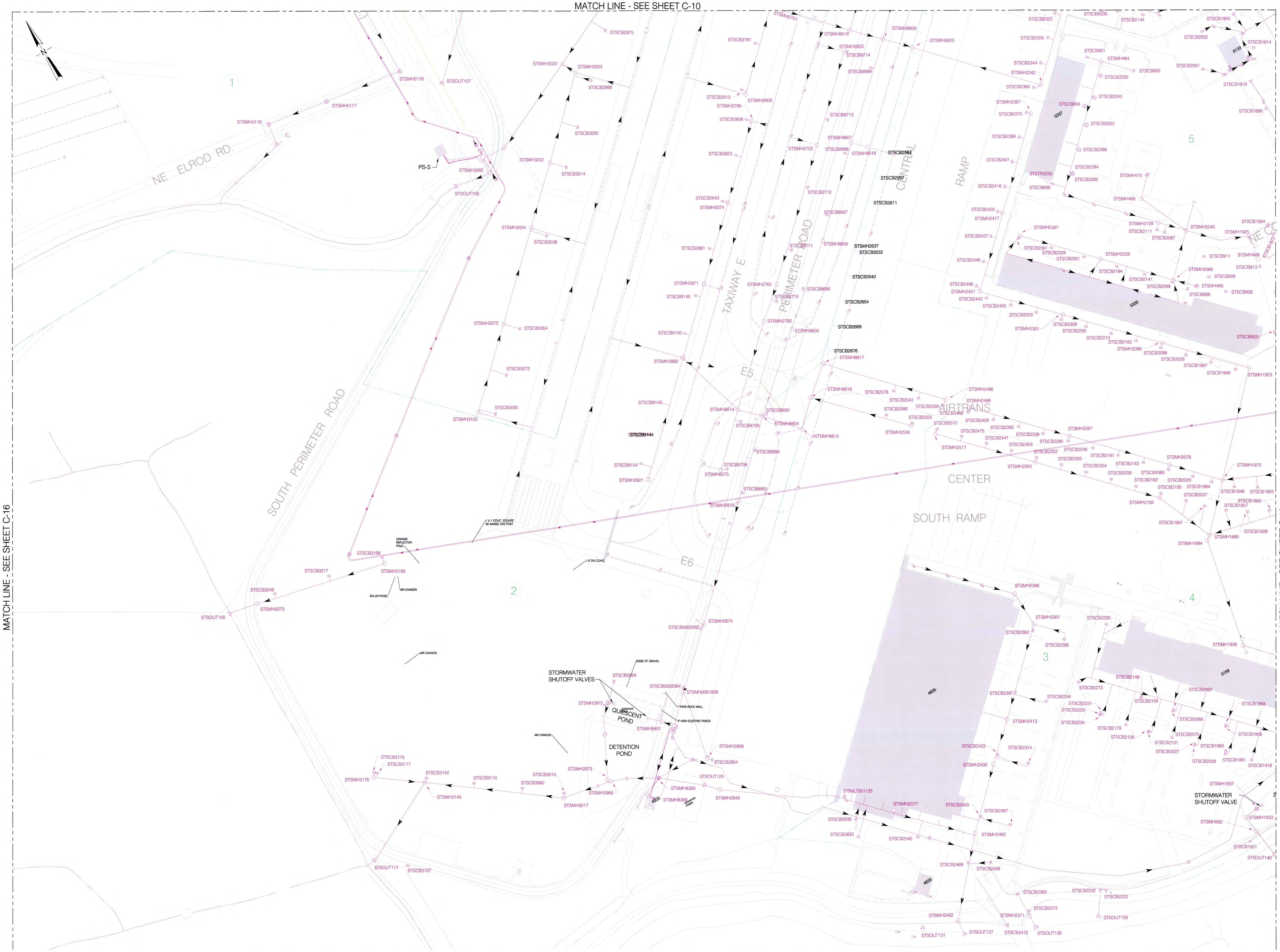

NO.	DATE	BY	REVISIONS	CK'D	APPVD

NO.	DATE	BY	REVISIONS	CK'D	APPVD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 — DESIGN NUMBER
1173 — PROJECT NUMBER

DESIGNED BY: ENGINEERING CAD
DRAWN BY: P. REYNOLDS
CHECKED BY: P. EBERT
DATE: OCT 2013
SCALE: 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
SOUTH END RUNWAY 3-21 - MAINTENANCE HANGAR

SUBMITTED BY: PATRICK R. EBERT, CAD MANAGER
TYPE: MD
DRAWING NO.: PDX 2013-3023
19/22 (C-17)

NO.	DATE	BY	REVISIONS	CKD	APPVD	NO.	DATE	BY	REVISIONS	CKD	APPVD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 — DESIGN NUMBER
1173 — PROJECT NUMBER

DESIGNED BY: ENGINEERING CAD
DRAWN BY: P. REYNOLDS
CHECKED BY: P. EBERT
DATE: OCT 2013
SCALE: 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
N.E. AIRTRANS WAY - O.A.N.G.

SUBMITTED BY: PATRICK R. EBERT, CAD MANAGER

TYPE: MD
DRAWING NO.: PDX 2013-3023
20/22 (C-18)

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MATCH LINE - SEE SHEET C-18

MATCH LINE - SEE SHEET C-20

COLWOOD

GOLF

COURSE

NE CORNFOOT RD.

NE ALDERWOOD RD.

NE 79TH CT.

NE CULLY BLVD.

NE 66T

AVE

STSMH4898
STSCB4947
STSCB4946
STSCB4951
STSCB4910
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STSMH4917
STSMH4862
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STSOUT132
STSCB4270
STSMH4260

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

NO.	DATE	BY	REVISIONS	CK'D	APP'VD

PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER
1173 PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE OCT 2013
SCALE 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
SOUTHEAST CORNER OF O.A.N.G. BASE

SUBMITTED BY PATRICK R. EBERT, CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3023 21/22 (C-19)

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PORT OF PORTLAND
PORTLAND, OREGON

2010Z144 DESIGN NUMBER | 1173 PROJECT NUMBER

DESIGNED BY ENGINEERING CAD
DRAWN BY P. REYNOLDS
CHECKED BY P. EBERT
DATE OCT 2013
SCALE 1" = 100'

PORTLAND INTERNATIONAL AIRPORT

STORM SEWER SYSTEM
COLUMBIA SLOUGH - N.E. 82ND AVENUE

SUBMITTED BY
PATRICK R. EBERT
CAD MANAGER

TYPE MD | DRAWING NO. PDX 2013-3023 22/22 (C-20)

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Appendix D

PDX Spill Response Procedures

PORT OF PORTLAND

PORTLAND INTERNATIONAL AIRPORT

SPILL RESPONSE PROCEDURES

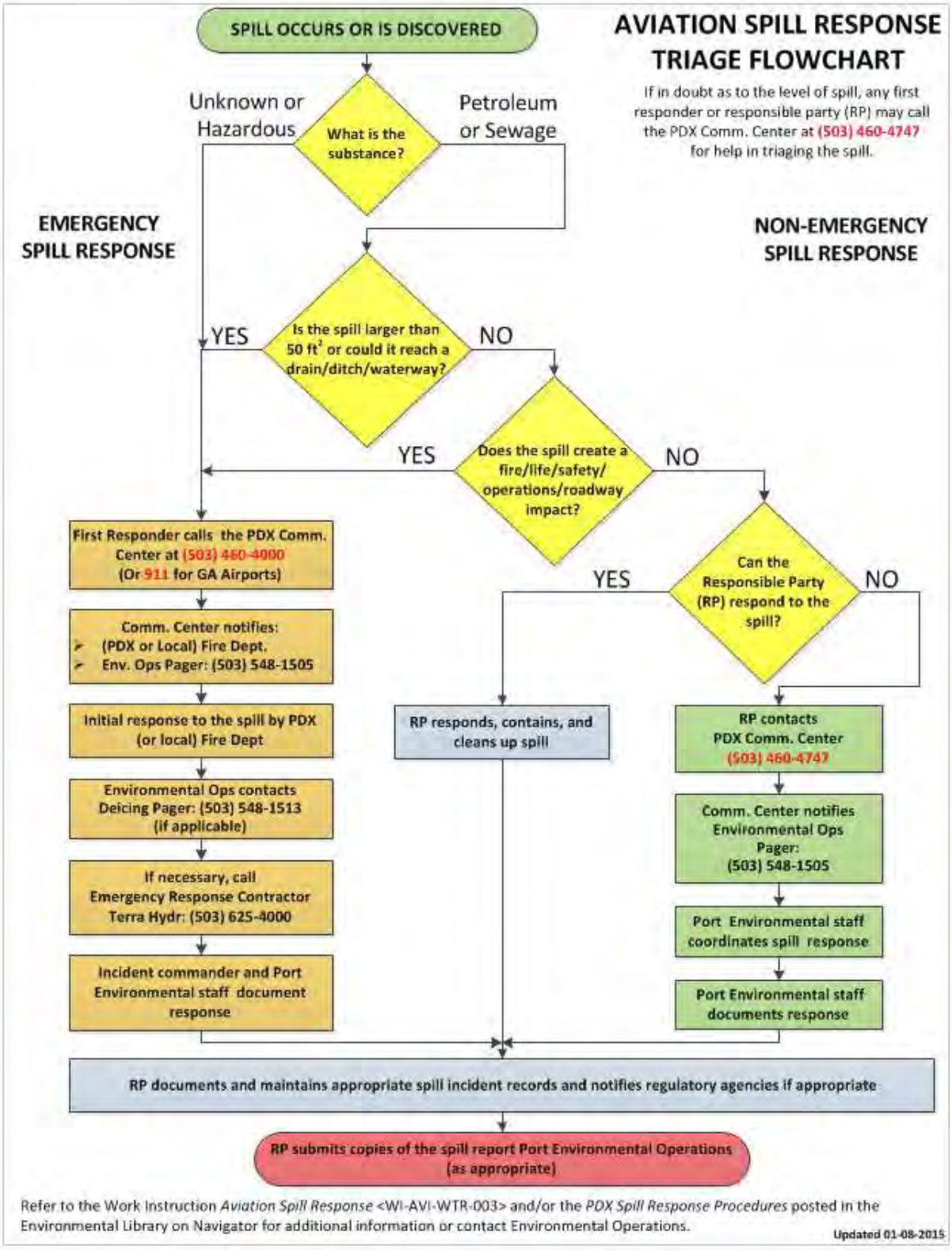
(Updated January 14, 2015)

Approved by Phillip A. Ralston

Phil Ralston, General Manager,
Environmental Operations
Port of Portland

Date January 14, 2015

Quick Reference: Aviation Spill Response Triage Flowchart



PDX SPILL RESPONSE PROCEDURES

Table of Contents

REVISION HISTORY

PDX SPILL RESPONSE PROCEDURES	
Various	
11/05/2007	
05/05/2011	Updated Incident Command responsibilities and associated training requirements (Aviation Environmental will no longer be delegated this responsibility); updated key contact information/numbers; updated related flowcharts for consistency with current work instructions.
12/13/2011	Incorporated labeling requirement reference language from Stormwater General Permit. We determined this was a minor edit and did not require updated sign off on the enclosed procedures.
04/10/2014	Updated spill response flowchart and procedures to improve consistency with Port-wide emergency response plans. Incorporated deicing plant notification.
01/15/2015	Updated spill response flow chart to reference responses to petroleum or sewage spills versus unknown or hazardous spills – so responders can implement emergency spill response for spills where they are unaware of the material or the material's reportable quantity; Updated section 5.0 for consistency with the new flowchart.

1.0 POLICY STATEMENT

The Port of Portland (Port) will follow a standard set of procedures to quickly and efficiently respond to spills of hazardous and non-hazardous materials at the Portland International Airport (PDX). The Port's principal goals in establishing these procedures are to ensure that the public, PDX employees, tenants, and contractors (including those responding to spills) are protected from undue exposure to these materials, to protect the environment that may otherwise be impacted by these spills, to protect property, and to minimize operational disruptions caused by spills. This plan was developed to be consistent with the Port's Environmental Management System, PDX emergency response procedures and safety procedures.

2.0 PLAN PURPOSE

The PDX Spill Response Procedures (SRPs) were developed to provide a framework of emergency response efforts to address spills and accidental release of material within the Port boundaries. The PDX SRPs will detail the following:

- Roles, responsibilities, communication, and reporting procedures;
- spill response, cleanup, removal, and disposal procedures;
- training requirements; and
- equipment.

3.0 INTRODUCTION

3.1 Background – General

3.1.1 PDX is a multi-employer work site and each individual employer is the Responsible Party (RP) in the event that their product is spilled/released or if their employee spills/ releases a material.

3.1.2 The most likely materials spilled/released at PDX and its surrounding jurisdiction are vehicle fluids, jet fuel, and sewage.

3.1.3 Tenants, airlines, construction contractors, and ground service companies account for the majority of historical spills/releases that have occurred at PDX and its surrounding jurisdiction.

3.1.4 The PDX Fire Department may provide initial incident command and control for spills/releases.

3.1.5 The PDX Environmental Operations Department is responsible for ensuring appropriate agency notification by tenants, airlines, construction contractors, and ground service companies.

3.1.6 The PDX Environmental Operations Department is responsible for the oversight of containment and cleanup of spills/releases, some of which may impact waterways and outfalls.

3.2 Geographic Jurisdiction of PDX Spill Response Plans

3.2.1 These SRPs apply to spills within the perimeter of PDX's facility fence, as well as Port property bordered by the Columbia Slough, I-205, Marine Drive, and 33rd Avenue, excluding the non-aviation portions of Portland International Center.

3.2.2 Under special circumstances, such as incidents significantly affecting the operation of the airport, the PDX SRPs may be implemented for spills in the Portland International Center (PIC) or on the Portland Air National Guard (PANG) base.

4.0 REGULATORY GUIDANCE

The procedures contained in this plan shall ensure compliance with the requirements of the following regulations:

- 29 CFR PART 1910.120 (OSHA) Hazardous Waste Operations and Emergency Response
- 40 CFR PART 117.3 (EPA) Determination of Reportable Quantities
- OAR 340, Division 142 (Oregon State) Oil and Hazardous Materials Emergency Response Requirements
- NFPA 407 (National Fire Protection Agency) Standard for Aircraft Fuel Servicing
- 40 CFR PART 300 (EPA) National Contingency Plan

5.0 SPILL DETERMINATION

In order to ensure compliance with all spill response regulatory guidance and to simplify responder callout procedures, two levels of spills have been developed – Emergency and Non-emergency. For the purposes of this plan, the definitions are as follows:

5.1 Emergency Spill

5.1.1 A spill or release of oil or hazardous material that covers an area over 50 ft^2 (about the size of a small bathroom, 10 feet x 5 feet) OR

5.1.2 a spill of a volume that exceeds the material's reportable quantity (see Appendix A). Note: The reportable quantity for petroleum products is 42 gallons; OR

5.1.3 a spill of an unknown material or material for which the RQ is not immediately known; OR

5.1.4 a spill or release of any hazardous material, in any quantity that may:

- Reach a drain, ditch, or underground water system;
- directly impact a waterway (includes rivers, streams, marshes, and creeks);
- impact PDX operations or roadways (e.g. requires shutting down traffic lanes, restrict access to essential operational areas or services);
- present a safety or health hazard; OR
- require response or cleanup assistance from personnel outside the immediate release area (such as Port Environmental Operations, Fire, or Operations; or outside Emergency Spill Response Contractors).

5.2 Non-emergency Spill

5.2.1 Spills that can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel; AND

5.2.2 do not pose any safety or health hazard; AND

5.2.3 have no potential to impact/ reach/ affect any waterway, drain, ditch, or underground water system.

5.2.4 Examples of spills that meet the above criteria and can be considered a non-emergency spill include:

- Small amounts of vehicle fluids (oil, radiator fluid, gasoline, diesel, brake fluid, etc.);
- biohazard/sewage spills that can be contained in the immediate area and are smaller than 50 ft^2 in total area;
- non-hazardous materials spills (materials that do not fall into the hazardous materials classification, is non-reactive and therefore not harmful to the environment);
- jet fuel spills that can be contained in the immediate area, will not spill into any drains, and are smaller than 50 ft^2 in total area or 42 gallons.

6.0 SPILL RESPONSE PROCEDURES

PDX Spill Response Procedures will be implemented in the event of any release or spill. The spill determination - emergency or non-emergency - as detailed above, will determine the appropriate personnel/agency response to the release.

In the event of a spill, general response actions include:

- Shut off the source of the spill immediately, if possible.
- Report the spill to the PDX Communications Center (503) 460-4000 and applicable agencies.
- Contain the spill using sorbent products appropriate for the spilled material, if possible. Use appropriate personal protective equipment.
- Cleanup and document the spill. Appropriately characterize and dispose of spill cleanup materials.

6.1 General

6.1.1 Judgment and Control Criteria for Spills & Emergency Response

- Non-emergency spills will be cleaned up by the RP. In the event that the RP is unwilling or unable to clean up

the spill, PDX personnel or contractors will clean up the spill and the RP will be billed for the cleanup cost.

- The PDX Fire Department will be contacted and will initiate the Incident Command System (ICS), take initial control of all Emergency Spills, and determine if additional contract cleanup resources are required. The PDX Fire Department may relinquish Incident Command to another department or agency, as appropriate.

6.1.2 Containment, Cleanup, and Removal/Disposal

- Containment, cleanup, and removal/disposal of spills that occur in the Geographical Jurisdiction of these procedures per Section 3.2 will be executed and/or administered by the RP, with possible oversight by the PDX Fire Department, Environmental Operations Department, or PDX Airport Operations (Airside/Landside).

- Tenants, airlines, construction contractors, and service providers will be charged for the damage their spills cause to property (e.g., asphalt damage from fuel spills). They will also be charged for cleanup operations conducted on their behalf by the Port of Portland.

- Once the spill is contained by the RP or appropriate level of Port response personnel, the control of the incident will then be turned over to the City, PDX Airport Operations (Airside/Landside), or the PDX Environmental Operations Department for cleanup operations, depending on where the spill occurred.

- Spill cleanup materials and spill debris from spills for which the Port is not responsible must be collected, stored, characterized and disposed of by the Responsible Party.

- If the Port is cleaning up the spill on behalf of the RP, spill cleanup materials shall be left with the RP. The Port may temporarily store cleanup materials in the Port's Hazardous Materials Building if the RP has not been determined.

6.2 Emergency Spill Response Contractors & Cleanup

6.2.1 Environmental Operations is the primary requestor of Emergency Spill Response Contractor support. For the majority of spills, Environmental Operations will be contacted by the Comm. Center and will make the determination about the need for contractor support.

6.2.2 In the case of a catastrophic spill that would require immediate spill management and control by a contractor, other responding groups may call the Comm. Center and request immediate contractor response for the containment and/or cleanup of the spill. These groups may include: PDX Fire, PDX Airport Operations (Airside/Landside), Maintenance or Police.

6.2.3 Emergency Spill Response Contractors are listed in Appendix C of these procedures.

6.3 Spill Response Chart

SPILL OCCURS AND IS IDENTIFIED AS*:	
NON-EMERGENCY SPILL	**EMERGENCY SPILL**
1. Responsible Party (RP) contains spill within immediate area with appropriate supplies on-hand.	1. The first party/person to discover the Emergency Spill will contact the Comm. Center at **503-460-4000** to report the spill. If able, containment protocols will be initiated.
2. RP will notify the Comm. Center at **503-460-4747** if assistance is required to contain or clean up the spill.	2. Comm. Center will dispatch PDX Fire to the scene and will notify: **Env. Ops Pager: 503-548-1505**
3. RP will notify PDX Environmental Operations if Port-supplied equipment or material was utilized so supplies can be re-stocked.	3. PDX Fire responds to scene, begins/continues containment procedures; and assesses the type, amount, and possible impacts of the spill. Environmental Operations notifies Spill response contractor, if needed, and provides cleanup oversight. Environmental Operations will contact Deicing if appropriate.
4. RP maintains appropriate spill incident records and notifies regulatory agencies if appropriate.	4. RP maintains appropriate spill incident records and notifies regulatory agencies if appropriate.
5. Port Environmental Operations should get copies of the report, if appropriate.	5. Port Environmental Operations should get copies of the report.

* If in doubt as to the level of spill any first responder or responsible party (RP) may call the Comm. Center at **503-460-4747** for help in triaging the spill.

7.0 STAFF AGENCY-SPECIFIC ROLES & RESPONSIBILITIES

7.1 PDX Airport Operations (Airside/Landside)

- Contact the Comm. Center when an emergency spill is discovered, or when direction or assistance is required on a non-emergency spill;
- are provided with HazCom and Spill Response training for designated staff;
- assist in cleanup of non-emergency spills and emergency spills as directed by the Incident Commander and in accordance with equipment, training, and materials (when available);
- may request, through the Comm. Center, immediate contractor response for the containment and/or cleanup of catastrophic spills; and
- oversee RP cleanups as directed by PDX Environmental Operations.

7.2 PDX Communication (Comm.) Center

- Serve as initial Port point of contact for receiving reports of emergency spills, or for non-emergency spills requiring direction or assistance; and
- triage all calls and dispatch the appropriate level of response personnel as requested or as needed for response and cleanup. See page (ii) for triage.

7.3 PDX Environmental Operations Department

- Develop, maintain, and review the PDX Spill Response Procedures and Program;
- maintain Environmental Operations staff for response to emergency and hazardous material spills;
- contact the deicing emergency pager at 503-548-1513 (if applicable) with details so that deicing operations can protect the deicing system from cross contamination, help to contain the spill with the deicing system infrastructure when possible,

and protect the City of Portland Waste Water Treatment Plant from cross contamination;

- maintain required records for emergency and hazardous material spills;
- serve as liaison to regulatory agencies;
- prepare reports, documentation and maintain records as required by Port procedures and regulatory requirements;
- arrange for appropriate training for employees, staff, and the PDX Fire Department for emergency and hazardous material spill response;
- provide guidance to tenants and contractors for spill response and cleanup when necessary; and
- contact Emergency Spill Response Contractors as needed.

7.4 PDX Deicing

- Respond to spill notifications, as appropriate to protect the deicing system from cross contamination, help to contain the spill with the deicing system infrastructure when possible, and protect the City of Portland Waste Water Treatment Plant from cross contamination.

7.5 PDX Fire

- Maintain and train PDX Fire Department staff for response to emergency and non-emergency spills;
- establish ICS for emergency spills;
- when appropriate, use defensive measures to contain and control emergency spills;
- assist in cleanup of emergency spills in accordance with equipment, training, and materials, as appropriate;
- notify PDX Environmental Operations Department and/or Emergency Spill Response Contractors, as appropriate; and

- complete appropriate documentation, reporting, and maintain records in accordance with Port procedures and regulatory requirements.

7.6 PDX Maintenance

- Contact the Comm. Center when an emergency spill is discovered, or when direction or assistance is required on a non-emergency spill;
- maintain and train the PDX Maintenance staff for awareness and response to emergency and non-emergency spills that impact Maintenance facilities and operations;
- respond to departmental emergency and non-emergency spills in accordance with this plan and within the scope of staff training and capabilities;
- assist in maintaining spill equipment and spill supply stock; and
- assist in cleanup of non-emergency spills and emergency spills as directed by the Incident Commander and in accordance with equipment, training, and materials (when available).

7.7 PDX Police

- Contact the Comm. Center when an emergency spill is discovered, or when direction or assistance is required on a non-emergency spill; and
- provide traffic and crowd control when requested.

7.8 All Port Employees

- Ensure all containers are clearly and properly labeled in order to support appropriate spill response (refer to the Port-wide Labeling Work Instruction for additional detail);
- contact the Comm. Center when an emergency spill is discovered, or when direction or assistance is required on a non-emergency spill;
- maintain HazCom and Spill Response training for designated staff; and

- cleanup or oversee the cleanup of incidental spills in their area.

7.9 PDX Tenants, Airlines, Construction Contractors, and Service Providers

- Contact the Comm. Center when an emergency spill is discovered, or when direction or assistance is required on a non-emergency spill;
- train appropriate personnel in accordance with HazCom requirements and the PDX Spill Response Procedures;
- maintain appropriate cleanup materials and equipment;
- maintain records of spill response actions; and
- report all regulated spills to the appropriate regulatory agencies in accordance with individual spill response plan.
- RP will notify PDX Environmental Operations what Port-supplied equipment or material was utilized so supplies can be tracked and re-stocked.

7.10 Emergency Spill Response Contractors

- Provide environmental response and cleanup services as requested; and
- maintain a response crew with PDX security access badges and appropriate training.

8.0 REGULATORY REPORTING REQUIREMENTS

8.1 Reportable Quantity (RQ)

As defined in OAR 340-142-0050 and 40 CFR Part 117.3. Spills and releases, or threatened spills of oil or hazardous materials in quantities equal or greater than the following amounts:

8.1.1 If spilled or discharged into waters of the state or in a location from which it is likely to escape into waters of the state any quantity of oil that would produce a visible film, sheen, oily slick, oily solids, or coat aquatic life, habitat or property with oil, but excluding normal discharges from properly operating marine engines.

8.1.2 If spilled on the surface of the land, and not likely to escape into waters, any quantity of oil or petroleum product equal to or greater than 42 gallons.

8.1.3 An amount equal to or greater than the quantity of any hazardous substance listed in Appendix A.

8.2 Reporting Responsibilities

8.2.1 Tenants, Airlines, Construction Contractors, Service Providers will report any RQ to:

- The appropriate regulatory agency; AND
- the PDX Environmental Operations Department.

8.2.2 PDX Environmental Operations Department will:

- Notify the appropriate regulatory agency of regulated spills caused by the Port as well as those not reported by RPs, to the extent the Port has actual knowledge that it has not been reported.
- If the amount of oil or hazardous material meets or exceeds the reportable quantity in any 24-hour period, report the spill or release to the **Oregon Emergency Response System (1-800-452-0311 out-of-state, and 503-378-4124 in-state) AND the National Response Center, 1-800-424-8802.**
- If the quantity of oil or hazardous material meets or exceeds the quantity referenced in Appendix A, report the spill or release to the **Oregon Emergency Response System (1-800-452-0311 out-of-state, and 503-378-4124 in-state) AND the National Response Center, 1-800-424-8802.**

  Note: A sheen on waters of the state or that emerges from the storm system outfall is reportable – regardless of the quantity released. If an Emergency Spill of oil reaches navigable waters of the United States, determine if a Federal On-Scene Coordinator (FOSC) will be designated and, if possible, coordinate all response actions through that FOSC.

9.0 TRAINING

9.1 Hazard Communication & Awareness Training - Non-emergency Spill

9.1.1 Appropriate PDX personnel, tenants, airlines, construction contractors, and service providers will receive Hazard Communication training in accordance with 29 CFR 1910.1200. They will also receive basic awareness training on the PDX Spill Response Procedures.

9.1.2 Personnel with this training can respond to and clean up any non-emergency spill.

9.2 Emergency/Hazardous Materials Spill Response Training

9.2.1 The PDX Fire Department and Environmental Operations Department will have training that meets the requirements of 29 CFR 1910.120 (q) for Hazardous Materials Awareness and Operations.

9.2.2 Incident Commanders will also have appropriate Incident Command training and 24- or 40-hour HAZWOPER training.

9.3 40-Hour HAZWOPER

9.3.1 PDX Emergency Response Contractors who conduct remediation or final cleanup of Emergency/Hazardous Material Spills must have 40-hour HAZWOPER training meeting the requirements of 29 CFR 1910.120 (e).

10.0 EQUIPMENT

10.1 Port-supplied Equipment & Material

10.1.1 PDX will purchase, maintain, and re-stock appropriate spill cleanup and containment equipment. These cleanup kits will include sorbent materials and a limited amount of PPE (boot covers, gloves, and disposable coveralls). The cleanup kits will be sited at secure locations for access by PDX personnel and Emergency Spill Response Contractors.

10.1.2 PDX also maintains a Spill Response Mobile Unit. This unit is located at the PDX Maintenance facility.

10.2 Tenant Equipment & Material

10.2.1 Tenants, airlines, construction contractors, and service providers are responsible for securing and maintaining the appropriate equipment for responding to and cleaning up spills they cause.

10.2.2 If they require the use of Port equipment, they will be billed for the cost of the materials.

10.2.3 Spill cleanup materials and debris must be stored and disposed of by the Responsible Party.

11.0 DEFINITIONS

- **Biohazard/Sewage Spills** are spills of raw sewage or other materials that may contain "Blood-borne Pathogens." OSHA defines "Blood-borne Pathogens" as pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

- **Communication (Comm.) Center** is located at PDX's main terminal and is the central call-taking and dispatch entity for PDX. The Communications Center can be reached at: Emergency 503-460-4000, Non-emergency 503-460–4747.

- **Cleanup Operation** in relation to Emergency & Hazardous Material Spills means an operation where hazardous substances are removed, contained, incinerated, neutralized, stabilized, cleaned up, or in any other manner processed or handled with the ultimate goal of making the site safer for people or the environment.

- **Emergency/Hazardous Material Spill** means a spill that may impact a waterway or Port Operations or presents a potential safety or health hazard such as fire, explosion, or chemical exposure.

- **Emergency Response** means a response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual aid groups, local fire departments, etc.) to an occurrence, which results or is likely to result in an Emergency/Hazardous Material Spill.

- **Emergency Response Contractors** are companies that have appropriately trained personnel and equipment to respond to, and clean up Emergency/Hazardous Material Spills.

- **Environmental Receptors** at PDX are defined as areas potentially at risk for environmental contamination from a hazardous substance or petroleum product release. Environmental Receptors may include soil, groundwater, sediments, and surface waters of the Columbia Slough, storm drains, quiescent ponds, and retention ponds.

- **First Responder** is, in these procedures, the person who witnesses or discovers the spill. This person's primary responsibility is to clean up the spill, if practical. Also, the First Responder contacts the Communications Center when an Emergency/Hazardous Material or fuel spill is discovered, or when direction or assistance is required on a Non-emergency/Incidental Spill.

- **Hazard Communication** refers to the OSHA 29 CFR 1910.1200 Hazard Communication or Worker "Right-to-Know" law that includes chemical labeling, training, and work practice requirements.

- **Hazardous Material/Hazardous Substance** is a substance that may present a potential safety or health hazard, such as fire, explosion, or chemical exposure, and/or a substance defined as such by regulation.

- **Hazardous Materials Response (HAZMAT)** team is an organized group of employees with appropriate training and equipment who are expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance. The team members perform responses to releases or potential releases of hazardous substances for the purpose of control or stabilization of the incident. PDX uses the Portland Fire Department HAZMAT team when necessary.

- **Incident Commander** is the individual responsible for coordinating the emergency response for Emergency/Hazardous Material Spills and determining if the spill is hazardous. Qualified individuals are trained in the Incident Command System and have at least completed the 24-hour Hazardous Waste Operations and Emergency Response training in accordance with the HAZWOPER standard, 29 CFR 1910.120 (q)(6).

- **Non-emergency/Incidental Spills** mean any spill that does not meet the definition of an "Emergency/Hazardous Material Spill".

- **Reportable Quantity (RQ)** is defined as the quantity of hazardous material or petroleum product that must be reported to EPA or DEQ if released into the environment. The reportable quantities of hazardous substances are specified in 40 CFR Part 117.3 (listing also included in Appendix A). In the case of oil or oil related products, DEQ regulations define a reportable quantity as any volume equal to or greater than 42 gallons of oil spilled on the ground surface, or if in water, any quantity. The specific reportable quantity may be determined from the material's material safety data sheet (MSDS).

- **Responsible Party (RP)** is defined as the individual or company whose operations or equipment caused the spill or release. If there is a dispute in determining the RP, the owner of the leasehold will be the default RP and subsequently responsible for the cleanup of the spill.

- **Waterway Impact Spills** are any spills that may impact the water/environmental receptors.

- **40-hour HAZWOPER** refers to the Hazardous Waste Operations and Emergency Response training requirements detailed in 29 CFR 1910.120 (e) for environmental cleanup contractors.

Appendix A

40 CFR Part 117.3 Reportable Quantities of Hazardous Substance

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 (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), 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, byproduct, 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 ("RQ") 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.

[50 FR 13474, Apr. 4, 1985, as amended at 67 FR 45321, July 9, 2002]

§ 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. 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)(2) 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 section 3001 of the Resource Conservation and Recovery Act (RCRA). The "RCRA Waste Number" column provides the waste identification numbers assigned to various substances by RCRA regulations. The "Pounds (kg)" column provides the reportable quantity adjustment for each hazardous substance in pounds and kilograms. Appendix A to §302.4, which lists CERCLA hazardous substances in sequential order by CASRN, provides a per-substance grouping of regulatory synonyms (i.e., names by which each hazardous substance is identified in other statutes and their implementing regulations).

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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Acenaphthene	83–32–9	2		100 (45.4)
Acenaphthylene	208–96–8	2		5000 (2270)
Acetaldehyde	75–07–0	1,3,4	U001	1000 (454)
Acetaldehyde, chloro-	107–20–0	4	P023	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Acetaldehyde, trichloro-	75–87–6	4	U034	5000 (2270)
Acetamide	60–35–5	3		100 (45.4)
Acetamide, N-(aminothioxomethyl)-	591–08–2	4	P002	1000 (454)
Acetamide, N-(4-ethoxyphenyl)-	62–44–2	4	U187	100 (45.4)
Acetamide, N-9H-fluoren-2-yl-	53–96–3	3,4	U005	1 (0.454)
Acetamide, 2-fluoro-	640–19–7	4	P057	100 (45.4)
Acetic acid	64–19–7	1		5000 (2270)
Acetic acid, (2,4-dichlorophenoxy)-, salts & esters	94–75–7	1,3,4	U240	100 (45.4)
Acetic acid, ethyl ester	141–78–6	4	U112	5000 (2270)
Acetic acid, fluoro-, sodium salt	62–74–8	4	P058	10 (4.54)
Acetic acid, lead(2+) salt	301–04–2	1,4	U144	10 (4.54)
Acetic acid, thallium(1+) salt	563–68–8	4	U214	100 (45.4)
Acetic acid, (2,4,5-trichlorophenoxy)-	93–76–5	1,4	See F027	1000 (454)
Acetic anhydride	108–24–7	1		5000 (2270)
Acetone	67–64–1	4	U002	5000 (2270)
Acetone cyanohydrin	75–86–5	1,4	P069	10 (4.54)
Acetonitrile	75–05–8	3,4	U003	5000 (2270)
Acetophenone	98–86–2	3,4	U004	5000 (2270)
2-Acetylaminofluorene	53–96–3	3,4	U005	1 (0.454)
Acetyl bromide	506–96–7	1		5000 (2270)
Acetyl chloride	75–36–5	1,4	U006	5000 (2270)
1-Acetyl-2-thiourea	591–08–2	4	P002	1000 (454)
Acrolein	107–02–8	1,2,3,4	P003	1 (0.454)
Acrylamide	79–06–1	3,4	U007	5000 (2270)
Acrylic acid	79–10–7	3,4	U008	5000 (2270)
Acrylonitrile	107–13–1	1,2,3,4	U009	100 (45.4)
Adipic acid	124–04–9	1		5000 (2270)
Aldicarb	116–06–3	4	P070	1 (0.454)
Aldrin	309–00–2	1,2,4	P004	1 (0.454)
Allyl alcohol	107–18–6	1,4	P005	100 (45.4)
Allyl chloride	107–05–1	1,3		1000 (454)
Aluminum phosphide	20859–73–8	4	P006	100 (45.4)
Aluminum sulfate	10043–01–3	1		5000 (2270)
4-Aminobiphenyl	92–67–1	3		1 (0.454)
5-(Aminomethyl)-3-isoxazolol	2763–96–4	4	P007	1000 (454)
4-Aminopyridine	504–24–5	4	P008	1000 (454)
Amitrole	61–82–5	4	U011	10 (4.54)
Ammonia	7664–41–7	1		100 (45.4)
Ammonium acetate	631–61–8	1		5000 (2270)
Ammonium benzoate	1863–63–4	1		5000 (2270)
Ammonium bicarbonate	1066–33–7	1		5000 (2270)
Ammonium bichromate	7789–09–5	1		10 (4.54)
Ammonium bifluoride	1341–49–7	1		100 (45.4)
Ammonium bisulfilte	10192–30–0	1		5000 (2270)
Ammonium carbamate	1111–78–0	1		5000 (2270)
Ammonium carbonate	506–87–6	1		5000 (2270)
Ammonium chloride	12125–02–9	1		5000 (2270)
Ammonium chromate	7788–98–9	1		10 (4.54)
Ammonium citrate, dibasic	3012–65–5	1		5000 (2270)
Ammonium fluoborate	13826–83–0	1		5000 (2270)
Ammonium fluoride	12125–01–8	1		100 (45.4)
Ammonium hydroxide	1336–21–6	1		1000 (454)
Ammonium oxalate	6009–70–7	1		5000 (2270)
	5972–73–6			
	14258–49–2			
Ammonium picrate	131–74–8	4	P009	10 (4.54)
Ammonium silicofluoride	16919–19–0	1		1000 (454)
Ammonium sulfamate	7773–06–0	1		5000 (2270)
Ammonium sulfide	12135–76–1	1		100 (45.4)
Ammonium sulfite	10196–04–0	1		5000 (2270)
Ammonium tartrate	14307–43–8	1		5000 (2270)
	3164–29–2			
Ammonium thiocyanate	1762–95–4	1		5000 (2270)
Ammonium vanadate	7803–55–6	4	P119	1000 (454)
Amyl acetate	628–63–7	1		5000 (2270)
iso-Amyl acetate	123–92–2			
sec-Amyl acetate	626–38–0			
tert-Amyl acetate	625–16–1			
Aniline	62–53–3	1,3,4	U012	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
o-Anisidine	90–04–0	3		100 (45.4)
Anthracene	120–12–7	2		5000 (2270)
Antimonydagger;dagger;	7440–36–0	2		5000 (2270)
ANTIMONY AND COMPOUNDS	N.A.	2,3		**
Antimony Compounds	N.A.	2,3		**
Antimony pentachloride	7647–18–9	1		1000 (454)
Antimony potassium tartrate	28300–74–5	1		100 (45.4)
Antimony tribromide	7789–61–9	1		1000 (454)
Antimony trichloride	10025–91–9	1		1000 (454)
Antimony trifluoride	7783–56–4	1		1000 (454)
Antimony trioxide	1309–64–4	1		1000 (454)
Argentate(1-), bis(cyano-C)-, potassium	506–61–6	4	P099	1 (0.454)
Aroclor 1016	12674–11–2	1,2,3		1 (0.454)
Aroclor 1221	11104–28–2	1,2,3		1 (0.454)
Aroclor 1232	11141–16–5	1,2,3		1 (0.454)
Aroclor 1242	53469–21–9	1,2,3		1 (0.454)
Aroclor 1248	12672–29–6	1,2,3		1 (0.454)
Aroclor 1254	11097–69–1	1,2,3		1 (0.454)
Aroclor 1260	11096–82–5	1,2,3		1 (0.454)
Aroclors	1336–36–3	1,2,3		1 (0.454)
Arsenicdagger;dagger;	7440–38–2	2,3		1 (0.454)
Arsenic acid H3AsO4	7778–39–4	4	P010	1 (0.454)
ARSENIC AND COMPOUNDS	N.A.	2,3		**
Arsenic Compounds (inorganic including arsine)	N.A.	2,3		**
Arsenic disulfide	1303–32–8	1		1 (0.454)
Arsenic oxide As2O3	1327–53–3	1,4	P012	1 (0.454)
Arsenic oxide As2O5	1303–28–2	1,4	P011	1 (0.454)
Arsenic pentoxide	1303–28–2	1,4	P011	1 (0.454)
Arsenic trichloride	7784–34–1	1		1 (0.454)
Arsenic trioxide	1327–53–3	1,4	P012	1 (0.454)
Arsenic trisulfide	1303–33–9	1		1 (0.454)
Arsine, diethyl-	692–42–2	4	P038	1 (0.454)
Arsinic acid, dimethyl-	75–60–5	4	U136	1 (0.454)
Arsonous dichloride, phenyl-	696–28–6	4	P036	1 (0.454)
Asbestosdagger;dagger;dagger;	1332–21–4	2,3		1 (0.454)
Auramine	492–80–8	4	U014	100 (45.4)
Azaserine	115–02–6	4	U015	1 (0.454)
Aziridine	151–56–4	3,4	P054	1 (0.454)
Aziridine, 2-methyl-	75–55–8	3,4	P067	1 (0.454)
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,8aalpha, 8balpha)]-.	50–07–7	4	U010	10 (4.54)
Barium cyanide	542–62–1	1,4	P013	10 (4.54)
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56–49–5	4	U157	10 (4.54)
Benz[c]acridine	225–51–4	4	U016	100 (45.4)
Benzal chloride	98–87–3	4	U017	5000 (2270)
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2propynyl)-	23950–58–5	4	U192	5000 (2270)
Benz[a]anthracene	56–55–3	2,4	U018	10 (4.54)
1,2-Benzanthracene	56–55–3	2,4	U018	10 (4.54)
Benz[a]anthracene, 7,12-dimethyl-	57–97–6	4	U094	1 (0.454)
Benzenamine	62–53–3	1,3,4	U012	5000 (2270)
Benzenamine, 4,4'-carbonimidoylbis (N,N dimethyl-	492–80–8	4	U014	100 (45.4)
Benzenamine, 4-chloro-	106–47–8	4	P024	1000 (454)
Benzenamine, 4-chloro-2-methyl-, hydrochloride	3165–93–3	4	U049	100 (45.4)
Benzenamine, N,N-dimethyl-4-(phenylazo)-	60–11–7	3,4	U093	10 (4.54)
Benzenamine, 2-methyl-	95–53–4	3,4	U328	100 (45.4)
Benzenamine, 4-methyl-	106–49–0	4	U353	100 (45.4)
Benzenamine, 4,4'-methylenebis [2-chloro-	101–14–4	3,4	U158	10 (4.54)
Benzenamine, 2-methyl-,hydrochloride	636–21–5	4	U222	100 (45.4)
Benzenamine, 2-methyl-5-nitro-	99–55–8	4	U181	100 (45.4)
Benzenamine, 4-nitro-	100–01–6	4	P077	5000 (2270)
Benzene[a]	71–43–2	1,2,3,4	U019	10 (4.54)
Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)- α-hydroxy-, ethyl ester.	510–15–6	3,4	U038	10 (4.54)
Benzene, 1-bromo-4-phenoxy-	101–55–3	2,4	U030	100 (45.4)
Benzenebutanoic acid, 4-[bis(2- chloroethyl)amino]-	305–03–3	4	U035	10 (4.54)
Benzene, chloro-	108–90–7	1,2,3,4	U037	100 (45.4)
Benzene, (chloromethyl)-	100–44–7	1,3,4	P028	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Benzenediamine, ar-methyl-	95–80–7 496–72–0 823–40–5 25376–45–8	3,4	U221	10 (4.54)
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117–81–7	2,3,4	U028	100 (45.4)
1,2-Benzenedicarboxylic acid, dibutyl ester	84–74–2	1,2,3,4	U069	10 (4.54)
1,2-Benzenedicarboxylic acid, diethyl ester	84–66–2	2,4	U088	1000 (454)
1,2-Benzenedicarboxylic acid, dimethyl ester	131–11–3	2,3,4	U102	5000 (2270)
1,2-Benzenedicarboxylic acid, dioctyl ester	117–84–0	2,4	U107	5000 (2270)
Benzene, 1,2-dichloro-	95–50–1	1,2,4	U070	100 (45.4)
Benzene, 1,3-dichloro-	541–73–1	2,4	U071	100 (45.4)
Benzene, 1,4-dichloro-	106–46–7	1,2,3,4	U072	100 (45.4)
Benzene, 1,1'-(2,2-dichloroethylidene) bis[4-chloro-	72–54–8	1,2,4	U060	1 (0.454)
Benzene, (dichloromethyl)-	98–87–3	4	U017	5000 (2270)
Benzene, 1,3-diisocyanatomethyl-	91–08–7 584–84–9 26471–62–5	3,4	U223	100 (45.4)
Benzene, dimethyl-	1330–20–7	1,3,4	U239	100 (45.4)
1,3-Benzenediol	108–46–3	1,4	U201	5000 (2270)
1,2-Benzenediol,4-[1-hydroxy-2-(methyl amino)ethyl]-	51–43–4	4	P042	1000 (454)
Benzeneethanamine, alpha,alpha-dimethyl-	122–09–8	4	P046	5000 (2270)
Benzene, hexachloro-	118–74–1	2,3,4	U127	10 (4.54)
Benzene, hexahydro-	110–82–7	1,4	U056	1000 (454)
Benzene, methyl-	108–88–3	1,2,3,4	U220	1000 (454)
Benzene, 1-methyl-2,4-dinitro-	121–14–2	1,2,3,4	U105	10 (4.54)
Benzene, 2-methyl-1,3-dinitro-	606–20–2	1,2,4	U106	100 (45.4)
Benzene, (1-methylethyl)-	98–82–8	3,4	U055	5000 (2270)
Benzene, nitro-	98–95–3	1,2,3,4	U169	1000 (454)
Benzene, pentachloro-	608–93–5	4	U183	10 (4.54)
Benzene, pentachloronitro-	82–68–8	3,4	U185	100 (45.4)
Benzenesulfonic acid chloride	98–09–9	4	U020	100 (45.4)
Benzenesulfonyl chloride	98–09–9	4	U020	100 (45.4)
Benzene,1,2,4,5-tetrachloro-	95–94–3	4	U207	5000 (2270)
Benzenethiol	108–98–5	4	P014	100 (45.4)
Benzene,1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-	50–29–3	1,2,4	U061	1 (0.454)
Benzene,1,1'-(2,2,2-trichloroethylidene) bis[4-methoxy-	72–43–5	1,3,4	U247	1 (0.454)
Benzene, (trichloromethyl)-	98–07–7	3,4	U023	10 (4.54)
Benzene, 1,3,5-trinitro-	99–35–4	4	U234	10 (4.54)
Benzidine	92–87–5	2,3,4	U021	1 (0.454)
1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts	81–07–2	4	U202	100 (45.4)
Benzo[a]anthracene	56–55–3	2,4	U018	10 (4.54)
1,3-Benzodioxole, 5-(1-propenyl)-1	120–58–1	4	U141	100 (45.4)
1,3-Benzodioxole, 5-(2-propenyl)-	94–59–7	4	U203	100 (45.4)
1,3-Benzodioxole, 5-propyl-	94–58–6	4	U090	10 (4.54)
1,3-Benzodioxol-4-ol, 2,2-dimethyl-, (Bendiocarb phenol)	22961–82–6	4	U364	##
1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate (Bendiocarb).	22781–23–3	4	U278	##
Benzo[b]fluoranthene	205–99–2	2		1 (0.454)
Benzo(k)fluoranthene	207–08–9	2		5000 (2270)
7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- (Carbofuran phenol).	1563–38–8	4	U367	##
7-Benzofuranol, 2,3-dihydro-2,2- dimethyl-, methylcarbamate.	1563–66–2	1,4	P127	10 (4.54)
Benzoic acid	65–85–0	1		5000 (2270)
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).	57–64–7	4	P188	##
Benzonitrile	100–47–0	1		5000 (2270)
Benzo[rst]pentaphene	189–55–9	4	U064	10 (4.54)
Benzo[ghi]perylene	191–24–2	2		5000 (2270)
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo- 1-phenylbutyl)-, & salts.	81–81–2	4	P001 U248	100 (45.4)
Benzo[a]pyrene	50–32–8	2,4	U022	1 (0.454)
3,4-Benzopyrene	50–32–8	2,4	U022	1 (0.454)
ρ-Benzoquinone	106–51–4	3,4	U197	10 (4.54)
Benzotrichloride	98–07–7	3,4	U023	10 (4.54)
Benzoyl chloride	98–88–4	1		1000 (454)
Benzyl chloride	100–44–7	1,3,4	P028	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Beryllium dagger;dagger;	7440–41–7	2,3,4	P015	10 (4.54)
BERYLLIUM AND COMPOUNDS	N.A.	2,3		**
Beryllium chloride	7787–47–5	1		1 (0.454)
Beryllium compounds	N.A.	2,3		**
Beryllium fluoride	7787–49–7	1		1 (0.454)
Beryllium nitrate	13597–99–4 7787–55–5	1		1 (0.454)
Beryllium powder dagger;dagger;	7440–41–7	2,3,4	P015	10 (4.54)
alpha-BHC	319–84–6	2		10 (4.54)
beta-BHC	319–85–7	2		1 (0.454)
delta-BHC	319–86–8	2		1 (0.454)
gamma-BHC	58–89–9	1,2,3,4	U129	1 (0.454)
2,2′-Bioxirane	1464–53–5	4	U085	10 (4.54)
Biphenyl	92–52–4	3		100 (45.4)
[1,1′-Biphenyl]-4,4′-diamine	92–87–5	2,3,4	U021	1 (0.454)
[1,1′-Biphenyl]-4,4′-diamine,3,3′-dichloro-	91–94–1	2,3,4	U073	1 (0.454)
[1,1′-Biphenyl]-4,4′-diamine,3,3′-dimethoxy-	119–90–4	3,4	U091	100 (45.4)
[1,1′-Biphenyl]-4,4′-diamine,3,3′-dimethyl-	119–93–7	3,4	U095	10 (4.54)
Bis(2-chloroethoxy) methane	111–91–1	2,4	U024	1000 (454)
Bis(2-chloroethyl) ether	111–44–4	2,3,4	U025	10 (4.54)
Bis(chloromethyl) ether	542–88–1	2,3,4	P016	10 (4.54)
Bis(2-ethylhexyl) phthalate	117–81–7	3,4	U028	100 (45.4)
Bromoacetone	598–31–2	4	P017	1000 (454)
Bromoform	75–25–2	2,3,4	U225	100 (45.4)
Bromomethane	74–83–9	2,3,4	U029	1000 (454)
4-Bromophenyl phenyl ether	101–55–3	2,4	U030	100 (45.4)
Brucine	357–57–3	4	P018	100 (45.4)
1,3-Butadiene	106–99–0	3		10 (4.54)
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87–68–3	2,3,4	U128	1 (0.454)
1-Butanamine, N-butyl-N-nitroso-	924–16–3	4	U172	10 (4.54)
1-Butanol	71–36–3	4	U031	5000 (2270)
2-Butanone	78–93–3	3,4	U159	5000 (2270)
2-Butanone, 3,3-dimethyl-1(methylthio)-, O-[(methylamino)carbonyl] oxime.	39196–18–4	4	P045	100 (45.4)
2-Butanone peroxide	1338–23–4	4	U160	10 (4.54)
2-Butenal	123–73–9 4170–30–3	1,4	U053	100 (45.4)
2-Butene, 1,4-dichloro-	764–41–0	4	U074	1 (0.454)
2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3- methyl-1-oxobutoxy] methyl]-2,3, 5,7a-tetrahydro- 1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*),7aalpha]]-.	303–34–4	4	U143	10 (4.54)
Butyl acetate	123–86–4	1		5000 (2270)
iso-Butyl acetate	110–19–0			
sec-Butyl acetate	105–46–4			
tert-Butyl acetate	540–88–5			
n-Butyl alcohol	71–36–3	4	U031	5000 (2270)
Butylamine	109–73–9	1		1000 (454)
iso-Butylamine	78–81–9			
sec-Butylamine	513–49–5 13952–84–6			
tert-Butylamine	75–64–9			
Butyl benzyl phthalate	85–68–7	2		100 (45.4)
n-Butyl phthalate	84–74–2	1,2,3,4	U069	10 (4.54)
Butyric acid	107–92–6	1		5000 (2270)
iso-Butyric acid	79–31–2			
Cacodylic acid	75–60–5	4	U136	1 (0.454)
Cadmium dagger;dagger;	7440–43–9	2		10 (4.54)
Cadmium acetate	543–90–8	1		10 (4.54)
CADMIUM AND COMPOUNDS	N.A.	2,3		**
Cadmium bromide	7789–42–6	1		10 (4.54)
Cadmium chloride	10108–64–2	1		10 (4.54)
Cadmium compounds	N.A.	2,3		**
Calcium arsenate	7778–44–1	1		1 (0.454)
Calcium arsenite	52740–16–6	1		1 (0.454)
Calcium carbide	75–20–7	1		10 (4.54)
Calcium chromate	13765–19–0	1,4	U032	10 (4.54)
Calcium cyanamide	156–62–7	3		1000 (454)
Calcium cyanide Ca(CN)2	592–01–8	1,4	P021	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Calcium dodecylbenzenesulfonate	26264–06–2	1		1000 (454)
Calcium hypochlorite	7778–54–3	1		10 (4.54)
Captan	133–06–2	1,3		10 (4.54)
Carbamic acid, 1H-benzimidazol-2-yl, methyl ester (Carbendazim).	10605–21–7	4	U372	##
Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester (Benomyl).	17804–35–2	4	U271	##
Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester (Barban).	101–27–9	4	U280	##
Carbamic acid, [(dibutylamino)thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester (Carbosulfan).	55285–14–8	4	P189	##
Carbamic acid, dimethyl-,1-[(dimethylamino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester (Dimetilan).	644–64–4	4	P191	##
Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester (Isolan).	119–38–0	4	P192	##
Carbamic acid, ethyl ester	51–79–6	3,4	U238	100 (45.4)
Carbamic acid, methyl-, 3-methylphenyl ester (Metolcarb)	1129–41–5	4	P190	##
Carbamic acid, methylnitroso-, ethyl ester	615–53–2	4	U178	1 (0.454)
Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)] bis-, dimethyl ester (Thiophanate-methyl).	23564–05–8	4	U409	##
Carbamic acid, phenyl-, 1-methylethyl ester (Propham)	122–42–9	4	U373	##
Carbamic chloride, dimethyl-	79–44–7	3,4	U097	1 (0.454)
Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters	111–54–6	4	U114	5000 (2270)
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester.	2303–16–4	4	U062	100 (45.4)
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2- propenyl) ester (Triallate).	2303–17–5	4	U389	##
Carbamothioic acid, dipropyl-, S - (phenylmethyl) ester (Prosulfocarb).	52888–80–9	4	U387	##
Carbaryl	63–25–2	1,3,4	U279	100 (45.4)
Carbofuran	1563–66–2	1,4	P127	10 (4.54)
Carbon disulfide	75–15–0	1,3,4	P022	100 (45.4)
Carbonic acid, dithallium(1+) salt	6533–73–9	4	U215	100 (45.4)
Carbonic dichloride	75–44–5	1,3,4	P095	10 (4.54)
Carbonic difluoride	353–50–4	4	U033	1000 (454)
Carbonochloridic acid, methyl ester	79–22–1	4	U156	1000 (454)
Carbon oxyfluoride	353–50–4	4	U033	1000 (454)
Carbon tetrachloride	56–23–5	1,2,3,4	U211	10 (4.54)
Carbonyl sulfide	463–58–1	3		100 (45.4)
Catechol	120–80–9	3		100 (45.4)
Chloral	75–87–6	4	U034	5000 (2270)
Chloramben	133–90–4	3		100 (45.4)
Chlorambucil	305–03–3	4	U035	10 (4.54)
Chlordane	57–74–9	1,2,3,4	U036	1 (0.454)
Chlordane, alpha & gamma isomers	57–74–9	1,2,3,4	U036	1 (0.454)
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES).	57–74–9	1,2,3,4	U036	1 (0.454)
CHLORINATED BENZENES	N.A.	2		**
Chlorinated camphene	8001–35–2	1,2,3,4	P123	1 (0.454)
CHLORINATED ETHANES	N.A.	2		**
CHLORINATED NAPHTHALENE	N.A.	2		**
CHLORINATED PHENOLS	N.A.	2		**
Chlorine	7782–50–5	1,3		10 (4.54)
Chlornaphazine	494–03–1	4	U026	100 (45.4)
Chloroacetaldehyde	107–20–0	4	P023	1000 (454)
Chloroacetic acid	79–11–8	3		100 (45.4)
2-Chloroacetophenone	532–27–4	3		100 (45.4)
CHLOROALKYL ETHERS	N.A.	2		**
p-Chloroaniline	106–47–8	4	P024	1000 (454)
Chlorobenzene	108–90–7	1,2,3,4	U037	100 (45.4)
Chlorobenzilate	510–15–6	3,4	U038	10 (4.54)
p-Chloro-m-cresol	59–50–7	2,4	U039	5000 (2270)
Chlorodibromomethane	124–48–1	2		100 (45.4)
1-Chloro-2,3-epoxypropane	106–89–8	1,3,4	U041	100 (45.4)
Chloroethane	75–00–3	2,3		100 (45.4)
2-Chloroethyl vinyl ether	110–75–8	2,4	U042	1000 (454)
Chloroform	67–66–3	1,2,3,4	U044	10 (4.54)
Chloromethane	74–87–3	2,3,4	U045	100 (45.4)
Chloromethyl methyl ether	107–30–2	3,4	U046	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
beta-Chloronaphthalene	91–58–7	2,4	U047	5000 (2270)
2-Chloronaphthalene	91–58–7	2,4	U047	5000 (2270)
2-Chlorophenol	95–57–8	2,4	U048	100 (45.4)
o-Chlorophenol	95–57–8	2,4	U048	100 (45.4)
4-Chlorophenyl phenyl ether	7005–72–3	2		5000 (2270)
1-(o-Chlorophenyl)thiourea	5344–82–1	4	P026	100 (45.4)
Chloroprene	126–99–8	3		100 (45.4)
3-Chloropropionitrile	542–76–7	4	P027	1000 (454)
Chlorosulfonic acid	7790–94–5	1		1000 (454)
4-Chloro-o-toluidine, hydrochloride	3165–93–3	4	U049	100 (45.4)
Chlorpyrifos	2921–88–2	1		1 (0.454)
Chromic acetate	1066–30–4	1		1000 (454)
Chromic acid	11115–74–5 7738–94–5	1		10 (4.54)
Chromic acid H2CrO4, calcium salt	13765–19–0	1,4	U032	10 (4.54)
Chromic sulfate	10101–53–8	1		1000 (454)
Chromium dagger;dagger;	7440–47–3	2		5000 (2270)
CHROMIUM AND COMPOUNDS	N.A.	2,3		**
Chromium Compounds	N.A.	2,3		**
Chromous chloride	10049–05–5	1		1000 (454)
Chrysene	218–01–9	2,4	U050	100 (45.4)
Cobalt Compounds	N.A.	3		**
Cobaltous bromide	7789–43–7	1		1000 (454)
Cobaltous formate	544–18–3	1		1000 (454)
Cobaltous sulfamate	14017–41–5	1		1000 (454)
Coke Oven Emissions	N.A.	3		1 (0.454)
Copper dagger;dagger;	7440–50–8	2		5000 (2270)
COPPER AND COMPOUNDS	N.A.	2		**
Copper cyanide Cu(CN)	544–92–3	4	P029	10 (4.54)
Coumaphos	56–72–4	1		10 (4.54)
Creosote	N.A.	4	U051	1 (0.454)
Cresol (cresylic acid)	1319–77–3	1,3,4	U052	100 (45.4)
m-Cresol	108–39–4	3		100 (45.4)
o-Cresol	95–48–7	3		100 (45.4)
p-Cresol	106–44–5	3		100 (45.4)
Cresols (isomers and mixture)	1319–77–3	1,3,4	U052	100 (45.4)
Cresylic acid (isomers and mixture)	1319–77–3	1,3,4	U052	100 (45.4)
Crotonaldehyde	123–73–9 4170–30–3	1,4	U053	100 (45.4)
Cumene	98–82–8	3,4	U055	5000 (2270)
Cupric acetate	142–71–2	1		100 (45.4)
Cupric acetoarsenite	12002–03–8	1		1 (0.454)
Cupric chloride	7447–39–4	1		10 (4.54)
Cupric nitrate	3251–23–8	1		100 (45.4)
Cupric oxalate	5893–66–3	1		100 (45.4)
Cupric sulfate	7758–98–7	1		10 (4.54)
Cupric sulfate, ammoniated	10380–29–7	1		100 (45.4)
Cupric tartrate	815–82–7	1		100 (45.4)
Cyanide Compounds	N.A.	2,3		**
CYANIDES	N.A.	2,3		**
Cyanides (soluble salts and complexes) not otherwise specified.	N.A.	4	P030	10 (4.54)
Cyanogen	460–19–5	4	P031	100 (45.4)
Cyanogen bromide (CN)Br	506–68–3	4	U246	1000 (454)
Cyanogen chloride (CN)Cl	506–77–4	1,4	P033	10 (4.54)
2,5-Cyclohexadiene-1,4-dione	106–51–4	3,4	U197	10 (4.54)
Cyclohexane	110–82–7	1,4	U056	1000 (454)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α, 2α, 3β–, 4α, 5α, 6β).	58–89–9	1,2,3,4	U129	1 (0.454)
Cyclohexanone	108–94–1	4	U057	5000 (2270)
2-Cyclohexyl-4,6-dinitrophenol	131–89–5	4	P034	100 (45.4)
1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77–47–4	1,2,3,4	U130	10 (4.54)
Cyclophosphamide	50–18–0	4	U058	10 (4.54)
2,4-D Acid	94–75–7	1,3,4	U240	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
2,4-D Ester	94–11–1 94–79–1 94–80–4 1320–18–9 1928–38–7 1928–61–6 1929–73–3 2971–38–2 25168–26–7 53467–11–1	1		100 (45.4)
2,4-D, salts and esters	94–75–7	1,3,4	U240	100 (45.4)
Daunomycin	20830–81–3	4	U059	10 (4.54)
DDD	72–54–8	1,2,4	U060	1 (0.454)
4,4′-DDD	72–54–8	1,2,4	U060	1 (0.454)
DDE [b]	72–55–9	2		1 (0.454)
DDE [b]	3547–04–4	3		5000 (2270)
4,4′-DDE	72–55–9	2		1 (0.454)
DDT	50–29–3	1,2,4	U061	1 (0.454)
4,4′-DDT	50–29–3	1,2,4	U061	1 (0.454)
DDT AND METABOLITES	N.A.	2		**
DEHP	117–81–7	2,3,4	U028	100 (45.4)
Diallate	2303–16–4	4	U062	100 (45.4)
Diazinon	333–41–5	1		1 (0.454)
Diazomethane	334–88–3	3		100 (45.4)
Dibenz[a,h]anthracene	53–70–3	2,4	U063	1 (0.454)
1,2:5,6-Dibenzanthracene	53–70–3	2,4	U063	1 (0.454)
Dibenzo[a,h]anthracene	53–70–3	2,4	U063	1 (0.454)
Dibenzofuran	132–64–9	3		100 (45.4)
Dibenzo[a,i]pyrene	189–55–9	4	U064	10 (4.54)
1,2-Dibromo-3-chloropropane	96–12–8	3,4	U066	1 (0.454)
Dibromoethane	106–93–4	1,3,4	U067	1 (0.454)
Dibutyl phthalate	84–74–2	1,2,3,4	U069	10 (4.54)
Di-n-butyl phthalate	84–74–2	1,2,3,4	U069	10 (4.54)
Dicamba	1918–00–9	1		1000 (454)
Dichlobenil	1194–65–6	1		100 (45.4)
Dichlone	117–80–6	1		1 (0.454)
Dichlorobenzene	25321–22–6	1		100 (45.4)
1,2-Dichlorobenzene	95–50–1	1,2,4	U070	100 (45.4)
1,3-Dichlorobenzene	541–73–1	2,4	U071	100 (45.4)
1,4-Dichlorobenzene	106–46–7	1,2,3,4	U072	100 (45.4)
m-Dichlorobenzene	541–73–1	2,4	U071	100 (45.4)
o-Dichlorobenzene	95–50–1	1,2,4	U070	100 (45.4)
p-Dichlorobenzene	106–46–7	1,2,3,4	U072	100 (45.4)
DICHLOROBENZIDINE	N.A.	2		**
3,3′-Dichlorobenzidine	91–94–1	2,3,4	U073	1 (0.454)
Dichlorobromomethane	75–27–4	2		5000 (2270)
1,4-Dichloro-2-butene	764–41–0	4	U074	1 (0.454)
Dichlorodifluoromethane	75–71–8	4	U075	5000 (2270)
1,1-Dichloroethane	75–34–3	2,3,4	U076	1000 (454)
1,2-Dichloroethane	107–06–2	1,2,3,4	U077	100 (45.4)
1,1-Dichloroethylene	75–35–4	1,2,3,4	U078	100 (45.4)
1,2-Dichloroethylene	156–60–5	2,4	U079	1000 (454)
Dichloroethyl ether	111–44–4	2,3,4	U025	10 (4.54)
Dichloroisopropyl ether	108–60–1	2,4	U027	1000 (454)
Dichloromethane	75–09–2	2,3,4	U080	1000 (454)
Dichloromethoxyethane	111–91–1	2,4	U024	1000 (454)
Dichloromethyl ether	542–88–1	2,3,4	P016	10 (4.54)
2,4-Dichlorophenol	120–83–2	2,4	U081	100 (45.4)
2,6-Dichlorophenol	87–65–0	4	U082	100 (45.4)
Dichlorophenylarsine	696–28–6	4	P036	1 (0.454)
Dichloropropane	26638–19–7	1		1000 (454)
1,1-Dichloropropane	78–99–9			
1,3-Dichloropropane	142–28–9			
1,2-Dichloropropane	78–87–5	1,2,3,4	U083	1000 (454)
Dichloropropane—Dichloropropene (mixture)	8003–19–8	1		100 (45.4)
Dichloropropene	26952–23–8	1		100 (45.4)
2,3-Dichloropropene	78–88–6			
1,3-Dichloropropene	542–75–6	1,2,3,4	U084	100 (45.4)
2,2-Dichloropropionic acid	75–99–0	1		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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Dichlorvos	62–73–7	1,3		10 (4.54)
Dicofol	115–32–2	1		10 (4.54)
Dieldrin	60–57–1	1,2,4	P037	1 (0.454)
1,2:3,4-Diepoxybutane	1464–53–5	4	U085	10 (4.54)
Diethanolamine	111–42–2	3		100 (45.4)
Diethylamine	109–89–7	1		100 (45.4)
N,N-Diethylaniline	91–66–7	3		1000 (454)
Diethylarsine	692–42–2	4	P038	1 (0.454)
1,4-Diethyleneoxide	123–91–1	3,4	U108	100 (45.4)
Diethylhexyl phthalate	117–81–7	2,3,4	U028	100 (45.4)
N,N′-Diethylhydrazine	1615–80–1	4	U086	10 (4.54)
O,O-Diethyl S-methyl dithiophosphate	3288–58–2	4	U087	5000 (2270)
Diethyl-p-nitrophenyl phosphate	311–45–5	4	P041	100 (45.4)
Diethyl phthalate	84–66–2	2,4	U088	1000 (454)
O,O-Diethyl O-pyrazinyl phosphorothioate	297–97–2	4	P040	100 (45.4)
Diethylstilbestrol	56–53–1	4	U089	1 (0.454)
Diethyl sulfate	64–67–5	3		10 (4.54)
Dihydrosafrole	94–58–6	4	U090	10 (4.54)
Diisopropylfluorophosphate (DFP)	55–91–4	4	P043	100 (45.4)
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha, 8alpha,8abeta)-.	309–00–2	1,2,4	P004	1 (0.454)
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)-.	465–73–6	4	P060	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-octahydro-,(1aalpha,2beta, 2aalpha,3beta,6beta,6aalpha, 7beta,7aalpha)-.	60–57–1	1,2,4	P037	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-octahydro-,(1aalpha,2beta, 2abeta,3alpha,6alpha, 6abeta,7beta,7aalpha)-, & metabolites.	72–20–8	1,2,4	P051	1 (0.454)
Dimethoate	60–51–5	4	P044	10 (4.54)
3,3′-Dimethoxybenzidine	119–90–4	3,4	U091	100 (45.4)
Dimethylamine	124–40–3	1,4	U092	1000 (454)
Dimethyl aminoazobenzene	60–11–7	3,4	U093	10 (4.54)
p-Dimethylaminoazobenzene	60–11–7	3,4	U093	10 (4.54)
N,N-Dimethylaniline	121–69–7	3		100 (45.4)
7,12-Dimethylbenz[a]anthracene	57–97–6	4	U094	1 (0.454)
3,3′-Dimethylbenzidine	119–93–7	3,4	U095	10 (4.54)
alpha,alpha-Dimethylbenzylhydroperoxide	80–15–9	4	U096	10 (4.54)
Dimethylcarbamoyl chloride	79–44–7	3,4	U097	1 (0.454)
Dimethylformamide	68–12–2	3		100 (45.4)
1,1-Dimethylhydrazine	57–14–7	3,4	U098	10 (4.54)
1,2-Dimethylhydrazine	540–73–8	4	U099	1 (0.454)
alpha,alpha-Dimethylphenethylamine	122–09–8	4	P046	5000 (2270)
2,4-Dimethylphenol	105–67–9	2,4	U101	100 (45.4)
Dimethyl phthalate	131–11–3	2,3,4	U102	5000 (2270)
Dimethyl sulfate	77–78–1	3,4	U103	100 (45.4)
Dinitrobenzene (mixed)	25154–54–5	1		100 (45.4)
m-Dinitrobenzene	99–65–0			
o-Dinitrobenzene	528–29–0			
p-Dinitrobenzene	100–25–4			
4,6-Dinitro-o-cresol, and salts	534–52–1	2,3,4	P047	10 (4.54)
Dinitrophenol	25550–58–7	1		10 (4.54)
2,5-Dinitrophenol	329–71–5			
2,6-Dinitrophenol	573–56–8			
2,4-Dinitrophenol	51–28–5	1,2,3,4	P048	10 (4.54)
Dinitrotoluene	25321–14–6	1,2		10 (4.54)
3,4-Dinitrotoluene	610–39–9			
2,4-Dinitrotoluene	121–14–2	1,2,3,4	U105	10 (4.54)
2,6-Dinitrotoluene	606–20–2	1,2,4	U106	100 (45.4)
Dinoseb	88–85–7	4	P020	1000 (454)
Di-n-octyl phthalate	117–84–0	2,4	U107	5000 (2270)
1,4-Dioxane	123–91–1	3,4	U108	100 (45.4)
DIPHENYLHYDRAZINE	N.A.	2		**
1,2-Diphenylhydrazine	122–66–7	2,3,4	U109	10 (4.54)
Diphosphoramide, octamethyl-	152–16–9	4	P085	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Diphosphoric acid, tetraethyl ester	107–49–3	1,4	P111	10 (4.54)
Dipropylamine	142–84–7	4	U110	5000 (2270)
Di-n-propylnitrosamine	621–64–7	2,4	U111	10 (4.54)
Diquat	85–00–7 2764–72–9	1		1000 (454)
Disulfoton	298–04–4	1,4	P039	1 (0.454)
Dithiobiuret	541–53–7	4	P049	100 (45.4)
1,3-Dithiolane-2- carboxaldehyde, 2,4- dimethyl-O-[(methylamino)carbonyl] oxime (Tirpate).	26419–73–8	4	P185	##
Diuron	330–54–1	1		100 (45.4)
Dodecylbenzenesulfonic acid	27176–87–0	1		1000 (454)
Endosulfan	115–29–7	1,2,4	P050	1 (0.454)
alpha-Endosulfan	959–98–8	2		1 (0.454)
beta-Endosulfan	33213–65–9	2		1 (0.454)
ENDOSULFAN AND METABOLITES	N.A.	2		**
Endosulfan sulfate	1031–07–8	2		1 (0.454)
Endothall	145–73–3	4	P088	1000 (454)
Endrin	72–20–8	1,2,4	P051	1 (0.454)
Endrin aldehyde	7421–93–4	2		1 (0.454)
ENDRIN AND METABOLITES	N.A.	2		**
Endrin, & metabolites	72–20–8	1,2,4	P051	1 (0.454)
Epichlorohydrin	106–89–8	1,3,4	U041	100 (45.4)
Epinephrine	51–43–4	4	P042	1000 (454)
1,2-Epoxybutane	106–88–7	3		100 (45.4)
Ethanal	75–07–0	1,3,4	U001	1000 (454)
Ethanamine, N,N-diethyl-	121–44–8	1,3,4	U404	5000 (2270)
Ethanamine, N-ethyl-N-nitroso-	55–18–5	4	U174	1 (0.454)
1,2-Ethanediamine, N,N-dimethyl-N′-2- pyridinyl-N′-(2-thienylmethyl)-.	91–80–5	4	U155	5000 (2270)
Ethane, 1,2-dibromo-	106–93–4	1,3,4	U067	1 (0.454)
Ethane, 1,1-dichloro-	75–34–3	2,3,4	U076	1000 (454)
Ethane, 1,2-dichloro-	107–06–2	1,2,3,4	U077	100 (45.4)
Ethanedinitrile	460–19–5	4	P031	100 (45.4)
Ethane, hexachloro-	67–72–1	2,3,4	U131	100 (45.4)
Ethane, 1,1′-[methylenebis(oxy)]bis[2- chloro-	111–91–1	2,4	U024	1000 (454)
Ethane, 1,1′-oxybis-	60–29–7	4	U117	100 (45.4)
Ethane, 1,1′-oxybis[2-chloro-	111–44–4	2,3,4	U025	10 (4.54)
Ethane, pentachloro-	76–01–7	4	U184	10 (4.54)
Ethane, 1,1,1,2-tetrachloro-	630–20–6	4	U208	100 (45.4)
Ethane, 1,1,2,2-tetrachloro-	79–34–5	2,3,4	U209	100 (45.4)
Ethanethioamide	62–55–5	4	U218	10 (4.54)
Ethane, 1,1,1-trichloro-	71–55–6	2,3,4	U226	1000 (454)
Ethane, 1,1,2-trichloro-	79–00–5	2,3,4	U227	100 (45.4)
Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester (A2213).	30558–43–1	4	U394	##
Ethanimidothioic acid, 2-(dimethylamino)-N-[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester (Oxamyl).	23135–22–0	4	P194	##
Ethanimidothioic acid, N-[[(methylamino) carbonyl]oxy]-, methyl ester.	16752–77–5	4	P066	100 (45.4)
Ethanimidothioic acid, N,N′[thiobis[(methylimino) carbonyloxy]]bis-, dimethyl ester (Thiodicarb).	59669–26–0	4	U410	##
Ethanol, 2-ethoxy-	110–80–5	4	U359	1000 (454)
Ethanol, 2,2′-(nitrosoimino)bis-	1116–54–7	4	U173	1 (0.454)
Ethanol, 2,2′-oxybis-, dicarbamate (Diethylene glycol, dicarbamate).	5952–26–1	4	U395	##
Ethanone, 1-phenyl-	98–86–2	3,4	U004	5000 (2270)
Ethene, chloro-	75–01–4	2,3,4	U043	1 (0.454)
Ethene, (2-chloroethoxy)-	110–75–8	2,4	U042	1000 (454)
Ethene, 1,1-dichloro-	75–35–4	1,2,3,4	U078	100 (45.4)
Ethene, 1,2-dichloro-(E)	156–60–5	2,4	U079	1000 (454)
Ethene, tetrachloro-	127–18–4	2,3,4	U210	100 (45.4)
Ethene, trichloro-	79–01–6	1,2,3,4	U228	100 (45.4)
Ethion	563–12–2	1		10 (4.54)
Ethyl acetate	141–78–6	4	U112	5000 (2270)
Ethyl acrylate	140–88–5	3,4	U113	1000 (454)
Ethylbenzene	100–41–4	1,2,3		1000 (454)
Ethyl carbamate	51–79–6	3,4	U238	100 (45.4)
Ethyl chloride	75–00–3	2,3		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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Ethyl cyanide	107–12–0	4	P101	10 (4.54)
Ethylenebisdithiocarbamic acid, salts & esters	111–54–6	4	U114	5000 (2270)
Ethylenediamine	107–15–3	1		5000 (2270)
Ethylenediamine-tetraacetic acid (EDTA)	60–00–4	1		5000 (2270)
Ethylene dibromide	106–93–4	1,3,4	U067	1 (0.454)
Ethylene dichloride	107–06–2	1,2,3,4	U077	100 (45.4)
Ethylene glycol	107–21–1	3		5000 (2270)
Ethylene glycol monoethyl ether	110–80–5	4	U359	1000 (454)
Ethylene oxide	75–21–8	3,4	U115	10 (4.54)
Ethylenethiourea	96–45–7	3,4	U116	10 (4.54)
Ethylenimine	151–56–4	3,4	P054	1 (0.454)
Ethyl ether	60–29–7	4	U117	100 (45.4)
Ethylidene dichloride	75–34–3	2,3,4	U076	1000 (454)
Ethyl methacrylate	97–63–2	4	U118	1000 (454)
Ethyl methanesulfonate	62–50–0	4	U119	1 (0.454)
Famphur	52–85–7	4	P097	1000 (454)
Ferric ammonium citrate	1185–57–5	1		1000 (454)
Ferric ammonium oxalate	2944–67–4 55488–87–4	1		1000 (454)
Ferric chloride	7705–08–0	1		1000 (454)
Ferric fluoride	7783–50–8	1		100 (45.4)
Ferric nitrate	10421–48–4	1		1000 (454)
Ferric sulfate	10028–22–5	1		1000 (454)
Ferrous ammonium sulfate	10045–89–3	1		1000 (454)
Ferrous chloride	7758–94–3	1		100 (45.4)
Ferrous sulfate	7720–78–7 7782– 63–0	1		1000 (454)
Fine mineral fibers[c]	N.A.	3		**
Fluoranthene	206–44–0	2,4	U120	100 (45.4)
Fluorene	86–73–7	2		5000 (2270)
Fluorine	7782–41–4	4	P056	10 (4.54)
Fluoroacetamide	640–19–7	4	P057	100 (45.4)
Fluoroacetic acid, sodium salt	62–74–8	4	P058	10 (4.54)
Formaldehyde	50–00–0	1,3,4	U122	100 (45.4)
Formic acid	64–18–6	1,4	U123	5000 (2270)
Fulminic acid, mercury(2+)salt	628–86–4	4	P065	10 (4.54)
Fumaric acid	110–17–8	1		5000 (2270)
Furan	110–00–9	4	U124	100 (45.4)
2-Furancarboxaldehyde	98–01–1	1,4	U125	5000 (2270)
2,5-Furandione	108–31–6	1,3,4	U147	5000 (2270)
Furan, tetrahydro-	109–99–9	4	U213	1000 (454)
Furfural	98–01–1	1,4	U125	5000 (2270)
Furfuran	110–00–9	4	U124	100 (45.4)
Glucopyranose, 2-deoxy-2–(3-methyl-3-nitrosoureido)-,D-D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-.	18883–66–4 18883–66–4	4 4	U206 U206	1 (0.454) 1 (0.454)
Glycidylaldehyde	765–34–4	4	U126	10 (4.54)
Glycol ethers[d]	N.A.	3		**
Guanidine, N-methyl-N'-nitro-N-nitroso-	70–25–7	4	U163	10 (4.54)
Guthion	86–50–0	1		1 (0.454)
HALOETHERS	N.A.	2		**
HALOMETHANES	N.A.	2		**
Heptachlor	76–44–8	1,2,3,4	P059	1 (0.454)
HEPTACHLOR AND METABOLITES	N.A.	2		**
Heptachlor epoxide	1024–57–3	2		1 (0.454)
Hexachlorobenzene	118–74–1	2,3,4	U127	10 (4.54)
Hexachlorobutadiene	87–68–3	2,3,4	U128	1 (0.454)
HEXACHLOROCYCLOHEXANE (all isomers)	608–73–1	2		**
Hexachlorocyclopentadiene	77–47–4	1,2,3,4	U130	10 (4.54)
Hexachloroethane	67–72–1	2,3,4	U131	100 (45.4)
Hexachlorophene	70–30–4	4	U132	100 (45.4)
Hexachloropropene	1888–71–7	4	U243	1000 (454)
Hexaethyl tetraphosphate	757–58–4	4	P062	100 (45.4)
Hexamethylene-1,6–diisocyanate	822–06–0	3		100 (45.4)
Hexamethylphosphoramide	680–31–9	3		1 (0.454)
Hexane	110–54–3	3		5000 (2270)
Hexone	108–10–1	3,4	U161	5000 (2270)
Hydrazine	302–01–2	3,4	U133	1 (0.454)
Hydrazinecarbothioamide	79–19–6	4	P116	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Hydrazine, 1,2-diethyl-	1615–80–1	4	U086	10 (4.54)
Hydrazine, 1,1-dimethyl-	57–14–7	3,4	U098	10 (4.54)
Hydrazine, 1,2-dimethyl-	540–73–8	4	U099	1 (0.454)
Hydrazine, 1,2-diphenyl-	122–66–7	2,3,4	U109	10 (4.54)
Hydrazine, methyl-	60–34–4	3,4	P068	10 (4.54)
Hydrochloric acid	7647–01–0	1,3		5000 (2270)
Hydrocyanic acid	74–90–8	1,4	P063	10 (4.54)
Hydrofluoric acid	7664–39–3	1,3,4	U134	100 (45.4)
Hydrogen chloride	7647–01–0	1,3		5000 (2270)
Hydrogen cyanide	74–90–8	1,4	P063	10 (4.54)
Hydrogen fluoride	7664–39–3	1,3,4	U134	100 (45.4)
Hydrogen phosphide	7803–51–2	3,4	P096	100 (45.4)
Hydrogen sulfide H2S	7783–06–4	1,4	U135	100 (45.4)
Hydroperoxide, 1-methyl-1-phenylethyl-	80–15–9	4	U096	10 (4.54)
Hydroquinone	123–31–9	3		100 (45.4)
2-Imidazolidinethione	96–45–7	3,4	U116	10 (4.54)
Indeno(1,2,3-cd)pyrene	193–39–5	2,4	U137	100 (45.4)
Iodomethane	74–88–4	3,4	U138	100 (45.4)
1,3-Isobenzofurandione	85–44–9	3,4	U190	5000 (2270)
Isobutyl alcohol	78–83–1	4	U140	5000 (2270)
Isodrin	465–73–6	4	P060	1 (0.454)
Isophorone	78–59–1	2,3		5000 (2270)
Isoprene	78–79–5	1		100 (45.4)
Isopropanolamine dodecylbenzenesulfonate	42504–46–1	1		1000 (454)
Isosafrole	120–58–1	4	U141	100 (45.4)
3(2H)-Isoxazolone, 5–(aminomethyl)-	2763–96–4	4	P007	1000 (454)
Kepone	143–50–0	1,4	U142	1 (0.454)
Lasiocarpine	303–34–4	4	U143	10 (4.54)
Lead††	7439–92–1	2		10 (4.54)
Lead acetate	301–04–2	1,4	U144	10 (4.54)
LEAD AND COMPOUNDS	N.A.	2,3		**
Lead arsenate	7784–40–9 7645–25–2 10102–48–4	1		1 (0.454)
Lead, bis(acetato-O)tetrahydroxytri-	1335–32–6	4	U146	10 (4.54)
Lead chloride	7758–95–4	1		10 (4.54)
Lead compounds	N.A.	2,3		**
Lead fluoborate	13814–96–5	1		10 (4.54)
Lead fluoride	7783–46–2	1		10 (4.54)
Lead iodide	10101–63–0	1		10 (4.54)
Lead nitrate	10099–74–8	1		10 (4.54)
Lead phosphate	7446–27–7	4	U145	10 (4.54)
Lead stearate	1072–35–1 7428–48–0 52652–59–2 56189–09–4	1		10 (4.54)
Lead subacetate	1335–32–6	4	U146	10 (4.54)
Lead sulfate	7446–14–2 15739–80–7	1		10 (4.54)
Lead sulfide	1314–87–0	1		10 (4.54)
Lead thiocyanate	592–87–0	1		10 (4.54)
Lindane	58–89–9	1,2,3,4	U129	1 (0.454)
Lindane (all isomers)	58–89–9	1,2,3,4	U129	1 (0.454)
Lithium chromate	14307–35–8	1		10 (4.54)
Malathion	121–75–5	1		100 (45.4)
Maleic acid	110–16–7	1		5000 (2270)
Maleic anhydride	108–31–6	1,3,4	U147	5000 (2270)
Maleic hydrazide	123–33–1	4	U148	5000 (2270)
Malononitrile	109–77–3	4	U149	1000 (454)
Manganese, bis(dimethylcarbamodithioato-S,S′)-Manganese dimethyldithio- carbamate).	15339–36–3	4	P196	##
Manganese Compounds	N.A.	3		**
MDI	101–68–8	3		5000 (2270)
MEK	78–93–3	3,4	U159	5000 (2270)
Melphalan	148–82–3	4	U150	1 (0.454)
Mercaptodimethur	2032–65–7	1,4	P199	10 (4.54)
Mercuric cyanide	592–04–1	1		1(0.454)
Mercuric nitrate	10045–94–0	1		10 (4.54)
Mercuric sulfate	7783–35–9	1		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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Mercuric thiocyanate	592–85–8	1		10 (4.54)
Mercurous nitrate	10415–75–5	1	10 (4.54)	7782–86–7
Mercury	7439–97–6	2,3,4	U151	1 (0.454)
MERCURY AND COMPOUNDS	N.A.	2,3		**
Mercury, (acetato-O)phenyl-	62–38–4	4	P092	100 (45.4)
Mercury Compounds	N.A.	2,3		**
Mercury fulminate	628–86–4	4	P065	10 (4.54)
Methacrylonitrile	126–98–7	4	U152	1000 (454)
Methanamine, N-methyl-	124–40–3	1,4	U092	1000 (454)
Methanamine, N-methyl-N-nitroso-	62–75–9	2,3,4	P082	10 (4.54)
Methane, bromo-	74–83–9	2,3,4	U029	1000 (454)
Methane, chloro-	74–87–3	2,3,4	U045	100 (45.4)
Methane, chloromethoxy-	107–30–2	3,4	U046	10 (4.54)
Methane, dibromo-	74–95–3	4	U068	1000 (454)
Methane, dichloro-	75–09–2	2,3,4	U080	1000 (454)
Methane, dichlorodifluoro-	75–71–8	4	U075	5000 (2270)
Methane, iodo-	74–88–4	3,4	U138	100 (45.4)
Methane, isocyanato-	624–83–9	3,4	P064	10 (4.54)
Methane, oxybis(chloro-	542–88–1	2,3,4	P016	10 (4.54)
Methanesulfenyl chloride, trichloro-	594–42–3	4	P118	100 (45.4)
Methanesulfonic acid, ethyl ester	62–50–0	4	U119	1 (0.454)
Methane, tetrachloro-	56–23–5	1,2,3,4	U211	10 (4.54)
Methane, tetranitro-	509–14–8	4	P112	10 (4.54)
Methanethiol	74–93–1	1,4	U153	100 (45.4)
Methane, tribromo-	75–25–2	2,3,4	U225	100 (45.4)
Methane, trichloro-	67–66–3	1,2,3,4	U044	10 (4.54)
Methane, trichlorofluoro-	75–69–4	4	U121	5000 (2270)
Methanimidamide, N,N-dimethyl-N′-[3-[[(methylamino)carbonyl]oxy]phenyl]-, monohydrochloride (Formetanate hydrochloride).	23422–53–9	4	P198	##
Methanimidamide, N,N-dimethyl-N′-[2-methyl-4-[[(methylamino)carbonyl]oxy]phenyl]-(Formparanate).	17702–57–7	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.	115–29–7	1,2,4	P050	1 (0.454)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-.	76–44–8	1,2,3,4	P059	1 (0.454)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-—.	57–74–9	1,2,3,4	U036	1 (0.454)
Methanol	67–56–1	3,4	U154	5000 (2270)
Methapyrilene	91–80–5	4	U155	5000 (2270)
1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-.	143–50–0	1,4	U142	1 (0.454)
Methiocarb	2032–65–7	1,4	P199	10 (4.54)
Methomyl	16752–77–5	4	P066	100 (45.4)
Methoxychlor	72–43–5	1,3,4	U247	1 (0.454)
Methyl alcohol	67–56–1	3,4	U154	5000 (2270)
2-Methyl aziridine	75–55–8	3,4	P067	1 (0.454)
Methyl bromide	74–83–9	2,3,4	U029	1000 (454)
1-Methylbutadiene	504–60–9	4	U186	100 (45.4)
Methyl chloride	74–87–3	2,3,4	U045	100 (45.4)
Methyl chlorocarbonate	79–22–1	4	U156	1000 (454)
Methyl chloroform	71–55–6	2,3,4	U226	1000 (454)
3-Methylcholanthrene	56–49–5	4	U157	10 (4.54)
4,4′-Methylenebis(2-chloroaniline)	101–14–4	3,4	U158	10 (4.54)
Methylene bromide	74–95–3	4	U068	1000 (454)
Methylene chloride	75–09–2	2,3,4	U080	1000 (454)
4,4′-Methylenedianiline	101–77–9	3		10 (4.54)
Methylene diphenyl diisocyanate	101–68–8	3		5000 (2270)
Methyl ethyl ketone	78–93–3	3,4	U159	5000 (2270)
Methyl ethyl ketone peroxide	1338–23–4	4	U160	10 (4.54)
Methyl hydrazine	60–34–4	3,4	P068	10 (4.54)
Methyl iodide	74–88–4	3,4	U138	100 (45.4)
Methyl isobutyl ketone	108–10–1	3,4	U161	5000 (2270)
Methyl isocyanate	624–83–9	3,4	P064	10 (4.54)
2-Methyllactonitrile	75–86–5	1,4	P069	10 (4.54)
Methyl mercaptan	74–93–1	1,4	U153	100 (45.4)
Methyl methacrylate	80–62–6	1,3,4	U162	1000 (454)
Methyl parathion	298–00–0	1,4	P071	100 (45.4)
4-Methyl-2-pentanone	108–10–1	3,4	U161	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Methyl tert-butyl ether	1634–04–4	3		1000 (454)
Methylthiouracil	56–04–2	4	U164	10 (4.54)
Mevinphos	7786–34–7	1		10 (4.54)
Mexacarbate	315–18–4	1,4	P128	1000 (454)
Mitomycin C	50–07–7	4	U010	10 (4.54)
MNNG	70–25–7	4	U163	10 (4.54)
Monoethylamine	75–04–7	1		100 (45.4)
Monomethylamine	74–89–5	1		100 (45.4)
Naled	300–76–5	1		10 (4.54)
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)-.	20830–81–3	4	U059	10 (4.54)
1-Naphthalenamine	134–32–7	4	U167	100 (45.4)
2-Naphthalenamine	91–59–8	4	U168	10 (4.54)
Naphthalenamine, N,N'-bis(2-chloroethyl)-	494–03–1	4	U026	100 (45.4)
Naphthalene	91–20–3	1,2,3,4	U165	100 (45.4)
Naphthalene, 2-chloro-	91–58–7	2,4	U047	5000 (2270)
1,4-Naphthalenedione	130–15–4	4	U166	5000 (2270)
2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl-(1,1′-biphenyl)-4,4′-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt.	72–57–1	4	U236	10 (4.54)
1-Naphthalenol, methylcarbamate	63–25–2	1,3,4	U279	100 (45.4)
Naphthenic acid	1338–24–5	1		100 (45.4)
1,4-Naphthoquinone	130–15–4	4	U166	5000 (2270)
alpha-Naphthylamine	134–32–7	4	U167	100 (45.4)
beta-Naphthylamine	91–59–8	4	U168	10 (4.54)
alpha-Naphthylthiourea	86–88–4	4	P072	100 (45.4)
Nickel††	7440–02–0	2		100 (45.4)
Nickel ammonium sulfate	15699–18–0	1		100 (45.4)
NICKEL AND COMPOUNDS	N.A.	2,3		**
Nickel carbonyl Ni(CO)4, (T-4)-	13463–39–3	4	P073	10 (4.54)
Nickel chloride	7718–54–9 37211–05–5	1		100 (45.4)
Nickel compounds	N.A.	2,3		**
Nickel cyanide Ni(CN)2	557–19–7	4	P074	10 (4.54)
Nickel hydroxide	12054–48–7	1		10 (4.54)
Nickel nitrate	14216–75–2	1		100 (45.4)
Nickel sulfate	7786–81–4	1		100 (45.4)
Nicotine, & salts	54–11–5	4	P075	100 (45.4)
Nitric acid	7697–37–2	1		1000 (454)
Nitric acid, thallium (1+) salt	10102–45–1	4	U217	100 (45.4)
Nitric oxide	10102–43–9	4	P076	10 (4.54)
p-Nitroaniline	100–01–6	4	P077	5000 (2270)
Nitrobenzene	98–95–3	1,2,3,4	U169	1000 (454)
4-Nitrobiphenyl	92–93–3	3		10 (4.54)
Nitrogen dioxide	10102–44–0 10544–72–6	1,4	P078	10 (4.54)
Nitrogen oxide NO	10102–43–9	4	P076	10 (4.54)
Nitrogen oxide NO2	10102–44–0 10544–72–6	1,4	P078	10 (4.54)
Nitroglycerine	55–63–0	4	P081	10 (4.54)
Nitrophenol (mixed)	25154–55–6	1		100 (45.4)
m-Nitrophenol	554–84–7	.....		.....
o-Nitrophenol	88–75–5	1,2		100 (45.4)
p-Nitrophenol	100–02–7	1,2,3,4	U170	100 (45.4)
2-Nitrophenol	88–75–5	1,2		100 (45.4)
4-Nitrophenol	100–02–7	1,2,3,4	U170	100 (45.4)
NITROPHENOLS	N.A.	2		**
2-Nitropropane	79–46–9	3,4	U171	10 (4.54)
NITROSAMINES	N.A.	2		**
N-Nitrosodi-n-butylamine	924–16–3	4	U172	10 (4.54)
N-Nitrosodiethanolamine	1116–54–7	4	U173	1 (0.454)
N-Nitrosodiethylamine	55–18–5	4	U174	1 (0.454)
N-Nitrosodimethylamine	62–75–9	2,3,4	P082	10 (4.54)
N-Nitrosodiphenylamine	86–30–6	2		100 (45.4)
N-Nitroso-N-ethylurea	759–73–9	4	U176	1 (0.454)
N-Nitroso-N-methylurea	684–93–5	3,4	U177	1 (0.454)
N-Nitroso-N-methylurethane	615–53–2	4	U178	1 (0.454)
N-Nitrosomethylvinylamine	4549–40–0	4	P084	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
N-Nitrosomorpholine	59–89–2	3		1 (0.454)
N-Nitrosopiperidine	100–75–4	4	U179	10 (4.54)
N-Nitrosopyrrolidine	930–55–2	4	U180	1 (0.454)
Nitrotoluene	1321–12–6	1		1000 (454)
m-Nitrotoluene	99–08–1	.....		.....
o-Nitrotoluene	88–72–2	.....		.....
p-Nitrotoluene	99–99–0	.....		.....
5-Nitro-o-toluidine	99–55–8	4	U181	100 (45.4)
Octamethylpyrophosphoramide	152–16–9	4	P085	100 (45.4)
Osmium oxide OsO4, (T–4)–	20816–12–0	4	P087	1000 (454)
Osmium tetroxide	20816–12–0	4	P087	1000 (454)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145–73–3	4	P088	1000 (454)
1,2-Oxathiolane, 2,2-dioxide	1120–71–4	3,4	U193	10 (4.54)
2H-1,3,2-Oxazaphosphorin-2–amine, N,N- bis(2-chloroethyl)tetrahydro-, 2-oxide.	50–18–0	4	U058	10 (4.54)
Oxirane	75–21–8	3,4	U115	10 (4.54)
Oxiranecarboxyaldehyde	765–34–4	4	U126	10 (4.54)
Oxirane, (chloromethyl)-	106–89–8	1,3,4	U041	100 (45.4)
Paraformaldehyde	30525–89–4	1		1000 (454)
Paraldehyde	123–63–7	4	U182	1000 (454)
Parathion	56–38–2	1,3,4	P089	10 (4.54)
PCBs	1336–36–3	1,2,3		1 (0.454)
PCNB	82–68–8	3,4	U185	100 (45.4)
Pentachlorobenzene	608–93–5	4	U183	10 (4.54)
Pentachloroethane	76–01–7	4	U184	10 (4.54)
Pentachloronitrobenzene	82–68–8	3,4	U185	100 (45.4)
Pentachlorophenol	87–86–5	1,2,3,4	See F027	10 (4.54)
1,3-Pentadiene	504–60–9	4	U186	100 (45.4)
Perchloroethylene	127–18–4	2,3,4	U210	100 (45.4)
Phenacetin	62–44–2	4	U187	100 (45.4)
Phenanthrene	85–01–8	2		5000 (2270)
Phenol	108–95–2	1,2,3,4	U188	1000 (454)
Phenol, 2-chloro-	95–57–8	2,4	U048	100 (45.4)
Phenol, 4-chloro-3-methyl-	59–50–7	2,4	U039	5000 (2270)
Phenol, 2-cyclohexyl-4,6-dinitro-	131–89–5	4	P034	100 (45.4)
Phenol, 2,4-dichloro-	120–83–2	2,4	U081	100 (45.4)
Phenol, 2,6-dichloro-	87–65–0	4	U082	100 (45.4)
Phenol, 4,4′-(1,2-diethyl-1,2-ethenediyl)bis-, (E)	56–53–1	4	U089	1 (0.454)
Phenol, 2,4-dimethyl-	105–67–9	2,4	U101	100 (45.4)
Phenol, 4-(dimethylamino)-3,5-dimethyl-, 4 methylcarbamate (ester).	315–18–4	1,4	P128	1000 (454)
Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	2032–65–7	1,4	P199	10 (4.54)
Phenol, 2,4-dinitro-	51–28–5	1,2,3,4	P048	10 (4.54)
Phenol, methyl-	1319–77–3	1,3,4	U052	100 (45.4)
Phenol, 2-methyl-4,6-dinitro-, & salts	534–52–1	2,3,4	P047	10 (4.54)
Phenol, 2,2′-methylenebis[3,4,6- trichloro-	70–30–4	4	U132	100 (45.4)
Phenol, 2-(1-methylethoxy)-, methylcarbamate	114–26–1	3,4	U411	100 (45.4)
Phenol, 3-(1-methylethyl)-, methyl carbamate (m-Cumenyl methylcarbamate).	64–00–6	4	P202	##
Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate (Promecarb).	2631-37–0	4	P201	##
Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88–85–7	4	P020	1000 (454)
Phenol, 4-nitro-	100–02–7	1,2,3,4	U170	100 (45.4)
Phenol, pentachloro-	87–86–5	1,2,3,4	See F027	10 (4.54)
Phenol, 2,3,4,6-tetrachloro-	58–90–2	4	See F027	10 (4.54)
Phenol, 2,4,5-trichloro-	95–95–4	1,3,4	See F027	10 (4.54)
Phenol, 2,4,6-trichloro-	88–06–2	1,2,3,4	See F027	10 (4.54)
Phenol, 2,4,6-trinitro-, ammonium salt	131–74–8	4	P009	10 (4.54)
L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-	148–82–3	4	U150	1 (0.454)
p-Phenylenediamine	106–50–3	3		5000 (2270)
Phenylmercury acetate	62–38–4	4	P092	100 (45.4)
Phenylthiourea	103–85–5	4	P093	100 (45.4)
Phorate	298–02–2	4	P094	10 (4.54)
Phosgene	75–44–5	1,3,4	P095	10 (4.54)
Phosphine	7803–51–2	3,4	P096	100 (45.4)
Phosphoric acid	7664–38–2	1		5000 (2270)
Phosphoric acid, diethyl 4-nitrophenyl ester	311–45–5	4	P041	100 (45.4)
Phosphoric acid, lead(2+) salt (2:3)	7446–27–7	4	U145	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester.	298–04–4	1,4	P039	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester.	298–02–2	4	P094	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58–2	4	U087	5000 (2270)
Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester.	60–51–5	4	P044	10 (4.54)
Phosphorofluoridic acid, bis(1-methylethyl) ester	55–91–4	4	P043	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56–38–2	1,3,4	P089	10 (4.54)
Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297–97–2	4	P040	100 (45.4)
Phosphorothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl] O,O-dimethyl ester.	52–85–7	4	P097	1000 (454)
Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester.	298–00–0	1,4	P071	100 (45.4)
Phosphorus	7723–14–0	1,3		1 (0.454)
Phosphorus oxychloride	10025–87–3	1		1000 (454)
Phosphorus pentasulfide	1314–80–3	1,4	U189	100 (45.4)
Phosphorus sulfide	1314–80–3	1,4	U189	100 (45.4)
Phosphorus trichloride	7719–12–2	1		1000 (454)
PHTHALATE ESTERS	N.A.	2		**
Phthalic anhydride	85–44–9	3,4	U190	5000 (2270)
2-Picoline	109–06–8	4	U191	5000 (2270)
Piperidine, 1-nitroso-	100–75–4	4	U179	10 (4.54)
Plumbane, tetraethyl-	78–00–2	1,4	P110	10 (4.54)
POLYCHLORINATED BIPHENYLS	1336–36–3	1,2,3		1 (0.454)
Polycyclic Organic Matter[e]	N.A.	3		**
POLYNUCLEAR AROMATIC HYDROCARBONS	N.A.	2		**
Potassium arsenate	7784–41–0	1		1 (0.454)
Potassium arsenite	10124–50–2	1		1 (0.454)
Potassium bichromate	7778–50–9	1		10 (4.54)
Potassium chromate	7789–00–6	1		10 (4.54)
Potassium cyanide K(CN)	151–50–8	1,4	P098	10 (4.54)
Potassium hydroxide	1310–58–3	1		1000 (454)
Potassium permanganate	7722–64–7	1		100 (45.4)
Potassium silver cyanide	506–61–6	4	P099	1 (0.454)
Pronamide	23950–58–5	4	U192	5000 (2270)
Propanal, 2-methyl-2-(methylsulfonyl)-, O-[(methylamino)carbonyl] oxime (Aldicarb sulfone).	1646–88–4	4	P203	##
Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime.	116–06–3	4	P070	1 (0.454)
1-Propanamine	107–10–8	4	U194	5000 (2270)
1-Propanamine, N-propyl-	142–84–7	4	U110	5000 (2270)
1-Propanamine, N-nitroso-N-propyl-	621–64–7	2,4	U111	10 (4.54)
Propane, 1,2-dibromo-3-chloro-	96–12–8	3,4	U066	1 (0.454)
Propane, 1,2-dichloro-	78–87–5	1,2,3,4	U083	1000 (454)
Propanedinitrile	109–77–3	4	U149	1000 (454)
Propanenitrile	107–12–0	4	P101	10 (4.54)
Propanenitrile, 3-chloro-	542–76–7	4	P027	1000 (454)
Propanenitrile, 2-hydroxy-2-methyl-	75–86–5	1,4	P069	10 (4.54)
Propane, 2-nitro-	79–46–9	3,4	U171	10 (4.54)
Propane, 2,2'-oxybis[2-chloro-	108–60–1	2,4	U027	1000 (454)
1,3-Propane sultone	1120–71–4	3,4	U193	10 (4.54)
1,2,3-Propanetriol, trinitrate	55–63–0	4	P081	10 (4.54)
Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93–72–1	1,4	See F027	100 (45.4)
1-Propanol, 2,3-dibromo-, phosphate (3:1)	126–72–7	4	U235	10 (4.54)
1-Propanol, 2-methyl-	78–83–1	4	U140	5000 (2270)
2-Propanone	67–64–1	4	U002	5000 (2270)
2-Propanone, 1-bromo-	598–31–2	4	P017	1000 (454)
Propargite	2312–35–8	1		10 (4.54)
Propargyl alcohol	107–19–7	4	P102	1000 (454)
2-Propenal	107–02–8	1,2,3,4	P003	1 (0.454)
2-Propenamide	79–06–1	3,4	U007	5000 (2270)
1-Propene, 1,3-dichloro-	542–75–6	1,2,3,4	U084	100 (45.4)
1-Propene, 1,1,2,3,3,3-hexachloro-	1888–71–7	4	U243	1000 (454)
2-Propenenitrile	107–13–1	1,2,3,4	U009	100 (45.4)
2-Propenenitrile, 2-methyl-	126–98–7	4	U152	1000 (454)
2-Propenoic acid	79–10–7	3,4	U008	5000 (2270)
2-Propenoic acid, ethyl ester	140–88–5	3,4	U113	1000 (454)
2-Propenoic acid, 2-methyl-, ethyl ester	97–63–2	4	U118	1000 (454)
2-Propenoic acid, 2-methyl-, methyl ester	80–62–6	1,3,4	U162	1000 (454)
2-Propen-1-ol	107–18–6	1,4	P005	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
beta-Propiolactone	57–57–8	3		10 (4.54)
Propionaldehyde	123–38–6	3	1000 (454)	
Propionic acid	79–09–4	1		5000 (2270)
Propionic anhydride	123–62–6	1		5000 (2270)
Propoxur (Baygon)	114–26–1	3,4	U411	100 (45.4)
n-Propylamine	107–10–8	4	U194	5000 (2270)
Propylene dichloride	78–87–5	1,2,3,4	U083	1000 (454)
Propylene oxide	75–56–9	1,3		100 (45.4)
1,2-Propylenimine	75–55–8	3,4	P067	1 (0.454)
2-Propyn-1-ol	107–19–7	4	P102	1000 (454)
Pyrene	129–00–0	2		5000 (2270)
Pyrethrins	121–29–9	1		1 (0.454)
	121–21–1			
	8003–34–7			
3,6-Pyridazinedione, 1,2-dihydro-	123–33–1	4	U148	5000 (2270)
4-Pyridinamine	504–24–5	4	P008	1000 (454)
Pyridine	110–86–1	4	U196	1000 (454)
Pyridine, 2-methyl-	109–06–8	4	U191	5000 (2270)
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts	54–11–5	4	P075	100 (45.4)
2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2- chloroethyl)amino]-	66–75–1	4	U237	10 (4.54)
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56–04–2	4	U164	10 (4.54)
Pyrrolidine, 1-nitroso-	930–55–2	4	U180	1 (0.454)
Pyrrolo[2,3-b] indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-(Physostigmine).	57–47–6	4	P204	##
Quinoline	91–22–5	1,3		5000 (2270)
Quinone	106–51–4	3,4	U197	10 (4.54)
Quintobenzene	82–68–8	3,4	U185	100 (45.4)
Radionuclides (including radon)	N.A.	3		§
Reserpine	50–55–5	4	U200	5000 (2270)
Resorcinol	108–46–3	1,4	U201	5000 (2270)
Saccharin, & salts	81–07–2	4	U202	100 (45.4)
Safrole	94–59–7	4	U203	100 (45.4)
Selenious acid	7783–00–8	4	U204	10 (4.54)
Selenious acid, dithallium (1+) salt	12039–52–0	4	P114	1000 (454)
Seleniumdagger;dagger;	7782–49–2	2		100 (45.4)
SELENIUM AND COMPOUNDS	N.A.	2,3		**
Selenium Compounds	N.A.	2,3		**
Selenium dioxide	7446–08–4	1,4	U204	10 (4.54)
Selenium oxide	7446–08–4	1,4	U204	10 (4.54)
Selenium sulfide SeS2	7488–56–4	4	U205	10 (4.54)
Selenourea	630–10–4	4	P103	1000 (454)
L-Serine, diazoacetate (ester)	115–02–6	4	U015	1 (0.454)
Silver dagger;dagger;	7440–22–4	2		1000 (454)
SILVER AND COMPOUNDS	N.A.	2		**
Silver cyanide Ag(CN)	506–64–9	4	P104	1 (0.454)
Silver nitrate	7761–88–8	1		1 (0.454)
Silvex (2,4,5-TP)	93–72–1	1,4	See F027	100 (45.4)
Sodium	7440–23–5	1		10 (4.54)
Sodium arsenate	7631–89–2	1		1 (0.454)
Sodium arsenite	7784–46–5	1		1 (0.454)
Sodium azide	26628–22–8	4	P105	1000 (454)
Sodium bichromate	10588–01–9	1		10 (4.54)
Sodium bifluoride	1333–83–1	1		100 (45.4)
Sodium bisulfite	7631–90–5	1		5000 (2270)
Sodium chromate	7775–11–3	1		10 (4.54)
Sodium cyanide Na(CN)	143–33–9	1,4	P106	10 (4.54)
Sodium dodecylbenzenesulfonate	25155–30–0	1		1000 (454)
Sodium fluoride	7681–49–4	1		1000 (454)
Sodium hydrosulfide	16721–80–5	1		5000 (2270)
Sodium hydroxide	1310–73–2	1		1000 (454)
Sodium hypochlorite	7681–52–9	1		100 (45.4)
	10022–70–5			
Sodium methylate	124–41–4	1		1000 (454)
Sodium nitrite	7632–00–0	1		100 (45.4)
Sodium phosphate, dibasic	7558–79–4	1		5000 (2270)
	10039–32–4			
	10140–65–5			

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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Sodium phosphate, tribasic	7601–54–9 7758–29–4 7785–84–4 10101–89–0 10124–56–8 10361–89–4	1		5000 (2270)
Sodium selenite	7782–82–3 10102–18–8	1		100 (45.4)
Streptozotocin	18883–66–4	4	U206	1 (0.454)
Strontium chromate	7789–06–2	1		10 (4.54)
Strychnidin-10-one, & salts	57–24–9	1,4	P108	10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy-	357–57–3	4	P018	100 (45.4)
Strychnine, & salts	57–24–9	1,4	P108	10 (4.54)
Styrene	100–42–5	1,3		1000 (454)
Styrene oxide	96–09–3	3		100 (45.4)
Sulfuric acid	7664–93–9 8014–95–7	1		1000 (454)
Sulfuric acid, dimethyl ester	77–78–1	3,4	U103	100 (45.4)
Sulfuric acid, dithallium (1+) salt	7446–18–6 10031–59–1	1,4	P115	100 (45.4)
Sulfur monochloride	12771–08–3	1		1000 (454)
Sulfur phosphide	1314–80–3	1,4	U189	100 (45.4)
2,4,5-T	93–76–5	1,4	See F027	1000 (454)
2,4,5-T acid	93–76–5	1,4	See F027	1000 (454)
2,4,5-T amines	2008–46–0 1319–72–8 3813–14–7 6369–96–6 6369–97–7	1		5000 (2270)
2,4,5-T esters	93–79–8 1928–47–8 2545–59–7 25168–15–4 61792–07–2	1		1000 (454)
2,4,5-T salts	13560–99–1	1		1000 (454)
TCDD	1746–01–6	2,3		1 (0.454)
TDE	72–54–8	1,2,4	U060	1 (0.454)
1,2,4,5-Tetrachlorobenzene	95–94–3	4	U207	5000 (2270)
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746–01–6	2,3		1 (0.454)
1,1,1,2-Tetrachloroethane	630–20–6	4	U208	100 (45.4)
1,1,2,2-Tetrachloroethane	79–34–5	2,3,4	U209	100 (45.4)
Tetrachloroethylene	127–18–4	2,3,4	U210	100 (45.4)
2,3,4,6-Tetrachlorophenol	58–90–2	4	See F027	10 (4.54)
Tetraethyl pyrophosphate	107–49–3	1,4	P111	10 (4.54)
Tetraethyl lead	78–00–2	1,4	P110	10 (4.54)
Tetraethyldithiopyrophosphate	3689–24–5	4	P109	100 (45.4)
Tetrahydrofuran	109–99–9	4	U213	1000 (454)
Tetranitromethane	509–14–8	4	P112	10 (4.54)
Tetraphosphoric acid, hexaethyl ester	757–58–4	4	P062	100 (45.4)
Thallic oxide	1314–32–5	4	P113	100 (45.4)
Thallium dagger;dagger;	7440–28–0	2		1000 (454)
THALLIUM AND COMPOUNDS	N.A.	2		**
Thallium (I) acetate	563–68–8	4	U214	100 (45.4)
Thallium (I) carbonate	6533–73–9	4	U215	100 (45.4)
Thallium chloride TlCl	7791–12–0	4	U216	100 (45.4)
Thallium (I) nitrate	10102–45–1	4	U217	100 (45.4)
Thallium oxide Tl2O3	1314–32–5	4	P113	100 (45.4)
Thallium (I) selenite	12039–52–0	4	P114	1000 (454)
Thallium (I) sulfate	7446–18–6 10031–59–1	1,4	P115	100 (45.4)
Thioacetamide	62–55–5	4	U218	10 (4.54)
Thiodiphosphoric acid, tetraethyl ester	3689–24–5	4	P109	100 (45.4)
Thiofanox	39196–18–4	4	P045	100 (45.4)
Thioimidodicarbonic diamide [(H2N)C(S)] 2NH	541–53–7	4	P049	100 (45.4)
Thiomethanol	74–93–1	1,4	U153	100 (45.4)
Thioperoxydicarbonic diamide [(H2N)C(S)] 2S2, tetramethyl-.	137–26–8	4	U244	10 (4.54)
Thiophenol	108–98–5	4	P014	100 (45.4)
Thiosemicarbazide	79–19–6	4	P116	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Thiourea	62–56–6	4	U219	10 (4.54)
Thiourea, (2-chlorophenyl)-	5344–82–1	4	P026	100 (45.4)
Thiourea, 1-naphthalenyl-	86–88–4	4	P072	100 (45.4)
Thiourea, phenyl-	103–85–5	4	P093	100 (45.4)
Thiram	137–26–8	4	U244	10 (4.54)
Titanium tetrachloride	7550–45–0	3		1,2,41000 (454)
Toluene	108–88–3	1,2,3,4	U220	1000 (454)
Toluenediamine	95–80–7 496–72–0 823–40–5 25376–45–8	3,4	U221	10 (4.54)
2,4-Toluene diamine	95–80–7 496–72–0 823–40–5 25376–45–8	3,4	U221	10 (4.54)
Toluene diisocyanate	91–08–7 584–84–9 26471–62–5	3,4	U223	100 (45.4)
2,4-Toluene diisocyanate	91–08–7 584–84–9 26471–62–5	3,4	U223	100 (45.4)
o-Toluidine	95–53–4	3,4	U328	100 (45.4)
p-Toluidine	106–49–0	4	U353	100 (45.4)
o-Toluidine hydrochloride	636–21–5	4	U222	100 (45.4)
Toxaphene	8001–35–2	1,2,3,4	P123	1 (0.454)
2,4,5-TP acid	93–72–1	1,4	See F027	100 (45.4)
2,4,5-TP esters	32534–95–5	1		100 (45.4)
1H-1,2,4-Triazol-3-amine	61–82–5	4	U011	10 (4.54)
Trichlorfon	52–68–6	1		100 (45.4)
1,2,4-Trichlorobenzene	120–82–1	2,3		100 (45.4)
1,1,1-Trichloroethane	71–55–6	2,3,4	U226	1000 (454)
1,1,2-Trichloroethane	79–00–5	2,3,4	U227	100 (45.4)
Trichloroethylene	79–01–6	1,2,3,4	U228	100 (45.4)
Trichloromethanesulfenyl chloride	594–42–3	4	P118	100 (45.4)
Trichloromonofluoromethane	75–69–4	4	U121	5000 (2270)
Trichlorophenol	25167–82–2	1		10 (4.54)
2,3,4-Trichlorophenol	15950–66–0			
2,3,5-Trichlorophenol	933–78–8			
2,3,6-Trichlorophenol	933–75–5			
3,4,5-Trichlorophenol	609–19–8			
2,4,5-Trichlorophenol	95–95–4	1,3,4	See F027	10 (4.54)
2,4,6-Trichlorophenol	88–06–2	1,2,3,4	See F027	10 (4.54)
Triethanolamine dodecylbenzenesulfonate	27323–41–7	1		1000 (454)
Triethylamine	121–44–8	1,3,4	U404	5000 (2270)
Trifluralin	1582–09–8	3		10 (4.54)
Trimethylamine	75–50–3	1		100 (45.4)
2,2,4-Trimethylpentane	540–84–1	3		1000 (454)
1,3,5-Trinitrobenzene	99–35–4	4	U234	10 (4.54)
1,3,5-Trioxane, 2,4,6-trimethyl-	123–63–7	4	U182	1000 (454)
Tris(2,3-dibromopropyl) phosphate	126–72–7	4	U235	10 (4.54)
Trypan blue	72–57–1	4	U236	10 (4.54)
Unlisted Hazardous Wastes Characteristic of Corrosivity	N.A.	4	D002	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Ignitability	N.A.	4	D001	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Reactivity	N.A.	4	D003	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Toxicity:				
Arsenic (D004)	N.A.	4	D004	1 (0.454)
Barium (D005)	N.A.	4	D005	1000 (454)
Benzene (D018)	N.A.	1,2,3,4	D018	10 (4.54)
Cadmium (D006)	N.A.	4	D006	10 (4.54)
Carbon tetrachloride (D019)	N.A.	1,2,4	D019	10 (4.54)
Chlordane (D020)	N.A.	1,2,4	D020	1 (0.454)
Chlorobenzene (D021)	N.A.	1,2,4	D021	100 (45.4)
Chloroform (D022)	N.A.	1,2,4	D022	10 (4.54)
Chromium (D007)	N.A.	4	D007	10 (4.54)
o-Cresol (D023)	N.A.	4	D023	100 (45.4)
m-Cresol (D024)	N.A.	4	D024	100 (45.4)
p-Cresol (D025)	N.A.	4	D025	100 (45.4)
Cresol (D026)	N.A.	4	D026	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
2,4-D (D016)	N.A.	1,4	D016	100 (45.4)
1,4-Dichlorobenzene (D027)	N.A.	1,2,4	D027	100 (45.4)
1,2-Dichloroethane (D028)	N.A.	1,2,4	D028	100 (45.4)
1,1-Dichloroethylene (D029)	N.A.	1,2,4	D029	100 (45.4)
2,4-Dinitrotoluene (D030)	N.A.	1,2,4	D030	10 (4.54)
Endrin (D012)	N.A.	1,4	D012	1 (0.454)
Heptachlor (and epoxide) (D031)	N.A.	1,2,4	D031	1 (0.454)
Hexachlorobenzene (D032)	N.A.	2,4	D032	10 (4.54)
Hexachlorobutadiene (D033)	N.A.	2,4	D033	1 (0.454)
Hexachloroethane (D034)	N.A.	2,4	D034	100 (45.4)
Lead (D008)	N.A.	4	D008	10 (4.54)
Lindane (D013)	N.A.	1,4	D013	1 (0.454)
Mercury (D009)	N.A.	4	D009	1 (0.454)
Methoxychlor (D014)	N.A.	1,4	D014	1 (0.454)
Methyl ethyl ketone (D035)	N.A.	4	D035	5000 (2270)
Nitrobenzene (D036)	N.A.	1,2,4	D036	1000 (454)
Pentachlorophenol (D037)	N.A.	1,2,4	D037	10 (4.54)
Pyridine (D038)	N.A.	4	D038	1000 (454)
Selenium (D010)	N.A.	4	D010	10 (4.54)
Silver (D011)	N.A.	4	D011	1 (0.454)
Tetrachloroethylene (D039)	N.A.	2,4	D039	100 (45.4)
Toxaphene (D015)	N.A.	1,4	D015	1 (0.454)
Trichloroethylene (D040)	N.A.	1,2,4	D040	100 (45.4)
2,4,5-Trichlorophenol (D041)	N.A.	1,4	D041	10 (4.54)
2,4,6-Trichlorophenol (D042)	N.A.	1,2,4	D042	10 (4.54)
2,4,5-TP (D017)	N.A.	1,4	D017	100 (45.4)
Vinyl chloride (D043)	N.A.	2,3,4	D043	1 (0.454)
Uracil mustard	66–75–1	4	U237	10 (4.54)
Uranyl acetate	541–09–3	1		100 (45.4)
Uranyl nitrate	10102–06–4	1		100 (45.4)
	36478–76–9			
Urea, N-ethyl-N-nitroso-	759–73–9	4	U176	1 (0.454)
Urea, N-methyl-N-nitroso-	684–93–5	3,4	U177	1 (0.454)
Urethane	51–79–6	3,4	U238	100 (45.4)
Vanadic acid, ammonium salt	7803–55–6	4	P119	1000 (454)
Vanadium oxide V2O5	1314–62–1	1,4	P120	1000 (454)
Vanadium pentoxide	1314–62–1	1,4	P120	1000 (454)
Vanadyl sulfate	27774–13–6	1		1000 (454)
Vinyl acetate	108–05–4	1,3		5000 (2270)
Vinyl acetate monomer	108–05–4	1,3		5000 (2270)
Vinylamine, N-methyl-N-nitroso-	4549–40–0	4	P084	10 (4.54)
Vinyl bromide	593–60–2	3		100 (45.4)
Vinyl chloride	75–01–4	2,3,4	U043	1 (0.454)
Vinylidene chloride	75–35–4	1,2,3,4	U078	100 (45.4)
Warfarin, & salts	81–81–2	4	P001, U248	100 (45.4)
Xylene	1330–20–7	1,3,4	U239	100 (45.4)
m-Xylene	108–38–3	3		1000 (454)
o-Xylene	95–47–6	3		1000 (454)
p-Xylene	106–42–3	3		100 (45.4)
Xylene (mixed)	1330–20–7	1,3,4	U239	100 (45.4)
Xylenes (isomers and mixture)	1330–20–7	1,3,4	U239	100 (45.4)
Xylenol	1300–71–6	1		1000 (454)
Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester (3beta,16beta,17alpha, 18beta,20alpha).	50–55–54	4	U200	5000 (2270)
Zinc dagger;dagger;	7440–66–6	2		1000 (454)
ZINC AND COMPOUNDS	N.A.	2		**
Zinc acetate	557–34–6	1		1000 (454)
Zinc ammonium chloride	52628–25–8	1		1000 (454)
	14639–97–5			
	14639–98–6			
Zinc, bis(dimethylcarbamodithioato-S,S')-, (Ziram)	137–30–4	4	P205	##
Zinc borate	1332–07–6	1		1000 (454)
Zinc bromide	7699–45–8	1		1000 (454)
Zinc carbonate	3486–35–9	1		1000 (454)
Zinc chloride	7646–85–7	1		1000 (454)
Zinc cyanide Zn(CN)2	557–21–1	1,4	P121	10 (4.54)
Zinc fluoride	7783–49–5	1		1000 (454)
Zinc formate	557–41–5	1		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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Zinc hydrosulfite	7779–86–4	1		1000 (454)
Zinc nitrate	7779–88–6	1		1000 (454)
Zinc phenolsulfonate	127–82–2	1		5000 (2270)
Zinc phosphide Zn3P2	1314–84–7	1,4	P122, U249	100 (45.4)
Zinc silicofluoride	16871–71–9	1		5000 (2270)
Zinc sulfate	7733–02–0	1		1000 (454)
Zirconium nitrate	13746–89–9	1		5000 (2270)
Zirconium potassium fluoride	16923–95–8	1		1000 (454)
Zirconium sulfate	14644–61–2	1		5000 (2270)
Zirconium tetrachloride	10026–11–6	1		5000 (2270)
F001	.....	4	F001	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 halogenated solvents listed below 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	127–18–4	2,3,4	U210	100 (45.4)
(b) Trichloroethylene	79–01–6	1,2,3,4	U228	100 (45.4)
(c) Methylene chloride	75–09–2	2,3,4	U080	1000 (454)
(d) 1,1,1-Trichloroethane	71–55–6	2,3,4	U226	1000 (454)
(e) Carbon tetrachloride	56–23–5	1,2,3,4	U211	10 (4.54)
(f) Chlorinated fluorocarbons	N.A.	.....		5000 (2270)
F002	.....	4	F002	10 (4.54)
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 halogenated solvents listed below or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.				
(a) Tetrachloroethylene	127–18–4	2,3,4	U210	100 (45.4)
(b) Methylene chloride	75–09–2	2,3,4	U080	1000 (454)
(c) Trichloroethylene	79–01–6	1,2,3,4	U228	100 (45.4)
(d) 1,1,1-Trichloroethane	71–55–6	2,3,4	U226	1000 (454)
(e) Chlorobenzene	108–90–7	1,2,3,4	U037	100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane	76–13–1	.....		5000 (2270)
(g) o-Dichlorobenzene	95–50–1	1,2,4	U070	100 (45.4)
(h) Trichlorofluoromethane	75–69–4	4	U121	5000 (2270)
(i) 1,1,2-Trichloroethane	79–00–5	2,3,4	U227	100 (45.4)
F003	.....	4	F003	100 (45.4)
The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents.				
(a) Xylene	1330-20–7	.....		1000 (454)
(b) Acetone	67–64–1	.....		5000 (2270)
(c) Ethyl acetate	141–78–6	.....		5000 (2270)
(d) Ethylbenzene	100–41–4	.....		1000 (454)
(e) Ethyl ether	60–29–7	.....		100 (45.4)
(f) Methyl isobutyl ketone	108–10–1	.....		5000 (2270)
(g) n-Butyl alcohol	71–36–3	.....		5000 (2270)
(h) Cyclohexanone	108–94–1	.....		5000 (2270)
(i) Methanol	67–56–1	.....		5000 (2270)
F004	.....	4	F004	100 (45.4)
The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:				
(a) Cresols/Cresylic acid	1319–77–3	1,3,4	U052	100 (45.4)
(b) Nitrobenzene	98–95–3	1,2,3,4	U169	1000 (454)
F005	.....	4	F005	100 (45.4)
The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:				
(a) Toluene	108–88–3	1,2,3,4	U220	1000 (454)
(b) Methyl ethyl ketone	78–93–3	3,4	U159	5000 (2270)
(c) Carbon disulfide	75–15–0	1,3,4	P022	100 (45.4)
(d) Isobutanol	78–83–1	4	U140	5000 (2270)
(e) Pyridine	110–86–1	4	U196	1000 (454)
F006	.....	4	F006	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
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.				
F007	.....	4	F007	10 (4.54)
Spent cyanide plating bath solutions from electroplating operations.				
F008	.....	4	F008	10 (4.54)
Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.				
F009	.....	4	F009	10 (4.54)
Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.				
F010	.....	4	F010	10 (4.54)
Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.				
F011	.....	4	F011	10 (4.54)
Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.				
F012	.....	4	F012	10 (4.54)
Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.				
F019	.....	4	F019	10 (4.54)
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.				
F020	.....	4	F020	1 (0.454)
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.)				
F021	.....	4	F021	1 (0.454)
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.				
F022	.....	4	F022	1 (0.454)
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.				
F023	.....	4	F023	1 (0.454)
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 a 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 hexachlorophene from highly purified 2,4,5-trichlorophenol.)				
F024	.....	4	F024	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out 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. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 40 CFR 261.31 or 261.32.)				
F025	.....	4	F025	1 (0.454)
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.				
F026	.....	4	F026	1 (0.454)
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.				
F027	.....	4	F027	1 (0.454)
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- trichlorophenol as the sole component.)				
F028	.....	4	F028	1 (0.454)
Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.				
F032	.....	4	F032	1 (0.454)
Wastewaters (except those that have not come into contact with process contaminants), 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.				
F034	.....	4	F034	1 (0.454)
Wastewaters (except those that have not come into contact with process contaminants), 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.				
F035	.....	4	F035	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Wastewaters (except those that have not come into contact with process contaminants), 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.				
F037	.....	4	F037	1 (0.454)
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 and oily cooling 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. Sludges 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. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under § 261.4(a)(12)(i), if those residuals are to be disposed of.				
F038	.....	4	F038	1 (0.454)
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 non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, 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.				
F039	.....	4	F039	1 (0.454)
Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of 40 CFR part 261. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.)				
K001	.....	4	K001	1 (0.454)
Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.				
K002	.....	4	K002	10 (4.54)
Wastewater treatment sludge from the production of chrome yellow and orange pigments.				
K003	.....	4	K003	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Wastewater treatment sludge from the production of molybdate orange pigments.				
K004	.....	4	K004	10 (4.54)
Wastewater treatment sludge from the production of zinc yellow pigments.				
K005	.....	4	K005	10 (4.54)
Wastewater treatment sludge from the production of chrome green pigments.				
K006	.....	4	K006	10 (4.54)
Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).				
K007	.....	4	K007	10 (4.54)
Wastewater treatment sludge from the production of iron blue pigments.				
K008	.....	4	K008	10 (4.54)
Oven residue from the production of chrome oxide green pigments.				
K009	.....	4	K009	10 (4.54)
Distillation bottoms from the production of acetaldehyde from ethylene.				
K010	.....	4	K010	10 (4.54)
Distillation side cuts from the production of acetaldehyde from ethylene.				
K011	.....	4	K011	10 (4.54)
Bottom stream from the wastewater stripper in the production of acrylonitrile.				
K013	.....	4	K013	10 (4.54)
Bottom stream from the acetonitrile column in the production of acrylonitrile.				
K014	.....	4	K014	5000 (2270)
Bottoms from the acetonitrile purification column in the production of acrylonitrile.				
K015	.....	4	K015	10 (4.54)
Still bottoms from the distillation of benzyl chloride.				
K016	.....	4	K016	1 (0.454)
Heavy ends or distillation residues from the production of carbon tetrachloride.				
K017	.....	4	K017	10 (4.54)
Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.				
K018	.....	4	K018	1 (0.454)
Heavy ends from the fractionation column in ethyl chloride production.				
K019	.....	4	K019	1 (0.454)
Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.				
K020	.....	4	K020	1 (0.454)
Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.				
K021	.....	4	K021	10 (4.54)
Aqueous spent antimony catalyst waste from fluoromethanes production.				
K022	.....	4	K022	1 (0.454)
Distillation bottom tars from the production of phenol/acetone from cumene.				
K023	.....	4	K023	5000 (2270)
Distillation light ends from the production of phthalic anhydride from naphthalene.				
K024	.....	4	K024	5000 (2270)
Distillation bottoms from the production of phthalic anhydride from naphthalene.				
K025	.....	4	K025	10 (4.54)
Distillation bottoms from the production of nitrobenzene by the nitration of benzene.				
K026	.....	4	K026	1000 (454)
Stripping still tails from the production of methyl ethyl pyridines.				
K027	.....	4	K027	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Centrifuge and distillation residues from toluene diisocyanate production.				
K028		4	K028	1 (0.454)
Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.				
K029		4	K029	1 (0.454)
Waste from the product steam stripper in the production of 1,1,1- trichloroethane.				
K030		4	K030	1 (0.454)
Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.				
K031		4	K031	1 (0.454)
By-product salts generated in the production of MSMA and cacodylic acid.				
K032		4	K032	10 (4.54)
Wastewater treatment sludge from the production of chlordane.				
K033		4	K033	10 (4.54)
Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.				
K034		4	K034	10 (4.54)
Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.				
K035		4	K035	1 (0.454)
Wastewater treatment sludges generated in the production of creosote.				
K036		4	K036	1 (0.454)
Still bottoms from toluene reclamation distillation in the production of disulfoton.				
K037		4	K037	1 (0.454)
Wastewater treatment sludges from the production of disulfoton.				
K038		4	K038	10 (4.54)
Wastewater from the washing and stripping of phorate production.				
K039		4	K039	10 (4.54)
Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.				
K040		4	K040	10 (4.54)
Wastewater treatment sludge from the production of phorate.				
K041		4	K041	1 (0.454)
Wastewater treatment sludge from the production of toxaphene.				
K042		4	K042	10 (4.54)
Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.				
K043		4	K043	10 (4.54)
2,6-Dichlorophenol waste from the production of 2,4-D.				
K044		4	K044	10 (4.54)
Wastewater treatment sludges from the manufacturing and processing of explosives.				
K045		4	K045	10 (4.54)
Spent carbon from the treatment of wastewater containing explosives.				
K046		4	K046	10 (4.54)
Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.				
K047		4	K047	10 (4.54)
Pink/red water from TNT operations.				
K048		4	K048	10 (4.54)
Dissolved air flotation (DAF) float from the petroleum refining industry.				
K049		4	K049	10 (4.54)
Slop oil emulsion solids from the petroleum refining industry.				
K050		4	K050	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Heat exchanger bundle cleaning sludge from the petroleum refining industry.				
K051		4	K051	10 (4.54)
API separator sludge from the petroleum refining industry.				
K052		4	K052	10 (4.54)
Tank bottoms (leaded) from the petroleum refining industry.				
K060		4	K060	1 (0.454)
Ammonia still lime sludge from coking operations.				
K061		4	K061	10 (4.54)
Emission control dust/sludge from the primary production of steel in electric furnaces.				
K062		4	K062	10 (4.54)
Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).				
K064		4	K064	10 (4.54)
Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.				
K065		4	K065	10 (4.54)
Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.				
K066		4	K066	10 (4.54)
Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.				
K069		4	K069	10 (4.54)
Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting the stay, EPA will publish a notice of the action in the **Federal Register**.)				
K071	.....	4	K071	1 (0.454)
Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.				
K073	.....	4	K073	10 (4.54)
Chlorinated hydrocarbon waste from the purification step of the diaphragm cellprocess using graphite anodes in chlorine production.				
K083	.....	4	K083	100 (45.4)
Distillation bottoms from aniline production.				
K084	.....	4	K084	1 (0.454)
Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.				
K085	.....	4	K085	10 (4.54)
Distillation or fractionation column bottoms from the production of chlorobenzenes.				
K086	.....	4	K086	10 (4.54)
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.				
K087	.....	4	K087	100 (45.4)
Decanter tank tar sludge from coking operations.				
K088	.....	4	K088	10 (4.54)
Spent potliners from primary aluminum reduction.				
K090	.....	4	K090	10 (4.54)
Emission control dust or sludge from ferrochromiumsilicon production.				
K091	.....	4	K091	10 (4.54)
Emission control dust or sludge from ferrochromium production.				
K093	.....	4	K093	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Distillation light ends from the production of phthalic anhydride from ortho-xylene.				
K094		4	K094	5000 (2270)
Distillation bottoms from the production of phthalic anhydride from ortho-xylene.				
K095		4	K095	100 (45.4)
Distillation bottoms from the production of 1,1,1-trichloroethane.				
K096		4	K096	100 (45.4)
Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.				
K097		4	K097	1 (0.454)
Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.				
K098		4	K098	1 (0.454)
Untreated process wastewater from the production of toxaphene.				
K099		4	K099	10 (4.54)
Untreated wastewater from the production of 2,4-D.				
K100		4	K100	10 (4.54)
Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.				
K101		4	K101	1 (0.454)
Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.				
K102		4	K102	1 (0.454)
Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.				
K103		4	K103	100 (45.4)
Process residues from aniline extraction from the production of aniline.				
K104		4	K104	10 (4.54)
Combined wastewater streams generated from nitrobenzene/aniline production.				
K105		4	K105	10 (4.54)
Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.				
K106		4	K106	1 (0.454)
Wastewater treatment sludge from the mercury cell process in chlorine production.				
K107		4	K107	10 (4.54)
Column bottoms from product separation from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazines.				
K108		4	K108	10 (4.54)
Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazides.				
K109		4	K109	10 (4.54)
Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.				
K110		4	K110	10 (4.54)
Condensed column overheads from intermediate separation from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazides.				
K111		4	K111	10 (4.54)
Product washwaters from the production of dinitrotoluene via nitration of toluene.				
K112		4	K112	10 (4.54)
Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.				
K113		4	K113	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.				
K114	.....	4	K114	10 (4.54)
Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.				
K115	.....	4	K115	10 (4.54)
Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.				
K116	.....	4	K116	10 (4.54)
Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.				
K117	.....	4	K117	1 (0.454)
Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.				
K118	.....	4	K118	1 (0.454)
Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.				
K123	.....	4	K123	10 (4.54)
Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.				
K124	.....	4	K124	10 (4.54)
Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.				
K125	.....	4	K125	10 (4.54)
Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.				
K126	.....	4	K126	10 (4.54)
Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.				
K131	.....	4	K131	100 (45.4)
Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.				
K132	.....	4	K132	1000 (454)
Spent absorbent and wastewater separator solids from the production of methyl bromide.				
K136	.....	4	K136	1 (0.454)
Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.				
K141	.....	4	K141	1 (0.454)
Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).				
K142	.....	4	K142	1 (0.454)
Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.				
K143	.....	4	K143	1 (0.454)
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.				
K144	.....	4	K144	1 (0.454)
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.				

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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
K145		4	K145	1 (0.454)
Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.				
K147		4	K147	1 (0.454)
Tar storage tank residues from coal tar refining.				
K148		4	K148	1 (0.454)
Residues from coal tar distillation, including, but not limited to, still bottoms.				
K149		4	K149	10 (4.54)
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.]				
K150		4	K150	10 (4.54)
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.				
K151		4	K151	10 (4.54)
Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of waste-waters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.				
K156		4	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.)				
K157		4	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.)				
K158		4	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.)				
K159		4	K159	##
Organics from the treatment of thiocarbamate wastes.				
K161		4	K161	##
Purification solids (including filtration, evaporation, and centrifugation solids), baghouse dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This does not include K125 or K126.)				
K169[f]		4	K169	10 (4.54)
Crude oil storage tank sediment from petroleum refining operations.				
K170[f]		4	K170	1 (0.454)
Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations.				
K171[f]		4	K171	1 (0.454)
Spent hydrotreating catalyst from petroleum refining operations. (This listing does not include inert support media.)				
K172[f]		4	K172	1 (0.454)
Spent hydrorefining catalyst from petroleum refining operations. (This listing does not include inert support media.)				
K174[f]		4	K174	1 (0.454)
K175[f]		4	K175	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	Statutory codedagger;	RCRA waste No.	Final RQ pounds (Kg)
K176				
Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide)		4	K176	1 (0.454)
K177				
Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide)		4	K177	5,000 (2270)
K178				
Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride ilmenite process		4	K178	1 (0.454)

dagger; Indicates the statutory source defined by 1,2,3, and 4, as described in the note preceding Table 302.4.

dagger;dagger; No reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers (0.004 inches).

dagger;dagger;dagger; The RQ for asbestos is limited to friable forms only.

The Agency may adjust the statutory RQ for this hazardous substance in a future rulemaking; until then the statutory one-pound RQ applies.

§ The adjusted RQs for radionuclides may be found in Appendix B to this table.

** Indicates that no RQ is being assigned to the generic or broad class.

[a] Benzene was already a CERCLA hazardous substance prior to the CAA Amendments of 1990 and received an adjusted 10-pound RQ based on potential carcinogenicity in an August 14, 1989, final rule (54 FR 33418). The CAA Amendments specify that "benzene (including benzene from gasoline)" is a hazardous air pollutant and, thus, a CERCLA hazardous substance.

[b] The CAA Amendments of 1990 list DDE (3547–04–4) as a CAA hazardous air pollutant. The CAS number, 3547–04–4, is for the chemical, p,p'dichlorodiphenylethane. DDE or p,p'-dichlorodiphenyldichloroethylene, CAS number 72–55–9, is already listed in Table 302.4 with a final RQ of 1 pound. The substance identified by the CAS number 3547–04–4 has been evaluated and listed as DDE to be consistent with the CAA section 112 listing, as amended.

[c] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

[d] Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH2CH2)n-OR' where:
n = 1, 2, or 3;
R = alkyl C7 or less; or
R = phenyl or alkyl substituted phenyl;
R' = H or alkyl C7 or less; or
OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.

[e] Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 °C.

[f] See 40 CFR 302.6(b)(1) for application of the mixture rule to this hazardous waste.

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

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,8aalpha,8balpha)]-
	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.

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

CASRN	Hazardous substance
	1,2-Benzenediol,4-[1-hydroxy-2-(methylamino) ethyl]-.
51796	Carbamic acid, ethyl ester.
	Ethyl carbamate.
	Urethane.
52686	Trichlorfon.
52857	Famphur.
	[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester.
Phosphoric acid, O-[4-	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)-, & salts.
55185	Ethanamine, N-ethyl-N-nitroso-.
	N-Nitrosodiethylamine.
55630	Nitroglycerine.
	1,2,3-Propanetriol, trinitrate.

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

CASRN	Hazardous substance
55914	Diisopropylfluorophosphate (DFP).
	Phosphorofluororidic acid, bis(1-methylethyl) 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[j]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.
57147	Hydrazine, 1,1-dimethyl-.
	1,1-Dimethylhydrazine.
57249	Strychnidin-10-one, & salts.
	Strychnine, & salts.
57476	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- (Physostigmine).
57578	beta-Propiolactone.
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	Benz[a]anthracene, 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)-.
	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-.
59892	N-Nitrosomorpholine.
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.
60355	Acetamide.
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,2aalpha,3beta,6beta, 6aalpha,7beta, 7aalpha)-.
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.
	1-Naphthalenol, methylcarbamate.
64006	Phenol, 3-(1-methylethyl)-, methyl carbamate (m-Cumenyl methylcarbamate).
64186	Formic acid.
64197	Acetic acid.
64675	Diethyl sulfate.
65850	Benzoic acid.
66751	Uracil mustard.
	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.
68122	Dimethylformamide.
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-octahydro-, (1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta,7aalpha)-, & metabolites.
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′-dimethyl-(l,1′-biphenyl)-4,4′-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt.
74839	Bromomethane.
	Methane, bromo-.
	Methyl bromide.

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

CASRN	Hazardous substance
74873	Chloromethane.
	Methane, chloro-.
	Methyl chloride.
74884	Iodomethane
	Methane, iodo-.
	Methyl iodide.
74895	Monomethylamine.
74908	Hydrocyanic acid.
	Hydrogen cyanide.
74931	Methanethiol.
	Methyl mercaptan.
	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.
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-Methyllactonitrile.
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.

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

CASRN	Hazardous substance
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-.
	Trichloroethylene.
79061	Acrylamide.
	2-Propenamide.
79094	Propionic acid.
79107	Acrylic acid.
	2-Propenoic acid.
79118	Chloroacetic acid.
79196	Hydrazinecarbothioamide.
	Thiosemicarbazide.
79221	Carbonochloridic acid, methyl ester.
	Methyl chlorocarbonate.
79312	iso-Butyric acid.
79345	Ethane, 1,1,2,2-tetrachloro-.
	1,1,2,2-Tetrachloroethane.
79447	Carbamic chloride, dimethyl-.
	Dimethylcarbamoyl chloride.
79469	Propane, 2-nitro-.
	2-Nitropropane.
80159	alpha,alpha-Dimethylbenzylhydroperoxide.
	Hydroperoxide, 1-methyl-1-phenylethyl-.
80626	Methyl methacrylate.
	2-Propenoic acid, 2-methyl-, methyl ester.
81072	Saccharin, & salts.
	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts.
81812	Warfarin, & salts.
	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts.
82688	Benzene, pentachloronitro-.
	PCNB.
	Pentachloronitrobenzene.
	Quintobenzene.
83329	Acenaphthene.
84662	Diethyl phthalate.
	1,2-Benzenedicarboxylic acid, diethyl ester.
84742	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.

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

CASRN	Hazardous substance
	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-.
90040	o-Anisidine.
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.
91667	N,N-Diethylaniline.
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.
92524	Biphenyl.
92671	4-Aminobiphenyl.
92875	Benzidine.
	[1,1′-Biphenyl]-4,4′-diamine.
92933	4-Nitrobiphenyl.
	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-.
	Silvex (2,4,5-TP).
	2,4,5-TP acid.
93765	Acetic acid, (2,4,5-trichlorophenoxy)-.
93721	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)-.
94791	2,4-D Ester.
94804	2,4-D Ester.
95476	o-Xylene.
95487	o-Cresol.
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.
96093	Styrene oxide.
96128	Propane, 1,2-dibromo-3-chloro-.
	1,2-Dibromo-3-chloropropane.
96457	Ethylenethiourea.
	2-Imidazolidinethione.
97632	Ethyl methacrylate.
	2-Propenoic acid, 2-methyl-, ethyl ester.
98011	Furfural.
	2-Furancarboxaldehyde.

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

CASRN	Hazardous substance
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.
	Phenol, 4-nitro-.
	4-Nitrophenol.
100254	p-Dinitrobenzene.
100414	Ethylbenzene.
100425	Styrene.
100447	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.
101688	MDI.
	Methylene diphenyl diisocyanate.
101779	4,4′-Methylenedianiline.
103855	Phenylthiourea.
	Thiourea, phenyl-.
105464	sec-Butyl acetate.
105679	Phenol, 2,4-dimethyl-.
	2,4-Dimethylphenol.
106423	p-Xylene.
106445	p-Cresol.
106467	Benzene, 1,4-dichloro-.
	p-Dichlorobenzene.
	1,4-Dichlorobenzene.
106478	Benzenamine, 4-chloro-.
	p-Chloroaniline.
106490	Benzenamine, 4-methyl-.
	p-Toluidine.
106503	p-Phenylenediamine.
106514	p-Benzoquinone.
	2,5-Cyclohexadiene-1,4-dione.
	Quinone.
106887	1,2-Epoxybutane.
106898	1-Chloro-2,3-epoxypropane.
	Epichlorohydrin.
	Oxirane, (chloromethyl)-.
106934	Dibromoethane.
	Ethane, 1,2-dibromo-.
	Ethylene dibromide.
106990	1,3-Butadiene.
107028	Acrolein.
	2-Propenal.

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

CASRN	Hazardous substance
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.
107211	Ethylene glycol.
107302	Chloromethyl methyl ether.
	Methane, chloromethoxy-.
107493	Diphosphoric acid, tetraethyl ester.
	Tetraethyl pyrophosphate.
107926	Butyric acid.
108054	Vinyl acetate.
	Vinyl acetate monomer.
108101	Hexone.
	Methyl isobutyl ketone.
	4-Methyl-2-pentanone.
108247	Acetic anhydride.
108316	Maleic anhydride.
	2,5-Furandione.
108383	m-Xylene.
108394	m-Cresol.
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	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.
110543	Hexane.
110758	Ethene, (2-chloroethoxy)-.
	2-Chloroethyl vinyl ether.
110805	Ethanol, 2-ethoxy-.
	Ethylene glycol monoethyl ether.
110827	Benzene, hexahydro-.
	Cyclohexane.
110861	Pyridine.
111422	Diethanolamine.
111444	Bis(2-chloroethyl) ether.
	Dichloroethyl ether.
	Ethane, 1,1′-oxybis[2-chloro-.

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

CASRN	Hazardous substance
111546	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters.
	Ethylenebisdithiocarbamic acid, salts & esters.
111911	Bis(2-chloroethoxy) methane.
	Dichloromethoxyethane.
	Ethane, 1,1′-[methylenebis(oxy)]bis(2-chloro-.
114261	Phenol, 2-(1-methylethoxy)-, methylcarbamate.
	Propoxur (Baygon).
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)-, O-[(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.
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.
	1,3-Benzodioxole, 5-(1-propenyl)-.
120809	Catechol.
120821	1,2,4-Trichlorobenzene.
120832	Phenol, 2,4-dichloro-.
	2,4-Dichlorophenol.
121142	Benzene, 1-methyl-2,4-dinitro-.
	2,4-Dinitrotoluene.
121211	Pyrethrins.
121299	Pyrethrins.
121448	Ethanamine, N,N-diethyl-.
	Triethylamine.
121697	N,N-Dimethylaniline.
121755	Malathion.
122098	alpha,alpha-Dimethylphenethylamine.
	Benzeneethanamine, alpha,alpha-dimethyl-.
122429	Carbamic acid, phenyl-, 1-methylethyl ester (Propham).
122667	Hydrazine, 1,2-diphenyl-.
	1,2-Diphenylhydrazine.
123319	Hydroquinone.
123331	Maleic hydrazide.
	3,6-Pyridazinedione, 1,2-dihydro-.
123386	Propionaldehyde.
123626	Propionic anhydride.
123637	Paraldehyde.
	1,3,5-Trioxane, 2,4,6-trimethyl-.
123739	Crotonaldehyde.
	2-Butenal.
123864	Butyl acetate.
123911	1,4-Diethyleneoxide.
	1,4-Dioxane.
123922	iso-Amyl acetate.
124049	Adipic acid.
124403	Dimethylamine.

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

CASRN	Hazardous substance
	Methanamine, N-methyl-.
124414	Sodium methylate.
124481	Chlorodibromomethane.
126727	Tris(2,3-dibromopropyl) phosphate.
	1-Propanol, 2,3-dibromo-, phosphate (3:1).
126987	Methacrylonitrile.
	2-Propenenitrile, 2-methyl-.
126998	Chloroprene.
127184	Ethene, tertrachloro-.
	Perchloroethylene.
	Tetrachloroethylene.
127822	Zinc phenolsulfonate.
129000	Pyrene.
130154	1,4-Naphthalenedione.
	1,4-Naphthoquinone.
131113	Dimethyl phthalate.
	1,2-Benzenedicarboxylic acid, dimethyl ester.
131748	Ammonium picrate.
	Phenol, 2,4,6-trinitro-, ammonium salt.
131895	Phenol, 2-cyclohexyl-4,6-dinitro-.
	2-Cyclohexyl-4,6-dinitrophenol.
132649	Dibenzofuran.
133062	Captan.
133904	Chloramben.
134327	alpha-Naphthylamine.
	1-Naphthalenamine.
137268	Thioperoxydicarbonic diamide ([H2N)C(S)]2S2, tetramethyl-.
	Thiram.
137304	Zinc, bis(dimethylcarbamodithioato-S,S′)-, (Ziram).
140885	Ethyl acrylate.
	2-Propenoic acid, ethyl ester.
141786	Acetic acid, ethyl ester.
	Ethyl acetate.
142289	1,3-Dichloropropane.
142712	Cupric acetate.
142847	Dipropylamine.
	1-Propanamine, N-propyl-.
143339	Sodium cyanide Na(CN).
143500	Kepone.
	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-.
145733	Endothall.
	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid.
148823	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-.
	Melphalan.
151508	Potassium cyanide K(CN).
151564	Aziridine.
	Ethylenimine.
152169	Diphosphoramide, octamethyl-.
	Octamethylpyrophosphoramide.
156605	Ethene, 1,2-dichloro- (E).
	1,2-Dichloroethylene.
156627	Calcium cyanamide.
189559	Benzo[rst]pentaphene.
	Dibenzo[a,i]pyrene.
191242	Benzo[ghi]perylene.
193395	Indeno(1,2,3-cd)pyrene.
205992	Benzo[b]fluoranthene.
206440	Fluoranthene.
207089	Benzo(k)fluoranthene.
208968	Acenaphthylene.
218019	Chrysene.
225514	Benz[c]acridine.
297972	O,O-Diethyl O-pyrazinyl phosphorothioate.

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

CASRN	Hazardous substance
	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester.
298000	Methyl parathion.
	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester.
298022	Phorate.
	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio) methyl] ester.
298044	Disulfoton.
	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester.
300765	Naled.
301042	Acetic acid, lead(2+) salt.
	Lead acetate.
302012	Hydrazine.
303344	Lasiocarpine.
	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*), 7aalpha]]-.
305033	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-.
	Chlorambucil.
309002	Aldrin.
	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha, 8abeta)-.
311455	Diethyl-p-nitrophenyl phosphate.
	Phosphoric acid, diethyl 4-nitrophenyl ester.
315184	Mexacarbate.
	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester).
319846	alpha—BHC.
319857	beta—BHC.
319868	delta—BHC.
329715	2,5-Dinitrophenol.
330541	Diuron.
333415	Diazinon.
334883	Diazomethane.
353504	Carbon oxyfluoride.
	Carbonic difluoride.
357573	Brucine.
	Strychnidin-10-one, 2,3-dimethoxy-.
460195	Cyanogen.
	Ethanedinitrile.
463581	Carbonyl sulfide.
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-.
494031	Chlornaphazine.
	Naphthalenamine, N,N′-bis(2-chloroethyl)-.
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 Ag(CN).
506683	Cyanogen bromide (CN)Br.
506774	Cyanogen chloride (CN)Cl.

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

CASRN	Hazardous substance
506876	Ammonium carbonate.
506967	Acetyl bromide.
509148	Methane, tetranitro-.
	Tetranitromethane.
510156	Benzeneacetic acid, 4-chloro-α- (4-chlorophenyl)-α-hydroxy-, ethyl ester.
	Chlorobenzilate.
513495	sec-Butylamine.
528290	o-Dinitrobenzene.
532274	2-Chloroacetophenone.
534521	4,6-Dinitro-o-cresol, and salts.
	Phenol, 2-methyl-4,6-dinitro-, & salts.
540738	Hydrazine, 1,2-dimethyl-.
	1,2-Dimethylhydrazine.
540841	2,2,4-Trimethylpentane.
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.
544923	Copper cyanide Cu(CN).
554847	m-Nitrophenol.
557197	Nickel cyanide $Ni(CN)_2$.
557211	Zinc cyanide $Zn(CN)_2$.
	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 $Ca(CN)_2$.
592041	Mercuric cyanide.
592858	Mercuric thiocyanate.
592870	Lead thiocyanate.
593602	Vinyl bromide.
594423	Methanesulfenyl chloride, trichloro-.
	Trichloromethanesulfenyl chloride.
598312	Bromoacetone.
	2-Propanone, 1-bromo-.
606202	Benzene, 2-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.
621647	Di-n-propylnitrosamine.
	1-Propanamine, N-nitroso-N-propyl-.
624839	Methane, isocyanato-.

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

CASRN	Hazardous substance
	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).
680319	Hexamethylphosphoramide.
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.
	Oxiranecarboxyaldehyde.
815827	Cupric tartrate.
822060	Hexamethylene-1,6-diisocyanate.
823405	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 As2O5.
	Arsenic pentoxide.
1303328	Arsenic disulfide.
1303339	Arsenic trisulfide.
1309644	Antimony trioxide.
1310583	Potassium hydroxide.
1310732	Sodium hydroxide.
1314325	Thallic oxide.
	Thallium oxide Tl2O3.
1314621	Vanadium oxide V2O5.
	Vanadium pentoxide.

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

CASRN	Hazardous substance
1314803	Phosphorus pentasulfide.
	Phosphorus sulfide.
	Sulfur phosphide.
1314847	Zinc phosphide Zn_3P_2.
1314870	Lead sulfide.
1319728	2,4,5-T amines.
1319773	Cresol (cresylic acid).
Cresols (isomers and mixture).	
Cresylic acid (isomers and mixture).	
Phenol, methyl-.	
1320189	2,4-D Ester.
1321126	Nitrotoluene.
1327533	Arsenic oxide As2O3.
	Arsenic trioxide.
1330207	Benzene, dimethyl-.
Xylene.	
Xylene (mixed).	
Xylenes (isomers and mixture).	
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.
1464535	1,2:3,4-Diepoxybutane.
	2,2′-Bioxirane.
1563388	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- (Carbofuran phenol).
1563662	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
Carbofuran.	
1582098	Trifluralin.
1615801	Hydrazine, 1,2-diethyl-.
	N,N′-Diethylhydrazine.
1634044	Methyl tert-butyl ether.
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.

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

CASRN	Hazardous substance
2008460	2,4,5-T amines.
2032657	Mercaptodimethur.
	Methiocarb.
	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate.
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	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.
3547044	DDE.
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.
7439921	Lead.
7439976	Mercury.
7440020	Nickel.
7440224	Silver.
7440235	Sodium.
7440280	Thallium.
7440360	Antimony.
7440382	Arsenic.
7440417	Beryllium.
	Beryllium powder.
7440439	Cadmium.
7440473	Chromium.
7440508	Copper.
7440666	Zinc.
7446084	Selenium dioxide.
	Selenium oxide.
7446142	Lead sulfate.
7446186	Sulfuric acid, dithallium(1+) salt.

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

CASRN	Hazardous substance
	Thallium(I) sulfate.
7446277	Lead phosphate.
	Phosphoric acid, lead(2+) salt (2:3).
7447394	Cupric chloride.
7488564	Selenium sulfide SeS_2.
7550450	Titanium tetrachloride.
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 H_3AsO_4.
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.
7783008	Selenious acid.
7783064	Hydrogen sulfide H_2S.
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	Mevinphos.
7786814	Nickel sulfate.
7787475	Beryllium chloride.
7787497	Beryllium fluoride.
7787555	Beryllium nitrate.
7788989	Ammonium chromate.

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

CASRN	Hazardous substance
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.
7803512	Hydrogen phosphide.
	Phosphine.
7803556	Ammonium vanadate.
	Vanadic acid, ammonium salt.
8001352	Chlorinated camphene.
Toxaphene.	
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.
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.
11097691	Aroclor 1254.
11104282	Aroclor 1221.
11115745	Chromic acid.
11141165	Aroclor 1232.
12002038	Cupric acetoarsenite.
12039520	Selenious acid, dithallium(1+) salt.
Thallium (I) selenite.	
12054487	Nickel hydroxide.

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

CASRN	Hazardous substance
12125018	Ammonium fluoride.
12125029	Ammonium chloride.
12135761	Ammonium sulfide.
12672296	Aroclor 1248.
12674112	Aroclor 1016.
12771083	Sulfur monochloride.
13463393	Nickel carbonyl $Ni(CO)_4$, (T–4)-.
13560991	2,4,5-T salts.
13597994	Beryllium nitrate.
13746899	Zirconium nitrate.
13765190	Calcium chromate.
	Chromic acid H2CrO4, calcium salt.
13814965	Lead fluoborate.
13826830	Ammonium fluoborate.
13952846	sec-Butylamine.
14017415	Cobaltous sulfamate.
14216752	Nickel nitrate.
14258492	Ammonium oxalate.
14307358	Lithium chromate.
14307438	Ammonium tartrate.
14639975	Zinc ammonium chloride.
14639986	Zinc ammonium chloride.
14644612	Zirconium sulfate.
15339363	Manganese, bis(dimethylcarbamodithioato-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.	
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]-.
Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-.	
Streptozotocin.	
20816120	Osmium oxide OsO_4, (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).

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

CASRN	Hazardous substance
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-propynyl)-.
	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.
25550587	Dinitrophenol.
26264062	Calcium dodecylbenzenesulfonate.
26419738	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)carbonyl]oxime (Tirpate).
26471625	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.
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.
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-, dimethyl 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)
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)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
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)
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)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
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)
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 (3.7E7)
Gadolinium-149	64	100 (3.7E 12)
Gadolinium-151	64	100 (3.7E 12)
Gadolinium-152	64	0.001 (3.7E 7)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
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)
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)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
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)
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)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
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)
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)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
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)
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)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Radium-223	88	1 (3.7E 10)
Radium-224	88	10 (3.7E 11)
Radium-225	88	1 (3.7E 10)
Radium-226Φ	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)
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)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
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)
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-232Φ	90	0.001 (3.7E 7)
Thorium-234	90	100 (3.7E 12)
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)

APPENDIX B TO § 302.4—RADIONUCLIDES—Continued

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Uranium-232	92	0.01 (3.7E 8)
Uranium-233	92	0.1 (3.7E 9)
Uranium-234φ	92	0.1 (3.7E 9)
Uranium-235φ	92	0.1 (3.7E 9)
Uranium-236	92	0.1 (3.7E 9)
Uranium-237	92	100 (3.7E 12)
Uranium-238φ	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)
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.

φ—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, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 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 toxicity identified in 40 CFR 261.24. Unlisted hazardous wastes which exhibit toxicity have the reportable quantities listed in Table 302.4 for the contaminant on which the characteristic of toxicity is based. The reportable quantity applies to the waste itself, not merely to the toxic contaminant. If an unlisted hazardous waste exhibits 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 toxicity and one or more of the other characteristics referenced in 40 CFR 302.4(b), the reportable quantity for that waste

Appendix B

Aviation Spill Report Template

PORT OF PORTLAND

Port of Portland Aviation Spill Report

REPORT NO.

DATE: CALL TIME: ARRIVAL TIME:

INCIDENT SPECIFIC LOCATION ADDRESS:

RESPONSIBLE PARTY(IES):

COMPANY:

ADDRESS: CITY: STATE:

ZIP: PHONE:

HAZARDOUS SUBSTANCE

Material Involved: ☐ Fuel ☐ Oil ☐ Sewage ☐ Other

Estimated Quantity:

Reportable Quantity? Yes/ No
i.e. 42 gallons of petroleum product

Affected Media: ☐ Soil ☐ Surface Water ☐ Groundwater ☐ Other

Cause of Incident:

- ☐ During Delivery/Ship
- ☐ Fueling Operation
- ☐ Fire Explosion
- ☐ During Handling
- ☐ Storage
- ☐ Excavation
- ☐ During Repair
- ☐ Unauthorized Release
- ☐ Abandoned
- ☐ Other, i.e. vehicle leak
- ☐ Unknown

RESPONDERS

- ☐ PDX FIRE
- ☐ OPS
- ☐ Responsible Party
- ☐ Agency Name and Representative: _____
- ☐ PDX ENVIRONMENTAL
- ☐ ESD
- ☐ Environmental Contractor
- ☐ Maintenance
- ☐ Other

NOTIFICATIONS

- ☐ NRC
- ☐ OERS
- ☐ DEQ
- ☐ Aviation Properties
- ☐ Legal
- ☐ Deicing System Operator
- ☐ Risk
- ☐ Public Affairs
- ☐ OTHER (parking)
- ☐ NONE

Date:
Time:

EVENT OCCURRENCE

Release to Storm System? Yes / No

Contained in Storm System? Yes / No Drainage Basin & Outfall Number? _____

EVENT RESPONSE

Response on Port Property? Yes / No Response off Port Property? Yes / No

Describe:

Injury? Yes/ No Evacuation Necessary? Yes/ No Property Damage? Yes/ No

Describe:

PERSON MAKING REPORT

NAME:

TITLE: PHONE:

COMMENTS:

Appendix C

Resource Telephone List

Resource Telephone List

Local Emergency (Police, Fire, Ambulance)		911

Port of Portland

PDX Communications Center	Emergency/Hazardous Materials Spills	503/460-4000
PDX Communications Center	Non-emergency/Incidental Spills	503/460-4747
Phil Ralston	Gen. Mgr., Environmental Operations	503/415-6331 971/409-8033 (mobile)
Daren Griffin	Gen. Mgr., Airport Operations	503/415-6195 971/255-6724 (mobile)
Port Risk Management	On-call Pager	503/548-1600
Port Public Affairs	On-call Pager	503/548-1774
Port Legal Counsel		
David Ashton	Assistant General Counsel, Environmental	503/415-6090
Misti Johnson	Assistant General Counsel	503/415-6148
Port Safety Pager	On-call Pager	503/548-1618 (pager)
Tom Peterson	Chief Engineer	503/415-6360

State, Federal & Local Reporting Agencies

Oregon State Agencies

Oregon Emergency Response System (OERS)	800/452-0311
Department of Environmental Quality (DEQ) NW Region	503/229-5263
State Health Division	503/731-4000
State Radiation Division	503/541-4014
State Department of Energy	800/221-8035
State Fire Marshal Hazardous Materials Duty Officer	503/307-1488 (pager)
State Fire Marshal Office	503/378-5210
Poison Control Center	800/452-7165

Federal Agencies

Environmental Protection Agency (EPA) Region X	800/424-4372
EPA Region X - Portland, Oregon Office	503/326-3250
National Response Center (NRC)	800/424-8802
National Oceanographic Atmospheric Administration (NOAA)	206/526-6095
National Weather Service	503/326-3720
U.S. Coast Guard Emergency Number	503/240-9300
U.S. Coast Guard Non-emergency Number	503/240-9301

Portland Local Agencies

City of Portland Bureau of Environmental Services	503-823-7180
Multnomah County Drainage District (MCDD)	503/281-5675
City of Portland Fire Department Haz-Mat Team	503/823-3946
City of Gresham Haz-Mat Team	503/618-2590
City of Tualatin Haz-Mat Team	503/629-0111
Columbia Boulevard Sewage Treatment Plant	503/823-2400

Sheriff - River Patrol

Columbia River Patrol	503/288-6788
Willamette River Patrol	503/249-7952

Port Contracted Consultants

Emergency Responders/Hazardous Materials Cleanup

Terra Hydr, Inc. (24-Hour)	503/625-4000
Hank Stukey	503/720-6590 (mobile)
Cowlitz Clean Sweep	503/247-9466

Soil and Groundwater Remediation

Apex Companies, LLC	503/924-4704

Waste Management

WasteXpress Environmental Services	503/224-3206
Veolia Environmental Services	360/260-0882

Air

Bridgewater Group, Inc.	503/675-5252

Asbestos

PBS (Oversight/Management)	503/248-1939
PAS (Abatement)	360/574-8400

Chemical Information

ChemTrec	800/424-9300
Chemical Reference Center	800/262-8200

Utilities

Northwest Natural Gas	503/226-4211
Portland General Electric	800/544-1795
Pacific Power and Light	503/682-3623
Port Utility Locator	503/548-1518 (pager)

Port Tenant Fueling Operators

ASIG		
Scott Baker	(Office)	503/249-4565
	(Direct Line)	503/249-4567
	(Mobile)	503/752-1726
Atlantic Aviation	(Office)	503/331-4220

Appendix D

Portland International Airport Drainage Plan

(PDX Storm Sewer System)

LEGEND:

SYMBOLS

- WETLAND
- IMPERVIOUS P.O.P. AIRPORT SURFACE
- IMPERVIOUS C.O.P. RIGHT OF WAY SURFACE
- VEGETATED SWALE
- STORM WATER QUIESCENT/DETENTION POND
- MATERIAL LOADING AND ACCESS AREA
- MONITORING POINT
- PORT OWNED ABOVE GROUND STORAGE TANK
- PORT OWNED UNDERGROUND STORAGE TANK
- TENANT OWNED ABOVE GROUND STORAGE TANK
- SPILL KIT LOCATION
- WATER QUALITY MANHOLE
- OIL / WATER SEPARATOR
- PUMP STATION WITH OUTLET FLOW DIRECTION
- SS12200 NPDES DESIGNATED OUTFALL NUMBER
- OUTFALL & OUTFALL NUMBER
- STORM SYSTEM FLOW VALVE
- STORM BASIN NUMBER

LINE TYPES

- VERIFIED PART OF SYSTEM
- ABANDONED PART OF SYSTEM
- UNVERIFIED PART OF SYSTEM
- SUBTERRANEAN DRAINAGE (SUBDRAIN)
- CENTERLINE OF DITCH
- (OUT) (IN) CULVERT END DESIGNATIONS
- STORM BASIN BOUNDARY
- PROPERTY LINE
- 1200COLS PERMIT BOUNDARY
- SAND FILTER

COLUMBIA RIVER

NE MARINE DRIVE

NORTH PERIMETER ROAD

RUNWAY

TERMINAL BUILDING

TAXIWAY B

TAXIWAY C

PERIMETER ROAD

NE 33RD AVE

SOUTHWEST QUADRANT

SOUTHWEST RAMP

CENTRAL RAMP

SOUTH CENTRAL RAMP

USAF RESERVE APRON

AIRTRANS CENTER

PORT OF PORTLAND

PORTLAND INTERNATIONAL AIRPORT
STORM WATER POLLUTION CONTROL MAP

0 200 400 800 1,200 1,600
SCALE IN FEET

PDX 2011-3020 1/4 (C-1)

0 1/4" 1/2" 1" 2"

COLUMBIA RIVER

NORTH PERIMETER ROAD

NE MARINE DRIVE

RUNWAY

TAXIWAY A

GA RAMP

NE AIRPORT WAY

HERTZ

AVIS

ECONOMY PARKING

EAST ECONOMY PARKING

NE AIR CARGO RD

TAXIWAY B

RUNWAY

TAXIWAY C

PORTLAND INTERNATIONAL CENTER

I-205

PDX MAINT COMPOUND

USAF RESERVE APRON

OREGON AIR NATIONAL GUARD APRON

COLWOOD GOLF COURSE

SEE INSET ON SHEET C4

NE ALDERWOOD RD

NE 82ND AVENUE

NE CORNFOOT RD

60" OUTFALL
Multnomah County Drainage District
SS12200

LEGEND:

SYMBOLS

- WETLAND
- IMPERVIOUS P.O.P. AIRPORT SURFACE
- IMPERVIOUS C.O.P. RIGHT OF WAY SURFACE
- VEGETATED SWALE
- STORM WATER QUIESCENT/DETENTION POND
- MATERIAL LOADING AND ACCESS AREA
- MONITORING POINT
- PORT OWNED ABOVE GROUND STORAGE TANK
- PORT OWNED UNDERGROUND STORAGE TANK
- TENANT OWNED ABOVE GROUND STORAGE TANK
- SPILL KIT LOCATION
- WATER QUALITY MANHOLE
- OIL / WATER SEPARATOR
- PUMP STATION WITH OUTLET FLOW DIRECTION
- SS12200 NPDES DESIGNATED OUTFALL NUMBER
- OUTFALL & OUTFALL NUMBER
- STORM SYSTEM FLOW VALVE
- STORM BASIN NUMBER

LINE TYPES

- VERIFIED PART OF SYSTEM
- ABANDONED PART OF SYSTEM
- UNVERIFIED PART OF SYSTEM
- SUBTERRANEAN DRAINAGE (SUBDRAIN)
- CENTERLINE OF DITCH
- (OUT) 48" (IN) CULVERT END DESIGNATIONS
- STORM BASIN BOUNDARY
- PROPERTY LINE
- 1200COLS PERMIT BOUNDARY
- SAND FILTER

PORT OF PORTLAND

PORTLAND INTERNATIONAL AIRPORT STORM WATER POLLUTION CONTROL MAP

0 200 400 800 1,200 1,600

SCALE IN FEET

PDX 2011-3020 2/4 (C-2)

0 1/4" 1/2" 1" 2"

LEGEND:

SYMBOLS

- WETLAND
- IMPERVIOUS P.O.P. AIRPORT SURFACE
- IMPERVIOUS C.O.P. RIGHT OF WAY SURFACE
- VEGETATED SWALE
- STORM WATER QUIESCENT/DETENTION POND
- MATERIAL LOADING AND ACCESS AREA
- MONITORING POINT
- PORT OWNED ABOVE GROUND STORAGE TANK
- PORT OWNED UNDERGROUND STORAGE TANK
- TENANT OWNED ABOVE GROUND STORAGE TANK
- SPILL KIT LOCATION
- WATER QUALITY MANHOLE
- OIL / WATER SEPARATOR
- PUMP STATION WITH OUTLET FLOW DIRECTION
- SS12200 NPDES DESIGNATED OUTFALL NUMBER
- OUTFALL & OUTFALL NUMBER
- STORM SYSTEM FLOW VALVE
- STORM BASIN NUMBER

LINE TYPES

- VERIFIED PART OF SYSTEM
- ABANDONED PART OF SYSTEM
- UNVERIFIED PART OF SYSTEM
- SUBTERRANEAN DRAINAGE (SUBDRAIN)
- CENTERLINE OF DITCH
- CULVERT END DESIGNATIONS (OUT) (IN)
- STORM BASIN BOUNDARY
- PROPERTY LINE
- 1200COLS PERMIT BOUNDARY
- SAND FILTER

TAXIWAY B
RUNWAY
TAXIWAY C
TAXIWAY F
TAXIWAY E
SOUTHWEST RAMP
SOUTHWEST QUADRANT
CENTRAL RAMP
USAF RESERVE APRON
SOUTH CENTRAL RAMP
AIRTRANS CENTER
1s
1e
1C
1E
1S
1
2
3
4
5
6
RIVERSIDE GOLF COURSE
BROADMOOR GOLF COURSE
OUTFALL MCDD OWNERSHIP MDD1
OUTFALL MCDD OWNERSHIP MDD2
OUTFALL MCDD OWNERSHIP MDD3
NE 33RD AVENUE
COLUMBIA SLOUGH
24" OUTFALL Port of Portland Outfall 2
48" OUTFALL Port of Portland SS03PP

PORT OF PORTLAND

PORTLAND INTERNATIONAL AIRPORT
STORM WATER POLLUTION CONTROL MAP

0 200 400 800 1,200 1,600
SCALE IN FEET

PDX 2011-3020 3/4 (C-3)

0 1/4" 1/2" 1" 2"

NE AIR CARGO RD

TAXIWAY B

RUNWAY

TAXIWAY C

USAF RESERVE APRON

OREGON AIR NATIONAL GUARD APRON

COLWOOD GOLF COURSE

NE CORNFOOT RD

NE ALDERWOOD RD

NE 82ND AVENUE

60" OUTFALL
Multnomah County Drainage District
SS12200

SEE INSET

PORTLAND INTERNATIONAL CENTER

NE ALDERWOOD WAY

MT ST HELENS AVE

I-205

48" OUTFALL
City of Portland
SS12000

NE COLUMBIA BLVD

PDX MAINTENANCE COMPOUND

LEGEND:

SYMBOLS

- WETLAND
- IMPERVIOUS P.O.P. AIRPORT SURFACE
- IMPERVIOUS C.O.P. RIGHT OF WAY SURFACE
- VEGETATED SWALE
- STORM WATER QUIESCENT/DETENTION POND
- MATERIAL LOADING AND ACCESS AREA
- MONITORING POINT
- PORT OWNED ABOVE GROUND STORAGE TANK
- PORT OWNED UNDERGROUND STORAGE TANK
- TENANT OWNED ABOVE GROUND STORAGE TANK
- SPILL KIT LOCATION
- WATER QUALITY MANHOLE
- OIL / WATER SEPARATOR
- PUMP STATION WITH OUTLET FLOW DIRECTION
- SS12200 NPDES DESIGNATED OUTFALL NUMBER
- OUTFALL & OUTFALL NUMBER
- STORM SYSTEM FLOW VALVE
- STORM BASIN NUMBER

LINE TYPES

- VERIFIED PART OF SYSTEM
- ABANDONED PART OF SYSTEM
- UNVERIFIED PART OF SYSTEM
- SUBTERRANEAN DRAINAGE (SUBDRAIN)
- CENTERLINE OF DITCH
- (OUT) (IN) CULVERT END DESIGNATIONS
- STORM BASIN BOUNDARY
- PROPERTY LINE
- 1200COLS PERMIT BOUNDARY
- SAND FILTER

PORT OF PORTLAND

PORTLAND INTERNATIONAL AIRPORT
STORM WATER POLLUTION CONTROL MAP

0 200 400 800 1,200 1,600
SCALE IN FEET

PDX 2011-3020 4/4 (C-4)

0 1/4" 1/2" 1" 2"

Appendix E

Tank Loading and Unloading Procedure and Vehicle Refueling Procedure

UNLEADED & DIESEL PRODUCTS
FUELING INSTRUCTIONS

SAFETY TIPS FOR REFUELING

- ➲ No smoking within 25 feet of the fuel island
- ➲ Make sure there is a fully charged fire extinguisher readily available
- ➲ Know the location of the emergency shut off valves before pumping fuel
- ➲ Never leave your vehicle unattended while refueling

- **Pull the vehicle up to the pump of choice**
- **Turn off the vehicle's ignition and set the parking brake**
- **Insert the nozzle into the spout of the vehicle**
- **Leave the nozzle off but flip the pump handle into the on position**
- **Insert the chip key into the fuel pump and follow the prompts**

  1. **Enter your 4-digit PIN number**
  2. **Enter the odometer reading to the nearest mile OR hour (do not enter any tenths)**
  3. **Enter the pump number to be used**
  4. **Begin pumping of the fuel**
  5. **When the nozzle clicks off, turn the pump lever to the OFF position**

     DO NOT TOP OFF!

- **Return the nozzle to the pump**
- **Place absorbent on any spilled or dribbled product fitting**
- **Pick up any absorbent you put down and place it in the dirty absorbent container.**

IF THERE ARE PROBLEMS FUELING, CONTACT THE MAINTENANCE OPERATIONS CENTER AT 503-460-4683

ANY SPILLS (BEYOND MINOR DRIPS) AND/OR EMERGENCIES SHOULD BE REPORTED TO THE PDX COMM. CENTER AT 503-460-4000

For additional Information: refer to the PDX SPCC Plan and associated procedures (available on the Port's Navigator intranet site on the Environmental page) or contact Aviation Environmental if you have questions. **Updated 04-28-2011.**

TANK LOADING AND UNLOADING PROCEDURES

If there is a spill, contact the PDX Comm. Center at 503-460-4000 to implement spill response.

1. Ensure the tank trunk is accurately spotted, brakes are set and wheels are chocked. Drivers are NOT ALLOWED to remove wheel chocks until all lines are disconnected.

2. The driver must remain with the vehicle during the entire loading or unloading period.

3. No flame of any kind is permitted near the tank truck or within the vapor area around the tank truck. Smoking is strictly forbidden within this area. Only spark-proof tools are to be used.

4. Make sure the tank being loaded is vented before connecting the loading line.

5. Read the level indicator or visually inspect the receiving tank to be sure sufficient space is available to receive the material being transferred.

6. Attach ground trap to bumper of tank truck, if required. Place catch pans in position under tank truck connections as needed to catch any liquid that may leak during the transfer

7. Place spill mats over any nearby storm drains that are in the flow path of a potential spill.

8. Remove the tank truck unloading line closure carefully. If significant leakage occurs, contact your supervisor for instructions.

9. Be sure connections between dispensing and receiving tanks are secured before opening the valves for liquid transfer.

10. Start pump and check to be sure there is no leakage at any of the connections or anywhere along the transfer lines. If leak is present, immediately stop the pump, shut the valves, and repair the leak.

11. After liquid has been transferred, stop pump, close all valves, disconnect loading or unloading line, replace closures on valve lines, inspect the lowermost drain and outlets of vehicle for leakage and correct as necessary, and release truck/tank car.

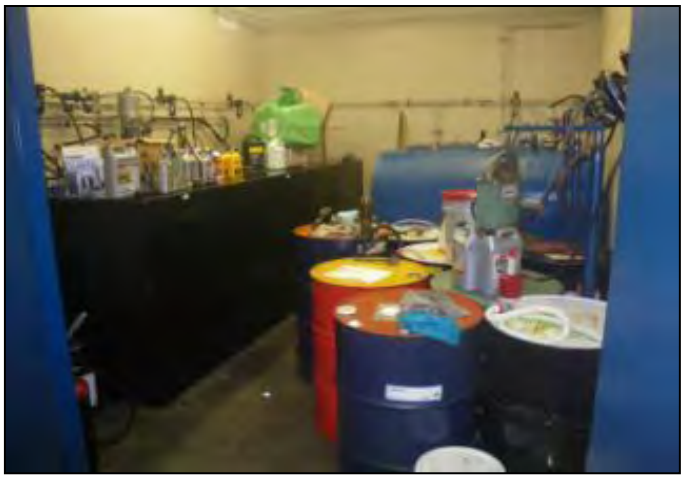
12. Prior to departure, the driver of a tank truck is required to examine the lowest drain and other outlets for leakage. Where necessary, outlets are adjusted to prevent leakage in transit.

13. **In the event of a spill :**
    - **Non-Emergency/Incidental Spills**: use materials in the spill kit to contain and absorb spill. Place used absorbent in the used absorbent container.
    - **Emergency/Hazardous Material:** In the event of a spill of hazardous material, a spill you need assistance with, or any emergency, **call the PDX Comm. Center at 503-460-4000 to implement the Spill Response Plan and/or Emergency Response.**

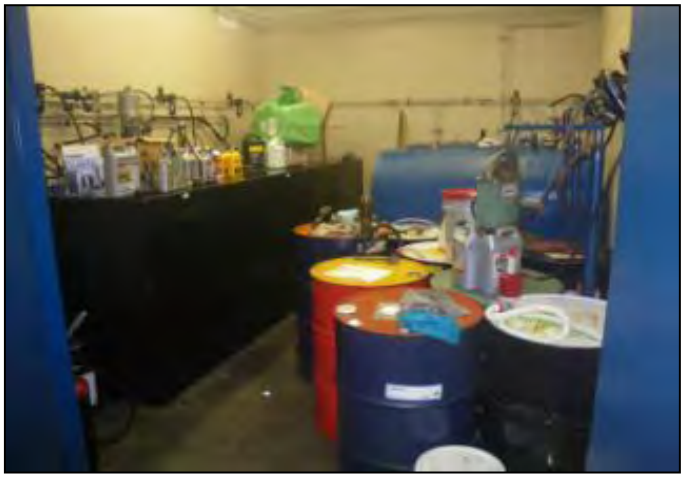
For additional Information: refer to the PDX SPCC Plan and associated procedures (available on the Port's Navigator intranet site on the Environmental page) or contact Aviation Environmental if you have questions. **Updated 04-28-2011.**

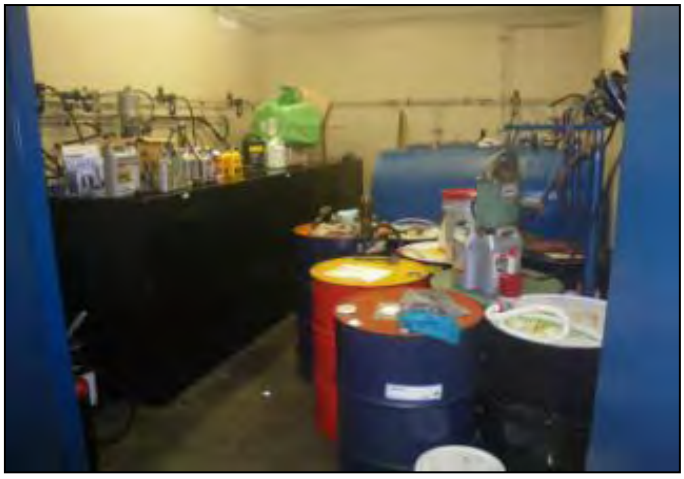
Appendix F

Tank/Area Data Sheets

TANK ID:	Tank 357
Also Known As:	Tanks PDX-10, PDX-13, PDX-14, and PDX-15 (each of four compartments)
Location:	Maintenance Facility Oil Room
Shown On:	Figure C-4
Contents:	Hydraulic Oil (250 gallons) Gear Oil (250 gallons) Coolant Oil (250 gallons) Motor Oil (500 gallons)
Capacity:	1,250 gallons total
Material:	Steel
Type:	Double-Walled AST
Secondary Containment:	Double-Wall; Building Interior
Description of Drainage from Secondary Containment:	Intrinsic secondary containment does not drain. Tertiary containment provided by Oil Room - floor drain inside room is normally plugged and drains to oil-water separator and sanitary sewer.
Fault Analysis:	Failure of primary containment will flow to the interstitial space of the double-walled containment system. In addition, spills within the oil room would be contained by the room itself (floor drain is plugged and building structure would prevent spills from exiting building).
Engineering Controls:	Visual fill gauges, tank sited indoors.
Corrosion Protection:	None - AST indoors.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located inside the Maintenance Facility (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 358
Also Known As:	Tank PDX-11
Location:	Maintenance Facility Oil Room
Shown On:	Figure C-4
Contents:	Automatic Transmission Fluid
Capacity:	275 gallons
Material:	Steel
Type:	Single-walled AST
Secondary Containment:	Located within Facility Oil Room
Description of Drainage from Secondary Containment:	Secondary containment provided by Oil Room - floor drain inside room is normally plugged and drains to oil-water separator and sanitary sewer.
Fault Analysis:	Spills within the oil room would be contained by the room itself (floor drain is plugged and building structure would prevent spills from exiting building).
Engineering Controls:	Visual fill gauge, tank sited indoors.
Corrosion Protection:	None - AST indoors.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located inside the Maintenance Facility (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 12
Location:	Maintenance Facility Oil Room
Shown On:	Figure C-4
Contents:	Antifreeze
Capacity:	275 gallons
Material:	Steel
Type:	Single-walled AST
Secondary Containment:	Located within Facility Oil Room
Description of Drainage from Secondary Containment:	Secondary containment provided by Oil Room - floor drain inside room is normally plugged and drains to oil-water separator and sanitary sewer.
Fault Analysis:	Spills within the oil room would be contained by the room itself (floor drain is plugged and building structure would prevent spills from exiting building).
Engineering Controls:	Visual fill gauge, tank sited indoors.
Corrosion Protection:	None - AST indoors.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located inside the Maintenance Facility (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Maintenance Facility Drum Storage
Location:	Maintenance Facility Oil Room and Vehicle Service Bays
Shown On:	Figure C-4 (Shops and Administration Building)
Contents:	Various Petroleum Products (Greases, Oils)
Capacity:	Up to 12 55-gallon drums
Material:	Steel
Type:	55-gallon drums
Secondary Containment:	Oil Room drum storage contained by Oil Room. Drums used in service bays are stored on spill pallets.
Description of Drainage from Secondary Containment:	Floor drains inside Maintenance Facility drain to oil-water separator and sanitary sewer. Floor drain in Oil Room is plugged.
Fault Analysis:	Spills from drums most likely to occur during dispensing from in-service drums or during moving of drums. Such activities are attended by trained Port personnel who would respond immediately to spill event with available spill kit materials. During normal use spills would be contained by Oil Room or spill pallets.
Engineering Controls:	Oil-water separator, spill pallets.
Corrosion Protection:	None - drums stored indoors.
Integrity Testing:	Not applicable to drums
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Drums are located inside the Maintenance Facility (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Drums are not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	None. Spill kit materials available in vicinity of drum storage area.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Haz Mat Storage Building Drum Storage
Location:	Hazardous Materials Storage Building
Shown On:	Figure C-4 (Hazardous Materials Storage Building)
Contents:	Various Petroleum Products (Fuels, Oils, Greases)
Capacity:	Up to Six 55-gallon drums
Material:	Steel
Type:	55-gallon drums
Secondary Containment:	Drums located within contained building.
Description of Drainage from Secondary Containment:	Floor drains inside Haz Mat building drain to oil-water separator and containment tank.
Fault Analysis:	Spills from drums most likely to occur during dispensing from in-service drums or during moving of drums. Such activities are attended by trained Port personnel who would respond immediately to spill event with available spill kit materials. Spills from drums may flow to the building floor drains which are connected to an oil-water separator and a spill containment tank.
Engineering Controls:	Oil-water separator and containment tank.
Corrosion Protection:	None - drums stored indoors.
Integrity Testing:	Not applicable to drums
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Drums are located inside the Haz Mat Storage Building (kept secured). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Drums are not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	None. Spill kit materials available in building.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 279
Also Known As:	Tank PDX-9
Location:	Maintenance Facility
Shown On:	Figure C-4
Contents:	Diesel Fuel
Capacity:	500 gallons
Material:	Steel
Type:	Double-Walled AST
Secondary Containment:	Double-Wall
Description of Drainage from Secondary Containment:	Intrinsic secondary containment does not drain.
Fault Analysis:	Failure of primary containment will flow to the interstitial space of the double-walled containment system.
Engineering Controls:	Visual fill gauges.
Corrosion Protection:	Painted double-wall AST not in direct contact with ground. Above-ground piping.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 279 Ancillary Day Tank
Location:	Maintenance Facility Emergency Generator Room
Shown On:	Figure C-4
Contents:	Diesel Fuel
Capacity:	100 gallons
Material:	Steel
Type:	Single-Walled AST
Secondary Containment:	Located inside building (Emergency Generator Room)
Description of Drainage from Secondary Containment:	Emergency Generator Room does not drain.
Fault Analysis:	Failure of primary containment will flow to floor of the Emergency Generator Room.
Engineering Controls:	Pump cut-off devices
Corrosion Protection:	None - tank located indoors.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Tank located within building. Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	None
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)

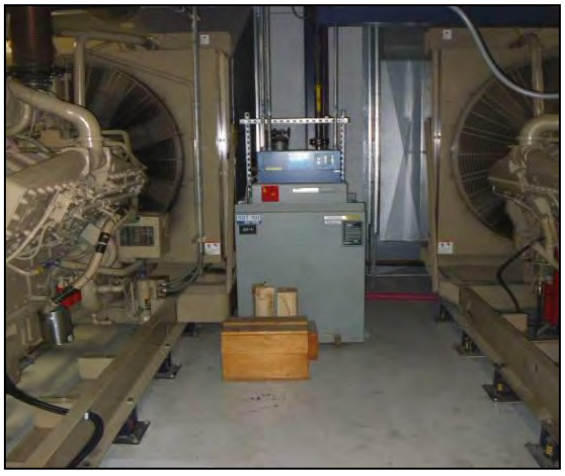
TANK ID:	Tank 273
Location:	Maintenance Facility
Shown On:	Figure C-4
Contents:	Used Oil
Capacity:	500 gallons
Material:	Steel
Type:	Double-Walled AST
Secondary Containment:	Double-Wall
Description of Drainage from Secondary Containment:	Intrinsic secondary containment does not drain.
Fault Analysis:	Failure of primary containment will flow to the interstitial space of the double-walled containment system.
Engineering Controls:	Visual fill gauges.
Corrosion Protection:	Painted double-wall AST not in direct contact with ground. Above-ground piping.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Bollards protect tank from vehicle traffic. Tank is not located in areas accessible by the public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 22
Location:	Fire Training Facility
Shown On:	Figure C-1
Contents:	Jet Fuel
Capacity:	2,000 gallons
Material:	Steel
Type:	Single-Walled AST
Secondary Containment:	Concrete berm with sufficient capacity to hold contents of largest tank and precipitation from 25-year 24-hour storm event (See attached containment capacity worksheet).
Description of Drainage from Secondary Containment:	Drainage from secondary containment curb flows to adjacent oil-water separator and to holding tank for subsequent disposal.
Fault Analysis:	Failure of primary containment will flow to the concrete bermed containment vault which is connected via a valve to the adjacent oil-water separator system. The oil-water separator discharges to a nearby tank for collection and transport to sanitary waste drain or off-site management.
Engineering Controls:	Overfill protection, emergency shut-off valves.
Corrosion Protection:	Painted single-wall AST. Buried piping to have cathodic protection.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years. Inspect any exposed piping for deterioration.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	
Notes:	

TANK ID:	Tank 23
Location:	Fire Training Facility
Shown On:	Figure C-1
Contents:	Jet Fuel
Capacity:	2,000 gallons
Material:	Steel
Type:	Single-Walled AST
Secondary Containment:	Concrete berm with sufficient capacity to hold contents of largest tank and precipitation from 25-year 24-hour storm event (See attached containment capacity worksheet).
Description of Drainage from Secondary Containment:	Drainage from secondary containment curb flows to adjacent oil-water separator and to holding tank for subsequent disposal.
Fault Analysis:	Failure of primary containment will flow to the concrete bermed containment vault which is connected via a valve to the adjacent oil-water separator system. The oil-water separator discharges to a nearby tank for collection and transport to sanitary waste drain or off-site management.
Engineering Controls:	Overfill protection, emergency shut-off valves.
Corrosion Protection:	Painted single-wall AST. Buried piping to have cathodic protection.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years. Inspect any exposed piping for deterioration.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	
Notes:	The ownership of Tank 23 is currently unknown and is being determined – but is being included in this SPCC Plan for completeness

TANK ID:	Tank 24
Location:	Fire Training Facility
Shown On:	Figure C-1
Contents:	Recycled Jet Fuel
Capacity:	400 gallons
Material:	Steel
Type:	Single-Walled AST
Secondary Containment:	Concrete berm with sufficient capacity to hold contents of largest tank and precipitation from 25-year 24-hour storm event (See attached containment capacity worksheet).
Description of Drainage from Secondary Containment:	Drainage from secondary containment curb flows to adjacent oil-water separator and to holding tank for subsequent disposal.
Fault Analysis:	This tank is not currently in use. While operating, failure of primary containment will flow to the concrete bermed containment vault which is connected via a valve to the adjacent oil-water separator system. The oil-water separator discharges to a nearby tank for collection and transport to sanitary waste drain or off-site management.
Engineering Controls:	None
Corrosion Protection:	Painted single-wall AST not in direct contact with ground.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	
Notes:	The tank is not currently in use and associated piping has been disconnected from service points.

TANK ID:	Tank 272
Location:	PDX Fire Department
Shown On:	Figure C-1
Contents:	Diesel Fuel
Capacity:	2,000 gallons
Material:	Steel
Type:	Double-Walled AST
Secondary Containment:	Double-Wall
Description of Drainage from Secondary Containment:	Intrinsic secondary containment does not drain.
Fault Analysis:	Failure of primary containment will flow to the interstitial space of the double-walled containment system.
Engineering Controls:	Overfill protection, emergency shut-off valves.
Corrosion Protection:	Painted double-wall AST not in direct contact with ground. Above-ground piping.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years. Inspect any exposed piping for deterioration.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Bollards protect tank from vehicle traffic. Tank is not located in areas accessible by the public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

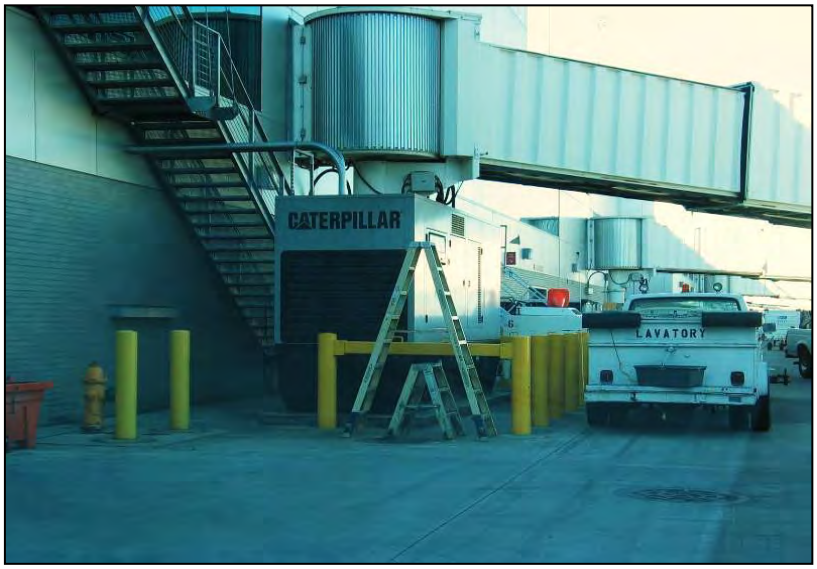
TANK ID:	Tank 282
Location:	Central Utility Plant, Emergency Generator Room
Shown On:	Figure C-3
Contents:	Diesel Fuel
Capacity:	150 gallons
Material:	Steel
Type:	Single-walled AST with attached secondary containment shell.
Secondary Containment:	Outer shell surrounding tank (231 gallon capacity). AST Located indoors
Description of Drainage from Secondary Containment:	Secondary containment shell does not drain.
Fault Analysis:	Spills within the oil room would be contained by the room itself (building structure would prevent spills from exiting building).
Engineering Controls:	Overfill protection
Corrosion Protection:	None - AST indoors.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located inside the Central Utility Plant (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 283
Location:	Central Utility Plant, Emergency Generator Room
Shown On:	Figure C-3
Contents:	Diesel Fuel
Capacity:	150 gallons
Material:	Steel
Type:	Single-walled AST with attached secondary containment shell.
Secondary Containment:	Outer shell surrounding tank (231 gallon capacity). AST Located indoors
Description of Drainage from Secondary Containment:	Secondary containment shell does not drain.
Fault Analysis:	Spills within the oil room would be contained by the room itself (building structure would prevent spills from exiting building).
Engineering Controls:	Overfill protection
Corrosion Protection:	None - AST indoors.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located inside the Central Utility Plant (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 284
Location:	Central Utility Plant, Emergency Generator Room
Shown On:	Figure C-3
Contents:	Diesel Fuel
Capacity:	150 gallons
Material:	Steel
Type:	Single-walled AST with attached secondary containment shell.
Secondary Containment:	Outer shell surrounding tank (231 gallon capacity). AST Located indoors
Description of Drainage from Secondary Containment:	Secondary containment shell does not drain.
Fault Analysis:	Spills within the oil room would be contained by the room itself (building structure would prevent spills from exiting building).
Engineering Controls:	Overfill protection
Corrosion Protection:	None - AST indoors.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located inside the Central Utility Plant (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 285
Location:	Central Utility Plant, Emergency Generator Room
Shown On:	Figure C-3
Contents:	Diesel Fuel
Capacity:	150 gallons
Material:	Steel
Type:	Single-walled AST with attached secondary containment shell.
Secondary Containment:	Outer shell surrounding tank (231 gallon capacity). AST Located indoors
Description of Drainage from Secondary Containment:	Secondary containment shell does not drain.
Fault Analysis:	Spills within the oil room would be contained by the room itself (building structure would prevent spills from exiting building).
Engineering Controls:	Overfill protection
Corrosion Protection:	None - AST indoors.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located inside the Central Utility Plant (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 389
Location:	Deicing Treatment Plant
Shown On:	Figure C-5
Contents:	Diesel
Capacity:	980 gallons
Material:	Steel
Type:	Double-walled steel emergency generator fuel tank
Secondary Containment:	Intrinsic secondary containment
Description of Drainage from Secondary Containment:	Secondary containment shell does not drain.
Fault Analysis:	Failure of primary containment will flow to the interstitial space of the double-walled containment system.
Engineering Controls:	Visual fill gauges and interstitial leak detection.
Corrosion Protection:	Tank not exposed to atmospheric conditions (in weather-rated enclosure) and not in direct contact with ground.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located inside the Maintenance Facility (kept secured when site not attended). Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Tank 384
Location:	North side of C Concourse
Shown On:	Figure C-2
Contents:	Diesel
Capacity:	500 Gallons
Material:	Steel
Type:	Double-walled steel emergency generator fuel tank
Secondary Containment:	Intrinsic secondary containment
Description of Drainage from Secondary Containment:	Secondary containment shell does not drain.
Fault Analysis:	Failure of primary containment will flow to the interstitial space of the double-walled containment system.
Engineering Controls:	Visual fill gauges and interstitial leak detection.
Corrosion Protection:	Tank not exposed to atmospheric conditions (in weather-rated enclosure) and not in direct contact with ground.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	AST is located in restricted area of terminal building. Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tank is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available in vicinity of tank.
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Vehicle 16232
Location:	Service vehicle, parked in Equipment Storage Building
Contents:	Diesel Fuel
Capacity:	100 gallons
Material:	Steel
Type:	Single-Walled vehicle-mounted service tanks
Secondary Containment:	Active containment (spill kit available on vehicle). Equipment Storage building floor drain is connected to vault and storage tank.
Description of Drainage from Secondary Containment:	Spills from service tanks would drain to the ground in the immediate vicinity of the vehicle, active secondary containment (use of spill kit) would be used to control spill.
Fault Analysis:	Spills from service tanks most likely to occur during loading of tanks or dispensing fuel. Both activities are attended by trained Port personnel who would respond immediately to spill event with spill kit materials available on the vehicle.
Engineering Controls:	Automatic closing dispenser nozzle. Tanks mounted to allow easy visual inspection.
Corrosion Protection:	Tank not in contact with the ground.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Vehicle stored within Equipment Storage Building when not in use.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available on vehicle at all times.
Spill Response/Cleanup Procedures.	Follow General Aviation Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Vehicle 17034
Location:	Service vehicle, parked in Equipment Storage Building
Contents:	Diesel Fuel
Capacity:	100 gallons
Material:	Steel
Type:	Single-Walled vehicle-mounted service tanks
Secondary Containment:	Active containment (spill kit available on vehicle). Equipment Storage building floor drain is connected to vault and storage tank.
Description of Drainage from Secondary Containment:	Spills from service tanks would drain to the ground in the immediate vicinity of the vehicle, active secondary containment (use of spill kit) would be used to control spill.
Fault Analysis:	Spills from service tanks most likely to occur during loading of tanks or dispensing fuel. Both activities are attended by trained Port personnel who would respond immediately to spill event with spill kit materials available on the vehicle.
Engineering Controls:	Automatic closing dispenser nozzle. Tanks mounted to allow easy visual inspection.
Corrosion Protection:	Tank not in contact with the ground.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Vehicle stored within Equipment Storage Building when not in use.
Other Applicable Spill Prevention Measures:	Follow Tank Loading and Unloading Procedures (Appendix E). Spill kit materials available on vehicle at all times.
Spill Response/Cleanup Procedures.	Follow General Aviation Airport Spill Response Procedures (Appendix D)
Photograph:	

TANK ID:	Main Terminal Food Wastes (Communal Grease Vat)
Location: **Shown On:**	Adjacent to Main Terminal (Outside of Food Court) Figure C-2
Contents:	Vegetable Oil
Capacity:	250 gallons
Material:	Communal Vat = Steel with Poly Lid
Type:	Communal Vat = Portable (Rolling) Vat Tank
Secondary Containment:	Communal Vat contained in sloped loading dock with drainage to sanitary sewer. Area is beneath cover.
Description of Drainage from Secondary Containment:	Spills at Communal Vat drains into sanitary sewer.
Fault Analysis:	Spills associated with Communal Vat are likeliest to occur during transfer of vegetable oil (grease) into tank - spills would be limited to loading dock.
Engineering Controls:	The communal grease vat is filled manually and the level of oil in the tank is visible during transfers.
Corrosion Protection:	Tank is not in direct contact with the ground.
Integrity Testing:	Not required for this tank. Follow STI SP001 Standard.
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Tanks are not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	Spill kit materials available at all times.
Spill Response/Cleanup Procedures.	Follow General Aviation Airport Spill Response Procedures (Appendix D)

Photographs:

OIL-FILLED EQUIPMENT	PDX (CUP) Oil Filled Regulators (6)
Location:	Central Utility Plant, Oil Regulator Room
Shown On:	Figure C-3
Contents:	Dielectric Fluid
Capacity:	4 @ 165 gallons; 1 @ 178 gallons; 1 @ 160 gallons
Material:	Steel
Type:	Regulator
Secondary Containment:	The oil regulators are housed inside a room with a concrete floor and a caulked steel berm segregates the oil regulators from possible building exits. The containment area dimensions are approximately 30' x 30' x 2" or a total volume of approximately 1,122 gallons.
Description of Drainage from Secondary Containment:	N/A
Fault Analysis:	Failure of primary regulator containment would flow to the bermed area of the Oil Regulator room and would be contained fully within the building. Containment volume is well in excess of needed volume.
Engineering Controls:	N/A (oil-filled equipment; not oil storage)
Corrosion Protection:	N/A (oil-filled equipment; not oil storage); located indoors.
Integrity Testing:	N/A (oil-filled equipment; not oil storage)
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Regulators are located within secured building. Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Regulators are not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	None
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)
Photograph:	

OIL-FILLED EQUIPMENT PDX Transformers (16)

Location:	Central Utility Plant (5); Terminal North (1); Concourse E (3); Concourse D (2); Concourse C (2); Concourse B (1); Parking (2)
Shown On:	Figures C-2 and C-3
Contents:	Transformer Fluid
Capacity:	Transformer 1359002345 = 544 gallons (CUP North) Transformer 1359002346 = 544 gallons (CUP North) Transformer 1359002365 = 1,045 gallons (CUP South) Transformer HBB5445-001T = 753 gallons (CUP South) Transformers T2B and T3B = 204 gallons each Transformer ET-E = 188 gallons Transformers TE-A and TE-B = 290 gallons each Transformer TDA = 211 gallons Transformer TDB = 306 gallons Transformers TCA and TCB = 481 gallons each Transformer USM1 = 240 gallons Transformer P1-A = 550 gallons Transformer P1 = 275 gallons
Material:	Steel
Type:	Transformer
Secondary Containment:	Active containment (spill kits available in vicinity of transformers and on service vehicles). Transformers other than 1359002345, 1359002346, 1359002365, and HBB5445-001T are located indoors or within containment curbs that have capacity greater than the enclosed transformers.
Description of Drainage from Secondary Containment:	N/A
Fault Analysis:	Failure of primary transformer containment would flow to ground in vicinity of transformer. Transformers other than 1359002345, 1359002346, 1359002365, and HBB5445-001T are indoors or have containment curbs. Flow in vicinity of remaining transformers serviced by storm drain outfitted with insert maintained in the closed position.
Engineering Controls:	N/A (oil-filled equipment; not oil storage)
Corrosion Protection:	N/A (oil-filled equipment; not oil storage)
Integrity Testing:	N/A (oil-filled equipment; not oil storage)
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Transformers are is not located in areas accessible by public.
Other Applicable Spill Prevention Measures:	None
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)

Continued on Next Page

Photographs:

CUP North Courtyard:
1359002345 and 1359002346

CUP South Courtyard: HBB5445-001T
and 1359002365

Terminal N. Bag Tunnel Rm. T1344B:
T2B (335004) and T3B (335005)

Concourse E at gate E-1
Rm. T1550A: ET-E

Parking Structure
1st Flr. SW Corner
RM 1205B: P-1

Concourse E at gate E-1
Rm. E1000: TE-A and TE-B

Concourse D at Gate D-9
Rm. D1620: TDA and TDB

Parking Structure 1st Flr. SW
Corner RM 1205A: P-1A

ConcourseB, 1st Fl.
Rm. B1110A: USM1

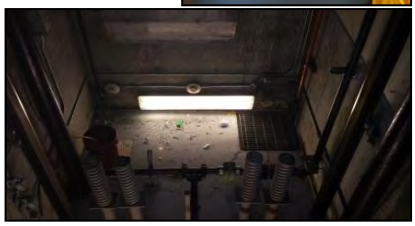
Concourse C, West at Gate C-
15, Rm. C1080: TCA and TCB

Operating Equipment (Elevator Tanks)

Location:	Main Terminal (9); A Concourse (1); B Concourse (1); C Concourse (4); D Concourse (6); E Concourse (2); Building 8855 (1)
Shown On:	Figure C-2 and C-6
Contents:	Hydraulic Oil
Capacity:	ELEVT01 = 110 gallons ELEVT02 = 110 gallons ELEVT03 = 110 gallons ELEVT05 = 165 gallons ELEVTF07 = 330 gallons ELEVT08 = 220 gallons ELEVT09 = 115 gallons ELEVT10 = 165 gallons ELEVT29 = 110 gallons ELEVA03 = 171 gallons ELEVB01 = 100 gallons ELEVC06 = 165 gallons ELEVCF08 = 171 gallons ELEVCF16 = 180 gallons ELEVC18 = 100 gallons ELEVD01 = 180 gallons ELEVDF02 = 265 gallons ELEVD03 = 160 gallons ELEVD09 = 90 gallons ELEVD10 = 100 gallons ELEVD11 = 90 gallons ELEVE01 = 80 gallons ELEVE06 = 100 gallons Building 8855 = 100 gallons
Material:	Steel
Type:	Elevator Hydraulic Reservoirs
Secondary Containment:	Operating equipment (hydraulic reservoirs) are exempt from sized secondary containment requirements. Reservoirs, however, are located within buildings and releases would be contained on building floors before oil could exit from buildings. Elevator jacks located in pits. Drains in vicinity of pits all flow to sanitary sewer.
Description of Drainage from Secondary Containment:	N/A
Fault Analysis:	Failure of the reservoir tanks is unlikely, but would result in spillage of hydraulic oil onto the floor of the associated mechanical room. Several mechanical rooms are near to exterior doors and large spills could reach outdoor areas (ELEVT1, ELEVT2, ELEVT5, ELEVT9, ELEVT10, ELEVD1, ELEVD3, ELEVC6, ELEVCF16). Release from elevator jacks would be limited to pits. Several pits have pumped sumps that discharge to the sanitary sewer (ELEVT5, ELEVT7, ELEVT8, ELEVT9, ELEVT10, ELEVDF2, ELEVC6, ELEVCF8, ELEVCF16, ELEVC18) or are elevated pits that can leak to indoor areas (ELEVT1, ELEVT3, ELEVE1).
Engineering Controls:	N/A (oil-filled equipment; not oil storage)
Corrosion Protection:	N/A (oil-filled equipment; not oil storage)
Integrity Testing:	N/A (oil-filled equipment; not oil storage)
Inspections and Records:	Monthly visual inspections, records kept minimum 3 years.
Security:	Access to PDX is controlled by fencing and secure doors and/or gated entrances consistent with requirements for Homeland Security. Port provides 24-hour security monitoring of PDX. Operating equipment not accessible by public.
Other Applicable Spill Prevention Measures:	None
Spill Response/Cleanup Procedures.	Follow Portland International Airport Spill Response Procedures (Appendix D)

Photographs:

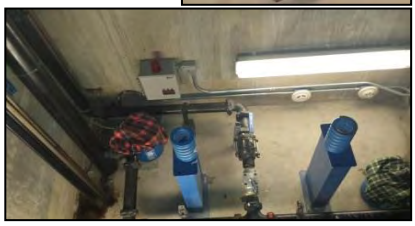
Elevator A03



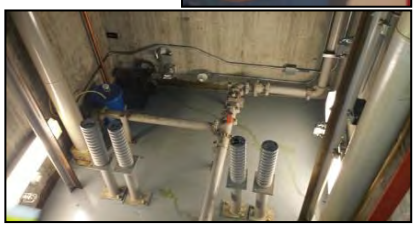
Elevator B01

Elevator C06

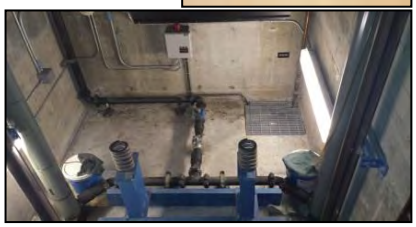
Elevator C18



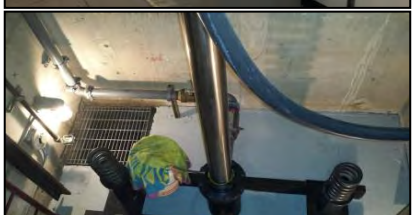
Elevator CF08



Elevator CF16



Elevator D01

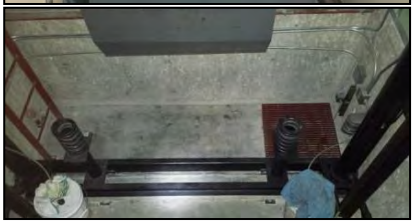


Elevator D03

Elevator D09

Elevator D10

Elevator D11

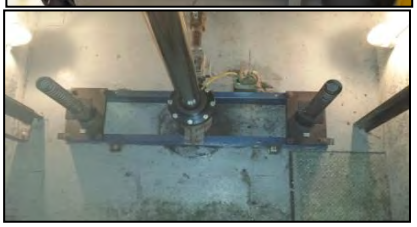


Building 8855 Elevator

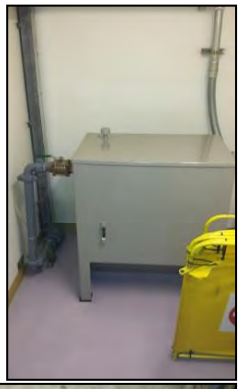
Elevator DF02

Elevator E01

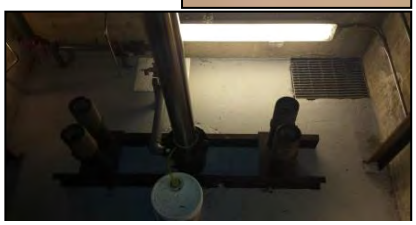
Elevator E06



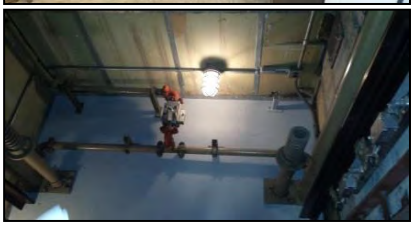
Elevator T01



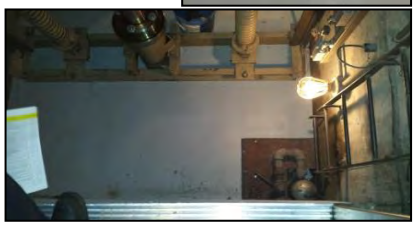
Elevator T02



Elevator T03

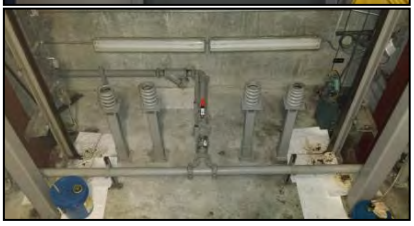


Elevator T05

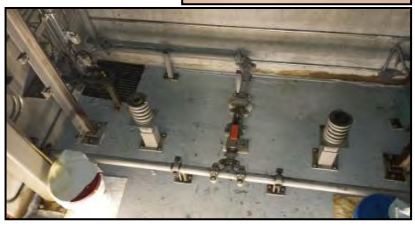


Elevator TF07

Elevator T08



Elevator T09



Elevator T10

Elevator T29