

Portland Harbor Natural Resource Damage Assessment

Phase 2: Allocation Summary Memo for the Port of Portland

1.0 INTRODUCTION

The Port of Portland (Port), both an owner and operator of sites in Portland Harbor, has engaged in activities resulting in releases of substances of concern. As part of the Portland Harbor natural resource damage assessment (NRDA) Phase 2 process, and for settlement purposes only, the Trustee Council developed a party-specific allocation of natural resource damages liability for 49 sites with which the Port is associated: 8, 13, 17, 18, 21, 22, 24, 47, 48, 71, 73, 76L, 108, 127, 133, 136, 143, 144, 157, 160, 163, 164, 165, 171, 175, 181, 182, 186, 188, 191, 195, 197, 207, 218, 222, 231, 232, 234, 236, 237, 238, 248, 249, 250, 263, 277L, 303, 309, 596, and 597.¹ That liability is determined in units of discounted service acre-years (DSAYs). Based on the information gathered throughout the Phase 2 process, methods described in the Trustee Council's allocation methodology report, and data and assumptions described below, the Port of Portland's liability is calculated to be 199.2 DSAYs.

This memorandum summarizes the information the Trustee Council utilized to develop the allocation, and is organized as follows:

- ❖ Section 2 provides background information.
- ❖ Section 3 describes general operations at the Port's sites.
- ❖ Section 4 outlines the Port's activities at their sites.
- ❖ Section 5 is a list of references.

¹ The allocation presented in this memorandum is limited to an allocation of natural resource damages liability by the Trustee Council and does not inform or have any application relative to other environmental liabilities associated with the Portland Harbor Superfund Site, including but not limited to remedial liability. The use of "allocation" or "liability" in this memorandum refers only to the Trustee Council's settlement-oriented allocation of natural resource damages liability.

2.0 OVERVIEW OF PORT SITES

Exhibit 2-1 is a map of the Port's sites included in their party-specific allocation, and Exhibits 2-2 and 2-3 outline background information for each of these sites. The relevant tax lot parcels are described in Appendix A of the Consent Decree associated with the settlement of natural resource damages for these parcels.

EXHIBIT 2-1 MAP OF PORT SITES

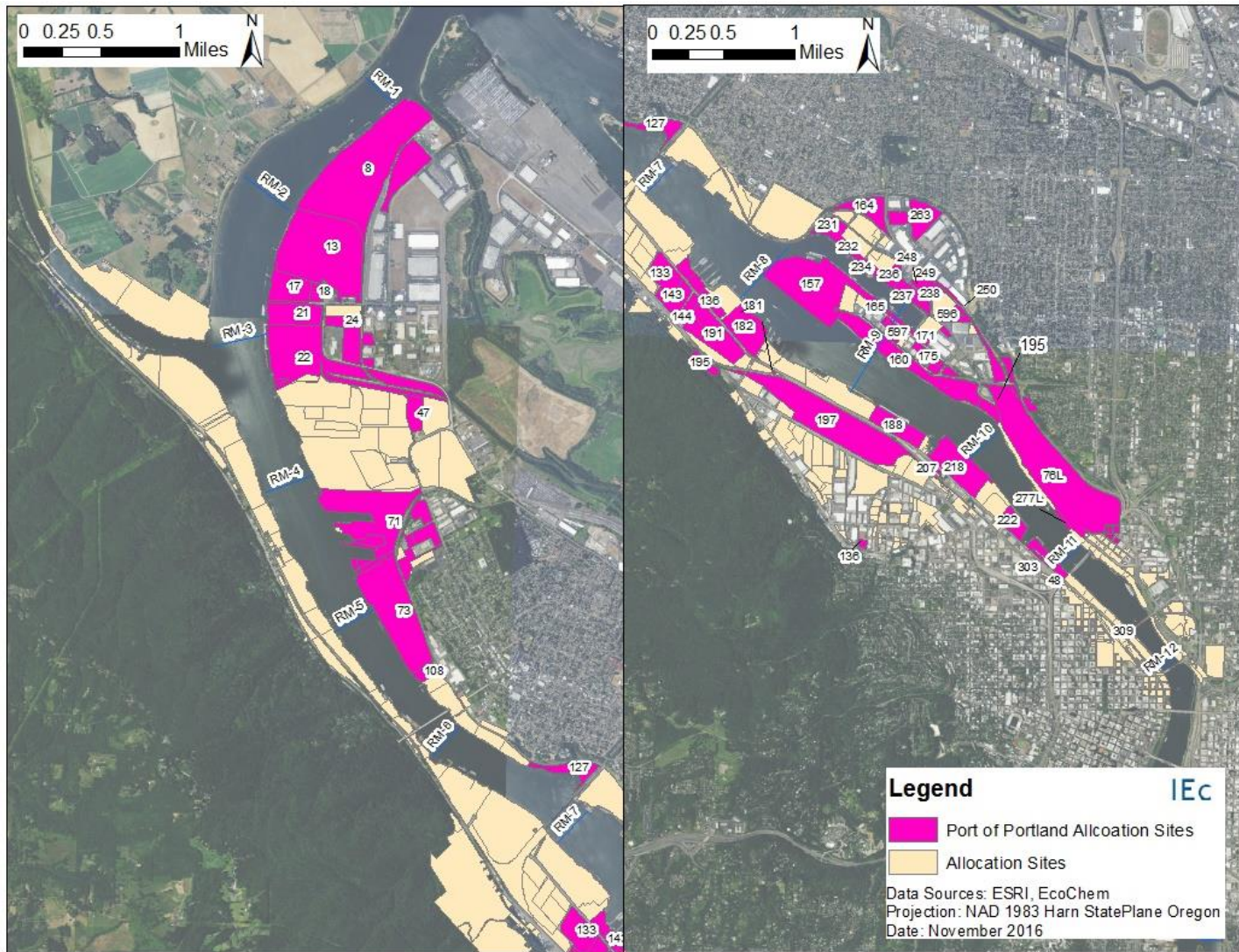


EXHIBIT 2-2 PORT OWNER/OPERATOR SITES BACKGROUND INFORMATION

SITE ID	ADDRESS¹	CURRENT OWNER	PORT OWNER/OPERATOR YEARS	ACREAGE
8	15660 N. Lombard St.	Port of Portland	1971—Present	223 acres
71	11040 N. Lombard St	Port of Portland	1971—Present	121 acres
127	N. Edgewater St	Metro (1996—Present)	1903—1953	9 of 25 total site acres
157	5555 N. Channel Ave	Cascade General (2000—Present)	1922—2000	125 acres
160	N. Channel & N. Lagoon Ave	Port of Portland	1966, 1967—Present	71 acres
165	5420 N. Lagoon Ave	Port of Portland	1922—Present	2.5 acres
218	NW Front Ave	Port of Portland	1971—Present	52 acres
222	2400 NW Front Ave	City of Portland (2004—Present)	1971-2004	16 acres
234	6208 N. Ensign St.	Port of Portland	1958—Present	6.4 acres
237	5949 N. Basin Ave	Becker Trucking LLC (2005—Present)	1958—2005	7.5 acres
303	NW Front Ave & NW Riverscape St.	Riverscape LLC (2003—Present)	1971—2003	13 acres

Note.

1. All addresses located in Portland, OR.

EXHIBIT 2-3 PORT OWNER SITES BACKGROUND INFORMATION

SITE ID	ADDRESS^{1,2}	PORT OWNERSHIP START DATE	PORT OWNERSHIP END DATE	ACREAGE
13	14400 N Rivergate Blvd	1943	1968	145
17	14003 N Rivergate Blvd	1943	1968	28
18	14025 N Rivergate Blvd	1960	1970	5.24
21	13939 N Rivergate Blvd	1941	1963	29.95
22	13035 - 1333 N Rivergate Blvd	1943	1968	9.88
24	13940 N Rivergate Blvd	1941	1976	9.88
47	Exact address unavailable (Unnamed Road)	1941	unknown	unknown
48	13050 N Rivergate Blvd	1941	1979	3.16
73	11020 N Lombard St	1971	present	112
76L	N Going St & N Wygant St	1927	1943	unknown
76L	N Port Center Way	1969	1974	unknown

SITE ID	ADDRESS^{1,2}	PORT OWNERSHIP START DATE	PORT OWNERSHIP END DATE	ACREAGE
108	8940 N Brandford St	2007	present	6.5
133	6080 NW Front Ave	1928	2008	7.6
	6080 NW Front Ave	1928	1994	unknown
136	5700 NW Front Ave	1924	1946	unknown
136	5724 – 5740 NW Front Ave	1924	1946	unknown
136	5480 NW Front Ave	1924	1946	unknown
136	5480 NW Front Ave	1924	2004	unknown
143	5533 NW Doane Ave	1924	2008	unknown
144	5528 NW Doane Ave	1924	2004	unknown
163	5405 N Lagoon Ave	1922	1983	unknown
164	7007 N Cutter Circle	1958	1992	5
164	7007 N Cutter Circle	1958	1992	1.13
164	6936 N Fathom St	1958	1968	unknown
164	6936 N Fathom St	1958	1968	unknown
171	5036 N Lagoon Ave	1922	1995	3.96
175	4859 N Lagoon Ave	1922	1976	1.45
175	5001 N Lagoon Ave	1922	1962	2.6
181	5034 NW Front Ave	1967	1973	unknown
182	5034 NW Front Ave	1967	1973	unknown
182	4950 NW Front Ave	1967	1973	unknown
186	4250, 4350, & 4700 Front Ave	1980	1985	85
188	3838 NW Front Ave	1927	1956	33.66
191	5501 NW Front Ave	1924	1939	unknown
191	5501 NW Front Ave	1924	unknown	unknown
195	4099 N Port Center Way	1965	2003	8
197	3500 NW Yeon Ave	unknown	1928	unknown
207	3445 – 3455 NW Front Ave	1971	unknown	unknown
231	6767 N Basin Ave	1955	1971	6.9
231	6735 N Basin Ave	1958	1972	14.32
232	6211 N Ensign St	1958	1973	4.26
236	6147 N Basin Ave	1951	1959	4.44
236	6135 N Basin Ave	1951	1959	5.13
238	5617 – 5885 N Basin Ave	1951	1996	0.6

SITE ID	ADDRESS^{1,2}	PORT OWNERSHIP START DATE	PORT OWNERSHIP END DATE	ACREAGE
248	5926 – 5938 N Basin Ave	1951	1960	unknown
248	5926 – 5938 N Basin Ave	1951	1972	unknown
249	5820 N Basin Ave	1951	1959	unknown
250	5500 N Basin Ave	1951	1960	1.16
263	6845 N Cutter Circle	1958	1990	unknown
277L	N. River Street (RM 10.6)	1971	2007	2.9
309	1030 NW Naito Pkwy	1980	present	0.36
596	5400 N Emerson St	1951	1995	1.62
596	5400 N Emerson St	1951	1959	unknown
596	5400 N Basin Ave	1951	1960	unknown
596	5400 N Basin Ave	1951	1960	0.05
596	5400 N Basin Ave	unknown	1995	unknown
596	5400 N Basin Ave	1980	1986	2
597	5161 N Lagoon Ave	1922	1964	0.64
597	5161 N Lagoon Ave	1922	1964	1.86
597	5161 N Lagoon Ave	1922	1963	unknown
597	5160 N Lagoon Ave	1922	1995	unknown

Notes.

1. All addresses are located in Portland, Oregon.
2. Multiple tax parcels may be associated with one site.

3.0 PORT OWNERSHIP AND OPERATIONS

The following section briefly describes the Port’s ownership of and operations at the sites listed in Exhibits 2-2 and 2-3.

SITE 8 (Terminal 5)

The Port has been the landowner of Terminal 5 since 1965 and acts as property manager for the three tenants currently leasing facilities at the terminal. Activities at Terminal 5 performed by or contracted for by the Port include facility development, management of lease agreements/rights-of-way with utilities and the Union Pacific Railroad, and limited property and grounds maintenance. The Port also has maintenance responsibility for the dock and access ramp to Berth 503 (e.g., fender system, maintenance dredging, concrete repair), and maintenance dredging responsibilities at Berths 501 and 502. The Port has historically provided grounds maintenance (e.g., landscaping) at the Portland Bulk Terminals leasehold.

SITE 71 (Port of Portland Terminal 4-Slip 1 and Slip 3)

The Port acquired Terminal 4 from the City of Portland Commission of Public Docks (CPD) in 1971 and is the current owner. The Port's primary role is to promote marine commerce and provide a public platform for shipping-related activities. Several underground storage units are present on the property. The Port currently leases the property to Cereal Food Processors, Inc., International Raw Materials, and Kinder Morgan Bulk Terminals.

SITE 127 (Willamette Cove)

The Willamette Cove was formed in 1908 when BNSF Railway constructed an embankment for the railroad bridge. The Port is the former owner of the tax lots that comprised the central portion of the property from 1903 to 1953. The Port initially developed the property with the construction of the St. Johns Dry Docks, which served as a common use ship repair yard until 1953. Metro is the current owner of all tax lots comprising Site 127. It is currently undeveloped.

SITE 157 (Swan Island Shipyard/Portland Ship Repair Yard)

The Port owned Site 157 from 1922 to 2000. Between 1926 and 1931, the Port constructed an airport on the island. From 1942 to 1949, the U.S. Maritime Commission constructed a ship building yard under a lease with the Port. In 1950, the Port converted the shipyard to a public, common-user ship repair yard. Ship repair specialists contracted with vessel owners and operators to perform ship repair work using Portland Ship Repair Yard infrastructure. The Port was not a party to this contracting process and was not authorized to compete for commercial vessel repair. The Port's involvement was limited to providing and maintaining the common-use infrastructure (buildings, berths, docks), the ballast water treatment plant, autoclave, and certain rentable equipment (e.g., forklifts). The Port also provided certain services to ship repair contractors such as dockside crane service; raising and refloating vessels in dry docks; and utilities (e.g., compressed air, electricity, and water). As the owner of a public common-use shipyard, the Port had to allow the ship repair work to be performed at the shipyard if the vessel owner or operator could satisfy the Port's published tariff rates for use of the infrastructure, equipment, or services available. In 2000, the Port sold the ship repair yard to Cascade General.

SITE 160 (CEMEX, DTNA, & Port Center)

The Port acquired several properties on Site 160 in 1966 and 1987. The CEMEX leasehold features include a concrete mixing plant, truck scale, mixer truck parking area, aggregate storage piles, a stormwater treatment swale, and a process water storage and settling pond. In the eastern corner of the CEMEX leasehold, near N. Channel Avenue, is a truck fueling area. The fueling area uses an aboveground storage tank, which is covered and completely contained. CEMEX receives rock by barge. The rock is transported via a conveyor system that extends from a load-out barge to the upland leasehold. Daimler Truck North America (DTNA) leases approximately 7 acres at the southeast end of the property from the Port and uses this area for temporary staging of trucks and trailers.

SITE 165 (Portland Shipyard, Berth 308, Former Tetra Tech Leasehold)

The Port has owned this property since 1922. An office and warehouse building were constructed in 1980. An adjacent parcel includes an asphalt-concrete roadway that provides vehicle access to the land adjacent to Berth 308 and the riverbank.

SITE 186

Site 186 is located on the west side of the Willamette River at river mile 9. In the 1930s, the Site was mainly submerged land with a dock. Beginning in 1942, Gunderson Brothers Engineering Corporation

owned and operated a rail car and marine barge manufacturing facility on Area 1. In approximately 1948 and 1957, Gunderson created Areas 2 and 3, respectively, by landfill of dredged sediments. In 1965, FMC acquired Gunderson Brothers as a wholly-owned subsidiary, and Gunderson Brothers continued operations on Areas 1 and 2. In 1973, FMC absorbed Gunderson Brothers, re-organizing Gunderson as FMC's Marine and Rail Equipment Division. By 1980, FMC sought to expand to Area 3. To facilitate the expansion to Area 3, FMC entered into a lease agreement with the Port. In a lease agreement dated September 15, 1980, the Port issued revenue bonds, as authorized by the provisions of Chapter 777 and Chapter 778 of the Oregon Revised Statutes, for the purpose of acquiring, constructing, and installing industrial development facilities. The bonds were used to expand FMC's manufacturing facility for rail cars. FMC was responsible for the construction of the infrastructure required for the expansion at the expense of the Port. The project was the property of the Port. In 1985, the Port conveyed Area 3 to FMC and on the same day, FMC conveyed Area 3 to Gunderson, Inc., the current owner.

SITE 218 (Terminal 2)

Since acquiring the Terminal in 1971, the Port has acted primarily as the landlord for the tenants, who lease buildings and outside space and/or hold preferential berth use rights. Prior to 1971, the City CPD acted in this role. As the owner, the Port has performed the normal activities of a commercial property lessor, such as maintenance and repair of the docks, maintenance dredging, and generally maintaining Port buildings and equipment. The Port also schedules vessels calling on Terminal 2, and in the past, it handled receipt and delivery of cargo (primarily containerized). From time to time, the Port provides certain limited services to tenants, such as removing solids from the SSA Marine steam cleaning unit.

SITES 222 & 303 (Terminal 1)

The Port acquired Terminal 1 North and Terminal 1 South in 1971. Consistent with other Port marine terminals, the Port's primary role during its ownership of Terminal 1 North and South was to promote marine commerce and provide a public platform for shipping-related activities. Thus, the Port's functions were limited to entering into agreements for use or lease of the property and related infrastructure and maintaining the property and infrastructure in good working order. The Port sold Terminal 1 South to the Riverscape LLC in 2001 and Terminal 1 North to the City of Portland in 2004.

SITE 234 (Dredge Base)

The property remained undeveloped until 1973. From 1973 to 1995, the Port leased the property to various entities. During that time, the Port acted as the landowner and conducted property management and general maintenance of the office building and parking areas. In 1996, the Port relocated its base of operations for its Navigation Division to the property. Port activities at the Dredge Base have included administrative office activities, moorage of the Dredge Oregon at the adjacent dock, maintenance responsibilities for the upland and overwater structures, and activities associated with dredge equipment maintenance and storage.

SITE 237 (Becker Property)

The Becker Property was purchased by the Port in 1958 and was developed in the mid-1960s for use as a small marine terminal with upland buildings and an adjacent berth (formerly Berth 311). Berth 311 was originally constructed as a dock for marine to truck transfer. Berth 311 was modified in 1975 as a concrete pier and lay berth and was used for mooring vessels under repair, temporary lay berthing of vessels awaiting repair, and long-term lay berthing of vessels. The Port sold the property to Becker Trucking LLC in 2005.

Port Owner Sites (13, 17, 18, 21, 22, 24, 47, 48, 73, 76L, 108, 133, 136, 143, 144, 163, 164, 171, 175, 181, 182, 188, 191, 195, 197, 207, 231, 232, 236, 238, 248, 249, 250, 263, 277L, 309, 596, and 597)

Since the early 1900s, the Port has held property interests in a number of tax parcels located in Portland. Examples include ownership for development, leased properties, easements, alignments, greenways, and roads. The Port did not operate on these properties.

4.0 PORT ACTIVITIES

Exhibit 4-1 identifies, for each of the Port’s properties in Appendix A of the Consent Decree, the activities that had the potential to result in the release of one or more of the substances of concern included in the Trustee Council’s evaluation of natural resource damages. These types of activities are further described in the Trustee Council’s allocation methodology report.

EXHIBIT 4-1 PORT-RELATED ACTIVITIES¹

Port Activities - Site 8
creosote treated railroad ties
landfill of construction and demolition debris
landfilling used sandblast grit
petroleum leaks/spills
underground storage tank (UST) diesel
Port Activities - Site 13
creosote-treated railroad ties
unprotected petroleum sump
Port Activities - Site 21
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 22
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 71
coal/coal tar pitch storage/distribution
creosote treated railroad ties
creosote treated wood pilings
hydraulic oil leakage/spills
landfill of construction and demolition debris
landfill of dredged sediments-Willamette prior to 1980
PCB capacitor use
PCB transformer use/spills/storage
petroleum leaks/spills
UST diesel
UST gasoline
UST heating oil
UST other petroleum/unknown petroleum
UST waste oil

Port Activities - Site 73
creosote treated railroad ties
creosote treated wood pilings
landfill of dredged sediments-Willamette prior to 1980
UST gasoline
UST other/unknown petroleum
Port Activities - Site 108
creosote treated wood pilings
landfill of construction and demolition debris
landfill of dredged sediments-Willamette prior to 1980
slag storage or landfilling
Port Activities - Site 127
landfill of dredged sediments-Willamette prior to 1980
coal/coal tar pitch storage/distribution
creosote treated railroad ties
creosote treated wood pilings
extensive vehicle operations or washing facilities
ship berthing
ship/boat maintenance and/or construction
Port Activities - Site 133
creosote treated wood pilings
fueling operations
landfill of dredged sediments-Willamette prior to 1980
landfilling of Doane Lake by surrounding properties
unprotected petroleum sump
Port Activities - Site 136
above-ground storage tank (AST) bunker c
AST diesel
AST Kerosene
AST lubrication oil
AST other petroleum/unknown petroleum
creosote treated wood pilings
fueling operations
landfill of dredged sediments-Willamette prior to 1980
UST gasoline

Port Activities - Site 143
creosote treated wood pilings
fueling operations
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 144
creosote treated wood pilings
fueling operations
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 157
application/disposal of pesticides
AST heating oil
ballast water storage/treatment
creosote treated wood pilings
extensive vehicle operations or washing facilities
fuel oil use
fueling operations
hydraulic oil leakage/spills
landfill of dredged sediments-Willamette prior to 1980
PCB transformer use/spills/storage
petroleum leaks/spills
sandblasting for other than boats or vessels
ship berthing
ship maintenance and/or construction
unprotected storage of spent sandblasting grit
UST diesel
UST gasoline
UST heating oil
UST other petroleum/unknown petroleum
wood preservative use
Port Activities - Site 160
AST other petroleum/unknown petroleum
creosote treated railroad ties
creosote treated wood pilings
extensive vehicle operations or washing facilities
landfill of dredged sediments-Willamette prior to 1980

Port Activities - Site 160 (continued)
PCB transformer use/spills/storage
ship berthing
unprotected storage of spent sandblasting grit
Port Activities - Site 164
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 165
creosote treated wood pilings
landfill of dredged sediments-Willamette prior to 1980
ship berthing
UST gasoline
Port Activities - Site 175
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 181
creosote treated wood pilings
landfill of construction and demolition debris
landfill of dredged sediments-Willamette prior to 1980
ship berthing
slag storage or landfilling
Port Activities - Site 182
creosote treated wood pilings
landfill of construction and demolition debris
landfill of dredged sediments-Willamette prior to 1980
ship berthing
slag storage or landfilling
Port Activities - Site 186
creosote treated railroad ties
creosote treated wood pilings
landfill of dredged sediments-Willamette prior to 1980
ship berthing
UST diesel
UST gasoline
UST other petroleum/unknown petroleum

Port Activities - Site 188
creosote treated wood pilings
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 191
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 195
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 218
application/disposal of pesticides
AST diesel
Port Activities - Site 218 (continued)
AST gasoline
AST waste oil
contaminant release from sunken ships
creosote treated railroad ties
creosote treated wood pilings
hydraulic fluid use
landfill of dredged sediments-Willamette prior to 1980
PCB capacitor use
PCB transformer use/spills/storage
ship berthing
ship/boat maintenance and/or construction
unprotected storage of spent sandblasting grit
UST diesel
UST gasoline
UST waste oil
Port Activities - Site 222
creosote treated railroad ties
creosote treated wood pilings
extensive vehicle operations or washing facilities
landfill of dredged sediments-Willamette prior to 1980
UST other petroleum/unknown petroleum
Port Activities - Site 231
landfill of dredged sediments-Willamette prior to 1980

Port Activities - Site 232
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 234
fueling operations
landfill of dredged sediments-Willamette prior to 1980
petroleum leaks/spills
ship berthing
Port Activities - Site 236
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 237
AST diesel
Port Activities - Site 237 (continued)
creosote treated wood pilings
landfill of dredged sediments-Willamette prior to 1980
sandblasting for other than boats or vessels
ship berthing
UST gasoline
UST waste oil
Port Activities - Site 238
landfill of dredged sediments-Willamette prior to 1980
UST diesel
Port Activities - Site 248
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 249
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 263
landfill of dredged sediments-Willamette prior to 1980

Port Activities - Site 303
AST bilge water
AST diesel
AST gasoline
AST waste oil
creosote treated wood pilings
landfill of dredged sediments-Willamette prior to 1980
petroleum leaks/spills
ship/boat maintenance and/or construction
unprotected storage of spent sandblasting grit
UST gasoline
UST other petroleum/unknown petroleum
Port Activities - Site 596
landfill of dredged sediments-Willamette prior to 1980
Port Activities - Site 597
landfill of dredged sediments-Willamette prior to 1980
ship berthing
ship/boat maintenance and/or construction
Note. 1. The Port did not conduct relevant activities at Sites 17, 18, 24, 47, 48, 76L, 163, 171, 197, 207, 250, 277L, and 309.

5.0 REFERENCES

Lower Willamette Group. 2009. Portland Harbor Draft Remedial Investigation Report. Prepared by Integral Consulting, Inc., Windward Environmental LLC, Kennedy/Jenks Consultants, and Anchor QEA, LLC.

Oregon Department of Environmental Quality. 2013. Environmental Cleanup Site Information Database. <https://www.deq.state.or.us/lq/ECSI/ecsiquery.asp?listtype=lis&listtitle=Environmental+Cleanup+Site%20Information+Database>

Portland Harbor Natural Resource Trustee Council. 2022. Portland Harbor Natural Resource Damage Assessment: Allocation Methodology Report. Prepared by Industrial Economics, Incorporated.

The Trustee Council also reviewed 57 additional documents submitted by Phase 2 parties that are settlement confidential and therefore not identified.