Portland Harbor Natural Resource Damage Assessment Phase 2: Allocation Summary Memo for Ashland, Inc., Hercules, LLC, and Valvoline, Inc.

1.0 INTRODUCTION

Ashland, Inc., Hercules, LLC, and Valvoline, Inc. (Ashland/Hercules/Valvoline), 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 site-specific allocation of natural resource damages liability for seven sites with which Ashland/Hercules/Valvoline is associated: 123, 239, 271, 279b, 508, 509 and 510.¹ 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, Ashland/Hercules/Valvoline's liability is calculated to be 0.20 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 Ashland/Hercules/Valvoline's sites.
- Section 4 outlines Ashland/Hercules/Valvoline's activities at their sites.
- Section 5 is a list of references.

memorandum refers only to the Trustee Council's settlement-oriented allocation of natural resource damages liability.

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

2.0 OVERVIEW OF ASHLAND/HERCULES/VALVOLINE SITES

Exhibit 2-1 is a map of Ashland/Hercules/Valvoline's sites included in the site-specific allocation, and Exhibit 2-2 outlines 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 ASHLAND/HERCULES/VALVOLINE SITES

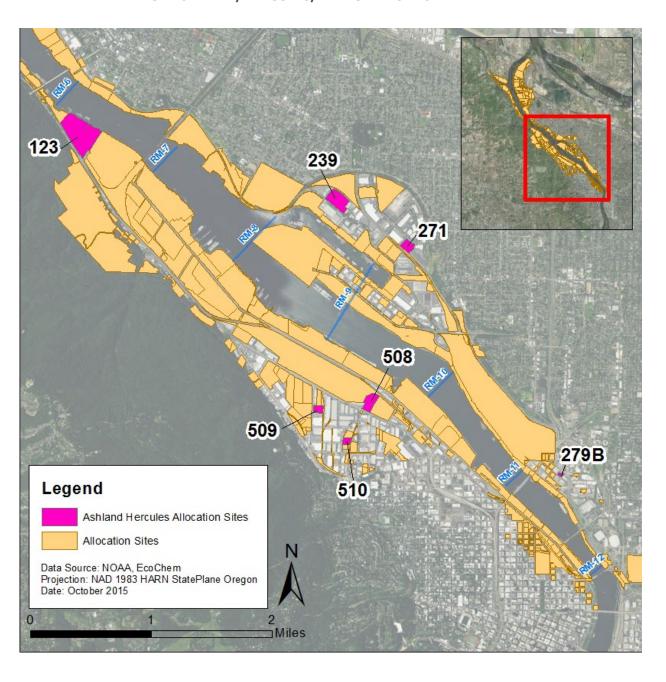


EXHIBIT 2-2 ASHLAND/HERCULES/VALVOLINE SITE BACKGROUND INFORMATION

SITE	SITE ADDRESS ¹	CURRENT OWNER	ASHLAND/ HERCULES/ VALVOLINE DATES OF OWNERSHIP	ASHLAND/ HERCULES/ VALVOLINE DATES OF OPERATION	SITE ACREAGE
123	7540 NW St Helens Rd	NW Natural Gas Co	none	9/1956 – 12/1956	44.65
239	6650 North Basin Avenue	OCF Joseph E Weston Public Foundation	none	1986 –1987	13.47
271	6000 North Cutter Circle	Gray Family Mock's Landing LLC	none	1983 – 1987	4.9
279B	2308 North Clark Avenue	City of Portland	1951 – 2002	1931 – 2001	0.66
508	3366 NW Yeon Avenue	Solenis LLC	1931 – 2014	1931 – Present	7.3
509	3322 NW 35th Avenue	Standard Steel Property LLC	none	1990 – 2007	3.18
510	2800 NW 31st Avenue	NWP Enterprises LLC	none	1986 –1991	2.27

Note.

^{1.} All addresses located in Portland, Oregon.

3.0 ASHLAND/HERCULES/VALVOLINE OWNERSHIP AND OPERATIONS

The following section briefly describes Ashland/Hercules/Valvoline's ownership of and operations at the sites listed in Exhibit 2-2.

Site 123

Site 123 is located adjacent to the Willamette River at River Mile 6.4. Ashland, Inc. leased two above ground storage tanks located on the property from Beazer/Koppers Inc. from September 1965 to December 1965. The tanks were used to store fatty acids.

Site 239

Site 239 is located upland, about 800 feet east of the Willamette River at River Mile 8.4. The building was constructed in 1986 as a multi-tenant warehouse and office building. Ashland, Inc. leased the Property from 1986 to 1987 from Hoffman Industries & Tama Investments and utilized the property for indoor storage and distribution of pre-packaged petroleum products.

Site 271

Site 271 is located upland, about 1200 feet east of the Willamette River near River Mile 9. Ashland, Inc. leased the Property from Keller Enterprise, Inc. from 1983 to 1987. The building on property was constructed in 1983 and utilized by Ashland, Inc. as a warehouse for storage and distribution of petroleum-based pre-packaged car care products (e.g., in underground storage tanks).

Site 279B

Site 279B is located upland, about 800 feet east of the Willamette River at River Mile 11.3. Hercules Inc. began shipping, receiving, blending and packaging petroleum products as early as 1931 and continued to 2001. Ashland, Inc. purchased this property in 1951 and sold it to the City of Portland in 2002. The City is the current owner. The property is currently being used as a parking lot and for storage of the City's deicing solution.

Site 508

Site 508 is located upland, about 600 feet west of the Willamette River at River Mile 9.6. Hercules, Inc. purchased the property in 1931 and produced and distributed chemical products needed in the paper-making industry. From the 1950s to the 1970s, operations included barrel, truck, and rail car washing. In 2008, Ashland, Inc. purchased Hercules, Inc. and subsequently sold Hercules, Inc. in 2014. Ashland/Hercules/Valvoline continues to operate on the property today, manufacturing chemicals used in the paper industry as well as maintaining an on-site quality control laboratory.

Site 509

Site 509 is located upland, about 3000 feet west of the Willamette River near River Mile 9. Ashland/Hercules/Valvoline believes that historically, the property was owned and operated by Nabisco, though no information is available. Ashland, Inc. leased the property from Hill Investment Company from 1990 until 2007. Operations included storage, repackaging, drum washing, and shipment of industrial chemicals, food grade materials and plastic pellets. A small lab operated on the site, providing technical support for customers. Ashland, Inc. also received customer containerized waste for subsequent transfer to disposal/recycling facilities. Hill Investment Company sold the property to Standard Steel Properties LLC in 2007.

Site 510

Site 510 is located upland, about 2700 feet west of the Willamette River near River Mile 9. Ashland/Hercules/Valvoline believes that historically, the property was owned and operated by Glidden. Ashland, Inc. leased the property from Fern R. Meltzer from 1986 to 1991. Operations included repackaging, blending and distribution of petroleum products, chemicals, resin, acids and bases and drum washing.

4.0 ASHLAND/HERCULES/VALVOLINE ACTIVITIES

Exhibit 4-1 identifies, for each of Ashland/Hercules/Valvoline'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 ASHLAND/HERCULES/VALVOLINE-RELATED ACTIVITIES

Ashland/Hercules/Valvoline Activities - Site 123				
No activities.				
Ashland/Hercules/Valvoline Activities - Site 239				
No activities.				
Ashland/Hercules/Valvoline Activities - Site 271				
Underground storage tank (UST) - other petroleum/unknown petroleum				
Ashland/Hercules/Valvoline Activities - Site 279b				
Steel manufacturing				
Petroleum leaks/spills				
Fueling operations				
Fuel oil use				
UST heating oil				
UST gasoline				
Aboveground storage tank (AST) - waste oil				
AST other petroleum/unknown petroleum				
Ashland/Hercules/Valvoline Activities - Site 508				
Adhesives production				
Adhesives waste disposal				
Extensive vehicle operations				
UST diesel				
UST gasoline				
UST waste oil				
Ashland/Hercules/Valvoline Activities - Site 509				
Extensive vehicle operations				
UST diesel				
AST waste oil				
AST other petroleum/unknown petroleum				
Petroleum leaks/spills				
Landfilling of dredged sediment-Willamette prior to 1980				
Ashland/Hercules/Valvoline Activities - Site 510				
AST other petroleum/unknown petroleum				

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 eight additional documents submitted by Phase 2 parties that are settlement confidential and therefore not identified.