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Preliminary Evaluation of City Outfalls

PORTLAND HARBOR STUDY AREA

Environmental Services
City of Portland

NOTEBOOK 2

Westshore Stormwater and CSO Outfalls

DECEMBER 2000

City of Portland Stormwater Outfall 18
Summary of Existing Information

Physical Description

City of Portland Stormwater Outfall 18 is a 72-inch pipe and was constructed about 1955. At one time, this outfall had CSO diversion overflows. The diversion manhole has been sealed. Thus outfall receives flows from Forest Park streams. Outfall 18 is located on the upstream end of the Equilon dock.

The storm drainage basin for this outfall is approximately 475 acres. Landuse in the basin is predominately designated as vacant (55 percent of the basin) and industrial (22 percent). Single family residences, forest, and rural designations make up less than 2 percent of the basin. Right-of-ways are estimates at 14 percent of the basin.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Landuse map

There are sixteen non-City outfalls within approximately 600 feet northwest (downstream) and 800 feet southeast (upstream) of Outfall 18. The outfall designations are as follows:

- WP-131 to WP-150: Gunderson

These non-City outfalls are assigned to Gunderson, although various tenants may contribute to Gunderson's total discharge.

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall was identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 18 are available from one source:

- Portland Harbor Sediment Investigation, EPA/DEQ (Stations SD140, SD142, SD143, SD144 and SD146)

There have been a five sediment sample locations sampled in the vicinity of the Outfall 18 (see attached figure). All of the stations had samples collected at the surface (0-10 cm). In a addition, Station SD143 had a depth-composite sample collected (0-90 cm).

Two stations are located upstream of Outfall 18; Station SD144 is approximately 200 feet upstream and SD146 is approximately 400 feet upstream. Station SD143 is between the shoreline and Outfall 18. Two stations are located downstream of Outfall 19; SD142 is approximately 250 feet downstream and Station SD140 is approximately 600 feet downstream.

Table 1 shows the available sediment data with station ID, sample ID, field replicate and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall. The sediment data collected in 1997 as part of the Portland Harbor Sediment Investigation showed elevated concentrations for several analytes in exceedence of the DEQ baseline at the surface and may be of interest to the city. These analytes are:

- **Chromium:** detected in concentrations greater than 3 times the baseline in the depth-composite sample at sediment station SD143
- **Lead**: detected in concentrations greater than 3 times the baseline in the depth-composite sample at sediment station SD143
- **Mercury:** detected in concentrations greater than 3 times the baseline in the depth-composite sample at sediment station SD143
- **Zinc:** detected in concentrations greater than 3 times the baseline in the depth-composite sample at sediment station SD143
- **Bis(2-ethylhexyl) phthalate:** detected in concentrations greater than 3 times the baseline in the depth-composite sample at sediment station SD143
- **2-Methylnapthalene:** detected in concentrations greater than 3 times the baseline in the depth-composite sample at sediment station SD143

The only sediment sample that had concentrations greater than three times the DEQ baseline was a depth composite and the surface sample concentrations were significantly lower, suggesting a historic release.

The primary purpose for identifying analytes of interest is to help determine potential sources contributing to the City's conveyance system. Table 2 provides information on industrial uses of the analytes of interest that can aid in evaluating specific facilities and their potential to contribute contaminants.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 lists the industrial chemical uses for analytes of interest at Outfall 22C.

Table 3 summarizes the available information on facilities currently located in the Outfall 18 drainage basin, including where site runoff drains, discharge permits, business type and whether there is exposure of site activities to stormwater.

Table 4 shows available stormwater data for industrial facilities required to have an NPDES permit to discharge to the City's stormwater system.

Table 5 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 6 EPA's Toxic Release Inventory, which records releases of chemicals to the environment, and the Hazardous Waste Generators, which shows sites that treat, store, or dispose of hazardous materials.

Table 7 EPA's Corrective Action (CORRACTS) list contains information about handlers with corrective action activity. This list is maintained by the Environmental Protection Agency as part of RCRA Title C.

Table 8 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 8.

Table 9 is DEQ's list of leaking underground storage tanks (LUST). The list includes both sites with active leaks and those that have been cleaned up to the satisfaction of the DEQ in the past. Behind this table, the LUST incident reports are provided for facilities listed in Table 9.

Table 10 is DEQ's list of permitted tanks that contains information on sites that are registered to receive commercial fuel deliveries.

Table 11 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 12 is the State Fire Marshal's list of hazardous spills to which the fire department has responded.

Table 13 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 14 is the CRL (Confirmed Release List) inventory of sites that are currently being remediated under one of three separate programs, the Voluntary Cleanup Program, the Site Response Program, and the Site Assessment Program.

Table 15 lists the SIC numbers and descriptions for the sites identified in the Table 3 facility list.

Table 16 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type.

The following databases were searched but no information was available for sites within the drainage basin:

- EPA RCRA Treatment Storage Disposal
- EPA Emergency Response Notification System
- DEQ Leaking Underground Storage Tank List
- DEQ Underground Storage Tank List

Outfall 18 Summary

The analytes of interest identified as of potential interest to the city outfall include:

- Chromium
- Lead
- Mercury
- Zinc
- Bis(2-ethylhexyl) phthalate
- 2-Methylnapthalene

The only sediment sample that had concentrations greater than three times the DEQ baseline was a depth composite and the surface sample concentrations were significantly lower, suggesting a historic release.

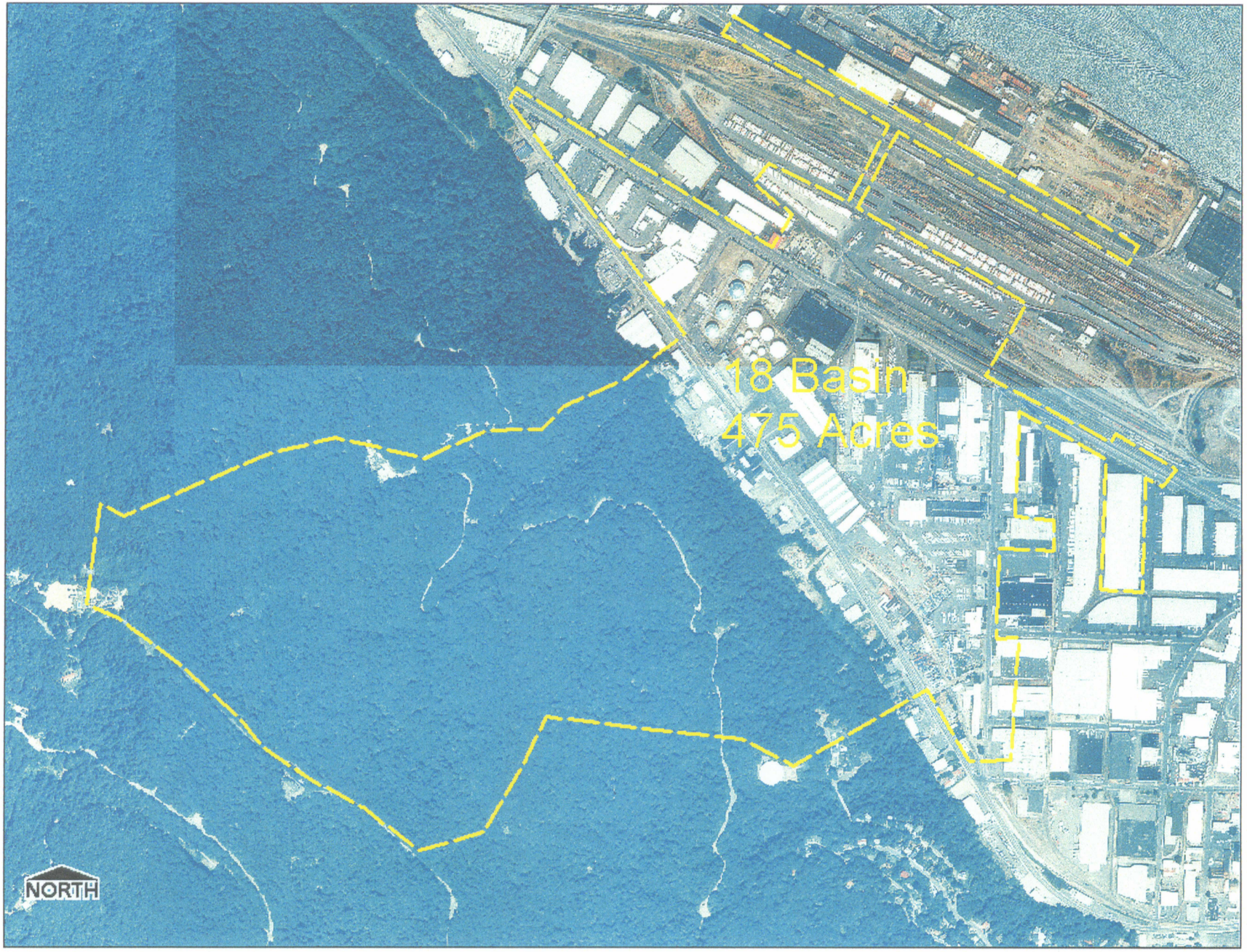
Upon review of the environmental databases, there are a number of sites that have the potential to have released metals either to the City or adjacent private outfalls. Stormwater data maintained by the City show higher metals concentrations at ABF Freight, Bay News, and Gunderson. The ECSI database also indicated that there is a potential for metals release from Columbia American Plating but BES does not maintain the stormwater data for this site. DEQ files should be reviewed for NPDES stormwater data from this site. In addition, the ECSI database indicated the potential for metals release from several other sites , including Gunderson, Magnus Company and National Lead Company.

Based on the ECSI database, PAHs and oils have been found on site or released to the river from several sites (Burlington Northern, Christenson Oil, and McWhorter Inc.) in the vicinity of the Outfall 18 drainage basin. These may have contributed to the elevated 2-methylnapthalene concentrations in sediment.

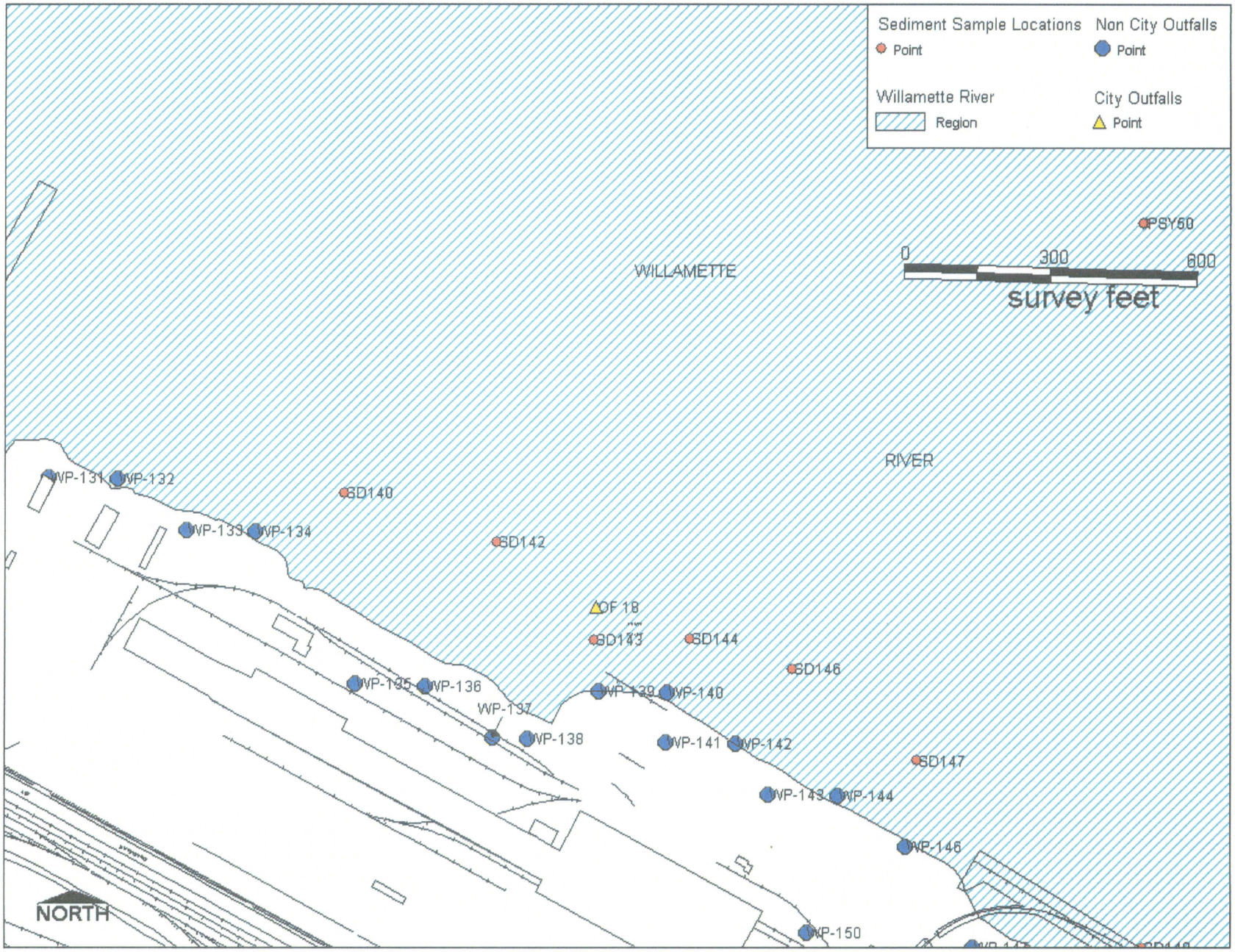
There is no demonstrated source of phthalates within the basin. Bis(2-ethylhexyl) phthalate is commonly used at a plasticizer, such as polyvinyl chloride resins and vinyl copolymer resins, and could be used in a variety of industrial and commercial uses that may not show up in the environmental databases that were searched. According to the ECSI database, McClosky Varnish Company (located at the McWhorter site from 1943 to 1989) and McWhorter Inc manufactured resins but there is no information on phthalates for this site.

Figures

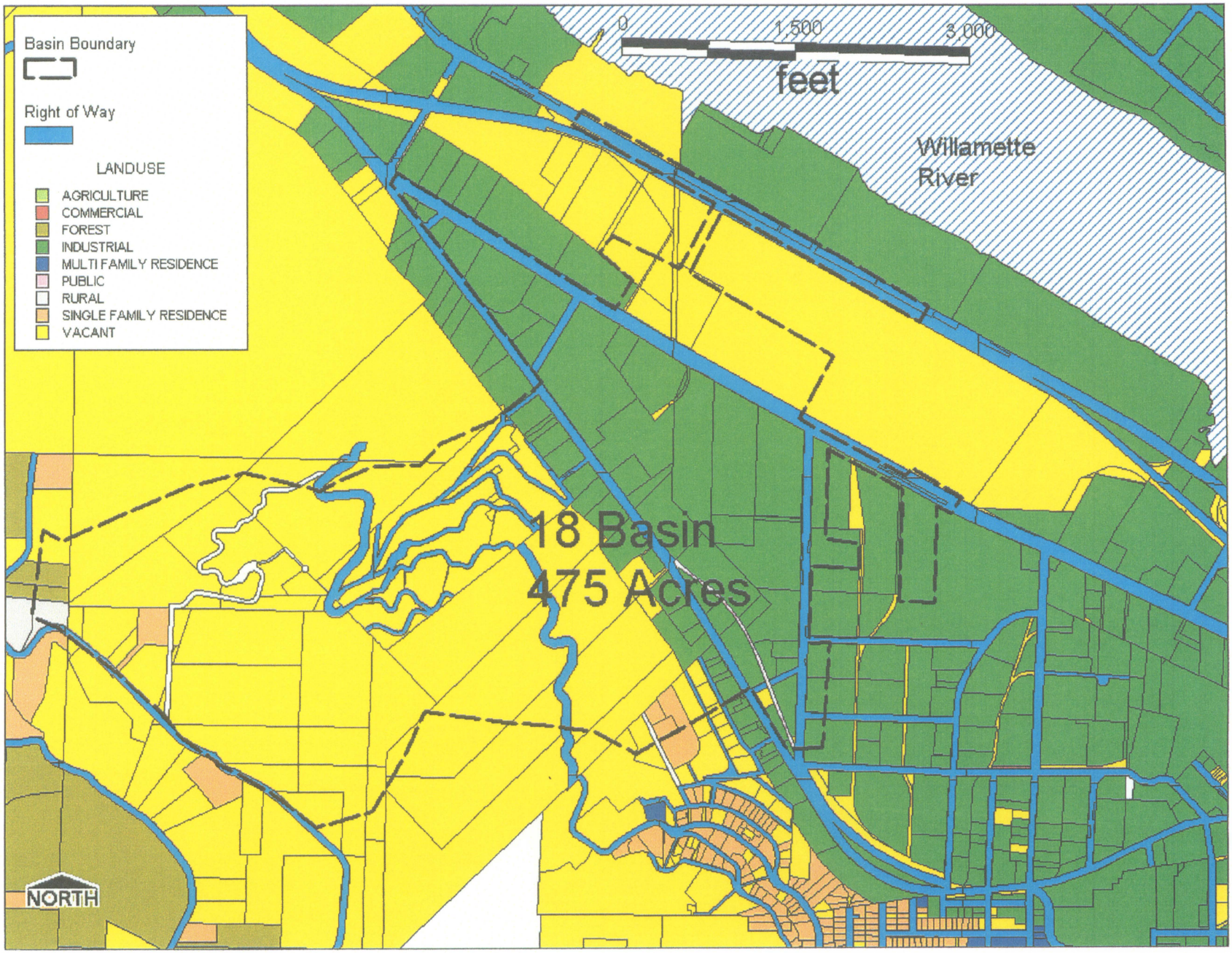
18 Outfall - Stormwater Drainage Map
City of Portland



Basin 18 Aerial Photo
City of Portland



Outfall 18 Map with Sediment Sample and Non-City Outfall Locations
City of Portland



Land Use Within Basin 18
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 18

	StationID	SD146	SD144	SD143	SD143	SD142	SD140
	Sample ID #	0	0	0	0000A	0	0
	Field Replicate #	#	#	#	#	#	#
	SubSample #	#	#	#	#	#	#
	Sample Depth	0-10 CM	0-10 CM	0-10 CM	0-90 CM	0-10 CM	0-10 CM
	Sample Date	9/24/97	9/24/97	9/24/97	10/16/97	9/24/97	9/24/97
Analyte	Units	DEQ Baseline	Analytes of Interest					
Aluminum	PPM	42800		41000	42100	28900	31900	40300	41000
Antimony	PPM	5		5 UJ	6 J	5 UJ	5 UJ	6	5 UJ
Arsenic	PPM	5		5 U	6	5 U	9	6	5 U
Barium	PPM	195		189	183	148	274	177	186
Beryllium	PPM	0.7		0.7	0.6	0.48	0.44	0.7	0.6
Cadmium	PPM	0.6		0.4	0.5	0.5	5.3	0.5 J	0.6
Chromium	PPM	41	X	37.8	39.3	32.1	**157**	37.9	37.6
Cobalt	PPM	19.7		19.2	18.5	14.8	17.6	18.1	19
Copper	PPM	60		43.9	48.3	34.1	124	47.9 J	44
Iron	PPM	45000		42900	44700	34500	36500	43000	43400
Lead	PPM	30	X	14	20	28	**1080**	17 J	15
Manganese	PPM	810		691	635	512	483	632	694
Mercury	PPM	0.1	X	0.05	0.06	0.04	**0.37**	0.06	0.08
Nickel	PPM	32		30	30	23.2	30.7	29	30
Selenium	PPM	15		14	11	10	8	14	10
Silver	PPM	1.4		0.7	0.8	0.6	3.4	0.8	0.7
Thallium	PPM	13		8	12	5 U	5 U	10	11
Titanium	PPM	2075		1900	2160	1840	1870	2010	
Vanadium	PPM	112		105	110	86.3	91.9	108	106
Zinc	PPM	118	X	100	120	109	**583**	113 J	102
Total organic carbon	PCT	2		1.4	1.7	1	5.6	1.8	1.6
4-Methylphenol	PPB	680		750	1200	290	910 U	950	730
Benzoic acid	PPB	200		190 U	190 U	190 U	9100 U	190 U	200 U
Benzyl alcohol	PPB	20		19 U	19 U	19 U	910 U	19 U	20 U
Bis(2-ethylhexyl) phthalate	PPB	390	X	170	440	640	**5000**	300	190
Butyl benzyl phthalate	PPB	20		19 U	20	30	910 U	19 U	20 U
Di-n-butyl phthalate	PPB	20		19 U	19 U	19 U	910 U	19 U	20 U
Di-n-octyl phthalate	PPB	20		19 U	19 U	19 U	910 U	19 U	20 U
Dibenzofuran	PPB	100		19 U	19 U	19 U	910 U	21	20 U
Dimethyl phthalate	PPB	20		19 U	19 U	19 U	910 U	19 U	20 U
Pentachlorophenol	PPB	97		95 U	96 U	96 U	4500 U	95 U	99
Phenol	PPB	20		19 U	19 U	19 U	910 U	19 U	20 U
2-Methylnaphthalene	PPB	150	X	19 U	19 U	36	**2000**	19 U	20 U
Acenaphthene	PPB	180		19 U	19 U	20	910 U	35	20 U
Acenaphthylene	PPB	60		19 U	19 U	19 U	910 U	19 U	20 U
Anthracene	PPB	150		19 U	19 U	19 U	910 U	20	20 U
Benzo(a)anthracene	PPB	360		22	38	38	910 U	58	40
Benzo(a)pyrene	PPB	500		23	41	55	910 U	48	36
Benzo(b)fluoranthene	PPB	350		24	59	64	910 U	55	40
Benzo(g,h,i)perylene	PPB	250		19 U	28	28	910 U	27	22
Benzo(k)fluoranthene	PPB	225		20	38	37	910 U	56	32
Chrysene	PPB	425		38	68	68	910 U	86	91
Dibenz(a,h)anthracene	PPB	125		19 U	19 U	19 U	910 U	19 U	20 U
Fluoranthene	PPB	600		55	110	110	910 U	200	130
Fluorene	PPB	125		19 U	19 U	27	910 U	33	20 U
Indeno(1,2,3-c,d)pyrene	PPB	225		19 U	31	32	910 U	33	23
Naphthalene	PPB	200		19 U	19 U	19 U	910 U	19 U	20 U
Phenanthrene	PPB	700		32	58	110	1100	140	62
Pyrene	PPB	700		50	88	110	910 U	140	110
Carbazole	PPB	100		19 U	19 U	19 U	910 U	19 U	20 U

Qualifier List: ***Bold indicates 3 times the DEQ baseline value***

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Table 2
Industrial Chemical Uses for Analytes of Interest at Outfall 18

Chemical	USE
Chromium	In manufacturing of chrome-steel or chrome-nickel-steel alloys (stainless steel), nonferrous alloys, heat resistant bricks for refractory furnaces. To greatly increase strength, hardness and resistance of metals to abrasion, corrosion and oxidation. For chrome plating of other metals; leather tanning; as pigment and mordant; wood preservative. Use of 51Cr as diagnostic aid see sodium chromate(VI).
Lead	Construction material for tank linings, piping, and other equipment handling corrosive gases and liquids used in the manufacturing of sulfuric acid, petr refining, halogenation, sulfonation, extraction, condensation; for x-ray and atomic radiation protection; manufacturing of tetraethyl lead, pigments for paints, and other organic and inorganic lead compounds; bearing metal and alloys; storage batteries; in ceramics, plastics, and electronic devices; in building construction; in solder and other lead alloys; in the metallurgy of steel and other metals.
Mercury	In barometers, thermometers, hydrometers, pyrometers; in mercury arc lamps producing ultraviolet rays; in mercury salts, mirrors; as catalyst in oxidation of organic compds; extracting gold & silver from ores; making amalgams, electric rectifiers, mercury fulminate; also in dentistry; in determining N by Kjeldahl method, for Millon's reagent; as cathode in electrolysis, electroanalysis, and many other uses. Also pharmaceuticals, agricultural chemicals, anti-fouling paints.
Zinc	Galvanizing sheet iron; as ingredient of alloys such as bronze, brass, Babbitt metal, German silver, & special alloys for die-casting; as a protective coating for other metals to prevent corrosion; for electrical apparatus, especially dry cell batteries, household utensils, castings, printing plates, building materials, railroad car linings, automotive equipment; as reducing agent in organic chemistry; for deoxidizing bronze; extracting gold by the cyanide process, purifying fats for soaps; bleaching bone glue; manufacturing sodium hydrosulfite; insulin zinc salts; as reagent in analytical chemistry, e.g., in the Marsh & Gutzeit test for arsenic; as a reducer in the determination of iron.
Bis(2-ethylhexyl) phthalate	As plasticizer in flexible vinyl products, such as polyvinyl chloride resins and vinyl copolymer resins. As replacement for PCB's in dielectric fluids for electric capacitors. Found in floor tiles, various types of furnishings for households and transportation vehicles, food packaging systems, industrial tubing and conduits, medical tubing, cathetars and blood containers, some types of dental material, coatings for drugs. Phthalate esters also used as defoaming agents in manufacturing paper, as a vehicle for perfumes in cosmetic products and in lubricating oils.
2-Methylnaphthalene	Component of crude oil and a product of combustion which is produced and released to the environment during natural fires. Emissions from petroleum refining, coal tar distillation, and gasoline and diesel fueled engines are major contributors to the environment. Pure form used in vitamin K production and as a chemical intermediate and may be released manufacturing effluents and the disposal of waste byproducts. Because of the widespread use in a variety products, released to the environment through landfills, municipal waste water treatment facilities and waste incinerators.

Table 3
Outfall 18 Facility List

Aquarius Search: Aug-2000
Basin Reconn: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit No.	Business Type	Exposure	Comments
R941300320	ABCO Sanitation	3233 NW St. Helens Rd	MS4	5521, 7699*			Waste processor	Yes	
R941190130	ABF Freight Systems	4285 NW Yeon Ave.	MS4	4213*	NPDES	1200Z	Transportation	Yes	
R941200160	Ackroyd Photography Inc	3840 NW Yeon Ave.	MS4	7221			Photo processor	No	
R94291400	Active Equipment Co.	3103 NW St. Helens Rd.	MS4	5082			Distribution	No	
R941190361	American Steel Inc.	4033 NW Yeon Ave.	MS4	5051*			Metal fabrication	Yes	
R941291370	Ashland Chemical Inc.	3322 NW 35th Ave.	MS4	213*, 5162*, 5169*, 2865*			Chemical distributor	No	
R941291370	Ashland Chemical Inc.	3322 NW 35th Ave.	Sanitary	213*, 5162*, 5169*, 2865	Pretreatment	400.026	Chemical distributor		
R941291620	B&I Furnishings Inc.	3621 NW Yeon Ave.	MS4	5021			Distribution	No	
R697400490	Baxter & Flaming Industries	3717 NW St. Helens Rd.	MS4	3442*, 3449*			Manufacturing	No	
R941290710	Bay News Inc.	3333 NW 35th Ave.	MS4	4212*, 4213*, 5192*	NPDES	1200Z	Transportation	Yes	
R697400250	Becker Trucking	3641 NW St. Helens Rd.	MS4	4212*, 4213*			Transportation	Yes	
R941200040 R941201230	Burlington Northern Railroad	3930 NW Yeon Ave.	MS4	4011*	NPDES	1200Z	Transportation	Yes	
R941290110	Carson Oil Co. Inc.	3125 NW 35th Ave.	MS4	5983, 5171*, 7538*	NPDES	1200Z	Oil distributor	Yes	
R941290110	Carson Oil Co. Inc.	3125 NW 35th Ave.	Sanitary	5171*, 7538*	Pretreatment	400.033	Oil distributor		
R697400830	Christensen Oil	3821 NW St. Helens Rd.	MS4	2992*, 5170*, 5171*	NPDES	1200Z	Oil distributor	Yes	
R084303610	Columbia American Plating	3003 NW 35th Ave.	MS4	3471*	NPDES	1200Z	Metal plater	Yes	
R084303610	Columbia American Plating	3003 NW 35th Ave.	Sanitary	3471*	Pretreatment	413.005	Metal plater		
R941200160	Container Recovery Inc.	3900 NW Yeon Ave.	MS4	4200, 5093*	NPDES	1200Z	Container recycler	Yes	
R941190330	Equilon Enterprises, LLC	3800 NW St. Helens Rd.	MS4	2911*, 5171*, 5172*	NPDES	1200T	Petroleum terminal	Yes	
R941190330	Equilon Enterprises, LLC	3800 NW St. Helens Rd.	MS4	2911*, 5171*, 5172*	NPDES	1300J	Petroleum terminal	Yes	
R941190330	Equilon Enterprises, LLC	3800 NW St. Helens Rd.	MS4	2911*, 5171*, 5172*	NPDES	1500A	Petroleum terminal	Yes	
R941190330	Equilon Enterprises, LLC	3800 NW St. Helens Rd.	Sanitary	2911*, 5171*, 5172*	Pretreatment		Petroleum terminal		
R941190290	Food Sak	4325 NW Yeon Ave.	MS4	5411			Convenience store	No	
R941290710	FTL Freightlines	3333 NW 35th Ave.	MS4	4214, 5192			Transportation	Yes	
R941300530	G-S Industrial Services Inc.	3530 NW St. Helens Rd.	MS4	5085*			Office/warehouse	No	
R941200500	Gunderson Inc.	4350 NW Front Ave.	MS4	3321*, 3743*	NPDES	1200Z	Manufacturing	Yes	
R941200500	Gunderson Inc.	4350 NW Front Ave.	WP-131 to WP 15	3321*, 3743*	NPDES	1200Z	Manufacturing	Yes	
R649704660	Hawthorn Inn & Suite	4319 NW Yeon Ave.	MS4	5812, 7011			Hotel	No	
R941290710	Hemphill Oil Co.	3333 NW St. Helens Rd.	MS4	1710*, 1711*, 1730*, 5170*, 5172*, 5983*			Oil distributor	Yes	
R941190190	High Reach Inc.	4200 NW Yeon Ave.	MS4	7359*			Equipment rental	Yes	
R941291170	I Harris	3077 NW St. Helens Rd.	MS4	?			Trans/offices	Yes	
R941290710	IJB Portland Terminal Inc.	3333 NW 35th Ave.	MS4	4011, 4013			Transportation	Yes	
R941290340	Industrial Craters & Packers	3074 NW St. Helens Rd.	MS4	4783			Manufacturing	No	
R941300380	Industrial Export Co.	3340 NW St. Helens Rd.	MS4	5051			Distribution	Yes	
R697400010	Industrial Valve of Oregon	3615 NW St. Helens Rd.	MS4	5085			Sales/repair	No	
R941290710	JLE Enterprises	3333 NW 35th Ave.	MS4	7542			Truck washing	No	
R941190200	McDowell Welding & Pipe	4000 NW St. Helens Rd.	MS4	3441*, 3559*	NPDES	1200L	Metal fabrication	Yes	
R941190700	McWhorter Technologies	4155 NW Yeon Ave.	MS4	2821*, 2851*	NPDES	100J	Manufacturing	Yes	
R941190700	McWhorter Technologies	4155 NW Yeon Ave.	MS4	2821*, 2851*	NPDES	1200Z	Manufacturing	Yes	
R941190700	McWhorter Technologies	4155 NW Yeon Ave.	MS4	2821*, 2851*	NPDES	1500A	Manufacturing	Yes	
R941190700	McWhorter Technologies	4155 NW Yeon Ave.	Sanitary	2821*, 2851*	Pretreatment	414.002	Manufacturing		
R941190290	Michelin Tire Corp.	4240 NW Yeon Ave.	MS4	5014			Warehouse	No	
R084303350	Myers Container Corp.	3000 NW St. Helens Rd.	MS4	3412*, 5085*, 7699*			Container recycler	Yes	

Table 3
Outfall 18 Facility List

Aquarius Search: Aug-2000
Basin Reconn: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit No.	Business Type	Exposure	Comments
R084303350	Myers Container Corp.	3000 NW St. Helens Rd.	Sanitary	3412*, 5085*, 7699*	Pretreatment	414.028	Container recycler		
R941300440	Northwestern Industrial Maintenance	3509 NW St. Helens Rd.	MS4	1799			Equipment repair	Yes	
R941291400	O&S Supply Co.	3103 NW St. Helens Rd.	MS4	5085*			Distribution	No	
R084303300	Oregon Handling Equipment	2949 NW St. Helens Rd.	MS4	3537*, 5046*, 5084*			Offices	No	
R941200150	Owens Corning	3750 NW Yeon Ave.	MS4	2952*, 2992*	NPDES	100J	Manufacturing	Yes	
R941200150	Owens Corning	3750 NW Yeon Ave.	MS4	2952*, 2992*	NPDES	1200Z	Manufacturing	Yes	
R941200150	Owens Corning	3750 NW Yeon Ave.	MS4	2952*, 2992*	NPDES	1300J	Manufacturing	Yes	
R941200150	Owens Corning	3750 NW Yeon Ave.	MS4	2952*, 2992*	NPDES	1500A	Manufacturing	Yes	
R941200150	Owens Corning	3750 NW Yeon Ave.	MS4	2952*, 2992*	NPDES	500J	Manufacturing	Yes	
R941200150	Owens Corning	3750 NW Yeon Ave.	Sanitary	2952*, 2992*	Pretreatment	400.092	Manufacturing		
R941290800	Owens Corning/Trumbull	3605 NW 35th Ave.	MS4	2952			Distribution	Yes	
R941291170	Pacific Pride	3031 NW St. Helens Rd.	MS4	5171			Gas station	Yes	
R941201230	Pacific Rail Services	3930 NW Yeon Ave.	MS4	4789			Transportation	Yes	
R941190190	Pacific Welding Inc.	4166 NW Yeon Ave.	MS4	7692			Metal fabrication	Yes	
R649704640	Performance Mobility Inc.	4347 NW Yeon Ave.	MS4	7352, 5047, 5013			Office/dist	No	
R6977400250	Pro Lube	3641 NW St. Helens Rd.	MS4	7699*			Vehicle repair	Yes	
R941290570	Professional Records Center	3587 NW Yeon Ave.	MS4	4226*			Offices	No	
R941290710	Pronto Distribution	3333 NW 35th Ave.	MS4	4789			Trans/distribution	Yes	
R941190190	Service Steel Inc.	4200 NW Yeon Ave.	MS4	3499*, 5051*			Metal fabrication	Yes	
R941300350	Special Asphalt Products	3537 NW St. Helens Rd.	MS4	2952*			Distribution	Yes	
R941300350	Special Asphalt Products	3537 NW St. Helens Rd.	MS4	5170*			Distribution	Yes	
R084303320	Sprint Equipment Building	2955 NW St. Helens Rd.	MS4	4813			Phone center	No	
R697400250	T W Express Inc.	3641 NW St. Helens Rd.	MS4	4731			Transportation	Yes	
R941300390	Terrys Diesel Repair	3345 NW St. Helens Rd.	MS4	7538			Vehicle repair	No	
R941300460	Trad Trucking Co. Inc.	3133 NW St. Helens Rd.	MS4	4212*, 4214*			Transportation	Yes	
R941290570	Tricor Packaging	3599 NW Yeon Ave.	MS4	5113			Distribution	No	
R941290710	Trimac/Rentway Truck Leasing	3333 NW 35th Ave.	MS4	4212, 4213, 7359, 7533			Transportation	Yes	
R084303330	US Sprint Communications	2955-57 NW St. Helens Rd.	MS4	4813			Phone center	No	
R941190200	USNR Portland	4000 NW St. Helens Rd.	MS4	5085*			Distribution	No	
R941200170	Van Waters & Rogers	3950 NW Yeon Ave.	MS4	5169*	NPDES	Individual	Chemical manufacturing	Yes	
R941200170	Van Waters & Rogers	3950 NW Yeon Ave.	Sanitary	5161*, 5169*	Pretreatment	400.025	Chemical manufacturing		
R941190980	Western Pacific Building Materials Inc.	3865 NW St. Helens Rd.	MS4	5031			Distribution	No	
R697400830	Western Stations	3821 NW St. Helens Rd.	MS4	9999			?	?	May not be active
R941190910	Western Wire Works	4025 NW Express Ave.	MS4	3496*	NPDES	1200Z	Metal fabrication	Yes	
R941290800	Westport Supply Co.	3536 NW 35th Ave	MS4	5085, 5087			Distribution	No	
R941290690	Wilhelm Trucking Co. 3250	~~3520~~ NW St. Helens Rd.	MS4	4212*, 4213*, 7353*	NPDES	1200Z	Transportation	Yes	
R941290690	Wilhelm Trucking Co. 3250	~~3520~~ NW St. Helens Rd.	Sanitary	4212*, 4213*, 7353*	Pretreatment	400.047	Transportation		

R941290780

*indicates SIC # has been verified via site inspection

CEG = Conditionally Exempt Generator
SQG = Small Quantity Generator

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 18

Location Code	Collection Date	Permit Type	pH	Temp.	TP	COD	TS	TSS	TOC	Diss OC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc	Total O&G
			SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ABF Freight Systems																					
01	01/19/1996	1200Z			0.2	38		164	21		<0.003	0.0014	0.003	0.0099	0.01	<0.0005		0.004			12
01	03/04/1996	1200Z	7		0.7	27		415	13		<0.005	0.002	0.018	0.061	0.064	<0		0.017		0.36	4.3
01	05/16/1996	1200Z	6.5		1.4	10		510	10		<0.005	<0.002	0.017	0.064	0.07	<0		0.014		0.39	8
01	03/03/1997	1200Z				27	28		<1			<0.001	<0.003	<0.067	<0.02	0.0005	<0.003	<0.004	<0.02	<0.209	7.1
01	04/08/1997	1200Z	6.5		0.03	41		83		4.3	<0.005	<0.002	0.006	0.021	0.022	<0.0002		<0.005		0.11	0.9
01	01/22/1998	1200Z	6.6	9		73		193						0.027	<0.1					0.968	21
01	05/08/1998	1200Z	6.6		0.8	290		150	73		<0.005	0.023	0.009	0.29	0.11	<0.0002		0.03		2.2	5.9
01	11/20/1998	1200Z	6.8	14.1		52		81						<0.03	<0.1					0.516	15
01	02/22/1999	1200Z	7			57		109						<0.03	<0.1					0.53	11
01	03/03/1999	1200Z	7.1					36						0.014	0.017					0.088	<5
01	11/24/1999	1200Z	5.9			51		19						<0.03	<0.1					0.16	8
01	12/08/1999	1200Z	8	10.3		4		32						<0.03	<0.1					0.85	6.9
02	03/04/1996	1200Z	6.4		0.25	<10		182	5		<0.005	<0.002	0.02	0.05	0.11	<0		0.009		0.29	4.2
02	05/16/1996	1200Z	6.2		0.24	140		100	4		<0.005	<0.002	0.008	0.025	0.038	<0		<0.005		0.14	1.6
02	03/03/1997	1200Z				200	230		2.21			<0.001	0.004	0.027	0.061	0.0007	<0.003	0.013	<0.02	0.25	17
02	04/08/1997	1200Z	6.6		0.1	100		160	27		<0.005	<0.002	0.013	0.047	0.041	<0.0002		0.011		0.54	3.7
02	01/22/1998	1200Z	6.7	9.4		260		576						0.093	<0.1					0.518	30
02	05/08/1998	1200Z	6.5		1	230		400	35		<0.005	<0.005	0.021	0.079	0.078	<0.0002		0.015		0.45	<5
02	11/20/1998	1200Z	6.7	14.3		67		109						0.042	<0.1					0.18	13
02	02/22/1999	1200Z	7.1			120		330						0.05	<0.1					0.26	21.5
02	03/03/1999	1200Z	6.4					59						0.015	0.01					0.26	<5
02	11/24/1999	1200Z	6.1			130		21						<0.03	<0.1					0.21	7.7
02	12/08/1999	1200Z	7.6	10.3		36		132						0.045	<0.1					0.13	11.5

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 18

Location Code	Collection Date	Permit Type	pH SU	Temp °C	TP mg/L	TPO4 mg/L	COD mg/L	TSS mg/L	TOC mg/L	Arsenic mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Nickel mg/L	Zinc mg/L	Polar O&G mg/L	Total O&G mg/L	TPH mg/L
Bay News Inc.																				
03	01/15/1996	1200Z	5.8		0.23		30	24	7.6	<0.005	<0.002	<0.005		0.017	<0				1.9	
03	04/11/1996	1200Z	6.5		<0.1		631	36	270	<0.005	<0.002	0.008		0.034	<0					
03	07/01/1997	1200Z	6.2		2.2		120	180	17	0.011	0.013	0.12	0.28	0.4	<0.0002	0.099	3.2		6	
03	10/10/1997	1200Z	6.69		0.61			483	52	<0.4	<0.08	0.068	0.019	0.3	<0.0002	<0.04	1.4		10	
03	10/27/1999	1200Z	6.8				71	54.7					<0.03	<0.1			0.11		12	
07	01/15/1996	1200Z	6.3		<0.1		40	195	1.1	<0.005	<0.002	<0.005		<0.005	<0				9	
07	04/11/1996	1200Z	6.6		0.25		14.4	42	7	<0.005	<0.002	0.008		0.027	<0					
07	07/01/1997	1200Z	6.3		0.14		44	30	9.5	<0.005	<0.002	<0.005	0.016	0.009	<0.0002	<0.005	0.19		1.4	
07	10/27/1999	1200Z	7.1				160	348					<0.03	<0.1			0.56		15	
13	01/15/1996	1200Z	6.2		<0.1		24	30	1.2	<0.005	<0.002	0.005		0.021	<0					
13	07/01/1997	1200Z	6.4		0.32		120	45	14	<0.005	<0.002	<0.005	0.02	0.011	<0.0002	0.005	0.26		3.1	
13	10/10/1997	1200Z	6.58		0.34			1680	39	<0.4	<0.08	0.036	0.13	0.18	<0.0002	<0.04	1		30	
13	10/27/1999	1200Z	6.7				57	54.3					<0.03	<0.1			0.13		10	
17	01/15/1996	1200Z	6.2		<0.1		47	84	1.2	<0.005	0.008	0.013		0.06	<0				7.6	
17	04/11/1996	1200Z	6.2		0.24		61.1	104	7	0.031	<0.002	0.045		0.06	<0					
17	07/01/1997	1200Z	6.3		9.4		1100	1500	44	0.029	0.12	0.46	1.4	2.4	<0.0002	0.29	9.6		5.5	
17	10/10/1997	1200Z	6.47		0.08			116	72	<0.4	<0.08	0.021	0.013	<0.15	<0.0002	<0.04	0.56		21	
17	10/27/1999	1200Z	6.4				240	202					0.13	0.1			1		140	
Burlington Northern Railroad																				
01	10/28/1997	1200Z	6.55		1.1		780	1200	13									21	72	
01	06/26/1998	1200Z	7.58			1.1	120	130	10	<0.005	0.003	0.002	0.04	0.023	<0.002	<0.01	0.33		7	
01	11/30/1998	1200Z						34												
01	11/24/1999	1200Z	5.3				15	8.7					<0.03	<0.1			0.23		<5	
Carson Oil Co.																				
01	11/20/1998	1200Z	6.9	14.6			190	223					0.039	<0.1			0.21		25	
01	12/07/1998	1200Z	5.83					119					<0.02	0.029			0.22		9	
01	02/18/1999	1200Z	7.1				56	146					0.037	<0.1			0.16		<5	
01	10/27/1999	1200Z	5.7				140	186					0.07	<0.1			0.4		17	
01	05/08/2000	1200Z	5.82					68					0.03	0.01			0.2		4	
Christensen Oil																				
01	10/30/1997	1200Z	7.39				105	108	32.1	0.003	0.0017	0.0083	0.028	0.0357	0.00042	0.005	0.37		1.03	
01	11/20/1998	1200Z	6.4	13.8			28	152					<0.03	<0.1			0.14		7.3	
01	01/19/1999	1200Z	6.28					120					<0.018	<0.045			0.09		<3	
01	03/01/1999	1200Z	6.7				110	246					0.056	<0.1			0.29		14.7	
01	05/17/1999	1200Z	6.15					19					<0.02	<0.05			0.02		<3	
01	10/27/1999	1200Z	6.6				87	98.8					<0.03	<0.1			0.34		23	
01	11/10/1999	1200Z	6.37					73					0.1	<0.05			0.28	5	16	11

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 18

Location Code	Collection Date	Permit Type	Flow gallons	Daily Flow gallons	pH SU	Temp. °C	TP mg/L	COD mg/L	TSS mg/L	TOC mg/L	Arsenic mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Zinc mg/L	Total O&G mg/L	Ethanol mg/L
Equilon -Texaco																						
01	01/02/1995	1300J																			2	
01	01/09/1995	1300J																			2.3	
01	01/16/1995	1300J																			1	
01	01/23/1995	1300J																			1.6	
01	01/30/1995	1300J																			4.2	
01	02/07/1995	1300J																			0.9	
01	02/13/1995	1300J																			2.3	
01	02/20/1995	1300J																			2.4	
01	02/28/1995	1300J																			3.1	
01	03/06/1995	1300J																			2.5	
01	03/13/1995	1300J																			2.9	
01	03/20/1995	1300J																			1.8	
01	03/27/1995	1300J																			5	
01	04/03/1995	1300J																			1.9	
01	04/10/1995	1300J																			0.9	
01	04/16/1995	1300J																			1.3	
01	04/23/1995	1300J																			1.7	
01	04/30/1995	1300J																			2.5	
01	05/07/1995	1300J																			0.9	
01	05/14/1995	1300J																			2.8	
01	05/21/1995	1300J																			2.4	
01	05/28/1995	1300J																			3.3	
01	06/04/1995	1300J																			1	
01	06/11/1995	1300J																			1.6	
01	06/18/1995	1300J																			1.4	
01	06/25/1995	1300J																			4.3	
01	07/02/1995	1300J																			2.3	
01	07/09/1995	1300J		43																	2.8	
01	07/15/1995	1300J		331																	1.7	
01	07/23/1995	1300J																			1.7	
01	07/30/1995	1300J																			2.1	
01	08/06/1995	1300J																			0.9	
01	08/13/1995	1300J																			1.4	
01	08/20/1995	1300J																			4.1	
01	08/27/1995	1300J																			4.9	
01	09/03/1995	1300J																			2.8	
01	09/10/1995	1300J																			4.2	
01	09/17/1995	1300J																			<4.8	<10
01	09/24/1995	1300J																			3.7	
01	10/01/1995	1300J																			4.8	
01	10/08/1995	1300J																			7.2	
01	10/10/1995	1300J			5.62		0.11	342	52	74	<0.005	<0.002	<0.005	0.015	0.012	<0		<0.005		0.22	5.2	
01	10/15/1995	1300J																			2.2	
01	10/22/1995	1300J																			1.9	
01	10/29/1995	1300J																			2.3	
01	11/06/1995	1300J																			1.1	
01	11/13/1995	1300J																			<0.5	
01	11/15/1995	1300J					0.05	10		7.6	<0.005	<0.001	<0.003	<0.004	<0.02	0.0009	0.005	0.008	<0.02	0.082	16	

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 18

Location Code	Collection Date	Permit Type	Flow gallons	Daily Flow gallons	pH SU	Temp. °C	TP mg/L	COD mg/L	TSS mg/L	TOC mg/L	Arsenic mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Zinc mg/L	Total O&G mg/L	Ethanol mg/L
Equilon -Texaco																						
01	11/21/1995	1300J																			6.4	
01	11/28/1995	1300J																			0.9	
01	12/03/1995	1300J																			<0.5	
01	12/09/1995	1300J																			1.4	
01	12/17/1995	1300J																			0.8	
01	12/19/1995	1300J			6.7		0.11	182		28	<0.005	<0.002	<0.005	<0.005	0.023	<0		<0.005		<0.005	1.4	
01	12/24/1995	1300J																			1	31.9
01	12/31/1995	1300J																			11	
01	07/06/1996	1300J	0																		<0.5	
01	07/14/1996	1300J	0																		9.7	
01	07/21/1996	1300J	0																		5.8	
01	07/28/1996	1300J	1685																		6.2	
01	08/04/1996	1300J	5054																		5.6	
01	08/11/1996	1300J	0																		<0.5	
01	09/15/1996	1300J	75758																		<0.5	
01	09/22/1996	1300J	5054																		<0.5	
01	09/29/1996	1300J	0																		<0.5	
01	10/06/1996	1300J	0																		<0.5	
01	10/13/1996	1300J	1509																		16	
01	10/14/1996	1300J			6.2		1.8	270	10	68	<0.002	<0.005	<0.005	0.016	0.014	<0.0002		<0.015		0.44	14	
01	10/20/1996	1300J	0																		<0.5	
01	10/27/1996	1300J	0																		<0.5	
01	11/03/1996	1300J	25243																		29.8	
01	11/10/1996	1300J	0																		<0.5	
01	11/17/1996	1300J	2033																		<0.5	
01	11/25/1996	1300J	0																		<0.5	
01	12/02/1996	1300J	97569																		<0.5	
01	12/08/1996	1300J	77439																		<0.5	
01	12/15/1996	1300J	0																		<0.5	
01	12/22/1996	1300J	35352																		<0.5	
01	12/23/1996	1300J			6.81		0.611	41.4	<10	7.27	<0.001	<0.001	0.00124	0.0057	0.0048	<0.0002		<0.002		0.128	<5	
01	01/02/1997	1300J	0																		<0.5	
01	01/12/1997	1300J	0																		<0.5	
01	01/20/1997	1300J	10606																		<0.5	
01	01/23/1997	1300J																				20.6
01	01/27/1997	1300J	74074																		6.57	22.7
01	02/02/1997	1300J	835.2																		<0.5	
01	02/10/1997	1300J	0																		<0.5	
01	02/16/1997	1300J	1684.8																		<0.5	<10
01	02/24/1997	1300J	0																		<0.5	
01	03/02/1997	1300J	52186																		<0.5	
01	03/09/1997	1300J	89222																		<0.5	<10
01	03/18/1997	1300J	116165																		<0.5	
01	03/23/1997	1300J	0																		<0.5	
01	03/30/1997	1300J	37037																		<0.5	
01	04/06/1997	1300J	0																		5.44	
01	04/13/1997	1300J	18518																		6.63	
01	04/20/1997	1300J	1684.8																		<0.5	

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 18

Location Code	Collection Date	Permit Type	Flow gallons	Daily Flow gallons	pH SU	Temp. °C	TP mg/L	COD mg/L	TSS mg/L	TOC mg/L	Arsenic mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Zinc mg/L	Total O&G mg/L	Ethanol mg/L
Equilon -Texaco																						
01	04/27/1997	1300J	13464																		<0.5	
01	05/04/1997	1300J	1684.8																		<0.5	<10
01	05/11/1997	1300J	0																		<0.5	
01	05/18/1997	1300J	0																		<0.5	
01	05/25/1997	1300J	0																		5.71	
01	06/01/1997	1300J	5054.4																		8.3	
01	06/08/1997	1300J	0																		<0.5	
01	06/15/1997	1300J	0																		5.19	
01	06/22/1997	1300J	65650																		5.58	
01	06/29/1997	1300J	0																		6.89	
01	07/06/1997	1300J	835.2																		<0.5	
01	07/13/1997	1300J	0																		<0.5	<10
01	07/20/1997	1300J	0																		<0.5	
01	07/27/1997	1300J	0																		5.57	
01	08/03/1997	1300J	0																		<0.5	<10
01	08/10/1997	1300J	0																		<0.5	
01	08/17/1997	1300J	0																		<0.5	
01	08/24/1997	1300J	112795																		14.1	
01	09/02/1997	1300J	0																		21.1	
01	09/07/1997	1300J	0																		14.9	16.6
01	09/14/1997	1300J	8424																		5.57	<10
01	09/21/1997	1300J	0																		<0.5	
01	09/28/1997	1300J	0																		<0.5	
01	10/05/1997	1300J	8424																		<0.5	
01	10/12/1997	1300J	3369.6																		<0.5	
01	10/20/1997	1300J	0																		<0.5	<10
01	10/27/1997	1300J	0																		<0.5	
01	10/31/1997	1300J			6.75		0.066	19.6	<10	5.05	<0.001	<0.001	<0.001	0.004	0.008	<0.0002		<0.002		0.137	1.27	
01	11/03/1997	1300J	16834																		<0.5	<10
01	11/10/1997	1300J	0																		<0.5	
01	11/17/1997	1300J	37037																		<0.5	
01	11/19/1997	1300J	178445																		<0.5	
01	11/24/1997	1300J	60610																		<0.5	
01	12/01/1997	1300J	0																		<0.5	20.3
01	12/08/1997	1300J	5054.4																		<0.5	
01	12/15/1997	1300J	70704																		<0.5	
01	12/22/1997	1300J	16834																		<0.5	
01	12/29/1997	1300J	0																		<0.5	
01	01/20/1998	1300J			6.85		0.04	37.9	<10	10.1	<0.001	<0.001	0.001		0.003	<0.0002		0.004		0.346	6.14	
01	12/17/1998	1300J			6.63		0.05	14	<10	4.08	<0.001	<0.001	<0.001	0.004	0.002	0.00034		<0.002		0.338	0.601	
01	02/17/1999	1300J			6			29	11					<0.03	<0.1					0.14	5.6	
01	02/26/1999	1300J			6.32		<0.035	<5	<10	3.1	<0.001	<0.001	0.001	0.0035	0.003	<0.0002		<0.002		0.137	<0.5	
01	12/09/1999	1300J			5.8	7.4		22	3.5					<0.03	<0.1					0.14	6.9	
02	10/14/1996	1300J			7.3		1	36	24	7.1	<0.002	<0.005	<0.005	0.015	0.013	<0.0002		<0.015		0.081	<5	
02	12/23/1996	1300J			6.9		0.815	17.9	<10	3.19	<0.001	<0.001	0.00512	0.0084	0.0123	<0.0002		0.0043		0.054	<5	

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 18

Location Code	Collection Date	Permit Type	pH	Temp.	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Iron	Lead	Mercury	Nickel	Zinc	Total O&G
			SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Gunderson Inc.																	
01	01/09/1995	1200Z	6.9		73	77	6.9		0.000076		0.061		0.048			0.29	5.2
01	06/14/1995	1200Z	7.3		25		5.8				0.026		0.01			0.092	0.88
01	01/05/1998	1200Z	6.16	7.2		50					0.061		0.039			0.358	4.83
01	01/28/1999	1200Z	7.3		92	165					0.09		<0.1			0.39	11.9
01	05/10/2000	1200Z	6.3	9	13	13					<0.03		<0.1			1.9	<5
02	01/09/1995	1200Z	6.3		45	42	6.5	0.0045	0.0043		0.068		0.032			0.29	1.9
02	06/14/1995	1200Z	7		46		6.1	0.0029		0.006	0.063		0.025			0.32	0.72
02	06/15/1995	1200Z				24											
02	05/20/1998	1200Z	7.63	13.5		<10					0.02		0.002			0.109	<0.5
03	01/09/1995	1200Z	6.1		30		6.4		0.003							2.2	
03	05/20/1998	1200Z	6.94	13.5		<10					0.021		0.006			0.147	0.658
04	01/09/1995	1200Z	6.8		15											0.19	
04	06/14/1995	1200Z	6.9				4.1				0.036					0.37	
05	01/09/1995	1200Z	7.2		110	19	25		0.000064		0.049		0.0077			0.58	10
05	06/14/1995	1200Z	7.4		45		7.3	0.034		0.016	0.16		0.03			0.88	2.3
05	06/15/1995	1200Z				44											
06	01/09/1995	1200Z	7		67	400	6.4	0.0096	0.0039	0.071	0.39		0.57	0.0014	0.066	1.4	1.2
06	01/05/1998	1200Z	6.35	8		<10					0.013		0.001			0.93	<0.5
07	01/05/1998	1200Z	6.42	6.8		20					0.057		0.023			0.306	1.98
08	01/05/1998	1200Z	6.43	7.7		<10					0.022		0.009			0.163	0.931
08	01/28/1999	1200Z	6.1		26	58					0.06		<0.1			0.22	5.8
09	01/05/1998	1200Z	7.11	7.4		32					0.059		0.034			0.416	2.86
10	01/05/1998	1200Z	7.1	7.4		67					0.07		0.035			0.356	2.92
11	01/05/1998	1200Z	6.61	7.3		<10					0.011	0.004				0.217	<0.5
12	04/22/1996	1200Z	6.9	12.8	10	2	3.4	<0.002	0.002	<0.003	0.004		<0.02	0.0011	<0.004	2.12	7.6
12S	02/24/1999	1200Z	9.4		9	1					<0.03		<0.1			0.42	6.2
12W	02/24/1999	1200Z	6.7		5	12					<0.03		<0.1			0.61	7.5
13	01/05/1998	1200Z				<10					0.014		0.001			1.35	<0.5
13	01/28/1999	1200Z	5.9		4	5					0.04		<0.1			0.3	<5
14	01/05/1998	1200Z	7.05	8.8		<0.1					0.005		<0.001			0.446	<0.5
16	01/05/1998	1200Z	7.05	6.9		25					0.159		0.02			0.478	1.76
17	01/05/1998	1200Z	7.1	7.1		184					0.486		0.074			1.2	3.82
17	05/20/1998	1200Z	6.99	14.6		<10					0.149		0.01			0.428	<0.5
19	01/05/1998	1200Z	7.5	6.8		78					0.317		0.047			0.851	5.44
19	05/20/1998	1200Z	7.1	14		<10					0.134		0.011			0.469	<1.2
20	01/05/1998	1200Z	6.75	7.1		<10					0.051		0.008			0.341	0.5
21	01/05/1998	1200Z	6.66	6.7		1100					0.09		1.89			5.35	<0.5
22	01/05/1998	1200Z	7.14	7.5							0.293		0.245			0.779	
22	05/20/1998	1200Z	6.76	14		<10					0.116		0.127			0.528	<0.5
23	01/05/1998	1200Z	7.48	6.5		<10					0.053		0.055			0.321	<0.5
24	01/05/1998	1200Z	6.66	6.4		50					0.196		0.038			0.62	2.58

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 18

Location Code	Collection Date	Permit Type	pH	Residual Cl	BOD-5	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Nonpolar O&G	Polar O&G	Total O&G	Chloroform	Ethyl Benzene	Toluene
			SU	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L.	mg/L	mg/L	mg/L	mg/L
McWhorter Technologies																						
01	04/10/1995	1200Z	6.9			14		6.4		0.00051		0.012	0.0036			0.49						
01	11/09/1995	1200Z	6.8			17	20	8.1	<0.002	<0.005	<0.005	<0.01	0.082	<0	0.015	0.2			0.55			
01	04/15/1996	1200Z	6.9			13	<10	8.2	<0.002	<0.005	<0.005	0.02	0.0002	<0	<0.015	0.31			<0.5			
01	11/15/1996	1200Z	6.88	<0.1		30.6	<10	18.6	<0.001	<0.001	0.004	0.0156	0.0076	<0.0002	0.0063	0.56			<5			
01	04/22/1997	1200Z	6.72			16.4	<10	6.16	<0.001	<0.001	<0.001	0.0103	0.0023	<0.0002	<0.002	0.5	<5	<5	<5			
01	11/25/1997	1200Z	7.07			<5	<10	<3	<0.001	<0.001	<0.001	0.006	0.004	<0.0002	<0.002	0.24			<5			
01	06/04/1998	1200Z	7.18			<5	19	<3											<5			
01	11/24/1999	1200Z	6			46	16					0.036	<0.1			0.25			<5			
02	04/10/1995	1200Z	6.5			7				0.00014		0.006				0.22						
02	11/09/1995	1200Z	7.3			11	<10	4.5	<0.002	<0.005	<0.005	<0.01	0.0071	<0	<0.015	0.16			<0.5			
02	04/15/1996	1200Z	6.9			13	11	5.7	<0.002	<0.005	<0.005	0.012	0.0054	<0	<0.015	0.23			<0.5			
02	11/15/1996	1200Z	7.08			35.5	14	11.6	<0.001	<0.001	0.0026	0.0167	0.0063	<0.0002	0.0032	0.25			<5			
02	04/22/1997	1200Z	6.88			<5	<10	3.35	<0.001	<0.001	<0.001	0.0063	0.0012	<0.0002	<0.002	0.15	<5	<5	<5			
02	11/25/1997	1200Z	7.09			<5	<10	<3	<0.001	<0.001	0.001	0.007	0.004	<0.0002	<0.002	0.37			<5			
02	06/04/1998	1200Z	6.99			<5	<10	4.2											<5			
02	11/24/1999	1200Z	6.5			41	51.5					0.044	<0.1			0.2			16			
03	04/10/1995	1200Z	6			63		23		0.00041		0.012	0.0057			0.3			0.86			
03	11/09/1995	1200Z	6.1			120	<10	43	<0.002	<0.005	<0.005	<0.01	0.015	<0	<0.015	0.18			<0.5			
03	04/15/1996	1200Z	6.1			120	<10	54	<0.002	<0.005	<0.005	0.013	0.015	<0	<0.015	0.18			<0.5			
03	11/15/1996	1200Z	7			26.1	<10	19.6	<0.001	<0.001	0.0021	0.0128	0.0074	<0.0002	0.002	0.49			<5		13.3	8.17
03	04/22/1997	1200Z	6.7			59.4	16	23.2	<0.001	<0.001	0.00135	0.0132	0.01	<0.0002	0.0029	0.42	<5	<5	<5		84.1	
03	05/27/1997	1200Z	8.27		143	542	<10	168	0.0035	0.00102	0.00264	0.0477	0.0187	<0.0002	0.0047	0.41	<5	<5	<5	1	215	184
03	11/25/1997	1200Z	6.75			19.3	<10	11.1	<0.001	<0.001	0.001	0.009	0.01	<0.0002	0.002	0.16			<5			
03	06/04/1998	1200Z	6.62			46.2	<10	18.9											<5			
03	11/24/1999	1200Z	6.2			44	26					<0.03	<0.1			0.08			6.4			

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 18

Location Code	Collection Date	Permit Type	pH	Temp.	Spec. Cond.	Residual Cl	NH4-N	BOD-5	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc	Nonpolar O&G	Polar O&G	Total O&G	TPH
			SU	°C	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Owens Corning																									
01	06/05/1995	1200Z							150		53	0.008		0.005	0.07	0.004			0.04		0.55				
01	06/13/1995	1200Z	6.46							5															
01	01/09/1996	1200Z	6.94						8	<1	<1	<0.005	0.004	<0.001	<0.02	0.002	<0		<0.01		0.04			<3	
01	04/01/1996	1200Z	7.68		79.5	<0.18	<0.12	3	28.9	77	2.4													5	
01	05/28/1997	1200Z	7.15						46	11	12	0.0015	0.0009	0.002	0.02	0.008	<0.0005		<0.01		0.11		<3	<3	<3
01	12/15/1997	1200Z	7.12						6	2	0.8	<0.0005	<0.0002	<0.002	<0.02	0.0046	<0.0005		<0.01		0.05			<3	
01	12/28/1998	1200Z	8							54					<0.02	<0.02					0.09			<3	
01	06/24/1999	1200Z	6.78							18					<0.02	<0.05					0.03			<3	
01	04/13/2000	1200Z	6.9	14					4	19					<0.03	<0.1					0.07			<5	
01	04/13/2000	1200Z	8.29							13					<0.02	<0.021					0.18			<3	
02	04/13/2000	1200Z	8.3	18.1					45	24.4					<0.03	<0.1					0.47			5.3	
03	06/05/1995	1200Z							83		31	0.009		0.008		0.017			0.02		0.19			5	
03	06/13/1995	1200Z	8.37							40															
03	01/09/1996	1200Z	6.95						4	<1	1	0.011	<0.001	<0.001	<0.02	0.002	<0		<0.01		0.13			<3	
03	05/28/1997	1200Z	7.59						27	6	7.7	0.013	<0.0002	0.001	<0.02	0.004	<0.0005		<0.01		0.07		<3	<3	<3
03	12/15/1997	1200Z	7.53						27	93	0.9	0.013	0.0004	0.015	0.04	0.024	<0.0005		<0.01		0.36			<3	
03	12/28/1998	1200Z	7.48							46					0.02	<0.05					0.28			<3	
03	01/28/1999	1200Z	4.8						4	20					<0.03	<0.1					0.07			<5	
04	06/05/1995	1200Z							58		20				0.02	0.015			0.02		0.11				
04	06/13/1995	1200Z	6.95							82															
04	01/24/1996	1200Z	7.5						6	11	<1	<0.005	<0.001	0.002	<0.02	0.009	<0		<0.01		0.1			<3	
04	05/28/1997	1200Z	7.55						30	36	6.7	0.0062	0.0007	0.006	0.04	0.041	0.0007		0.02		0.21		<3	3	<3
04	12/15/1997	1200Z	7.04						40	24	0.8	0.0006	<0.0002	<0.002	<0.02	0.0039	<0.0005		<0.01		0.04			<3	
04	01/28/1999	1200Z	8.7						210	73					0.04	<0.1					0.5			19.9	
Western Wire Works																									
01	11/20/1998	1200Z	7.02							12					0.016	0.014					0.07			1.3	
01	05/07/1999	1200Z	6.88							6.5					0.012	<0.005					0.01			<5	
01	10/27/1999	1200Z	6.4						26	25					<0.03	<0.1					0.08			11	
02	11/20/1998	1200Z	7.02							3					<0.001	<0.001					0.02			<1	
02	05/04/1999	1200Z	6.89							<5					0.012	0.007					0.12			<5	
02	10/27/1999	1200Z	5.5						2	2					<0.03	<0.1					0.05			8	
Wilhelm Trucking Co.																									
01	11/18/1996	1200Z	5.6	6.6					5	1	8.49	0.0023	<0.001	<0.003	<0.004	0.038	<0.0005	<0.003	<0.004	<0.02	0.39			19	
01	10/08/1997	1200Z	5.8							430			<0.01	<0.02	0.085	0.29					0.33	<2		9.7	3.7
01	10/09/1997	1200Z	6.3	10.8					6	46					<0.02	<0.3					0.57			19	
01	02/06/1998	1200Z	5.8							430					0.085	0.29					0.33	3.7		9.7	
01	11/10/1998	1200Z	6.1						20	59					<0.03	<0.1					0.99			8.1	
01	12/28/1998	1200Z	6.4						25	42					<0.03	<0.1					0.06			9.6	
01	03/01/1999	1200Z	6.4						29	84.3					<0.03	<0.1					0.06			5.4	
01	10/27/1999	1200Z	6.8						200	426					0.12	0.12					0.48			12	

Table 5
Outfall 18 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.
4350	NL	NL	Gunderson Bros. (steel fabricators)	Gunderson Bros. (steel fabricators)	Gunderson Bros. (steel fabricators)	Gunderson Bros. (steel fabricators)	Gunderson Bros. (steel fabricators)
NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.
2949	NL	NL	NL	Lectro-Lift Fork Truck mfrs.	Lectro-Lift Fork Truck mfrs.	Lectro-Lift Fork Truck mfrs.	Lectro-Lift Fork Truck mfrs.
3000	NL	NL	NL	Reimann & McKinney Inc. (steel drum reconditioners)	Reimann & McKinney Inc. (steel drum reconditioners)	NL	NL
3033	NL	NL	NL	Clyde's Iron & Steel Co.	Clyde's Iron & Steel Co.	NL	NL
3074	Magnus Metal Division of National Lead Co. (brass founders)	Magnus Metal Division of National Lead Co. (brass founders)	O'Neill Transfer co.	O'Neill Transfer co.	O'Neill Transfer co.	NL	NL
3103	NL	NL	NL	Sure-Seal Tractor Parts	NL	NL	NL
3133	NL	NL	NL	Timberline Equipment Co. (machinery)			Traditional Trucking Co.
3200	NL	NL	NL	Wilhelm Trucking Co.	Wilhelm Trucking Co.	Wilhelm Trucking Co.	NL
3250	NL	NL	NL	NL	NL	NL	Wilhelm Trucking Co.
3333	NL	NL	NL	Hemphill Oil Co. (fuel oil)	Hemphill Oil Co. (fuel oil)		Hemphill Oil Co.
3335	NL	NL	NL	NL	NL	NL	Long Painting Co.
3340	NL	NL	NL	NL	NL	NL	Index Steel
3345	NL	NL	NL	NL	NL	NL	Terry's Diesel Repair
3347	NL	NL	NL	Mitchell Bros. (crane repair)	NL	NL	NL
3349	NL	NL	NL	Saab Motors (repair)	Saab Motors (repair)	NL	NL
3537	NL	NL	NL	NL	NL	NL	Special Asphalt Inc.
3601	National Pitch Products Corp. (roofing materials)	National Pitch Products Corp. (roofing materials)	NL	NL	NL	NL	NL
3615	NL	NL	NL	American Chain & Cable Mfrs.	NL	NL	Industrial Valves of Oregon

Table 5
Outfall 18 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
3640	The Texas Co.—Portland Terminal (trucking)	NL	NL	NL	NL	NL	NL
3641	NL	NL	Nehalem Valley Trucking	John Day Portland Auto Freight Trucking/ Nehalem Valley Trucking/ Tillamook-Portland Auto Freight	John Day Portland Auto Freight Trucking/ Nehalem Valley Trucking/ Tillamook-Portland Auto Freight	Becker Trucking	Becker Trucking
3664	NL	NL	NL	Texaco Inc. (transformer dept.)	NL	NL	NL
3717	General Paint Corp. (varnish factory)	NL	Truck Parts Wrecking Inc.	Truck Parts Wrecking Inc.	NL	NL	NL
3800	NL	NL	NL	NL	NL	Texaco Refining	Texaco Refining
3821	Texaco Refining	Texaco Refining	Christenson Oil Co.	Christenson Oil Co.	Christenson Oil Co.	Texaco Refining	Texaco Refining
3950	NL	NL	Reynolds Metals Co.	Reynolds Metals Co.	Reynolds Metals Co.	NL	NL
4000	NL	NL	NL	Steel Products of Oregon	NL	NL	McDowell Welding
4015	NL	Wilhelm Trucking	Wilhelm Trucking	Wilhelm Trucking	Wilhelm Trucking	Wilhelm Trucking	NL
NW Yeon Ave.	**NW Yeon Ave.**	**NW Yeon Ave.**	**NW Yeon Ave.**	**NW Yeon Ave.**	**NW Yeon Ave.**	**NW Yeon Ave.**	**NW Yeon Ave.**
3500	NL	Portland Terminal RR (round house)	Portland Terminal RR (round house)	Portland Terminal RR (round house)	Portland Terminal RR (round house)	Portland Terminal RR (round house)	Portland Terminal RR
3551	NL	NL	NL	NL	NL	NL	Spicers Paper
3581	NL	NL	NL	NL	NL	NL	Port Townsend Paper
3601	NL	NL	NL	General Can Co./ Durkin Chemical Co./ General Transport Trucking	NL	Mt. Hood Beverage Co. (beer distr.)	Mt. Hood Beverage Co. (beer distr.)
3720	NL	Great Western Chemical Co.	Great Western Chemical Co.	Great Western Chemical Co.	Great Western Chemical Co.	Great Western Chemical Co.	NL
3750	NL	NL	NL	Fry Roofing Co.	NL	Owens-Corning Fiberglass/ Trumbull Asphalt	Owens-Corning Fiberglass/ Trumbull Asphalt
3840	NL	NL	NL	Ackroyd Photography	Ackroyd Photography	Ackroyd Photography	Ackroyd Photography
3900	NL	NL	NL	Westland Trailer Manufacturers	NL	NL	NL
3940	NL			Great Northern RR			

Table 5
Outfall 18 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
3950	NL	NL	NL	Scientific Supplies Co. (laboratory equipment)/ Van Waters & Rogers			Van Waters & Rogers Chemicals
4033	NL	NL	NL	American Steel Inc.	American Steel Inc.	American Steel Inc.	American Steel
4155	NL	NL	NL	McCloskey Varnish Co.	McCloskey Varnish Co.	NL	McWhorter Inc.
4200	NL	NL	NL	Pacific Light Materials Foundry	Pacific Light Materials Foundry	NL	NL
4240	NL	NL	NL	NL	NL	Michelin Tire Corp.	Michelin Tire Corp.
4285	NL	NL	NL	NL	NL	ABF Freight Lines	ABF Freight Lines
NW Express Ave.	**NW Express Ave.**	**NW Express Ave.**	**NW Express Ave.**	**NW Express Ave.**	**NW Express Ave.**	**NW Express Ave.**	**NW Express Ave.**
4025	NL	NL	NL	Western Wire Works Inc. (mfrs.)	Western Wire Works Inc. (mfrs.)	Western Wire Works Inc. (mfrs.)	Western Wire Works Inc. (mfrs.)
NW 30th Ave.	**NW 30th Ave.**	**NW 30th Ave.**	**NW 30th Ave.**	**NW 30th Ave.**	**NW 30th Ave.**	**NW 30th Ave.**	**NW 30th Ave.**
2304	NL	NL	NL	NL	NL	Pacific State Machinery	Pacific State Machinery
2305	NL	NL	NL	Riddell Trailer & Equipment Co.	NL	NL	NL
2315	United Foundry Co.	NL	NL	NL	NL	NL	NL
2335	Multnomah Iron Works (machinery mfrs.)		NL	Wade Manufacturing Co. (machinery)	NL	NL	NL
2406	NL	NL	NL	Galvanizers Inc.	Galvanizers Inc.	Galvanizers Inc.	Galvanizers Co.
2551	NL	NL	NL	Pacific Pumping Co. (mfrs.)	Pacific Pumping Co. (mfrs.)	Paco-Johnston Pumps Co.	Paco-Johnston Pumps Co.
NW 31st Ave.	**NW 31st Ave.**	**NW 31st Ave.**	**NW 31st Ave.**	**NW 31st Ave.**	**NW 31st Ave.**	**NW 31st Ave.**	**NW 31st Ave.**
2330	NL	NL	NL	Liberty Transportation	Liberty Transportation	Liberty Transportation	Liberty Transportation
2345	NL	NL	NL	Wesco Distr.	Wesco Distr.	Wesco Distr.	Wesco Distr.
2730	NL	NL	NL	Portland Brewing Co.	Portland Brewing Co.	Portland Brewing Co.	Portland Brewing Co.
2750	NL	NL	NL	Power Transmission Products	Power Transmission Products	Power Transmission Products	Power Transmission Products
2755	NL	NL	NL	Lomac Motors (automobile engine mfr.)	Lomac Motors (automobile engine mfr.)	Lomac Motors (automobile engine mfr.)	NL

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Outfall 18 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
2800	NL	NL	NL	Glidden-Durkee Division of SCM (plant)	Glidden Coatings	Glidden Coatings	Northwest Pump & Equipment Co.
2805	NL	NL	NL	NL	NL	NL	Pacific Package Express
2854	NL	NL	NL	Carrier Air Conditioning Co.	Carrier Air Conditioning Co.	NL	NL
2909	NL	NL	NL	Holman Transfer Co.	Holman Transfer Co.	NL	NL
2929	NL	NL	NL	Frigidaire Sales Corp. (refrigerators)	Frigidaire Sales Corp. (refrigerators)	NL	NL
3150	NL	NL	NL	Airefco Inc. (air conditioner mfr.)	Airefco Inc. (air conditioner mfr.)	NL	NL
NW 35th Ave.	**NW 35th Ave.**	**NW 35th Ave.**	**NW 35th Ave.**	**NW 35th Ave.**	**NW 35th Ave.**	**NW 35th Ave.**	**NW 35th Ave.**
2720	NL	NL	NL	Goodyear Tire & Rubber Co.	NL	NL	NL
2727	Soule Steel Co.	Soule Steel Co.	Soule Steel Co.	Soule Steel Co. (plant)	Soule Steel Co.	NL	NL
2840	NL	NL	General Tire & Rubber Co.	General Tire & Rubber Co.	NL	Daily Journal of Commerce (newspaper)	Daily Journal of Commerce (newspaper)
3003	NL	NL	NL	NL	NL		Columbia America Plating
3125	NL	NL	Arrow Transportation Co.	Arrow Transportation Co.	Arrow Transportation Co.	Carson Oil Co.	Carson Oil Co.
3136	NL	NL	NL	NL	NL	NL	Weyerhaeuser Corp.
3322	NL	NL	Cordano Chemical Co/ Pihl Transfer & Storage Co.	Cordano Chemical Co./ GAF Corp. (dye stuffs)/ Pihl Transfer & Storage Co./ Sherwin-Williams Paint	Ashland Chemical	Ashland Chemical/ General Polymers	Ashland Chemical/ General Polymers
3326	NL	NL	Signode Steel Corp.	Signode Steel Corp.	Signode Steel Corp.	NL	NL
3333	NL	NL	Garrett Trucking	Garrett Trucking	Garrett Trucking	NL	Bay News Press
3605	NL	NL	Trumbull Asphalt Co.	Trumbull Asphalt Co.	Trumbull Asphalt Co.	NL	NL

Table 6
Outfall 18 EPA Toxic Release Inventory List and Hazardous Waste Generator List

RNO	Address	Company	EPA ID	TRI ID	SIC Number	Generator Status	Releases to Environment	Chemicals Used on Site
R941190130	4285 NW Yeon Ave	ABF Freight System Inc	ORD112669049	*	4213	CEG	*	*
R941190361	4033 NW Yeon	American Steel Llc	ORD016861478	*		CEG	*	*
R941291370	3322 NW 35th Ave.	Ashland Distribution Co.	ORD115485989	97210SHLND3322N	4225, 4226, 5162, 5169	LQG	To Air only	Certain glycol ethers, ethylene glycol, styrene, toluene, xylene
R697400490	3717 NW St. Helens Rd	Baxter & Flaming Ind Inc	ORD987188117	*	3411	CEG	*	*
R084303610	3003 NW 35th Ave.	Columbia American Plating Co.	ORD068788926	97210CLMBM3003N	3471	LQG	To Air only	Chlorine, hydrochloric acid, sodium hydroxide solution, sulfuric acid
R941190330	3800 NW St. Helens Rd.	Equilon Portland Terminal	ORD000641639	97210QLNPR3800N	5171	LQG	To Air only	1,2,4-trimethylbenzene, benzene, ethylbenzene, n-hexane, toluene, xylene
R941200500	4350 NW Front St.	Gunderson Inc.	ORD009027368	97210GNDRS4350N	3731, 3743	LQG	To Air only	1,1,1-trichloroethane, 1,2,4-trimethylbenzene, aluminum (fume or dust), certain glycol ethers, chromium, ethylbenzene, manganese, methyl ethyl ketone, methyl isobutyl ketone, n-butyl alcohol, nickel, toluene, xylenes
R941190200	4000 NW St. Helens Rd	McDowell Welding & Pipe Fitting Inc	OR0000070334	*	3499	CEG	*	*

Table 6
Outfall 18 EPA Toxic Release Inventory List and Hazardous Waste Generator List

RNO	Address	Company	EPA ID	TRI ID	SIC Number	Generator Status	Releases to Environment	Chemicals Used on Site
R941190700	4155 NW Yeon Ave.	McWhorter Techs. Inc.	ORD002277085	97210THMCC4155N	2819, 2821	LQG	To Air only	1,2,4-trimethylbenzene, acrylic acid, butyl acrylate, certain glycol ethers, ethyl acrylate, ethylbenzene, ethylene glycol, maleic anhydride, methyl ethyl ketone, methyl isobutyl ketone, methyl methacrylate, n-butyl alcohol, phthalic anhydride, styrene, toluene, toluene 2,4-diisocyanate, vinyl acetate, xylene
R941200150	3750 NW Yeon	Owens Corning Fiberglas	ORD987180940	*	2951	CEG	*	*
R941200170	3950 NW Yeon Ave.	Van Waters & Rogers Inc.	ORD009227398	97210VNWTR3950N	5169	LQG	To Air only	1,2,4-trimethylbenzene, certain glycol ethers, ethylbenzene, formic acid, methyl isobutyl ketone, n,n-dimethylformamide, n-methyl-2-pyrrolidone, nitric acid, phosphoric acid, toluene, trichloroethylene, xylene
R941190980	3865 NW St. Helens Rd	Western Pacific Building Materials Inc	ORQ000007948	*	2431	SQG	*	*

CEG = Conditionally Exempt Generator
LQG = Large Quantity Generator
SQG = Small Quantity Generator
* No information available in database

Table 8
Outfall 19 EPA RCRA Treatment Storage Disposal

Address	EPA ID	TRI Facility ID	Name
4155 NW Yeon Ave	ORD002277085	97210THMCC4155N	McWhorter Techs. Inc.

Table 9
Outfall 18 DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI ID	CERCLIS	Action	Status
R941290710	3333 NW 35th Ave	ANRFS Holdings Inc.	1820		Remedial Investigation recommended (RI)	LIS
R941200040 R941201230	NW Yeon Ave	Burlington Northern - HUB Center	100		State Basic Preliminary Assessment recommended (PA)	SUS
R697400830	3821 NW St. Helens Rd	Christenson Oil - Plant No. 1	2426		State Expanded Preliminary Assessment recommended (XPA)	SUS
R084303610	3003 NW 35th Ave	Columbia American Plating Co.	29	68788926	Remedial Investigation recommended (RI)	LIS
R941200500	4350 NW Front Ave	Gunderson Inc.	1155		Remedial Investigation	LIS
R941291370	3322 NW 35th Ave	Hill Investment Co.	1076		State Expanded Preliminary Assessment recommended (XPA)	LIS
R941290340	3074 NW St. Helens Rd	Magnus Co.	69	980639439	Site Screening recommended (EV)	SUS
R941190700	4155 NW Yeon Ave	McWhorter Inc.	135		No further State action required	NFA
R941190770	NW St. Helens Rd	PGE - Forest Park Property	2406		Letter Agreement	SUS
R941291670	3720 NW Yeon Ave	Schnitzer Investment - near NW 35th and Yeon	2424		State Expanded Preliminary Assessment recommended (XPA)	SUS
R941190330	3800 NW St. Helens Rd	Texaco Portland Terminal	169	000641639	Negotiations	LIS
R941200090	4500 NW Front Ave	Texaco Product Pipeline	2117		Negotiations	LIS
R941290800	3605 NW 35th Ave	Trumbull Asphalt Plant	1160		Remedial Investigation/Feasibility Study recommended	LIS
R941200170	3950 NW Yeon Ave	Van Waters & Rogers	330	009227398	Other remedial or investigative action recommended	LIS

LIS = Listed
NFA = No Further Action
SUS = Suspected
* No information available in database

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1820

shows data entered as of December 19, 2000 at 8:39:47 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1820	Site Name: ANRFS Holdings Inc.		CERCLIS No:
	Address: 3333 NW 35th AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 29		Tax Lots: 17
	Latitude: 45 deg. 32 ' 48"	Longitude: 122 deg. 43 ' 12"	Site Size: 9.3 ac.
Other Site Names:			
	ANR Freight Terminal		
	Coastal Corp.		
	FTL Inc.		
Operations:			

Contamination Information

Hazardous Substances/Waste Types:	Chlorinated solvents, petroleum-based solvents, hydrocarbons.
Manner and Time of Release:	The manner and time of release(s) are not known.
Contamination Information:	Coastal Corp. (Houston, TX), the property owner, met with DEQ 1/23/96 to find out whether DEQ could make the determination that Coastal was not responsible for groundwater contamination that it has discovered on the site. Coastal believed that the contamination, consisting of chlorinated and petroleum-based VOCs, originated from undetermined off-site sources. The site has had two other unrelated contamination issues: releases from USTs that were removed in 1992 (for which DEQ's UST Program issued an NFA letter 9/92), and oil in groundwater along the northern property boundary, for which Owens-Corning (Trumbull Asphalt) has assumed responsibility. There are a number of shallow monitoring wells on-site, and the highest level of chlorinated VOCs occur along the western side of the property. Sources for this groundwater contamination had not been determined as of July 1997.
Pathways:	Groundwater is relatively shallow at the site, located at an average depth of 6 to 10 feet. There is no evidence of groundwater usage for other than industrial supply in the site vicinity (there are two recorded industrial wells within 0.5 mile of the site.) The nearest surface water is the Willamette River, located about 0.5 mile northeast of the site. The site is fenced and paved, and because all documented contamination is in the subsurface, direct contact does not appear to be a significant risk. As a result of these factors, exposure pathways from on-site contamination are likely to be limited.

Environmental/Health Threats:

Status of Investigative or Remedial Action: (GMW 7/30/97) In September 1996, Coastal/ANFRS Holdings entered the Voluntary Cleanup Program, seeking concurrence from DEQ that groundwater contamination along the western boundary of the site originated from off-site sources. From its review of available on- and off-site data, the VCP concluded that while there was no documentation of on-site releases of VOCs, there were a number of possible sources for such on-site releases in the past. In June 1997, ANFRS Holdings decided to terminate its agreement with VCP. DEQ's further-action recommendations for the site are as follows: 1) evaluate potential on-site sources of contamination; 2) conduct a full characterization of groundwater on-site and where possible, at neighboring facilities; 3) based on this data, determine source(s) of groundwater contamination; and 4) conduct a risk assessment and beneficial-use determination for groundwater. Further state action at this site is a medium priority. (GMW 8/26/98) Coastal Corp. has submitted a report prepared by Fluor Daniel documenting the removal of and sampling beneath an on-site trench drain and sump. They concluded that this former feature was not a significant source of groundwater contamination at the site. Report forwarded to NWR.

Data Sources: Letter report dated 1/22/96 from DRT Environmental Consultants (Fort Collins, CO); other site investigative work is summarized in DEQ's 1/23/97 File Review Memo, prepared while the site was in the Voluntary Cleanup Program. 8/18/98 report from Fluor Daniel on removal of the trench drain and sump at the site. See also LUST File 26-91-0063 (ANR Freight System)

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
BENZENE	Groundwater	21.6 ppb	11/20/1995	Y		
DICHLOROETHANE,1,1-	Groundwater	383 ppb	11/20/1995	Y		
DICHLOROETHYLENE,1,1-	Groundwater	47.7 ppb	11/20/1995	Y		
DICHLOROETHYLENE,1,2-CIS-	Groundwater	1,375 ppb	11/20/1995	Y		
ETHYLBENZENE	Groundwater	551 ppb	11/20/1995	Y		
METHYLENE CHLORIDE	Groundwater	98.6 ppb	11/20/1995	Y		
TETRACHLOROETHYLENE	Groundwater	4.1 ppb	11/20/1995	Y		
TOLUENE	Groundwater	1,070 ppb	11/20/1995	Y		
TRICHLOROETHANE,1,1,1-	Groundwater	43.1 ppb	11/20/1995	Y		
TRICHLOROETHYLENE	Groundwater	39.3 ppb	11/20/1995	Y		
TRIMETHYLBENZENE,1,2,4-	Groundwater	25.7 ppb	11/20/1995	Y		
VINYL CHLORIDE	Groundwater	979 ppb	11/20/1995	Y		
XYLENEs	Groundwater	1,599 ppb	11/20/1995	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
SITE EVALUATION	01/20/1996	07/30/1997	Gil Wistar	DEQ	NW	SAS
Site added to database	01/24/1996		Janelle Waggy	DEQ	NW	VCS
VCS Waiting List	04/03/1996	07/29/1996		DEQ	NW	VCS
PRELIMINARY ASSESSMENT EQUIVALENT	07/30/1996	01/23/1997	Tom Roick	DEQ	NW	VCS
NEGOTIATIONS	07/30/1996	07/30/1997	Tom Roick	DEQ	NW	VCS
Proposal for Confirmed Release List recommended	07/30/1997	07/30/1997	Tom Roick	DEQ	NW	VCS
Proposal for Inventory recommended	07/30/1997	07/30/1997	Tom Roick	DEQ	NW	VCS
Remedial Investigation recommended (RI)	07/30/1997	07/30/1997	Gil Wistar	DEQ	NW	SAS
Facility proposed for Confirmed Release List	08/14/1997	08/14/1997	Kim Van Patten	DEQ	NW	VCS

Facility proposed for Inventory	08/14/1997 08/14/1997	Kim Van Patten	DEQ	NW	VCS
Facility placed on Confirmed Release List	09/30/1997 09/30/1997	Kim Van Patten	DEQ	NW	VCS
Facility placed on Inventory	09/30/1997 09/30/1997	Kim Van Patten	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 100

shows data entered as of December 19, 2000 at 8:40:32 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 100	Site Name: Burlington Northern - HUB Center		CERCLIS No:
	Address: NW Yeon AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 20		Tax Lots: 4,7,32
	Latitude: 45 deg. 32 ' 17"	Longitude: 122 deg. 43 ' 5"	Site Size: 105.2 acres
Other Site Names:			

Operations:

Name: Burlington Northern - HUB Center

Comments: Railroad switching yard .

Years of Operation:

SIC Code: 4013 — Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	trichlorophenol, phenol, 2-nitrophenol, methylene chloride, oil and grease
Manner and Time of Release:	Operating practices. Time of release: continuous; specific dates unknown.
Contamination Information:	Contractors excavated sediments from a storm sewer ditch. The sediments were relocated on-site. A spill of 15-20 gallons of heavy, black, odoriferous oil into the Willamette River via a storm sewer outfall, contained by boom, some cleanup. Some of the spilled material escaped the boom, quantity unknown. Source of spilled material unknown.
Pathways:	Surface contact.
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	Contractors excavated sediments and relocated on-site.
Data Sources:	DEQ Brown file; correspondence from owner and/or operator; lab results. See also LUST File #26-91-0441 (Portland Railroad Company).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
METHYLENE CHLORIDE	Soil	0.74 ppm				
NITROPHENOL,2-	Soil	1.2 ppm				
OIL - LUBRICATING	Soil	11.36 ppm				
PHENOL	Soil	5.0 ppm				
TRICHLOROPHENOL ISOMERS	Soil	0.9 ppm				

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	05/09/1988		Michael Zollitsch	DEQ		SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ		SAS
SITE EVALUATION	01/03/1991	01/03/1991	Matt McClincy	DEQ		SAS
Insufficient information to list	01/04/1991		Matt McClincy	DEQ		SAS
Listing Review completed	01/04/1991	01/04/1991	Matt McClincy	DEQ		SAS
State Basic Preliminary Assessment recommended (PA)	03/24/2000	03/24/2000	Gil Wistar	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2426

shows data entered as of December 19, 2000 at 8:41:04 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2426	Site Name: Christenson Oil - Plant Number 1		CERCLIS No:
	Address: 3821 NW Saint Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 1,2,& 3 (1200, 1300, 1400)
	Latitude: 45 deg. 32 ' 58.2"	Longitude: 122 deg. 43 ' 36.8"	Site Size: 2.08 acres
Other Site Names:			
	HAJ, Incorporated		
Operations:			
	Name: Christenson Oil		
	Comments: HAJ, Inc. dba Christenson Oil .		
	Years of Operation: 1940's - Current		
	SIC Code: 2992		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Petroleum products and metals.
Manner and Time of Release:	Presumably from historic spills and possible tank leaks.
Contamination Information:	In September 1998, a release of lube oil occurred during filling of a 20,000 gallon AST; approximately 715 gallons of product were recovered. No soil removal or sampling was conducted. In November 1995, approximately 60 gal. of hydraulic oil were released to soils at a bulk loading area at the northwest end of the property when a product transfer hose to a tank truck broke. Approximately 60 gallons of oil and 52 gallons of rainwater were vacuumed up. There is no record of a soil sampling or removal. During the night of October 16-17, 1975, less than 1000 gallons of oil (bright stock) were released to the floor of the main building when a transfer valve was left open and unattended overnight, and a mixing tank overflowed. The oil entered the building's floor drains, which discharge to a small creek at the site's western property line. The release was not discovered until the following morning. The oil was reportedly contained within the creek, and cleanup was completed within two days. There is no record of soil or sediment samplings or removals. The creek discharges to the Willamette River at City of Portland Stormwater Outfall #18, near the Gunderson facility. Site stormwater discharges to an unnamed creek on the northwestern property line; some discharges to a City stormwater catch basin in St.Helens Road. Stormwater samples from the site have contained oil & grease, lead, and mercury

at concentrations above the limits set in the site's stormwater permit. Levels of copper and zinc have exceeded acute freshwater aquatic toxicity criteria. Cadmium concentrations have exceeded chronic freshwater aquatic toxicity criteria. Stoddard solvent, diesel fuel, and heavier oil were detected in subsurface soils during an October 1990 decommissioning of two USTs at the site. The contamination did not appear to originate from the USTs, although the actual source was not clearly ascertained. The full vertical and horizontal extent of subsurface contamination was not defined. Approximately 200 cu. yds. (variously reported as 50 to 355 yds.) of contaminated soil were aerated on site between February 1991 and August 1993. The soils were treated on the southeastern portion of the site and were to be spread across the site at completion, although (as of September 1993) final disposition remained unknown.

Pathways: Possible direct contact, inhalation, or incidental ingestion by on site workers. Possible direct contact, inhalation, or incidental ingestion by utility trench workers. Possible ecological impacts to aquatic life in the Willamette River.

Environmental/Health Threats: Potential health threat to on-site workers, utility trench workers, or ecological impacts to river.

Status of Investigative or Remedial Action: Free petroleum product was recovered from site surfaces following three site releases (October 1975, November 1995, and November 1998), although there are no records to indicate that site soils or creek sediments were ever sampled or cleaned up. 200 cubic yards (variously reported as 50 to 355 cubic yards) of soil contaminated with Stoddard solvent, diesel fuel, and heavy oil, which were excavated from a UST decommissioning location in October 1990, were aerated onsite in two stockpiles from February 1991 to August 1993. The soils were treated on the southwestern portion of the site and were to be spread across the site, although (as of September 1993) final disposition is unclear.

Data Sources: Spill/Release Report (OERS) 98-2288, 9/25/98; Spill/Release Form (DEQ Office Reference) 95-263 (OERS Number 95-2221), 11/6/95; Christenson Oil/HAJ, Inc, response to DEQ Site Assessment Information Request, 11/20/99; DEQ Water Quality File, Stormwater Permit, Christenson Oil; LUST file 26-90-0415. Additional local background information: Texaco Portland Terminal File, ECSI #169; McWhorter, Inc. (McClosky Varnish) File, ECSI #135; Portland Harbor Sediment Investigation Report, by Roy F. Weston, Inc., May 1998.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
CADMIUM	Other	Stormwater	10/30/1997	Y		
COPPER	Other	Stormwater	11/10/1999	Y		
DIESEL - FUEL OIL	Soil	1020 ppm in excavated soils; 90 ppm left in subsurface soils	10/26/1990	Y		
LEAD	Other	Stormwater	10/30/1997	Y		
MERCURY	Other	Stormwater	10/30/1997	Y		
NAPHTHA	Soil	Excavated soils	10/26/1990	Y		
OIL - LUBRICATING	Soil	900 ppm in excavated soils; 160 ppm left in subsurface	10/26/1990	Y		
TOTAL PETROLEUM HYDROCARBONS (TPH)	Other	As l & grease in stormwater		Y		
TOTAL PETROLEUM HYDROCARBONS (TPH)	Soil	In excavated subsurface soils, ten months after soil aeration initiated.	11/25/1991	Y		
ZINC	Other	Stormwater	11/10/1999	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	10/25/1999	10/25/1999	Janelle Waggy	DEQ	NW	VCS
Site Screening recommended (EV)	10/26/1999	10/26/1999	Mark Pugh	DEQ	NW	SAS
SITE EVALUATION	05/22/2000	06/29/2000	Steve Fortuna	DEQ	NW	SAS
Insufficient information to list	06/29/2000	06/29/2000	Steve Fortuna	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	06/29/2000	06/29/2000	Steve Fortuna	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 29

shows data entered as of December 19, 2000 at 8:42:04 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 29	Site Name: Columbia American Plating Co.		CERCLIS No: 068788926
	Address: 3003 NW 35th AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 29		Tax Lots: 11
	Latitude: 45 deg. 32 ' 40"	Longitude: 122 deg. 43 ' 2"	Site Size: .8 acres
Other Site Names:			

Operations:

Name: Columbia American Plating Co.

Comments: Metal finishing, electronic plating shop .

Years of Operation: 1975 to present

SIC Code: 3471 — Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	high pH, cadmium, chrome, lead, cyanide, zinc, trichloroethylene, hydrochloric acid
Manner and Time of Release:	Tank failure due to metal fatigue in pickling process tank on 4/28/84; other releases may have resulted from past operating practices at the facility, including wastewater collection, treatment, and discharge, and hazardous waste handling and storage.
Contamination Information:	Past waste management practices at the site resulted in RCRA compliance and enforcement actions starting in the 1980s. Violations have consisted of storage of hazardous wastes for over 90 days, often in deteriorated and leaking containers; inadequate protection from spills; and unauthorized recycling/treatment of hazardous waste. Until mid-1991, the facility was cited for numerous violations of its wastewater discharge permit, involving cyanides and heavy metals. A 2,300-gal. spill from an acid pickling tank entered the south parking area in 1984. Groundwater grab samples collected in 1992 from just beyond CAP's northern property line showed dissolved cyanides at 30 ppb, and TCE at 240 ppb. TCLP metals were not found above detection limits in these samples. Cyanide may have migrated from the CAP facility, because of the water treatment system on the the northern end of the site. It is also possible that the TCE and other chlorinated compounds originated from CAP, because of historical usage of TCE and TCA for degreasing; however, these materials are common industrial solvents with many other potential sources. An EPA Site Inspection in 1994 documented the presence of total metals, PAHs, and several chlorinated solvents in subsurface soils at the site.
Pathways:	Potential soil and groundwater contamination beneath storage and treatment areas.

Environmental/Health Threats:	potential groundwater contamination
Status of Investigative or Remedial Action:	After repeated RCRA violations, DEQ fined the facility in 1990 and 1991. The latter penalty was accompanied by a Consent Agreement requiring Columbia American Plating to remove all accumulated hazardous wastes from the site by 5/1/93. Although this date passed without full compliance, the facility did significantly reduce its storage of hazardous wastes. DEQ initiated a PA 7/92, but due to the large quantities of hazardous wastes on-site, DEQ determined that waste removal and RCRA enforcement were needed before a PA could be conducted safely. The PA was finally completed 12/93, and it recommended a federal Site Investigation with subsurface soil and groundwater sampling. An SI that incorporated only soil sampling was completed 10/94. Although EPA's contractor found a variety of inorganic and organic contaminants in these samples, and concluded that site operations had probably affected groundwater as well, EPA determined 11/94 that no further federal action would be taken at the site, due to the lack of human and environmental receptors in the site vicinity. This lack of receptors makes the site a low priority for further state action.
Data Sources:	CERCLIS file, including 9/94 Site Inspection Report; Source file - RCRA/hazardous waste; Inspection reports; "Phase II Site Investigation, Carson Oil Main Office," by Cascade Earth Sciences, Ltd. 4/10/92; DEQ PA, 12/93.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
BENZO(a)ANTHRACENE	Soil	1,220 ppb	07/07/1995	Y		
BENZO(a)PYRENE	Soil	1,700 ppb	07/06/1994	Y		
BENZO(b)FLUORANTHENE	Soil	1,730 ppb	07/06/1994	Y		
BENZO(ghi)PERYLENE	Soil	1,610 ppb	07/06/1994	Y		
BENZO(k)FLUORANTHENE	Soil	654 ppb	07/06/1994	Y		
CADMIUM	Soil	300 ppm	07/06/1994	Y		
CHROMIUM	Soil	306 ppm	07/06/1994	Y		
CHRYSENE	Soil	1,520 ppb	07/06/1994	Y		
CYANIDE (AS ION)	Soil	36.3 ppm	07/06/1994	Y		
HYDROCHLORIC ACID	Soil	Unknown				
INDENO(1,2,3-cd)PYRENE	Soil	1,350 ppb	07/06/1994	Y		
TETRACHLOROETHYLENE	Soil	20.1 ppb	07/05/1994	Y		
TRICHLOROETHYLENE	Soil	47.4 ppb	07/05/1994	Y		
ZINC	Soil	2,340 ppm	07/06/1994	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	06/01/1981			EPA		
EPA PA1/SI1	02/20/1985	07/31/1985		EPA		
No Further Remedial Action Planned under Federal program	07/31/1985	07/31/1985		EPA		
Site added to database	04/22/1988		Marilyn Daniel	DEQ		SAS
Listing Review completed	12/20/1990	12/21/1990	Matt McClincy	DEQ	NW	SAS
SITE EVALUATION	12/20/1990	12/20/1990	Matt McClincy	DEQ	NW	SAS
Excluded from confirmed release definition	12/21/1990	12/21/1990	Matt McClincy	DEQ	NW	SAS
BASIC PRELIMINARY ASSESSEMENT	07/02/1992	12/09/1993	Gil Wistar	DEQ	NW	SAS
Site Confirmatory Sampling recommended	12/09/1993	12/09/1993	Gil Wistar	DEQ	NW	SAS
EPA Screening Site Inspection 2	04/15/1994	10/24/1994		EPA		
No Further Remedial Action Planned under Federal program	11/15/1994	11/15/1994		EPA		

SITE PRIORITY EVALUATION FOR FURTHER ACTION	03/20/1995	03/23/1995	Gil Wistar	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	03/23/1995	03/23/1995	Gil Wistar	DEQ	NW	SAS
Proposal for Inventory recommended	03/23/1995	03/23/1995	Gil Wistar	DEQ	NW	SAS
Listing Review completed	03/23/1995	03/23/1995	Gil Wistar	DEQ	NW	SAS
Remedial Investigation recommended (RI)	03/23/1995	03/23/1995	Gil Wistar	DEQ	NW	SAS
Facility proposed for Confirmed Release List	04/03/1995	04/03/1995		DEQ	NW	SAS
Facility proposed for Inventory	04/03/1995	04/03/1995		DEQ	NW	SAS
Review for final listing	06/09/1995	06/15/1995		DEQ	NW	SAS
Listing on Confirmed Release List recommended	06/15/1995	06/15/1995		DEQ	NW	SAS
Listing on Inventory recommended	06/15/1995	06/15/1995		DEQ	NW	SAS
Facility placed on Confirmed Release List	06/16/1995	06/16/1995	Heather Schijf	DEQ	NW	SAS
Facility placed on Inventory	06/16/1995	06/16/1995	Heather Schijf	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1155

shows data entered as of December 19, 2000 at 8:42:50 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1155	Site Name: Gunderson Inc.		CERCLIS No:
	Address: 4350 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 20		Tax Lots:
	Latitude: 45 deg. 33 ' 21"	Longitude: 122 deg. 43 ' 27"	Site Size: 67 acres
Other Site Names:			
	Portland Harbor Sediment Study		
Operations:			

Contamination Information

Hazardous Substances/Waste Types:	1,1,1-trichloroethane (TCA), PAHs, TPH, BTEX, waste solvents, PCBs, chromium, copper, nickel, mercury, zinc.
Manner and Time of Release:	Suspected leaks and spills from degreasing operations, leaking underground storage tanks, sandblasting, painting and salvage yard operations. Time of release: unknown.
Contamination Information:	(4/19/00 MJM/VCP) The property consists of 67 acres along the west bank of the Willamette River. Gunderson leased the property in 1985 and purchased it in June 1993. An above-ground TCA dip tank used for degreasing is located on the northwest end of the facility. A spill occurred at this dip tank in 1980. TCA has been detected in shallow groundwater at concentrations as high as 7.2 mg/L. A deeper monitor well completed in the underlying basalts contained TCA at concentrations of 2.0 mg/L. Historically, the southeast end of the property was used by Schnitzer Steel Products & American Ship Dismantlers as a ship and automobile salvage yard. A total of 11 hydrocarbon storage tanks were identified throughout the property; nine were used for petroleum storage and one was used for toluene solvent storage (Tank #6). An inactive tank (Tank #11) containing solvents and waste oil was discovered underneath a paint storage room. Soil and perched groundwater near Tank 11 were found to contain significant levels of TPH and various PAHs. No contaminants were identified in the underlying water table aquifer. Xylene and ethylbenzene have been detected in the soil at former Tank #6. Investigation of the former Schnitzer yard has been very limited. Initial surface sampling identified lead levels as high as 4800 mg/kg, PCBs at 17 ppm and 19 ppm, and elevated levels of chromium, copper, mercury, zinc, and nickel. Loose asbestos was also found. Follow-up investigation has shown groundwater contamination above MCLs by lead, chromium, and cadmium.
Pathways:	The site is located in the floodplain of the Willamette River. This site was built up in the early 1900s with dredged fill from the river. The surrounding area is heavy industrial with no nearby residents. Local industrial water supply wells draw from depths typically between 200 and 600 feet below ground.

Environmental/Health Threats:	Groundwater has been impacted, potential for direct contact with soil contamination, potential impacts to river.
Status of Investigative or Remedial Action:	(5/3/95 MHK/VCP) Considerable soil and groundwater investigation was completed by Gunderson's consultant Squier Associates prior to joining VCP. Reports documenting the work were submitted in January and November 1992. An initial review was completed 2/11/93. Reviews of UST decommissioning work were completed by VCP and NWR UST staff on 12/6/93 and 3/8/94. It was determined that 9 of 11 tanks (#'s 1,2,3,4,5,7,8,9,10) were decommissioned in accordance with DEQ regulations. Agreement to perform a RI/FS completed 4/15/94. The Agreement addresses the northwest third of the facility (TCA contaminated groundwater and nearby petroleum contamination) and the remaining UST issues (#'s 6 and 11). Gunderson elected to defer follow-up on the remainder of the site, particularly the Former Schnitzer Yard, pending completion of the RI/FS. A scoping proposal for the RI/FS was submitted on May 19, 1994. Quarterly groundwater monitoring was started in June 1994. A work plan for the first phase of additional investigation was approved 3/1/95 and field work started 3/22/95. (7/13/95 MHK) Reports documenting the work were submitted 7/6/95. (10/30/95) Geoprobe sampling in area of TCA dip tank further characterized soil and groundwater contamination; TCA concentrations in groundwater are as high as 170 mg/L and extend to the top of the basalts approx 40 ft bgs. (5/27/98 MJM/VCP) Efforts to characterize the nature & extent of the TCA in groundwater are on going. A NFA decision for UST #6 was made 2/17/98. A pocket of petroleum impated soil associated with UST #6 remains beneath a structure. Should site conditions change allowing access to the soil, additional evaluation will be required to determine if additional cleanup is necessary. Vapor extraction system installed May 1998 to remediate soil in UST #11 (aromatic tank) area.
Data Sources:	Risk Assessment Guidance, Gunderson Inc., Squire Associates, 10/20/92; Environmental Site Assessment, Gunderson, Inc, Squire Associates, 1/17/91; Additional Soil and Groundwater Investigation, Gunderson, Inc, Squire Associates, 12/20/91; NWR Voluntary Cleanup Program - Gunderson File.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
CADMIUM	Groundwater	0.02 mg/l	07/01/1991	Y		
CADMIUM	Soil	27 ppm	06/05/1989	Y		
CHROMIUM	Groundwater	0.43 mg/l	07/01/1991	Y		
CHROMIUM	Soil	240 ppm	06/05/1989	Y		
COPPER	Soil	3800 ppm	06/05/1989	Y		
DICHLOROETHYLENE,1,1-	Groundwater	1.5 mg/l	07/01/1991	Y		
LEAD	Groundwater	0.59 mg/l	07/01/1991	Y		
LEAD	Soil	4,800 ppm	06/05/1989	Y		
MERCURY	Soil	7.5 ppm	06/05/1989	Y		
NICKEL	Soil	240 ppm	06/05/1989	Y		
PCBs	Soil	19 ppm	06/05/1989	Y		
TETRACHLOROETHYLENE	Groundwater	0.22 mg/l	07/01/1991	Y		
TOTAL PETROLEUM HYDROCARBONS (TPH)	Soil	2,800 ppm	07/01/1991	Y		
TRICHLOROETHANE,1,1,1-	Groundwater	170 mg/L	10/01/1996	Y		
TRICHLOROETHANE,1,1,1-	Soil	56 mg/kg	10/01/1996	Y		
ZINC	Soil	12,000 ppm	06/05/1989	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
NEGOTIATIONS	07/15/1991	04/15/1994	Mike Kortenhof	DEQ	NW	VCS
Site added to database	11/05/1991		Mike Rosen	DEQ		VCS
SITE EVALUATION	02/11/1993	02/11/1993	Mike Kortenhof	DEQ	HQ	VCS
PRELIMINARY ASSESSMENT EQUIVALENT	02/11/1993	02/11/1993	Mike Kortenhof	DEQ	HQ	VCS
Letter Agreement	04/15/1994	04/15/1994	Mike Kortenhof	DEQ	NW	VCS
REMEDIAL INVESTIGATION	04/21/1994		Matt McClincy	DEQ	NW	VCS
Listing Review completed	05/15/1995	05/18/1995	Mike Kortenhof	DEQ		VCS
Proposal for Confirmed Release List recommended	05/18/1995	05/18/1995	Mike Kortenhof	DEQ		VCS
Proposal for Inventory recommended	05/18/1995	05/18/1995	Mike Kortenhof	DEQ		VCS
Facility proposed for Confirmed Release List	10/20/1995	10/20/1995	Mike Kortenhof	DEQ		VCS
Facility proposed for Inventory	10/20/1995	10/20/1995	Mike Kortenhof	DEQ		VCS
REMEDIAL DESIGN	10/30/1995		Matt McClincy	DEQ	NW	VCS
Facility placed on Confirmed Release List	02/12/1996	02/12/1996	Matt McClincy	DEQ	NW	VCS
Facility placed on Inventory	02/12/1996	02/12/1996	Matt McClincy	DEQ	NW	VCS
Letter Agreement	07/01/1997	07/01/1997	Matt McClincy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1076

shows data entered as of December 19, 2000 at 8:44:12 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1076	Site Name: Hill Investment Co.		CERCLIS No:
	Address: 3322 NW 35th AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 29		Tax Lots: 137 (R94129 1370) 1N1E29BA 500
	Latitude: 45 deg. 32 ' 51"	Longitude: 122 deg. 43 ' 3"	Site Size: 3.18 acres
Other Site Names:			
	Nabisco Warehouse		
	Ashland Chemical Co.		
Operations:			
	Name: Ashland Chemical co.		
	Comments: warehouse facility .		
	Years of Operation:		
	SIC Code: 4225		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Cis-1,2-dichloroethene, perchloroethylene (at saturation concentration in groundwater), trichloroethylene, vinyl chloride, trans-1,2-dichloroethene.
Manner and Time of Release:	
Contamination Information:	During a 1990 site assessment, chorinated solvents were detected at very high levels (e.g., PCE at 35.5 ppm; essentially at saturation) in groundwater at the site. Nabisco formerly occupied the site, and Ashland Chemical Co. is the current operator. At the time, the highest concentration of solvents was found in a monitoring well considered by the contractor to be upgradient, suggesting an off-site source. Since the discovery of chlorinated solvents, DEQ's oversight has been limited to underground storage tank issues and petroleum contamination (see UST file #26-89-0280). No groundwater sampling for chlorinated solvents has occurred since 1990. Solvent issues also explored in LUST File #26-89-0013 (Terminal Transfer), Jan-July 1990; with preliminary site screening by Geotechnical Resources, Inc., March 1989).
Pathways:	Site is in the Guilds Lake industrial area. Topography is flat; soil is fill (boring log shows material to be silty sands). Depth to groundwater is about 9.5 feet and its uses are unknown.
Environmental/Health Threats:	Chlorinated solvents present in the groundwater, with PCE at saturation concentration.

Status of Investigative or Remedial Action:	Hill Investment Co. indicated to DEQ in April 1991 that it would conduct its own preliminary assessment. However, as of July 1995, no PA has been performed at the site, and Hill Investment disagrees that it ever consented to conduct its own PA. In view of the very high levels of chlorinated solvents found in groundwater, Site Assessment recommends that the RP initiate further groundwater investigation as soon as possible. Otherwise, DEQ should perform an XPA, under medium priority. Despite the RP's claim that solvents migrated from off-site, Site Assessment believes more data is needed to determine their origin.
Data Sources:	NWR LUST file #26-89-0280 containing the following: Nabisco Site Soil & GW Sampling Round II 11/11/90; Nabisco Site Soil & GW Sampling & Asbestos Survey 10/11/90. LUST file #26-89-0013, Terminal Transfer (Jan-July 1990 for site photos). Preliminary Site Screening Report, March 1989, by Geotechnical Resources, Inc).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
DICHLOROETHYLENE,1,2-CIS-	Groundwater	3,580 ppb	10/25/1990	Y		
TETRACHLOROETHANE,1,1,1,2-	Groundwater	35,500 ppb	09/07/1990	Y		
TRICHLOROETHYLENE	Groundwater	5,040 ppb	09/07/1990	Y		
VINYL CHLORIDE	Groundwater	308 ppb	10/25/1990	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Proposal for Confirmed Release List recommended	01/24/1991	01/24/1991	Aaron Bodor	DEQ		SAS
Listing Review completed	01/24/1991	01/24/1991	Aaron Bodor	DEQ		SAS
SITE EVALUATION	01/24/1991	01/24/1991	Aaron Bodor	DEQ		SAS
Site added to database	01/24/1991		Aaron Bodor	DEQ		SAS
BASIC PRELIMINARY ASSESSEMENT	04/03/1991		John Odisio	DEQ		SAS
Facility proposed for Confirmed Release List	06/26/1991	06/26/1991	Aaron Bodor	DEQ		SAS
Listing on Confirmed Release List recommended	09/18/1992	09/18/1992	Loretta Pickerell	DEQ		SAS
Review for final listing	09/18/1992	09/18/1992	Loretta Pickerell	DEQ		SAS
Facility placed on Confirmed Release List	10/23/1992	10/23/1992	Loretta Pickerell	DEQ		SAS
SITE PRIORITY EVALUATION FOR FURTHER ACTION	06/12/1995	07/20/1995	Gil Wistar	DEQ	NW	SAS
Other remedial or investigative action recommended	07/20/1995	07/20/1995	Gil Wistar	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	07/20/1995	07/20/1995	Gil Wistar	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the

report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 69

shows data entered as of December 19, 2000 at 8:45:00 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 69	Site Name: Magnus Co.		CERCLIS No: 980639439
	Address: 3074 NW St. Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 29		Tax Lots: 34
	Latitude: 45 deg. 32 ' 44"	Longitude: 122 deg. 43 ' 17"	Site Size: 1 acres

Other Site Names:

Operations:

Name: Magnus Co.

Comments: Bearing rehabilitation plant .

Years of Operation: 1930-1967

SIC Code: 3562 Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	lead
Manner and Time of Release:	Lead melting operations; time of release: 1930-1967.
Contamination Information:	Magnus Co. (from 1930-1936) and National Lead Company (from 1936-1967) operated a bearing rehabilitation plant at the site. Furnaces were used to melt lead from the bearings. Cracks in the building's concrete floor were filled with lead. Also, lead dust settled on structural beams within the building. Some lead dust may have settled outside the building on unpaved areas.
Pathways:	Workers at the business that currently uses the site (Industrial Craters, Inc.) may be exposed to lead-containing dust that has settled inside the building.
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	Further DEQ information or investigation needed. (3/25/93 DRobinson/EPA) Based on a review by EPA's contractor, PRC Environmental Management, no further investigation is anticipated under the Federal Superfund program. PRC recommended that soil contamination on site be mitigated, to reduce the threat through the soil and air pathways.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
LEAD	Other	280 ppm				
LEAD	Soil	39 ppm				

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	06/01/1981			EPA		
EPA PA1/SI1	11/02/1984	09/16/1986		EPA		
Site added to database	04/29/1988		John Odisio	DEQ		SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ		SAS
EPA Site Inspection Prioritization	10/28/1992	02/23/1993		EPA		
No Further Remedial Action Planned under Federal program	02/23/1993	02/23/1993		EPA		
Site Screening recommended (EV)	02/12/1994	02/12/1994	Dan Crouse	DEQ		SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 135

shows data entered as of December 19, 2000 at 8:46:11 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 135	Site Name: McWhorter Inc.		CERCLIS No:
	Address: 4155 NW Yeon AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: No further action required	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 70
	Latitude: 45 deg. 33 ' 0"	Longitude: 122 deg. 43 ' 18"	Site Size: 1.92 acres
Other Site Names:			
	McClosky Varnish		
Operations:			
	Name: McWhorter Inc.		
	Comments: Manufactures paint products and resins .		
	Years of Operation: July 1989 to present		
	SIC Code: 2821		Operating Status: Active
	Name: McCloskey Varnish Co.		
	Comments: Manufactured varnish products and oil/water based resins .		
	Years of Operation: 1943 to July 1989		
	SIC Code: 2821		Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	resins, mineral spirits, petroleum, BTEX, styrene
Manner and Time of Release:	Numerous small spills and releases documented between 1985 and 1990. Most were cleaned up. Also suspected migration of petroleum onto site from off-site source.
Contamination Information:	(6/28/91 MJZ/SAS) McCloskey Varnish Company began manufacturing paint products at the site in the 1940s. In September 1986, DEQ issued a Notice of Violation (NOV) for two minor releases of methyl methacrylate and polyvinyl acetate. The action apparently spurred McCloskey to retain Century Environmental Services to complete a Closure Plan (under RCRA?). In part, the Closure Plan outlined the steps that had been taken to address nine releases that had occurred in 1985 and 1986. Several of these releases had impacted a creek that ran through the property. As part of the remediation, the creek was routed through a pipe and covered over, although it is not clear from the file that contaminated sediments in the creek bed were ever removed. DEQ approved the Closure Plan in November 1987. In July 1989, the property was purchased by McWhorter, a wholly-owned subsidiary of Valspar Corporation.

Pathways:	The site is located in an industrial area in northwest Portland. The Willamette River is half-a-mile north and east (downgradient) of the site. Forest Park is 1/4 mile southwest of the site. Soils consist of 2-10 feet of a silt/sand/gravel fill, over 23-40 feet of sand, over a layer of silt and clay. Groundwater fluctuates between 10-17 feet bgs. The site itself consists of two fenced parcels (separated by Yeon AVE), with an underground encased product transfer pipeline between them. There are 25 underground and 36 above-ground storage tanks at the site that hold potentially hazardous materials. The above-ground tanks are on concrete slabs and are bermed. Most of the site is built-over/paved-over.
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(6/28/91 MJZ/SAS) In August 1990, an unknown volume of mineral spirits leaked from a pipe fitting near two underground storage tanks (USTs). Soil sampling found up to 5,460 ppm TPH (6,170 ppm using HCID). Cleanup of the spill is ongoing in the LUST program. In October 1990, while investigating a suspected release of cyclohexanone, McWhorter discovered diesel fuel in on-site soils (2-12 feet bgs) at levels up to 8,650 ppm. The diesel is thought to have migrated onto the site from the adjacent Texaco Portland Terminal site (ECSI #169). DEQ recommends that McWhorter work with Texaco to address the petroleum contamination. Following approval of the Closure Plan, no further action is necessary for the pre-1990 identified releases.
Data Sources:	1) July 1986 Century Environmental Services "Closure Plan". 2) July 1991 Parametrix "Preliminary Assessment". 3) LUST file #26-90-0288. 4) LUST file #26-90-0389.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ETHYLBENZENE	Sediment	285.20 ppm				
STYRENE	Soil	116.5 ppm				
TOLUENE	Sediment	75.50 ppm				
TOTAL PETROLEUM HYDROCARBONS (TPH)	Soil	up to 8,650 ppm	11/09/1990	Y		
XYLENEs	Sediment	4354 ppm				

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	03/29/1988		Michael Zollitsch	DEQ	HQ	SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ	HQ	SAS
SITE EVALUATION	01/24/1991	01/24/1991	Michael Zollitsch	DEQ	HQ	SAS
State Basic Preliminary Assessment recommended (PA)	01/24/1991	01/24/1991	Michael Zollitsch	DEQ	HQ	SAS
BASIC PRELIMINARY ASSESSEMENT	01/25/1991	06/28/1991	Michael Zollitsch	DEQ	HQ	SAS
Listing Review completed	06/28/1991	06/28/1991	Michael Zollitsch	DEQ	HQ	SAS
NO FURTHER STATE ACTION REQUIRED	06/28/1991	06/28/1991	Michael Zollitsch	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

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Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
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Details for Site ID 2406

shows data entered as of December 19, 2000 at 8:46:40 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2406	Site Name: PGE - Forest Park Property		CERCLIS No:
	Address: NW Saint Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 100
	Latitude: 45 deg. 32 ' 57"	Longitude: 122 deg. 43 ' 32"	Site Size:
Other Site Names:			
	Portland General Electric		
	PGE - Yeon Site		
Operations:			
	Name: PGE Yeon Site		
	Comments: .		
	Years of Operation: unknown		
	SIC Code: 4911		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	PCBs
Manner and Time of Release:	
Contamination Information:	(9/7/99 SAM/VCP) Suspected leakage (PCBs) from electrical equipment.
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(9/7/99 SAM/VCP) Signed agreement to participate in DEQ's Independent Cleanup Pathway Program. Requested ICP and site-specific technical consultation. Final report to be submitted to DEQ approx. November 1, 1999.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Independent Cleanup Program	07/30/1999		Sheila Monroe	DEQ	NW	VCS
Letter Agreement	08/23/1999	08/23/1999	Sheila Monroe	DEQ	NW	VCS
Site added to database	09/07/1999	09/07/1999	Janelle Waggy	DEQ	NW	VCS

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Details for Site ID 2424

shows data entered as of December 19, 2000 at 8:47:13 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2424	Site Name: Schnitzer Investment - near NW 35th and Yeon		CERCLIS No:
	Address: 3720 NW Yeon AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 20		Tax Lots: 200 (29-1N1E) (R94129-1670)
	Latitude: 45 deg. 32 ' 54.1"	Longitude: 122 deg. 43 ' 1.4"	Site Size: 2.84 acres

Other Site Names:

former Chase Bag Company
former Great Western Chemical Company
former Willard Storage Battery Company of Calif.

Operations:

Name: Chase Packaging Corporation	
Comments: Multiwall bag manufacture. .	
Years of Operation: 1984-1989 (?)	
SIC Code: 2674	Operating Status: Inactive
Name: Ace Hardware	
Comments: Hardware wholesale facility .	
Years of Operation: 1972 - 1975	
SIC Code: 5072	Operating Status: Inactive
Name: Schnitzer Investment Corporation	
Comments: Property owner / property management .	
Years of Operation: 1971 (?) to 1999	
SIC Code: 6512	Operating Status: Active
Name: Great Western Chemical Company	
Comments: Chemical Manufacturing .	
Years of Operation: 1959 - 1970	
SIC Code: 2899	Operating Status: Inactive
Name: Willard Storage Battery Company of Calif	

Comments: Storage Battery Manufacture .

Years of Operation: 1948 - 1958

SIC Code: 3691 Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	Possible PCE DNAPL at site. Various PCE decomposition products in nearby groundwater: TCE, cis- and trans-1,2-DCE, 1,1-DCE, vinyl chloride, chloromethane. RCRA records indicate Schnitzer Investments removed 297 tons of lead-contaminated (hazardous waste) soils from site in December 1997. Accumulation of leaking drums photographed on site in February 1991.
Manner and Time of Release:	No verified on-site release of hazardous substances, but 297 tons of lead-contaminated soil removed from site in December 1997, large accumulation of apparently leaking drums (contents unknown) photographed at site in February 1991, and an inactive 1000 gallon UST decommissioned at site in 1985 (use unknown) by filling in place. 1963 air photo indicates that materials (including apparent drums) were stored along the southern end of the site when Great Western Chemical Company operated at the site.
Contamination Information:	Subsurface soil and groundwater data (1990-1991) from adjoining Hill Investment Company site (to south) (ECSI #1076; LUST #26-89-0280) suggests that releases of perchloroethylene (PCE; PERC) may have occurred on the Schnitzer Investment (former Chase Bag Company) site. Groundwater data from Hill Investment site suggests the presence of free-product (DNAPL) PCE. 2/91 photos by George D. Ward & Assoc (environmental contractor for Terminal Transfer site to east; LUST #26-89-0013) depict leaking drums stored at former Chase Bag site. Parcel was also historically the site of chemical manufacturing operations by Great Western Chemical Company. DEQ Hazardous Waste files indicate that Schnitzer Investment conducted a Hazardous Waste removal action at the site in December 1997: 297 tons of lead-contaminated soil were removed and sent to CWM in Arlington for treatment and disposal. DEQ has no other documentation of the 1997 soil removal activities.
Pathways:	Primary pathways of concern would be: 1) potential dermal contact, inhalation, or incidental ingestion of subsurface contaminants by utility trench workers; 2) potential vapor inhalation by on-site workers; and 3) potential discharge of contaminated groundwater to leaking storm sewer lines and discharge to Willamette River at City Outfalls 17 and 18.
Environmental/Health Threats:	Potential threats to utility trench workers (inhalation, dermal contact, incidental ingestion), on-site workers (vapors), or aquatic life within Willamette River (potential contaminant discharge to leaking storm sewer lines)
Status of Investigative or Remedial Action:	XPA recommended with subsurface soil and groundwater sampling for potential lead and volatile chlorinated hydrocarbons.
Data Sources:	DEQ LUST file #26-89-0013, Terminal Transfer site. DEQ LUST file #26-89-0280, Hill Investment Company site. DEQ HWIMSy database file for Schnitzer Investment Corp. at 3720 NW Yeon.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
SITE EVALUATION	10/25/1999	11/02/1999	Steve Fortuna	DEQ	NW	SAS
Site added to database	10/25/1999	10/25/1999	Janelle Waggy	DEQ	NW	VCS
Insufficient information to list	11/02/1999	11/02/1999	Steve Fortuna	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	11/02/1999	11/02/1999	Steve Fortuna	DEQ	NW	SAS
SRS Waiting List	11/08/1999	11/08/1999	Steve Fortuna	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

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NPL Site: Is the site on EPA's Superfund List? (Y/N).
Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.
Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 169

shows data entered as of December 19, 2000 at 8:47:44 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 169	Site Name: Texaco Portland Terminal		CERCLIS No: 000641639
	Address: 3800 NW St. Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 33
	Latitude: 45 deg. 33 ' 0"	Longitude: 122 deg. 43 ' 29"	Site Size: 18.8 acres
Other Site Names:			
	Portland Harbor Site Discovery		
	SEE ECSI #2117		
Operations:			
	Name: Petroleum bulk plant		
	Comments: .		
	Years of Operation: Since 1926		
	SIC Code: 5171		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Petroleum products (gasoline, diesel, petroleum sludge) and ethanol. Previous operations included storage and distribution of bunker fuel, jet fuel, and lubrication oil. Lead in adjacent Willamette River sediments.
Manner and Time of Release:	Specific sources undetermined. General releases from product handling, storage and distribution. Time of release: Before 1984, additional contemporary releases are possible.
Contamination Information:	(5/1/95 TER/VCS) The first site subsurface investigation was performed in 1983 by Texaco Terminal personnel. The investigation was prompted by discovery of a hydrocarbon-like sheen on water in the drainage ditch near the oil/water separator. The drainage ditch (now relined with culvert) flowed across the site from beneath NW St. Helens Road in a timber flume which discharged into the Willamette River. Groundwater monitoring confirmed the release and product recovery actions were initiated in 1983. Between 1983 and 1986, 31,231 gallons of floating product were recovered from an onsite recovery well. A total of 38 monitoring wells have been installed at the site. Aquifer testing and sparge and vapor extraction tests have been conducted. No offsite work has been conducted by Texaco. However, file information for the downgradient McWhorter facility indicates that contamination likely extends offsite. Texaco entered into a Letter Agreement with the Voluntary Cleanup Program on August 12, 1993. At that time Texaco was completing field work for a focused remedial investigation and feasibility study (RI/FS) for the site. (1/12/00 TBG/SAP) A RI prepared for the site by Texaco's consultant in 1994 concluded that "the results of the RA indicate that risks associated with the chemicals of concern at the site are within DEQ's and EPAs target risk limits for cancer and for non-cancer effects for human

health. In ddition, impacts to environmental receptors appear unlikely." The FS concluded that the no-action alternative was protective. Approximately 36 tons of lead contaminated surface soil were excavated from the site in 1996 and disposed of at an off-site facility. The source was historic sandblasting of the ASTs.

Pathways: Recent data indicates surface soil contamination from lead paint/sandblast grit. Potential point sources include former gasoline/diesel loading rack; former bunker-fuel loading rack; underground piping to barge dock; oil/water separator and feeder lines; USTs and ancillary underground piping; former underground piping to loading racks; current gasoline/diesel loading rack; diesel dispensing station; boiler/pump house. Potential area sources include former bunker fuel ASTs; diesel/fuel oil ASTs; former lube-oil ASTs. Nearest surface water is the Willamette River.

Environmental/Health Threats: Potential for direct contact through surface soils. Shallow groundwater contamination.

Status of Investigative or Remedial Action: Scoring package mailed 10/5/92. Proposed overall score: 21, based in part on the 1969 dumping of separator sludge. (1/93 TER/VCS) RI in progress, should be completed by 1/94. VCS will proceed with a file review after submittal of the RI report. VCS Letter Agreement 8/27/93. Focused RI report completed 2/24/94. VCS file review completed 5/24/94. Additional work to proceed with VCS oversight. (5/2/95 TER/VCS) Meeting to discuss a formal Agreement held 11/7/94. RI/FS Addendum and Groundwater Monitoring Proposal received 9/94 and comments provided 1/4/95. Lead impacts on surface soils from the 1969 separator sludge dumping evaluated. Determined that no further work regarding sludge dumping was necessary. Draft Agreement prepared 3/95. Quarterly Monitoring Report and additional information received from Texaco 3/95. (7/5/95 TER/VCS) Offsite sampling plan submitted 4/30. Quarterly Monitoring Report received 6/16. (8/31/95 TER/VCS) Bid for Lead Dust Cleanup Services received 7/95. Quarterly Groundwater Monitoring Report received 8/95. Comments on the Draft Agreement received 8/95. VCP participation terminated 8/31/95. (1/20/00 TBG/SAP) Based on initial sampling results from a river sediment quality study, the Texaco terminal and pipeline (ECSI #2117) have been identified as a potential source of contamination to the Portland Harbor. A strategy recommendation was completed on September 2, 1999. A Remedial Investiagation (RI) is required to evaluate the potential ecological threat of the sediment contamination (high priority). (9/26/00 MJM/VCP) DEQ and Equilon entered into a Voluntary RI Agreement on August 16, 2000.

Data Sources: Monitoring Report 3800 NW St. Helens Road, prepared by Groundwater Technology, Inc. 12/91; Soil & Groundwater Investigation, Texaco Environmental Services 11/14/91; Monitoring Report, Texaco Refining & Marketing, Inc. 12/18/91; Monitoring Report, Texaco Refining & Marketing, Inc. 9/91; Focused Remedial Investigation Report 2/24/94; Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc., for USEPA, May 1998; MetroScan Property Records, Multnomah County, Oregon; Equilon Enterprises LLC response to DEQ Site Assessment Information Request, April 14, 1999.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ACENAPHTHENE	Soil	11 mg/kg	06/30/1993	Y		
ACENAPHTHYLENE	Groundwater	0.17 mg/l	06/30/1993	Y		
ANTHRACENE	Groundwater	.0031 mg/l	06/30/1993	Y		
ANTHRACENE	Soil	6.6 mg/kg	06/30/1993	Y		
ARSENIC	Groundwater	.027 mg/l	06/30/1993	Y		
ARSENIC	Soil	9.4 mg/kg	06/30/1993	Y		
BENZENE	Groundwater	2.6 mg/l	03/30/1993	Y		
BENZENE	Soil	4.1 mg/kg	03/30/1993	Y		
BENZO(a)ANTHRACENE	Groundwater	.0006 mg/l	06/30/1993	Y		
BENZO(a)ANTHRACENE	Soil	4.5 mg/kg	06/30/1993	Y		
BENZO(a)PYRENE	Soil	2.4 mg/kg	06/30/1993	Y		

BENZO(b) FLUORANTHENE	Groundwater	.0005 mg/l	06/30/1993	Y
BENZO(b) FLUORANTHENE	Soil	1.7 mg/kg	06/30/1993	Y
BENZO(ghi)PERYLENE	Groundwater	.0004 mg/l	06/30/1993	Y
BENZO(ghi)PERYLENE	Soil	6.6 mg/kg	06/30/1993	Y
BENZO(k) FLUORANTHENE	Groundwater	.0001 mg/l	06/30/1993	Y
BENZO(k) FLUORANTHENE	Soil	0.87 mg/kg	06/30/1993	Y
CHRYSENE	Groundwater	.0005 mg/kg	06/30/1993	Y
CHRYSENE	Soil	2.1 mg.kg	06/30/1993	Y
DIBENZO(a,h) ANTHRACENE	Groundwater	.011 mg/l	06/30/1993	Y
DIBENZO(a,h) ANTHRACENE	Soil	4.8 mg/kg	06/30/1993	Y
ETHYLBENZENE	Groundwater	1.6 mg/l	06/30/1993	Y
ETHYLBENZENE	Soil	20 mg/kg	06/30/1993	Y
FLUORANTHENE	Groundwater	.069 mg/l	06/30/1993	Y
FLUORANTHENE	Soil	38 mg/kg	06/30/1993	Y
FLUORENE	Groundwater	.018 mg/l	06/30/1993	Y
FLUORENE	Soil	20 mg/kg	06/30/1993	Y
INDENO(1,2,3-cd)PYRENE	Groundwater	.0012 mg/l	06/30/1993	Y
INDENO(1,2,3-cd)PYRENE	Soil	1.5 mg/kg	06/30/1993	Y
LEAD	Groundwater	.011 mg/l	06/30/1993	Y
LEAD	Soil	395 mg/kg	06/30/1993	Y
NAPHTHALENE	Groundwater	0.43 mg/l	06/30/1993	Y
NAPHTHALENE	Soil	18 mg/lg	06/30/1993	Y
PHENANTHRENE	Groundwater	.031 mg/l	06/30/1993	Y
PHENANTHRENE	Soil	38 mg/kg	06/30/1993	Y
PYRENE	Groundwater	.0013 mg/l	06/30/1993	Y
PYRENE	Soil	6.9 mg/kg	06/30/1993	Y
TOLUENE	Groundwater	0.82 mg/l	06/30/1993	Y
TOLUENE	Soil	38 mg/kg	06/30/1993	Y
TOTAL PETROLEUM HYDROCARBONS (TPH)	Groundwater	(gasoline) 24 mg/l, (diesel/oil) 65 mg/l	06/30/1993	Y
TOTAL PETROLEUM HYDROCARBONS (TPH)	Soil	(gasoline) 8,900 mg/kg, (diesel/oil) 16,000 mg/kg	06/30/1993	Y
XYLENEs	Groundwater	1.5 mg/l	06/30/1993	Y
XYLENEs	Soil	94 mg/kg	06/30/1993	Y

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	01/01/1983			EPA		
EPA PA1/SI1	06/01/1984	08/23/1984		EPA		
No Further Remedial Action Planned under Federal program	08/23/1984	08/23/1984		EPA		
Site added to database	03/21/1988		Michael Zollitsch	DEQ		SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ		SAS

SITE EVALUATION	03/01/1992	03/01/1992		DEQ	SAS
Listing Review completed	03/02/1992	03/02/1992		DEQ	SAS
Insufficient information to list	03/03/1992	09/30/1992		DEQ	SAS
SITE SCORING	03/04/1992	07/30/1992		DEQ	SAS
PRELIMINARY ASSESSMENT EQUIVALENT	05/04/1992	09/28/1992		DEQ	SAS
Proposal for Confirmed Release List recommended	09/30/1992	09/30/1992		DEQ	SAS
Proposal for Inventory recommended	09/30/1992	09/30/1992		DEQ	SAS
Facility proposed for Confirmed Release List	10/05/1992	10/05/1992		DEQ	SAS
Facility proposed for Inventory	10/05/1992	10/05/1992		DEQ	SAS
Extension requested by owner/operator	11/13/1992	11/13/1992		DEQ	SAS
Petition or request granted	11/14/1992	11/14/1992		DEQ	SAS
VCS Waiting List	02/24/1993	06/22/1993	Mike Rosen	DEQ	VCS
NEGOTIATIONS	06/23/1993	09/11/1994	Mike Kortenhof	DEQ	VCS
REMEDIAL INVESTIGATION	09/12/1994	08/31/1995	Tom Roick	DEQ NW	VCS
Review for final listing	06/01/1995	09/05/1995	Tom Roick	DEQ NW	VCS
Listing on Confirmed Release List recommended	09/05/1995	09/05/1995	Tom Roick	DEQ NW	VCS
Listing on Inventory recommended	09/05/1995	09/05/1995	Tom Roick	DEQ NW	VCS
Facility placed on Confirmed Release List	09/15/1995	09/15/1995	Tom Roick	DEQ NW	VCS
Facility placed on Inventory	09/15/1995	09/15/1995	Tom Roick	DEQ NW	VCS
BASIC PRELIMINARY ASSESSEMENT	09/07/1999	09/07/1999	Thomas Gainer	DEQ NW	SAS
Remedial Investigation recommended (RI)	09/07/1999	09/07/1999	Thomas Gainer	DEQ NW	SAS
SITE SCORING	09/07/1999	09/07/1999	Thomas Gainer	DEQ NW	SAS
Letter Agreement	02/29/2000		Matt McClincy	DEQ NW	VCS
NEGOTIATIONS	02/29/2000		Matt McClincy	DEQ NW	VCS
REMEDIAL INVESTIGATION	08/16/2000		Matt McClincy	DEQ NW	DEQ

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2117

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See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2117	Site Name: Texaco Product Pipeline		CERCLIS No:
	Address: 4500 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: R94120 0500 (Gunderson propty)
	Latitude: 45 deg. 33 ' 10.2"	Longitude: 122 deg. 43 ' 20"	Site Size: estim. 0.35 acres
Other Site Names:			
	Equilon Portland Sales Terminal Pipeline		
	Portland Harbor Sediment Study		
	SEE ALSO ECSI #169		
Operations:			
	Name: Texaco Product Pipeline		
	Comments: Product unloading/transfer pipeline. .		
	Years of Operation: 1926 to present		
	SIC Code: 4613		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Petroleum products. Primary contaminants of concern at this time are BTEX constituents (benzene, toluene, ethylbenzene, and xylenes), although MTBE, PAHs, and lead may also be present. Accidental rupture of one of Texaco's inactive pipelines during late winter 1998/99 released up to 300 gallons of Bunker oil, so PAHs may also be a significant concern at the site.
Manner and Time of Release:	Soil contamination data suggests that the release originated from an underground pipeline leak. It is unclear if the pipline is the only source of petroleum releases, though. One of Texaco's nearby inactive Bunker fuel pipelines was also ruptured during fiber-optics cable trenching activities in the late winter of 1998/99, releasing approximately 300 gallons of Bunker fuel.
Contamination Information:	Commercial gasoline with some diesel fuel. Primarily BTEX contamination. Possible MTBE. Possible lead if historic releases were also involved. Possible PAHs, depending on overall diesel fuel concentrations. One of Texaco's inactive underground pipelines was also ruptured during the late winter of 1998/99 when a trenching contractor who was installing an underground fiber-optics cable struck the pipeline, releasing approximately 300 gallons of bunker fuel (1/20/00 TBG/SAP) Soil and groundwater investigation was conducted in 1997 to evaluate petroleum hydrocarbons around Texaco's pipelines located under the Gunderson facility. Gasoline range contamination was observed in soil and groundwater. Petroleum vapors had been observed in nearby sewers and inside the Gunderson building. Because the downgradient extent of

contamination has not been determined, it is unclear whether contaminants released from the pipeline have migrated to the Willamette River.

Pathways: Most significant concerns are: vapor releases (benzene) to nearby buildings on the Gunderson property; vapor and free product releases to the sanitary sewer line that could create explosive conditions within the sewer lines; potential hazard to utility trench workers; potential damage to other nearby underground utilities (natural gas, water, telephone); potential discharges to storm sewers that discharge to the Willamette River; potential discharge of contaminated groundwater to the Willamette River; and potential exacerbation of existing subsurface contamination at the Gunderson site.

Environmental/Health Threats: Benzene inhalation threat through vapor intrusion into Gunderson buildings, BTEX vapor inhalation and BTEX / PAH contact threat to potential utility trench workers and sanitary sewer workers, potential explosion hazard in sanitary sewer line.

Status of Investigative or Remedial Action: Texaco has begun construction of a sparging system at the site, although it has yet to be activated. Removal of any free product (LNAPL), and further characterization of subsurface soil and groundwater contamination will be required, as well as a visual examination of the pipeline for potential active leaks. DEQ has received no cleanup report describing any soil or groundwater remediations for a Bunker fuel release that occurred when a Bunker fuel pipeline was struck during utility trenching activities in the late winter of 1998/99. (1/20/00 TGB/SAP) Based on initial sampling results of a river sediment quality study, the Texaco pipeline has been identified as a potential source of contamination to the Portland Harbor. A Stragegy Recommendation was completed in September 1999. A Remedial Investigation (RI) is required to evaluate the potential ecological threat of the sediment contamination (high priority). (3/1/00 JMW/SAP) Voluntary Agreement for Remedial Investigation and Source Control Measures forwarded to Equilon Enterprises on February 29, 2000. Signed agreement due by March 31, 2000.

Data Sources: DEQ Spill Files, spill numbers 97-0497 and 97-0506; Soil and Groundwater Investigation on Front Avenue, by SECOR, 10/97; Quarterly groundwater monitoring reports (1998); Remedial System Installation and Groundwater and Soil Vapor Monitoring Report (5/98).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
BARIUM	Sediment	Texaco Dock - 274 ppm	09/01/1997	Y		
BENZENE	Groundwater		06/11/1997	Y		
BENZENE	Other	In sanitary sewer line (Manhole #1)	02/18/1997	Y		
BENZENE	Soil		06/10/1997	Y		
BIS(2-ETHYLHEXYL) PHTHALATE	Sediment	Texaco Dock - 440-5000 ppb	09/01/1997	Y		
BUTYL BENZYL PHTHALATE	Sediment	30 ppb	09/01/1997	Y		
CADMIUM	Sediment	Texaco Dock - 5.3 ppm	09/01/1999	Y		
CHROMIUM	Sediment	Texaco Dock - 157 ppm	09/01/1997	Y		
COPPER	Sediment	Texaco Dock - 124 ppm	09/01/1997	Y		
CRESOL,4-	Sediment	Texaco Dock - 730-1200 ppb	09/01/1997	Y		
DIESEL - FUEL OIL	Soil	Detected (greater than 50 mg/kg; not quantified)	06/10/1997	Y		
ETHYLBENZENE	Groundwater	MW-1	06/11/1997	Y		
ETHYLBENZENE	Other	In sanitary sewer line (Manhole #2)	02/18/1997	Y		
ETHYLBENZENE	Soil	GP-3	09/11/1997	Y		

GASOLINE	Groundwater	MW-1	06/11/1997	Y
GASOLINE	Other	In Sanitary Sewer Line (Manhole #2)	02/18/1997	Y
GASOLINE	Soil	GP-3	06/10/1997	Y
LEAD	Sediment	Texaco Dock - 1080 ppm	09/01/1997	Y
MERCURY	Sediment	Texaco Dock - 0.37 ppm	09/01/1997	Y
METHYLNAPHTHALENE,2-	Sediment	Texaco Dock - 2000 ppb	09/01/1997	Y
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	Texaco Dock - LPAHs 1100 ppb	09/01/1997	Y
SILVER	Sediment	Texaco Dock - 3.4 ppm	09/01/1997	Y
THALLIUM	Sediment	Texaco Dock - 15 ppm	09/01/1997	Y
TITANIUM	Sediment	Texaco Dock - 2160 ppm	09/01/1997	Y
TOLUENE	Groundwater	MW-1	06/11/1997	Y
TOLUENE	Other	In Sanitary Sewer Line (Manhole #1)	02/18/1997	Y
TOLUENE	Soil		06/10/1997	Y
XYLENEs	Groundwater	MW-1	06/11/1997	Y
XYLENEs	Other	In Sanitary Sewer Line (Manhole #1)	02/18/1997	Y
XYLENEs	Soil	GP-3	06/10/1997	Y
ZINC	Sediment	Texaco Dock - 120-583 ppm	09/01/1997	Y

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	10/23/1997	10/23/1997	Alicia Voss	DEQ	NW	SAS
PRELIMINARY ASSESSMENT EQUIVALENT	10/23/1997	04/22/1999	Steve Fortuna	DEQ	NW	SAS
Remedial Investigation/Feasibility Study recommended	12/11/1998	04/23/1999	Steve Fortuna	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	04/23/1999	04/23/1999	Steve Fortuna	DEQ	NW	SAS
Proposal for Inventory recommended	04/23/1999	04/23/1999	Steve Fortuna	DEQ	NW	SAS
Facility proposed for Confirmed Release List	04/30/1999	04/30/1999	Kim Van Patten	DEQ	NW	SAS
Facility proposed for Inventory	04/30/1999	04/30/1999	Kim Van Patten	DEQ	NW	SAS
SITE EVALUATION	09/02/1999	09/02/1999	Thomas Gainer	DEQ	NW	SAS
SITE SCORING	09/02/1999	09/02/1999	Thomas Gainer	DEQ	NW	SAS
Remedial Investigation recommended (RI)	09/02/1999	09/02/1999	Thomas Gainer	DEQ	NW	SAS
Facility placed on Confirmed Release List	09/14/1999	09/14/1999	Kim Van Patten	DEQ	NW	SAS
Facility placed on Inventory	09/14/1999	09/14/1999	Kim Van Patten	DEQ	NW	SAS
Letter Agreement	02/29/2000		Matt McClincy	DEQ	NW	VCS
NEGOTIATIONS	02/29/2000		Matt McClincy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

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NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1160

shows data entered as of December 19, 2000 at 8:49:37 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1160	Site Name: Trumbull Asphalt Plant		CERCLIS No:
	Address: 3605 NW 35th AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 20		Tax Lots: 15
	Latitude: 45 deg. 32 ' 50"	Longitude: 122 deg. 43 ' 20"	Site Size: 9.4 acres

Other Site Names:

Operations:

Name: Trumbull Asphalt Plant

Comments: Asphalt manufacturing plant .

Years of Operation: 1930s to present

SIC Code: 2911 — Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	
Manner and Time of Release:	Leak from old underground asphalt fume line prior to 6/88.
Contamination Information:	(11/26/91 RP/NWR) In 7/88, during decommissioning of an underground fume line, soil and groundwater contamination by petroleum hydrocarbons were discovered at the site. Initial investigation by Crosby and Overton found two distinct areas of petroleum hydrocarbon contamination. One area was similar to diesel fuel, the other appeared to be blowing distillate (BD) releated to asphalt processing and the old fume line.
Pathways:	
Environmental/Health Threats:	Possible free product migration and contaminated groundwater migration off site.

Status of Investigative or Remedial Action: (11/25/91 RP/NWR) At present, groundwater contamination remains, including free product in at least one area. It may or may not have migrated off-site. The PRP intends to continue and perhaps expand groundwater monitoring efforts. Since most of the contaminated areas are covered with asphalt, no soil removal or remediation has been planned or attempted. Further assessment and continued monitoring of the site is recommended. Owens/Corning Fiberglass conducted a PA at the Trumbull Asphalt Plant. Inventory ranking package needs to be completed. (4/13/93 EB/VCS) Significant levels of TPH contamination remain in the soil. Analysis of contaminants is required (BTEX, PAHs). Effort to remove as much contaminated soil as reasonably possible is required. TPH is still present in groundwater (BTEX, BDL). PAH and TPH analyses should be continued.

Data Sources:

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
TOTAL PETROLEUM HYDROCARBONS (TPH)	Groundwater	160 ppm (0.04 inches of free product)	07/26/1992	Y		
TOTAL PETROLEUM HYDROCARBONS (TPH)	Soil	9350 mg/kg (as high as 162,000 in 1988 data)		Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
SITE EVALUATION	11/24/1991	11/24/1991	Aaron Bodor	DEQ		SAS
Proposal for Confirmed Release List recommended	11/25/1991	11/25/1991	Aaron Bodor	DEQ		SAS
Listing Review completed	11/25/1991	11/25/1991	Aaron Bodor	DEQ		SAS
Preliminary Assessment Equivalent recommended (PAE)	11/26/1991	11/26/1991	Aaron Bodor	DEQ		SAS
Site added to database	12/31/1991		Aaron Bodor	DEQ		SAS
Remedial Investigation/Feasibility Study recommended	02/25/1992	06/30/1992		DEQ	HQ	SAS
PRELIMINARY ASSESSMENT EQUIVALENT	02/25/1992	06/30/1992		DEQ	HQ	SAS
Proposal for Inventory recommended	06/30/1992	06/30/1992		DEQ		SAS
Facility proposed for Confirmed Release List	12/07/1992	12/07/1992		DEQ		SAS
Facility proposed for Inventory	12/07/1992	12/07/1992		DEQ		SAS
Listing on Confirmed Release List recommended	03/24/1993	03/24/1993		DEQ		SAS
Review for final listing	03/24/1993	03/24/1993		DEQ		SAS
Listing on Inventory recommended	03/24/1993	03/24/1993		DEQ		SAS
Facility placed on Confirmed Release List	04/15/1993	04/15/1993	Heather Schijf	DEQ	HQ	SAS
Facility placed on Inventory	04/15/1993	04/15/1993	Heather Schijf	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

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NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 330

shows data entered as of December 19, 2000 at 8:50:38 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 330	Site Name: Van Waters & Rogers		CERCLIS No: 009227398	
	Address: 3950 NW Yeon AVE Portland 97210			
	County: Multnomah		Region: Northwest	
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N	Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 20		Tax Lots: 17	
	Latitude: 45 deg. 32 ' 57"	Longitude: 122 deg. 43 ' 6"	Site Size: 9.6 acres	
Other Site Names:				
	Univar Corp.			
	McKesson Chemical Co.			
Operations:				
	Name: Van Waters & Rogers			
	Comments: Packages and stores chemicals (also recycles solvents) .			
	Years of Operation: 1946 to present			
	SIC Code: 4226		Operating Status: Active	

Contamination Information

Hazardous Substances/Waste Types:	halogenated and aromatic VOCs, pesticides
Manner and Time of Release:	Past practices; spills. Time of release: sometime after 1974.
Contamination Information:	(11/30/93 KPD/SAS) Van Waters & Rogers, a subsidiary of Univar Corp., started as a chemical supply company in 1946. About 1974, the company expanded into recycling and distilling spent solvents. In August 1980, methylene chloride spilled from a ruptured tank hose. The spill was confined to the pavement and mopped up. In September 1983, about 515 gallons of trichloroethylene (TCE) spilled from a ruptured tank gauge across a paved road and into the storm sewers. An emergency valve in the sewer line blocked the spill, and the TCE was pumped out. The City of Portland recorded a series of low pH discharges (0.8 to 3.2) in 1984 and 1985. VWR decided not to renew its hazardous waste storage permit in December 1985. Soil and groundwater sampling was required as part of RCRA Closure activities. The sampling, performed in the summer of 1987, found high levels of solvents in the soil (down to 11 feet) and in the groundwater. In January 1989, toluene spilled from a leaking valve into the storm sewers. The toluene was contained and pumped out. In June 1990, DEQ was informed of a release of 3,900 gallons of nitric acid, phosphoric acid, and water. No information on the cleanup is in the files. As of May 1992, 16 substances were present in the groundwater at the site at levels above the federal Maximum Contaminant Levels (MCLs) for drinking water.

Pathways:

Environmental/Health Threats: At least a dozen chemicals (mostly solvents) are present in the groundwater at levels above the federal MCLs for drinking water.

Status of Investigative or Remedial Action: (11/30/93 KPD/SAS) Surface contamination apparently was cleaned up by January 1992. Groundwater contamination at the site is presently being remediated, via corrective action, under the federal RCRA program. Site Assessment recommends that the site be placed on both the Confirmed Release List and the Inventory. Once the site has been closed under RCRA, the site can be reevaluated to determine if any further action is necessary under the state Superfund program.

Data Sources:
1) Inspection reports.
2) EPA CERCLA Preliminary Assessment.
3) Correspondence FROM owner and/or operator.
4) Laboratory results.
5) Spill reports.
6) Sampling and Analysis Plan.
7) Phase I Field Investigation and Analytical Program report.
8) Progress Report XXV.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
BENZENE	Groundwater	up to 530 ppb		Y		
CHLOROFORM	Groundwater	up to 1,000 ppb		Y		
DICHLOROETHANE,1,2-	Groundwater	up to 130 ppb		Y		
DICHLOROETHYLENE,1,1-	Groundwater	up to 4,600 ppb		Y		
DICHLOROETHYLENE,1,2-CIS-	Groundwater	up to 65,000 ppb		Y		
DICHLOROETHYLENE,1,2-TRANS-	Groundwater	up to 230 ppb		Y		
ETHYLBENZENE	Groundwater	up to 3,600 ppb		Y		
METHYLENE CHLORIDE	Groundwater	up to 290,000 ppb		Y		
STYRENE	Groundwater	up to 520 ppb		Y		
TETRACHLOROETHYLENE	Groundwater	up to 98,000 ppb		Y		
TOLUENE	Groundwater	up to 130,000 ppb		Y		
TRICHLOROETHANE,1,1,1-	Groundwater	up to 51,000 ppb		Y		
TRICHLOROETHANE,1,1,2-	Groundwater	up to 110 ppb		Y		
TRICHLOROETHYLENE	Groundwater	up to 90,000 ppb		Y		
VINYL CHLORIDE	Groundwater	up to 850 ppb		Y		
XYLENEs	Groundwater	up to 15,000 ppb		Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	02/01/1980			EPA		
EPA Basic Preliminary Assessment	06/26/1984	09/17/1984		EPA		
Site added to database	08/16/1988		Michael Zollitsch	DEQ	HQ	SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ	HQ	SAS

EPA Preliminary Assessment 2	08/14/1991	12/05/1991		EPA		
SITE EVALUATION	06/28/1992	06/28/1992	Kevin Dana	DEQ	HQ	SAS
Listing Review completed	06/29/1992	06/29/1992	Kevin Dana	DEQ	HQ	SAS
Proposal for Confirmed Release List recommended	06/30/1992	06/30/1992	Kevin Dana	DEQ	HQ	SAS
PRELIMINARY ASSESSMENT EQUIVALENT	11/29/1993	11/29/1993	Kevin Dana	DEQ	HQ	SAS
Proposal for Inventory recommended	11/30/1993	11/30/1993	Kevin Dana	DEQ	HQ	SAS
Other remedial or investigative action recommended	12/01/1993	12/01/1993	Kevin Dana	DEQ	HQ	SAS
Facility proposed for Confirmed Release List	05/25/1994	05/25/1994	Kevin Dana	DEQ	HQ	SRS
Facility proposed for Inventory	05/25/1994	05/25/1994	Kevin Dana	DEQ	HQ	SRS
Review for final listing	10/18/1994	10/18/1994	Kevin Dana	DEQ	HQ	SRS
Listing on Confirmed Release List recommended	10/19/1994	10/19/1994	Kevin Dana	DEQ	HQ	SRS
Listing on Inventory recommended	10/19/1994	10/19/1994	Kevin Dana	DEQ	HQ	SRS
Facility placed on Confirmed Release List	10/24/1994	10/24/1994	Heather Schijf	DEQ	HQ	SAS
Facility placed on Inventory	10/24/1994	10/24/1994	Heather Schijf	DEQ	HQ	SAS

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Table 10
Outfall 18 DEQ Leaking Underground Storage Tanks List

RNO	Address	Log Number	Company	Zip	Cleanup Start	Cleanup End	Site Work Complete
R941290110	3125 NW 35th Ave	26-91-0235	Carson Oil Company	97210	24-Jun-91	17-Jun-92	17-Jun-92
R941290110	3125 NW 35th Ave	26-97-0451	Carson Oil Company	97210	18-Jun-97		23-Mar-00
R941291500	3155 NW Yeon	26-90-0160	Fred N. Bay News Co.	97210	12-Mar-90	23-Nov-90	12-Mar-90
R941290690	3250 NW St Helens Rd	26-89-0230	Wilhelm Trucking Co.	97210	16-Oct-89	16-Apr-91	19-Feb-90
R941291370	3322 NW 35th	26-89-0280	Hill Investment/Nabisco Warehouse	97210	17-Nov-92		
R941290710	3333 NW 35th	26-91-0063	A N R Freight System	97210	07-Feb-91	03-Sep-92	03-Sep-92
R941300400	3333 NW St Helens Rd	26-89-0165	Hemphill Oil Company	97210	04-Aug-89		
R941300380	3340 NW St Helens Road	26-92-0247	Industrial Export Company (Index)	97210	29-Aug-92	30-Oct-96	09-Jul-96
R347602940	3441 NW Guam Street	26-90-0219	Northwest Steel		20-Jun-90	09-Jul-90	09-Jul-90
R941201230	3500 NW Yeon	26-91-0441	Portland Railroad Company	97210			
R941300350	3537 NW St Helens Rd	26-90-0207	Special Asphalt Products, Inc.	97210	22-Mar-90	15-Oct-90	15-Oct-90
R941290570	3570 NW Yeon	26-88-0054	Trumball Asphalt Fume Line	97210	17-Jul-92	17-Jul-92	17-Jul-92
R941290570	3599 N W Yeon	26-90-0126	Coca Cola of Oregon	97210	10-Apr-90	06-Sep-91	06-Sep-91
R941291620	3601 NW Yeon Ave	26-89-0013	Terminal Transfer, Inc.	97210	01-Jan-91		
R697400250	3641 NW St Helens Road	26-90-0379	Courtesy Trucking (Truck Term.)	97210	11-Oct-90	13-Dec-90	13-Dec-90
R941190330	3800 NW St Helens Road	26-89-0323	Texaco Portland, OR Sales Terminal	97210	21-Dec-89	09-Nov-90	04-Jan-90
R697400830	3821 NW St Helens Rd	26-90-0415	Christenson Oil	97210	26-Oct-90		
R941190980	3865 NW St Helens Road	26-87-0041	Lagrande Chain Corp.	97210	16-Nov-92	16-Nov-92	16-Nov-92
R941200160	3900 NW Yeon	26-87-0030	Convoy Corporation	97210	04-Jan-88	30-Dec-88	06-Jan-88
R941190141	3939 NW St Helens Rd	26-90-0001	Bingham Construction, Inc.	97210	29-Dec-89	11-Apr-95	23-Jan-95
R941190700	4155 NW Yeon	26-90-0288	McWhorter Technologies Inc	97210	08-Aug-90		
R941190700	4155 NW Yeon	26-90-0389	McWhorter, Inc.	97210	15-Oct-90	15-Jan-91	15-Jan-91
R941190130	4285 NW Yeon	26-89-0176	Silver Eagle Trucking	97210	22-Aug-89	06-Aug-90	06-Oct-89
R941190130	4300 NW Yeon	26-90-0486	Schnitzer Investment	97210	13-Dec-90	21-May-92	21-May-92
R941200500	4350 NW Front	26-91-0064	Gunderson Incorporated	97210	06-Feb-91	06-Aug-96	06-Aug-96

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:09 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-91-0235
UST FAC NBR: 3066 DATE REPORTED: 24-JUN-91

SITE NAME: CARSON OIL COMPANY
SITE ADDRESS: 3125 NW 35TH AVE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)224-8500

----------SITE ASSESSMENT----------

DATE DISCOVERED: 24-JUN-91 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: N	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: Y	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: N
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 24-JUN-91 REMEDIATION COMPLETED: 17-JUN-92
CLEANUP STARTED: 24-JUN-91 NO FURTHER ACTION: 17-JUN-92

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:11 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-97-0451
UST FAC NBR: 3066 DATE REPORTED: 12-JUN-97

SITE NAME: CARSON OIL COMPANY
SITE ADDRESS: 3125 NW 35TH AVE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)224-8500

----------SITE ASSESSMENT----------

DATE DISCOVERED: 11-JUN-97 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: N	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: Y	(SA)Site Assessment: Y	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: Y	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 12-JUN-97 REMEDIATION COMPLETED: 23-MAR-00
CLEANUP STARTED: 18-JUN-97 NO FURTHER ACTION: 05-JUN-00

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:07 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0160
UST FAC NBR: 1956 DATE REPORTED: 02-MAY-90

SITE NAME: FRED N. BAY NEWS CO.
SITE ADDRESS: 3155 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)228-0251

----------SITE ASSESSMENT----------

DATE DISCOVERED: 13-MAR-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: Y
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: Y	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 12-MAR-90 REMEDIATION COMPLETED: 12-MAR-90
CLEANUP STARTED: 12-MAR-90 NO FURTHER ACTION: 23-NOV-90

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:04 pm

INCIDENT INFORMATION

LOG NBR: 26-89-0230
UST FAC NBR: 3493 DATE REPORTED: 17-OCT-89

SITE NAME: WILHELM TRUCKING CO.
SITE ADDRESS: 3250 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 227-0561

SITE ASSESSMENT

DATE DISCOVERED: 16-OCT-89 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: Y
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

CONTAMINANTS/IMPACTS

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

SITE/SOIL MANAGEMENT

RELEASE STOPPED: 16-OCT-89 REMEDIATION COMPLETED: 19-FEB-90
CLEANUP STARTED: 16-OCT-89 NO FURTHER ACTION: 16-APR-91

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:05 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0280
UST FAC NBR: 4358 DATE REPORTED: 12-NOV-89

SITE NAME: HILL INVESTMENT/NABISCO WAREHOUSE
SITE ADDRESS: 3322 NW 35TH
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 222-1063

----------SITE ASSESSMENT----------

DATE DISCOVERED: 17-NOV-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: Y
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED: 31-JUL-00
CLEANUP STARTED: 17-NOV-92 NO FURTHER ACTION: 18-SEP-00

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:09 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-91-0063
UST FAC NBR: 5039 DATE REPORTED: 07-FEB-91

SITE NAME: A N R FREIGHT SYSTEM
SITE ADDRESS: 3333 NW 35TH
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 224-7300

----------SITE ASSESSMENT----------

DATE DISCOVERED: 07-FEB-91 OFFSITE MIGRATION:

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: N	(PL) Pipe Leak: N
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: Y	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 07-FEB-91 REMEDIATION COMPLETED: 03-SEP-92
CLEANUP STARTED: 07-FEB-91 NO FURTHER ACTION: 03-SEP-92

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:04 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0165
UST FAC NBR: 5030 DATE REPORTED: 04-AUG-89

SITE NAME: HEMPHILL OIL COMPANY
SITE ADDRESS: 3333 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: 222-1776

----------SITE ASSESSMENT----------

DATE DISCOVERED: 03-AUG-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: Y
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: N
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED:
CLEANUP STARTED: 04-AUG-89 NO FURTHER ACTION:

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:10 pm

INCIDENT INFORMATION

LOG NBR: 26-92-0247
UST FAC NBR: 2255 DATE REPORTED: 31-AUG-92

SITE NAME: INDUSTRIAL EXPORT COMPANY (INDEX)
SITE ADDRESS: 3340 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)228-6434

SITE ASSESSMENT

DATE DISCOVERED: 29-AUG-92 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: Y
(LD)Lab:DEQ: N	(DC)Decommissioning: N	(PL)Pipe Leak: N
(LR)Lab:RP Y	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

CONTAMINANTS/IMPACTS

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: Y	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

SITE/SOIL MANAGEMENT

RELEASE STOPPED: 29-AUG-92 REMEDIATION COMPLETED: 09-JUL-96
CLEANUP STARTED: 29-AUG-92 NO FURTHER ACTION: 30-OCT-96

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:08 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0219
UST FAC NBR: DATE REPORTED: 20-JUN-90

SITE NAME: NORTHWEST STEEL
SITE ADDRESS: 3441 NW GUAM STREET
SITE CITY: PORTLAND ZIP:
SITE COUNTY: MULTNOMAH PHONE:

----------SITE ASSESSMENT----------

DATE DISCOVERED: 10-JUN-90 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: N	(PL) Pipe Leak: N
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: Y	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: Y
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: Y	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 20-JUN-90 REMEDIATION COMPLETED: 09-JUL-90
CLEANUP STARTED: 20-JUN-90 NO FURTHER ACTION: 09-JUL-90

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:10 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-91-0441
UST FAC NBR: DATE REPORTED: 01-NOV-91

SITE NAME: PORTLAND RAILROAD COMPANY
SITE ADDRESS: 3500 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE:

----------SITE ASSESSMENT----------

DATE DISCOVERED: OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: N	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: Y	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED:
CLEANUP STARTED: NO FURTHER ACTION:

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:07 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0207
UST FAC NBR: 1050 DATE REPORTED: 22-MAR-90

SITE NAME: SPECIAL ASPHALT PRODUCTS, INC.
SITE ADDRESS: 3537 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)295-6490

----------SITE ASSESSMENT----------

DATE DISCOVERED: 01-NOV-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: N	(PL)Pipe Leak: Y
(LR)Lab:RP Y	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: Y	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 22-MAR-90 REMEDIATION COMPLETED: 15-OCT-90
CLEANUP STARTED: 22-MAR-90 NO FURTHER ACTION: 15-OCT-90

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:03 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-88-0054
UST FAC NBR: DATE REPORTED: 26-AUG-88

SITE NAME: TRUMBALL ASPHALT FUME LINE
SITE ADDRESS: 3570 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE:

----------SITE ASSESSMENT----------

DATE DISCOVERED: 22-AUG-88 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: N
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED: 17-JUL-92
CLEANUP STARTED: 17-JUL-92 NO FURTHER ACTION: 17-JUL-92

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:07 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0126
UST FAC NBR: 1750 DATE REPORTED: 10-APR-90

SITE NAME: COCA COLA OF OREGON
SITE ADDRESS: 3599 N W YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 248-1064

----------SITE ASSESSMENT----------

DATE DISCOVERED: 10-APR-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: Y
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 10-APR-90 REMEDIATION COMPLETED: 06-SEP-91
CLEANUP STARTED: 10-APR-90 NO FURTHER ACTION: 06-SEP-91

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:03 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0013
UST FAC NBR: 8277 DATE REPORTED: 18-JAN-89

SITE NAME: TERMINAL TRANSFER, INC.
SITE ADDRESS: 3601 NW YEON AVE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 228-2171

----------SITE ASSESSMENT----------

DATE DISCOVERED: OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: N	(PL) Pipe Leak: Y
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: Y	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: Y	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: Y	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED:
CLEANUP STARTED: 01-JAN-91 NO FURTHER ACTION:

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:08 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0379
UST FAC NBR: 3924 DATE REPORTED: 11-OCT-90

SITE NAME: COURTESY TRUCKING (TRUCK TERM., INC.)
SITE ADDRESS: 3641 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 223-7514

----------SITE ASSESSMENT----------

DATE DISCOVERED: 11-OCT-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: Y
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 11-OCT-90 REMEDIATION COMPLETED: 13-DEC-90
CLEANUP STARTED: 11-OCT-90 NO FURTHER ACTION: 13-DEC-90

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:51 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0323
UST FAC NBR: 7120 DATE REPORTED: 21-DEC-89

SITE NAME: TEXACO PORTLAND, OR SALES TERMINAL
SITE ADDRESS: 3800 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 226-3571

----------SITE ASSESSMENT----------

DATE DISCOVERED: 21-DEC-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 21-DEC-89 REMEDIATION COMPLETED: 04-JAN-90
CLEANUP STARTED: 21-DEC-89 NO FURTHER ACTION: 09-NOV-90

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:54 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0415
UST FAC NBR: 2887 DATE REPORTED: 31-OCT-90

SITE NAME: CHRISTENSON OIL
SITE ADDRESS: 3821 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)228-9461

----------SITE ASSESSMENT----------

DATE DISCOVERED: 26-OCT-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: Y
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: Y	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent Y	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 26-OCT-90 REMEDIATION COMPLETED:
CLEANUP STARTED: 26-OCT-90 NO FURTHER ACTION:

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:49 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-87-0041
UST FAC NBR: 8272 DATE REPORTED: 27-FEB-87

SITE NAME: LAGRANDE CHAIN CORP.
SITE ADDRESS: 3865 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)224-8326

----------SITE ASSESSMENT----------

DATE DISCOVERED: 19-JAN-87 OFFSITE MIGRATION:

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: N	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: Y	(SA)Site Assessment: Y	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: Y	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED: 16-NOV-92
CLEANUP STARTED: 16-NOV-92 NO FURTHER ACTION: 16-NOV-92

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:56 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-87-0030
UST FAC NBR: 4739 DATE REPORTED: 28-DEC-87

SITE NAME: CONVOY CORPORATION
SITE ADDRESS: 3900 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 222-9843

----------SITE ASSESSMENT----------

DATE DISCOVERED: 28-DEC-87 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: Y	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: N
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: Y

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED: 06-JAN-88
CLEANUP STARTED: 04-JAN-88 NO FURTHER ACTION: 30-DEC-88

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:52 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0001
UST FAC NBR: 7227 DATE REPORTED: 02-JAN-90

SITE NAME: BINGHAM CONSTRUCTION, INC.
SITE ADDRESS: 3939 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)224-2676

----------SITE ASSESSMENT----------

DATE DISCOVERED: 02-JAN-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: Y	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 29-DEC-89 REMEDIATION COMPLETED: 23-JAN-95
CLEANUP STARTED: 29-DEC-89 NO FURTHER ACTION: 11-APR-95

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 01:00 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0288
UST FAC NBR: 7122 DATE REPORTED: 10-AUG-90

SITE NAME: MCWHORTER TECHNOLOGIES INC
SITE ADDRESS: 4155 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 226-3751

----------SITE ASSESSMENT----------

DATE DISCOVERED: 10-AUG-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: N	(PL) Pipe Leak: Y
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: Y	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: Y	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 08-AUG-90 REMEDIATION COMPLETED:
CLEANUP STARTED: 08-AUG-90 NO FURTHER ACTION:

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:58 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0389
UST FAC NBR: 7122 DATE REPORTED: 15-OCT-90

SITE NAME: MCWHORTER, INC.
SITE ADDRESS: 4155 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 226-3751

----------SITE ASSESSMENT----------

DATE DISCOVERED: 15-OCT-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: N	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: Y	(OT) Other: Y
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent Y	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 15-OCT-90 REMEDIATION COMPLETED: 15-JAN-91
CLEANUP STARTED: 15-OCT-90 NO FURTHER ACTION: 15-JAN-91

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:55 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0176
UST FAC NBR: 6292 DATE REPORTED: 22-AUG-89

SITE NAME: SILVER EAGLE TRUCKING
SITE ADDRESS: 4285 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE:

----------SITE ASSESSMENT----------

DATE DISCOVERED: 18-AUG-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 16-AUG-89 REMEDIATION COMPLETED: 06-OCT-89
CLEANUP STARTED: 22-AUG-89 NO FURTHER ACTION: 06-AUG-90

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:58 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0486
UST FAC NBR: DATE REPORTED: 12-DEC-90

SITE NAME: SCHNITZER INVESTMENT PROPERTY
SITE ADDRESS: 4300 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE:

----------SITE ASSESSMENT----------

DATE DISCOVERED: 13-DEC-90 OFFSITE MIGRATION:

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: Y
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 13-DEC-90 REMEDIATION COMPLETED: 21-MAY-92
CLEANUP STARTED: 13-DEC-90 NO FURTHER ACTION: 21-MAY-92

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:56 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-91-0064
UST FAC NBR: 7473 DATE REPORTED: 07-FEB-91

SITE NAME: GUNDERSON INCORPORATED
SITE ADDRESS: 4350 NW FRONT
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)228-9281

----------SITE ASSESSMENT----------

DATE DISCOVERED: 06-FEB-91 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: Y
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: Y	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: Y	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 06-FEB-91 REMEDIATION COMPLETED: 06-AUG-96
CLEANUP STARTED: 06-FEB-91 NO FURTHER ACTION: 06-AUG-96

(opens_inc.rpt)

Table 11
Outfall 18 DEQ Permitted Tanks List

RNO	Address	Company	Permit ID
R941190361	4033 NW Yeon	American Steel	26-4544-1998-OPER
R941290110	3125 NW 35th Ave	Carson Oil Company	26-3066-1998-OPER
R941190700	4155 NW Yeon	McWhorter Technologies Inc	26-7122-1998-OPER
R941300350	3537 NW St Helens Rd	Special Asphalt Products, Inc.	26-1050-1998-OPER
R941291170	3031 NW St. Helens Road	St. Helens Road Cardlock	26-11864-1998-OPER
R941190330	3800 NW St Helens Rd	Texaco - Portland Sales Terminal	26-7120-1998-OPER

Table 12
Outfall 18 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
3500 NW Yeon Ave.	Trumbull Asphalt	10177	Aug-1939	12000	UST	yard	
3500 NW Yeon Ave.	Locomotive Fuel Supply	92513	May-1959	20000	UST	yard	
4100 NW Front Ave.	Industrial Air Products/ American Ship Dismantlers	1579	Jul-1965	500	UST	yard	Propane
4350 NW Front Ave.	Gunderson Bros.	940897	Jul-1994	1150	UST	yard	Gasoline
4350 NW Front Ave.	Gunderson Bros.	931596	Dec-1993	2000	AST	yard	LP CO2
4350 NW Front Ave.	Gunderson Bros.	921085	Jul-1991	2000	AST	yard	
4350 NW Front Ave.	Gunderson Bros.	920322--REM	Mar-1992				Removed Cryogen tank
4350 NW Front Ave.	Gunderson Bros.	910058--REM	Jan-1991	2@ 3000	UST	yard	
4350 NW Front Ave.	Gunderson Bros.	910058--REM	Jan-1991	3@ 1000	UST	yard	
4350 NW Front Ave.	Gunderson Bros.	910058--REM	Jan-1991	10000	UST	yard	
4350 NW Front Ave.	Gunderson Bros.	910058--REM	Jan-1991	5000	UST	yard	
4350 NW Front Ave.	Gunderson Bros.	910058--REM	Jan-1991	2@ 6000	UST	yard	
4350 NW Front Ave.	Gunderson Bros.	910058--REM	Jan-1991	500	UST	yard	
4350 NW Front Ave.	Gunderson Bros.	87535--REM	Mar-1987				Abandoned 6 tanks
4350 NW Front Ave.	Gunderson Bros.	99633	Apr-1963	1760	UST	yard	
4350 NW Front Ave.	Gunderson Bros.	95421	Nov-1960	2400	UST	yard	
4350 NW Front Ave.	Gunderson Bros.	95422	Nov-1960	2400	UST	yard	
4524 NW Front Ave.	Harvey Utz (SFR)	528	Apr-1936	675	UST	yard	
4629 NW Front Ave.	E. Jones (SFR)	6764	Jan-1938	275	AST	basement	
4700 NW Front Ave.	Gunderson Bros.	6391	Aug-1973	4@ 250	AST	integral	
4700 NW Front Ave.	FMC Corp.	593	Jun-1980	150	AST	detached	Propane
4700 NW Front Ave.	Gunderson Bros.	3094	Dec-1966	119	AST	detached	
4700 NW Front Ave.	Gunderson Bros.	4238	May-1968	288	AST	detached	
4700 NW Front Ave.	Gunderson Bros.	5664	Mar-1971	2@ 100	AST	detached	In lunch trailer
4700 NW Front Ave.	Gunderson Bros.	67300	Feb-1952	175	UST	underground floor	
4700 NW Front Ave.	Gunderson Bros.	4906	Jul-1969	2000	AST	furnace oil tank	
3135 NW Guam	Pine (SFR)	37114	Nov-1947	100	UST	yard	
3213 NW Guam	NW Bookbinding	881117	Sep-1988	500	AST	detached	Propane
3217 NW Guam	White (SFR)	65500	Oct-1951	110	AST	detached	
3250 NW Guam	Holman Dist.	890591--REM	Jun-1989	1000	UST	yard	NE side of bldg
3250 NW Guam	Holman Dist.	900104	Jan-1990	500	AST	detached	Propane
3250 NW Guam	Holman Dist.	243	Dec-1977	2000	AST	integral	
3441 NW Guam	NW Steel Processing	890971--REM	Aug-1989	10,000	UST	yard	
3441 NW Guam	NW Steel Processing	890971--REM	Aug-1989	5000	UST	yard	
3441 NW Guam	Standard Steel	10184--REM	Apr-1979	2@ 1000	UST	building	NW corner of whse on NW 35th Ave
3441 NW Guam	Standard Steel	7497	Sep-1969	2@ 1000	UST	building	

Table 12
Outfall 18 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
3441 NW Guam	Standard Steel	86656	Oct-1986	500	AST	detached	
3441 NW Guam	Boothe Packaging	4248	Jun-1968	499	AST	integral	Gasoline
NW 29th/ St. Helens Rd.	Portland Machine Co.	277	Mar-1978	500	AST	detached	
2953 NW St. Helens Rd.	Kittrell (SFR)	48090	Jun-1949	675	UST	yard	
3000 NW St. Helens Rd.	Reimann & McKenney (steel drum mfr)	666	Aug-1964	6000	UST	yard	
3000 NW St. Helens Rd.	Reimann & McKenney (steel drum mfr)	19368	Apr-1944	600	UST	yard	
3000 NW St. Helens Rd.	Emeis & Co.	92738	Jul-1959	1000	UST	yard	
3000 NW St. Helens Rd.	Myers Container		Jul-1991	288	UST	yard	Gasoline
3000 NW St. Helens Rd.	Myers Container	930912--REM	Jul-1993	1000	UST	yard	NW side of property
3000 NW St. Helens Rd.	Reimann & McKenney (steel drum mfr)	7611	Aug-1970	1000	UST	yard	
3000 NW St. Helens Rd.	Reimann & McKenney (steel drum mfr)	2560	Oct-1950	1000	UST	yard	
3000 NW St. Helens Rd.	Myers Container	911612	Dec-1991	288	AST	yard	Gasoline
3031 NW St. Helens Rd.	Truax Harris	980805	Jun-1998	2@ 10000	UST	yard	
3031 NW St. Helens Rd.	Truax Harris	980805	Jun-1998	2@ 12000	UST	yard	
3031 NW St. Helens Rd.	Truax Harris	980805	Jun-1998	8000	UST	yard	
3040 NW St. Helens Rd.	Pearson (SFR)	5664	Sep-1957	1000	UST	yard	
3103 NW St. Helens Rd.	O&S Supply	960600	Jun-1996	6000	UST	basement	HOT
3250 NW St. Helens Rd.	Wilhelm Trucking	891078--REM	Sep-1989	550	UST	yard	North of maintenance bldg.
3250 NW St. Helens Rd.	Wilhelm Trucking	891078--REM	Sep-1989	2@ 2000	UST	yard	North of maintenance bldg.
3250 NW St. Helens Rd.	Wilhelm Trucking	891078--REM	Sep-1989	2@ 4000	UST	yard	North of maintenance bldg.
3250 NW St. Helens Rd.	Wilhelm Trucking	891078--REM	Sep-1989	8000	UST	yard	North of maintenance bldg.
3250 NW St. Helens Rd.	Wilhelm Trucking	891178--REM	Oct-1989	?	UST	yard	
3250 NW St. Helens Rd.	Wilhelm Trucking	4390	Feb-1953	285	UST	yard	
3250 NW St. Helens Rd.	Campbell Crane	4389	Feb-1953	1000	UST	yard	
3250 NW St. Helens Rd.	Wilhelm Trucking	1313	Mar-1965	8000	UST	yard	Diesel
3333 NW St. Helens Rd.	Hemphill Oil	890730--REM	Jul-1989	2000	UST	yard	Center of property
3333 NW St. Helens Rd.	Hemphill Oil	890730--REM	Jul-1989	675	UST	yard	Center of property
3333 NW St. Helens Rd.	Portland Oil	5927	Nov-1980	2000	UST	yard	
3333 NW St. Helens Rd.	Portland Oil	4470	Jun-1953	675	UST	yard	
3333 NW St. Helens Rd.	Portland Oil Co.	438	Jun-1964	675	UST	yard	
3340 NW St. Helens Rd.	Industrial Steel	960797	Jul-1996	500	AST	detached	
3347 NW St. Helens Rd.	Widing Transportation Co.	99845	Nov-1963	2500	UST	yard	
3347 NW St. Helens Rd.	Time Oil	4548	Oct-1953	1750	UST	yard	
3347 NW St. Helens Rd.	Merrell Construction Co.	63219	Jun-1951	675	UST	yard	
3400 NW St. Helens Rd.	Burns Bros. Tire & Supply	5796	Mar-1958	1000	UST	yard	
3509 NW St. Helens Rd.	AJ Zinda Co.	87675--REM	Nov-1987	6000	UST	yard	Gasoline
3509 NW St. Helens Rd.	AJ Zinda Co.	87675--REM	Nov-1987	2@ 2000	UST	yard	Gasoline

Table 12
Outfall 18 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
3509 NW St. Helens Rd.	AJ Zinda Co.	87675--REM	Nov-1987	150	UST	yard	Waste oil
3509 NW St. Helens Rd.	AJ Zinda Co.	87675--REM	Nov-1987	3000	UST	yard	Gasoline
3509 NW St. Helens Rd.	AJ Zinda Co.	87675--REM	Nov-1987	8000	UST	yard	Diesel
3537 NW St. Helens Rd.	D&H Oil Co.	10534--DECOM	Jun-1962	2@ 1000	UST	yard	NE corner of maintenance shed, DECOMMISSIONED IN PLACE
3620 NW St. Helens Rd.	American Steel	920996	Jul-1992	2@ 500	AST	detached	Gasoline
3640 NW St. Helens Rd.	Texaco Oil	4897	Dec-1954	550	UST	yard	Waste oil
3640 NW St. Helens Rd.	Texaco (bulk petroleum plant)	94059	Mar-1960		UST	yard	
3641 NW St. Helens Rd.	Texaco Oil	901304--REM	Oct-1990	1000	UST	yard	
3641 NW St. Helens Rd.	Texaco Oil	901304--REM	Oct-1990	2000	UST	yard	
3641 NW St. Helens Rd.	Texaco Oil	901304--REM	Oct-1990	3000	UST	yard	
3641 NW St. Helens Rd.	Texaco Oil	901304--REM	Oct-1990	10,000	UST	yard	
3641 NW St. Helens Rd.	Nehalem Valley Motor Freight	5515	Nov-1970	2@ 1000	UST	yard	Motor oil
3641 NW St. Helens Rd.	Nehalem Valley Motor Freight	6276	Dec-1959	3000	UST	yard	
3641 NW St. Helens Rd.	Nehalem Valley Motor Freight	6276	Dec-1959	2000	UST	yard	
3641 NW St. Helens Rd.	Shell Oil	7287	Jul-1967	3@ 15000	UST	yard	
3800 NW St. Helens Rd.	Texaco (Portland Terminal)	931473	Nov-1993	2@ 1010	UST	yard	
3800 NW St. Helens Rd.	Texaco	4057	Feb-1968	500	AST	detached	
3800 NW St. Helens Rd.	Texaco		Aug-1991	84,200 barrels	AST	yard	
3800 NW St. Helens Rd.	Texaco	3049	Sep-1949	1000	UST	yard	
3800 NW St. Helens Rd.	Texaco		Mar-1981	2@ 10,000	UST	yard	20 tanks total (20,895,000 gallons)
3800 NW St. Helens Rd.	Texaco		Mar-1981	1000	UST	yard	20 tanks total (20,895,000 gallons)
3800 NW St. Helens Rd.	Texaco	3987	Sep-1974	4000	UST	yard	
3800 NW St. Helens Rd.	Texaco	3987	Sep-1974	8000	UST	yard	
3821 NW St. Helens Rd.	Christenson Oil	941552	Apr-1995	7@ 5,000	AST	yard	Oil and oil additives
3821 NW St. Helens Rd.	Christenson Oil	941552	Apr-1995	7500	AST	yard	Oil and oil additives
3821 NW St. Helens Rd.	Christenson Oil	941552	Apr-1995	2000	AST	yard	Oil and oil additives
3821 NW St. Helens Rd.	Christenson Oil	941552	Apr-1995	3000	AST	yard	Oil and oil additives
3821 NW St. Helens Rd.	Christenson Oil	901196--REM	Jul-1990	2@ 10,000	UST	yard	
3821 NW St. Helens Rd.	Christenson Oil	1482	Jul-1984	30,000	AST	detached	
3821 NW St. Helens Rd.	Christenson Oil	6713	Jan-1975	10,000	UST	yard	
3821 NW St. Helens Rd.	Christenson Oil	6481	Dec-1973	2@ 10,000	UST	yard	
3865 NW St. Helens Rd.	LaGrande Chain Co.	881565--REM	Feb-1989	2@ 10,000	UST	yard	East side of property
3865 NW St. Helens Rd.	LaGrande Chain Co.	881565--REM	Feb-1989	1000	UST	yard	East side of property
3865 NW St. Helens Rd.	Pacific Steel Warehouse	7047	Apr-1965	2@ 9,000	UST	yard	
3865 NW St. Helens Rd.	Pacific Steel Warehouse	8411	Dec-1974	5,000	UST	yard	

Table 12
Outfall 18 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
3939 NW St. Helens Rd.	Bingham Construction Co.	891245--REM	Nov-1989	3@ 10000	UST	yard	East of office, north of shop, tanks were bare steel and patched, soil is
3939 NW St. Helens Rd.	Bingham Construction Co.	891245--REM	Nov-1989	4@ 1000	UST	yard	East of office, north of shop, tanks were bare steel and patched, soil is
3939 NW St. Helens Rd.	Bingham Construction Co.	891245--REM	Nov-1989	8000	UST	yard	East of office, north of shop, tanks were bare steel and patched, soil is
4000 NW St. Helens Rd.	LaGrande Steel	931655--REM	Dec-1993	5000	UST	yard	South of bldg, north of Express Ave.
4000 NW St. Helens Rd.	LaGrande Steel	931655--REM	Dec-1993	2000	UST	yard	South of bldg, north of Express Ave.
4000 NW St. Helens Rd.	CSMI	930761	Jun-1993	1500	AST	yard	
4000 NW St. Helens Rd.	Steel Products Co.	7403	Oct-1968	2000	UST	yard	Gasoline
4000 NW St. Helens Rd.	Steel Products Co.	7403	Oct-1968	5000	UST	yard	Diesel
4001 NW St. Helens Rd.	Wilhelm Trucking	12852	Oct-1966	10,000	UST	yard	
4061 NW St. Helens Rd.	LeFebre (SFR)	80736	Dec-1954	675	UST	yard	
NW 29th/ Industrial	General Electric	72541	Feb-1953	8000	UST	yard	
3000 NW 29th Ave.	General Electric	65882	Nov-1951	8000	UST	yard	
3107 NW 29th Ave.	Anderson & Westfall	71825	Dec-1952	675	UST	yard	
3107 NW 29th Ave.	Truax Oil		Apr-1981	10,000	UST	yard	Diesel
3240 NW 29th Ave.	Grinell Bldg. (whse.)	61699	Feb-1951	4000	UST	yard	
2750 NW 31st Ave.	Chemical Distribution (whse)	1473	Jul-1984	8000	UST	yard	
2755 NW 31st Ave.	Lomac Motors	1903	Oct-1965	40 bbl	UST	yard	
2755 NW 31st Ave.	Quality Parts	900692	May-1990	675	UST	yard	
2800 NW 31st Ave.	Kendall Heating	85435	Feb-1956	1000	UST	yard	
2909 NW 31st Ave.	Holman Transfer Co.	91971	Jan-1959				
2727 NW 35th Ave.	Soule Steel	8328	Oct-1938	675	UST	yard	REMOVED 7/93
2840 NW 35th Ave.	General Tire & Rubber	97608	Mar-1962	250	AST	detached	Propane
3500 NW 35th Ave.	Guilds Lake Courts	Courtesy	Oct-1947	8@ 1000	UST	yard	

Table 13
Outfall 18 State Fire Marshal Hazardous Spills List

RNO	Address	Chemical	Date	Incident ID
R941201230	3500 NW Yeon Ave.	Triethylamine	04/11/94	HM-06-940158
R941201230	3500 NW Yeon Ave.	Toluene	12/23/94	HM-06-940493
R941300390	3335 NW St. Helens Rd.	Propane	07/15/87	02-291-870023
R347601820	3250 NW Guam St.	Propane	09/17/88	02-291-880125
R941290700	3000 NW St. Helens Rd.	Diesel fuel #2	03/06/97	02-291-970187
R084303610	3003 NW 35th Ave.	Hydrochloric acid	01/27/91	02-291-910024
R697400250	3641 NW St. Helens Rd.	Pigment	04/09/91	02-291-910118
R941190330	3800 NW St. Helens Rd.	Gasoline	04/05/91	02-291-910121
R941201230	3930 NW Yeon Ave.	Transmission oil	05/11/97	02-291-970217
R941201230	3930 NW Yeon Ave.	Paint related materials	04/30/98	HM-06-980055
R941201230	3930 NW Yeon Ave.	Pine oil	05/13/89	02-291-890160
R941201230	3930 NW Yeon Ave.	Phenolic resin	07/02/90	02-291-900175
R941201230	3930 NW Yeon Ave.	Chromic acid/Chromium trioxide	07/07/97	HM-06-970105
R941291550	3950 NW Yeon Ave.	Aqua ammonia	08/10/90	02-291-900225
R941291550	3950 NW Yeon Ave.	Evap-o-kleen	06/06/90	02-291-900146
R941190700	4155 NW Yeon Ave.	Mineral spirits	11/03/86	02-291-860105
R941190700	4155 NW Yeon Ave.	Ethyl acrylate	07/02/86	02-291-860017
R941190290	4240 NW Yeon Ave.	Diesel fuel #2	05/25/95	02-291-950244
R941190130	4285 NW Yeon Ave.	Aluminum chloride	08/28/88	02/291-880077
R649704660	4319 NW Yeon Ave.	Motor oil	05/27/00	02-291-000146
R941191100	4320 NW St. Helens Rd.	Tetramethylthiuammonosulf?	11/27/90	02-291-900452
?	4315 NW Front Ave.	Chemlene	08/09/88	02-291-880072
R941290570	3571 NW Yeon Ave.	Diesel fuel #2	12/21/95	02-291-950641

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941190130	4285 NW Yeon Ave	ABF Freight System Inc	18722	4212	Antifreeze	Ethylene Glycol	Liquid	Gallons	20-49	Acute Health Hazard	
R941190130	4285 NW Yeon Ave	ABF Freight System Inc	18722	4212	Diesel #2	Petroleum Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	
R941190130	4285 NW Yeon Ave	ABF Freight System Inc	18722	4212	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	500-999	Combustible Materials	
R941190130	4285 NW Yeon Ave	ABF Freight System Inc	18722	4212	Propane	Propane	Gas	Gallons	50-199	Flammable Gases	
R941190130	4285 NW Yeon Ave	ABF Freight System Inc	18722	4212	Waste Oil	Petroleum Hydrocarbon	Liquid	Gallons	200-499	Combustible Materials	Chronic Health Hazard
R941200160	3840 NW Yeon Ave	Ackroyd Photo Inc	46481	7335							
R94291400	3103 NW St Helens Rd	Active Equipment Co	14885	5251							
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	4705 Corrosion Inhibitor	Petroleum Distillate	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Acetylene	Acetylene	Gas	Cubic Feet	200-499	Flammable Gases	Acute Health Hazard
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Antifreeze	Ethylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Argon	Argon	Gas	Cubic Feet	200-499	NonFlammable Gases	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Coogar 500	Argon	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Gasoline	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Gear Compound	Hydrocarbon Base Oils	Liquid	Gallons	50-199	Combustible Materials	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Hydraulic Oil	Highly Refined Base Lubricating Oils	Liquid	Gallons	1,000-4,999	Combustible Materials	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Metal Working Fluid	Hydrocarbon Based Oil	Liquid	Gallons	50-199	Combustible Materials	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Nitrogen	Nitrogen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Omala Oils	Heavy Paraffinic Distillate	Liquid	Gallons	50-199	Combustible Materials	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	Oxidizers
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Oxygen Liquid	Oxygen	Gas	Gallons	1,000-4,999	NonFlammable Gases	Oxidizers
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Paint Latex	2-Butoxyethanol/ 1,2 Ethanediol	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Paint Oil Base	Toluene	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Propane	Propane	Gas	Gallons	500-999	Flammable Gases	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Rotella 15w/40	Petroleum Hydrocarbon	Liquid	Gallons	200-499	Combustible Materials	
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Solvent	Petroleum Distillate Hydrocarbon Solvent	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R941190361	4033 NW Yeon	American Steel LLC	7087	5051	Waste Hydraulic Oil	Petroleum Hydrocarbons	Liquid	Gallons	500-999	Combustible Materials	
R697400250	3641 NW St Helens Rd 201	American Truckline Inc	67302	4213							
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Abs Bay 633-1050 Natural	Styrene	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Abs Mon 456-1002 Natural	Styrene	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Abs Mon 633-4000 Black	Styrene	Solid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Acetal Polymer Hival 1607 5-9	Acetal Polymer	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Acetaminophen Usp 90% Coarse	Acetaminophen	Solid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Acetic Acid	Acetic Acid	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Acetic Acid Glacial	Acetic Acid	Liquid	Gallons	500-999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Acetic Anhydride	Acetic Anhydride	Liquid	Pounds	50,000-99,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Acetone	Acetone	Liquid	Gallons	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Acetylene	Acetylene	Gas	Cubic Feet	5,000-9,999	Flammable Gases	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Aluminum Sulfate	Aluminum Sulfate	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Amercor 6510	Cyclohexylamine	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Amercor 8750	Cyclohexylamine	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Amino-2 Methyl-2 Propanol-1 95%	Amino-2 Methyl-2 Propanol-1	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Antifreeze Permanent	Ethylene Glycol	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Aqua Ammonia 26be	Ammonium Hydroxide	Liquid	Gallons	5,000-9,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Argon	Argon	Gas	Cubic Feet	0-4	NonFlammable Gases	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Arrow 11889	Bht	Solid	Gallons	500-999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ascorbic Acid Usp/FCC Fine	Acsorbic Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ascorbic Acid/FCC Extra Fine Granular	Ascorbic Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Biosperse 250	Magnesium Nitrate	Liquid	Gallons	5,000-9,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Borax 10 MOL	Sodium Tetraborate Decahydrate	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Boric Acid Tech Granular	Boric Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Boric Acid Tech Powdered	Boric Acid	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Butanol	Butanol	Liquid	Gallons	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Butyl Acetate Normal 98%	Butyl Acetate	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Calcium Carbonate	Calcium Carbonate	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Calcium Chloride 94% Brining	Calcium Chloride	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Calcium Chloride 94-97% Pellets	Calcium Chloride	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Calcium Chloride Fcc Gd Anhydrous	Calcium Chloride	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Calcium Propionate Fcc Crystals	Calcium Propionate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Calcium Stearate Fcc Powder	Calcium Stearate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Calcium Stearate Kosher Powder	Calcium Stearate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Cantab Plus		Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Catalyst Reichold 46-702	Hydrogen Peroxide	Liquid	Gallons	1,000-4,999	Oxidizers	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Catalyzed Sulfite Corrosion Inhibitor	Sodium Sulfite	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Caustic Potash Solution 45%	Potassium Hydroxide	Liquid	Gallons	50,000-99,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Caustic Soda Beads	Sodium Hydroxide	Solid	Pounds	10,000-49,999	Acute Health Hazard	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Caustic Soda Liquid 50%	Sodium Hydroxide	Liquid	Gallons	5,000-9,999	Acute Health Hazard	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Cetyl/Stearyl Alcohol Nf Flaked	Cetyl/Stearyl Alcohol	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Chelate Crystal 220	Ethylenediamine Tetraacetic Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Chelating Liquid 100	Tetrasodium Salt Of Edta	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Chelating Liquid 1500/2010	Hydroxyethylidene Bisphosphonic Acid	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Chelating Liquid 80	Ethylene Diamine Tetracetic Acid	Liquid	Gallons	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Chop Mat Oc 1 1/2 Oz-50"	Glass Fibre	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Citric Acid Anhyd Fcc Fine Gran	Citric Acid	Solid	Pounds	100,000-249,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Citric Acid Anhyd Fcc Granular	Citric Acid	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Cryotech Cma Deicer	Calcium Magnesium Acetate	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Cyclohexylamine Tech	Cyclohexylamine	Liquid	Pounds	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Diacetone Alcohol	Diacetone Alcohol	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Diethylene Glycol 99%	Diethylene Glycol	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Diethylene Glycol Monoethyl Ether Acetat	Diethylene Glycol Monoethyl Ether Acetat	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Dioctyl Adipate	Dioctyl Adipate	Liquid	Pounds	10,000-49,999	Combustible Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Dipropylene Gylcol Monomethyl Ether	Dipropylene Gylcol Monomethyl Ether	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	D-Limonene	D-Limonene	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Dodecylbenzene Sodium Sulfonate	Dodecylbenzene Sodium Sulfonate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Dodecylbenzene Sulfonic Acid	Dodecylbenzene Sulfonic Acid	Liquid	Pounds	1,000-4,999	Acute Health Hazard	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Dowfrost	Propylene Glycol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Drew Plus 913 BL Foam Control Agent	Aliphatic Petroleum Distillates	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Drewplus L464 Foam Control	Aliphatic Petroleum Distillates	Liquid	Gallons	10,000-49,999	Combustible Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Drewplus L-474	Aliphatic Petroleum Distillates	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Drewsperse 747 Deposit Control Agent	Nitrilotris	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ethanol Sda 3c 190 Proof	Ethanol	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ethanol Spec Ind Anhy 4082	Ethanol	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ethyl Acetate 99%	Ethyl Acetate	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ethylene Glycol	Ethylene Glycol	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ethylene Glycol Monobutyl Ether	Ethylene Glycol Monobutyl Ether	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ethylene Glycol Monomethyl Ether	Ethylene Glycol Monomethyl Ether	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Poisonous Materials
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ethylene Glycol Monopropyl Ether	Ethylene Glycol Monopropyl Ether	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ferric Chloride Soln	Ferric Chloride	Liquid	Pounds	5,000-9,999	Corrosives	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ferrous Sulfate	Ferrous Sulfate Monohydrate	Solid	Pounds	5,000-9,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ferrous Sulfate With Anti-Caking Agent	Ferrous Sulfate	Solid	Pounds	5,000-9,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Genapol 26l60	Genapol	Liquid	Pounds	200-499	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Glycerine Natural 99.5%	Glycerine	Liquid	Gallons	50,000-99,999	Misc.Haz. Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Glycol Ether Pm Acetate	Propylene Glycol Methyl Acetate	Liquid	Pounds	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	GP Reichhold 33-133-00 Resin	Polyester Resin	Liquid	Pounds	10,000-49,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	GP Reichold 33-266 Polylite Resin	Polyester Resin	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	GP Reichold 51-119 (1063-3) Resin	Polyester Resin	Liquid	Pounds	10,000-49,999	Reactive Material	Acute Health Hazard

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Gun Roving OC 357b-AA-162 Crpk	Fiber Glass	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hetron 922	Vinyl Ester	Liquid	Pounds	5,000-9,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hetron 922 L 25	Vinyl Ester	Liquid	Gallons	10,000-49,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hetron 980	Vinyl Ester	Liquid	Pounds	10,000-49,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hetron D 1218	Styrene	Liquid	Pounds	10,000-49,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hetron D 1619	Vinyl Ester Resin	Liquid	Pounds	5,000-9,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hetron D 1623	Vinyl Ester Resin	Liquid	Pounds	5,000-9,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hetron Fr992	Vinyl Ester Resin	Liquid	Pounds	5,000-9,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hexane	Hexane	Liquid	Gallons	10,000-49,999	Flammable Liq.(FP<0F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hexylene Glycol	Hexylene Glycol	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	HI Sol 10	Aromatic Petroleum Distillate	Liquid	Pounds	10,000-49,999	Combustible Materials	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	HI Sol 15	Aromatic Petroleum Distillates	Liquid	Pounds	10,000-49,999	Combustible Materials	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hydrogen Peroxide 30%	Hydrogen Peroxide	Liquid	Pounds	1,000-4,999	Oxidizers	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Hydrogen Peroxide 35% Tech	Hydrogen Peroxide	Liquid	Gallons	5,000-9,999	Oxidizers	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Iso Reichhold 33-409 No Wax Resin	Polyester Resin	Liquid	Pounds	10,000-49,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Iso Reichhold 33-410 Resin	Polyester Resin	Liquid	Pounds	10,000-49,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Iso Reichold 33-433-01 Resin	Polyester Resin	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Iso Reihhold 33-451-00 6060-5 Resin	Polyester Resin	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Reactive Material
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Isobutanol	Isobutanol	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Isobutyl Isobutyrate	Isobutyl Isobutyrate	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Isophorone	Isophorone	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Isopropanol 99%	Isopropanol	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Isoset WD3-A322	Calcium Carbonate	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Kerosene	Kerosene	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Kwik Dri	Acetone	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Lactic Acid 88%	Lactic Acid	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Magnesium Oxide Magchem 30	Magnesium Oxide	Solid	Pounds	10,000-49,999	Acute Health Hazard	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Magnesium Sulfate Heptahydrate Usp	Magnesium Sulfate	Solid	Pounds	5,000-9,999	Misc.Haz. Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Malic Acid Fcc Fine Grain	Malic Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Methanol	Methanol	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Methyl Ethyl Ketone	Methyl Ethyl Ketone	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Methyl Isobutyl Ketone	Methyl Isobutyl Ketone	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Methylene Chloride	Methylene Chloride	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Mineral Spirits 4% Aromatics	Mineral Spirits	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Mineral Spirits 66	Aliphatic Hydrocarbon	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Mineral Spirits 66 1% Aromatics	Petroleum Distillates	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Mineral Spirits Odorless	Heavy Alkalated Naphtha	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Miranol Fbs	Cocoamphodipropionate	Liquid	Pounds	5,000-9,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Mixed Solvents Lgt 108-032295	Toluene	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Modar 824 Lts	Polymer Resin	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Monoethanolamine	Monoethanolamine	Liquid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Morpholine	Morpholine	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Muriatic Acid 20 Degree Baume	Muriatic Acid	Liquid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Muriatic Acid 20%	Muriatic Acid	Liquid	Pounds	5,000-9,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Nitric Acid	Nitric Acid	Liquid	Gallons	500-999	Corrosives	Oxidizers
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Nitrilotris 50%	Metholene Phosphonic Acid	Liquid	Pounds	5,000-9,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Nitrogen	Nitrogen	Gas	Cubic Feet	36818	NonFlammable Gases	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Nylon Dup Zyr 101 L BKB 009 BLK	Polyhexamethylene Adapimide	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Phosphoric Acid 75%	Phosphoric Acid	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Phosphoric Acid 85%	Phosphoric Acid	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polypropylene DSM 62/EC Natural	Propylene Ethylene	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polypropylene Him 65 F 4-2 Natural	Propylene Ethylene	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polypropylene Him 7823 Natural	Propylene Ethylene Copolymer	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polypropylene Him 8623	Propylene Ethylene Copolymer	Solid	Pounds	250,000-499,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polypropylene Hyn Ap 7310 Hs Nt	Propylene Ethylene	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polypropylene Mnt 8623 Nat	Propylene Ethylene	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polypropylene Mnt Sb 751 Natural	Propylene Ethylene	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polystyrene Dow 6087 Sfw1-27 Natural	Decabromodiphenyl Oxide	Solid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polystyrene Hun 333 A2y 9100 Natural	Styrene	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polyurethane Dow 2102-90 A Nat	Propylene Ethylene	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Polyurethane Dow 2102-90 A Natural	Polyurethane	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Potassium Acetate	Potassium Acetate	Liquid	Pounds	50,000-99,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Potassium Carbonate Dense Gran Glass	Potassium Carbonate	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Potassium Sorbate Fcc Granular	Potassium Sorbate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Potassium Sorbate Fcc Powder	Potassium Sorbate	Solid	Pounds	10,000-49,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Propanol	Propanol	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Propyl Acetate Normal	Propyl Acetate	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Propylene Glycol Industrial	Propylene Glycol	Liquid	Pounds	10,000-49,999	Combustible Materials	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Propylene Glycol Monobutyl Ether	Propylene Glycol Monobutyl Ether	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Propylene Glycol Usp	Propylene Glycol	Liquid	Gallons	10,000-49,999	Combustible Materials	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Propylene Oxide	Propylene Oxide	Liquid	Pounds	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Refrigerant 134 A	1,1,1,2-Tetrafluoroethane	Gas	Cubic Feet	200-499	NonFlammable Gases	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Refrigerant 22	Chlorodifluoromethane	Gas	Cubic Feet	20-49	NonFlammable Gases	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Reichhold 33-328-00 Resin	Polyester Resin	Solid	Pounds	10,000-49,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Resin Reichold 33-540-05 Resin	Polyester Resin	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Rhodafac Ra-600	Phosphoric Acid	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Rodda 461 Lacquer Thinner	Aliphatic Petroleum Distillate	Liquid	Pounds	10,000-49,999	Flammable Liq.(FP<0F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Salt Gran Food Grade	Sodium Chloride	Solid	Pounds	50,000-99,999	Acute Health Hazard	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sb 310 Phosphate Blend	Sodium Tripolyphosphate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Soda Ash Dense	Sodium Carbonate	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium 2-Ethylhexyl Sulfate 40%	Sodium 2-Ethylhexyl Sulfate	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Acid Pyrophosphate FG	Sodium Acid Pyrophosphate	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Aluminum Phosphate AC	Sodium Aluminum Phosphate Ac	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Benzoate NF/FCC EDF	Sodium Benzoate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Bicarbonite USP Powder	Sodium Bicarbonate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Bisulfite FG OR USP Anhyd Gran	Sodium Bisulfite	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Chlorite 80% Tech	Sodium Chlorite	Solid	Pounds	10,000-49,999	Oxidizers	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Citrate Dihyd Usp/Fcc Fine	Sodium Citrate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Gluconate Fcc Fine Gran	Sodium Gluconate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Hexametaphosphate	Sodium Hexametaphosphate	Solid	Pounds	5,000-9,999	Misc.Haz. Materials	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Hypochlorite 12.5%	Sodium Hypochlorite	Liquid	Gallons	10,000-49,999	Corrosives	Oxidizers
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Isodecyl Sulfate 40% Soln	Sodium Isodecyl Sulfate	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Metasilicate, Anhydrous	Sodium Metasilicate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Silicate 41 Degree	Sodium Silicate	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Silicofluoride	Sodium Silicofluoride	Solid	Pounds	10,000-49,999	Poisonous Materials	PESTICIDE
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Sulfate Anhydrous Tech	Sodium Sulfate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Sulfite Anhyd FG Pwd	Sodium Sulfite	Solid	Pounds	50,000-99,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Thiosulfate Pentahydrate	Sodium Thiosulfate	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Trip0lyphosphate FCC Gran	Sodium Tripolyphosphate	Solid	Gallons	10,000-49,999	Acute Health Hazard	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Tripolyphosphate Tech Light	Sodium Tripolyphosphate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sodium Xylene Sulfonate 40%	Xylene	Liquid	Gallons	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Solvent 140-66	Aliphatic Hydrocarbon	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Solvent 529-66	Aliphatic Petroleum Distillates	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Solvent 529-66 Low Odor	Aliphatic Petroleum Distillate	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sorbitol 70% Solution Usp	Sorbitol	Liquid	Pounds	100,000-249,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sorbitol Nf/Fcc Cryst Coarse Powder	Sorbitol	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sorbitol Nf/Fcc Crystalline Gr	Sorbitol	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Steamax 1848 Corrosion Inhibitor	Cyclohexylamine	Liquid	Pounds	500-999	Flamm.Liq. (73F<FP<141F)	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Styrene Monomer 50 Ppm Inhibitor	Styrene	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sulfamic Acid Crystals	Sulfamic Acid	Solid	Pounds	100,000-249,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sulfuric Acid 1400 Sp Gr (50% 414)	Sulfuric Acid	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sulfuric Acid 66 Be	Sulfuric Acid	Liquid	Gallons	50,000-99,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sulfuric Acid 93%	Sulfuric Acid	Liquid	Gallons	10,000-49,999	Acute Health Hazard	Corrosives
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Sulfuric Acid Low Particulate Grade	Sulfuric Acid	Liquid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Tetramethylammonium Hydroxide	Tetramethylammonium Hydroxide	Liquid	Gallons	5,000-9,999	Corrosives	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Thinner 511	Acetone	Liquid	Pounds	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Toluene	Toluene	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Toluene Recycled	Toluene	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Triax Mon 2253-40811 Black	Styrene	Solid	Gallons	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Triethanolamine 85%	Triethanolamine	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Triethanolamine 85% Low Freeze Grade	Triethanolamine	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Trisodium Phosphate Anhydrous	Trisodium Phosphate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ve Reichhold 31-353-00 9300 Np Resin	Vinyl Ester Resin	Liquid	Pounds	10,000-49,999	Reactive Material	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Ve Reichold 33-250-01 Hydrex Resin	Polyester Resin	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Vm&P Naphtha	Light Aliphatic Solvent Naphtha	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	White Mineral Oil 205 Usp	Petroleum Hydrocarbon	Liquid	Pounds	10,000-49,999	Combustible Materials	Acute Health Hazard
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	White Mineral Oil 85 Nf	Petroleum Hydrocarbon	Liquid	Pounds	10,000-49,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941291370	3322 NW 35th Ave	Ashland Chemical Co	6738	5169	Xylene	Xylene	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941201230	3930 NW Yeon Ave	AT&T	74610	4813	*	*	*	*	*	*	*
R697400490	3717 NW St Helens Rd	Baxter & Flaming Ind Inc	4774	3442	Carbon Dioxide	Carbon Dioxide	Liquid	Gallons	20-49	NonFlammable Gases	Acute Health Hazard
R697400490	3717 NW St Helens Rd	Baxter & Flaming Ind Inc	4774	3442	Opex Lacquer Primer	Toluene	Liquid	Gallons	50-199	Misc.Haz. Materials	
R697400490	3717 NW St Helens Rd	Baxter & Flaming Ind Inc	4774	3442	Thinner	Light Petroleum Distillate	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941290710	3333 NW 35th Ave	Bay News	23893	5192	Acetylene	Acetylene	Gas	Cubic Feet	50-199	Flammable Gases	Acute Health Hazard
R941290710	3333 NW 35th Ave	Bay News	23893	5192	Antifreeze	Ethylene Glycol	Liquid	Gallons	200-499	Acute Health Hazard	
R941290710	3333 NW 35th Ave	Bay News	23893	5192	Argon	Argon	Gas	Cubic Feet	50-199	NonFlammable Gases	
R941290710	3333 NW 35th Ave	Bay News	23893	5192	Diesel	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	
R941290710	3333 NW 35th Ave	Bay News	23893	5192	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	500-999	Combustible Materials	
R941290710	3333 NW 35th Ave	Bay News	23893	5192	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	Oxidizers
R941290710	3333 NW 35th Ave	Bay News	23893	5192	Waste Motor Oil	Petroleum Hydrocarbon	Liquid	Gallons	500-999	Combustible Materials	Chronic Health Hazard
R697400250	3641 NW St Helens Rd	Becker Trucking Inc	50268	4213	Propane	Propane	Gas	Gallons	20-49	Flammable Gases	
R941201230	3930 NW Yeon Ave	Burlington Northern Santa Fe	18604	4011	Acetylene	Acetylene	Gas	Cubic Feet	1,000-4,999	Flammable Gases	Acute Health Hazard
R941201230	3930 NW Yeon Ave	Burlington Northern Santa Fe	18604	4011	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	
R941201230	3930 NW Yeon Ave	Burlington Northern Santa Fe	18604	4011	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	Oxidizers
R941201230	3930 NW Yeon Ave	Burlington Northern Santa Fe	18604	4011	Suva Mp 66	Chlorodifluoromethane 60%	Gas	Pounds	50-199	Acute Health Hazard	
R084303300	2949 NW St Helens Rd	Caster Technology	8430	3537							
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Absorbs It	Sedimentary Opal Clay	Solid	Pounds	500-999	Misc.Haz. Materials	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Automate Green 1/Red Dye	Xylene	Liquid	Gallons	20-49	Flamm.Liq. (73F<FP<141F)	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Base Oils	Petroleum Hydrocarbon	Liquid	Gallons	100,000-249,999	Combustible Materials	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Cresylic Acid	C-9 Phenolics	Liquid	Gallons	50-199	Corrosives	Combustible Materials
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Diesel #2	Petroleum Distillates	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Isobutyl Alcohol	Isobutyl Alcohol	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Kerosene	Kerosene	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Lubrizol 3702	Zinc C1-C14 Alkyldithiophosphate	Liquid	Gallons	200-499	Combustible Materials	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Lubrizol Additives	Alkylated Phenol Sulfide	Liquid	Gallons	1,000-4,999	Combustible Materials	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Motor Oil/Lubricants	Petroleum Hydrocarbon	Liquid	Gallons	10,000-49,999	Combustible Materials	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Motor Oil/Lubricants	Petroleum Hydrocarbon	Liquid	Gallons	1,000-4,999	Combustible Materials	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Oil 2 Cycle Mix	Hydrotreated Distillate	Liquid	Gallons	200-499	Combustible Materials	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Oleic Acid	Oleic Acid	Liquid	Gallons	200-499	Misc.Haz. Materials	
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Solvent	Petroleum Distillate Hydrocarbon Solvent	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R697400830	3821 NW St Helens Rd	Christenson Oil	3076	2992	Transmission Fluid	Petroleum Distillates	Liquid	Gallons	5,000-9,999	Combustible Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Acid Copper Solution	Copper Sulfate	Liquid	Gallons	500-999	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Ammonium Hydroxide	Ammonium Hydroxide	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Axarel 6100	Diisobutyl Glutarate	Liquid	Gallons	50-199	Combustible Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Cadmium Cyanide	Cadmium Cyanide	Liquid	Gallons	200-499	Poisonous Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Calcium Chloride Anhydrous	Calcium Chloride	Solid	Pounds	50-199	Acute Health Hazard	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Caustic Soda	Sodium Hydroxide	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Chlorine	Chlorine	Liquid	Pounds	200-499	NonFlammable Gases	Poison Gases
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Chromic Acid	Chromic Acid	Solid	Pounds	200-499	Corrosives	Oxidizers

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R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Chromic Acid Solution	Chromic Acid	Liquid	Gallons	200-499	Corrosives	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Copper Cyanide	Cuprous Cyanide	Liquid	Gallons	200-499	Poisonous Materials	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Copper Metal	Copper	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Cyanide Plating Solutions	Sodium Cyanide	Liquid	Gallons	200-499	Poisonous Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Electroless Nickel Baths	Nickel Sulfate	Liquid	Gallons	1,000-4,999	Chronic Health Hazard	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Hydrochloric Acid	Hydrochloric Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Hydrofluoric Acid 48%	Hydrofluoric Acid	Liquid	Gallons	50-199	Corrosives	Poisonous Materials
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Hydrogen Peroxide	Hydrogen Peroxide	Liquid	Gallons	50-199	Oxidizers	Corrosives
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Hydroxyacetic Acid	Hydroxyacetic Acid	Liquid	Gallons	50-199	Acute Health Hazard	Corrosives
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Iridite 12I-10	Nitric Acid	Liquid	Gallons	50-199	Corrosives	Oxidizers
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Iridite 12I-4s	Chromic Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Isoprep 172	Potassium Hydroxide	Liquid	Gallons	50-199	Corrosives	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Isoprep Ncz	Sodium Hydroxide	Solid	Pounds	500-999	Corrosives	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Lead	Lead	Solid	Pounds	1,000-4,999	Chronic Health Hazard	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Magnesium Hydroxide	Magnesium Hydroxide	Liquid	Gallons	200-499	Misc.Haz. Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Nichem 2500 A	Nickel Sulfate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Nichem 2500 B	Acetic Acid	Liquid	Gallons	50-199	Misc.Haz. Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Nichem 2500 C	Sodium Hypophosphite	Liquid	Gallons	50-199	Misc.Haz. Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Nickel Chloride Solution	Nickel Chloride	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Nickel Metal	Nickel	Solid	Pounds	200-499	Chronic Health Hazard	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Nickel Plating Solution	Nickel	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Nickel Sulfate Solution	Nickel Sulfate	Liquid	Gallons	200-499	Corrosives	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Nitric Acid	Nitric Acid	Liquid	Gallons	50-199	Corrosives	Oxidizers
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Phosphoric Acid	Phosphoric Acid	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Potassium Cyanide	Potassium Cyanide	Solid	Pounds	50-199	Poisonous Materials	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Promethium 147	Promethium	Solid	Millicures	0-4	Radioactive Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Propane	Propane	Liquid	Gallons	50-199	Flammable Gases	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Protolux 2000	Organic Acid Proprietary	Liquid	Gallons	50-199	Misc.Haz. Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Silver Cyanide Soln	Potassium Cyanide	Liquid	Gallons	50-199	Poisonous Materials	Corrosives
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Sodium Cyanide	Sodium Cyanide	Solid	Pounds	50-199	Poisonous Materials	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Sodium Hydrogen Sulfate Solution	Sodium Hydrogen Sulfate	Liquid	Gallons	1,000-4,999	Corrosives	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Sodium Hypochlorite	Sodium Hypochlorite	Liquid	Gallons	500-999	Oxidizers	Corrosives
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Sodium Metabisulfite	Sodium Metabisulfite	Solid	Pounds	200-499	Acute Health Hazard	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Sulfuric Acid	Sulfuric Acid	Liquid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Thallium 204	Thallium	Solid	Millicures	0-4	Radioactive Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Tin Metal	Tin	Solid	Pounds	200-499	Misc.Haz. Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Waste Acid	Hydrochloric	Liquid	Gallons	500-999	Corrosives	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Waste Chromating Solution	Nitric Acid	Liquid	Gallons	500-999	Corrosives	Oxidizers
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Waste Nitric Acid	Nitric Acid	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Waste Soap Solution	Sodium Hydroxide	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Waste Water Treatment Sludge	Chromium +3	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Zinc Cyanide	Zinc Cyanide	Solid	Pounds	200-499	Poisonous Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Zinc Metal	Zinc	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R084303610	3003 NW 35th Ave	Columbia American Plating Co	6552	3471	Zinc Plating Bath	Sodium Hydroxide	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Acetone	Acetone	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Acetylene	Acetylene	Gas	Cubic Feet	200-499	Flammable Gases	Acute Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Caustic Cleaning Solution	Sodium Hydroxide	Liquid	Gallons	5,000-9,999	Corrosives	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Caustic Liquid	Sodium Hydroxide	Liquid	Gallons	1,000-4,999	Chronic Health Hazard	Corrosives
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Diesel Oil	Petroleum Hydrocarbons	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Donax Tg Fluid	Solvent Refined, Hydrotreated	Liquid	Millicures	50-199	Acute Health Hazard	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Gasoline	Toluene	Liquid	Gallons	50-199	Flammable Liq.(FP<0F)	Chronic Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Mc Blend	Acetone	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Muriatic Acid	Hydrochloric Acid	Liquid	Gallons	200-499	Acute Health Hazard	Corrosives
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Oxygen	Oxygen	Gas	Cubic Feet	200-499	NonFlammable Gases	Oxidizers
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Paint	Petroleum Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Pigmented Filamite	Clay	Solid	Gallons	50-199	Combustible Materials	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Propane	Propane	Gas	Gallons	200-499	Flammable Gases	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Solvent	Petroleum Distillate Hydrocarbon Solvent	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Solvent 1	Toluene/Xylene	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Sulfuric Acid	Sulfuric Acid	Solid	Gallons	200-499	Corrosives	Acute Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Tellus Oil 100	Heavy Paraffinic Distillate	Liquid	Gallons	50-199	Combustible Materials	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Tellus Oil 32	Heavy Paraffinic Distillate	Liquid	Gallons	50-199	Combustible Materials	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Tellus Oil 46	Heavy Paraffinic Distillate	Liquid	Gallons	50-199	Combustible Materials	Acute Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Used Oil	Petroleum Hydrocarbons	Liquid	Gallons	1,000-4,999	Combustible Materials	Chronic Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Waste Flammable Liquid	Toluene, Mek, Etc.	Liquid	Gallons	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Waste Paint & Solvents	Acetone, Toluene, Xylene	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Wd-40	Aliphatic Petroleum Distillates	Liquid	Gallons	10-19	Combustible Materials	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Zep Dry Graphite #006101	1,1,1-Trichloroethane	Liquid	Gallons	10-19	Chronic Health Hazard	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Zep Dry Moly	1,1,1-Trichloroethane	Liquid	Gallons	10-19	Chronic Health Hazard	
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Zep Dyna 143	Solvent Naphtha	Liquid	Gallons	10-19	Combustible Materials	Acute Health Hazard
R084303351	3000 NW St Helens Rd	Container Management Svcs	2032	7699	Zep Super Penetrant	Aliphatic Naphtha	Liquid	Gallons	10-19	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	Acetylene	Acetylene	Gas	Cubic Feet	500-999	Flammable Gases	Acute Health Hazard
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	All Purpose Bathroom Cleaner	2-Butoxyethanol	Liquid	Gallons	50-199	Corrosives	
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	Hydraulic Oil	Highly Refined Base Lubricating Oils	Liquid	Gallons	50-199	Combustible Materials	
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	Master X Bleach	Sodium Hypochlorite	Liquid	Gallons	20-49	Acute Health Hazard	
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	200-499	Combustible Materials	
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	Oxygen	Oxygen	Gas	Cubic Feet	500-999	NonFlammable Gases	Oxidizers
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	Propane	Propane	Gas	Gallons	500-999	Flammable Gases	
R941200160	3900 NW Yeon	Container Recovery Inc	35561	5093	Waste Oil	Petroleum Hydrocarbon	Liquid	Gallons	200-499	Combustible Materials	Chronic Health Hazard
R941290710	3333 NW 35th Ave	Distribution Inc	78906	4212							
R941300530	3530 NW St Helens Rd	G/S Associates Inc	61133	5085	Propane	Propane	Gas	Gallons	200-499	Flammable Gases	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Carbon Dioxide	Carbon Dioxide	Gas	Pounds	50,000-99,999	NonFlammable Gases	Acute Health Hazard
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Gasoline	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Nitrogen Cryogenic Liquid	Nitrogen	Gas	Gallons	1,000-4,999	NonFlammable Gases	Acute Health Hazard
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Oxygen	Oxygen	Liquid	Gallons	5,000-9,999	NonFlammable Gases	Oxidizers
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Paint Oil Base/Mek	Mek	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Primer Water Base	2-Butoxyethanol	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Propane	Propane	Gas	Gallons	5,000-9,999	Flammable Gases	
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Rando Oil Hd 46	Highly Refined Base Oil	Liquid	Gallons	1,000-4,999	Combustible Materials	
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Waste Paint Powder	Toluene	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200500	4350 NW Front	Gunderson Incorporated	2314	3743	Waste Thinners	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	
R941300400	3333 NW St Helens Rd	Hemphill Oil Company	18923	5983	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	
R941300380	3340 NW St Helens Rd	Index	46326	5051	Acetylene	Acetylene	Gas	Cubic Feet	200-499	Flammable Gases	Acute Health Hazard
R941300380	3340 NW St Helens Rd	Index	46326	5051	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	
R941300380	3340 NW St Helens Rd	Index	46326	5051	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	50-199	Combustible Materials	
R941300380	3340 NW St Helens Rd	Index	46326	5051	Propane	Propane	Gas	Gallons	20-49	Flammable Gases	
R941290340	3074 NW St Helens Rd	Industrial Craters & Packers	46247	4783	Acetylene	Acetylene	Gas	Cubic Feet	200-499	Flammable Gases	Acute Health Hazard
R941290340	3074 NW St Helens Rd	Industrial Craters & Packers	46247	4783	Oxygen	Oxygen	Gas	Cubic Feet	200-499	NonFlammable Gases	Oxidizers
R941290340	3074 NW St Helens Rd	Industrial Craters & Packers	46247	4783	Propane	Propane	Gas	Gallons	20-49	Flammable Gases	
R697400010	3615 NW St Helens Rd	Industrial Valve Of Oregon	46442	5085							
R941290570	3587 NW Yeon Ave	Iron Mountain Records Mgmt	57291	4226							
R941290570	3599 NW Yeon Ave Bldg 1	Kranson Industries Inc	67931	5085	1,4 Butanediol	1,4 Butanediol	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	240-5001 Pram-1	Wet Adhesion Monomer	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	59-5005	Mineral Spirits	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	901-9303 Ethylene Glycol	Ethylene Glycol	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	902-9212 Benzoic Acid	Benzoic Acid	Solid	Pounds	10,000-49,999	Combustible Materials	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	902-9257 Phthalic Anhydride	Phthalic Anhydride	Solid	Pounds	100,000-249,999	Acute Health Hazard	Chronic Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	902-9262 Maleic Anhydride	Maleic Anhydride	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	905-9015 Isobutyl Alcohol	Isobutanol	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	905-9038 Isopropyl Alcohol	Isopropyl Alcohol	Liquid	Pounds	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	906-9018 Isophorone	Isophorone	Liquid	Pounds	10,000-49,999	Combustible Materials	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	906-9034 Pm Acetate	Propylene Glycol Monoethyl Ether Acetate	Liquid	Pounds	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	906-9055 Methyl Ethyl Ketone	Methyl Ethyl Ketone	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	906-9056 Methyl N-Propyl Ketone	Methyl N-Propyl Ketone	Liquid	Pounds	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	906-9059 Mibk	Methyl Isobutyl Ketone	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	906-9099 Cyclohexanone	Cyclohexanone	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	907-9028 Glycol Ether Eb	2-Butoxy Ethanol	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	907-9031 Glycol Ether Ep	Ethylene Glycol Mono Propyl Ether	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	908-9071 Mineral Spirits 0%	Mineral Spirits	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	908-9082 Aromatic 150	Aromatic Naphtha	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard

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Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	908-9088 Solvent 100	Solvent Naphtha, Light Aromatic	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	908-9095 Xylene	Xylene	Liquid	Pounds	100,000-249,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	908-9382 Vm&P Naphtha	Light Aliphatic Solvent Naphtha	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	908-9880 Toluene	Toluene	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	910-8529	Benzyl Alcohol	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	910-8590 Ammonia 19%	Ammonium Hydroxide	Liquid	Pounds	1,000-4,999	Acute Health Hazard	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-8357	Methacrylic Acid	Liquid	Pounds	1,000-4,999	Acute Health Hazard	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9033 Methyl Methacrylate	Methyl Methacrylate	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Reactive Material
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9247 Glacial Acrylic Acid	Acrylic Acid	Liquid	Pounds	1,000-4,999	Corrosives	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9275 Butyl Acrylate	Butyl Acrylate	Liquid	Pounds	50,000-99,999	Reactive Material	Flamm.Liq. (73F<FP<141F)
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9398 Methacrylic Acid	2-Methyl-2-Propenoic Acid	Liquid	Pounds	1,000-4,999	Reactive Material	Corrosives
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9591 Sipomer Wam	Wet Adhesion Monomer	Liquid	Pounds	500-999	Reactive Material	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9861 Vinyl Acetate	Vinyl Acetate	Liquid	Pounds	100,000-249,999	Flammable Liq.(0F<FP<73F)	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9873 Styrene	Styrene	Liquid	Pounds	10,000-49,999	Reactive Material	Flamm.Liq. (73F<FP<141F)
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9878 Rocryl 410 Monomer	Hydroxypropyl Methacrylate	Liquid	Pounds	10,000-49,999	Reactive Material	Combustible Materials
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	911-9888 2-Ethylhexyl Acrylate	Ethylhexyl Acrylate	Liquid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	914-9822 Ck2400	Phenol-Formaldehyde Polymer	Solid	Pounds	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	916-8408 Verr-40	Methyl Ethyl Ketone	Liquid	Pounds	250,000-499,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	916-8409 Vmca	Vinyl Polymer	Solid	Pounds	50,000-99,999	Acute Health Hazard	Chronic Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	923-8605 Proxel Gxl	Benzisothiazolinone Solution	Liquid	Pounds	500-999	Acute Health Hazard	Chronic Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	923-8609 Alipal Co436	Ethyl Alcohol	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	923-8617 Triton Qs-44	Surfactant-Supplier Trade Secret	Liquid	Pounds	500-999	Acute Health Hazard	Chronic Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	923-8633 Lubrizol Amps 2405 Monomer	Sodium 2-Acrylamido-2,2 Dimethylethane S	Liquid	Pounds	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	923-8635 Rhodacal A 246l Surfacant	Sodium C14-C16 Olefin Sulfonate	Liquid	Pounds	1,000-4,999	Acute Health Hazard	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	923-8636 Aerosol Ma 80-I Surfactant	Sodium D-Hexyl Sulfosuccinate	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	940-8516 Carnauba Wax	Ethylene Glycol Monobutyl Ether	Liquid	Pounds	10,000-49,999	Acute Health Hazard	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	940-9789 Zirconium 6%	Zirconium 2-Ethyl Hexanoate	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Acrylamac 16-1066	Toluene	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Acrylamac Hs 2322980	Methyl N-Amyl Ketone	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Aminomac 20-2000	N-Butyl Alcohol	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Aminomal 20-2053	Isobutyl Alcohol	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Aquamal 248-5580	Vinyl Acetate	Liquid	Pounds	100,000-249,999	Chronic Health Hazard	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Carbamac 234-1507	Chevron Thinner	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Carbamac 43-4310	Mineral Spirits	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Carbamac 43-4345	Mineral Spirits	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Caustic Soda Solution	Sodium Hydroxide	Liquid	Gallons	5,000-9,999	Corrosives	Acute Health Hazard

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Chemacoil 240-1019	Methyl Ethyl Ketone	Liquid	Pounds	250,000-499,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Chemacoil 240-1023	Methyl Ethyl Ketone	Liquid	Pounds	250,000-499,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 052-5205	Xylene	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 201-1180	Mineral Spirits	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 201-2056	Mineral Spirits	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 204-1050	Vm & P Naphtha	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 204-1061	Light Aliphatic Solvent Naphtha	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 204-1504	Naphtha	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 207-1047	Xylene	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 207-1048	Xylene	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 207-1049	Toluene	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 207-1053	Xylene	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 207-1163	Xylene	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 207-1196	Xylene	Liquid	Pounds	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 207-1246	Toluol	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 207-1395	Vm & P Naphtha	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 210-1060	Stoddard Solvent	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 50-5060	Solvent Naphtha	Liquid	Pounds	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 50-5070	Mineral Spirits	Liquid	Pounds	100,000-249,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 51-5117	Mineral Spirits	Liquid	Pounds	100,000-249,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 51-7634	Solvent Naphtha	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 52-5206	Solvent Naphtha Vmp	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 52-5251	Xylene	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 52-5252	Xylene	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 52-7784	Methyl N-Amyl Ketone	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 53-5306	Solvent Naphtha Vmp	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 53-7002	Solvent Naphtha Vmp	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac 54-5415	Solvent Naphtha Vmp	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac Hs 204-2850	Xylene	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac Hs 207-2725	Xylene	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac Hs 57-5742	Xylene	Liquid	Pounds	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac Hs 57-5875	Methyl N-Propyl Ketone	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac Wr 216-3610	Xylene	Liquid	Pounds	1,000-4,999	Combustible Materials	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Duramac Wr 74-7451	Ethylene Glycol Monobutyl Ether	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Macopol 214-1003	Light Aliphatic Solvent Naphtha	Liquid	Pounds	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Macopol Hs 214-2122	Xylene	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Nitrogen	Nitrogen	Gas	Gallons	1,000-4,999	NonFlammable Gases	
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Rezimac 062-6260	Solvent Naphtha, Heavy Alkylate	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Rezimac 12-1204	Mineral Spirits	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

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R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Rezimac 213 1285	Mineral Spirits	Liquid	Pounds	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Rezimac 74-7478	Secondary Butanol	Liquid	Pounds	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Rezimal Hs 57-5754	Methyl N-Propyl Ketone	Liquid	Pounds	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941190700	4155 NW Yeon	McWhorter Technologies Inc	5639	2821	Solution Acrylic 1702	Solvent Naphtha Sc-150	Liquid	Pounds	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190290	4240 NW Yeon	Michelin Tire Corp	46577	5088	Lead Acid Batteries-Wet	Sulfuric Acid	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941291400	3103 SW St Helens Rd	O & S Supply	24984	7389							
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Acetylene	Acetylene	Gas	Cubic Feet	200-499	Flammable Gases	Acute Health Hazard
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Anti Tak	Potassium Hydroxide	Liquid	Gallons	1,000-4,999	Corrosives	Misc.Haz. Materials
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Antifreeze	Ethylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Asphalt Liquid	Petroleum Asphalt	Liquid	Gallons	250,000-499,999	Combustible Materials	Dangerous When Wet
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Blowing Distillate Oil	Light Paraffinic Oil	Liquid	Gallons	1,000-4,999	Combustible Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Cesium 137	Radioactive Isotope Of Cesium	Solid	Millicures	200-499	Radioactive Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Diesel Fuel #2	Petroleum Mid- Distillate	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Glas Mat	Fibrous Glass	Solid	Pounds	250,000-499,999	Misc.Haz. Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Industrial Oil	Highly Refined Base Oil	Liquid	Gallons	50-199	Combustible Materials	Chronic Health Hazard
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Instant Lok Hot Melt Adhesive	Paraffin Wax	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Limestone	Calcium Carbonate	Solid	Pounds	250,000-499,999	Misc.Haz. Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Mineral Spirits	Aliphatic Hydrocarbon	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	200-499	Combustible Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Nalco 2548	Sodium Bisulfite	Liquid	Gallons	50-199	Acute Health Hazard	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Nalco 2584	Sodium Hydroxide	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Nalco 2800	Acrylamide-Sodium Acrylate Resin	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Nalco 2813	Cyclohexylamine	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Neutral Oil	Hydrotreated Heavy Paraffin Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Oxygen	Oxygen	Gas	Cubic Feet	50-199	NonFlammable Gases	Oxidizers
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Propane	Propane	Gas	Gallons	1,000-4,999	Flammable Gases	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Roofing Granules	Chromium Oxide/Copper Oxide	Solid	Pounds	1,000,000-2,499,999	Acute Health Hazard	Chronic Health Hazard
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Roofing Granules	Chromium Oxide/Copper Oxide	Solid	Pounds	1,000,000-2,499,999	Acute Health Hazard	Chronic Health Hazard
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Strontium 90	Radioactive Isotope Of Strontium	Solid	Millicures	20-49	Radioactive Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Therminol 55	C14-30 Alkylaromatic Derivatives	Liquid	Gallons	50-199	Combustible Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Thermonal 59	Aromatic Hydrocarbons	Liquid	Gallons	200-499	Combustible Materials	
R941200150	3750 NW Yeon & 3605 NW	Owens-Corning Fiberglas	384	2952	Waste Oil	Petroleum Hydrocarbon	Liquid	Gallons	200-499	Combustible Materials	Chronic Health Hazard
R649704640	4347 NW Yeon Ave	Performance Mobility Inc	69037	7532	*	*	*	*	*	*	*
R941190190	4200 NW Yeon	Service Steel Inc	77323	5051	*	*	*	*	*	*	*
R941300350	3537 NW St Helens Rd	Special Asphalt Products	31418	2952	Diesel	Petroleum Distillates	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	
R941300350	3537 NW St Helens Rd	Special Asphalt Products	31418	2952	Gasoline	Toluene	Liquid	Gallons	10,000-49,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R941300350	3537 NW St Helens Rd	Special Asphalt Products	31418	2952	Gasoline	Toluene	Liquid	Gallons	10,000-49,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R941300350	3537 NW St Helens Rd	Special Asphalt Products	31418	2952	Kerosene	Kerosene	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	
R941300350	3537 NW St Helens Rd	Special Asphalt Products	31418	2952	Naphtha	Aliphatic Hydrocarbons	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941300440	3509 NW St Helens Rd	Specialized Training Svc	61694	8249							
R941300350	3537 NW St Helens Rd	Star-Oilco	48551	5541	Diesel	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	

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R941300350	3537 NW St Helens Rd	Star-Oilco	48551	5541	Gasoline	Toluene	Liquid	Gallons	5,000-9,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R941300390	3345 NW St Helens Rd	Terrys Diesel Repair Inc	27129	7538	Antifreeze	Ethylene Glycol	Liquid	Gallons	200-499	Acute Health Hazard	
R941300390	3345 NW St Helens Rd	Terrys Diesel Repair Inc	27129	7538	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	200-499	Combustible Materials	
R941201230	3930 NW Yeon	Total Employee Mngmt Co	74982	4212							
R941300460	3133 NW St Helens	Trad Trucking Inc	24278	4231	Acetylene Gas	Acetylene	Gas	Gallons	50-199	Flammable Gases	
R941300460	3133 NW St Helens	Trad Trucking Inc	24278	4231	Antifreeze	Ethylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	
R941300460	3133 NW St Helens	Trad Trucking Inc	24278	4231	Argon Gas	Argon	Gas	Gallons	200-499	NonFlammable Gases	
R941300460	3133 NW St Helens	Trad Trucking Inc	24278	4231	Breakthrough	C-12-C13 Paraffinic Hydrocarbons	Liquid	Gallons	20-49	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941300460	3133 NW St Helens	Trad Trucking Inc	24278	4231	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	50-199	Combustible Materials	
R941300460	3133 NW St Helens	Trad Trucking Inc	24278	4231	Oxygen	Oxygen	Gas	Gallons	200-499	NonFlammable Gases	Oxidizers
R941300460	3133 NW St Helens	Trad Trucking Inc	24278	4231	Propane	Propane	Gas	Gallons	200-499	Flammable Gases	
R941291170	3031 NW St Helens Rd	Truax Harris Energy Co	67445	5541	Diesel	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	
R941291170	3031 NW St Helens Rd	Truax Harris Energy Co	67445	5541	Gasoline	Toluene	Liquid	Gallons	10,000-49,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R697400250	3641 NW St Helens Rd	TW Express Inc	59574	4213	*	*	*	*	*	*	*
R697400250	3641 NW St Helens Rd	TW Express Inc	59574	4213	*	*	*	*	*	*	*
R941190190	4200 NW Yeon	United Rentals Northwest Inc	35143	7353	Diesel #2	Petroleum Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	
R941190190	4200 NW Yeon	United Rentals Northwest Inc	35143	7353	Gasoline	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R941190190	4200 NW Yeon	United Rentals Northwest Inc	35143	7353	Lead Acid Batteries-Wet	Sulfuric Acid	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941190190	4200 NW Yeon	United Rentals Northwest Inc	35143	7353	Mineral Oil	Severly Hydrotreated Hydrocarbon Oil	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941190190	4200 NW Yeon	United Rentals Northwest Inc	35143	7353	Oxygen Cryogenic Liquid	Oxygen	Gas	Gallons	500-999	NonFlammable Gases	Oxidizers
R941190190	4200 NW Yeon	United Rentals Northwest Inc	35143	7353	Propane	Propane	Gas	Gallons	200-499	Flammable Gases	
R941190190	4200 NW Yeon	United Rentals Northwest Inc	35143	7353	Propane	Propane	Gas	Gallons	500-999	Flammable Gases	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	1,4-Dioxane	1,4-Dioxane	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	1b1b-Isobutyl Isobutyrate	Isobutyl Isobutyrate	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	2.38% Tmah	Tetramethylammonium Hydroxide	Liquid	Gallons	500-999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	2-Mercapto Ethanol	2-Mercapto Ethanol	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	2-Propanol	Isopropyl Alcohol	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	323 Red Stop Off	Methyl Ethyl Ketone	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	6970 Mineral Oil	Mineral Oil	Liquid	Gallons	10,000-49,999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	89c91 2001/300 Thinner	Methyl Ethyl Ketone	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Abzol Eg Cleaner	1-Bromopropane	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Abzol Vg Cleaner	1-Bromopropane	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ac 101 Blend	Sodium Hydroxide	Liquid	Gallons	1,000-4,999	Reactive Material	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Accosoft 550I-90%	Isopropyl Alcohol	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Acetic Acid 20-90%	Acetic Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Acetone	Acetone	Liquid	Gallons	100,000-249,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Acetone W/ 12% Methanol	Acetone	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Acid Foamer	Quaternary Ammonium Chloride	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Acid Thickener	Ethoxylated Alkyl Amines	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Acrylic Acid Glacial	Acrylic Acid	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Activated Carbon	Carbon	Solid	Pounds	10,000-49,999	Combustible Materials	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Acto	Sodium Carbonate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Acusol 445 Polymer	Polyacrylic Acid	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Adsee 799	Surfactant	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Adsee Ak31-64	Isopropyl Alcohol	Liquid	Gallons	200-499	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aerosol Ma 80-I	Sodium Di(1,3-Dimethylbutyl)Sulfosuccina	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aersol Dt 75%	Ethyl Alcohol	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Af 60 Dimethyl Silicone	Acetaldehyde	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Af 9010 Antifoam Emulsion	Polydimethyl Siloxane	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Af 9020 Dimethylsilicone	Polydimethyl Siloxane	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Agefloc Bsolv	Polyquaternary Amine	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Agent Dev	Formaldehyde	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alfol 1214/1412 Linear Alcohol	Dodecanol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alfol 16 Alcohol	1-Hexadecanol	Solid	Pounds	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alfonic 1012-S Ethoxylate	Ethylene Oxide	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alkali Surfactant	Isodecyloxypropoliminodipropionic Acid	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alkaline Electrocleaner 14	Sodium Metasilicate	Solid	Pounds	1,000-4,999	Reactive Material	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alox-Aqualox 232hr	Triethanolamine	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alpha-Step Ml-40	Methyl Alcohol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alpha-Step Ml-40/Mc-48	Methyl Alcohol	Liquid	Gallons	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alum (Dry)	Aluminum Sulfate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Alum (Dry)	Aluminum Sulfate	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aluminum Chlorohydrate	Aluminum Chlorohydrate	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aluminum Phosphide	Aluminum Phosphide	Solid	Pounds	5,000-9,999	Poisonous Materials	Dangerous When Wet
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Amgard Teep	Tributoxyethyl Phosphate	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aminoethylethanolamine	2-(2-Aminoethylamine)Ethanol	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ammonium Bicarbonate	Ammonium Bicarbonate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ammonium Bifluoride	Ammonium Bifluoride	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ammonium Chloride	Ammonium Chloride	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ammonium Hydroxide	Ammonium Hydroxide	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ammonium Persulfate	Ammonium Persulfate	Solid	Pounds	10,000-49,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ammonium Sulfate	Ammonium Sulfate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ammonium Thiosulfate 60%	Ammonium Thiosulfate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ammonyx Lo	Lauryl Dimethyl Amine Oxide	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Amphosol Cg/Ca	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Amphoteric 400	Amphoteric Surfactant	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Amphoteric L	Coco Amidopropyl Betaine	Liquid	Gallons	50-199	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Amphoteric N	C12-C15 Alkyloxypropyl-3 Imino Dipropion	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Amphoteric Sc	Amphoteric Surfactant	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Anhydrous Ammonia	Ammonia	Liquid	Gallons	10,000-49,999	NonFlammable Gases	Acute Health Hazard

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Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Antifreeze	Ethylene Glycol	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aqua Mag	Polyphosphate Composition	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aquabac 200g Biolarvicide	Bacillus Thuringiensis	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aquamag Nw	Magnesium Hydroxide	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Arconate Hp Propylene Carbonate	Propylene Carbonate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Arcosolv Dpm	Dipropylene Glycol	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Arcosolv Pm	1-Methoxy-2-Propanol	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Arcosolv Pm/Dmf Blend	Propylene Glycol Monoethyl Ether	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Arcosolv Ptb	Propylene Glycol T-Butyl Ester	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aristonate M	Hydrotreated Light Naphthenic Distillate	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Arlacel 165	Glyceryl Stearate	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aromatic 100	Naphtha	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Aromatic 150	Naphthalene	Liquid	Gallons	5,000-9,999	Combustible Materials	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Arosurf Mg-93	Methyl Chloride	Liquid	Gallons	10,000-49,999	Flammable Liq.(FP<0F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ascorbic Acid	Ascorbic Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Atmos 150 Emulsifiers	Mono-Acid Diglycerides	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Axarel 32	Aliphatic Hydrocarbon/Petroleum/Hydrocar	Liquid	Gallons	200-499	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Axarel 6100	Diisobutyl Glutarate	Liquid	Gallons	50-199	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bact-O-Stat	Sodium Hypochlorite	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bact-O-Stat	Sodium Hypochlorite	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Banzol	Chlorpyrifos	Liquid	Gallons	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bare Spot Weed & Grass	Diuron	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Barium Chloride	Barium Chloride	Solid	Pounds	5,000-9,999	Poisonous Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Barium Chloride Crystal	Barium Chloride	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bayhibit Am Inhibitor	Cadmium	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Belsperse (R) 161	Poly(Acrylic Acid-Co-Hypophosphite)	Liquid	Gallons	500-999	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bentonite Bighorn 200 Mesh	Bentonite	Solid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Benzoflex	Benzoic Acid	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Benzoflex 9-88 Plasticizer	Dipropylene Glycol	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Benzoic Acid	Benzoic Acid	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Benzyl Alcohol	Benzyl Alcohol	Liquid	Gallons	500-999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bevro-Sheen	Sodium Hydroxide	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bht Antioxidant	2,6 Di-Tert-Butyl Paracresol	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio Soft D-40	Linear Alkylbenzene Sulfonate	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio Soft D-62	Linear Alkylbenzene Sulfonate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio Soft Ld-150	Denatured Ethyl Alcohol	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio Soft S 100	Dodecylbenzene Sulfonic Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio Terge 804	Surfactant In Alcohol/Water Solution	Liquid	Gallons	500-999	Acute Health Hazard	

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Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio Terge As-40	Alpha Olefin Sulfonate	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio Terge Pas-85	Isopropyl Alcohol	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bioclean 103a, 107a, 511	Nitriltriacetic Acid	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio-Soft Ni-7	Neodol 1-9	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio-Soft Ni-7	Neodol 1-9	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Bio-Terge As-90 Beads	Ethanol	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Birko Bleach	Sodium Metasilicate	Solid	Pounds	1,000-4,999	Acute Health Hazard	Reactive Material
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blanket Wash 405	Naphtha	Liquid	Gallons	50-199	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Ac 1	Sodium Hydroxide	Liquid	Gallons	500-999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Ac 103	Caustic Soda Solution	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Ac-3-E	Phosphoric Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Acetone Ipa	Isopropanol	Liquid	Gallons	200-499	Flammable Liq.(FP<0F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Bevro-Sheen	Sodium Hydroxide	Liquid	Gallons	1,000-4,999	Corrosives	Reactive Material
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Boeing 60/40	Sec-Butyl Alcohol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Caustic Soda/Potash	Sodium Hydroxide	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Chill Methanol W/Inh.	Methanol	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Chill V	Methanol	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Citation Cs-21	Sodium Metasilicate	Liquid	Gallons	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Citation Sanitrete Summer	Alkyl Dimethyl Benzyl Ammonoum Chloride	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Citation Sanitrete Winter	Propylene Glycol	Liquid	Gallons	5,000-9,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Cy Wash	Perchloroethylene	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Deg With Nmp	N-Methyl 2-Pyrrolidone	Liquid	Gallons	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Dispersant	Tolu-Sol 20 Naphtha	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Ditoma Ez Flow #2	Diethanolamine	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Dtl 10	Toluene	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Ethyl Alcohol	Ethyl Alcohol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Evaposhine	Phosphoric Acid	Liquid	Gallons	1,000-4,999	Corrosives	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Experimental	Propyl Acetate	Liquid	Gallons	5,000-9,999	Flammable Liq.(FP<0F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Freightliner 4	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(FP<0F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend If-22	Naphtha	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend If-42	Toluene	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend If-61	Acetone	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend James River #1	N-Propyl Alcohol	Liquid	Gallons	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Jp	Ethylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Kcr Water Plus	1,2-Propylene Glycol	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Korpine Lacquer Thinner	Toluene	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Lacquer 22	Methyl N-Amyl Ketone	Liquid	Gallons	500-999	Flammable Liq.(FP<0F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Lacquer Thinner 61	Acetone	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Mailwell #325	Shell Sol 340 Ht	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Mineral Spirits	Petroleum Naphthas	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Monoammonium Phosphate	Ammonium Phosphate	Liquid	Gallons	500-999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Morton Low Voc Solvent	Acetone	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Nor 48-399	Toluene	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Paint & Spray 3	Acetone	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Pentone Cbo-1	Sodium Hydroxide	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Pentohe Lovd 650	Naphthas	Liquid	Gallons	500-999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Principal Klenzade	Caustic Soda	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Refined Acetone	Acetone	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Remover 13.14b	D-Limonene	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Rinsaid	Alkylaryl Poly-Ether Surfactant	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Rv Oil	Toluene	Liquid	Gallons	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Sodium Bicarbonate	Sodium Bicarbonate	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Solder Station	Propylene Glycol Methyl Ether	Liquid	Gallons	50-199	Acute Health Hazard	Flamm.Liq. (73F<FP<141F)
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Solv-Sol	Toluene	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Stephensen Lacquer	N-Butyl Acetate	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend T-6	Toluene	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Thinner 176	Toluene	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Tta 21055	1-Methoxy-2-Acetoxypropane	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Ttc 1055	Morpholine	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Ttc 2055	Denatured Ethyl Alcohol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Vw&R Reducer Thinner	Methyl Isobutyl Ketone	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Vwr Wash Solvent	Toluene	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Whizzle Juice	Xylene	Liquid	Gallons	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Wms 898-1	Xylene	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Wmw 1098-1	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Blend Woodtreat Mb Rtu	Petroleum Naphtha	Liquid	Gallons	10,000-49,999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Borax 10 Mol	Sodium Tetraborate Decahydrate	Solid	Pounds	50,000-99,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Boric Acid	Boric Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Borid	Boric Acid	Solid	Pounds	1,000-4,999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Briquest 543-45 As	Diethylenetriaminepentakis	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Briquest Adpa 60 Aw	1,1 Diphosphonic Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Brisperse 891	Polymaleic Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Britesil (R) H24	Sodium Silicate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Btc 2125 M 80%	Ethyl Alcohol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Btc 2125 Mp40	Quaternary	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Btc 8358 80%	Ethyl Alcohol	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Btc 885	Ethyl Alcohol	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Btc 888	Didecyldimethylammonium Chloride	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Btc 99	Ethyl Alcohol	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Butyl Acetate Normal 98%	Butyl Acetate	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Butyl Alcohol Secondary	Butyl Alcohol	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Butyl Carbitol Solvent	Butyl Carbitol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Butyl Cellosolve Solvent	Butyl Cellosolve	Liquid	Gallons	5,000-9,999	Poisonous Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cadox Bff-5o	Benzoyl Peroxide - (Bpo)	Solid	Pounds	5,000-9,999	Organic Peroxides	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Carbonate	Calcium Carbonate	Solid	Pounds	50,000-99,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Chloride	Calcium Chloride	Solid	Pounds	100,000-249,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Chloride	Calcium Chloride	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Chloride Dihydrate	Calcium Chloride	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Hypochlorite Granular 65%	Calcium Hypochlorite	Solid	Pounds	10,000-49,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Nitrate	Calcium Nitrate	Solid	Pounds	1,000-4,999	Acute Health Hazard	Oxidizers
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Oxide	Calcium Oxide	Solid	Pounds	10,000-49,999	Dangerous When Wet	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Propionate	Calcium Propionate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Propionate	Calcium Propionate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Stearate	Calcium Stearate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium Sulfate	Calcium Sulfate	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calcium-L-Lactate	Calcium Lactate Pentahydrate	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Calsoft F-90	Sodium Dodecylbenzene	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Canola	Canola Oil	Liquid	Gallons	500-999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Carbitol Solvent Low Gravity	Carbitol	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Carbowax Polyethylene Glycol	Polyoxyethylene Glycol	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Carboxymethyl Cellulose Sodium	Cellulose	Solid	Pounds	5,000-9,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Castor Oil Pale 1 Pressed	Castor Oil	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Caustic Potash - Anhydrous	Potassium Hydroxide	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Caustic Potash Liquid	Potassium Hydroxide	Liquid	Gallons	50,000-99,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Caustic Soda Anhydrous	Sodium Hydroxide	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Caustic Soda Beads	Sodium Hydroxide	Solid	Pounds	50,000-99,999	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Caustic Soda Liquid	Sodium Hydroxide	Liquid	Gallons	100,000-249,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cb Stinger Wasp Spray	I Etramethrin	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cedaphos Fa 600	Phosphoric Acid	Liquid	Gallons	50-199	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cedepal Td403mf-Ld	Alcohol Ethoxy Sulfate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Chameleon	Dipropylene Glycol Methyl Ether	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Chlorinated Trisodium	Sodium Chloride	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Chloro-O-Pic	Chloropicrin	Liquid	Gallons	200-499	Poisonous Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Chlorowax 41sw	Chlorinated Paraffin	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Chromic Acid Flakes	Chromic Acid	Solid	Pounds	5,000-9,999	Corrosives	Oxidizers
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cirtec Sp	Sodium Hydroxide	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Citric Acid Anhydrous	Citric Acid	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Citrus Terpenes #03-4740	Citrus Terpenes	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cobratect Tt 100	Polytriazole	Solid	Pounds	5,000-9,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Contrac Bait Cake	Bromadiolone	Solid	Pounds	1,000-4,999	Acute Health Hazard	PESTICIDE

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Copper Sulfate	Copper Sulfate Pentahydrate	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Crucibles	Silicon Dioxide	Solid	Pounds	10,000-49,999	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cryscoat Ultra Seal	Ethyl Alcohol	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cupric Sulfate Solution	Cupric Sulfate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cyclohexane	Cyclohexane	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cyclohexanone	Cyclohexanone	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Cyclohexylamine	Cyclohexylamine	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	D909	Sodium Metasilicate	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dariloid 100, 300, 400 Gfs	Guar Gum	Solid	Pounds	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dbe	Dimethyl Glutarate	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dbp Plasticizer	Dibutyl Phthalate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dehybor (R) Anhydrous Borax	Sodium Tetra Borate	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Deltagard G	Deltrmethrin	Solid	Pounds	1,000-4,999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Denatured Alcohol	Ethanol	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dequest 2000	Aminotri-Methylenephosphonic Acid	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dequest 2010	1 Hydroxyethylidene-11-Diphosphonic Acid	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dequest 2066a Deflocculant And Seq.	Phosphonic Acid	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Deriphat 160-C	Beta Alanine	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dexol Preditor	Chlorpyrifos	Liquid	Gallons	500-999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dextrin	Dextrin	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dextrose	Dextrose	Solid	Pounds	100,000-249,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diacetone Alcohol	Diacetone Alcohol	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diammonium Phosphate	Diammonium Phosphate	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diamond Brite	Ethylene Glycol	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diatomaceous Earth	Crystalline Silica	Solid	Pounds	100,000-249,999	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diatomaceous Earth/Flux Calcined	Crystalline Silica	Solid	Pounds	10,000-49,999	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diazinon 4e	Diazinon	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dicalcium Phosphate Dihydrate	Dicalcium Phosphate	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dicyandiamide	Dicyanciamide	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diethanolamine Low Freezing	Diethanolamine	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diethylene Glycol	Diethylene Glycol	Liquid	Gallons	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Diisopropanolamine Lfg 90	Diisopropanolamine	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dilute Acetic Acid 80%	Acetic Acid	Liquid	Gallons	500-999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dimethylformamide	Dimethylformamide	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dipotassium Phosphate	Dipotassium Phosphate	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dipropylene Glycol	Dipropylene Glycol	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Disodium Phosphate	Disodium Phosphate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	D-Limonene	D-Limonene	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dm Glycol Ether	Diethylene Glycol Monoethyl Ether	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dolomite	Alkaline Earth	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dough Conditioner Pz-44	Whey	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowanol (R) Pm Glycol Ether	1-Methyl-2-Propanol	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowanol (R) Pnp Glycol Ether	Propylene Glycoln-Propyl Ether	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowanol Dpnb Glycol Ether	Dipropylene Glycol N-Butyl	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowanol Eb	Ethylene Glycol N-Butyl Ether	Liquid	Gallons	5,000-9,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowanol Pm/Dpm Blend	Glycol Ether	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowanol Pnb	Glycol Ether	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowfax 2a1 Solution	Sodium Oxybis(Dodecylbenzenesulfonat	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowfax 3b2	Decyl(Sulfophenoxy)Benzene Sulfonic Acid	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowflake 77-80%	Calcium Chloride	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowflake Process Grade 77-80%	Calcium Chloride	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowfrost (R) Heat Transfer Fluid	Propylene Glycol	Liquid	Gallons	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowicide A	Sodium 0-Phenyl Phenate	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowicil 75	1-(3-Chloroallyl)-3,5,7-Triaza-1-Azonia	Solid	Pounds	1,000-4,999	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowper (R) Solvent	Tetrachloroethylene	Liquid	Gallons	1,000-4,999	Poisonous Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowtherm (R) 4000 Heat Transfer	Ethylene Glycol	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowtherm A	Diphenyl Oxide	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dowtherm Sr-1	Ethylene Glycol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dragnet (R) Ft Termiticide	Permethrin	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drakeol (R) 5	Mineral Oil	Liquid	Gallons	500-999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drakeol 10	Mineral Oil	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drakeol 15	White Mineral Oil	Liquid	Gallons	200-499	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drakeol 19	Mineral Oil	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drakeol 21	Mineral Oil	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drakeol 35	White Mineral Oil	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drakeol 7	Mineral Oil	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drakeol 9	Mineral Oil	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Drione Insecticide	Pyrethrin	Solid	Pounds	500-999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dursban Pro Insecticide	Chlorpyrifos	Liquid	Gallons	50-199	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Dursban Tc	Chlorpyrifos	Liquid	Gallons	50-199	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	E Series Premix	Surfactant	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Eastman Ep Solvent	Glycol Ether	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Eastman Isopropyl Acetate	Isopropyl Acetate	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Elvacite 2016 Acrylic Resin	Polymethyl Methacrylate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Emersol 120	Palmitic Acid	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Emersol 120	Palmitic Acid	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Emersol 132, 136	Stearic Acid	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Emersol 213	Oleic Acid	Solid	Pounds	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Emery 622 Coconut	Palmitoleic Acid	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Emulsifier Four	Isopropanol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Epal 20+ Linear Alcohol	Octadecanol	Solid	Pounds	5,000-9,999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Epal 8 Alcohol	N-Octanol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Epsom Salts	Magnesium Sulfate Heptahydrate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ethanol Cda 20	Ethyl Alcohol	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ethanol Red Band Iii 190 Proof	Ethyl Alcohol	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ethanol Sda-408 190 Proof	Ethyl Alcohol	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ethyl Acetate 99%	Ethyl Acetate	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ethyl Acetate Nf	Ethyl Acetate	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ethylene Glycol Iron	Ethylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ethylene Glycol Regular	Ethylene Glycol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ethylenediamine	Ethylenediamine	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Eucarol Age Et	Sodium Cocoglucoside Tartrate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Expeller Pressed Almond Oil	Almond Oil	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Exx-Print 588 D	Hydrotreated Light Petroleum Distillate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Exxsol D 60 Fluid	Naphtha	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ferric Chloride Soln	Ferric Chloride	Liquid	Gallons	1,000-4,999	Corrosives	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ferric Sulfate	Ferric Sulfate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ferric Sulfate 50%	Ferric Sulfate	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ferrous Chloride Soln	Ferrous Chloride	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ferrous Sulfate	Ferrous Sulfate Monohydrate	Solid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ficam W	Bendiocarb	Solid	Pounds	500-999	Poisonous Materials	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Fluoboric Acid Solution	Fluoboric Acid	Liquid	Gallons	500-999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Food Plant Fogging Insecticide	Pyrethrum	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Forestall	N-Ethyl-N-Soyamorpholinium Ethosulfate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Formaldehyde Solution	Formaldehyde	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Formasil 45	Polydimethylsiloxane	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Formed Molecular Sieve	Silicon Dioxide	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Formic Acid	Formic Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Formula 314-T	1-Bromo-3-Chloro-5-Dimethyl	Solid	Pounds	500-999	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Formula N-4	Isopropanol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Fumaric Acid	Trans-Butenedioic Acid	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Fumaric Acid Fcc, Nf	Trans-Butenedioic Acid	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Fyfanon Ulv	Malathion	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	G-3300	Isopropylamine	Liquid	Gallons	50-199	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Geowet C-50	Sodium Dioctyl Sulfosuccinate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glacial Acetic Acid	Acetic Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glacial Acetic Acid Reagent	Acetic Acid	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Gluconic Acid 50%	Gluconic Acid	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Gluconic Delta Lactone	Gluconic Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glucopon 220 Up	Alkyl Polyglycoside	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycerine Natural 99.5%	Glycerine	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Db	Diethylene Glycol Butyl Ether	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether De	Diethylene Glycol Monoethyl Ether	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether De-Sg	Glycol Ether	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Dpm	Dipropylene Glycol Monomethyl Ether	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Eb	2-Butoxyethanol	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Ee	Ethylene Glycol Monoethyl Ether	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Eea	Ethylene Glycol Monoethyl Ether Acetate	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Eep	Etrhyl 3-Ethoxypropionate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Ep	Ethylene Glycol Monopropyl Ether	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Ep	Ethylene Glycol Monopropyl Ether	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Eph	Ethylene Glycol Phenyl Ether	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Pm	Propylene Glycol Methyl Ether	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Pm Acetate	Propylene Glycol Methyl Acetate	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycol Ether Tpm	Tripropylene Glycol Methyl Ether	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glycolic Acid	Glycolic Acid	Liquid	Gallons	500-999	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Glyfos	Glyphosate	Liquid	Gallons	50-199	Chronic Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Heptane	Heptane	Liquid	Gallons	1,000-4,999	Flammable Liq.(FP<0F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hexamethylenetetramine	Hexamethylenetetramine	Solid	Pounds	50,000-99,999	Flammable Solids	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hexane	Hexane	Liquid	Gallons	1,000-4,999	Flammable Liq.(FP<0F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hexyl Carbitol Solution	Ethylene Glycol	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hexylene Glycol	Hexylene Glycol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hi Speed Ac-Cu-Guard	Ammonium Hydroxide	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hi Speed Finishing Soln	Ammonium Chloride	Liquid	Gallons	200-499	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	High Purity Acetonitrile	Acetonitrile	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	High Speed Ac-Cu Guard Starter	Ammonium Chloride	Liquid	Gallons	500-999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hti 8120	Morpholine	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hti 9000	Phosphoric Acid, Monoethyl Ester	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hw 44 L	Sodium Silicate	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hydrobromic Acid 48%	Hydrobromic Acid	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hydrochloric Acid (Tech)	Hydrochloric Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hydrochloric Acid 20 Deg. Inh.	Hydrochloric Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hydrofluoric Acid 70%	Hydrofluoric Acid	Liquid	Gallons	5,000-9,999	Corrosives	Poisonous Materials
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hydrofluosilicic Acid 25-27%	Fluorosilicic Acid	Liquid	Gallons	200-499	Acute Health Hazard	Corrosives

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hydrogen Peroxide 20-60%	Hydrogen Peroxide	Liquid	Gallons	10,000-49,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Hydrolube	White Mineral Oil	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Iconol @ Toa 3 Surfactant	Poly(Oxy-1.2-Ethanediyl	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Induclor	Calcium Hypochlorite	Solid	Pounds	1,000-4,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Industrol Dw-5	Alcohol C8-10, Ethoxylate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Industrol N-3	Oxirane, Methyl Polymer	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Iron Stain Control Additive 250	Inorganic Acid	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isobutanol	Isobutanol	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isobutyl Acetate	Isobutyl Acetate	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isocyanuric Acid	Isocyanuric Acid	Solid	Pounds	1,000-4,999	Reactive Material	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isopar (R) L	Petroleum Hydrocarbon	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isopar M Fluid	Synthetic Isoparaffinic Hydrocarbon	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isopar V Fluid	Synthetic Isoparaffinic Hydrocarbon	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isophorone	Isophorone	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isopropanol Anhydrous	Isopropanol	Liquid	Gallons	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isopropyl Acetate 99%	Isopropyl Acetate	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isopropyl Alcohol	Isopropyl Alcohol	Liquid	Gallons	50,000-99,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Isopropylaminoethanols	Isopropylethanolamine	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Jaguar 4500 F	Guar Gum	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	K (R)	Sodium Silicate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kasil 1	Potassium Silicate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kasil 6	Potassium Silicate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kelco Gel	Gellan Gum	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kelcoloid Manucol Ester	Propylene Glycol	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Keltrol	Xanthan Gum	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kessco Egms	Ethylene Glycol	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kessco Gms Pure	Fatty Acid Ester	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kesso Octyl Palmitate	Fatty Acid Ester	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	K-Flex	Diethylene Glycol	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kleanrol Flux	Zinc Chloride	Solid	Pounds	500-999	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Klearfac Aa-270	Oxirane, Methyl Polymer	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Knox Out 2fm	Diazinon	Liquid	Gallons	50-199	Misc.Haz. Materials	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Kp-140	Tributoxyethyl Phosphate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	L-45/1000	Polydimethyl Siloxane	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	L45/350	Polyimethyl Siloxane	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	L-45/50 Silicone Oil	Polydimethyl Silixane	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lacquer Diluent	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lacquer Diluent 66	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lacquer Thinner	Toluene	Liquid	Gallons	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lactic Acid 88%	Lactic Acid	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lactose	Lactose	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Larvadex	Cyromazine	Solid	Pounds	1,000-4,999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Le-45	Polydimethyl Siloxane	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Le-46	Polydimethylsiloxane	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lecithin	Soya Lecithin	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Leveraged Heat Activated Leavener	Magnesium Phosphate	Solid	Pounds	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lignosite An	Lignosulfonic Acid	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lime Hydrated	Calcium Hydroxide	Solid	Pounds	250,000-499,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lipotin 100	Lipotin	Liquid	Gallons	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Liquik 125	N-Alkyl Dimethylbenzyl	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Liquik 4	Sodium Hydroxide	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Liquik Char	None As Per 29 Cfr 1910.1200	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Liquik Su Tec	Sodium Hydroxide	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Log Sealer	None As Per 29 Cfr 1910.1200	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ludox Colloidal Silica	Sodium Silicate	Liquid	Gallons	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ludox Colloidal Silica	Sodium Silicate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Lutensol Ap 10	Alkylphenolethoxylate	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Luxco Paraffin Wax 12	Paraffin Wax	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	M&T Heef 25 Rs	Chromic Acid	Solid	Pounds	500-999	Corrosives	Oxidizers
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mae (Tm) Etchants	Nitric Acid	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mae 1b	Nitric Acid	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Magnesium Chloride	Magnesium Chloride	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Magnesium Oxide	Magnesium Oxide	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Magnifloc 573-C	Polyquaternary Amine	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Makon Nf12	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Makon Op-9	Nonionic Alkoxylate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Maleic Anhydride	Maleic Anhydride	Solid	Pounds	1,000-4,999	Reactive Material	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Malic Acid	Malic Acid	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Malic Acid 50/50 Solution	Malic Acid	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Maltrin M-200, M-205, M-250	Corn Syrup Solids	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Maprosyl 30	Surfactant	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Maxamp Alkaline	Sodium Hydroxide	Solid	Pounds	500-999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Maxforce Fc Ant Station	Fipronil	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mayoquest L-50	Sodium Heptonate	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Merpol Hcs Surfactant	Hexylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Metalist	Sodium Carbonate	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methanol	Methanol	Liquid	Gallons	100,000-249,999	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel (R) F50 Hydroxypropyl	Hydroxypropyl Methylcellulose	Solid	Pounds	1,000-4,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel 228 Hydroxypropyl	Hydroxy Propyl Methylcellulose	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel 240-S	Hydroxypropyl Methylcellulose	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel A15-Lv/A4m	Methylcellulose	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel A40m Fg	Sodium Chloride	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel A4m Premium	Methylcellulose	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel E15 Fg	Hydroxy Propyl Methyl	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel E5 Premium	Hydroxy Propyl Methyl	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel J75ms	Hydroxypropyl Methylcellulose	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel K100 M Prem	Hydroxypropyl Methyl Cellulose	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel K15m	Hydroxypropyl Methyl Cellulose	Solid	Pounds	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methocel K4m Food Grade	Hydroxypropyl Methyl Cellulose	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Meth-O-Gas	Methyl Bromide	Gas	Gallons	5,000-9,999	Poison Gases	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methyl Bromide	Methyl Bromide	Gas	Gallons	1,000-4,999	Poison Gases	NonFlammable Gases
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methyl Ethyl Ketone	Methyl Ethyl Ketone	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methyl Isoamyl Ketone	Methyl Isoamyl Ketone	Liquid	Gallons	500-999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methyl Isobutyl Ketone	Methyl Isobutyl Ketone	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methyl N-Amyl Ketone	Methyl Amyl Ketone	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methyl Paraben	Methyl Paraben	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methyl Propyl Ketone	Methyl Propyl Ketone	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methylene Chloride Fcc/Nf	Methylene Chloride	Liquid	Gallons	200-499	Poisonous Materials	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methylene Chloride Tech	Methylene Chloride	Liquid	Gallons	10,000-49,999	Poisonous Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methylene Chloride Urethane Grade	Methylene Chloride	Liquid	Gallons	500-999	Poisonous Materials	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Methylene Chloride/Vapor Degreasing	Methylene Chloride	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Metso 66	Sodium Hydroxide	Solid	Pounds	1,000-4,999	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Metso Beads 2048	Sodium Silicate	Solid	Pounds	5,000-9,999	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Metso Pentabead - 20	Silicic Acid Disodium Salt Penta Hydrate	Solid	Pounds	10,000-49,999	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mht 100 Magnesium Hydroxide	Magnesium Hydroxide	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mineral Oil 21 Usp	Mineral Oil	Liquid	Gallons	1,000-4,999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mineral Seal Oil	Petroleum Distillate	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mineral Spirits 66	Aliphatic Hydrocarbon	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mineral Spirits, Quick Dry	Petroleum Distillates	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Miranol Fbs	Cocoamphodipropionate	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mirataine Jc-Ha	Methanol	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Mono Calcium Phosphate	Mono Calcium Phosphate	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Monoammonium Phosphate	Monoammonium Phosphate	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Monoethanolamine	Monoethanolamine	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Monopotassium Phosphate	Monopotasium Phosphate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Monosodium Glutamate	Monosodium Glutamate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Monosodium Phosphate	Monosodium Phosphate	Solid	Pounds	10,000-49,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Morlex Corrosion Inhibitor	Diethylaminoethanol	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Morpholine	Morpholine	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Muriatic Acid 20 Deg Commercial	Hydrochloric Acid	Liquid	Gallons	50,000-99,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	N,N Dimethylethanolamine	N,N Dimethylethanolamine	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nacconol 40g	Alkylaryl Sulfonates	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nacconol 90g	Linear Alkylbenzene Sulfonate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	N-Butanol	N-Butyl Alcohol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	N-Butanol	N-Butyl Alcohol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Neobor (R) Borax 5 Mol	Sodium Tetraborate	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Neodol (R) 91-6	Alcohol Ethoxylates	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Neodol 1-7	Alcohol Ethoxylates	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Neutronyx 656	Alcohol Ethoxylate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Niaproof Anionic Surfactant 8	Sulfates Of Alcohols	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nickel Anodes	Nickel	Solid	Pounds	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nickel Sulfamate	Nickel Sulfamate	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nickel Sulfate Solution	Nickel Sulfate	Liquid	Gallons	50-199	Corrosives	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ninate 411	Amine Alkibenzene Sulfonate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ninol 40-Co	Diethanolamine	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ninol Ilcm	Diethanolamine	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nitric Acid	Nitric Acid	Liquid	Gallons	10,000-49,999	Corrosives	Oxidizers
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	N-Methyl Pyrrolidone	N-Methyl Pyrrolidone	Liquid	Gallons	5,000-9,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	N-Methyl Pyrrolidone	N-Methyl Pyrrolidone	Liquid	Gallons	5,000-9,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nonyl Phenol	Nonylphenol	Liquid	Gallons	50-199	Combustible Materials	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Norpar 13	Petroleum Solvent	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Norpar 15	Petroleum Solvent	Liquid	Gallons	50-199	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Np-1 Plus Concentrate	Iodopropanyl Butyl	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	N-Propanol	N-Propyl Alcohol	Liquid	Gallons	5,000-9,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	N-Propanol	N-Propyl Alcohol	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	N-Propyl Acetate	N-Propyl Acetate	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nta Powder	Trisodium Nitrilotriacetate	Solid	Pounds	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nutrasweet	Aspartame	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nutrifos 088	Sodium Phosphate Tribasic	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Nyacol 9950	Silicon Dioxide	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	O (R)	Sodium Silicate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oakite Cryscoat 187	Monosodium Phosphate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oakite Cryscoat 647	Phosphoric Acid	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oakite Deodorizer	Nitric Acid	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oakite E66 Brite	Sodium Hydroxide	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oakite Gardollean 3380	Sodium Tripolyphosphate	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Odorless Mineral Spirits	Hydrotreated Heavy Naphtha	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oleic Acid	Oleic Acid	Liquid	Gallons	500-999	Misc.Haz. Materials	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Onyxide 200	Exahydro 1,3,5-Tris-S-Triazine	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Optim (R) Glycerine 99% Usp	Glycerine	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Orange Essence Terpenes	None As Per 29 Cfr 1910.1200	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Flamm.Liq. (73F<FP<141F)
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Orange Fresh Fragrance	Proprietary Mixture	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oxalic Acid	Oxalic Acid	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oxone Monopersulfate	Potassium Hydrogen Peroxymonosulfate	Solid	Pounds	5,000-9,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Oxone Monopersulfate Compound	Potassium Peroxymonosulfate	Solid	Pounds	5,000-9,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Palmitic Acid	Stearic Acid	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pan-O-Lite Leavening Agent	Mixture Sodium Aluminum Phosphate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Paraffin Wax 143	Paraffin Wax	Solid	Pounds	10,000-49,999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Parapol 1300	Lube Oil Additive	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Parol (Tm) 70 Mineral Oil	Mineral Oil	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Peg 200 Dibenzoate	Propylene Glycol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Peladow (R) Dg Calcium Chloride	Calcium Chloride	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pel's Caustic Soda Beads	Sodium Hydroxide	Solid	Pounds	50,000-99,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Penreco (R) Snow	Petrolatum	Solid	Pounds	5,000-9,999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Perchloroethylene Svg	Tetrachloroethylene	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Petrolatum Amber	Petrolatum	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Petroleum Wax Blend	Paraffin Wax	Solid	Pounds	100,000-249,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Petrosul (R) L-60	Petroleum Oil Sulfonate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pf Etchant	Ferric Chloride	Liquid	Gallons	50-199	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Phibro-Guard Tft	Ammonium Chloride	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Phosphoric Acid 75%-85%	Phosphoric Acid	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pittabs	Calcium Hypochlorite	Solid	Pounds	1,000-4,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pittclor (R)	Calcium Hypochlorite	Solid	Pounds	10,000-49,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Plurafac Ra-40	Alcohols C12-18 Ethoxylated	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Plurafac Ra-43 Surfactant	Alcohol C12-18, Ethoxyl	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pluronic (R) 31r1	Oxirane Methyl Polymer	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pluronic (R) L-61	Oxirane,Methyl-Polymer	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pluronic (R) L62lf	Oxiran Methyl Polymer	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pluronic 17r2	Oxirane Methyl Polymer	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pluronic 25-R2	Oxirane, Methyl-Polymer	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pluronic L-121	Oxirane Methyl Polymer	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pluronics L64	Polyoxyethylene	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Polyacrylic Acid	Polyacrylic Acid	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Poly-G Wt 90,000	Polyglycol	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Poly-G Wt-9150	Polyglycol	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Polyglycol E-400	Polyethylene Glycol	Liquid	Gallons	50-199	Misc.Haz. Materials	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Polyglycol P 2000	Polyether Polyol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Polyglycol P 425	Poly Ether Polyol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Polyglycol P1200	Polyether Polyol	Liquid	Gallons	200-499	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Polyglycol P1200	Polyether Polyol	Liquid	Gallons	50-199	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Polysilicon	Paint Preservative	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Poly-Tergent S 405lf	Alcohols C6 - C10 Ethoxylate	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Aluminum	Potassium Aluminum Sulfate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Benzoate	Benzoic Acid	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Bicarbonate	Potassium Bicarbonate	Solid	Pounds	1,000-4,999	Corrosives	Reactive Material
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Carbonate	Potassium Carbonate	Solid	Pounds	100,000-249,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Chloride	Potassium Chloride	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Citrate Mon	Tripotassium 2-Hydroxy	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Fluoride	Potassium Fluoride	Solid	Pounds	1,000-4,999	Poisonous Materials	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Hydroxide	Potassium Hydroxide	Solid	Pounds	100,000-249,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Metabisulfite	Potassium Metabisulfite	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Permanganate	Potassium Permanganate	Solid	Pounds	10,000-49,999	Oxidizers	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Sorbate	Potassium 2, Hexadienoate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potassium Tripolyphosphate Powder	Potassium Tripolyphosphate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Potti Power	Ethyl Alcohol	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Powdered Cellulose	Cellulose	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ppg Calcium Hypochlorite Tablets	Calcium Hypochlorite	Solid	Pounds	50,000-99,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Praestol 2515 Tr	Acrylamide Copolymer	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Prelete	1,1,1-Trichlorethane	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Prentox 5lb Malathion Spray	1-Propanol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Propanol	Propanol	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Propionic Acid	Propionic Acid	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Propyl Acetate	Propyl Acetate	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Propyl Cellosolve Solution	Glycol Ether	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Propylene Glycol Industrial	Propylene Glycol	Liquid	Gallons	5,000-9,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Propylene Glycol Usp	Propylene Glycol	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pt 565 Plus Xlo	Pyrethrins	Liquid	Gallons	50-199	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pugetsol Df	Ethyl Alcohol	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pumice	Silicone Dioxide	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Purasolv Els	Ethyl Lactate	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pure-Dent	Corn Starch	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Purple Marking Ink	Ethanol	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Py-Ran Monocalcium Phosphate	Phosphoric Acid	Solid	Pounds	1,000-4,999	Corrosives	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pyrenone 50	Pyrethrum	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pyrenone 5-1 Mag Conc	Pyrethrum	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pyrenone Crop Spray	Pyrethrum	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pyrenone Food Plant Fogging Insecticide	Pyrethrins	Liquid	Gallons	50-199	Poisonous Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Pzx Copper Sulfate	Cupric Sulfate	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Q9 Laboratory Cleaner	None As Per 29 Cfr 1910.1200	Liquid	Gallons	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Qm 1	Sodium Hydroxide	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Quintox Rat & Mouse Bait	Cholecalciferol	Solid	Pounds	1,000-4,999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Refined & Bleached Linseed Oil	Linseed Oil	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rewoteric Am Ksf 40	Cocoamphodipropionate	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rhodafac Bg-510	Polyoxyethylene Isodecyl Ether Phosphate	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rhodapon Bos Std	Sodium 2-Ethylhexyl Sulfate	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rhodaterge Bcc	Ethylene Oxide	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rhodopol 23	Xanthan Gum	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rhodopol 23	Xanthan Gum	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rodel Lsio High Purity	Silicon	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rodine 213	Complex Substituted Keto-Amine	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rodine 31a		Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rodine 426	Keto-Amine Hydrogen Chloride	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rodine 51	Hydrochloric Acid	Liquid	Gallons	50-199	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rodine 52	Substituted Triazine	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rodine 85	Formaldehyde	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rodine 95	Triazine	Liquid	Gallons	50-199	Corrosives	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Rosin Tall Oil	Rosin Acids	Liquid	Gallons	50-199	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Safeway Ka	Potassium Acetate	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sag 10 Silicone Antifoam Emulsion	Water	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sag 275d	Polydimethyl Siloxane	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sag 710	Silicafied Polydimethylsiloxane	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sag 730	Polydimethylsiloxane Emulsion	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Salicylic Acid	Benzoic Acid	Solid	Pounds	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Santoquin (R) Mixture 6	Ethoxyquin	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sapstain Control Np-1	Didecyl Dimethyl Ammonium Chloride	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sapstain Control Sscc-3359	Nonylphenol Ethoxylate	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Satin Shield (R) Ss10	Polyethylene Wax	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Seqlene Es-50	Sodium Glucoheptonate	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sequestrene 220 Chelate	Tetrasodium Salt Of Ethylene Diamine	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sesqui (Tm) Sodium Sesquicarbonate	Sodium Sesquicarbonate	Solid	Pounds	5,000-9,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sf1204 Siloxane Mixtures	Octamethylcyclotetrasiloxane	Liquid	Gallons	50-199	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sf96-50 Dimethylpolysiloxanes	Polydimethyl Siloxane	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sheath (R) Rb-1	Petroleum Distillates	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Shell Sol 2-Solvent	Petroleum Solvent/Benzene	Liquid	Gallons	5,000-9,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Shell Sol 715	Solvent Naphtha, Heavy Alkalate	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Shine A Line	Phosphoric Acid	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Shultz Glue Remover	Toluene	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Silicon Carbide	Silicon Carbide	Solid	Pounds	100,000-249,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Silicone 795 Lv Antifoam	Polydimethylsiloxane Emusion	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Silwet Da-40	Allyl Alcohol Alkoxlate	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Silwet L-7657	Polyalkyleneoxide Polydimethylsiloxane	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Simplesse D100, 500, 550	Simplesse	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sm-2140 Silicone Emulsion	Dimethylpolysiloxane	Liquid	Gallons	50-199	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	So/San 30m	Ethyl Alcohol Denatured	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Soda Ash	Sodium Carbonate	Solid	Pounds	250,000-499,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Acetate Anhydrous	Sodium Acetate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Acid Pyrophosphate	Sodium Acid Pyrophosphate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Aluminate 38% Solution	Sodium Aluminate	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Benzoate	Sodium Benzoate	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Bicarbonate	Sodium Bicarbonate	Solid	Pounds	250,000-499,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Bichromate	Sodium Bichromate	Solid	Pounds	1,000-4,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Bisulfate Globular	Sodium Bisulfate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Bisulfite 40%	Sodium Bisulfite	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Chlorate	Sodium Chlorate	Solid	Pounds	1,000-4,999	Oxidizers	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Chloride	Sodium Chloride	Solid	Pounds	50,000-99,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Chlorite Solution	Sodium Chlorite	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Citrate	Sodium Citrate	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Erythorbate	Sodium Erythorbate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Fluoride	Sodium Fluoride	Solid	Pounds	10,000-49,999	Poisonous Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Fluorosilicate	Sodium Fluorosilicate	Solid	Pounds	50,000-99,999	Poisonous Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Form Sulfoxylate	Sodium Carbonate	Solid	Pounds	1,000-4,999	Reactive Material	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Glucoheptonate	Sodium Glucoheptonate	Solid	Pounds	500-999	Reactive Material	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Gluconate	Sodium Gluconate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Hexametaphosphate	Sodium Hexametaphosphate	Solid	Pounds	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Hypochlorite	Sodium Hypochlorite	Liquid	Gallons	10,000-49,999	Oxidizers	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Lignosulfonate	Sodium Lignosulfonate	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Metabisulfite Anhydrous	Anhydrous Sodium Bisulfite	Solid	Pounds	250,000-499,999	Acute Health Hazard	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Metaborate	Sodium Metaborate	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Molybdate	Sodium Molybdate	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Nitrate	Sodium Nitrate	Solid	Pounds	5,000-9,999	Oxidizers	Reactive Material
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Nitrite	Sodium Nitrite	Solid	Pounds	10,000-49,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Orthosilicate	Sodium Orthosilicate	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Perborate Tetrahydrate	Sodium Perborate Tetrahydrate	Solid	Pounds	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Percarbonate	Sodiumcarbonate, Peroxyhydrate	Solid	Pounds	1,000-4,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Persulfate	Disodium Peroxydisulfate	Solid	Pounds	1,000-4,999	Oxidizers	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Phosphate Di-Basic	Sodium Phosphate Di-Basic	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Polyphosphates-Glassy	Sodium Polyphosphates	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Propionate	Sodium Propionate	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Silicate D	Sodium Silicate	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Silicate Solution	Sodium Silicate	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Sulfate, Anhydrous	Sodium Sulfate	Solid	Pounds	100,000-249,999	Flammable Solids	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Sulfide	Sodium Sulfide	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Sulfide 10% Solution	Sodium Sulfide	Liquid	Gallons	1,000-4,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Sulfite	Sodium Sulfite	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Sulfite Catalyzed	Sodium Sulfite	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Sulfite Solution	Sodium Sulfite	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Thiosulfate	Sodium Thiosulfate	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Tolytriazole	Sodium Tolytriazole	Liquid	Gallons	50-199	Corrosives	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sodium Tripolyphosphate	Sodium Tripolyphosphate	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Solvent 2	Xylene	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Solvent 2247	Naphthas	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Solvent 7521	Methyl Ethyl Ketone	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sorbic Acid	Sorbic Acid	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sorbic Acid Powder	Sorbic Acid	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sorbo	Sorbitol	Liquid	Gallons	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sorbogem 1162	Crystal Sorbitol	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Span 80	Sorbitan Monoleate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sporzyme 1b	None As Per 29cfr 1910.1200	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sr15 Methylphenyl Resin Solution	Petroleum Naphtha	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Steol 4n	Alcohol Ethoxysulfate	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Steol Ca 460	Ethyl Alcohol	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Steol Cs 460/Ks 460	Ethanol	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepan C-68	Tallow Methyl Ester	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepan Mc48/Lm 80/20 Blend	Methanol	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepan Pearl 2	Anionic/Nonionic Detergent	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepanate Sxs	Hydrotrope	Liquid	Gallons	5,000-9,999	Misc.Haz. Materials	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepan-Mild Lsb	Anionic Detergent Blend	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepanol Abhs-15c	Ethyl Alcohol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepanol Aeg	Ethyl Alcohol	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepanol Am	Alkyl Sulfate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepanol Wac	Sodium Lauryl Sulfate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Stepanol Wa-Special	Alkyl Sulfate	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Styrene Monomer	Styrene	Liquid	Gallons	500-999	Acute Health Hazard	Flammable Liq.(0F<FP<73F)
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sulfamic Acid	Sulfamic Acid	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sulfur Dioxide	Sulfur Dioxide	Gas	Gallons	10,000-49,999	NonFlammable Gases	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Sulfuric Acid	Sulfuric Acid	Liquid	Gallons	50,000-99,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Super Guar	Supercol Guar	Solid	Pounds	5,000-9,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Superfloc N-1986 Flocculant	Naphtha	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Superfloc N-300 Lmw	Ammonium Chloride	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Suspend Sc Insecticide	Deltamethrin	Liquid	Gallons	50-199	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Talc	Talc	Solid	Pounds	1,000-4,999	Chronic Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Talon G Weather Block Bait	Brodifacoum	Solid	Pounds	500-999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Talstar Pl Granular	Bifenthrin	Solid	Pounds	5,000-9,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tamol Sn	Sodium Salt Condensed	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tandem 522		Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tartaric Acid	Tartaric Acid	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Teklac 375	Whey	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Teknar Hp-D Larvacide	Bacillus Thuringiensis Israeliensis	Liquid	Gallons	1,000-4,999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tekstim	Ethylene Oxide	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tenox 20	Propylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tenox 4 Food Grade	Corn Oil	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tergitol 15-S-15	Secondary Alcohol Ethoxylate	Solid	Pounds	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tergitol 15-S-5	Sec. Alcohol Ethoxylate	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tergitol 15-S-9	Sec. Alcohol Ethoxylate	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tergitol Minfoam 1x	Nonylphenol Polyethylene Glycol Ether	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tergitol Min-Foam 2x	Sec. Alcohol Ethoxylated Propoxylated	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tergitol Np4, 6, 7, 8, 9, 10	Polyoxyethylene Glycol	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tetrahydrofuran	Tetrahydrofuran	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tetrapotassium Pyrophosphate	Tetrapotassium Pyrophosphate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tetrasodium Pyrophosphate	Tetrasodium Pyrophoshate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Texanol (R) Ester Alcohol	2,2,4-Trimethyl-1,3-Pentanediol Monoisob	Liquid	Gallons	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ti Pure Titanium Dioxide	Silicone Dioxide	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Timbertreat 4 Wt	Xylene	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tim-Bor	Disodium Octoborate Tetrahydrate	Solid	Pounds	5,000-9,999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Toluene	Toluene	Liquid	Gallons	100,000-249,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard

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Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Toluene Sulfonic Acid High Para	P-Toluenesulfonic Acid	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tolusol O	Petroleum Solvent	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tomah Ao-14-2	Dihydroxyethylisodecyloxypropylam inoxide	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tomah Pa-14 Acetate	Isodecyloxypropylamine Acetate	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tomah Q-14-2	Methyl Dihydroxyethylisotrideyloxypropyl	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tomah Q-17-2	Methyl Dihydroxyethylisotridecyloxypropy	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tomah Q-C-15	Quaternary Ammonium Chloride	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Topcithin Us, Sb, Db	Lecithin	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Toximul Ta-15	Surfactants	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Trapper (R) Glue Board	None As Per 29cfr 1910.1200	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tribute Termiticide/Insecticide	Fenvalerate	Liquid	Gallons	50-199	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tricalcium Phosphate	Tricalcium Phosphate	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Trichloroethylene	Trichloroethylene	Liquid	Gallons	5,000-9,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triethanolamine 85	Triethanolamine	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triethanolamine 99	Triethanolamine	Liquid	Gallons	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triethylamine	Triethylamine	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triethylene Glycol	Triethylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triethylenetetramine	Triethylenetetramine	Solid	Pounds	50-199	Combustible Materials	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Trigonox A-70w	T-Butyl Hydroperoxide	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Organic Peroxides
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tripe Wash 2p	Sodium Carbonate	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tripotassium Phosphate	Tripotassium Phosphate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Trisodium Phosphate	Trisodium Phosphate	Solid	Pounds	10,000-49,999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton 35, 45, 305, 405, Surfactant	Octylphenoxypolyethoxy Ethanol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Bg-10 Surfactant	Alkyl Glucoside	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Ca	Nonylphenoxypolyethoxyethanol	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Cf-10	Benzyl Chloride	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Cf-32	Alkylaminopolyethoxypolypropoxyp opanol	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Cf-76	4-Nonylphenoxypolyethoxypoly-propoxy Ethy	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Cf-87	Decanoic Acid	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Df-12	Modified Polyethoxylated Alcohol	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Df-16 Surfactant	Modified Polyethoxylated Alcohol	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Df-20	Modified Ethoxylated Anionic Surfactant	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Gr-7m	Dioctyl Sodium Sulfosuccinate	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton H-66	Phosphate Ester	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton H-66 Surfactant	Phosphate Ester Potassium Salt	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton N-57	Nonylphenoxypolyethoxyethanol	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton Qs-44	Polyethylene Glycol Monoether Phosphate	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton X-10, 114 Surfactant	Octylphenoxypolyethoxy Ethanol	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton X-100	Octylphenoxypolyethoxyethanol	Liquid	Gallons	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton X-102 Surfactant	Octylphenoxypolyethoxy Ethanol	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton X-15 Surfactant	Octylphenoxypolyethoxyethanol	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Triton X-305	Oxtylphenoxypolyethoxytethanol	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Trolamine 85%, 95% Nf Grade	Triethanolamine	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Trolleze	White Mineral Oil	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Trough Grease Spray Ss	Petrolatum	Solid	Pounds	5,000-9,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tween 20, 60k, 80	Polyoxyethylene	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Tyzor Tbt Titanate	Tetrabutyl Titanate	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ucar Aircraft Deicing Fluid	Ethylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ucon Lubricant 75-H-90	Oxirane	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Ucon Metalworking Lubricant	Diethanolamine	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Uld Bp 50, 100	Pyrethrins	Liquid	Gallons	200-499	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Unichrome Hcr 710	Chromic Acid	Solid	Pounds	1,000-4,999	Oxidizers	Corrosives
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Uniflex	Dibasic Acid Esters	Liquid	Gallons	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Unipine 85 Pine Oil	P-Menthenols	Liquid	Gallons	200-499	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Uni-Rez 7003	Rosin, Maleated, Polymer With Glycerol	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Uni-Rez 8170	Rosin Based Resin	Solid	Pounds	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Uni-Rez 8250	Rosin, Pumarated, Polymer W/ Pentaerythr	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Unitol Acd Special	Organic Acids	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Unitol Czs	Tall Oil	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Unitol Dsr-90	Fatty Acid	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Unitol Tall Oil	Distilled Tall Oil	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Urea	Urea	Solid	Pounds	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Valfor 100	Sodium Silico Aluminate	Solid	Pounds	200-499	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vanblend 910	Benzene	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vanfloc 47	Polyacrylamide, Hydrolyzed	Solid	Pounds	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vanwet 9n6	Alkylphenol Hydroxypolyoxyethylene	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vanwet 9n9	Nonylphenol Surfactant	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vanzol A-1	Ethyl Alcohol	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Varisoft 222-Lm	Methyl Bis 2 Hydroxyethyl Ams	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Velate 262	Isodecyl Benzoate	Liquid	Gallons	500-999	Acute Health Hazard	Combustible Materials
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Versagel	Mineral Oil	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Versene (R) Acid Chelating Agent	Ethylenediaminetetra Acetic Acid	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Versene (R) Ca Chelating Acid	Disodium Salt Of Ethyleneiaminetetraacet	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	

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Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Versene (R) Na Chelating Acid	Disodium Salt Of Ethylendiaminetetraacet	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Versene 100	Tetrasodium Edta	Liquid	Gallons	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Versene 220	Tetrasodium Edta	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Versenex 80	Pentasodium Edta	Liquid	Gallons	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vikane Gas Fumigant	Sulfuryl Fluoride	Gas	Gallons	500-999	Poison Gases	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vinyl Toluene	Vinyl Toluene	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Virtek D	Sodium Hydrosulfite	Solid	Pounds	1,000-4,999	Spontaneously Combustible Material	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vm&P Naphtha	Light Aliphatic Solvent Naphtha	Liquid	Gallons	10,000-49,999	Flammable Liq.(0F<FP<73F)	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Vwr Mpa-40	Sodium Dimethyldithiocarbamate	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Wash Lacquer Thinner	Toluene	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Wax 1765	Parafin Wax	Liquid	Gallons	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Wax Emulsion Paraffin	Diethanolamine	Liquid	Gallons	1,000-4,999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Wax Slack	Petroleum Slack Wax	Liquid	Gallons	50,000-99,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Weatherblok Bait	Brodifacoum	Solid	Pounds	500-999	Acute Health Hazard	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Windshield Washer Fluid	Methyl Alcohol	Liquid	Gallons	500-999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Witch Hazel	Ethyl Alcohol	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Witconol 5951	1,2-Propylene Glycol	Liquid	Gallons	500-999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Woodlife F Clear	Mineral Spirits	Liquid	Gallons	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Xanthan Gum	Xanthan Gum	Solid	Pounds	1,000-4,999	Combustible Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Xlerator	1,7,7-Trimethylbicyclo(221)Heptone 2	Liquid	Gallons	50-199	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Xylene	Xylene	Liquid	Gallons	50,000-99,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Zaclon (R) Galvanizing Fluxes	Zinc Ammonium Chloride	Solid	Pounds	10,000-49,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Zinc Chloride	Zinc Chloride	Solid	Pounds	500-999	Corrosives	Acute Health Hazard
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Zinc Metal	Zinc	Solid	Pounds	500-999	Misc.Haz. Materials	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Zinc Phosphide	Zinc Phosphide	Solid	Pounds	500-999	Poisonous Materials	PESTICIDE
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Zinc Stearate	Zinc Stearate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941200170	3950 NW Yeon Ave	Van Waters & Rogers Inc	5535	5169	Zinc Sulfate	Zinc Sulfate Monohydrate	Solid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941190980	3865 NW St Helens Rd	Western Pacific Bldg Materials	62233	5031	Custom Wiping Stains	Aliphatic Hydrocarbons	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941190980	3865 NW St Helens Rd	Western Pacific Bldg Materials	62233	5031	Excelite Lacquer	Acetone	Liquid	Gallons	200-499	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941190980	3865 NW St Helens Rd	Western Pacific Bldg Materials	62233	5031	Mixing Lacquer White	Isobutyl Acetate	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941190980	3865 NW St Helens Rd	Western Pacific Bldg Materials	62233	5031	Sanding Sealer	Isobutyl Acetate	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	
R941190980	3865 NW St Helens Rd	Western Pacific Bldg Materials	62233	5031	Vinyl Primer Surfacer	Isobutyl Acetate	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Chronic Health Hazard
R941190980	3865 NW St Helens Rd	Western Pacific Bldg Materials	62233	5031	Wonderbond	Vinyl Acetate	Liquid	Gallons	50-199	Chronic Health Hazard	
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Acetylene	Acetylene	Gas	Cubic Feet	1,000-4,999	Flammable Gases	Acute Health Hazard
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Argon	Argon	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Argon And Carbon Dioxide Mixture	Argon	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Carbon Dioxide	Carbon Dioxide	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	Acute Health Hazard
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Cutting Compound #2	Paraffinic Distillates	Liquid	Gallons	50-199	Misc.Haz. Materials	
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Cylinder Oil	Petroleum Hydrocarbons	Liquid	Gallons	200-499	Combustible Materials	

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RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Hydraulic Fluid	Petroleum Hydrocarbons	Liquid	Gallons	1,000-4,999	Combustible Materials	Acute Health Hazard
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Machine Oil	Hydrocarbon Base Oil	Liquid	Gallons	500-999	Combustible Materials	
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Magnudraw 50l	Sodium Petroleum Sulfonate	Liquid	Gallons	200-499	Combustible Materials	Acute Health Hazard
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Mapp Gas	Methyl Acetylene	Gas	Cubic Feet	1,000-4,999	Flammable Gases	Acute Health Hazard
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Mineral Spirits	Aliphatic Hydrocarbon	Liquid	Gallons	200-499	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Nitrogen	Nitrogen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Oil Vanishing	Hydrotreated Heavy Naphtha	Liquid	Gallons	200-499	Combustible Materials	
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Oxygen	Oxygen	Gas	Cubic Feet	5,000-9,999	NonFlammable Gases	Oxidizers
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Propane	Propane	Liquid	Gallons	200-499	Flammable Gases	
R941190910	4025 NW Express Ave	Western Wire Works Inc	6525	3496	Waste Hydraulic Fluid	Petroleum Hydrocarbon	Liquid	Gallons	500-999	Combustible Materials	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	2276 Fabric Softener 30gl	Alkyldrnethyl Benzylammonium Chloride	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Alert	Petroleum Grease	Solid	Pounds	10-19	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Aquid	Nonylphenol Ethoxilate	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Assist	Sodium Hydroxide	Liquid	Gallons	500-999	Corrosives	Acute Health Hazard
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Builder 300	Sodium Hydroxide	Liquid	Gallons	5,000-9,999	Acute Health Hazard	Corrosives
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Calwhite	Sodium Borate Perhydrate	Solid	Pounds	1,000-4,999	Oxidizers	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Cloreze	Organically Bound Chlorine	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Concentrated Laundry Detergent	Sodium Metasilicate	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Control	Quaternary Ammonium Chlorides	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Diver Alk 1c	Sodium Hydroxide	Liquid	Gallons	500-999	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Dowper	Tetrachloroethylene	Liquid	Gallons	500-999	Acute Health Hazard	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Dryorth	Sodium Hydroxide	Solid	Pounds	200-499	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	F-501 Bacteria Softener	Alkyl Dimethyl Ethylbenzyl	Liquid	Gallons	200-499	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Factor Plus	Nonylphenoxy Polyethoxy Glycol	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Force	Nonylphenol Ethoxylate	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Gurtler Dynomite	Sodium Hydroxide	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Gurtler Econo Blue Dr	Sodium Silicofluoride	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	III	Petroleum Distillates	Liquid	Gallons	36818	Flammable Liq.(FP<0F)	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Konite	Sodium Hydroxide	Solid	Pounds	20-49	Acute Health Hazard	Corrosives
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Liquid Braun	Sodium Hydroxide	Liquid	Gallons	500-999	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Liquid Hi-Chlor	Hypochlorite Solutions	Liquid	Gallons	50-199	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Liquid Insure	Hydrogen Peroxide	Liquid	Gallons	50-199	Oxidizers	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Polycot	Sodium Metasilicate	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Pyratex	Glycol Ether	Liquid	Gallons	20-49	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Rinspeed	Liquid Laundry Water Conditioner	Liquid	Gallons	200-499	Acute Health Hazard	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Royal Blend	Caustic Soda	Solid	Pounds	5,000-9,999	NonFlammable Gases	Corrosives
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Sodium Hypochlorite	Sodium Hypochlorite	Liquid	Gallons	1,000-4,999	Oxidizers	Corrosives
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Sodium Thiosulfate	Sodium Thiosulfate	Solid	Pounds	1,000-4,999	Acute Health Hazard	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Special Alkali 45	Sodium Metasilicate	Liquid	Gallons	500-999	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Sulfuric Acid	Sulfuric Acid	Liquid	Gallons	200-499	Corrosives	Acute Health Hazard
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Tc Turbo Flex	Phosphoric Acid	Liquid	Gallons	200-499	Corrosives	

Table 14
Outfall 18 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Tc Turbo Lifter	Nonylphenol Ethoxylate	Liquid	Gallons	200-499	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Tri Liquid Sour	Fluorosilicic Acid	Liquid	Gallons	200-499	Corrosives	
R941290800	3536 NW 35th Ave	Westport Supply Co Inc	16005	5087	Vulcan	Tetrachloroethylene	Liquid	Gallons	500-999	Acute Health Hazard	Chronic Health Hazard

* No information available in database

Table 15
Outfall 18 Confirmed Release List

RNO	Site Name	Address	Site ID	Substance	Media	Phase	Program
R941290710	ANRFS Holdings Inc.	3333 NW 35th Ave	1820	Benzene, Dichloroethane,1,1- Dichloroethylene,1,1-Dichloroethylene,1,2-cis-, Ethylbenzene, Methylene Chloride, Tetrachloroethylene, Toluene, Trichloroethane,1,1,1-, Trichloroethylene, Trimethylbenzene,1,2,4-, Vinyl Chloride, Xylenes	Groundwater	1	SAS
R084303610	Columbia American Plating Co.	3003 NW 35th Ave	29	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(ghi)perylene, Benzo(k)fluoranthene, Cadmium, Chromium, Chrysene, Cyanide (as ion), Hydrochloric Acid, Indeno(1,2,3-cd)pyrene, Tetrachloroethylene, Trichloroethylene, Zinc	Soil	1	SAS
R941200500	Gunderson Inc.	4350 NW Front Ave	1155	Cadmium, Chromium, Copper, Dichloroethylene,1,1-, Lead, Mercury, Nickel, PCBs, Solvent - Waste, Tetrachloroethylene, Total Petroleum Hydrocarbons (TPH), Trichloroethane,1,1,1-, Zinc	Soil, Groundwater	2	VCS
R941291370	Hill Investment Co.	3322 NW 35th Ave	1076	Dichloroethylene,1,2-cis-; Tetrachloroethane,1,1,1,2-; Trichloroethylene; Vinyl Chloride	Groundwater	1	SAS
R941190330	Texaco Portland Terminal	3800 NW St. Helens Rd	169	Acenaphthene, Acenaphthylene, Anthracene, Arsenic, Benzene, Benzo(a)anthracene, Benzo(A)Pyrene, Benzo(b)Fluoranthene, Benzo(ghi)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Ethylbenzene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Lead, Naphthalene, Phenanthrene, Pyrene, Toluene, Total Petroleum Hydrocarbons (TPH), Xylenes	Groundwater, soil	2	VCS
R941200090	Texaco Product Pipeline	4500 NW Front Ave	2117	*			
R941200170	Van Waters & Rogers	3950 NW Yeon Ave	330	Benzene, Chloroform, Dichloroethane,1,2-, Dichloroethylene,1,1-, Dichloroethylene,1,2-cis-, Dichloroethylene,1,2-trans-, Ethylbenzene, Methylene Chloride, Styrene, Tetrachloroethylene, Toluene, Trichloroethane,1,1,1-, Trichloroethane,1,1,2-, Trichloroethylene, Vinyl Chloride, Xylenes	Groundwater	1	SAS

Phase
1: Facilities where remedial investigation and feasibility studies have not been initiated.
2: Facilities where remedial investigation or feasibility studies are underway.

Program
SAS: Indicates that the site is still under investigation through the DEQ
VCS: Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property under the oversight of DEQ's Voluntary Cleanup Section.

Table 16
Outfall 18 SIC Information

SIC Number	SIC Definition
1710	Plumbing, Heating, Air Conditioning
1711	Plumbing, Heating, Air Conditioning
1730	Electrical Work
1799	Special Trade Contractors, NEC
2819	Industrial Inorganic Chemicals, NEC
2821	Plastics Materials, Synthetic Resins, and Nonvulcanizable Elastomers
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products
2865	Cyclic Organic Crudes and Intermediates, and Organic Dyes and Pigments
2911	Petroleum Refining
2952	Asphalt Felts and Coatings
2992	Petroleum Lubricating Oil and Grease Manufacturing
3321	Gray and Ductile Iron Foundries
3412	Metal Shipping Barrels, Drums, Kegs, and Pails
3441	Fabricated Structural Metal--Mfg of
3442	Metal Doors, Sash, Frames, Molding, and Trim Manufacturing
3449	Miscellaneous Structural Metal Work
3471	Electroplating, Plating, Polishing, Anodizing, and Coloring
3496	Miscellaneous Fabricated Wire Products
3499	Fabricated Metal Products, NEC
3537	Industrial Trucks, Tractors, Trailers, and Stackers
3559	Special Industry Machinery, NEC
3669	Communications Equipment, NEC
3731	Ship Building and Repairing
3743	Railroad Equipment
4011	Railroads, Line-Haul Operating
4013	Railroad Switching and Terminal Establishments
4200	Trucking and Warehousing
4212	Local Trucking without Storage
4213	Trucking, Except Local
4214	Local Trucking with Storage
4225	General Warehousing and Storage
4226	Special Warehousing and Storage, NEC
4231	Trucking terminals, freight: with or without maintenance facilities
4731	Arrangement of Transportation of Freight and Cargo
4783	Packing and Crating
4789	Transportation Services, NEC
4813	Telephone Communications, Except Radiotelephone
5013	Motor Vehicle Supplies and New Parts
5014	Tires and Tubes
5021	Furniture
5031	Lumber, Plywood, Millwork, and Wood Panels
5046	Commercial Equipment, NEC
5047	Medical, Dental, and Hospital Equipment and Supplies
5051	Metals Service Center/OFC—Wholesale
5082	Construction and Mining (Except Petroleum) Machinery and Equipment
5085	Industrial Supplies—Wholesale

Table 16
Outfall 18 SIC Information

SIC Number	SIC Definition
5087	Service Establishment Equipment and Supplies
5088	Transportation equipment and supplies, except motor vehicles-wholesale
5093	Scrap and Waste Materials
5113	Industrial and Personal Service Paper
5162	Plastics Materials and Basic Forms and Shapes
5169	Chemicals and Allied Products, NEC
5170	Petroleum and Petroleum Products
5171	Petroleum Bulk Stations and Terminals
5172	Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals
5192	Books, Periodicals, and Newspapers
5411	Grocery Stores
5521	Motor Vehicle Dealers (Used Only)
5541	Gasoline Service Stations
5812	Eating Places
5983	Fuel Oil Dealers
7011	Hotels and Motels
7221	Photographic Studios, Portrait
7352	Medical Equipment Rental and Leasing
7353	Heavy Construction Equipment Rental and Leasing
7359	Equipment Rental and Leasing, NEC
7532	Top, Body, and Upholstery Repair Shops and Paint Shops
7533	Automotive Exhaust System Repair Shops
7538	General Automotive Repair Shops
7542	Carwashes
7692	Welding Repair
7699	Repair Services, NEC
8249	Vocational Schools, NEC
9999	Nonclassifiable Establishments

NEC = Not Elsewhere Classified

Table 17
Drainage Basin for Outfall 18: Area by Landuse

Total Landuse Area in Basin

Land Use	Total Area in Basin (acres)
Commercial	--
Industrial	139.0
Multifamily Residence	--
Single Family Residence	4.5
Vacant	262.5
Forest	2.0
Rural	1.3
Total Basin Area	**475**
Estimated Right-of-Ways	66

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R961250770	3130 NW Forest Ln	1.00	FOR	0.79
R961251060		2.32	FOR	1.25
R084303250	2839 NW St. Helens Rd	0.78	IND	0.72
R084303290	2919 NW St. Helens Rd	0.19	IND	0.18
R084303300	2949 NW St. Helens Rd	0.37	IND	0.36
R084303320	2955 NW St. Helens Rd	0.18	IND	0.18
R084303330	2955-2957 NW St. Helens Rd	0.32	IND	0.32
R084303351	3000 NW St. Helens Rd	2.25	IND	2.24
R084303420	2727 NW 35th Ave	1.58	IND	1.57
R084303570	3003 WI/ NW 35th Ave	0.52	IND	0.50
R084303590	3000 NW St. Helens Rd	0.90	IND	0.90
R084303610	3003 NW 35th Ave	0.75	IND	0.74
R084303650	2630 NW St. Helens Rd	0.13	IND	0.08
R347600580	2720 NW 35th Ave	3.60	IND	0.92
R347601330	3445 NW Luzon St	2.90	IND	1.19
R347601510	2840 NW 35th Ave	2.88	IND	1.24
R347602940	3136 NW 35th Ave	3.69	IND	0.12
R649704640	4325-4347 NW Yeon Ave	0.76	IND	0.75
R649704660	4319 NW Yeon Ave	1.94	IND	1.93
R649712600	2700 NW St. Helens Rd	0.58	IND	0.58
R697400010	3615 NW St. Helens Rd	1.18	IND	1.15
R697400250	3641 NW St. Helens Rd	1.52	IND	1.49
R697400490	3717 NW St. Helens Rd	1.17	IND	1.17
R697400770	3821 WI/ NW St. Helens Rd	0.37	IND	0.37
R697400800	3821 WI/ NW St. Helens Rd	0.28	IND	0.27
R697400830	3821 NW St. Helens Rd	1.47	IND	1.47
R941190130	4285 NW Yeon Ave	5.11	IND	5.09
R941190190	4200 NW Yeon Ave	4.80	IND	0.36
R941190200	4000 NW St. Helens Rd	1.77	IND	1.76
R941190330	3610-3640 NW St. Helens Rd	12.91	IND	12.91
R941190351	4150 NW Yeon Ave	2.11	IND	2.11
R941190361	4033 NW Yeon Ave	5.12	IND	5.12
R941190650	4465 NW Yeon Ave	0.19	IND	0.19

Table 17
Drainage Basin for Outfall 18: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R941190700	4155 NW Yeon Ave	1.41	IND	1.41
R941190910	4025 NW Express Ave	2.50	IND	2.50
R941190950	3950 NW St. Helens Rd	1.67	IND	1.66
R941190980	3865 NW St. Helens Rd	2.99	IND	0.15
R941191100	4320 NW St. Helens Rd	0.49	IND	0.44
R941191150		7.12	IND	7.12
R941191280		0.15	IND	0.15
R941200150	3750 NW Yeon Ave	8.06	IND	7.93
R941200160	3900 NW Yeon Ave	9.12	IND	9.12
R941200170	3950 NW Yeon Ave	9.38	IND	9.34
R941200500	4700 NW Front Ave	20.37	IND	0.53
R941200540	3950 WI/ NW Yeon Ave	0.14	IND	0.14
R941200570	4012 NW Front Ave	20.02	IND	0.17
R941290110	3125 NW 35th Ave	3.59	IND	3.59
R941290340	3250 WI/ NW St. Helens Rd	1.00	IND	0.98
R941290500	3621 NW Yeon Ave	0.45	IND	0.02
R941290570	3501-3599 NW Yeon Ave	26.65	IND	6.47
R941290690	3250 NW St. Helens Rd	4.83	IND	4.83
R941290700	3000 NW St. Helens Rd	0.76	IND	0.76
R941290710	3333 NW 35th Ave	6.95	IND	6.95
R941290720	3333 W/ NW 35th Ave	0.28	IND	0.28
R941290780	3250 WI/ NW St. Helens Rd	1.02	IND	0.99
R941290800	3738 NW Yeon St	2.50	IND	2.27
R941291170	3031 NW St. Helens Rd	2.26	IND	2.22
R941291210	3031 WI/ NW St. Helens Rd	0.45	IND	0.45
R941291370	3322 NW 35th Ave	3.18	IND	2.47
R941291390	3103 WI/ NW St. Helens Rd	0.01	IND	0.01
R941291400	3103 NW St. Helens Rd	0.93	IND	0.88
R941291550	3900 Sw/ NW Yeon Ave	2.12	IND	2.11
R941291620	3601-3621 NW Yeon Ave	7.36	IND	0.27
R941291670	3720 NW Yeon Ave	2.84	IND	0.17
R941291910	3136 WI/ Ne 35th Ave	2.04	IND	0.10
R941300350	3537 NW St. Helens Rd	1.29	IND	1.29
R941300380	3340 NW St. Helens Rd	4.38	IND	4.38
R941300390	3335-3347 NW St. Helens Rd	2.37	IND	2.37
R941300400	3333 NW St. Helens Rd	0.58	IND	0.58
R941300440	3509 NW St. Helens Rd	1.87	IND	1.86
R941300460	3133 NW St. Helens Rd	1.49	IND	1.49
R941300520	3340 WI/ NW St. Helens Rd	0.95	IND	0.94
R941300530	3530 NW St. Helens Rd	1.61	IND	1.60
R961250840	2934 NW 53rd Dr	3.38	RUR	0.00
R961250880	2922 NW 53rd Dr	1.73	RUR	1.31
R084302600	2750 NW Alexandra Ave	0.55	SFR	0.55
R084302630	2640 NW Alexandra Ave	2.50	SFR	1.16
R084302800	2640 WI/ NW Alexandra Ave	0.67	SFR	0.61
R590304260	2896 NW 53rd Dr	2.17	SFR	2.17
R084302030	2640 S/ NW Alexandra Ave	7.53	VAC	0.50
R084302430		1.70	VAC	0.89

Table 17
Drainage Basin for Outfall 18: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R084302860		1.75	VAC	1.29
R084302960	NW Sussex Ave	0.56	VAC	0.56
R084302960	NW Sussex Ave	0.56	VAC	0.00
R084303020	NW Sussex Ave	0.57	VAC	0.57
R084303060	NW Sussex Ave	0.29	VAC	0.11
R084303660	2630 N/ NW St. Helens Rd	0.03	VAC	0.03
R590302680		3.42	VAC	2.70
R590302960		2.15	VAC	2.15
R590303010		5.08	VAC	4.21
R590303660		6.63	VAC	6.54
R590303710		13.06	VAC	12.97
R590303760		13.49	VAC	13.46
R590303810		11.11	VAC	11.11
R590303870		0.20	VAC	0.17
R590303910		4.52	VAC	4.52
R590303960		0.14	VAC	0.02
R590304310		0.80	VAC	0.76
R590304320		3.29	VAC	3.26
R590304330		3.66	VAC	3.66
R590304360		0.11	VAC	0.11
R590304390		0.74	VAC	0.74
R649712620	2700 N/ NW St. Helens Rd	0.41	VAC	0.41
R697401170		1.27	VAC	1.05
R697401370		0.11	VAC	0.11
R697401390		2.32	VAC	1.88
R697401690		4.19	VAC	4.17
R697402190		4.10	VAC	4.10
R697402590		0.10	VAC	0.10
R697402600		0.05	VAC	0.05
R697402850		0.17	VAC	0.17
R697402870		0.11	VAC	0.11
R697402880		4.32	VAC	4.31
R697403590		1.80	VAC	1.80
R697403750		0.13	VAC	0.13
R697403760		3.70	VAC	3.69
R697404350		2.07	VAC	2.06
R697404360		2.62	VAC	2.61
R697404370		0.85	VAC	0.85
R697405170		2.26	VAC	2.26
R697405570		1.10	VAC	0.92
R697405730		0.96	VAC	0.96
R697405870		0.95	VAC	0.95
R697405970		0.78	VAC	0.78
R697406130		0.07	VAC	0.07
R697406190		0.03	VAC	0.02
R941190010		1.32	VAC	0.62
R941190070		33.63	VAC	1.28
R941190570		6.17	VAC	2.24

Table 17
Drainage Basin for Outfall 18: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R941190590		0.70	VAC	0.00
R941190660		0.26	VAC	0.13
R941190670		2.24	VAC	1.80
R941190830		0.12	VAC	0.12
R941190880	4033 NW Yeon Ave	0.03	VAC	0.03
R941190890	4033 NW Yeon Ave	0.18	VAC	0.18
R941191190	4700 WI/ NW Front Ave	0.57	VAC	0.09
R941191210		0.05	VAC	0.05
R941191240	4700 WI/ NW Front Ave	14.94	VAC	0.63
R941200040		4.15	VAC	3.86
R941200520	4033 NW Yeon Ave	0.01	VAC	0.00
R941200530	4033 NW Yeon Ave	0.01	VAC	0.00
R941201230		82.79	VAC	15.57
R941290880		0.31	VAC	0.00
R941291600		1.31	VAC	0.03
R941300020		0.03	VAC	0.03
R941300040		5.85	VAC	5.83
R941300070		7.80	VAC	7.77
R941300090		2.42	VAC	1.26
R941300190		4.08	VAC	4.07
R941300200		9.56	VAC	9.54
R941300210		1.97	VAC	1.96
R941300220		1.20	VAC	1.19
R941300230		2.00	VAC	2.00
R941300250		0.22	VAC	0.22
R941300270		12.31	VAC	12.03
R941300290		6.70	VAC	4.37
R941300320	3333 S/ NW St. Helens Rd	1.56	VAC	1.56
R941300500	2922 W/ NW 53rd Dr	0.70	VAC	0.68
R941300510	3133 S/ NW St. Helens Rd	0.86	VAC	0.86
R941300540		17.48	VAC	17.44
R941300550		16.46	VAC	2.24
R941300560		8.58	VAC	8.56
R941300570		21.87	VAC	14.05
R941300580		0.07	VAC	0.07
R941300590		0.66	VAC	0.66
R941300600		4.76	VAC	4.75
R941300610		1.05	VAC	1.05
R941300640		8.39	VAC	5.12
R941300650		4.53	VAC	1.89
R941300660		10.56	VAC	10.39
R941300670		24.88	VAC	11.16
R961250410		9.46	VAC	1.31

City of Portland Stormwater Outfall 19
Summary of Existing Information

Physical Description

City of Portland Stormwater Outfall 19 is a 42-inch pipe and was constructed about 1977. Drainage is mostly industrial, flow from Forest Park, and flow from ODOT storm lines. There has been some stormwater monitoring data collected for this outfall as part of the Industrial Stormwater Program.

The storm drainage basin for this outfall is approximately 475 acres. Landuse in the basin is predominately designated vacant (74 percent of the basin) and industrial (20 percent). Single family residences are less than 1 percent of the basin. Right-of-ways are estimated to be about 6 percent of the basin.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Landuse map

There are two non-City outfalls within approximately 400 and 600 feet downstream and one non-City outfall approximately 700 feet upstream of the 19 outfall. The private outfall designations are as follows:

- WP-127: Gunderson
- WP-256: Gunderson
- WP-257: Gunderson

These non-City outfalls are assigned to Gunderson, although various tenants may contribute to the Gunderson's total discharge.

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall was identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 19 are available from one source:

- Portland Harbor Sediment Investigation, EPA/DEQ (Stations SD137 and SD135)

The two sediment sample locations sampled in the vicinity of the 19A outfall (see attached figure) had samples collected at the surface (0-10 cm). Station SD135 also had a depth-composite sample collected (0-90 cm). Sediment station SD135 is approximately 400 feet downstream from Outfall 19. Sediment station SD137 is approximately 600 feet upstream of Outfall 19.

Table 1 shows the available sediment data with station ID, sample ID, and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall. To identify analytes of interest, data were evaluated based on a comparison of sediment concentrations at SD137 with three times the DEQ baseline and with sediment concentrations of the upstream stations. Based on this comparison, no analytes of interest were identified. All sediment results at SD137 and SD135 were less than three times the DEQ baseline values at Outfall 19.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ, and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 summarizes the available information on facilities currently located in the Outfall 19 drainage basin, including where site runoff drains, discharge permits, business type and whether there is exposure of site activities to stormwater.

Table 3a shows available stormwater data maintained by BES for industrial facilities required to have an NPDES permit to discharge to the City's stormwater system. BES maintains monitoring data for 1200- and 1300-series NPDES general stormwater permits.

Table 3b shows BES stormwater quality monitoring data collected at Outfall 19 as part of its MS4 NPDES permit.

Table 4 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 5 lists EPA's Toxic Release Inventory, which records releases of chemicals to the environment, and the Hazardous Waste Generators, which shows sites that treat, store, or dispose of hazardous materials.

Table 6 EPA's Corrective Action (CORRACTS) list contains information about handlers with corrective action activity. This list is maintained by EPA as part of RCRA Title C.

Table 7 lists EPA's Treatment Storage Disposal (TSD) of sites that treat, store, or dispose of hazardous materials.

Table 8 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 8.

Table 9 is DEQ's list of leaking underground storage tanks (LUST). The list includes both sites with active leaks and those that have been cleaned up to the satisfaction of the DEQ in the past. Behind this table, the LUST incident reports are provided for facilities listed in Table 9.

Table 10 is DEQ's list of permitted tanks that contains information on sites that are registered to receive commercial fuel deliveries.

Table 11 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 12 is the State Fire Marshal's list of hazardous material incidents to which the fire department has responded.

Table 13 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 14 is the CRL (Confirmed Release List) inventory of sites that are currently being remediated under one of three separate programs, the Voluntary Cleanup Program, the Site Response Program, and the Site Assessment Program.

Table 15 lists the SIC numbers and descriptions for the sites identified in the Table 2 facility list.

Table 16 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type.

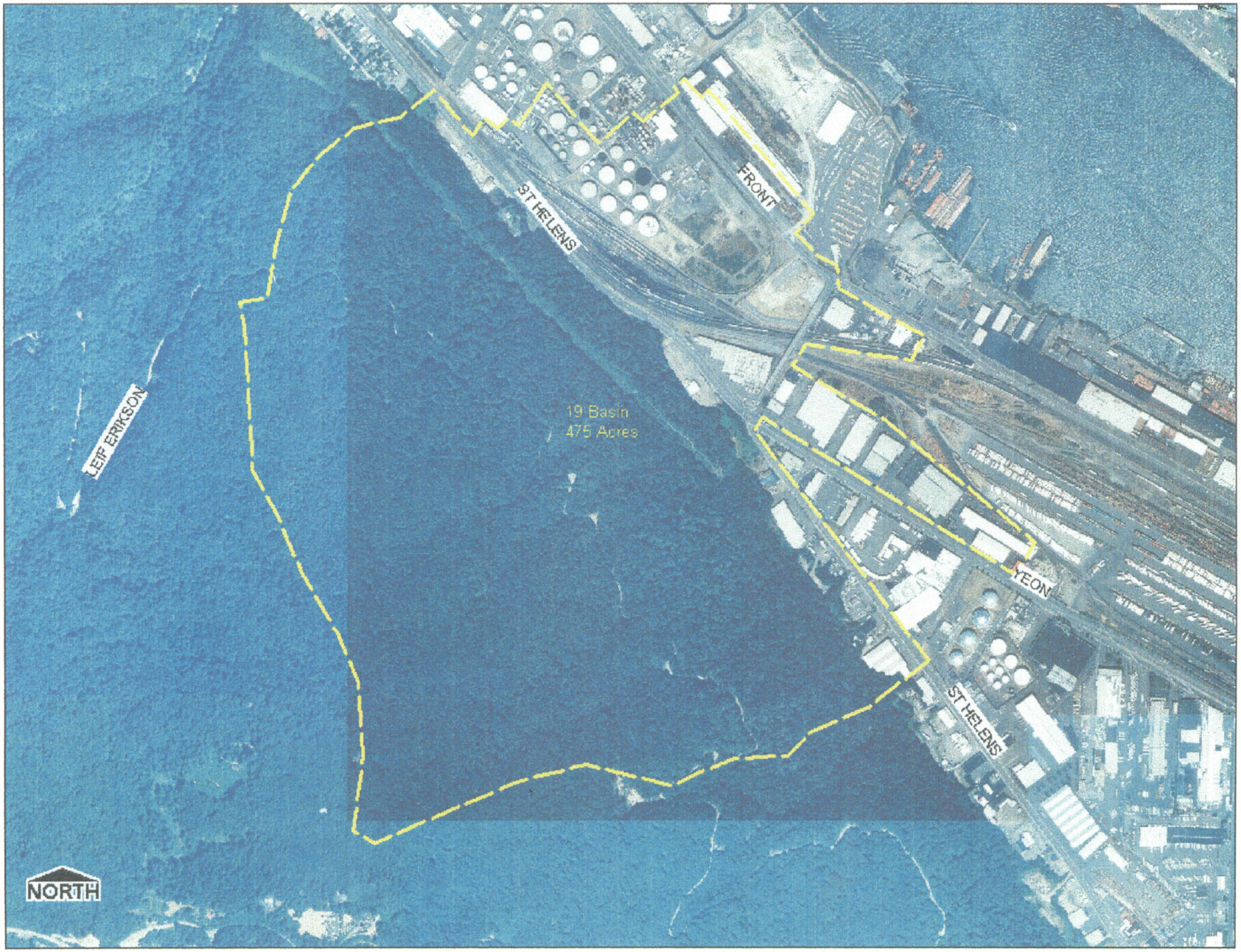
The following databases were searched but no information was available for sites within the drainage basin:

- EPA Emergency Response Notification System List

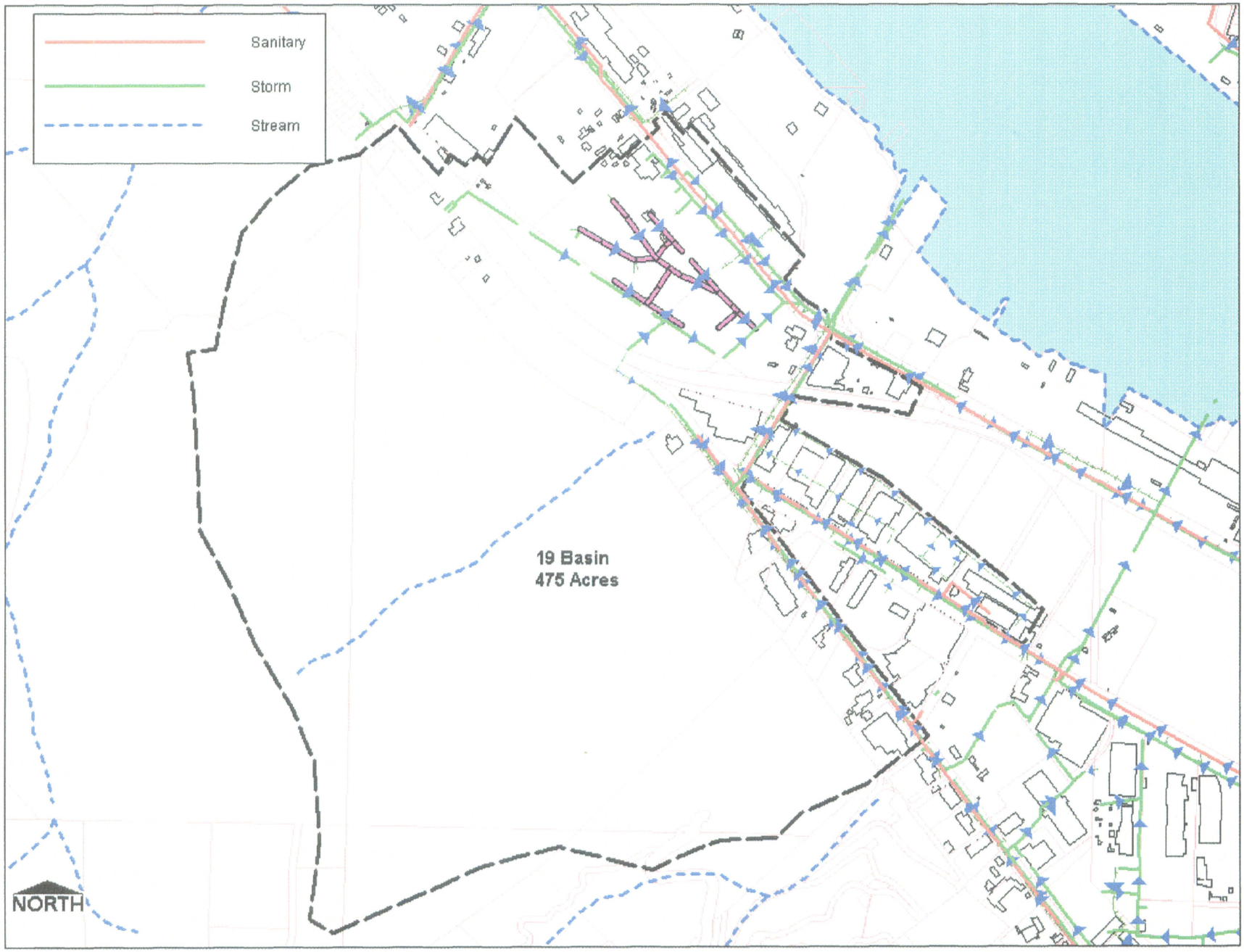
19 Outfall Evaluation

Sediment results upstream and downstream of Outfall 19 were all less than three times the DEQ baseline values and no analytes of interest could be identified. The environmental database searches indicate the basin has approximately 93 acres of land designated as industrial and a number of facilities with documented or suspected releases to soils, groundwater and the storm system.

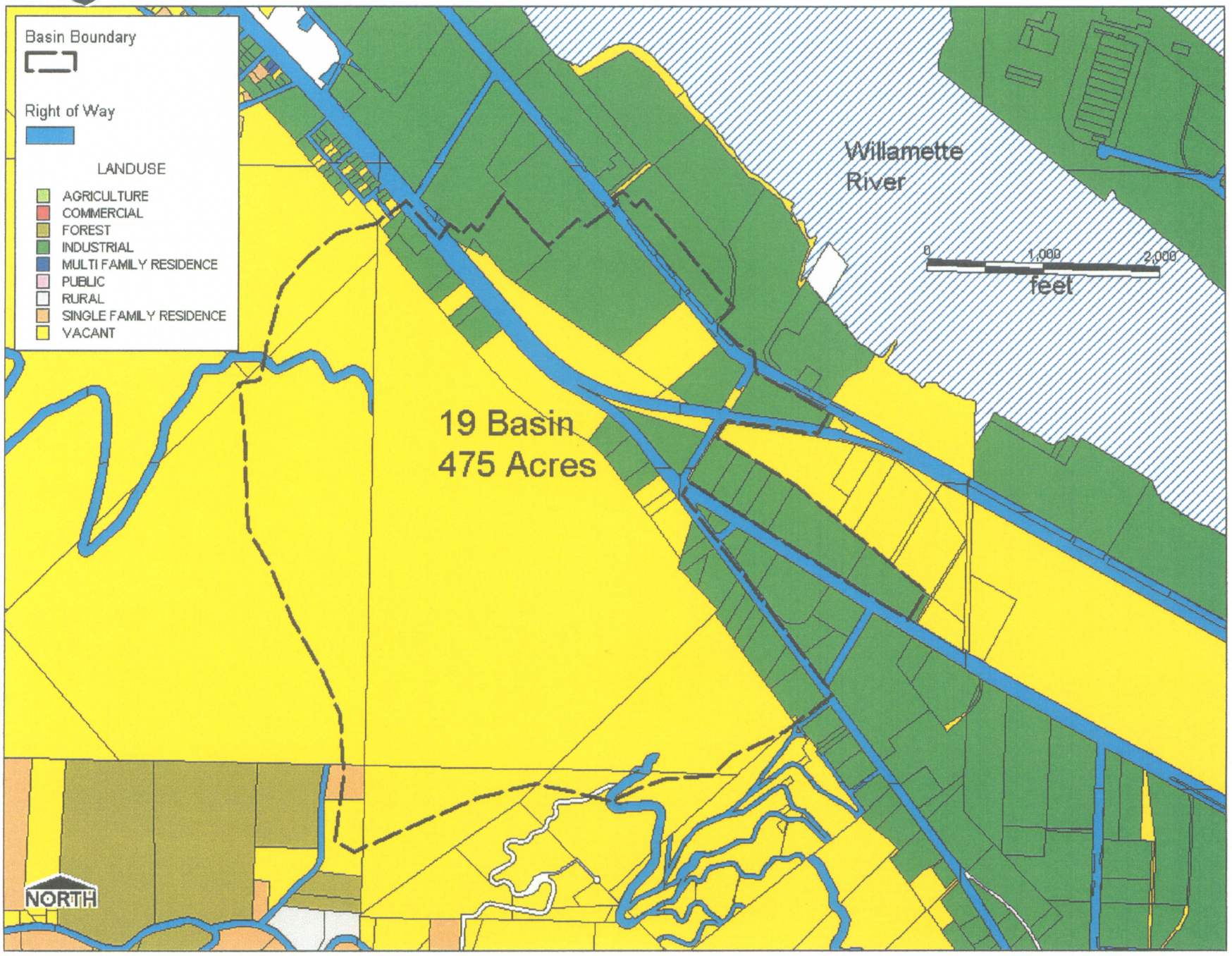
Figures



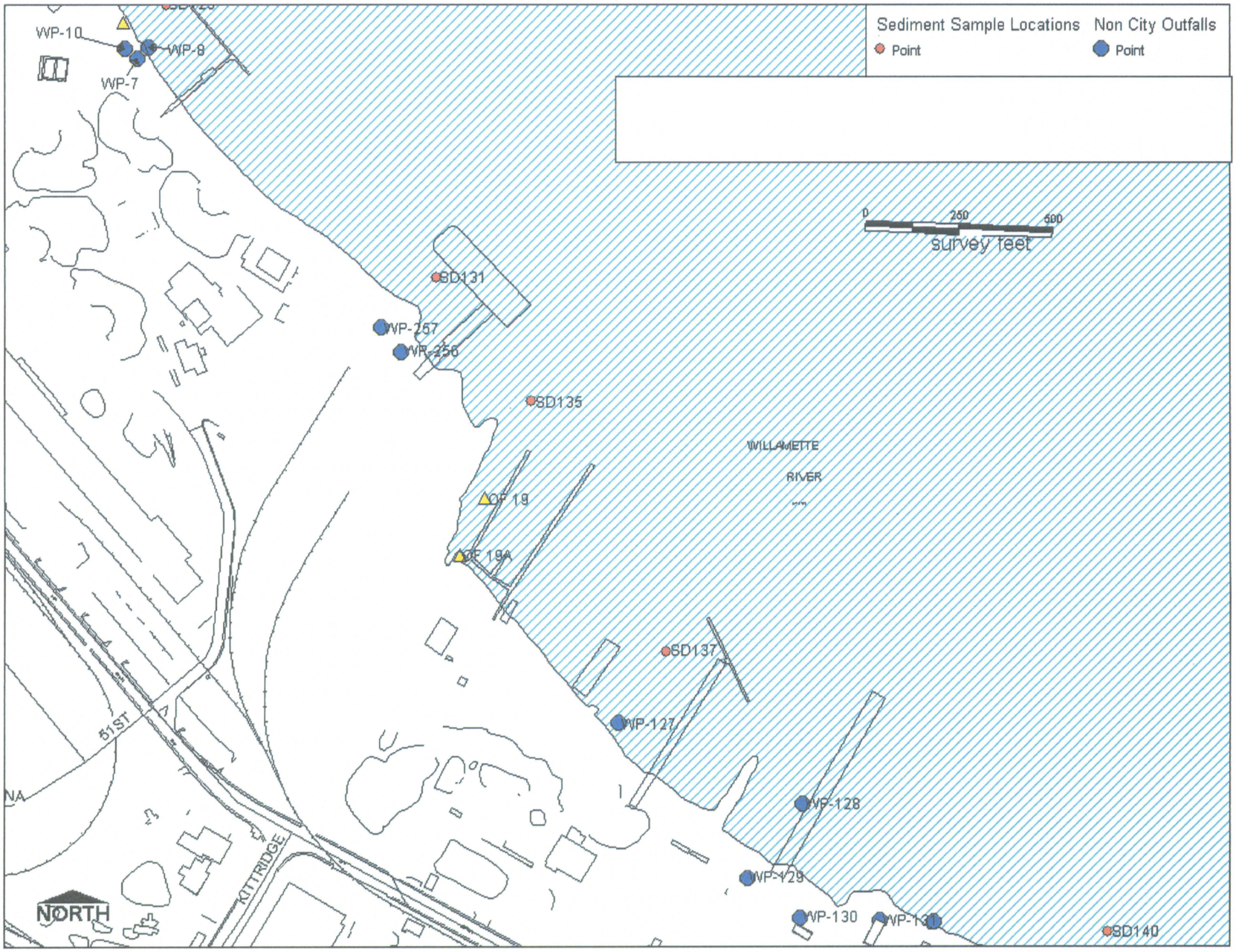
Basin 19 Aerial Photo
City of Portland



19 Outfall - Stormwater Drainage Map
City of Portland



Land Use Within Basin 19
City of Portland



Outfall 19 Map with Sediment Sample and Non-City Outfall Locations
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 19

			StationID	SD137	SD135	SD135
			Sample ID #	0000-CC	0	0000A
			Field Replicate #	#	#	#
			SubSample #	#	#	#
			Sample Depth	0-10 CM	0-10 CM	0-90 CM
			Sample Date	09/24/1997	09/24/1997	10/16/1997
Analyte	**Units**	**DEQ Baseline**	**Analyte of Interest**			
Aluminum	PPM	42800		38400	33000	40900
Antimony	PPM	5		6 J	5 UJ	5 UJ
Arsenic	PPM	5		5 U	5 U	5 U
Barium	PPM	195		181	157	197
Beryllium	PPM	0.7		0.6	0.53	0.56
Cadmium	PPM	0.6		0.5	0.4	0.7
Chromium	PPM	41		37.8	31.6	38.7
Cobalt	PPM	19.7		18.2	15.8	18.9
Copper	PPM	60		42.2	37.3	55.7
Iron	PPM	45000		41400	35700	41400
Lead	PPM	30		17	16	32
Manganese	PPM	810		573	505	658
Mercury	PPM	0.1		0.07	0.05	0.2
Nickel	PPM	32		29	26	30.2
Selenium	PPM	15		15	9	8
Silver	PPM	1.4		0.8	0.9	1.5
Thallium	PPM	13		15	10	6
Titanium	PPM	2075		1960		
Vanadium	PPM	112		102	87.5	108
Zinc	PPM	118		103	103	181
Total organic carbon	PCT	2		1.3	1	1.7
4-Methylphenol	PPB	680		590	340	290
Benzoic acid	PPB	200		200 U	200 U	380
Benzyl alcohol	PPB	20		20 U	20 U	20 U
Bis(2-ethylhexyl) phthalate	PPB	390		250	320	270
Butyl benzyl phthalate	PPB	20		20 U	20 U	20 U
Di-n-butyl phthalate	PPB	20		20 U	20 U	20 U
Di-n-octyl phthalate	PPB	20		20 U	20 U	20 U
Dibenzofuran	PPB	100		20 U	20 U	20 U
Dimethyl phthalate	PPB	20		20 U	20 U	20 U
Pentachlorophenol	PPB	97		99	100	100
Phenol	PPB	20		20 U	20 U	20 U
2-Methylnaphthalene	PPB	150		20 U	20 U	54
Acenaphthene	PPB	180		20 U	20 U	28
Acenaphthylene	PPB	60		20 U	20 U	20 U
Anthracene	PPB	150		20 U	20 U	27
Benzo(a)anthracene	PPB	360		32	34	57
Benzo(a)pyrene	PPB	500		36	46	72
Benzo(b)fluoranthene	PPB	350		40	41	64
Benzo(g,h,i)perylene	PPB	250		23	29	65
Benzo(k)fluoranthene	PPB	225		30	29	54
Chrysene	PPB	425		61	58	95
Dibenz(a,h)anthracene	PPB	125		20 U	20 U	20 U
Fluoranthene	PPB	600		120	98	200
Fluorene	PPB	125		20 U	20 U	29
Indeno(1,2,3-c,d)pyrene	PPB	225		20	24	47
Naphthalene	PPB	200		20 U	20 U	84
Phenanthrene	PPB	700		67	71	200
Pyrene	PPB	700		100	79	240
Carbazole	PPB	100		20 U	20 U	20 U

Qualifier List: ***Bold indicates 3 times the DEQ baseline value***

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Table 2
Outfall 19 Facility List

Aquarius Search: Jul-2000
Basin Reconn: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit No.	Business Type	Exposure	Comments
R941190451	ACME Trading & Supply	4927 NW Front Ave.	MS4	5093*	NPDES	1200Z	Metal recycler	Yes	
R941190451	Allied Movers	4927 NW Front Ave.	MS4	4213			Transportation	Yes	
R941190150	American Transport Inc.	4015 NW St. Helens	MS4	4212, 4213, 7353			Transportation	Yes	Formerly Wilhelm Truck Leasing
R941190150	Anderson Roofing Co. Inc.	4015 NW St. Helens	MS4	1761					vacant
R941190501	Applied Industrial Technology	5041 NW Front Ave.	MS4	5085			Distribution	No	
R941190501	Asset Recovery Inc.	4959 NW Front Ave.	MS4	1629*, 5093*	NPDES	1200R		Yes	Now business park
R941190141	Bingham Construction Inc.	3939 NW St. Helens	MS4	1541			Offices/wrhse	No	
R941190860	Brazil Electric Motors	4315 NW St. Helens	MS4	5063			Equipment repair	No	
R941190510	Burlington Northern & Santa Fe Railroad Co.	5814 NW Doane Ave.	MS4	4011*, 4013*	NPDES	1200Z	Transportation	Yes	
R941190060	Cabinet Factories Outlet	4303 NW St. Helens	MS4	5712			Distribution	No	
R649704640	Carpet Resource Center	4338 NW Yeon Ave.	MS4	5023			Distribution	No	Formerly Commercial Affiliates Carpet
R941180264	Cascade Petrol Transport	5480 NW Front Ave.	WP-8, WP-9, WP-10	4212, 5170			Petroleum dist	Yes	
R941190280	Cascade Solutions	4650 NW St. Helens	MS4	8742			Offices	No	
R941190400	Charles W. Belle & Associates	5275 NW St. Helens	MS4	2400, 2448			Offices/storage yard	No	
R941190640	Chevron USA Inc.	5501 NW Front Ave.	MS4	2911*, 2951*	NPDES	100J	Asphalt refinery	Yes	
R941190640	Chevron USA Inc.	5501 NW Front Ave.	MS4	2911*, 2951*	NPDES	1200Z	Asphalt refinery	Yes	
R941190640	Chevron USA Inc.	5501 NW Front Ave.	Sanitary	2911*, 2951*	Pretreatment	419.001	Asphalt refinery		
R941191040	Color Magic Inc.	4488 NW Yeon Ave.	MS4	2752*, 2759 ,2799			Photo processor	Yes	
R941190501	Color Systems International	4931 NW Front Ave.	MS4	?			Distribution	No	
R941180264	Don Pilcher Auto Sales	5480 NW Front Ave.	MS4	5521					could not find
R941191030	Dura Industries Inc.	4466 NW Yeon Ave.	MS4	1721*, 3471*, 3479*			Metal finisher/painter	Yes	
R941191030	Dura Industries Inc.	4466 NW Yeon Ave.	Sanitary	1721*, 3471*, 3479*	Pretreatment	413.019	Metal finisher/painter		
R941191030	Dura Industries Inc.	4466 NW Yeon Ave.	Sanitary	1721*, 3471*, 3479*	Pretreatment	433.028	Metal finisher/painter		
R649741611	Glacier Northwest	5034 NW Front Ave.	MS4	3273*			Concrete plant	Yes	
R649741611	Glacier Northwest	5034 NW Front Ave.	on-site	3273*	WPCF		Concrete plant	Yes	
R649741630	Hampton Lumber Distribution	4950 NW Front Ave.	WP-256, WP-257	2411, 2421, 5031			Distribution	Yes	
R941190190	High Reach Inc.	4200 NW Yeon Ave.	MS4	7359*			Equipment rental	Yes	
R941190060	iPower	4301 NW St. Helens	MS4	5051			Office/warehouse	No	Formerly Lagrand Steel
R649704640	Kelly Goodwin Co.	4332 NW Yeon Ave.	MS4	5031			Distribution	No	
R941191100	Lacey-Harmer Supply & Mfg Co.	4320 NW St. Helens	MS4	5085			Distribution	No	
R941190290	Laclede Chain MGR Co.	4270 NW Yeon Ave.	MS4	5013*, 5085*			Distribution	No	
R941190280	Madden Fabrication	4670 NW St. Helens	MS4	3441*, 3444*, 3446*			Metal Fabrication	No	
R941190280	Madden Fabrication	4670 NW St. Helens	on-site	3441*, 3444*, 3446*			Metal Fabrication	No	
R941191040	McKesson Chemical	4488 NW Yeon Ave.	MS4	2899					Now Color Magic
R941190501	Midwest Sign & Screen Printing	5035 NW Front Ave.	MS4	2396, 5063, 5084			Printing/Distribution	Yes	
R941190480	Mount Hood Chemical	4444 NW Yeon Ave.	MS4	2841*	NPDES	1200Z	Manufacturing	Yes	
R941190480	Mount Hood Chemical	4444 NW Yeon Ave.	Sanitary	2841*	Pretreatment	400.087	Manufacturing		
R941190710	Multnomah Disposal & Recycling	4135 NW St. Helens	MS4	4953					vacant
R941190501	O4 Controls Inc.	4943 NW Front Ave.	MS4	3829			Distribution	No	
R941190501	Oregonian Insert Facility	5015 NW Front Ave.	MS4	2711, 5192			Distribution	No	
R941190280	Power Rents / United Rentals	4621 NW St. Helens	MS4	6749, 7513			Heavy Equipment	Yes	
R941190190	Service Steel Inc.	4200 NW Yeon Ave.	MS4	3499*, 5050*, 5051*			Metal Fabrication	Yes	
R941191140	Shaver Transportation Co.	4900 NW Front Ave.	Sheetflow	4449*, 4492*			Tugboat and Barge	Yes	Process discharge from barge

Table 2
Outfall 19 Facility List

Aquarius Search: Jul-2000
Basin Reconn: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit No.	Business Type	Exposure	Comments
R941191030	Thompson Tile Co.	4456 NW Yeon Ave.	MS4	5032			Distribution	No	
R941190160	TOSCO Distribution Co.	5528 NW Doane Ave.	MS4	5171*	Batch		Bulk Petroleum Dist	Yes	storm water
R941190160	TOSCO Distribution Co.	5528 NW Doane Ave.	MS4	5171*	NPDES	1300J	Bulk Petroleum Dist	Yes	
R941190160	TOSCO Distribution Co.	5528 NW Doane Ave.	MS4	5171*	NPDES	Individual	Bulk Petroleum Dist	Yes	
R941190160	TOSCO Distribution Co.	5528 NW Doane Ave.	Sanitary	5171*	Pretreatment	400.137	Bulk Petroleum Dist		
R649741622	Tube Forgings of America Inc.	5200 NW Front Ave.	MS4	3462*, 3498*	NPDES	1200Z	Metal Fabrication	Yes	
R649741622	Tube Forgings of America Inc.	5200 NW Front Ave.	Sanitary	3462*, 3498*	ADCM		Metal Fabrication		
R649741622	Tube Forgings of America Inc.	5200 NW Front Ave.	Sanitary	3462*, 3498*	Batch		Metal Fabrication		
R941190160	UNOCAL Terminal	5528 NW Doane Ave.	MS4	2869*, 2911*, 2992*, 5171*, 5172, 5983*	NPDES	1200T	Petroleum terminal	Yes	
R941190160	UNOCAL Terminal	5528 NW Doane Ave.	MS4	2869*, 2911*, 2992*, 5171*, 5172, 5983*	NPDES	Individual	Petroleum terminal	Yes	
R941190160	UNOCAL Terminal	5528 NW Doane Ave.	Sanitary	2869*, 2911*, 2992*, 5171*, 5172, 5983*	Pretreatment	400.012	Petroleum terminal		
R941190060	US Tsubaki Inc	4307 NW St. Helens	MS4	5063					vacant
R941190280	West Coast Paper Co.	4600 NW St. Helens	MS4	5085*, 5111*			Distribution	No	
R941190060	Western Fluid Power Corp.	4309 NW St. Helens Rd.	MS4	3492*, 3559*, 3594*, 5084*, 5085*	NPDES	NEC	Manufacturing	No	
R941191060	Western Graphics Data	4468 NW Yeon Ave.	MS4	2752, 2789, 2796			Printing/Distribution	No	Formerly Western Lithograph
R941190840	Young Mechanical Services	5315 NW St. Helens	MS4	1790*, 1791			Repair	No	Formerly NW Field Services

* Indicates SIC # has been verified via site inspection

ADCM = Alternate Discharge Control Mechanism
NEC = No Exposure Certification

Table 3a
NPDES Stormwater Results for Industries Discharging to the Outfall 19

Location Code	Collection Date	Permit Type	pH SU	Temp. °C	Spec. Cond. mg/l	TP mg/L	TPO4 mg/L	COD mg/L	TSS mg/L	TOC mg/L	Arsenic mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Silver mg/L	Zinc mg/L	Total O&G mg/L
ACME Trading & Supply																						
01	03/08/1995	1200Z	7.58		22			48	38	12	0	0.007	0	0.46	0.16	0.0004		0			0.21	5.2
01	11/08/1995	1200Z	7.4		45			90	80	7.5		0.0044	0.017	0.617	0.369	0.00079		0.024			0.395	10
01	11/27/1995	1200Z		9.1	16			160	235	76		0.009	0.05	4.44	1.09	0.007	0.159	0.104	<0.02	0.002	1.24	45.9
01	01/23/1996	1200Z	8.4					470	468	88	0.0115	0.00234	0.103	1.96	1.9	0.0057		0.198			1.73	53.7
01	04/25/1996	1200Z	7.7					55	50	15	<0.05	0.0095	0.0325	1.94	0.921	0.00085		0.1			0.884	16
01	10/14/1996	1200Z			100			130	86	33	0.0013	0.007	0.015	0.75	0.44	0.0011		0.063			0.46	42.6
01	11/06/1996	1200Z	7.2		23.4			55	30	8.3	<0.05	<0.002	0.0087	0.371	0.225	0.00027		0.018			0.176	<5
01	03/19/1997	1200Z	7.7		83			540	424	59	0.00506	0.004	0.086	3.06	1.93	0.0029	0.608	0.247	0.071		1.93	57.5
01	04/14/1997	1200Z	7		90			60	35	7	<0.05	<0.002	0.046	0.237	0.223	<0.0002		0.05			0.141	<5
01	10/30/1997	1200Z	6.2	22.2	<10			35	15	4.2	<0.05	<0.002	0.0051	0.233	0.695	<0.0002		0.011			0.0949	8
01	11/19/1997	1200Z	7.6					120	158					3.73	0.669						0.721	28
01	05/13/1998	1200Z	6.4	21.4	25			55	70	10	<0.1	<0.002	0.0052	0.367	5.09	0.00028		0.012			0.258	6
01	11/04/1998	1200Z	7.3						22					0.346	0.572						0.542	8.3
01	11/10/1998	1200Z	6.8					50	40	6.2				0.276	2.78						0.176	12
01	02/08/1999	1200Z	6.6					25	12					0.2	0.19						0.23	6.3
01	03/12/1999	1200Z	6						35					0.246	0.921						0.135	5
01	10/27/1999	1200Z	7					47	20					0.21	0.16						0.3	11
01	01/10/2000	1200Z	7.8	18.3					<5					0.011	0.031						0.037	<5
01	03/27/2000	1200Z	5.9	11.2				42	30.2					0.37	0.18						0.34	5.2
01	04/13/2000	1200Z	6.8	22.1					5					0.043	0.093						0.055	<5
Asset Recovery Inc.																						
01	06/15/1995	1200R	7.4		46			62	99	14			0.01	0.16	0.08	0.0005					0.21	
02	06/15/1995	1200R	7.29		73			96	80	23			0.01	0.21	0.23	0.0016		0.08			0.42	
Burlington Northern Railroad																						
01	10/28/1997	1200Z	6.55			1.1		780	1200	13												72
01	06/26/1998	1200Z	7.58				1.1	120	130	10	<0.005	0.003	0.002	0.04	0.023	<0.002		<0.01			0.33	7
01	11/30/1998	1200Z							34													
01	11/24/1999	1200Z	5.3					15	8.7					<0.03	<0.1						0.23	<5
Chevron USA																						
02	03/28/1995								9.8		0.05	0.01	0.02	0.03	0.02	0.0002		0.02			0.13	5
02	05/01/1995		5.8					10	21	<5	<0.005	<0.001	0.004	0.011	<0.02	<0.0005	0.003	<0.004	<0.02	<0.002	0.086	11
02	06/12/1995		6.7					6.5		5.9												
02	10/30/1995																					0.5
02	11/06/1995		6.4					25	17	8.5	<0.05	<0.02	<0.03	0.04	0.03	<0		<0.02			0.22	<5
02	03/14/1996		6.9					41	20	4.5	<0.05	<0.02	<0.02	0.02	<0.03	<0		<0.02			0.23	11
02	12/10/1996		6.6	8.5				10	171	<1	<0.001	<0.001	0.005	0.008	<0.02	<0.0005	<0.003	<0.004	<0.02		0.437	14
02	08/28/1997		6.4						21			<0.04	<0.02	0.02	0.3		<0.2	<0.05	<0.3		0.057	20
02	11/25/1997		6.2						3.5					0.023	<0.06						0.07	<2
02	03/03/1998		6.4					<10	5.7	2.5	0.17	0.016	0.026	0.012	0.13	0.00043		<0.04			0.031	3.1
02	11/06/1998		6.5					14	8.5	2.5	<0.12	<0.01	<0.02	0.02	<0.062	<0.0004		<0.034			0.069	<2
02	12/07/1998		6.5					3	2.6					<0.03	<0.1						<0.05	<5
02	02/09/1999		6.7					<10	14	2.8	<0.12	0.021	<0.024	0.032	<0.13	<0.0004		0.082			0.094	2
02	11/08/1999		6.4					18	13	2.2	<0.12	<0.01	<0.01	0.012	<0.04	<0.0003		<0.03			0.048	<2

Table 3a
NPDES Stormwater Results for Industries Discharging to the Outfall 19

Location Code	Collection Date	Permit Type	pH SU	Temp. °C	COD mg/L	TSS mg/L	TVS mg/L	TOC mg/L	Arsenic mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Zinc mg/L	Nonpolar O&G mg/L	Polar O&G mg/L	Total O&G mg/L
Mount Hood Chemical																					
01	03/23/1995	1200Z	7.03		16	6					0.098					0.05					7
01	06/12/1995	1200Z	7.25		8	3		1				0.02	0.006					0.05			4
01	10/19/1995	1200Z	7.07																		3
01	11/23/1995	1200Z	6.88																		<3
01	12/28/1995	1200Z	7.13																		<3
01	01/08/1996	1200Z	6.93																		8
01	01/19/1996	1200Z			68	130		38	<0.003	0.0015	0.1	0.0722	0.046	<0		0.0183		0.628			16
01	02/06/1996	1200Z	7.05		4	6			<0.05	<0.005	<0.005	<0.02	<0.05	<0		<0.01		0.08	6		9
01	03/25/1996	1200Z	6.99																		<3
01	04/01/1996	1200Z	6.86																		4
01	05/24/1996	1200Z	6.73		5	5			<0.05	<0.005	0.011	<0.02	<0.05	<0		<0.01		0.16	5		8
01	06/21/1996	1200Z	6.84																		<3
01	10/14/1996	1200Z	7.22		7	3			<0.05	<0.005	<0.005	<0.02	<0.05	<0.0005		<0.01		0.06			6
01	03/03/1997	1200Z	7.05		3		5		<0.05	<0.005	<0.005	0.04	<0.05	<0.0005		0.01		0.16			<3
01	12/30/1997	1200Z	7.15			11						<0.02	<0.05					<0.02	3	<3	4
01	12/30/1997	1200Z	6.7	15	53	154				<0.04	<0.02	0.027	<0.2		<0.2	<0.05	<0.3	0.148			13
01	01/14/1998	1200Z	7.03			5						<0.02	<0.05					<0.02	<3	<3	<3
01	05/12/1998	1200Z	6.95			14						<0.02	<0.05					<0.02	<3	<3	<3
01	10/15/1998	1200Z	7.2			59						<0.02	<0.05					0.06			3
01	11/20/1998	1200Z	6.9	13.5	460	173						0.087	<0.1					0.984			24
01	11/30/1998	1200Z	7.05			75						0.08	0.2					0.38			<3
01	12/14/1998	1200Z	7.1			102						0.16	0.23					0.19			7
01	01/11/1999	1200Z	6.9			63						<0.03	<0.1					0.22			5
01	02/18/1999	1200Z	7		89	156						0.059	<0.1					0.26			16.3
01	02/25/1999	1200Z	7			95						0.06	0.1					0.35			7
01	06/07/1999	1200Z	7			82						0.05	<0.1					0.18			4
01	11/22/1999	1200Z	6.6			59						0.05	<0.1					0.38			0.38
01	11/24/1999	1200Z	6.3		140	67						0.055	<0.1					0.41			<5
01	06/01/2000	1200Z										0.104	0.021					0.3			
01	06/01/2000	1200Z	6.5			82						<0.03	<0.1					0.33			<5

Table 3a
NPDES Stormwater Results for Industries Discharging to the Outfall 19

Location Code	Collection Date	Permit Type	pH SU	Temp. °C	TP mg/L	COD mg/L	TSS mg/L	TOC mg/L	Arsenic mg/L	Cadmium mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Silver mg/L	Zinc mg/L	Composite Total O&G mg/L	Polar O&G mg/L	Total O&G mg/L
Tube Forgings of America Inc.																						
01	03/13/1995	1200Z				17	32	2.7	0	0	0.007	0.019	0.029	0		0			0.234			1
01	06/03/1995	1200Z				51	52	10.3	<0	<0.003	0.016	0.044	0.058	<0		<0.02			0.395			
01	09/25/1995	1200Z				95	119		<0.005	<0.003	0.011	0.035	0.029	<0		<20			0.427	9.6	3	
01	12/06/1996	1200Z	6.92			29	39	8	<0.005	<0.004	0.015	0.028	0.024	<0.0005		<0.02			0.355			<5
01	10/29/1997	1200Z			0.14	38	40	5.6		<0.004	<0.005	0.011				<0.02			0.397			<5
01	01/14/1998	1200Z	6.74				162					0.068	0.054						1.14			10+13
01	05/12/1998	1200Z	7.72			139	114	17.1				0.047	0.031						1.39			14
01	10/13/1998	1200Z	6.5				92					0.03	<0.06						0.36			4.9
01	01/19/1999	1200Z	6.8				84					0.031	<0.25						0.48			8.4
01	11/08/1999	1200Z	6.8				170					0.027	<0.08						0.71			9
01	02/28/2000	1200Z	6.5				35					0.015	<0.08						0.36			3.7
02	03/08/1995	1200Z				68	100	5.7	<0.005	<0.001	0.003	0.034	0.047	<0.0005		<0.004			0.304			17.6
02	03/13/1995	1200Z				30	36	4.9	0	0	0.015	0.023	0.059	0		0			0.565			
02	04/07/1995	1200Z																				4
02	06/03/1995	1200Z				106	168	15.5	<0.005	<0.003	0.026	0.054	0.071	<0		<0.02			0.699			
02	09/25/1995	1200Z				143	137	13.3	<0.005	<0.003	0.019	0.039	0.043	<0.0005		<0.02			0.698		<1	
02	11/27/1995	1200Z	9.1	9.1		51	222	17		0.001	0.025	0.129	0.209	0.001	<0.003	0.01	<0.02	<0	0.614			13
02	01/24/1996	1200Z	8.13			<5	6	0.8	<0.005	<0.003	<0.005	0.01	0.009	0.0005		<0.02			0.113		<5	
02	02/06/1996	1200Z	6.6	12		15	55.7	9	0.0075	0.0002	0.0078	0.0289	0.053	<0.0005		0.007			0.203			11
02	02/06/1996	1200Z	6.6	12		15	55.7	9	0.0075	0.002	0.0078	0.0289	0.053	<0.0005		0.007			0.203			11
02	11/21/1996	1200Z	8.8	11		120	178	37.2	0.002	0.001	0.017	0.049	0.065	<0.0005	<0.003	0.022	<0.02		0.581			14
02	12/06/1996	1200Z	6.81			13	15	2.6	<0.005	<0.004	<0.005	0.011	0.011	<0.0005		<0.02			0.216			<5
02	10/08/1997	1200Z	8			38	92.3					<0.02	<0.3						0.214			16
02	10/29/1997	1200Z			0.03	14	10	3		<0.004	<0.005	<0.01				<0.02			0.239			<5
02	01/14/1998	1200Z	8.37				72					0.023	0.027						0.471			<5
02	05/12/1998	1200Z	8.7			61	118	11.6				0.03	0.014						1.58			<5
02	10/13/1998	1200Z	7.6				58					0.025	<0.06						0.25			<2
02	11/20/1998	1200Z	6.3			29	57					<0.03	<0.1						0.677			12
02	01/19/1999	1200Z	6.8				16					0.056	<0.25						0.34			<2
02	02/08/1999	1200Z	6.9			14	38					0.03	<0.1						0.46			<5
02	06/24/1999	1200Z	6.9			23	63.2					0.042	<0.1						0.68			<5
02	11/08/1999	1200Z	8.1				75					0.021	<0.08						0.55			4.3
02	11/10/1999	1200Z	8.6			7	72.3					0.035	<0.1						0.35			5.8
02	02/28/2000	1200Z	6.4				65					0.014	<0.08						0.28			17
03	11/27/1995	1200Z	7.7	9.4			26	9.8		0.001	0.004	0.017	<0.02	0.0005	<0.003	<0.004	<0.02	<0.0005	0.316			11
03	01/24/1996	1200Z	8.14			18	56	2.8	<0.005	<0.003	0.025	0.034	0.021	<0.0005		<0.02			0.258		<5	
03	02/06/1996	1200Z	6.7	12		100	52	40	0.0073	0.0005	0.0148	0.0335	0.03	<0.0005		0.0148			0.649			12.6
03	02/06/1996	1200Z	6.7	12		100	52	40	0.0073	0.0005	0.0148	0.0335	0.03	<0.0005		0.0148			0.649			12.6
03	11/21/1996	1200Z	7.6	11		87	81	29.3	<0.001	<0.001	0.018	0.026	0.032	<0.0005	<0.003	0.022	0.06		0.94			19
03	12/06/1996	1200Z	6.54			23	25	4.3	<0.005	<0.004	0.016	0.016	0.013	<0.0005		<0.02			0.407			<5
03	10/08/1997	1200Z	6.8			34	18					<0.02	0.3						0.434			11
03	10/29/1997	1200Z			0.02	20	<5	3.4		<0.004	<0.005	0.088				<0.02			0.606			<5
03	01/14/1998	1200Z	7.14				208					0.059	0.052						2.03			12
03	05/12/1998	1200Z	7.57			69	33	14.7				0.047	0.01						1.89			6
03	10/13/1998	1200Z	6.7				18					0.025	<0.06						0.73			2.7
03	11/20/1998	1200Z	7.3			10	112					0.039	<0.1						0.312			6.8
03	01/19/1999	1200Z	6.7				24					0.046	<0.25						0.96			3
03	02/08/1999	1200Z	6.5			37	34					0.04	<0.1						1			9.7
03	06/24/1999	1200Z	6.6			34	15					0.058	<0.1						0.8			6.6
03	11/08/1999	1200Z	7				81					0.023	<0.08						2.5			5.3
03	11/10/1999	1200Z	7.2			23	30					0.031	<0.1						1.4			5.5
03	02/28/2000	1200Z	6.9				36					0.013	0.1						0.68			8.7

Table 3a
NPDES Stormwater Results for Industries Discharging to Outfall 19

Location Code	Collection Date	Permit Type	Daily Flow	pH	Temp.	TP	BOD5	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Total O&G
			gallons	SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
TOSCO																			
04	07/09/1997	1300J		7.4		0.23		6	2	5.3	<0.12	<0.01	<0.02	0.011	<0.06	<0.0003	<0.03	0.14	<2
04	12/03/1997	1300J		6.2		0.23		<10	16	2.2	0.2	0.01	0.062	0.021	0.18	<0.0004	0.054	0.14	2.5
04	01/01/1998	1300J	489.58	7.18															6.242
04	02/01/1998	1300J	1656	7.05															6.42
04	04/01/1998	1300J	74	7.08															9.556
04	05/01/1998	1300J	428	7.09															5.556
04	05/19/1998	1300J		7.2	14.3			20	2					0.02	<0.1			0.069	7.1
04	06/29/1998	1300J	89.33	7.3		<0.05		<10	2	4.86	<0.12	<0.01	<0.02	0.02	<0.08	<0.0004	<0.03	0.09	4.4
04	07/01/1998	1300J		7.1															4.157
04	09/01/1998	1300J	67	7.2															<2
04	10/01/1998	1300J	~229	6.96															4.719
04	11/01/1998	1300J	*1149	*7.02															*4.585
04	12/01/1998	1300J	259	*5.78															3.5
04	12/28/1998	1300J	284	*6.73		0.14		<10	8	1.7	<0.06	<0.005	<0.01	0.16	0.043	<0.0004	0.023	0.19	6.4
04	01/01/1999	1300J	809	*5.91															9.08
04	02/01/1999	1300J	1661	*5.96															6.374
04	03/01/1999	1300J	656	*6.04															7.75
04	03/18/1999	1300J		6.6															3.3
04	04/01/1999	1300J	139	*6.17															8.471
04	05/01/1999	1300J	259	*6.09															9.56
04	06/01/1999	1300J	*154	*6.35															*4.29
04	06/08/1999	1300J		7			<10	<10	3	5.5	<0.12	<0.01	<0.02	0.015	<0.06	<0.0004	<0.03	0.15	<2
04	07/01/1999	1300J		*6.29															5.495
04	09/28/1999	1300J		7.5							<0.12	<0.01	<0.02	<0.021	<0.06	0.0027	<0.051	0.091	3.6
04	10/25/1999	1300J																	2.3
04	11/11/1999	1300J	*817	6.2															3
04	11/23/1999	1300J		6	11.9			<5	6					<0.03	<0.1			0.12	<5
04	12/02/1999	1300J		6.4		<0.3		13	18	0.8	<0.12	<0.01	<0.01	<0.01	<0.08	<0.0003	<0.03	0.09	<2
04	12/09/1999	1300J		6.4															<2
04	12/16/1999	1300J	*313																<2
04	12/21/1999	1300J		6.1															
04	12/30/1999	1300J		6.2															<2
04	01/05/2000	1300J	*698	6.4															<2
04	01/20/2000	1300J		6.2															<2
04	02/09/2000	1300J		6															<2
04	02/22/2000	1300J	*347	6.7															3.6
04	03/09/2000	1300J	*536	6.6															<2
04	03/22/2000	1300J		7															3.9
04	04/03/2000	1300J																	
04	04/04/2000	1300J		6.9															3.1
04	04/24/2000	1300J	*156	6.7															2.2

Table 3a
NPDES Stormwater Results for Industries Discharging to Outfall 19

Location Code	Collection Date	Permit Type	Daily Flow	pH	Temp.	TP	BOD5	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Total O&G
			gallons	SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
TOSCO																			
04	05/10/2000	1300J	*251	6.3															<2
04	05/24/2000	1300J		6.7															2.7
04	06/07/2000	1300J		6.9															<2
04	06/20/2000	1300J		7.5		0.03		<10	3.3	3.6	<0.012	<0.02	0.05	<0.01	<0.08	<0.0003	<0.03	0.03	2.5
04	06/01/1997	INDIV	46	7.11															4.22
04	09/01/1997	INDIV		7.41															7.66
04	10/01/1997	INDIV	346	7.23															5.73
04	11/01/1997	INDIV	208	7.18															4.6
04	12/01/1997	INDIV	560	7.23															9.759

*Average

Table 3a
NPDES Stormwater Results for Industries Discharging to Outfall 19

Location Code	Collection Date	Permit Type	Temp.	TP	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Zinc	Total O&G
			°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
UNOCAL																			
04	06/09/1995	1200T		0.07	20	9	8.45					0.05	0.0003					0.55	
04	11/22/1995	1200T	11.4	<0.06	7	5.6	4.4		<0.001	0.003	0.004	<0.02	0.001	<0.003	<0.004	<0.02	<0	0.103	11
04	01/24/1996	1200T	5.6	<0.06	28	3	<3	<0.003	<0.0001	0.002	0.0075	0.005	<0		0.004			0.066	8.1
04	02/01/1996	1200T	6.71																5.32
04	04/01/1996	1200T	6.61																5.3
04	05/01/1996	1200T	6.99																7.33
04	06/01/1996	1200T	6.88																5.1
04	09/01/1996	1200T	7.12																5.63
04	10/01/1996	1200T	6.53																4.32
04	11/01/1996	1200T	6.45																4.52
04	12/01/1996	1200T	6.76																3.3
04	02/01/1997	1200T	6.75																4.95
04	02/13/1997	1200T	6.95																4.194
04	02/19/1997	1200T	7.11																3.587
04	02/23/1997	1200T	6.39																8.9
04	02/28/1997	1200T	6.55																3.146
04	03/01/1997	1200T	6.39																2.1
04	03/03/1997	1200T	6.28																2.727
04	03/03/1997	1200T	6.24																2.826
04	03/07/1997	1200T	6.12																1.319
04	03/11/1997	1200T	6.33																1.011
04	03/19/1997	1200T	6.7																0.435
04	03/26/1997	1200T	6.72																4.324
04	04/01/1997	1200T	6.96																1.77

Table 3b
NPDES Stormwater Data for City of Portland

Date	Subsample Time	Hardness mg $CaCO_3$/L	Cadmium (Dissolved) ug/L	Chromium (Dissolved) µg/L	Copper (Dissolved) ug/L	Lead (Diss.) ug/L	Silver (Dissolved) ug/L	Zinc (Dissolved) ug/L	Cadmium (Total) ug/L	Chromium (Total) µg/L	Copper (Total) ug/L	Lead (Total) ug/L	Silver (Total) ug/L	Zinc (Total) ug/L	Ammonia-Nitrogen mg/L	COD mg/L	BOD_5 mg/L	Cond. (Lab) umhos/cm	Nitrate-Nitrogen mg/L	PO4-P (Dis) mg/L	TDS mg/L	TKN mg/L	TP mg/L	TS mg/L	TSS mg/L
10/09/1998	05:59 to 06:13	98.0	0.1 U		5.57	3.14	0.27	17.8	6.09		441	862	111	1730	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/09/1998	06:14 to 06:29	22.8	0.33		9.99	0.99	0.1 U	102	1.32		59.0	70.8	3.51	351	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/09/1998	06:30 to 07:44	23.8	0.19		10.3	1.91	0.1 U	90.7	0.93		50.2	69.3	1.12	262	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/09/1998	07:45 to 08:59	14.8	0.21		7.97	1.77	0.1 U	63.5	1.57		39.8	54.2	1.15	182	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/09/1998	05:59 to 06:29	NA	NA		NA	NA	NA	NA	NA		NA	NA	NA	NA	0.35	590	35	62	0.31	0.092	100	4.63	1.55	760	660
10/09/1998	06:30 to 08:59	NA	NA		NA	NA	NA	NA	NA		NA	NA	NA	NA	0.39	94	5	43	0.30	0.046	23.0	1.07	0.32	126	103
01/13/1999	21:14 to 21:29	43.0	0.31		9.32	1.50	0.1 U	171	0.70		54.0	58.9	5.70	339	0.18	65	10	87	0.92	0.030	99	1.06	0.31	197	98
01/13/1999	21:29 to 21:44	37.8	0.48		16.7	10.6	0.1 U	205	0.82		77.9	91.3	8.89	371	0.13	72	8	58	0.53	0.024	76.0	0.99	0.35	249	173
01/13/1999	21:44 to 23:00	46.0	0.27		6.13	1.01	0.1 U	104	0.59		30.5	28.2	0.58	199	0.12	39	4	59	0.71	0.032	87.1	0.73	0.31	168	81
01/13/1999	23:00 to 00:15	52.4	0.17		3.90	0.69	0.1 U	59.3	0.30		16.0	11.8	0.13	106	0.15	16	4 U	95	1.5	0.053	120	0.57	0.20	147	22
03/08/1999	6:59 to 7:14	34.2	0.23		9.75	0.62	0.1 U	176	0.55		57.5	36.1	0.64	307	0.18	59	9	76	0.97	0.037	68.0	1.02	0.22	180	112
03/08/1999	7:14 to 7:29	31.6	0.38		8.98	1.04	0.1 U	126	0.73		27.2	15.4	0.69	194	0.15	41	7	70	0.96	0.039	68	0.86	0.18	141	73
03/08/1999	7:29 to 8:45	38.4	0.16		4.17	0.47	0.1 U	51.4	0.24		13.7	5.97	0.1 U	81.4	0.11	12	3	94	1.7	0.046	100	0.55	0.13	125	22
03/08/1999	8:45 to 10:00	46.6	0.1 U		2.72	0.26	0.1 U	19.2	0.12		8.49	2.47	0.1 U	30.7	0.10	6	2 U	117	2.2	0.050	130	0.35	0.11	134	7
10/25/1999	10:44 to 10:58	137	0.61		64.4	4.30	0.79	536	3.50		254	182	38.6	1760	2.23	470	72	308	1.8	0.13	370	7.94	4.55	841	474
10/25/1999	10:59 to 11:13	86.4	0.71		48.0	1.72	0.80	634	3.80		169	103	40.3	1240	1.19	240	34	190	1.1	0.090	220	5.16	0.92	455	238
10/25/1999	11:23 to 12:33	62.0	0.56		38.5	1.71	0.33	380	6.49		96.4	54.9	28.6	665	0.89	130	18	121	0.76	0.11	130	2.87	0.49	221	91
10/25/1999	12:38 to 13:48	45.2	0.42		27.9	1.53	0.31	230	1.64		77.9	42.7	19.2	409	2.00	93	14	111	0.51	0.19	120	3.53	0.52	191	75
01/31/2000	Flow Composite	21.6	0.46		6.08	0.66	0.23	81.3	0.87		27.7	25.2	4.77	184	0.14	39	5	43	0.67	0.030	52	0.66	0.21	135	83
02/22/2000	Flow Composite	28.6	1.58 *		8.52	1.26	0.1 U	116	0.72		34.1	26.8	1.62	255	0.17	40	4	64	0.79	0.034	59	1.05	0.29	143	84
09/30/2000	Flow Composite	23.6	0.24	0.62	17.6	1.28	0.13	100	1.36	16.6	118	66.2	24.5	410	0.32	99	14	40.9	0.41	0.091	43	1.83	0.58	231	188

U = Not detected at method reporting limit shown

NA = Not analyzed

* = Reported result may reflect incidental contamination

Table 4
Outfall 19 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.
3950	NL	NL	Reynolds Metals Co.	Reynolds Metals Co.	Reynolds Metals Co.	NL	NL
4000	NL	NL	NL	Steel Products of Oregon	NL	NL	McDowell Welding
4015	NL	Wilhelm Trucking	Wilhelm Trucking	Wilhelm Trucking	Wilhelm Trucking	Wilhelm Trucking	NL
4135	West Side Auto Wrecking	West Side Auto Wrecking	West Side Auto Wrecking	West Side Auto Wrecking	West Side Auto Wrecking	NL	NL
4201	Griffith Rubber Mills	Griffith Rubber Mills	Griffith Rubber Mills	Griffith Rubber Mills	Griffith Rubber Mills	NL	NL
4300	McCullough and Sons (tank mfrs.)	McCullough & Sons Metal Fabricators	McCullough & Sons Metal Fabricators	McCullough & Sons Metal Fabricators	McCullough & Sons Metal Fabricators	NL	NL
4315	Portland Sand Blast Co.	Portland Sand Blast Co.	Portland Sand Blast Co.	Brazil & Co. (used machinery)	Brazil & Co. (used machinery)	Brazil & Co. (used machinery)	Brazil Electric Motors
4600	NL	NL	NL	BF Goodrich Tires	BF Goodrich Tires	West Coast Paper	West Coast Paper
4608	NL	NL	NL	Master Fence Fittings	Master Fence Fittings	NL	NL
4621	NL	NL	NL	Consolidated Freightways (tanker division)	Consolidated Freightways (tanker division)	Power Rents Inc.	Power Rents Inc.
5275	NL	NL	NL	Specialty Truck Parts Inc. (auto wreckers)	NL	NL	NL
5300	Union Oil of California (plant)	NL	NL	NL	NL	NL	NL
5315	NL	NL	NL	Berry Transport	Berry Transport	Berry Transport	CET Environmental Services
NW Yeon	NW Yeon	NW Yeon	NW Yeon	NW Yeon	NW Yeon	NW Yeon	NW Yeon
4200	NL	NL	NL	Pacific Light Materials Foundry	NL	NL	NL
4240	NL	NL	NL	NL	Pacific Light Materials Foundry	Pacific Light Materials Foundry	NL
4285	NL	NL	NL	NL	NL	NL	Michelin Tire Corp.
4465	NL	NL	NL	Fire Engine 16	Fire Engine 16	Fire Engine 16	City of Portland
4466	NL	NL	NL	NL	NL	NL	NL
NW 35th	NW 35th	NW 35th	NW 35th	NW 35th	NW 35th	NW 35th	NW 35th
3605	NL	NL	NL	Trumbull Asphalt Co.	Trumbull Asphalt Co.	Trumbull Asphalt Co.	NL

Table 4
Outfall 19 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW Doane Ave.	NW Doane Ave.	NW Doane Ave.	NW Doane Ave.	NW Doane Ave.	NW Doane Ave.	NW Doane Ave.	NW Doane Ave.
5500	NL	NL	Union Oil of California—garage	Union Oil of California—garage	Union Oil of California—terminal	NL	NL
5528	NL	NL	Union Oil of California—terminal	Union Oil of California—terminal	Union Oil of California—terminal	Unocal 76 Northwest Area	Unocal 76 Northwest Area
5531	NL	NL	Standard Oil of California—motor transport dept. and	Standard Oil of California—motor transport dept. and	Standard Oil of California—motor transport dept. and plant	Chevron Oil	Chevron Oil
5814	NL	NL	NL	NL	NL	NL	NL
NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.
3600	Russell's Moorage	NL	NL	NL	NL	NL	NL
3630	Oceanic Terminals Inc./ Oregon Stevedoring Co.	Oceanic Terminals Inc./ Oregon Stevedoring Co.	Municipal Terminal #2 Pier/ Oregon Stevedoring Co.	Municipal Terminal #2 Pier/ Oregon Stevedoring Co.	Municipal Terminal #2 Pier/ Oregon Stevedoring Co.	Municipal Terminal #2 Pier/ Oregon Stevedoring Co.	NL
3641	NL	NL	NL	NL	NL	Concannon Paper	Concannon Paper
3645	NL	Schnitzer Steel Products Co.	Schnitzer Steel Products Co.	Schnitzer Steel Products Co.	Schnitzer Steel Products Co.	Schnitzer Steel Products Co.	NL
3660	NL	City Fire Bureau Engine #6 and Boat	City Fire Bureau Engine #6 and Boat	City Fire Bureau Engine #6 and Boat #2	City Fire Bureau Engine #6 and Boat #2	City Fire Bureau Engine #6 and Boat	NL
3710	NL	NL	NL	NL	NL	James River Corp. (paper)	James River Corp. (paper)
3850	Shaver Transportation Co. (towing)	Shaver Transportation Co. (towing)	NL	NL	NL	NL	NL
3900	Parker-Schramm Paving Plant	Parker-Schramm Paving Plant	NL	NL	NL	NL	NL
4012	NL	NL	American Ship Dismantlers Inc.	American Ship Dismantlers Inc.	American Ship Dismantlers Inc.	NL	NL
4350	NL	NL	NL	NL	NL	Gunderson Inc.	Gunderson Inc.
4700	NL	NL	Gunderson Bros. (steel fabricators)	Gunderson Bros. (steel fabricators)	Gunderson Bros. (steel fabricators)	Gunderson Bros. (steel fabricators)	NL
4850	NL	NL	NL	NL	NL	NL	Lakeside Industries
4900	NL	NL	Shaver Transportation Co. (towing)	Shaver Transportation Co. (towing)	Shaver Transportation Co. (towing)	NL	NL
4927	NL	NL	Acme Trading & Supply Co. (scrap metal)	Acme Trading & Supply Co. (scrap metal)	Acme Trading & Supply Co. (scrap metal)	NL	Acme Trading & Supply/ Empire Metals Corp.

Table 4
Outfall 19 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.
4959	NL	NL	Airco Industrial Gases (acetylene gas)	Airco Industrial Gases (acetylene gas)	Airco Industrial Gases (acetylene gas)	NL	NL
5005	NL	NL	Northern States Mfg. & Materials (wall board mfrs.)	Northern States Mfg. & Materials (wall board mfrs.)	Northern States Mfg. & Materials (wall board mfrs.)	NL	NL
5041	NL	NL	NL	NL	NL	NL	Applied Industries of Portland
5200	NL	NL	Oregon Steel Mills Inc. (rolling mill)	Oregon Steel Mills Inc. (rolling mill)	NL	NL	Tube Forgings of America
5325	Signal Oil Co.	Signal Oil Co.	Signal Oil Co.	NL	NL	NL	NL
5500	NL	NL	Douglas Oil Co. of California (asphalt terminal)	Douglas Oil Co. of California (asphalt terminal)	Chevron Oil Co.	NL	NL
5501	NL	NL	Chevron Asphalt Co. (mfrs.)	Chevron Asphalt Co. (mfrs.)	Chevron Asphalt Co. (mfrs.)	NL	NL
5700	NL	NL	Flintkote Co. (roofing materials)	Flintkote Co. (roofing materials)	Flintkote Co. (roofing materials)	NL	NL
6345	NL	NL	Shell Oil Co. (asphalt plant)	Shell Oil Co. (asphalt plant)	Shell Oil Co. (asphalt plant)	NL	NL
6350	NL	NL	Bird & Son Inc. (asphalt roofing products mfr.)	Bird & Son Inc. (asphalt roofing products mfr.)	Bird & Son Inc. (asphalt roofing products mfr.)	NL	NL
6451	Pacific Roofing Co. (mfrs.)	NL	NL	NL	NL	NL	NL
6529	NL	NL	Industrial Air Products Co. (acetylene plant)	Industrial Air Products Co. (acetylene plant)	Industrial Air Products Co. (acetylene plant)	NL	NL

Table 5
Outfall 19 EPA Toxic Release Inventory List and Hazardous Waste Generator List

RNO	Address	Company	EPA ID	TRI ID	SIC Code	Generator Status	Releases to Environment	Chemicals Used on Site
R941190640	5501 NW Front Ave	Chevron Products Company Willbridge	ORD009031873	97210WLLBR5501N	2911	LQG	*	*
R941191040	4488 NW Yeon Ave	Color Magic Inc	ORD049799232		2752	SQG	*	*
R941191030	4466 NW Yeon	Dura Industries Inc	ORD083647347	97210DRNDS4466N	3479	SQG	*	*
R941190480	4444 NW Yeon Ave	Mt Hood Chemical Corp		97201MTHDC4444N	2841	*	*	Phosphoric Acid, Sodium Nitrite, Certain Glycol Ethers
R941190480	4444 NW Yeon Ave	Mt Hood Chemical Corp	ORD009020108	97210MTHDC4444N	2842	CEG	*	*
R941190650	4465 NW Yeon Ave	Portland Cy of Fire Bureau Haz Was	ORD981768690		9224	SQG	*	*
R941201230	3950 NW Yeon Ave	Quadra Corporation	ORQ000000414		2899	CEG	*	*
R941190160	5528 NW Doane Ave	Tosco Portland Terminal	ORD087458196		5171	LQG	*	*
R941190060	4309 NW St Helens	Western Fluid Power	ORD052211737		3492	CEG	*	*

CEG=Conditionally Exempt Generator
LQG = Large Quantity Generator
SQG = Small Quantity Generator
* No information available in database

Table 6
Outfall 19 EPA Corrective Action List

EPA ID	Handler Name	Address	Zip	CA 050	CA 075	CA 999
ORD049799232	Color Magic Inc	4488 NW Yeon Ave	97210	Yes	Lo	Yes

Corrective Action Event Codes Used as Column Headings Have the Following Meanings:

Event Code	Event Description
CA050	RFA Completed
CA075	CA Prioritization (NCAPS)
CA999	CA Process Is Terminated

Table 7
Outfall 19 EPA RCRA Treatment Storage Disposal

Address	EPA ID	TRI Facility ID	Name
4466 NW Yeon Ave	ORD083647347	97210DRNDS4466N	Dura Ind. Inc.
4444 NW Yeon Ave	ORD009020108	97210MTHDC4444N	Mt. Hood Chemical Corp.

Table 8
Outfall 19 DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI	CERCLIS	Action	Status
R941190400	5275 NW St. Helens Rd	Anderson Brothers Property	970		State Basic Preliminary Assessment recommended (PA)	LIS
R941190860	4315 NW St. Helens Rd	Brazil & Co.	1026		State Basic Preliminary Assessment recommended (PA)	SUS
R941190451	4927 NW Front Ave	Calbag Metals	2454		State Expanded Preliminary Assessment recommended (XPA)	SUS
R941191030	4466 NW Yeon Ave	Dura Industries	111		Site Screening recommended	SUS
R649741622	5200 NW Front Ave	Front LP Properties	1239		State Expanded Preliminary Assessment recommended (XPA)	SUS
R649741611	5034 NW Front Ave	Glacier Northwest Inc.	2378		Site Screening recommended	SUS
R941191120	4850 NW Front Ave	Lakeside Industries	2372		State Basic Preliminary Assessment recommended (PA)	SUS
r941180264	5550 NW Front Ave	McCall Oil	134		Remedial Investigation	SUS
R941190480	4444 NW Yeon Ave	Mt. Hood Chemical Corp.	81	9020108	No further State action required	NFA
R941191040	4488 NW Yeon Ave	Mt. Hood Chemical Property	1328		No further State action required	NFA
R941190501	4959 NW Front Ave	Schnitzer Investment Corp	2442		State Expanded Preliminary Assessment recommended (XPA)	SUS
R941191140	4900 NW Front Ave	Shaver Transportation Company	2377		State Expanded Preliminary Assessment recommended (XPA)	SUS
R941190160	5528 NW Doane Ave	Unocal - Willbridge Terminal	177		Remedial Investigation	SUS

LIS = Listed
NFA = No Further Action
SUS = Suspected

1/ 25,160 = 1599

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 970

shows data entered as of November 27, 2000 at 3:06:25 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 970	Site Name: Anderson Brothers Property		CERCLIS No:
	Address: 5275 NW St. Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots:
	Latitude: 45 deg. 33 ' 33"	Longitude: 122 deg. 44 ' 22"	Site Size: 3.9 acres
Other Site Names:			
	Northwest Field Services Inc.		
	Berry Transport Inc.		
Operations:			
	Name: Anderson Brothers Property		
	Comments: Former trucking company hauling agricultural products, dry freight and bulk . oil and gas; site now being leased by an environmental consulting firm		
	Years of Operation: 1948-1988		
	SIC Code: 4231		Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	Oil, motor oil, Stoddard solvent, paint waste, solvent wastes.
Manner and Time of Release:	Spill from a 55-gallon drum - Time of release 3/89. Other releases unknown
Contamination Information:	The property at 5315 NW St Helens Rd was used by a trucking firm for 40 years. The primary activity was bulk oil and gas transporting. At one point the company had 30 trucks, all of which were serviced and repaired at the facility. Information regarding drums on site suggest that other contaminants on site included paint, solvents (toluene, mineral spirits), used motor oil, and varnish. The quantity of these other contaminants appears to be low in comparison to the quantity of oil and gas. One spill of paint is documented on site. Soil was removed and one soil sample taken. Only EP Toxicity was performed for metals, not total metal analysis. Detection limits for the soil sample analysis for solvents (EPA 601) were high due to a significant amount of hydrocarbons present. Three drums of waste and 14 drums of paint-contaminated soil were removed.
Pathways:	Depth of groundwater fluctuates between 3.4 and 13.3 feet below ground level. The predominant direction of groundwater flow is northeast. The site is not fenced.
Environmental/Health Threats:	Potential groundwater contamination.

Status of Investigative or Remedial Action:	(10/17/94 GMW/SAS) The former property owner decommissioned 5 underground storage tanks (USTs) from the site in 12/88, and minor diesel contamination was found in soil beneath the tanks. Contamination was removed to "sight and smell" standards then in place. Fourteen drums of contaminated soil associated with a 1989 paint spill were removed, but confirmation sampling failed to quantify remaining contaminants. The paint spill occurred at the 5315 address. Northwest Field Services, Inc, the current property leasee, identified 3 locations with visual evidence of petroleum contamination in early 1994. They removed 59 tons of soil from 1 of these 3 areas, and left soil contamination with up to 4,100 ppm diesel in place in the southern part of the excavation. This removal occurred at the 5275 address. The site warrants further action under a low to medium priority. In addition, Site Assessment recommends placing the site on the Confirmed Release List.
Data Sources:	Correspondence from owner and/or operator. Hazardous Waste Manifests. Hahn & Associates report "An Environmental Property Transfer Assessment - Level I," dated 7/17/89. Northwest Field Service letter report to DEQ, dated 9/13/94. Leaking UST file #26-88-0115.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
HYDROCARBONS	Soil	4,100 ppm	04/12/1994	Y		
PAINT WASTES AND SOLVENTS	Soil					

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	08/16/1989		Debbie Bailey	DEQ		SAS
SITE EVALUATION	12/27/1990	12/27/1990	Matt McClincy	DEQ		SAS
Insufficient information to list	12/28/1990		Matt McClincy	DEQ		SAS
Listing Review completed	12/28/1990	12/28/1990	Matt McClincy	DEQ		SAS
State Basic Preliminary Assessment recommended (PA)	12/28/1990	12/28/1990	Matt McClincy	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	10/17/1994	10/17/1994	Gil Wistar	DEQ	NW	SAS
SITE PRIORITY EVALUATION FOR FURTHER ACTION	10/17/1994	10/17/1994	Gil Wistar	DEQ	NW	SAS
Facility proposed for Confirmed Release List	12/05/1994	12/05/1994	Angela Schrock	DEQ	HQ	SAS
Petition or request granted	01/17/1995	03/08/1995	Angela Schrock	DEQ	HQ	SAS
Extension requested by owner/operator	01/17/1995	03/08/1995	Angela Schrock	DEQ	HQ	SAS
Owner/operator comments received on listing notification	03/10/1995	09/14/1995	Gil Wistar	DEQ	HQ	SAS
Review for final listing	09/01/1995	09/14/1995	Gil Wistar	DEQ	HQ	SAS
Listing on Confirmed Release List recommended	09/11/1995	09/11/1995	Gil Wistar	DEQ	HQ	SAS
Facility placed on Confirmed Release List	09/14/1995	09/14/1995	Gil Wistar	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1026

shows data entered as of November 27, 2000 at 3:09:19 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1026	Site Name: Brazil & Co.		CERCLIS No:
	Address: 4315 NW St..Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots:
	Latitude: 45 deg. 33 ' 17"	Longitude: 122 deg. 43 ' 59"	Site Size: 0 acres

Other Site Names:

Operations:

Contamination Information

Hazardous Substances/Waste Types: PCBs

Manner and Time of Release:

Contamination Information: Owner may have dismantled transformers on-site and routinely dumped their contents onto the ground.

Pathways:

Environmental/Health Threats:

Status of Investigative or Remedial Action:

Data Sources: Database report filed 7/6/89; Phone memo

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	03/22/1990		Sara Laumann	DEQ	HQ	SAS
Insufficient information to list	12/28/1990		Matt McClincy	DEQ	HQ	SAS
Listing Review completed	12/28/1990	12/28/1990	Matt McClincy	DEQ	HQ	SAS
SITE EVALUATION	12/28/1990	12/28/1990	Matt McClincy	DEQ	HQ	SAS
State Basic Preliminary Assessment recommended (PA)	12/28/1990	12/28/1990	Matt McClincy	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2454

shows data entered as of November 27, 2000 at 3:10:19 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2454	Site Name: Calbag Metals		CERCLIS No:
	Address: 4927 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 1400
	Latitude: 45 deg. 33 ' 28"	Longitude: 122 deg. 43 ' 53"	Site Size: 4.71 acres
Other Site Names:			
	ACME Trading and Supply		
Operations:			
	Name: Calbag Metals		
	Comments: .		
	Years of Operation: unknown		
	SIC Code: 3341		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	
Manner and Time of Release:	
Contamination Information:	Sampling results from the Portland Harbor revealed elevated levels of barium, cadmium, lead, mercury, and zinc in Willamette River sediments adjacent to the site.
Pathways:	
Environmental/Health Threats:	The site lies in an industrialized area. No residentially zoned properties occur within a quarter mile of the site. Because a substantial portion of the site is paved, the risk exposure to potentially contaminated surface soil appears low.
Status of Investigative or Remedial Action:	Based on initial sampling results from a river sediment quality study, the Calbag Metals site has been identified as a potential source of contamination to the Portland Harbor. (2/2/00 MTP/SAP) Strategy Recommendation completed December 1999. An Expanded Preliminary Assessment should be conducted at the site to evaluate sediment contamination as a result of discharges from the outfalls or shallow contaminated groundwater discharge to the Willamette River.

Data Sources:

1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for USEPA, May 1998.
2) DEQ LUST Database.
3) DEQ HWIMSy Hazardous Waste Generator Database.
4) DEQ SPINS Spill Database.
5) MetroScan Property Records, Multnomah County, Oregon.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ANTIMONY	Sediment	5 ppm (downstream)	09/01/1997	Y		
ANTIMONY	Sediment	6 ppm (upstream)	09/01/1997	Y		
BARIUM	Sediment	197 ppm	09/01/1997	Y		
BENZOIC ACID	Sediment	380 ppb	09/01/1997	Y		
CADMIUM	Sediment	0.7 ppm	09/01/1997	Y		
LEAD	Sediment	32 ppm	09/01/1997	Y		
MERCURY	Sediment	0.2 ppm	09/01/1997	Y		
SILVER	Sediment	1.5 ppm	09/01/1997	Y		
ZINC	Sediment	126 ppm (downstream)	09/01/1997	Y		
ZINC	Sediment	181 ppm	09/01/1997	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site Screening recommended (EV)	12/01/1999	12/01/1999	Mark Pugh	DEQ	NW	SAS
SITE EVALUATION	12/09/1999	12/21/1999	Mark Pugh	DEQ	NW	SAS
Site added to database	12/09/1999	12/09/1999	Janelle Waggy	DEQ	NW	VCS
Insufficient information to list	12/21/1999	12/21/1999	Mark Pugh	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	12/21/1999	12/21/1999	Mark Pugh	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 111

shows data entered as of November 27, 2000 at 3:13:47 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 111	Site Name: Dura Industries		CERCLIS No:
	Address: 4466 NW Yeon AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 106,103
	Latitude: 45 deg. 33 ' 8"	Longitude: 122 deg. 43 ' 34"	Site Size: 3.6 acres
Other Site Names:			

Operations:

Name: Dura Industries

Comments: Paint shop/plating .

Years of Operation:

SIC Code: 3479 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	cadmium, chromium, lead
Manner and Time of Release:	Manner and time of release unknown; discovered March 1985.
Contamination Information:	The facility has received NOVs for various hazardous waste management practices. From the source file, it is hard to confirm a release. Sampling by the source indicates a release occurred. Later samples (split w/DEQ) showed lower levels of contaminants (what appears to be the only soil sample is negative). (12/18/90 MJM) The soil sample run by the facility was for total metals. Cd and Cr appear to be above what is considered background in the area. The DEQ sample analysis was an EP-Tox, which showed the two metals were not leachable.
Pathways:	Possible soil contamination.
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	There was more sampling later and the values were lower. There appears to be one soil sample. The results from Federal Testing were inconsistent with the later results. This issue was never resolved.
Data Sources:	Source File Program DEQ HW, NW Region; Inspection reports; correspondence from owner and/or operator; Notice of Violation Letter; Complaint form; Lab results.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
CADMIUM	Soil	206 ppm				
CHROMIUM	Soil	236 ppm				
LEAD	Soil	335 ppm				

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	07/28/1988		Michael Zollitsch	DEQ	HQ	SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ	HQ	SAS
Insufficient information to list	12/18/1990		Matt McClincy	DEQ	HQ	SAS
Listing Review completed	12/18/1990	12/18/1990	Matt McClincy	DEQ	HQ	SAS
SITE EVALUATION	12/18/1990	12/19/1990	Matt McClincy	DEQ	HQ	SAS
Site Screening recommended (EV)	03/24/2000	03/24/2000	Gil Wistar	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

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NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1239

shows data entered as of November 27, 2000 at 3:15:04 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1239	Site Name: Front LP Properties		CERCLIS No:
	Address: 5200 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: four contiguous tax lots
	Latitude: 45 deg. 33 ' 34.92"	Longitude: 122 deg. 44 ' 1.74"	Site Size: approx. 44 acres

Other Site Names:

Portland Harbor Sediment Study

Tube Forgings

Hampton Lumber Sales

CMI Northwest

Lonestar NW

Operations:

Name: Lone Star Northwest

Comments: .

Years of Operation: September 1989 - Mar 94

SIC Code: 3200 Operating Status: Inactive

Name: Tube Forgings of America

Comments: pipe fitting manufacturing facility (Oregon Steel Mills was operator prior to . 1976)

Years of Operation: 1979 to present

SIC Code: 3494 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Waste oil on-site. Willamette River sediments: antimony, barium, cadmium, lead, mercury, silver, thallium, zinc, 4-methyphenol, benzoic acid.
Manner and Time of Release:	

Contamination Information:	(5/7/92 Enforcement Section) As a result of complaints received, DEQ staff inspected the site on 11/20/91 and 12/10/91. Staff observed approximately 43 55-gallon containers of waste stored on site. Most of the containers were of poor integrity and some were stored on soil in a non-upright position. Three above-ground waste storage tanks were observed and waste batteries (some broken) were also present. RP was unable to identify the contents in the majority of the containers. (6/17/99 JMW/SAS) Sampling results from the Portland Harbor Sediment Study revealed antimony, barium, cadmium, lead, mercury, silver, thallium, zinc, 4-methylphenol and benzoic acid in river sediments. (2/14/00 MTP/SAP) Glacier (new operator at Lonestar NW parcel) submitted a completed Site Assessment (SA) questionnaire, a Phase I report and a soil removal report. The removal was done for TPH-impacted soil and it appears they removed most of it over 500 ppm. Limited sampling for a variety of constituents was conducted. PCBs were detected at 9 ppm in a 0-40 feet composite sample, but not in surface soil or drain sediment sample. There are indications of environmental impacts as a result of imported slag fill, including elevated metals over SOCLEAN in soil (Cr, Ni, Pb, Cu), and elevated pH (to 12.5) in groundwater. Of these, only Cr was above SOCLEAN. Elevated metals (over Portland Harbor reference concentrations) also appear in a storm drain sediment sample that may be a dry well. It appears these elevated metals arose from imported slag related to the Oregon Steel site as discussed in the reports.
Pathways:	
Environmental/Health Threats:	Contamination originating at the site may represent a significant threat to human health and the environment both in the uplands portion of the site and the Willamette River.
Status of Investigative or Remedial Action:	(5/7/92 Enforcement Section) "An assessment of the site to determine the full extent of soil and groundwater contamination...is necessary to protect the public health and the environment." See Stipulation and Final Order in file for more information. (6/17/99 JMW/SAS) Based on initial sampling results from a river sediment quality study, the Front Avenue Ltd property has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 4, 1999. Response from Tube Forgings has not been received. A site screening is scheduled (level III priority). (12/27/99 MTP/SAS) Strategy Recommendation completed December 10, 1999. Site consists of four tax lots occupied by three separate business owners: Tube Forgings, CMI Northwest/Hampton Lumber and Lone Star Northwest. An Expanded Preliminary Assessment (XPA) should be conducted at the site to evaluate potential upland source areas and sediment contamination resulting from discharges from the outfalls or shallow groundwater to the Willamette River.
Data Sources:	1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for USEPA, May 1997. 2) DEQ LUST Database. 3) DEQ HWIMSy Hazardous Waste Generator Database. 4) DEQ SPINS Spill Database. 5) MetroScan Property Records, Multnomah County, Oregon. 6) Northwest Geological Services, 1993, Review of Chlorinated Solvent Results, Bunker Fuel LUST, Tube Forgings of America, 5200 NW Front Street. 7) Century West, 1989, Report of Findings, Environmental Investigation, Tank Removal Site, 5200 NW Front Avenue, Portland, Oregon. 8) Emcon, Northwest, 1993, Tube Forgings of America, Inc., Removal of Petroleum-Hydrocarbon-Impacted Soil. 9) Zidell Phase I Environmental Assessment Preliminary Report, Sweet-Edwards/ EMCON, Inc., July 1989. 10) Soil Removal Report Zidell Property Front Avenue, Portland, Oregon, Sweet-Edwards/EMCON, January 1990.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ANTIMONY	Sediment	SD131 5 ppm	09/01/1997	Y		
ANTIMONY	Sediment	6 ppm - upstream	09/01/1997	Y		
BARIUM	Sediment	SD135A 197 ppm	09/01/1997	Y		
BENZOIC ACID	Sediment	SD135a 380 ppb	09/01/1997	Y		
CADMIUM	Sediment	SD135a 0.7 ppm	09/01/1997	Y		

CRESOL,4-	Sediment	880 ppb - downstream	09/01/1997	Y
LEAD	Sediment	SD135a 32 ppm	09/01/1997	Y
MERCURY	Sediment	SD135a 0.2 ppm	09/01/1997	Y
SILVER	Sediment	SD135a 1.5 ppm	09/01/1997	Y
THALLIUM	Sediment	15 ppm - upstream	09/01/1997	Y
ZINC	Sediment	SD131 126 ppm	09/01/1997	Y
ZINC	Sediment	SD135a 181 ppm	09/01/1997	Y

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	08/30/1992	08/30/1992	Loretta Pickerell	DEQ		SAS
Site Screening recommended (EV)	02/12/1994	02/12/1994	Dan Crouse	DEQ		SAS
SITE SCORING	11/16/1999	11/16/1999	Mark Pugh	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	12/10/1999	12/10/1999	Mark Pugh	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	12/10/1999	12/10/1999	Mark Pugh	DEQ	NW	SAS
PRELIMINARY ASSESSMENT EQUIVALENT	12/10/1999	12/10/1999	Mark Pugh	DEQ	NW	SAS
Proposal for Inventory recommended	12/10/1999	12/10/1999	Mark Pugh	DEQ	NW	SAS
Facility proposed for Confirmed Release List	03/29/2000	03/29/2000	Kim Van Patten	DEQ	NW	SAS
Facility proposed for Inventory	03/29/2000	03/29/2000	Kim Van Patten	DEQ	NW	SAS
Owner/operator comments received on listing notification	04/13/2000	04/13/2000	Kim Van Patten	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

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Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2378

shows data entered as of November 27, 2000 at 3:15:55 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2378	Site Name: Glacier Northwest Inc.		CERCLIS No:
	Address: 5034 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: Lot 1
	Latitude: 45 deg. 33 ' 32"	Longitude: 122 deg. 43 ' 50"	Site Size:
Other Site Names:			
	Portland Harbor Sediment Study		
	SEE ECSI #1239 (Front LP Properties)		
	Lone Star Northwest		
Operations:			
	Name: Lone Star Northwest		
	Comments: .		
	Years of Operation: approx February 1988 - March 1994		
	SIC Code: 3200		Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	bis(2-Ethylhexyl)phthalate
Manner and Time of Release:	
Contamination Information:	Weston sampling results from the Portland Harbor Sediment Study revealed bis(2-Ethylhexyl) phthalates in river sediments.
Pathways:	
Environmental/Health Threats:	

Status of Investigative or Remedial Action:	(6/18/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Lone Star NW property has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent 3/3/99. A response has not been received. A site screening is scheduled (level III priority). (12/27/99 JMW/SAP) Strategy Recommendation for Front LP Properties completed December 1999. High priority for a Preliminary Assessment w/sampling, Front LP Properties consists of four contiguous tax lots occupied by three separate businesses: Tube Forgings of America, CMI Northwest/Hampton Lumber, and Lone Star Northwest, Inc. See ECSI #1239. (2/24/00 JMW/SAP) Response from Site Assessment Review notice received in February 2000.
Data Sources:	1) Portland Harbor Sediment Investigation Report, Roy F. Weston, Inc, 5/98. 2) Zidell Phase 1 Environmental Assessment Preliminary Report, Sweet-Edwards EMCON, Inc., July 31, 1989. 3) Soil Removal Report, Zidell Property, Front Avenue, Portland, Oregon, Sweet-Edwards/EMCON, January 29, 1990. 4) Phase II Environmental Site Assessment, Zidell Property, Final Report, Sweet-Edwards/EMCON, November 3, 1989.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	06/18/1999	06/18/1999	Janelle Waggy	DEQ	NW	VCS
Site Screening recommended (EV)	06/18/1999	06/18/1999	Steve Fortuna	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

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Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Details for Site ID 2372

shows data entered as of November 27, 2000 at 3:16:56 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2372	Site Name: Lakeside Industries		CERCLIS No:
	Address: 4850 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 700
	Latitude: 45 deg. 33 ' 28"	Longitude: 122 deg. 43 ' 45"	Site Size: 18.42 acres
Other Site Names:			
	Portland Harbor Sediment Study		
Operations:			
	Name: Lakeside Industries		
	Comments: .		
	Years of Operation: 1988 - Current		
	SIC Code: 1610		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Antimony, barium, cadmium, lead, mercury, silver, zinc, 4-methylphenol, and benzoic acid present in river sediments near the site.
Manner and Time of Release:	
Contamination Information:	Weston sampling results from the Portland Harbor Sediment Study revealed metals and semivolatile organic compounds in river sediments adjacent to the site.
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(6/11/99 JMW/SAP) Based on intitial sampling results from a river sediment quality study, the Lakeside Industries property has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was send on March 3, 1999. Response from Lakeside Industries was received April 27, 1999. A site screening is scheduled (level III priority). (11/23/99 MTP/SAP) Strategy Recommendation completed November 23, 1999. Preliminary Assessment (PA) recommended for evaluation of operational history and potential contaminant sources.

Data Sources:

1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc., for USEPA, May 1998.
2) Shaver Transportation response to DEQ Site Assessment Information Request, April 15, 1999.
3) DEQ LUST Database.
4) DEQ Hazardous Waste Information System (HWIMSy) Database.
5) DEQ Spill Information Network (SPINS) Database.
6) MetroScan Property Records, Multnomah County, Oregon.
7) EPA SITEINFO Mapping Application.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ANTIMONY	Sediment	6 ppm (5 ppm downstream)	09/30/1999	Y		
BARIUM	Sediment	197 ppm	09/30/1997	Y		
BENZOIC ACID	Sediment	380 ppb	09/30/1997	Y		
CADMIUM	Sediment	0.7 ppm	09/30/1997	Y		
CRESOL,4-	Sediment	upstream - 730 ppb	09/30/1997	Y		
LEAD	Sediment	32 ppm	09/30/1997	Y		
MERCURY	Sediment	0.2 ppm	09/30/1997	Y		
SILVER	Sediment	1.5 ppm	09/30/1997	Y		
ZINC	Sediment	181 ppm (126 ppm downstream)	09/30/1999	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	06/11/1999	06/11/1999	Janelle Waggy	DEQ	NW	VCS
Site Screening recommended (EV)	06/11/1999	06/11/1999	Steve Fortuna	DEQ	NW	SAS
SITE SCORING	11/01/1999	11/01/1999	Mark Pugh	DEQ	NW	SAS
Insufficient information to list	11/23/1999	11/23/1999	Mark Pugh	DEQ	NW	SAS
State Basic Preliminary Assessment recommended (PA)	11/23/1999	11/23/1999	Mark Pugh	DEQ	NW	SAS
SITE EVALUATION	11/23/1999	11/23/1999	Mark Pugh	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

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Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 134

shows data entered as of November 27, 2000 at 3:17:45 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 134	Site Name: McCall Oil		CERCLIS No:
	Address: 5550 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 18		Tax Lots: 17
	Latitude: 45 deg. 33 ' 50"	Longitude: 122 deg. 44 ' 20"	Site Size: 7.5 acres
Other Site Names:			
	Portland Harbor Sediment Study		
	Great Western Chemical		
Operations:			
	Name: McCall Oil		
	Comments: Petroleum terminal .		
	Years of Operation: 1975 - Present		
	SIC Code: 5171		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Petroleum, VOCs. In adjacent Willamette River sediments: aluminum, barium, cadmium, cobalt, lead, mercury, zinc, 4-methylphenol, butylbenzylphthalate, di-n-octylphthalate, dibenzofuran, LPAHs and HPAHs.
Manner and Time of Release:	Approximately 11 spills ranging up to 10,000 gallons have been documented on the site since it became an active petroleum handling facility in 1946.
Contamination Information:	An oil spill occurred on 11/4/88 at the McCall facility. 8,400 gallons of bunker 'C' oil (asphalt, tar). Cleanup was initiated by McCall Oil. Copper and arsenic contamination was discovered near the chemical plant in 1991 and a soil removal was done. Due to contamination seen on adjoining properties, a state PA was requested in 1993. Three wells were installed in 1994 and a round of groundwater samples taken. These samples showed that there was VOC contamination near the chemical plant. Two additional wells were installed in December 1994 to investigate the VOC material. (11/19/99 TBG/SAS) It appears site activities have resulted in sediment contamination adjacent to the site. Concentrations of dibenzofuran and PAHs near McCall's dock and cadmium, lead and zinc near Great Western Chemical Company's storm water outfall exceeded Portland Harbor baseline values. Although phthalates were also detected above baseline, they do not appear to be used at this site. Groundwater monitoring data shows on-site diesel or lube oil contamination may be migrating to the river, although it is not clear if subsurface migration is contributing towards documented river sediment contamination. Although elevated levels of metals and chlorinated solvents have been detected in on-site groundwater in the past, these contaminants do not appear to be migrating to the river at this time.

Pathways:	Soil and groundwater. Historically the petroleum products handled on the site have been viscous (asphalt) so the probability of migration to groundwater is relatively low. Contaminiation is expected to be limited to shallow soils.
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(3/31/95 KAC/SRS) Numerous small oil spills have occurred during the life of the facility. All were cleaned up by facility employees. A removal action was performed in 1991 when copper and arsenic contamination was discovered in the chemical plant area. An expanded PA was begun in 1994 and included the drilling of 3 wells and soil and groundwater sampling. Two additional wells were drilled in December 1994, after VOC contamination was found near the center of the property. (11/19/99 TBG/SAP) Based on initial sampling results from a river sediment quality study, the McCall Oil site has been identified as a potential source of contamination to the Portland Harbor. A Strategy Recommendation was completed in November 1999. A Remedial Investigation (RI) is required to evaluate the potential ecological threat of the sediment contamination. (3/1/00 JMW/SAP) Voluntary Agreement for Remedial Investigation and Source Control Measures forwarded to McCall Oil and Chemical Corporation on February 29, 2000. Signed agreement due back March 31, 2000. (9/20/00 TBG/VCP) RI Agreement signed 8/16/00. RI workplan submitted on September 14, 2000.
Data Sources:	1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston Inc. for USEPA, May 1998. 2) Preliminary Assessment, prepared by EMCON Northwest, Inc. for McCall Oil and Chemical Corporation and Great Western Chemical Company, April 5, 1994. 3) Evaluation of Metal Migration, prepared by EMCON Northwest, Inc. for Great Western Chemical Company, April 26, 1994. 4) Telephone Conversation Concerning McCall Marine Terminal Construction History with Tom Bernet, November 15, 1999. 5) DEQ LUST, HWIMSy (Hazardous Waste Generator) and SPINS (Spill) Databases. 6) MetroScan Property Records, Multnomah County, Oregon.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ALUMINUM	Sediment	43700 - 43800 ppm	09/01/1997	Y		
BARIUM	Sediment	203 ppm	09/01/1997	Y		
BUNKER - FUEL OIL	Soil					
BUTYL BENZYL PHTHALATE	Sediment	120 ppb	09/01/1997	Y		
CADMIUM	Sediment	.07 ppm	09/01/1997	Y		
COBALT	Sediment	20 ppm	09/01/1997	Y		
CRESOL,4-	Sediment	880 ppb	09/01/1997	Y		
DI-n-OCTYL PHTHALATE	Sediment	110 ppb	09/01/1997	Y		
DIBENZOFURAN	Sediment	200 ppb	09/01/1997	Y		
LEAD	Sediment	47 ppm	09/01/1997	Y		
MERCURY	Sediment	0.11 - 0.17 ppm	09/01/1997	Y		
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	LPAHs - 2237 ppb	09/01/1997	Y		
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	HPAHs - 3038 ppb	09/01/1997	Y		
ZINC	Sediment	142 - 212 ppm	09/01/1997	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	08/04/1988		Michael Zollitsch	DEQ		SAS
SITE EVALUATION	02/27/1994	02/27/1994	Ken Cameron	DEQ	HQ	SRS
Insufficient information to list	02/28/1994		Ken Cameron	DEQ		SRS
Listing Review completed	02/28/1994	02/28/1994	Ken Cameron	DEQ		SRS
BASIC PRELIMINARY ASSESSEMENT	03/01/1994	06/01/1994	Ken Cameron	DEQ	HQ	SRS
EXPANDED PRELIMINARY ASSESSMENT	06/01/1994		Ken Cameron	DEQ	HQ	SRS
State Expanded Preliminary Assessment recommended (XPA)	06/01/1994	06/01/1994	Ken Cameron	DEQ		SRS
Insufficient information to list	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
Listing Review completed	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
SITE PRIORITY EVALUATION FOR FURTHER ACTION	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
Remedial Investigation recommended (RI)	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
SITE SCORING	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
Letter Agreement	02/29/2000	08/16/2000	Thomas Gainer	DEQ	NW	VCS
NEGOTIATIONS	02/29/2000	08/16/2000	Thomas Gainer	DEQ	NW	VCS
REMEDIAL INVESTIGATION	08/16/2000		Thomas Gainer	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 81

shows data entered as of November 27, 2000 at 3:19:03 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 81	Site Name: Mt. Hood Chemical Corp.		CERCLIS No: 009020108
	Address: 4444 NW Yeon AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: No further action required	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 48
	Latitude: 45 deg. 33 ' 17"	Longitude: 122 deg. 43 ' 46"	Site Size: 2.3 acres
Other Site Names:			

Operations:

Name: Mt. Hood Chemical Corp.

Comments: Manufacturer of a broad range of cleaning compounds. .

Years of Operation: 1973 to present

SIC Code: 2841 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	corrosive liquids, methylene chloride
Manner and Time of Release:	Possible leak or spill from drum. Time of release: unknown
Contamination Information:	Manufacturer doesn't produce hazardous waste as a byproduct: feedstocks are blended or diluted to make product. Feedstocks include corrosive acids & bases & flammable liquid chemicals. There have been two events since 1973 when there has been a discharge to a sanitary sewer of liquids with pH >12.5. In the past the company has admitted to washing out empty surfactant feedstock drums onto a gravel surface which may flow to a storm drain connection. However, no hazardous substances were detected in this area after sampling. A parking lot storm drain catchment basin was sampled & found to contain 4400 mg/L of methylene chloride. Rain could carry chemical to storm drain & ultimately to Willamette River. May have resulted from feedstock drum leaking to drain.
Pathways:	
Environmental/Health Threats:	

Status of Investigative or Remedial Action: (6/8/92 KPD/SAS) In May 1985, DEQ's Northwest Region required Mt. Hood Chemical to clean out its storm drain catchment basin and alter its rinsing and storage practices. The company pumped and shoveled out the storm drain catchment basin in June 1985. Sand and gravel from the catchment was dried and stored in pails inside the building. Confirmation sampling in July 1985 found methylene chloride at less than 2.5 ppb. Empty drums were sent off-site for reconditioning, or washed out inside the building. Residues were funneled into a city-approved neutralization pit. The drum storage site was moved to where the residues could be contained. Site Assessment believes no further action is required at this site at this time under the state Superfund program.

Data Sources:

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
METHYLENE CHLORIDE	Other	4400 mg/L	07/30/1984	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	01/01/1983			EPA		
EPA PA1/SI1	10/29/1984	12/10/1984		EPA		
No Further Remedial Action Planned under Federal program	12/10/1984	12/10/1984		EPA		
Site added to database	04/04/1988		Mike Rosen	DEQ	HQ	SRS
Refer to RCRA Program	04/04/1988			DEQ	NW	RCRA
SITE EVALUATION	06/07/1992	06/07/1992	Kevin Dana	DEQ	HQ	SAS
Listing Review completed	06/08/1992	06/08/1992	Kevin Dana	DEQ	HQ	SAS
Excluded from confirmed release definition	06/09/1992		Kevin Dana	DEQ	HQ	SAS
NO FURTHER STATE ACTION REQUIRED	06/10/1992	06/10/1992	Kevin Dana	DEQ	HQ	SAS
EPA Site Inspection Prioritization	08/17/1992	08/17/1992		EPA		
No Further Remedial Action Planned under Federal program	03/30/1993	03/30/1993		EPA		

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1328

shows data entered as of November 27, 2000 at 3:19:52 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1328	Site Name: Mt. Hood Chemical Property		CERCLIS No:
	Address: 4488 NW Yeon AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: No further action required	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots:
	Latitude: 45 deg. 33 ' 10"	Longitude: 122 deg. 43 ' 30"	Site Size: 2.55 acres
Other Site Names:			
	McKesson Chemical Co.		
	Van Waters & Rogers		
Operations:			

Contamination Information

Hazardous Substances/Waste Types:	
Manner and Time of Release:	
Contamination Information:	This facility has historically been used for bulk chemical storage and distribution, as well as for transport and storage of some hazardous wastes (mostly chlorinated solvent wastes). Most of the site is paved, and chemical storage and handling took place on concrete pads or within concrete containment basins. Chemical storage and handling ceased at the site in late 1986, and in 1990, Van Waters & Rogers began to implement its RCRA Facility Closure plan. No known spills have occurred at the site since McKesson Chemical Co. began operations in 1961. A 1991 RCRA Facility Assessment prepared by DEQ supported RCRA "clean closure." A 1991 DEQ soil sample from the most downgradient portion of the site contained 460 ppb TCA, compared to the Oregon Soil Cleanup Standard of 9,000 ppb. Van Waters & Roger's sample from the same area was non-detect for VOCs, including TCA.
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(10/3/95 GMW/SAS) In 1/92, DEQ's Hazardous Waste Section determined that Van Waters & Rogers had accomplished "clean closure" of the site under RCRA. This was based on a full decontamination of the facility, including the concrete hazardous waste storage pad and sump. Concrete in the sump, although found to be stained, had no cracks that penetrated the matrix, and concrete core samples contained no significant contamination. Because there is no evidence of significant contamination anywhere else at this facility, Site Assessment recommends no further action.

Data Sources: RCRA source files, DEQ Northwest Region.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	01/24/1993		Dan Crouse	DEQ	HQ	SAS
Site Screening recommended (EV)	02/12/1994	02/12/1994	Dan Crouse	DEQ		SAS
SITE EVALUATION	08/22/1995	09/29/1995	Gil Wistar	DEQ	NW	SAS
Listing Review completed	09/29/1995	10/03/1995	Gil Wistar	DEQ	NW	SAS
NO FURTHER STATE ACTION REQUIRED	10/03/1995	10/03/1995	Gil Wistar	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

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Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2442

shows data entered as of November 27, 2000 at 3:20:44 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2442	Site Name: Schnitzer - Kittridge		CERCLIS No:
	Address: 4959 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 1200
	Latitude: 45 deg. 33 ' 28.9"	Longitude: 122 deg. 43 ' 50.4"	Site Size: 4.95 acres
Other Site Names:			
	Portland Harbor Sediment Study		
	Schnitzer Investment Corp		
	Asset Recovery		
Operations:			
	Name: Schnitzer Investment Corp		
	Comments: .		
	Years of Operation: 1996 - July 1999		
	SIC Code: 5093		Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	Cadmium, lead, mercury, zinc, barium, silver and benzoic acid have been recorded in Willamette River sediments adjacent to the site. Metals and high pH readings (in the vicinity of 12.5) have been documented in subsurface soil and groundwater on-site.
Manner and Time of Release:	
Contamination Information:	Sampling results from the Portland Harbor revealed elevated levels of barium, cadmium, lead, mercury, silver, zinc, and benzoic acid in sediments adjacent to the site. Elevated levels of metals have been documented in subsurface soil and groundwater in the portion of the site formerly used for storage of lime sludges (the lime pond). This area also had pH readings in the range of 12.5. Impervious materials now cover this area, and most of the site.
Pathways:	
Environmental/Health Threats:	The site lies in an industrialized area. No residentially zoned properties occur within a quarter mile of the site. Because a substantial portion of the site is paved, the risk exposure to potentially contaminated surface soil appears low.

Status of Investigative or Remedial Action: Based on initial sampling results from a river sediment quality study, the Schnitzer site has been identified as a potential source of contamination to the ECD. (2/2/00 TBG/SAP) Strategy Recommendation completed December 1999. An Expanded Preliminary Assessment should be conducted at the site to evaluate sediment contamination as a result of discharge from the outfalls or shallow contaminated groundwater discharge to the Willamette River.

Data Sources:
1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for USEPA, May 1998.
2) DEQ LUST Database.
3) DEQ HWIMSy Hazardous Waste Generator Database.
4) DEQ SPINS Spill Database.
5) MetroScan Property Records, Multnomah County, Oregon.
6) CH2M Hill, 1996, Asset Recovery Groundwater Assessment.
7) CH2M Hill, 1996, Remedial Actions Completed at the former Asset Recovery Site.
8) CH2M Hill, 1995, Environmental Site Assessment for the Asset Recovery Site.
9) The Earth Technology Corporation (ETC), 1990, Report on an Environmental Assessment of Property located at 4959 NW Front Avenue, Portland, Oregon, for Northwest Airgas, Inc.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ANTIMONY	Sediment	5 ppm - downstream	09/01/1997	Y		
ANTIMONY	Sediment	6 ppm - upstream	09/01/1999	Y		
BARIUM	Sediment	197 ppm	09/01/1999	Y		
BENZOIC ACID	Sediment	380 ppb	09/01/1999	Y		
CADMIUM	Sediment	0.7 ppm	09/01/1999	Y		
LEAD	Sediment	32 ppm	09/01/1999	Y		
MERCURY	Sediment	0.2 ppm	09/01/1999	Y		
SILVER	Sediment	1.5 ppm	09/01/1999	Y		
ZINC	Sediment	126 ppm - downstream	09/01/1999	Y		
ZINC	Sediment	181 ppm - upstream	09/01/1999	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	11/18/1999	11/18/1999	Janelle Waggy	DEQ	NW	VCS
Site Screening recommended (EV)	11/18/1999	11/18/1999	Mark Pugh	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	11/24/1999	11/24/1999	Mark Pugh	DEQ	NW	SAS
SITE EVALUATION	11/24/1999	11/24/1999	Mark Pugh	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	11/24/1999	11/24/1999	Mark Pugh	DEQ	NW	SAS
SITE SCORING	12/13/1999	12/13/1999	Mark Pugh	DEQ	NW	SAS
Facility proposed for Confirmed Release List	03/20/2000	03/20/2000	Kim Van Patten	DEQ	NW	SAS
Extension requested by owner/operator	05/02/2000	05/02/2000	Kim Van Patten	DEQ	NW	SAS
Petition or request granted	05/12/2000	05/12/2000	Kim Van Patten	DEQ	NW	SAS
Owner/operator comments received on listing notification	06/20/2000	06/20/2000	Kim Van Patten	DEQ	NW	SAS
Decision Not to List Site (on the CRL or Inventory)	08/01/2000	08/01/2000	Chuck Donaldson	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

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Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.
NPL Site: Is the site on EPA's Superfund List? (Y/N).
Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.
Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2377

shows data entered as of November 27, 2000 at 3:21:32 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2377	Site Name: Shaver Transportation Company		CERCLIS No:
	Address: 4900 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 800
	Latitude: 45 deg. 33 ' 28"	Longitude: 122 deg. 43 ' 46"	Site Size: 5.17 acres
Other Site Names:			
	Portland Harbor Sediment Study		
Operations:			
	Name: Shaver Transportation Company		
	Comments: .		
	Years of Operation: 1958 - Current		
	SIC Code: 4499		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Elevated metals in adjacent sediment include: mercury, zinc, cadmium, copper, and lead.
Manner and Time of Release:	
Contamination Information:	Weston sampling results from the Portland Harbor Sediment Study revealed bis(2-ethylhexyl) phthalate, metals, and benzoic acid in river sediments adjacent to the site.
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(6/7/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Shaver Transportation property has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 3, 1999. Response from Shaver Transportation submitted April 15, 1999. A site screening is scheduled (level II priority). (11/23/99 MTP/SAP) Strategy Recommendation completed November 23, 1999. An Expanded Preliminary Assessment (XPA) to include sediment sampling and an evaluation of operational history to determine if the site has contributed to metals contamination in adjacent sediment is recommended.

Data Sources:

1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for USEPA, May 1998.
2) Shaver Transportation response to DEQ Site Assessment Information Request, April 15, 1999.
3) DEQ LUST Database.
4) DEQ Hazardous Waste Information System (HWIMSy) Database.
5) DEQ Spill Information Network (SPIN) Database.
6) MetroScan Property Records, Multnomah County, Oregon.
7) EPA SITEINFO Mapping Application.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
CADMIUM	Sediment	1.12 ppm	06/23/1999	Y		
COPPER	Sediment	61.7 ppm	06/23/1998	Y		
LEAD	Sediment	103 ppm	06/23/1998	Y		
MERCURY	Sediment	0.22 ppm	06/23/1998	Y		
ZINC	Sediment	201 ppm	06/23/1998	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	06/17/1999	06/17/1999	Janelle Waggy	DEQ	NW	VCS
Site Screening recommended (EV)	06/17/1999	06/17/1999	Steve Fortuna	DEQ	NW	SAS
SITE SCORING	10/29/1999	10/29/1999	Mark Pugh	DEQ	NW	SAS
Insufficient information to list	11/29/1999	11/29/1999	Mark Pugh	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	11/29/1999	11/29/1999	Mark Pugh	DEQ	NW	SAS
SITE EVALUATION	11/29/1999	11/29/1999	Mark Pugh	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 177

shows data entered as of November 27, 2000 at 3:23:22 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 177	Site Name: Unocal - Willbridge Terminal		CERCLIS No:
	Address: 5528 NW Doane AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 16
	Latitude: 45 deg. 33 ' 41"	Longitude: 122 deg. 44 ' 30"	Site Size: 18.6 acres

Other Site Names:

Union Oil - Willbridge Terminal

Tosco - Willbridge Terminal

Chevron - Willbridge Dist Terminal (ECSI #25)

Shell Oil Company - Willbridge Plant (ECSI #160)

Willbridge Bulk Fuel Area (ECSI #1549)

Operations:

Name: Unocal - Willbridge Terminal

Comments: Petroleum transfer terminal. .

Years of Operation: 1920s to present

SIC Code: 5171 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	diesel, gasoline, heavy oils and constituents
Manner and Time of Release:	Past practices (spills). Time of release: unknown; 2/22/97 tank overfill (unattended tank transfer).
Contamination Information:	The US Coast Guard discovered oil seeping from the shoreline on 1/28/82. The site is between Union Oil and the Chevron Terminal. The site is on Union property but both Union and Chevron agreed to conduct groundwater contamination studies. The program was modified in 1986 and is continuing. (11/12/91 RP/NWR) There are currently 4 oil/water separators on site that treat wastewater from surface runoff and groundwater treatment. However, they are designed to remove free product and not dissolved contamination. The extent of petroleum contamination of soil and groundwater, especially dissolved contamination has not been determined. At least 4 separate releases have been identified, based on work done by Riedel (diesel, gasoline, and heavy oil). Groundwater contamination continues to bypass the recovery systems as witnessed by ongoing seepage into the Willamette River (most recently on 10/28/91 by Andree Pollock DEQ/NWR).

	While NPDES permits have (10/15/97; SMF): Additional release of 11,700 gallons of premium grade gasoline at Tank Farm #2 on 2/22/97. MSDS suggests that the product may have contained MTBE (up to 11 percent) and tetraethyl lead (33 ppm).
Pathways:	Surface water, soil; recovery system and 4 oil/water separators to remove free product from groundwater maintained by Riedel Environmental Services. Free product on shallow groundwater table represents inhalation threat to on- and off-site workers, and contact/inhalation/fire/explosion hazard to potential utility trench workers along NW Front Street. Dissolved constituents represent a threat to aquatic life in the river.
Environmental/Health Threats:	Seepage of contaminated groundwater into the Willamette River. Potential vapor exposure to on- and off-site workers. Potential vapor/contact/fire/ explosion threat to utility trench workers along NW Front Avenue.
Status of Investigative or Remedial Action:	Responsible party cleanup or removal recommended. (11/12/91 RP/NWR) Extent of petroleum and dissolved phase petroleum contamination is unknown. Recovery systems have dealt exclusively with free-product contamination of groundwater, mainly diesel. Other petroleum products have been released, but have not been adequately investigated. (8/9/95 DMC/SAS) For more information on remedial activities, refer to ECSI site #1549. Remedial action for 2/22/97 gasoline spill should be addressed through existing Consent Order for Willbridge Bulk Fuel Area (ECSI #1549). ECSI #25, 160, and 177 have been combined into ECSI #1549.
Data Sources:	NPDES permit review and ongoing evaluation by Andree Pollock; (10/28/91) inspection reports; correspondence from owner and/or operator; Notice of Violation Letter; Spill/response documents (OARS #97-0545).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
DIESEL - FUEL OIL	Groundwater	unknown	10/28/1991		Y	
DIESEL - FUEL OIL	Soil	unknown	10/28/1991		Y	
DIESEL - FUEL OIL	Surface Water	unknown (seepage into Willamette River)	10/28/1991		Y	
GASOLINE	Groundwater	unknown	10/28/1991		Y	
GASOLINE	Soil	unknown	10/28/1991		Y	
GASOLINE	Surface Water	unknown (seepage into Willamette River)	10/28/1991		Y	
OIL OR FUEL RELATED COMPOUNDS	Groundwater	unknown (heavy oil)	10/28/1991		Y	
OIL OR FUEL RELATED COMPOUNDS	Soil	unknown (heavy oil)	10/28/1991		Y	
OIL OR FUEL RELATED COMPOUNDS	Surface Water	unknown (heavy oil seepage into Willamette River)	10/28/1991		Y	

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	08/16/1988		Michael Zollitsch	DEQ	HQ	SAS
SITE EVALUATION	11/11/1991	11/11/1991	Rai Peterson	DEQ	NW	SAS
Listing Review completed	11/12/1991	11/12/1991	Rai Peterson	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	11/13/1991	11/13/1991	Rai Peterson	DEQ	NW	SAS
State Basic Preliminary Assessment recommended (PA)	11/14/1991	11/14/1991	Rai Peterson	DEQ	NW	SAS
BASIC PRELIMINARY ASSESSEMENT	07/27/1992		Karl Morgenstern	DEQ	HQ	SAS
Facility proposed for Confirmed Release List	10/05/1992	12/08/1992	Karl Morgenstern	DEQ		SAS

Owner/operator comments received on listing notification	01/27/1993		Dan Crouse	DEQ		SAS
REMEDIAL INVESTIGATION	09/02/1993		Sheree Stewart	DEQ	HQ	SRS
NEGOTIATIONS	09/02/1993	03/31/1994	Sheree Stewart	DEQ	HQ	SRS
REMOVAL	04/01/1994	09/08/1998	Jill Kiernan	DEQ	NW	SRS
PRELIMINARY ASSESSMENT EQUIVALENT	10/01/1997	10/15/1997	Steve Fortuna	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	10/15/1997	10/15/1997	Steve Fortuna	DEQ	NW	SAS
Remedial Investigation/Feasibility Study recommended	10/15/1997	10/15/1997	Steve Fortuna	DEQ	NW	SAS
Proposal for Inventory recommended	10/15/1997	10/15/1997	Steve Fortuna	DEQ	NW	SAS
Decision Not to List Site (on the CRL or Inventory)	09/08/1998	09/08/1998	Janelle Waggy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

Return to ECSI Query Home Page

Return to Cleanup and Spills Page
Return to DEQ Home Page

Table 9
Outfall 19 DEQ Leaking Underground Storage Tanks List

RNO	Address	Log Number	Company	Cleanup Start	Cleanup End	Site Work Complete
R941190840	5315 NW St Helens	26-88-0115	Berry Transportation	5/3/89	5/3/89	5/3/89
R941190190	4200 NW Yeon	26-93-0149	EGW Machinery, Inc.	9/9/93	9/30/96	3/6/96
R941190141	3939 NW St Helens Road	26-90-0001	Bingham Construction, Inc.	12/29/89	4/11/95	4/11/95
R941190200	4000 NW St Helens Road	26-94-0001	LaGrande Steel Corp.	12/30/93	12/1/95	9/11/95
R941190280	4621 NW St Helens Road	26-92-0239	Lend Lease Trucks, Inc. – Power	7/14/92	7/24/97	
R941190130	4300 NW St Helens Road	26-90-0336	McCulloch Property	9/18/90	10/2/90	10/2/90
R941190290	4300 NW Yeon	26-90-0486	Schnitzer Investment	12/13/90		
R941190160	5528 NW Doane Ave	26-97-0577	Tosco - Portland Terminal/Unocal			
R649741622	5200 NW Front	26-88-0116	Zidells			

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

July 30, 1998 02:44 pm

INCIDENT INFORMATION

LOG NBR: 26-88-0115
UST FAC NBR: DATE REPORTED: 14-DEC-88

SITE NAME: BERRY TRANSPORTATION
SITE ADDRESS: 5315 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE:

SITE ASSESSMENT

DATE DISCOVERED: 08-DEC-88 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: Y
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: Y	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

CONTAMINANTS/IMPACTS

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

SITE/SOIL MANAGEMENT

RELEASE STOPPED: REMEDIATION COMPLETED: 03-MAY-89
CLEANUP STARTED: 03-MAY-89 NO FURTHER ACTION: 03-MAY-89

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:57 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-93-0149
UST FAC NBR: 3016 DATE REPORTED: 09-SEP-93

SITE NAME: EGW MACHINERY, INC.
SITE ADDRESS: 4200 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)224-2000

----------SITE ASSESSMENT----------

DATE DISCOVERED: 09-SEP-93 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP Y	(CP)Complaint: N	(OF)Overfill: Y
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: Y	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 09-SEP-93 REMEDIATION COMPLETED: 08-MAR-96
CLEANUP STARTED: 09-SEP-93 NO FURTHER ACTION: 30-SEP-96

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:52 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0001
UST FAC NBR: 7227 DATE REPORTED: 02-JAN-90

SITE NAME: BINGHAM CONSTRUCTION, INC.
SITE ADDRESS: 3939 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)224-2676

----------SITE ASSESSMENT----------

DATE DISCOVERED: 02-JAN-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: Y	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 29-DEC-89 REMEDIATION COMPLETED: 23-JAN-95
CLEANUP STARTED: 29-DEC-89 NO FURTHER ACTION: 11-APR-95

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 09:00 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-94-0001
UST FAC NBR: 8273 DATE REPORTED: 03-JAN-94

SITE NAME: LAGRANDE STEEL CORP.
SITE ADDRESS: 4000 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 224-8326

----------SITE ASSESSMENT----------

DATE DISCOVERED: 30-DEC-93 OFFSITE MIGRATION: Y

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: Y
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: Y	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 30-DEC-93 REMEDIATION COMPLETED: 11-SEP-95
CLEANUP STARTED: 30-DEC-93 NO FURTHER ACTION: 01-DEC-95

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:57 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-92-0239
UST FAC NBR: 5907 DATE REPORTED: 21-AUG-92

SITE NAME: LEND LEASE TRUCKS, INC. - POWER RENTS
SITE ADDRESS: 4621 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 228-1315

----------SITE ASSESSMENT----------

DATE DISCOVERED: 31-JUL-92 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: Y	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 14-JUL-92 REMEDIATION COMPLETED: 19-MAY-97
CLEANUP STARTED: 14-JUL-92 NO FURTHER ACTION: 24-JUL-97

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:53 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0336
UST FAC NBR: DATE REPORTED: 18-SEP-90

SITE NAME: MCCULLOCH PROPERTY
SITE ADDRESS: 4300 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE:

----------SITE ASSESSMENT----------

DATE DISCOVERED: 01-JUL-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist Y	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 18-SEP-90 REMEDIATION COMPLETED: 02-OCT-90
CLEANUP STARTED: 18-SEP-90 NO FURTHER ACTION: 02-OCT-90

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:58 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0486
UST FAC NBR: DATE REPORTED: 12-DEC-90

SITE NAME: SCHNITZER INVESTMENT PROPERTY
SITE ADDRESS: 4300 NW YEON
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE:

----------SITE ASSESSMENT----------

DATE DISCOVERED: 13-DEC-90 OFFSITE MIGRATION:

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: Y
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 13-DEC-90 REMEDIATION COMPLETED: 21-MAY-92
CLEANUP STARTED: 13-DEC-90 NO FURTHER ACTION: 21-MAY-92

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 09:02 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-97-0577
UST FAC NBR: 1203 DATE REPORTED: 04-AUG-97

SITE NAME: TOSCO - PORTLAND TERMINAL/UNOCAL PDX TE
SITE ADDRESS: 5528 NW DOANE AVE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 248-1530

----------SITE ASSESSMENT----------

DATE DISCOVERED: 04-AUG-97 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 04-AUG-97 REMEDIATION COMPLETED:
CLEANUP STARTED: 04-AUG-97 NO FURTHER ACTION:

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:55 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-88-0116
UST FAC NBR: DATE REPORTED: 03-NOV-88

SITE NAME: ZIDELLS
SITE ADDRESS: 5200 NW FRONT
SITE CITY: PORTLAND ZIP:
SITE COUNTY: MULTNOMAH PHONE: (503)241-0716

----------SITE ASSESSMENT----------

DATE DISCOVERED: 02-NOV-88 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: Y
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: Y	(TT)Tank Test: N	(QT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED:
CLEANUP STARTED: NO FURTHER ACTION:

(opens_inc.rpt)

Table 10
Outfall 19 DEQ Permitted Tanks List

RNO	Address	Company	Permit ID
R941291170	3031 NW St. Helens Road	St. Helens Road Cardlock	26-11864-1998-OPER
R941190330	3800 NW St. Helens Road	Texaco - Portland Sales Terminal	26-7120-1998-OPER

Table 11
Outfall 19 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
5528 NW Doane	Tosco	981517-REM	Nov-98	6000	UST	yard	NW corner of tank farm
5528 NW Doane	Tosco	970795-REM	Jul-97	3@ 550	UST	adjacent to NW Doane and railroad tracks	Diesel, waste oil, gasoline. Removed by Olympus Environmental
5528 NW Doane	Tosco	970795-REM	Jul-97	600	UST	adjacent to NW Doane and railroad tracks	Diesel, waste oil, gasoline. Removed by Olympus Environmental
5528 NW Doane	Tosco	970795-REM	Jul-97	1000	UST	adjacent to NW Doane and railroad tracks	Diesel, waste oil, gasoline. Removed by Olympus Environmental
5528 NW Doane	Tosco	970795-REM	Jul-97	5000	UST	adjacent to NW Doane and railroad tracks	Diesel, waste oil, gasoline. Removed by Olympus Environmental
5528 NW Doane	Unocal	940475--REM	Apr-94	10,000	UST	yard	Foss Environmental Decom. 10,000 diesel, rem. 675 waste oil
5528 NW Doane	Unocal	940475--REM	Apr-94	675	UST	yard	Foss Environmental Decom. 10,000 diesel, rem. 675 waste oil
5528 NW Doane	Unocal	931238	Sep-93	20,000	AST	yard	Was used for fuel additive, now for waste water
5528 NW Doane	Unocal	10250	Oct-79	6000	AST	yard	114 total tanks, 366,288 gallons
4900 NW Front Ave.	Shaver Transportation	920077	Jan-92	2@ 10000	UST	yard	
4900 NW Front Ave.	Shaver Transportation	97321	Dec-61	5000	UST	yard	
4900 NW Front Ave.	Shaver Transportation	97322	Dec-61	5000	UST	yard	
4927 NW Front Ave.	ACME Trading & Supply	920532	Apr-92	1000	AST	detached	
4927 NW Front Ave.	ACME Trading & Supply	7373	May-68	2000	AST	detached	
4927 NW Front Ave.	ACME Trading & Supply	7373	May-68	1000	AST	detached	
4927 NW Front Ave.	ACME Trading & Supply	4293	Jul-68	495	AST	detached	
4950 NW Front Ave.	Hampton Distribution Center	941424	Nov-94	6000	AST	yard	Diesel
4950 NW Front Ave.	Hampton Distribution Center	941027	Aug-94	500	AST	yard	Propane
4950 NW Front Ave.	Tricon Forest Products	900285	Feb-90	1100	AST	yard	
4950 NW Front Ave.	Tricon Forest Products	900764	Jun-90	575	AST	detached	Gasoline (forklift fuel)
4959 NW Front Ave.	ACME Trading & Supply	911485	Oct-91	550	AST	detached	
4959 NW Front Ave.	Quimby Welding Supply	911786	Dec-91	500	AST	detached	Gasoline
4959 NW Front Ave.	Quimby Welding Supply	920505	Mar-92	1500	AST	yard	
4959 NW Front Ave.	Airco (acetone storage)	7160	May-66	1500	AST	detached	
4959 NW Front Ave.	Airco	1567	May-84	1000	AST	detached	
4959 NW Front Ave.	Airco (gas plant)	891	Mar-82	1000	AST	detached	
4959 NW Front Ave.	Airco	5248	Apr-70	1150	AST	detached	Mappgas
4959 NW Front Ave.	Air Reduction Co.	93845	Jan-60	1000	UST	basement	
4959 NW Front Ave.	Air Reduction Co.	60165	Oct-50	1000	AST	basement	
4959 NW Front Ave.	Leonard & Block	23902	Jun-46	2500	UST	yard	

Table 11
Outfall 19 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
5200 NW Front Ave.	Zidell Marine	881205--REM	Nov-88	20,000	UST	yard	On Front Ave. by paint booth
5200 NW Front Ave.	Zidell Marine	880540--REM	Apr-88	4000	UST	yard	
5200 NW Front Ave.	Zidell Marine	880540--REM	Apr-88	1000	UST	yard	
5200 NW Front Ave.	Oregon Steel Mills	81938	Apr-55	2000	UST	yard	
5200 NW Front Ave.	Zidell Marine	880539--DECOMM	Apr-88	1000	UST	yard	
5200 NW Front Ave.	Zidell Marine	880539--DECOMM	Apr-88	10,000	UST	yard	
5200 NW Front Ave.	Oregon Steel Mills	4873	Nov-54	675	AST	detached	
5200 NW Front Ave.	Oregon Steel Mills	4253	Jul-52	4000	AST	detached	
5200 NW Front Ave.	Oregon Steel Mills	4872	Nov-51	2000	AST	detached	
5200 NW Front Ave.	Oregon Steel Mills	4252	Jul-52	3000	UST	yard	Diesel oil
5200 NW Front Ave.	Tube Forgings of America	87614	Aug-87	1150	AST	detached	Propane
5200 NW Front Ave.	Tube Forgings of America	1076	Nov-82	1000	AST	detached	
5200 NW Front Ave.	Tube Forgings of America	71437	Nov-52	500	AST	integral	Propane
5200 NW Front Ave.	Tube Forgings of America	71436	Nov-52	500	AST	integral	Propane
5200 NW Front Ave.	Oregon Steel Mills	86412	May-56	675	AST	detached	
5250 NW Front Ave.	Oregon Steel Mills	41426	Aug-48	675	UST	yard	Diesel oil
5250 NW Front Ave.	Oregon Steel Mills	18902	Jun-42	2@ 25000	UST	yard	
5250 NW Front Ave.	Oregon Steel Mills	18899	Jun-43	10,000	UST	yard	
5250 NW Front Ave.	Oregon Steel Mills	18898	Jun-43	10,000	UST	yard	
5480 NW Front Ave.	McCall Oil	890969--REM	Aug-89	20,000	UST	yard	
5480 NW Front Ave.	McCall Oil	890969--REM	Aug-89	4,000	UST	yard	
5480 NW Front Ave.	McCall Oil	10254	Nov-79	20,000	UST	yard	
5480 NW Front Ave.	McCall Oil	10254	Nov-79	4,000	UST	yard	
5540 NW Front Ave.	Great Western Chemical	911113	Aug-91	3,700	UST	basement	
5540 NW Front Ave.	Great Western Chemical	890877	Aug-89	1,000	UST	yard	
5501 NW Front Ave.	Chevron	970832	Aug-97	5,077	AST	detached	Heated oil used to flush asphalt from tanker
5501 NW Front Ave.	Chevron	980714	Dec-82	550	AST	detached	Asphalt bulk plant
5501 NW Front Ave.	American Bitumuls Co.	4135	Mar-52	300	AST	detached	
5501 NW Front Ave.	Chevron	950892	Aug-95	120	AST	detached	Diesel
3939 NW St. Helens Rd.	Bingham Construction Co.	891245--REM	Nov-89	3@ 10,000	UST	yard	East of office, north of shop, tanks were bare steel and patched, soil is contaminated
3939 NW St. Helens Rd.	Bingham Construction Co.	891245--REM	Nov-89	4@ 1,000	UST	yard	East of office, north of shop, tanks were bare steel and patched, soil is contaminated

Table 11
Outfall 19 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
3939 NW St. Helens Rd.	Bingham Construction Co.	891245--REM	Nov-89	8000	UST	yard	East of office, north of shop, tanks were bare steel and patched, soil is contaminated
4000 NW St. Helens	LaGrande Steel	931655--REM	Dec-93	5000	UST	yard	South of bldg, north of Express Ave.
4000 NW St. Helens	LaGrande Steel	931655--REM	Dec-93	2000	UST	yard	South of bldg, north of Express Ave.
4000 NW St. Helens	CSMI	930761	Jun-93	1500	AST	yard	
4000 NW St. Helens	Steel Products Co.	7403	Oct-68	2000	UST	yard	2000=gasoline, 5000=diesel
4000 NW St. Helens	Steel Products Co.	7403	Oct-68	5000	UST	yard	2000=gasoline, 5000=diesel
4001 NW St. Helens	Wilhelm Trucking	12852	Oct-66	10,000	UST	yard	
4061 NW St. Helens	LeFebre (SFR)	80736	Dec-54	675	UST	yard	
4300 NW St. Helens	McCullough & Sons	76675	Feb-54	300	UST	yard	
4621 NW St. Helens	Williams (ofice & whse.)	84510	Oct-55	1000	UST	yard	
5315 NW St. Helens	Berry Transportation	51883	Oct-49	1000	UST	yard	
5275 NW St. Helens	Stanton Transportation	4345	Mar-49	1000	UST	yard	
5391 NW St. Helens	Pool (SFR)	48166	May-49	675	UST	yard	

Table 12
Outfall 19 State Fire Marshal Hazardous Spills List

RNO	Address	Chemical	Date	Incident ID
R941191100	4320 NW St Helens	Tetramethylthiuammonosulf	11/27/90	02-291-900452
R941190130	4285 NW Yeon	Aluminum Chloride	08/28/88	02-291-880077
R941190860	4315 NW Front	Chemlene	08/09/88	02-291-880072
R941191140	4900 NW Front Avenue	Gw Anthraquinone 50% Liquid	08/13/97	02-291-970420
R649741630	4950 NW Front Rd	Diesel Fuel	09/07/89	02-291-890315
R941190640	5501 NW Front	Bunker C Fuel Oil	06/30/89	02-291-890236
R941190640	5501 NW Front Ave	Gasoline	04/15/98	HM-06-980022
R941190160	5528 NW Doane	450 Neutral Oil	08/19/86	02-291-860050
?	NW St Helens and Doane	Hydrogen Peroxide Solution	07/03/88	02-291-880014
R941190290	4240 NW Yeon	Diesel Fuel	05/25/95	02-291-950244
R941190160	4927 NW Front	Waste Magnesium/Teflon Flare	07/21/88	02-291-880024

Table 13
Outfall 19 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941190160	4927 NW Front	Acme Trading & Supply	13966	5093	Alkaline Cleaning Liquic	Sodium Hydroxide	Liquid	Gallons	50-199	Corrosives	
R941190160	4927 NW Front	Acme Trading & Supply	13966	5093	Aluminum Dross	Aluminum	Solid	Pounds	50,000-99,999	Dangerous When Wet	Combustible Materials
R941190160	4927 NW Front	Acme Trading & Supply	13966	5093	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	200-499	Flamm.Liq.	
R941190160	4927 NW Front	Acme Trading & Supply	13966	5093	Lubricating Oil	Refined Mineral Oil	Liquid	Gallons	200-499	Combustible Materials	
R941190160	4927 NW Front	Acme Trading & Supply	13966	5093	Nitrogen	Nitrogen	Gas	Gallons	20-49	Nonflammable Gases	
R941190160	4927 NW Front	Acme Trading & Supply	13966	5093	Propane	Propane	Gas	Gallons	20-49	Flammable Gases	Acute Health Hazard
R941190501	5041 NW Front	Applied Industrial Tech Inc	17024	5085	Bronze	Copper	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	
R941190501	5041 NW Front	Applied Industrial Tech Inc	17024	5085	Ferrecote 5856hf	Naphtha	Liquid	Gallons	20-49	Flammable	
R941190501	5041 NW Front	Applied Industrial Tech Inc	17024	5085	Gear Oil	Severely Refined Petroleum	Liquid	Gallons	50-199	Combustible Materials	
R941190501	5041 NW Front	Applied Industrial Tech Inc	17024	5085	Oven Chain Lubricant/Dixon	Petroleum Distillate/Graphite	Liquid	Gallons	200-499	Flamm.Liq.	
R941190501	5041 NW Front	Applied Industrial Tech Inc	17024	5085	Premium 105 Solvent	Petroleum Naphtha	Liquid	Gallons	200-499	Flamm.Liq.	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Acetylene	Acetylene	Gas	Cubic	500-999	Flammable Gases	Acute Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Ad-Here	Propylene Glycol Monoethyl Ether	Liquid	Gallons	50,000-99,999	Flammable	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Aero Foam	Petroleum Hydrocarbon	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Arosurf Aa 27	Tallow Diamine	Liquid	Gallons	10,000-49,999	Combustible Materials	Corrosives
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Arosurf Aa-54-100	Amines	Liquid	Gallons	10,000-49,999	Corrosives	Flammable
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Asphalt Charge Stock	Petroleum Hydrocarbons	Liquid	Gallons	5,000,000-7,499,999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Asphalt Cutback	Petroleum Distillate	Liquid	Gallons	50,000-99,999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Asphalt Emulsion	Petroleum Hydrocarbon	Liquid	Gallons	1,000,000-2,499,999	Combustible Materials	Acute Health Hazard
R941190640	5501 NW Front Ave	Chevron USA Products	5505	2911	Asphalt Liquid	Petroleum Asphalt	Liquid	Gallons	25,000,000-49,999,999	Combustible Materials	Dangerous When Wet
R941190640	5501 NW Front Ave	Chevron USA Products	5505	2911	Asphalt Liquid	Petroleum Asphalt	Liquid	Gallons	25,000,000-49,999,999	Combustible Materials	Dangerous When Wet
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Beltz 409	Sodium Hydroxide	Liquid	Gallons	200-499	Corrosives	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Bentonite Clay	Sodium Montmorillonite	Solid	Pounds	10,000-49,999	Acute Health Hazard	Chronic Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Boiler Treatment Chemicals	Potassium Hydroxide	Liquid	Gallons	1,000-4,999	Corrosives	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Butanol	Butanol	Liquid	Gallons	10,000-49,999	Flamm.Liq.	Acute Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Calcium Chloride	Calcium Chloride	Solid	Pounds	50,000-99,999	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Caustic Alkali Liquid Nos	Sodium Hydroxide	Liquid	Gallons	100,000-249,999	Corrosives	Acute Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Caustic Soda	Sodium Hydroxide	Liquid	Gallons	10,000-49,999	Corrosives	Acute Health Hazard
R941190640	5501 NW Front Ave	Chevron USA Products	5505	2911	Crude Oil	Petroleum Hydrocarbon	Liquid	Gallons	50,000,000-74,999,999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Cylinder Oil Iso46	Hydrotreated Distillate	Liquid	Gallons	50-199	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Desolve	D-Limonene	Liquid	Gallons	500-999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Detergent, Chevron	Hydrotreated Petroleum Distillates	Liquid	Gallons	200-499	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Dialia Oil Ax	Petroleum Hydrocarbon	Liquid	Gallons	50-199	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Diesel Fuel Low Sulfur	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Flamm.Liq.	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Distillate Overhead	Naphtha	Liquid	Gallons	10,000-49,999	Flamm.Liq.	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Dupont & Shell Polymers	Thermoplastic Rubber	Solid	Pounds	50,000-99,999	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Fuel Oil #6	Petroleum Oil	Liquid	Gallons	10,000-49,999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Hydraulic Oil	Highly Refined Base Lubricating Oils	Liquid	Gallons	200-499	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Indolin Sa-L	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Indulin C	Sodium Lignate	Solid	Pounds	10,000-49,999	Corrosives	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Indulin W5	Liquid Amine	Liquid	Gallons	10,000-49,999	Combustible Materials	Corrosives
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Isoprep 34 Alkaline	Sodium Phosphate	Solid	Pounds	500-999	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Kenamide W-39	Nickel	Solid	Pounds	500-999	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Kerosene	Kerosene	Liquid	Gallons	100,000-249,999	Flamm.Liq.	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Kiln Dried Salt	Sodium Chloride	Solid	Pounds	500-999	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Limestone Powder	Calcium Carbonate	Solid	Pounds	500-999	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Lubricating Oil	Refined Mineral Oil	Liquid	Gallons	200-499	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Machine Oil	Hydrocarbon Base Oil	Liquid	Gallons	20-49	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	200-499	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Muriatic Acid	Hydrochloric Acid	Liquid	Gallons	10,000-49,999	Acute Health Hazard	Corrosives
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 1005a Corrosion	Monoethanolamine	Liquid	Gallons	500-999	Corrosives	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 1258a	Naphthalene	Liquid	Gallons	1,000-4,999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 2508 Plus	Petroleum Distillates	Liquid	Gallons	200-499	Combustible Materials	

Table 13
Outfall 19 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 2548	Sodium Bisulfite	Liquid	Gallons	500-999	Acute Health Hazard	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 2813	Cyclohexylamine	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 2834	Sodium Hydroxide	Liquid	Gallons	50-199	Corrosives	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 2857	Octadecylamine	Liquid	Gallons	200-499	Acute Health Hazard	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 2899 Corrosion	Sodium Tolytriazole	Liquid	Gallons	50-199	Corrosives	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 5300	Amine Substituted Amine	Liquid	Gallons	500-999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco 7346 Microbiocide	1.Brom-3-Chloro-5	Liquid	Gallons	200-499	Oxidizers	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco Ec 1014a	Aromatic Naphtha	Liquid	Gallons	1,000-4,999	Oxidizers	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco Polymer Optimer	Acrylamide Modified Polymer	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco Transport Plus 2800	Acrylamide/Sodium Acrulate Resin	Liquid	Gallons	200-499	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nalco Tri-Act 2813	Cyclohexylamine	Liquid	Gallons	200-499	Corrosives	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Naphtha	Aliphatic Hydrocarbons	Liquid	Gallons	10,000-49,999	Flammable	Acute Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Neutral Oil	Hydrotreated Heavy Paraffin Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	Acute Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Nitrogen	Nitrogen	Liquid	Gallons	10,000-49,999	Nonflammable Gases	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Oxygen	Oxygen	Gas	Cubic	500-999	Nonflammable Gases	Oxidizers
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Perchloroethylene	Perchloroethylene	Liquid	Gallons	50-199	Acute Health Hazard	Chronic Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Petroleum Solvents	Petroleum Hydrocarbons	Liquid	Gallons	500-999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Process Waste Gas	Hydrogen Sulfide	Gas	Cubic	100,000-249,999	Flammable Gases	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Propane	Propane	Gas	Gallons	50-199	Flammable Gases	Acute Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Redicote E-11	Fatty Amine	Liquid	Gallons	500-999	Flammable	Corrosives
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Redicote E35c	Fatty Amine	Liquid	Gallons	10,000-49,999	Combustible Materials	Corrosives
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Slimicide J-12	Alkyl Dimethyl Ammonium Chloride	Liquid	Gallons	500-999	Misc.Haz. Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Solvents	Aliphatic Petroleum Distillates	Liquid	Gallons	200-499	Flammable	Acute Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Thinners	Petroleum Hydrocarbons	Liquid	Gallons	50-199	Flamm.Liq.	Chronic Health Hazard
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Turbine Oil 100	Petroleum Hydrocarbon	Liquid	Gallons	50-199	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Vacuum Gas Oil	Petroleum Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	
R941190640	5501 NW Front	Chevron USA Products	5505	2911	Vinsol Resin	Furfural	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	
R649741630	4950 NW Front	CMI Northwest	53650	5031	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq.	
R649741630	4950 NW Front	CMI Northwest	53650	5031	Propane	Propane	Gas	Gallons	200-499	Flammable Gases	Acute Health Hazard
R941190501	5500 NW Front	Kraft Mechanical Rp	54764	1711							
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Acetylene	Acetylene	Gas	Cubic	1,000-4,999	Flammable Gases	Acute Health Hazard
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Carbon Dioxide	Carbon Dioxide	Gas	Gallons	10,000-49,999	Nonflammable Gases	
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Cement	Calcium Oxide	Solid	Pounds	750,000-999,999	Acute Health Hazard	Chronic Health Hazard
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Concrete Admixtures	Portland Cement	Liquid	Gallons	10,000-49,999	Chronic Health Hazard	
R649741611	5034 NW Front Ave	Lonestar Northwest	21201	3273	Concrete Sand	Silica	Solid	Pounds	10,000,000-24,999,999	Chronic Health Hazard	
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	10,000-49,999	Flamm.Liq.	
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Fly Ash	Silicon Dioxide	Solid	Pounds	100,000-249,999	Acute Health Hazard	Chronic Health Hazard
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Gasoline	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Hydrochloric Acid	Hydrochloric Acid	Liquid	Gallons	50-199	Corrosives	Acute Health Hazard
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Lead Acid Batteries-Wet	Sulfuric Acid	Solid	Pounds	1,000-4,999	Corrosives	Acute Health Hazard
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Oxygen	Oxygen	Gas	Cubic	1,000-4,999	Nonflammable Gases	Oxidizers
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Propane	Propane	Gas	Gallons	500-999	Flammable Gases	Acute Health Hazard
R649741611	5034 NW Front	Lonestar Northwest	21201	3273	Various Types Oil	Petroleum Hydrocarbons	Liquid	Gallons	1,000-4,999	Combustible Materials	
R941190501	5035 NW Front	Midwest Sign & Screen	17108	2800	Hc 303	Methylene Chloride	Liquid	Gallons	50-199	Acute Health Hazard	
R941190501	5035 NW Front	Midwest Sign & Screen	17108	2800	Hysol Hd3561 Hardener	3,3'-Oxybis(2,1-Ethan-Diloxy)Bis-1-	Liquid	Gallons	50-199	Corrosives	
R941190501	5035 NW Front	Midwest Sign & Screen	17108	2800	Ink	Petroleum Hydrocarbon Oil	Liquid	Gallons	200-499	Combustible Materials	
R941190501	5035 NW Front	Midwest Sign & Screen	17108	2800	Ink Materials Combustibles	Petroleum Distillates	Liquid	Gallons	500-999	Combustible Materials	
R941190501	5035 NW Front	Midwest Sign & Screen	17108	2800	Solvent	Petroleum Distillate Hydrocarbon	Liquid	Gallons	200-499	Flamm.Liq.	Chronic Health Hazard
R941190160	4927 NW Front Ave A	ONRP America Inc	62928	5031	*	*	*	*	*	*	*
R941190501	5043 NW Front	Unig Distributing Rp	64660	5032	*	*	*	*	*	*	*

*No information available in database

Table 14
Outfall 19 Confirmed Release List

Site Name	Address	Zip	Site ID	Substances	Media	Phase	Program
Anderson Brothers Property	5275 & 5315 NW St. Helens Rd	97210	970	Hydrocarbons, Paint Wastes and Solvents	Soil	1	SAS
Chevron USA Asphalt Refinery	5501 NW Front Ave	97210	1281	Acenaphthylene, Arsenic, Barium, Benzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Diesel - Fuel Oil, Ethylbenzene, Gasoline, Naphthalene, Phenols, Toluene, Total Petroleum Hydrocarbons (TPH),	Soil, Groundwater	2	VCS
Texaco Portland Terminal	3800 NW St. Helens Rd	97210	169	Acenaphthene, Acenaphthylene, Anthracene, Arsenic, Benzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(ghi)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Ethylbenzene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Lead, Naphthalene, Phenanthrene, Pyrene, Toluene, Total	Groundwater, soil	2	VCS
Van Waters & Rogers	3950 NW Yeon Ave	97210	330	Benzene, Chloroform, Dichloroethane,1,2-, Dichloroethylene,1,1-, Dichloroethylene,1,2-cis-, Dichloroethylene,1,2-trans-, Ethylbenzene, Methylene Chloride, Styrene, Tetrachloroethylene, Toluene, Trichloroethane,1,1,1-, Trichloroethane,1,1,2-, Trichloroethylene,	Groundwater	1	SAS
Willbridge Bulk Fuel Area	NW Doane Ave	97210	1549	Petroleum Hydrocarbons	Soil	2	SRS

Phase

1: Facilities where remedial investigation and feasibility studies have not been initiated.

2: Facilities where remedial investigation or feasibility studies are underway.

Program

VCS: Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property under the oversight of DEQ's Voluntary Cleanup Section.

SRS: Indicates that the site may be facing enforcement action through the DEQ

SAS: Indicates that the site is still under investigation through the DEQ

Table 15
Outfall 19 SIC Information

SIC Number	SIC Definition
1541	General Contractors-Industrial Buildings and Warehouses
1629	Heavy Construction, NEC
1711	Plumbing, Heating, and Air-Conditioning
1721	Painting and Paper Hanging
1761	Roofing, Siding, and Sheet Metal Work
1790	Miscellaneous Special Trade Contractors
1791	Structural Steel Erection
2396	Girls', Children's, and Infants' Outerwear, NEC
2400	Lumber and Wood Products
2411	Logging
2421	Sawmills and Planing Mills, General
2431	Millwork
2448	Wood Pallets and Skids
2711	Newspapers: Publishing, or Publishing and Printing
2752	Commercial Printing, Lithographic
2759	Commercial Printing, NEC
2789	Bookbinding and Related Work
2796	Platemaking and Related Services
2799	Printing Trade Services, NEC
2800	Chemical/Allied Prod, NEC
2819	Industrial Inorganic Chemicals, NEC
2841	Soaps and Other Detergents, Except Speciality Cleaners
2842	Speciality Cleaning, Polishing, and Sanitary Preparations
2869	Industrial Organic Chemicals, NEC
2899	Chemicals and Chemical Preparations, NEC
2911	Petroleum Refining
2951	Asphalt Paving Mixtures and Blocks
2952	Asphalt Felts and Coatings
2992	Lubricating Oils and Greases
3273	Ready-Mixed Concrete
3411	Metal Can Manufacturing
3441	Fabricated Structural Metal
3444	Sheet Metal Work
3446	Architectural and Ornamental Metal Work
3462	Iron and Steel Forgings
3471	Electroplating, Plating, Polishing, Anodizing, and Coloring
3479	Coating, Engraving, and Allied Services, NEC
3492	Fluid Power Valves and Hose Fittings
3498	Fabricated Pipe and Pipe Fittings
3499	Fabricated Metal Products, NEC
3559	Special Industry Machinery, NEC
3594	Fluid Power Pumps and Motors
3829	Measuring and Controlling Devices, NEC
4011	Railroads, Line-haul Operating
4013	Railroad Switching and Terminal Establishments
4212	Local Trucking Without Storage
4213	Trucking, Except Local

Table 15
Outfall 19 SIC Information

SIC Number	SIC Definition
4953	Refuse Systems
5013	Motor Vehicle Supplies and New Parts
5023	Home Furnishings
5031	Lumber, Plywood, Millwork, and Wood Panels
5032	Brick, Stone and Related Construction Materials
5050	Metals and Minerals, Except Petroleum
5051	Metals Service Centers and Offices
5063	Electrical Apparatus and Equipment Wiring Supplies, and Construction Materials
5074	Plumbing and Heating Equipment and Supplies (Hydronics)
5084	Industrial Machinery and Equipment
5085	Industrial Supplies
5093	Scrap and Waste Materials
5111	Printing and Writing Paper
5170	Petroleum and Petroleum Products
5171	Petroleum Bulk Stations and Terminals
5172	Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals
5192	Books, Periodicals, and Newspapers
5521	Motor Vehicle Dealers (Used Only)
5712	Furniture Stores
5983	Fuel Oil Dealers
7353	Heavy Construction Equipment Rental and Leasing
7359	Equipment Rental and Leasing, NEC
7513	Truck Rental and Leasing, Without Drivers
8742	Management Consulting Services
9224	Fire Departments, including Volunteer-Government

NEC = Not Elsewhere Classified

Table 16
Drainage Basin for Outfall 19: Area by Landuse

Total Area by Landuse

Landuse	Total Area in Basin (acres)
Commercial	--
Industrial	93.2
Single Family Residence	1.3
Multifamily Residence	--
Vacant	351.1
Total Basin Area	**475**
Estimated Right-of-Ways	29.4

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R649741611	5034 NW Front Ave	11.68	IND	0.15
R649741622	5200 NW Front Ave	13.73	IND	5.94
R649741630	Front Ave	15.33	IND	0.21
R915504430	5391 NW St Helens Rd	0.54	IND	0.53
R941190060	4301-4309 NW St Helens Rd	2.25	IND	2.25
R941190100	4315 Wi/ NW St Helens Rd	0.84	IND	0.84
R941190141	3939 NW St Helens Rd	1.19	IND	1.19
R941190150	4015 NW St Helens Rd	2.48	IND	2.46
R941190160	5500-5528 NW Doane Ave	18.62	IND	6.44
R941190190	4200 NW Yeon Ave	4.80	IND	4.51
R941190280	4600-4670 NW St Helens Rd	3.82	IND	3.82
R941190290	4322-4338 NW Yeon Ave	7.36	IND	7.36
R941190300		0.99	IND	0.99
R941190370	5135 NW St Helens Rd	0.69	IND	0.69
R941190380	5109 NW St Helens Rd	1.89	IND	1.89
R941190400	5275 NW St Helens Rd	0.93	IND	0.93
R941190451	4927 NW Front Ave	4.70	IND	4.47
R941190480	4444 NW Yeon Ave	2.34	IND	2.34
R941190501	4959 NW Front Ave	4.68	IND	4.65
R941190640	5600 NW St Helens Rd	31.27	IND	21.31
R941190690	4135 Wi/ NW St Helens Rd	0.96	IND	0.96
R941190710	4135 NW St Helens Rd	0.96	IND	0.96
R941190720	4135 Wi/ NW St Helens Rd	1.03	IND	1.02
R941190730	4621 NW St Helens Rd	1.80	IND	1.80
R941190740	4621 Wi/ NW St Helens Rd	0.93	IND	0.93
R941190790	4621 Wi/ NW St Helens Rd	1.63	IND	1.54
R941190790	4621 Wi/ NW St Helens Rd	1.63	IND	0.00
R941190840	5315 NW St Helens Rd	2.94	IND	2.93
R941190860	4315 NW St Helens Rd	0.60	IND	0.60
R941190980	3865 NW St Helens Rd	2.99	IND	2.82
R941191030	4456 NW Yeon Ave	1.65	IND	1.64

Table 16
Drainage Basin for Outfall 19: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R941191040	4488 NW Yeon Ave	2.38	IND	2.35
R941191060	4468 NW Yeon Ave	1.93	IND	1.93
R941191070	5528 Wi/ NW Doane Ave	0.21	IND	0.21
R941191110	4309 Wi/ NW St Helens Rd	0.61	IND	0.60
R961250900	3460 NW Forest Ln	2.21	SFR	1.32
R697401690		3.50	VAC	0.02
R915504330		0.57	VAC	0.13
R915504480		0.34	VAC	0.10
R941190070		33.63	VAC	32.30
R941190110		211.53	VAC	186.25
R941190310		8.32	VAC	8.32
R941190410		0.97	VAC	0.96
R941190510		0.07	VAC	0.07
R941190520		0.37	VAC	0.37
R941190530		10.95	VAC	10.95
R941190560		10.14	VAC	0.26
R941190570		6.17	VAC	0.08
R941190580		1.61	VAC	1.61
R941190590		0.70	VAC	0.01
R941190600		2.94	VAC	0.05
R941190610		6.60	VAC	0.10
R941190770		2.31	VAC	2.31
R941190810		1.03	VAC	1.03
R941191020	4927 Wi/ NW Front Ave	0.37	VAC	0.37
R941191080		0.60	VAC	0.60
R941191160		0.01	VAC	0.01
R941191220	5600 Wi/ NW St Helens Rd	7.28	VAC	7.28
R941191250		0.04	VAC	0.04
R941191260		0.42	VAC	0.01
R941191270		0.06	VAC	0.04
R941300640		8.39	VAC	1.07
R941300650		4.53	VAC	2.63
R941300660		10.56	VAC	0.15
R941300670		24.88	VAC	13.67
R961240020		259.37	VAC	0.01
R961240050		186.16	VAC	58.32
R961240050		186.16	VAC	10.30
R961250410		9.46	VAC	2.09
TLID 1N1W24		62.85	VAC	9.59

City of Portland Stormwater Outfall 19A Summary of Existing Information

Physical Description

City of Portland Stormwater Outfall 19A is a 36-inch pipe and was constructed about 1977. Outfall 19A may have been originally an ODOT outfall but is listed in the City of Portland's outfall book. This outfall drains a small area of NW Front Avenue and has few connections. City Outfall 19 is approximately 100 feet north of Outfall 19.

The storm drainage basin for this outfall is approximately 4.8 acres and is predominately Front Avenue right-of-way (estimated 78 percent). Some small drainage is believed to come from adjacent landuses, including industrial (13 percent) and vacant (9 percent) lands.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Landuse map

There are two non-City outfalls within approximately 400 and 600 feet downstream and one non-City outfall approximately 700 feet upstream of the 19A outfall. The private outfall designations are as follows:

- WP-127: Gunderson
- WP-256: Gunderson
- WP-257: Gunderson

These non-City outfalls are assigned to Gunderson, although various tenants may contribute to the Gunderson's total discharge.

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall were identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 19A are available from one source:

- Portland Harbor Sediment Investigation, EPA/DEQ (Stations SD137 and SD135)

The two sediment sample locations sampled in the vicinity of the 19A outfall (see attached figure) had samples collected at the surface (0-10 cm). Station SD135 also had a depth-composite sample collected (0-90 cm). Sediment station SD135 is approximately 400 feet downstream from Outfall 19A. Sediment station SD137 is approximately 600 feet upstream of Outfall 19A.

Table 1 shows the available sediment data with station ID, sample ID, and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall. To identify analytes of interest, data were evaluated based on a comparison of sediment concentrations at SD137 with three times the DEQ baseline and with sediment concentrations of the upstream stations. Based on this comparison, no analytes of interest were identified. All sediment results at SD137 and SD135 were less than three times the DEQ baseline values at Outfall 19A.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ, and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 summarizes the available information on facilities currently located in the Outfall 19A drainage basin, including where site runoff drains, discharge permits, business type and whether there is exposure of site activities to stormwater.

Table 3 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 4 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 4.

Table 5 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 6 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 7 lists the SIC numbers and descriptions for the sites identified in the Table 2 facility list.

Table 8 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type.

The following databases were searched but no information was available for sites within the drainage basin:

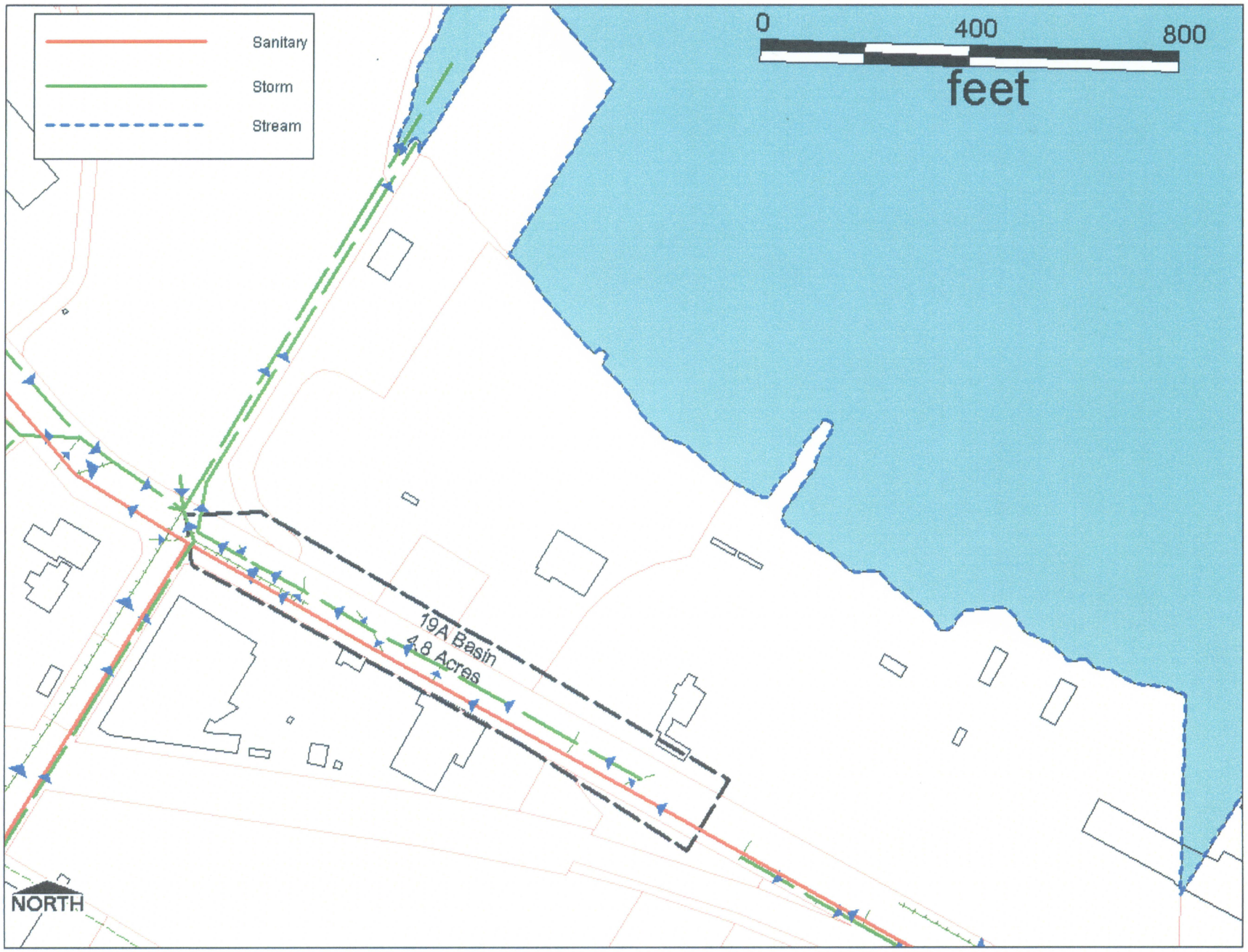
- BES Database of NPDES Stormwater Data
- EPA Toxic Release Inventory and Hazardous Waste Generators Lists
- EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)
- EPA Corrective Action List
- EPA Emergency Response Notification System List
- EPA RCRA Treatment Storage Disposal List
- DEQ Confirmed Release List (CRL)
- DEQ Leaking Underground Storage Tanks (LUST) List
- DEQ's Permitted Tanks List
- State Fire Marshal Hazardous Material Incidents List

19A Outfall Evaluation

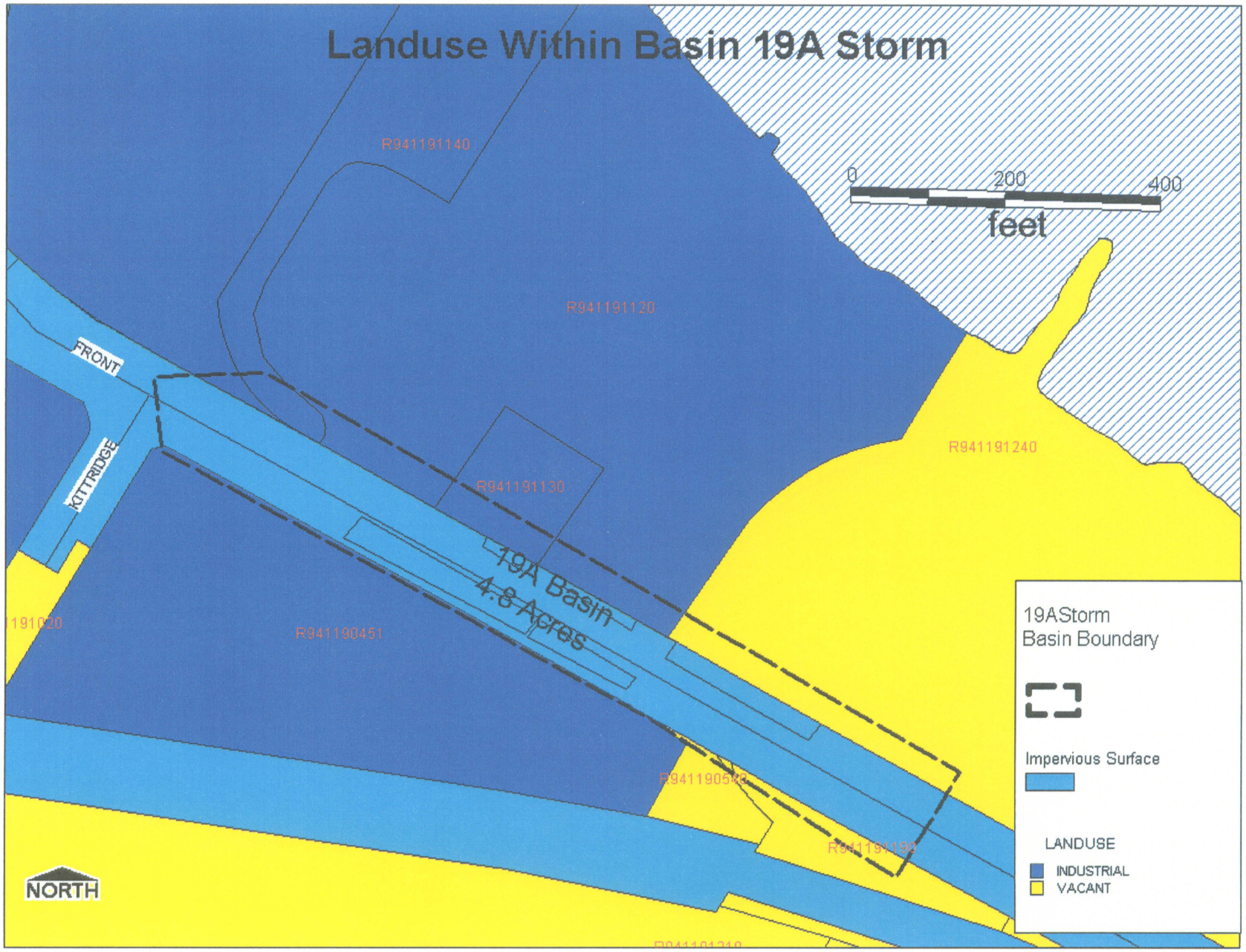
Sediment results upstream and downstream of Outfall 19A were all less than three times the DEQ baseline values and no analytes of interest could be identified. The drainage basin is quite small and is predominately a small portion of Front Avenue right-of-way, with some industrial and vacant land drainage. The environmental database searches indicate no reported incidents of release.

Figures

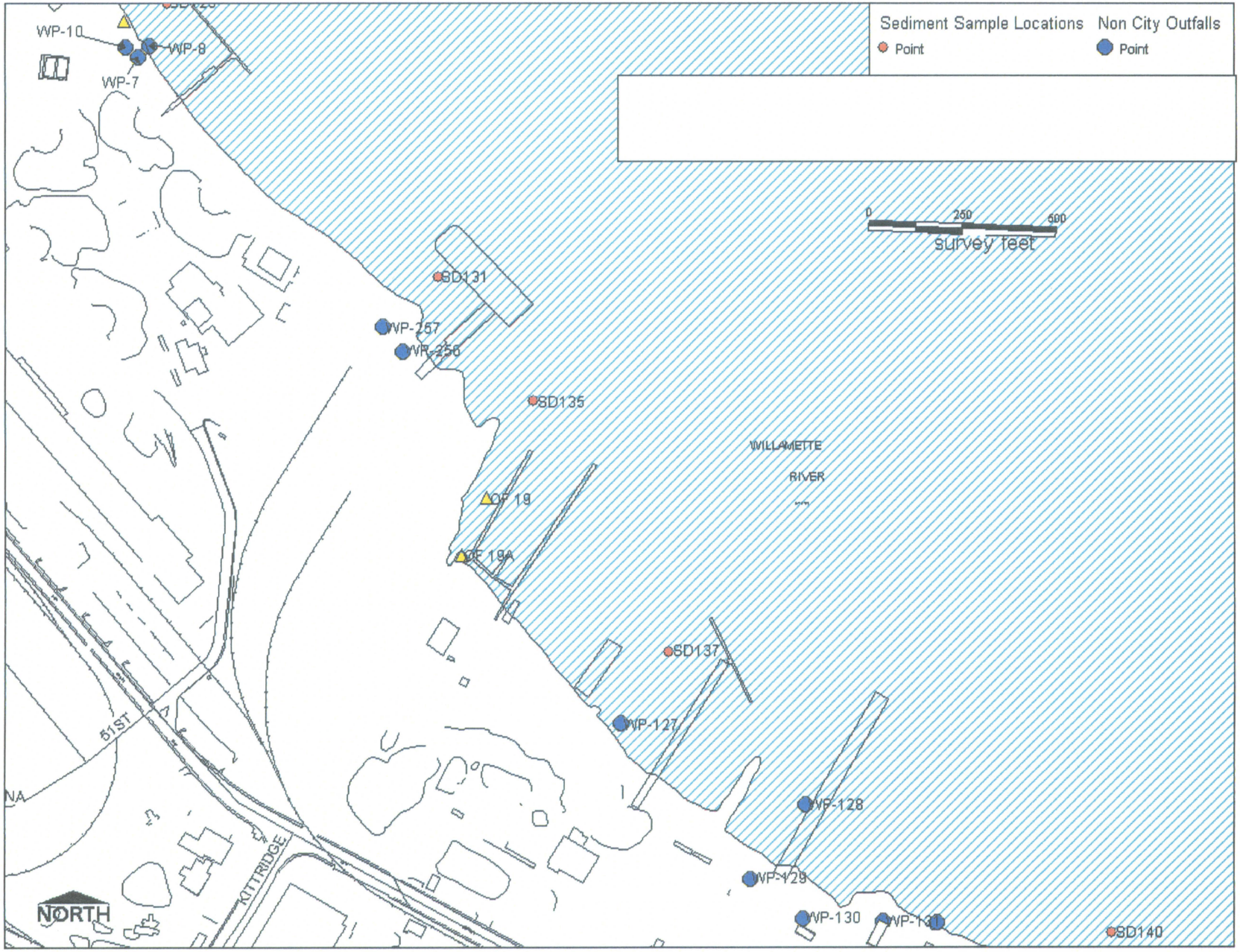
Basin 19A Aerial Photo
City of Portland



19A Outfall - Stormwater Drainage Map
City of Portland



Land Use Within Basin 19A
City of Portland



Outfall 19A Map with Sediment Sample and Non-City Outfall Locations
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 19A

		StationID		SD137	SD135	SD135
		Sample ID #		0000-CC	0	0000A
		Field Replicate #		#	#	#
		SubSample #		#	#	#
		Sample Depth		0-10 CM	0-10 CM	0-90 CM
		Sample Date		09/24/1997	09/24/1997	10/16/1997
Analyte	**Units**	**DEQ Baseline**	**Analyte of Interest**			
Aluminum	PPM	42800		38400	33000	40900
Antimony	PPM	5		6 J	5 UJ	5 UJ
Arsenic	PPM	5		5 U	5 U	5 U
Barium	PPM	195		181	157	197
Beryllium	PPM	0.7		0.6	0.53	0.56
Cadmium	PPM	0.6		0.5	0.4	0.7
Chromium	PPM	41		37.8	31.6	38.7
Cobalt	PPM	19.7		18.2	15.8	18.9
Copper	PPM	60		42.2	37.3	55.7
Iron	PPM	45000		41400	35700	41400
Lead	PPM	30		17	16	32
Manganese	PPM	810		573	505	658
Mercury	PPM	0.1		0.07	0.05	0.2
Nickel	PPM	32		29	26	30.2
Selenium	PPM	15		15	9	8
Silver	PPM	1.4		0.8	0.9	1.5
Thallium	PPM	13		15	10	6
Titanium	PPM	2075		1960		
Vanadium	PPM	112		102	87.5	108
Zinc	PPM	118		103	103	181
Total organic carbon	PCT	2		1.3	1	1.7
4-Methylphenol	PPB	680		590	340	290
Benzoic acid	PPB	200		200 U	200 U	380
Benzyl alcohol	PPB	20		20 U	20 U	20 U
Bis(2-ethylhexyl) phthalate	PPB	390		250	320	270
Butyl benzyl phthalate	PPB	20		20 U	20 U	20 U
Di-n-butyl phthalate	PPB	20		20 U	20 U	20 U
Di-n-octyl phthalate	PPB	20		20 U	20 U	20 U
Dibenzofuran	PPB	100		20 U	20 U	20 U
Dimethyl phthalate	PPB	20		20 U	20 U	20 U
Pentachlorophenol	PPB	97		99	100	100
Phenol	PPB	20		20 U	20 U	20 U
2-Methylnaphthalene	PPB	150		20 U	20 U	54
Acenaphthene	PPB	180		20 U	20 U	28
Acenaphthylene	PPB	60		20 U	20 U	20 U
Anthracene	PPB	150		20 U	20 U	27
Benzo(a)anthracene	PPB	360		32	34	57
Benzo(a)pyrene	PPB	500		36	46	72
Benzo(b)fluoranthene	PPB	350		40	41	64
Benzo(g,h,i)perylene	PPB	250		23	29	65
Benzo(k)fluoranthene	PPB	225		30	29	54
Chrysene	PPB	425		61	58	95
Dibenz(a,h)anthracene	PPB	125		20 U	20 U	20 U
Fluoranthene	PPB	600		120	98	200
Fluorene	PPB	125		20 U	20 U	29
Indeno(1,2,3-c,d)pyrene	PPB	225		20	24	47
Naphthalene	PPB	200		20 U	20 U	84
Phenanthrene	PPB	700		67	71	200
Pyrene	PPB	700		100	79	240
Carbazole	PPB	100		20 U	20 U	20 U

Qualifier List: ***Bold indicates 3 times the DEQ baseline value***

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Table 2
Outfall 19A Facility List

Aquarius Search: Jul-2000
Basin Reconn: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit No.	Business Type	Exposure	Comments
R941191120	Lakeside Industries	4850 NW Front Ave.	drywell	1611*, 2879*, 2951*			Asphalt manufacturing	Yes	
R941191120	Lakeside Industries	4850 NW Front Ave.	MS4	1611*, 2879*, 2951*			Asphalt manufacturing	Yes	

* Indicates SIC # has been verified via site inspection

Table 3
Outfall 19A Polk Directory List

NW Front Avenue	1940	1950	1960	1970	1980	1990	1999
4850	NL	NL	NL	NL	NL	NL	Lakeside Industries

NL = Not listed

Table 4
Outfall 19A DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI ID	CERCLIS	Action	Status
R941191120	4850 NW Front Ave	Lakeside Industries	2372		State Basic Preliminary Assessment recommended (PA)	SUS

SUS = Suspected

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2372

shows data entered as of November 17, 2000 at 7:13:02 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2372	Site Name: Lakeside Industries		CERCLIS No:
	Address: 4850 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 700
	Latitude: 45 deg. 33 ' 28"	Longitude: 122 deg. 43 ' 45"	Site Size: 18.42 acres
Other Site Names:			
	Portland Harbor Sediment Study		
Operations:			
	Name: Lakeside Industries		
	Comments: .		
	Years of Operation: 1988 - Current		
	SIC Code: 1610		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Antimony, barium, cadmium, lead, mercury, silver, zinc, 4-methylphenol, and benzoic acid present in river sediments near the site.
Manner and Time of Release:	
Contamination Information:	Weston sampling results from the Portland Harbor Sediment Study revealed metals and semivolatile organic compounds in river sediments adjacent to the site.
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(6/11/99 JMW/SAP) Based on intitial sampling results from a river sediment quality study, the Lakeside Industries property has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was send on March 3, 1999. Response from Lakeside Industries was received April 27, 1999. A site screening is scheduled (level III priority). (11/23/99 MTP/SAP) Strategy Recommendation completed November 23, 1999. Preliminary Assessment (PA) recommended for evaluation of operational history and potential contaminant sources.

Data Sources:

1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc., for USEPA, May 1998.
2) Shaver Transportation response to DEQ Site Assessment Information Request, April 15, 1999.
3) DEQ LUST Database.
4) DEQ Hazardous Waste Information System (HWIMSy) Database.
5) DEQ Spill Information Network (SPINS) Database.
6) MetroScan Property Records, Multnomah County, Oregon.
7) EPA SITEINFO Mapping Application.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ANTIMONY	Sediment	6 ppm (5 ppm downstream)	09/30/1999	Y		
BARIUM	Sediment	197 ppm	09/30/1997	Y		
BENZOIC ACID	Sediment	380 ppb	09/30/1997	Y		
CADMIUM	Sediment	0.7 ppm	09/30/1997	Y		
CRESOL,4-	Sediment	upstream - 730 ppb	09/30/1997	Y		
LEAD	Sediment	32 ppm	09/30/1997	Y		
MERCURY	Sediment	0.2 ppm	09/30/1997	Y		
SILVER	Sediment	1.5 ppm	09/30/1997	Y		
ZINC	Sediment	181 ppm (126 ppm downstream)	09/30/1999	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	06/11/1999	06/11/1999	Janelle Waggy	DEQ	NW	VCS
Site Screening recommended (EV)	06/11/1999	06/11/1999	Steve Fortuna	DEQ	NW	SAS
SITE SCORING	11/01/1999	11/01/1999	Mark Pugh	DEQ	NW	SAS
Insufficient information to list	11/23/1999	11/23/1999	Mark Pugh	DEQ	NW	SAS
State Basic Preliminary Assessment recommended (PA)	11/23/1999	11/23/1999	Mark Pugh	DEQ	NW	SAS
SITE EVALUATION	11/23/1999	11/23/1999	Mark Pugh	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

Table 5
Outfall 19A Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
4850 NW Front Ave.	General Construction Co.	4740	Apr-69	1000	UST	yard	
4850 NW Front Ave.	Mobil Oil	98953	Mar-63	10,000	UST	yard	Diesel
4850 NW Front Ave.	Gilpen Construction	17516	Dec-42	675	UST	yard	
4850 NW Front Ave.	Lakeside Industries	920285	Feb-92	120	AST	yard	
4850 NW Front Ave.	Lakeside Industries	890468	May-89	15,000	AST	yard	
4850 NW Front Ave.	General Construction Co.	3596	Nov-50	2000	AST	yard	
4850 NW Front Ave.	Lakeside Industries	890706	May-89	500	AST	yard	Propane

AST = Aboveground Storage Tank
UST = Underground Storage Tank

Table 6
Outfall 19A State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty	Haz Class 1	Haz Class 2
R941191120	4850 NW Front Ave	Lakeside Industries	12337	1611	Antifreeze	Ethylene Glycol	Liquid	Gallons	200-499	Acute Health Hazard	
R941191120	4850 NW Front Ave	Lakeside Industries	12337	1611	Antifreeze	Ethylene Glycol	Liquid	Gallons	200-499	Acute Health Hazard	
R941191120	4850 NW Front Ave	Lakeside Industries	12337	1611	Asphalt Oil (Hot)	Petroleum Hydrocarbon	Liquid	Gallons	50,000-99,999	Combustible Materials	
R941191120	4850 NW Front Ave	Lakeside Industries	12337	1611	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73f<Fp<141f)	
R941191120	4850 NW Front Ave	Lakeside Industries	12337	1611	Propane	Propane	Gas	Gallons	19-Oct	Flammable Gases	
R941191120	4850 NW Front Ave	Lakeside Industries	12337	1611	Propane	Propane	Gas	Gallons	1,000-4,999	Flammable Gases	
R941191120	4850 NW Front Ave	Lakeside Industries	12337	1611	Waste Oil	Petroleum Hydrocarbons	Liquid	Gallons	500-999	Combustible Materials	Chronic Health Hazard

Table 7
Outfall 19A SIC Information

SIC Number	SIC Definition
1611	Highway and Street Construction, Except Elevated Highways
2879	Agricultural Chemicals, NEC
2951	Asphalt Paving Mixtures and Blocks

NEC = Not Elsewhere Classified

Table 8
Drainage Basin for Outfall 19A: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R46974 1630	NW Front Ave	15.33	IND	0.03
R94119 1140	4900 NW Front Ave	2.26	IND	0.10
R94119 1120	4850 NW Front	8.87	IND	0.35
R94119 1130	4850 NW Front	0.53	IND	0.14
R94119 0451	4927 NW Front	4.70	IND	0.01
R94119 1140	4700 NW Front	14.94	VAC	0.33
R94119 1190	4700 NW Front	0.57	VAC	0.10
R94119 1200		0.01	VAC	0.01
R94119 0540		0.28	VAC	0.01

Total Area by Landuse

Landuse	Total Area (acres)
Commercial	--
Industrial	0.6
Single Family Residence	--
Multifamily Residence	--
Vacant	0.4
Total Basin Area	**48**
Estimated Right-of-Ways	46.9

City of Portland
Stormwater Outfall 21 Abandoned
Summary of Existing Information

Physical Description

This outfall was constructed in 1946. It appears this outfall was constructed to replace a private outfall for what is now Chevron Asphalt, at 5501 NW Front Ave., that was abandoned when its location was covered by backfill to create land from river bottom. The drainage to this outfall was from the Chevron property alone, and no street drainage was provided. It was abandoned in 1967 when the flow was rerouted to outfall 22. The outfall was a 21-inch pipe. Near the time the City abandoned the outfall, it was extended approximately 300 feet, presumably by Oregon Steel Mills as they backfilled the river to create additional land. The extended outfall is WP-8. Discharges from outfall 21 while operated by the City took place at a location that is now 300 feet inland from the current riverbank and covered by 25 feet of fill.

Oregon Steel Mills had a process waste water treatment pond with a discharge to the river at the same general location as WP-7. This outfall no longer exists. While in use this outfalls' process waste water had flows averaging 7 million gallons a day with suspended solids of 20 mg/l and oil and grease of up to 10 mg/l. An NPDES permit issued by the DEQ covered this discharge. This information is based on a DEQ factsheet for the NPDES permit renewal in 1972; additional information on this discharge, such as the duration of discharge, would need to be accessed through DEQ files.

There are four non-City outfalls in the vicinity of Outfall 21 Abandoned. These non-City outfalls are assigned to the following facility:

- WP-7: Tube Forgings
- WP-8: McCall Oil
- WP-9: McCall Oil
- WP-10: McCall Oil

A map of showing the locations of the abandoned City outfall, the current non-City outfalls and where sediment samples were collected. Note that the location of Outfall 21 Abandoned is on dry land because the shoreline and the area immediately adjacent to the outfall were filled after the outfall was abandoned. Sediment samples near the current shoreline are not representative of the sediment adjacent to the abandoned City outfall.

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for

action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall were identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 21 Abandoned are available from one source:

- Portland Shipyard Sediment Investigation, Port of Portland (Stations SD120, SD123, SD131)

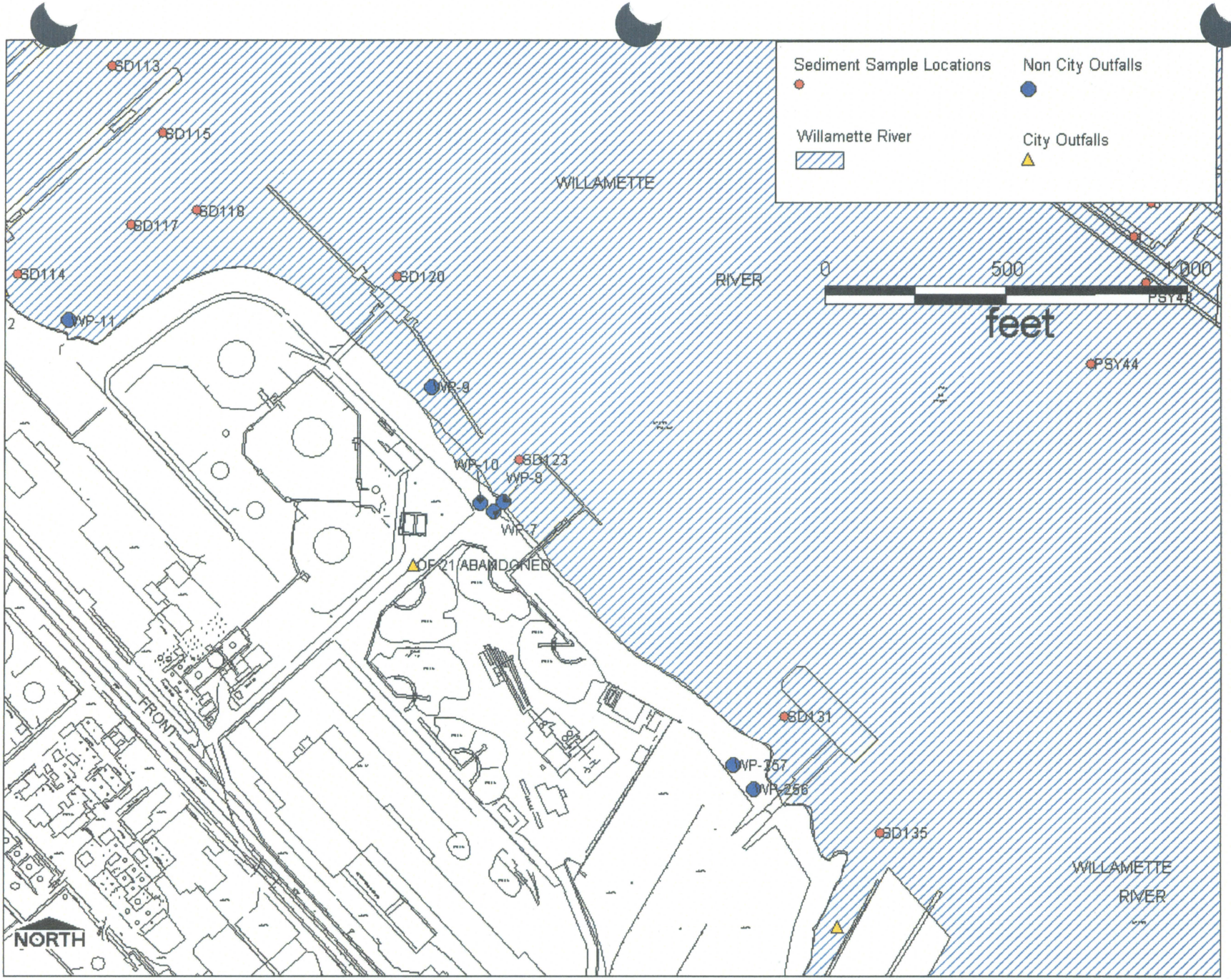
There have been a total of 3 sediment sample locations sampled in the vicinity of Outfall 21 Abandoned. Sediment Station SD120 is 600 feet downstream of the Outfall 21A and adjacent to the McCall Oil dock. SD123 is approximately 150 feet directly offshore of the abandoned City outfall and near the Glacier NW dock. SD131 is 1100 feet upstream of the City outfall. All stations had samples collected at the surface (0-10 cm). A depth composite (0-90 cm) was also collected at Stations SD120.

Table 1 shows the available sediment data with station ID, sample ID, field replicate and subsample numbers, sample depth and sample date. To identify analytes of interest , data were evaluated based on a comparison of detected sediment concentrations at the adjacent SD123 station that were greater than 3 times the baseline level and compared to sediment concentrations at the upstream station SD131 . Based on these decision criteria, no analytes of interest were identified.

The sediment data collected at the downstream Station SD120 showed higher concentrations for a number of analytes in the depth composite compared with the surface sample, suggesting historical releases. This station is adjacent to McCall Oil dock and the source of these analytes may be a result of activities at this site.

No analytes exceeded the DEQ baseline values at the sediment station SD123 which is immediately adjacent to City's abandoned outfall. Because this outfall existed from 1946 – 1955, drained only Chevron property, and the area adjacent to the outfall is now upland due to shoreline filling, this outfall will not be considered further.

Figures



Outfall 21 Abandoned Map Sediment Sample and Non-City Outfall Locations
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 21 Abandoned

	StationID	SD131	SD123	SD120	SD120
	Sample ID #	0	0	0	0000A
	Field Replicate #	#	#	#	#
	SubSample #	#	#	#	#
	Sample Depth	0-10 CM	0-10 CM	0-10 CM	0-90 CM
	Sample Date	09/24/1997	09/24/1997	09/24/1997	10/16/1997
Analyte	Units	DEQ Baseline	Analytes of Interest				
Aluminum	PPM	42800		36600	37400	42200	43700
Antimony	PPM	5		5 J	5 UJ	6 U	5 UJ
Arsenic	PPM	5		5 U	5 U	6 U	5 U
Barium	PPM	195		170	168	177	203
Beryllium	PPM	0.7		0.56	0.59	0.7	0.63
Cadmium	PPM	0.6		0.5	0.4	0.5	0.6
Chromium	PPM	41		34.7	33.7	38	40.8
Cobalt	PPM	19.7		17.4	17.8	17.8	19.8
Copper	PPM	60		39.8	41.5	42.2	54.3
Iron	PPM	45000		38700	38700	42300	44200
Lead	PPM	30		20	14	17	23
Manganese	PPM	810		542	631	677	788
Mercury	PPM	0.1		0.06	0.06	0.06	0.08
Nickel	PPM	32		28	28.1	28	31.5
Selenium	PPM	15		10	9	10	13
Silver	PPM	1.4		0.7	0.6	0.8	1.1
Thallium	PPM	13		9	6	6	6
Vanadium	PPM	112		94.2	94.3	105	107
Zinc	PPM	118		126	97.2	104	142
Total organic carbon	PCT	2		1.1	1.5	1.6	1.8
4-Methylphenol	PPB	680		360	270	880	45
Benzoic acid	PPB	200		200 U	190 U	200 U	200 U
Benzyl alcohol	PPB	20		20 U	19 U	20 U	20 U
Bis(2-ethylhexyl) phthalate	PPB	390		210	91	150	300
Butyl benzyl phthalate	PPB	20		20 U	19 U	20 U	20 U
Di-n-butyl phthalate	PPB	20		20 U	19 U	20 U	20 U
Di-n-octyl phthalate	PPB	20		20 U	19 U	20 U	20 U
Dibenzofuran	PPB	100		20 U	19 U	20 U	200
Dimethyl phthalate	PPB	20		20 U	19 U	20 U	20 U
Pentachlorophenol	PPB	97		100 U	96 U	99 U	98 U
Phenol	PPB	20		20 U	19 U	20 U	20 U
2-Methylnaphthalene	PPB	150		20 U	19 U	20 U	110
Acenaphthene	PPB	180		20 U	19 U	20 U	380
Acenaphthylene	PPB	60		20 U	19 U	20 U	20 U
Anthracene	PPB	150		20	19 U	20 U	160
Benzo(a)anthracene	PPB	360		33	20	23	190
Benzo(a)pyrene	PPB	500		41	20	24	100
Benzo(b)fluoranthene	PPB	350		40	21	24	120
Benzo(g,h,i)perylene	PPB	250		28	19 U	20 U	46
Benzo(k)fluoranthene	PPB	225		33	19	20	130
Chrysene	PPB	425		60	41	38	310
Dibenz(a,h)anthracene	PPB	125		20 U	19 U	20 U	20 U
Fluoranthene	PPB	600		78	55	56	1100
Fluorene	PPB	125		20 U	19 U	20 U	300
Indeno(1,2,3-c,d)pyrene	PPB	225		24	19 U	20 U	42
Naphthalene	PPB	200		20 U	19 U	20 U	97
Phenanthrene	PPB	700		39	33	25	1300
Pyrene	PPB	700		69	46	50	1000
Carbazole	PPB	100		20 U	19 U	20 U	20 U

Qualifier List: ***Bold indicates 3 times the DEQ baseline value***

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

City of Portland Stormwater Outfall 22
Summary of Existing Information

Physical Description

The original Outfall 22 was built prior to 1938 and was a 27-inch pipe (now called 22 Abandoned). It was reconstructed and moved in 1973 to its present location. The current City of Portland Stormwater Outfall 22 is a 60-inch pipe. Outfall 22 is approximately 300 feet upstream of the abandoned Outfall 22. Outfall 22 is a former CSO outfall but the diversion manhole has been sealed.

This outfall has a recurring problem with hydrocarbon infiltration from known groundwater contamination. A containment boom is permanently maintained at this outfall.

The storm drainage basin for this outfall is approximately 88 acres. Landuse in the basin is industrial (53 percent) with some flow from Forest Park creeks (23 percent vacant). Commercial and single family residences are a small part of the overall landuse (less than 3 percent each) and the right-of-ways are estimated to be 19 percent of the total basin.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Landuse map

There are three non-City outfalls within approximately 500 feet downstream of Outfall 22. These non-City outfalls are assigned to the following facility:

- WP-11: Great Western Chemical
- WP-12: Tosco
- WP-14: Chevron Transportation

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall was identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfalls 22 and 22 Abandoned are available from one source:

- Portland Harbor Sediment Investigation, EPA/DEQ (Stations SD112, SD113, SD114, SD115, SD117, and SD118)

There have been six sediment sample locations sampled in the vicinity of the Outfall 22 (see attached sediment sampling location map). All stations had samples collected at the surface (0-10 cm). A depth composite (0-90 cm) was also collected at one of the stations (SD117).

Sediment Station SD114 is approximately 50 feet offshore from Outfall 22. Sediment Station SD112 is approximately 350 downstream of Outfall 22 and approximately 200 feet offshore from the abandoned Outfall 22. The remaining sediment Stations SD113, SD115, SD117, and SD118 are between 400 and 700 feet offshore from Outfall 22.

Table 1 shows the available sediment data with station ID, sample ID, field replicate and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall.

The sediment data collected in 1997 as part of the Portland Harbor Sediment Investigation showed elevated concentrations for two analytes in exceedence of the DEQ baseline at the surface and may be of interest to the city. These analytes are:

- **Butyl benzyl phthalate:** detected in concentrations greater than 3 times the baseline at SD114
- **Di-n-octyl phthalate**: detected in concentrations greater than 3 times the baseline at SD114

No analytes exceeded 3 times the DEQ baseline values at SD112, the sediment location closest to Outfall 22 Abandoned.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 lists the industrial chemical uses for analytes of interest at Outfall 22 and 22 Abandoned.

Table 3 summarizes the available information on facilities currently located in the Outfall 22 drainage basin, including where site runoff drains, discharge permits, business type and whether there is exposure of site activities to stormwater.

Table 4 shows available stormwater data for industrial facilities required to have an NPDES permit to discharge to the City's stormwater system.

Table 5 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 6 lists EPA's Toxic Release Inventory, which records releases of chemicals to the environment, and the Hazardous Waste Generators, which shows sites that treat, store, or dispose of hazardous materials.

Table 7 lists EPA's Emergency Response Notification System (ERNS) which contains data on reported hazardous materials releases and cleanup procedures used to remediate the site.

Table 8 lists EPA's RCRA Treatment Storage Disposal (TSD) sites that treat, store, or dispose of hazardous materials under the Resource Conservation and Recovery Act (RCRA). RCRA governs the management of hazardous materials by tracking all parties who generate or transport them.

Table 9 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 9.

Table 10 is DEQ's list of leaking underground storage tanks (LUST). The list includes both sites with active leaks and those that have been cleaned up to the satisfaction of the DEQ in the past. Behind this table, the LUST incident reports are provided for facilities listed in Table 10.

Table 11 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 12 is the State Fire Marshal's list of hazardous spills to which the fire department has responded.

Table 13 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 14 is the CRL (Confirmed Release List) inventory of sites that are currently being remediated under one of three separate programs, the Voluntary Cleanup Program, the Site Response Program, and the Site Assessment Program.

Table 15 lists the SIC numbers and descriptions for the sites identified in the Table 3 facility list.

Table 16 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type

The following databases were searched but no information was available for sites within the drainage basin:

- EPA Corrective Action List
- EPA Comprehensive Environmental Response, Compensation and Liability Information System
- DEQ Leaking Underground Storage Tank List

Outfall 22 Summary

The analytes identified as of potential interest to the city outfall include:

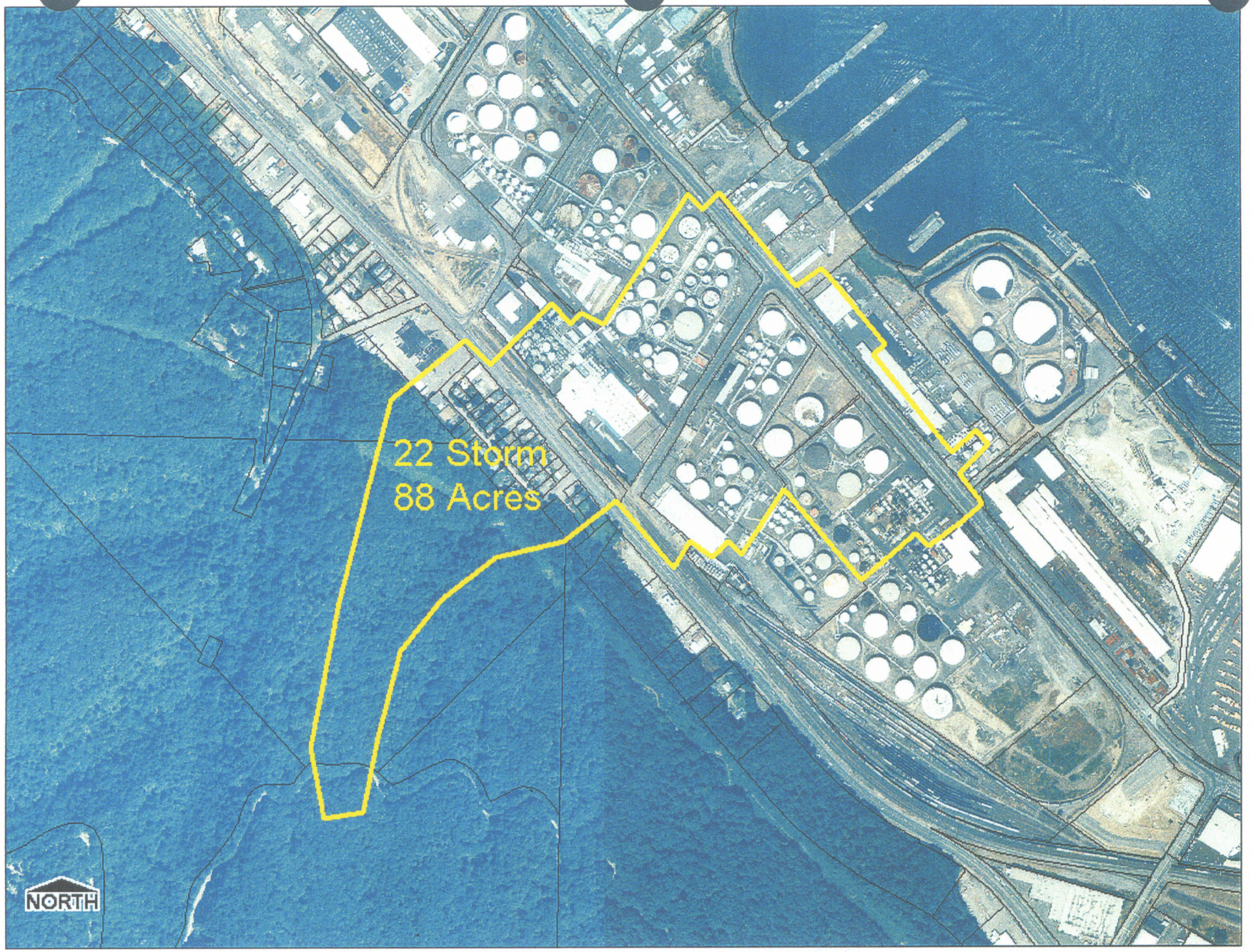
- Butyl benzyl phthalate
- Di-n-octyl phthalate

There are two private outfalls (Great Western and Tosco) near the City outfall that may contribute to sediment quality in this area.

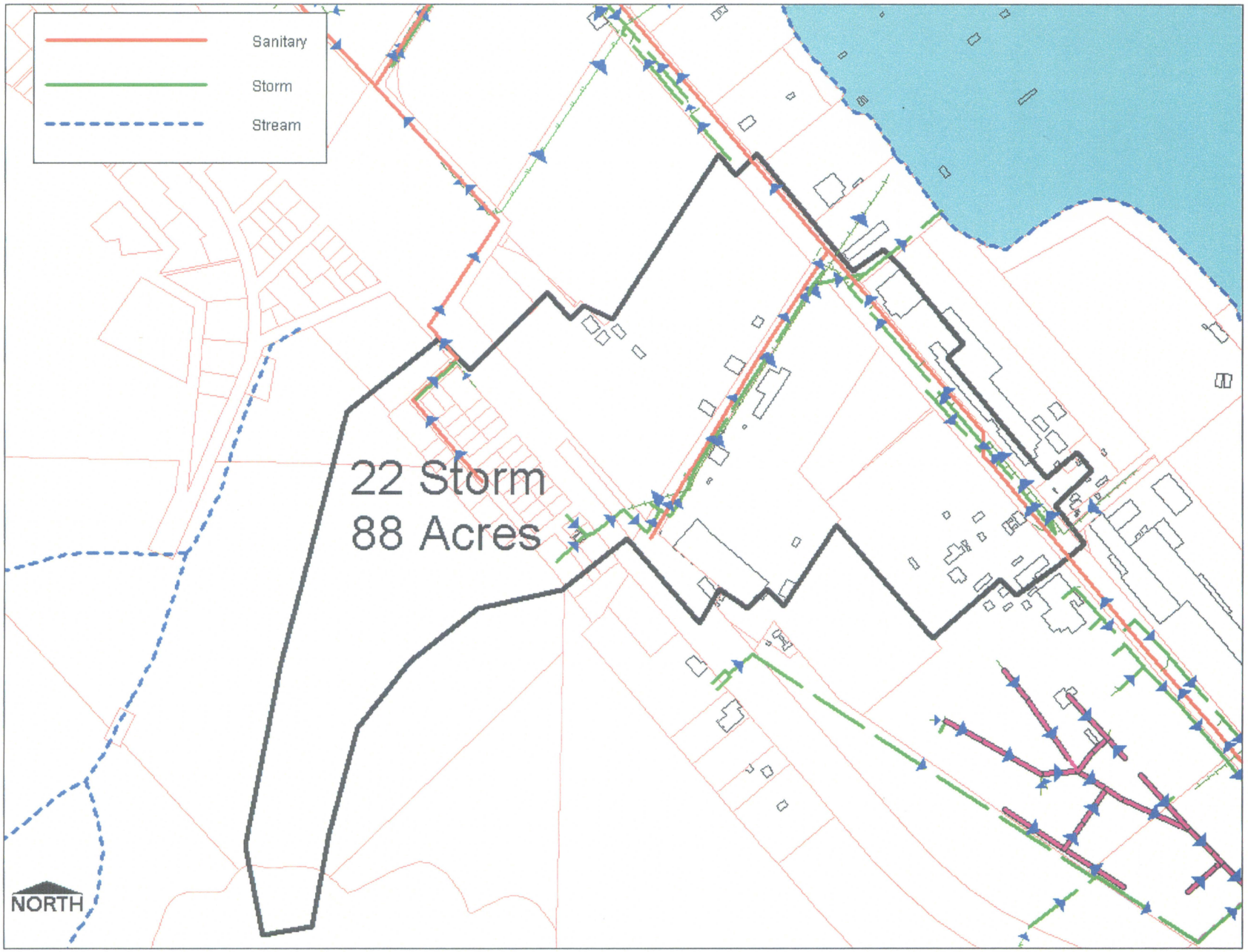
No measurements of phthalates in stormwater are available from any of the industrial facilities. Some phthalates are listed for Great Western under the State Fire Marshal Hazardous Substances List but this doesn't necessarily indicate release. Phthalates are commonly used as a plasticizer and could be used in a variety of industrial and commercial uses that may not show up in the environmental databases that were searched.

There are five sites on DEQ's Environmental Cleanup Site Investigation list but there is no information in the database on whether phthalates were sampled for or detected at any of these sites. Additional investigation into DEQ files for these sites is recommended.

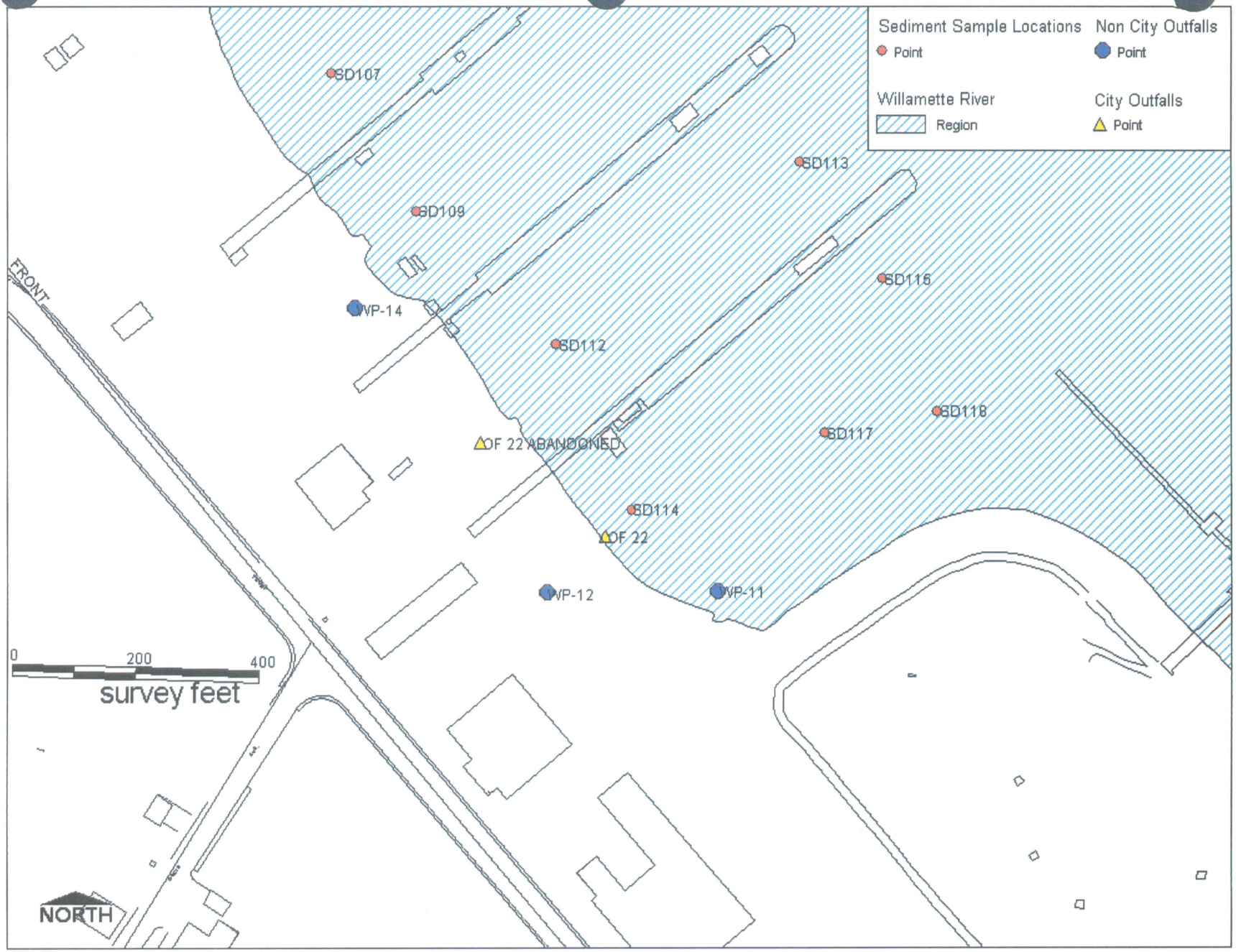
Figures



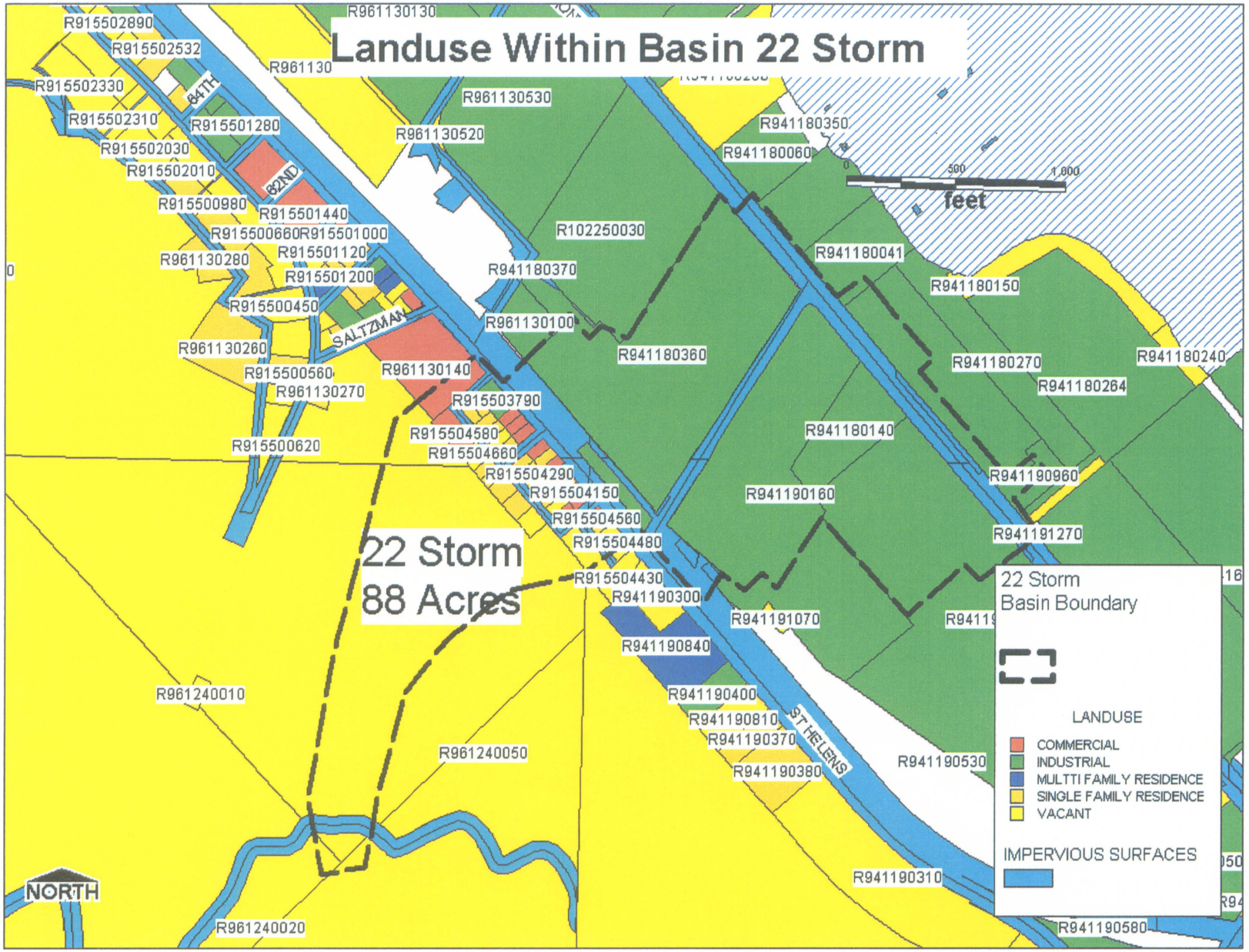
Basin 22 Aerial Photo
City of Portland



22 Outfall - Stormwater Drainage Map
Citv of Portland



Outfall 22 Map with Sediment Sample and Non-City Outfall Locations
City of Portland



Land Use Within Basin 22
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfalls 22 and 22 (Abandoned)

			StationID	SD118	SD117	SD117	SD115	SD113	SD114	SD112
			Sample ID #	0	0000A	0000-CC	0	0	0	0
			Field Replicate #	#	#	#	#	#	#	#
			SubSample #	#	#	#	#	#	#	#
			Sample Depth	0-10 CM	0-90 CM	0-10 CM	0-10 CM	0-10 CM	0-10 CM	0-10 CM
			Sample Date	09/23/1997	10/16/1997	09/23/1997	09/23/1997	09/23/1997	09/23/1997	09/23/1997
Analyte	Units	DEQ Baseline	Analytes of Interest							
Aluminum	PPM	42800		28400	37900	28600	43800	43700	15800	42800
Antimony	PPM	5		4 J	4 UJ	4 UJ	5 UJ	6 U	3 UJ	5 UJ
Arsenic	PPM	5		4 U	4 U	4 U	5 U	6 U	3 U	5 U
Barium	PPM	195		144	185	153	187	190	113	183
Beryllium	PPM	0.7		0.43	0.54	0.52	0.7	0.7	0.33	0.7
Cadmium	PPM	0.6		0.3	0.5	0.4	0.4	0.4	0.7	0.5
Chromium	PPM	41		27.6	35.1	28	38.5	38.9	24.3	37.5
Cobalt	PPM	19.7		17.1	17.5	16	19.9	19.5	13.3	18.8
Copper	PPM	60		27.8	42.7	29.7	45.1	45.9	28.7	46.9
Iron	PPM	45000		35400	39900	35200	43600	44100	31700	43400
Lead	PPM	30		12	22	20	14	13	47	14
Manganese	PPM	810		482	558	467	770	801	393	715
Mercury	PPM	0.1		0.06	0.17	0.11	0.06	0.07	0.02	0.06
Nickel	PPM	32		26.5	28.4	24.4	31	31	26.5	29
Selenium	PPM	15		8	7	11	11	15	9	13
Silver	PPM	1.4		0.6	1	0.9	0.8	0.8	0.4	0.7
Thallium	PPM	13		8	4 U	9	10	11	7	8
Titanium	PPM	2075			2020	1900				
Vanadium	PPM	112		91.2	105	91.8	110	110	73.7	109
Zinc	PPM	118		89.2	157	101	101	105	212	108
Total organic carbon	PCT	2		1.5	1.3	0.78	1.5	1.7	0.72	1.5
4-Methylphenol	PPB	680		88	370	360	630	1100	20 U	640
Benzoic acid	PPB	200		200 U	190 U	200 U	200 U	200 U	200 U	190 U
Benzyl alcohol	PPB	20		20 U	19 U	20 U	20 U	20 U	20 U	19 U
Bis(2-ethylhexyl) phthalate	PPB	390		59	90 UJ	180	120	210	250	130
Butyl benzyl phthalate	PPB	20	X	20 U	19 U	20 U	20 U	20 U	**120**	19 U
Di-n-butyl phthalate	PPB	20		20 U	19 U	20 U	20 U	20 U	20 U	19 U
Di-n-octyl phthalate	PPB	20	X	20 U	19 U	20 U	20 U	20 U	**110**	19 U
Dibenzofuran	PPB	100		20 U	19 U	20 U	20 U	20 U	20 U	19 U
Dimethyl phthalate	PPB	20		20 U	19 U	20 U	20 U	20 U	20 U	19 U
Pentachlorophenol	PPB	97		99 U	95 U	99 U	98 U	98 U		97 U
Phenol	PPB	20		20 U	19	20 U	20 U	20 U	20 U	19 U
2-Methylnaphthalene	PPB	150		20 U	56	20 U	20 U	20 U	20 U	19 U
Acenaphthene	PPB	180		20 J	35	25	20 U	26	23	25
Acenaphthylene	PPB	60		25	34	20 U	20 U	20 U	20 U	19 U
Anthracene	PPB	150		110	48	24	20 U	31		21
Benzo(a)anthracene	PPB	360		200	63	66	24	49	140	81
Benzo(a)pyrene	PPB	500		220	73	77	32	48	180	71
Benzo(b)fluoranthene	PPB	350		100	52	63	26	45	200	65
Benzo(g,h,i)perylene	PPB	250		98	63	62	20 U	25	130	37
Benzo(k)fluoranthene	PPB	225		170	66	64	25	51	180	76
Chrysene	PPB	425		260	98	86	40	72	240	110
Dibenz(a,h)anthracene	PPB	125		20 U	19 U	20 U	20 U	20 U	20 U	19 U
Fluoranthene	PPB	600		260	240	120	74	180	250	370
Fluorene	PPB	125		20 U	34	20 U	20 U	29	37	26
Indeno(1,2,3-c,d)pyrene	PPB	225		97	43	58	22	30	160	49
Naphthalene	PPB	200		20 U	110	35	20 U	21	20 U	19 U
Phenanthrene	PPB	700		290	260	110	37	150	180	150
Pyrene	PPB	700		460	300	180	69	150	260	270
Carbazole	PPB	100		20 U	19 U	20 U	20 U	20 U		19 U

Bold indicates 3 times the DEQ baseline value

Qualifier List:

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Table 2
Industrial Chemical Uses for Analytes of Interest at Outfalls 22 and 22 (abandoned)

Chemical	Use
Butyl benzyl phthalate	Used as a plasticizer and organic intermediate. Plasticizer for PVC-based flooring products, polyvinyl acetate emulsion adhesives, other plastics, eg, ethyl cellulose, in coatings, eg, for automobiles; for polyvinyl and cellulose resins.
Di-n-octyl phthalate	Used as a plasticizer in plastics & rubber materials, for cellulose ester resins, polystyrene resins, and vinyl resins (eg, polyvinyl chloride). Used for film, wire, cables, and adhesives. Used as dye carrier.

Table 3
Outfall 22 Facility List

Aquarius Database Search: Jul-2000
Basin Reconnaissance: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit No.	Business Type	Exposure	Comments
R961130140	Anderson Roofing	5885 NW St. Helens	MS4	1761			Offices	Yes	
R961130140	Anderson Roofing	5885 NW St. Helens	MS4	1799			Storage	Yes	
None Listed	Burlington Northern & Santa Fe Railroad Co.	5814 NW Doane Ave.	MS4	4011*, 4013*	NPDES	1200Z	Transportation	Yes	
R941180270	Cascade Motor Transport	5480 NW Front Ave.	WP-11, WP-9	4212	NPDES	1300J	Transportation	Yes	Covered by McCall Oils NPDES Permit.
R941180051	Chevron Transportation	5924 NW Front Ave.	WP-14	4212	NPDES	1200Z	Vehicle maintenance	Yes	
R941190640	Chevron USA	5501 NW Front Ave.	MS4	2911*, 2951*	NPDES	100J	Asphalt refinery	Yes	
R941190640	Chevron USA	5501 NW Front Ave.	MS4	2911*, 2951*	NPDES	1200Z	Asphalt refinery	Yes	
R941190640	Chevron USA	5501 NW Front Ave.	Sanitary	2911*, 2951*	Pretreatment	419.001	Asphalt refinery	Yes	
R941180051	Chevron USA - Willbridge Distribution	5531 NW Doane Ave.	MS4	5171*	NPDES	1300J	Petroleum terminal	Yes	
R941180051	Chevron USA - Willbridge Distribution	5531 NW Doane Ave.	MS4	5171*	NPDES	Batch	Petroleum terminal	Yes	
R941180051	Chevron USA - Willbridge Distribution	5531 NW Doane Ave.	MS4	5171*	NPDES	Individual	Petroleum terminal	Yes	
R941180051	Chevron USA - Willbridge Distribution	5531 NW Doane Ave.	Sanitary	5171*	Pretreatment	400.014	Petroleum terminal	Yes	
R941180170	Great Western Chemical	5540 NW Front Ave.	MS4	5169			Chemical distribution	No	
R941180170	Great Western Chemical Co.	5700 NW Front Ave.	WP-11/MS4	2842*, 2899*, 5169*	NPDES	1200Z	Chemical manuf/distrib	Yes	
R941180170	Great Western Chemical Co.	5700 NW Front Ave.	Sanitary	2842*, 2899*, 5169*	Pretreatment	400.003	Chemical manuf/distrib	Yes	
R94180264, R94190960	McCall Oil and Chemical Corp.	5480 NW Front Ave.	Private	5171	NPDES	1300J	Petroleum terminal	Yes	
R915503790	M P I Stocks	5655 NW St. Helens	MS4	3484			Vehicle repair	No	
R941180170	Olin Microelectronic Materials	5740b NW Front Ave.	MS4	5169			Chemical distribution	No	Covered by GW Chemicals NPDES Permit.
R915503870	Rainy Day Saloon	5625 NW St. Helens	MS4	5813			Restaurant	No	
R915504170	Teriyaki House	5501 NW St. Helens	MS4	5812			Restaurant	No	
R941190160 R941191070 R941180041	TOSCO Distribution Co.	5528 NW Doane Ave.	WP-12	5171*			Bulk petroleum distrib	Yes	
R941190160 R941191070 R941180041	TOSCO Distribution Co.	5528 NW Doane Ave.	MS4	5171*	Batch		Bulk petroleum distrib	Yes	to storm sewer
R941190160 R941191070 R941180041	TOSCO Distribution Co.	5528 NW Doane Ave.	MS4	5171*	NPDES	1300J	Bulk petroleum distrib	Yes	
R941190160 R941191070 R941180041	TOSCO Distribution Co.	5528 NW Doane Ave.	MS4	5171*	NPDES	Individual	Bulk petroleum distrib	Yes	
R941190160 R941191070 R941180041	TOSCO Distribution Co.	5528 NW Doane Ave.	Sanitary	5171*	Pretreatment	400.137	Bulk petroleum distrib	Yes	
R941190160	TOSCO Northwest Co. - office	5882 NW St. Helens	MS4	5171*, 5984*			Bulk petroleum distrib	Yes	
R915503900	Union Tank Car Co.	5605 NW St. Helens	MS4	4789*, 7699*			Maint equip storage	Yes	
R941190160	UNOCAL Terminal	5528 NW Doane Ave.	MS4	2869*, 2911*, 2992*, 5171*, 5983*	NPDES	1200T	Petroleum terminal	Yes	
R941190160	UNOCAL Terminal	5528 NW Doane Ave.	MS4	2869*, 2911*, 2992*, 5171*, 5983*	NPDES	Individual	Petroleum terminal	Yes	
R941190160	UNOCAL Terminal	5528 NW Doane Ave.	Sanitary	2869*, 2911*, 2992*, 5171*, 5983*	Pretreatment	400.012	Petroleum terminal	Yes	

* Indicates SIC # has been verified via site inspection

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	pH	Temp.	COD	TSS	TOC	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Phosphorus	Total Phosphorus	Selenium	Silver	Zinc	Total O&G	Residual Chlorine	Ethanol
			SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Chevron Transportation																								
01	05/21/1993	1200Z	7		19	<10	6.2	<0.004		<0.05	<0.05		<0.004	<0.001				<0.5	<0.004	<0.05		<0.5		
01	11/30/1993	1200Z	6.8		19	<10	5.5	<0.004	<0.05	0.00053	<0.02		<0.004	<0.0005			<0.5		<0.004	<0.02		<0.5		
01	05/31/1994	1200Z	6.6		14	<10	5.1	<0.004		0.00048	<0.02	<0.02	0.012	<0.0005		<0.05	<0.5				0.28	0.53		
01	11/20/1996	1200Z	6.53		<5	<10	<3	<0.001		<0.001	0.0013	0.0038	0.0022	<0.0002		0.0082					0.112	<5		
01	03/07/1997	1200Z	6.66		<13.3	<10	<1	<0.001		<0.001	0.0013	0.00408	0.0024	<0.0002		<0.002					0.13	8.2		
01	12/10/1997	1200Z	7.04		14.5	<10	3.03	0.002		<0.001	0.0022	0.0129	0.0054	<0.0002		<0.02					3.24	<5		
01	01/14/1998	1200Z	7.34		6.53	<10	<3	0.0021		<0.001	0.0012	0.0056	0.0019	0.00025		<0.002	<0.2				0.187	<5		
01	03/25/1998	1200Z	6.29		11.9	<10	3.58	0.0058		<0.001	0.001	0.012	0.0022	<0.0005		0.0032		<0.035			0.077	<5		
01	11/12/1998	1200Z	6.57			<10		0.0146		<0.001	0.001	0.0118	0.0025	<0.0002		<0.002					0.051	<5		
01	03/04/1999	1200Z	6.82			<10		0.0076		<0.001	<0.001	0.005	0.0011	<0.001		<0.002					0.04	<5		
01	11/12/1999	1200Z	6.81			<10		0.0107		<0.001	0.0014	0.0238	0.0034	<0.0002		<0.002					0.168	<5		
01	03/03/2000	1200Z																				<5		
Chevron USA																								
01	05/21/1993	1200Z	7		19	<10	6.2	<0.004		<0.05	<0.05		<0.004	<0.001				<0.5	<0.004	<0.05		<0.5		
01	11/30/1993	1200Z	6.8		19	<10	5.5	<0.004	<0.05	0.00053	<0.02		<0.004	<0.0005			<0.5		<0.004	<0.02		<0.5		
01	05/31/1994	1200Z	6.6		14	<10	5.1	<0.004		0.00048	<0.02	<0.02	0.012	<0.0005		<0.05	<0.5				0.28	0.53		
01	03/28/1995	1200Z				18															0.07	5		
01	05/01/1995	1200Z	5.5		20	35	<5	<0.005		<0.001	0.004	0.01	0.02	<0.0005	0.007	<0.004			<0.02	<0.002	0.132	9.1		
01	06/12/1995	1200Z	6.7		48		15																	
01	10/30/1995	1200Z																				<5		<5
01	11/06/1995	1200Z	6.4		32	45	8.1	<0.05		<0.02	<0.03	0.04	0.03	<0		<0.02					0.21	<5		
01	11/22/1995	1200Z	7.8	15	23	50	15			<0.001	<0.003	0.013	<0.02	0.0008	0.01	0.006			0.025	<0	0.072			
01	03/14/1996	1200Z	6.9		52	19	4.1	<0.05		<0.02	<0.02	<0.02	<0.03	<0		<0.02					0.15	8		
01	11/20/1996	1200Z	6.53		<5	<10	<3	<0.001		<0.001	0.0013	0.0038	0.0022	<0.0002		0.0082					0.112	<5		
01	12/10/1996	1200Z	7.3	9	8	12	<1	<0.001		<0.001	<0.003	0.007	0.02	<0.0005	<0.003	<0.004			<0.02		0.075	7.8		
01	03/07/1997	1200Z	6.66		<13.3	<10	<1	<0.001		<0.001	0.0013	0.00408	0.0024	<0.0002		<0.002					0.13	8.2		
01	08/28/1997	1200Z	6.1			141				<0.04	<0.02	0.025	<0.3		<0.2	<0.05			<0.3		0.299	6.2		
01	11/25/1997	1200Z	6.3			21						0.023	<0.06								0.11	2.2		
01	12/10/1997	1200Z	7.04		14.5	<10	3.03	0.002		<0.001	0.0022	0.0129	0.0054	<0.0002		<0.02					3.24	<5		
01	01/14/1998	1200Z	7.34		6.53	<10	<3	0.0021		<0.001	0.0012	0.0056	0.0019	0.00025		<0.002	<0.2				0.187	<5		
01	03/03/1998	1200Z	2.1		36.2	60	11	<0.16		0.015	0.033	0.047	0.16	<0.0004		<0.04					0.27	4		
01	03/10/1998	1200Z	5.9			11																		
01	03/25/1998	1200Z	6.29		11.9	<10	3.58	0.0058		<0.001	0.001	0.012	0.0022	<0.0005		0.0032		<0.035			0.077	<5		
01	11/06/1998	1200Z	5.8		19	16	1.6	<0.12		<0.01	<0.02	0.021	<0.062	<0.0004		<0.034					0.073	2.6		
01	11/12/1998	1200Z	6.57			<10		0.0146		<0.001	0.001	0.0118	0.0025	<0.0002		<0.002					0.051	<5		
01	12/07/1998	1200Z	6.4		8	13						<0.03	<0.1								0.068	8.9		
01	02/09/1999	1200Z	7.2			55	2.8	<0.12		0.02	0.036	0.034	<0.13	<0.0004		0.08					0.12	<2		
01	03/04/1999	1200Z	6.82			<10		0.0076		<0.001	<0.001	0.005	0.0011	<0.001		<0.002					0.04	<5		
01	11/08/1999	1200Z	6.1		12	4.5	2.8	<0.12		<0.01	<0.01	0.012	<0.04	<0.0003		<0.03					0.31	2.1		
01	11/12/1999	1200Z	6.81			<10		0.0107		<0.001	0.0014	0.0238	0.0034	<0.0002		<0.002					0.168	<5		
01	12/09/1999	1200Z	5.9	8.1	3	15						<0.03	<0.1								0.073	7.4		
01	02/28/2000	1200Z	5.7		<10	12	2.8	<0.12		<0.01	<0.01	<0.01	<0.08	<0.0003		<0.03					1.1	1.9		
01	03/03/2000	1200Z																				<5		
01	05/03/2000	1200Z	5.8		17	26	7.8	<0.12		<0.02	0.07	<0.01	<0.09			0.09					0.13	4.2		
T47	10/03/1996	1200Z	7.2																				0.15	
T71	05/08/1996	1200Z	6.8										<0.025									<0.5	0.2	

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	Daily Flow	pH	COD	TSS	TOC	Copper	Lead	Zinc	Non-Polar O&G	Total O&G	Residual Chlorine	Ethanol	Isopropyl alcohol	Methanol
			gallons	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Chevron USA - Willbridge Distribution																
01	10/08/1999	1300J		6.41								<5		<10		
01	10/27/1999	1300J										<5				
01	11/05/1999	1300J	*93750	*7								<5				
01	11/10/1999	1300J										<5				
01	11/17/1999	1300J		7.7	4	2		<0.03	<0.1	0.058		<5				
01	11/24/1999	1300J										<5				
01	12/02/1999	1300J										<5				
01	12/07/1999	1300J	*93750	*6.3								<5				
01	01/03/2000	1300J	*10084	*6.7								<6				
01	01/09/2000	1300J										<5		<10		
01	01/17/2000	1300J										<6				
01	01/24/2000	1300J										5.75				
01	01/31/2000	1300J										<5				
01	02/08/2000	1300J										<5				
01	02/14/2000	1300J										<5				
01	02/22/2000	1300J	*12492	*7.3								<5				
01	03/03/2000	1300J	*8332	8.4								<5				
01	04/13/2000	1300J	*9612	6.9								<5		<10		
01	05/01/2000	1300J	*19280									<6				
01	06/12/2000	1300J	*167979	7.3								<5		<10		
02	09/13/1999	1300J	>1.67	7.33								<5				
02	11/02/1999	1300J	*604	*6.3								<5				
02	11/08/1999	1300J										<5				
02	11/16/1999	1300J		6.5	9	<1		<0.03	<0.1	0.18		5.2				
02	11/16/1999	1300J										<5				
02	11/23/1999	1300J										<5				
02	12/01/1999	1300J	*663	*6								<5				
02	01/18/2000	1300J	*675	*6.5								54				
02	01/25/2000	1300J										<5				
02	01/31/2000	1300J										<5				
02	02/08/2000	1300J										<5				
02	02/14/2000	1300J	*838	*6.7								<5				
02	03/02/2000	1300J	1000	6.4								<5				
02	04/06/2000	1300J	*350	6.9								<5				
02	05/01/2000	1300J	*800									<5				
02	06/08/2000	1300J	350	6.8								<5				
01	05/21/1995	INDIV		7	19		6.2									
01	06/15/1995	INDIV										0.57				
01	06/18/1995	INDIV										2				

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	Daily Flow	pH	COD	TSS	TOC	Copper	Lead	Zinc	Non-Polar O&G	Total O&G	Residual Chlorine	Ethanol	Isopropyl alcohol	Methanol
			gallons	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Chevron USA - Willbridge Distribution																
01	11/06/1995	INDIV										<0.5				
01	12/01/1995	INDIV										0				
01	01/01/1996	INDIV										<10		<10		
01	02/05/1996	INDIV										<5				
01	03/22/1996	INDIV										<5				
01	04/02/1996	INDIV										<5		<10		
01	05/13/1996	INDIV										<5				
01	10/01/1996	INDIV										<6.5		<10		
01	11/01/1996	INDIV										<5				
01	12/04/1996	INDIV										<5				
01	12/10/1996	INDIV										<5				
01	01/01/1997	INDIV										<5		<10		
01	03/01/1997	INDIV										<5				
01	06/06/1997	INDIV										<5				
01	08/20/1997	INDIV										<5				
01	09/15/1997	INDIV										<5				
01	10/01/1997	INDIV										<5		<10		
01	11/07/1997	INDIV										<5				
01	12/09/1997	INDIV										<6				
01	01/02/1998	INDIV										<6		<10		
01	02/02/1998	INDIV										<5				
01	03/02/1998	INDIV										<5				
01	04/11/1998	INDIV										<5		<10		
01	05/26/1998	INDIV										<5				
01	06/13/1998	INDIV										<5				
01	09/18/1998	INDIV										<5		<10		
01	10/04/1998	INDIV										<6		<10		
01	11/03/1998	INDIV										<5				
01	12/02/1998	INDIV										<5				
01	12/07/1998	INDIV		7	5	18		<0.03	<0.1	<0.05		9.3				
01	01/17/1999	INDIV										<5		<10		
01	02/20/1999	INDIV										<5				
01	03/01/1999	INDIV										<5				
01	04/01/1999	INDIV										<5		<1	<1	<1
01	05/03/1999	INDIV										<5				
01	06/12/1999	INDIV										<5				
02	11/27/1995	INDIV										0.95				
02	12/01/1995	INDIV										<10				
02	01/01/1996	INDIV										<10				

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	Daily Flow	pH	COD	TSS	TOC	Copper	Lead	Zinc	Non-Polar O&G	Total O&G	Residual Chlorine	Ethanol	Isopropyl alcohol	Methanol
			gallons	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Chevron USA - Willbridge Distribution																
02	02/05/1996	INDIV										<5				
02	03/05/1996	INDIV										<5				
02	04/03/1996	INDIV										<5				
02	05/14/1996	INDIV										<5				
02	12/10/1996	INDIV										7.1				
02	12/12/1996	INDIV										<5				
02	01/01/1997	INDIV										<5				
02	03/01/1997	INDIV										<5				
02	10/01/1997	INDIV										<5				
02	11/07/1997	INDIV										<5				
02	01/15/1998	INDIV										<5				
02	03/03/1998	INDIV										<5				
02	05/26/1998	INDIV										<5				
02	10/04/1998	INDIV										<5				
02	12/07/1998	INDIV										<5				
02	12/07/1998	INDIV		6.5	7	1		<0.03	<0.1	0.063		8.7				
02	05/04/1999	INDIV										<5				
02	06/23/1999	INDIV										<5				
02	10/04/1999	INDIV		6.94								<5				
02	10/11/1999	INDIV		6.72								<5				
02	10/29/1999	INDIV										<5				
T47	06/06/1996	INDIV		6.8					0.007		<0.5		0.5			
T47	09/04/1996	INDIV		7									<0.1			

*Average

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	pH	Temp.	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc	Polar O&G	Non-Polar O&G	Total O&G
			SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Great Western Chemical																				
01	06/05/1995	1200Z	5.43		40	110	17		0.002	0.016	0.09	0.037			0.01		0.55			
01	07/06/1995	1200Z	5.57																	8
01	10/17/1995	1200Z	6.78		58	66	14	0.012	0.001	0.021	0.49	0.21	<0		<0.01		0.4			5
01	06/17/1996	1200Z	5.89		480	42	150	0.012	0.0033	0.031	1.8	0.23	<0		0.03		1.5			<3
01	12/16/1996	1200Z																		
01	06/04/1997	1200Z	5.6		25	35	8	<0.13	0.011	<0.02	0.14	<0.06	<0.0003		<0.03		0.19			2.4
01	10/28/1997	1200Z	6.2		82	42	26.7	<0.12	0.02	0.033	0.049	0.11	<0.0003		<0.03		0.21	<2		2.6
01	06/25/1998	1200Z	6.3		55	46	23	<0.16	<0.01	<0.02	0.077	<0.08	0.00041		<0.03		0.27	<2		4.9
01	09/22/1998	1200Z	5.6		130	110	38	<0.38	<0.086	<0.03	0.51	0.22	<0.0004		<0.075		0.49		18	22
01	11/20/1998	1200Z	5.8		<10	15	6.1	<0.12	<0.015	<0.02	0.048	<0.06	<0.0004		0.056		0.21		<2	2.4
01	05/07/1999	1200Z	5.4		43	17	8.3	<0.12	<0.015	<0.02	<0.025	<0.06	<0.0004		<0.05		<0.02			<2
01	10/08/1999	1200Z	5.2			63	6.3				0.16	<0.06					0.52			3.3
01	01/10/2000	1200Z	3.3			11					0.05	<0.08								6.4
02	04/07/1995	1200Z	6.9	10.2	41	40.8	40.8	<0.005	<0.001	<0.003	0.012	<0.02	<0.0005		<0.004		0.106			9.2
02	06/05/1995	1200Z	6.56		15	40	8			0.005	0.05	0.015					0.19			
02	02/06/1996	1200Z	6	11.9	19	59.4	20	<0.003	<0	0.0089	0.0289	0.026	<0.0005		0.004		0.138			12.9
02	03/03/1997	1200Z			42	35	1.89		0.001	<0.003	0.017	<0.02	0.0008	<0.003		<0.02	0.083			12
02	06/04/1997	1200Z	5.9		28	47	7.8	0.12	0.015	<0.02	0.049	<0.06	<0.0003		0.033		0.19			2.9
02	10/28/1997	1200Z	6.2		114	72	32.9	<0.12	<0.01	0.12	0.82	0.28	0.00033		0.035		0.84	<2		4.8
02	05/12/1998	1200Z	6.5		39	13					0.055	<0.1					0.295			14
02	06/24/1998	1200Z	5.8		<10	150	17	<0.16	<0.01	<0.02	0.061	0.096	0.00048		<0.03		0.37	<2		2.3
02	09/22/1998	1200Z	5.6		63	94	22	<0.38	<0.086	<0.03	0.065	<0.2	<0.0004		<0.075		0.29		<2	<2
02	11/20/1998	1200Z	6		17	47	4.5	<0.12	0.012	<0.02	0.017	<0.06	<0.0004		<0.03		0.17		<2	3.2
02	02/05/1999	1200Z	6.2		23	22					0.06	<0.1					0.25			<5
02	05/07/1999	1200Z	5.5			78	6.4	<0.12	<0.015	<0.02	0.035	0.087	<0.0004		<0.046		0.16			<2
02	10/08/1999	1200Z	5.9			14					0.017	<0.06					0.3			3
02	01/10/2000	1200Z	5.8			14					0.01	0.08								
02	03/27/2000	1200Z	5.9	12.5	49	30					0.03	<0.1					0.15			<5
T6	10/22/1996	1200Z	6.5																	
T6	11/20/1996	1200Z	7.2																	
T6	12/09/1996	1200Z	7.3																	
T6	01/03/1997	1200Z	6																	
T8	11/19/1996	1200Z	6.5																	
T8	12/04/1996	1200Z	6.5																	
T8	12/30/1996	1200Z	6.5																	

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	Daily Flow	pH	Temp.	TP	BOD5	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Total O&G
			gallons	SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
TOSCO																			
01	07/09/1997	1300J		6.75		0.98		27	29	8.7	<0.12	<0.01	<0.02	<0.01	<0.06	<0.0003	<0.03	0.042	<2
01	12/03/1997	1300J		6.3		0.21		<10	5.5	2.1	0.31	<0.01	0.052	0.019	0.19	<0.0004	0.047	0.35	3.4
01	01/01/1998	1300J	888.71	7.15															6.023
01	02/01/1998	1300J	2785	7.18															7.16
01	04/01/1998	1300J	125	7.11															5.341
01	05/01/1998	1300J	720	7.11															7.675
01	05/19/1998	1300J		7	14.6			19	6					0.038	<0.1			0.235	9
01	06/29/1998	1300J	150.56	7.1		<0.05		27	9	4.66	<0.12	<0.01	<0.02	0.019	0.087	<0.0004	<0.03	0.12	4.3
01	07/01/1998	1300J		7.11															3.626
01	09/01/1998	1300J	113	6.5															3.4
01	10/01/1998	1300J	~386	6.92															5.114
01	11/01/1998	1300J	*1909	7.02															9.31
01	12/01/1998	1300J	656	*6.92															2.921
01	12/07/1998	1300J		6.6				8	4.5					<0.03	<0.1			0.121	15
01	12/28/1998	1300J	511	*6.92		0.11		<10	11	2.4	0.06	<0.005	<0.01	<0.005	<0.03	0.0004	5	0.07	9.31
01	01/01/1999	1300J	1363	*6.17															7
01	02/01/1999	1300J	2356	*6.28															7.222
01	03/01/1999	1300J	1106	*6.02															7.55
01	03/18/1999	1300J		6.6															<2
01	04/01/1999	1300J	233	*6.08															6.889
01	05/01/1999	1300J	437	*6.03															7.33
01	06/01/1999	1300J	*259	5.97															*5.26
01	06/08/1999	1300J		7				<10	4.5	7.4	<0.12	<0.01	0.02	0.019	<0.06	<0.0004	<0.03	0.13	2.6
01	07/01/1999	1300J		*6.25															6.739
01	09/28/1999	1300J		7															6.1
01	10/25/1999	1300J																	<2
01	11/11/1999	1300J	*1375	6.6															4.9
01	11/23/1999	1300J		6.2	11.4			11	34					<0.03	<0.1			0.17	<5
01	12/02/1999	1300J		6.5															<2
01	12/02/1999	1300J		6.5		<0.3		25	70	1.9	<0.12	<0.01	<0.01	<0.01	<0.08	<0.0003	<0.03	0.096	<2
01	12/16/1999	1300J	*528																2.3
01	12/21/1999	1300J		5.9															
01	12/30/1999	1300J		6.1															<2
01	01/05/2000	1300J	*1176	6.7															<2
01	01/20/2000	1300J		6.5															<2
01	02/09/2000	1300J		6.2															<2
01	02/22/2000	1300J	*553	6.4															<2
01	03/09/2000	1300J	*904	6.8															4.4
01	03/22/2000	1300J		6.8															8.3
01	04/03/2000	1300J																	

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	Daily Flow	pH	Temp.	TP	BOD5	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Total O&G
			gallons	SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
TOSCO																			
01	04/04/2000	1300J		6.6															<2
01	04/24/2000	1300J	*264	6.8															<2
01	05/10/2000	1300J	*426	6.4															<2
01	05/24/2000	1300J		6.3															3.1
01	06/07/2000	1300J		6.4															2.2
01	06/20/2000	1300J		7.3		0.45		<10	1.5	4.4	<0.01	<0.02	0.04	<0.01	8	0.0005	<0.03	0.03	<2
01	06/01/1997	INDIV	84.5	7.08															5.2
01	09/01/1997	INDIV		7.28															6.87
01	10/01/1997	INDIV	453	7.19															4.77
01	11/01/1997	INDIV	451	7.19															7.28
01	12/01/1997	INDIV	613	7.2															7.416
02	12/03/1997	1300J		6		0.3		<10	2	1.8	0.19	0.012	0.053	0.017	0.13	<0.0004	0.053	0.27	2.8
02	01/01/1998	1300J	579.03	7.21															5.056
02	02/01/1998	1300J	2183	7.09															6.145
02	04/01/1998	1300J	42	7.11															6.333
02	05/01/1998	1300J	242	7.11															5.506
02	05/19/1998	1300J		6.5	14			20	10					0.028	<0.1			0.096	5
02	06/29/1998	1300J	50.53	6.2		<0.05		<10	1.6	6.19	<0.12	<0.01	<0.02	0.019	<0.08	<0.0004	<0.03	0.1	4.9
02	07/01/1998	1300J		7.07															3.258
02	09/01/1998	1300J	38	6.5															2.9
02	10/01/1998	1300J	~130	6.98															6.517
02	11/01/1998	1300J	*640	7.04															*5.229
02	12/01/1998	1300J	183	5.52															2.4
02	12/07/1998	1300J		6.3				11	5.4					<0.03	<0.1			0.095	12
02	12/28/1998	1300J	166	6.74		0.05		<10	1.7	2.1	<0.06	<0.005	<0.01	0.009	<0.03	<0.0004	5	0.055	8.778
02	01/01/1999	1300J	457	*5.94															8.65
02	02/01/1999	1300J	790	*5.99															6.067
02	03/01/1999	1300J	371	*6.1															8.47
02	03/18/1999	1300J		6.2															<2
02	04/01/1999	1300J	78	*5.96															8.333
02	05/01/1999	1300J	142	*6.1															6.222
02	06/01/1999	1300J	*87	*6.3															*4.65
02	06/08/1999	1300J		6.5			<10	<10	12	16	<0.12	<0.01	<0.02	0.013	<0.06	<0.0004	<0.03	0.18	2
02	07/01/1999	1300J		*6.08															5.87
02	09/28/1999	1300J		6.6															3
02	10/25/1999	1300J																	3.5
02	11/11/1999	1300J	*462	6.2															5.4
02	11/23/1999	1300J		6.3	10.9			9	5.2					<0.03	<0.1			0.092	<5
02	12/02/1999	1300J		5.9															5.9
02	12/02/1999	1300J		5.9		<0.3		25	19	1	<0.12	<0.01	<0.01	<0.01	<0.08	<0.0003	<0.03	0.08	<2

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	Daily Flow	pH	Temp.	TP	BOD5	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Total O&G
			gallons	SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
TOSCO																			
02	12/16/1999	1300J	*177																<2
02	12/21/1999	1300J		5.7															
02	12/30/1999	1300J		6															<2
02	01/05/2000	1300J	*395	6.2															<2
02	01/20/2000	1300J		6															3
02	02/09/2000	1300J		6.4															2.1
02	02/22/2000	1300J	*185	5.6															<2
02	03/09/2000	1300J	*303	6.2															2.3
02	03/22/2000	1300J		6.1															3.8
02	04/03/2000	1300J																	
02	04/04/2000	1300J		6.4															<2
02	04/24/2000	1300J	*88	6.5															<2
02	05/10/2000	1300J	*142	6															15
02	05/24/2000	1300J		6.1															3.5
02	06/07/2000	1300J		5.9															3.8
02	06/20/2000	1300J		6.1		0.06		<10	4.7	4.4	<0.012	<0.02	0.07	<0.01	<0.08	<0.0003	<0.03	0.04	<2
02	10/01/1997	INDIV	155	7.19															5.61
02	11/01/1997	INDIV	261	7.19															5.5
02	12/01/1997	INDIV	539	7.22															5.506

*Average

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22

Location Code	Collection Date	Permit Type	TP	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Total O&G
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
UNOCAL															
01	06/09/1995	1200T	0.02		3.7	1.43						0.0004			
01	01/01/1996	1200T													3.88
01	01/24/1996	1200T	<0.06	1	16	<3	<0.003	0.0004	<0	0.0118	0.004	<0.0005	0.008	0.107	7
01	02/01/1996	1200T													4.76
01	04/01/1996	1200T													4.21
01	05/01/1996	1200T													4.21
01	06/01/1996	1200T													5.25
01	09/01/1996	1200T													6.17
01	10/01/1996	1200T													3.54
01	11/01/1996	1200T													3.7
01	12/01/1996	1200T													3.25
01	01/01/1997	1200T													4.31
01	02/01/1997	1200T													3.83
01	02/13/1997	1200T													3.65
01	02/19/1997	1200T													4.022
01	03/01/1997	1200T													2.94
01	03/03/1997	1200T													7.935
01	03/11/1997	1200T													1.809
01	03/19/1997	1200T													0.549
01	03/26/1997	1200T													1.512
01	04/01/1997	1200T													2.82
02	06/09/1995	1200T	0.04	26	10.8	7.97				0.01		0.0003		0.25	
02	01/01/1996	1200T													3.58
02	02/01/1996	1200T													4.56

Table 5
Outfall 22 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW St. Helens Road	**NW St. Helens Road**	**NW St. Helens Road**	**NW St. Helens Road**	**NW St. Helens Road**	**NW St. Helens Road**	**NW St. Helens Road**	**NW St. Helens Road**
5501	NL	NL	NL	NL	NL	NL	NL
5605	Willbridge Garage (auto repair)	Willbridge Garage (auto repair)	Willbridge Garage (auto repair)	Union Tank Car Co.	Union Tank Car Co.	Union Tank Car Co.	Union Tank Car Co.
5625	NL	NL	NL	NL	NL	NL	NL
5655	NL	NL	NL	Murray's Shell Service	NL	NL	NL
5882	NL	NL	NL	NL	NL	NL	NL
5885	Silver Eagle Transportation	Silver Eagle Transportation	Silver Eagle Transportation	Silver Eagle Company, Beaver Motor Company (truck dealer)	Silver Eagle Company, Beaver Motor Company (truck dealer)	Silver Eagle Company, Beaver Motor Company (truck dealer)	NL
NW Front Ave.	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**
5480	NL	NL	NL	NL	NL	NL	McCall Oil & Chemical
5501	NL	NL	Chevron Asphalt Co. (mfrs.)	Chevron Asphalt Co. (mfrs.)	Chevron Asphalt Co. (mfrs.)	Chevron Co.	Chevron Co.
5531	NL	NL	NL	NL	NL	NL	NL
5540	NL	NL	NL	NL	NL	NL	Great Western Chemical Corp.
5700	NL	NL	Flintkote Co. (roofing materials)	Flintkote Co. (roofing materials)	Flintkote Co. (roofing materials)	Great Western Chemical Corp.	Great Western Chemical Corp.
5740	NL	NL	NL	NL	NL	NL	Great Western Chemical Corp.
NW Doane Ave.	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**
5528	NL	NL	NL	Union Oil of California terminal	Union Oil of California terminal	Union Oil of California terminal	Unocal 76 Northwest Area
5814	NL	NL	NL	NL	NL	NL	NL

NL = Not listed

Table 6
Outfall 22 EPA Toxic Release Inventory List and Hazardous Waste Generator List

RNO	Address	Company	EPA ID	TRI ID	SIC Number	Generator Status	Releases to Environment	Chemicals Used on Site
R941180360	5531 NW Doane Ave	Chevron USA Inc Willbridge Distrib Ctr	ORD000831701	97208CHVRN5531N	5171	LQG	Only air	Benzene, 1,2,4-Trimethyl-, Benzene, Ethylbenzene, Methyl Tert-Butyl Ether (Mtbe), N-Hexane, Toluene, Xylenes, Zinc Compounds
R941180170	5700 NW Front Ave	Great Western Chemical Company	ORD058131178	*	2899	LQG	*	
R941180170	5700 N.W. Front Ave	Great Western Chemical Company Portland	ORD980981278	97210GRTWS5700N	2842, 5169	LQG	Only air	Certain Glycol Ethers, Ethylbenzene, Ethylene Glycol, Methanol, Methyl Ethyl Ketone, Nitric Acid, Phosphoric Acid, Toluene, Xylenes
R941190640	5501 NW Front Ave	Chevron Products Company Willbridge	ORD009031873	97210WLLBR5501N	2911	LQG	Only air	Benzene, 1,2,4-Trimethyl-, Benzene, Cyclohexane, Ethylbenzene, Methyl Tert-Butyl Ether (MTBE), N-Hexane, Toluene, Xylenes, Zinc
R94180264, R94190960	5480 NW Front Ave	McCall Oil and Chemical	ORD096990569	*	5171, 4226	SQG	*	
R961130140	5885 NW St Helens Rd	Metropolitan Service District	ORD981774110	*	*	*	*	
R941190160	5882 NW St Helens Rd	TOSCO Northwest Company Owned Equipment	ORD987190949	*	5171	*	*	
R941190160	5528 NW Doane Ave	TOSCO Portland Terminal	ORD087458196	*	5171	LQG	*	1,2,4-Trimethyl-, Benzene, Cyclohexane, Ethylbenzene, N-Hexane, Naphthalene, Toluene, Xylenes
R941180170	5740b NW Front Ave	Olin Microelectronic Materials	ORQ000006288	*	4225	LQG	*	

LQG = Large Quantity Generator
SQG = Small Quantity Generator
* No information available in database

Table 7
Outfall 22 EPA Emergency Response Notification System

Company	Site Address	ID	Spill Date	Media	Chem ID	Contaminant	Quantity	Units	Comment
Tidewater barge lines	5528 NW Doane	609372	02/10/1999	Willamette River	1851	Oil: diesel	3.0	Gal	Tug defiance / material spilled during fueling operations due to an undetermined cause. 2-3 gallons spilled / small boat in water / boom deployed / sorbents used. The sheen is small and just around the vessel will make necessary notifications
Unknown organization	TOSCO dock	609383	02/10/1999	Willamette River	1851	Oil: diesel	1.0	Qrt	The responsible party has not been determined / material spilled duringtransfer operations fm the dock to the tug Defiance. Sorbents used / clean up completed / it is believed the material spilled fm the dock hose. No sheen remains / will notify: state and USCG.

Table 8
Outfall 22 EPA RCRA Treatment Storage Disposal

ADDRESS	EPA ID	TRI FACILITY ID	NAME
5501 NW Front Ave	ORD009031873	97210WLLBR5501N	Chevron USA Prods. Co.

Table 9
Outfall 22 DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI ID	CERCLIS	Action	Status	Notes
R94180264, R94190960	5550 NW Front Ave	McCall Oil	134	*	*	SUS	
R941190160	5528 NW Doane Ave	Unocal - Willbridge Terminal	177	*	*	SUS	
R941180360	5531 NW Doane Ave	Chevron - Willbridge Distribution Terminal	25	000831701	*	SUS	
R941190640	5501 NW Front Ave	Chevron USA Asphalt Refinery	1281	009031873	Remedial Investigation	LIS	
NA	NW Doane Ave	Willbridge Bulk Fuel	1549	*	Remedial Investigation	SUS	

LIS = Listed
NA = Not Applicable
SUS = Suspected
* No information available in database

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 134

shows data entered as of August 15, 2000 at 4:35:02 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 134	Site Name: McCall Oil		CERCLIS No:
	Address: 5550 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 18		Tax Lots: 17
	Latitude: 45 deg. 33 ' 50"	Longitude: 122 deg. 44 ' 20"	Site Size: 7.5 acres
Other Site Names:			
	Portland Harbor Sediment Study		
	Great Western Chemical		
Operations:			
	Name: McCall Oil		
	Comments: Petroleum terminal .		
	Years of Operation: 1975 - Present		
	SIC Code: 5171		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Petroleum, VOCs. In adjacent Willamette River sediments: aluminum, barium, cadmium, cobalt, lead, mercury, zinc, 4-methylphenol, butylbenzylphthalate, di-n-octylphthalate, dibenzofuran, LPAHs and HPAHs.
Manner and Time of Release:	Approximately 11 spills ranging up to 10,000 gallons have been documented on the site since it became an active petroleum handling facility in 1946.
Contamination Information:	An oil spill occurred on 11/4/88 at the McCall facility. 8,400 gallons of bunker 'C' oil (asphalt, tar). Cleanup was initiated by McCall Oil. Copper and arsenic contamination was discovered near the chemical plant in 1991 and a soil removal was done. Due to contamination seen on adjoining properties, a state PA was requested in 1993. Three wells were installed in 1994 and a round of groundwater samples taken. These samples showed that there was VOC contamination near the chemical plant. Two additional wells were installed in December 1994 to investigate the VOC material. (11/19/99 TBG/SAS) It appears site activities have resulted in sediment contamination adjacent to the site. Concentrations of dibenzofuran and PAHs near McCall's dock and cadmium, lead and zinc near Great Western Chemical Company's storm water outfall exceeded Portland Harbor baseline values. Although phthalates were also detected above baseline, they do not appear to be used at this site. Groundwater monitoring data shows on-site diesel or lube oil contamination may be migrating to the river, although it is not clear if subsurface migration is contributing towards documented river sediment contamination. Although elevated levels of metals and chlorinated solvents have been detected in on-site groundwater in the past, these contaminants do not appear to be migrating to the river at this time.

Pathways:	Soil and groundwater. Historically the petroleum products handled on the site have been viscous (asphalt) so the probability of migration to groundwater is relatively low. Contaminiation is expected to be limited to shallow soils.
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(3/31/95 KAC/SRS) Numerous small oil spills have occurred during the life of the facility. All were cleaned up by facility employees. A removal action was performed in 1991 when copper and arsenic contamination was discovered in the chemical plant area. An expanded PA was begun in 1994 and included the drilling of 3 wells and soil and groundwater sampling. Two additional wells were drilled in December 1994, after VOC contamination was found near the center of the property. (11/19/99 TBG/SAP) Based on initial sampling results from a river sediment quality study, the McCall Oil site has been identified as a potential source of contamination to the Portland Harbor. A Strategy Recommendation was completed in November 1999. A Remedial Investigation (RI) is required to evaluate the potential ecological threat of the sediment contamination. (3/1/00 JMW/SAP) Voluntary Agreement for Remedial Investigation and Source Control Measures forwarded to McCall Oil and Chemical Corporation on February 29, 2000. Signed agreement due back March 31, 2000.
Data Sources:	1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston Inc. for USEPA, May 1998. 2) Preliminary Assessment, prepared by EMCON Northwest, Inc. for McCall Oil and Chemical Corporation and Great Western Chemical Company, April 5, 1994. 3) Evaluation of Metal Migration, prepared by EMCON Northwest, Inc. for Great Western Chemical Company, April 26, 1994. 4) Telephone Conversation Concerning McCall Marine Terminal Construction History with Tom Bernet, November 15, 1999. 5) DEQ LUST, HWIMSy (Hazardous Waste Generator) and SPINS (Spill) Databases. 6) MetroScan Property Records, Multnomah County, Oregon.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ALUMINUM	Sediment	43700 - 43800 ppm	09/01/1997	Y		
BARIUM	Sediment	203 ppm	09/01/1997	Y		
BUNKER - FUEL OIL	Soil					
BUTYL BENZYL PHTHALATE	Sediment	120 ppb	09/01/1997	Y		
CADMIUM	Sediment	.07 ppm	09/01/1997	Y		
COBALT	Sediment	20 ppm	09/01/1997	Y		
CRESOL,4-	Sediment	880 ppb	09/01/1997	Y		
DI-n-OCTYL PHTHALATE	Sediment	110 ppb	09/01/1997	Y		
DIBENZOFURAN	Sediment	200 ppb	09/01/1997	Y		
LEAD	Sediment	47 ppm	09/01/1997	Y		
MERCURY	Sediment	0.11 - 0.17 ppm	09/01/1997	Y		
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	LPAHs - 2237 ppb	09/01/1997	Y		
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	HPAHs - 3038 ppb	09/01/1997	Y		
ZINC	Sediment	142 - 212 ppm	09/01/1997	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	08/04/1988		Michael Zollitsch	DEQ		SAS
SITE EVALUATION	02/27/1994	02/27/1994	Ken Cameron	DEQ	HQ	SRS
Insufficient information to list	02/28/1994		Ken Cameron	DEQ		SRS
Listing Review completed	02/28/1994	02/28/1994	Ken Cameron	DEQ		SRS
BASIC PRELIMINARY ASSESSEMENT	03/01/1994	06/01/1994	Ken Cameron	DEQ	HQ	SRS
EXPANDED PRELIMINARY ASSESSMENT	06/01/1994		Ken Cameron	DEQ	HQ	SRS
State Expanded Preliminary Assessment recommended (XPA)	06/01/1994	06/01/1994	Ken Cameron	DEQ		SRS
Insufficient information to list	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
SITE SCORING	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
Remedial Investigation recommended (RI)	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
SITE PRIORITY EVALUATION FOR FURTHER ACTION	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
Listing Review completed	11/15/1999	11/15/1999	Thomas Gainer	DEQ	NW	SAS
Letter Agreement	02/29/2000		Thomas Gainer	DEQ	NW	VCS
NEGOTIATIONS	02/29/2000		Thomas Gainer	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 177

shows data entered as of August 15, 2000 at 4:42:15 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 177	Site Name: Unocal - Willbridge Terminal		CERCLIS No:
	Address: 5528 NW Doane AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots: 16
	Latitude: 45 deg. 33 ' 41"	Longitude: 122 deg. 44 ' 30"	Site Size: 18.6 acres

Other Site Names:

Union Oil - Willbridge Terminal

Tosco - Willbridge Terminal

Chevron - Willbridge Dist Terminal (ECSI #25)

Shell Oil Company - Willbridge Plant (ECSI #160)

Willbridge Bulk Fuel Area (ECSI #1549)

Operations:

Name: Unocal - Willbridge Terminal

Comments: Petroleum transfer terminal. .

Years of Operation: 1920s to present

SIC Code: 5171 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	diesel, gasoline, heavy oils and constituents
Manner and Time of Release:	Past practices (spills). Time of release: unknown; 2/22/97 tank overfill (unattended tank transfer).
Contamination Information:	The US Coast Guard discovered oil seeping from the shoreline on 1/28/82. The site is between Union Oil and the Chevron Terminal. The site is on Union property but both Union and Chevron agreed to conduct groundwater contamination studies. The program was modified in 1986 and is continuing. (11/12/91 RP/NWR) There are currently 4 oil/water separators on site that treat wastewater from surface runoff and groundwater treatment. However, they are designed to remove free product and not dissolved contamination. The extent of petroleum contamination of soil and groundwater, especially dissolved contamination has not been determined. At least 4 separate releases have been identified, based on work done by Riedel (diesel, gasoline, and heavy oil). Groundwater contamination continues to bypass the recovery systems as witnessed by ongoing seepage into the Willamette River (most recently on 10/28/91 by Andree Pollock DEQ/NWR).

While NPDES permits have (10/15/97; SMF): Additional release of 11,700 gallons of premium grade gasoline at Tank Farm #2 on 2/22/97. MSDS suggests that the product may have contained MTBE (up to 11 percent) and tetraethyl lead (33 ppm).

Pathways: Surface water, soil; recovery system and 4 oil/water separators to remove free product from groundwater maintained by Riedel Environmental Services. Free product on shallow groundwater table represents inhalation threat to on- and off-site workers, and contact/inhalation/fire/explosion hazard to potential utility trench workers along NW Front Street. Dissolved constituents represent a threat to aquatic life in the river.

Environmental/Health Threats: Seepage of contaminated groundwater into the Willamette River. Potential vapor exposure to on- and off-site workers. Potential vapor/contact/fire/ explosion threat to utility trench workers along NW Front Avenue.

Status of Investigative or Remedial Action: Responsible party cleanup or removal recommended. (11/12/91 RP/NWR) Extent of petroleum and dissolved phase petroleum contamination is unknown. Recovery systems have dealt exclusively with free-product contamination of groundwater, mainly diesel. Other petroleum products have been released, but have not been adequately investigated. (8/9/95 DMC/SAS) For more information on remedial activities, refer to ECSI site #1549. Remedial action for 2/22/97 gasoline spill should be addressed through existing Consent Order for Willbridge Bulk Fuel Area (ECSI #1549). ECSI #25, 160, and 177 have been combined into ECSI #1549.

Data Sources: NPDES permit review and ongoing evaluation by Andree Pollock; (10/28/91) inspection reports; correspondence from owner and/or operator; Notice of Violation Letter; Spill/response documents (OARS #97-0545).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
DIESEL - FUEL OIL	Groundwater	unknown	10/28/1991		Y	
DIESEL - FUEL OIL	Soil	unknown	10/28/1991		Y	
DIESEL - FUEL OIL	Surface Water	unknown (seepage into Willamette River)	10/28/1991		Y	
GASOLINE	Groundwater	unknown	10/28/1991		Y	
GASOLINE	Soil	unknown	10/28/1991		Y	
GASOLINE	Surface Water	unknown (seepage into Willamette River)	10/28/1991		Y	
OIL OR FUEL RELATED COMPOUNDS	Groundwater	unknown (heavy oil)	10/28/1991		Y	
OIL OR FUEL RELATED COMPOUNDS	Soil	unknown (heavy oil)	10/28/1991		Y	
OIL OR FUEL RELATED COMPOUNDS	Surface Water	unknown (heavy oil seepage into Willamette River)	10/28/1991		Y	

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	08/16/1988		Michael Zollitsch	DEQ	HQ	SAS
SITE EVALUATION	11/11/1991	11/11/1991	Rai Peterson	DEQ	NW	SAS
Listing Review completed	11/12/1991	11/12/1991	Rai Peterson	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	11/13/1991	11/13/1991	Rai Peterson	DEQ	NW	SAS
State Basic Preliminary Assessment recommended (PA)	11/14/1991	11/14/1991	Rai Peterson	DEQ	NW	SAS
BASIC PRELIMINARY ASSESSEMENT	07/27/1992		Karl Morgenstern	DEQ	HQ	SAS
Facility proposed for Confirmed Release List	10/05/1992	12/08/1992	Karl Morgenstern	DEQ		SAS

Owner/operator comments received on listing notification	01/27/1993		Dan Crouse	DEQ		SAS
REMEDIAL INVESTIGATION	09/02/1993		Sheree Stewart	DEQ	HQ	SRS
NEGOTIATIONS	09/02/1993	03/31/1994	Sheree Stewart	DEQ	HQ	SRS
REMOVAL	04/01/1994	09/08/1998	Jill Kiernan	DEQ	NW	SRS
PRELIMINARY ASSESSMENT EQUIVALENT	10/01/1997	10/15/1997	Steve Fortuna	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	10/15/1997	10/15/1997	Steve Fortuna	DEQ	NW	SAS
Remedial Investigation/Feasibility Study recommended	10/15/1997	10/15/1997	Steve Fortuna	DEQ	NW	SAS
Proposal for Inventory recommended	10/15/1997	10/15/1997	Steve Fortuna	DEQ	NW	SAS
Decision Not to List Site (on the CRL or Inventory)	09/08/1998	09/08/1998	Janelle Waggy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 25

shows data entered as of August 15, 2000 at 4:42:51 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 25	Site Name: Chevron - Willbridge Distribution Terminal		CERCLIS No: 000831701
	Address: 5531 NW Doane AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 18		Tax Lots: 5
	Latitude: 45 deg. 33 ' 41"	Longitude: 122 deg. 44 ' 30"	Site Size: 43 acres
Other Site Names:			
	Chevron USA - Willbridge		
	Chevron Bulk Plant - Willbridge		
	Willbridge Bulk Fuel Area (ECSI #1549)		
	Shell Oil Company - Willbridge Plant (ECSI #160)		
	UNOCAL - Willbridge Terminal (ECSI #177)		
Operations:			
	Name: Chevron - Willbridge Distribution Termin		
	Comments: Receives and redistributes petroleum products; receives, warehouses, . and distributes tires, batteries, and automotive accessories		
	Years of Operation: 1912 to present		
	SIC Code: 5171		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	petroleum hydrocarbons weathered gasoline products tank bottoms
Manner and Time of Release:	Past operating practices; spills, leaks to storm sewer, sludge burial; 13 spills between 6/73 and 9/84; ongoing seepage 10/28/91.
Contamination Information:	Past activities (inland spills, tank bottoms burial practices, leaky petroleum transmission lines at main distribution terminal) have allowed petroleum products to permeate fill sands and accumulate at top of shallow aquifer. Actual source of groundwater contamination is obscure. Shell and Union Oil have tank farms adjoining this site and may have contributed. (City of Portland) facility fined five times by Coast Guard as a result of oil seeps at edge of Willamette River. Waste in form of weatherized gasoline products, tank bottoms, and API separator product; leachate from old sludge burial pits. (11/13/91 RP/NWR) Petroleum seepage into Willamette River observed by DEQ staff 10/28/91.
Pathways:	Groundwater contamination, surface water, potential soil contamination.

Environmental/Health Threats:	Seepage of contaminated groundwater into the Willamette River.
Status of Investigative or Remedial Action:	Network of 3 recovery wells to intercept flow of hydrocarbons to river. Storm sewer reconstructed to eliminate petroleum migration via storm sewer. API separator and hydro cleaner installed to process petroleum contaminated groundwater. Spill containment and catchment devices installed (mainly free product removal). (3/31/93 DBennett/EPA) No further investigation anticipated under the Federal Superfund program; recommend PRP continue working with DEQ. (5/25/94 KAM/SRS) Further action letter sent 6/30/93. (8/9/95 DMC/SAS) For more information on remedial activities, refer to site #1549. ECSI #25, 160, 177 have been combined into ECSI #1549.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
LEAD	Groundwater	32 ppm EP Tox			Y	
PETROLEUM HYDROCARBONS	Groundwater	Above detec. limit			Y	
PETROLEUM HYDROCARBONS	Surface Water	DEQ staff observed discharge to river 10/28/91			Y	

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	08/01/1980			EPA		
EPA PA1/SI1	02/11/1985	06/20/1985		EPA		
No Further Remedial Action Planned under Federal program	06/20/1985	06/20/1985		EPA		
Site added to database	04/22/1988		Marilyn Daniel	DEQ		SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ		SAS
SITE EVALUATION	12/11/1989	12/11/1989	Debbie Bailey	DEQ	HQ	SRS
State Basic Preliminary Assessment recommended (PA)	12/12/1989	12/12/1989	Debbie Bailey	DEQ		SRS
BASIC PRELIMINARY ASSESSEMENT	03/08/1990	07/10/1992	Karl Morgenstern	DEQ	HQ	SAS
Listing Review completed	11/13/1991	11/13/1991	Loretta Pickerell	DEQ		SAS
Proposal for Confirmed Release List recommended	11/14/1991	11/14/1991	Loretta Pickerell	DEQ		SAS
Facility proposed for Confirmed Release List	10/05/1992	10/05/1992	Loretta Pickerell	DEQ		SAS
EPA Site Inspection Prioritization	03/02/1993	03/02/1993		EPA		
No Further Remedial Action Planned under Federal program	03/31/1993	03/31/1993		EPA		
REMEDIAL INVESTIGATION	09/02/1993		Jill Kiernan	DEQ	NW	SRS
NEGOTIATIONS	09/02/1993	03/31/1994	Sheree Stewart	DEQ	HQ	SRS
REMOVAL	04/01/1994	09/08/1998	Jill Kiernan	DEQ	NW	SRS
Decision Not to List Site (on the CRL or Inventory)	09/08/1998	09/08/1998	Janelle Waggy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).
Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.
Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1281

shows data entered as of August 15, 2000 at 4:43:21 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1281	Site Name: Chevron USA Asphalt Refinery		CERCLIS No: 009031873
	Address: 5501 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 19		Tax Lots:
	Latitude: 45 deg. 33 ' 43"	Longitude: 122 deg. 44 ' 12"	Site Size: 38 acres
Other Site Names:			

Operations:

Name: Chevron USA Asphalt Ref.

Comments: asphalt refinery, emulsions manufacturing and asphalt blending. 91 production . tanks, 8 tank truck loading racks, 1 tank car loading rack.

Years of Operation: since 1947

SIC Code: 2911 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	TPH (petroleum); primarily gasoline, BTEX, PAHs, phenolic compounds
Manner and Time of Release:	Incidental spills during operations, transport and transfer since 1947.
Contamination Information:	Free product in groundwater in the general vicinity of the site prompted DEQ to request a PA in 1993.
Pathways:	The site is located near the southwest bank of the Willamette River at river mile 8.25. The river is approximately .25 mile from the site.
Environmental/Health Threats:	Potential for direct contact, as well as for releases to the Willamette River.
Status of Investigative or Remedial Action:	After review of Environmental Site Assessment, SRS transferred project to VCS in April 1994.
Data Sources:	Environmental Site Assessment Report, Chevron Willbridge Asphalt Refinery, November 4, 1993, prepared by SEACOR.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ACENAPHTHYLENE	Soil	98 mg/Kg	09/17/1993	Y		
ARSENIC	Groundwater	.072 mg/l	08/10/1993	Y		
BARIUM	Groundwater	.17 mg/l	08/10/1993	Y		
BARIUM	Soil	187 mg/Kg	09/17/1993	Y		
BENZENE	Groundwater	720 ug/l	08/10/1993	Y		
BENZENE	Soil	6.0 mg/Kg	09/17/1993	Y		
BENZO(a)ANTHRACENE	Soil	3.7 mg/Kg	09/17/1993	Y		
BENZO(a)PYRENE	Soil	0.27 mg/Kg	08/10/1993	Y		
BENZO(b)FLUORANTHENE	Soil	0.6 mg/Kg	09/17/1993	Y		
BENZO(k)FLUORANTHENE	Soil	0.55 mg/Kg	09/17/1993	Y		
CHRYSENE	Soil	4.4 mg/Kg	09/17/1993	Y		
DIESEL - FUEL OIL	Groundwater	28 mg/l	08/10/1993	Y		
ETHYLBENZENE	Groundwater	47 ppb	08/10/1993	Y		
ETHYLBENZENE	Soil	11 mg/Kg	09/17/1993	Y		
GASOLINE	Groundwater	5.2 mg/l	08/10/1993	Y		
GASOLINE	Soil	1,600 mg/Kg	09/17/1993	Y		
NAPHTHALENE	Groundwater	3.6 ug/l	08/10/1993	Y		
NAPHTHALENE	Soil	16 mg/kg	08/10/1993	Y		
PHENOLS	Groundwater	.09 ug/l	08/10/1993	Y		
TOLUENE	Groundwater	5.4 mg/l	01/10/1994	Y		
TOLUENE	Soil	35 mg/Kg	09/17/1993	Y		
TOTAL PETROLEUM HYDROCARBONS (TPH)	Soil	36,000 mg/Kg	09/17/1993	Y		
VANADIUM	Soil	103 mg/Kg	09/17/1993	Y		
XYLENEs	Groundwater	60 mg/l	08/10/1993	Y		
XYLENEs	Soil	37 mg/Kg	09/17/1993	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	08/21/1979			EPA		
EPA Basic Preliminary Assessment	11/01/1983	09/17/1984		EPA		
No Further Remedial Action Planned under Federal program	09/17/1984	09/17/1984		EPA		
Site added to database	01/23/1993		Dan Crouse	DEQ	HQ	SAS
REMEDIAL INVESTIGATION	01/05/1994		Mike Kortenhof	DEQ	NW	VCS
Listing Review completed	04/18/1994	04/18/1994	Sheree Stewart	DEQ	HQ	SRS
SITE EVALUATION	04/18/1994	04/18/1994	Sheree Stewart	DEQ	HQ	SRS
Proposal for Confirmed Release List recommended	04/19/1994	04/19/1994	Sheree Stewart	DEQ	HQ	SRS
Facility proposed for Confirmed Release List	07/26/1994	07/26/1994		DEQ	HQ	SAS
Listing on Confirmed Release List recommended	10/19/1994	10/19/1994		DEQ	HQ	SAS
Review for final listing	10/19/1994	10/19/1994		DEQ	HQ	SAS
Facility placed on Confirmed Release List	10/24/1994	10/24/1994	Heather Schijf	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.
NPL Site: Is the site on EPA's Superfund List? (Y/N).
Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.
Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1549

shows data entered as of August 15, 2000 at 4:43:56 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1549	Site Name: Willbridge Bulk Fuel Area		CERCLIS No:
	Address: NW Doane AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: Y
Property:	Twnshp/Range/Sect: 0 , 0 , 0		Tax Lots:
	Latitude: 45 deg. 33 ' 57"	Longitude: 122 deg. 44 ' 22"	Site Size:

Other Site Names:

Chevron - Willbridge Distribution Terminal

Shell Oil Co. - Willbridge Plant

Unocal - Willbridge Terminal

Operations:

Name: Willbridge Bulk Fuel Area

Comments: .

Years of Operation:

SIC Code: 5171 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylene, polynuclear aromatic hydrocarbons (PAHs), heavy metals, DDT.
Manner and Time of Release:	Leaks and spills from product tanks and pipelines.
Contamination Information:	Remedial investigations have been conducted at the Shell Oil, Chevron, and Unocal facilities since the 1970s. A fairly extensive network of wells provide groundwater contamination data on all three facilities. There is free product and dissolved-phase contamination from petroleum products beneath all three facilities. There are high levels of heavy metals in groundwater beneath the three facilities. In addition, groundwater at the Shell Oil facility contains DDT.
Pathways:	The Willamette River is adjacent to all three sites, which is in direct hydraulic connection with the contaminated groundwater. The river is used for fishing and recreational purposes. Seepage of contaminants in groundwater into the river is on-going.
Environmental/Health Threats:	Contaminant concentrations in groundwater may present current and future threats to human health and the environment via discharge to the Willamette River. Volatile emissions from the free product in groundwater could affect the health and safety of utility/service line workers.

Status of Investigative or Remedial Action: (1/17/96 JAK/SRS) Chevron, Shell, and Unocal signed a Consent Order with DEQ on 3/30/94, to conduct a remedial investigation, feasibility study, and interim remedial measures. A Work Plan for Interim Actions was submitted in 9/94 and approved by DEQ in 6/95. An Interim Action Design Plan was also submitted in 4/95 and approved by DEQ in 6/95. Interim actions were initiated in 5/95 to address free product in groundwater and contaminant seepage into the Willamette River. These include: (1) free-product removal from existing monitoring wells via recovery canisters, auto-bailers, and/or petro-belts; (2) continued operation of a subsurface cutoff trench; and (3) placement of containment booms around seepage areas in the Willamette River. Although the focus of site efforts is on interim actions to control seepage of free product into the Willamette River, the submittal of an RI/FS Work Plan is scheduled for April 1997. Quarterly groundwater monitoring is ongoing. NOTE: ECSI #25, 160, and 177 combined into ECSI #1549.

Data Sources:
1) Chevron site files (ECSI #25).
2) Shell site files (ECSI #160).
3) Unocal site files (ECSI #177).
4) SRS Project Manager files.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
SITE EVALUATION	08/29/1993	08/29/1993	Sheree Stewart	DEQ	HQ	SRS
PRELIMINARY ASSESSMENT EQUIVALENT	08/29/1993	08/29/1993	Sheree Stewart	DEQ	HQ	SRS
Listing Review completed	08/30/1993	08/30/1993	Sheree Stewart	DEQ	HQ	SRS
Insufficient information to list	08/31/1993		Sheree Stewart	DEQ	HQ	SRS
Remedial Investigation/Feasibility Study recommended	09/01/1993	09/01/1993	Sheree Stewart	DEQ	HQ	SRS
NEGOTIATIONS	09/02/1993	03/30/1994	Sheree Stewart	DEQ	HQ	SRS
Proposal for Confirmed Release List recommended	03/30/1994	03/30/1994	Jill Kiernan	DEQ	NW	SRS
Proposal for Inventory recommended	03/30/1994	03/30/1994	Jill Kiernan	DEQ	NW	SRS
REMOVAL	03/30/1994		Jill Kiernan	DEQ	NW	SRS
Consent Order	03/30/1994	03/30/1994	Sheree Stewart	DEQ	NW	SRS
REMEDIAL INVESTIGATION	03/30/1994		Jill Kiernan	DEQ	NW	SRS
Site added to database	05/04/1994		Sheree Stewart	DEQ	HQ	SRS
Facility proposed for Confirmed Release List	09/28/1998	09/28/1998	Kim Van Patten	DEQ	NW	SRS
Facility proposed for Inventory	09/28/1998	09/28/1998	Kim Van Patten	DEQ	NW	SRS
Facility placed on Confirmed Release List	12/29/1998	12/29/1998	Kim Van Patten	DEQ	NW	SRS
Facility placed on Inventory	12/29/1998	12/29/1998	Kim Van Patten	DEQ	NW	SRS

Key to certain acronyms and terms in this report:
CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.
Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.
NPL Site: Is the site on EPA's Superfund List? (Y/N).
Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-

priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.
Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Table 10
Outfall 22 DEQ Leaking Underground Storage Tanks List

RNO	Address	Log Number	Company	Cleanup Start	Cleanup End	Site Work Complete
R941180360	5531 NW Doane Ave	26-94-0072	Chevron NW Doane Ave	4/26/94	5/24/94	5/24/94
R941180170	5540 NW Front Ave	26-89-0173	Great Western Chemical-Portland	8/17/89	1/22/90	1/22/90
R941190160	5528 NW Doane Ave	26-97-0577	TOSCO - Portland Terminal/UNOCAL	9/4/97	*	*

* No information available in database

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 09:00 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-94-0072
UST FAC NBR: 5928 DATE REPORTED: 26-APR-94

SITE NAME: CHEVRON NW DOANE AVE
SITE ADDRESS: 5531 NW DOANE AVE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 221-7758

----------SITE ASSESSMENT----------

DATE DISCOVERED: 23-APR-94 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: Y
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: Y	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED: 24-MAY-94
CLEANUP STARTED: 26-APR-94 NO FURTHER ACTION: 24-MAY-94

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:50 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0173
UST FAC NBR: 4749 DATE REPORTED: 18-AUG-89

SITE NAME: GREAT WESTERN CHEMICAL-PORTLAND
SITE ADDRESS: 5540 NW FRONT AVE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)242-0200

----------SITE ASSESSMENT----------

DATE DISCOVERED: 17-AUG-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP Y	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 17-AUG-89 REMEDIATION COMPLETED: 22-JAN-90
CLEANUP STARTED: 17-AUG-89 NO FURTHER ACTION: 22-JAN-90

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 09:02 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-97-0577
UST FAC NBR: 1203 DATE REPORTED: 04-AUG-97

SITE NAME: TOSCO - PORTLAND TERMINAL/UNOCAL PDX TE
SITE ADDRESS: 5528 NW DOANE AVE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 248-1530

----------SITE ASSESSMENT----------

DATE DISCOVERED: 04-AUG-97 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 04-AUG-97 REMEDIATION COMPLETED:
CLEANUP STARTED: 04-AUG-97 NO FURTHER ACTION:

(opens_inc.rpt)

Table 11
Outfall 22 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/AST	Location	Comments
5501 NW Front Ave.	American Bitumuls Co.	4135	Mar-1952	300	AST	detached	Steel, lube oil
5635 NW St. Helens	Casciato (SFR)	34604	Jul-1947	275	AST	basement	NW corner of tank farm
5700 NW Front Ave.	Chemax	10714	Apr-1986	2@ 9,000	AST	detached	Diesel, waste oil, gasoline. Removed by Olympus Environmental
5700 NW Front Ave.	Chemax	10714	Apr-1986	4@ 20,000	AST	detached	Diesel, waste oil, gasoline. Removed by Olympus Environmental
5700 NW Front Ave.	Chemax	10714	Apr-1986	6@ 10,000	AST	detached	Diesel, waste oil, gasoline. Removed by Olympus Environmental
5700 NW Front Ave.	Chemax	2273	Apr-1987	30,000	AST	detached	Diesel, waste oil, gasoline. Removed by Olympus Environmental
5700 NW Front Ave.	Chemax	2273	Apr-1987	3@ 12,000	AST	detached	Foss Environmental Decom. 10,000 diesel, rem. 675 waste oil
5700 NW Front Ave.	Chemax	2273	Apr-1987	2@ 10,000	AST	detached	Foss Environmental Decom. 10,000 diesel, rem. 675 waste oil
5700 NW Front Ave.	Chemax	2273	Apr-1987	2@ 21,000	AST	detached	Was used for fuel additive, now for waste water
5700 NW Front Ave.	Chemax	2273	Apr-1987	5@ 20,000	AST	detached	
5700 NW Front Ave.	Chemax	10715	Apr-1987	3@ 20,000	AST	detached	114 total tanks, 366,288 gallons
5700 NW Front Ave.	Chemax	10715	Apr-1987	5@ 10,000	AST	detached	
5531 NW Doane	Chevron	6976	Jul-1964	285	AST	detached	
5501 NW Front Ave.	Chevron	980714	Dec-1982	550	AST	detached	
5531 NW Doane	Chevron	86527	Aug-1986	3@ 84,000	AST	yard	Heated oil used to flush asphalt from tanker trucks
5531 NW Doane	Chevron	941117	Oct-1994	7@ 11,000	AST	yard	Asphalt bulk plant
5501 NW Front Ave.	Chevron	950892	Aug-1995	120	AST	detached	
5501 NW Front Ave.	Chevron	970832	Aug-1997	5,077	AST	detached	Diesel
5533 NW Doane	Chevron	981559--REM	Dec-1998		AST	Abandon Tank #3	Trichloroethane
5700 NW Front Ave.	Flintkote (Roofing Mfg.)	2497	Feb-1948	675	AST	detached	
5700 NW Front Ave.	Flintkote (Roofing Mfg.)	66226	Nov-1951	200	AST	detached	
5700 NW Front Ave.	Flintkote (Roofing Mfg.)	4423	Apr-1953	1000	AST	detached	
5540 NW Front Ave.	Great Western Chemical	890877	Aug-1989	1,000	UST	yard	
5700 NW Front Ave.	Great Western Chemical	961182	Dec-1996	13,000	AST	yard	Hydrochloric acid
5700 NW Front Ave.	Great Western Chemical	961181--REM	Dec-1996	2@ 12,000	AST	yard	H2SO4
5480 NW Front Ave.	McCall Oil	10254	Nov-1979	4,000	UST	yard	
5480 NW Front Ave.	McCall Oil	10254	Nov-1979	20,000	UST	yard	
5700 NW Front Ave.	McCall Oil	890885	Aug-1989	4,000	AST	yard	
5700 NW Front Ave.	McCall Oil	890885	Aug-1989	20,000	AST	yard	Steel, contains lube oil
5700 NW Front Ave.	McCall Oil	890885	Aug-1989	30,000	AST	yard	Lube oil
5480 NW Front Ave.	McCall Oil	890969--REM	Aug-1989	4,000	UST	yard	Steel, contains lube oil
5480 NW Front Ave.	McCall Oil	890969--REM	Aug-1989	20,000	UST	yard	Mineral spirits
5880 NW St. Helens	Shell Oil	486	Sep-1979	4@ 25,000	AST	detached	
5880 NW St. Helens	Shell Oil	96399	Sep-1979	1000	UST	yard	Lube oil
5885 NW St. Helens	Silver Eagle Transportation	*	Apr-1948	10,000	UST	yard	
5885 NW St. Helens	Silver Eagle Transportation	*	Apr-1948	3@ 1,000	UST	yard	
5885 NW St. Helens	Silver Eagle Transportation	82859	Jun-1955	12,000	UST	yard	
5700 NW Front Ave.	The Flintkote Co.	42968	Jul-1948	675	UST	yard	
5700 NW Front Ave.	The Flintkote Co.	79553	Sep-1954	675	UST	basement	
5528 NW Doane	Tosco	970795-REM	Jul-1997	600	UST	adjacent to NW Doane and railroad tracks	
5528 NW Doane	Tosco	970795-REM	Jul-1997	1000	UST	adjacent to NW Doane and railroad tracks	Lube oil
5528 NW Doane	Tosco	970795-REM	Jul-1997	5000	UST	adjacent to NW Doane and railroad tracks	Fuel oil salvage
5528 NW Doane	Tosco	970795-REM	Jul-1997	3@ 550	UST	adjacent to NW Doane and railroad tracks	
5528 NW Doane	Tosco	981517-REM	Nov-1998	6000	UST	yard	
5528 NW Doane	Unocal	10250	Oct-1979	6000	AST	yard	
5528 NW Doane	Unocal	931238	Sep-1993	20,000	AST	yard	
5528 NW Doane	Unocal	940475--REM	Apr-1994	675	UST	yard	
5528 NW Doane	Unocal	940475--REM	Apr-1994	10,000	UST	yard	
5625 NW St. Helens	Wilkenson (SFR)	50702	Sep-1949	675	UST	yard	

Table 12
Outfall 22 State Fire Marshal Hazardous Spills List

RNO	Address	Chemical	Date	Incident ID
R941180170	5700 NW Front	Sodium Chlorite	07/19/95	HM-06-950330
NA	NW 57th & St Helens	Grain Dust	01/28/91	02-291-910026
NA	St Helens Rd	Gasoline	12/23/87	02-291-870181
R941190640	5501 NW Front	Bunker C Fuel Oil	06/30/89	02-291-890236
R941190640	5501 NW Front Ave	Gasoline	04/15/98	HM-06-980022
R941190160	5528 NW Doane	450 Neutral Oil	08/19/86	02-291-860050
R941180360	5531 NW Doane	Jet Fuel	03/26/97	02-291-970190
R941180170	5700 NW Front	Sodium Dichloroisocyanurate	01/11/96	HM-06-960073
NA	NW 57th & St Helens	Diesel Fuel	10/06/89	02-291-890387
NA	NW Front	PBA 3	05/05/92	02-291-920134
NA	NW St Helens & Doane	Hydrogen Peroxide Solution	07/03/88	02-291-880014
NA	NW St Helens Rd	Sodium Arsenite	05/14/88	02-291-880302

NA = Not applicable

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Acetylene	Acetylene	Gas	Cubic Feet	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Ad-Here	Propylene Glycol Monoethyl Ether	Liquid	Gallons	50,000-99,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Aero Foam	Petroleum Hydrocarbon	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Arosurf Aa 27	Tallow Diamine	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Arosurf Aa-54-100	Amines	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Asphalt Charge Stock	Petroleum Hydrocarbons	Liquid	Gallons	5,000,000-7,499,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Asphalt Cutback	Petroleum Distillate	Liquid	Gallons	50,000-99,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Asphalt Emulsion	Petroleum Hydrocarbon	Liquid	Gallons	1,000,000-2,499,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Asphalt Liquid	Petroleum Asphalt	Liquid	Gallons	25,000,000-
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Asphalt Liquid	Petroleum Asphalt	Liquid	Gallons	25,000,000-
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Beltz 409	Sodium Hydroxide	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Bentonite Clay	Sodium Montmorillonite	Solid	Pounds	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Boiler Treatment Chemicals	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Butanol	Butanol	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Calcium Chloride	Calcium Chloride	Solid	Pounds	50,000-99,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Caustic Alkali Liquid Nos	Sodium Hydroxide	Liquid	Gallons	100,000-249,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Caustic Soda	Sodium Hydroxide	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Crude Oil	Petroleum Hydrocarbon	Liquid	Gallons	50,000,000-
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Cylinder Oil Iso46	Hydrotreated Distillate	Liquid	Gallons	50-199
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Desolve	D-Limonene	Liquid	Gallons	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Detergent, Chevron	Hydrotreated Petroleum Distillates	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Dialia Oil Ax	Petroleum Hydrocarbon	Liquid	Gallons	50-199
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Diesel Fuel Low Sulfur	Petroleum Distillates	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Distillate Overhead	Naphtha	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Dupont & Shell Polymers	Thermoplastic Rubber	Solid	Pounds	50,000-99,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Fuel Oil #6	Petroleum Oil	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Hydraulic Oil	Highly Refined Base Lubricating Oils	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Indolin Sa-L	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Indulin C	Sodium Lignate	Solid	Pounds	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Indulin W5	Liquid Amine	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Isoprep 34 Alkaline	Sodium Phosphate	Solid	Pounds	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Kenamide W-39	Nickel	Solid	Pounds	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Kerosene	Kerosene	Liquid	Gallons	100,000-249,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Kiln Dried Salt	Sodium Chloride	Solid	Pounds	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Limestone Powder	Calcium Carbonate	Solid	Pounds	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Lubricating Oil	Refined Mineral Oil	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Machine Oil	Hydrocarbon Base Oil	Liquid	Gallons	20-49
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Muriatic Acid	Hydrochloric Acid	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 1005a Corrosion Inhibitor	Monoethanolamine	Liquid	Gallons	500-999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 1258a	Naphthalene	Liquid	Gallons	1,000-4,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 2508 Plus	Petroleum Distillates	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 2548	Sodium Bisulfite	Liquid	Gallons	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 2813	Cyclohexylamine	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 2834	Sodium Hydroxide	Liquid	Gallons	50-199
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 2857	Octadecylamine	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 2899 Corrosion Inhibitor	Sodium Tolytriazole	Liquid	Gallons	50-199
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 5300	Amine Substituted Amine	Liquid	Gallons	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco 7346 Microbiocide	1.Brom-3-Chloro-5	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco Ec 1014a	Aromatic Naphtha	Liquid	Gallons	1,000-4,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco Polymer Optimer 7194	Acrylamide Modified Polymer	Liquid	Gallons	1,000-4,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco Transport Plus 2800	Acrylamide/Sodium Acrulate Resin	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nalco Tri-Act 2813	Cyclohexylamine	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Naphtha	Aliphatic Hydrocarbons	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Neutral Oil	Hydrotreated Heavy Paraffin Distillate	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Nitrogen	Nitrogen	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Oxygen	Oxygen	Gas	Cubic Feet	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Perchlorcethylene	Perchloroethylene	Liquid	Gallons	50-199
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Petroleum Solvents	Petroleum Hydrocarbons	Liquid	Gallons	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Process Waste Gas	Hydrogen Sulfide	Gas	Cubic Feet	100,000-249,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Propane	Propane	Gas	Gallons	50-199
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Redicote E-11	Fatty Amine	Liquid	Gallons	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Redicote E35c	Fatty Amine	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Slimicide J-12	Alkyl Dimethyl Ammonium Chloride	Liquid	Gallons	500-999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Solvents	Aliphatic Petroleum Distillates	Liquid	Gallons	200-499
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Thinners	Petroleum Hydrocarbons	Liquid	Gallons	50-199
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Turbine Oil 100	Petroleum Hydrocarbon	Liquid	Gallons	50-199
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Vacuum Gas Oil	Petroleum Distillate	Liquid	Gallons	10,000-49,999
R941190640	Chevron USA Products	5501 NW Front Ave	5505	2911, 2951	Vinsol Resin	Furfural	Solid	Pounds	10,000-49,999
R941190640	West Pac Environmental Inc	5501 NW Front St	60053	1799	*	*	*	*	*
R941180170	Great Western Chimical	5540 NW Front Ave	8225	5169	*	*	*	*	*
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	8801p	Potassium Oleate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	8823p	Potassium Oleate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	8859p	Potassium Oleate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acetic Acid 60% Solution	Acetic Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acetic Acid Glacial	Acetic Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acetone	Acetone	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acetylene	Acetylene	Gas	Cubic Feet	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acintol Fa-1	Tall Oil Fatty Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acl-60	Sodium Dichloroisocyanurate	Solid	Pounds	5,000-9,999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acumer 2000 Polymer	Acrylic Polymer	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acumer 2100 Polymer	Acrylic Polymer	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acumer 3100 Polymer	Acrylic Terpolymer	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acumer 5000 Polymer	Acrylic Polymer	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acumer 9000	Polyacrylate Copolymer	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Acusol 445 Polymer	Polyacrylic Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Adogen 572	1,3-Propanediamine,N-9-Octadecenyl-1	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Adox 6125	Sodium Chlorite	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Adox 750	Sodium Chlorite	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Adox 8125	Sodium Chlorite	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Air Compressed	Air	Gas	Cubic Feet	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Alcosperse 465	Polyacrylic Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Alfol 1214 Gc Linear Alcohol	Dodecanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Aluminum Nitrate 60% Solution	Aluminum Nitrate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Aluminum Sulfate	Aluminum Sulfate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Aluminum Sulfate Liquid	Aluminum Sulfate 48%	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ammonium Bifluoride	Ammonium Bifluoride	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ammonium Chloride	Ammonium Chloride	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ammonium Persulfate	Ammonium Persulfate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ammonium Thiocyanate 63-65%	Ammonium Thiocyanate	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ammonium Thiocyanate 99%	Ammonium Thiocyanate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Amp-95	2-Amino-2-Methyl-1-Propanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Antarox Bl 330	Oxirane	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Anthraquinone (50% Solution)	Anthraquinone	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Aqua Ammonia	Ammonium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Arcosolv Pm	1-Methoxy-2-Propanol	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Arcosolv Pm Acetate	Methoxy-2-Propanol Acetate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Arcosolv Pnb	Propylene Glycol N-Butyl Ether	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Arctictherm Dye Solutions	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Arctictherm Inhibitor Conc-1015	Dipotassium Phosphate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ascorbic Acid 99%	Ascorbic Acid	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atmer 1010	Mono & Diglycerides Of Fatty Acids	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Acidclean Af	Ethylene Glycol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Aurotech Activator	Ethanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Aurotech Cnn Makeup	Sodium Hypophosphite	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Aurotech Cnn Repl A	Nichel Sulfate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Aurotech Cnn Repl B	Sodium Hypophosphite	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Aurotech En Correction	Sodium Hypophosphite	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Aurotech Sf Make-Up	Potassium Hydroxide	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Aurotech Sf Replenisher	Sulfuric Acid	Liquid	Gallons	50-199

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Basiclean Lp	Sodium Hydroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupracid Bl-Ct	Sulfuric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupracid Brightener	Sulfuric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupracid Gs Corr. Solution	Sulfuric Acid	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupracid Gs818 Additive	Sulfuric Acid	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupracid Hs Basic Leveller	Sulfuric Acid	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupracid Up Brightener	Sulfuric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupracidup Leveller	Sulfuric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupraetch Bd	Potassium Peroxomonosulfate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupraetch Hs	Copper Compound	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupraetch La Liquid	Sodium Bisulfate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Cupraetch Pt Part A	Sodium Persulfate	Solid	Pounds	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Multibond M	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Multibond R Oxide Reducer	Trichloroethane	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Multibond So Part A	Sodium Chlorite	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Multibond Solution Part B	Sodium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neoganth Activator 834	Sulfuric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neoganth B Predip	Sodium Bisulfate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neoganth Wa Reducer	Dimethylaminoborane	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neopact Basic Solution	Hydrochloric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neopact Buffer Solution	Sodium Carbonate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neopact Conditioner	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neopact Conditioner U	Methylamine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neopact Post Dip Solution	Sodium Carbonate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neopact Reduction Solution	Sodium Hypophosphite	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neopact Selector Mix Cd	Phosphoric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neutraganth Part B	Quadrol	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Neutratganth Part A	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Novaganth Hc Stabilizer	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Noviganth Hc Additive	Copper Edta	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Noviganth Hc Make-Up	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Reduction Solution Cu	Formaldehyde	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Securiganth 902 Cleaner	Ethanolamine	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Securiganth Hcf-45 Cleaner	Diethylene Glycol Monomethyl Ether	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Securiganth P Make-Up Salt	Potassium Permanganate	Solid	Pounds	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Securiganth P Pre-	Diethylene Glycol Monobutyl Ether	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Securiganth P Solution	Potassium Permanganate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Securiganth P-225 Additive	Sodium Permanganate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Securiganth P-500 Reduct	Hydroxylamine Sulfate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Securiganth U Neutralizer	Hydroxylamine Sulfate	Liquid	Gallons	200-499

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Sheracid Pc 50	Sulfuric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Sulfolyt Acid Concentrate	Methanesulfonic Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Sulfolyt Additive	Methanesulfonic Acid	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Sulfolyt Additive Sth	Methanesulfonic Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Sulfolyt Tin Solution	Stannous Methane Sulfonate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Atotech Wetting Agent G13	None As Per 29cfr 1910.1200	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Bardac 208m	Dialkyl Dimethyl Ammonium Chloride	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Barquat 4280z	Alkyl Dimethylbenzyl Ammonium Chloride	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Bayhibit Am	2-Phosphono-1,2,4 Butanetricarboxylic Ac	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Belclene 200	Polymaleic Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Bellsol 1	Ethyl Alcohol	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Belsperse 161	Polyacrylate-Co-Hypophosphite Na Salt	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Bentonite	Sodium Montmorillonite	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Benzoic Acid	Benzoic Acid	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Benzoic/Ipa 30/70 Blend	Isopropyl Alcohol	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Betamate 73312	Methacrylic Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Betamate 73313 Structural Adhesive	N-Aminoethylpiperazine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Betamate 76325	N-Aminoethylpiperazine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Betaseal 57302	Phthalate Esters	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Biosurf 20	Iodine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Blanket Wash Ddbw-10	Petroleum Distillate (Naphtha)	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Blo	Butyrolactone	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Borax 10 Mol	Sodium Tetraborate Decahydrate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Borax Anhydrous	Sodium Tetraborate	Solid	Pounds	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Borax Std Mol V-Bor Penta	Sodium Tetraborate Pentahydrate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Boric Acid	Boric Acid	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Bps 320	Phosphoric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Burco Hcs-50nf	Alkylether Hydroxypropyl Sultaine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Burco Tme	Sulfur Containing Polyalkylene Oxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Butyl Carbitol	Diethylene Glycol Monobutyl Ether	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Butyl Cellosolve	2-Butoxy Ethanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ca 1945 Fatty Acid	Oleic Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calcium Carbonate	Calcium Carbonate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calcium Chloride	Calcium Chloride	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calcium Chloride Liquid 35%	Calcium Chloride	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calcium Hypochlorite Granules	Calcium Hypochlorite	Solid	Pounds	100,000-249,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calcium Nitrate 50% Solution	Calcium Nitrate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calcium Sulfate	Calcium Sulfate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Ac-27z	Polyacrylic Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Bhc 243	None As Per 29cfr 1910.1200	Solid	Pounds	500-999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Biochek 240	Formaldehyde	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Boilerguard C-1	Diethylene Glycol Butyl Ether	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Burolock 2220	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Burolock Hp-05	None As Per 29cfr 1910.1200	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon C-39 Corrosion Inhibitor	Zinc Oxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Cat Floc T	None As Per 29cfr 1910.1200	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Cat-Floc 2953	Poly(Aluminum Hydroxy)Chloride	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Catfloc Cl	None As Per 29cfr 1910.1200	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Catfloc L	None As Per 29cfr 1910.1200	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Catfloc Tl	Cationic Polymer	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Corrosion Inhibitor Cs	Sodium Nitrite	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon E-2271	Petroleum Distillate	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Felteccel 905	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Hydraid Trp-935	Petroleum Distillate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Hydraid Trp-954	Petroleum Distillate	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Kindest Kare	None As Per 29cfr 1910.1200	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Lab Klenz Plus	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Lotion-Klenz	Fatty Acids	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Metasol 940	Sodium Bromide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Metasol Cb-220	1,2-Dibromo-2,4-Dicyano-Butane	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Metasol D3t	Tetrahydro-3,5-Dimethyl-2h-1,3,5-Thiadia	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Metasol D3t-A	Sodium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Metasol Tk-100 Dispersion W	2-(4-Thiazolyl)Benezimidasole	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Metasol Tk-100 Powder	2-(4-Thiazolyl)Benezimidasole	Solid	Pounds	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Orlene 108	Polyoxyethylene-Polyoxypropylene Copolym	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Orlene Pc-142cw	None As Per 29cfr 1910.1200	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Pax Lano Sav	Sodium Tetraborate Decahydrate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Pcl-402	Anionic Polymer	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Phreeguard Xlp-2350	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Pol-E-Z 3466	Petroleum Distillate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Pol-E-Z 652	Petroleum Distillate	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Pol-E-Z 7736	Petroleum Distillate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Pol-E-Z-2706	Petroleum Distillate	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Pre-Tect 5500	Hydroquinone	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Pre-Tect 97	Sodium Sulfite	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon R-300	Anionic Polymer	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Skin Care Lotion	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Tektamer 38 Ad	1,2-Bromo-2,4-Dicyanobutane	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Towerbrom 960	Sodium Dichloro-S-Triazinetrione	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Trc-233	None As Per 29cfr 1910.1200	Liquid	Gallons	500-999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Unadjusted Powder	Sodium Polyphosphate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Vestal Tec Orange Lotion	None As Per 29cfr 1910.1200	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Calgon Wt-2354	Cationic Polymer	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Canola Salad Oil	Canola Oil	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Carbon Metasorb & Darco	Activated Carbon	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Carnuba Wax	Carnuba Wax	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Caustic Potash Liquid	Potassium Hydroxide	Liquid	Gallons	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Caustic Soda 50%	Sodium Hydroxide Soln	Liquid	Gallons	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Caustic Soda 50% Low Freeze	Sodium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Caustic Soda Beads	Sodium Hydroxide	Solid	Pounds	100,000-249,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Caustic Soda Flake	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Caustic Soda Solution 25%	Sodium Hydroxide	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Caustic Soda Solution 30%	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Celite 501, 535, 545, 560, 503z, Aqua	Flux Calcined Diatomaceous Earth	Solid	Pounds	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Celite 512, 577, 577z & Std Super Cel	Calcined Diatomaceous Earth	Solid	Pounds	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Celite Filter Cel	Silica	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Cellosolve Acetate	Ethoxy Ethanol Acetate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Centromix-E	Lecithin	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 107	Hydrochloric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 151	Phosphate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 158	Sodium Phosphate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 160	Tetrasodium-1-Hydroxyethylidene-1,1-Diph	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 162	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 164	Sodium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 165	Sodium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 166	Alkaline Polymer Salts	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 167	Alkaline Polymer Salts	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 167	Alkaline Polymer Salts	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 168	Alkaline Polyorganic Salts	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 171	Sodium Sulfite	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 172	Sodium Sulfite	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 174	Sodium Hydroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 176	Diethylhydroxylamine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 179	Diethylhydroxylamine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 193	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 194	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 195	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 198	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 201	Sodium Nitrite	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 224	Potassium Hydroxide	Liquid	Gallons	200-499

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 226	Sodium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 227	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 228	Potassium Hydroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 228 Sp	Potassium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 228c	Sodium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 230	Potassium Hydroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 234	Potassium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 239	Potassium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 241	Sodium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 242	None As Per 29cfr 1910.1200	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 243	Sodium Polyacralate Salts	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 251	Potassium Sulfite	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 263	Isopropyl Alcohol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 270	Diethylethanolamine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 2719	Polyquaternary Amine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 273	Diethylethanolamine	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 2737	Aluminum Hydroxychloride	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 274	Morpholine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 275	Morpholine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 2758	Liquid Polymer	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 2760	Hydrocarbon Oil	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 277	Diethylethanolamine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 278	Cyclohexylamine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 279	Diethylethanolamine	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 2790I	None As Per 29cfr 1910.1200	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 280	Cyclohexylamine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 282	Morpholine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 285	Cyclohexylamine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 302	Isopropyl Alcohol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 305	Sodium Molybdate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 316x	Sulfuric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 318	Sodium Molybdate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 348	Acrylic Polymers, Potassium Salt	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 350	Alkaline Salts	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 350 Hp	Sodium Phosphate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 351	Zinc Compounds	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 351-N	Sodium Molybdate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 351-S	Disodium Molybdate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 352	Zinc Compounds	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 353	Sodium Molybdate	Liquid	Gallons	1,000-4,999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 355	Disodium Molybdate Dihydrate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 361	Sodium Nitrate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 363	Sodium Nitrite	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 366	Sodium Nitrite	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 367	Sodium Molybdate, Dihydrate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 447	Sodium Hexametaphosphate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 477	Silicone Defoamer	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 480	2,2-Dibromo-3-Nitrilopropionamide	Liquid	Cubic Feet	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 489	Poly Ethylene Dichloride	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 490	Glutaraldehyde	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 492	1-Bromo-3-Chloro-5,5-Dimethylhydantion	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 508 X	Sodium Metasilicate Pentahydrate	Solid	Pounds	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 508df	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 508xl	Sodium Carbonate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 528	Paraffin Hydrocarbons	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 644	Oxalic Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 649	Sodium Hydrosulfite	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 718	Manganese Dioxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 781	Methanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 785	Methanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 843	Petroleum Distillate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 873	Cationic Polymer	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 915	Polydimethyldiallyl Ammonium Chloride	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax 948	Aliphatic Hydrocarbon	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemax Ac-103	Hydrofluoric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemelex Film Cleaner	Heptane	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemoxide Lm-30	Alkyl Dimethylamine Oxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chemwood Wood Putty - Pine	Acetone	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Chlorine	Chlorine	Gas	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Citric Acid	Citric Acid	Solid	Pounds	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Clintose A	Dextrose Monchydrate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Clt-540 Corrosion Inhibitor	Sodium Nitrite	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Cmc 2500 Pre-Hydrated	Sodium Carboxymethyl Cellulose	Solid	Pounds	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Cobratec Tt 50s	Sodium Tolytriazole	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Concentrate Clean Front	Iodine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Copper Sulfate	Copper Sulfate Pentahydrate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Copper Sulfate Liquid	Copper Sulfate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Corn Oil	Corn Oil	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Cream Of Tartar	Cream Of Tartar	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Cyclohexylamine	Cyclohexylamine	Liquid	Gallons	500-999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	D-Limonene	D-Limonene	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dequest 2000 (Ntpa)	Aminotri (Methylene Phosphonic Acid)	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dequest 2010	1 Hydroxyethylidene-11-Diphosphonic Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dequest 2060	Phosphonic Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Diammonium Phosphate	Diammonium Phosphate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dicalcium Phosphate Dihydrate	Dicalcium Phosphate	Solid	Pounds	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Diethylaminoethanol	Diethylaminoethanol	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dipotassium Phosphate	Dipotassium Phosphate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dipotassium Phosphate 50% Solution	Dipotassium Phosphate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Disodium Phosphate	Disodium Phosphate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dolphin Elastiseal Black 7025	Toluene	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dolphin Elastiseal White 7029	Toluene	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dolphin Hydroarmor 7765	Magnesium Silicate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dolphin Lovisc-6075	Mineral Spirits	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dowfax 2a1	Dodecylbenzene Sulfonic Acid, Disodium	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dtc Acid Fl	Sulfuric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Dur-Em 204	Citric Acid	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Durkex 500	Cottonseed Oil	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Emerest 2355	Ethylene Glycol Distearate	Solid	Pounds	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Emersol 213	Oleic Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Emersol 7021 Fg	Oleic Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Emery 621	Lauric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Emery 7000	Oleic Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Emid 6533	Coconut Diethanolamide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ep Celatom Fp & Fw	Flux-Calcined Diatomaceous Earth	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ethoduomeen T-13	Alkyltrimethylene Diamines	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ethyl Acetate 99.5%	Ethyl Acetate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ethyl Alcohol	Ethyl Alcohol	Liquid	Gallons	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ethylene Glycol	Ethylene Glycol	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ethylene Glycol Inhibited	Ethylene Glycol	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ferric Chloride	Ferric Chloride	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Ferrous Sulfate Heptahydrate	Ferrous Sulfate Heptahydrate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Florever C	Acetone	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Formaldehyde 37/14% & 37/7%	Formaldehyde	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Formic Acid 90% & 95%	Formic Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Fumaric Acid	Trans-Butenedioic Acid	Solid	Pounds	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	G W 18a Floculant	Petroleum Distillate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gasoline	Petroleum Distillates	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gelatin	Gelatin	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Genapol Pn-30	Pc-Eo Block Polymer	Liquid	Gallons	50-199

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Glycerine 99.5% Usp	Glycerine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Glycol Ee Acetate	Glycol Acetate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Glycol Ether Db	Diethylene Glycol Butyl Ether	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Glycol Ether Dpm	Dipropylene Glycol Monomethyl Ether	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Glycol Ether Eb	2-Butoxyethanol	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Glycol Ether Pm	Propylene Glycol Methyl Ether	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Glycol Ether Ptb	Propylene Glycol T-Butyl Ether	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Goodrite 7058	Sodium Polyacrylates	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Goodrite 7600n (Xp-18)	Sodium Polyacrylate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Ace 572	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Alas 478	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Alka 556	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Alkaline Cleaner 553	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Atak 554	Sodium Hydroxide	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw B-Lube 881	Potassium Oleate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Base 511	Sodium Metasilicate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Big Job 579	Sodium Dodecylbenzene Sulfonate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Bolt 569	Sodium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Break Out 514	Potassium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Brite Tank 513	Sodium Metasilicate, Pentahydrate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw C-Lube 880	Potassium Oleate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Case 545	Potassium Hydroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Caust-I-Foam 618	Sodium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Chlor-A-Foam 606	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Churn Clean 626	Sodium Metasilicate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Cip 539	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Cip 541	Potassium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Cip 542	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Citri Clean 753	Isopropanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Cut 414	Potassium Hydroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw D-Foam 677	None As Per 29cfr 1910.1200	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw D-Stone 597	Phosphoric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Dfa-521	Sulfuric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Draw 476	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Dust Control 1784	Sodium Alpha Olefin Sulfonate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw E-Lube 884	Potassium Oleate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Easy 516	Diethylene Glycol Monobutyl Ether	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Evac 571	Nitric Acid	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Explode 415	Sodium Metasilicate, Pentahydrate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw F-N-V Wash 634	Sodium Metasilicate, Pentahydrate	Solid	Pounds	10,000-49,999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Fac-517	Isopropyl Alcohol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Famic 568	Sulfamic Acid	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Fight 116	Sodium Carbonate Peroxyhydrate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Final Rinse 709	Hydrogen Peroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Floor Brite 142	Sodium Metasilicate Pentahydrate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Floor Sheen 143	Sodium Metasilicate, Pentahydrate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Fnv Wash 634l	Potassium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Foam 1846-50	Isopropyl Alcohol	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Foam 846	Isopropyl Alcohol	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Foam 849	Isopropyl Alcohol	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Foam Clean 546	Sodium Metasilicate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Foam Jack 559	Sodium Metasilicate Pentahydrate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Foam-A-Chlor 577	Potassium Hydroxide	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Foam-A-Chlor Hd 755	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Fomcid 563	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Fpa-523	Sulfuric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Gwpc 614	Sodium Carbonate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Gwpd-655	Mineral Oil	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Halt 510	Diethylene Glycol Monobutyl Ether	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Hand Dip 603	Phosphoric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Jack 570	Sodium Metasilicate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Jet 592	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Key 547	Sodium Dodecylbenzene Sulfonate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Kick 551	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Latch 515	Sodium Dodecylbenzene Sulfonate	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lca 616	None As Per 29cfr 1910.1200	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lca 616 D	Potassium Hydroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lca 616 Lwh	None As Per 29cfr 1910.1200	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lca 617	None As Per 29cfr 1910.1200	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lca 619	None As Per 29cfr 1910.1200	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lca 621	Tetrasodium Edta	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lca-615d	Sodium Dodecylbenzene Sulfonate	Solid	Pounds	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lcc 582 D	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lcc 582 F	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lcc 582(C)	Sodium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lcc 582(E)	Sodium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lch 583-F	Sodium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lch-583e	Potassium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Ldd 950	Isopropyl Alcohol	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Ldd 950 N.A.M	Isopropyl Alcohol	Liquid	Gallons	50-199

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lino 576	Sodium Metasilicate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lino 576d	Sodium Metasilicate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Liqui Churn 627	Potassium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Lmr-660	Phosphoric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Metal Grabber	Sodium Dimethyl Dithiocarbamate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Mild 499	None As Per 29cfr 1910.1200	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Nulube 885	Isopropyl Alcohol	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Ovaclean 589	Sodium Metasilicate,Pentahydrate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Ovaclean-589l1	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw P-Lube 882	Isopropyl Alcohol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Part 560	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pbw 548	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pd 951 N.A.M	Sodium Dodecylbenzene Sulfonate	Solid	Pounds	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pearl 952	Monoethanolamine Dodecylbenzene	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pet-Lube 883	Potassium Fatty Acid Soaps	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Prevent 855	Polymer Salt	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Prevent 856	Polymer	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Prevent 862	Sodium Polyacrylate Co Hypophosphite	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pristene Acid Cleaner 693	Sulfuric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pristene Chlor Circl Cleaner 692	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pristene Hd Circulation Cleaner	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pristene Hd Foam Cleaner 690	Sodium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Pristene Manual Cleaner 694	Potassium Oleate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Procid 573	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Proclean-821	Sodium Carbonate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Proclean-821l	Potassium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Propylene Glycol Inhibitor 1013	Dipotassium Phosphate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Protect 730	Aqueous Solution Amine Salt	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Prozyme-822	Sodium Carbonate Peroxyhydrate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Quat 479	Alkyl Dimethylbenzyl Ammonium Chloride	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Rise 580	Sodium Metasilicate Pentahydrate	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Saf-T Green	Propylene Glycol Monomethyl Ether	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sani Dyne-470	Phosphoric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sani-Clean	Sodium Hypochlorite 12.5%	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sanibac 386	Sodium Dichloroisocyanurate Dihydrate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sanifoam 633	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sheen 604	Nitric Acid	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Shine On 680	Isporopyl Alcohol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Slip 726	None As Per 29cfr 1910.1200	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Slip 727	Mineral Oil	Liquid	Gallons	1,000-4,999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Slip 728	None As Per 29cfr 1910.1200	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Snap 564	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sodium Chlorite 25%	Sodium Chlorite	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Solo 578	Sodium Carbonate	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Solo-578 Premix Liquid	Phosphate Ester Surfactant	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Solvent 23 Red	Toluene	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Span 562	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sparkle 600	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Splash-518	Sodium Dodecylbenzene Sulfonate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Spray Sheen 512	Sodium Dodecylbenzene Sulfonate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sprint 607	Sodium Dodecylbenzene Sulfonate	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Ssb 567	Nitric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Stay 498	Silicon Dioxide	Solid	Pounds	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Sting 552	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Super Cleaner 543	Sodium Hydroxide	Solid	Pounds	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Surfactant 9 Mol	Nonylphenoxy Poly(Ethyleneoxy) Ethanol	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Tart Clean 760	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Tart Clean Plus	Sodium Hydroxide	Solid	Pounds	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Tuf Smoke 537	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Tufclean 602	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Tuflube 889	Isopropyl Alcohol	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Turbo 598x	Hydrofluoric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Udderclean 473	Phosphoric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Wisp 535	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gw Wisp Plus 534	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Gwsa 20-S Defoamer	None As Per 29 Cfr 1910.1200	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Helium	Helium	Gas	Cubic Feet	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydrated Ammonium-Calcium Nitrate	Calcium Nitrate	Solid	Pounds	50,000-99,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydraulic Oil	Highly Refined Base Lubricating Oils	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydrochloric Acid 32% Water White	Hydrochloric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydrogen	Hydrogen	Gas	Cubic Feet	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydrogen Peroxide 31%	Hydrogen Peroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydrogen Peroxide 35%	Hydrogen Peroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydrogen Peroxide 50%	Hydrogen Peroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydroxyacetic Acid 70%	Hydroxyacetic Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Hydroxylamine Sulfate	Hydroxylanine Sulfate	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	7978	5169	Igepal Ca 630	Octylphenoxy Poly(Ethyleneoxy) Ethanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	4929 Grinding Fluid	Triethanolamine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Acetone	Acetone	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Act-Cmi-K	Proprietary Amide	Liquid	Gallons	1,000-4,999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Alpha 433 Thinner	Ethyl Alcohol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Alpha 564m Reliasolv	Tetrachloroethylene	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Alpha 871-25a	Ethyl Alcohol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Alphamask 110 Hy Water Solder	Methyl Alcohol	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Aluminizing Lacquer 39802	Toluene	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Aluminum Oxide	Aluminum Oxide	Solid	Pounds	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Aurobond Tcl Replenisher Part A&B	Hydrochloric Acid	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 1518 Photoresist	Polyethylene Glycol Monoethyl Acetate	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 312 Mit Developer	Tetramethylammonium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 351 Developer	Sodium Borates	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 400 K Developer 1:5	Potassium Borates	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 400 K Developer 1:5	Potassium Borates	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 400k Developer Diluted 1:5	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 5209e Photo Resist	Propylene Glycol Monomethyl Ether Acetat	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 5218-E Photoresist	Propylene Glycol Monomethyl Ether Acetat	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az 9245 Photoresist	Propylene Glycol Monomethyl Ether Acetat	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Az Ebr Solvent	Propylene Glycol Monomethyl Ether Acetat	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Bioact 50 Aqueous Cleaner	2-Propanol-1-Butoxy	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Buffered Oxide Etch 10:1	Hydrofluoric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Calcium Chloride 35%	Calcium Chloride	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Caustic Soda Beads	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Caustic Soda Flake	Sodium Hydroxide	Solid	Pounds	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Caustic Soda Liquid 25%	Sodium Hydroxide	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Caustic Soda Liquid 50%	Sodium Hydroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Celatom Diatomite	Diatomaceous Earth	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Celite 512	Calcined Diatomaceous Earth	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Cem 388 Ws Contrast	N-Butanol	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Chrome Etch 1	Nitric Acid	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Dusqueeze	Dipentene Solvent	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Enflux Ncf-8660	Ethanol	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Freon 22	Chlorodifluoromethane	Gas	Pounds	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Gw Sani-Clean	Sodium Hypochlorite 12.5%	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hfe-7100 3m	Methyl Nonafluorobutyl Ether	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hp 15% Hcl Solution	Hydrochloric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai 506/Accuglass 211	Isopropanol	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Act 935	Catechol	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Ammonium Hydroxide	Ammonium Hydroxide	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Boe 100:1	Ammonium Fluoride	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Boe 20:1	Ammonium Fluoride	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Developer Cpo-18	Tetramethyl Ammonium Hydroxide	Liquid	Gallons	10,000-49,999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Golden R Ht-135	Hexafluoropropene	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Hmds	Hexamethyldisilazane	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Hydrofluoric Acid 49%	Hydrofluoric Acid	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Hydrogen Peroxide 30%	Hydrogen Peroxide	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Isopropyl Alcohol	Isopropanol	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Isopropyl Alcohol 99%	Isopropyl Alcohol	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Ix 871 Photoresist	Methyl-3-Methoxypropionate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Jsr Pfr Ix950	Methyl 3-Methoxypropionate	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Mcpr I70m Lom	Methoxy-3-Methoxypropionate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Nitric Acid	Nitric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Pfrix 415h Photo	Ethyl Lactate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Phosphoric Acid 85%	Phosphoric Acid	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Polymide Developer A-515	Cyclopenanone	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Semi Resist Hs-02a8	Methyl Amyl Ketone	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Sulfuric Acid 97%	Sulfuric Acid	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Sv-Nmp Solvent	N-Methyl-2-Pyrrolidone	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Teos	Tetraethyl Orthosilicate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Thinner Ebr 70/30	Propylene Glycol Methyl Ether	Liquid	Gallons	10,000-49,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Trimethyl Borate	Borates	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Hyundai Trimethyl Phosphate	Trimethyl Phosphate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Instapak Componet A1-40-Wa	Diphenylmethane Diisocyanate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Instapak Componet B1-40-Wb	Glycerine	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Megasolv Ndc	Proprietary Blend	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	N-Butyl Alcohol	N-Butyl Alcohol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Nano-Strip 2x	Sulfuric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Nanostrip Cleaning Solution	Sulfuric Acid	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Nickel Chloride Liquid	Nickel Chloride	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Nickel Sulfate Liquid	Nickel Sulfate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	No Clean Solder Paste	Proprietary	Solid	Pounds	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt 500 Series Resin	Ethyl Acetate	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Acetic Acid	Acetic Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Acetone Semi	Acetone	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Acid Etch	Nitric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Aluminum Etch Series	Phosphoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Ammonium Hydroxide	Ammonium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Buf. Oxide Etch	Ammonium Fluoride	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Buf. Oxide Etch 6:1,7:1,8:1	Ammonium Fluoride	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Buffered Etch 410w/Ohs	Ammonium Fluoride	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Developer 900 Series	Tetramethyl Ammonium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Developer Hprd 428 & 429	Tetramethyl Ammonium Hydroxide	Liquid	Gallons	1,000-4,999

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt E-6 Metal Etch	Phosphoric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Etch 777	Acetic Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Ethylene Glycol Semi	Ethylene Glycol	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Hexamethyldisilazane	Hexamethyldisilazane	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Hydrochloric Acid Semi &	Hydrochloric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Hydrofluoric Acid Dilute	Hydrofluoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Hydrofluoric Acid Semi &	Hydrofluoric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Hydrogen Peroxide 30%	Hydrogen Peroxide	Liquid	Gallons	5,000-9,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Isopropyl Alcohol Semi &	Isopropyl Alcohol	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Ktl 895 I 50	1-Methoxy-2-Propanol Acetate	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Methyl Alcohol	Methanol	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Microstrip 2001	N-Methyl Pyrrolidone	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt N-Methyl-2-Pyrrolidone	N-Methyl-2-Pyrrolidone	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Nitric Acid Ppb/Gpg/Semi	Nitric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Ocg Resist Hipr 6512 Gh	Ethyl Lactate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Pad Etch	Ammonium Fluoride	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Phosphoric Acid 85%	Phosphoric Acid	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Phosphoric Acid Frekle	Phosphoric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Positive Resist 825	Ethyl-3-Ethoxypropionate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Potassium Hydroxide 45%	Potassium Hydroxide	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Rer 500 & 550 Series	Ethyl Lactate	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Resist Hipc	Ethyl Lactate	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Sulfuric Acid Ppb/Semi	Sulfuric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Olin Hunt Super Q	Ammonium Fluoride	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Paratherm Nf Heat Transfer Fluid	Petroleum Hydrocarbon	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Percol 757 Polymer	Adipic Acid	Solid	Pounds	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Potassium Hydroxide Pellets	Potassium Hydroxide	Solid	Pounds	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Potassium Phosphate	Dipotassium Phosphate	Solid	Pounds	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Preferential Silicon Etch 300	Ethylenediamine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Propylene Glycol Tech Usp	Propylene Glycol	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Repack Ethyl Acetate 99.5%	Ethyl Acetate	Liquid	Gallons	19-Oct
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Shipley Megaposit Mf-701 Developer	Tetramethyl Ammonium Hydroxide	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Shipley Microposit 51822 Photo	Propylene Glycol Monomethyl Ether Acetat	Liquid	Gallons	09-May
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Shipley Microposit Ec Solvent 13	Ethyl Lactate	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Shipley Microposit Remover	Ethanolamine	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Sodium Hydroxide (50% Soln)	Sodium Hydroxide	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Sodium Hydroxide 25%	Sodium Hydroxide	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Sulfuric Acid 50%	Sulfuric Acid	Liquid	Gallons	1,000-4,999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Sulfuric Acid 66 Be	Sulfuric Acid	Liquid	Gallons	500-999
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Syansol 190 Pm41	Ethanol	Liquid	Gallons	50-199

Table 13
Outfall 22 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Sylgard 170 Silicone Elastomer	Quartz	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Tektronix Optical Cleaning Kit	Isopropanol	Liquid	Gallons	200-499
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Toluene Reagent Grade	Toluene	Liquid	Gallons	20-49
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Trans-Etch N	Phosphoric Acid	Liquid	Gallons	50-199
R941180170	Great Western Chemical	5700 NW Front Ave	23591	5169	Trichloroethylene Tech	Trichloroethylene	Liquid	Gallons	50-199
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	350B Solvent	Parafins (Incl. Naphthalenes)	Liquid	Gallons	50-199
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Antifreeze	Ethylene Glycol	Liquid	Gallons	50-199
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Asphalt Liquid	Petroleum Asphalt	Liquid	Gallons	10,000,000-24,999,999
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Chemax 230	Potassium Hydroxide	Liquid	Gallons	50-199
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000,000-2,499,999
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	D-Limonene	D-Limonene	Liquid	Gallons	50-199
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Liquid Red Dye BHF-50 Unisol	Petroleum Hydrocarbon	Liquid	Gallons	1,000-4,999
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Motor Oils	Petroleum Hydrocarbon	Liquid	Gallons	50-199
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Oil Bunker C	Petroleum Hydrocarbon	Liquid	Gallons	2,500,000-4,999,999
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Paints	Light Aliphatic Naphtha	Liquid	Gallons	50-199
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Reprocessed Fuel Oil	Petroleum Hydrocarbons	Liquid	Gallons	250,000-499,999
R94180264, R94190960	McCall Oil And Chemical Corp	5480 NW Front Ave	17518	5171	Starreon Diesel Additives	Petroleum Naphtha	Liquid	Gallons	1,000-4,999

* No information available in database

Table 14
Outfall 22 Confirmed Release List

Site Name	Address	Zip	Site ID	Substance	Media	Phase	Program
Chevron USA Asphalt Refinery	5501 NW Front Ave	97210	1281	Acenaphthylene, Arsenic, Barium, Benzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Diesel - Fuel Oil, Ethylbenzene, Gasoline, Naphthalene, Phenols, Toluene, Total Petroleum Hydrocarbons (TPH), Vanadium, Xylenes	Soil, Groundwater	2	VCS
Willbridge Bulk Fuel Area	NW Doane Ave	97210	1549	Petroleum Hydrocarbons	Soil	2	SRS

Phase

2: Facilities where remedial investigation or feasibility studies are underway.

Program

VCS: Voluntary Cleanup: Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property under the oversight of DEQ's Voluntary Cleanup Program

SRS: Site Response: Indicates that the site may be facing enforcement action through the DEQ

Table 15
Outfall 22 SIC Information

SIC Number	SIC Definition
1761	Roofing, Siding, and Sheet Metal Work
1799	Special Trade Contractors, NEC
2842	Polishes and Sanitation Goods
2869	Industrial Organic Chemicals, NEC
2899	Chemicals and Chemical Preparations, NEC
2911	Petroleum Refining (Including Asphalt)
2951	Asphalt Paving Mixtures and Blocks
2992	Lubricating Oils and Greases
3484	Small Arms
4011	Railroads, Line-Haul Operating
4013	Switching and Terminal Services
4212	Local Trucking Without Storage
4225	General Warehousing and Storage
4226	Special Warehousing and Storage
4789	Transportation Services, NEC
5169	Chemicals and Allied Products, NEC
5171	Petroleum Bulk Terminals
5812	Eating Places
5813	Drinking Places
5983	Fuel Oil Dealers
5984	Liquified Petroleum Gas Dealers
7699	Repair Services, NEC

NEC = Not Elsewhere Classified

Table 16
Drainage Basin for Outfall 22: Area by Land Use

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Area Within Basin (Acres)
R915503870	5625 NW St Helens Rd	0.11	COM	0.11
R915503890	WI/5625 NW St Helens Rd	0.11	COM	0.11
R915503900	5605 NW St Helens Rd	0.11	COM	0.11
R915504050	5575 NW St Helens Rd	0.11	COM	0.11
R915504090	5545 NW St Helens Rd	0.11	COM	0.11
R915504150	WI/5501 NW St Helens Rd	0.11	COM	0.10
R915504170	5501 NW St Helens Rd	0.11	COM	0.10
R915504190	WI/5501 NW St Helens Rd	0.11	COM	0.11
R915504560	WI/5501 NW St Helens Rd	0.11	COM	0.10
R915504580	5645 NW Willbridge Ave	0.46	COM	0.45
R961130140	5885 NW St Helens Rd	3.12	COM	0.76
R102250030	5800 NW St Helens Rd	12.43	IND	0.05
R915503790	5655 NW St Helens Rd	0.36	IND	0.36
R941180041	5528 NW Doane Ave	3.05	IND	0.23
R941180051	5531 NW Doane Ave	3.13	IND	0.09
R941180060		2.61	IND	0.02
R941180140	5825 NW Front Ave	3.23	IND	3.22
R941180170	5540-5724 NW Front Ave	7.39	IND	2.70
R941180264	5480 NW Front Ave	11.69	IND	0.01
R941180360	5533 NW Doane Ave	18.49	IND	17.68
R941190160	5500-5528 NW Doane Ave	18.62	IND	12.14
R941190640	5600 NW St Helens Rd	31.27	IND	10.00
R941190960	5700 NW Front Ave	1.16	IND	0.46
R961130100	5800 NW Balboa St	1.29	IND	0.04
R915503930	5604 NW 56th Ave	0.11	SFR	0.11
R915503970	5624 NW Willbridge Ave	0.11	SFR	0.11
R915503990	5632 NW Willbridge Ave	0.11	SFR	0.11
R915504010	5710 NW 57th Ave	0.12	SFR	0.12
R915504030	5714 NW 57th Ave	0.12	SFR	0.12
R915504070	5555 NW St Helens Rd	0.11	SFR	0.11
R915504130	5525 NW St Helens Rd	0.11	SFR	0.10
R915504230	5524 NW Willbridge Ave	0.11	SFR	0.11
R915504250	5532 NW Willbridge Ave	0.11	SFR	0.11
R915504270	5542 NW Willbridge Ave	0.11	SFR	0.11
R915504300	5454 NW 56th Ave	0.11	SFR	0.11
R915504540	5433 NW St Helens Rd	0.11	SFR	0.10
R915504700	5601 NW Willbridge Ave	0.11	SFR	0.11
R915504720	5575 NW Willbridge Ave	0.11	SFR	0.11
R915504740	5551 NW Willbridge Ave	0.23	SFR	0.23
R915504780	5531 NW Willbridge Ave	0.23	SFR	0.23
R915503950		0.11	VAC	0.11
R915504110		0.11	VAC	0.10
R915504210		0.11	VAC	0.11
R915504290		0.11	VAC	0.11
R915504330		0.57	VAC	0.44
R915504480		0.34	VAC	0.20
R915504660		0.11	VAC	0.11
R915504680		0.11	VAC	0.11
R915504820		0.23	VAC	0.23
R941190110		211.53	VAC	0.00
R941191260		0.42	VAC	0.01
R941191270		0.06	VAC	0.02
TLID 1N1W24-00100		62.85	VAC	18.54

Total Area by Landuse

Landuse	Total Area (acres)
Commercial	2.2
Industrial	47.0
Single Family Residence	2.0
Multifamily Residence	--
Vacant	20.1
Total Basin Area	**88**
Estimated Right-of-Ways	16.7

City of Portland Stormwater Outfall 22A Summary of Existing Information

Physical Description

This outfall is not an official City outfall but is in the City's outfall book. This outfall is really Saltzman Creek, which is predominantly open channel except for approximately 1400 feet of culverts. Ownership of these culverts is uncertain but is likely a combination of private, City, ODOT and railroad. Outfall 22D is unofficially the exit of Saltzman Creek as it daylights into an open channel about 300 feet from the Willamette River. The outfall is a 8'x8' concrete box flume. The City's storm line contributions are very small, serving approximately 3 acres of City right-of way (about 2300 feet of roadway).

The storm drainage basin for Saltzman Creek is approximately 1105 acres. Landuse in the basin is predominately composed of drainage from Forest Park (82 percent vacant land) with some single family residences (10 percent). Industrial landuse is about 3 percent of the total drainage area (35 acres). The right-of-ways are estimated at 56 acres, although only about 3 acres are served by the City storm system.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Landuse map

There are three non-City outfalls in proximity to Outfall 22A. Two of the non-City outfalls (WP-28 & WP-29) discharge to Saltzman Creek downstream of Outfall 22A. Outfall WP-14 is approximately 800 feet upstream of the Saltzman Creek outlet. These non-City outfalls are assigned to the following facility:

- WP-14: Chevron Transportation
- WP-28: Certainteed/GS Roofing
- WP-29: Certainteed/GS Roofing

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall was identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 22 are available from one source:

- Portland Harbor Sediment Investigation, EPA/DEQ (Stations SD100, SD104, SD105, SD107, and SD109)

There have been five sediment locations sampled in the vicinity of the Outfall 22A (see attached figure). All stations had samples collected as surface (0-10 cm); one of these stations was sub-sampled (SD100). A depth composite (0-90 cm) and sub-sample was also collected at Station SD100. Sediment stations SD107 and SD109 are between 400 and 800 feet upstream of the Saltzman Creek outlet. Sediment stations SD104 and SD105 are 200-500 feet offshore and slightly upstream of the outlet. Sediment station SD100 is along the shoreline and approximately 500 downstream of the creek outlet.

Table 1 shows the available sediment data with station ID, sample ID, field replicate and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall. The sediment data collected in 1997 as part of the Portland Harbor Sediment Investigation showed elevated concentrations for one analyte in exceedence of the DEQ baseline and may be of interest to the city. This analyte is:

- **Benzoic Acid:** detected in concentrations greater than 3 times the baseline at SD100 in the composite sample (0-90cm)

This compound was only detected in the depth composite and not in the surface sample, suggesting historical deposition rather than a more current source. SD-100 is adjacent to the Elf Autochem/Pennwalt pier. Currently it is used for bulk salt unloading from freighters.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 lists the industrial chemical uses for analytes of interest at Outfall 22A.

Table 3 summarizes the available information on facilities currently located in the Saltzman Creek/Outfall 22A drainage basin, including where site runoff drains, discharge permits, business type and whether there is exposure of site activities to stormwater.

Table 4 shows available stormwater data for industrial facilities required to have an NPDES permit to discharge to the City's stormwater system.

Table 5 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 6 lists EPA's Toxic Release Inventory, which records releases of chemicals to the environment, and the Hazardous Waste Generators, which shows sites that treat, store, or dispose of hazardous materials.

Table 7 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 7.

Table 8 is DEQ's list of leaking underground storage tanks (LUST). The list includes both sites with active leaks and those that have been cleaned up to the satisfaction of the DEQ in the past. Behind this table, the LUST incident reports are provided for facilities listed in Table 8.

Table 9 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 10 is the State Fire Marshal's list of hazardous spills to which the fire department has responded.

Table 11 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 12 is the CRL (Confirmed Release List) inventory of sites that are currently being remediated under one of three separate programs, the Voluntary Cleanup Program, the Site Response Program, and the Site Assessment Program.

Table 13 lists the SIC numbers and descriptions for the sites identified in the Table 3 facility list.

Table 14 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type

The following databases were searched but no information was available for sites within the drainage basin:

- EPA Corrective Action List
- EPA Emergency Response Notification System List
- EPA RCRA Treatment Storage Disposal List
- DEQ Permitted Tank List

Outfall 22A Summary

The analytes of interest identified as of potential interest to the city outfall include:

- Benzoic acid

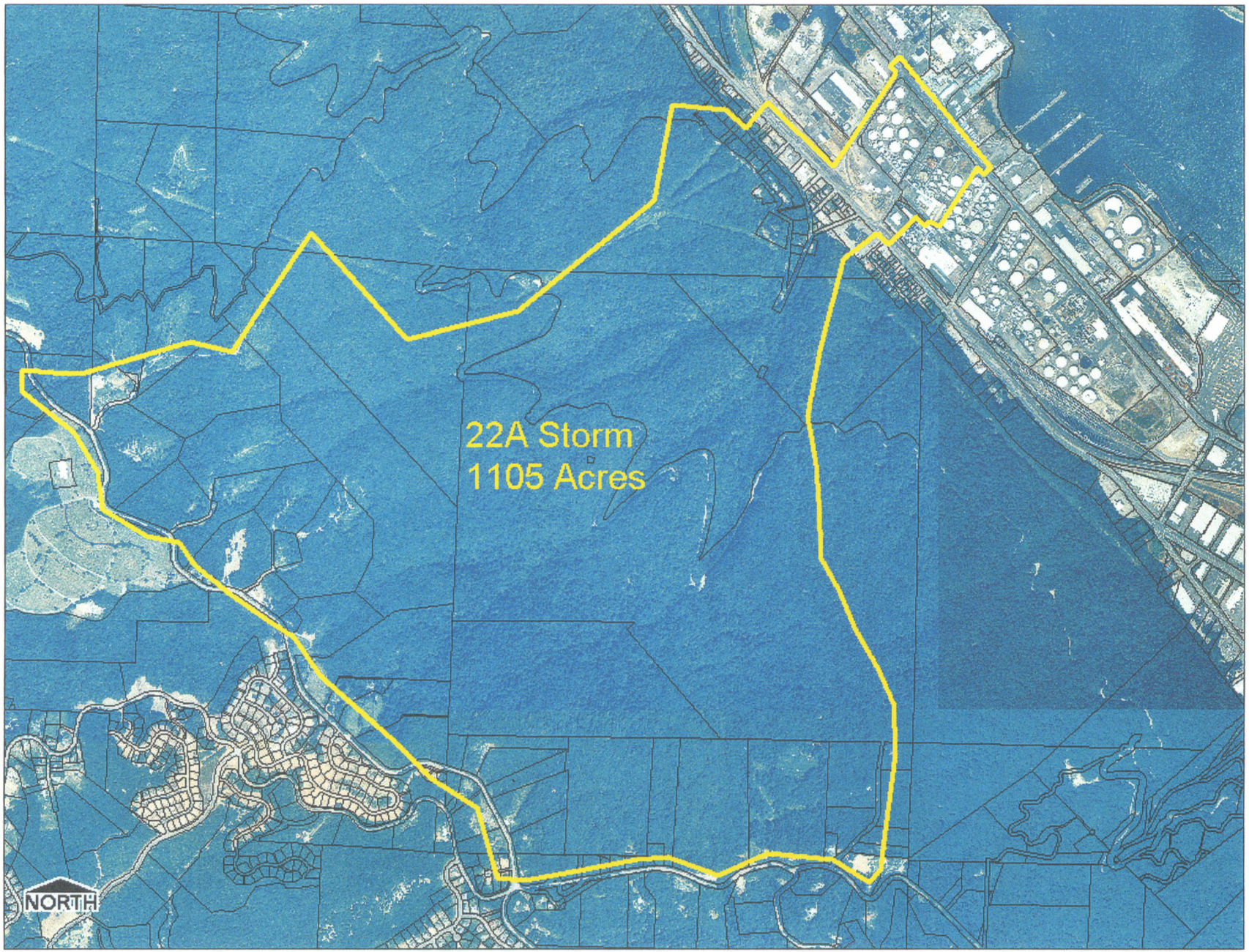
No measurements of benzoic acid in stormwater are available from any of the industrial facilities. It must be noted that the available industrial stormwater data are relatively limited; not all industries monitor and the analytes that are measured are limited.

Benzoic acid is commonly used as for preserving foods, fruit juice, alkloidal solutions, manufacturing dyes, benzoates and bezoyl compounds and is a pharmaceutical aid as an antifungal.

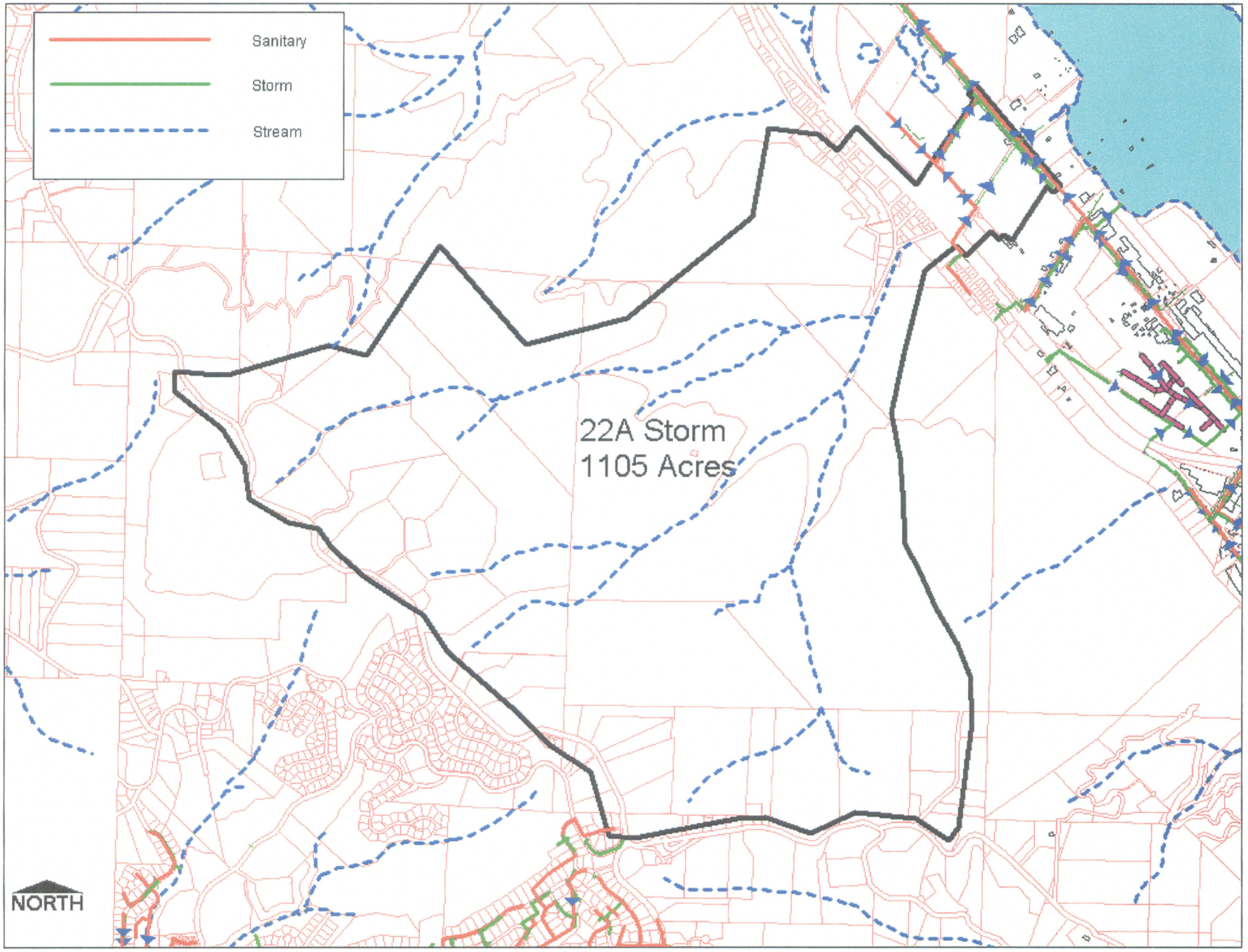
There are five sites on DEQ's Environmental Cleanup Site Investigation list but there is no information in the database on whether benzoic acid was sampled for or detected at any of these sites. Additional investigation into DEQ files for these sites is recommended.

The only sediment sample that exceeded three times the DEQ baseline values was at SD100, which is adjacent to the Elf Autochem/Pennwalt pier. Additional investigation into DEQ files for this site is also recommended.

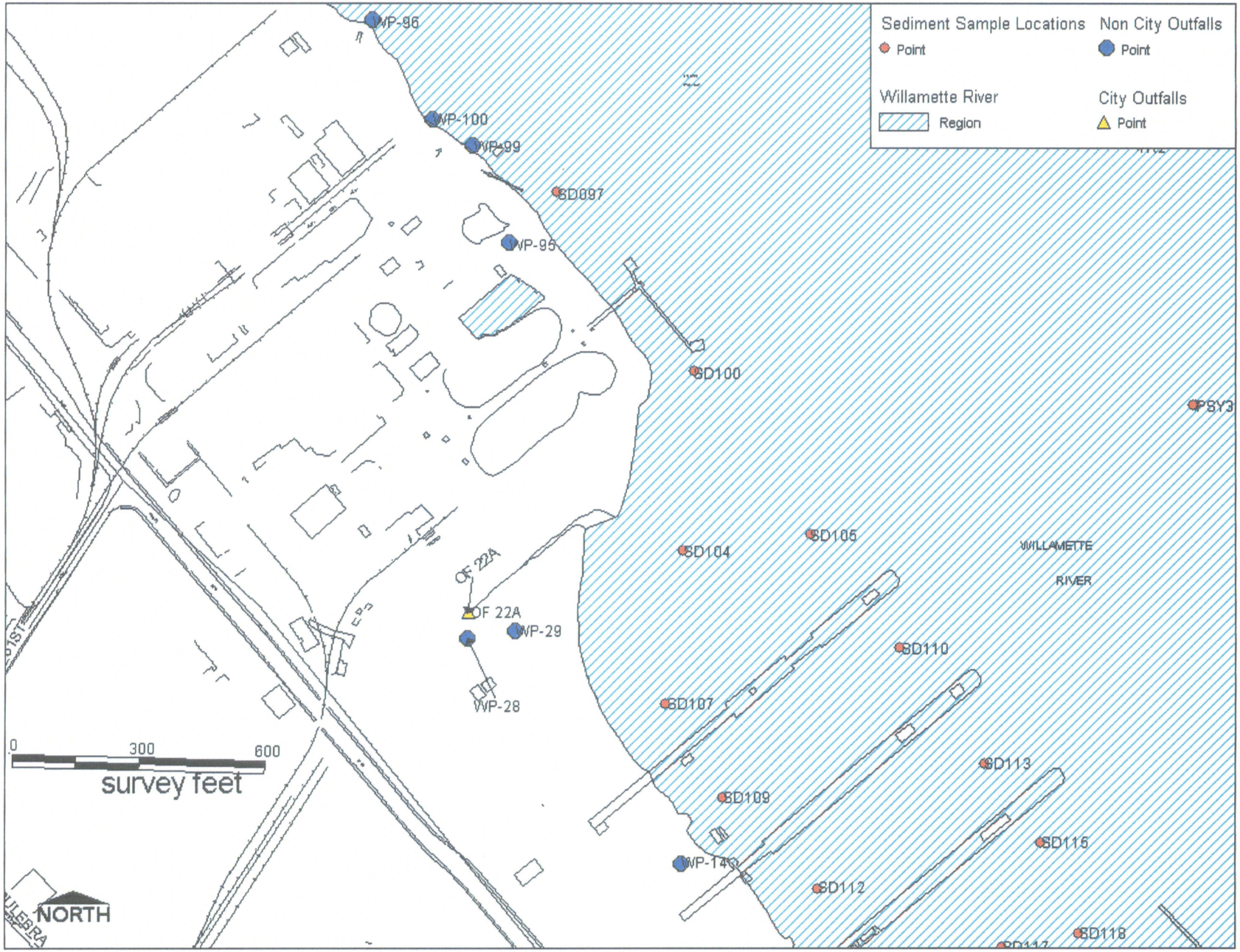
Figures



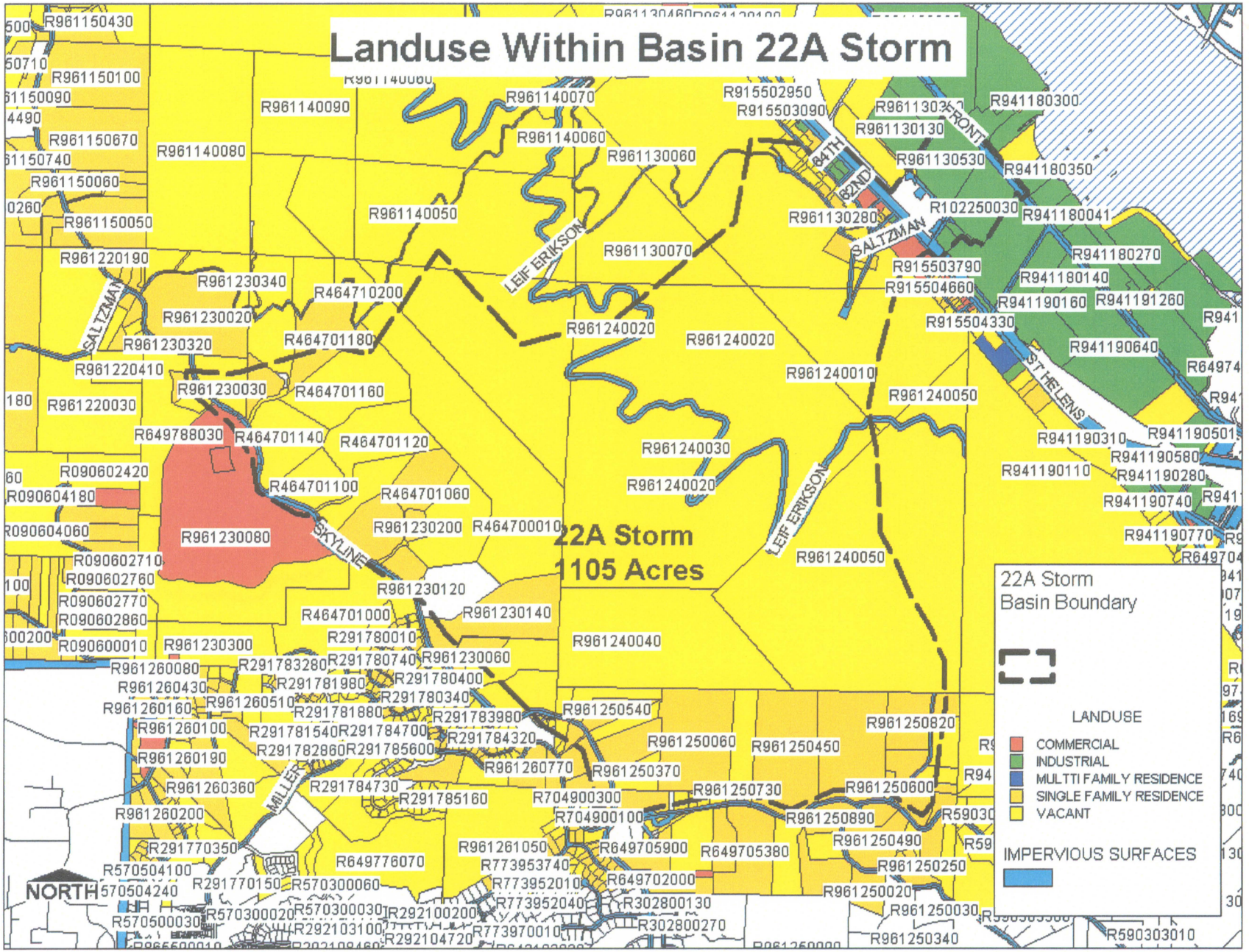
Basin 22A Aerial Photo
City of Portland



22A Outfall - Stormwater Drainage Map
City of Portland



Outfall 22A Map with Sediment Sample and Non-City Outfall Locations
City of Portland



Land Use Within Basin 22A
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 22A

			StationID	SD109	SD107	SD104	SD105	SD100	SD100	SD100	SD100
			Sample ID #	0	0	0	0	0	0	0000A	0000A
			Field Replicate #	#	#	#	#	#	#	#	#
			SubSample #	#	#	#	#	#	E	#	E
			Sample Depth	0-10 CM	0-10 CM	0-10 CM	0-10 CM	0-10 CM	0-10 CM	0-90 CM	0-90 CM
			Sample Date	09/23/1997	09/23/1997	09/23/1997	09/23/1997	09/22/1997	09/22/1997	10/16/1997	10/16/1997
Analyte	**Units**	**DEQ Baseline**	**Analytes of Interest**								
Aluminum	PPM	42800		41700	42300	29200	40700	27000	15200	34400	22100
Antimony	PPM	5		6 UJ	6 UJ	5 UJ	6 UJ	4 UJ	10 U	5 UJ	5 U
Arsenic	PPM	5		6 U	6 U	5 U	6 U	4 U	4	5 U	3
Barium	PPM	195		180	179	134	176	126	116	125	109
Beryllium	PPM	0.7		0.6	0.7	0.49	0.7	0.47	1 U	0.49	1 U
Cadmium	PPM	0.6		0.5	0.5	0.3	0.3	0.2	1 U	0.6	1 U
Chromium	PPM	41		37.7	38.3	28	37.5	27.6	20	35.9	30
Cobalt	PPM	19.7		18.7	18.2	12.7	18.5	12.2	13	16.6	16
Copper	PPM	60		47.6	44.8	30.8	43.3	23.2	21	41.7	39
Iron	PPM	45000		43700	43600	32800	42900	29200	23400	36100	30400
Lead	PPM	30		16	16	10	11	11	20 U	20	21
Manganese	PPM	810		721	676	277	688	377	361	344	323
Mercury	PPM	0.1		0.06	0.07	0.07	0.06	0.04	0.04	0.06	0.08
Nickel	PPM	32		30	29	20.7	29	18.9	17	27	25
Selenium	PPM	15		15	11	10	13	9	1 U	10	1 U
Silver	PPM	1.4		0.9	0.9	0.9	1.2	0.8	2 U	1.1	2 U
Thallium	PPM	13		10	6	5	10	8	1 U	6	1 U
Vanadium	PPM	112		108	109	79	107	73.7	64	93.5	85
Zinc	PPM	118		112	108	69.5	97.1	64.6	61	110	104
Total organic carbon	PCT	2		1.8	1.6	1.3	1.5	0.75	1.24	1.7	1.88
4-Methylphenol	PPB	680		580	770	1300	590	250	50 U	410	190
Benzoic acid	PPB	200	X	200 U	190 U	190 U	190 U	190 UJ		**720**	
Benzyl alcohol	PPB	20		20 U	19 U	19 U	19 U	19 U		20 U	
Bis(2-ethylhexyl) phthalate	PPB	390		240	430	320	270	68	236	250	180
Butyl benzyl phthalate	PPB	20		20 U	19 U	19 J	19 U	19 U	20 U	20 U	20 U
Di-n-butyl phthalate	PPB	20		20 U	23	19 U	19 U	19 U	50	20 U	20 U
Di-n-octyl phthalate	PPB	20		20 U	19 U	19 U	19 U	19 U	20 U	20 U	20 U
Dibenzofuran	PPB	100		35	44	19 U	19 U	19 U	20 U	20 U	20 U
Dimethyl phthalate	PPB	20		20 U	19 U	19 U	19 U	19 U	20 U	20 U	20 U
Pentachlorophenol	PPB	97		99 U	96 U	97 U	95 U	97 U	50 U	98 U	50 U
Phenol	PPB	20		20 U	19 U	19 U	19 U	19 U	20 U	52	49
2-Methylnaphthalene	PPB	150		20 U	22	19 U	19 U	19 U	20 U	20 U	20 U
Acenaphthene	PPB	180		49	54	19 U	19 U	19 U	20 U	20 U	20 U
Acenaphthylene	PPB	60		20 U	19 U	19 U	19 U	19 U	20 U	20 U	20 U
Anthracene	PPB	150		34	38	19 U	19 U	19 U	20 U	20 U	20 U
Benzo(a)anthracene	PPB	360		100	100	34	38	28	45	20	32
Benzo(a)pyrene	PPB	500		91	79	49	36	36	52	29	27
Benzo(b)fluoranthene	PPB	350		100	84	54	36	30	70	27	38
Benzo(g,h,i)perylene	PPB	250		46	37	47	22	33	37	24	20 U
Benzo(k)fluoranthene	PPB	225		94	93	42	46	27	23	20	20 U
Chrysene	PPB	425		150	170	58	58	40	58	35	41
Dibenz(a,h)anthracene	PPB	125		20 U	19 U	19 U	19 U	19 U	20 U	20 U	20 U
Fluoranthene	PPB	600		360	430	86	120	59	108	52	75
Fluorene	PPB	125		58	66	19 U	19 U	19 U	20 U	20 U	20 U
Indeno(1,2,3-c,d)pyrene	PPB	225		57	52	48	29	31	46	20	20 U
Naphthalene	PPB	200		26	21	19 U	19 U	19 U	20 U	20 U	20 U
Phenanthrene	PPB	700		300	350	40	71	39	44	41	31
Pyrene	PPB	700		300	390	78	120	72	116	56	96
Carbazole	PPB	100		20 U	19 U	19 U	19 U	19 U	20 U	20 U	20 U

Qualifier List:

Bold indicates 3 times the DEQ baseline value

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Table 2
Industrial Chemical Uses for Analytes of Interest at Outfall 22A

Chemical	Use
Benzoic acid	Preserving foods, fats, fruit juices, alkaloidal solns, etc; manufacturing benzoates and benzoyl compds, dyes; as a mordant in calico printing; for curing tobacco. As standard in volumetric and calorimetric analysis. Pharmaceutic aid (antifungal).

Table 3
Outfall 22A Facility List

Aquarius Database Search: Jul-2000
Basin Reconnaissance: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit No.	Business Type	Exposure	Comments
R915500110	Ackerly Comm	5909 NW St. Helens Rd.	MS4	4226			Storage	Yes	Drums
R961130140	Anderson Roofing	5885 NW St. Helens Rd.	MS4	1761			Offices	Yes	
R915500330	Beaver State Scaffolding & Equipment Co.	5920 NW Saltzman Rd.	MS4	7359			Warehouse	No	
R915501440	Berry Transport	6115 NW St. Helens Rd.	MS4	4213			Petroleum distribution	Yes	Trucks
R941180130	Certainteed / GS Roofing	6350 NW Front Ave.	WP-28, WP-29	2952*	NPDES	1200Z	Distribution	Yes	
R941180360	Chevron USA - Willbridge	5531 NW Doane Ave.	MS4	5171*	NPDES	1300J	Petroleum terminal	Yes	
R941180360	Chevron USA - Willbridge	5531 NW Doane Ave.	MS4	5171*	NPDES	Batch	Petroleum terminal	Yes	to storm sewer
R941180360	Chevron USA - Willbridge	5531 NW Doane Ave.	MS4	5171*	NPDES	Individual	Petroleum terminal	Yes	
R941180360	Chevron USA - Willbridge	5531 NW Doane Ave.	Sanitary	5171*	Pretreatment	400.014	Petroleum terminal		
R915500010	Commercial Steam Cleaning	5959 NW St. Helens Rd.	MS4	1799			Mobile washing	Yes	
R961130530 R102250030	GATX Terminals Corporation	5880 NW St. Helens Rd.	MS4	5171*	NPDES	1300J	Petroleum terminal	Yes	
R961130530 R102250030	GATX Terminals Corporation	5880 NW St. Helens Rd.	on-site	5171*	NPDES	1300J	Petroleum terminal	Yes	
R961130530 R102250030	GATX Terminals Corporation	5880 NW St. Helens Rd.	Sanitary	5171*	Pretreatment	400.065	Petroleum terminal		
R961130530 R102250030	Shell Oil Co. - Willbridge Dist. Co.	5880 NW St. Helens Rd.	MS4	5084*			Petroleum terminal	Yes	
R961130130	Specialty Transport Inc.	6161 NW 61st Ave.	MS4	4213*			Transportation	Yes	

*Indicates SIC # has been verified via site inspection

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	pH	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Non-Polar O&G	Total O&G
			SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Certainteed / GS Roofing																
01	06/23/1995	1200Z	5.96	<10	6	<1	<0.005	<0.002	<0.005	<0.005	<0.005	<0.0002	<0.005	0.008		5.3
01	12/29/1995	1200Z	6.5	<10	<5	1.9	<0.01	<0.002	<0.01	<0.01	<0.01	<0.0002	<0.1	<0.1		<0.5
01	12/17/1996	1200Z	7	<10	87	2.2	<0.005	<0.002	0.011	0.013	0.008	<0.0002	0.008	0.19		1.6
01	12/16/1997	1200Z	7.63		23					<0.02	<0.15			0.15		<5
01	03/23/1998	1200Z	7.35		100					0.022	0.019			0.2	<5	<5
01	11/20/1998	1200Z	6.4		32					<0.1	<0.05			0.12	<5	<5
01	05/07/1999	1200Z	7.22		15					0.03	<0.05			0.665		<5
01	12/02/1999	1200Z	7.13											0.035		
02	06/23/1995	1200Z	6.32	22.3	27	14.8	<0.005	<0.002	<0.005	<0.005	<0.005	<0.0002	<0.005	0.013		<0.5
02	12/29/1995	1200Z	6.8	31	33	6.3	0.01	<0.002	<0.01	0.01	0.01	<0.0002	<0.1	0.2		4.2
02	05/14/1996	1200Z	8	74	56	18	0.008		0.006	0.027	0.012		0.008	0.4		4.1
02	11/22/1996	1200Z	7.4	35	10	12	<0.005	<0.002	<0.005	0.01	<0.005	<0.0002	<0.005	0.14		1
02	12/16/1997	1200Z	7.91		61					<0.02	<0.15			0.23		7
02	03/23/1998	1200Z	7.29		82					<0.02	0.02			0.2	<5	<5
02	11/20/1998	1200Z	7		41					<0.1	<0.05			0.41	<5	<5
02	05/07/1999	1200Z	7.65		16					0.026	<0.05			0.086		<5
02	12/02/1999	1200Z	8.08											0.033		

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	pH	Residual Cl	COD	TSS	TOC	Copper	Lead	Zinc	Non-Polar O&G	Total O&G	Methanol	Ethanol	Isopropyl Alcohol
			gallons	SU	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Chevron USA - Willbridge Dist																
01	05/21/1995	INDIV		7		19		6.2								
01	06/15/1995	INDIV											0.57			
01	06/18/1995	INDIV											2			
01	11/06/1995	INDIV											<0.5			
01	12/01/1995	INDIV											0			
01	01/01/1996	INDIV											<10		<10	
01	02/05/1996	INDIV											<5			
01	03/22/1996	INDIV											<5			
01	04/02/1996	INDIV											<5		<10	
01	05/13/1996	INDIV											<5			
01	10/01/1996	INDIV											<6.5		<10	
01	11/01/1996	INDIV											<5			
01	12/04/1996	INDIV											<5			
01	12/10/1996	INDIV											<5			
01	01/01/1997	INDIV											<5		<10	
01	03/01/1997	INDIV											<5			
01	06/06/1997	INDIV											<5			
01	08/20/1997	INDIV											<5			
01	09/15/1997	INDIV											<5			
01	10/01/1997	INDIV											<5		<10	
01	11/07/1997	INDIV											<5			
01	12/09/1997	INDIV											<6			
01	01/02/1998	INDIV											<6		<10	
01	02/02/1998	INDIV											<5			
01	03/02/1998	INDIV											<5			
01	04/11/1998	INDIV											<5		<10	
01	05/26/1998	INDIV											<5			
01	06/13/1998	INDIV											<5			
01	09/18/1998	INDIV											<5		<10	
01	10/04/1998	INDIV											<6		<10	
01	11/03/1998	INDIV											<5			
01	12/02/1998	INDIV											<5			
01	12/07/1998	INDIV		7		5	18		<0.03	<0.1	<0.05		9.3			
01	01/17/1999	INDIV											<5		<10	
01	02/20/1999	INDIV											<5			

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	pH	Residual Cl	COD	TSS	TOC	Copper	Lead	Zinc	Non-Polar O&G	Total O&G	Methanol	Ethanol	Isopropyl Alcohol
			gallons	SU	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Chevron USA - Willbridge Dist																
01	03/01/1999	INDIV											<5			
01	04/01/1999	INDIV											<5	<1	<1	<1
01	05/03/1999	INDIV											<5			
01	06/12/1999	INDIV											<5			
01	10/08/1999	1300J		6.4									<5		<10	
01	10/27/1999	1300J											<5			
01	11/05/1999	1300J	*93750	*7									<5			
01	11/10/1999	1300J											<5			
01	11/17/1999	1300J		7.7		4	2		<0.03	<0.1	0.058		<5			
01	11/24/1999	1300J											<5			
01	12/02/1999	1300J											<5			
01	12/07/1999	1300J	*93750	*6.3									<5			
01	01/03/2000	1300J	*10084	*6.7									<6			
01	01/09/2000	1300J											<5		<10	
01	01/17/2000	1300J											<6			
01	01/24/2000	1300J											5.75			
01	01/31/2000	1300J											<5			
01	02/08/2000	1300J											<5			
01	02/14/2000	1300J											<5			
01	02/22/2000	1300J	*12492	*7.3									<5			
01	03/03/2000	1300J	*8332	8.4									<5			
01	04/13/2000	1300J	*9612	6.9									<5		<10	
01	05/01/2000	1300J	*19280										<6			
01	06/12/2000	1300J	*167979	7.3									<5		<10	
02	11/27/1995	INDIV											0.95			
02	12/01/1995	INDIV											<10			
02	01/01/1996	INDIV											<10			
02	02/05/1996	INDIV											<5			
02	03/05/1996	INDIV											<5			
02	04/03/1996	INDIV											<5			
02	05/14/1996	INDIV											<5			
02	12/10/1996	INDIV											7.1			
02	12/12/1996	INDIV											<5			
02	01/01/1997	INDIV											<5			
02	03/01/1997	INDIV											<5			

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	pH	Residual Cl	COD	TSS	TOC	Copper	Lead	Zinc	Non-Polar O&G	Total O&G	Methanol	Ethanol	Isopropyl Alcohol
			gallons	SU	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Chevron USA - Willbridge Dist																
02	10/01/1997	INDIV											<5			
02	11/07/1997	INDIV											<5			
02	01/15/1998	INDIV											<5			
02	03/03/1998	INDIV											<5			
02	05/26/1998	INDIV											<5			
02	10/04/1998	INDIV											<5			
02	12/07/1998	INDIV											<5			
02	12/07/1998	INDIV		6.5		7	1		<0.03	<0.1	0.063		8.7			
02	05/04/1999	INDIV											<5			
02	06/23/1999	INDIV											<5			
02	09/13/1999	1300J	>1.67	7.3									<5			
02	10/04/1999	INDIV		6.9									<5			
02	10/11/1999	INDIV		6.7									<5			
02	10/29/1999	INDIV											<5			
02	11/02/1999	1300J	*604	*6.3									<5			
02	11/08/1999	1300J											<5			
02	11/16/1999	1300J		6.5		9	<1		<0.03	<0.1	0.18		5.2			
02	11/16/1999	1300J											<5			
02	11/23/1999	1300J											<5			
02	12/01/1999	1300J	*663	*6									<5			
02	01/18/2000	1300J	*675	*6.5									54			
02	01/25/2000	1300J											<5			
02	01/31/2000	1300J											<5			
02	02/08/2000	1300J											<5			
02	02/14/2000	1300J	*838	*6.7									<5			
02	03/02/2000	1300J	1000	6.4									<5			
02	04/06/2000	1300J	*350	6.9									<5			
02	05/01/2000	1300J	*800										<5			
02	06/08/2000	1300J	350	6.8									<5			
T47	06/06/1996	INDIV		6.8	0.5					0.007		<0.5				
T47	09/04/1996	INDIV		7	<0.1											

* Average

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
01	01/02/1996	1300J						<1	<5
01	01/15/1996	1300J						<1	
01	01/22/1996	1300J						<1	
01	01/29/1996	1300J						<1	
01	02/12/1996	1300J						1	
01	02/15/1996	1300J						<1	
01	02/20/1996	1300J						<1	
01	02/26/1996	1300J						<1	
01	03/11/1996	1300J						<1	
01	03/15/1996	1300J						2	
01	03/18/1996	1300J						<1	
01	04/01/1996	1300J						<1	
01	04/15/1996	1300J						<2	
01	04/29/1996	1300J						<2	
01	05/13/1996	1300J						<2	
01	05/20/1996	1300J			<2				
01	05/28/1996	1300J			<2				
01	06/03/1996	1300J						<2	
01	06/10/1996	1300J						<2	
01	07/01/1996	1300J						<2	
01	07/15/1996	1300J						<2	
01	08/07/1996	1300J						<2	
01	08/19/1996	1300J						<2	
01	09/09/1996	1300J						<2	<5
01	10/01/1996	1300J			6.74			<2	
01	10/14/1996	1300J			6.93			<2	
01	11/04/1996	1300J			6.91			<2	
01	11/18/1996	1300J			6.58			<2	
01	01/11/1997	1300J			7.9			6.9	
01	01/29/1997	1300J			6.7			<5	
01	02/06/1997	1300J			6.7			<5	
01	02/10/1997	1300J			6.4			<2	
01	03/13/1997	1300J			7			<5	
01	03/25/1997	1300J			7.4			<5	

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
01	04/13/1997	1300J			6.3			<5	
01	04/14/1997	1300J			7.1			<5	
01	05/06/1997	1300J			7			<5	
01	05/20/1997	1300J			7			<5	
01	06/04/1997	1300J			7			<5	
01	06/20/1997	1300J			6.9			<5	
01	07/02/1997	1300J			6.9	<5		<5	
01	07/21/1997	1300J			7.3	<5		<5	
01	08/04/1997	1300J			7.2	<5		<5	
01	08/20/1997	1300J			7.1	<5		<5	
01	09/09/1997	1300J			7.2	<5		<5	
01	09/25/1997	1300J			7.1	<5		<5	
01	10/13/1997	1300J	5656		6.8	<5	5656	<5	
01	10/23/1997	1300J			6.9	<5		<5	
01	11/06/1997	1300J			7	<5		<5	
01	11/20/1997	1300J	6000		6.3	<5	6000	<5	
01	12/08/1997	1300J			6.9	<5		<5	
01	12/22/1997	1300J	4250		6.9	<5	4250	<5	
01	01/05/1998	1300J			6.7	<1		<1	
01	01/26/1998	1300J	10892		6.7	<1	10892	<1	
01	02/02/1998	1300J			6.4	<1		<1	
01	02/10/1998	1300J	9936		6.6	<1	9936	<1	
01	03/01/1998	1300J			6.7			<1	<1
01	04/06/1998	1300J			7.1	<1		<1	
01	04/20/1998	1300J	2466		6.8	<1	2466	<1	
01	05/04/1998	1300J			7	<5		<5	
01	05/22/1998	1300J	3937		6.8	<5	3937	<5	
01	06/08/1998	1300J			6.8			<5	
01	06/16/1998	1300J	2800		6.7		2800	<5	<1
01	07/08/1998	1300J			6.8	<5		<5	
01	07/24/1998	1300J	619		6.7	<5	619	<5	
01	08/06/1998	1300J			6.7	<5		<5	
01	08/25/1998	1300J	1062		6.8	<5	1062	<5	
01	09/04/1998	1300J			6.9			<5	

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
01	09/21/1998	1300J	2233		6.7		2233	<5	
01	10/08/1998	1300J			6.8			<5	
01	10/26/1998	1300J	2454		6.8		2454	<5	
01	11/06/1998	1300J	13066		6.9		13066	<5	
01	11/25/1998	1300J			6.7			<5	
01	12/03/1998	1300J	7411		6.3		7411	<5	
01	12/28/1998	1300J			6.3			<5	
01	01/05/1999	1300J			8.1			<5	
01	01/18/1999	1300J	12360		6.6		12360	<5	
01	02/02/1999	1300J			5.9			<5	
01	02/17/1999	1300J	27464		5.9		27464	<5	
01	03/01/1999	1300J	4225		6.5		4225	<5	
01	03/23/1999	1300J			7.1			<5	
01	04/06/1999	1300J			7.2			<5	
01	04/23/1999	1300J			6.6			<5	
01	05/10/1999	1300J			6.5			<5	
01	05/24/1999	1300J	*1900		6.3		*1900	<5	
01	06/09/1999	1300J			5.2			<5	
01	06/21/1999	1300J			6.5			<5	
01	07/13/1999	1300J	*516		7.6		*516	<5	<0.5
01	07/26/1999	1300J			7			<5	
01	08/20/1999	1300J	*1090		7.1	<5	*1090	<5	
01	10/28/1999	1300J			6.7			<5	
01	11/09/1999	1300J	*19433		6.5		*19433	<5	
01	11/18/1999	1300J			6.4	11		11	
01	12/07/1999	1300J	>16258		6.3		>16258	11	
01	12/28/1999	1300J			7.1			6.5	
01	01/06/2000	1300J	*75828		6.4		*75828	<5	<0.5
01	01/10/2000	1300J			5.7			<5	<0.5
01	01/21/2000	1300J			6.4			<5	
01	02/03/2000	1300J			6.7	<5		11	
01	02/08/2000	1300J			6.2			<5	
01	02/16/2000	1300J						<5	
01	02/24/2000	1300J				<5		6.4	

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
01	03/01/2000	1300J	*7612				*7612	<5	
01	03/08/2000	1300J						<5	
01	03/16/2000	1300J						<5	
01	03/22/2000	1300J						<5	
01	03/27/2000	1300J						<5	
01	04/07/2000	1300J	*6515				*6515	<5	<0.5
01	04/13/2000	1300J						<5	
01	04/19/2000	1300J						<5	
01	04/25/2000	1300J						<5	
01	05/03/2000	1300J	*5225				*5225	<5	
01	05/11/2000	1300J						<5	
01	05/19/2000	1300J						<5	
01	05/26/2000	1300J						<5	
01	05/30/2000	1300J						<5	
01	06/07/2000	1300J	*3000				*3000	<5	
01	06/16/2000	1300J						<5	
01	06/23/2000	1300J						<5	
01	06/29/2000	1300J						<5	
03	01/02/1996	1300J						<1	<5
03	01/05/1996	1300J						<1	
03	01/15/1996	1300J						2.2	
03	01/22/1996	1300J						<1	
03	02/05/1996	1300J						<1	
03	03/04/1996	1300J						<1	
03	03/11/1996	1300J						<1	
03	04/22/1996	1300J						<2	
03	05/13/1996	1300J			<2				
03	09/09/1996	1300J						<2	<5
03	11/18/1996	1300J			6.72			<2	
03	01/29/1997	1300J			6.7			<5	
03	03/13/1997	1300J			7			<5	
03	04/13/1997	1300J			6.1			<5	
03	04/14/1997	1300J			7			<5	
03	05/06/1997	1300J			7			<5	

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
03	06/04/1997	1300J			7			<5	
03	09/25/1997	1300J			7.1	<5		<5	
03	11/06/1997	1300J			7	<5		<5	
03	11/20/1997	1300J	34358		6.6	6	34358	6	
03	12/08/1997	1300J			6.5	<5		<5	
03	12/22/1997	1300J	16312		6.5	<5	16312	<5	
03	01/05/1998	1300J			6.6	<1		<1	
03	01/26/1998	1300J	65750		6.4	<1	65750	<1	
03	02/02/1998	1300J			6.4	<1		<1	
03	02/10/1998	1300J	30580		6.5	<1	30580	<1	
03	03/01/1998	1300J			6.4			<1	<1
03	04/28/1998	1300J	30533			<1	30533	<1	
03	05/22/1998	1300J	25031		6.7	<5	25031	<5	
03	06/08/1998	1300J			6.7			<5	
03	06/16/1998	1300J	16433		6.6		16433	<5	<1
03	10/26/1998	1300J	2515		6.8		2515	<5	
03	11/06/1998	1300J	36200		6.9		36200	<5	
03	11/25/1998	1300J			6.6			<5	
03	12/03/1998	1300J	34735		6.5		34735	<5	
03	12/28/1998	1300J			7			<5	
03	01/05/1999	1300J			7			<5	
03	01/18/1999	1300J			7.5			<5	
03	02/02/1999	1300J			6.2			<5	
03	02/17/1999	1300J	102717		6.6		102717	<5	
03	03/01/1999	1300J	49200		6.5		49200	<5	
03	03/23/1999	1300J			7			<5	
03	04/06/1999	1300J			6.9			<5	
03	04/23/1999	1300J			6.4			<5	
03	05/10/1999	1300J			5.9			<5	
03	05/24/1999	1300J	*21724		6.1		*21724	<5	
03	06/09/1999	1300J			6.2			<5	
03	06/21/1999	1300J	*8200		6.9		*8200	<5	
03	07/13/1999	1300J	*9000		6.6		*9000	<5	<0.5
03	10/28/1999	1300J			6.4			<5	

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
03	11/09/1999	1300J	*13733		6.5		*13733	<5	
03	11/18/1999	1300J			6.5			<5	
03	12/07/1999	1300J	*33097		6.5		*33097	<5	
03	12/28/1999	1300J			6.7			<5	
03	01/21/2000	1300J			7.1			<5	
03	02/03/2000	1300J			6.7			<5	
03	02/08/2000	1300J			6.5			<5	
03	02/18/2000	1300J						<5	
03	02/24/2000	1300J				<5		5.4	
03	03/01/2000	1300J	*57830				*57830	<5	
03	03/08/2000	1300J						<5	
03	03/16/2000	1300J						<5	
03	03/22/2000	1300J						<5	
03	03/27/2000	1300J						<5	
03	04/07/2000	1300J	*5100				*5100	<5	<0.5
03	04/13/2000	1300J						<5	
03	04/19/2000	1300J						<5	
03	04/25/2000	1300J						<5	
03	05/03/2000	1300J						<5	
03	05/11/2000	1300J						<5	
03	05/19/2000	1300J						<5	
03	05/26/2000	1300J						<5	
03	05/26/2000	1300J						<5	
03	06/07/2000	1300J	*2600				*2600	<5	
T140	01/05/1996	1300J						<1	
T140	01/15/1996	1300J						2.2	
T140	01/22/1996	1300J						<1	
T140	02/01/1996	1300J						<1	
T140	02/06/1996	1300J						<1	
T140	02/15/1996	1300J						<1	
T140	02/22/1996	1300J						2	
T140	03/04/1996	1300J						<1	
T140	04/16/1996	1300J						<1	
T140	04/26/1996	1300J						<2	

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
T140	05/22/1996	1300J						<2	
T140	07/23/1996	1300J						<2	
T140	08/01/1996	1300J						<2	
T140	08/14/1996	1300J						<2	
T140	08/27/1996	1300J						<2	
T140	09/09/1996	1300J			6.12			4	
T140	09/20/1996	1300J			6.33			6	
T140	10/07/1996	1300J			6.14			<2	
T140	10/15/1996	1300J			6.48			<2	
T140	11/12/1996	1300J			7.38			<2	
T140	11/19/1996	1300J			6.72			<2	
T140	11/28/1996	1300J			7.23			<2	
T140	12/05/1996	1300J			7.1			<5	
T140	12/08/1996	1300J			8.25			<5	
T140	12/09/1996	1300J			6.5			<5	
T140	12/19/1996	1300J			6.8			<5	
T140	12/23/1996	1300J			6.8			<5	
T140	12/27/1996	1300J			6.7			<5	
T140	12/31/1996	1300J			7.2			<5	
T140	01/03/1997	1300J			6.6			<5	
T140	01/06/1997	1300J			8.1			9.3	
T140	01/09/1997	1300J			6.7			3.8	
T140	01/22/1997	1300J			6.3			<5	
T140	01/31/1997	1300J			6.1			6.9	
T140	02/10/1997	1300J			6.4			<5	
T140	03/03/1997	1300J			5.8			<5	
T140	03/13/1997	1300J			7.1			9.1	
T140	03/18/1997	1300J			6.8			<5	
T140	03/27/1997	1300J			6.9			<5	
T140	04/08/1997	1300J			7.3			<5	
T140	05/19/1997	1300J			6.8			<5	
T140	06/04/1997	1300J			7			<5	
T140	08/05/1997	1300J			7	<5		<5	
T140	11/26/1997	1300J			6.3	<5		<5	

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
T140	12/09/1997	1300J			6.5	<5		<5	
T140	01/02/1998	1300J			6.6	<5		<5	
T140	01/05/1998	1300J			6.7	<1		<1	
T140	01/12/1998	1300J			6.5	<1		<1	
T140	01/19/1998	1300J			6.5	<1		<1	
T140	02/02/1998	1300J			6.5	<1		<1	
T140	02/10/1998	1300J			6.3	<1		<1	
T140	04/08/1998	1300J			6.3	<1		<1	
T140	04/24/1998	1300J			6.8	<1		<1	
T140	05/04/1998	1300J		559020	6.2	<5		<5	
T140	05/22/1998	1300J		359500	6.7	<5		<5	
T140	06/08/1998	1300J			6.6	<5		<5	
T140	10/26/1998	1300J		559020	6.8			<5	
T140	11/25/1998	1300J		559020	6.6			<5	
T140	12/03/1998	1300J		562338	6.4			<5	
T140	12/11/1998	1300J		559020	6.7			<5	
T140	12/27/1998	1300J		555030	7.1			<5	
T140	01/05/1999	1300J		555030	6.6			<5	
T140	01/18/1999	1300J		554354	6.7			<5	
T140	01/22/1999	1300J		578928	6.4			<5	
T140	01/29/1999	1300J		560364	6.2			<5	
T140	02/08/1999	1300J		578928	6.9			<5	
T140	02/17/1999	1300J		570000	5.9			<5	
T140	02/22/1999	1300J		578928	6.6			<5	
T140	03/01/1999	1300J		562338	6.5			<5	
T140	03/09/1999	1300J		562338	6.5			<5	
T140	03/23/1999	1300J		560000	6.9			<5	
T140	04/02/1999	1300J		15430	6.7			<5	
T140	04/28/1999	1300J		559020	6.6			<5	
T140	05/10/1999	1300J		562338	5.7			<5	
T140	08/03/1999	1300J		560532	6.3	<5		<5	
T140	12/07/1999	1300J		560616	6.7			<5	
T140	12/13/1999	1300J		560196	6.5			22	
T140	12/28/1999	1300J		495768	6.4			<5	

Table 4
NPDES Stormwater Results for Industries Discharging to the 22A Outfall

Location Code	Collection Date	Permit Type	Daily Flow	Batch Flow	pH	Polar O&G	Non-Polar O&G	Total O&G	Ethanol
			gallons	gallons	SU	mg/L	mg/L	mg/L	mg/L
GATX Terminals Corporation									
T140	01/10/2000	1300J		560532	5.7			<5	
T140	01/21/2000	1300J		530292	6.6			<5	
T140	02/01/2000	1300J		561666	6.5			<5	
T140	02/08/2000	1300J		561666	6.3	<5		9.5	
T140	02/18/2000	1300J		557718				<5	
T140	03/01/2000	1300J		560700				<5	<0.5
T140	03/16/2000	1300J		555030				<5	
T140	04/10/2000	1300J		421554				<5	<0.5
T140	05/30/2000	1300J		539112				<5	

*Average

Table 5
Outfall 22A Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW St. Helens Rd.	**NW St. Helens Rd.**	**NW St. Helens Rd.**	**NW St. Helens Rd.**	**NW St. Helens Rd.**	**NW St. Helens Rd.**	**NW St. Helens Rd.**	**NW St. Helens Rd.**
5880	Shell Oil	Shell Oil	Shell Oil	Shell Oil	Shell Oil	GATX Terminal Corp./ Tosco Northwest	GATX Terminal Corp./ Tosco Northwest
5885	Silver Eagle Transportation	Silver Eagle Transportation	Silver Eagle Transportation	Silver Eagle Company, Beaver Motor Company (truck dealer)	NL	NL	NL
5909	Gas Station	Gas Station	Ralph Baker Gas	Smitty's Gas	Kern's Gas	Kern's Gas	Betts Telecommunications
5959	NL	NL	NL	Saybolt Petroleum Inspectors	Commercial Steam Cleaning	Commercial Steam Cleaning	Commercial Steam Cleaning
6115	Asbury Transportation Company	Asbury Transportation Company	Asbury Transportation Company	Asbury Transportation Company	Asbury Transportation Company, Sun Transportation	Lee and Eastes Tank Lines, Motor Freight Services	Berry Transportation, Interstate Sandblasting
NW Saltzman Rd.	**NW Saltzman Rd.**	**NW Saltzman Rd.**	**NW Saltzman Rd.**	**NW Saltzman Rd.**	**NW Saltzman Rd.**	**NW Saltzman Rd.**	**NW Saltzman Rd.**
5920	NL	NL	NL	Vacant	Beaver State Scaffolding	Beaver State Scaffolding	Beaver State Scaffolding
NW Front Ave.	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**	**NW Front Ave.**
6350	NL	NL	Bird & Son Inc. (asphalt roofing products mfr.)	Bird & Son Inc. (asphalt roofing products mfr.)	Bird & Son Inc. (asphalt roofing products mfr.)	GS Roofing Products	GS Roofing Products
NW Doane Ave.	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**	**NW Doane Ave.**
5531	NL	NL	Standard Oil of California—motor transport dept. and plant	Standard Oil of California—motor transport dept. and plant	Standard Oil of California—motor transport dept. and plant	Chevron Oil	Chevron Oil
NW 61st Ave.	**NW 61st Ave.**	**NW 61st Ave.**	**NW 61st Ave.**	**NW 61st Ave.**	**NW 61st Ave.**	**NW 61st Ave.**	**NW 61st Ave.**
6161	Bethlehem Pacific Steel	Bethlehem Pacific Steel	Gilmore Steel	Gilmore Steel	Gilmore Steel	BFI Medical Recycling, Jack Gray Transportation, Metro Control Station	BFI Medical Recycling, Jack Gray Transportation, Metro Control Station

NL = Not listed

Table 6
Outfall 22A EPA Toxic Release Inventory List and Hazardous Waste Generator List

RNO	Address	Company	EPA ID	TRI ID	SIC Number	Generator Status	Releases to Environment	Chemicals Used on Site
R941180360	5531 N.W. Doane Ave	Chevron Prods. Co. Willbridge Terminal	ORD000831701	97208CHVRN5531N	5171, 2992	LQG	Only air	Benzene, 1,2,4-Trimethyl-, Benzene, Ethylbenzene, Methyl Tert-Butyl Ether (MTBE), N-Hexane, Toluene, Xylenes, Zinc
R961130530 R102250030	5880 NW St Helens Rd	GATX Terminals Corp Portland Willbridge (Shell Oil-Willbridge Plant)	ORD093481646	*	4226	LQG	Only air	Carbon Monoxide, Nitrogen Dioxide, PM10 Total 0-10um, Suspended Particulate (TSP), Sulfur Dioxide, Volatile Org
R961130530 R102250030	5880 NW St Helens Rd	Shell Oil Co Willbridge Tanks	ORQ000013375	*	5084	LQG	*	*
R961130140	5885 NW St Helens Rd	Metropolitan Service District	ORD981774110	*	*	*	*	*
R941180130	6350 N.W. Front Ave	GS Roofing Prods. Co. Inc.	ORD045770005	97210CSRFN6350N	2952	CEG	*	*
R961130130	6161 NW 61st Ave	Metro Central Transfer Station	ORD043003458	*	4953		*	*

CEG=Conditionally Exempt Generator
LQG = Low Quantity Generator
* No information available in database

Table 7
Outfall 22A DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI ID	CERCLIS	Action	Status
R941180360	5531 NW Doane Ave	Chevron - Willbridge Distribution Terminal	25	000831701	Remedial Investigation	*
R941180130	6350 NW Front Ave	Genstar Roofing Products	117	*	Site Screening recommended (EV)	*
R961130130	6161 NW 61st Ave	Metro Central Transfer Station	1398	043003458	State Expanded Preliminary Assessment recommended (XPA)	SUS
R961130530 R102250030	5880 NW St. Helens Rd	Shell Oil Co. - Willbridge Plant	160	93481646	Remedial Investigation	SUS
Multiple	NW Doane Ave	Willbridge Bulk Fuel Area	1549	*	Remedial Investigation	LIS

SUS = Suspected
LIS = Listed
* No information available in database

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 25

shows data entered as of November 22, 2000 at 8:41:51 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 25	Site Name: Chevron - Willbridge Distribution Terminal		CERCLIS No: 000831701
	Address: 5531 NW Doane AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 18		Tax Lots: 5
	Latitude: 45 deg. 33 ' 41"	Longitude: 122 deg. 44 ' 30"	Site Size: 43 acres

Other Site Names:

Chevron USA - Willbridge

Chevron Bulk Plant - Willbridge

Willbridge Bulk Fuel Area (ECSI #1549)

Shell Oil Company - Willbridge Plant (ECSI #160)

UNOCAL - Willbridge Terminal (ECSI #177)

Operations:

Name: Chevron - Willbridge Distribution Termin

Comments: Receives and redistributes petroleum products; receives, warehouses, . and distributes tires, batteries, and automotive accessories

Years of Operation: 1912 to present

SIC Code: 5171 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	petroleum hydrocarbons weathered gasoline products tank bottoms
Manner and Time of Release:	Past operating practices; spills, leaks to storm sewer, sludge burial; 13 spills between 6/73 and 9/84; ongoing seepage 10/28/91.
Contamination Information:	Past activities (inland spills, tank bottoms burial practices, leaky petroleum transmission lines at main distribution terminal) have allowed petroleum products to permeate fill sands and accumulate at top of shallow aquifer. Actual source of groundwater contamination is obscure. Shell and Union Oil have tank farms adjoining this site and may have contributed. (City of Portland) facility fined five times by Coast Guard as a result of oil seeps at edge of Willamette River. Waste in form of weatherized gasoline products, tank bottoms, and API separator product; leachate from old sludge burial pits. (11/13/91 RP/NWR) Petroleum seepage into Willamette River observed by DEQ staff 10/28/91.
Pathways:	Groundwater contamination, surface water, potential soil contamination.

Environmental/Health Threats:	Seepage of contaminated groundwater into the Willamette River.
Status of Investigative or Remedial Action:	Network of 3 recovery wells to intercept flow of hydrocarbons to river. Storm sewer reconstructed to eliminate petroleum migration via storm sewer. API separator and hydro cleaner installed to process petroleum contaminated groundwater. Spill containment and catchment devices installed (mainly free product removal). (3/31/93 DBennett/EPA) No further investigation anticipated under the Federal Superfund program; recommend PRP continue working with DEQ. (5/25/94 KAM/SRS) Further action letter sent 6/30/93. (8/9/95 DMC/SAS) For more information on remedial activities, refer to site #1549. ECSI #25, 160, 177 have been combined into ECSI #1549.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
LEAD	Groundwater	32 ppm EP Tox			Y	
PETROLEUM HYDROCARBONS	Groundwater	Above detec. limit			Y	
PETROLEUM HYDROCARBONS	Surface Water	DEQ staff observed discharge to river 10/28/91			Y	

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	08/01/1980			EPA		
EPA PA1/SI1	02/11/1985	06/20/1985		EPA		
No Further Remedial Action Planned under Federal program	06/20/1985	06/20/1985		EPA		
Site added to database	04/22/1988		Marilyn Daniel	DEQ		SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ		SAS
SITE EVALUATION	12/11/1989	12/11/1989	Debbie Bailey	DEQ	HQ	SRS
State Basic Preliminary Assessment recommended (PA)	12/12/1989	12/12/1989	Debbie Bailey	DEQ		SRS
BASIC PRELIMINARY ASSESSEMENT	03/08/1990	07/10/1992	Karl Morgenstern	DEQ	HQ	SAS
Listing Review completed	11/13/1991	11/13/1991	Loretta Pickerell	DEQ		SAS
Proposal for Confirmed Release List recommended	11/14/1991	11/14/1991	Loretta Pickerell	DEQ		SAS
Facility proposed for Confirmed Release List	10/05/1992	10/05/1992	Loretta Pickerell	DEQ		SAS
EPA Site Inspection Prioritization	03/02/1993	03/02/1993		EPA		
No Further Remedial Action Planned under Federal program	03/31/1993	03/31/1993		EPA		
REMEDIAL INVESTIGATION	09/02/1993		Jill Kiernan	DEQ	NW	SRS
NEGOTIATIONS	09/02/1993	03/31/1994	Sheree Stewart	DEQ	HQ	SRS
REMOVAL	04/01/1994	09/08/1998	Jill Kiernan	DEQ	NW	SRS
Decision Not to List Site (on the CRL or Inventory)	09/08/1998	09/08/1998	Janelle Waggy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).
Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.
Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 117

shows data entered as of November 22, 2000 at 8:45:21 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 117	Site Name: Genstar Roofing Products		CERCLIS No:
	Address: 6350 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots: 29
	Latitude: 45 deg. 34 ' 21"	Longitude: 122 deg. 44 ' 52"	Site Size: 6.3 acres
Other Site Names:			
	Bird & Son		
Operations:			
	Name: Genstar Roofing Products		
	Comments: Manufacturing - asphaltic roofing materials .		
	Years of Operation:		
	SIC Code: 2952		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	fuel oil (#6 bunker)
Manner and Time of Release:	A pipe to the boiler from the tank developed a leak, causing a spill on 1/5/86.
Contamination Information:	In January 1986, a leaking pipeline caused a spill of 1,200 - 1,500 gallons of fuel oil. The leak was repaired and it appears that some soil may have been excavated.
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	Pipe was repaired - it appears that some soil excavation occurred. Further action letter sent 6/30/93 by KAM/SRS.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
BUNKER - FUEL OIL	Soil	Unknown				
BUNKER - FUEL OIL	Surface Water	Unknown				

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	08/01/1988		Michael Zollitsch	DEQ		SAS
Site Screening recommended (EV)	02/12/1994	02/12/1994	Dan Crouse	DEQ		SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1398

shows data entered as of November 22, 2000 at 8:47:57 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1398	Site Name: Metro Central Transfer Station		CERCLIS No: 043003458
	Address: 6161 NW 61st AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots:
	Latitude: 45 deg. 34 ' 4"	Longitude: 122 deg. 44 ' 47"	Site Size: 10.4 acres
Other Site Names:			
	American Steel Industries Inc.		
Operations:			
	Name: Metro Central Transfer Station		
	Comments: Solid waste transfer and material recovery facility .		
	Years of Operation: 1990 - present		
	SIC Code: 4959		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	pesticides, herbicides, benzene, heavy metals
Manner and Time of Release:	Migration of contaminants from adjacent site; time of release unknown.
Contamination Information:	(6/28/93 KPD/SAS) A succession of steel companies have operated a warehouse on the site since at least 1924. In 1989, Trans Industries proposed purchasing the site and converting the warehouse into a solid waste transfer station for Metro. An initial Site Investigation found that the groundwater was contaminated with pesticides, herbicides, BTEX compounds, and heavy metals. The contamination is believed to come from the adjacent Rhone-Poulenc site (ECSI #155).
Pathways:	The site is located in a heavily industrialized part of NW Portland. The Willamette River is about a quarter-mile north and east of the site, and Forest Park is about a quarter-mile south and west of the site. Groundwater at the site is not used for drinking. The public is encouraged to drive onto the site to drop off household hazardous wastes, but are told to remain in their cars.
Environmental/Health Threats:	Groundwater contamination from off-site source; possible migration to Willamette River.

Status of Investigative or Remedial Action: (2/23/95 KPD/SRS) Because contaminated groundwater is continuing to migrate onto the site, Site Response recommends that the site be placed on the Confirmed Release List (CRL). The source of the contamination is currently being cleaned up, so Site Response does not recommend any additional action be taken at this time. When the cleanup at the Rhone-Poulenc site has been completed, Site Response recommends that an expanded Preliminary Assessment (XPA) be performed to check that the cleanup has removed the contamination beneath the transfer station.

Data Sources:

1. EPA Preliminary Assessment (9/87).
2. Environmental Site Investigation (9/89).
3. Dames & Moore Preliminary Assessment (11/89).
4. Environmental Risk Investigation (4/90).
5. Dames & Moore Removal Report (1/93).
6. UST Log #26-89-0329.
7. Doane Lake Study Area files (ECSI #36).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ALDRIN	Groundwater	6.7 ppb	05/01/1993	Y		
BENZENE	Groundwater	3,600 ppb	05/01/1993	Y		
DIELDRIN	Groundwater	8.5 ppb	05/01/1993	Y		
ENDRIN	Groundwater	2.8 ppb	05/01/1993	Y		
MCPA	Groundwater	3,700 ppb	05/01/1993	Y		
MCPP	Groundwater	4,600 ppb	05/01/1993	Y		
SILVEX	Groundwater	81 ppb	05/01/1993	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	09/01/1979			EPA		
EPA Basic Preliminary Assessment	09/29/1987	09/30/1987		EPA		
No Further Remedial Action Planned under Federal program	09/30/1987	09/30/1987		EPA		
SITE EVALUATION	06/28/1993	06/28/1993	Kevin Dana	DEQ	HQ	SAS
Listing Review completed	06/29/1993	06/30/1993	Kevin Dana	DEQ	HQ	SAS
Site added to database	06/29/1993		Kevin Dana	DEQ	HQ	SAS
Insufficient information to list	06/30/1993	02/23/1995	Kevin Dana	DEQ	HQ	SAS
State Expanded Preliminary Assessment recommended (XPA)	07/01/1993	07/01/1993	Kevin Dana	DEQ	HQ	SAS
Proposal for Confirmed Release List recommended	02/23/1995	02/23/1995	Kevin Dana	DEQ	HQ	SAS
Insufficient information to list	05/08/2000	05/08/2000	Gil Wistar	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the

report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 160

shows data entered as of November 22, 2000 at 8:49:57 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 160	Site Name: Shell Oil Co. - Willbridge Plant		CERCLIS No: 093481646
	Address: 5880 NW St. Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1E , 18		Tax Lots: 21
	Latitude: 45 deg. 33 ' 50"	Longitude: 122 deg. 44 ' 45"	Site Size: 25.4 acres
Other Site Names:			
	Shell Oil Bulk Plant - Willbridge		
	Chevron - Willbridge Dist Terminal (ECSI #25)		
	UNOCAL - Willbridge Terminal (ECSI #177)		
	Willbridge Bulk Fuel Area (ECSI #1549)		
Operations:			
	Name: Shell Oil Co. Willbridge Plant		
	Comments: Petroleum tank farm. .		
	Years of Operation: since 1914		
	SIC Code: 5171		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	DDT, chlorinated solvents, petroleum tank bottoms, VOCs, lead
Manner and Time of Release:	Spills/past practices/on-site disposal; time of release unknown.
Contamination Information:	Releases through several 'spills' and historic waste management practices.
Pathways:	Soil contamination as well as surface water and groundwater contamination.
Environmental/Health Threats:	Soil and groundwater contamination and possibly surface water contamination.
Status of Investigative or Remedial Action:	Most spills were cleaned up. (3/24/93 KAM/SRS) Further action recommended; high priority. Site has been referred to the Site Response Program. (8/9/95 DMC/SAS) Ongoing remedial investigation and interim remedial actions now under the Willbridge Bulk Fuel Area project (site #1549). ECSI #25, 160, and 177 have been combined into ECSI #1549.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
BENZENE	Groundwater	12 ppm		Y		
DDD,p,p'-	Soil	230 ppm		Y		
DDT,p,p'-	Soil	17 ppm		Y		
ETHYLBENZENE	Groundwater	38.5 ppm		Y		
FLUORANTHENE	Groundwater	1 ppm		Y		
FLUORENE	Groundwater	0.3 ppm		Y		
LEAD	Groundwater	0.15 ppm		Y		
PHENANTHRENE	Groundwater	0.46 ppm		Y		
PYRENE	Groundwater	0.06 ppm		Y		
TOLUENE	Groundwater	27.8 ppm		Y		
TOTAL PETROLEUM HYDROCARBONS (TPH)	Groundwater	220 ppm		Y		
XYLENEs	Groundwater	78.6 ppm		Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	05/01/1981			EPA		
EPA Basic Preliminary Assessment	09/28/1987	09/29/1987		EPA		
Site added to database	04/13/1988		Michael Zollitsch	DEQ		SAS
EPA Preliminary Assessment 2	09/19/1988	10/11/1988		EPA		
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ		SAS
EPA Screening Site Inspection 1	12/21/1988	12/21/1988		EPA		
SITE EVALUATION	07/26/1992	07/26/1992	Karl Morgenstern	DEQ	HQ	SAS
State Basic Preliminary Assessment recommended (PA)	07/26/1992	07/26/1992	Karl Morgenstern	DEQ	HQ	SAS
BASIC PRELIMINARY ASSESSEMENT	07/27/1992	03/24/1993	Karl Morgenstern	DEQ	HQ	SAS
Proposal for Confirmed Release List recommended	03/24/1993	03/24/1993	Karl Morgenstern	DEQ		SRS
Proposal for Inventory recommended	03/24/1993	03/24/1993	Karl Morgenstern	DEQ		SRS
Listing Review completed	03/24/1993	03/24/1993	Karl Morgenstern	DEQ		SRS
Other remedial or investigative action recommended	04/06/1993	04/06/1993	Karl Morgenstern	DEQ		SRS
Facility proposed for Confirmed Release List	06/01/1993	06/01/1993		DEQ		SAS
Facility proposed for Inventory	06/01/1993	06/01/1993		DEQ		SAS
Owner/operator comments received on listing notification	09/02/1993			DEQ		SAS
REMEDIAL INVESTIGATION	09/02/1993		Jill Kiernan	DEQ	NW	SRS
NEGOTIATIONS	09/02/1993	03/31/1994	Sheree Stewart	DEQ	HQ	SRS
REMOVAL	04/01/1994	09/08/1998	Jill Kiernan	DEQ	NW	SRS
Decision Not to List Site (on the CRL or Inventory)	09/08/1998	09/08/1998	Janelle Waggy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

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Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.
NPL Site: Is the site on EPA's Superfund List? (Y/N).
Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.
Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1549

shows data entered as of November 22, 2000 at 8:57:20 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1549	Site Name: Willbridge Bulk Fuel Area		CERCLIS No:
	Address: NW Doane AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: Y
Property:	Twnshp/Range/Sect: 0 , 0 , 0		Tax Lots:
	Latitude: 45 deg. 33 ' 57"	Longitude: 122 deg. 44 ' 22"	Site Size:
Other Site Names:			
	Chevron - Willbridge Distribution Terminal		
	Shell Oil Co. - Willbridge Plant		
	Unocal - Willbridge Terminal		
Operations:			
	Name: Willbridge Bulk Fuel Area		
	Comments: .		
	Years of Operation:		
	SIC Code: 5171		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylene, polynuclear aromatic hydrocarbons (PAHs), heavy metals, DDT.
Manner and Time of Release:	Leaks and spills from product tanks and pipelines.
Contamination Information:	Remedial investigations have been conducted at the Shell Oil, Chevron, and Unocal facilities since the 1970s. A fairly extensive network of wells provide groundwater contamination data on all three facilities. There is free product and dissolved-phase contamination from petroleum products beneath all three facilities. There are high levels of heavy metals in groundwater beneath the three facilities. In addition, groundwater at the Shell Oil facility contains DDT.
Pathways:	The Willamette River is adjacent to all three sites, which is in direct hydraulic connection with the contaminated groundwater. The river is used for fishing and recreational purposes. Seepage of contaminants in groundwater into the river is on-going.
Environmental/Health Threats:	Contaminant concentrations in groundwater may present current and future threats to human health and the environment via discharge to the Willamette River. Volatile emissions from the free product in groundwater could affect the health and safety of utility/service line workers.

Status of Investigative or Remedial Action: (1/17/96 JAK/SRS) Chevron, Shell, and Unocal signed a Consent Order with DEQ on 3/30/94, to conduct a remedial investigation, feasibility study, and interim remedial measures. A Work Plan for Interim Actions was submitted in 9/94 and approved by DEQ in 6/95. An Interim Action Design Plan was also submitted in 4/95 and approved by DEQ in 6/95. Interim actions were initiated in 5/95 to address free product in groundwater and contaminant seepage into the Willamette River. These include: (1) free-product removal from existing monitoring wells via recovery canisters, auto-bailers, and/or petro-belts; (2) continued operation of a subsurface cutoff trench; and (3) placement of containment booms around seepage areas in the Willamette River. Although the focus of site efforts is on interim actions to control seepage of free product into the Willamette River, the submittal of an RI/FS Work Plan is scheduled for April 1997. Quarterly groundwater monitoring is ongoing. NOTE: ECSI #25, 160, and 177 combined into ECSI #1549.

Data Sources:
1) Chevron site files (ECSI #25).
2) Shell site files (ECSI #160).
3) Unocal site files (ECSI #177).
4) SRS Project Manager files.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
SITE EVALUATION	08/29/1993	08/29/1993	Sheree Stewart	DEQ	HQ	SRS
PRELIMINARY ASSESSMENT EQUIVALENT	08/29/1993	08/29/1993	Sheree Stewart	DEQ	HQ	SRS
Listing Review completed	08/30/1993	08/30/1993	Sheree Stewart	DEQ	HQ	SRS
Insufficient information to list	08/31/1993		Sheree Stewart	DEQ	HQ	SRS
Remedial Investigation/Feasibility Study recommended	09/01/1993	09/01/1993	Sheree Stewart	DEQ	HQ	SRS
NEGOTIATIONS	09/02/1993	03/30/1994	Sheree Stewart	DEQ	HQ	SRS
Proposal for Confirmed Release List recommended	03/30/1994	03/30/1994	Jill Kiernan	DEQ	NW	SRS
Proposal for Inventory recommended	03/30/1994	03/30/1994	Jill Kiernan	DEQ	NW	SRS
REMOVAL	03/30/1994		Jill Kiernan	DEQ	NW	SRS
Consent Order	03/30/1994	03/30/1994	Sheree Stewart	DEQ	NW	SRS
REMEDIAL INVESTIGATION	03/30/1994		Jill Kiernan	DEQ	NW	SRS
Site added to database	05/04/1994		Sheree Stewart	DEQ	HQ	SRS
Facility proposed for Confirmed Release List	09/28/1998	09/28/1998	Kim Van Patten	DEQ	NW	SRS
Facility proposed for Inventory	09/28/1998	09/28/1998	Kim Van Patten	DEQ	NW	SRS
Facility placed on Confirmed Release List	12/29/1998	12/29/1998	Kim Van Patten	DEQ	NW	SRS
Facility placed on Inventory	12/29/1998	12/29/1998	Kim Van Patten	DEQ	NW	SRS

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NPL Site: Is the site on EPA's Superfund List? (Y/N).
Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-

priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.
Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Table 8
Outfall 22A DEQ Leaking Underground Storage Tanks List

RNO	Address	Log Number	Company	Cleanup Start	Cleanup End	Site Work
R961130130	6161 NW 61st	26-89-0329	American Steel	12/29/1989	12/05/1990	12/05/1990
R941180360	5531 NW Doane Ave	26-94-0072	Chevron NW Doane Ave	04/26/1994	04/24/1994	04/24/1994
R915500110	5909 NW St. Helens Rd	26-90-0197	Don Thomas Petroleum	05/31/1990	08/21/1990	08/21/1990
R941180130	6350 NW Front Avenue	26-90-0119	Genstar Roofing Products Company	*	*	*
R915501440	6115 NW St. Helens Rd	26-89-0199	Lee & Eastes Tank Lines, Inc.	09/12/1989	09/28/1989	11/16/1989

* No information available in database

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:54 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0329
UST FAC NBR: 4546 DATE REPORTED: 29-DEC-89

SITE NAME: AMERICAN STEEL
SITE ADDRESS: 6161 NE 61ST
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)226-1511

----------SITE ASSESSMENT----------

DATE DISCOVERED: 29-DEC-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP Y	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: Y
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 29-DEC-89 REMEDIATION COMPLETED: 05-DEC-90
CLEANUP STARTED: 29-DEC-89 NO FURTHER ACTION: 05-DEC-90

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 09:00 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-94-0072
UST FAC NBR: 5928 DATE REPORTED: 26-APR-94

SITE NAME: CHEVRON NW DOANE AVE
SITE ADDRESS: 5531 NW DOANE AVE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 221-7758

----------SITE ASSESSMENT----------

DATE DISCOVERED: 23-APR-94 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: Y
(LR) Lab:RP Y	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: Y	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED: 24-MAY-94
CLEANUP STARTED: 26-APR-94 NO FURTHER ACTION: 24-MAY-94

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

July 30, 1998 02:45 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0197
UST FAC NBR: 9074 DATE REPORTED: 01-JUN-90

SITE NAME: DON THOMAS PETROLEUM
SITE ADDRESS: 5909 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 227-0145

----------SITE ASSESSMENT----------

DATE DISCOVERED: 31-MAY-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: Y
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: Y	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 31-MAY-90 REMEDIATION COMPLETED: 21-AUG-90
CLEANUP STARTED: 31-MAY-90 NO FURTHER ACTION: 21-AUG-90

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

June 11, 1999 08:52 am

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0119
UST FAC NBR: 6094 DATE REPORTED: 05-APR-90

SITE NAME: GENSTAR ROOFING PRODUCTS COMPANY
SITE ADDRESS: 6350 NW FRONT AVENUE
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)222-1307

----------SITE ASSESSMENT----------

DATE DISCOVERED: 05-APR-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: Y
(LR)Lab:RP Y	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: Y	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED:
CLEANUP STARTED: NO FURTHER ACTION:

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

July 30, 1998 02:46 pm

INCIDENT INFORMATION

LOG NBR: 26-89-0199
UST FAC NBR: 3536 DATE REPORTED: 12-SEP-89

SITE NAME: LEE & EASTES TANK LINES, INC.
SITE ADDRESS: 6115 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (206) 623-5403

SITE ASSESSMENT

DATE DISCOVERED: 09-SEP-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: Y
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

CONTAMINANTS/IMPACTS

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

SITE/SOIL MANAGEMENT

RELEASE STOPPED: 12-SEP-89 REMEDIATION COMPLETED: 28-SEP-89
CLEANUP STARTED: 12-SEP-89 NO FURTHER ACTION: 16-NOV-89

(opens_inc.rpt)

Table 9
Outfall 22A Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
5531 NW Doane	Chevron	86527	Aug-86	3@ 84,000	AST	yard	Steel, lube oil
5531 NW Doane	Chevron	941117	Oct-94	7@ 11,000	AST	yard	
5531 NW Doane	Chevron	6976	Jul-64	285	AST	detached	
5533 NW Doane	Chevron	981559--REM	Dec-98		AST	Abandon Tank #3	
6350 NW Front Ave.	GS Roofing Products	911021--REM	Aug-91	2000	UST	yard	Diesel--rear of property behind warehouse
6350 NW Front Ave.	GS Roofing Products	900428	Apr-90	1000	UST	yard	
6350 NW Front Ave.	Fibreboard Paper	5675	Sep-57	250	UST	yard	Gasoline
6350 NW Front Ave.	Pacific Roofing	4400	Mar-53	1000	UST		
6350 NW Front Ave.	Fibreboard Paper	89645	Oct-57	250	AST	integral	Propane
6350 NW Front Ave.	Pacific Roofing	41110	Jul-48	500	UST	yard	
5880 NW St. Helens Rd.	Shell Oil	486	Sep-79	4@ 25,000	AST	detached	Lube oil
5880 NW St. Helens Rd.	Shell Oil	96399	Sep-79	1000	UST	yard	Fuel oil salvage
5885 NW St. Helens Rd.	Silver Eagle	82859	Jun-55	12,000	UST	yard	
5885 NW St. Helens Rd.	Silver Eagle		Apr-48	3@ 1,000	UST	yard	
5885 NW St. Helens Rd.	Silver Eagle		Apr-48	10,000	UST	yard	
5909 NW St. Helens Rd.	Stinker Station	96968	Oct-1961	675	UST	yard	
5909 NW St. Helens Rd.	Asbury Transportation	65389	Oct-1951	675	UST	yard	
5909 NW St. Helens Rd.	Asbury Transportation	65352	Oct-1951	285	UST	yard	
5912 NW Saltzman Rd.	Passmore (SFR)	54446	Feb-50	2 bbl (110 gal)	AST	basement	
6168 NW Saltzman Rd.	Cheatham (SFR)	31971	Aug-47	675	UST	yard	
6161 NW 61st Ave.	Gilmore Steel	6608	Jul-74	12,000	UST	yard	
6161 NW 61st Ave.	Merrell Construction Co.	64123	Aug-51	675	UST	yard	

AST = Aboveground Storage Tank
REM = Removed or Replaced
SFR = Single Family Residence
UST = Underground Storage Tank

Table 10
Outfall 22A State Fire Marshal Hazardous Spills List

RNO	Address	Chemical	Date	Incident ID
R941180360	5531 NW Doane 97210	Jet Fuel	03/26/1997	02-291-970190
R961130530 R102250030	5880 NW St Helens Rd 97210	Steely Weld - Signal Bond	01/15/1988	02-291-880210
R961130530 R102250030	5880 NW St Helens Rd	Steely Weld - Signal Bond	01/15/1988	02-291-880210
R915500110	5909 NW St Helens 97210	Diesel Fuel	03/10/1989	02-291-890077
R961130130	6161 NW 61st Ave 97210	Unknown	04/02/1997	02-291-970195
R961130130	6161 NW 61st 97210	Waste Products	03/05/1998	HM-06-980029
R961130130	6161 NW 61st 97210	Railway Torpedo	03/23/1991	02-291-910092
R961130130	6161 NW 61st Ave 97210	Unknown Chemical	01/09/1997	02-291-970059
R961130130	6161 NW Front Av 97203	Unknown	10/08/1997	02-291-970431
R961130130	Metro Central Transfer 97210	Unknown Chemical	10/19/1995	HM-06-950532
?	NW St Helens & Doane 97210	Hydrogen Peroxide Solution	07/03/1988	02-291-880014

Table 11
Outfall 22A State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Acetylene	Acetylene	Gas	Cubic Feet	1,000-4,999	Flammable Gases	Acute Health Hazard
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Antifreeze	Ethylene Glycol	Liquid	Gallons	500-999	Acute Health Hazard	*
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	*
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Hydraulic Oil	Highly Refined Base Lubricating Oils	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	200-499	Combustible Materials	*
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	Oxidizers
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Propane	Propane	Gas	Gallons	200-499	Flammable Gases	*
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Waste Oil	Petroleum Hydrocarbon	Liquid	Gallons	500-999	Combustible Materials	Chronic Health Hazard
R961130140	5885 NW St Helens	Anderson Roofing Co Inc	72293	1761	*	*	*	*	*	*	*
R915500330	5920 SW Saltzman Rd	Beaver State Scaffolding	46991	7353	*	*	*	*	*	*	*
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Acetylene	Acetylene	Gas	Cubic Feet	200-499	Flammable Gases	Acute Health Hazard
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Asphalt Coating	Asphalt Petroleum Tar	Liquid	Gallons	50,000-99,999	Combustible Materials	*
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Asphalt Flux	Asphalt Petroleum Tar	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Asphalt Windseal Adhesive	Asphalt Petroleum Tar	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	*
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Krayton 1184 Thermoplastic Rubber	Styrene-Butadiene-Styrene Block	Solid	Pounds	5,000-9,999	Misc.Haz. Materials	*
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	Oxidizers
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Propane	Propane	Gas	Gallons	500-999	Flammable Gases	*
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Propylene	Propylene	Gas	Gallons	500-999	Flammable Gases	*
R941180130	6350 NW Front Ave	Certainteed Corporation	4565	2952	Regal Oil 46	Heavy Parafinic Petro Distillates	Liquid	Gallons	500-999	Combustible Materials	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	*	*	*	*	*	*	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Acetylene	Acetylene	Gas	Cubic Feet	1,000-4,999	Flammable Gases	Acute Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Antifreeze	Ethylene Glycol	Liquid	Gallons	50-199	Acute Health Hazard	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Aviation Gasoline	Petroleum Distillates	Liquid	Gallons	1,000,000-2,499,999	Flammable Liq.(FP<0F)	Acute Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	5,000,000-7,499,999	Flamm.Liq. (73F<FP<141F)	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Ethanol	Ethanol	Liquid	Gallons	2,500,000-4,999,999	Flammable Liq.(0F<FP<73	Acute Health Hazard

Table 11
Outfall 22A State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Gas Treatment/Cleaner	Naphthenes	Liquid	Gallons	1,000-4,999	Acute Health Hazard	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Gasoline	Toluene	Liquid	Gallons	10,000,000-24,999,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Gasoline Additives	Petroleum Distillates	Liquid	Gallons	100,000-249,999	Combustible Materials	Acute Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Gear Lubricant	Refined Mineral Oil	Liquid	Gallons	100,000-249,999	Combustible Materials	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Grease	Severely Refined Petroleum Distillate	Liquid	Gallons	100,000-249,999	Combustible Materials	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Helium	Helium	Gas	Gallons	20-49	NonFlammable Gases	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Industrial Oil	Highly Refined Base Oil	Liquid	Gallons	7,500,000-9,999,999	Combustible Materials	Chronic Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Jet Fuel	Kerosene	Liquid	Gallons	7,500,000-9,999,999	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Liquefied Petroleum Gas	Propane	Gas	Gallons	200-499	Flammable Gases	Acute Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Lube Oil Blending Additives	Zinc Diakyldithiophosphate	Liquid	Gallons	2,500,000-4,999,999	Acute Health Hazard	Combustible Materials
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Lube Oil Blending Additives	Zinc Diakyldithiophosphate	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Combustible Materials
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Lubricating Oil	Refined Mineral Oil	Liquid	Gallons	2,500,000-4,999,999	Combustible Materials	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	1,000,000-2,499,999	Combustible Materials	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Nitrogen Liquid	Nitrogen	Gas	Gallons	50-199	NonFlammable Gases	Acute Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Norkool Concentrate	Ethylene Glycol	Liquid	Gallons	500-999	Misc.Haz. Materials	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Oxygen	Oxygen	Gas	Gallons	20-49	NonFlammable Gases	Oxidizers
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Paint	Petroleum Distillates	Liquid	Gallons	20-49	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Starting Fluid	Ethyl Ether	Liquid	Gallons	500-999	Flammable Liq.(FP<0F)	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Techron	Stoddard Solvent	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	*
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Thinner	Light Petroleum Distillate	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R941180360	5531 NW Doane Ave	Chevron Products Co Inc	15053	5171	Voltz Solvent	D-Limonene	Liquid	Gallons	50-199	Combustible Materials	*
R915500010	5959 NW SSt Helens Road Box 868	Commercial Steam Cleaning	29580	1799	Wet Mix Recovery	Petroleum Distillates	Liquid	Gallons	50,000-99,999	Acute Health Hazard	*
R961130140	5885 NW St Helens Road	DEQ	20380	9199	Analyzer Calibration Gas	Nitrogen	Gas	Cubic Feet	200-499	NonFlammable Gases	*
R961130140	5885 NW St Helens Road	DEQ	20380	9199	Nitrogen	Nitrogen	Gas	Cubic Feet	200-499	NonFlammable Gases	*
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Asphalt Coating	Asphalt Petroleum Tar	Liquid	Gallons	50,000-99,999	Combustible Materials	*

Table 11
Outfall 22A State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Asphalt Flux	Asphalt Petroleum Tar	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Asphalt Windseal Adhesive	Asphalt Petroleum Tar	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	*
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	Oxidizers
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Propane	Propane	Gas	Gallons	500-999	Flammable Gases	Acute Health Hazard
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Propylene	Propylene	Gas	Gallons	500-999	Flammable Gases	*
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Regal Oil 46	Heavy Parafinic Petro Distillates	Liquid	Gallons	500-999	Combustible Materials	*
R941180130	6350 NW Front Ave	G S Roofing Products	4565	2952	Vector	Styrene Ethylene Butylene Copolymer	Solid	Pounds	10,000-49,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	7492 Additive - Eca	Zinc Salt Of Dialkyl Dithiophosphoric	Liquid	Gallons	20-49	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	8510m Hydraulic Oil	Severely Hydrotreated Naphenic Pet Dist	Liquid	Gallons	5,000-9,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	8512m Hydraulic Oil	Severely Hydrotreated Naphenic Pet Dist	Liquid	Gallons	5,000-9,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	8513m Hydraulic Oil	Severely Hydrotreated Naphenic Pet Dist	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	9310h Hydraulic Oil	Solvent Refined Hvy Paraffinic Dist	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	9312h Hydraulic Oil	Solvent Refined Hvy Paraffinic Dist	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	9313h Hydraulic Oil	Solvent Refined Hvy Paraffinic Dist	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	9315h Hydraulic Oil	Solvent Refined Hvy Paraffinic Dist	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Ac-60-C, Ac-100-C	Calcium Alkylsalicylate	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Acetylene	Acetylene	Gas	Cubic Feet	200-499	Flammable Gases	Acute Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Acidless Tallow	Fats, Triglycerides	Liquid	Gallons	0-4	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Acryloid Additives	Acrylic Copolymer	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Aeroshell Oils	Paraffinic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Alexia Oil 50	Paraffinic Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Anglamol 6043u	Olefin Sulfide	Liquid	Gallons	200-499	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Anti Foam	Silicone	Liquid	Gallons	20-49	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Argina T Oils	Paraffinic Distillate	Liquid	Gallons	5,000-9,999	Combustible Materials	*

Table 11
Outfall 22A State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Aviation Gasoline	Petroleum Distillates	Liquid	Gallons	100,000-249,999	Flammable Liq.(FP<0F)	Acute Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Butylated Hydroxy Toluene	Butylated Hydroxy Toluene	Solid	Pounds	20-49	Acute Health Hazard	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Caprinus Oils	Heavy Naphthenic Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Carnea Oil	Light Napathenic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Castor Oil	Triglyceride Of Ricinoleic Acid	Liquid	Gallons	20-49	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Clavus Oils	Light Naphthenic Distillate	Liquid	Gallons	500-999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Corena P Oil 100	Solvent Refined Hydrotreated Para Dist	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Diala Ax Oil	Light Naphthenic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	500,000-749,999	Flamm.Liq. (73F<FP<141F)	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Donax Oils T6	Dewaxed Heavy Paraffinic Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	Acute Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Emerest 2421, 2427	Dioleate	Liquid	Gallons	50-199	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Emersol 110, 210	Palmitic Acid	Solid	Pounds	09-May	Combustible Materials	Corrosives
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Emerst 2421	Glyceryl Mono Oleate	Liquid	Gallons	50-199	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Empicryl 6052	C8 Thru C-18 Alcohols	Liquid	Gallons	500-999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Ethanol	Ethanol	Liquid	Gallons	750,000-999,999	Flammable Liq.(0F<FP<73	Acute Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Fire & Ice All Season 10w30	Solvent Dewaxed Hvy Paraffinic Dist	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Fire & Ice Hd 30	Solvent Refined Hvy Paraffinic Dist	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Fuel Oil #6	Petroleum Oil	Liquid	Gallons	750,000-999,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Gadinia Oils	Hydrotreated Heavy Paraffinic Distillate	Liquid	Gallons	500-999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Gasoline	Toluene	Liquid	Gallons	250,000,000-499,999,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Gasoline Additives	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Combustible Materials	Acute Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Hitec 1240	Zinc Dialkyldithiophosphate	Liquid	Gallons	0-4	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Hitec 1910	Ethoxylated Long Chain Alcohols	Liquid	Gallons	200-499	Acute Health Hazard	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Hitec 2565	2,6-Di-Tert-Butyl Phenol	Liquid	Gallons	5,000-9,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Hitec 388	Phosphoric Acid	Liquid	Gallons	200-499	Acute Health Hazard	*

Table 11
Outfall 22A State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Hitec 5710	Phenol	Liquid	Gallons	200-499	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Hitec 5710	Phenol	Solid	Pounds	1,000-4,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Hitec 644, E655, 1910	Zinc Dialkyldithiophosphate	Liquid	Gallons	10,000-49,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Hvi Base Oils	Heavy Paraffinic Distillate	Liquid	Gallons	1,000,000-2,499,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Ional Regular	None As Per 29cfr 1910.1200	Solid	Pounds	50-199	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Irganox Additive	Tertbutylphenol	Liquid	Gallons	19-Oct	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Jet A Aviation Fuel	Kerosene	Liquid	Gallons	100,000-249,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Lubrizol 1395	Zinc C1-C14 Alkyldithiophosphate	Liquid	Gallons	50-199	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Lubrizol 5396	Butylated Phenol	Liquid	Gallons	200-499	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Lubrizol 5986	Polyolefin Anhydride	Liquid	Gallons	1,000-4,999	Acute Health Hazard	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Lubrizol 6620	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Lubrizol 92	Pinene	Liquid	Gallons	50-199	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Lubrizol 9692a	Zinc Aryldithiophosphate	Liquid	Gallons	200-499	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Lubrizol 9812	Zinc C1-C14 Alkyldithiophosphate	Liquid	Gallons	10,000-49,999	Acute Health Hazard	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Melina Oils	Heavy Paraffinic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Morlina Oil 100	Solvent Refined Hydrotreated Hvy Para	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Motor Oil Sae 10w/30	Solvent Dewaxed Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Mulsor 3cw	Fatty Acid Ester	Liquid	Gallons	20-49	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Mvi Base Oils	Light Naphthenic Distillate	Liquid	Gallons	1,000,000-2,499,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Mysella Oils	Heavy Paraffinic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Oloa Additives	Zinc Alkyl Dithiophosphate	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Ortholeum Additive	Mixed Alkyl Acid Phosphate	Liquid	Gallons	20-49	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Oxygen	Oxygen	Gas	Cubic Feet	500-999	NonFlammable Gases	Oxidizers
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Paranox 52	Calcium Salt Of Alkyl Phenol Sulfide	Liquid	Gallons	200-499	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Paratac	Polyisobutylene	Liquid	Gallons	20-49	Combustible Materials	*

Table 11
Outfall 22A State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Paratone N	Polyisobutylene	Liquid	Gallons	20-49	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Plexol 305	Octylphenoxypolyethoxy ethanol	Liquid	Gallons	20-49	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Prime Chlor Para F/Cereclor 42	None As Per 29cfr 1910.1200	Liquid	Gallons	200-499	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Propane	Propane	Gas	Gallons	50-199	Flammable Gases	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Recovered Lube Mixture	Heavy Paraffinic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Red Bk 50	2-Naphthenol	Liquid	Gallons	19-Oct	Flamm.Liq. (73F<FP<141F)	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Rimula Oils	Heavy Paraffinic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Rotella T Oil	Heavy Paraffinic Distillate	Liquid	Gallons	200-499	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Sh/Cf Hdmo 10w	Highly Refined Petroleum Oil	Liquid	Gallons	0-4	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Sh/Cf2 Hdmo 40	Highly Refined Petroleum Oil	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Sh/Cf4 Hdmo 30	Highly Refined Petroleum Oil	Liquid	Gallons	5,000-9,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Sh/Cg4 Hdmo 15w40	Hydrotreated Heavy Paraffinic Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Shell Fleet Hdmo 15w40	Highly Refined Petroleum Oils	Liquid	Gallons	5,000-9,999	Acute Health Hazard	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Shell Turbo 32	Solvent, Paraffinic Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Shell Vis 300 Concentrate	Petroleum Hydrocarbon	Liquid	Gallons	10,000-49,999	Acute Health Hazard	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Shell Viscosity Improvers	Styrene Ethylene Block Copolymers	Liquid	Gallons	50,000-99,999	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Sj Pcmo Mg 10w30	Hydrotreated Heavy Paraffinic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Spirax Oils	Hydrotreated Residual Oil	Liquid	Gallons	1,000-4,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Stadis 450	Toluene	Liquid	Gallons	09-May	Flamm.Liq. (73F<FP<141F)	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Sulferized Oleic Acid	9-Octadecenoic Acid	Liquid	Gallons	50-199	Corrosives	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Syn-O-Ad 8484	Tri-Cresyl Phosphate	Liquid	Gallons	50-199	Combustible Materials	Acute Health Hazard
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Tellus Oils/Hydraulic Oils	Hydrotreated Paraffinic Distillate	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Tergol 180h	Solvent Refined Heavy Paraffinic Dist.	Liquid	Gallons	200-499	Misc.Haz. Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Torcula Oils	Heavy Paraffinic Distillate	Liquid	Gallons	200-499	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Transmission Fluid	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Combustible Materials	*

Table 11
Outfall 22A State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Turbo Oils	Hydrotreated Heavy Paraffinic Dist.	Liquid	Gallons	10,000-49,999	Combustible Materials	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Vanwet 9n9	Nonylphenol Surfactant	Liquid	Gallons	200-499	Acute Health Hazard	*
R961130530 R102250030	5880 NW St Helens Road	GATX Terminals Corporation	15049	5171	Viscoplex I-330	Solvent Refined Paraffinic	Liquid	Gallons	500-999	Misc.Haz. Materials	*
R961130130	6161 NW 61st St	Metro Regional Government	24770	9199	Compressed Air	Nitrogen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	*
R961130130	6161 NW 61st St	Metro Regional Government	24770	9199	Paint And Related Material	Toluene	Liquid	Gallons	1,000-4,999	Flammable Liq.(0F<FP<73	*
R961130130	6161 NW 61st St	Metro Regional Government	24770	9199	Paint Latex	2-Butoxyethanol/ 1,2 Ethanediol	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	*
R961130130	6161 NW 61st St	Metro Regional Government	24770	9199	Pesticides Various	Misc. Pesticides	Solid	Pounds	1,000-4,999	Poisonous Materials	Pesticide

* No information available in database

Table 12
Outfall 22A Confirmed Release List

Site Name	Address	Zip	Site Id	Substances	Media	Phase	Program
Willbridge Bulk Fuel Area	NW Doane Ave	97210	1549	Petroleum hydrocarbons	Soil	2	SRS

Phase
2: Facilities where remedial investigation or feasibility studies are underway.

Program
SRS: Indicates that the site may be facing enforcement action through the DEQ

Table 13
Outfall 22A SIC Information

SIC Number	SIC Definition
1761	Roofing, Siding and Sheet Metal Work
1799	Special Trade Contractors, NEC
2842	Specialty Cleaning, Polishing, and Sanitation Preparations
2951	Asphalt Paving Mixtures and Blocks
2952	Asphalt Felts and Coatings
2992	Lubricating Oils and Greases
4213	Trucking, except Local
4226	Special Warehousing and Storage, NEC
4953	Refuse Systems
5084	Industrial Machinery and Equipment
5169	Chemicals and Allied Products, NEC
5171	Petroleum Bulk Stations and Terminals
7353	Heavy Construction Equipment Rental and Leasing
7359	Equipment Rental and Leasing, NEC
9199	General Government, NEC

NEC = Not Elsewhere Classified

Table 14
Drainage Basin for Outfall 22A: Area by Land Use

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R961130130	6161 WI/ NW 61st Ave	10.41	IND	0.04
R915501260	Sec/NW St Helens Rd & 64th A	0.11	IND	0.11
R961130340	5533 WI/ NW Doane Ave	0.04	IND	0.04
R915500150	5920 WI/ NW Saltzman Rd	0.10	IND	0.09
R915501080	6051 NW 60th Ave	0.11	IND	0.11
R915501140	6041 NW 60th Ave	0.11	IND	0.11
R915500010	5959 NW St Helens Rd	0.11	IND	0.11
R915501200	6031 NW 60th Ave	0.11	IND	0.11
R915500110	5909 NW St Helens Rd	0.11	IND	0.13
R915501100	6115 WI/ NW St Helens Rd	0.11	IND	0.11
R915501120	6115 WI/ NW St Helens Rd	0.11	IND	0.11
R915500210	5920 WI/ NW Saltzman Rd	0.14	IND	0.14
R915501160	6115 WI/ NW St Helens Rd	0.16	IND	0.16
R915501000	6115 WI/ NW St Helens Rd	0.23	IND	0.23
R915501040	6007 NW St Helens Rd	0.23	IND	0.23
R915500230	5920 WI/ NW Saltzman Rd	0.27	IND	0.28
R915502650	6423 NW St Helens Rd	0.42	IND	0.27
R915500330	5920 NW Saltzman Rd	0.45	IND	0.45
R915501360	6115 WI/ NW St Helens Rd	0.92	IND	0.91
R915501440	6115 NW St Helens Rd	0.99	IND	0.98
R961130100	5800 NW Balboa St	1.29	IND	1.25
R941180060	5880 NW St Helens Rd	2.61	IND	0.11
R961130140	5885 NW St Helens Rd	3.12	IND	2.31
R941180130	6350 NW Front Ave	3.52	IND	0.29
R941180290	6350 WI/ NW Front Ave	4.70	IND	0.07
R961130330	6529 NW Front Ave	6.32	IND	0.01
R102250030	5800 NW St Helens Rd	12.41	IND	12.36
R961130530	5800 WI/ NW St Helens Rd	12.74	IND	12.74
R941180360	5533 NW Doane Ave	18.49	IND	0.74
R961130360	6400 NW Front Ave	43.51	IND	0.22
R915500020	5947-5949 NW St Helens Rd	0.11	MFR	0.11
R915500030	5919-5921 NW St Helens Rd	0.11	MFR	0.11
R915501220	6021 NW 60th Ave	0.16	MFR	0.16
R961250880	2922 NW 53rd Dr	1.73	SFR	0.02
R961250840	2934 NW 53rd Dr	3.38	SFR	2.25
R915500410	5930 NW Saltzman Rd	0.12	SFR	0.11
R915500290	6030 NW 60th Ave	0.13	SFR	0.13
R961130270	5945 NW Saltzman Rd	0.31	SFR	0.31
R915500820	6168 NW Saltzman Rd	0.62	SFR	0.62
R961230210	4050 NW Skyline Blvd	0.28	SFR	0.06
R915500170	6040 NW 60th Ave	0.28	SFR	0.28
R704900050	8210 NW Ridgetop Ct	0.39	SFR	0.18
R915501950	6316 NW Saltzman Rd	0.39	SFR	0.39
R704900450	8205 NW Ridgetop Ct	0.41	SFR	0.38
R704900100	8222 NW Ridgetop Ct	0.43	SFR	0.07
R915500560	5944 NW Saltzman Rd	0.53	SFR	0.52
R961130280	6163 NW Saltzman Rd	0.69	SFR	0.68
R915500880	6218 NW Saltzman Rd	0.72	SFR	0.73
R961250600	2950 NW 53rd Dr	1.01	SFR	0.89
R961250420	3325 NW Skyline Blvd	1.30	SFR	0.96
R961130260	6111 NW Saltzman Rd	2.12	SFR	2.09
R961250900	3460 NW Forest Ln	2.21	SFR	0.92
	8148 NW Thompson Rd	2.25	SFR	0.22
R961230200	NW Skyline Blvd	2.35	SFR	2.35

Total Area by Landuse

Landuse	Total Area (acres)
Commercial	--
Industrial	34.9
Single Family Residence	109.8
Multifamily Residence	0.4
Vacant	901.9
Total Basin Area	**1105**
Estimated Right-of-Ways	58.1

Table 14
Drainage Basin for Outfall 22A: Area by Land Use

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R961250290	3131 NW Skyline Blvd	2.56	SFR	1.29
R464701010	4040 NW Skyline Blvd	3.60	SFR	3.62
R961230060	3516 NW Skyline Blvd	3.71	SFR	2.51
R961250470	3231 NW Skyline Blvd	4.06	SFR	1.58
R961250440	3026 NW Skyline Blvd	4.50	SFR	3.79
R961250540	3336-3348 NW Skyline Blvd	4.90	SFR	4.85
R961250380	3200 NW Skyline Blvd	7.57	SFR	7.57
R464701080	9440 NW Lightening Ridge Dr	9.83	SFR	9.31
R464701060	4131 NW Thunder Crest Dr	10.61	SFR	10.52
R464701000	3826 NW Skyline Blvd	11.65	SFR	11.27
R464701020	4043 NW Skyline Blvd	12.05	SFR	11.76
R961250060	7729 NW Thompson Rd	27.67	SFR	27.62
R961250450	7449 NW Thompson Rd	27.90	VAC	26.17
R961250460	7007 NW Thompson Rd	27.15	VAC	25.50
R961250820	3355 NW Forest Ln	9.18	VAC	9.18
R961250770	3130 NW Forest Ln	1.71	VAC	0.92
R961251060		2.32	VAC	0.95
R961230030		8.72	VAC	5.32
R961230140	3750 NW Skyline Blvd	23.28	VAC	20.61
R961250980	3325 WI/ NW Skyline Blvd	0.14	VAC	0.10
		4.01	VAC	4.01
		0.07	VAC	0.06
		0.07	VAC	0.07
		0.55	VAC	0.04
R291783420		0.04	VAC	0.04
R291783430		0.03	VAC	0.03
		3.49	VAC	0.19
R291783410		0.06	VAC	0.06
R649790570	9936 NW Wind Ridge Dr	4.80	VAC	4.20
		6.01	VAC	4.53
R915502710	6411 NW 64th Ave	0.21	VAC	0.21
R915502300		0.15	VAC	0.15
R915501800		0.26	VAC	0.26
R915501280	6215 W/ NW St Helens Rd	0.44	VAC	0.44
R915502310		0.21	VAC	0.21
R915501780		0.11	VAC	0.11
R915501830		0.26	VAC	0.26
R915502130		0.17	VAC	0.17
R915501700		0.44	VAC	0.44
R915501870		0.12	VAC	0.12
R915501890		0.47	VAC	0.47
R915502010		0.13	VAC	0.13
R915500120		0.00	VAC	0.00
		0.01	VAC	0.01
R464700040		0.02	VAC	0.02
R941180370	5800 S/ NW St Helens Rd	0.03	VAC	0.03
R961250620		0.07	VAC	0.08
R961130520		0.08	VAC	0.12
R915500390		0.11	VAC	0.11
R915500430		0.11	VAC	0.11
R915500070	5909 NW/ NW St Helens Rd	0.12	VAC	0.12
R915501860		0.12	VAC	0.12
R961240030		0.13	VAC	0.11
R915500980		0.15	VAC	0.15

Table 14
Drainage Basin for Outfall 22A: Area by Land Use

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R291786900		0.19	VAC	0.04
R291786880		0.20	VAC	0.01
R291786920		0.20	VAC	0.04
R291786960		0.21	VAC	0.04
R915502750		0.21	VAC	0.04
R291784660	8528 NW Kelly Cir	0.22	VAC	0.21
R291786940		0.22	VAC	0.04
R291786980		0.22	VAC	0.03
R291787000		0.22	VAC	0.00
R961230380	3516 N/ NW Skyline Blvd	0.22	VAC	0.12
R961240010		0.22	VAC	0.23
R291785710		0.26	VAC	0.13
R961250050		0.26	VAC	0.05
R291784620		0.28	VAC	0.12
R291784640		0.28	VAC	0.18
R915500600		0.28	VAC	0.28
R961250720		0.29	VAC	0.02
R961250640		0.29	VAC	0.05
R649790580	9900 NW Wlnd Ridge Dr	0.30	VAC	0.31
R915502250		0.30	VAC	0.30
R291785720		0.32	VAC	0.18
R961250690		0.42	VAC	0.20
R704900400	8217 NW Ridgetop Ct	0.44	VAC	0.32
R464700020		0.46	VAC	0.46
R961230220	4050 NW Skyline Blvd	0.46	VAC	0.01
R915500620		0.55	VAC	0.55
R961250580		0.63	VAC	0.22
R915500520		0.64	VAC	0.63
R464700030		0.65	VAC	0.64
R961250330		0.66	VAC	0.33
R915502150		0.75	VAC	0.38
R915502030		0.77	VAC	0.76
R464700050		0.78	VAC	0.79
R961250730	7575 NW Thompson Rd	0.79	VAC	0.72
R961250350	NW Skyline Blvd	0.95	VAC	0.76
R961250680		0.95	VAC	0.64
R961230120	NW Skyline Blvd	0.95	VAC	0.91
R915500450		0.99	VAC	0.78
R915502330		1.40	VAC	1.36
R915500660		1.49	VAC	1.49
R961250560		1.62	VAC	1.62
R649788020		2.00	VAC	0.48
R649788010		2.00	VAC	0.68
R961250530		3.80	VAC	3.79
R961250400		4.94	VAC	4.94
R961250370	3130 NW Skyline Blvd	5.02	VAC	5.02
R961130310	6200 NW St Helens Rd	7.52	VAC	0.09
R961130350	5909 NW 61st Ave	9.21	VAC	0.00
R961250410		9.46	VAC	1.50
R961250630		9.52	VAC	8.19
R649790590		9.74	VAC	1.11
R464701100		10.21	VAC	10.18
R961260470		10.25	VAC	6.44
R941180200		10.53	VAC	0.19

Table 14
Drainage Basin for Outfall 22A: Area by Land Use

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R961230370		11.07	VAC	8.89
R464701180	9838 NW Wlnd Ridge Dr	15.18	VAC	3.86
R464701140		15.24	VAC	15.20
R464701120		18.97	VAC	18.91
R464701040		19.06	VAC	19.10
R649788030	4912 NW Skyline Blvd	20.42	VAC	0.09
R464701160		25.08	VAC	23.46
R961130070		51.67	VAC	6.95
		62.39	VAC	33.70
R961230080	4101 NW Skyline Blvd	68.30	VAC	2.81
R464700010		70.82	VAC	67.71
R961240040		73.20	VAC	71.01
R961140050	NW Saltzman Rd	74.72	VAC	0.97
		80.13	VAC	59.67
R961240050		186.16	VAC	116.83
R961130060		200.27	VAC	44.52
R961240020		259.37	VAC	243.63

City of Portland Stormwater Outfall 22B Summary of Existing Information

Physical Description

The City of Portland Stormwater Outfall 22B was constructed in 1980 and is a 48-inch pipe. Outfall 22B provides drainage for industrial sites and NW Front Avenue. This outfall also provides overflow drainage for Doane Lake and the Gould Battery Superfund site. There is a 48-inch sewage overflow connection to Guiles Lake pump station.

The storm drainage basin for this outfall is approximately 37 acres. Landuse in the basin is primarily industrial (53 percent) and vacant land (27 percent). Right-of-ways are estimated at 19 percent of the drainage area.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Landuse map

There are two non-City outfalls in close proximity to Outfall 22B. WP-213 is adjacent to Outfall 22B. WP-6 is offshore from the City outfall. These non-City outfalls are assigned to the following facilities:

- WP-06: Rhone Poulanc
- WP-213: Culvert

Ownership of WP-213 is unknown; it drains an undeveloped area between railroad tracks and Front Avenue The attached map of outfall location shows the City Outfall 22B and private outfall WP-213 on land rather than along the shoreline. Both of these outfalls are located at the top of the bank. Private outfall WP-06 is an underwater discharge.

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall was identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 22B are available from two sources:

- Portland Harbor Sediment Investigation, EPA/DEQ (Stations SD077, SD078, and SD080)
- McCormick and Baxter RI Phase I, DEQ (Stations T-1A, T2A, and S-2A)

Six sediment sample locations sampled in the vicinity of the Outfall 22B (see attached figure) were used to screen sediment data. All stations (SD080, SD078, SD077, T2A, T-1A, and S-2A) had samples collected at the surface (0-10 cm or 0-0.2 feet). Station SD080 also had a sub-sample collected at the surface. Sediment stations SD080 and T2A are upstream of the City outfall. The remaining sediment stations are downstream of Outfall 22B.

Table 1 shows the available sediment data with station ID, sample ID, field replicate and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall. The sediment data collected in 1997 as part of the Portland Harbor Sediment Investigation and McCormick and Baxter RI Phase I showed elevated concentrations for several analytes in exceedance of the DEQ baseline and may be of interest to the city. These analytes are:

- **Acenaphthene:** detected in concentrations greater than 3 times the baseline at sediment station SD077
- **Benzo(k)fluoranthene:** detected in concentrations greater than 3 times the baseline at sediment station SD077
- **Fluorene:** detected in concentrations greater than 3 times the baseline at sediment station SD077
- **Pyrene:** detected in concentrations greater than 3 times the baseline at sediment station SD077
- **Carbazole:** detected in concentrations greater than 3 times the baseline at sediment station SD077

Several analytes (LPAH, 2,4-D) exceeded 3 times the DEQ baseline values in the vicinity of the outfall but were not identified as analytes of interest because concentrations were greater at locations upstream of the outfall, indicating an upstream source. Benzoic acid was found at higher concentration at the farthest downstream station (S-2A) but was undetected at sediment locations between S-2A and the City outfall, suggesting another source.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 lists the industrial chemical uses for analytes of interest at Outfall 22B.

Table 3 summarizes the available information on facilities currently located in the Outfall 22B drainage basin, including where site runoff drains, discharge permits, business type and whether there is exposure of site activities to stormwater.

Table 4 shows available stormwater data for industrial facilities required to have an NPDES permit to discharge to the City's stormwater system. Table 3 lists other facilities that have NPDES permits but the City does not have data for these facilities.

Table 5 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 6 lists EPA's Toxic Release Inventory, which records releases of chemicals to the environment, and the Hazardous Waste Generators, which shows sites that treat, store, or dispose of hazardous materials.

Table 7 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 7.

Table 8 is DEQ's list of leaking underground storage tanks (LUST). The list includes both sites with active leaks and those that have been cleaned up to the satisfaction of the DEQ in the past. Behind this table, the LUST incident reports are provided for facilities listed in Table 8.

Table 9 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 10 is the State Fire Marshal's list of hazardous spills to which the fire department has responded.

Table 11 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 12 is the CRL (Confirmed Release List) inventory of sites that are currently being remediated under one of three separate programs, the Voluntary Cleanup Program, the Site Response Program, and the Site Assessment Program.

Table 13 lists the SIC numbers and descriptions for the sites identified in the Table 3 facility list.

Table 14 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type.

The following databases were searched but no information was available for sites within the drainage basin:

- EPA Corrective Action List
- EPA Emergency Response Notification System

- EPA RCRA Treatment Storage Disposal
- DEQ Permitted Tanks List

Outfall 22B Summary

The analytes of interest identified as of potential interest to the City outfall include the following polyaromatic hydrocarbons (PAHs):

- Acenaphthene
- Benzo(k)fluoranthene
- Fluorene
- Pyrene
- Carbazole

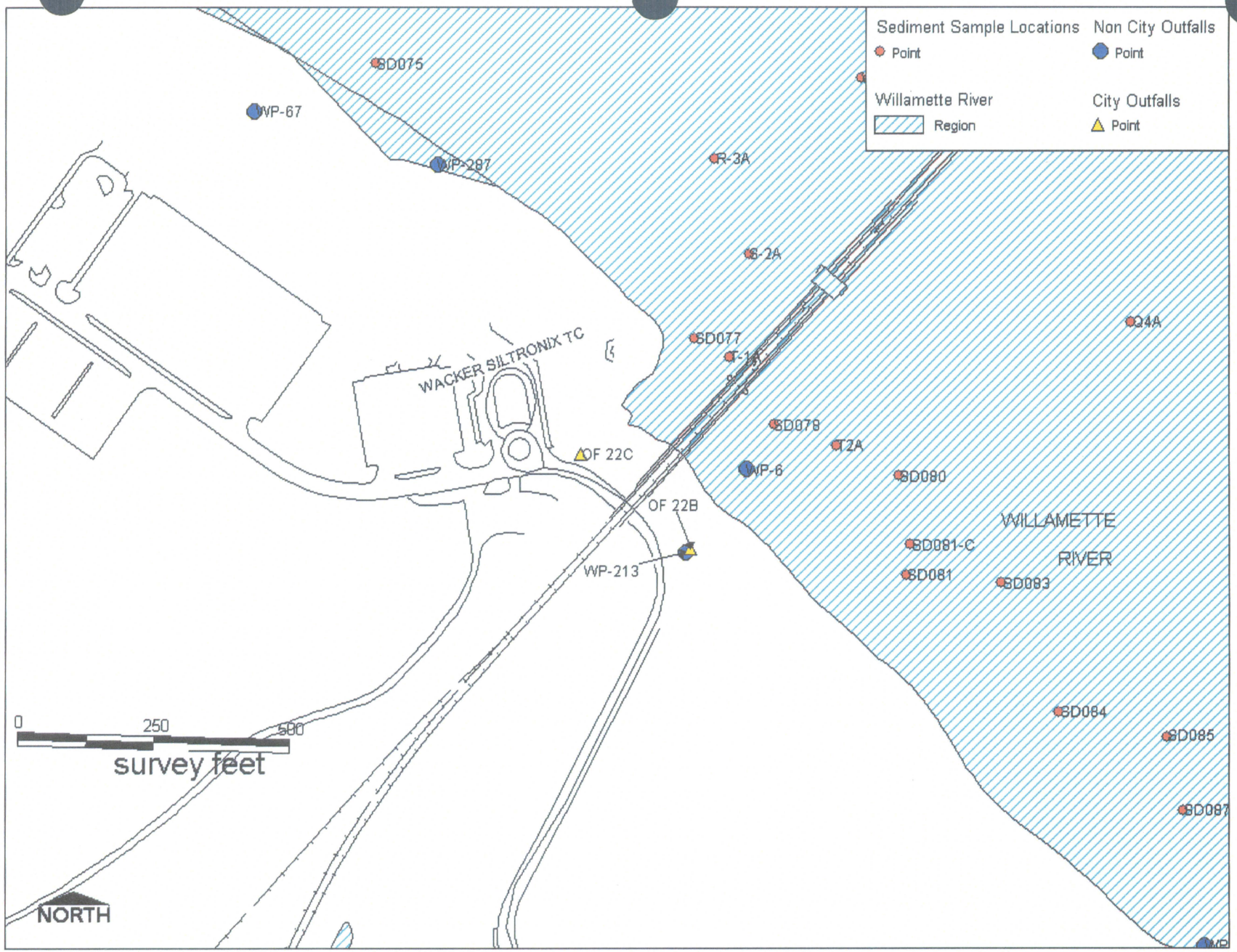
PAHs are found in fossil fuels, including petroleum refining and coal tar distillation. Although there are no refining or distillation activities documented within the drainage basin, there are these types of facilities upstream (see Outfalls 22 and 22A).

No measurements of PAHs in stormwater are available in City files for any of the industrial facilities. The City files do not include data for all facilities that have stormwater permits. Review of DEQ files for stormwater data related to PAHs is recommended

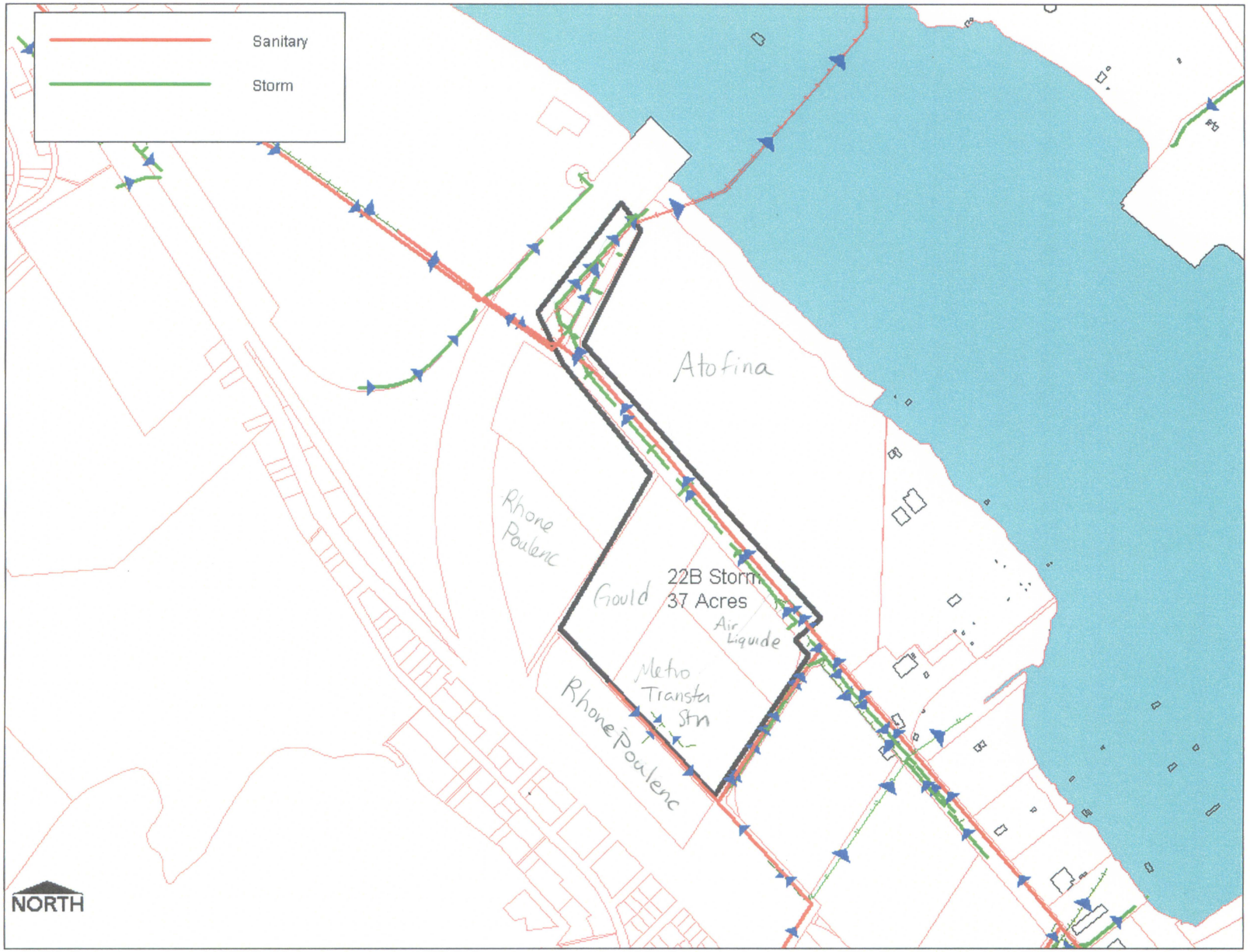
There are five sites on DEQ's Environmental Cleanup Site Investigation list but there is no information in the database on whether PAHs were sampled for or detected at any of these sites. There is a potential PAH source northwest of the railroad line; the Doane Lake Study Area Site Summary Report indicates that, there was 30,000 cubic yards of coal tar laid down from a coal gasification plant. Additional investigation into DEQ files for these sites is recommended.

Figures

Basin 22B Aerial Photo
City of Portland



Outfall 22B Map with Sediment Sample and Non-City Outfall Locations
City of Portland



22B Outfall - Stormwater Drainage Map
City of Portland

Land Use Within Basin 22B
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 22B

			StationID	SD080	SD080	T2A	SD078	T-1A	SD077	S-2A
			Sample ID #	0	0	SC61	0	SC61A	0	SC72
			Field Replicate #	#	#	#	#	#	#	#
			SubSample #	#	E	#	#	#	#	#
			Sample Depth	0-10 CM	0-10 CM	0-0.2 FT	0-10 CM	0-0.2 FT	0-10 CM	0-0.2 FT
			Sample Date	09/22/1997	09/22/1997	09/26/1990	09/21/1997	09/26/1990	09/21/1997	09/26/1990
Analyte	**Units**	**DEQ Baseline**	**Analytes of Interest**							
Aluminum	PPM	42800		40000	24600	21000	25500	14000	30600	21000
Antimony	PPM	5		5 UJ	10 U	7.5 E		12 E		6.2 E
Arsenic	PPM	5		5 U	3	5.8 E	8 U	4.2 E	10 U	5.5 E
Barium	PPM	195		175	160	180	149	130	153	160
Beryllium	PPM	0.7		0.7	1 U	0.79	0.5	0.9	0.7	0.7
Cadmium	PPM	0.6		0.4	1 U	0.58 U	0.3 U	0.88 U	0.4	0.55 U
Chromium	PPM	41		37.1	29	28	24.9	14	22.6	27
Cobalt	PPM	19.7		18.3	17	27	15.4	26	21.3	19
Copper	PPM	60		42.6	40	34	25.4	12	29.4	37
Iron	PPM	45000		44200	33300	40000	41400	51000	58600	35000
Lead	PPM	30		14	20 U	26	25	21	27	23
Manganese	PPM	810		693	650	560	487	590	605	620
Mercury	PPM	0.1		0.06	0.08	0.1	0.1	0.01	0.03	0.08
Nickel	PPM	32		30	26	25	25	11	21	23
Selenium	PPM	15		14	1 U	0.39 UE	11	0.59 UE	14	0.36 UE
Silver	PPM	1.4		1.2	2 U	0.78 UE	1	1.2 UE	1.6	0.73 UE
Thallium	PPM	13		5 U	1 U	1.2	8 U	1.6	10 U	0.78
Titanium	PPM	2075							3200	
Vanadium	PPM	112		106	86	95	89.1	160	147	87
Zinc	PPM	118		131	119	190	100	90	124	130
Total organic carbon	PCT	2		1.5	1.96	0.3	0.98	0.3	1.3	1.1
4-Methylphenol	PPB	680		500	50 U	570	48	480 UE	68	350
Benzoic acid	PPB	200		190 U		790 U	190 U	1200 U	190 UJ	**1200**
Benzyl alcohol	PPB	20		19 U		160	19 UJ	240 U	19 UJ	300 U
Bis(2-ethylhexyl) phthalate	PPB	390		260	640	250	210	1100 E	180 U	1000
Butyl benzyl phthalate	PPB	20		19 U	20 U	16 U	19 U	24 UE	19 U	30 UE
Di-n-butyl phthalate	PPB	20		21	29	16 U	19 U	24 U	19 U	30 U
Di-n-octyl phthalate	PPB	20		19 U	20 U	16 U	19 U	24 UE	19 U	30 UE
Dibenzofuran	PPB	100		19 U	20	170 E	20	92	160	120
Dimethyl phthalate	PPB	20		19 U	20 U	16 UE	19 U	24 U	19 U	30 U
Pentachlorophenol	PPB	97		11	50 U	160 UE	4.6	240 U	6.4	300 U
Phenol	PPB	20		19 U	20 U	160 U	19 U	240 U	19 U	300 U
2-Methylnaphthalene	PPB	150		19 U	20 U	280	24	73	430	110
Acenaphthene	PPB	180	X	32	53	370 E	46	81	**2400**	180
Acenaphthylene	PPB	60		19 U	44	250 E	19 U	53	**140**	59
Anthracene	PPB	150		64	103	310 E	60	160	420	97
Benzo(a)anthracene	PPB	360		220	368	650 E	240	580	740	290
Benzo(a)pyrene	PPB	500		240	345	790	360	530	890	360
Benzo(b)fluoranthene	PPB	350		170	366		300		700	
Benzo(g,h,i)perylene	PPB	250		130	199	470	200	330	420 J	340
Benzo(k)fluoranthene	PPB	225	X	190	119		310		**670**	
Chrysene	PPB	425		310	378	860 E	340	720	920	420
Dibenz(a,h)anthracene	PPB	125		34	42	150	74	120	140	150 U
Fluoranthene	PPB	600		310	670	1300 E	440	750	1700	670
Fluorene	PPB	125	X	30	52	290 E	34	95	**1400**	140
Indeno(1,2,3-c,d)pyrene	PPB	225		140	253	340	190	340	380	230
Naphthalene	PPB	200		31	34	410 E	55	160	300	270
Phenanthrene	PPB	700		180	265	930 E	230	380	2200	350
Pyrene	PPB	700	X	390	700	1400 E	580	950	**2500**	700
HPAH	PPB	2400				6800		5400		3640
LPAH	PPB	700				**2550 E**		920		1090
Carbazole	PPB	100	X	19 U	20 U	59	40 J	54	**700 J**	59 U
2,4-D	PPB	3.3		**93**	0.2 U		**21**		**24**	
2,4-Dichlorophenoxybutyric acid	PPB	5			0.5 U					
Total Polychlorinated Biphenyls	PPB	180				4.7 U		4 UE		4.5 U

Qualifier List:

Qualifier	Definition
E	Estimate
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UE	Undetected at the detection limit shown; Estimate.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Bold indicates 3 times the DEQ baseline value

Table 2
Industrial Chemical Uses for Analytes of Interest at Outfall 22B

Chemical	Use
Acenaphthene	In effluents from petroleum refining and coal tar distillation. Released to atmosphere through combustion of coal and diesel fuel. Used as a chemical intermediate for a variety of products including dyes, pigments, fluorescent whiteners, and pesticides. May be in manufacturing effluents waste byproducts. May be released from landfills, municipal waste water treatment facilities and waste incinerators because the widespread use of acenaphthene in a variety of products.
Benzo(k)fluoranthene	Occurs in fossil fuels. No commercial production or known use. Occurs ubiquitously as a product of incomplete combustion, and has been identified in smoke of cigarettes and marijuana cigarettes, emissions from gasoline engines, in emissions from burning of various types of coal, emissions from oil-fired heating and oil-fired stoves, used motor oils, lubricating oils, and coal tar.
Carbazole	Anthracene derivative. Contained in coal, petroleum, and peat and may be released to the environment from the incomplete combustion of these materials. May be released to the environment in emissions from waste incineration, tobacco smoke, aluminum manufacturing, and rubber combustion. May be released to via effluents from coal processing and wood-treatment facilities. Used in manufacturing of insecticides, lubricants, rubber antioxidants, odor inhibitor in detergents: as important dye intermediate in making photographic plates sensitive to UV light.
Fluorene	Occurs ubiquitously in products of incomplete combustion, in cigarette smoke, in exhaust from gasoline engines and in sewage sludge. Released to the atmosphere in emissions from the combustion of biomass, coal, polymers, tobacco, refuse, wood, and fly ash, etc from municipal waste incinerators; it is also released in emissions from asphalt paving and diesel exhausts. Combustion of wood, newspapers, and domestic waste in wood stoves releases fluorene to the atmosphere.
Pyrene	Released to environment as a ubiquitous product of incomplete combustion, occurring in exhaust from motor vehicles, emissions from cigarette smoke, coal-, oil-, and wood-burning stoves and furnaces. Used as a starting material in the manufacture of dyes and optical brighteners.

Table 3
Outfall 22B Facility List

Aquarius Database Search: Jul-2000
Basin Reconnaissance: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit No.	Business Type	Exposure	Comments
R961130330	Air Liquide	6529 NW Front Ave.	MS4	2813*	NPDES	1200Z	Manufacturing	Yes	
R961130360	ATOFINA Chemicals Inc.	6400 NW Front Ave.	MS4	2812*, 2819*, 5169*			Manufacturing	Yes	
R961130360	ATOFINA Chemicals Inc.	6400 NW Front Ave.	WP-95 to WP-101	2812*, 2819*, 5169*	NPDES	Individual	Manufacturing	Yes	
R961130360	ATOFINA Chemicals Inc.	6400 NW Front Ave.	Sanitary	2812*, 2819*, 5169*	Pretreatment	300.01	Manufacturing		
R961130130	Browning-Ferris Industries	6161 NW 61st Ave.	MS4	4953*	NPDES	1200Z	Solid waste transfer	Yes	
R961130420	City of Portland Pump Station	7110 NW Front Ave.	MS4				Pump Station	Yes	
R961130350	Gould Battery - AKA Canonie	5909 NW 61st Ave.	MS4	9999	NPDES	Individual	Superfund site	Yes	
R961130350	Gould Battery - AKA Canonie	5909 NW 61st Ave.	Sanitary	9999	Pretreatment	500.01	Superfund site		
R961130130	Metro Central Transfer	6161 NW 61st Ave.	MS4	4212*, 4953*	NPDES	1200Z	Solid waste transfer	Yes	
R961130130	Metro Central Transfer	6161 NW 61st Ave.	Sanitary	4212*, 4953*	Pretreatment	400.088	Solid waste transfer		
R961130360	Pilcher O'Leary Construction	6400 NW Front Ave.	WP-95 to WP-101	1541			Construction yard	Yes	
R961130310	Rhone Poulenc AG Co.	6200 NW St. Helens Rd.	WP-6	2879*	NPDES	Individual	Manufacturing	Yes	
R961130360	Washore Mechanical Inc.	6400 NW Front Ave.	WP-95 to WP-101	1629			Construction yard	Yes	

* Indicates SIC # has been verified via site inspection

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22B

Location Code	Collection Date	Permit Type	pH SU	Temp. °C	Spec. Cond. mg/l	Residual Cl mg/l	NH4-N mg/L	BOD-5 mg/L	COD mg/L	TSS mg/L	Arsenic mg/L	Cadmium mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Zinc mg/L	Total O&G mg/L
Air Liquide																				
01	01/30/1997	1200Z	6.47		1.7	<0.05	0.03		23	160	<0.01	<0.004		<0.05	0.0029		<0.04		0.12	<2
01	04/16/1997	1200Z	6.94		4.8	<0.05	0.02		11	10	<0.01	<0.004		<0.01	<0.001		<0.03		0.53	<2
01	06/03/1997	1200Z	6.9		<3	<0.003	0.113		14	15	<0.001	0.002	<0.02	0.194	<0.0002	0.015	<0.004		0.218	15
01	11/19/1997	1200Z	8	10.9			0.062		29	422				<0.2					0.279	29
01	01/06/1998	1200Z	7.1		2.1	<0.005	0.086		11	28	<0.005	<0.002		0.01	0.0003		<0.005		0.18	1.7
01	05/20/1998	1200Z	3.3		3	0.007	0.055		19	3.3	<0.005	0.003		0.017	<0.0002		0.005		0.33	<5
01	10/04/1998	1200Z	7.6	21.7	5	0.0056	0.0432		35	85	<0.1	<0.002		<0.025	0.00027		<0.01		0.127	6
01	11/23/1998	1200Z	8.3				<0.03		<2	38				<0.1					0.069	<5
01	02/24/1999	1200Z	9.4				<0.03		11	21				<0.1					0.099	<5
01	04/26/1999	1200Z	9.8	22.5	5.8	<0.005	0.0666		44	15	<0.1	0.0021		<0.025	<0.0002		<0.01		0.262	<5
01	12/01/1999	1200Z	7.4	9.5			0.04		13	33.2				<0.1					0.32	6.8
01	12/07/1999	1200Z	6.6	17	1.3	0.005	0.0234	7.59	56	35	<0.1	<0.002		<0.025	0.00025		<0.01		0.079	6
01	05/05/2000	1200Z	7.7	20.2	3.6	0.014	0.0731	27.1	220	410	<0.1	<0.002		0.051	0.0011		0.011		0.345	9
Metro Transfer																				
01	06/03/1997	1200Z	6.8		0.024	300	0.325	0.0015		220	0.00389	0.009				0.074	0.018	<0.02	0.831	26
01	12/09/1999	1200Z	6.1	7.1		300	0.2			320									0.88	53.1
01	06/12/2000	1200Z	6.91				0.15			33									0.71	3

Table 5
Outfall 22B Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.
6400	Pennsylvania Salt Co.	Pennsylvania Salt Co.	Pennsylvania Salt Co.	Pennwalt Corp	Pennwalt Corp	Pennwalt Corp	Elf Atochem
6529	NL			Industrial Air Products Co. (acetylene plant)	Air Liquide Inc.	Air Liquide Inc.	Air Liquide Inc.
NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.	NW St. Helens Rd.
6200	Chipman Chemical Co.	Chipman Chemical Co.	Chipman Chemical Co.	Rhodia Inc., Chipman Chemical Co.	Rhone-Poulenc Inc., Atlas Building Wreckers	Rhone-Poulenc Inc.	Rhone-Poulenc Inc.
NW 61st Ave.	NW 61st Ave.	NW 61st Ave.	NW 61st Ave.	NW 61st Ave.	NW 61st Ave.	NW 61st Ave. (1995)	NW 61st Ave.
5909	Morris & Son Smelters	Morris & Son Smelters	Morris & Son Smelters	Morris & Son Smelters	Gould Refrigeration and Alloying	Canonie Environmental and Gould Inc. Corporate Property	Gould Inc. Property
6161	Bethlehem Steel	Bethlehem Steel	Gilmore Steel	Gilmore Steel	Gilmore Steel	BFI Recycle Now and BFI Waste Systems, F. Browning Industries, Jack Gray Transportation, Metro Control Station, and Transport Industries	BFI Medical Recycling, Jack Gray Transportation, Metro Control Station

Table 6
Outfall 22B EPA Toxic Release Inventory List and Hazardous Waste Generator List

RNO	Address	Company	EPA ID	TRI ID	SIC Number	Generator Status	Releases to Environment	Chemicals Used on Site
R961130360	6400 NW Front Ave	Elf Atochem N.A. Inc.	ORD009031840	97208PNNWL6400N	2812, 2819	SQG	Ammonia, Chromium, Chromium Compounds, Hydrogen Chloride, Sodium Hydroxide, Sodium Sulfate,	Ammonia, Chlorine, Hydrogen Chloride, Chromium, Sodium Hydroxide, Sodium Sulfate, Sulfuric Acid
R961130310	6200 NW St Helens Rd	Rhone Poulenc Inc	ORD990659492	97210RHNPL6200N	2879	LQG	Only Air	1,2,4-Trimethylbenzene, Ethylbenzene, Xylenes

LQG = Large Quantity Generator
SQG = Small Quantity Generator

Table 7
Outfall 22B DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI ID	CERCLIS	Action	Status
R961130360	Elf Atochem North America (ATOFINA Chemicals)	6400 NW Front Ave	398	9031840	Remedial Investigation	LIS
R961130350	Gould Inc./NL Industries Inc.	5909 NW 61st Ave	49	95003687	Remedial Action	LIS
R961130130	Metro Central Transfer Station	6161 NW 61st Ave	1398	43003458	State Expanded Preliminary Assessment recommended (XPA)	SUS
R961130310	Rhone-Poulenc - East Doane Lake	6200 NW St. Helens Rd	155	1000537 or 991000000	Removal Action Recommended (RM)	LIS
?	1N/1W/S13 & 12	Doane Lake Study Area	36	980664916	Other remedial or investigative action recommended	SUS

LIS = Listed
SUS = Suspected

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 398

shows data entered as of November 17, 2000 at 7:39:46 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 398	Site Name: ATOFINA Chemicals, Inc.		CERCLIS No: 009031840	
	Address: 6400 NW Front AVE Portland 97210			
	County: Multnomah		Region: Northwest	
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N	Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots: 36	
	Latitude: 45 deg. 34 ' 26"	Longitude: 122 deg. 44 ' 55"	Site Size: 74.8 acres	
Other Site Names:				
	Atochem North America			
	Pennwalt Chemical Corp.			
	Elf Atochem North America			
Operations:				
	Name: Elf Atochem North America			
	Comments: Chemical manufacturing plant. .			
	Years of Operation: 1941 - present			
	SIC Code: 2812		Operating Status: Active	

Contamination Information

Hazardous Substances/Waste Types:	chlorine, hydrochloric acid, ammonia, sodium hydroxide, asbestos, sodium metabisulfite, sodium bichromate, sulfuric acid, monochlorobenzene, and DDT.
Manner and Time of Release:	Spills, documented in 1987.
Contamination Information:	(5/19/93 KPD/SAS) The facility primarily produces chlorine, but also produces hydrochloric acid, hydrogen, sodium chlorate, and sodium hydroxide. Asbestos (used as a diaphragm in electrolytic cells) was historically buried in a pit on-site. The buried asbestos was removed in 1992 with DEQ Air Quality Program oversight. Waste diaphragm asbestos is currently conveyed to a filter press and the filter cake is placed into drums for off-site disposal. "Brine purification residue" (a mixture of calcium carbonate and magnesium hydroxide) is dewatered in a filter press and the dry solids are currently landfilled at a DEQ permitted landfill. The residue is not hazardous. Four Willamette River outfalls (regulated under a common NPDES permit) are also present. Six chemical spills were reported to have occurred at the site in 1987, the first year reporting was required. Excavation activities in 1992 encountered residues determined to be associated with the manufacture of DDT by Pennwalt in the late 1940s and early 1950s. DDT residue was removed by Atochem in a trench disposal area from the northwestern portion of the plant site in 1994. Investigation of the former DDT manufacturing area (current acid plant area) by Atochem in 1994

showed high concentrations of DDT in soil and monochlorobenzene in groundwater.

Pathways: The site is located in a heavily industrialized part of NW Portland. The Willamette River is adjacent to the site on the north and east. Groundwater in the surrounding area is known to be contaminated with lead and herbicides, among other chemicals. See ECSI #36 for more information. Investigation of the Acid Plant Area has revealed DDT and chlorobenzene (a DDT manufacturing component) in groundwater monitoring wells adjacent to the Willamette River. EPA/DEQ 1997 Portland Harbor Sediment Study turned up DDT in sediment adjacent to the Acid Plant.

Environmental/Health Threats:

Status of Investigative or Remedial Action: (10/29/97 MJM/VCP) Elf Atochem entered the DEQ Voluntary Cleanup Program (2/96) and requested DEQ oversight for the investigation & cleanup of the former DDT manufacturing area (current Acid Plant area). Field work in the fall & winter of 1996 focused on delineating the former DDT manufacturing residue disposal pond and overflow trench and beginning the characterization of groundwater quality between the former disposal pond and the Willamette River. Data from work is summarized in a June 1997 report. (8/26/98 MJM/VCP) Elf Atochem and DEQ entered Voluntary RI/FS Agreement to investigate former DDT manufacturing releases. Additional investigative activities are underway. (9/26/00 MJM/VCP) During the fall of 2000, ATOFINA will be removing a minimum of 1,740 cubic yards of soil with some of the highest levels of DDT at the site. The removal takes advantage of a planned facility maintenance shutdown which allows access to specific areas of the plant. ATOFINA is also paving or placing temporary covers over areas of the plant to control surface soils containing DDT from being transported by stormwater to the Willamette River.

Data Sources: EPA Preliminary Assessment (12/10/84).
Laboratory Data.
Correspondence FROM owner and/or operator.
Doane Lake Study Area files (ECSI #36).
Voluntary Cleanup Program project file

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
AMMONIA	Soil	Unknown				
CHLOROBENZENE	Groundwater	370 mg/L	11/03/1994	Y		
DDT,p,p'-	Soil	150,000 mg/kg	04/20/1994	Y		
SODIUM BICHROMATE	Surface Water	Unknown				
SODIUM CHLORATE	Surface Water	Unknown				

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	09/01/1979			EPA		
EPA PA1/SI1	10/24/1984	12/10/1984		EPA		
No Further Remedial Action Planned under Federal program	12/10/1984	12/10/1984		EPA		
Site added to database	10/06/1988		Marilyn Daniel	DEQ	HQ	SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ	HQ	SAS
SITE EVALUATION	05/12/1993	05/12/1993	Kevin Dana	DEQ	HQ	SAS
Preliminary Assessment Equivalent recommended (PAE)	05/12/1993	05/12/1993	Kevin Dana	DEQ	HQ	SAS
PRELIMINARY ASSESSMENT EQUIVALENT	05/13/1993	05/13/1993	Kevin Dana	DEQ	HQ	SAS
Listing Review completed	05/14/1993	05/14/1993	Kevin Dana	DEQ	HQ	SAS
Insufficient information to list	05/17/1993		Kevin Dana	DEQ	HQ	SAS

State Expanded Preliminary Assessment recommended (XPA)	05/18/1993	05/18/1993	Kevin Dana	DEQ	HQ	SAS
VCS Waiting List	06/27/1995	02/12/1996		DEQ	NW	VCS
Letter Agreement	02/01/1996	02/01/1996	Matt McClincy	DEQ	NW	VCS
NEGOTIATIONS	02/12/1996	06/11/1996	Matt McClincy	DEQ	NW	VCS
Proposal for Confirmed Release List recommended	06/11/1996	06/11/1996	Matt McClincy	DEQ	NW	VCS
Listing Review completed	06/11/1996	06/11/1996	Matt McClincy	DEQ	NW	VCS
Proposal for Inventory recommended	06/11/1996	06/11/1996	Matt McClincy	DEQ	NW	VCS
REMEDIAL INVESTIGATION	06/11/1996		Matt McClincy	DEQ	NW	VCS
Facility proposed for Confirmed Release List	12/30/1996	12/30/1996	Matt McClincy	DEQ	NW	VCS
Facility proposed for Inventory	12/30/1996	12/30/1996	Matt McClincy	DEQ	NW	VCS
Facility placed on Confirmed Release List	04/07/1997	04/07/1997	Kim Van Patten	DEQ	NW	VCS
Facility placed on Inventory	04/07/1997	04/07/1997	Kim Van Patten	DEQ	NW	VCS
Letter Agreement	08/26/1998	08/26/1998	Matt McClincy	DEQ	NW	VCS
REMOVAL	09/19/2000		Matt McClincy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 49

shows data entered as of November 17, 2000 at 7:41:37 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 49	Site Name: Gould Inc./NL Industries Inc.		CERCLIS No: 095003687
	Address: 5909 NW 61st AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: Y	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots: 35
	Latitude: 45 deg. 34 ' 3"	Longitude: 122 deg. 44 ' 41"	Site Size: 9.2 acres
Other Site Names:			
	NL Industries Inc.		
Operations:			
	Name: Gould Inc./NL Industries Inc.		
	Comments: Battery recycler and secondary lead smelter .		
	Years of Operation: 1949-1981		
	SIC Code: 2819		Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	lead, arsenic, cadmium, sulfuric acid, zinc, antimony
Manner and Time of Release:	On-site disposal. Batteries were crushed and processed. Residuals were dumped into Doane Lake (now a remnant of a Lake) and also some casings were buried on the adjacent Rhone-Poulenc property. Time of release: Between 1949 and 1981.
Contamination Information:	(07/18/1997 JAK/SRS) Secondary lead smelting operations at the site led to the burial of battery casings and matte, both at the site and on adjacent properties. On-site soil, and surface water and sediments of East Doane Lake, are contaminated with high levels of lead. EPA added the site to the National Priorities List (NPL) in September 1983. A Remedial Investigation and Feasibility Study (RI/FS) was conducted at the site from 1985 to 1988. EPA issued a Record of Decision (ROD) for the Soils Operable Unit at the site in March 1988, requiring the excavation of all buried battery casings and matte, treatment of battery casings to remove and recycle lead, and treatment of the contaminated soils, sediment, and matte to reduce the mobility of lead. Contamination is also present at the site from the adjacent Rhone-Poulenc property (ECSI #155). Rhone-Poulenc's former operations (the manufacture, formulation, and distribution of pesticide products) resulted in organic contamination of soil and groundwater on both the Rhone-Poulenc and Gould sites. DEQ is coordinating the investigation and cleanup of Rhone-Poulenc with that of Gould.

Pathways:	Air, surface water, groundwater, soil are contaminated. The primary pathways of contamination considered during the remedial action were direct contact and the air pathway. Surface water and groundwater do not appear impacted above health based levels. Sediments in Doane Lake contain lead (from Gould) and other contamination (in all likelihood from surrounding facilities).
Environmental/Health Threats:	Airborne lead and dust, groundwater, surface water. The long-term environmental threat from this site is localized. When the smelter was operational (pre-1980), the environmental threat was greatest. The remedy was designed to stabilize and bind the lead contamination so that it could be disposed of on-site in a protective manner.
Status of Investigative or Remedial Action:	(07/18/1997 JAK/SRS) EPA issued Unilateral Administrative Orders to seven companies (PRPs) in January 1992 requiring implementation of the remedial action as specified in the ROD. Remedial actions were initiated at the site in June 1993. An estimated 24,000 tons of battery casings were excavated and processed through the separation/treatment plant, with 244 tons of plastic and 88 tons of lead recycled. Contaminated soils and matte were stabilized, producing 20,000 cubic-yard blocks which are currently stored at the site. Several problems were encountered with the battery seperation/treatment process. Although several modifications were made to the process, it was determined that the process was not efficient or cost-effective and that only limited quantities of processed materials were recyclable. In addition, the volume of battery casings to be excavated and processed was overestimated in the ROD. In May 1994, EPA allowed the PRPs to suspend operations and evaluate alternative remedial actions. After conducting a focused feasibility study, the PRPs submitted a proposed alternative cleanup plan to EPA in October 1995. EPA prepared a Proposed ROD Amendment, which went out for public comment April 1 through May 31, 1996. Major components of the alternative cleanup plan include construction of an 8.5-acre on-site containment facility (OCF) to RCRA (40 CFR 264, Subpart N) standards, excavation of remaining battery casings on the Gould site, excavation of contaminated sediment in East Doane Lake, stabilization of lead fines, consolidation of approximately 60,000 cubic yards of excavated and previously stockpiled material in the OCF, filling of East Doane Lake, wetlands mitigation measures, institutional controls, and groundwater monitoring. The PRPs initiated pre-design in November 1996.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ARSENIC	Groundwater	Up to 0.61 ppm		Y		
ARSENIC	Soil	Up to 63 ppm		Y		
CADMIUM	Soil	Up to 12 ppm		Y		
CHROMIUM	Groundwater	Up to 0.017 ppm		Y		
CHROMIUM	Soil	Up to 290 ppm		Y		
LEAD	Air	To 5.2 microg/cu.m		Y		
LEAD	Groundwater	Up to 0.29 ppm		Y		
LEAD	Sediment	Up to 12,000 ppm		Y		
LEAD	Soil	Up to 20,000 ppm		Y		
LEAD	Surface Water	Up to 0.28 ppm		Y		
SULFURIC ACID	Groundwater	pH 5.7		Y		
SULFURIC ACID	Soil	pH 4.7		Y		
SULFURIC ACID	Surface Water	pH 6.3		Y		
ZINC	Groundwater	Up to 6.9 ppm		Y		
ZINC	Soil	Up to 10,000 ppm		Y		
ZINC	Surface Water	Up to 0.041 ppm		Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	11/19/1980			EPA		
EPA Screening Site Inspection 1	08/08/1982	08/08/1982		EPA		
Proposed for the NPL	12/30/1982	09/08/1983		EPA		
EPA Basic Preliminary Assessment	09/07/1983	09/08/1983		EPA		
National Priorities List Site	09/08/1983		Jill Kiernan	DEQ	NW	SRS
REMEDIAL INVESTIGATION	08/28/1985	03/31/1988	Bruce Gilles	DEQ	HQ	SRS
FEASIBILITY STUDY	08/28/1985	03/31/1988	Bruce Gilles	DEQ	HQ	SRS
Site added to database	04/08/1988		John Odisio	DEQ	HQ	SAS
RECORD OF DECISION	07/19/1988	09/30/1988		EPA		
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ	HQ	SAS
REMEDIAL DESIGN	02/01/1990	01/31/1992	Brian McClure	DEQ	HQ	SRS
SITE EVALUATION	07/28/1990	07/28/1990	Brian McClure	DEQ	HQ	SRS
Preliminary Assessment Equivalent recommended (PAE)	07/28/1990	07/28/1990	Brian McClure	DEQ	HQ	SRS
Listing Review completed	07/29/1990	07/30/1990	Brian McClure	DEQ	HQ	SRS
PRELIMINARY ASSESSMENT EQUIVALENT	07/29/1990	07/29/1990	Brian McClure	DEQ	HQ	SRS
Proposal for Confirmed Release List recommended	07/30/1990	07/30/1990	Brian McClure	DEQ	HQ	SRS
Proposal for Inventory recommended	07/30/1990	07/30/1990	Brian McClure	DEQ	HQ	SRS
Facility proposed for Confirmed Release List	06/20/1991	07/20/1991	Brian McClure	DEQ	HQ	SRS
Facility proposed for Inventory	06/20/1991	07/20/1991	Brian McClure	DEQ	HQ	SRS
Review for final listing	12/23/1991	12/24/1991	Brian McClure	DEQ	HQ	SRS
Listing on Confirmed Release List recommended	12/24/1991	12/24/1991	Brian McClure	DEQ	HQ	SRS
Listing on Inventory recommended	12/24/1991	12/24/1991	Brian McClure	DEQ	HQ	SRS
Facility placed on Confirmed Release List	12/30/1991	12/30/1991	Loretta Pickerell	DEQ	HQ	SAS
Facility placed on Inventory	12/30/1991	12/30/1991	Loretta Pickerell	DEQ	HQ	SAS
REMEDIAL ACTION	02/01/1992		Jill Kiernan	DEQ	NW	SRS
REMEDIAL DESIGN	07/18/1997		Jill Kiernan	DEQ	NW	SRS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1398

shows data entered as of November 17, 2000 at 7:42:34 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1398	Site Name: Metro Central Transfer Station		CERCLIS No: 043003458
	Address: 6161 NW 61st AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots:
	Latitude: 45 deg. 34 ' 4"	Longitude: 122 deg. 44 ' 47"	Site Size: 10.4 acres
Other Site Names:			
	American Steel Industries Inc.		
Operations:			
	Name: Metro Central Transfer Station		
	Comments: Solid waste transfer and material recovery facility .		
	Years of Operation: 1990 - present		
	SIC Code: 4959		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	pesticides, herbicides, benzene, heavy metals
Manner and Time of Release:	Migration of contaminants from adjacent site; time of release unknown.
Contamination Information:	(6/28/93 KPD/SAS) A succession of steel companies have operated a warehouse on the site since at least 1924. In 1989, Trans Industries proposed purchasing the site and converting the warehouse into a solid waste transfer station for Metro. An initial Site Investigation found that the groundwater was contaminated with pesticides, herbicides, BTEX compounds, and heavy metals. The contamination is believed to come from the adjacent Rhone-Poulenc site (ECSI #155).
Pathways:	The site is located in a heavily industrialized part of NW Portland. The Willamette River is about a quarter-mile north and east of the site, and Forest Park is about a quarter-mile south and west of the site. Groundwater at the site is not used for drinking. The public is encouraged to drive onto the site to drop off household hazardous wastes, but are told to remain in their cars.
Environmental/Health Threats:	Groundwater contamination from off-site source; possible migration to Willamette River.

Status of Investigative or Remedial Action: (2/23/95 KPD/SRS) Because contaminated groundwater is continuing to migrate onto the site, Site Response recommends that the site be placed on the Confirmed Release List (CRL). The source of the contamination is currently being cleaned up, so Site Response does not recommend any additional action be taken at this time. When the cleanup at the Rhone-Poulenc site has been completed, Site Response recommends that an expanded Preliminary Assessment (XPA) be performed to check that the cleanup has removed the contamination beneath the transfer station.

Data Sources:
1. EPA Preliminary Assessment (9/87).
2. Environmental Site Investigation (9/89).
3. Dames & Moore Preliminary Assessment (11/89).
4. Environmental Risk Investigation (4/90).
5. Dames & Moore Removal Report (1/93).
6. UST Log #26-89-0329.
7. Doane Lake Study Area files (ECSI #36).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ALDRIN	Groundwater	6.7 ppb	05/01/1993	Y		
BENZENE	Groundwater	3,600 ppb	05/01/1993	Y		
DIELDRIN	Groundwater	8.5 ppb	05/01/1993	Y		
ENDRIN	Groundwater	2.8 ppb	05/01/1993	Y		
MCPA	Groundwater	3,700 ppb	05/01/1993	Y		
MCPP	Groundwater	4,600 ppb	05/01/1993	Y		
SILVEX	Groundwater	81 ppb	05/01/1993	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	09/01/1979			EPA		
EPA Basic Preliminary Assessment	09/29/1987	09/30/1987		EPA		
No Further Remedial Action Planned under Federal program	09/30/1987	09/30/1987		EPA		
SITE EVALUATION	06/28/1993	06/28/1993	Kevin Dana	DEQ	HQ	SAS
Listing Review completed	06/29/1993	06/30/1993	Kevin Dana	DEQ	HQ	SAS
Site added to database	06/29/1993		Kevin Dana	DEQ	HQ	SAS
Insufficient information to list	06/30/1993	02/23/1995	Kevin Dana	DEQ	HQ	SAS
State Expanded Preliminary Assessment recommended (XPA)	07/01/1993	07/01/1993	Kevin Dana	DEQ	HQ	SAS
Proposal for Confirmed Release List recommended	02/23/1995	02/23/1995	Kevin Dana	DEQ	HQ	SAS
Insufficient information to list	05/08/2000	05/08/2000	Gil Wistar	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the

report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 155

shows data entered as of November 17, 2000 at 7:43:05 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 155	Site Name: Rhone-Poulenc - Doane Lake		CERCLIS No: 990659492
	Address: 6200 NW St. Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: Y Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots: 31,43
	Latitude: 45 deg. 34 ' 4"	Longitude: 122 deg. 45 ' 1"	Site Size: 16.4 acres
Other Site Names:			
	East Doane Lake		
Operations:			
	Name: Rhone-Poulenc, Inc.		
	Comments: production of agricultural chemicals (herbicides, insecticides) .		
	Years of Operation: 1943 to July 1990		
	SIC Code: 2879		Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	2,4-D, 2,4,5-T, dioxins and furans, isomers of dichlorobenzene, phenolic compounds, creosols, trichloroethene, BTEX, lead, and arsenic.
Manner and Time of Release:	Discharges of untreated wastes on-site and treated process wastewater off-site to West Doane Lake. Time of release: 1950-1980.
Contamination Information:	(10/15/1999 ELB/SRS) Chemicals formulated or manufactured at the Rhone-Poulenc (R-P) facility were released to the environment through a variety of means, including spills, leaks, and direct discharges. Prior to 1966, wastewater was discharged directly to Doane Lake. From 1966 until 1975, the wastewater was discharged to the Willamette River. After 1975, wastewater was discharged to the Portland sewer system. R-P began investigating contamination at the site in the early 1980s under DEQ oversight. In October 1983, R-P began pumping and treating contaminated groundwater at the site. In December 1989, R-P entered into a Consent Order with DEQ to conduct a Remedial Investigation and Feasibility Study (RI/FS) at the site. R-P's progress on the investigation, however, was extremely slow. A workplan for conducting the RI/FS wasn't approved until May 1994, and to-date neither the RI/FS nor an associated Risk Assessment has been completed.

Pathways:	The site is located in the Doane Lake Study Area (ECSI #36) and the Portland Harbor area (ECSI #2068). The Gould/NL Superfund site (ECSI #49) is adjacent. Surrounding land use is industrial. Groundwater on- and off-site is contaminated, as is surface water in Doane Lake. Runoff, surface water, and groundwater discharge to the Willamette River. The Rhone-Poulenc facility was largely demolished in 1992, except for the administrative and storage buildings, foundation slabs, and the wastewater treatment system.
Environmental/Health Threats:	Wastewaster from the site was historically discharged to West Doane Lake and the Willamette River. Surface soil, subsurface soil, and groundwater are all contaminated at the site.
Status of Investigative or Remedial Action:	(10/15/1999 ELB/SRS) In December 1997, DEQ determined that removal of contaminated sediments from East Doane Lake was warranted, and directed R-P to prepare a removal workplan. R-P argued that a removal was unnecessary. DEQ decided that R-P's refusal to conduct the removal, coupled with lack of progress on the RI/FS over the past eight years, demonstrated that R-P was substantially "unwilling" to investigate and clean up the site. Based on this determination, DEQ terminated the Consent Order in February 1998 and declared the site an Orphan project in March 1998. DEQ completed the East Doane Lake sediment removal in November 1998, using funds from the Orphan Site Account. R-P will be expected to reimburse DEQ for the removal costs. The contaminated sediments are currently stockpiled at the site, and will be moved into an on-site containment facility (OCF). Construction of the OCF is expected to be completed by the end of 1999. In addition, DEQ has developed a workplan for completion of the Remedial Investigation. This workplan was attached to a new consent order for the site. RI activities completed to date include the installation of additional monitoring wells and initiation of a groundwater monitoring program. The RI is expected to be completed in 2000. (4/17/00 ELB/SRP) The first round of groundwater sampling was completed in April 2000. A second round is scheduled for September 2000. The first phase of additional characterization of source areas and to support the risk is currently planned for fall 2000.
Data Sources:	1) October 1983 Dames & Moore "Geohydrologic & Waste Management Investigation" 2) March 1991 Final RI/FS Work Plan. 3) Doane Lake Study Area files (ECSI #36). 4) SRS Project Manager files.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
BENZENE	Soil	Up to 2.6 ppm	05/01/1991	Y		
D,2,4-	Groundwater	364 ppm	01/01/1991	Y		
D,2,4-	Soil	5670 ppm	01/01/1991	Y		
DB,2,4-	Groundwater	532 ppm	01/01/1991	Y		
DB,2,4-	Soil	394 ppm	01/01/1991	Y		
DICHLOROBENZENE,1,2-	Groundwater	38.6 ppm	01/01/1991	Y		
DICHLOROBENZENE,1,2-	Soil	14 ppm	01/01/1991	Y		
DICHLOROPHENOL,2,4-	Groundwater	358 ppm	01/01/1991	Y		
DICHLOROPHENOL,2,4-	Soil	2700 ppm		Y		
DICHLOROPHENOL,2,6-	Groundwater	57.6 ppm	01/01/1991	Y		
DICHLOROPHENOL,2,6-	Soil	370 ppm		Y		
DICHLOROPROP	Groundwater	25 ppm	01/01/1991	Y		
DICHLOROPROP	Soil	4.9 ppm	01/01/1991	Y		
ETHYLBENZENE	Groundwater	84 ppm	01/01/1991	Y		
ETHYLBENZENE	Soil	470 ppm	01/01/1991	Y		
MCPA	Groundwater	111 ppm	01/01/1991	Y		
MCPA	Soil	270 ppm	01/01/1991	Y		
METHYLENE CHLORIDE	Groundwater	779 ppm	01/01/1991	Y		
METHYLENE CHLORIDE	Soil	6.6 ppm	01/01/1991	Y		
PHENOLS	Groundwater	46 ppm	01/01/1991	Y		
PHENOLS	Soil	68 ppm	01/01/1991			

T,2,4,5-	Groundwater	23.2 ppm	01/01/1991	Y
T,2,4,5-	Soil	49.8 ppm	01/01/1991	Y
TETRACHLORODIBENZO-p-DIOXIN,2,3,7,8-	Groundwater	2.6 x 10 -3 ppm	01/01/1991	Y
TETRACHLORODIBENZO-p-DIOXIN,2,3,7,8-	Soil	8.8 x 10 -5	01/01/1991	Y
TOLUENE	Groundwater	4.9 ppm		Y
TOLUENE	Soil	23 ppm	01/01/1991	Y
TRICHLOROETHYLENE	Groundwater	4.7 ppm	01/01/1991	Y
TRICHLOROETHYLENE	Soil	240 ppm	01/01/1991	Y
TRICHLOROPHENOL,2,4,6-	Groundwater	19.6 ppm	01/01/1991	Y
TRICHLOROPHENOL,2,4,6-	Soil	1000 ppm		Y
XYLENEs	Groundwater	290 ppm	01/01/1991	Y
XYLENEs	Soil	2300 ppm	01/01/1991	Y

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
EPA Basic Preliminary Assessment	08/01/1979	08/01/1979		EPA		
Site added to CERCLIS	08/01/1979			EPA		
EPA Screening Site Inspection 1	01/01/1982	01/01/1982		EPA		
Site added to database	05/03/1988		Mike Rosen	DEQ	HQ	SAS
SITE EVALUATION	03/20/1989	03/22/1989	Sandy Anderson	DEQ	HQ	SRS
Remedial Investigation/Feasibility Study recommended	03/22/1989	03/22/1989	Sandy Anderson	DEQ	HQ	SRS
NEGOTIATIONS	03/23/1989	12/26/1989	Sandy Anderson	DEQ	HQ	SRS
Consent Order	12/26/1989	12/26/1989	Sandy Anderson	DEQ	HQ	SRS
REMEDIAL INVESTIGATION	12/27/1989	02/24/1998	Mavis Kent	DEQ	NW	SRS
FEASIBILITY STUDY	12/27/1989	02/24/1998	Mavis Kent	DEQ	NW	SRS
SITE PRIORITY EVALUATION FOR FURTHER ACTION	08/08/1990	08/08/1990	Sandy Anderson	DEQ	HQ	SRS
Listing Review completed	08/09/1990	08/09/1990	Sandy Anderson	DEQ	HQ	SRS
Place on hold	08/10/1990	12/15/1993	Bruce Gilles	DEQ	HQ	SRS
EPA Site Inspection Prioritization	09/23/1993	09/23/1993		EPA		
PRELIMINARY ASSESSMENT EQUIVALENT	12/14/1993	12/14/1993	Mavis Kent	DEQ	HQ	SRS
Proposal for Confirmed Release List recommended	12/15/1993	12/15/1993	Mavis Kent	DEQ	HQ	SRS
Proposal for Inventory recommended	12/15/1993	12/15/1993	Mavis Kent	DEQ	HQ	SRS
Facility proposed for Confirmed Release List	02/10/1994	02/10/1994	Mavis Kent	DEQ	HQ	SRS
Facility proposed for Inventory	02/10/1994	02/10/1994	Mavis Kent	DEQ	HQ	SRS
Owner/operator comments received on listing notification	03/21/1994	06/23/1994		DEQ	HQ	SAS
Review for final listing	06/10/1994	06/23/1994	Mavis Kent	DEQ	NW	SRS
Listing on Confirmed Release List recommended	06/23/1994	06/23/1994	Mavis Kent	DEQ	NW	SRS
Listing on Inventory recommended	06/23/1994	06/23/1994	Mavis Kent	DEQ	NW	SRS
Facility placed on Confirmed Release List	06/24/1994	06/24/1994	Heather Schijf	DEQ	HQ	SAS
Facility placed on Inventory	06/24/1994	06/24/1994	Heather Schijf	DEQ	HQ	SAS
Remedial Investigation/Feasibility Study recommended	02/24/1998	02/24/1998	Mavis Kent	DEQ	NW	SRS
SITE PRIORITY EVALUATION FOR FURTHER ACTION	02/25/1998	03/09/1998	Eric Blischke	DEQ	HQ	SRS

Removal Action Recommended (RM)	03/09/1998 03/09/1998	Eric Blischke	DEQ	HQ	SRS
ORPHAN SITE	03/20/1998 07/08/1999	Eric Blischke	DEQ	HQ	SRS
NEGOTIATIONS	03/23/1998 07/08/1999	Eric Blischke	DEQ	HQ	SRS
REMOVAL	07/31/1998 11/30/1998	Eric Blischke	DEQ	HQ	SRS
REMOVAL	06/01/1999	Eric Blischke	DEQ	HQ	SRS
Consent Order	07/08/1999 07/08/1999	Eric Blischke	DEQ	HQ	SRS
REMEDIAL INVESTIGATION	07/09/1999	Eric Blischke	DEQ	NW	SRS

Key to certain acronyms and terms in this report:

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Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 36

shows data entered as of November 17, 2000 at 7:43:42 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 36	Site Name: Doane Lake Study Area		CERCLIS No: 980664916
	Address: Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: Y
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots: 35,42,111,31,43,1,33,44,36
	Latitude: 45 deg. 34 ' 38"	Longitude: 122 deg. 45 ' 17"	Site Size: 120 acres
Other Site Names:			

Operations:

Name: Doane Lake Study Area

Comments: Formerly a wetland and lake; filled in for use by heavy industry. .

Years of Operation: 1913 to present

SIC Code: 4953 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	chlorophenols, coal tar, creosote, PAHs, herbicides, insecticides, radioactive casting sands, lead, calcium hydroxide sludge, volatile organics, sulfuric acid, asbestos
Manner and Time of Release:	Past operating practices; dumping to lake. Time of releases: early 1900s to 1980s.
Contamination Information:	(3/1/95 KPD/SRS) Doane Lake is a shallow lake and wetland in the floodplain of the Willamette River. Early in this century, the lake was split into three sections by an elevated railroad line. From the 1920s to the 1940s, heavy industries set up along the shores, filling in most of the remnants of Doane Lake. Northwest of the railroad line, 30,000 cubic yards of coal tar were laid down from a coal gasification plant. Southeast of the railroad line, a company engaged in battery "breaking" and lead smelting buried 80,000 tons of lead-bearing material, and discharged 6.5 million gallons of sulfuric acid into the lake. An adjacent agricultural chemical production facility discharged wastewaters containing chlorinated phenolic and aromatic compounds, as well as herbicides and insecticides. In addition, highly alkaline calcium hydroxide and mildly radioactive zirconium sands have been landfilled in the area. In 1983, NL/Gould (the "battery breaking" site) was placed on the National Priorities List (NPL). The RI/FS for NL/Gould was completed in 1988. However, DEQ decided to continue the groundwater investigation for an additional two years, looking into the possibility of an area-wide cleanup. The "Doane Lake Study" was completed in 1990.

Pathways:	The site is bordered by the Willamette River to the northeast. Forest Park is directly across Highway 30 to the southwest. Oil storage and refining facilities border the site to the southeast (see ECSI #1549). The McCormick & Baxter Superfund site (ECSI #74) is directly across the river from Doane Lake. Public access is restricted to all portions of the Study Area except the Waste Transfer Station.
Environmental/Health Threats:	Groundwater contamination, potential releases to the Willamette River.
Status of Investigative or Remedial Action:	(3/1/95 KPD/SRS) Upon completion of the Doane Lake Study, DEQ decided it would be more efficient to investigate and clean up the sites in the study area individually, rather than attempt a cleanup of the study area as a whole. An investigation is currently underway at the GASCO site northwest of the railroad line, and remedial activities are underway at the NL/Gould and Rhone-Poulenc (agricultural chemical plant) sites southeast of the line. However, since a cleanup of the area is expected to take years, in the interim, SRS recommends that the study area be placed on the Confirmed Release List (CRL) and the Inventory.
Data Sources:	1. ESCO Corp.- Willbridge Landfill files (ECSI #397). 2. Elf Atochem North America files (ECSI #398). 3. GASCO files (ECSI #84)(see VCS Project Manager files). 4. Gould Inc./NL Industries Inc files (ECSI #49)(see SRS Project Manager files). 5. Metro Central Transfer Station files (ECSI #1398). 6. Rhone-Poulenc Inc.- NW St Helens RD files (ECSI #155)(see SRS Project Manager files). 7. Schnitzer Investment - Doane Lake files (ECSI #395). 8. Wacker Siltronic Corporation files (ECSI #183). 9. Doane Lake Study Area files (ECSI #36).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ANTHRACENE	Groundwater	330 ppb		Y		
ARSENIC	Groundwater	610 ppb		Y		
BENZENE	Groundwater	23,300 ppb		Y		
D,2,4-	Groundwater	364 ppb		Y		
DICHLOROPHENOL,2,4-	Groundwater	358 ppb		Y		
ETHYLBENZENE	Groundwater	4,680 ppb		Y		
FLUORANTHENE	Groundwater	110 ppb		Y		
LEAD	Groundwater	290 ppb		Y		
METHYLENE CHLORIDE	Groundwater	779 ppb		Y		
PETROLEUM HYDROCARBONS	Groundwater	89,000 ppb		Y		
SULFURIC ACID	Groundwater	pH 5.7		Y		
TOLUENE	Groundwater	5,960 ppb		Y		
ZINC	Groundwater	6,900 ppb		Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
EPA Screening Site Inspection 1	08/01/1979	11/06/1979		EPA		
EPA Basic Preliminary Assessment	08/01/1979	08/01/1979		EPA		
Site added to CERCLIS	08/01/1979			EPA		
Site added to database	05/03/1988		Marilyn Daniel	DEQ	HQ	SAS
NEGOTIATIONS	01/01/1989	11/26/1990	Jill Kiernan	DEQ	HQ	SRS
SITE EVALUATION	01/10/1990	01/10/1990	Sandy Anderson	DEQ	HQ	SRS

REMEDIAL INVESTIGATION	01/10/1990	07/08/1992	Jill Kiernan	DEQ	HQ	SRS
Consent Order	01/10/1990	01/10/1990	Sandy Anderson	DEQ	HQ	SRS
Other remedial or investigative action recommended	01/10/1990	01/10/1990	Sandy Anderson	DEQ	HQ	SRS
Listing Review completed	07/29/1990	07/29/1990	Sandy Anderson	DEQ	HQ	SRS
Place on hold	07/30/1990	05/31/1993	Sandy Anderson	DEQ	HQ	SRS
Closeout activities on completed project	06/25/1992	05/31/1993	Jill Kiernan	DEQ	HQ	SRS
PRELIMINARY ASSESSMENT EQUIVALENT	07/08/1992	07/08/1992	Jill Kiernan	DEQ	HQ	SRS
Other remedial or investigative action recommended	07/09/1992	07/09/1992	Jill Kiernan	DEQ	HQ	SRS
EPA Site Inspection Prioritization	02/15/1995	02/16/1995		EPA		
No Further Remedial Action Planned under Federal program	02/16/1995	02/16/1995		EPA		
SITE PRIORITY EVALUATION FOR FURTHER ACTION	02/27/1995	02/28/1995	Kevin Dana	DEQ	HQ	SRS
Listing Review completed	02/28/1995	02/28/1995	Kevin Dana	DEQ	HQ	SRS
Proposal for Confirmed Release List recommended	03/01/1995	03/01/1995	Kevin Dana	DEQ	HQ	SRS
Proposal for Inventory recommended	03/01/1995	03/01/1995	Kevin Dana	DEQ	HQ	SRS

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SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

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Table 8
Outfall 22B DEQ Leaking Underground Storage Tanks List

RNO	Address	Log Number	Company	Cleanup Start	Cleanup End	Site Work Complete
R961130130	6161 NW 61st	26-89-0329	American Steel	12/29/89	12/5/90	12/5/90

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

November 30, 1999 12:54 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0329
UST FAC NBR: 4546 DATE REPORTED: 29-DEC-89

SITE NAME: AMERICAN STEEL
SITE ADDRESS: 6161 NE 61ST
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503)226-1511

----------SITE ASSESSMENT----------

DATE DISCOVERED: 29-DEC-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP Y	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SB)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: Y
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 29-DEC-89 REMEDIATION COMPLETED: 05-DEC-90
CLEANUP STARTED: 29-DEC-89 NO FURTHER ACTION: 05-DEC-90

(opens_inc.rpt)

Table 9
Outfall 22B Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
6400 NW Front Ave.	ELF Atochem	931457	Nov-93	11,500	AST	detached	Liquid nitrogen
6400 NW Front Ave.	ELF Atochem	940749	Jun-94	500	AST	yard	
6400 NW Front Ave.	ELF Atochem	940275	Mar-94	2,500	AST	yard	Liquid caustic
6400 NW Front Ave.	Pennwalt Corp.	881537	Feb-89	480 T	AST	detached	Liquid chlorine
6400 NW Front Ave.	Pennwalt Corp.	10716--REM	Apr-86	1,100	UST	yard	Diesel, Gasoline, by shift supr office
6400 NW Front Ave.	Pennwalt Corp.	10716--REM	Apr-86	2,200	UST	yard	Diesel, Gasoline, by shift supr office
6400 NW Front Ave.	Pennwalt Corp.	10710--REM	Apr-86	1,000	UST	yard	25' from auto repair bldg on Industrial plant property
6400 NW Front Ave.	Penn Salt Corp.	66903	Jan-51	1,000	UST	yard	
6400 NW Front Ave.	Penn Salt Corp.	58467	Aug-50	6,335	UST	yard	Moved 30' south
6400 NW Front Ave.	Penn Salt Corp.	50891	Sep-49	11,000	UST	yard	
6400 NW Front Ave.	Pennwalt Corp.	8374	Sep-74	2,000	UST	yard	
6400 NW Front Ave.	Penn Salt Corp.	3649	Nov-50	1,000	UST	yard	
6400 NW Front Ave.	Penn Salt Chemical Corp.	98693	Dec-62	250	AST	detached	Propane
6400 NW Front Ave.	Penn Salt Corp.	84852	Nov-55	1,000	AST	integral	Gasoline
6400 NW Front Ave.	Penn Salt Corp.	71857	Dec-52	500	AST	integral	Gasoline
6400 NW Front Ave.	Penn Salt Corp.	71671	Nov-52	500	AST	integral	Propane for lead pots & bunsen burners
6400 NW Front Ave.	Pennwalt Corp.	2269	Apr-86	1000	AST	detached	Steel, contains diesel
6451 NW Front Ave.	Pacific Roofing	9392	Apr-39	8000	UST	yard	Fuel oil
6529 NW Front Ave.	Liquid Air Corp.	931323	Oct-93	1500	UST	yard	
6529 NW Front Ave.	Air Liquide (acetylene	86	Mar-77	1000	AST	detached	
6551 NW Front Ave.	Pennsylvania Salt Co.	15729	Jul-41	2@ 8,000	UST	yard	Boiler
6200 NW St. Helens Rd.	Rhodia Inc.	3134	May-73	2@ 26,000	AST	yard	Alcohol
6200 NW St. Helens Rd.	Rhone-Poulenc Inc.	407	Mar-79	287	AST	detached	
6200 NW St. Helens Rd.	Rhone-Poulenc Inc.		Mar-57	1000	UST	yard	Diesel
6200 NW St. Helens Rd.	Rhone-Poulenc Inc.	37011	Dec-47	1000	UST	yard	
5909 NW 61st Ave.	Morns & Kirk Lead Mfg.	70481	Sep-52	12,000	UST	yard	
5909 NW 61st Ave.	Morns & Kirk Lead Mfg.	44705	Nov-48	25,000	UST	yard	
6161 NW 61st Ave.	Gilmore Steel	6608	Jul-74	12,000	UST	yard	
6161 NW 61st Ave.	Merrell Construction Co.	64123	Aug-51	675	UST	yard	

AST=Aboveground Storage Tank
REM=Removed or Replaced
UST=Underground Storage Tank

Table 10
Outfall 22B State Fire Marshal Hazardous Spills List

RNO	Address	Chemical	Date	Incident ID
R961130360	6400 NW Front	Chlorine	07/11/96	HM-06-960425
R961130360	6400 NW Front	Chlorine	08/01/95	HM-06-950387
R961130130	6161 NW 61st Ave	Unknown	04/02/97	02-291-970195
R961130130	6161 NW 61st	Waste Products	03/05/98	HM-06-980029
R961130130	6161 NW 61st	Railway Torpedo	03/23/91	02-291-910092
R961130130	6161 NW 61st Ave	Unknown Chemical	01/09/97	02-291-970059
R961130310	6200 NW St Helens Rd	Bromine	10/06/89	999-10-890376
R961130360	6400 NW Front	Sodium Hydroxide Liquid	06/29/90	02-291-900177
R961130360	6400 NW Front	Chlorine	05/19/92	02-291-920135
R961130360	6400 NW Front Ave	Hydrogen	03/04/96	HM-06-960226
R961130360	6400 NW Front Ave	Sodium Hydroxide	02/07/89	02-291-890168
R961130360	6400 NW Front Ave	Hydrochloric Acid	07/29/87	02-291-870033
R961130130	Metro Central Transfer 97210	Unknown Chemical	10/19/95	HM-06-950532

Table 11
Outfall 22B State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty
R961130360	6400 NW Front Ave	Washore Mechanical Inc	26295	1629	*	*	*	*	*
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Acetylene	Acetylene	Gas	Cubic Feet	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Anderol 750	Petroleum Hydrocarbon	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Antifreeze	Ethylene Glycol	Liquid	Gallons	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Argon	Argon	Gas	Cubic Feet	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Asbestos	Asbestos	Solid	Pounds	10,000-49,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Boiler Anti Foam BL-197	Polyalkylene Glycol	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Boiler Treatment BL-1770	Tetrapotassium	Liquid	Gallons	500-999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Burolock 4440	Phosphate Solution	Liquid	Gallons	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Carbon Dioxide	Carbon Dioxide	Gas	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Carbon Dioxide	Carbon Dioxide	Gas	Gallons	20-49
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Chemtreat BL 1285	Diethylhydroxylamine	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Chemtreat CL-1479	Sodium Hydroxide	Liquid	Gallons	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Chevron Insulating Oil	Petroleum Hydrocarbon	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Chlorate Filter Cake	Sodium Dichromate	Solid	Pounds	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Chlorine	Chlorine	Liquid	Pounds	1,000,000-2,499,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Compressor Oil	Petroleum Hydrocarbon	Liquid	Gallons	500-999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Freon 11	Trichlorofluoromethane	Liquid	Pounds	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Freon 12	Dichlorodifluoro-Methane	Liquid	Pounds	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Fuel Oil #6	Petroleum Oil	Liquid	Gallons	250,000-499,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Gasoline	Petroleum Distillates	Liquid	Gallons	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Helium	Helium	Gas	Cubic Feet	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	High Calcium Lime	Calcium Hydroxide	Solid	Pounds	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Hydraulic Oil	Highly Refined Base Lubricating Oils	Liquid	Gallons	500-999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Hydrochloric Acid	Hydrochloric Acid	Liquid	Gallons	10,000-49,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Hydrogen	Hydrogen	Gas	Cubic Feet	100,000-249,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Hydrogen Peroxide 50%	Hydrogen Peroxide	Liquid	Gallons	5,000-9,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Kenite 1000	Diatomaceous Earth	Solid	Pounds	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Kerosene	Kerosene	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Lime	Calcium Oxide	Solid	Pounds	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Lubricating Oil	Refined Mineral Oil	Liquid	Gallons	500-999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Methanol	Methanol	Liquid	Gallons	20-49

Table 11
Outfall 22B State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Mineral Spirits	Aliphatic Hydrocarbon	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Mobil Dte 24 Hydraulic Oil	Petroleum Hydrocarbon	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Mobila 523 Mobarma 523	Petroleum Distillates	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Napa Dexron III	Petroleum Distillates	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Nitrogen	Nitrogen	Gas	Cubic Feet	10,000-49,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Nitrogen Cryogenic Liquid	Nitrogen	Liquid	Gallons	10,000-49,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Nitrous Oxide	Nitrous Oxide	Gas	Cubic Feet	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Phreeguard 2110	Phosphate Solution	Liquid	Gallons	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Portland Cement	Calcium Oxide	Solid	Pounds	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Propane	Propane	Liquid	Gallons	500-999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Refrigerant 134 A	1,1,1,2-Tetrafluoroethane	Liquid	Pounds	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Refrigerant 22	Chlorodifluoromethane	Liquid	Pounds	5,000-9,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Resin Duolite C-467	Divinylbenzene/Styrene	Solid	Pounds	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sani-Clean	Sodium Hypochlorite	Liquid	Gallons	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sm-2 Modifier	Polytetrafluoroethylene	Solid	Pounds	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Borohydride	Sodium Borohydride	Liquid	Gallons	500-999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Carbonate	Sodium Carbonate	Liquid	Gallons	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Chlorate	Sodium Chlorate	Solid	Pounds	10,000-49,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Chlorate	Sodium Chlorate	Liquid	Gallons	250,000-499,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Chloride	Sodium Chloride	Solid	Pounds	100,000,000-249,999,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Dichromate	Sodium Dichromate	Solid	Pounds	10,000-49,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Hydroxide	Sodium Hydroxide	Liquid	Gallons	5,000,000-7,499,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Hydroxide	Sodium Hydroxide	Solid	Pounds	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Hypochlorite	Sodium Hypochlorite	Liquid	Gallons	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Metabisulfite	Sodium Metabisulfite	Solid	Pounds	100,000-249,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sodium Thiosulfate	Sodium Thiosulfate	Solid	Pounds	5,000-9,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Solvent 325	Aliphatic Hydrocarbon	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sorbitol	Sorbitol	Liquid	Gallons	200-499
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Spent Sulfuric Acid	Sulfuric Acid	Liquid	Gallons	10,000-49,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Sulfuric Acid	Sulfuric Acid	Liquid	Gallons	10,000-49,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Texaco Havoline Motor Oil SAE 20/20w	Petroleum Distillates	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Texaco Meropa 150 220 68	Petroleum Hydrocarbon	Liquid	Gallons	50-199

Table 11
Outfall 22B State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Texaco Regal R&O 150 100	Petroleum Distillates	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Texaco Ursa Super Plus 30	Petroleum Distillates	Liquid	Gallons	50-199
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	Used Oil	Petroleum Hydrocarbons	Liquid	Gallons	1,000-4,999
R961130360	6400 NW Front Ave	Elf Atochem North America	2372	2812	York Oil	Petroleum Hydrocarbon	Liquid	Gallons	50-199
R961130130	6161 NW 61st St	Metro Regional Government	24770	9199	Compressed Air	Nitrogen	Gas	Cubic Feet	1,000-4,999
R961130130	6161 NW 61st St	Metro Regional Government	24770	9199	Paint And Related Material	Toluene	Liquid	Gallons	1,000-4,999
R961130130	6161 NW 61st St	Metro Regional Government	24770	9199	Paint Latex	2-Butoxyethanol/ 1,2 Ethanediol	Liquid	Gallons	1,000-4,999
R961130130	6161 NW 61st St	Metro Regional Government	24770	9199	Pesticides Various	Misc. Pesticides	Solid	Pounds	1,000-4,999
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Acetylene	Acetylene	Gas	Cubic Feet	1,000-4,999
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Antifreeze	Ethylene Glycol	Liquid	Gallons	500-999
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	10,000-49,999
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Hydraulic Oil	Highly Refined Base Lubricating Oils	Liquid	Gallons	1,000-4,999
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	200-499
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Propane	Propane	Gas	Gallons	200-499
R961130130	6161 NW 61st St	Allied Waste Transportation In	22258	4953	Waste Oil	Petroleum Hydrocarbon	Liquid	Gallons	500-999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Acetone	Acetone	Liquid	Gallons	1,000-4,999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Acetylene	Acetylene	Gas	Cubic Feet	50,000-99,999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Calcium Carbide	Calcium Carbide	Solid	Pounds	50,000-99,999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Hydrogen	Hydrogen	Gas	Cubic Feet	100,000-249,999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Hydrogen	Hydrogen	Gas	Cubic Feet	1,000,000-2,499,999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Lime Hydrated	Calcium Hydroxide	Liquid	Gallons	10,000-49,999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Nitrogen	Nitrogen	Gas	Cubic Feet	50,000-99,999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Nitrogen Cryogenic Liquid	Nitrogen	Liquid	Gallons	1,000-4,999
R961130330	6529 NW Front Ave	Air Liquide America	1794	2813	Oil	Petroleum Hydrocarbon	Liquid	Gallons	200-499

Table 12
Outfall 22B Confirmed Release List

Site Name	Address	Zip	Site ID	Substances	Media	Phase	Program
Elf Atochem North America	6400 NW Front Ave	97210	398	Ammonia, Chlorobenzene, DDT,p,p'-, Sodium Bichromate, Sodium Chlorate	Soil, Groundwater, Surface Water	2	VCS
Gould Inc./NL Industries Inc.	5909 NW 61st Ave	97210	49	Arsenic, Cadmium, Chromium, Lead, Sulfuric Acid, Zinc	Air, Groundwater, Sediment, Soil, Surface Water	3	SRS
Rhone-Poulenc - East Doane Lake	6200 NW St. Helens Rd	97210	155	Benzene, D,2,4-, DB,2,4-, Dichlorobenzene,1,2-, Dichlorophenol,2,4-, Dichlorophenol,2,6-, Dichloroprop, Ethylbenzene, MCPA, Methylene Chloride, Phenols, T,2,4,5-, Tetrachlorodibenzo-p-dioxin,2,3,7,8-, Toluene, Trichloroethylene, Trichlorophenol,2,4,6-, Xylenes	Groundwater, soil	2	SRS

Phase
2: Facilities where remedial investigation or feasibility studies are underway.
3: Facilities where the remedial investigation and feasibility studies have been completed and remedial design, removal or remedial action is underway.

Program
SRS = Indicates that the site may be facing enforcement action through the DEQ
VCS = Voluntary Cleanup Program

Table 13
Outfall 22B SIC Information

SIC Number	SIC Definition
1541	Industrial Buildings and Warehouses
1629	Heavy Construction, NEC
2812	Alkalies and Chlorine
2813	Industrial Gases
2819	Industrial Inorganic Chemicals, NEC
2879	Pesticides And Agricultural Chemicals, NEC
4212	Local Trucking without Storage
4953	Refuse Systems
5169	Chemical & Allied Products, NEC
9199	General Government, NEC
9999	Non Classifiable Establishments

NEC = Not Elsewhere Classified

Table 14
Drainage Basin for Outfall 22B: Area by Land Use

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Within Basin (Acres)
R961130360	6400 NW Front Ave	43.51	IND	2.64
R961130420	N/NW Front Ave and 61st	0.44	IND	0.41
R961130330	6529 NW Front Ave	6.32	IND	6.32
R961130130	6161 WI/ NW 61st Ave	10.41	IND	10.32
R961130490		0.81	VAC	0.81
1N1W13A -- 00400		0.05	VAC	0.05
R961130440		10.51	VAC	0.40
R961130370		0.85	VAC	0.39
R961130350	5909 NW 61st Ave	9.21	VAC	8.51

Total Area by Landuse

Landuse	Total Area (acres)
Commercial	--
Industrial	19.7
Single Family Residence	--
Multifamily Residence	--
Vacant	10.2
Total Basin Area	**37**
Estimated Right-of-Ways	7.2

City of Portland Stormwater Outfall 22C
Summary of Existing Information

Physical Description

City of Portland Stormwater Outfall 22C is an 84-inch pipe and was constructed about 1978. This outfall mainly drains some upland wetlands, remnants of Doane Lake, Forest Park streams, and a few industrial sites.

The storm drainage basin for this outfall is approximately 1008 acres. Landuse in the basin is designated as predominantly vacant (86 percent of the total basin area), with some single family residences (5 percent of the area). Commercial and industrial landuse are both about 2 percent of the total area (approximately 20 acres each). Right-of ways are estimated at about 5 percent of the basin, or 55 acres.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Landuse map

There are two non-City outfalls in close proximity to Outfall 22C, both of which are upstream of the city outfall. These non-City outfalls are assigned to the following facilities:

- WP-06: Rhone Poulanc
- WP-213: Culvert

Ownership of WP-213 is unknown; it drains an undeveloped area between railroad tracks and Front Avenue The attached map of outfall location shows the City Outfall 22B and private outfall WP-213 on land rather than along the shoreline. Both of these outfalls are located at the top of the bank. Private outfall WP-06 is an underwater discharge.

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall was identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 22B are available from two sources:

- Portland Harbor Sediment Investigation, EPA/DEQ (Stations SD077, SD078, and SD080)
- McCormick and Baxter RI Phase I, DEQ (Stations T-1A, T2A, and S-2A)

Six sediment sample locations sampled in the vicinity of the Outfall 22C (see attached figure) were used to screen sediment data. All stations (SD080, SD078, SD077, T2A, T-1A, and S-2A) had samples collected at the surface (0-10 cm or 0-0.2 feet). Station SD080 also had a sub-sample collected at the surface. Sediment stations SD078, SD080 and T2A are upstream of the City outfall. The remaining sediment stations are downstream of Outfall 22C.

Table 1 shows the available sediment data with station ID, sample ID, field replicate and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall. The sediment data collected in 1997 as part of the Portland Harbor Sediment Investigation and McCormick and Baxter RI Phase I showed elevated concentrations for several analytes in exceedence of the DEQ baseline at the surface and may be of interest to the City. These analytes are:

- **Acenaphthene:** detected in concentrations greater than 3 times the baseline at sediment station SD077
- **Benzo(k)fluoranthene:** detected in concentrations greater than 3 times the baseline at sediment station SD077
- **Fluorene:** detected in concentrations greater than 3 times the baseline at sediment station SD077
- **Pyrene:** detected in concentrations greater than 3 times the baseline at sediment station SD077
- **Carbazole:** detected in concentrations greater than 3 times the baseline at sediment station SD077

The primary purpose for identifying analytes of interest is to help determine potential sources contributing to the City's conveyance system. Table 2 provides information on industrial uses of the analytes of interest that can aid in evaluating specific facilities and their potential to contribute contaminants.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 lists the industrial chemical uses for analytes of interest at Outfall 22C.

Table 3 summarizes the available information on facilities currently located in the Outfall 22C drainage basin, including where site runoff drains, discharge permits, business type and whether there is exposure of site activities to stormwater.

Table 4 shows available stormwater data for industrial facilities required to have an NPDES permit to discharge to the City's stormwater system.

Table 5 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 6 EPA's Toxic Release Inventory, which records releases of chemicals to the environment, and the Hazardous Waste Generators, which shows sites that treat, store, or dispose of hazardous materials.

Table 7 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 7.

Table 8 is DEQ's list of leaking underground storage tanks (LUST). The list includes both sites with active leaks and those that have been cleaned up to the satisfaction of the DEQ in the past. Behind this table, the LUST incident reports are provided for facilities listed in Table 8.

Table 9 is DEQ's list of permitted tanks that contains information on sites that are registered to receive commercial fuel deliveries.

Table 10 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 11 is the State Fire Marshal's list of hazardous spills to which the fire department has responded.

Table 12 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 13 is the CRL (Confirmed Release List) inventory of sites that are currently being remediated under one of three separate programs, the Voluntary Cleanup Program, the Site Response Program, and the Site Assessment Program.

Table 14 lists the SIC numbers and descriptions for the sites identified in the Table 3 facility list.

Table 15 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type.

The following databases were searched but no information was available for sites within the drainage basin:

- EPA Emergency Response Notification System
- EPA RCRA Treatment Storage Disposal
- EPA Corrective Action List

Outfall 22C Summary

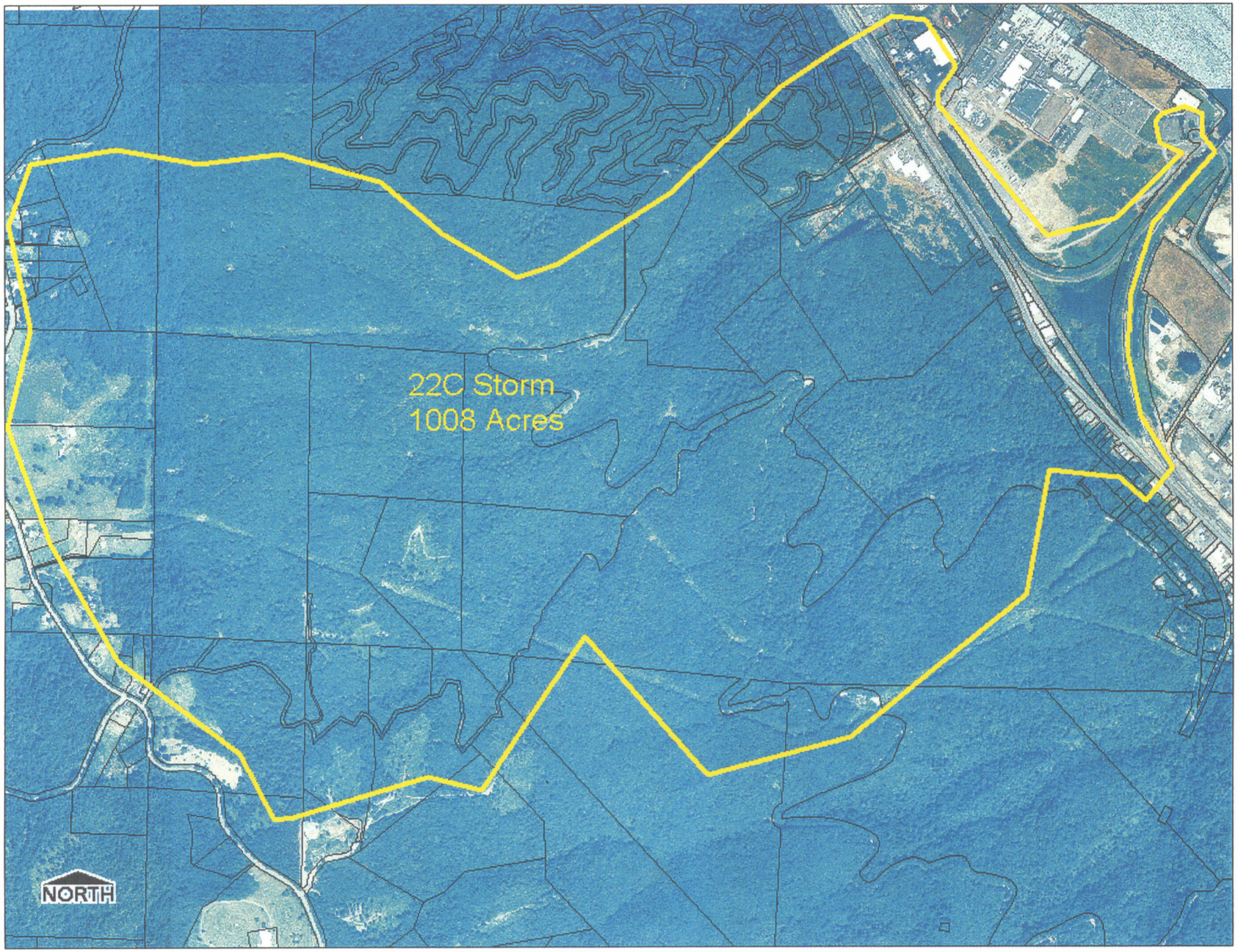
The analytes of interest identified as of potential interest to the City outfall include the following polyaromatic hydrocarbons (PAHs):

- Acenaphthene
- Benzo(k)fluoranthene
- Fluorene
- Pyrene
- Carbazole

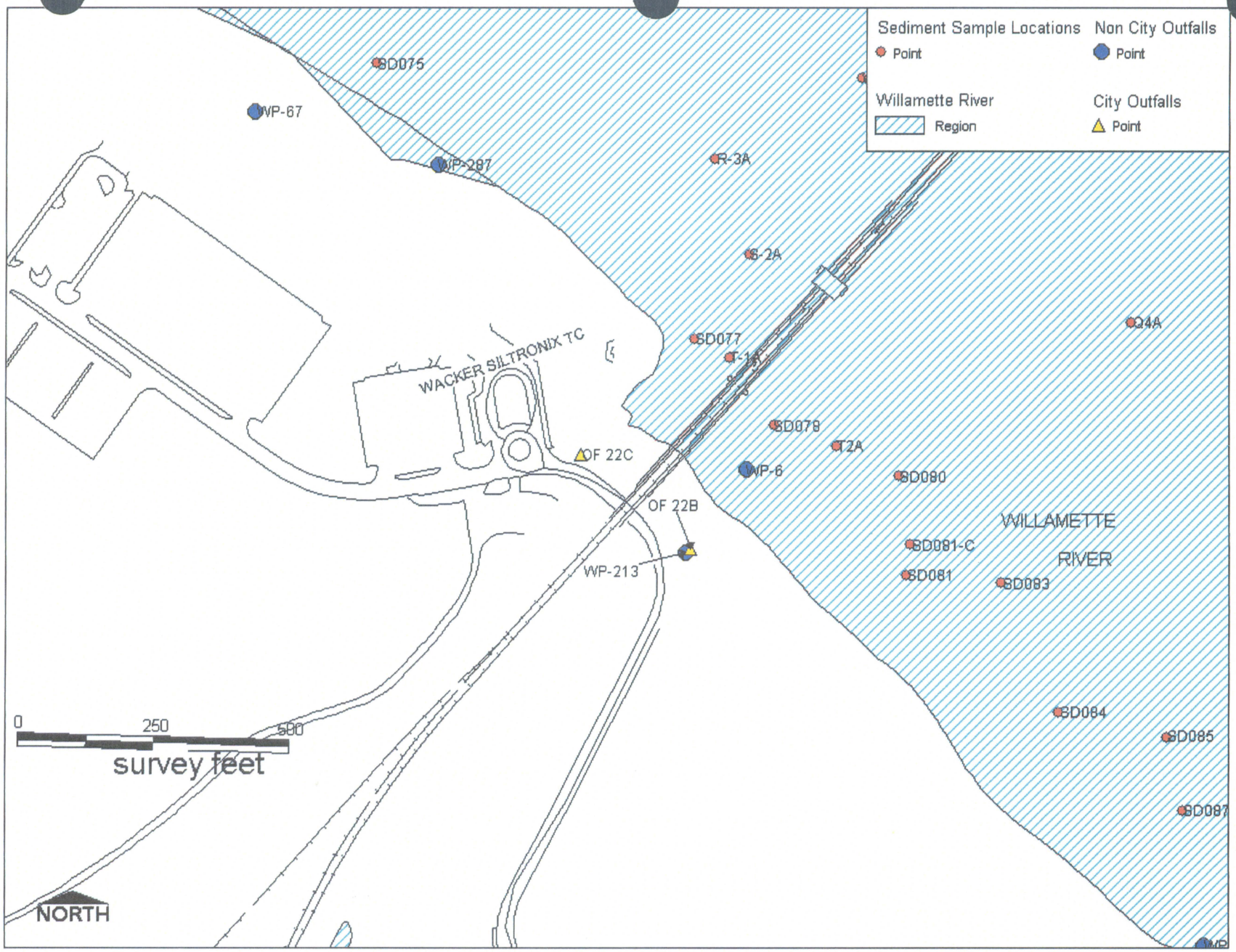
Reviews of the environmental databases suggest several sites that have the potential for significant release of PAHs to the City's storm system. Koppers Industries is a coal tar pitch distributor and the NPDES stormwater data (see Table 4) from this site shows PAHs concentrations in stormwater.

The ECSI database also indicates that PAHs have been detected at Wacker Siltronic Corp. DEQ's ECSI report reads: *"Predecessor company of Northwest Natural Gas accumulated 30,000 cubic yards of coal tar in on-site pits. Coal tar pits were buried under 10 feet of overburden and spent oxide in 1973. Wacker purchased part of the property in 1978. Subsurface soil sampling on the vacant southern half of the site in 1985 found high levels of PAHs, plus lesser amounts of herbicides. Similar contamination was found in subsurface soil sampling on another portion of the site in 1990. The same year groundwater contaminated with TPH and BTEX compounds was found near a fuel line corridor. In addition, there has been occasional releases of solvents from Wacker's operations".* PAHs are not measured in the Wacker Siltronic stormwater to evaluate release into stormwater.

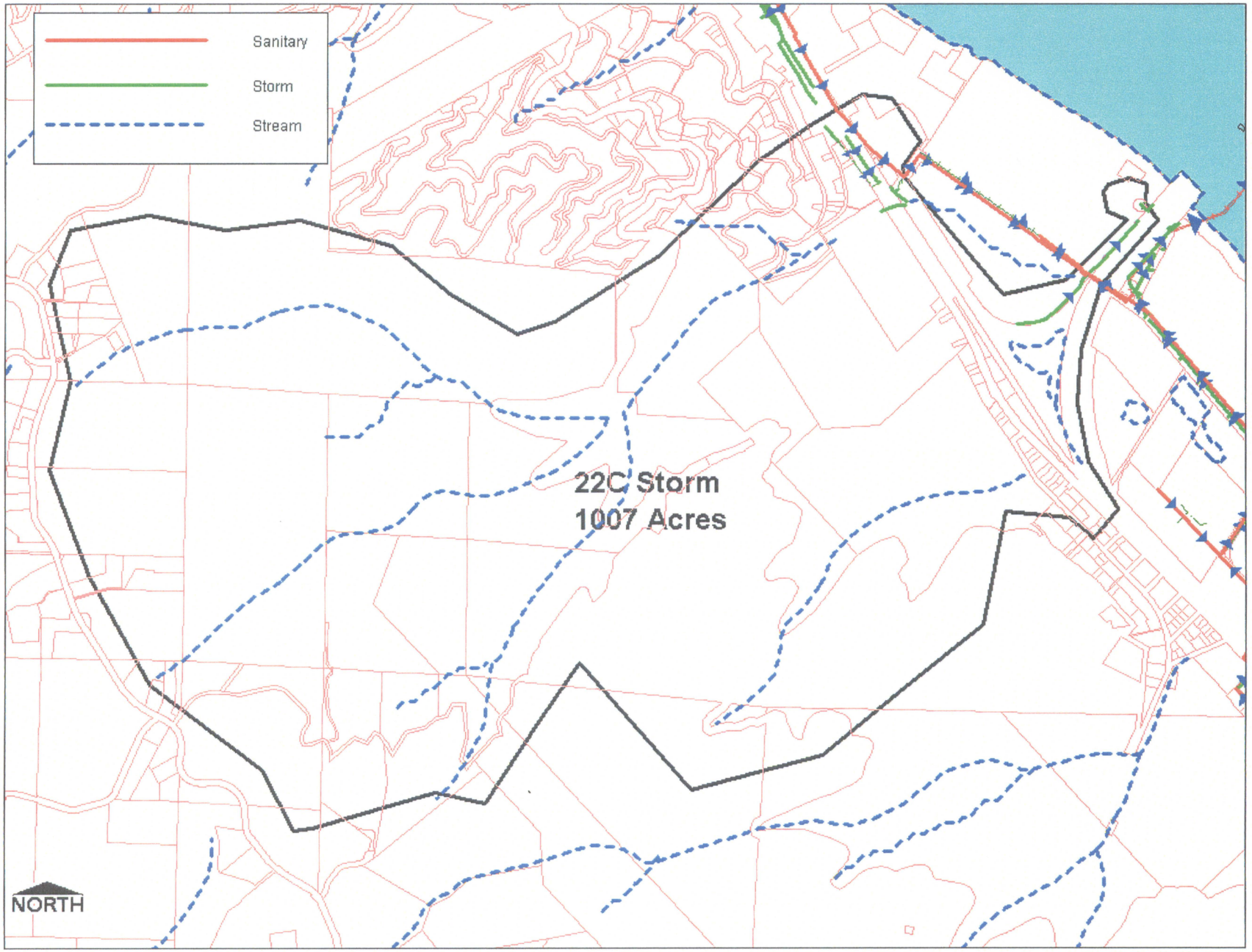
Figures



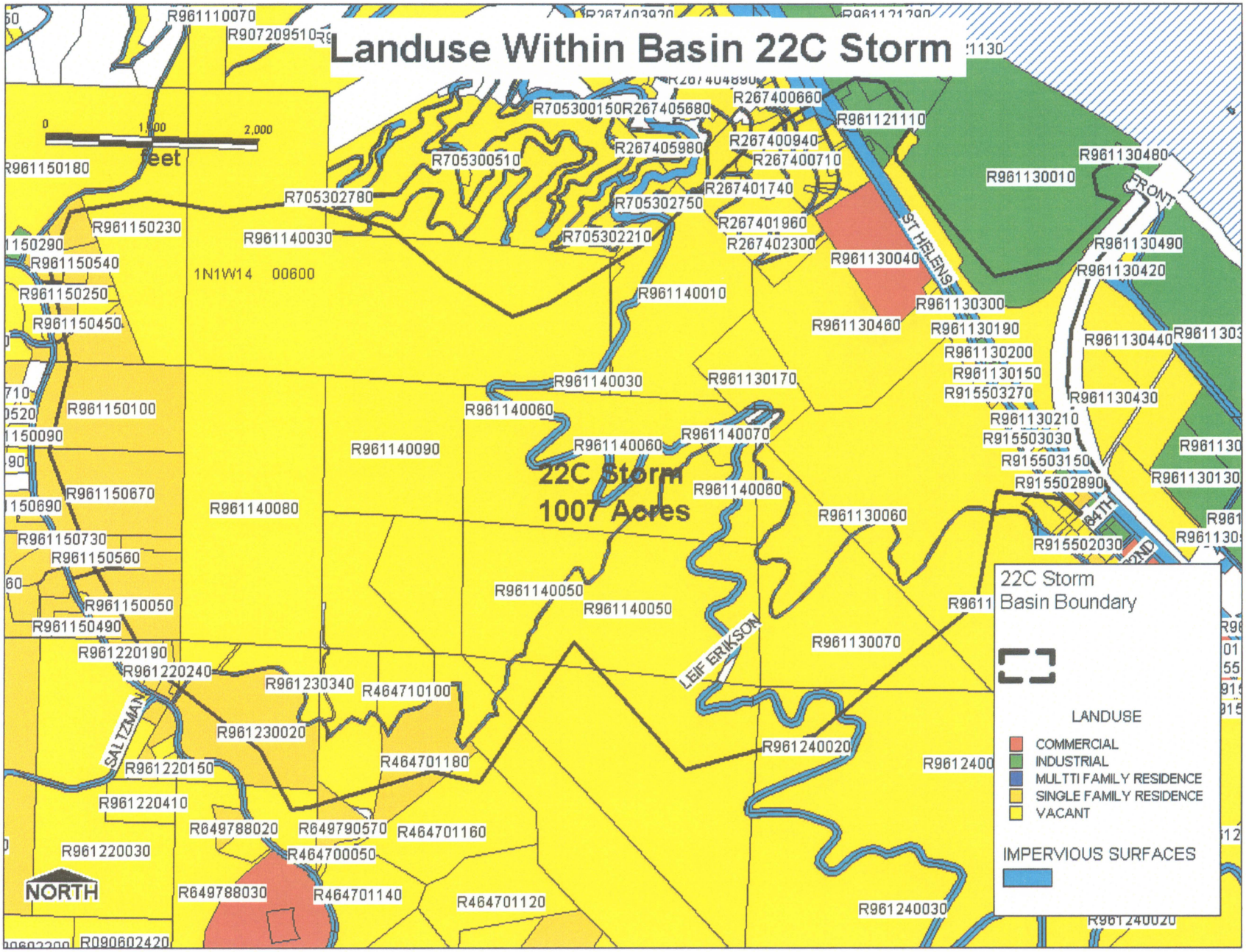
Basin 22C Aerial Photo
City of Portland



Outfall 22C Map with Sediment Sample and Non-City Outfall Locations
City of Portland



22C Outfall - Stormwater Drainage Map
City of Portland



Land Use Within Basin 22C
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 22C

				StationID	SD080	SD080	T2A	SD078	T-1A	SD077	S-2A
				Sample ID #	0	0	SC61	0	SC61A	0	SC72
				Field Replicate #	#	#	#	#	#	#	#
				SubSample #	#	E	#	#	#	#	#
				Sample Depth	0-10 CM	0-10 CM	0-0.2 FT	0-10 CM	0-0.2 FT	0-10 CM	0-0.2 FT
				Sample Date	09/22/1997	09/22/1997	09/26/1990	09/21/1997	09/26/1990	09/21/1997	09/26/1990
Analyte	Units	DEQ Baseline	Analytes of Interest								
Aluminum	PPM	42800		40000	24600	21000	25500	14000	30600	21000	
Antimony	PPM	5		5 UJ	10 U	7.5 E		12 E		6.2 E	
Arsenic	PPM	5		5 U	3	5.8 E	8 U	4.2 E	10 U	5.5 E	
Barium	PPM	195		175	160	180	149	130	153	160	
Beryllium	PPM	0.7		0.7	1 U	0.79	0.5	0.9	0.7	0.7	
Cadmium	PPM	0.6		0.4	1 U	0.58 U	0.3 U	0.88 U	0.4	0.55 U	
Chromium	PPM	41		37.1	29	28	24.9	14	22.6	27	
Cobalt	PPM	19.7		18.3	17	27	15.4	26	21.3	19	
Copper	PPM	60		42.6	40	34	25.4	12	29.4	37	
Iron	PPM	45000		44200	33300	40000	41400	51000	58600	35000	
Lead	PPM	30		14	20 U	26	25	21	27	23	
Manganese	PPM	810		693	650	560	487	590	605	620	
Mercury	PPM	0.1		0.06	0.08	0.1	0.1	0.01	0.03	0.08	
Nickel	PPM	32		30	26	25	25	11	21	23	
Selenium	PPM	15		14	1 U	0.39 UE	11	0.59 UE	14	0.36 UE	
Silver	PPM	1.4		1.2	2 U	0.78 UE	1	1.2 UE	1.6	0.73 UE	
Thallium	PPM	13		5 U	1 U	1.2	8 U	1.6	10 U	0.78	
Titanium	PPM	2075							3200		
Vanadium	PPM	112		106	86	95	89.1	160	147	87	
Zinc	PPM	118		131	119	190	100	90	124	130	
Total organic carbon	PCT	2		1.5	1.96	0.3	0.98	0.3	1.3	1.1	
4-Methylphenol	PPB	680		500	50 U	570	48	480 UE	68	350	
Benzoic acid	PPB	200		190 U		790 U	190 U	1200 U	190 UJ	**1200**	
Benzyl alcohol	PPB	20		19 U		160	19 UJ	240 U	19 UJ	300 U	
Bis(2-ethylhexyl) phthalate	PPB	390		260	640	250	210	1100 E	180 U	1000	
Butyl benzyl phthalate	PPB	20		19 U	20 U	16 U	19 U	24 UE	19 U	30 UE	
Di-n-butyl phthalate	PPB	20		21	29	16 U	19 U	24 U	19 U	30 U	
Di-n-octyl phthalate	PPB	20		19 U	20 U	16 U	19 U	24 UE	19 U	30 UE	
Dibenzofuran	PPB	100		19 U	20	170 E	20	92	160	120	
Dimethyl phthalate	PPB	20		19 U	20 U	16 UE	19 U	24 U	19 U	30 U	
Pentachlorophenol	PPB	97		11	50 U	160 UE	4.6	240 U	6.4	300 U	
Phenol	PPB	20		19 U	20 U	160 U	19 U	240 U	19 U	300 U	
2-Methylnaphthalene	PPB	150		19 U	20 U	280	24	73	430	110	
Acenaphthene	PPB	180	X	32	53	370 E	46	81	**2400**	180	
Acenaphthylene	PPB	60		19 U	44	250 E	19 U	53	140	59	
Anthracene	PPB	150		64	103	310 E	60	160	420	97	
Benzo(a)anthracene	PPB	360		220	368	650 E	240	580	740	290	
Benzo(a)pyrene	PPB	500		240	345	790	360	530	890	360	
Benzo(b)fluoranthene	PPB	350		170	366		300		700		
Benzo(g,h,i)perylene	PPB	250		130	199	470	200	330	420 J	340	
Benzo(k)fluoranthene	PPB	225	X	190	119		310		**670**		
Chrysene	PPB	425		310	378	860 E	340	720	920	420	
Dibenz(a,h)anthracene	PPB	125		34	42	150	74	120	140	150 U	
Fluoranthene	PPB	600		310	670	1300 E	440	750	1700	670	
Fluorene	PPB	125	X	30	52	290 E	34	95	**1400**	140	
Indeno(1,2,3-c,d)pyrene	PPB	225		140	253	340	190	340	380	230	
Naphthalene	PPB	200		31	34	410 E	55	160	300	270	
Phenanthrene	PPB	700		180	265	930 E	230	380	2200	350	
Pyrene	PPB	700	X	390	700	1400 E	580	950	**2500**	700	
HPAH	PPB	2400				6800		5400		3640	
LPAH	PPB	700				**2550 E**		920		1090	
Carbazole	PPB	100	X	19 U	20 U	59	40 J	54	**700 J**	59 U	
2,4-D	PPB	3.3		**93**	0.2 U		**21**		**24**		
2,4-Dichlorophenoxybutyric acid	PPB	5			0.5 U						
Total Polychlorinated Biphenyls	PPB	180				4.7 U		4 UE		4.5 U	

Qualifier List:

Qualifier	Definition
E	Estimate
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UE	Undetected at the detection limit shown; Estimate.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Table 2
Industrial Chemical Uses for Analytes of Interest at Outfall 22C

Chemical	Use
Acenaphthene	combustion of coal and diesel fuel. Used as a chemical intermediate for a variety of products including dyes, pigments, fluorescent whiteners, and pesticides. May be in manufacturing effluents waste byproducts. May be released from landfills, municipal waste water treatment facilities and waste incinerators because the widespread use of acenaphthene in a variety of products.
Benzo(k)fluoranthene	Occurs in fossil fuels. No commercial production or known use. Occurs ubiquitously as a product of incomplete combustion, and has been identified in smoke of cigarettes and marijuana cigarettes, emissions from gasoline engines, in emissions from burning of various types of coal, emissions from oil-fired heating and oil-fired stoves, used motor oils, lubricating oils, and coal tar.
Carbazole	Anthracene derivative. Contained in coal, petroleum, and peat and may be released to the environment from the incomplete combustion of these materials. May be released to the environment in emissions from waste incineration, tobacco smoke, aluminum manufacturing, and rubber combustion. May be released to via effluents from coal processing and wood-treatment facilities. Used in manufacturing of insecticides, lubricants, rubber antioxidants, odor inhibitor in detergents: as important dye intermediate in making photographic plates sensitive to UV light.
Fluorene	Occurs ubiquitously in products of incomplete combustion, in cigarette smoke, in exhaust from gasoline engines and in sewage sludge. Released to the atmosphere in emissions from the combustion of biomass, coal, polymers, tobacco, refuse, wood, and fly ash, etc from municipal waste incinerators; it is also released in emissions from asphalt paving and diesel exhausts. Combustion of wood, newspapers, and domestic waste in wood stoves releases fluorene to the atmosphere.
Pyrene	Released to environment as a ubiquitous product of incomplete combustion, occurring in exhaust from motor vehicles, emissions from cigarette smoke, coal-, oil-, and wood-burning stoves and furnaces. Used as a starting material in the manufacture of dyes and optical brighteners.

Table 3
Outfall 22C Facility List

Aquarius Database Search: Jul-2000
Basin Reconnaissance: Jul-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit	Business Type	Exposure	Comments
R961130150	A & C Foundry	6720 NW St. Helens	MS4	5084, 3559			Metal Fabrication	Yes	
R915502650	Accurate Meter	6423 NW St. Helens	MS4	5063			Equipment repair	Yes	
R961130040	City of Portland Police Impound Yard	7200 NW St. Helens	MS4	4226			Vehicle Salvage	Yes	
R915501440	Coffee Express	6115 NW St. Helens	MS4	5499			Coffee stand	No	
R961130190 R961130200	Imperial Trucking Inc.	6834 NW St. Helens Rd.	MS4	4212					vacant
R915501440	Interstate Sandblasting	6115 NW St. Helens	MS4	1799, 5561, 3479			Equipment cleaning	Yes	
R915502950	Kinder Morgan	6565 NW St. Helens	MS4	4613			Substation	Yes	
R961121110	Koppers Industries	7540 NW St. Helens	MS4	2865*, 4491*, 5169*	NPDES	Individual	Bulk organic chemicals	Yes	
R961121110	Koppers Industries	7540 NW St. Helens	Sanitary	2865*, 4491*, 5169*	Pretreatment	314.001	Bulk organic chemicals		
R915501360	Landstar Gemini Transportation	6215 NW St. Helens	MS4	4212			Transportation	Yes	
R915501440	Lee & Eastes Tank Lines	6115 NW St. Helens	MS4	4212			Transportation	Yes	
R915501360	Performance Publishing Inc. - Sales	6215 NW St. Helens	MS4	2731			Office	No	
R915502650	Ray's Truck Service	6423 NW St. Helens	MS4	7538			Vehicle repair	Yes	
R915502950	Santa Fe Pacific Pipeline Co.	6565 NW St. Helens	MS4	4613*	NPDES	1500A	Transportation	Yes	
R915501440	Situs Inc.	6115 NW St. Helens	MS4	5712				Yes	vacant
R961130190 R921130200	Total Western	6834 NW St. Helens Rd.	MS4	1711?			Metal Fabrication	No	
R915501360	U-Haul Company	6215 NW St. Helens	MS4	7513			Vehicle storage	Yes	vacant
R915501360	Union 76	6215 NW St. Helens	MS4	5541			Gas station	Yes	
R961130010	Wacker Siltronic Corp.	7200 NW Front Ave.	MS4	3674*	NPDES	1200Z	Manufacturing	Yes	
R961130010	Wacker Siltronic Corp.	7200 NW Front Ave.	MS4	3674*	NPDES	Individual	Manufacturing	Yes	
R961130010	Wacker Siltronic Corp.	7200 NW Front Ave.	Sanitary	3674*	Pretreatment	469.001	Manufacturing	Yes	
R915501360	WWS Trucking Inc.	6215 NW St. Helens	MS4	4212			Transportation	Yes	

* Indicates SIC # has been verified via site inspection

CEG = Conditionally Exempt Generator
SQG = Small Quantity Generator

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22C

Location Code	Collection Date	Permit Type	Flow - batch	Flow - daily	Flow - monthly	pH	Temp.	Total O&G	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a) anthacene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene
			gallons	gallons	gallons	SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Koppers																
01	10/01/1996	INDIV				7	57	1								
01	11/01/1996	INDIV				7.2	52	2								
01	12/03/1996	INDIV				7	48	4								
01	01/01/1997	INDIV			32.903	7.1	45									
01	02/01/1997	INDIV			7.857	7.2	50									
01	03/01/1997	INDIV			17.742	7.1	50									
01	04/01/1997	INDIV			14.667	7	57									
01	05/01/1997	INDIV			10.645	6.8	62									
01	06/01/1997	INDIV				7.1	64	8.5								
01	06/30/1997	INDIV				6.95	57	2								
01	08/28/1997	INDIV				7.2	60	7.7								
01	09/18/1997	INDIV		3667		7	58	3.7								
01	09/23/1997	INDIV							0.0005	0.0005	0.0004	0.0012	0.0025	0.0025	0.002	0.00087
01	10/01/1997	INDIV		17742			53	2								
01	10/16/1997	INDIV						12								
01	10/29/1997	INDIV						3.2								
01	11/10/1997	INDIV		20000		6.8	48	2								
01	11/12/1997	INDIV														
01	11/21/1997	INDIV						2.7								
01	11/26/1997	INDIV						2								
01	12/09/1997	INDIV						3								
01	12/16/1997	INDIV						2								
01	12/22/1997	INDIV		28387		6.9	42	5.4								
01	01/05/1998	INDIV		21290		7	45	2								
01	01/14/1998	INDIV						4.2								
01	01/21/1998	INDIV						2	0.017	0.0047	0.01	0.019	0.019	0.011	0.022	0.011
01	02/02/1998	INDIV		31429		7	52	2.1								
01	02/10/1998	INDIV						2.4								
01	02/18/1998	INDIV						4.4								
01	02/24/1998	INDIV						4.1								
01	03/02/1998	INDIV		21290		7	55	4.1								
01	03/11/1998	INDIV						4.8								
01	03/23/1998	INDIV						2.5								
01	04/23/1998	INDIV		7333		6.9	59	5.4	0.0025	0.00024	0.0023	0.026	0.045	0.036	0.034	0.036
01	05/13/1998	INDIV		21903		7	60	2.1								
01	05/19/1998	INDIV						2.4								
01	05/27/1998	INDIV						2								
01	06/24/1998	INDIV		7330		6.85	64	2.8								
01	09/18/1998	INDIV		7333		6.9	68	2	0.01	0.0084	0.0056	0.041	0.073	0.055	0.063	0.055
01	10/13/1998	INDIV		12258		6.7	58	2	0.0049	0.0017	0.0054	0.066	0.144	0.1	0.099	0.1
01	11/03/1998	INDIV						2.6								
01	11/20/1998	INDIV						2								
01	11/23/1998	INDIV		30333		7		2.6								
01	11/30/1998	INDIV						3								
01	12/07/1998	INDIV						2.7								
01	12/14/1998	INDIV						2.3								
01	12/28/1998	INDIV		52580		7.1	13.6	2								
01	01/04/1999	INDIV		28387		7.2	9.9	4.5	0.033	0.041	0.0079	0.0094	0.0084	0.0092	0.0047	0.0092
01	01/11/1999	INDIV						3.3								
01	01/18/1999	INDIV						4.1								

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22C

Location Code	Collection Date	Permit Type	Chrysene mg/L	Dibenzo(a,h) anthracene mg/L	Fluoranthene mg/L	Fluorene mg/L	Indeno (1,2,3-cd) pyrene mg/L	Naphthalene mg/L	Phenanthrene mg/L	Pyrene mg/L	Freon extractable matls - total mg/L	Phenols - Total (EPA 420) mg/L	Phenol mg/L
Koppers													
01	10/01/1996	INDIV											0.05
01	11/01/1996	INDIV											0.52
01	12/03/1996	INDIV										0.06	
01	01/01/1997	INDIV									6.5	0.1	
01	02/01/1997	INDIV									1.5	0.1	
01	03/01/1997	INDIV									3.2	0.17	
01	04/01/1997	INDIV									1.6	0.08	
01	05/01/1997	INDIV									4	0.05	
01	06/01/1997	INDIV										0.24	
01	06/30/1997	INDIV										0.085	
01	08/28/1997	INDIV										0.05	
01	09/18/1997	INDIV										0.1	
01	09/23/1997	INDIV	0.0001	0.00063	0.0037	0.0012	0.00002	0.001	0.0002	0.0001			
01	10/01/1997	INDIV										0.09	
01	10/16/1997	INDIV											
01	10/29/1997	INDIV											
01	11/10/1997	INDIV										0.1	
01	11/12/1997	INDIV										0.07	
01	11/21/1997	INDIV											
01	11/26/1997	INDIV											
01	12/09/1997	INDIV										0.283	
01	12/16/1997	INDIV											
01	12/22/1997	INDIV											
01	01/05/1998	INDIV										0.15	
01	01/14/1998	INDIV											
01	01/21/1998	INDIV	0.019	0.0003	0.023	0.012	0.032	0.00035	0.01	0.019			
01	02/02/1998	INDIV										0.05	
01	02/10/1998	INDIV											
01	02/18/1998	INDIV											
01	02/24/1998	INDIV											
01	03/02/1998	INDIV										0.13	
01	03/11/1998	INDIV											
01	03/23/1998	INDIV											
01	04/23/1998	INDIV	0.029	0.0058	0.031	0.0014	0.047	0.00024	0.012	0.03		0.05	
01	05/13/1998	INDIV										0.05	
01	05/19/1998	INDIV											
01	05/27/1998	INDIV											
01	06/24/1998	INDIV										0.12	
01	09/18/1998	INDIV	0.047	0.012	0.044	0.0097	0.079	0.0019	0.024	0.043		0.052	
01	10/13/1998	INDIV	0.073	0.052	0.052	0.0039	0.18	0.00048	0.018	0.048		0.05	
01	11/03/1998	INDIV										0.1	
01	11/20/1998	INDIV											
01	11/23/1998	INDIV											
01	11/30/1998	INDIV										0.05	
01	12/07/1998	INDIV											
01	12/14/1998	INDIV											
01	12/28/1998	INDIV											
01	01/04/1999	INDIV	0.0094	0.0003	0.018	0.025	0.0076	0.48	0.012	0.016		0.05	
01	01/11/1999	INDIV											
01	01/18/1999	INDIV											

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22C

Location Code	Collection Date	Permit Type	Flow - batch	Flow - daily	Flow - monthly	pH	Temp.	Total O&G	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a) anthacene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene
			gallons	gallons	gallons	SU	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Koppers																
01	01/25/1999	INDIV						4.6								
01	02/02/1999	INDIV						2								
01	02/08/1999	INDIV						2								
01	02/17/1999	INDIV						2								
01	02/22/1999	INDIV	49286			7.2	9.7	3.1								
01	03/01/1999	INDIV		35484		7.1		2.8								
01	03/08/1999	INDIV						3.1								
01	03/15/1999	INDIV						2.9								
01	03/22/1999	INDIV						2.3								
01	03/29/1999	INDIV						2								
01	04/05/1999	INDIV		22000		7		2.5	0.014	0.028	0.11	0.02		0.051	0.024	0.0061
01	04/12/1999	INDIV						3								
01	04/26/1999	INDIV						2								
01	05/04/1999	INDIV						2								
01	05/12/1999	INDIV						2								
01	05/17/1999	INDIV						2								
01	05/25/1999	INDIV				6.8	15.9	2.7								
01	06/07/1999	INDIV		14667		7.1	18	2								
01	06/23/1999	INDIV						2								
01	07/27/1999	INDIV		7097		7.3	24.7	2	0.0004	0.00017	0.0005	0.0026	0.0031	0.0034	0.0022	0.0021
01	08/11/1999	INDIV		7097		7.2	21	2								
01	09/02/1999	INDIV		7333		8.2	22.7	2								
01	10/13/1999	INDIV		14194		8.9	13.2	3	0.0066	0.0019	0.0039	0.015	0.021	0.02	0.017	0.016
01	10/27/1999	INDIV						3.4								
01	11/08/1999	INDIV		22000		8	12.1	5.7								
01	11/17/1999	INDIV						4.4								
01	11/22/1999	INDIV						2.7								
01	12/02/1999	INDIV		21290		7.5	11.2	7.5								
01	12/07/1999	INDIV						4.5								
01	12/16/1999	INDIV						3.4								
01	01/03/2000	INDIV		21290		7	8.9	2	0.0077	0.0013	0.0052	0.024	0.042	0.03	0.034	0.029
01	01/11/2000	INDIV						2								
01	01/24/2000	INDIV						2.8								
01	02/01/2000	INDIV		37931		7.4	10.1	2.8								
01	02/08/2000	INDIV						4.7								
01	02/15/2000	INDIV						7.1								
01	02/22/2000	INDIV						2								
01	02/29/2000	INDIV						4.5								
01	03/13/2000	INDIV		42742		7	10	2								
01	03/21/2000	INDIV						4.9								
01	03/28/2000	INDIV						2.1								
01	04/13/2000	INDIV		14667		7.6	14.6	3.4	0.004	0.0017	0.0014	0.0057	0.0079	0.0072	0.0058	0.0094
01	04/26/2000	INDIV						2								
01	05/04/2000	INDIV		21290		7.4	15.5	2.3								
01	05/10/2000	INDIV						5.1								
01	05/24/2000	INDIV						2								
01	06/13/2000	INDIV		7333		6.5	17	2.5								

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22C

Location Code	Collection Date	Permit Type	Chrysene	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	Freon extractable matls - total	Phenols - Total (EPA 420)	Phenol
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Koppers													
01	01/25/1999	INDIV											
01	02/02/1999	INDIV										0.06	
01	02/08/1999	INDIV											
01	02/17/1999	INDIV											
01	02/22/1999	INDIV											
01	03/01/1999	INDIV										0.05	
01	03/08/1999	INDIV											
01	03/15/1999	INDIV											
01	03/22/1999	INDIV											
01	03/29/1999	INDIV											
01	04/05/1999	INDIV	0.022	0.0042	0.03	0.019	0.033	0.44	0.035	0.028		0.26	
01	04/12/1999	INDIV											
01	04/26/1999	INDIV											
01	05/04/1999	INDIV										0.05	
01	05/12/1999	INDIV											
01	05/17/1999	INDIV											
01	05/25/1999	INDIV											
01	06/07/1999	INDIV										0.05	
01	06/23/1999	INDIV											
01	07/27/1999	INDIV	0.003	0.0016	0.0037	0.00016	0.0016	0.00026	0.0014	0.0032		0.05	
01	08/11/1999	INDIV										0.05	
01	09/02/1999	INDIV										0.07	
01	10/13/1999	INDIV	0.0185	0.0063	0.024	0.0055	0.0087	0.035	0.016	0.023		0.06	
01	10/27/1999	INDIV											
01	11/08/1999	INDIV										0.1	
01	11/17/1999	INDIV											
01	11/22/1999	INDIV											
01	12/02/1999	INDIV										0.09	
01	12/07/1999	INDIV											
01	12/16/1999	INDIV											
01	01/03/2000	INDIV	0.029	0.0056	0.046	0.0055	0.038	0.00079	0.016	0.042		0.16	
01	01/11/2000	INDIV											
01	01/24/2000	INDIV											
01	02/01/2000	INDIV										0.05	
01	02/08/2000	INDIV											
01	02/15/2000	INDIV											
01	02/22/2000	INDIV											
01	02/29/2000	INDIV										0.05	
01	03/13/2000	INDIV											
01	03/21/2000	INDIV											
01	03/28/2000	INDIV											
01	04/13/2000	INDIV	0.007	0.0023	0.0097	0.0023	0.0052	0.013	0.0039	0.0084		0.05	
01	04/26/2000	INDIV											
01	05/04/2000	INDIV										0.54	
01	05/10/2000	INDIV											
01	05/24/2000	INDIV											
01	06/13/2000	INDIV										0.05	

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 22C

Location Code	Collection Date	Permit Type	pH	Fluoride	TP	BOD5	COD	TSS	TOC	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Polar O&G	Non-Polar O&G	Total O&G
			SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Wacker Siltronics																				
01	05/28/1997	1200Z	9.29	<0.5	<0.035	<4	39.7	117	6.42	0.00239	<0.001	0.00898	0.0242	0.00766	0.00083	0.0083	0.319	0.358	0.751	1.11
01	11/19/1997	1200Z	7.35			11	30.9	26.75	11.9	0.0025	<0.001	0.0037	0.009	0.0021	0.0002	0.0047	0.0911			<0.5
01	05/19/1998	1200Z	7.35					20.25					0.0082	0.0011			0.173			<5
01	11/10/1998	1200Z	6.87					3.75					0.0056	<0.001			0.193			<5
01	05/11/1999	1200Z	6.36					6					0.0118	0.0015			0.33			5
01	10/27/1999	1200Z	7.05					14					0.0097	0.002			0.173			<5
01	05/10/2000	1200Z	7					151.5					0.0198	0.00902			0.347			<5
01	07/03/2000	1200Z						14.75												
02	05/28/1997	1200Z	5.64	<0.5	<0.035	<4	67	75	6.37	0.00115	0.00111	0.015	0.0394	0.0199	<0.0002	0.0103	0.282	0.818	1.87	2.69
02	11/19/1997	1200Z	6.92			8.4	22.7	13.5	9.36	0.001	<0.001	0.0076	0.0064	0.0035	<0.0002	0.0077	0.133			1.75
02	05/19/1998	1200Z	6.9					34.25					0.0176	0.006			0.199			<5
02	11/10/1998	1200Z	7.47					1.25					0.0094	0.0012			0.207			<5
02	05/11/1999	1200Z	6.39					5					0.0142	0.0017			0.298			<5
02	10/27/1999	1200Z	6.41					6.25					0.0116	0.002			0.423			5
02	05/10/2000	1200Z	6.7					27.5					0.00872	0.00705			0.143			<5
03	05/28/1997	1200Z	5.09	<0.5	<0.035	<4	22.7	82	2.37	<0.001	<0.001	0.00831	0.0294	0.0123	0.00023	0.0063	0.362	<0.5	<0.5	<0.5
03	11/19/1997	1200Z	6.96			3.4	13.2	5.75	4.54	<0.001	<0.001	0.0012	0.0035	0.0012	<0.0002	<0.002	0.167			0.685
03	05/19/1998	1200Z	6.9					7					0.0173	0.001			0.167			<5
03	11/10/1998	1200Z	6.65					1.25					0.0099	<0.001			0.247			<5
03	05/11/1999	1200Z	6.54					1					0.0128	0.001			0.28			<5
03	10/27/1999	1200Z	5.5					8.25					0.0122	0.0018			0.287			5
03	05/10/2000	1200Z	6.7					19					0.00681	0.00278			0.202			<5

Table 5
Outfall 22C Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.	NW Front Ave.
7110	NL	NL	NL	NL	NL	NL	NL
7200	NL	NL	NL	NL	Wacker Siltronics	Wacker Siltronics	Wacker Siltronics
NW St. Helens	NW St. Helens	NW St. Helens	NW St. Helens	NW St. Helens	NW St. Helens	NW St. Helens	NW St. Helens
6115	Asbury Transportation Company	Asbury Transportation Company	Asbury Transportation Company	Asbury Transportation Company	Asbury Transportation Company, Sun Transportation	Lee and Eastes Tank Lines, Motor Freight Services	Berry Transportation, Interstate Sandblasting
6215	Barry's Lunch	Vacant	NL	J&H Richfield Service	Arco Service (Gas Station)	Chemline Corporation, J&H Mobil, Reichert Trucking	Gemini Transportation, Jinkz Corporation (Union 76 Gas Station)
6423	Consumer's Service Gas	Mel's Auto Gas	Payless Gas	Payless Gas	Ray's Truck Service	Ray's Truck Service	Accurate Meter Co.
6565	SFR	SFR	SFR	Southern Pacific Pipelines Inc. (Oil)	Southern Pacific Pipelines Inc. (Oil)	Southern Pacific Pipelines Inc. (Oil)	Southern Pacific Pipelines Inc. (Oil)
6720	NL	NL	NL	NL	NL	NL	NL
6834	NL	NL	NL	NL	NL	NL	NL
7200	NL	NL	NL	NL	NL	NL	NL
7540	NL	NL	NL	Koppers Lumber Treatment	Koppers Lumber Treatment	Koppers Lumber Treatment	Koppers Lumber Treatment

NL = Not listed

Table 6
Outfall 22C EPA Toxic Release Inventory List and Hazardous Waste Generator List

RNO	Address	Company	EPA ID	TRI ID	SIC Number	Generator Status	Releases to Environment	Chemicals Used on Site
R961121110	7540 NW St. Helens Road	Koppers Inds. Inc. Portland Tar Plant	ORD027734359	97210KPPRS7540N	2865	CEG	To Water: Polycyclic Aromatic Compounds	Anthracene, Biphenyl, Creosote, Dibenzofuran, Naphthalene, Polycyclic Aromatic Compounds
R961130010	7200 NW Front Ave	Wacker Siltronic Corp.	ORD096253737	97210WCKRS7200N	3674	SQG	To Water: Nitrate Compounds, Nitric Acid	Acetone, Aluminum Oxide, Ammonia, Dichloromethane, Ethylene Glycol, Freon 113, Hydrochloric Acid, Hydrogen Fluoride, N-Butyl Alcohol, Nitrate Compounds, Nitric Acid, Sulfuric Acid, Trichloroethylene

CEG = Conditionally Exempt Generator
SQG = Small Quantity Generator
* No information available in database

Table 7
Outfall 22C DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI ID	CERCLIS	Action	Status
R961121110	Helens Rd	Koppers Industries Inc.	2348	27734359	Site Screening recommended (EV)	SUS
R961130010	7200 NW Front Ave	Wacker Siltronic Corp.	183	96253737	Remedial Investigation/ Feasibility Study recommended	Negotiations
R915502950	6565 NW St. Helens Rd.	Santa Fe Pacific Pipeline Co.	2104		State Expanded Preliminary Assessment recommended (XPA)	LIS
R961136440	6900 NW Front Ave	ESCO Corp. - Willbridge Landfill	397		State Basic Preliminary Assessment recommended	SUS

LIS = Listed
SUS = Suspected

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2348

shows data entered as of December 18, 2000 at 2:43:21 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2348	Site Name: Koppers Industries Inc.		CERCLIS No: 027734359
	Address: 7540 NW Saint Helens RD Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 12		Tax Lots: 111
	Latitude: 45 deg. 34 ' 45"	Longitude: 122 deg. 45 ' 30"	Site Size: 6.85 acres

Other Site Names:

Portland Harbor Site Discovery

Pittsburgh Acquisition Corporation, Inc.

Wacker Siltronics (SEE ECSI #183)

Operations:

Name: Kopper's Industries Inc.

Comments: .

Years of Operation: 1965 - Current

SIC Code: 2865 Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	
Manner and Time of Release:	
Contamination Information:	SEE ECSI 183 (Wacker Siltronics).
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	Evaluation of this site included in Strategy Recommendation for Wacker Siltronics. Refer to ECSI #183.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	07/01/1979			EPA		
EPA Screening Site Inspection 1	12/23/1987	12/15/1988		EPA		
No Further Remedial Action Planned under Federal program	12/15/1988	12/15/1988		EPA		
EPA Site Inspection Prioritization	11/15/1994	02/16/1995		EPA		
Site added to database	05/24/1999	05/24/1999	Janelle Waggy	DEQ	NW	VCS
Site Screening recommended (EV)	05/24/1999	05/24/1999	Steve Fortuna	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 183

shows data entered as of November 21, 2000 at 12:07:22 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 183	Site Name: Wacker Siltronic Corp.		CERCLIS No: 096253737
	Address: 7200 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots: 1
	Latitude: 45 deg. 34 ' 30"	Longitude: 122 deg. 45 ' 1"	Site Size: 84.6 acres
Other Site Names:			
	Portland Harbor Site Discovery		
Operations:			
	Name: Wacker Siltronic Corp.		
	Comments: Semiconductor manufacture .		
	Years of Operation: 1978 - present		
	SIC Code: 3674		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	PAHs, BTEX, phenols, 2,4-D. In adjacent Willamette River sediments: beryllium, cobalt, iron, manganese, selenium, silver, titanium, vanadium, zinc, 2-methylnaphthalene, bis(2-ethyhexyl) phthalate, carbazole, pentachlorophenol, di-n-butylphthalate, dibenzofuran, PAHs, DDTs, 2,4-D, 2,4-DB
Manner and Time of Release:	Past practices; time of release unknown.
Contamination Information:	(5/20/93 KPD/SAS) Predecessor company of Northwest Natural Gas accumulated 30,000 cubic yards of coal tar in on-site pits. Coal tar pits were buried under 10 feet of overburden and spent oxide in 1973. Wacker purchased part of the property in 1978. Subsurface soil sampling on the vacant southern half of the site in 1985 found high levels of PAHs, plus lesser amounts of herbicides. Similar contamination was found in subsurface soil sampling on another portion of the site in 1990. The same year groundwater contaminated with TPH and BTEX compounds was found near a fuel line corridor. In addition, there has been occasional releases of solvents from Wacker's operations. (1/19/00 JMW/SAP) In September and October 1997, EPA's contractor, Roy F. Weston Inc., collected sediment samples within the Portland Harbor (RM 3.5 to RM 9.5). Beryllium, cobalt, iron, manganese, selenium, silver, titanium, vanadium, zinc, 2-methylnaphthalene, bis(2-Ethylhexyl)phthalate, carbazole, Di-N-Butylphthalate, dibenzofuran, pentachlorophenol, PAHs, DDTs, 2,4-D, 2,4-DB and TOC were detected in river sediments.

Pathways:	The site is located in a heavily industrialized part of NW Portland. The Willamette River is adjacent to the site on the northeast, and Forest Park is less than a quarter mile to the southwest. Past solvent releases and suspected leaks from underground fuel line may have helped to mobilize the coal tar contamination.
Environmental/Health Threats:	Site is located in heavy industrial area. Significant soil and groundwater contamination, but contaminated soil is under surface and groundwater not used. Greatest threat may be to Willamette River and to on-site workers who dig into contaminated soil without adequate personal safety equipment.
Status of Investigative or Remedial Action:	(5/20/93 KPD/SAS) Contaminated soil is 10-20 feet below ground surface, and groundwater in the area is not used. Contaminants may pose a threat to the environment, particularly the adjacent Willamette River. Similar contamination at the adjacent Northwest Natural Gas Company Site (ECSI #84) has been referred to Voluntary Cleanup and Site Response for further action. Site Assessment recommends that this site be included in those investigations. (1/19/00 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Wacker Siltronic site has been identified as a potential source of contamination to the Portland Harbor. A Strategy Recommendation was completed on October 8, 1999. Due to the presence of contamination in sediment and the high potential for groundwater contamination, DEQ determined a RI/FS is required for the facility (high priority). (3/1/00 JMW/SAP) Voluntary Agreement for Remedial Investigation and Source Control Measures forwarded to Wacker Siltronic Corporation on February 29, 2000. Signed agreement due March 31, 2000.
Data Sources:	1) "Preliminary Report: Soil Investigation for Proposed Polysilicon Plant" by CH2M Hill, June 1985. 2) EPA CERCLA Preliminary Assessment report, by Ecology and Environment, October 1987. 3) Laboratory data from Pacific Environmental Laboratory, July 25, 1990. 4) "Findings Report: Groundwater and Soil Gas Investigation" by CH2M Hill, December 1990. 5) GASCO files (ECSI #84)(see VCS Project Manager files). 6) Doane Lake Study Area files (ECSI #36). 7) Portland Harbor Sediment Investigation Report, Roy F. Weston, Inc. for USEPA, May 1997.

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
BENZENE	Groundwater	23,300 ppb	12/01/1990	Y		
BENZENE	Soil	29 ppm	07/25/1990	Y		
BENZO(a)ANTHRACENE	Soil	210 ppm	07/25/1990	Y		
BENZO(a)PYRENE	Groundwater	760 ppb		Y		
BENZO(a)PYRENE	Soil	240 ppm	07/25/1990	Y		
BENZO(a)PYRENE	Soil	120 ppm	06/01/1985	Y		
BENZO(b)FLUORANTHENE	Soil	up to 120 ppm	06/01/1985	Y		
BENZO(b)FLUORANTHENE	Soil	180 ppm	07/25/1990	Y		
BENZO(k)FLUORANTHENE	Soil	up to 120 ppm	06/01/1985	Y		
BENZO(k)FLUORANTHENE	Soil	120 ppm	07/25/1990	Y		
BERYLLIUM	Sediment	0.9 ppm	09/01/1997	Y		
BIS(2-ETHYLHEXYL) PHTHALATE	Sediment	210 - 700 ppb	09/01/1997	Y		
CARBAZOLE	Sediment	170 - 3600 ppb	09/01/1997	Y		
CHLOROPHENOL	Soil	17.5 ppm		Y		
CHRYSENE	Soil	92 ppm	06/01/1985	Y		
CHRYSENE	Soil	280 ppm	07/25/1990	Y		
COBALT	Sediment	20.3 - 24.6 ppm	09/01/1997	Y		
D,2,4-	Sediment	9 - 93 ppb	09/01/1997	Y		

DB,2,4-	Sediment	13 - 130 ppb	09/01/1997	Y
DDT,p,p'-	Sediment	570 - 380 ppb	09/01/1997	Y
DI-n-BUTYL PHTHALATE	Sediment	21 ppb	09/01/1997	Y
DIBENZOFURAN	Sediment	160 - 3600 ppb	09/01/1997	Y
DIMETHYLPHENOL,2,4-	Groundwater	27 ppb	01/01/1900	Y
DIMETHYLPHENOL,2,4-	Soil	3.1 ppm	01/01/1900	Y
ETHYLBENZENE	Groundwater	4,680 ppb	12/01/1990	Y
INDENO(1,2,3-cd)PYRENE	Soil	up to 270 ppm	06/01/1985	Y
INDENO(1,2,3-cd)PYRENE	Soil	160 ppm	07/25/1990	Y
IRON	Sediment	51900 - 64500 ppm	09/01/1997	Y
MANGANESE	Sediment	863 - 909 ppm	09/01/1997	Y
METHYLNAPHTHALENE,2-	Sediment	180 - 11000 ppb	09/01/1997	Y
PENTACHLOROPHENOL	Sediment	4.6 - 11 ppb	09/01/1997	Y
PETROLEUM HYDROCARBONS	Groundwater	89,000 ppb	12/01/1990	Y
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	LPAHs 6860 - 165600 ppb	09/01/1997	Y
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	HPAHs 3034 - 268800 ppb	09/01/1997	Y
SELENIUM	Sediment	16 - 17 ppm	09/01/1997	Y
SILVER	Sediment	1.5 - 1.7 ppm	09/01/1997	Y
TETRACHLOROETHYLENE	Soil	11 ppm		Y
TITANIUM	Sediment	2740 - 3200 ppm	09/01/1997	Y
TOLUENE	Groundwater	5,960 ppb	12/01/1990	Y
TOLUENEDIAMINE,2,4-	Soil	160 ppm	06/01/1985	Y
VANADIUM	Sediment	113 - 152 ppm	09/01/1997	Y
ZINC	Sediment	120 - 150 ppm	09/01/1997	Y

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to CERCLIS	06/14/1985			EPA		
EPA Basic Preliminary Assessment	11/09/1987	11/09/1987		EPA		
Site added to database	05/02/1988		Michael Zollitsch	DEQ	HQ	SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ	HQ	SAS
EPA Screening Site Inspection 1	12/15/1988	12/15/1988		EPA		
NEGOTIATIONS	05/11/1990	08/05/1991	Mike Downs	DEQ	HQ	SRS
SITE EVALUATION	08/04/1991	08/04/1991	Mike Downs	DEQ	HQ	SRS
Preliminary Assessment Equivalent recommended (PAE)	08/04/1991	08/04/1991	Mike Downs	DEQ	HQ	SRS
PRELIMINARY ASSESSMENT EQUIVALENT	08/05/1991	08/05/1991	Mike Downs	DEQ	HQ	SRS
Listing Review completed	08/06/1991	08/06/1991	Mike Downs	DEQ	HQ	SRS
Proposal for Confirmed Release List recommended	08/07/1991	08/07/1991	Mike Downs	DEQ	HQ	SRS
Proposal for Inventory recommended	08/07/1991	08/07/1991	Mike Downs	DEQ	HQ	SRS
Facility proposed for Confirmed Release List	11/15/1991	11/15/1991	Mike Downs	DEQ	HQ	SRS
Facility proposed for Inventory	11/15/1991	11/15/1991	Mike Downs	DEQ	HQ	SRS
Extension requested by owner/operator	12/20/1991	12/20/1991				
Petition or request granted	12/22/1991	12/22/1991	Loretta Pickerell	DEQ	HQ	SAS

Owner/operator comments received on listing notification	02/13/1992	02/13/1992	Loretta Pickerell	DEQ	HQ	SAS
Review for final listing	07/29/1992	07/29/1992	Loretta Pickerell	DEQ	HQ	SAS
Listing on Confirmed Release List recommended	07/30/1992	07/30/1992	Loretta Pickerell	DEQ	HQ	SAS
Listing on Inventory recommended	07/30/1992	07/30/1992	Loretta Pickerell	DEQ	HQ	SAS
Facility placed on Confirmed Release List	10/22/1992	10/22/1992	Loretta Pickerell	DEQ	HQ	SAS
Facility placed on Inventory	10/22/1992	10/22/1992	Loretta Pickerell	DEQ	HQ	SAS
SITE PRIORITY EVALUATION FOR FURTHER ACTION	05/19/1993	05/19/1993	Kevin Dana	DEQ	HQ	SAS
Other remedial or investigative action recommended	05/20/1993	05/20/1993	Kevin Dana	DEQ	HQ	SAS
EPA Site Inspection Prioritization	03/07/1995	03/07/1995		EPA		
BASIC PRELIMINARY ASSESSEMENT	10/08/1999	10/08/1999	Eric Blischke	DEQ	NW	VCS
SITE SCORING	10/08/1999	10/08/1999	Eric Blischke	DEQ	NW	VCS
Remedial Investigation/Feasibility Study recommended	10/08/1999	10/08/1999	Eric Blischke	DEQ	NW	VCS
Letter Agreement	02/29/2000		Eric Blischke	DEQ	NW	VCS
NEGOTIATIONS	02/29/2000		Eric Blischke	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

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SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Details for Site ID 2104

shows data entered as of December 18, 2000 at 2:57:33 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2104	Site Name: Santa Fe Pacific Pipelines - Portland Station		CERCLIS No:	
	Address: 6565 NW St. Helens RD Portland 97210			
	County: Multnomah		Region: Northwest	
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N	Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots:	
	Latitude: 45 deg. 34 ' 34"	Longitude: 122 deg. 45 ' 34"	Site Size:	
Other Site Names:				
	Portland Harbor Sediment Study			
	Kinder Morgan			
Operations:				
	Name: Santa Fe Pacific Pipeline			
	Comments: .			
	Years of Operation: unknown			
	SIC Code: 4600		Operating Status: Inactive	
	Name: Kinder Morgan G.P., Inc.			
	Comments: .			
	Years of Operation: March 1998 - Current			
	SIC Code: 4600		Operating Status: Active	

Contamination Information

Hazardous Substances/Waste Types:	The following contaminants exceed baseline levels by more than two times in river sediments adjacent to the site and City of Portland outfall 22C: 2-methylnaphthalene, carbazole, LPAHs, HPAHs, 2,4-D, and 2,4-DB.
Manner and Time of Release:	
Contamination Information:	Gasoline and diesel spills in 1991 and 1994 have impacted soil and groundwater on and off-site. A drainage ditch adjacent to the site flows first into North Doane Lake, then discharges to the Willamette River through City of Portland outfall #22C. Considering the nature of this potential surface water migration pathway and that the site is 0.5 mile from the Willamette River, it appears unlikely that the site has significantly impacted river sediment.
Pathways:	
Environmental/Health Threats:	

Status of Investigative or Remedial Action:	(6/17/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Kinder Morgan property has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 5, 1999. A site screening is scheduled (level II priority). (2/7/00 JMW/SAP) Strategy Recommendation completed November 1999. Further action will proceed in the Site Assessment process (not as part of the Portland Harbor sediment investigation). An Expanded Preliminary Assessment should be conducted to evaluate potential sediment contamination in North Doane Lake, potential upland site contaminant sources, migration pathways, and past waste management practices.
Data Sources:	Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for USEPA, 5/98; Groundwater Monitoring Report, prepared by SECOR International, Inc. for Kinder Morgan, 3/4/99; Results of Portland Station Bioslurping Pilot Test, prepared by HartCrowser for Santa Fe Pacific Pipelines, Inc., 10/15/97; Vapor Extraction Testing and Analysis Report, prepared by HartCrowser for Santa Fe Pacific Pipelines, Inc., 5/16/97; Results of Soil Sampling and Analysis, prepared by HartCrowser for Santa Fe Pacific Pipeline Partners, L.P., 12/22/94; DEQ LUST Database; DEQ HWIMSy Hazardous Waste Generator Database; DEQ SPINS Spill Database; MetroScan Property Records, Multnomah County, Oregon

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
CARBAZOLE	Sediment	700 ppb (Outfall 22C)	09/01/1997	Y		
COBALT	Sediment	21 ppm (outfall 22C)	09/01/1997	Y		
COPPER	Sediment	58600 ppm (Outfall 22C)	09/01/1997	Y		
D,2,4-	Sediment	24 ppb (Outfall 22C)	09/01/1997	Y		
D,2,4-	Sediment	21 ppb (Upstream)	09/01/1997	Y		
DB,2,4-	Sediment	13 ppb (Outfall 22C)	09/01/1997	Y		
DB,2,4-	Sediment	23 ppb (Upstream)	09/01/1997	Y		
DDT,p,p'-	Sediment	380 ppb (Upstream)	09/01/1997	Y		
DIBENZOFURAN	Sediment	160 ppb (Outfall 22C)	09/01/1997	Y		
METHYLNAPHTHALENE,2-	Sediment	430 ppb (Outfall 22C)	09/01/1997	Y		
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	LPAHs - 6860 ppb (Outfall 22C)	09/01/1997	Y		
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	HPAHs - 3034 ppb (Upstream)	09/01/1997	Y		
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	HPAHs - 9060 ppb (Outfall 22C)	09/01/1997	Y		
SILVER	Sediment	1.6 ppm (Outfall 22C)	09/01/1997	Y		
TITANIUM	Sediment	3200 ppm (Outfall 22C)	09/01/1997	Y		
VANADIUM	Sediment	147 ppm (Outfall 22C)	09/01/1997	Y		
ZINC	Sediment	124 ppm (Outfall 22C)	09/01/1997	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	09/23/1997	09/23/1997	Steve Fortuna	DEQ	NW	SAS
Site Screening recommended (EV)	09/23/1997	09/23/1997	Steve Fortuna	DEQ	NW	SAS
SITE EVALUATION	11/29/1999	11/29/1999	Thomas Gainer	DEQ	NW	SAS
SITE SCORING	11/29/1999	11/29/1999	Thomas Gainer	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	11/29/1999	11/29/1999	Thomas Gainer	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	02/02/2000	02/02/2000	Thomas Gainer	DEQ	NW	SAS
Facility proposed for Confirmed Release List	02/18/2000	02/18/2000	Kim Van Patten	DEQ	NW	SAS
Facility placed on Confirmed Release List	06/15/2000	06/15/2000	Kim Van Patten	DEQ	NW	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 397

shows data entered as of November 21, 2000 at 12:09:50 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 397	Site Name: ESCO Corp. - Willbridge Landfill		CERCLIS No:
	Address: 6900 NW Front AVE Portland 97210		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 13		Tax Lots: 44
	Latitude: 45 deg. 34 ' 21"	Longitude: 122 deg. 44 ' 54"	Site Size: 10.5 acres
Other Site Names:			

Operations:

Name: ESCO Corp. - Willbridge Landfill

Comments: Landfill .

Years of Operation: 1953 - 1983

SIC Code: 4953 Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	Foundry sand, slag, demolition debris, dust, and foundry yard debris (including zirconium sand).
Manner and Time of Release:	Waste disposal - landfill; time of release 1953 to 1983.
Contamination Information:	(5/18/93 KPD/SAS) Privately-owned landfill that received non-recyclable wastes from ESCO's foundry operations. Wastes include mildly radioactive zirconium sand. Landfill was closed in 1983 with the approval of DEQ and the Oregon State Health Division. Groundwater at the site is contaminated with lead. The lead is thought to have migrated from the adjacent NL/Gould Superfund site (ECSI #49).
Pathways:	The site is located in a heavily industrialized part of NW Portland. The Willamette River is a few hundred yards north and east of the site, and Forest Park is about a quarter-mile south and west of the site. Groundwater in the area is not used for drinking.
Environmental/Health Threats:	Groundwater contamination, possibly migrating to Willamette River
Status of Investigative or Remedial Action:	(2/23/95 KPD/SRS) Because contaminated groundwater is continuing to migrate onto the site, Site Response recommends that the site be placed on the Confirmed Release List (CRL). In addition, Site Response recommends that a PA be performed to check the current status of the landfill (sufficiency of cap, etc.) and to determine the potential for zirconium migration to groundwater. (Options letter sent 5/25/93 by LSK/VCS).
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
LEAD	Groundwater	210 ppb		Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	10/06/1988		Marilyn Daniel	DEQ	HQ	SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ	HQ	SAS
SITE EVALUATION	05/13/1993	05/17/1993	Kevin Dana	DEQ	HQ	SAS
Listing Review completed	05/17/1993	05/17/1993	Kevin Dana	DEQ	HQ	SAS
Insufficient information to list	05/18/1993	02/23/1995	Kevin Dana	DEQ	HQ	SAS
State Basic Preliminary Assessment recommended (PA)	05/19/1993	05/19/1993	Kevin Dana	DEQ	HQ	SAS
Proposal for Confirmed Release List recommended	02/23/1995	02/23/1995	Kevin Dana	DEQ	HQ	SAS
Insufficient information to list	05/08/2000	05/08/2000	Gil Wistar	DEQ	HQ	SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Table 8
Outfall 22C DEQ Leaking Underground Storage Tanks List

RNO	Address	Log Number	Company	Cleanup Start	Cleanup End	Site Work Complete
R915502650	6423 NW St. Helens Road	26-90-0359	Fitz, Michael A. (Ray's Truck)	10/04/90		
R915501360	6215 NW St. Helens Road	26-89-0213	J&H Mobil	10/02/89		
R915501440	6115 NW St. Helens Road	26-89-0199	Lee & Eastes Tank Lines, Inc.	09/12/89	11/16/89	09/28/89
R915502950	6565 NW St. Helens Road	26-91-0211	Sante Fe Pacific Pipelines	05/04/91		03/15/94

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

July 30, 1998 02:44 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0359
UST FAC NBR: 4258 DATE REPORTED: 03-OCT-90

SITE NAME: FITZ, MICHAEL A. (RAY'S TRUCK SERVICE)
SITE ADDRESS: 6423 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97204
SITE COUNTY: MULTNOMAH PHONE: (503)283-1256

----------SITE ASSESSMENT----------

DATE DISCOVERED: 03-OCT-90 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: Y	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: Y	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 04-OCT-90 REMEDIATION COMPLETED:
CLEANUP STARTED: 04-OCT-90 NO FURTHER ACTION:

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

July 30, 1998 02:45 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0213
UST FAC NBR: 3494 DATE REPORTED: 02-OCT-89

SITE NAME: J & H MOBIL
SITE ADDRESS: 6215 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (503) 248-0744

----------SITE ASSESSMENT----------

DATE DISCOVERED: 02-OCT-89 OFFSITE MIGRATION: U

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: Y
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 02-OCT-89 REMEDIATION COMPLETED:
CLEANUP STARTED: 02-OCT-89 NO FURTHER ACTION:

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

July 30, 1998 02:46 pm

INCIDENT INFORMATION

LOG NBR: 26-89-0199
UST FAC NBR: 3536 DATE REPORTED: 12-SEP-89

SITE NAME: LEE & EASTES TANK LINES, INC.
SITE ADDRESS: 6115 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97210
SITE COUNTY: MULTNOMAH PHONE: (206) 623-5403

SITE ASSESSMENT

DATE DISCOVERED: 09-SEP-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: Y
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

CONTAMINANTS/IMPACTS

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

SITE/SOIL MANAGEMENT

RELEASE STOPPED: 12-SEP-89 REMEDIATION COMPLETED: 28-SEP-89
CLEANUP STARTED: 12-SEP-89 NO FURTHER ACTION: 16-NOV-89

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

July 30, 1998 02:47 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-91-0211
UST FAC NBR: DATE REPORTED: 04-MAY-91

SITE NAME: SANTA FE PACIFIC PIPELINES
SITE ADDRESS: 6565 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP:
SITE COUNTY: MULTNOMAH PHONE: (503) 224-3390

----------SITE ASSESSMENT----------

DATE DISCOVERED: 04-MAY-91 OFFSITE MIGRATION: Y

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: N	(PL) Pipe Leak: Y
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: Y	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: Y
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 04-MAY-91 REMEDIATION COMPLETED: 15-MAR-94
CLEANUP STARTED: 04-MAY-91 NO FURTHER ACTION:

(opens_inc.rpt)

Table 9
Outfall 22C DEQ Permitted Tanks List

RNO	Address	Company	Permit ID
R915501360	6215 NW St. Helens Road	Jinkz Corp.	26-3494-1998-OPER

Table 10
Outfall 22C Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
6215 NW St. Helens	Suburban Gas of Portland	95952	Mar-61	999	UST	yard	
NW 63rd/St. Helens	Richfield Oil Co.	6264	Nov-59	4000	UST	yard	4 tanks total = 16,000 gal
6433 NW St. Helens	Conner (SFR)	41405	Jul-48	675	UST	yard	
6485 NW St. Helens	Columbia Forge Works	65527	Oct-51	285	UST	yard	
6511 NW St. Helens	Kuehn (SFR)	73414	May-53	275	UST	basement	
6829 NW St. Helens	Grace (SFR)	21040	Oct-45	675	UST	yard	
6900 NW St. Helens	Chipman Chemicals	86734	Jun-56	10,000	AST	detached	

AST = Aboveground Storage Tank
UST = Underground Storage Tank

Table 11
Outfall 22C State Fire Marshal Hazardous Spills List

RNO	Address	Chemical	Date	Incident ID
R961130010	7200 NW Front Ave	Hydrofluric Acid	04/22/97	02-291-970202
R915502950	6565 NW St. Helens Road	Gasoline	10/20/94	02-291-940488

Table 12
Outfall 22C State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty
R915501440	6115 NW St Helens Rd	Interstate Sandblasting Inc	29544	1799	Paint	Petroleum Distillates	Liquid	Gallons	50-199
R915502650	6423 NW St Helens Rd	Accurate Meter Co	60891	7699	Caustic Soda	Sodium Hydroxide	Liquid	Millicures	50-199
R915502650	6423 NW St Helens Rd	Accurate Meter Co	60891	7699	Solvent	Petroleum Distillate Hydrocarbon Solvent	Liquid	Gallons	200-499
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Abrasive Aluminum Oxide	Aluminum Oxide	Solid	Pounds	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Abrasive Powder	Silicon Carbide	Solid	Pounds	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Acetic Acid 35%	Acetic Acid	Liquid	Gallons	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Acetone	Acetone	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Activated Carbon	Carbon	Solid	Pounds	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Aluminum Sulfate 48%	Aluminum Sulfate	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Ammonium Hydroxide 30%	Ammonium Hydroxide	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Antifoam Sag 795	Polydimethyl Siloxane	Liquid	Gallons	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Argon	Argon	Gas	Cubic Feet	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Argon 80%/Helium 20%	Argon	Gas	Cubic Feet	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Argon Liquid	Argon	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Arsine 10 Ppm In Hydrogen	Arsine	Gas	Cubic Feet	200-499
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Calcium Chloride Flake 77-80%	Calcium Chloride	Solid	Pounds	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Caustic Soda Beads	Sodium Hydroxide	Solid	Pounds	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Chromic Acid Solution	Chromic Acid	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Citric Acid	Citric Acid	Solid	Pounds	1,000-4,999

Table 12
Outfall 22C State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Conc. Acid Wastewater	Hydrofluoric Acid	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Dearborn 154	Sodium Hydroxide	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Detergent Q-9	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Devel A	Ortho Sodium Silicate	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Diborane 25-1000 Ppm In Hydrogen	Diborane	Gas	Cubic Feet	5,000-9,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Diesel	Petroleum Distillates	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Dipropylene Glycol	Dipropylene Glycol	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Dowfrost Glycol	Propylene Glycol	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Etching Solutions	Nitric Acid	Liquid	Gallons	200-499
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Ethylene Glycol	Ethylene Glycol	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Ferrosol 332	Organophosphonic Acid, Sodium Salt	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Ferrosol 335	Citric Acid	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Gasoline	Toluene	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Helium Gas	Helium	Gas	Cubic Feet	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Hydrochloric Acid 31-37%	Hydrochloric Acid	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Hydrofluoric Acid	Hydrofluoric Acid	Liquid	Gallons	5,000-9,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Hydrofluoric Acid 49%	Hydrofluoric Acid	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Hydrogen Chloride	Hydrogen Chloride	Gas	Cubic Feet	100,000-
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Hydrogen Cryogenic	Hydrogen	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Hydrogen Peroxide30%	Hydrogen Peroxide	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Isopropyl Alcohol	Isopropyl Alcohol	Liquid	Gallons	500-999

Table 12
Outfall 22C State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Isopropyl Alcohol 10%	Isopropyl Alcohol	Liquid	Gallons	200-499
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Kerosene	Kerosene	Liquid	Gallons	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Lime	Calcium Oxide	Solid	Pounds	50,000-99,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Lime Solution	Calcium Hydorxide	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Ludox, Glanzox, Levasil, Rodel Ls10, Rd-	Silica, Colloidal	Liquid	Gallons	5,000-9,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Lutensol Ap 10	Alkylphenolethoxylate	Liquid	Gallons	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Nitric Acid 70%	Nitric Acid	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Nitrogen	Nitrogen	Gas	Cubic Feet	50,000-99,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Nitrogen Cryogenic Liquid	Nitrogen	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Nitrous Oxide 80 Ppm	Nitrous Oxide	Gas	Cubic Feet	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Oils	Petroleum Hydrocarbon	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Phosphine 5-999 Ppm In Hydrogen	Phosphine	Gas	Cubic Feet	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Polyfloc Products	Petroleum Distillate	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Potassium Carbonate	Potassium Carbonate	Solid	Pounds	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Potassium Hydroxide	Potassium Hydroxide	Solid	Pounds	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Potassium Hydroxide Soln	Potassium Hydroxide	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Refrigerant 11	Trichlorofluoromethane	Liquid	Pounds	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Rokramar	Maleic Resin	Solid	Pounds	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Rp Team	Diethanolamine	Liquid	Gallons	200-499
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Silane	Silane	Gas	Cubic Feet	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Silicon Hyperpure Chips	Silicon	Solid	Pounds	10,000-49,999

Table 12
Outfall 22C State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Sky Wax	Toluene	Liquid	Gallons	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Sodium Chlorite 25%	Sodium Chlorite	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Sodium Hydroxide 25-50%	Sodium Hydroxide	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Sodium Metabisulfite	Sodium Metabisulfite	Solid	Pounds	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Sodium Metabisulfite Solution	Sodium Metabisulfite	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Sodium Sulfide 10%	Sodium Sulfide	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Stepanol Am	Alkyl Sulfate	Liquid	Gallons	200-499
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Sulfuric Acid 66 Be	Sulfuric Acid	Liquid	Gallons	10,000-49,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Tetramethylammonium Hydroxide	Tetramethylammonium Hydroxide	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Trichlorosilane	Trichlorosilane	Liquid	Cubic Feet	50,000-99,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Turco Caviclean #2	Sodium Dodecylbenzenesulfonate	Liquid	Gallons	200-499
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Vacuum Cleaner Dust	Antimony Trioxide	Solid	Pounds	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Vanwet 9n9	Nonylphenol Surfactant	Liquid	Gallons	500-999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Vector Htr & Hts	Triethanolamine	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Waste Alcohol	Isopropyl Alcohol	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Waste Chromic Sludge	Calcium	Solid	Pounds	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Waste Oil	Petroleum Hydrocarbon	Liquid	Gallons	1,000-4,999
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Waste Solvent	Petroleum Distillate	Liquid	Gallons	50-199
R961130010	7200 NW Front Ave	Wacker Siltronic Corp	5268	3674	Waste Wax	Parrafin Wax	Liquid	Pounds	500-999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Acetone	Acetone	Liquid	Gallons	5-9

Table 12
Outfall 22C State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Acetylene	Acetylene	Gas	Cubic Feet	500-999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Big Orange Solvent	D-Limonene	Liquid	Gallons	50-199
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Coal Tar Pitch	Pyrene	Solid	Pounds	10,000,000-24,999,999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Coal Tar Pitch	Pyrene	Liquid	Gallons	1,000,000-2,499,999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Creosote	Coal Tar Pitch Volatiles	Liquid	Gallons	200-499
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Creosote	Coal Tar Pitch Volatiles	Liquid	Gallons	5,000-9,999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Diesel #2	Petroleum Distillates	Liquid	Gallons	50-199
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Gasoline	Toluene	Liquid	Gallons	10-19
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Heavy Creosote Distillate	Creosote	Liquid	Gallons	10,000-49,999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Motor Oil	Highly Refined Base Oils	Liquid	Gallons	50-199
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Oxygen	Oxygen	Gas	Cubic Feet	500-999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Perchloroethylene	Perchloroethylene	Liquid	Gallons	5-9
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Petroleum Process Oil, Caloria Ht 43	Petroleum Distillates	Liquid	Gallons	1,000-4,999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Propane	Propane	Gas	Gallons	50-199
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Quinoline Refined	Quinoline	Liquid	Gallons	10-19
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Refined Tar	Hydrocarbons	Liquid	Gallons	10,000-49,999
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Sodium Hydroxide	Sodium Hydroxide	Solid	Pounds	200-499
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Sodium Sulfite	Sodium Sulfite	Solid	Pounds	200-499
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Toluene	Toluene	Liquid	Gallons	20-49
R961121110	7540 NW St Helens Rd	Koppers Industries Inc	6202	2865	Xylene	Xylene	Liquid	Gallons	20-49

Table 13
Outfall 22C Confirmed Release List

Address	Company	ECSI ID	Chemicals	Exposure	Phase	Program
7540 NW St. Helens Road	GASCO	84	Acenaphthene, Anthracene, Benzo(a)Pyrene, Ethylbenzene, Fluoranthene, Fluorene, Lead,	Soil, Groundwater	2	VCS
7200 NW Front Ave	Wacker Siltronic Corp.	183	Benzene, Benzo(a)Anthracene, Benzo(a)Pyrene, Benzo(b)Fluoranthene, Benzo(k)Fluoranthene, Chlorophenol, Chrysene, Dimethylphenol,2,4-, Ethylbenzene, Indeno(1,2,3-cd)Pyrene, Petroleum, Hydrocarbons, Tetrachloroethylene, Toluene,	Groundwater, Soil	1	SAS

Phase
1: Facilities where remedial investigation and feasibility studies have not been initiated.
2: Facilities where remedial investigation or feasibility studies are underway.

Program
VCS = Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property under the oversight of DEQ's Voluntary Cleanup Program.
SAS = Indicates that the site is still under investigation through the DEC

Table 14
Outfall 22C SIC Information

SIC Number	SIC Definition
1711	Plumbing, Heating, and Air-Conditioning
1799	Special Trade Contractors, NEC
2731	Book Publishing
2865	Cyclic Organic Crudes and Intermediates, and Organic Dyes and Pigments
3479	Coating, Engraving, and Allied Services, NEC
3559	Special Industry Machinery, NEC
3674	Semiconductors and Related Devices
4212	Local Trucking, Without Storage
4226	Special Warehousing and Storage, NEC
4491	Marine Cargo Handling
4613	Refined Petroleum Pipelines
5063	Electrical Apparatus and Equipment Wiring Supplies, and Construction Materials
5084	Industrial Machinery and Equipment
5169	Chemicals and Allied Products, NEC
5499	Miscellaneous Food Stores
5541	Gasoline Service Stations
5561	Recreational Vehicle Dealers
5712	Furniture Stores
7513	Truck Rental and Leasing, No Drivers
7538	General Automotive Repair Shops
7699	Repair Shops and Related Services, NEC

Table 15
Drainage Basin for Outfall 22C: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin
R961130040	7027 NW St. Helens Rd	16.96	COM	16.96
R915502470	6485 NW St. Helens Rd	0.33	IND	0.33
R915502532	6433 NW St. Helens Rd	0.76	IND	0.72
R915502650	6423 NW St. Helens Rd	0.42	IND	0.14
R915502890	6485 WI/NW St. Helens Rd	0.36	IND	0.36
R915503190	6511 NW St. Helens Rd	0.10	IND	0.10
R915503230	6485 WI/NW St. Helens Rd	0.28	IND	0.28
R961121110	7540 NW St. Helens Rd	6.45	IND	5.59
R961130010	7200 NW Front Ave	78.62	IND	12.40
R961130150	6688-6720 NW St. Helens Rd	0.68	IND	0.68
R961130180	6720 WI/NW St. Helens Rd	0.05	IND	0.05
R961130190	6720 WI/NW St. Helens Rd	0.12	IND	0.12
R961130200	6720 WI/NW St. Helens Rd	0.47	IND	0.47
R961130300	6720 WI/NW St. Helens Rd	0.20	IND	0.19
1N1W13DB 02100		0.36	IND	0.36
R915503310	6647 NW St. Helens Rd	0.14	SFR	0.12
R915503330	6637 NW St. Helens Rd	0.14	SFR	0.12
R915503530	6915 NW St. Helens Rd	0.18	SFR	0.16
R915503650	6821 NW St. Helens Rd	0.14	SFR	0.14
R915503670	6801 NW St. Helens Rd	0.27	SFR	0.27
R961150060	5800 NW Skyline Blvd	2.02	SFR	0.88
R961150100	6220-6330 NW Skyline Blvd	25.30	SFR	22.16
R961150250	6910 NW Skyline Blvd	0.95	SFR	0.69
R961150340	6830 NW Skyline Blvd	0.90	SFR	0.62
R961150370	6810 NW Skyline Blvd	0.91	SFR	0.40
R961150400	7010 NW Skyline Blvd	1.83	SFR	0.63
R961150430	6720 NW Skyline Blvd	6.07	SFR	5.64
R961150540	6936 NW Skyline Blvd	1.62	SFR	1.62
R961150550	10820 NW Springville Rd	3.28	SFR	2.05
R961150560	5754 NW Skyline Blvd	2.09	SFR	1.48
R961150570	5742 NW Skyline Blvd	2.33	SFR	2.26
R961150580	5740 NW Skyline Blvd	2.28	SFR	2.21
R961150590	6922 NW Skyline Blvd	0.97	SFR	0.92
R961150610	6930 NW Skyline Blvd	1.14	SFR	1.09
R961220010	5390 NW Skyline Blvd	2.04	SFR	0.93
R961220190	5420 NW Skyline Blvd	0.75	SFR	0.01
R961220230	5380 NW Skyline Blvd	0.84	SFR	0.26
R961220240	5340 NW Skyline Blvd	1.22	SFR	0.90
R961220250	10525 NW Saltzman Rd	0.84	SFR	0.60
R961150050	5656 NW Skyline Blvd	12.93	VAC	9.40
R961150670	6140 NW Skyline Blvd	24.72	VAC	20.73
R961230020	5100 NW Skyline Blvd	26.15	VAC	17.94
R961230030		8.72	VAC	1.31
R961230330		2.87	VAC	2.87
R961230340		5.96	VAC	5.96
R267400010		0.22	VAC	0.22
R267400190		0.15	VAC	0.15
R267400200		0.61	VAC	0.58
R267400250		2.28	VAC	2.28
R267400470		0.11	VAC	0.11
R267400480		0.26	VAC	0.24
R267400500		0.18	VAC	0.18
R267400510		0.15	VAC	0.15
R267400530		1.33	VAC	0.19
R267400710		2.80	VAC	2.74
R267400900		0.11	VAC	0.11
R267400920		0.12	VAC	0.12
R267400940		2.80	VAC	0.95
R267401170		1.42	VAC	0.38
R267401300		2.30	VAC	2.30
R267401450		3.25	VAC	0.48
R267401740		3.17	VAC	0.46
R267401960		5.09	VAC	5.09
R267402300		0.61	VAC	0.61
R267402350		2.44	VAC	2.37
R267402540		2.16	VAC	1.98
R464700010		70.83	VAC	3.10
R464701160		25.08	VAC	1.55

Total Area by Landuse

Landuse	Total Area (acres)
Commercial	17.0
Industrial	21.8
Single Family Residence	46.1
Multifamily Residence	--
Vacant	867.3
Total Basin Area	**1007**
Estimated Right-of-Ways	54.7

Table 15
Drainage Basin for Outfall 22C: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin
R464701180	9838 NW Wind Ridge Dr	15.18	VAC	11.28
R464710010		7.15	VAC	7.15
R464710020		0.82	VAC	0.82
R464710030		0.35	VAC	0.35
R464710100		26.67	VAC	6.78
R464710200		25.04	VAC	5.25
R649790570	9936 NW Wind Ridge Dr	4.80	VAC	0.59
R649790590		9.74	VAC	8.62
R705302780		30.00	VAC	1.29
R915502150		0.75	VAC	0.37
R915502330		1.40	VAC	0.04
R915502750		0.21	VAC	0.16
R915502830		0.31	VAC	0.31
R915502950	6565 NW St. Helens Rd	0.33	VAC	0.33
R915503010		0.15	VAC	0.14
R915503030		0.16	VAC	0.16
R915503050		0.35	VAC	0.35
R915503090		0.22	VAC	0.22
R915503110		0.27	VAC	0.27
R915503150		0.21	VAC	0.21
R915503210		0.10	VAC	0.10
R915503270	NW St. Helens Rd	0.25	VAC	0.23
R915503350		0.47	VAC	0.39
R915503430		0.18	VAC	0.15
R915503550		0.57	VAC	0.54
R915503630		0.15	VAC	0.14
R915503710		0.56	VAC	0.56
R961120420	St. Helens Rd	23.16	VAC	2.06
R961130020	6330-6346 NW St. Helens Rd	18.80	VAC	18.12
R961130060		200.27	VAC	62.19
R961130060		200.27	VAC	15.48
R961130070		51.67	VAC	51.07
R961130170	NW Leif Erickson Dr	15.99	VAC	14.57
R961130210		1.40	VAC	1.36
R961130320	NW St. Helens Rd	0.29	VAC	0.29
R961130410	7540 WI/NW St. Helens Rd	0.10	VAC	0.10
R961130460		36.40	VAC	36.40
R961130480	7200 WI/NW Front Ave	0.68	VAC	0.02
R961140010		40.76	VAC	33.25
R961140010		40.76	VAC	4.02
R961140030		157.63	VAC	1.63
R961140030		157.63	VAC	107.36
R961140050	NW Saltzman Rd	74.72	VAC	74.72
R961140060		61.65	VAC	34.58
R961140070		2.40	VAC	2.00
R961140080		80.00	VAC	78.88
R961140090		40.00	VAC	39.12
R961150230	F/NW Springville Rd	35.27	VAC	23.94
R961150440		0.34	VAC	0.34
R961150450		1.33	VAC	1.26
R961150460	NW Skyline Blvd	1.05	VAC	1.05
R961150470		0.04	VAC	0.04
R961150480		0.52	VAC	0.44
R961230130		0.22	VAC	0.22
R961230170	NW Leif Erickson Dr	78.00	VAC	1.40
R961240020		259.37	VAC	6.99
1N1W23 00300		1.84	VAC	1.84
1N1W23 00200		80.13	VAC	20.40
1N1W14BA 00500		4.30	VAC	0.51
1N1W14A 01300		1.50	VAC	1.46
1N1W14 00401		19.29	VAC	19.29
1N1W14 00402		19.52	VAC	19.52
1N1W14 00403		0.23	VAC	0.23
1N1W14 00404		0.09	VAC	0.09
1N1W14A 00200		2.65	VAC	0.57
1N1W14A 00300		1.84	VAC	1.84
1N1W13BB 00400		1.89	VAC	1.89
1N1W13BB 00600		0.26	VAC	0.26

Table 15
Drainage Basin for Outfall 22C: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin
1N1W12 00900		23.26	VAC	1.25
1N1W12CC 00900		1.33	VAC	0.19
R961130070		51.67	VAC	51.67
1N1W13DB 01100		0.33	VAC	0.33
1N1W13DB 01200		0.72	VAC	0.72
1N1W13DB 01300		0.41	VAC	0.15
1N1W13DB 01900		0.21	VAC	0.16
1N1W13DB 02000		0.31	VAC	0.31
1N1W13DB 02200		0.75	VAC	0.37
1N1W13DB 03300		1.40	VAC	0.03

City of Portland Stormwater Outfall 22D
Summary of Existing Information

Physical Description

This outfall was not originally constructed by the City of Portland and was likely installed by the property owners. The outfall was rebuilt and slightly relocated in 1998 by the City when the original pipe failed creating several sink holes. This outfall drains roughly 224 acres. The current outfall and the outfall it replaced both measure 48 inches in diameter. The new outfall is roughly 120 feet downstream from the old outfall location.

There are three non-City outfalls in the vicinity of Outfall 22D, desinated as:

- WP-152: Time Oil Linnton
- WP-210: Foss (abandoned)
- WP-212: Foss Maritime

A map of showing the locations of City Outfall 22D, the non-City outfalls, including the abandoned outfall that the City outfall replaced (WP-210), and the sediment samples.

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall were identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 22D are available from one source:

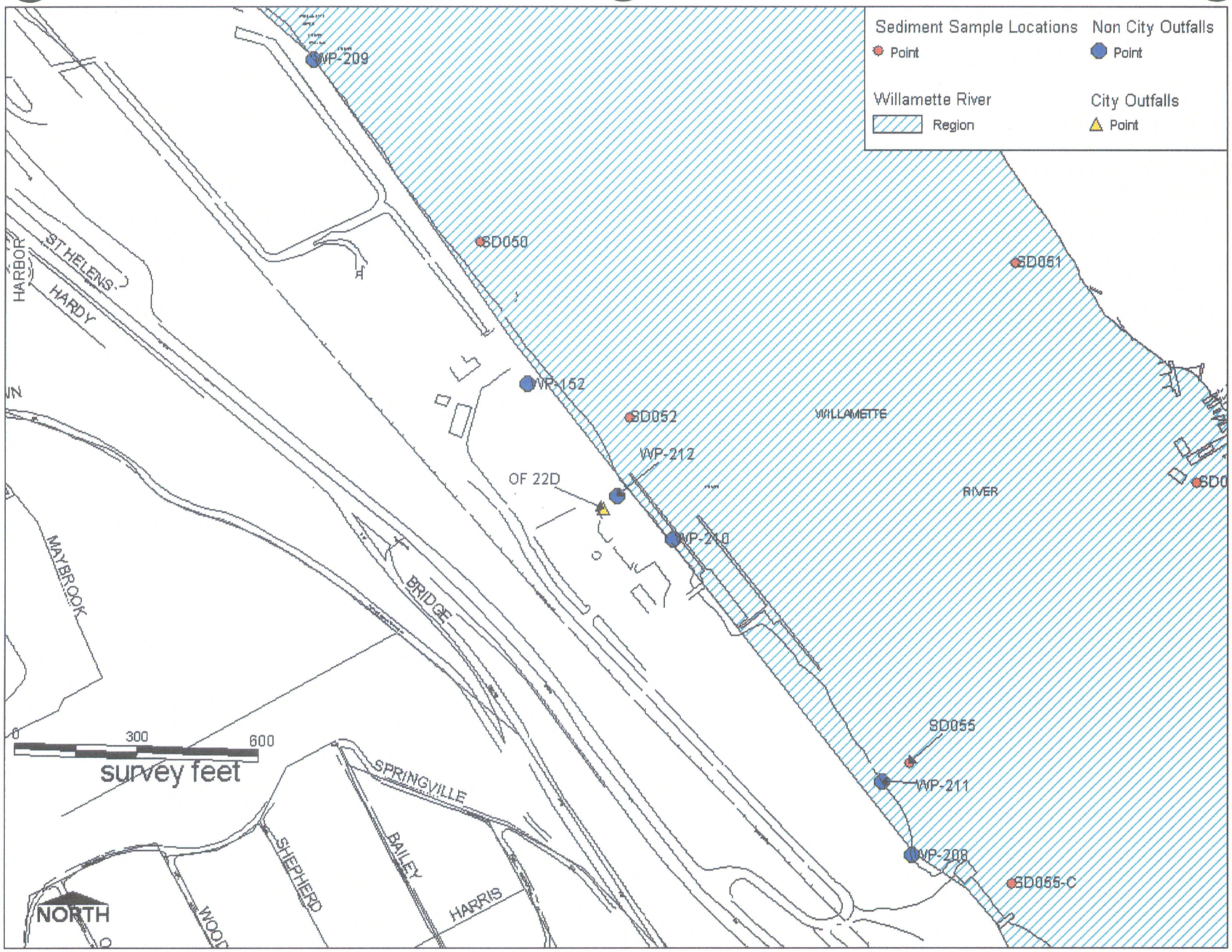
- Portland Harbor Sediment Investigation, EPA/DEQ (Stations SD050, SD052, SD055)

There are three sediment sample locations in the vicinity of the 22D outfall (see attached figure). All were collected as surface samples (0-10 cm). The sediment stations SD050 and SD052 are approximately 100 feet and 650 feet, respectively, downstream of Outfall 22D. Sediment station SD055 is approximately 1000 feet upstream of Outfall 22D.

Table 1 shows the available sediment data with station ID, sample ID, field replicate and subsample numbers, sample depth and sample date. To identify analytes of interest, data were evaluated based on a comparison of detected sediment concentrations at the closest downstream station SD052 station and at the upstream station SD055, with 3 times the baseline level. Based on these decision criteria, no analytes of interest were identified.

Because this outfall was constructed in 1998, any sediment contamination in this area is likely a result of historic releases. Therefore, this outfall will not be considered further.

Figures



Outfall 22D Map with Sediment Sample and Non-City Outfall Locations
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 22D

			StationID	SD055	SD052	SD050
			Sample ID #	0	0	0
			Field Replicate #	#	#	#
			SubSample #	#	#	#
			Sample Depth	0-10 CM	0-10 CM	0-10 CM
			Sample Date	09/19/1997	09/19/1997	09/19/1997
Analyte	**Units**	**DEQ Baseline**	**Analytes of Interest**			
Aluminum	PPM	42800		16600	37600	33200
Antimony	PPM	5		4 UJ	5 UJ	5 UJ
Arsenic	PPM	5		4 U	5 U	5 U
Barium	PPM	195		111	179	162
Beryllium	PPM	0.7		0.39	0.66	0.55
Cadmium	PPM	0.6		0.2	0.4	0.3
Chromium	PPM	41		18.6	36.1	31.9
Cobalt	PPM	19.7		12.9	18.3	16.8 J
Copper	PPM	60		18.8	37.9	35.5
Iron	PPM	45000		29800	41500	37400
Lead	PPM	30		9	16	13
Manganese	PPM	810		356	716	595
Mercury	PPM	0.1		0.02	0.05	0.05
Nickel	PPM	32		17.3	27.6	26.4
Selenium	PPM	15		9	10	9
Silver	PPM	1.4		0.7	1	0.7
Thallium	PPM	13		4 U	5 U	20
Titanium	PPM	2075		1520		
Vanadium	PPM	112		71.9	101	92.5
Zinc	PPM	118		67.3	98.6	85.4 J
Total organic carbon	PCT	2		1	1.3	1.1
4-Methylphenol	PPB	680		53	600	21
Benzoic acid	PPB	200		190 U	200 U	200 U
Benzyl alcohol	PPB	20		19 UJ	20 UJ	20 UJ
Bis(2-ethylhexyl) phthalate	PPB	390		73 U	190 U	150
Butyl benzyl phthalate	PPB	20		19 U	29	20 U
Di-n-butyl phthalate	PPB	20		19 U	20 U	20 UJ
Di-n-octyl phthalate	PPB	20		19 U	20 U	20 U
Dibenzofuran	PPB	100		19 U	30	26
Dimethyl phthalate	PPB	20		19 U	20 U	20 U
Pentachlorophenol	PPB	97		97 UJ	99 U	100 U
Phenol	PPB	20		19 U	20 U	20 U
2-Methylnaphthalene	PPB	150		19 U	50	32
Acenaphthene	PPB	180		28	66	70
Acenaphthylene	PPB	60		19 U	26	20
Anthracene	PPB	150		27	100	79
Benzo(a)anthracene	PPB	360		140	270	190
Benzo(a)pyrene	PPB	500		230	440	140
Benzo(b)fluoranthene	PPB	350		160	290	190
Benzo(g,h,i)perylene	PPB	250		190	320	20 U
Benzo(k)fluoranthene	PPB	225		140	320	220
Chrysene	PPB	425		180	390	260
Dibenz(a,h)anthracene	PPB	125		40	67	42
Fluoranthene	PPB	600		250	780	430
Fluorene	PPB	125		20	64	50
Indeno(1,2,3-c,d)pyrene	PPB	225		150	260	89
Naphthalene	PPB	200		27	97	86
Phenanthrene	PPB	700		110	450	290
Pyrene	PPB	700		270	770	380
Carbazole	PPB	100		31 J	100 J	30

Qualifier List: ***Bold indicates 3 times the DEQ baseline value***

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

City of Portland
CSO Outfall 23 and 23 Abandoned
Summary of Existing Information

Physical Description

City of Portland CSO Outfall 23 was originally constructed prior to 1925 and was a 16-inch pipe (see attached map showing 23 Abandoned outfall). Outfall 23 was reconstructed and moved to its present location in 1988, approximately 350 feet downstream of the abandoned outfall. The current outfall is 27 inches in diameter. This is a CSO outfall and has very little separated storm flow.

The CSO basin for this outfall is approximately 39 acres. Landuse within the CSO basin is primarily single family residences (21 percent) and vacant land (25 percent), with about 1 percent of the area each estimated for multifamily residences and industrial areas. Right-of ways are estimated as about half of the basin area.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Land use map

There are four non-City outfalls in the vicinity of the Outfall 23 and Outfall 23 Abandoned. These non-City outfalls are assigned to the following facility:

- WP-27: Arco
- WP-78: Mobil Oil
- WP-202: Arco/Mobil
- WP-209: Mobil Oil

Outfall WP-209 is upstream of Outfall 23 and the remaining outfalls listed above are downstream of both Outfalls 23 and 23 Abandoned.

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall was identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 23 and 23 Abandoned are available from one source:

- Portland Shipyard Sediment Investigation, Port of Portland (Stations SD043, SD044, SD045, SD046, SD047, SD048, SD050)

There have been a total of 7 sediment sample locations sampled in the vicinity of Outfall 23 and Outfall 23 Abandoned. All were collected as surface (0-10 cm) samples. A depth composite (0-90 cm) was also collected at one of the stations (SD048).

Sediment station SD047 and SD048 are approximately 150 feet upstream and offshore of Outfall 23. Sediment stations SD046 and SD045 are downstream of Outfall 23 and upstream of Outfall 23 Abandoned. The remaining stations (SD044 and SD043) are downstream of Outfall 23 Abandoned.

Table 1 shows the available sediment data with station ID, sample ID, field replicate and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall. Based on these decision criteria, one analyte of interest is:

- **2-Methylnapthalene:** detected in concentrations greater than 3 times the baseline at SD043 and SD044, but not at SD045

Stations SD043 and SD044 are located adjacent to the Mobil Oil dock, which conducts bulk petroleum distribution.

Also, there were a number of analytes (benzoic acid, dibenzofuran, and PAHs) greater than three times the DEQ baseline in the depth composite collected at SD048, upstream of Outfall 23, suggesting a historic or subsurface source unrelated to the City outfall.

The primary purpose for identifying analytes of interest is to help determine potential sources contributing to the City's conveyance system. Table 2 provides information on industrial uses of the analytes of interest that can aid in evaluating specific facilities and their potential to contribute contaminants.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 lists common uses for the industrial chemicals identified as analytes of interest in Table 1.

Table 3 summarizes the available information on facilities currently located in the vicinity of Outfall 23 drainage basin, including where site runoff drains, discharge permits, business

type and whether there is exposure of site activities to stormwater. The facilities listed are along the shoreline and discharge stormwater directly to the river through private outfalls although there is some potential for discharge to the CSO through the sanitary system.

Table 4 shows available stormwater data maintained by BES for industrial facilities required to have an NPDES permit to discharge to the City's stormwater system. Although Table 3 shows that Time Oil has an NPDES stormwater permit, BES has no stormwater data for this facility (likely on file with DEQ).

Table 5 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 6 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 6.

Table 7 is DEQ's list of leaking underground storage tanks (LUST). The list includes both sites with active leaks and those that have been cleaned up to the satisfaction of the DEQ in the past. Behind this table, the LUST incident reports are provided for facilities listed in Table 7.

Table 8 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 9 is the State Fire Marshal's list of hazardous material incidents to which the fire department has responded.

Table 10 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 11 is the CRL (Confirmed Release List) inventory of sites that are currently being remediated under one of three separate programs, the Voluntary Cleanup Program, the Site Response Program, and the Site Assessment Program.

Table 12 lists the SIC numbers and descriptions for the sites identified in the Table 3 facility list.

Table 13 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type.

The following databases were searched but no information was available for sites within the drainage basin:

- EPA Toxic Release Inventory and the Hazardous Waste Generators List
- EPA Corrective Action List
- EPA Emergency Response Notification System
- EPA RCRA Treatment Storage Disposal List
- DEQ Comprehensive Environmental Response, Compensation and Liability Information System

Outfall 23 and 23 Abandoned Summary

The analytes of interest identified as of potential interest to the City outfall include:

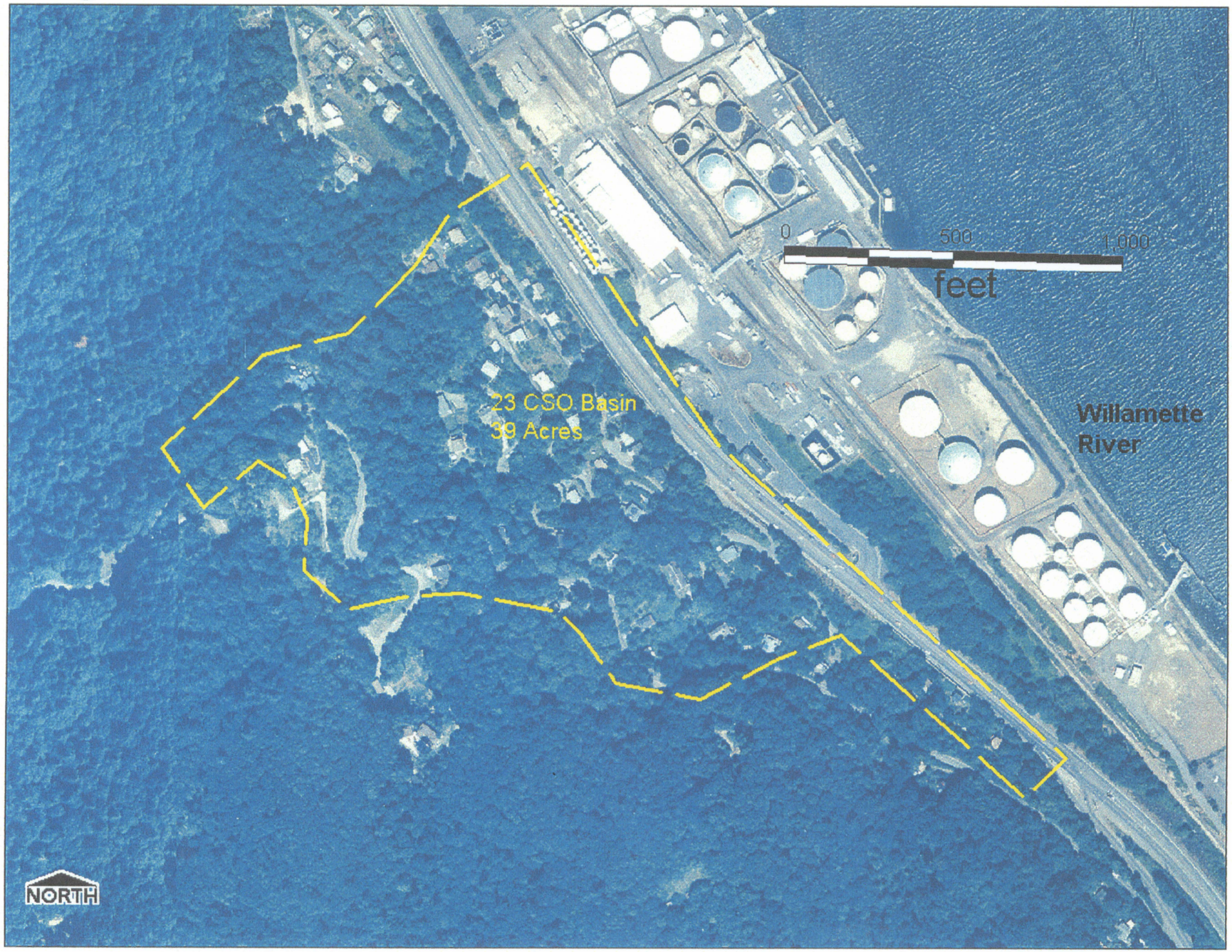
- 2-Methylnaphthalene

This analyte is a component of crude oil and the presence of it in sediment may be a result of adjacent shoreline landuses. The higher 2-methylnaphthalene concentrations are located along the Mobil Oil dock, where bulk petroleum distribution and transportation occurs, and facilities on their property have related activities (bulk petroleum distribution and transportation).

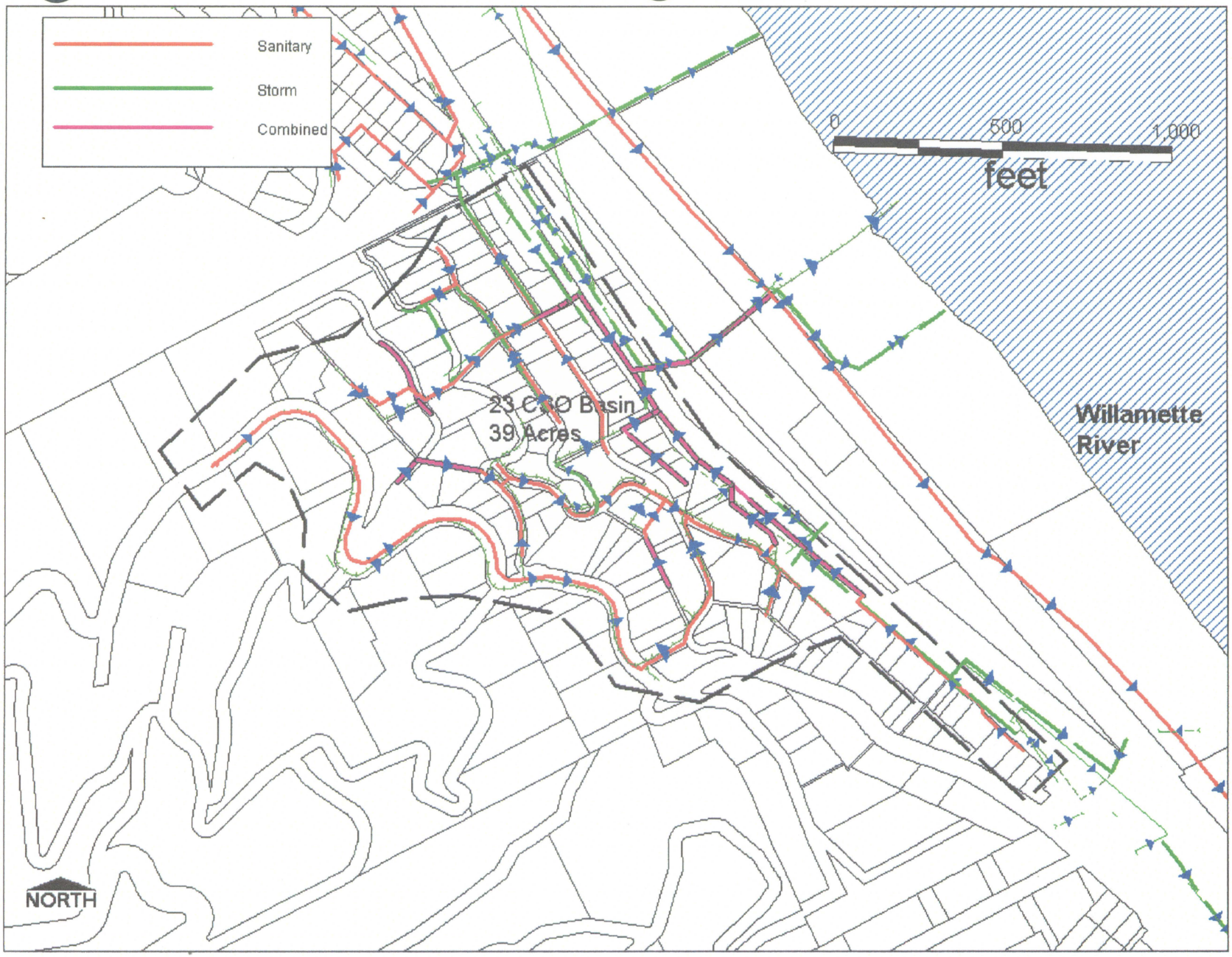
According to the DEQ's ECSI report on the Mobil Oil site, *"The facility has been used for bulk storage and dispensing of fuel oils, gasolines, and diesel fuels since 1928. Prior to 1970, petroleum sludges from above-ground storage tanks were discharged onto the ground during periodic tank cleanings. In the late 1960s, petroleum sheens began to appear on the surface of the Willamette River adjacent to the site. Mobil has attempted to control the release by constructing a slurry wall along the river bank."*

Sediment data downstream of the current CSO Outfall 23 and upstream of the historic CSO Outfall 23 tended to be lower in concentration than data both upstream and downstream of these City Outfalls. These outfalls are not considered a high priority because of the documented release of petroleum products in the vicinity of the current and abandoned Outfall 23 from other sources.

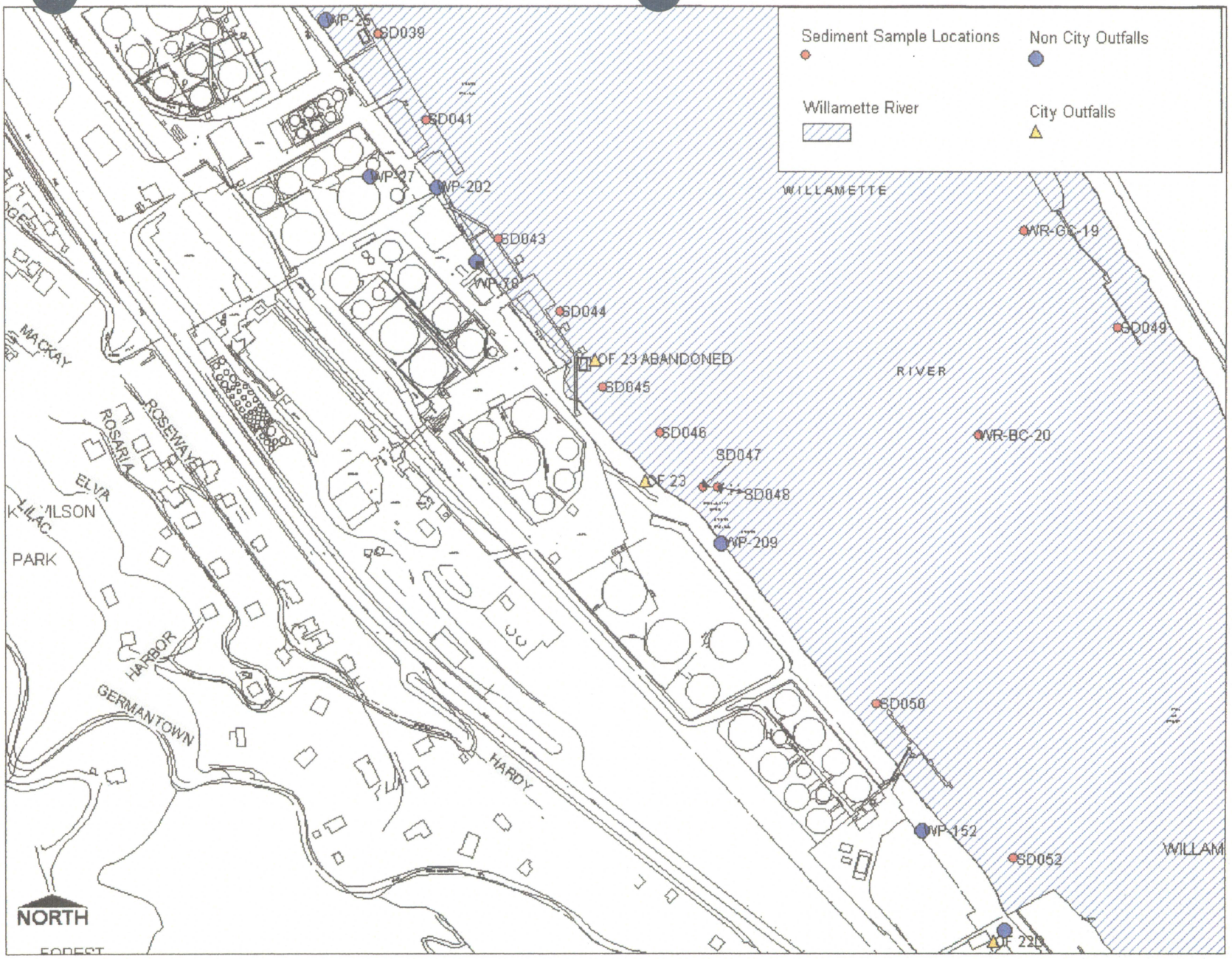
Figures



Basin 23 Aerial Photo
City of Portland



23 Outfall – Stormwater Drainage Map
City of Portland



Outfall 23 Map with Sediment Sample and Non-City Outfall Locations
City of Portland

Land Use Within Basin 23
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfalls 23 and 23 Abandoned

			StationID	SD050	SD048	SD048	SD047	SD046	SD045	SD044	SD043
			Sample ID #	0	0000-CC	0000A-CC	0	0	0	0	0
			Field Replicate #	#	#	#	#	#	#	#	#
			SubSample #	#	#	#	#	#	#	#	#
			Sample Depth	0-10 CM	0-10 CM	0-90 CM	0-10 CM	0-10 CM	0-10 CM	0-10 CM	0-10 CM
			Sample Date	9/19/97	9/19/97	10/15/97	9/19/97	9/19/97	9/19/97	9/19/97	9/19/97
Analyte	**Units**	**DEQ Baseline**	**Analytes of Interest**								
Aluminum	PPM	42800		33200	32700	35100	29100	36900	34700	38900	38800
Antimony	PPM	5		5 UJ	4 UJ	5 J	4 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Arsenic	PPM	5		5 U	5	4 U	4 U	5 U	5 U	5 U	5 U
Barium	PPM	195		162	154	167	142	173	166	183	187
Beryllium	PPM	0.7		0.55	0.57	0.57	0.51	0.6	0.57	0.63	0.7
Cadmium	PPM	0.6		0.3	0.3	0.4	0.2 U	0.3	0.3	0.3	0.4
Chromium	PPM	41		31.9	31.2	33.9	27.7	34.5	33.6	37.6	37.4
Cobalt	PPM	19.7		16.8 J	17.1	18.1	16.2 J	17.5 J	17.2 J	18.6	19.5
Copper	PPM	60		35.5	33.3	42.6	30.3	36.4	34.6	39.9	41.6
Iron	PPM	45000		37400	38300	41700	35900	39700	38900	42500	43100
Lead	PPM	30		13	10	27	12	13	14	16	15
Manganese	PPM	810		595	594	685	572	638	637	611	780
Mercury	PPM	0.1		0.05	0.05	0.07	0.04	0.04	0.05	0.05	0.05
Nickel	PPM	32		26.4	26	28.2 J	24.4	28.9	28.4	29.5	30
Selenium	PPM	15		9	13	8	10	8	12	14	15
Silver	PPM	1.4		0.7	0.8	1.2	0.7	0.6	0.7	0.7	0.8
Thallium	PPM	13		20	4	4 U	20	22	20	25	27
Titanium	PPM	2075			1870	1970					
Vanadium	PPM	112		92.5	96.3	99	87.4	99	98.2	104	108
Zinc	PPM	118		85.4 J	89.9	159	82 J	87.6 J	87 J	101	95.5
Total organic carbon	PCT	2		1.1	1.3	1.7	1.2	1.1	1.4	1.3	1.4
4-Methylphenol	PPB	680		21	280	68 J	25	20 U	19 U	32	19 U
Benzoic acid	PPB	200		200 U	190 U	**740 J**	190 U	200 U	190 U	200 U	190 U
Benzyl alcohol	PPB	20		20 UJ	19 UJ		19 UJ	20 UJ	19 UJ	20 UJ	19 UJ
Bis(2-ethylhexyl) phthalate	PPB	390		150	110 U		250	170	170	140 U	160 U
Butyl benzyl phthalate	PPB	20		20 U	19 U	19 U	19 U	20 U	19 U	20 U	19 U
Di-n-butyl phthalate	PPB	20		20 UJ	19 U	19 U	19 U	20 UJ	19 U	20 U	19 U
Di-n-octyl phthalate	PPB	20		20 U	19 U	19 U	19 UJ	20 U	19 UJ	20 U	19 U
Dibenzofuran	PPB	100		26	19 U	**1100**	19 U	20 U	31	32	19 U
Dimethyl phthalate	PPB	20		20 U	19 U	19 U	19 U	20 U	19 U	20 U	19 U
Pentachlorophenol	PPB	97		100 UJ	95 UJ	94 UJ	97 UJ	98 UJ	95 UJ	100 UJ	96 UJ
Phenol	PPB	20		20 U	19 U	19 U	19 U	20 U	19 U	20 U	19 U
2-Methylnaphthalene	PPB	150	X	32	25	350 J	19 U	20 U	29	**490**	**480**
Acenaphthene	PPB	180		70	51	**1300**	30	40	61	56	43
Acenaphthylene	PPB	60		20	19 U	61 J	19 U	20 U	19 U	20 U	19 U
Anthracene	PPB	150		79	62	**1300**	39	34	49	120	48
Benzo(a)anthracene	PPB	360		190	180	**1100**	79	86	82	210	130
Benzo(a)pyrene	PPB	500		140	290	910	120	83	56	260	150
Benzo(b)fluoranthene	PPB	350		190	190	**1100**	96	100	100	210	120
Benzo(g,h,i)perylene	PPB	250		20 U	190	400	19 UJ	20 U	19 UJ	160	95
Benzo(k)fluoranthene	PPB	225		220	210	510	94	90	87	240	140
Chrysene	PPB	425		260	260	960	120	120	120	310	180
Dibenz(a,h)anthracene	PPB	125		42	45		19 U	21	19 U	45	23
Fluoranthene	PPB	600		430	380	**4500**	200	210	250	720	700
Fluorene	PPB	125		50	38	**2900**	25	31	51	54	34
Indeno(1,2,3-c,d)pyrene	PPB	225		89	160	470	62	57	41	140	83
Naphthalene	PPB	200		86	63	360 J	28	33	50	50	37
Phenanthrene	PPB	700		290	230	**6800**	140	150	260	410	210
Pyrene	PPB	700		380	400	**4100**	260	190	250	600	490
Carbazole	PPB	100		30	67 J	240	19 U	20 U	21	97 J	52 J

Bold indicates 3 times the DEQ baseline value

Qualifier List:

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Table 2
Industrial Chemical Uses for Analytes of Interest at Outfall 23 and 23 Abandoned

Chemical	Use
2-Methylnaphthalene	Component of crude oil and a product of combustion which is produced and released to the environment during natural fires. Emissions from petroleum refining, coal tar distillation, and gasoline and diesel fueled engines are major contributors to the environment. Pure form used in vitamin K production and as a chemical intermediate and may be released manufacturing effluents and the disposal of waste byproducts. Because of the widespread use in a variety products, released to the environment through landfills, municipal waste water treatment facilities and waste incinerators.

Table 3
Outfall 23 Facility List

Aquarius Search: Aug-2000
Basin Reconn: Aug-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit	Business Type	Exposure	Comments
R320503710 R961110250	Mobil Oil Corporation	9420 NW St. Helens Rd.	WP-202, WP-78, WP-209	5171*, 5172, 2992*	NPDES	1300J	Bulk petroleum dist	Yes	
R961110371	Olympic Pipeline Co.	9420 NW St. Helens Rd.	WP-202, WP-78, WP-209	4613			Bulk petroleum dist	Yes	
R961110390	Shore Terminals LLC	9400 NW St. Helens	WP-152	5171*, 4226	NPDES	1200Z	Bulk petroleum	Yes	
R961110380	Time Oil Company	9100 NW St. Helens	WP-152	5171*, 4226	NPDES	1200Z	Bulk petroleum	Yes	

* Indicates SIC # has been verified via site inspection
All facilities have potential to discharge to CSO

Table 4
NPDES Stormwater Results for Industries Discharging to Outfall 23

Location Code	Collection Date	Tester	Daily Flow	pH	TSS	Copper	Lead	Zinc	Total O&G	Butanol	Ethanol	Isobutyl Alcohol	Isopropyl Alcohol	Methanol
			gallons	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mobil														
01	02/01/2000	1300J							16					
01	02/07/2000	1300J							8.8					
01	02/08/2000	1300J							7.2					
01	02/11/2000	1300J							3.5					
01	03/08/2000	1300J							5.1	<1	<1	<1	<1	<1
01	03/09/2000	1300J	*4651						4.7					
01	03/13/2000	1300J							8.9					
01	03/22/2000	1300J							9.2					
01	03/27/2000	1300J							5.9					
01	04/14/2000	1300J							4.8					
01	04/18/2000	1300J							3.7					
01	04/25/2000	1300J							4.6					
01	05/03/2000	1300J							2.1					
01	05/08/2000	1300J							6.8					
01	05/15/2000	1300J							<2					
01	06/06/2000	1300J							3.7					
Shore Terminals LLC														
01	01/21/2000	1200Z		6.8	28	<0.005	<0.005	0.0798	<5					

*Average

Table 5
Outfall 23 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
NW St. Helens Rd	NW St. Helens Rd	NW St. Helens Rd	NW St. Helens Rd	NW St. Helens Rd	NW St. Helens Rd	NW St. Helens Rd	NW St. Helens Rd
9100	NL	NL	NL	NL	NL	NL	NL
9400	NL	NL	NL	NL	NL	NL	NL
9420	NL	General Petroleum Corp	Mobil Oil	Mobil Oil	Mobil Oil, Olympic Pipeline	Mobil Oil, Olympic Pipeline	Mobil Oil, Mobil Gas

NL = Not listed

Table 6
Outfall 23 DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI ID	CERCLIS	Action	Status
R320503710 R961110250	9420 NW St. Helens Rd	Mobil Oil Terminal	137	*	Remedial Action	LIS
?	Hwy 30	St. Helens R - Gasoline Spill	337	*	Site Screening recommended (EV)	SUS

SUS = Suspected
* No information available in database

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 137

shows data entered as of December 11, 2000 at 8:48:19 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 137	Site Name: Mobil Oil Terminal		CERCLIS No:
	Address: 9420 NW St. Helens RD Portland 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 11		Tax Lots: 25
	Latitude: 45 deg. 35 ' 40"	Longitude: 122 deg. 46 ' 52"	Site Size: 24.23 acres
Other Site Names:			
	Mobil Oil Bulk Plant - St. Helens RD		
Operations:			
	Name: Mobil Oil Terminal		
	Comments: Bulk petroleum terminal .		
	Years of Operation: since about 1928		
	SIC Code: 5171		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	petroleum
Manner and Time of Release:	Periodic discharging of petroleum sludges to ground from 1928 to 1970. Spill on March 10, 1985; possibly other spills.
Contamination Information:	(07/18/97 MAF/VCS) The facility has been used for bulk storage and dispensing of fuel oils, gasolines, and diesel fuels since 1928. Prior to 1970, petroleum sludges from above-ground storage tanks were discharged onto the ground during periodic tank cleanings. In the late 1960s, petroleum sheens began to appear on the surface of the Willamette River adjacent to the site. Mobil has attempted to control the release by constructing a slurry wall along the river bank. In March 1985, 46,116 gallons of petroleum were spilled at the site. All but 11,004 gallons were recovered. Mobil entered DEQ's Voluntary Cleanup program in January 1992.
Pathways:	
Environmental/Health Threats:	Groundwater contaminated with petroleum products in excess of federal drinking water standards and ambient water quality criteria is discharging directly to the Willamette River.

Status of Investigative or Remedial Action: (07/18/97 MAF/VCS) The Mobil Oil Corporation has completed a Remedial Investigation, Risk Assessment, and Feasibility Study at the site, documenting extensive soil and groundwater contamination, primarily in the northeast section of the site. In April 1997, DEQ proposed a remedial action to address the contamination. The remedy included free-product recovery, soil vapor extraction, air sparging, and institutional controls to restrict land use and public access to the site. After seeking public comments on the proposal, the remedy was approved in a Record of Decision (ROD) in June 1997. (8/27/98 MJM/VCP) Negotiations for a Remedial Design/Remedial Action Agreement have been initiated. Mobil performed (Sept. 97) groundwater testing of the deeper aquifer as required in the ROD. A soil vapor extraction and air sparging system for Phase I has been constructed and vapor and start-up was initiated in November 1999.

Data Sources: 1) NWR file on spill incident.
2) "Human Health & Ecological Risk Assessment", Mobil Oil Corp. Portland Terminal by Kleinfelder, Inc. (1991).

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
DIESEL - FUEL OIL	Groundwater					
DIESEL - FUEL OIL	Soil					

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	08/05/1988		Michael Zollitsch	DEQ	HQ	SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ	HQ	SAS
Letter Agreement	02/01/1991	02/01/1991	Matt McClincy	DEQ	NW	VCS
SITE EVALUATION	03/01/1991	03/12/1991	Michael Fernandez	DEQ	HQ	VCS
NEGOTIATIONS	03/01/1991	12/31/1991	Michael Fernandez	DEQ	HQ	VCS
Refer to LUST Program	03/13/1991	07/16/1992	Michael Fernandez	DEQ	HQ	LUST
REMEDIAL INVESTIGATION	01/01/1992	03/31/1997	Michael Fernandez	DEQ	HQ	VCS
FEASIBILITY STUDY	01/01/1992	03/31/1997	Michael Fernandez	DEQ	HQ	VCS
RISK ASSESSMENT	01/01/1992	03/31/1997	Michael Fernandez	DEQ	HQ	VCS
Site Screening recommended (EV)	01/13/1994	01/13/1994	Dan Crouse	DEQ	HQ	SAS
SITE PRIORITY EVALUATION FOR FURTHER ACTION	12/14/1994	03/28/1996	Gil Wistar	DEQ	NW	SAS
Listing Review completed	03/27/1996	03/28/1996	Gil Wistar	DEQ	NW	SAS
Proposal for Confirmed Release List recommended	03/28/1996	03/28/1996	Gil Wistar	DEQ	NW	SAS
Proposal for Inventory recommended	03/29/1996	03/29/1996	Gil Wistar	DEQ	NW	SAS
Facility proposed for Confirmed Release List	03/18/1997	03/18/1997	Michael Fernandez	DEQ	HQ	VCS
Facility proposed for Inventory	03/18/1997	03/18/1997	Michael Fernandez	DEQ	HQ	VCS
PRELIMINARY ASSESSMENT EQUIVALENT	03/31/1997	03/31/1997	Matt McClincy	DEQ	NW	VCS
RECORD OF DECISION	04/01/1997	06/17/1997	Michael Fernandez	DEQ	HQ	VCS
Review for final listing	07/14/1997	07/14/1997	Michael Fernandez	DEQ	HQ	VCS
Listing on Confirmed Release List recommended	07/15/1997	07/15/1997	Michael Fernandez	DEQ	HQ	VCS
Listing on Inventory recommended	07/15/1997	07/15/1997	Michael Fernandez	DEQ	HQ	VCS
Facility placed on Confirmed Release List	07/18/1997	07/18/1997	Kim Van Patten	DEQ	NW	SAS
Facility placed on Inventory	07/18/1997	07/18/1997	Kim Van Patten	DEQ	NW	SAS
REMEDIAL DESIGN	10/01/1997	06/01/1999	Matt McClincy	DEQ	NW	VCS

REMEDIAL ACTION	06/01/1999	Matt McClincy	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 337

shows data entered as of December 11, 2000 at 8:51:45 AM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 337	Site Name: St. Helens RD - Gasoline Spill		CERCLIS No:
	Address: Hwy 30 Burlington 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 2N , 1W , 18		Tax Lots:
	Latitude: 45 deg. 39 ' 5"	Longitude: 122 deg. 51 ' 4"	Site Size: 0 acres
Other Site Names:			

Operations:

Name: St. Helens RD - Gasoline Spill

Comments: Highway .

Years of Operation:

SIC Code: 4212

Operating Status: Unknown

Contamination Information

Hazardous Substances/Waste Types:	gasoline
Manner and Time of Release:	
Contamination Information:	On 12/23/87, a truck trailer overturned on US Hwy 30 (St Helens Rd.) just east of Cornelius Pass Rd. Approximately 5700 gallons of gasoline were spilled.
Pathways:	Possible groundwater, soils, and surface water contamination.
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	Most of the free product was recovered by Riedel Environmental. Further cleanup was to be conducted by Delta Environmental Consultants, Minnesota.
Data Sources:	Spill Report NWR, 12/23/87

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
GASOLINE	Soil	Unknown				
GASOLINE	Surface Water	Unknown				

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	09/12/1988		Mike Rosen	DEQ		SRS
Responsible party notified re 11/88 Inventory listing	11/30/1988			DEQ		SAS
Site Screening recommended (EV)	02/12/1994	02/12/1994	Dan Crouse	DEQ		SAS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Table 7
Outfall 23 DEQ Leaking Underground Storage Tanks List

RNO	Address	Log Number	Company	Zip	Cleanup Start	Cleanup End	Site Work Complete
R320503710 R961110250	9420 NW St Helens Road	26-90-0283	Mobil Oil Co.	97231	07-Aug-1990	16-Jul-1992	16-Jul-1992

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 11, 2000 01:08 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0283
UST FAC NBR: 3562 DATE REPORTED: 07-AUG-90

SITE NAME: MOBIL OIL CO.
SITE ADDRESS: 9420 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP: 97231
SITE COUNTY: MULTNOMAH PHONE: (503)286-6748

----------SITE ASSESSMENT----------

DATE DISCOVERED: OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: N	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: N	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: N
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: Y	(OT)Other: N	(UN)Unknown: Y

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: REMEDIATION COMPLETED: 16-JUL-92
CLEANUP STARTED: 07-AUG-90 NO FURTHER ACTION: 16-JUL-92

(opens_inc.rpt)

Table 8
Outfall 23 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/AST	Location	Comments
9159 NW St. Helens Rd.	Cassidy SFR	3190	Jun-1949	675	UST	Yard	Heating oil
9371 NW St. Helens Rd.	Treber SFR	57623	Jul-1950	675	UST	Yard	Heating oil
9410 NW St. Helens Rd.	Mobil Oil	3847	Nov-1967	1,000	UST	Yard	Heating oil
9420 NW St. Helens Rd.	Mobil Oil	480	Aug-1979	1,000	UST	Yard	Heating oil
9535 NW St. Helens Rd.	Thompson SFR	46345	Feb-1949	675	UST	Yard	Heating oil
9685 NW St. Helens Rd.	Bellknapp SFR	17142	Nov-1941	275	AST	Basement	Heating oil

AST=Aboveground Storage Tank
UST=Underground Storage Tank
SFR = Single Family Residence

Table 9
Outfall 23 State Fire Marshal Hazardous Spills List

RNO	Address	Chemical	Date	Incident ID
R961110380	9100 NW St. Helens Rd	Gasoline	07/30/1992	02-291-920220
?	9420 NW St. Helens Rd	Transmission fluid	03/14/1989	02-291-890082

Table 10
Outfall 23 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	100 Sus Hydro Naphthenic Neutral	Petroleum Hydrocarbons	Liquid	Gallons	10,000-49,999	Chronic Health Hazard	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	600W Cylinder Oil	Hydrocarbons/Additives	Liquid	Gallons	1,000-4,999	Combustible Materials	
R320503710	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Acetone	Acetone	Liquid	Gallons	0-4	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Antifreeze	Ethylene Glycol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Cat Gear Oil	Hydrocarbons/Additives	Liquid	Gallons	100,000-249,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Chemstrip	Methylene Chloride	Liquid	Gallons	0-4	Acute Health Hazard	Chronic Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Chevron Ban Ice	Methyl Alcohol	Liquid	Gallons	50-199	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Concentrate PM	Calcium Sulfonate	Liquid	Gallons	200-499	Acute Health Hazard	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Curve Grease	Heavy Naphthenic Distillate	Liquid	Gallons	1,000-4,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	100,000-249,999	Flamm.Liq. (73F<FP<141F)	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Ethanol 200 Proof	Ethanol	Liquid	Gallons	5,000-9,999	Flammable Liq.(FP<0F)	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Fuel Oil	Petroleum Distillate	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Gasoline	Petroleum Distillates	Liquid	Gallons	25,000,000-49,999,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Goodwrench Oil	Phosphorodithoic Acid	Liquid	Gallons	5,000-9,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	HITEC 4977A	Aromatic Solvent Naphtha	Liquid	Gallons	5,000-9,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Honda Oil	Alkanes	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Industrial Enamel	Mineral Spirits	Liquid	Gallons	20-49	Flamm.Liq. (73F<FP<141F)	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Isopropyl Alcohol	Isopropyl Alcohol	Liquid	Gallons	36818	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Jet Oil II	Synthetic Esters	Liquid	Gallons	10,000-49,999	Chronic Health Hazard	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mineral Spirits 66 1% Aromatics	Petroleum Distillates	Liquid	Gallons	50-199	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil 1	Petroleum Hydrocarbons	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Aero	Hydrotreated Light Naphthenic Distillate	Liquid	Gallons	500-999	Combustible Materials	Chronic Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Aero HFA	Petroleum Hydrocarbons	Liquid	Gallons	1,000-4,999	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Almo	Chloroalkanes	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Delvac	Phosphorodithoic Acid	Liquid	Gallons	100,000-249,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil DTE Oil	Petroleum Hydrocarbons	Liquid	Gallons	100,000-249,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Grease	Petroleum Hydrocarbon	Liquid	Gallons	10,000-49,999	Combustible Materials	

Table 10
Outfall 23 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Grease Eal	Lithium Soap Thickener	Liquid	Gallons	5,000-9,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Hydraulic Oil	Petroleum Hydrocarbon	Liquid	Gallons	100,000-249,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Jet Oil 254	Petroleum Hydrocarbon	Liquid	Gallons	5,000-9,999	Combustible Materials	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Motor Oil	Petroleum Hydrocarbon	Liquid	Gallons	100,000-249,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Nyvac FR 2000	Diethylene Glycol	Liquid	Gallons	1,000-4,999	Acute Health Hazard	Chronic Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Pegasus	Petroleum Hydrocarbon	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Pyrogard D	Ethylene Glycol	Liquid	Gallons	1,000-4,999	Chronic Health Hazard	Combustible Materials
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Rarus	Triphenyl Phosphate	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil SHC	Synthetic Hydrocarbons	Liquid	Gallons	10,000-49,999	Combustible Materials	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Vactra Oil	Petroleum Hydrocarbon	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Vacuoline	Petroleum Hydrocarbon Oil, Lard	Liquid	Gallons	1,000-4,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Velocite Oil No 6	Petroleum Hydrocarbon	Liquid	Gallons	1,000-4,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobil Viscolite	Petroleum Hydrocarbons	Liquid	Gallons	1,000-4,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobile DTE 11m	Petroleum Hydrocarbons	Liquid	Gallons	10,000-49,999	Chronic Health Hazard	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilfluid 424	Phosphorodithoic Acid	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilgard	Petroleum Hydrocarbon	Liquid	Gallons	250,000-499,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilgear	Petroleum Hydrocarbon	Liquid	Gallons	50,000-99,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilith	Petroleum Hydrocarbon	Liquid	Gallons	5,000-9,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilmet	Petroleum Hydrocarbon, Lard, Esters	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilmet Alpha	Petroleum Hydrocarbons	Liquid	Pounds	200-499	Chronic Health Hazard	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilmet Beta Ccf	Sulfur	Liquid	Gallons	1,000-4,999	Misc.Haz. Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilmet Upsilon	Mineral Oil	Liquid	Pounds	500-999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobiltrans	Petroleum Hydrocarbon	Liquid	Gallons	5,000-9,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilube	Hydrocarbons/Additives	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mobilux	Petroleum Hydrocarbon	Liquid	Gallons	1,000-4,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Mopar	Petroleum Hydrocarbon	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Paint Enamel	Mineral Spirits	Liquid	Gallons	10-19	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard

Table 10
Outfall 23 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	UNIT	MaxQnty	Haz Class 1	Haz Class 2
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Phenolic Tank Lining	Epoxy Resin	Liquid	Gallons	20-49	Flammable Liq.(0F<FP<73F)	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Propane	Propane	Gas	Gallons	1,000-4,999	Flammable Gases	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Red Dye, Liquid	Diazo Dye In Naphthenic Oil	Liquid	Gallons	200-499	Chronic Health Hazard	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Slop Oil	Petroleum Hydrocarbon	Liquid	Gallons	10,000-49,999	Combustible Materials	
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Sulfuric Acid	Sulfuric Acid	Liquid	Gallons	0-4	Corrosives	Acute Health Hazard
R320503710 R961110250	9420 NW St Helens Rd	Mobil Oil Corporation	15050	5171	Toyota Genuine Motor Oil	Petroleum Hydrocarbon	Liquid	Gallons	1,000-4,999	Combustible Materials	
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Asa Additive	Toluene	Liquid	Gallons	500-999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Diesel	Petroleum Distillates	Liquid	Gallons	2,500,000-4,999,999	Flamm.Liq. (73F<FP<141F)	
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Ethanol	Ethanol	Liquid	Gallons	100,000-249,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Exxon Additive	Piba/Polyether/Hydrocarbon	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Fs Ii Additive	2-(2-Methoxyethoxy)	Liquid	Gallons	5,000-9,999	Combustible Materials	
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Gasoline	Petroleum Distillates	Liquid	Gallons	10,000,000-24,999,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Generic Additive	Polyolefin Amine	Liquid	Gallons	10,000-49,999	Flamm.Liq. (73F<FP<141F)	Chronic Health Hazard
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	JP-8 Jet Fuel	Kerosene	Liquid	Gallons	10,000,000-24,999,999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Nitrogen	Nitrogen	Gas	Pounds	1,000-4,999	NonFlammable Gases	
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Norkol Concentrate	Ethylene Glycol	Liquid	Gallons	50-199	Combustible Materials	
R961110390	9400 NW St Helens Rd	Shore Terminals LLC	78176	4226	Red Dye	Petroleum Hydrocarbons	Liquid	Gallons	50-199	Combustible Materials	

Table 11
Outfall 23 Confirmed Release List

Site Name	Address	Zip	Site ID	Substance	Media	Phase	Program
Mobil Oil Terminal	9420 NW St. Helens Rd	97231	137	Diesel - fuel oil	Groundwater, Soil	3	VCS

Phase
3: Facilities where the remedial investigation and feasibility studies have been completed and remedial design, removal or remedial action is underway.

Program
VCS: Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property under the oversight of DEQ's Voluntary Cleanup Section.

Table 12
Outfall 23 SIC Information

SIC Number	SIC Definition
2992	Lubricating Oils and Greases
4226	Special Warehousing and Storage, NEC
4613	Refined Petroleum Pipelines
5171	Petroleum Bulk Stations and Terminals
5172	Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals

NEC = Not Elsewhere Classified

Table 13
Drainage Basin for Outfall 23: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R320503710	9420 WI/ NW St. Helens Rd	0.09	IND	0.03
R961110250	9420 NW St. Helens Rd	24.23	IND	0.23
R961110250	9420 NW St. Helens Rd	24.23	IND	0.27
R320500180	9442-9446 NW Roseway Ave	0.17	MFR	0.16
R320500210	9450-9452 NW Roseway Ave	0.20	MFR	0.19
R320500240	9535 NW St. Helens Rd	0.26	SFR	0.24
R320500380	9633 NW St. Helens Rd	0.11	SFR	0.11
R320500500	9663 NW St. Helens Rd	0.12	SFR	0.11
R320500940	9418 NW Roseway Ave	0.32	SFR	0.20
R320501390	9360 NW Harbor Blvd	0.51	SFR	0.51
R320501610	9437 NW Germantown Rd	0.13	SFR	0.13
R320501650	9505 NW Germantown Rd	0.28	SFR	0.26
R320501730	9440 NW Harbor Blvd	0.56	SFR	0.57
R320501870	9416 NW Harbor Blvd	0.24	SFR	0.25
R320501960	9335 NW Roseway Ave	0.43	SFR	0.43
R320501970	9447 NW Roseway Ave	0.38	SFR	0.38
R320502030	9507 NW Roseway Ave	0.40	SFR	0.40
R320502090	9545 NW Roseway Ave	0.36	SFR	0.36
R320502170	9625 NW Roseway Ave	0.12	SFR	0.12
R320502190	9608 NW Rosaria Ave	0.22	SFR	0.22
R320502370	9505 NW Harbor Blvd	0.18	SFR	0.13
R320502430	9520 NW Elva Ave	0.11	SFR	0.10
R320502500	9550 NW Elva Ave	0.23	SFR	0.24
R320502530	9609 NW Rosaria Ave	0.30	SFR	0.30
R320502740	9609 NW Harbor Blvd	0.17	SFR	0.17
R320502890	9535 NW Harbor Blvd	0.33	SFR	0.33
R320502920	9511 NW Harbor Blvd	0.37	SFR	0.37
R320502980	9549 NW Elva Ave	0.29	SFR	0.29
R320504700	9620 NW Germantown Rd	0.45	SFR	0.40
R320504900	9920 NW Germantown Rd	0.69	SFR	0.69
R649725620	9748 NW Germantown Rd	2.97	SFR	0.56
R649735600	9843 NW Germantown Rd	0.35	SFR	0.34
R320500090		0.08	VAC	0.08
R320500220		0.08	VAC	0.08
R320500280		0.12	VAC	0.11
R320500360		0.06	VAC	0.06
R320500420		0.11	VAC	0.11
R320500460		0.12	VAC	0.11
R320500960		0.11	VAC	0.11
R320500980		0.04	VAC	0.04
R320501230		0.11	VAC	0.11
R320501250		0.12	VAC	0.12
R320501470		0.17	VAC	0.17
R320501630		0.12	VAC	0.13
R320501690		0.15	VAC	0.16
R320501710		0.16	VAC	0.16
R320501790		0.15	VAC	0.15
R320501810		0.11	VAC	0.12
R320501830		0.09	VAC	0.10
R320501850		0.12	VAC	0.11
R320501900		0.16	VAC	0.17
R320501920		0.05	VAC	0.05
R320502150		0.12	VAC	0.12
R320502390		0.21	VAC	0.21
R320502420		0.11	VAC	0.10
R320502450		0.08	VAC	0.09
R320502460		0.09	VAC	0.09
R320502480		0.10	VAC	0.11
R320502570		0.23	VAC	0.20

Total Area by Landuse

Landuse	Total Area
Commercial	--
Industrial	0.5
Single Family Residence	8.2
Multifamily Residence	0.3
Vacant	9.7
Total Basin Area	**39**
Estimated Right-of-Ways	20.2

Table 13
Drainage Basin for Outfall 23: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Landuse	Total Area Within Basin (Acres)
R320502720	9601 NW Harbor Blvd	0.04	VAC	0.04
R320502760		0.09	VAC	0.10
R320502780		0.14	VAC	0.14
R320502800		0.20	VAC	0.21
R320502830		0.23	VAC	0.23
R320502970		0.05	VAC	0.05
R320503050		0.22	VAC	0.23
R320503090		0.15	VAC	0.14
R320503110		0.32	VAC	0.32
R320503150		0.33	VAC	0.13
R320503190		0.41	VAC	0.37
R320503250		0.39	VAC	0.37
R320503330		0.05	VAC	0.05
R320503390		0.25	VAC	0.06
R320503420		0.27	VAC	0.25
R320503450		0.12	VAC	0.12
R320503470		0.82	VAC	0.76
R320504640		0.46	VAC	0.44
R320504800		0.95	VAC	0.50
R320504940	9729 NW Lilac Ave	0.97	VAC	0.58
R320700350	9924 NW Germantown Rd	0.91	VAC	0.18
R320701550		1.51	VAC	0.32
R320701630		2.59	VAC	0.71
R649735610	9843 WI/ NW Germantown Rd	0.05	VAC	0.05
R649735620	9802 NW Germantown Rd	0.24	VAC	0.23

City of Portland CSO Outfall 24
Summary of Existing Information

Physical Description

City of Portland CSO Outfall 24 was constructed prior to 1923. The outfall is 12 inches in diameter.

The drainage basin is 79 acres and landuse is predominately vacant (41 percent of the basin), single family residences (18 percent), and industrial (6 percent). Commercial, multifamily residences, and rural make up about 3 percent of the landuse. Right-of-ways are estimated to be approximately 33 percent of the basin area.

The following figures are attached:

- Aerial map with drainage basin of the outfall
- Stormwater drainage map
- Map of City and non-City outfall locations and sediment sample locations
- Landuse map

There are three non-City outfalls over 600 feet downstream and upstream of Outfall 24. The outfall designations are as follows:

- WP-77: Olympic Pipeline/GATX
- WP-106: Linnton Plywood
- WP-126: Linnton Plywood

Sediment Concerns

As part of the Site Discovery portion of the Portland Harbor Sediment Management Plan, DEQ had identified preliminary "baseline" sediment screening levels for sediment. Screening was conducted using updated baseline values obtained from DEQ. The DEQ baseline values are not based on environmental or human risk or a regulatory need for action and it is believed that the baseline values will tend to overestimate analytes of concern. Therefore, identification of analytes that may be of interest to the City outfall were identified as values that exceeded three times the DEQ baseline values. Sediment Quality Guidelines will be developed by DEQ and/or EPA that will more accurately predict analytes of concern based on risk to human health and the environment.

Sediment data in the vicinity of Outfall 24 are available from one source:

- Portland Harbor Sediment Investigation, EPA/DEQ (stations SD020, SD024, SD026, SD028)

There are four sediment sample locations that were sampled in the vicinity of the 24 Outfall (see attached figure). All were collected as surface samples. The SD024 and SD020 stations are downstream (approximately 500 feet and 800 feet, respectively) of Outfall 24. The SD026 and SD 028 are upstream (approximately 400 feet and 800 feet, respectively) of Outfall 24.

Table 1 shows the available sediment data with station ID, sample ID, and subsample numbers, sample depth and sample date. Table 1 also identifies detected sediment concentrations greater than 3 times the baseline level and the analytes that might be of interest to the evaluation of the City outfall. Sediment results at the downstream stations SD020 and SD024 were all less than three times the DEQ baseline values. The only analyte greater than 3 times the DEQ baseline was di-n-butyl phthalate, detected upstream of the City outfall. Therefore, no analytes of interest were identified for Outfall 24.

Drainage Basin Information

Baseline drainage basin information has been compiled from existing BES, DEQ, and EPA files and databases. The information included in the following tables has been selected for the purposes of assisting in the evaluation of the outfall. A list of the tables, along with a brief description, is summarized below.

Table 1 lists the sediment results for DEQ baseline analytes sampled at stations in the vicinity of the City outfall, with concentrations in bold to show results that are three times the DEQ baseline values.

Table 2 summarizes the available information on facilities currently located in the vicinity of the Outfall 24 drainage basin, including where site runoff drains, discharge permits, business type and whether there is exposure of site activities to stormwater. Although Table 2 indicates that a number of facilities have NPDES stormwater permits, BES does not have any stormwater data in its files (data may be available through DEQ).

Table 3 summarizes the Polk Directory information for selected addresses within the drainage basin for each decade since 1940.

Table 4 lists EPA's Toxic Release Inventory, which records releases of chemicals to the environment, and the Hazardous Waste Generators, which shows sites that treat, store, or dispose of hazardous materials.

Table 5 lists the sites for which the DEQ has established environmental cleanup site investigation files. This list contains both active and inactive sites, including low to high priority sites. Behind this table, the ECSI site summary reports are provided for sites listed in Table 5.

Table 6 is DEQ's list of leaking underground storage tanks (LUST). The list includes both sites with active leaks and those that have been cleaned up to the satisfaction of the DEQ in the past. Behind this table, the LUST incident reports are provided for facilities listed in Table 6.

Table 7 is the Portland Fire Bureau's list of underground storage tanks (USTs) registered with the City.

Table 8 is the State Fire Marshal's list of hazardous material incidents to which the fire department has responded.

Table 9 is the State Fire Marshal's list of hazardous substances that are used or stored at sites within the drainage basin. This list may not be comprehensive because companies are not required to provide this information to the State Fire Marshal.

Table 10 is the CRL (Confirmed Release List) inventory of sites that are currently being remediated under one of three separate programs, the Voluntary Cleanup Program, the Site Response Program, and the Site Assessment Program.

Table 11 lists the SIC numbers and descriptions for the sites identified in the Table 2 facility list.

Table 12 shows the landuse assigned to each tax lot, the tax lot area, the area of the tax lot within the basin boundary, and a summary of total acreage in the basin for each landuse type.

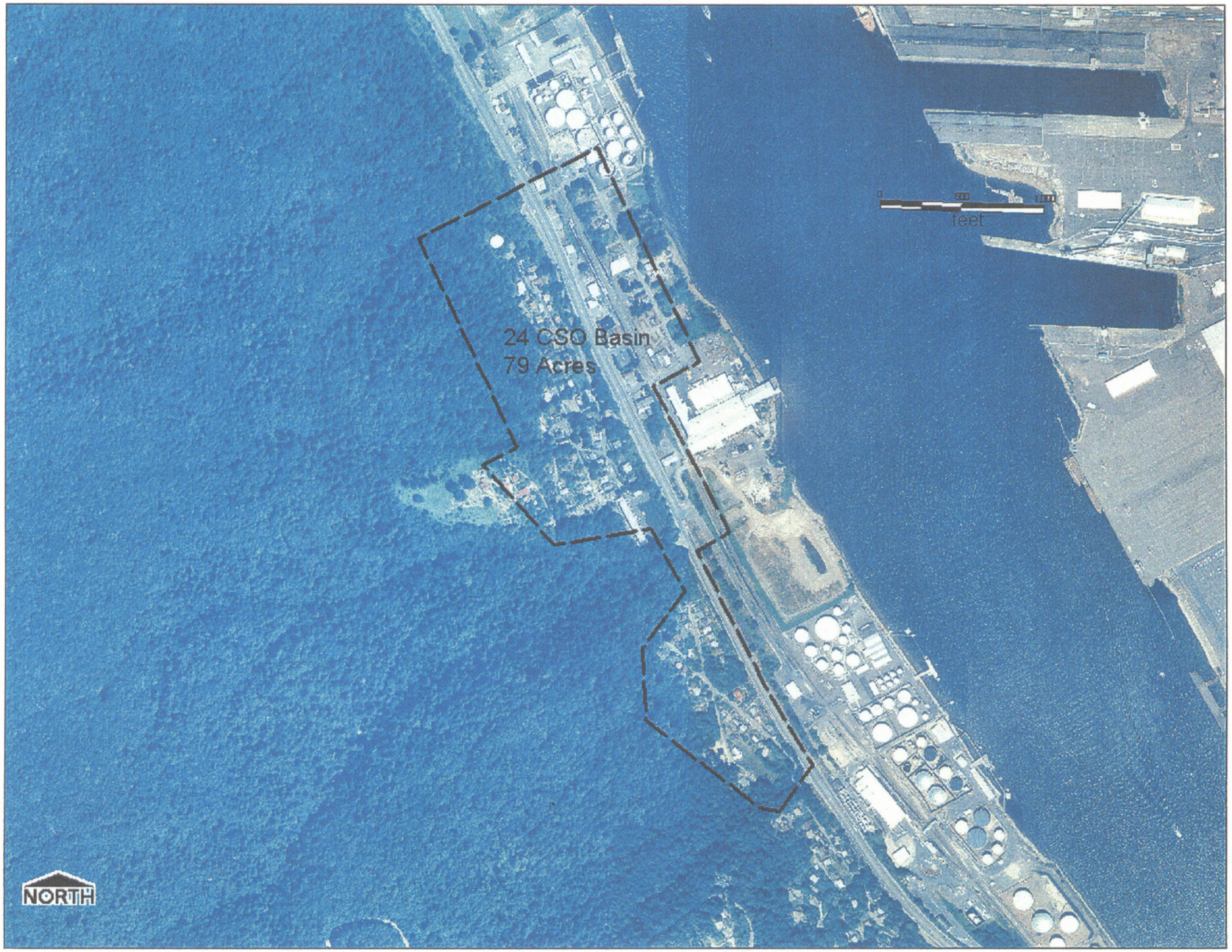
The following databases were searched but no information was available for sites within the drainage basin:

- EPA Corrective Action List
- EPA Emergency Response Notification System List
- EPA RCRA Treatment Storage Disposal List
- DEQ Permitted Tanks List
- DEQ Comprehensive Environmental Response, Compensation and Liability Information System

24 Outfall Evaluation

Based on the existing sediment data downstream and upstream of the Outfall 24, no analytes of interest were identified. Sediment results downstream of Outfall 24 were all less than two times the DEQ baseline values and no analytes of interest could be identified.

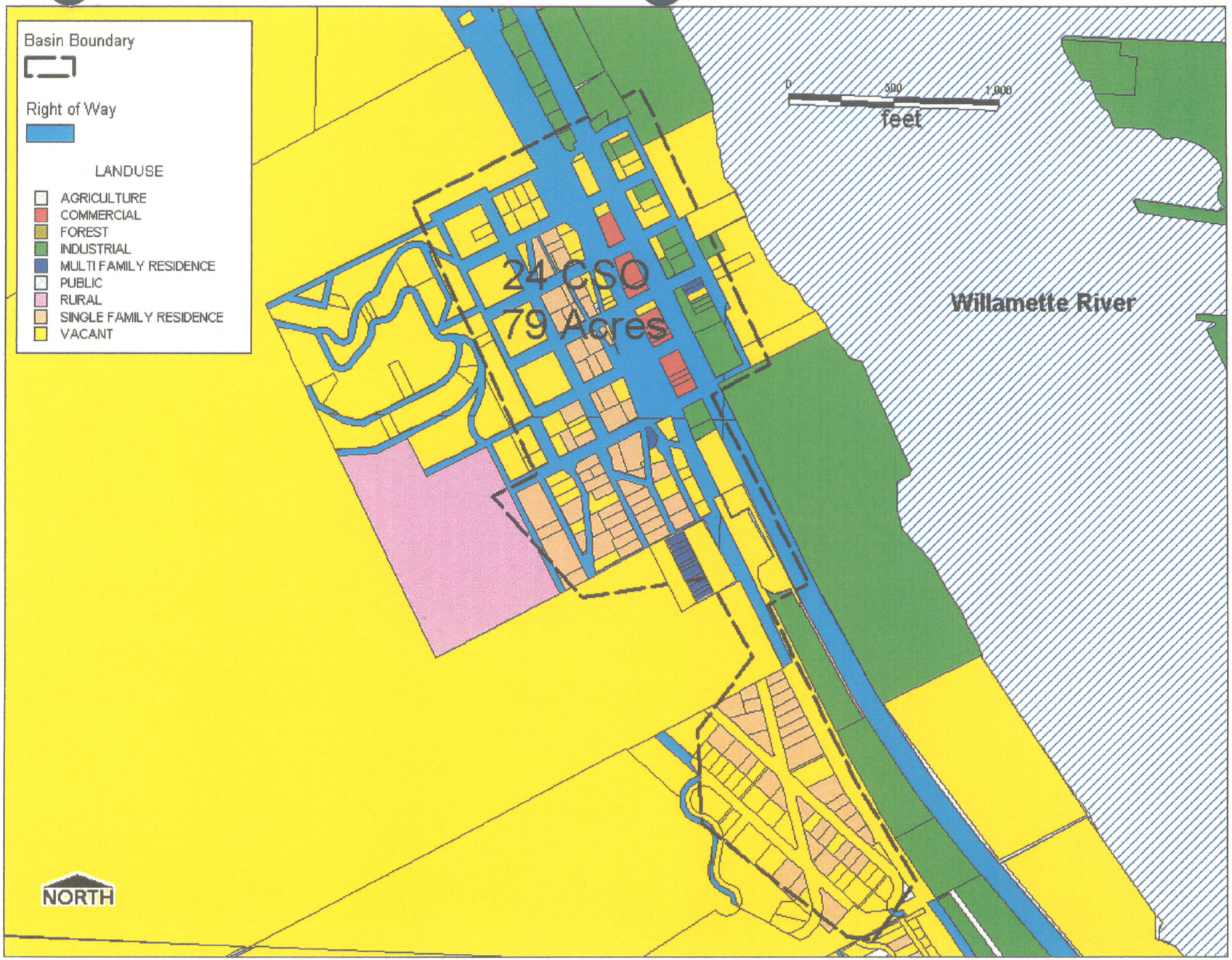
Figures



Basin 24 Aerial Photo
City of Portland

24 Outfall – Stormwater Drainage Map
City of Portland

Outfall 24 Map with Sediment Sample and Non-City Outfall Locations
City of Portland



Landuse Within Basin 24
City of Portland

Tables

Table 1
Sediment Results in the Vicinity of Outfall 24

			StationID	SD028	SD026	SD024	SD020
			Sample ID #	0	0	0	0
			Field Replicate #	#	#	#	#
			SubSample #	#	#	#	#
			Sample Depth	0-10 CM	0-10 CM	0-10 CM	0-10 CM
			Sample Date	09/17/1997	09/17/1997	09/17/1997	09/23/1997
Analyte	Units	DEQ Baseline	Analytes of Interest				
Aluminum	PPM	42800		39400	38300	39400	39200
Antimony	PPM	5		6 J	5 UJ	5 UJ	5 J
Arsenic	PPM	5		5 U	5 U	5 U	5 U
Barium	PPM	195		183	177	179	187
Beryllium	PPM	0.7		0.68	0.7	0.6	0.63
Cadmium	PPM	0.6		0.3	0.2	0.3	0.4
Chromium	PPM	41		36	36.2	37.1	36.3
Cobalt	PPM	19.7		17.9	18.5	18.3 J	19.2
Copper	PPM	60		40.9	41.7	40.9	41.2
Iron	PPM	45000		39900	40200	41400	41800
Lead	PPM	30		9	9	14	12
Manganese	PPM	810		723	715	667	772
Mercury	PPM	0.1		0.05	0.06	0.06 J	0.06
Nickel	PPM	32		27.9	28	29	29.9
Selenium	PPM	15		5 U	5 U	11	12
Silver	PPM	1.4		0.4	0.4	0.7	0.6
Thallium	PPM	13		9	11	24	8
Titanium	PPM	2075					1960
Vanadium	PPM	112		101	100	103	105
Zinc	PPM	118		88.2	92.5	98.6	92.8
Total organic carbon	PCT	2		1.2	1.5	1.6	1.3
4-Methylphenol	PPB	680		20 U	20 U	19 U	370
Benzoic acid	PPB	200		200 U	200 U	190 U	190 U
Benzyl alcohol	PPB	20		20 U	20 U	19 UJ	19 U
Bis(2-ethylhexyl) phthalate	PPB	390		110 UJ	140 UJ	140 UJ	120
Butyl benzyl phthalate	PPB	20		20 U	20 U	19 U	19 U
Di-n-butyl phthalate	PPB	20		20 U	20 U	19 UJ	19 U
Di-n-octyl phthalate	PPB	20		20 U	**91**	19 U	19 U
Dibenzofuran	PPB	100		28	20 U	19 U	19 U
Dimethyl phthalate	PPB	20		20 U	20 U	19 U	19 U
Pentachlorophenol	PPB	97		98 U	98 U	97 UJ	96 U
Phenol	PPB	20		20 U	20 U	19 U	19 U
2-Methylnaphthalene	PPB	150		20 U	20 U	19 U	19 U
Acenaphthene	PPB	180		50	31	26	20
Acenaphthylene	PPB	60		20 U	20 U	19 U	19 U
Anthracene	PPB	150		35	29	28	33
Benzo(a)anthracene	PPB	360		74	81	83	57
Benzo(a)pyrene	PPB	500		78	120	120	78
Benzo(b)fluoranthene	PPB	350		80	92	99	58
Benzo(g,h,i)perylene	PPB	250		36	59	69 J	49
Benzo(k)fluoranthene	PPB	225		58	83	89	66
Chrysene	PPB	425		120	120	120	82
Dibenz(a,h)anthracene	PPB	125		20 U	20 U	21	19 U
Fluoranthene	PPB	600		210	160	210	96
Fluorene	PPB	125		51	27	20	19 U
Indeno(1,2,3-c,d)pyrene	PPB	225		61	94	66	61
Naphthalene	PPB	200		23	30	30	19 U
Phenanthrene	PPB	700		220	130	120	88
Pyrene	PPB	700		210	220	220	120
Carbazole	PPB	100		20 U	20 U	19 UJ	19 U

Qualifier	Definition
J	PSAMP estimate - quality control not met.
U	Undetected at the detection limit shown.
UJ	Undetected at the detection limit shown; PSAMP estimate - quality control not met.

Bold indicates 3 times the DEQ baseline value

Table 2
Outfall 24 Facility List

Aquarius Search: Aug-2000
Basin Reconn: Aug-2000

RNO	Business Name	Address	Drainage	SIC Number	Permit Type	Permit	Business Type	Exposure	Comments
R839402480	Airport Auto Body	10828 NW St. Helens Rd.	CSO	7532			Auto repair	yes	
R839402460	American Sprinklers Inc.	10818 NW St. Helens Rd.	CSO	1799			Retail	no	
R839400340	ARCO Gas Station	11134 NW St. Helens Rd.	CSO	5541			Gas station	yes	
R961020480	Atlantic Richfield Company	9930 NW St. Helens Rd.	WP-25, WP-26, WP-27	5171*	NPDES	1500A	Bulk petroleum dist	yes	
R961020480	Atlantic Richfield Company	9930 NW St. Helens Rd.	WP-25, WP-26, WP-27	5171*	NPDES	1300J	Bulk petroleum dist	yes	
R961020480	Atlantic Richfield Company	9930 NW St. Helens Rd.	Sanitary	5171*	Pretreatment	400.112	Bulk petroleum dist	--	
R839400340	Chevron Service Station	11126 NW St. Helens Rd.	CSO	5541			Gas station	yes	vacant
R961021110	Columbia River Sand &	10504 NW St. Helens Rd.	WP-102, WP-203	5039*	NPDES	Individual	Sand/cement dist	yes	
R839402770	Decoy Tavern	10710 NW St. Helens Rd.	CSO	5812			Tavern	no	
R839401530	Elvin Davis	10918 NW St. Helens Rd.	CSO				Boat manufacturer	no	
R961030051 R839400010 R839400140	GATX Linnton	11400 NW St. Helens Rd.	WP-75, WP-76, WP-77, WP-204	5171	NPDES	1300J	Bulk petroleum dist	yes	
R830402650	Harmer Steel Products	9933 NW 107th Ave.	CSO	5051			Metal fabrication	yes	
R839402450	Lighthouse Inn	10808 NW St. Helens Rd.	CSO	5813			Tavern	no	
R839403420	Linnton Community Center	10614 NW St. Helens Rd.	CSO	8641			Recreation center	no	
R839401550	Linnton Feed Store	10920 NW St. Helens Rd.	CSO	5191			Retail	no	
R961021110	Linnton Plywood Association	10504 NW St. Helens Rd.	WP-102, WP-103, WP-104, WP-105, WP-	2436*, 3550*	NPDES	1200Z	Wood manufacturing	yes	
R961021110	Linnton Plywood Association	10504 NW St. Helens Rd.	WP-102, WP-103, WP-104, WP-105, WP-	2436*, 3550*	NPDES	Individual	Wood manufacturing	yes	
R961021110	Linnton Plywood Association	10504 NW St. Helens Rd.	Sanitary	2436*, 3550*	Pretreatment	429.001	Wood manufacturing	--	
R839401500	Marine Metal Products	10937 NW Front Ave.	CSO	1629			Metal fabrication	yes	
R961030080	NW Steel Services	10937 NW Front Ave.	CSO	?			Metal fabrication	yes	
R961030080 R839401500	R K Storage & Warehousing Inc.	10937 NW Front Ave.	CSO	4226			Transportation/storage	yes	
R961020490 R961020290	RC Industries	10832 NW Front Ave.	CSO	?			Metal fabrication	yes	
R961030080	West Coast Adhesives Co.	11104 NW Front Ave.	CSO	?					could not find

*indicates SIC # has been verified via site inspection

Table 3
Outfall 24 Polk Directory List

Address	1940	1950	1960	1970	1980	1990	1999
9930 NW St. Helens	NL	Richfield Oil	Richfield Oil	Atlantic Richfield Oil	Atlantic Richfield Oil	Atlantic Richfield Oil	Atlantic Richfield Oil
10504 NW St. Helens Rd.	Clark & Wilson Lumber	Linnton Terminals Dock	Linnton Plywood	Linnton Plywood	Linnton Plywood	Linnton Plywood	Linnton Plywood
10614 NW St. Helens Rd.	Linnton Community Center, Linnton Methodist church, Linnton Library	Linnton Community Center, Linnton Methodist church, Linnton Library	Linnton Community Center	Linnton Community Center	Linnton Community Center	Linnton Community Center	Linnton Community Center
10710 NW St. Helens Rd.	Linnton Smoke Shop	Linnton Smoke Shop	Linnton Smoke Shop	Linnton Smoke Shop	SFR	SFR	SFR
10808 NW St. Helens Rd.	Novak's Grill	Linnton Tavern	Linnton Tavern	Linnton Tavern	Linnton Tavern	SFR	SFR
10818 NW St. Helens Rd.	NL	NL	National Beer & wine	National Beer & wine	Dept. of Geology Whse	American Sprinkler, Corvair Underground	American Sprinkler
10828 NW St. Helens Rd.	Linnton Hotel	Linnton Hotel	Linnton Hotel	Vacant	NL	CMR Sign & lighting	Airport Auto Body
10918 NW St. Helens Rd.	Vacant	McGrady Shoe Repair	Mack's Shoe Repair	NL	NL	NL	NL
10920 NW St. Helens Rd.	Vacant	NL	NL	Linnton Feed & Seed Store	Linnton Feed & Seed Store	Linnton Feed & Seed Store	Linnton Feed & Seed Store
11126 NW St. Helens Rd.	NL	NL	NL	NL	NL	NL	NL
11134 NW St. Helens Rd.	NL	NL	Vacant	NL	NL	NL	NL
11400 NW St. Helens Rd.	Tidewater Associated Oil	Tidewater Associated Oil	Tidewater Associated Oil	Phillips Petroleum	GATX Tank Storage, Tosco, Big O Tires Whse	GATX Tank Storage, Tosco	GATX Tank Storage
9933 NW 107th Ave.	American Brake & Shoe Foundry	American Brake & Shoe Foundry	Vacant	Harmer Steel	Harmer Steel	Harmer Steel	Harmer Steel
10832 NW Front Ave.	SFR	SFR	SFR	NL	NL	Boat Trailer Repair	NL
10937 NW Front Ave.	NL	NL	NL	NL	Padden Steel	Marine Metal products	NL
11104 NW Front Ave.	NL	NL	West Coast Adhesives (plywood)	West Coast Adhesives (plywood)	West Coast Adhesives (plywood)	West Coast Adhesives (plywood)	NL
11104 NW Front Ave.	NL	NL	West Coast Adhesives (plywood)	West Coast Adhesives (plywood)	West Coast Adhesives (plywood)	West Coast Adhesives (plywood)	NL

NL = Not listed

Table 4
Outfall 24 EPA Toxic Release Inventory List and Hazardous Waste Generator List

RNO	Address	Company	EPA ID	TRI ID	SIC Code	Generator Status	Releases to Environment	Chemicals Used on Site
R961020480	9930 NW St. Helens Rd.	ARCO Products Company Portland Terminal	ORD052216603	97231RCPRD9930N	5171	LQG	Benzene: To water	Benzene, 1,2,4-trimethylbenzene, cumene, ethylbenzene, n-hexane, naphthalene, toluene, xylene
R961021110	10504 NW St. Helens Rd.	Linnton Plywood Assoc	ORD009023060	97231LNNTN10504	2436	*	Sodium hydroxide: To Air	Volatile Organic Compounds

LQG = Large Quantity Generator
* No information available in database

Table 5
Outfall 24 DEQ Environmental Cleanup Site Information List

RNO	Address	Company	ECSI ID	CERCLIS	Action	Status
R961020480	9930 NW St. Helens Rd	ARCO Bulk Terminal	1528	*	Remedial Investigation	LIS
R830402650	9933 NW 107th Ave	Babcock Land Company	2361	*	State Basic Preliminary Assessment recommended (PA)	SUS
R961021110	10504 NW St. Helens Rd	Columbia River Sand & Gravel Inc.	2351	*	Site Screening recommended (EV)	SUS
R961030051 R839400010 R839400140	11400 NW St. Helens Rd	GATX St. Helens Rd Facility	1096	*	Negotiations	LIS
R961021110	10504 NW St. Helens Rd	Linnton Plywood Association	2373	*	Negotiations	SUS
R961030051 R839400010 R839400140	11400 NW St. Helens Rd	Olympic Pipe Line Company	2374	*	Site Screening recommended (EV)	SUS
R971340060	11444 NW St. Helens Rd	Owens Corning - Linnton	1036	*	Expanded Preliminary	SUS
R839401320	10225 NW Front Ave	RK Storage and Warehousing	2376	*	State Basic Preliminary Assessment recommended (PA)	SUS
?	Hwy 30	St. Helens Rd - Gasoline	337	*	Site Screening recommended	SUS
R961030080	11104 NW Front Ave	West Coast Adhesive Co.	333	*	Remedial Action recommended (RA)	SUS

LIS = Listed
SUS = Suspected
*No information in database

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1528

shows data entered as of December 7, 2000 at 4:29:00 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1528	Site Name: ARCO Bulk Terminal		CERCLIS No:
	Address: 9930 NW St. Helens RD Burlington 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 2		Tax Lots: 48
	Latitude: 45 deg. 35 ' 35"	Longitude: 122 deg. 46 ' 40"	Site Size: 14.21 acres

Other Site Names:

ARCO Linnton Terminal

Portland Harbor Sediments

Operations:

Name: ARCO Bulk Terminal

Comments: Petroleum bulk facility .

Years of Operation: 1963 to present

SIC Code: 2911 — Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Petroleum products
Manner and Time of Release:	Releases from historical operations, above-ground tanks, underground pipelines, product transfer. Time of release: unknown; potentially 1963 to present.
Contamination Information:	(6/30/94 GMW) The facility has 26 above-ground storage tanks containing gasoline, diesel, lube oil, and additives. Files from DEQ's Northwest Region office indicate that during the 1960s and early 1970s there were a number of complaints about seepage or discharge of petroleum into the Willamette River. To prevent further releases, ARCO installed an 800-foot concrete retaining wall along the river and placed four "interceptor" wells along the base of this seawall. The interceptor wells were designed to extract free product from groundwater before it entered the river, and remain in operation today. On July 12, 1991, ARCO reported a leak in a buried diesel pipeline. Although the total volume of diesel released is unknown, ARCO's contractor recovered 750 gallons of product from a sump installed around the piping repair. In 1993, about 1,800 tons of petroleum-contaminated soil were removed from the site, some of which came from the area around the 1991 diesel release. Excavations from three other areas on-site contributed to this accumulation of contaminated soil, including: 1) the March 1992 construction of a new railroad

Letter Agreement	02/29/2000 06/20/2000	Thomas Gainer DEQ	NW	VCS
NEGOTIATIONS	02/29/2000 06/20/2000	Thomas Gainer DEQ	NW	VCS
REMEDIAL INVESTIGATION	06/20/2000	Thomas Gainer DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

Return to ECSI Query Home Page

Return to Cleanup and Spills Page
Return to DEQ Home Page

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2361

shows data entered as of December 7, 2000 at 4:29:53 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2361	Site Name: Babcock Land Company		CERCLIS No:
	Address: 9933 NW 107th AVE Portland 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 2		Tax Lots: 27, 29, 100, 112
	Latitude: 45 deg. 35 ' 56"	Longitude: 122 deg. 47 ' 3"	Site Size: approx. 1.9 acres
Other Site Names:			
	Portland Harbor Site Discovery		
	Harmer Steel Products Co.		
Operations:			
	Name: Harmer Steel Products Co		
	Comments: .		
	Years of Operation: August 1974 - Current		
	SIC Code: 3400		Operating Status: Active
	Name: Babcock Land Company		
	Comments: .		
	Years of Operation: 1998 - Current		
	SIC Code: 6531		Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	
Manner and Time of Release:	
Contamination Information:	Weston sampling results from the Portland Harbor Sediment Study revealed antimony and dioctylphthalates in river sediments.
Pathways:	

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2351

shows data entered as of December 7, 2000 at 4:30:44 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2351	Site Name: Columbia River Sand & Gravel Inc.		CERCLIS No:
	Address: 10504 NW Saint Helens RD Portland 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 2		Tax Lots: 111
	Latitude: 45 deg. 36 ' 4"	Longitude: 122 deg. 47 ' 8"	Site Size: 25.48 acres
Other Site Names:			
	Portland Harbor Site Discovery		
	Linnton Plywood Association (ECSI 2373)		
Operations:			
	Name: Columbia River Sand & Gravel Inc.		
	Comments: .		
	Years of Operation: unknown		
	SIC Code: 1400		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	
Manner and Time of Release:	
Contamination Information:	
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(10/1/99 TB/SAP) Site included in Strategy Recommendation for Linnton Plywood Association (property owner) SEE ECSI #2373.
Data Sources:	

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission

No information is available

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1096

shows data entered as of December 7, 2000 at 4:31:19 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1096	Site Name: GATX St. Helens RD Facility		CERCLIS No:
	Address: 11400 NW St. Helens RD Portland 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Listed on CRL or Inventory	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 3		Tax Lots: T1N/R1W-S03 TL 5 R96103-0050
	Latitude: 45 deg. 36 ' 13.31"	Longitude: 122 deg. 47 ' 6.29"	Site Size: 15.97 acres
Other Site Names:			
	GATX Linnton Terminal		
Operations:			
	Name: GATX St. Helens RD Facility		
	Comments: Bulk petroleum storage terminal .		
	Years of Operation: 1903 to present		
	SIC Code: 5171		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Benzene, xylene, toluene, ethylbenzene, gasoline, diesel fuel, MTBE, chlorobenzene, dichlorobenzenes. Willamette River sediments: carbazole, bis(2-ethyl-hexyl)phthalate, thallium, dibenzofuran, p-cresol, antimony, barium, and other metals.
Manner and Time of Release:	Unknown. At least one diesel fuel release was attributed to a leaking underground pipeline, although sources for other site contaminants are unknown.
Contamination Information:	(5/4/93 ELB/SAS) GATX is a bulk oil storage facility located along the west bank of the Willamette River in Portland. The 15.9-acre site has been operated as a petroleum storage, transfer and terminal facility since 1903. In March 1990, benzene and xylene were detected in MW-1, a monitoring well located on the adjacent Linnton Planing Mill site, 30 feet north of the GATX property. This well was installed as part of a leaking underground storage tank (LUST) investigation conducted on the Linnton Planing Mill site and was located 50-75 feet upgradient of the tank excavation. Water collected from this excavation revealed BTEX constituents. However, since MW-1 was located hydraulically upgradient of the tank excavation, DEQ recommended sampling to determine if GATX was the source of contamination in MW-1. Continued sampling of MW-1 indicated a dramatic decline in contaminant levels, coinciding with the removal of the LUST. It is not clear if this contamination is a result of a tank release or potential releases at the GATX facility. (10/11/99 SMF) Oil was observed seeping to the river

BENZO(a)ANTHRACENE	Soil	pushprobe boring GP-1	10/25/1995	Y
BENZO(a)PYRENE	Groundwater	pushprobe boring GP-1	10/26/1995	Y
BENZO(a)PYRENE	Sediment	In River Sediments	10/15/1997	Y
BENZO(a)PYRENE	Soil	pushprobe boring GP-1	10/25/1995	Y
BENZO(b)FLUORANTHENE	Groundwater	pushprobe boring GP-3	10/25/1995	Y
BENZO(b)FLUORANTHENE	Sediment	In River Sediments	10/15/1997	Y
BENZO(ghi)PERYLENE	Groundwater	pushprobe boring GP-3	10/25/1995	Y
BENZO(ghi)PERYLENE	Sediment	In River Sediments	10/15/1997	Y
BENZO(k)FLUORANTHENE	Groundwater	pushprobe boring GP-3	10/25/1995	Y
BENZO(k)FLUORANTHENE	Sediment	In River Sediments	10/15/1997	Y
BIS(2-ETHYLHEXYL) PHTHALATE	Sediment	In River Sediments	10/15/1997	Y
CHLOROBENZENE	Groundwater	pushprobe boring GP-3	11/01/1995	Y
CHRYSENE	Groundwater	pushprobe boring GP-3	10/25/1995	Y
CHRYSENE	Sediment	In River Sediments	10/15/1997	Y
CHRYSENE	Soil	pushprobe boring GP-1	10/25/1995	Y
CRESOL,4-	Sediment	In River Sediments	10/15/1997	Y
DIBENZO(a,h)ANTHRACENE	Sediment	In River Sediments	10/15/1997	Y
DIBENZOFURAN	Sediment	In River Sedimnets	10/15/1997	Y
DICHLOROBENZENE,1,2-	Groundwater	pushprobe boring GP-3	11/01/1995	Y
DICHLOROBENZENE,1,3-	Groundwater	pushprobe boring GP-3	11/01/1995	Y
DICHLOROBENZENE,1,4-	Groundwater	pushprobe boring GP-3	11/01/1995	Y
DIESEL - FUEL OIL	Other	free product from monitoring well MW-2	11/06/1995	Y
ETHYLBENZENE	Groundwater	445 mg/L		
ETHYLBENZENE	Soil	pushprobe GP-3	10/25/1995	Y
FLUORANTHENE	Groundwater	pushprobe boring GP-3	10/25/1995	Y
FLUORANTHENE	Sediment	In River Sediments	10/15/1997	Y
FLUORANTHENE	Soil	pushprobe boring GP-1	10/25/1995	Y
FLUORENE	Groundwater	pushprobe boring GP-3	10/25/1995	Y
FLUORENE	Sediment	In River Sediments	10/15/1997	Y
FLUORENE	Soil	pushprobe boring GP-4	10/26/1995	Y
GASOLINE	Groundwater	pushprobe boring GP-3	10/25/1995	Y

Remedial Investigation/Feasibility Study recommended	05/17/1999	06/04/1999	Steve Fortuna	DEQ	NW	SAS
Proposal for Inventory recommended	05/17/1999	06/04/1999	Steve Fortuna	DEQ	NW	SAS
Facility proposed for Confirmed Release List	09/08/1999	09/08/1999	Kim Van Patten	DEQ	NW	SAS
Facility proposed for Inventory	09/08/1999	09/08/1999	Kim Van Patten	DEQ	NW	SAS
Facility placed on Confirmed Release List	11/30/1999	11/30/1999	Kim Van Patten	DEQ	NW	SAS
Facility placed on Inventory	11/30/1999	11/30/1999	Kim Van Patten	DEQ	NW	SAS
Letter Agreement	02/29/2000		Don Pettit	DEQ	NW	VCS
NEGOTIATIONS	02/29/2000		Don Pettit	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2373

shows data entered as of December 7, 2000 at 4:31:51 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2373	Site Name: Linnton Plywood Association		CERCLIS No:
	Address: 10504 NW Saint Helens RD Portland 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 2		Tax Lots: 111
	Latitude: 45 deg. 35 ' 0"	Longitude: 122 deg. 46 ' 55"	Site Size: 26.5 acres
Other Site Names:			
	Portland Harbor Sediment Study		
Operations:			
	Name: Linnton Plywood Association		
	Comments: .		
	Years of Operation: 1971 - current		
	SIC Code: 2400		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	
Manner and Time of Release:	
Contamination Information:	Weston sampling results from the Portland Harbor Sediment Study revealed PAHs, 2-methylnaphthalene, dibenzofuran, mercury, zinc, and carbazole in river sediments adjacent to the site.
Pathways:	
Environmental/Health Threats:	

problem.
SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2374

shows data entered as of December 7, 2000 at 4:32:30 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2374	Site Name: Olympic Pipe Line Company		CERCLIS No:	
	Address: 11400 NW Saint Helens RD Portland 97231			
	County: Multnomah		Region: Northwest	
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N	Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 3		Tax Lots: 5	
	Latitude: 45 deg. 36 ' 30"	Longitude: 122 deg. 47 ' 31"	Site Size:	
Other Site Names:				
	Portland Harbor Sediment Study			
Operations:				
	Name: Olympic Pipe Line Company			
	Comments: Olympic Pipe Line covers locations between RM 3.5 and RM 7.9. .			
	Years of Operation: unknown			
	SIC Code: 4600		Operating Status: Active	

Contamination Information

Hazardous Substances/Waste Types:	Historic petroleum leaks reported.
Manner and Time of Release:	
Contamination Information:	
Pathways:	
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	(6/15/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, Olympic Pipe Line Company's petroleum pipeline has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 5, 1999. A response from Olympic Pipe Line Co. is expected in June 1999. A site screening is scheduled (level II priority).

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 1036

shows data entered as of December 7, 2000 at 4:33:17 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 1036	Site Name: Owens Corning - Linnton		CERCLIS No:
	Address: 11444 NW Saint Helens RD Portland 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N / Study Area: N
Property:	Twnshp/Range/Sect: 2N , 1W , 34		Tax Lots: 6
	Latitude: 45 deg. 36 ' 18"	Longitude: 122 deg. 47 ' 13"	Site Size: 43 acres
Other Site Names:			
	Kingsley Park		
	Portland Harbor Sediment Study		
	Linnton Planing Mill		
	Trumbull Asphalt Facility		
	Paramount Petroleum Site		
Operations:			
	Name: Linnton Planing Mill		
	Comments: Planing mill .		
	Years of Operation: 1978-1990		
	SIC Code: 2421		Operating Status: Inactive
	Name: Rivergate Timber Co.		
	Comments: Lumber treating company .		
	Years of Operation: 1969-1971		
	SIC Code: 2491		Operating Status: Inactive

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
ARSENIC	Soil	up to 46.2 ppm	01/04/1990	Y		
CHROMIUM	Soil	up to 21.3 ppm	01/04/1990	Y		
COPPER	Soil	up to 547 ppm	01/04/1990	Y		
PENTACHLOROPHENOL	Soil	up to 2.7 ppm	01/04/1990	Y		
PETROLEUM HYDROCARBONS	Sediment	2,522 ppb	06/01/1997	Y		
PETROLEUM HYDROCARBONS	Soil	up to 28,059 ppm	01/04/1990	Y		

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Agency Code	Region	Lead Pgm
Site added to database	07/01/1990		Aaron Bodor	DEQ	HQ	SAS
SITE EVALUATION	07/22/1990	07/22/1990	Aaron Bodor	DEQ	HQ	SAS
State Basic Preliminary Assessment recommended (PA)	07/22/1990	07/22/1990	Aaron Bodor	DEQ	HQ	SAS
BASIC PRELIMINARY ASSESSEMENT	07/23/1990	09/20/1991	Aaron Bodor	DEQ	HQ	SAS
Listing Review completed	09/20/1991	09/20/1991	Aaron Bodor	DEQ	HQ	SAS
NO FURTHER STATE ACTION REQUIRED	09/21/1991	09/21/1991	Aaron Bodor	DEQ	HQ	SAS
Site Screening recommended (EV)	06/15/1999	06/15/1999	Steve Fortuna	DEQ	NW	SAS
SITE SCORING	08/17/1999	08/17/1999	Thomas Gainer	DEQ	NW	SAS
Insufficient information to list	09/07/1999	09/07/1999	Thomas Gainer	DEQ	NW	SAS
SITE EVALUATION	09/07/1999	09/07/1999	Thomas Gainer	DEQ	NW	SAS
State Expanded Preliminary Assessment recommended (XPA)	09/07/1999	09/07/1999	Thomas Gainer	DEQ	NW	SAS
VCS Waiting List	10/18/1999	10/18/1999	Janelle Waggy	DEQ	NW	VCS
Letter Agreement	10/18/1999	10/18/1999	Janelle Waggy	DEQ	NW	VCS
EXPANDED PRELIMINARY ASSESSMENT	10/19/1999		Thomas Gainer	DEQ	NW	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions (E, NW, and W); the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is the site on EPA's Superfund List? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program cleans up high-priority sites where owners and operators responsible for the contamination are absent, or are unwilling or unable to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). ECSI assigns unique Site ID numbers to both individual sites and to Study Areas, which are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem.

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 2376

shows data entered as of December 7, 2000 at 4:33:58 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 2376	Site Name: RK Storage and Warehousing		CERCLIS No:
	Address: 10225 NW Front AVE Portland 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 3		Tax Lots: 8 and 49
	Latitude: 45 deg. 35 ' 48"	Longitude: 122 deg. 46 ' 55"	Site Size:
Other Site Names:			
	Portland Harbor Sediment Study		
Operations:			
	Name: RK Storage and Warehousing		
	Comments: .		
	Years of Operation: February 1998 - Current		
	SIC Code: 4210		Operating Status: Active

Contamination Information

Hazardous Substances/Waste Types:	Documented on-site contamination has included formaldehyde, phenolics, and petroleum; thallium was found at elevated levels in river sediments near the site.
Manner and Time of Release:	
Contamination Information:	Weston sampling results from the Portland Harbor Sediment Study revealed thallium in river sediments adjacent to the site.
Pathways:	
Environmental/Health Threats:	

action shown. SAS = Site Assessment; VCS = Voluntary Cleanup; SRS = Site Response (enforcement cleanup).

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Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 337

shows data entered as of December 7, 2000 at 4:34:32 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 337	Site Name: St. Helens RD - Gasoline Spill		CERCLIS No:
	Address: Hwy 30 Burlington 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 2N , 1W , 18		Tax Lots:
	Latitude: 45 deg. 39 ' 5"	Longitude: 122 deg. 51 ' 4"	Site Size: 0 acres
Other Site Names:			

Operations:

Name: St. Helens RD - Gasoline Spill

Comments: Highway .

Years of Operation:

SIC Code: 4212

Operating Status: Unknown

Contamination Information

Hazardous Substances/Waste Types:	gasoline
Manner and Time of Release:	
Contamination Information:	On 12/23/87, a truck trailer overturned on US Hwy 30 (St Helens Rd.) just east of Cornelius Pass Rd. Approximately 5700 gallons of gasoline were spilled.
Pathways:	Possible groundwater, soils, and surface water contamination.
Environmental/Health Threats:	
Status of Investigative or Remedial Action:	Most of the free product was recovered by Riedel Environmental. Further cleanup was to be conducted by Delta Environmental Consultants, Minnesota.
Data Sources:	Spill Report NWR, 12/23/87

Substance Contamination Information

Substance	Media Contaminated	Concentration Level	Date Recorded	Lab Data	Agency Observation	Owner Operator Admission
GASOLINE	Soil	Unknown				
GASOLINE	Surface Water	Unknown				

Querying DEQ's ECSI Database: Site Summary Report

Details for Site ID 333

shows data entered as of December 7, 2000 at 4:35:12 PM

See the bottom of this page for a key to certain acronyms and terms used in the report below.

Site Information

Site ID: 333	Site Name: West Coast Adhesive Co.		CERCLIS No:
	Address: 11104 NW Front AVE Portland 97231		
	County: Multnomah		Region: Northwest
	Investigation Status: Suspect site requiring further investigation	NPL Site: N	Orphan Site: N Study Area: N
Property:	Twnshp/Range/Sect: 1N , 1W , 2		Tax Lots: 1N/1W-2 TL 8, 49, 27, 100
	Latitude: 45 deg. 34 ' 7"	Longitude: 122 deg. 44 ' 37"	Site Size: 10.73 acres
Other Site Names:			
	Burlington Northern RR - Linnton		
Operations:			
	Name: West Coast Adhesive Co.		
	Comments: Chemical manufacturing .		
	Years of Operation: Late 1950s to 1990		
	SIC Code: 2891		Operating Status: Inactive

Contamination Information

Hazardous Substances/Waste Types:	phenol, formaldehydes, oil-range hydrocarbons
Manner and Time of Release:	Spill, 6/86.
Contamination Information:	DEQ investigated a complaint concerning odors and red substance on the ground after a spill occurred in 1986. In 1990, after West Coast Adhesives (WCA) discontinued operations and dismantled its tanks and other site structures, Glacier Park Company and Burlington Northern initiated surface and subsurface investigations on the property, including the northern portion where WCA had operated. The investigation on the WCA site consisted of six test pits/ trenches and four monitoring wells, and high levels of formaldehyde and phenolic resins were found in soil, leading to the contractor's recommendation that up to 1,250 cubic yards of soil be excavated and removed from this area. The contractor also found formaldehyde in at least one monitoring well. More recent sampling results (1/94) showed much lower levels of formaldehyde and phenols in subsurface soils, and a corresponding decrease in groundwater concentrations of formaldehyde. Other environmental concerns identified at the Burlington Northern site as a whole include a small area where an oily sludge was dumped, and three other areas containing

SIC Code: The Standard Industrial Classification code assigned to the operation described in this part of the report.
Pathways: A description of human or environmental resources that site contamination could affect.
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Table 6
Outfall 24 DEQ Leaking Underground Storage Tanks List

RNO	Address	Log Number	Company	Zip	Cleanup Start	Cleanup End	Site Work Complete
R961021110	10504 NW St Helens	26-89-0121	Linnton Plywood Association	97231	24-Aug-1989	19-Oct-1989	31-Aug-1989
R961030080	11104 NW Front Ave	26-89-0265	West Coast Adhesives Co.	97231	15-Nov-1989	17-Jan-1990	07-Dec-1989
R839400340	11130 NW St Helens	26-90-0078	Franko #58	97231	30-Nov-1994	10-Jan-1995	30-Nov-1994
R971340060	11444 NW St Helens	26-90-0006	Linnton Planing Mill	97231	03-Jan-1990	29-Sep-1992	16-Jul-1992
R961020480	9930 NW St Helens	26-91-0254	Arco Bulk Plant-Pipeline	97231	11-Jul-1991	09-Feb-1994	09-Feb-1994

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 19, 2000 12:52 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0121
UST FAC NBR: 5246 DATE REPORTED: 28-JUN-89

SITE NAME: LINNTON PLYWOOD ASSOCIATION
SITE ADDRESS: 10504 NW ST HELENS ROAD
SITE CITY: PORTLAND ZIP: 97231
SITE COUNTY: MULTNOMAH PHONE: (503)286-3672

----------SITE ASSESSMENT----------

DATE DISCOVERED: 21-JUN-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: Y
(LD)Lab:DEQ: N	(DC)Decommissioning: N	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: Y	(SA)Site Assessment: N	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: Y	(UN)Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: N
(MG)Misc.Gasoline: N	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: N	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: N	(UN)Unknown: N	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: Y	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 24-AUG-89 REMEDIATION COMPLETED: 31-AUG-89
CLEANUP STARTED: 24-AUG-89 NO FURTHER ACTION: 19-OCT-89

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 19, 2000 12:52 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-89-0265
UST FAC NBR: 2891 DATE REPORTED: 15-NOV-89

SITE NAME: WEST COAST ADHESIVES CO.
SITE ADDRESS: 11104 NW FRONT AVE
SITE CITY: PORTLAND ZIP: 97231
SITE COUNTY: MULTNOMAH PHONE: (503) 286-3515

----------SITE ASSESSMENT----------

DATE DISCOVERED: 15-NOV-89 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: Y
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: N
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 15-NOV-89 REMEDIATION COMPLETED: 07-DEC-89
CLEANUP STARTED: 15-NOV-89 NO FURTHER ACTION: 17-JAN-90

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 19, 2000 12:53 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0078
UST FAC NBR: 6000 DATE REPORTED: 26-FEB-90

SITE NAME: FRANKO #58
SITE ADDRESS: 11130 NW ST HELENS
SITE CITY: PORTLAND ZIP: 97231
SITE COUNTY: MULTNOMAH PHONE: (503)240-9098

----------SITE ASSESSMENT----------

DATE DISCOVERED: 02-FEB-90 OFFSITE MIGRATION:

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI)Staff: N	(RM)Routine Monitoring: N	(TL)Tank Leak: N
(LD)Lab:DEQ: N	(DC)Decommissioning: N	(PL)Pipe Leak: N
(LR)Lab:RP N	(CP)Complaint: N	(OF)Overfill: N
(LO)Lab:OTHER: N	(IC)Inventory Control: N	(SS)Surface Spill: N
(RR)RP Report: Y	(SA)Site Assessment: Y	(PV)Pump/Valve Leak: N
(OT)Other: N	(TT)Tank Test: N	(OT)Other: N
	(OT)Other: N	(UN)Unknown: Y

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG)Unleaded Gasoline: N	(SV)Solvent N	(SL)Soil: Y
(LG)Leaded Gasoline: N	(BF)Bunker Fuel N	(GW)Groundwater: Y
(MG)Misc.Gasoline: Y	(OP)Other Pet.Dist N	(SW)Surface Water: N
(DS)Diesil: Y	(CH)Chemical N	(DW)Drinking Water N
(FO)Fuel Oil: N	(HO)Heating Oil: N	(FV)Facility(Vapor) N
(WO)Waste Oil: Y	(UN)Unknown: Y	(FP)Facility(Free Product): N
(LB)Lubricant: N	(OT)Other: N	(UN)Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 02-FEB-90 REMEDIATION COMPLETED: 30-NOV-94
CLEANUP STARTED: 30-NOV-94 NO FURTHER ACTION: 10-JAN-95

(opens_inc.rpt)

OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 19, 2000 12:53 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-90-0006
UST FAC NBR: 10136 DATE REPORTED: 04-JAN-90

SITE NAME: LINNTON PLANING MILL
SITE ADDRESS: 11444 NW ST HELENS RD
SITE CITY: PORTLAND ZIP: 97231
SITE COUNTY: MULTNOMAH PHONE: (503)286-2545

----------SITE ASSESSMENT----------

DATE DISCOVERED: 03-JAN-90 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: Y	(PL) Pipe Leak: N
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: Y
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: Y	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: N	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: Y	(OP) Other Pet.Dist N	(SW) Surface Water: N
(DS) Diesil: N	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 03-JAN-90 REMEDIATION COMPLETED: 16-JUL-92
CLEANUP STARTED: 03-JAN-90 NO FURTHER ACTION: 29-SEP-92

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OREGON PUBLIC ENVIRONMENTAL SYSTEM
LUST INCIDENT REPORT

December 19, 2000 12:53 pm

----------INCIDENT INFORMATION----------

LOG NBR: 26-91-0254
UST FAC NBR: DATE REPORTED: 12-JUL-91

SITE NAME: ARCO BULK PLANT-PIPELINE
SITE ADDRESS: 9930 NW ST HELENS RD
SITE CITY: PORTLAND ZIP:
SITE COUNTY: MULTNOMAH PHONE:

----------SITE ASSESSMENT----------

DATE DISCOVERED: 11-JUL-91 OFFSITE MIGRATION: N

CONFIRMATION:	DISCOVERY:	CAUSE:
(SI) Staff: N	(RM) Routine Monitoring: N	(TL) Tank Leak: N
(LD) Lab:DEQ: N	(DC) Decommissioning: N	(PL) Pipe Leak: Y
(LR) Lab:RP N	(CP) Complaint: N	(OF) Overfill: N
(LO) Lab:OTHER: N	(IC) Inventory Control: N	(SS) Surface Spill: N
(RR) RP Report: N	(SA) Site Assessment: N	(PV) Pump/Valve Leak: N
(OT) Other: N	(TT) Tank Test: N	(OT) Other: N
	(OT) Other: Y	(UN) Unknown: N

----------CONTAMINANTS/IMPACTS----------

CONTAMINANTS:		MEDIA/IMPACT:
(UG) Unleaded Gasoline: N	(SV) Solvent N	(SL) Soil: Y
(LG) Leaded Gasoline: N	(BF) Bunker Fuel N	(GW) Groundwater: Y
(MG) Misc.Gasoline: N	(OP) Other Pet.Dist N	(SW) Surface Water: Y
(DS) Diesil: Y	(CH) Chemical N	(DW) Drinking Water N
(FO) Fuel Oil: N	(HO) Heating Oil: N	(FV) Facility(Vapor) N
(WO) Waste Oil: N	(UN) Unknown: N	(FP) Facility(Free Product): N
(LB) Lubricant: N	(OT) Other: N	(UN) Unknown: N

----------SITE/SOIL MANAGEMENT----------

RELEASE STOPPED: 11-JUL-91 REMEDIATION COMPLETED: 09-FEB-94
CLEANUP STARTED: 11-JUL-91 NO FURTHER ACTION: 09-FEB-94

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Table 7
Outfall 24 Portland Fire Bureau Underground Storage Tank List

Address	Name	Permit #	Date	Size	UST/ AST	Location	Comments
10205 NW 107th Ave.	SP&S Railroad	47218	1949	675	UST	Yard	Heating Oil
9685 NW St. Helens Rd.	Smith - SFR	17142	1941	275	UST	Basement	Heating Oil
9915 NW St. Helens Rd.	Schmid - SFR	68935	1952	675	UST	Yard	Heating Oil
9930 NW St. Helens Rd.	Playcraft Products	23268	1946	20,000	UST	Yard	Heating Oil
9933 NW St. Helens Rd.	Newman - SFR	82986	1955	275	UST	Basement	Heating Oil
9955 NW St. Helens Rd.	Schmid - SFR	32537	1947	675	Not Listed	Not Listed	Heating Oil
10011 NW St. Helens Rd.	Defreitis - SFR	32220	1947	675	UST	Yard	Heating Oil
10105 NW St. Helens Rd.	Chadwick - SFR	59367	1950	275	AST	Basement	Heating Oil
10140 NW St. Helens Rd.	Olsen - SFR	28879	1947	675	UST	Yard	Heating Oil
10145 NW St. Helens Rd.	Olsen - SFR	54375	1960	675	UST	Yard	Heating Oil
10152 NW St. Helens Rd.	Wiseman - SFR	35735	1947	Not Listed	Not Listed	Not Listed	Heating Oil
10160 NW St. Helens Rd.	Johnston - SFR	60149	1950	275	UST	Yard	Heating Oil
10165 NW St. Helens Rd.	Panos - SFR	69780	1952	650	UST	Yard	Heating Oil
10216 NW St. Helens Rd.	Doddroe - SFR	53139	1949	55	Not Listed	Not Listed	Heating Oil
10332 NW St. Helens Rd.	Kovack - Apartments	39077	1947	1000	Not Listed	Not Listed	Heating Oil
10400 NW St. Helens Rd.	Houg - SFR	37691	1947	Not Listed	Not Listed	Not Listed	Heating Oil
10425 NW St. Helens Rd.	Mult. Cnty School Dist. #1	74069	1953	1000	UST	Yard	Heating Oil
10432 NW St. Helens Rd.	Tenderella - SFR	83101	1955	330	UST	Yard	Heating Oil
10505 NW St. Helens Rd.	Mcintyre - SFR	10463	1939	675	UST	Yard	Heating Oil
10519 NW St. Helens Rd.	Wilson - SFR	29773	1947	675	UST	Yard	Heating Oil
10549 NW St. Helens Rd.	Gore - SFR	4369	1937	675	UST	Yard	Heating Oil - Detached Unit
10614 NW St. Helens Rd.	Linnton Community Centre	24556	1946	1760	UST	Yard	Heating Oil
10725 NW St. Helens Rd.	Pat's Lunch - Restaurant/SFR	81218	1955	675	UST	Yard	Heating Oil
10737 NW St. Helens Rd.	Kingsbury - SFR/Store	87867	1956	675	UST	Yard	Heating Oil
10800 NW St. Helens Rd.	Watson - SFR	3096	1966	Not Listed	Not Listed	Not Listed	Heating Oil
10805 NW St. Helens Rd.	Linnler Cash Grocery	45914	1949	675	UST	Yard	Heating Oil
10808 NW St. Helens Rd.	Bicknell - SFR	71181	1952	675	UST	Yard	Heating Oil
10906 NW St. Helens Rd.	Linnton Food & Supply	1175	1965	675	UST	Yard	Heating Oil
11120 NW St. Helens Rd.	Siebrasse - SFR	36006	1947	675	UST	Yard	Heating Oil
11400 NW St. Helens Rd.	Tidewater Oil Company	86921	1956	675	UST	Yard	Heating Oil
11413 NW St. Helens Rd.	Larson - SFR	24717	1946	275	UST	Yard	Heating Oil

AST = Aboveground Storage Tank
UST = Underground Storage Tank

Table 8
Outfall 24 State Fire Marshal Hazardous Spills List

RNO	Address	Chemical	Date	Incident ID
R961030051	11400 NW St. Helens Rd.	Unleaded gas	10/03/1998	HM-06-980220
R961020650	9930 NW St. Helens Rd.	Gasoline	01/15/1987	02-291-870348

Table 9
Outfall 24 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty	Haz Class 1	Haz Class 2
R839402460	10818 NW St. Helens Rd	American Sprinklers Inc	29315	3569	Cutting Oil	Petroleum Oil	Liquid	Gallons	50-199	Combustible Materials	
R839402460	10818 NW St. Helens Rd	American Sprinklers Inc	29315	3569	Oxygen	Oxygen	Gas	Cubic Feet	200-499	NonFlammable Gases	Oxidizers
R839400340	11134 NW St. Helens Rd	Arco H Mart	79138	5541	Gasoline	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R961020480	9930 NW St. Helens Rd	Arco Petroleum Products	15123	5171	Ansulite	Diethylene Glycol Monobutyl Ether	Liquid	Gallons	1,000-4,999	Acute Health Hazard	
R961020480	9930 NW St. Helens Rd	Arco Petroleum Products	15123	5171	Antifreeze	Ethylene Glycol	Liquid	Gallons	200-499	Acute Health Hazard	
R961020480	9930 NW St. Helens Rd	Arco Petroleum Products	15123	5171	Distillates	Petroleum Hydrocarbons	Liquid	Gallons	7,500,000-9,999,999	Combustible Materials	Acute Health Hazard
R961020480	9930 NW St. Helens Rd	Arco Petroleum Products	15123	5171	Ethanol	Ethanol	Liquid	Gallons	1,000,000-2,499,999	Flammable Liq.(0F<FP<73	Acute Health Hazard
R961020480	9930 NW St. Helens Rd	Arco Petroleum Products	15123	5171	Gasoline	Petroleum Distillates	Liquid	Gallons	7,500,000-9,999,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R961020480	9930 NW St. Helens Rd	Arco Petroleum Products	15123	5171	Gasoline Additives	Petroleum Distillates	Liquid	Gallons	100,000-249,999	Combustible Materials	Acute Health Hazard
R961020480	9930 NW St. Helens Rd	Arco Petroleum Products	15123	5171	Lubricating Oil	Refined Mineral Oil	Liquid	Gallons	1,000,000-2,499,999	Combustible Materials	
R961020480	9930 NW St. Helens Rd	Arco Petroleum Products	15123	5171	Unisol Liquid Red Bk-50	Kerosene	Liquid	Gallons	1,000-4,999	Flamm.Liq.(73F<FP<141F)	Acute Health Hazard
R961030051 R839400010 R839400140	11400 NW St. Helens Rd	GATX Terminals Corporation	16390	4226	Automate Red Ink	Xylene	Liquid	Gallons	50-199	Flamm.Liq.(73F<FP<141F)	
R961030051 R839400010 R839400140	11400 NW St. Helens Rd	GATX Terminals Corporation	16390	4226	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	1,000,000-2,499,999	Flamm.Liq.(73F<FP<141F)	
R961030051 R839400010 R839400140	11400 NW St. Helens Rd	GATX Terminals Corporation	16390	4226	Ethanol	Ethanol	Liquid	Gallons	500,000-749,999	Flammable Liq.(0F<FP<73F)	Acute Health Hazard
R961030051 R839400010 R839400140	11400 NW St. Helens Rd	GATX Terminals Corporation	16390	4226	Gasoline	Petroleum Distillates	Liquid	Gallons	7,500,000-9,999,999	Flammable Liq.(FP<0F)	Chronic Health Hazard
R961030051 R839400010 R839400140	11400 NW St. Helens Rd	GATX Terminals Corporation	16390	4226	Gasoline Additives	Petroleum Distillates	Liquid	Gallons	10,000-49,999	Combustible Materials	Acute Health Hazard
R961030051 R839400010 R839400140	11400 NW St. Helens Rd	GATX Terminals Corporation	16390	4226	Lubricating Oil	Refined Mineral Oil	Liquid	Gallons	50,000-99,999	Combustible Materials	
R830402650	9933 NW 107th Ave	Harmer Steel Products Co	47716	3325	Acetylene	Acetylene	Gas	Cubic Feet	500-999	Flammable Gases	Acute Health Hazard
R830402650	9933 NW 107th Ave	Harmer Steel Products Co	47716	3325	Argon 92%/Carbon Dioxide 8%	Argon	Gas	Cubic Feet	200-499	NonFlammable Gases	
R830402650	9933 NW 107th Ave	Harmer Steel Products Co	47716	3325	Carbon Dioxide	Carbon Dioxide	Liquid	Pounds	200-499	NonFlammable Gases	Acute Health Hazard
R830402650	9933 NW 107th Ave	Harmer Steel Products Co	47716	3325	Diesel Fuel	Petroleum Mid-Distillates	Liquid	Gallons	500-999	Flamm.Liq.(73F<FP<141F)	

Table 9
Outfall 24 State Fire Marshal Hazardous Substances List

RNO	Loc Address	Company Name	SFM ID	SIC Number	Chemical Trade Name	Most Hazardous Ingredient	Physical State	Unit	MaxQnty	Haz Class 1	Haz Class 2
R830402650	9933 NW 107th Ave	Harmer Steel Products Co	47716	3325	Lacquer Thinner	Toluene	Liquid	Gallons	19-Oct	Flammable Liq.(0F<FP<73	Acute Health Hazard
R830402650	9933 NW 107th Ave	Harmer Steel Products Co	47716	3325	Oxygen	Oxygen	Gas	Cubic Feet	1,000-4,999	NonFlammable Gases	Oxidizers
R830402650	9933 NW 107th Ave	Harmer Steel Products Co	47716	3325	Propane	Propane	Gas	Gallons	50-199	Flammable Gases	
R830402650	9933 NW 107th Ave	Harmer Steel Products Co	47716	3325	Propylene	Propylene	Gas	Gallons	50-199	Flammable Gases	
R839401550	10920 NW St. Helens Rd	Linnton Feed & Seed	14802	5251	Stove Oil	Petroleum Hydrocarbon	Liquid	Gallons	500-999	Flamm.Liq. (73F<FP<141F)	Acute Health Hazard
R839401500	10937 NW Front Ave	NW Steel Services	64826	7692	Argon	Argon	Gas	Millicures	500-999	NonFlammable Gases	
R839401500	10937 NW Front Ave	NW Steel Services	64826	7692	Carbon Dioxide	Carbon Dioxide	Liquid	Pounds	50-199	NonFlammable Gases	Acute Health Hazard
R839401500	10937 NW Front Ave	NW Steel Services	64826	7692	Oxygen	Oxygen	Gas	Millicures	500-999	NonFlammable Gases	Oxidizers
R839401500	10937 NW Front Ave	NW Steel Services	64826	7692	Propylene	Propylene	Gas	Cubic Feet	50-199	Flammable Gases	
R839403400	10610 NW St. Helens Rd	Starr & Brown Inc	70057	2084	*	*	*	*	*	*	*

* No information available in database

Table 10
Outfall 24 Confirmed Release List

Site Name	Address	Zip	Site ID	Substance	Media	Phase	Program
ARCO Bulk Terminal	9930 NW St. Helens Rd	97231	1528	Diesel - fuel oil, gasoline	Soil, Groundwater	1	SAS

Phase
1: Facilities where remedial investigation and feasibility studies have not been initiated.

Program
SAS: Indicates that the site is still under investigation through the DEQ

Table 11
Outfall 24 SIC Information

SIC Number	SIC Definition
1629	Heavy Construction, NEC
1799	Special Trade Contractors, NEC
2084	Wines, Brandy, and Brandy Spirits
2436	Softwood Veneer and Plywood
3325	Steel Foundries, NEC
3550	Special Industry Machinery
3569	General Industrial Machinery and Equipment, NEC
4226	Special Warehousing and Storage, NEC
5039	Construction Materials, NEC
5051	Metals Service Centers and Offices
5171	Petroleum Bulk Stations and Terminals
5191	Farm Supplies
5251	Hardware Stores
5541	Gasoline Service Stations
5812	Eating and Drinking Places
5813	Drinking Places (Alcoholic Beverages)
7532	Top, Body, and Upholstery Repair Shops and Paint Shops
7692	Welding Repair
8641	Civic, Social, and Fraternal Associations

NEC = Not otherwise classified

Table 12
Drainage Basin for Outfall 24: Area by Landuse

Total Landuse Area in Basin

Land Use	Total Area in Basin (acres)
Commercial	1.6
Industrial	4.3
Multifamily	0.7
Rural	0.2
Single Family Residence	14.1
Vacant	32.1
Total Basin	**79**
Estimated Right-of-Ways	25.9

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Land Use	Acres in Basin
R839401240	11030 NW St Helens Rd	0.29	COM	0.27
R839401530	10902 NW St Helens Rd	0.11	COM	0.12
R839401550	10920 NW St Helens Rd	0.34	COM	0.34
R839402440	10800 NW St Helens Rd	0.06	COM	0.06
R839402450	10808 NW St Helens Rd	0.06	COM	0.06
R839402460	10818 NW St Helens Rd	0.11	COM	0.12
R839402480	10828 NW St Helens Rd	0.14	COM	0.15
R839402770	10700 NW St Helens Rd	0.11	COM	0.12
R839402790	10710-10714 NW St Helens	0.06	COM	0.06
R839402800		0.06	COM	0.06
R839402810	10808 WI/ NW St Helens Rd	0.23	COM	0.24
R839400230	10222 NW 112th Ave	0.09	IND	0.09
R839400290	11125 NW Front Ave	0.17	IND	0.17
R839401380	11033 NW Front Ave	0.17	IND	0.17
R839401430	10937 WI/ NW Front Ave	0.10	IND	0.10
R839401450	10909 NW Front Ave	0.17	IND	0.17
R839401480	10921 NW Front Ave	0.11	IND	0.11
R839401500	10937 NW Front Ave	0.20	IND	0.20
R839402530	9933 WI/ NW 107th Ave	0.43	IND	0.43
R839402590	9933 WI/ NW 107th Ave	0.06	IND	0.06
R839402600	9933 WI/ NW 107th Ave	0.06	IND	0.06
R839402610	9933 WI/ NW 107th Ave	0.03	IND	0.03
R839402650	9933 NW 107th Ave	0.78	IND	0.78
R839403400	10610 NW St Helens Rd	0.17	IND	0.16
R839403420	10004 NW 107th Ave	0.27	IND	0.25
R961020330	10918 NW Front Ave	0.23	IND	0.15
R961020650	9930 NW St Helens Rd	2.86	IND	0.07
R961021110	10504 NW St Helens Rd	22.72	IND	0.19
R961030051	11400 NW St Helens Rd	15.97	IND	0.64
R961030200	11212 NW St Helens Rd	0.14	IND	0.13
R961030240		0.17	IND	0.02
R839400130		0.75	IND*	0.21
R839400140		0.13	IND*	0.13
ADD		0.08	MFR	0.08
R160901220	10140 NW 107th Ave	0.10	MFR	0.08
R501900060	10466 NW 2nd Ave	0.00	MFR	0.00

Table 12
Drainage Basin for Outfall 24: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Land Use	Acres in Basin
R501900080	10464 NW 2nd Ave	0.04	MFR	0.04
R501900120	10458 NW 2nd Ave	0.04	MFR	0.04
R501900140	10456 NW 2nd Ave	0.08	MFR	0.08
R501900160	10454 NW 2nd Ave	0.05	MFR	0.05
R501900180	10452 NW 2nd Ave	0.05	MFR	0.05
R501900200	10450 NW 2nd Ave	0.07	MFR	0.07
R501900220	10460 NW 2nd Ave	0.04	MFR	0.04
R839402630	10829 NW Front Ave	0.06	MFR	0.06
R839402640	10837 NW Front Ave	0.06	MFR	0.06
R961030130	S/NW 108th Ave	12.00	RUR	0.24
R160900010	10505 NW 4th Pl	0.18	SFR	0.13
R160900030	10543 NW 4th Pl	0.56	SFR	0.53
R160900080	10607 NW 4th Pl	0.14	SFR	0.14
R160900130	10615 NW 4th Pl	0.56	SFR	0.56
R160900220	10529 NW 4th Pl	0.08	SFR	0.09
R160900270	10601 NW 4th St	0.23	SFR	0.23
R160900390	10512 NW 4th Ave	0.24	SFR	0.24
R160900430	10538 NW 4th St	0.13	SFR	0.13
R160900470	10503 NW 3rd St	0.13	SFR	0.13
R160900490	10511 NW 3rd St	0.14	SFR	0.14
R160900510	10523 NW 3rd St	0.12	SFR	0.12
R160900530	10531 NW 3rd St	0.14	SFR	0.14
R160900550	10539 NW 3rd St	0.14	SFR	0.14
R160900610	10613 NW 3rd St	0.11	SFR	0.11
R160900630	10624 NW 4th Ave	0.14	SFR	0.14
R160900650	10633 NW 3rd St	0.07	SFR	0.07
R160900670	10638 NW 4th St	0.07	SFR	0.07
R160900690	10645 NW 3rd Ave	0.13	SFR	0.13
R160900710	10505 NW 2nd Ave	0.13	SFR	0.13
R160900730	10515 NW 2nd Ave	0.13	SFR	0.13
R160900750	10525 NW 2nd Ave	0.13	SFR	0.13
R160900770	10537 NW 2nd Ave	0.13	SFR	0.13
R160900790	10547 NW 2nd St	0.13	SFR	0.13
R160900810	10112 NW 3rd St	0.13	SFR	0.14
R160900850	10615 NW 2nd Ave	0.06	SFR	0.06
R160900880	10160 NW 107th Ave	0.36	SFR	0.37
R160900930	10182 NW 107th Ave	0.23	SFR	0.17
R160900970	10505 NW St Helens Rd	0.16	SFR	0.17
R160901010	10519 NW St Helens Rd	0.20	SFR	0.20
R160901090	10549 NW St Helens Rd	0.17	SFR	0.16
R839400980	11030 NW 2nd Ct	0.26	SFR	0.26
R839401010	11028 NW 2nd Ave	0.12	SFR	0.12
R839401040	11022 NW 2nd Ave	0.07	SFR	0.07
R839401120	10231 NW 110th Ave	0.17	SFR	0.17
R839401610	10250 NW 110th Ave	0.25	SFR	0.25
R839401650	10935 NW 2nd Ave	0.06	SFR	0.06
R839401660	10232 NW 110th Ave	0.12	SFR	0.12
R839401680	10255 NW 109th Ave	0.13	SFR	0.13

Table 12
Drainage Basin for Outfall 24: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Land Use	Acres in Basin
R839401700	10249 NW 109th Ave	0.11	SFR	0.11
R839401720	10239 NW 109th Ave	0.07	SFR	0.07
R839401730	10227 NW 109th Ave	0.11	SFR	0.12
R839402210	10254 NW 109th Ave	0.19	SFR	0.19
R839402240	10242 NW 109th Ave	0.17	SFR	0.17
R839402270	10226 NW 109th Ave	0.07	SFR	0.06
R839402300	10227 NW 108th Ave	0.13	SFR	0.13
R839402320	10217 NW 108th Ave	0.11	SFR	0.12
R839402340	10807 NW 2nd Ave	0.11	SFR	0.11
R839402850	10228 NW 108th Ave	0.08	SFR	0.08
R839402860	10216 NW 108th Ave	0.17	SFR	0.17
R839402920	10167 NW 107th Ave	0.25	SFR	0.25
R839402960	10153 NW 107th Ave	0.12	SFR	0.13
R839403120	10225 NW 107th Ave	0.11	SFR	0.11
R839403140	10205 NW 107th Ave	0.11	SFR	0.11
R839403200	10733 NW 3rd St	0.17	SFR	0.17
R873000030	9915 NW St Helens Rd	0.11	SFR	0.10
R873000050	9933 NW St Helens Rd	0.13	SFR	0.13
R873000070	9945 NW St Helens Rd	0.12	SFR	0.12
R873000090	9955 NW St Helens Rd	0.12	SFR	0.12
R873000110	10011 NW St Helens Rd	0.31	SFR	0.32
R873000190	10057 NW St Helens Rd	0.40	SFR	0.40
R873000230	10105 NW St Helens Rd	0.18	SFR	0.18
R873000250	10115 NW St Helens Rd	0.17	SFR	0.17
R873000270	10125 NW St Helens Rd	0.15	SFR	0.15
R873000290	10135 NW St Helens Rd	0.14	SFR	0.14
R873000310	10145 NW St Helens Rd	0.13	SFR	0.13
R873000330	10155 NW St Helens Rd	0.12	SFR	0.11
R873000350	10165 NW St Helens Rd	0.09	SFR	0.09
R873000370	10035 NW Wilark Ave	0.16	SFR	0.17
R873000400	10110 NW Hoge Ave	0.31	SFR	0.31
R873000440	10117 NW Wilark Ave	0.12	SFR	0.12
R873000460	10131 NW Wilark Ave	0.12	SFR	0.12
R873000480	10110 N/ NW Hoge Ave	0.24	SFR	0.24
R873000520	9965 NW Wilark Ave	0.12	SFR	0.12
R873000540	9991 NW Wilark Ave	0.22	SFR	0.22
R873000600	10025 NW Hoge Ave	0.11	SFR	0.11
R873000620	10035 NW Hoge Ave	0.23	SFR	0.23
R873000660	10107 NW Hoge Ave	0.23	SFR	0.23
R873001100	9889 NW Hoge Ave	0.11	SFR	0.11
R873001120	9897 NW Hoge Ave	0.11	SFR	0.11
R873001140	9909 NW Hoge Ave	0.11	SFR	0.11
R873001180	9919 NW Hoge Ave	0.11	SFR	0.11
R873001200	9925 NW Hoge Ave	0.11	SFR	0.11
R873001240	9939 NW Hoge Ave	0.13	SFR	0.13
R873001260	9912 NW Wilark Ave	0.14	SFR	0.14
R873001270	9848 NW Mackay Ave	0.22	SFR	0.11
R873001420	9820 NW Wilark Ave	0.34	SFR	0.29

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RNO	Site Address	Site Acres	Land Use	Acres in Basin
R873001450	9837 NW Wilark Ave	0.16	SFR	0.13
R873001460	9845 NW Mackay Ave	0.31	SFR	0.28
R160900210		0.01	VAC	0.00
R160900250		0.08	VAC	0.08
R160900310		0.14	VAC	0.14
R160900330		0.14	VAC	0.14
R160900350		0.12	VAC	0.12
R160900370		0.18	VAC	0.15
R160900570		0.20	VAC	0.20
R160900870		0.01	VAC	0.01
R160901030		0.21	VAC	0.21
R160901130		0.09	VAC	0.09
R160901190		0.15	VAC	0.15
R160901240		0.11	VAC	0.10
R160901260		0.17	VAC	0.17
R160901290		0.07	VAC	0.07
R160901310		0.15	VAC	0.14
R160901350		0.02	VAC	0.02
R283500010		1.90	VAC	0.19
R283502970		0.65	VAC	0.46
R283503230		0.95	VAC	0.84
R283503550		0.10	VAC	0.10
R283503590		0.34	VAC	0.19
R320502350		0.14	VAC	0.03
R839400240		0.11	VAC	0.09
R839400250	11105 NW Front Ave	0.11	VAC	0.11
R839400270	11105 N/ NW Front Ave	0.11	VAC	0.11
R839400320		0.06	VAC	0.06
R839400340	11134 NW St Helens Rd	0.26	VAC	0.27
R839400400		0.03	VAC	0.03
R839400410	11159 NW 2nd Ave	0.13	VAC	0.13
R839400430	11159 WI/ NW 2nd Ave	0.11	VAC	0.11
R839400450	11159 WI/ NW 2nd Ave	0.11	VAC	0.11
R839400470	11159 WI/ NW 2nd Ave	0.11	VAC	0.12
R839400490	11159 WI/ NW 2nd Ave	0.13	VAC	0.13
R839400510	11159 WI/ NW 2nd Ave	0.23	VAC	0.23
R839400550	11159 WI/ NW 2nd Ave	0.11	VAC	0.12
R839400650		0.80	VAC	0.80
R839400790		0.11	VAC	0.11
R839400810		0.92	VAC	0.92
R839400970		0.10	VAC	0.10
R839401110		0.04	VAC	0.02
R839401150		0.07	VAC	0.07
R839401170		0.23	VAC	0.17
R839401210		0.09	VAC	0.07
R839401290	1130 NW St Helens Rd	0.09	VAC	0.08
R839401310		0.10	VAC	0.10
R839401320	10225 NW Front Ave	0.27	VAC	0.27

Table 12
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Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Land Use	Acres in Basin
R839401360		0.11	VAC	0.11
R839401410		0.11	VAC	0.11
R839401750		0.06	VAC	0.04
R839401760		0.06	VAC	0.04
R839401770		0.14	VAC	0.15
R839401830		0.20	VAC	0.12
R839401890	S/NW 110th & 4th	0.92	VAC	0.92
R839402050		0.92	VAC	0.92
R839402410		0.18	VAC	0.03
R839402510	10836 NW St Helens Rd	0.09	VAC	0.09
R839402620	10827 NW Front Ave	0.08	VAC	0.08
R839402890		0.15	VAC	0.16
R839403060		0.23	VAC	0.23
R839403100		0.11	VAC	0.11
R839403160		0.11	VAC	0.12
R839403180		0.06	VAC	0.06
R839403300		0.17	VAC	0.13
R839403330		0.29	VAC	0.20
R873000010		0.06	VAC	0.07
R873000150		0.39	VAC	0.39
R873000580	10025 WI/ NW Hoge Ave	0.11	VAC	0.11
R873000700		0.64	VAC	0.18
R873000800		0.11	VAC	0.09
R873000820		0.11	VAC	0.11
R873000840	10040 NW Mackay Ave	0.11	VAC	0.12
R873000860		0.11	VAC	0.11
R873000880		0.11	VAC	0.11
R873000900		0.11	VAC	0.11
R873000920		0.23	VAC	0.23
R873000960		0.23	VAC	0.23
R873001000		0.23	VAC	0.23
R873001040		0.14	VAC	0.14
R873001060		0.11	VAC	0.11
R873001080		0.11	VAC	0.11
R873001160		0.11	VAC	0.12
R873001220		0.11	VAC	0.11
R873001266	9912 WI/ NW Wilark Ave	0.11	VAC	0.11
R873001276		0.11	VAC	0.12
R873001280		0.11	VAC	0.11
R873001290		0.23	VAC	0.23
R873001300		0.18	VAC	0.18
R873001440		0.12	VAC	0.08
R873001470		0.31	VAC	0.30
R873001510		0.46	VAC	0.46
R873001540		10.14	VAC	7.14
R873001550		0.13	VAC	0.13
R873001680		0.48	VAC	0.35
R873001740		1.40	VAC	0.02

Table 12
Drainage Basin for Outfall 24: Area by Landuse

Landuse Area by Tax Lots

RNO	Site Address	Site Acres	Land Use	Acres in Basin
R961020290	10832 NW Front	0.23	VAC	0.07
R961020490	NW 107th-110th & Front Ave	3.27	VAC	0.67
R961021120	10504 WI/ NW St Helens Rd	1.05	VAC	0.19
R961030080		2.89	VAC	0.94
R961030110		286.32	VAC	4.11
R961030120		127.46	VAC	0.00
R961100070		17.74	VAC	0.56
?		?	VAC	1.30
?		?	VAC	0.05
?		?	VAC	0.78