

MEMORANDUM



TO: Ms. Suzanne Dudziak, Port of Tacoma **DATE:** September 18, 2002
FROM: Brian Peters **PROJECT:** 834419 (01)
SUBJECT: Maersk Pacific Site Update

Per your request, Shaw Environmental, Inc. (Shaw Environmental) has prepared this memorandum detailing activities performed at the property occupied by Maersk Pacific, Ltd. in the vicinity of Building 600, located at 1675 Lincoln Avenue, Tacoma, Washington (site; Figure 1). The following summarizes characterization activities performed by others, as well as recent product recovery activities performed by Shaw Environmental.

Previous Site Characterization Activities

Previous work conducted at the site, as summarized in the Subsurface Exploration Report prepared by GeoEngineers, Inc. (GeoEngineers) dated April 3, 2001, indicated the following potential sources of petroleum hydrocarbons: a former 1.25 million-gallon aboveground storage tank (AST), a former 3,000-gallon waste oil underground storage tank (UST), an abandoned oil pipeline located north-northeast of Building 600, an abandoned lube oil pipeline located north of Building 600, and two existing USTs (1,000-gallon gasoline and 20,000-gallon diesel).

In December 1998, a 3,000-gallon waste oil UST was removed from the south side of Building 600. Petroleum hydrocarbon impacts to soil and groundwater were observed in the UST excavation.

In March 2000, Geotech Consultants, Inc. conducted site assessment activities at the site, which include advancing nine soil borings and installing three groundwater monitoring wells (GCI-MW-1 through GCI-MW-3) at the site (Figure 2). Analytical results from soil samples collected during this assessment indicated the presence of petroleum hydrocarbons ranging from 950 to 31,000 milligrams per kilogram (mg/kg) in the diesel range and 60 to 12,000 mg/kg in the heavy oil range. Analytical results from groundwater samples collected from the monitoring wells indicate petroleum hydrocarbons ranging from 3.1 to 850,000 milligrams per liter (mg/L) in the diesel range and 0.66 to 14,000 mg/L in the heavy oil range. Light non-aqueous phase liquid (free product) was measured in two monitoring wells (GCI-MW-1 and GCI-MW-3) at thicknesses of 0.2 and 0.92 feet.

In January 2001, GeoEngineers advanced a total of nine borings at the site to a maximum depth of 15 feet below ground surface (bgs) and installed monitoring wells in eight of the boring locations (GEI-MW-1 through GEI-MW-6, GEI-MW-8, and GEI-MW-9) at the site (Figure 2).

Analytical results from soil samples collected from monitoring well borings GEI-MW-1, GEI-MW-5, GEI-MW-8, and GEI-MW-9 had detectable concentrations of diesel range hydrocarbons (15 to 27,000 mg/kg) and heavy oil range hydrocarbons (30 to 1,900 mg/kg). Soil samples from monitoring well borings GEI-MW-2 through GEI-MW-4, GEI-MW-6, and boring GEI-B-7 did not contain petroleum hydrocarbons concentration above the laboratory reporting limits. Additionally, naphthalene was detected in soil samples collected from monitoring well borings GEI-MW-1, GEI-MW-8, and GEI-MW-9 at concentrations ranging from 0.37 to 45 mg/kg.

Analytical results from groundwater samples collected from the monitoring wells indicated diesel range hydrocarbon concentrations (ranging from 0.41 to 3 mg/L) and heavy oil range hydrocarbons (ranging from 0.42 to 1.1 mg/L) in monitoring wells GEI-MW-2, GEI-MW-4 through GEI-MW-6, GEI-MW-8, and GEI-MW-9. Gasoline range hydrocarbons were detected in groundwater samples collected from GEI-MW-4, GEI-MW-8, and GEI-MW-9 at concentrations ranging from 0.17 to 0.58 mg/L. Monitoring well GEI-MW-1 had a trace amount of free product and, therefore, was not sampled.

The majority of the petroleum-impacted soil and groundwater is located in the vicinity of the former 1.25 million-gallon AST and the former 3,000-gallon waste oil UST in the northeastern portion of Building 600.

Site Geology and Hydrogeology

The site lithology is comprised of fill material overlying silty sand and fine sand. The groundwater table is approximately 8 to 10 feet bgs. According to the GeoEngineers report, groundwater at the site is tidally influenced, which was confirmed by Shaw Environmental on April 24, 2002. At high tide, the groundwater flow direction during the GeoEngineers study was radially inward towards GEI-MW-1. Groundwater flow at high tide during the Shaw Environmental gauging event was indeterminate. At low tide, the groundwater gradient during both the GeoEngineers and Shaw Environmental gauging events was southwest and northeast from an apparent high point at GEI-MW-1. GEI-MW-1 is located directly below the center of former 1.25 million-gallon AST.

Free Product Recovery Activities

On February 5, 2002, Shaw Environmental installed recovery wells ITC-RW-1 and ITC-RW-2 in areas of known free product accumulation on groundwater, based on the results of previous site investigations performed. The well locations are shown on Figure 2. Well construction details and lithology encountered during drilling are presented on the attached boring logs. The surface completion of the wells consists of heavy duty, 12-inch diameter well vaults, and 3-foot by 3-foot square airport-grade concrete collars completed to match the surrounding surface grade.

After the initial gauging events, the wells were developed by Shaw Environmental on February 22, 2002 in an attempt to optimize the flow of LNAPL into the wells from the formation. The wells were developed using a surge block, bailer, and large peristaltic pump. After surging, the bailer and peristaltic pump were used to remove groundwater from the wells.

The two recovery wells were gauged periodically to monitor for free product accumulation from February 6 through May 2, 2002. The recovery well gauging data is presented in Table 1.

On May 8, 2002, Shaw Environmental began a passive free product recovery program by periodically skimming free product from the recovery wells using a peristaltic pump. Currently, Shaw Environmental is performing free product skimming activities every two weeks due to slow free product recharge, which may be attributed to the low groundwater elevation at the site during the drier months. Recovered free product is stored on site in a labeled, double contained, Department of Transportation-approved 55-gallon drum. As of September 4, 2002, approximately 9 gallons of free product have been recovered at the site from the recovery wells. Free product thickness and volume of free product recovered since May 8, 2002 are presented in Table 2.

Attachments: Table 1 - Well Gauging Results
Table 2 - Free product Thickness and Recovered Volume
Figure 1 - Site Location Map
Figure 2 - Site Plan
Boring Logs

Table 1
Well Gauging Results
Port of Tacoma
Maersk Pacific Site Product Recovery

Well Identification	Date Measured	Depth to Water (feet bgs)	Depth to Product (feet bgs)	Product Thickness (feet)
ITC-RW-1	2/6/2002	8.03	Sheen observed	Sheen observed
	2/12/2002	8.59	8.51	0.08
	2/22/2002	7.96	7.93	0.03
	2/25/2002	8.32	8.2	0.12
	3/6/2002	8.32	8.17	0.15
	3/20/2002	8.87	8.65	0.22
	4/4/2002	8.76	8.54	0.22
	4/11/2002	9.46	9.12	0.34
	4/17/2002	9.46	9.11	0.35
	4/24/2002	9.68	9.31	0.37
	5/2/2002	8.95	8.65	0.3
ITC-RW-2	2/6/2002	8.35	8.34	0.01
	2/12/2002	8.81	8.8	0.01
	2/22/2002	8.38	8.35	0.03
	2/25/2002	8.85	8.6	0.25
	3/6/2002	8.86	8.59	0.27
	3/20/2002	9.45	8.89	0.56
	4/4/2002	9.55	8.81	0.74
	4/11/2002	10.38	9.25	1.13
	4/17/2002	10.4	9.26	1.14
	4/24/2002	10.65	9.4	1.25
	5/2/2002	9.98	8.82	1.16
GEI-MW-1	2/25/2002	9.58	None	None
GEI-MW-2	2/25/2002	8.05	None	None
GEI-MW-3	2/25/2002	7.61	None	None
GEI-MW-6	2/25/2002	8.89	None	None
GCI-MW-1	2/25/2002	9.85	8.88	0.97

DRAWING NUMBER 834419

APPROVED BY

CHECKED BY

OFFICE BOTHELL

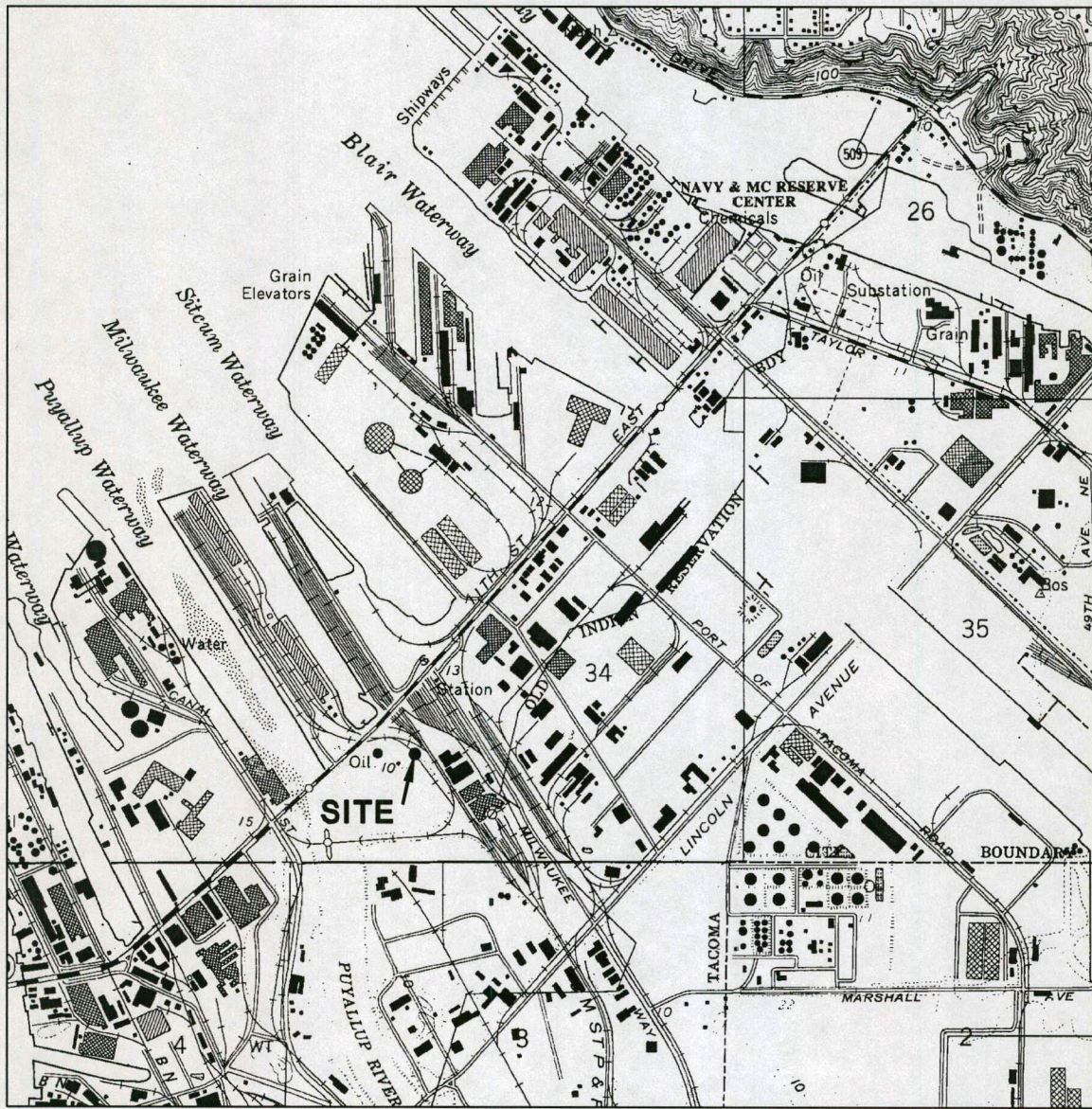
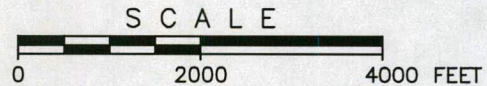


IMAGE Files: harborisle1.bmp Moersk1.tif Moersk1.tif
 XREF Files: <No Xrefs>
 / N:\Project\Final\PortofTacoma\834419\Drawings\moerskLocmap.dwg, Tue, 17/Sep/02 03:00pm mportaco
 Softdesk Project: N:\SDSK\PROJ\<none> Dimstyle: 0 Lscale: 0.3 PlotScale: 1



WASHINGTON



SCALE



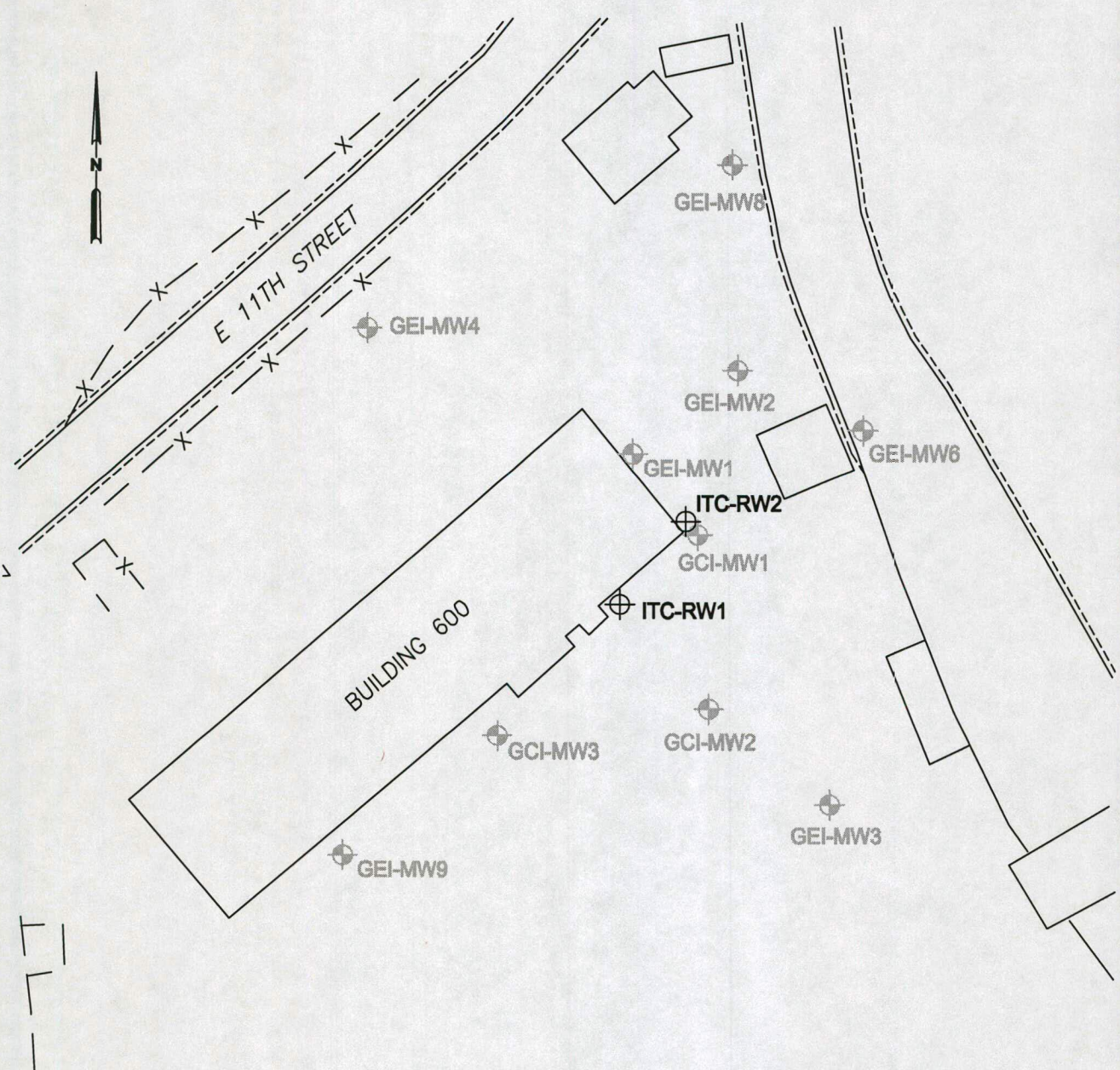
3350 Monte Villa Parkway
 Bothell, Washington 98021-8972
 (425) 485-5000 Fax. (425) 951-4808

SITE LOCATION MAP



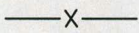
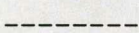
MAERSK PACIFIC LTD
 1675 LINCOLN AVENUE
 TACOMA, WASHINGTON

SOURCE:
 U.S.G.S. 7.5 Min. Quadrangle, TACOMA NORTH, WA - REVISED 1981.

OFFICE: BOTHELL
 DRAWN BY: MPortacio 9/17/02
 CHECKED BY:
 APPROVED BY:
 DRAWING NUMBER: 834419




LEGEND:

-  Product Recovery Well
-  Previously Installed Monitoring Well
-  Existing Fence
-  Bridges Line

NOTE: LOCATIONS ARE APPROXIMATE.



SOURCE: GEO ENGINEERS

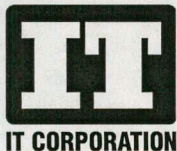
 Shaw E & I, Inc.	3350 Monte Villa Parkway Bothell, Washington 98021-8972 (425) 951-4800 Fax. (425) 951-4808
<p>FIGURE 2</p> <p>SITE PLAN</p> <p>PORT OF TACOMA TACOMA, WASHINGTON</p>	

LOG OF EXPLORATORY BORING

PROJECT NAME Port of Tacoma
LOCATION Tacoma, Washington
DRILLED BY Cascade Drilling, Inc.
DRILL METHOD Hollow-stem Auger
LOGGED BY Raul Fonda/Erin McQuillan

BORING NO. ITC-RW-1
PAGE 1 of 2
REFERENCE ELEV.
TOTAL DEPTH 16.5'
DATE COMPLETED 2/5/02

SAMPLE NUMBER (SAMPLE TYPE)	BLOWS PER 6 INCHES	PID (in ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				0				0 to 4 inches: ASPHALT
				4				4 inches to 2.5 feet: PEA GRAVEL
				5				2.5 to 10.0 feet: SAND (SP) , dark black, fine, trace fines (approximately 10 percent), damp, no noticeable odor.
10				5				
11				5				
				10				10.0 to 15.0 feet: SILTY SAND (SM) , dark black, fine sand (60 percent), some fines (40 percent), moist, hydrocarbon-like odor.
3				10				
3				10				
				15				15.0 to 16.5 feet: SAND (SP) , dark black, fine, trace fines (less than 10 percent), wet, hydrocarbon-like odor, sheen.
3				15				
3				15				
				16.5				Total depth drilled = 16.5 feet. Total depth sampled = 16.5 feet.
				20				See Page 2 for Well Completion Details.



REMARKS

LOG OF EXPLORATORY BORING

PROJECT NAME Port of Tacoma
LOCATION Tacoma, Washington
DRILLED BY Cascade Drilling, Inc.
DRILL METHOD Hollow-stem Auger
LOGGED BY Raul Fonda/Erin McQuillan

BORING NO. ITC-RW-1
PAGE 2 of 2
REFERENCE ELEV.
TOTAL DEPTH 16.5'
DATE COMPLETED 2/5/02

SAMPLE NUMBER (SAMPLE TYPE)	BLOWS PER 6 INCHES	PID (in ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO- LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				25				<p>WELL COMPLETION DETAILS</p> <p>0 to 5.0 feet: 4-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.</p> <p>5.0 to 15.0 feet: 4-inch-diameter, wire-wrapped, stainless steel screen.</p> <p>15.0 to 16.0 feet: 4-inch-diameter, stainless steel, end cap.</p> <p>0 to 2.5 feet: Concrete.</p> <p>2.5 to 4.0 feet: Bentonite chips hydrated with potable water.</p> <p>4.0 to 16.5 feet: 2/12 Monterey sand.</p>
				30				
				35				
				40				



REMARKS

LOG OF EXPLORATORY BORING

PROJECT NAME Port of Tacoma
LOCATION Tacoma, Washington
DRILLED BY Cascade Drilling, Inc.
DRILL METHOD Hollow-stem Auger
LOGGED BY Raul Fonda/Erin McQuillan

BORING NO. ITC-RW-2
PAGE 1 of 2
REFERENCE ELEV.
TOTAL DEPTH 16.5'
DATE COMPLETED 2/5/02

SAMPLE NUMBER (SAMPLE TYPE)	BLOWS PER 6 INCHES	PID (in ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 4 inches: ASPHALT 4 inches to 2.5 feet: PEA GRAVEL
								2.5 to 10.0 feet: SAND (SP), dark black, fine, trace fines (approximately 10 percent), damp, hydrocarbon-like odor.
	5 14 10			5				
			▽ 2/5/02					
	3 3 6			10				10.0 to 15.0 feet: SILTY SAND (SM), dark black, fine sand, some fines (approximately 30 percent), moist, hydrocarbon-like odor, sheen.
	2 2 5			15				15.0 to 16.5 feet: SAND (SP) SILTY SAND (SM), dark black, fine sand, some fines (approximately 10 percent), organic (tree root), wet, hydrocarbon-like odor, sheen.
								Total depth drilled = 16.5 feet. Total depth sampled = 16.5 feet.
								See Page 2 for Well Completion Details.
				20				



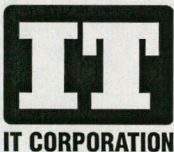
REMARKS
 Sheen noticed during water level measurement.

LOG OF EXPLORATORY BORING

PROJECT NAME Port of Tacoma
LOCATION Tacoma, Washington
DRILLED BY Cascade Drilling, Inc.
DRILL METHOD Hollow-stem Auger
LOGGED BY Raul Fonda/Erin McQuillan

BORING NO. ITC-RW-2
PAGE 2 of 2
REFERENCE ELEV.
TOTAL DEPTH 16.5'
DATE COMPLETED 2/5/02

SAMPLE NUMBER (SAMPLE TYPE)	BLOWS PER 6 INCHES	PID (in ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				25				WELL COMPLETION DETAILS 0 to 5.0 feet: 4-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 5.0 to 15.0 feet: 4-inch-diameter, wire-wrapped, stainless steel screen. 15.0 to 16.0 feet: 4-inch-diameter, stainless steel, end cap. 0 to 2.5 feet: Concrete. 2.5 to 4.0 feet: Bentonite chips hydrated with potable water. 4.0 to 16.5 feet: 2/12 Monterey sand.
				30				
				35				
				40				



REMARKS
 Sheen noticed during water level measurement.

PARCEL NO. 40

1. List the location and current mailing address for any property the Port of Tacoma has owned, leased or occupied in the CB/NT site and describe its approximate size and boundaries. Describe how long it has owned or occupied such property. Please list all current and prior owners, lessors, and occupants of such property.

The street address for parcel no. 40 is 1675 Lincoln Avenue, Tacoma, Washington 98421. The parcel is comprised of 29.85 acres. Its boundaries are outlined on the enclosed map of port property.

On May 11, 1981, the Port of Tacoma acquired parcel no. 40 from the Chicago, Milwaukee, St. Paul and Pacific Railroad Company.

Information regarding current tenancy on parcel no. 40 is given in response to question no. 3.

2. Please review the attached property list containing a description of properties in the CB/NT site for which EPA believes the Port of Tacoma has an ownership interest (Attachment 2). Indicate whether this list is correct and make any corrections or additions if appropriate. Please include an explanation for any changes to this list.

As agreed in the May 22, 1989 meeting between Dave McEntee and Bob Emerson (Port of Tacoma), Mike Stoner (EPA), Greg Bawden (TetraTech) and Hannah Sullivan (Bogle & Gates), the property list was revised to reflect those properties that drain into either the Hylebos or the Sitcum Waterways.

The revised list is as follows.

Property Draining into the Hylebos

Parcel no. 1B

Parcel no. 2

Parcel no. 4

Parcel no. 6

Easternmost section of parcel no. 9

Parcel no. 11

Parcel no. 12

Parcel no. 13

Parcel no. 14

Easternmost tip of parcel no. 15

Parcel no. 43

Parcel no. 45
Parcel no. 46
Parcel no. 47
Parcel no. 50
Parcel no. 51
Parcel no. 52
Parcel no. 56 (head of the Hylebos Waterway)

Property Draining into the Sitcum

Parcel no. 26
Parcel no. 27B
Parcel no. 27C
Parcel no. 28
Parcel no. 29
Parcel no. 30
Parcel no. 40
Parcel no. 41A
Parcel no. 42
Parcel no. 53 (Sitcum Waterway)
South Intermodal Railyard

In addition, the EPA asked the port to provide information regarding parcel no. 55 and City Marina.

Included herein is a map indicating the county assessor numbers as they correspond to the Port of Tacoma's parcel numbers. As agreed in the May 22 meeting, the port has referenced its parcel numbers, rather than the county assessor numbers, in response to the EPA's request for information.

3. Describe and list any leases or sub-leases which the Port of Tacoma has entered into (as either lessor or lessee) at any time pertaining to property or businesses associated with operations in the CB/NT site.

Since June 1, 1985, Sea-Land has leased parcel no. 40 as its main yard for international trade. Sea-Land's lease continues until May 31, 2015.

4. Provide a general description of all activities and operations carried out by the Port of Tacoma at any time on property in the CB/NT site. Specify the time periods and locations of such operations and activities.

In approximately 1984, the Port of Tacoma filled parcel no. 40 with bankrun gravel. It also constructed several operations buildings and paved the remaining area with asphalt.

5. List the generic names and chemical character of any "hazardous substances" and any "pollutants or contaminants" as defined on page 4 of this letter, that the Port of Tacoma has generated, stored, treated, transported, disposed or otherwise handled or used in any processes, activities, and operations carried out by the Port of Tacoma involving such hazardous substances, pollutants, or contaminants. Your description should include, but not be limited to, the following:

- a general description of materials used in production, maintenance or cleaning operations at each location
- a general description of waste streams and waste materials resulting from these processes
- analytical data describing these materials, or material safety data sheets (MSDS), if available
- the location and system for delivery, unloading, and storage of each substance to the facility
- monitoring systems used for chemical inventory in storage facilities

- procedures for cleaning storage tanks, equipment, and structures where such hazardous substances, pollutants or contaminants were used or otherwise handled.

As previously indicated, this property is leased and the Port of Tacoma has not generated, stored, treated, transported, disposed or handled any pollutants or contaminants on parcel no. 40. Additionally, the port has not carried out any processes, activities or operations, involving hazardous substances, pollutants or contaminants on this parcel.

6. For each hazardous substance identified above, please describe how the substance is or was handled, the dates or approximate time it was handled, and the total quantity in weight or volume (estimate if not available) of such hazardous substances, pollutants, or contaminants.

As previously indicated, the Port of Tacoma has not handled any hazardous substance on parcel no. 40.

7. Describe where and for how long any such hazardous substances, pollutants or contaminants described above were stored, and where and when the material was disposed of. Include on-property and off-property, informal and formal storage and disposal.

As previously indicated, the Port of Tacoma has not stored or disposed of any hazardous substances, pollutants or contaminants on parcel no. 40.

8. What arrangements (if any) were made to transport the hazardous substances, pollutants, or contaminants away from your property or operation? Who was the transporter of the hazardous substances, and what is the transporter's current/previous address?

As previously indicated, parcel no. 40 is leased and the Port of Tacoma has no knowledge of arrangements that have been made to dispose of hazardous substances, pollutants or contaminants from this parcel.

9. If any of the hazardous substances identified in response to questions 5-8 above were contained in oil or petroleum products, indicate the source of such hazardous substances, the amount and concentration mixed or contained in the oil, the date(s) such mixing occurred, the process or method of introduction of hazardous substances into the oil, and any other information in your possession regarding the presence of hazardous substances in oil or petroleum products which you generated, stored, transported, or disposed.

Please see the responses to questions 5 through 7.

10. Provide all information you have regarding spills, leaks, and pipeline breaks of hazardous substances, pollutants, or contaminants on or around property owned or occupied by the Port of Tacoma, including any spills caused by a lessor or occupant of such property. This should include the generic name and chemical constituents of the material(s) spilled, the quantity of material spilled, cleanup measures taken, the cause of the spill and any other related information.

As previously indicated, parcel no. 40 is leased and the Port of Tacoma has no knowledge regarding spills, leaks or pipeline breaks of hazardous substances, pollutants or contaminants on this parcel.

11. Describe and provide the results of all environmental investigations that have taken place on or around property owned or occupied by the Port of Tacoma. This includes investigations of the physical and chemical characteristics of the soil, surface water, sediments, air and groundwater. This also includes historical evaluations of potential/known contamination. Provide a list of all investigations planned or completed (include the purpose, dates, and relevant documents).

As previously indicated, parcel no. 40 is leased and the Port of Tacoma has no knowledge of environmental investigations that have taken place on or around this parcel.

12. Provide all existing maps, diagrams, and photos of property and operations of the Port of Tacoma. If appropriate, include information that indicates original shoreline boundaries, and any changes to the shoreline that may have occurred. Also indicate whether any portion of the property includes intertidal or submerged portions of the adjacent marine waterways or nearshore areas to a depth of sixty (60) feet below the Mean Lower Low Water (MLLW) contour.

The Port of Tacoma's files containing maps, diagrams and photographs of its properties are extensive and, because of their volume, are not included herein. However, an aerial photograph and/or drawing depicting the land and water areas of each parcel identified in response to question no. 2 are enclosed, including a drawing and photo of parcel no. 40.

The files will be made available to the EPA at its request.

13. Provide records and maps of locations of all underground structures at any property owned or occupied by the Port of Tacoma, including underground pipelines, bulkhead, storage facilities or other underground structures.

The as-built engineering drawings are too voluminous to include in this response. These drawings which detail underground structures on parcel no. 40 are available for inspection in the engineering office at the Port of Tacoma.

14. Describe the surface water drainage from such property, including but not limited to, whether precipitation collects in storm drains, ditches, or discharge to a local waterway.

Runoff from parcel no. 40 collects in storm drains adjacent to the property and discharges into the Sitcum Waterway.

15. Provide the name of all liability insurance carriers and copies of any liability insurance policies maintained by the Port of Tacoma that may provide liability coverage for damages resulting from releases of hazardous substances and/or wastes, pollutants, or contaminants. If such insurance policies are voluminous, or if you prefer not to submit them at this time but agree to submit the policies or make them available to EPA at a later date, you may provide EPA with a list of such insurance policies along with the name of the insurer, and the dates, extent, and amounts of such coverage.

The companies listed on the following pages have provided general liability, umbrella and excess coverage to the Port of Tacoma for the stated time periods. The port is unaware to what extent such policies may provide coverage for damages from the release of hazardous substances. Because the insurance policies are voluminous, they are not included herein. However, copies of the policies will be provided to the EPA upon its request.

General Liability

<u>Years</u>	<u>Company</u>	<u>Policy Number</u>	<u>Amounts</u>
05/09/88- 05/08/89	Lloyd's & Cos.	837158800	\$1M per occurrence \$1M aggregate
05/09/87- 05/08/88	Lloyd's & Cos.	837126900	\$1M per occurrence \$1M aggregate
05/09/86- 05/08/87	United States Fidelity & Guaranty	MP075316417	1M per occurrence \$1M aggregate
05/09/85- 05/08/86	United States Fidelity & Guaranty	MP064079356	\$.5M per occurrence \$1M aggregate
05/09/84- 05/08/85	United States Fidelity & Guaranty	1CC034500390	\$.5M per occurrence \$1M aggregate
05/09/83- 05/08/84	United States Fidelity & Guaranty	1CC025092826	\$.5M per occurrence \$1M aggregate
05/09/82- 05/08/83	United States Fidelity & Guaranty	1CC017044951	\$.5M per occurrence \$1M aggregate
05/09/81- 05/08/82	United States Fidelity & Guaranty	1CCD92884	\$.5M per occurrence \$1M aggregate
05/09/80- 05/08/81	United States Fidelity & Guaranty	1CCD68186	\$.5M per occurrence \$1M aggregate
05/09/79- 05/08/80	United States Fidelity & Guaranty	1CCC41932	\$.5M per occurrence \$1M aggregate
05/09/78- 05/08/79	United States Fidelity & Guaranty	1CCB58014	\$.5M per occurrence \$1M aggregate
05/09/77- 05/08/78	United States Fidelity & Guaranty	1CCA56215	\$.5M per occurrence \$1M aggregate
04/09/76- 05/09/77	Centennial	465-05-33-32	\$.5M per occurrence \$1M aggregate
03/20/75- 04/09/76	Pacific Insurance	L6388286	\$.5M per occurrence \$1M aggregate
03/20/74- 03/19/75	Pacific Insurance	L6359625	\$.5M per occurrence \$1M aggregate

Umbrella

12/31/87- 12/30/88	Lloyd's & Cos.	JSL-1242	\$30M per occurrence \$30M aggregate
12/31/86- 12/30/87	Lloyd's & Cos.	JSL-1242	\$30M per occurrence \$30M aggregate
12/31/85- 12/30/86	Lloyd's & Cos.	JSL-1145	\$30M per occurrence \$30M aggregate
12/31/84- 12/30/85	Lloyd's & Cos.	JSL-1145	\$30M per occurrence \$30M aggregate
12/31/83- 12/30/84	Lloyd's & Cos.	JSL-1145	\$30M per occurrence \$30M aggregate
12/31/82- 12/30/83	Lloyd's & Cos.	JSL-1094	\$30M per occurrence \$30M aggregate
12/31/81- 12/30/82	Lloyd's & Cos.	JSL-1094	\$30M per occurrence \$30M aggregate
12/31/80- 12/30/81	Lloyd's & Cos.	JSL-1093	\$30M per occurrence \$30M aggregate
12/31/79- 12/30/80	Lloyd's & Cos.	JSL-1074	\$15M per occurrence \$15M aggregate
12/31/78- 12/30/79	Lloyd's & Cos.	JSL-1047	\$15M per occurrence \$15M aggregate
12/31/77- 12/30/78	Lloyd's & Cos.	JSL-1027	\$14.5M per occurrence \$14.5M aggregate
12/31/76- 12/30/77	Mission Insurance	M833067	\$14.5M per occurrence \$14.5M aggregate
12/31/72- 12/30/75	Mission Insurance	M77182	\$14.5M per occurrence \$14.5M aggregate

Excess Umbrella

12/31/87- 12/30/88	Lloyd's & Cos.	JSL-1243	\$20M per occurrence \$20M aggregate
12/31/86- 12/30/87	Lloyd's & Cos.	JSL-1243	\$20M per occurrence \$20M aggregate
12/31/85- 12/30/86	Lloyd's & Cos.	JSL-1243	\$20M per occurrence \$20M aggregate

12/31/84- 12/30/85	Lloyd's & Cos.	JSL-1146	\$20M per occurrence \$20M aggregate
12/31/83- 12/30/84	Lloyd's & Cos.	JSL-1146	\$20M per occurrence \$20M aggregate
04/01/83- 12/31/83	Lloyd's & Cos.	JSL-1118	\$20M per occurrence \$20M aggregate
12/31/79- 12/30/80	Lloyd's & Cos.	JSL-1054	\$15M per occurrence \$15M aggregate
12/31/78- 12/30/79	Lloyd's & Cos.	JSL-1054	\$15M per occurrence \$15M aggregate

16. Please provide any other information, correspondence, or records in the possession or control of the Port of Tacoma regarding the use, treatment, storage, or disposal, or the transportation for use treatment, storage or disposal of hazardous substances or pollutants or contaminants at its property described in response to Question Number One above.

The Port of Tacoma has no information, correspondence or records regarding the use, treatment, storage or disposal of hazardous substances on parcel no. 40.

17. Provide a description of the types of records maintained by or otherwise available from the Port of Tacoma which are related to the subjects discussed in the above questions.

The Port of Tacoma maintains standard business files. Copies of leases and miscellaneous records related to its parcels are kept in the files.

18. Provide a list and the current or last known address and telephone numbers of all persons or companies which may have knowledge relating to any of the above questions.

Chicago, Milwaukee, St. Paul and Pacific Railroad Company
c/o Starley Hillman, Trustee
516 W. Jackson Blvd.
Chicago, IL 60606

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