Remediation Management

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Facsimile Cover Sheet

To: Scott Miller
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From: Ravi Kolhatkar
Company: Remediation Management
Phone:
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Date: 6/4/04

Pages including cover: 11

RE:

Port of Olympia investig^n by Northwest Testing.

Thanks.

Ravi

For transmission problems, please call
Betty Shum at (714) 228-6710

10 pages total

FAX to:

Ralph Moran, ARCO	(714) 670-5195
Scott Miller, SECOR	(503) 692-7074
Peter Mintzer, Trust rep.	(206) 447-0215
Ken Lederman, Ecology AAG	586-6760

Re: West Bay Tank Farm/Industrial Petroleum Distributors
Olympia, WA

From: Martha Maggi, WA Department of Ecology
Phone (360) 407-6248

Attached is the only written comment letter Ecology received during the official Public Comment Period for the IPD site agreed order. The letter is from the Port of Olympia and includes the report for the site assessment performed on Port property by Northwest Testing.

I have requested electronic raw soil data from the lab that performed the sample analysis for the Port property. If the format is compatible, I will have Ecology's petroleum chemist review the chromatograms and compare with the split soil samples that I collected from the IPD site during SECOR's push-probe sampling. If the format is incompatible, I intend to collect soil samples from Port property and have them analyzed by our chemist.

I am hoping the results will yield information on the probable source of contamination on Port property.

Thanks very much to the SECOR staff for assisting me in collecting the soil samples and generally keeping Ecology informed of field work status.

Please contact me if you have any concerns. I will distribute results from my split soil samples when the results are all in.

Thanks

Martha Maggi

10/19/00

Port of Olympia

October 9, 2000

Martha Maggi
Department of Ecology
Toxics Cleanup Program, SWRO
PO Box 47775
Olympia WA 98504-7775

Re: Industrial Petroleum Distributors Site Agreed Order

Dear Ms. Maggi:

The purpose of this letter is to comment on the proposed Agreed Order for the Industrial Petroleum Distributors site.

As you know, the Port of Olympia owns property across West Bay Drive from the Industrial Petroleum Distributor's site. The Port's site has been vacant for some time, and is heavily covered with blackberry thickets. To our knowledge, this parcel of land was at one time in the same ownership as the Industrial Petroleum Distributor's site, likely when it was operated by the Richfield Oil Corporation, and possibly ARCO. It is our understanding that the operator of the site imported fuel products by barge, and then off-loaded the product from barge to the above ground tanks. We believe that this transfer system consisted of a pump and piping system that traversed the now derelict pier, across the small waterfront upland parcel, then underneath the railroad tracks and West Bay Drive, and onto the Industrial Petroleum Distributor's site.

Given this historical use of the Port parcel, and the knowledge of the level of contamination on the Industrial Petroleum Distributors site, the Port hired Northwest Testing Company to perform an initial Level II site investigation. They performed the upland site investigation on September 20, 2000. The results of the field screening for the upland site indicated that heavy fuels were present on the site. Subsequent laboratory tests confirmed that the upland site is contaminated with hydrocarbon products and by products.

During the course of the Level II investigation the team located the former product transfer lines. Two 6" diameter steel product lines transferred the fuel to and from the pier to the bulk facility. These pipes passed beneath West Bay Drive and the railroad tracks, at which point they surfaced approximately 20' east of the centerline of the tracks and ran overground to the pier. These pipes remain at the subject site today, although they are no longer continuous from the tracks to the old pier. After surfacing near the tracks, the pipes have been terminated at the elbow. Both sections are then found to continue overground further to the east, terminating at approximately 94' east of the track centerline.

915 Washington Street NE, Olympia, WA 98501-6931 Tel (360) 586-6150 Fax (360) 586-4453 Inquiries@portolympia.com | Executive Director, Nick Handy

Based on the well-documented use of the Port parcel by the operators of the former bulk fuel tank farm, the Port requests that its parcel be included in the remedial investigation to determine the nature and extent of contamination as a result of the former bulk fuel operation.

Attached to this formal comment letter is a copy of the Level II site investigation prepared by Northwest Testing Company.

Sincerely,

Andrea Fontenot
Director of Engineering & Planning

cc: Nick Handy
Alexander Mackie
File

LEVEL II INVESTIGATION

PORT of OLYMPIA

WEST BAY DRIVE SITE

September 20, 2000

1.0) EXECUTIVE SUMMARY:

On September 20, 2000, this agency in conjunction with Cairone Construction and Environmental Inc. performed an environmental investigation for the Port of Olympia West Bay Drive property located along the east side of West Bay Drive, approximate address 1118 West Bay Drive, Olympia, Washington. This study focused on determining the presence and concentration of both refined and heavy petroleum hydrocarbons, volatiles, and lead contamination in shallow surface soils and groundwater. The study was performed to determine the potential impact to the property from the operations of the former Industrial Petroleum facility (later operated as Petroleum Reclaiming Services) just west and upgrade of the subject site.

1.1) REPORT LIMITATIONS:

This report was performed and prepared in accordance with generally accepted professional practices for environmental investigative studies conducted in the same or similar localities at the time of its conclusion. This report is intended for the exclusive use of the Port of Olympia and to those parties so designated by Port of Olympia, and applies to the specific property upon which it was conducted.

Reviews were not conducted on archived historical files. Information on long past site activities may exist that were not reviewed under the limited scope of this report. This site investigation can not eliminate the possibility of subsurface contamination at other locations at the site not expressly investigated.

This report is not meant to express a legal opinion, and no other warranty, expressed or implied, is made. Due to the nominal cost of this investigation relative to the costs incurred in a governmental mandated cleanup action (such as a CERCLIS action), the party which contracted this investigation understands that the liability incurred by Northwest Testing Company is limited to the cost of the investigation provided.

2.0) SITE and SITE VICINITY:

The subject site is located between the west shore of Budd Inlet and West Bay drive. The subject site comprises the north end of a larger property owned by the port. The site is located directly south of Reliable Steel, and is bordered by West Bay Drive and a railroad to the west, and Budd Inlet to the east. While the site is relatively level in grade, the east and south sides slope sharply into the bay. The north side the site is bordered by the laydown yard and drive area for Reliable Steel. The west side of the site is bordered by the railroad right-of-way. Grade slopes steeply westward of the railroad, where a high bank is encountered. After crossing West Bay Drive, slope again rises sharply where the former petroleum facility was located along the hillside.

The site has been vacant for some time, and is heavily covered with blackberry thickets. With the exception of the old product lines and the piling for the old fueling dock extending into the bay along the northeast side of the site (see below), no structures or evidence of structures were noted in the course of the work.

2.1) SITE HISTORY:

A shingle mill historically operated to the south of the subject site (1920's/1930's). Brick and concrete debris from this former structure remains further out into the bay, southeast of the subject area of investigation.

As noted above, an overground bulk fueling facility historically operated across West Bay Drive from the subject site. According to documents researched at the Southwest Regional Department of Ecology, bulk oil was transferred to and from ships in the harbor, and from a truck fueling facility off of West Bay Drive. The dates of operation extended from around 1951 to around 1977. The tanks were later used for waste oil storage from the early 1980's to around 1997, at which time all operations appear to have ended. The tanks at the site have recently been demolished and removed from the site. Heavy fuel contamination was encountered in the soils during the course of the removal. The site has not been remediated, although this is pending (see appendix).

At least two major fuel spills have been documented at the bulk facility. In 1974 a gas spill occurred at what was then the Atlantic Richfield facility (see affidavit in appendix). This happened during an off-loading operation from a barge on Budd Inlet. While the major portion of the spill was confined to the bulk facility itself, one of the affidavits indicates that gasoline "was spilling out the top of the tank and gasoline was running into the soil and down the hill at such a volume that it was actually running across West Bay Drive and going into Budd Inlet".

Some of the information reviewed also indicated that fuel oil may have entered the street storm water drains during the spills. This storm water drain crosses beneath West Bay Drive, runs east below the railroad tracks, and outlets into Budd Inlet.

Two 6" diameter iron product lines transferred the fuel to and from the Budd Bay loading dock to the bulk facility. These pipes passed beneath West Bay Drive and the railroad tracks, at which point

they surfaced approximately 20' east of the centerline of the tracks and ran overground to the pier. These pipes remain at the subject site today, although they are no longer continuous from the tracks to the old pier. After surfacing near the tracks, the pipes have been terminated at the elbow. Both sections are then found to continue overground further to the east, terminating at approximately 94' east of the track centerline.

3.0) GEOLOGY:

The excavations revealed a mixture of uniform clean sands along the southwest side of the test area (sample numbers S2 and S3) and a heavy moist clay towards the northwest side (sample numbers S1, S4, S5). A layer of sawdust was found along the north border of the site (exploratory excavations 1 and 2). This sawdust layer was found at approximately 24" to 30" bgs, and was at least 30" in thickness at exploratory pit #2. Large pieces of sandstone rip-rap were encountered while digging sample areas S1 through S5, an indication that the soil in these areas is a probable fill from the placement of the railroad track.

Groundwater was encountered at around 4.5' to 5.5' in most areas. Sampling was performed during an in-coming tide. The clay and silt soils were observed to be moist in most of the tested locations.

4.0) SAMPLING PROCEDURES:

Soil samples were obtained with hand tools. Care was taken to avoid cross-contamination while sampling. Samples were extracted with a sampling spoon that was decontaminated between samples. All samples were immediately placed into glass laboratory containers, sealed, and identified, and stored in a chilled cooler for transport to the laboratory.

4.1) FIELD SCREENING:

Field screening of the soils was done by the water sheen test and with a PID meter measuring total hydrocarbon vapor counts in an enclosed headspace. Excavated soils were also routinely examined visually and checked for staining and/or odor.

5.0) SITE INVESTIGATION:

After the excavator was mobilized to the site, the product line remaining on the surface was brushed out. The end of the two steel product lines which pass beneath West Bay Drive and the railroad tracks were also found. The lines were not capped, and the interior of each remained oil-coated. The initial excavation (S1) was made adjacent to the location where the product lines were buried. At approximately 4' bgs, heavy oil contamination was noted in the underlying clay/sandy soils. Groundwater entered the excavation, and a heavy oil sheen was noted on the surface of the water after stabilizing in the excavation. A series of four additional excavations spaced at

approximately 15' on center were made at approximately 15' east of the center line of the railroad track, terminating at 70' south of the north property line. These were made to determine if any near surface impact had been created from product spilling over West Bay Drive. No impact was noted in field and laboratory observation and testing.

Three additional excavations were made adjacent to the product pipe path, south side (see figure 1). Soil contamination was confirmed in excavation S6, 30' east of the railroad centerline. Groundwater contamination was confirmed at the final excavation TP2, 94' east of the railroad centerline. While soils were not tested in this area, soil contamination is suspected here as well. Soil and groundwater contamination was suspected in location TP1 (see attached figure 1).
Notable in the excavations along the pipeline route was a thick layer of sawdust at approximately 48" bgs. This layer was found in excavations S6, TP1, and TP2. This porous sawdust layer has offered an easy path for lateral migration of the product.

The product pipe terminated at the surface at around 92' east of the track centerline. Pipe was disconnected at a joint (threaded ends). A 24" deep trench was made perpendicular and across the probable route the pipe would have taken towards the pier. No pipe was encountered.

The site was revisited on September 28, and one hand augured sediment sample was taken from approximately 26" bgs, beneath the storm drain outfall into Budd Bay. The sample was retained for extended diesel hydrocarbon petroleum analysis. No contamination was indicated in field observations.

Sampling locations and methodology were adapted from the Field Sampling Procedures found in the February 1991 issue of the Department of Ecology Guidance for Site Checks and Site Assessments of Underground Storage Tanks and its revision. Samples were stored and transported to the laboratory for analysis, per sections 5.5 and 7.4 of the above referenced publication, and its revisions. All samples were analyzed at TEG Laboratories in Lacey, Washington.

6.0) RESULTS of LABORATORY ANALYSIS:

Samples were selectively analyzed for gasoline and extended diesel range hydrocarbons, BTEX, and for total lead. Elevated levels of diesel range petroleum contamination were found in subsurface soils at test locations S1 and S6. Significantly elevated levels of xylenes were also found in groundwater at location TP-2, with slightly elevated levels of xylenes (still over the 20-ppb Method A cleanup limits) found at location S1. While the levels of diesel contamination in soils were found to be higher at location S6, it is suspected that this was due to the more porous nature of the soils in this area. Heavy contamination was visually noted in excavation S1. Lead levels were found to be slightly elevated in samples S1 and S6, but within the 250 ppm cleanup levels allowable.

7.0) OBSERVATIONS and DISCUSSION:

Based upon the field observations and sampling results, both the soil and groundwater at the subject site appear to be impacted as a result of the pipeline fueling operations conducted across it. Based upon the information gathered in the course of this investigation, the area of impact to the site appears limited to the former fuel pipeline corridor. No contamination was confirmed from possible spills across West Bay Drive, although the west border of the subject property is well removed from the immediate area where a cross-the-roadway product spill would have had the most impact. Sampling and analysis could not confirm any impact to the subject site by way of fuel traveling through storm drains.

8.0) REFERENCE STANDARDS:

Reference standards for cleanup levels are taken from the Washington State Department of Ecology "Model Toxics Control Act Cleanup Regulation, Chapter 173-340, Method A Cleanup Standards.

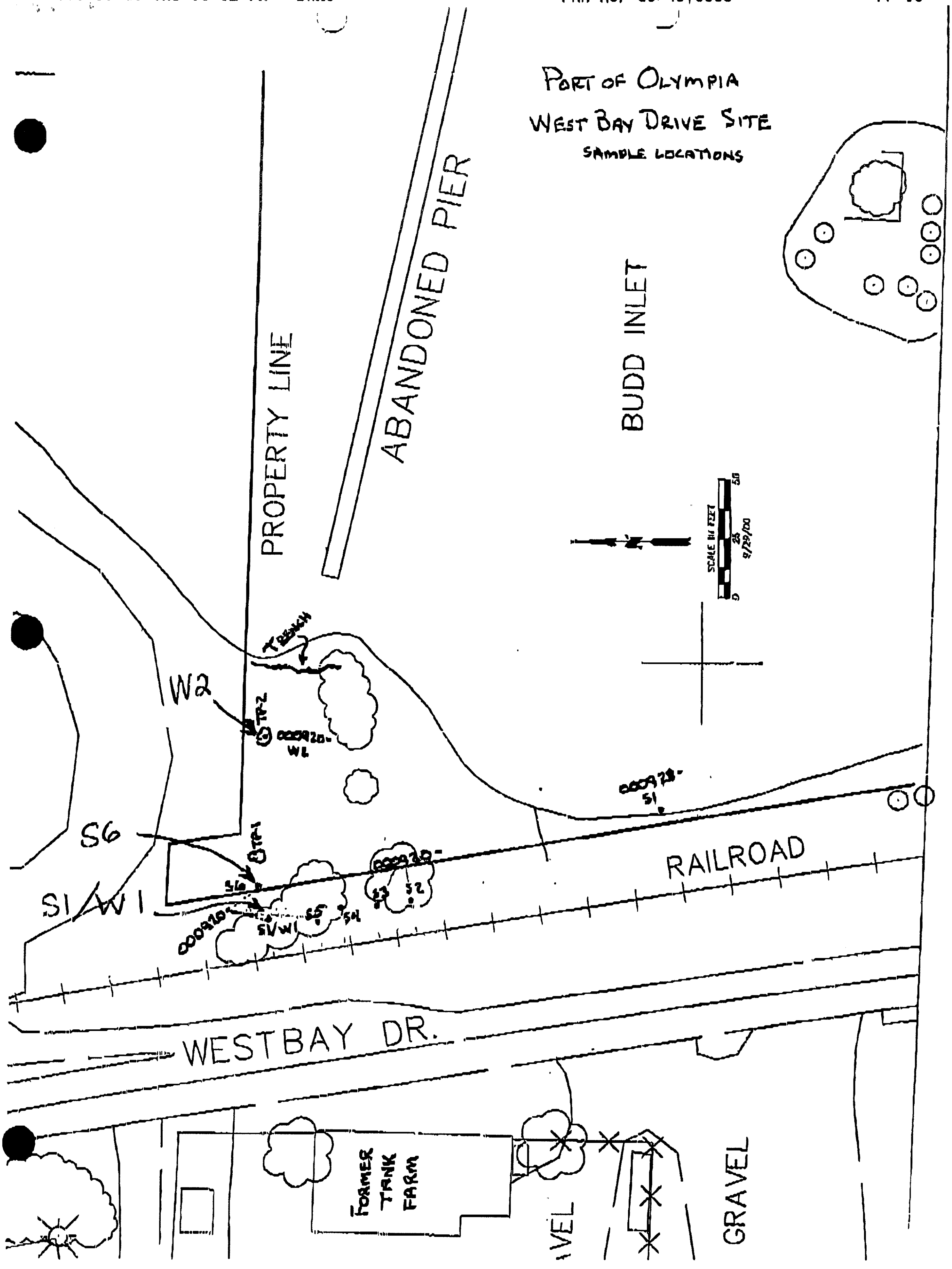
NORTHWEST TESTING COMPANY
Mark Robinson
Mark Robinson
Engineering Geologist
Registered Site Assessor

Port of Olympia
WEST BAY DRIVE PROPERTY

RESULTS OF FIELD SCREENING AND CHEMICAL ANALYSIS

Sample Number	Sample Location	Sample Depth	Date Sample	Field Screening PID	Field Screening Sheen	Refined Fuel Hydrocarbons WTPH-G (mg/kg)	Volatiles BTEX (mg/kg)	Heavy Fuel Hydrocarbons WTPH-D (Ext) (mg/kg)	Total Lead (mg/kg)
000920-S1	17' E of RR centerline, 10' S of N property line	5'	20-Sep	120	hs	nd	nd	330 (D)	11
000920-S2	14' E of RR centerline, 70' S of N property line	7'	20-Sep	nd	ns	na	na	nd	na
000920-S3	15' E of RR centerline, 55' S of N property line	6.5'	20-Sep	nd	ns	na	na	nd	na
000920-S4	15' E of RR centerline, 40' S of N property line	5'	20-Sep	nd	ns	ns	na	nd	na
000920-S5	15' E of RR centerline, 25' S of N property line	5.5'	20-Sep	nd	na	na	na	nd	na
000920-S6	30' E of RR centerline, 05' S of N property line	5.5'	20-Sep	90	hs	nd	X-23.9	14000 (D)	30
000920-S1	beneath the storm-drain outlet into Budd Bay	3'	20-Sep	nd	ns	na	na	nd	na
000920-W1	17' E of RR centerline, 10' S of N property line	5'	20-Sep	na	hs	nd	nd	35000 ug/L (D)	na
000920-W2	24.5' E of RR centerline, 10' S of N property line	4.5'	20-Sep	na	hs	X-170 ug/L	na	280000 ug/L (D)	na

Key: nd=non-detect
ns=no sheen
ms=moderate sheen
hs=heavy sheen
mg/kg=parts per million
ug/l=part per billion


PORT OF OLYMPIA
WEST BAY DRIVE SITE
SAMPLE LOCATIONS
PROPERTY LINE
ABANDONED PIER
BUDD INLET
TRENCH
W2
S6
S1/W1
RAILROAD
WESTBAY DR.
FORMER TANK FARM
GRAVEL