Parcel 40

IT CORPORATION

A Member of The IT Group

MEMORANDUM

TO: Suzanne Dudziak, Port of Tacoma **DATE:** March 14, 2002

FROM: Brian Peters **PROJECT:** 834419 (01)

SUBJECT: Maersk Pacific Site Update

On February 5, 2002, IT Corporation (ITC) installed recovery wells ITC-RW-1 and ITC-RW-2 in areas of known light non-aqueous phase liquid (LNAPL) accumulation of groundwater based upon the results of previous investigations performed at the site. The well locations are depicted on the attached Figure 1. Well construction details and lithology encountered during drilling are presented on the attached boring logs. Per your request, the surface completion of the wells consisted of heavy duty, 12-inch diameter well vault, and a 3-foot by 3-foot square airport-grade concrete collar completed to match the surrounding surface grade.

After the initial gauging events, the wells were developed by ITC on February 22, 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. A total of 50 gallons of water was removed from ITC-RW-1 and 30 gallons from ITC-RW-2.

The recovery wells have been periodically gauged and the results are presented in the attached table. Please note that all the wells in the vicinity of the suspected LNAPL plume were gauged on February 25.

Monitoring well GCI-MW-1, located approximately 8 feet from ITC-RW-2, had approximately 1 foot of LNAPL present on February 25, which is consistent with historical measurements in this well. The well is constructed with ¾-inch PVC pipe (no further details are known), which may account for the greater apparent thickness of LNAPL in the well as compared with the actual thickness in the formation due to capillary action (cohesion to the walls of the PVC).

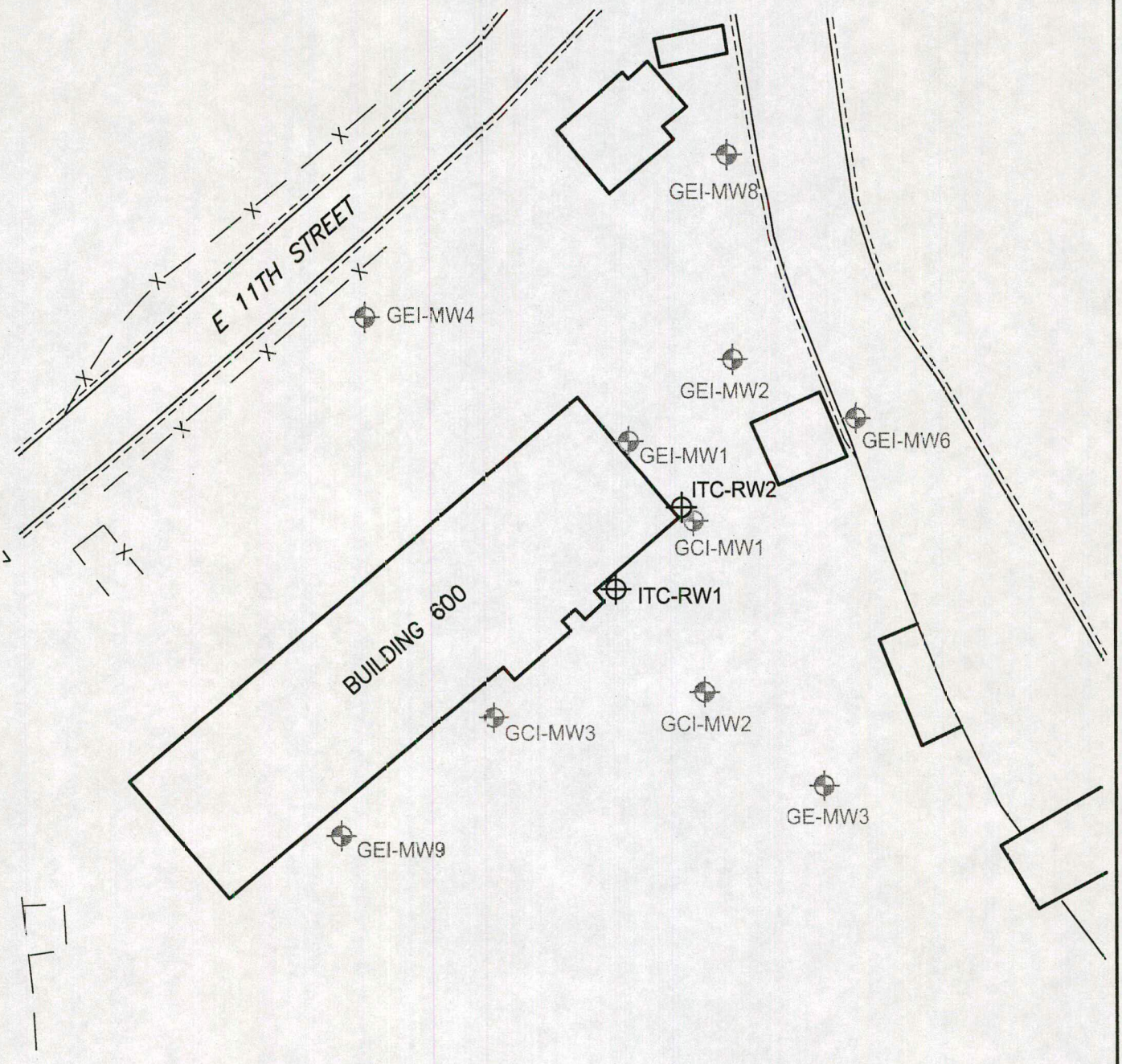
The current thickness of LNAPL in recovery wells ITC-RW-1 and ITC-RW-2 does not warrant the installation of an active LNAPL skimming system at the site. Site groundwater is currently at a seasonal high level, and assuming that LNAPL recovery is similar to the Former Milwaukee Railyard site, the greatest thickness of recoverable LNAPL would be evident at this time. Periodic gauging will be performed in conjunction with the weekly O&M schedule at the adjacent Milwaukee Railyard site. If the LNAPL thickness in these wells continues to increase, ITC will recommend the installation of passive skimming devices into each well.

Attachments: Well Gauging Results
Figure 1 – Site Plan
Boring Logs

Well Gauging Results
Maersk Pacific Ltd. Site
Port of Tacoma

Well Identification	Date Measured	Depth to Water (feet bgs)	Depth to Product (feet bgs)	Product Thickness (feet)
ITC-RW-1	2/6/02	8.03	Sheen observed	Sheen observed
	2/12/02	8.59	8.51	0.08
	2/22/02	7.96	7.93	0.03
	2/25/02	8.32	8.20	0.12
	3/6/02	8.32	8.17	0.15
ITC-RW-2	2/6/02	8.35	8.34	0.01
	2/12/02	8.81	8.80	0.01
	2/22/02	8.38	8.35	0.03
	2/25/02	8.85	8.60	0.25
	3/6/02	8.86	8.59	0.27
GEI-MW-1	2/25/02	9.58	None	None
GEI-MW-2	2/25/02	8.05	None	None
GEI-MW-3	2/25/02	7.61	None	None
GEI-MW-6	2/25/02	8.89	None	None
GCI-MW-1	2/25/02	9.85	8.88	0.97
GCI-MW-2	2/25/02	7.89	None	None

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
BOTHELL	MPortacio 3/13/02			834419



LEGEND:

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

NOTE: LOCATIONS ARE APPROXIMATE.

SCALE

0 100 200 FEET

SOURCE: GEO ENGINEERS

IT CORPORATION

3350 Monte Villa Parkway
Bothell, Washington 98021-8972
(425) 951-4800 Fax. (425) 951-4808

FIGURE 1

SITE PLAN

PORT OF TACOMA
TACOMA, WASHINGTON

LOG OF EXPLORATORY BORING

PROJECT NAME	**Port of Tacoma**	BORING NO.	**ITC-RW-1**
LOCATION	**Tacoma, Washington**	PAGE	**1 of 2**
DRILLED BY	**Cascade Drilling, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**16.5'**
LOGGED BY	**Raul Fonda/Erin McQuillan**	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, no noticeable odor.
	10 11 16			5				
	3 3 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 3 7			15				**15.0 to 16.5 feet: SAND (SP)**, dark black, fine, trace fines (less than 10 percent), wet, hydrocarbon-like odor, sheen.
								Total depth drilled = 16.5 feet. Total depth sampled = 16.5 feet.
				20				See Page 2 for Well Completion Details.

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	**Port of Tacoma**	BORING NO.	**ITC-RW-1**
LOCATION	**Tacoma, Washington**	PAGE	**2 of 2**
DRILLED BY	**Cascade Drilling, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**16.5'**
LOGGED BY	**Raul Fonda/Erin McQuillan**	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

IT CORPORATION

POT2.gds:2.3/14/02.POT2...834419

LOG OF EXPLORATORY BORING

PROJECT NAME	Port of Tacoma	BORING NO.	ITC-RW-2
LOCATION	Tacoma, Washington	PAGE	1 of 2
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	16.5'
LOGGED BY	Raul Fonda/Erin McQuillan	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	LITHC-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		▽ 2/5/02	5				
	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.
				20				See Page 2 for Well Completion Details.

REMARKS

Sheen noticed during water level measurement.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	**Port of Tacoma**	BORING NO.	**ITC-RW-2**
LOCATION	**Tacoma, Washington**	PAGE	**2 of 2**
DRILLED BY	**Cascade Drilling, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**16.5'**
LOGGED BY	**Raul Fonda/Erin McQuillan**	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.

IT CORPORATION

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

November 5, 2002

Suzanne Dudziak
Port of Tacoma
PO Box 1837
Tacoma WA 98401

Subject: Site Hazard Assessment – Maersk Pacific Ltd
Ecology Facility Site ID: 66987611

Dear Ms. Dudziak:

The Department of Ecology (Ecology) will conduct a site hazard assessment (SHA) of Maersk Pacific Ltd, 1675 Lincoln Avenue, Tacoma, WA 98421-2902, under the Model Toxics Control Act (MTCA), Chapter 173-340-320 WAC. This site has been on Ecology's Confirmed and Suspected Contaminated Sites List since April 18, 2000. This assessment will be performed by Sharon Bell, Tacoma-Pierce County Health Department. She will contact you in the near future to arrange a suitable time for a site visit, if that is deemed to be necessary.

The purpose of an SHA is to gather information on past/present waste management activities, along with other basic site-specific environmental data, in order to score the site following the Washington Ranking Method (WARM) Scoring Manual guidelines. Potential/actual threats to human health and the environment are evaluated for each applicable migration route, with a resultant "hazard ranking" for the site determined.

Sites are ranked on a scale of one to five, with one representing the highest level of concern, and five the lowest, relative to all other assessed/ranked sites in the state. The level of relative concern may be such that a recommendation of "No Further Action" (NFA) is made, and your site will then be removed from Ecology's Integrated Site Information System (ISIS) list.

For your information, Ecology will publish a notice in an upcoming issue of the Site Register that an SHA is scheduled for this site. This notice may evoke media inquiries. Likewise, the outcome of the SHA, either as a ranked site or a determination as NFA, will be published in the Site Register.

In addition to any required fieldwork, the following information will be considered in scoring this site:

- Ecology Southwest Regional Office Site Files
- Tacoma-Pierce County Health Department Site Files

You are requested to submit any additional environmental information regarding this site to:

Ms. Sharon Bell
Tacoma-Pierce County Health Department
Source Protection Programs
M/S 169
3629 South "D" Street
Tacoma, WA 98418-6813

Additional data could include any environmental assessments or laboratory analyses which have been conducted regarding this site and which have not previously been submitted to Ecology. Every attempt will be made to obtain the most recent and accurate data for scoring your site. If you have better information or comments on the adequacy of the data we already have, please let us know as soon as possible. The final site rank and eventual site priority will be based primarily on the information used in the scoring. Your active participation in the assessment and scoring process is important to insure that only the best data available is used.

Fact sheets describing Site Hazard Assessments, the Washington Ranking Method and the Hazardous Sites List are enclosed for your information. If you have any questions please call me at (360) 407-7195 or Sharon Bell at (253) 798-2891.

Sincerely,

Michael J. Spencer
Site Hazard Assessments
Toxics Cleanup Program

MJS:ms
Enclosures

cc: Sharon Bell, Tacoma-Pierce County Health Department
Dan Alexanian, Ecology Toxics Cleanup Program (TCP), SWRO

PORT of TACOMA U.S.A.

Mr. Dave Smith
Washington Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
P.O. Box 47775
Olympia, WA 98504-7775

April 5, 2001

Re: Maersk Pacific Limited Site
1675 Lincoln Avenue, Tacoma, Washington

Dear Mr. Smith:

As a follow-up to my previous correspondence with you on the Maersk Pacific Limited site, I'm forwarding a report entitled "Subsurface Exploration, Maersk Pacific Limited Site, 1675 Lincoln Avenue, Tacoma, Washington". The enclosed report shows that the nature and extent of hydrocarbons at this site have been defined. We are currently in the process of evaluating remedial options and will notify you of our conclusions when they are available.

If you have any questions associated with this notice and site assessment report, please call me at (253) 383-9453.

Sincerely,

Suzanne Dudziak
Environmental Program Manager
Enclosure

cc: Dick Gilmur
File

P.O. Box 1837 • Tacoma, Washington 98401-1837 • Telephone: (253) 383-5841

PORT of TACOMA U.S.A.

Mr. Dave Smith
Washington Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
P.O. Box 47775
Olympia, WA 98504-7775

April 10, 2000

Re: Discovery of a Hydrocarbon Release
Maersk Pacific Limited Site
1675 Lincoln Avenue, Tacoma, Washington

Dear Mr. Smith:

In accordance with WAC 173-340-300(2) the Port of Tacoma (Port) is reporting the discovery of a hydrocarbon release at the Maersk Pacific Limited Site, located at 1675 Lincoln Avenue, Tacoma, Washington. On January 20, 2000, the Port discovered soil and groundwater containing diesel and oil at the above-referenced property. A preliminary subsurface investigation was performed to try to delineate the extent of contamination. The attached report documents the investigation. The Port intends to further characterize the release and to identify appropriate cleanup measures associated with the release.

If you have any questions associated with this notice and site assessment report, please call me at (253) 383-9453.

Sincerely,

Suzanne Dudziak
Environmental Program Manager

Enclosure
cc: Port Attorney
File

P.O. Box 1837 • Tacoma, Washington 98401-1837 • Telephone: (253) 383-5841

SEVERN TRENT SERVICES

STL Seattle
5755 8th Street East
Tacoma, WA 98424

Tel: 253 922 2310
Fax: 253 922 5047
www.stl-inc.com

FAX TRANSMITTAL

Contact, Company, and Address:
Suzanne Dudziak
Port of Tacoma
P.O. Box 1837
Tacoma, WA 98401

Date: November 12, 2002

Phone Number: (253) 383-5841 x453

Fax Number: (253) 428-8679

Pages sent by fax: 2

Hard copy to follow: Yes

From

Message:
STL Work Order :109634
Project :Former Milwaukee Railyard (POT)
Date Received :10/30/2002
Project Manager :Anne Fowler

PORT of TACOMA U.S.A.

Mr. Gerry Olson
Maersk Pacific Limited
1002 Milwaukee Way
Tacoma, WA 98401

November 21, 2000

Re: Environmental Investigation Report; Maersk Pacific Limited Site

Dear Gerry,

Enclosed please find a copy of an environmental site assessment performed on the Maersk Pacific lease area. Based on the results of this study, further work will be required to determine the extent of hydrocarbon contamination and to identify what cleanup action may be necessary. We hope to perform additional work in the near future to resolve these issues. I'll be contacting you shortly with a proposed schedule for additional sampling in the vicinity of your maintenance building.

In the meantime, if you have any questions on the contents of this report, please feel free to call me at (253) 383-9453.

Sincerely,

Suzanne Dudziak
Environmental Program Manager
enclosure

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

April 18, 2000

Ms. Suzanne Dudziak
Port of Tacoma
PO Box 1837
Tacoma WA 98401-1837

Dear Ms. Dudziak:

Re: Port of Tacoma, Maersk Pacific Site, 1675 Lincoln Ave., Tacoma WA 98401

I am writing to you regarding the above-referenced property. Under the Model Toxics Control Act (Chapter 70.105D RCW), the Department of Ecology's (Ecology) Toxics Cleanup Program maintains a Facility Site/Site Information System (FS/SIS) database of known or suspected contaminated sites. This property has been added to the FS/SIS database.

Please note that inclusion in the database does not mean that Ecology has determined you are a potentially liable party under the Model Toxics Control Act, or that action is needed at this time. Ecology may conduct a more detailed inspection of this property, including testing for possible contamination, in the future. After that, we will be able to assess whether action will be needed and establish a priority for this work.

It is Ecology's policy to work cooperatively with persons to accomplish prompt and effective cleanups. However, due to limited resources and requirements in state law, we are not always able to provide requested assistance. Furthermore, your cooperation with Ecology in planning or conducting a remedial action is not admission of guilt or liability. If you decide to proceed with work on your own, please be aware that there are requirements in the state law which must be adhered to.

Enclosed is a copy of Chapter 70.105D RCW and the implementing regulations, Chapter 173-340 WAC, which detail these requirements. If you have any questions, please call Dave Smith at (360) 407-6250. Thank you for your cooperation.

Sincerely,

Tara Davis

Tara Davis
SIS Coordinator
Toxics Cleanup Program
Southwest Regional Office

DS/td
Enclosure

cc: Dave Smith, Ecology

Bob Goodstein
Jeff Lincoln
Dick Gilmur

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

April 18, 2000

Ms. Suzanne Dudziak
Port of Tacoma
PO Box 1837
Tacoma WA 98401-1837

Dear Ms. Dudziak:

Re: Port of Tacoma, Maersk Pacific Site, 1675 Lincoln Ave., Tacoma WA 98401

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Sincerely,

Tara Davis

Tara Davis
SIS Coordinator
Toxics Cleanup Program
Southwest Regional Office

DS/td
Enclosure

cc: Dave Smith, Ecology

PORT of TACOMA U.S.A.

Mr. Dave Smith
Washington Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
P.O. Box 47775
Olympia, WA 98504-7775

April 10, 2000

Re: Discovery of a Hydrocarbon Release
Maersk Pacific Limited Site
1675 Lincoln Avenue, Tacoma, Washington

Dear Mr. Smith:

In accordance with WAC 173-340-300(2) the Port of Tacoma (Port) is reporting the discovery of a hydrocarbon release at the Maersk Pacific Limited Site, located at 1675 Lincoln Avenue, Tacoma, Washington. On January 20, 2000, the Port discovered soil and groundwater containing diesel and oil at the above-referenced property. A preliminary subsurface investigation was performed to try to delineate the extent of contamination. The attached report documents the investigation. The Port intends to further characterize the release and to identify appropriate cleanup measures associated with the release.

If you have any questions associated with this notice and site assessment report, please call me at (253) 383-9453.

Sincerely,

Suzanne Dudziak

Suzanne Dudziak
Environmental Program Manager

Enclosure
cc: Port Attorney
File

Maersk - Pacific
conosp

PORT OF TACOMA

Environmental Department

Facsimile Cover Sheet

To: **Guy Buzzoni, SeaLand**

From: **Suzanne Dudziak**

Phone: (253) 383-9453
Fax: (253) 428-8679

Date: 6/8/99

Number of pages (including cover): 3

COMMENTS:

As a follow-up to the message left on your voicemail, attached are the Port's comments on the UST Characterization Report.

4.0 Analytical Results

Washington Administrative Code (WAC) 173-340-745 Method A sets an action level (maximum allowable limit) of 200 ppm (mg/kg) diesel and certain waste oil and 100 ppm (mg/kg) gasoline for soil. The results of the sample analysis revealed diesel range hydrocarbons above the state Model Toxics Control Act (MTCA) allowable limit of 200 parts per million (ppm) in the soils below of the excavation that contained the UST. The soil was also tested for gasoline range organics. The results show 2.3 ppm well below the action level of 100 ppm.

Table 1 - Analytical Results
Soil Analysis
Method TPH-D (Diesel/Oil)

Sample ID	Sample Location	Diesel	Oil	Gasoline Range
S1-12798	Soil Sample Excavation Bottom	6,600 ppm	370 ppm	—
S3-122098	Sludge From Inside UST	260,000 ppm	720,000 ppm	—

Analytical results for samples taken during UST assessment Sea-Land Facility

For all other analytical results please refer to Appendix D.

COMMON CONSTITUENTS BETWEEN SLUDGE AND SOIL

ETHYLBENZENE	7600	810
M,P XYLENE	27,000	290
N-PROPYLBENZENE	4500	1900
1,2,4 TRIMETHYLBENZENE	32,000	3100
SEC-BUTYLBENZENE	2300	2800
4 ISOPROPYLTOLUENE	3500	1900
NAPTHALENE	30,000	4000

1203 E. D Street, Suite 109 ⊛ P.O. Box 1803 ⊛ Tacoma, Washington 98401- 1803
P: 253. 627.3347 ⊛ F: 253 572.4207 ⊛ E: ceti@cetinw.com ⊛ W: www.cetinw.com

6.0 Conclusions

Analytical and visual evidence indicates that the site is contaminated with diesel product, including a free product at the groundwater surface. There is not contamination at the higher levels of the excavation for the waste oil tank immediately below the ground surface.

Sample results for ~~method 8270~~ Total RCRA 8 metals, method 8260 volatile organic compounds and method 8082 PCB's did not indicate any raised levels in the soil sample.

Based on the results of the laboratory soils analysis and on-site observations, it is CETI's opinion the subsurface soils in the UST excavation are contaminated by diesel and oil range petroleum range hydrocarbons. The amount of oil reported in the analytical results is minimal, however the diesel both observed in the UST excavation and reported through the analytical results indicate the need for further delineation of the site since Sea-Land's occupancy of the premises.

The evidence of a 1.25 million gallon diesel fuel tank, along with the previous evidence of fuel releases in the subsurface of the site prior to the installation of the 3,000 gallon waste oil tank, indicates that the release encountered in the excavation of the waste oil tank was from previous activities, not from the 3,000-gallon waste oil UST removed. There is no evidence that the waste oil tank was the source of any releases on the site.

At this time, CETI recommends closure of the waste oil UST matter. Any further investigation should be centered around previous activities and facilities on the site to and including the 1.25 million gallon diesel fuel tank and its related piping and facilities.

CETI further recommends TPCHD close this case with Sea-Land, the current tenant, and that a copy of this report be presented to the Port of Tacoma as owner of the property, and the Washington Department of Ecology so that the Port of Tacoma may further investigate the site in accordance with the applicable regulations for releases.

AND CHLORINATED VOLATILE ORGANICS.

THE CHLORINATED VOLATILE ORGANICS ARE MOST LIKELY FROM THE WASTE OIL TANK.

This is an incorrect statement.

1203 E. D Street, Suite 109 ⊛ P.O. Box 1803 ⊛ Tacoma, Washington 98401- 1803
P: 253. 627.3347 ⊛ F: 253.572.4207 ⊛ E: ceti@cetinw.com ⊛ W: www.cetinw.com

3/3

CREATIVE ENVIRONMENTAL TECHNOLOGIES, INC.
PROVIDING ENVIRONMENTAL SERVICES TO THE NORTHWEST FOR 15 YEARS

CETI

May 13, 1999

Sea-Land Service, Inc.
6000 Carnegie Boulevard
Charlotte, NC 28209-4637

Re: Sample Results For UST Report

Dear Mr. Buzzoni:

Regarding you faxed letter of May 13, 1999. Sample two (S-2) was a duplicate of sample one (S-1) and not analyzed or recorded on the chain of custody. The sample was held at our office for 30 day then destroyed. Sample four (S-4) was collected at the request of our client at the time, NW Tank and Environmental Services, of a stockpile of soil near the fuling island where USTs were retrofitted by NW Tank and Environmental Services. This sample is not related to the UST decommissioning event and was not included in the UST report.

If there are any other questions regarding the report or any other matter, please feel free to call at your convenience.

Sincerely,

Stephen Spencer

cc: John Spencer, CETI
Remy Cano, NW Tank & Environmental Services

P.O. Box 1803 ● Tacoma, Washington 98401-1803 ● 1203 E. D Street Suite 109
P: 253. 627.3347 ● F: 253.572.4207 ● E: ceti@cetinw.com ● www.cetinw.com

PORT of TACOMA U.S.A.

Mr. Dave Smith
Washington Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
P.O. Box 47775
Olympia, WA 98504-7775

April 10, 2000

Re: Discovery of a Hydrocarbon Release
Maersk Pacific Limited Site
1675 Lincoln Avenue, Tacoma, Washington

Dear Mr. Smith:

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If you have any questions associated with this notice and site assessment report, please call me at (253) 383-9453.

Sincerely,

Suzanne Dudziak
Environmental Program Manager

Enclosure
cc: Port Attorney
File

Maersk - Pac.
Corresp

Sea-Land

May 3, 1999 via HAND DELIVERY

Dick Gilmore
Port of Tacoma
P.O. Box 1837
Tacoma, Washington 98401

RE: DRAFT UST SITE ASSESSMENT / SITE CHARACTERIZATOIN
3,000 Gallon Waste Oil UST
Sea-Land, 1675 Lincoln Avenue, Tacoma, Washington

Dear Mr. Gilmore:

This follows our January 25th 1999 meeting regarding the above referenced underground storage tank (UST) removal. Enclosed for your review and input is a DRAFT UST Site Assessment / Site Characterization report prepared by Creative Environmental Technologies, Inc. (CETI), latest revision dated April 30, 1999.

The report concludes that Sea-Land's waste oil UST appeared in "excellent" condition during its removal and that the contamination release encountered occurred prior to Sea-Land's occupation of the premises. Laboratory testing identified diesel fuel contamination in the ground that was a different product with a different chemical make-up than the waste oil stored in the UST by Sea-Land. The presence of diesel fuel contamination was consistent with use of the site prior to Sea-Land's occupancy.

It is our understanding that Port of Tacoma will review the DRAFT report and provide us input based on their prior experiences with the jurisdictional limits of the Tacoma Pierce County Health Department (TPCHD) on such matters. After this input is received, Sea-Land will finalize the report with CETI and submit it to TPCHD. As discussed, we understand Port of Tacoma, at its cost, will then undertake the necessary release investigation and remedial efforts that will not interfere with Sea-Land's on-going use of the terminal.

We thank you for your continued attention to this matter.

Very truly yours,
Sea-Land Service, Inc.

Guy Buzzoni

Enc.

Cc:	John Spencer	CETI
	Curtis Foltz	TAC
	Gerry Olson	TAC
	Terry Murphy	TAC
	Larry Nielsen	TAC

Maersk - Pacific
Corresp.

RECEIVED
JUL 26 1999
ENVIRONMENTAL DEPT.

Sea-Land
Ideas that move the world.

Sea-Land Service, Inc.
6000 Carnegie Boulevard
Charlotte, NC 28209
Phone: 704.571.2000

July 20, 1999

via REGULAR MAIL

Dick Gilmur
Port of Tacoma
P.O. Box 1837
Tacoma, Washington 98401

RE: DRAFT UST SITE ASSESSMENT / SITE CHARACTERIZATION
3,000 Gallon Waste Oil UST
Sea-Land, 1675 Lincoln Avenue, Tacoma, Washington

Dear Mr. Gilmur:

This responds to the Port's June 8th 1999 memo from Suzanne Dudziak that transmits comments regarding the DRAFT UST Site Assessment / Site Characterization, latest revision dated April 30, 1999, prepared by Creative Environmental Technologies, Inc. (CETI) for the above referenced underground storage tank (UST) removal.

Attached are:

1. Our June 8th memo to CETI requesting their opinion regarding the specific comments given in the Port's June 8th memo.

2. CETI's reply to our related June 8th memo, dated June 22, 1999

We respectfully disagree with your position that both the Port of Tacoma and Sea-Land have shared liability for release investigation and remediation of the existing soil and groundwater contamination.

It is CETI's opinion that Sea-Land's waste oil UST appeared in "excellent" condition during its removal and that the contamination release encountered had occurred prior to Sea-Land's occupation of the premises. Laboratory testing identified diesel fuel contamination in the ground that was a different product with a different chemical make-up than the waste oil stored in the UST by Sea-Land. The presence of diesel fuel contamination was consistent with use of the site prior to Sea-Land's occupancy.

Based on CETI's opinion, we maintain that Port of Tacoma is liable for release investigation and remediation under the terms of the Lease, as amended.

We intend to finalize the CETI's DRAFT April 30th report without any further revision and submit it to TPCHD. We expect Port of Tacoma will fulfill its lease obligations, at its cost, by undertaking the necessary release investigation and remedial efforts that will not interfere with Sea-Land's on-going use of the terminal.

We thank you for your continued attention to this matter.

Very truly yours,
Sea-Land Service, Inc.

Guy Buzzoni

Att.

Cc:	Suzanne Dudziak	Port of Tacoma
	John Spencer	CETI
	Curtis Foltz	TAC
	Gerry Olson	TAC
	Terry Murphy	TAC
	Larry Nielsen	TAC

Sea-Land Service, Inc.
6000 Carnegie Boulevard, Charlotte, NC 28209-4637

FAX

Date: June 8, 1999	No. of pages: 8 (including cover sheet)

To:	**JOHN / STEVE SPENCER**	From:	**GUY BUZZONI**
Location:	**CETI**		**Terminal Operations Services**
Fax:	**253.572.4207**	Fax:	**704.571.4677**
Phone:	**253.627.3347**	Phone:	**704.571.2121**

Name:	*Location:*	*Fax:*
cc:		

RE: DRAFT UST SITE ASSESSMENT / SITE CHARACTERIZATOIN
3,000 Gallon Waste Oil UST
Sea-Land, 1675 Lincoln Avenue, Tacoma, Washington

John / Steve:

Port of Tacoma has reviewed your April 30th DRAFT UST Site Assessment / Site Characterization report. Their comments are given in the attached June 8th memo.

Before finalizing the DRAFT report for submission to Tacoma Pierce County Health Department based on Port of Tacoma's comments, please address the validity of the Port of Tacoma's comments and fax back a reply to me:

1. **Section 4.0 - Analytical Results:** The diesel and oil contaminants that are present in the soil and are also present in the sludge, but in significantly different concentrations. What is the significance of the common constituents between the sludge and the soil?

2. **Section 6.0 – Conclusions:** "Method 8260 volatile organic compounds did not indicate any raised levels in the soil sample." Is this an incorrect statement?

3. **Section 6.0 – Conclusions:** Are the subsurface soils in the UST excavation contaminated by diesel and oil range petroleum hydrocarbons and chlorinated volatile organics?

4. **Section 6.0 – Conclusions:** "There is no evidence that the waste oil tank was the source of any releases on the site since Sea-Land's occupancy of the premises." Is this an incorrect statement?

   Upon removal, the UST and associated piping was reported to be in excellent condition.

   Also attached is additional information that may be used to argue this statement. Our most recent tightness test of the waste oil UST and associated piping was conducted August 1992. The tightness test passed at that time.

5. **Section 6.0 – Conclusions:** Are the chlorinated volatile organics most likely from the waste oil tank?

Thanks.

PORT OF TACOMA

Environmental Department

Facsimile Cover Sheet

To: **Guy Buzzoni, SeaLand**

From: **Suzanne Dudziak**

Phone: (253) 383-9453
Fax: (253) 428-8679

Date: 6/8/99

Number of pages (including cover): 3

COMMENTS:

As a follow-up to the message left on your voicemail, attached are the Port's comments on the UST Characterization Report.

4.0 Analytical Results

Washington Administrative Code (WAC) 173-340-745 Method A sets an action level (maximum allowable limit) of 200 ppm (mg/kg) diesel and certain waste oil and 100 ppm (mg/kg) gasoline for soil. The results of the sample analysis revealed diesel range hydrocarbons above the state Model Toxics Control Act (MTCA) allowable limit of 200 parts per million (ppm) in the soils below of the excavation that contained the UST. The soil was also tested for gasoline range organics. The results show 2.3 ppm well below the action level of 100 ppm.

Table 1 - Analytical Results
Soil Analysis
Method TPH-D (Diesel/Oil)

Sample ID	Sample Location	Diesel	Oil	Gasoline Range
S1-12798	Soil Sample Excavation Bottom	6,600 ppm	370 ppm	—
S3-122098	Sludge From Inside UST	260,000 ppm	720,000 ppm	—

Analytical results for samples taken during UST assessment Sea-Land Facility

For all other analytical results please refer to Appendix D.

COMMON CONSTITUENTS BETWEEN SLUDGE AND SOIL

	SLUDGE	SOIL
ETHYLBENZENE	7600	810
M,P XYLENE	27,000	290
N-PROPYLBENZENE	4500	1900
1,2,4 TRIMETHYLBENZENE	32,000	3100
SEC. BUTYL BENZENE	2800	2800
4 ISOPROPYLTOLUENE	3500	1900
NAPTHALENE	30,000	4000

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6.0 Conclusions

Analytical and visual evidence indicates that the site is contaminated with diesel product, including a free product at the groundwater surface. There is not contamination at the higher levels of the excavation for the waste oil tank immediately below the ground surface.

Sample results for ~~Method A/W~~ Total RCRA 8 metals, method 8260 volatile organic compounds and method 8082 PCB's did not indicate any raised levels in the soil sample.

Based on the results of the laboratory soils analysis and on-site observations, it is CETI's opinion the subsurface soils in the UST excavation are contaminated by diesel and oil range petroleum range hydrocarbons. The amount of oil reported in the analytical results is minimal, however the diesel both observed in the UST excavation and reported through the analytical results indicate the need for further delineation of the site since Sea-Land's occupancy of the premises.

The evidence of a 1.25 million gallon diesel fuel tank, along with the previous evidence of fuel releases in the subsurface of the site prior to the installation of the 3,000 gallon waste oil tank, indicates that the release encountered in the excavation of the waste oil tank was from previous activities, not from the 3,000-gallon waste oil UST removed. There is no evidence that the waste oil tank was the source of any releases on the site.

At this time, CETI recommends closure of the waste oil UST matter. Any further investigation should be centered around previous activities and facilities on the site to and including the 1.25 million gallon diesel fuel tank and its related piping and facilities.

CETI further recommends TPCHD close this case with Sea-Land, the current tenant, and that a copy of this report be presented to the Port of Tacoma as owner of the property, and the Washington Department of Ecology so that the Port of Tacoma may further investigate the site in accordance with the applicable regulations for releases.

AND CHLORINATED VOIATLE ORGANICS.

THE CHLORINATED VOIATLE ORGANICS ARE MOST LIKELY FROM THE WASTE OIL TANK.

This is an incorrect statement

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UNDERGROUND STORAGE TANK
Tightness Testing Checklist

The purpose of this form is to certify the proper tightness testing of underground storage tank (UST) systems including connected underground piping. Tightness testing shall be conducted in accordance with Chapter 173-360 WAC.

This Tightness Testing Checklist shall be completed and signed by a Licensed Tightness Testing Supervisor. The supervisor shall be on site when all tank tightness testing activities are being conducted. The firm which employs the licensed supervisor shall also be licensed by the Washington State Department of Ecology as a Service Provider.

A separate checklist must be completed for each UST system (tank and associated piping) tightness tested, except that separate UST systems tightness tested at one site may be reported together by photcopying page 2 and 3 of this form and completing these pages separately for each UST system. The completed checklist should be mailed to the following address within 30 days of completion of tightness testing:

Underground Storage Tank Section
Department of Ecology
Mail Stop PV-11
Olympia, WA 98504-8711

For further information about completing this form, please contact the Department of Ecology UST Section.

The tank owner or operator must report a failed tightness test as a suspected release to UST staff at the appropriate Ecology regional office within 24 hours.

1. UST SYSTEM OWNER AND LOCATION

UST Owner/Operator: Sea-Land Service, Inc.

Owners Address: 3600 Port of Tacoma Road, Suite 405
(Street)

Tacoma, (City) | WA (State) | 98424 (P.O. Box / Zip+4 (required))

Telephone: 206-593-1457

Site ID Number (on invoice or available from Ecology if tank is registered): 100639

Site/Business Name: Sea Land Services

Site Address: 1675 Lincoln Avenue
(Street)

Tacoma, (City) | WA (State) | 98424 (County / Zip+4 (required))

2. TIGHTNESS TESTING PERFORMED BY:

Firm: ATEC Associates, Inc.

Service Provider License Number: S000283

Address: 13333 Bel-Red Road
(Street)

Bellevue, (City) | WA (State) | 98005-2332 (P.O. Box / Zip+4 (required))

Telephone: (206) 643-8078

Licensed Supervisor: Gary Peters

Supervisor License Number: W001743

	Yes	No	NA*
2. Have all written testing procedures developed by the manufacturer of the testing equipment and method been followed while the test was being set up and conducted?	X GP		
3. Was the product level in the tank during the test within the limitations stated in the evaluation results used to demonstrate that the tightness test method meets performance standards?	X GP		
4. Was the waiting period between the addition of product to the tank and the beginning of the test at or above the minimum waiting period stated in the evaluation results?	X GP		
5. If groundwater was present above the bottom of the tank, have the testing procedures accounted for its presence? (for single wall tanks)	X GP		
6. Have any loose fittings at the top of the tank been either tightened prior to beginning the test or accounted for when conducting the test and evaluating test results? (Applies to overfill methods only) *Exception: Interstitial space fitting on double wall tank should remain loose during test for interstitial space to vent to atmosphere.*			X GP
7. Have all vapor pockets either been removed prior to beginning the test or otherwise accounted for when conducting the test and evaluating test results?	X GP		
8. Based on evaluating test results and conducting any retesting as necessary to obtain conclusive test results, the tightness test is: X GP Passed ____ Failed **Note: Inconclusive test results will not be considered as a valid tightness test for purposes of complying with UST release detection regulations.**			
9. If the tightness test is considered a failed test, has the owner/operator been notified of the test results? Note: The tank owner or operator must report a failed tightness test as a suspected release to UST staff at the appropriate Ecology regional office within 24 hours of being notified by the testing firm that a failed tightness test has occurred.			X GP
10. If a failed test has occurred, results indicate that there is a leak in the: ____ Tank ____ Piping System If known, the leak rate is: ____ gallons per hour			

*Item not applicable

I hereby certify that I have been the licensed supervisor present during the above listed tightness testing activities and to the best of my knowledge they have been conducted in compliance with all applicable state and federal laws, regulations and procedures pertaining to underground storage tanks.

Persons submitting false information are subject to penalties under Chapter 173-360 WAC.

9-2-92 — Date

Gary Peters — Signature of Licensed Supervisor

5. ADDITIONAL REQUIRED SIGNATURES

9-2-92 — Date

Gary Peters — Signature of Licensed Service Provider firm (owner or person with signature authority)

9/10/92 — Date

L A Nelson for Sea-Land Services Inc. — Signature of Tank Owner or Authorized Representative

Sections 3, 4 and 5 must be completed separately for each tank and associated piping tested at the site. For additional tanks you may photocopy this form prior to completing.

3. TANK AND TESTING INFORMATION

1. Tank ID Number (as registered with Ecology): Waste oil
2. Date installed: Est. 1986
3. Tank capacity in gallons: 3000 Gallons
4. Date of tightness test: 8/31/92
5. Last substance stored: Waste oil
6. Is tank compartmentalized? No
7. Tank is: X single wall ____ double wall
8. Reason for conducting tightness test:

X To comply with leak detection requirements in UST rules

____ To bring temporarily closed tank back into service

____ Tank or piping repair

____ Other (describe) _____

9. Type of test conducted:

____ Tank tightness test only

____ Line tightness test only

____ Tank and lines tested separately

X Total system test (tank and lines tested together)

10. Test method type:

X Overfill

____ Underfill volumetric

____ Nonvolumetric

11. Tightness testing method(s) used (indicate if more than one method was used - see note following item 12):

Test method name/version Leak computer

Test method manufacturer _____

12. If a tank tightness test was conducted, indicate the percentage of tank volume that was filled with product during the test: 100%

Note: A tank must be tested up to the product level limited by the overfill prevention device. If an overfill prevention device is not installed, a tank must be tested *up to the 95% full level.* When underfill volumetric testing methods are used, the tank must be: 1) filled with product to the 95% full level or 2) the portion of the tank above the product level must be tested using a nonvolumetric method which meets performance standards, for tightness testing.

13. Indicate the method used to determine if groundwater was present above the bottom of the tank during the test (for single wall tanks): Two level test conducted

4. CHECKLIST

The following items shall be initialed by the licensed supervisor whose signature appears below.

	Yes	No	NA*
1. Has the tightness testing method used been demonstrated to meet the performance standard specified in the UST rules for the conditions under which the test was conducted? (e.g., detecting a 0.10 gallon per hour leak rate with probability of detection of at least 95% and a probability of false alarm of no more than 5%) *Note: A copy of Ecology's policy for demonstrating that leak detection methods meet performance standards may be obtained by contacting Ecology's UST section in Olympia.*	X		

*Item not applicable

(checklist continues on page 3)

CREATIVE ENVIRONMENTAL TECHNOLOGIES, INC.
PROVIDING ENVIRONMENTAL SERVICES TO THE NORTHWEST FOR OVER 15 YEARS

John R. Spencer
President/CEO
Direct: 253-383-2770

June 22, 1999

SeaLand Services
Terminal Operations Services
Attn: Mr. Guy Buzzoni
6000 Carnegie Blvd.
Charlotte, N.C. 28209

Re: Tacoma Site

Dear Guy:

You sent me a fax on June 8th asking five questions concerning the tank removal assessment. We will attempt to answer the questions in order of your request.

1. Re: Section 4.0 Analytical Results: You asked the significance of the common constituents between the sludge in the tank after removal and the soil. There are some common constituents as seen on the attached compilation of the analytical results. However, not all the constituents in the soil are found in the sludge and vis-a-versa. There is quite a bit of diesel and comparative little oil in the soil, while the ratio of diesel to oil in the tank is quite the opposite. Seventy two percent of the sludge in the tank was oil with 26% being diesel. The oil was almost 300% more than the diesel. While the soil contained a ratio of oil to diesel which was quite the opposite, with very little oil.

   The significance of the volatile constituents found in the soil do not mean that the tank leaked, but that there were volatile solvents in the soil from some source. The site has not been characterized in any form except one soil sample from the excavation. It is common knowledge the soil in the Milwaukee Railroad yard was contaminated. Until the site is fully characterized, is quite impossible to determine the source of the volatile contaminates.

our point — maybe from tank

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The tank appeared to be tight, with no evidence of leaking. The piping was tight[1] and there were no visual signs of leaking. The contamination was not visible or any indication of contaminate *until the excavation exceeded four feet below ground surface* (bgs). The top of the tank was three feet bgs and the piping ran down the top of the tank in the middle of the tank.

If the tank had been overfilled, or the piping had leaked, there surely would have been some indication of contaminates or product between the surface of the land and the top of the tank or if the pipe leaked there would be some indication between the top of the tank and the piping. But, there was no evidence of any spill *or release until the excavation reached a level four feet below the surface of the land.*

I would suspect that there was some past spill or release of some solvent in that area *before the tank was placed in service.*

It should also be noted that the constituents in the tank were not identical. There were some solvents in the tank such as 1,1,1 tricholoroethane (470,000 ug/kg) and none in the soil. Likewise, there were constituents in the soil that were not found in the tank. The footprint is not a match.

2. Section 6.0- Conclusions: We stated that there were no raised levels of Method 8260 volatile organic compounds in the soil sample. We define "raised" as meaning levels above cleanup levels. Therefore, there are no *raised* levels of volatile organic compounds.

3. Section 6.0 Conclusions: The soils in the excavation as far as the one sample is indicative, contain both diesel and oil range petroleum hydrocarbons as well as chlorinated volatile organic. However, the chlorinated volatile organic compounds are not above the cleanup level, and thus are not considered a contaminate in the cleanup sense.

4. Section 6.0 Conclusions: There is no evidence that the waste oil tank was the source of any release.

---

[1]. See the UST tightness testing form dated 9-2-92 attached

5. Section 6.0 Conclusions: You asked if the chlorinated volatile organics most likely came from the waste oil tank. Our answer is contained in the report and in the previous answers in this letter. There was no evidence of the tank or piping leaking. There was also no evidence of overfill releases occurring after the tank was installed.

Our answers as contained herein are our opinion based on Stephen Spencer's physical presence on site. Steve has more than 10 years experience in field work involved with tank decommissioning, along with his knowledge of field sampling and other accepted practices to determine the presence of such contaminates.

I trust this will put this matter to rest. We, again suggest that the site be characterized in full. We have spoken to the DOE project manager for the Milwaukee yard, and other at the agency who have worked at the site. I gathered that there is no question from their point of view that diesel contamination existed on the site prior to SeaLand's presence.

If you have questions, please give me a call.

Sincerely yours,

John R. Spencer

Encl: as stated

1203 E. D Street, Suite 109 ● P.O. Box 1803 ● Tacoma, Washington 98401-1803
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