

- Laboratory Analytical Reports and Chains of Custody

ADVANCED ANALYTICAL

Environmental Testing Laboratory

March 14, 2018

Nick Gerkin
Aerotech Environmental, Inc.
13925 Interurban Avenue South, Suite 210
Seattle, WA 98168

Dear Mr. Gerkin:

Please find enclosed the analytical data report for the *Modutech Marine (C80309-1)* Project.

Samples were received on *March 09, 2018*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 702-8571.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,



Val G. Ivanov, Ph.D.
Laboratory Manager

4078 148 Ave NE ■ Redmond, WA 98052

425.702-8571

E-mail: aachemlab@yahoo.com

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Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number:	C80309-1
Client:	Aerotech Environmental
Project Manager:	Nick Gerkin
Client Project Name:	Modutech Marine
Client Project Number:	na
Date received:	03/09/18

AAL Job Number: C80309-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech Marine
Client Project Number: na
Date received: 03/09/18

Analytical Results

8260B, µg/kg		MTH BLK	LCS	SB08@4'	MS	MSD	RPD
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/09/18	03/09/18	03/09/18	03/09/18	03/09/18	03/09/18
Date analyzed	Limits	03/09/18	03/09/18	03/09/18	03/09/18	03/09/18	03/09/18
MTBE	100	nd		nd			
Dichlorodifluoromethane	50	nd		nd			
Chloromethane	50	nd		nd			
Vinyl chloride	50	nd		nd			
Bromomethane	50	nd		nd			
Chloroethane	50	nd		nd			
Trichlorofluoromethane	50	nd		nd			
1,1-Dichloroethene	50	nd		nd			
Methylene chloride	20	nd		nd			
1,1-Dichloroethane	50	nd		nd			
cis-1,2-Dichloroethene	50	nd		nd			
Chloroform	50	nd		nd			
1,1,1-Trichloroethane	50	nd		nd			
Carbontetrachloride	50	nd		nd			
1,1-Dichloropropene	50	nd		nd			
Benzene	20	nd	108%	nd	107%	109%	2%
1,2-Dichloroethane(EDC)	20	nd		nd			
Trichloroethene	20	nd	109%	nd	124%	113%	9%
1,2-Dichloropropane	50	nd		nd			
Dibromomethane	50	nd		nd			
Bromodichloromethane	50	nd		nd			
cis-1,3-Dichloropropene	50	nd		nd			
Toluene	50	nd	105%	nd	104%	113%	9%
trans-1,3-Dichloropropene	50	nd		nd			
1,1,2-Trichloroethane	50	nd		nd			
Tetrachloroethene	50	nd		nd			
1,3-Dichloropropane	50	nd		nd			
Dibromochloromethane	20	nd		nd			
1,2-Dibromoethane (EDB)*	5	nd		nd			
Chlorobenzene	50	nd	93%	nd	95%	106%	11%
1,1,1,2-Tetrachloroethane	50	nd		nd			
Ethylbenzene	50	nd		nd			
Xylenes	50	nd		nd			
Styrene	50	nd		nd			
Bromoform	50	nd		nd			
Isopropylbenzene	50	nd		nd			
1,2,3-Trichloropropane	50	nd		nd			
Bromobenzene	50	nd		nd			
1,1,2,2-Tetrachloroethane	50	nd		nd			
n-Propylbenzene	50	nd		nd			
2-Chlorotoluene	50	nd		nd			
4-Chlorotoluene	50	nd		nd			
1,3,5-Trimethylbenzene	50	nd		nd			
tert-Butylbenzene	50	nd		nd			

AAL Job Number: C80309-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech Marine
Client Project Number: na
Date received: 03/09/18

Analytical Results

8260B, µg/kg		MTH BLK	LCS	SB08@4'	MS	MSD	RPD
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/09/18	03/09/18	03/09/18	03/09/18	03/09/18	03/09/18
Date analyzed	Limits	03/09/18	03/09/18	03/09/18	03/09/18	03/09/18	03/09/18
1,2,4-Trimethylbenzene	50	nd		nd			
sec-Butylbenzene	50	nd		nd			
1,3-Dichlorobenzene	50	nd		nd			
Isopropyltoluene	50	nd		nd			
1,4-Dichlorobenzene	50	nd		nd			
1,2-Dichlorobenzene	50	nd		nd			
n-Butylbenzene	50	nd		nd			
1,2-Dibromo-3-Chloropropane	50	nd		nd			
1,2,4-Trichlorobenzene	50	nd		nd			
Hexachloro-1,3-butadiene	50	nd		nd			
Naphthalene	50	nd		nd			
1,2,3-Trichlorobenzene	50	nd		nd			

*-instrument detection limits

Surrogate recoveries

Dibromofluoromethane	123%	126%	124%	126%	115%
Toluene-d8	108%	98%	128%	98%	118%
1,2-Dichloroethane-d4	91%	88%	78%	90%	83%
4-Bromofluorobenzene	95%	91%	95%	109%	94%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
M-matrix interference
C - coelution with sample peaks
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

AAL Job Number: C80309-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech Marine
Client Project Number: na
Date received: 03/09/18

Analytical Results

Metals (7010/7471), mg/kg		MTH BLK	LCS	SB01@3'	SB02@4'	SB03@4'	SB04@3'
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18
Date analyzed	Limits	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18
Lead (Pb)	1.0	nd	100%	5.4	5.0	1,100	6.2
Chromium (Cr)	1.0	nd	110%	2.0	3.2	18	2.0
Cadmium (Cd)	1.0	nd	79%	nd	nd	nd	nd
Arsenic (As)	1.0	nd	102%	2.2	2.9	7.0	nd
Mercury (Hg) (7471)	0.5	nd	88%	nd	nd	nd	nd

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

AAL Job Number: C80309-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech Marine
Client Project Number: na
Date received: 03/09/18

Analytical Results

Metals (7010/7471), mg/kg		SB05@4'	SB06@4'	SB07@4'	SB08@4'	SB09@4'	SB10@4'
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18
Date analyzed	Limits	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18
Lead (Pb)	1.0	210	67	16	20	160	25
Chromium (Cr)	1.0	4.0	2.1	3.1	3.2	12	4.6
Cadmium (Cd)	1.0	1.6	nd	nd	nd	nd	nd
Arsenic (As)	1.0	19	1.7	45	31	9.1	4.7
Mercury (Hg) (7471)	0.5	nd	nd	nd	nd	nd	nd

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

AAL Job Number: C80309-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech Marine
Client Project Number: na
Date received: 03/09/18

Analytical Results

Metals (7010/7471), mg/kg		SB11@4'	SB12@4'	SB13@4'	SB14@4'	SB15@4'	SB16@4'
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18
Date analyzed	Limits	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18	03/12/18
Lead (Pb)	1.0	97	490	220	4.8	23	40
Chromium (Cr)	1.0	5.9	9.2	5.9	1.3	4.5	6.2
Cadmium (Cd)	1.0	nd	nd	nd	nd	nd	nd
Arsenic (As)	1.0	39	17	11	6.1	3.4	14
Mercury (Hg) (7471)	0.5	nd	nd	nd	nd	nd	nd

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

AAL Job Number: C80309-1
 Client: Aerotech Environmental
 Project Manager: Nick Gerkin
 Client Project Name: Modutech Marine
 Client Project Number: na
 Date received: 03/09/18

Analytical Results

Metals (7010/7471), mg/kg		MS	MSD	RPD
Matrix	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/12/18	03/12/18	03/12/18
Date analyzed	Limits	03/12/18	03/12/18	03/12/18
Lead (Pb)	1.0	M	M	
Chromium (Cr)	1.0	112%	112%	0%
Cadmium (Cd)	1.0	90%	72%	22%
Arsenic (As)	1.0	M	M	
Mercury (Hg) (7471)	0.5	128%	130%	2%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Laboratory Job #: C80309-1

4078 148 Avenue NE
 Redmond, WA 98052
 (425) 702-8571
 aachemlab@yahoo.com

Client: Aerotech

Project Manager: Nick Gorkin

Address: 13925 Interurban Ave S Tukwila

Phone: 206 482 2287 Fax:

Project Name: Mathtech Machine

Project Number:

Collector: Justin Freiden

Date of collection: 3/9/18

	Sample ID	Time	Matrix	Container type	8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead	MTCA5 Metals	Notes, comments	# of containers	
1	SBC1@3'	0915	Soil	4oz														X			1
2	SBC2@4'	0935																X			1
3	SBC3@4'	1025																X			1
4	SBC4@3'	1050																X			1
5	SBC5@4'	1105																X			1
6	SBC6@4'	1125																X			1
7	SBC7@4'	1240																X			1
8	SBC8@4'	1255		14oz	X													X			2
9	SBC9@4'	1320		4oz														X			1
10	SBC10@4'	1340																X			1
11	SBC11@4'	1355																X			1
12	SBC12@4'	1410																X			1

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	1012 3/9/18	T. HANOV	3/9/18 10:12
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr ☐48 hr ☐Standard ☒

Laboratory Job #: C80309-1

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: Aerotech

Project Manager: Nick Gorkin

Address: 13925 Interurban Ave S Tukula

Phone: 206 482 2257 Fax:

Project Name: Molytech Molar

Project Number:

Collector: Justin Fesler

Date of collection: 3/15/18

	Sample ID	Time	Matrix	Container type	8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead	MTCAS Metals	Notes, comments	# of containers	
1	SB13@ 4'	1425	Soil	4oz														X			1
2	SB14@ 4'	1440	I	I														X			1
3	SB15@ 4'	1500	I	I														X			
4	SB16@ 4'	1520	I	I														X			1
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Relinquished by:	Date/Time	Received by:	Date/Time
<i>Justin Fesler</i>	10/12/18	<i>V. Hant</i>	03/09/18 10:12
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr ☐48 hr ☐Standard ☒

ADVANCED ANALYTICAL

Environmental Testing Laboratory

March 30, 2018

Nick Gerkin
Aerotech Environmental, Inc.
13925 Interurban Avenue South, Suite 210
Seattle, WA 98168

Dear Mr. Gerkin:

Please find enclosed the analytical data report for the *Modutech (C80329-1)* Project.

Samples were received on *March 29, 2018*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 702-8571.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,



Val G. Ivanov, Ph.D.
Laboratory Manager

4078 148 Ave NE ■ Redmond, WA 98052
425.702-8571

E-mail: aachemlab@yahoo.com

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Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number:	C80329-1
Client:	Aerotech Environmental
Project Manager:	Nick Gerkin
Client Project Name:	Modutech
Client Project Number:	na
Date received:	03/29/18

AAL Job Number: C80329-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 03/29/18

Analytical Results

Metals (7010), mg/kg		MTH BLK	LCS	SB03A(8)	SB07A(8)	SB08A(8)	SB11A(8)
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18
Date analyzed	Limits	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18
Lead (Pb)	1.0	nd	110%	50	25	30	7.7
Arsenic (As)	1.0	nd	87%	nd	38	32	1.2

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

AAL Job Number: C80329-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 03/29/18

Analytical Results

Metals (7010), mg/kg		SB12A(8)	SB17(4)	SB17(8)	SB18(4)	SB18(8)	SB19(4)
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18
Date analyzed	Limits	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18
Lead (Pb)	1.0	290	33	16	3.2	6.7	850
Arsenic (As)	1.0	9.4	1.4	nd	nd	nd	17

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

AAL Job Number: C80329-1
 Client: Aerotech Environmental
 Project Manager: Nick Gerkin
 Client Project Name: Modutech
 Client Project Number: na
 Date received: 03/29/18

Analytical Results

Metals (7010), mg/kg		SB19(8)	SB20(4)	SB20(8)	SB21(4)	SB21(8)	SB22(4)
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18
Date analyzed	Limits	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18
Lead (Pb)	1.0	33	13	18	11	24	38
Arsenic (As)	1.0	1.6	22	1.9	14	3.8	5.9

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

AAL Job Number: C80329-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 03/29/18

Analytical Results

Metals (7010), mg/kg		SB22(8)	SB23(4)	SB23(8)	MS	MSD	RPD
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18
Date analyzed	Limits	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18	03/29/18
Lead (Pb)	1.0	9.2	91	7.6	106%	111%	4%
Arsenic (As)	1.0	4.7	2.4	1.3	97%	92%	6%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
na - not analyzed
M- matrix interference
Results reported on dry-weight basis
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

Laboratory Job #: 080329-1

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: Aerotech Env. Consulting
Project Manager: Nick Gerkin, Justin Foslien
Address: 13925 Interurban Ave S, Tukwila, WA
Phone: 206 482 2287 Fax:

Project Name: Modutech
Project Number: —
Collector: Nick Gerkin
Date of collection: 3/28/18

	Sample ID	Time	Matrix	Container type	8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead + Arsenic	MTCAS Metals	Notes, comments	# of containers	
1	SB03A SB03A(8)	0935	S	ISw																	1
2	SB07A(8)	1245																			1
3	SB08A(8)	1315																			1
4	SB11A(8)	1545																			1
5	SB12A(8)	1440																			1
6	SB17(4)	1005																			1
7	SB17(8)	1020																			1
8	SB18(4)	1040																			1
9	SB18(8)	1045																			1
10	SB19(4)	1115																			1
11	SB19(8)	1120																			1
12	SB20(4)	1225	✓	✓																	✓

Relinquished by:	Date/Time	Received by:	Date/Time
	3/29/18 1050	Justin Foslien	03/29/18 1050
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr ☒48 hr ☐Standard ☒ No

Laboratory Job #: C80329-1

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.comClient: Aerotech Env. Consulting
Project Manager: Nick Gerkin, Justin Foster
Address: 13925 Interurban Ave S, Tukwila, WA
Phone: 206 482 2287 Fax:Project Name: Modutech
Project Number: —
Collector: Nick Gerkin
Date of collection: 3/28/18

	Sample ID	Time	Matrix	Container type	8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead + Arsenic	MTCAS Metals	Notes, comments	# of containers
1	SB20(8)	1230	S	1Sar																
2	SB21(4)	1345																		
3	SB21(8)	1355																		
4	SB22(4)	1605																		
5	SB22(8)	1615																		
6	SB23(4)	1635																		
7	SB23(8)	1650	↓	↓																↓
8																				
9																				
10																				
11																				
12																				

Relinquished by:	Date/Time	Received by:	Date/Time
	3/29/18 10:50	V. Hawn	03/29/18 10:50
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr ☒48 hr ☐Standard ☐

ADVANCED ANALYTICAL

Environmental Testing Laboratory

April 04, 2018

Nick Gerkin
Aerotech Environmental, Inc.
13925 Interurban Avenue South, Suite 210
Seattle, WA 98168

Dear Mr. Gerkin:

Please find enclosed the analytical data report for the *Modutech (C80403-1)* Project.

Samples were received on *April 03, 2018*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 702-8571.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,



Val G. Ivanov, Ph.D.
Laboratory Manager

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425.702-8571

E-mail: aachemlab@yahoo.com

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Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number:	C80403-1
Client:	Aerotech Environmental
Project Manager:	Nick Gerkin
Client Project Name:	Modutech
Client Project Number:	na
Date received:	04/03/18

AAL Job Number: C80403-1
 Client: Aerotech Environmental
 Project Manager: Nick Gerkin
 Client Project Name: Modutech
 Client Project Number: na
 Date received: 04/03/18

Analytical Results

Metals (7010), mg/kg		MTH BLK	LCS	SB04A(8)	SB07B(12)	SB08B(12)
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18
Date analyzed	Limits	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18
Lead (Pb)	1.0	nd	115%	27	1.4	30
Arsenic (As)	1.0	nd	114%	1.5	1.3	17

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

AAL Job Number: C80403-1
 Client: Aerotech Environmental
 Project Manager: Nick Gerkin
 Client Project Name: Modutech
 Client Project Number: na
 Date received: 04/03/18

Analytical Results

Metals (7010), mg/kg		SB12B(12)	SB13A(8)	SB24(4)	SB24(8)	SB25(4)	SB25(8)
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18
Date analyzed	Limits	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18
Lead (Pb)	1.0	15	11	2.7	12	43	260
Arsenic (As)	1.0	10	1.6	nd	11	2.0	27

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 na - not analyzed
 M- matrix interference
 Results reported on dry-weight basis
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

AAL Job Number: C80403-1
 Client: Aerotech Environmental
 Project Manager: Nick Gerkin
 Client Project Name: Modutech
 Client Project Number: na
 Date received: 04/03/18

Analytical Results

Metals (7010), mg/kg		SB26(4)	SB26(8)	SB27(4)	SB27(8)	MS	MSD	RPD
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18
Date analyzed	Limits	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18	04/03/18
Lead (Pb)	1.0	470	26	170	19	M	M	
Arsenic (As)	1.0	4.3	1.6	31	2.0	102%	100%	2%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

AAL Job Number: C80403-1
 Client: Aerotech Environmental
 Project Manager: Nick Gerkin
 Client Project Name: Modutech
 Client Project Number: na
 Date received: 04/03/18

Analytical Results

Metals (7010), mg/kg		MTH BLK	LCS	SB28(4)
Matrix	Soil	Soil	Soil	Soil
Date extracted	Reporting	04/05/18	04/05/18	04/05/18
Date analyzed	Limits	04/05/18	04/05/18	04/05/18
Lead (Pb)	1.0	nd	94%	3.8
Arsenic (As)	1.0	nd	102%	nd

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Laboratory Job #: C80403-1

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: Aerotech
Project Manager: Nick Gerkin
Address: 13925 Interurban Ave S, Tukwila, WA
Phone: 206 482 2287 Fax:

Project Name: Modutech
Project Number: —
Collector: Nick Gerkin
Date of collection: 4/2/18

	Sample ID	Time	Matrix	Container type	8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8082 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead + Arsenic	MTC5 Metals	Notes, comments	# of containers	
1	SB04A(8)	1540	S	15m													X				1
2	SB04A(12)	1545																		HOLD	1
3	SB07B(12)	0940															X				
4	SB07B(16)	0950																		HOLD	
5	SB08B(12)	1200															X				
6	SB08B(16)	1210																		HOLD	
7	SB12B(12)	1425															X				
8	SB12B(16)	1435																		HOLD	
9	SB13A(8)	1500															X				
10	SB13A(12)	1510																		HOLD	
11	SB24(4)	0830															X				
12	SB24(8)	0840	✓	✓													X				✓

Relinquished by:	Date/Time	Received by:	Date/Time
	4/3/18 1200		4/3/18 1200
Relinquished by:	Date/Time	Received by:	Date/Time
	4/3/18 1300		4/3/18 1310

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr ☒48 hr ☐Standard ☐

Laboratory Job #: C.80403-1

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: Aerotech

Project Name: Modutech

Project Manager: Nick Gerkin

Project Number: —

Address: 13925 Interurban Ave S, Tukwila, WA

Collector: Nick Gerkin

Phone: 206 482 2287 Fax: —

Date of collection: 4/2/18

	Sample ID	Time	Matrix	Container type	8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead+Arsenic	MTC5 Metals	Notes, comments	# of containers	
1	SB25(4)	0900	S	15r												X					1
2	SB25(8)	0910														X					1
3	SB26(4)	1055														X					
4	SB26(8)	1105														X					
5	SB26(12)	1115																		HOLD	
6	SB27(4)	1130														X					
7	SB27(8)	1140														X					
8	SB28(4)	1525	↓	↓												(X)				HOLD	↓
9																				per N. Gerwin	
10																				04/04/18 169	
11																					
12																					

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	4/5/18 1200	<i>[Signature]</i>	4/13/18 1200
Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	4/13/18 1300	V. Vano	04/03/18 1310

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr. ☒48 hr ☐Standard ☐

ADVANCED ANALYTICAL

Environmental Testing Laboratory

April 12, 2018

Nick Gerkin
Aerotech Environmental, Inc.
13925 Interurban Avenue South, Suite 210
Seattle, WA 98168

Dear Mr. Gerkin:

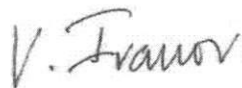
Please find enclosed the analytical data report for the *Modutech (C80411-4)* Project.

Samples were received on *April 11, 2018*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 702-8571.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,



Val G. Ivanov, Ph.D.
Laboratory Manager

4078 148 Ave NE ■ Redmond, WA 98052
425.702-8571

E-mail: aachemlab@yahoo.com

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Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number:	C80411-4
Client:	Aerotech Environmental
Project Manager:	Nick Gerkin
Client Project Name:	Modutech
Client Project Number:	na
Date received:	04/12/18

Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number: C80411-4
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 04/12/18

Analytical Results

TCLP Metals (7010/1311), mg/L		MTH BLK	LCS	SB03-4'	SB12-4'	SB19-4'
Matrix	Soil Extract	Soil Extract	Soil Extract	Soil Extract	Soil Extract	Soil Extract
Date extracted	Reporting	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18
Date analyzed	Limits	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18
TCLP Lead (Pb)	0.002	nd	109%	2.6	1.2	2.8

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M - matrix interference

Acceptable Recovery limits: 65% TO 135%

Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number: C80411-4
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 04/12/18

Analytical Results		Dupl		RPD
TCLP Metals (7010/1311), mg/L		SB26-4'	SB26-4'	SB26-4'
Matrix	Soil Extract	Soil Extract	Soil Extract	Soil Extract
Date extracted	Reporting	04/12/18	04/12/18	04/12/18
Date analyzed	Limits	04/12/18	04/12/18	04/12/18
TCLP Lead (Pb)	0.002	1.9	1.8	5%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

M - matrix interference

Acceptable Recovery limits: 65% TO 135%

Acceptable RPD limit: 30%



Chain of Custody Record

Laboratory Job #: C80309-1

①

Page 1 of 2

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: AerotechProject Manager: Nick GerkinAddress: 1512 Interurban Ave S TukwilaPhone: 206 482 2237 Fax: _____Project Name: Mattech Mining

Project Number: _____

Collector: Justin FrickDate of collection: 3/9/18

	Sample ID	Time	Matrix	Container type																Notes, comments	# of containers		
					8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead	MTCAS Metals	TCLP lead				
1	SBC1@3'	0925	Soil	4oz														X					1
2	SBC2@4'	0935																X					1
3	SBC3@4'	1025																X	⊗	← Added by			1
4	SBC4@3'	1050																X		N. Gerkin			1
5	SBC5@4'	1105																X		04/11/18			1
6	SBC6@4'	1125																X		1050			1
7	SBC7@4'	1210																X					1
8	SBC8@4'	1235		16oz	X													X					2
9	SBC9@4'	1320		4oz														X					1
10	SBC10@4'	1340																X					1
11	SBC11@4'	1355																X					1
12	SBC12@4'	1410																X	⊗				1

Relinquished by:	Date/Time	Received by:	Date/Time
<u>Nick Gerkin</u>	1012 3/9/18	<u>T. Navon</u>	3/9/18 10:12
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr ☐48 hr ☐Standard ☒

Laboratory Job #: 080329-1

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: Herotech Env. Consulting
Project Manager: Nick Gerkin, Justin Foslien
Address: 13925 Interurban Ave S, Tukwila, WA
Phone: 206 482 2287 Fax: _____

Project Name: Modutech
Project Number: _____
Collector: Nick Gerkin
Date of collection: 3/28/18

Phone: 206 482 2287 Fax:

Date of collection: 12/1/18

	Sample ID	Time	Matrix	Container type	8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead + Arsenic	MTCAS Metals	TCLP lead	Notes, comments	# of containers
1	SB03A(8)	0935	S	1 Jar																	
2	SB07A(8)	1245																			
3	SB08A(8)	1315																			
4	SB11A(8)	1545																			
5	SB12A(8)	1440																			
6	SB17(4)	1005																			
7	SB17(8)	1020																			
8	SB18(4)	1040																			
9	SB18(8)	1045																			
10	SB19(4)	1115																			
11	SB19(8)	1120																			
12	SB20(4)	1225	✓	✓																Added by N. Gerwin 04/11/18 yf	✓

Turnaround time:

Relinquished by:	Date/Time	Received by:	Date/Time
	3/29/18 1050	V. V. V. V.	03/29/18 1050
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr ☒48 hr ☐Standard ☒ No

Laboratory Job #: C.80403-1

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.comClient: Aerotech
Project Manager: Nick Gerkin
Address: 13925 Interurban Ave S, Tukwila, WA
Phone: 206 482 2287 Fax:Project Name: Modutech
Project Number: —
Collector: Nick Gerkin
Date of collection: 4/2/18

	Sample ID	Time	Matrix	Container type															Notes, comments	# of containers		
					8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8082 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead+As+Cu+Ni	MTC5 Metals			TCLP Lead	
1	SB25(4)	0900	S	15r												X						1
2	SB25(8)	0910														X						1
3	SB26(4)	1055														X		⊕		← Added		
4	SB26(8)	1105														X				by N Gerwin		
5	SB26(12)	1115																		HOLD 04/11/18		
6	SB27(4)	1130														X					VAT	
7	SB27(8)	1140														X						
8	SB28(4)	1525	↓	↓												⊗				HOLD		↓
9																				PER N. GERWIN		
10																				04/04/18 16h		
11																						
12																						

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	4/3/18 1200	<i>[Signature]</i>	4/13/18 1200
Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	4/3/18 1300	V. Ivanov	04/03/18 1310

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ☐24 hr ☒48 hr ☐Standard ☐

ADVANCED ANALYTICAL

Environmental Testing Laboratory

April 12, 2018

Nick Gerkin
Aerotech Environmental, Inc.
13925 Interurban Avenue South, Suite 210
Seattle, WA 98168

Dear Mr. Gerkin:

Please find enclosed the analytical data report for the *Modutech (C80411-2)* Project.

Samples were received on *April 11, 2018*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 702-8571.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,



Val G. Ivanov, Ph.D.
Laboratory Manager

4078 148 Ave NE ■ Redmond, WA 98052
425.702-8571

E-mail: aachemlab@yahoo.com

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Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number:	C80411-2
Client:	Aerotech Environmental
Project Manager:	Nick Gerkin
Client Project Name:	Modutech
Client Project Number:	na
Date received:	04/12/18

Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number: C80411-2
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 04/12/18

Analytical Results

Metals Total (7010), mg/L		MTH BLK	LCS	W-MW1	W-MW2	W-MW3	W-MW4
Matrix	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18
Date analyzed	Limits	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18
Lead Total (Pb)	0.002	nd	109%	nd	nd	nd	nd
Arsenic Total (Pb)	0.002	nd	120%	0.003	nd	nd	nd

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number: C80411-2
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 04/12/18

Analytical Results

Metals Total (7010), mg/L		MS	MSD	RPD
Matrix	Water	Water	Water	Water
Date extracted	Reporting	04/12/18	04/12/18	04/12/18
Date analyzed	Limits	04/12/18	04/12/18	04/12/18
Lead Total (Pb)	0.002	106%	112%	6%
Arsenic Total (Pb)	0.002	98%	93%	5%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number: C80411-2
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 04/12/18

Analytical Results

Metals Dissolved (7010), mg/L		MTH BLK	LCS	W-MW1	W-MW2	W-MW3	W-MW4
Matrix	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18
Date analyzed	Limits	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18	04/12/18
Lead Dissolved (Pb)	0.002	nd	109%	nd	nd	nd	nd
Arsenic Dissolved (Pb)	0.002	nd	120%	nd	nd	nd	nd

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number: C80411-2
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Modutech
Client Project Number: na
Date received: 04/12/18

Analytical Results

Metals Dissolved (7010), mg/L		MS	MSD	RPD
Matrix	Water	Water	Water	Water
Date extracted	Reporting	04/12/18	04/12/18	04/12/18
Date analyzed	Limits	04/12/18	04/12/18	04/12/18
Lead Dissolved (Pb)	0.002	106%	112%	6%
Arsenic Dissolved (Pb)	0.002	98%	93%	5%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Laboratory Job #: C80411-2

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.comClient: ~~modutech~~ Aartech Environmental Consulting

Project Name: modutech

Project Manager: Nick Berkin

Project Number:

Address: 12925 Interurban Avenue South, Tukwila, WA

Collector: Devin Melville

Phone: (206) 791-4641 Fax:

Date of collection: 4-10-18

Sample ID	Time	Matrix	Container type	8260 Volatiles	8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead + Arsenic	MTCA5 Metals	Notes, comments	# of containers
1 W-MW1	0840		P114													X	X	24 hour	2
2 W-MW2	0941		P114													X	X	24 hour	2
3 W-MW3	1010		P114													X	X	24 hour	2
4 W-MW4	1130		P114													X	X	24 hour	2
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Relinquished by:	Date/Time	Received by:	Date/Time
<i>Devin Melville</i>	4-11-18/1150	<i>V. Trunov</i>	04/11/18 15 ²⁰
Relinquished by:	Date/Time	Received by:	Date/Time
<i>Devin Melville</i>	4-11-18/1150		

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:
















Same day ☐24 hr ☒48 hr ☐Standard ☐

- Boring Logs

PHI - mm CONVERSION $\phi = \log_2 (d \text{ in mm})$ $1 \mu\text{m} = 0.001 \text{ mm}$		Fractional mm and Decimal inches	SIZE TERMS (after Wentworth, 1922)	SIEVE SIZES		Intermediate diameters of natural grains equivalent to sieve size	Number of grains per mg		Settling Velocity (Quartz, 20°C)		Threshold Velocity for traction cm/sec	
ϕ	mm			ASTM No. (U.S. Standard)	Tyler Mesh No.		Quartz spheres	Natural sand	Spheres (Gibbs, 1971) cm/sec	Crushed	(Nevin, 1946)	(modified from Hjulstrom, 1939)
-8	256	10.1"	BOULDERS ($\geq -8\phi$)									
-7	128	5.04"										
-6	64.0	2.52"	COBBLES	2 1/2"							200	1 m above bottom
-5	53.9			2.12"	2"						150	
-4	45.3			1 1/2"	1 1/2"							
-3	33.1	1.26"		1 1/4"	1.05"							
-2	26.9			1.06"								
-1	22.6			3/4"	.742"							
0	17.0	0.63"		5/8"	.525"				100	50		
1	16.0			1/2"	.425"				90	40	100	
2	13.4	0.53"		7/16"	.375"				80	30	90	
3	11.3	0.45"		3/8"	.312"				70	20	80	
4	9.52	0.32"	PEBBLES	5/16"	.250"				60	10	70	100
5	8.00			.265"	3				50	20	60	
6	6.73	0.16"		4	4				40	10	50	
7	5.66			5	5				30	5	40	
8	4.76			6	6				20	5	30	
9	4.00	0.08"		7	7				10	5	20	
10	3.36			8	8				8	5	10	
11	2.83			10	10				7	5	8	
12	2.38			12	12				6	5	7	
13	2.00	0.08"		14	14				5	5	6	
14	1.63	mm	SAND	16	16				4	5	5	30
15	1.41			20	20				3	5	4	
16	1.19			25	25				2	5	3	
17	1.00	1		30	30				1	5	2	
18	.840			35	35				1	5	2	
19	.707	1/2		40	40				1	5	2	
20	.545			45	45				1	5	2	
21	.420			50	50				1	5	2	
22	.354	1/4		60	60				1	5	2	
23	.297			70	70				1	5	2	
24	.250		SILT	80	80				1	5	2	26
25	.210	1/8		100	100				1	5	2	
26	.177			120	120				1	5	2	
27	.149			140	140				1	5	2	
28	.125			170	170				1	5	2	
29	.105	1/16		200	200				1	5	2	
30	.088			230	230				1	5	2	
31	.074			270	270				1	5	2	
32	.062	1/32		325	325				1	5	2	
33	.053			400	400				1	5	2	
34	.044		CLAY						1	5	2	Minimum (Inman, 1949)
35	.037	1/64							1	5	2	
36	.031								1	5	2	
37	.02								1	5	2	
38	.016	1/128							1	5	2	
39	.01								1	5	2	
40	.008								1	5	2	
41	.005	1/256							1	5	2	
42	.004								1	5	2	
43	.003	1/512							1	5	2	
44	.002		Clay/Silt boundary for mineral analysis						1	5	2	
45	.001	1/1024							1	5	2	

CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

UNIFIED SOIL CLASSIFICATION SYSTEM

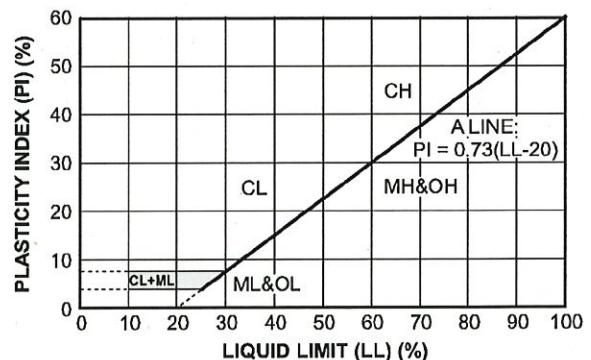
UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART		
COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size.)		
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	Clean Gravels (Less than 5% fines)	
	 GW	Well-graded gravels, gravel-sand mixtures, little or no fines
	 GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravels with fines (More than 12% fines)	
	 GM	Silty gravels, gravel-sand-silt mixtures
	 GC	Clayey gravels, gravel-sand-clay mixtures
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	Clean Sands (Less than 5% fines)	
	 SW	Well-graded sands, gravelly sands, little or no fines
	 SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with fines (More than 12% fines)	
	 SM	Silty sands, sand-silt mixtures
	 SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)		
SILTS AND CLAYS Liquid limit less than 50%	 ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
	 CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	 OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater	 MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
	 CH	Inorganic clays of high plasticity, fat clays
	 OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS	 PT	Peat and other highly organic soils
















LABORATORY CLASSIFICATION CRITERIA		
GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
GP	Not meeting all gradation requirements for GW	
GM	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
GC	Atterberg limits above "A" line with P.I. greater than 7	
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
SP	Not meeting all gradation requirements for GW	
SM	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
SC	Atterberg limits above "A" line with P.I. greater than 7	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 percent GW, GP, SW, SP
More than 12 percent GM, GC, SM, SC
5 to 12 percent Borderline cases requiring dual symbols

PLASTICITY CHART



Depth (ft)	Groundwater	Visual or Olfactory Evidence	Blow Counts	Recovery	USCS Classification	Soil Classification/ Description	Well Construction
						UNIFIED SOIL CLASSIFICATION SYSTEM EXPLANATION	
						GW GRAVELS, well-graded* OR Gravel+Sand mix, little-no fines	
						GP GRAVELS, poorly-graded* OR Gravel+Sand mix, little-no fines	
						GM GRAVELS, silty OR Gravel-sand-silt mix	
						GC GRAVELS, clayey OR Gravel-sand-clay mix	
						SW SAND, well-graded OR Gravelly Sands, little-no fines	
						SP SAND, poorly-graded OR Gravelly Sands, little-no fines	
						SM SAND, silty OR Sand-silt mix	
						SC SAND, clayey OR Sand-clay mix	
						ML SILT, inorganic (very fine sands, rock flour, silty or clayey fine sands) OR Clayey silts with slight plasticity	
						CL CLAY, inorganic, low-med plasticity (gravelly, sandy, silty, lean)	
						OL SILT, organic, AND SILT-CLAY, organic, low plasticity	
						MH SILT, inorganic (micaceous or diatomaceous fn sndy/silty soils) OR SILTY SOILS, elastic SILTS	
						CH CLAY, inorganic, high plasticity, fat clays	
						OH CLAY, organic, med-high plasticity OR Organic SILTS	
						PT PEAT and other highly organic SOILS	
						<p>* Terminology clarification: The term "Well graded" is a synonym for "Poorly sorted," both meaning that a wide range of particle sizes are present. The former term is employed in geotechnical descriptions, while the latter is preferred by the USDA in characterizing topsoils and subsoils.</p>	

Project Name: Swindahl Properties LLC
Project Number: 218-4036

Drilling Contractor: BoreTec
Valleyford, WA
Drilling Method: HSA
Borehole Diameter: 8.25"
Sampler Type: Split Spoon
ECY WELL ID#: BJN093
Licensed Driller: Maclen Escarsega
3160

Site Location: 2218 Marine View Drive, Tacoma, WA

Borehole Location: East Side of Site, just South of Main Driveway

Logged by: N. Gerkin

Boring Depth: 20.5 feet

GW Encountered: YES

Static GW Level: 4 feet

Surveyed Casing Elev.: 11.75' above MSL
Work Date: 04/05/18

Depth (ft)	Groundwater	PID (ppm)	Sample	Blow Counts	Recovery	USCS Classification	Soil Classification/ Description	Well Construction
1							Asphalt Surface	
2						GM	FILL - Silty GRAVEL with Sand, brown to gray, slightly moist, very fine to very coarse sand, fine to coarse subrounded to subangular gravel. Well graded. No distinct odor.	
3				9				
4		0.0		11				
5				17				
6						SP	SAND, dark gray with some red granules, saturated, poorly graded, trace fine sand and silt. No distinct odor.	
7								
8				2				
9		0.0		3				
10				2		SM	Silty SAND with GRAVEL, gray to tan, saturated, fine to coarse sand, small to medium subrounded gravel, very well graded. Decomposed organic material. No distinct odor.	
11								
12				2				
13		0.0		1		SP	SAND - Same as 4-8	
14				2				
15								
16				3				
17		0.0		5		ML	Clayey Silt with SAND, gray to tan, saturated, medium plasticity, coarse Sand lenses as above. No distinct odor.	
18				2				
19				6				
20		0.0		8				
21				8				
22							Bottom of borehole at 20.5 ft. Well installed.	
23							2-inch diameter. 0.020-inch slot screen from 4 to 19 feet bgs.	
24							Well was completed with concrete from 0.5 to 1 feet bgs, followed by bentonite from 1 to 3 feet bgs, followed by Colorado silica sand from 3 to 19.5 feet bgs.	
25								

Project Name: Swindahl Properties LLC
Project Number: 218-4036

Drilling Contractor: BoreTec
Valleyford, WA
Drilling Method: HSA
Borehole Diameter: 8.25"
Sampler Type: Split Spoon
ECY WELL ID#: BJN094
Licensed Driller: Maclen Escarsega
3160

Site Location: 2218 Marine View Drive, Tacoma, WA

Borehole Location: West Side of Site, just North of Boat Ramp

Logged by: N. Gerkin

Boring Depth: 20.5 feet

GW Encountered: YES

Static GW Level: 11 feet

Surveyed Casing Elev.: 10.27' above MSL
Work Date: 04/05/18

Depth (ft)	Groundwater	PID (ppm)	Sample	Blow Counts	Recovery	USCS Classification	Soil Classification/ Description	Well Construction
1							Gravel Surface	
2		0.0				GM		
3								
4							FILL - Silty GRAVEL with Sand, brown to gray, slightly moist, very fine to very coarse sand, fine to coarse subrounded to subangular gravel. Well graded. Concrete. No distinct odor.	
5								
6								
7		0.0						
8								
9								
10								
11		0.0				SP	SAND, dark gray with some red granules, saturated, poorly graded, trace fine sand and silt. No distinct odor.	
12								
13								
14		0.0						
15								
16								
17						ML	Clayey Silt with SAND, gray to tan, saturated, medium plasticity, coarse Sand lenses as above. Occasional Organic Matter No distinct odor.	
18								
19				7				
20		0.0		6		SP	SAND, dark gray with some red granules, saturated, poorly graded, trace fine sand and silt. No distinct odor.	
21				7				
22							Bottom of borehole at 20.5 ft. Well installed.	
23					Direct Push Recovery Split Spoon Recovery		2-inch diameter. 0.020-inch slot screen from 4 to 19 feet bgs.	
24							Well was completed with concrete from 0.5 to 1 feet bgs, followed by bentonite from 1 to 3 feet bgs, followed by Colorado silica sand from 3 to 19.5 feet bgs.	
25								

Project Name: Swindahl Properties LLC
Project Number: 218-4036

Drilling Contractor: BoreTec
Valleyford, WA
Drilling Method: HSA
Borehole Diameter: 8.25"
Sampler Type: Split Spoon
ECY WELL ID#: BJN095
Licensed Driller: Maclen Escarsega
3160

Site Location: 2218 Marine View Drive, Tacoma, WA

Borehole Location: West Side of Site, West of Work Tents

Logged by: N. Gerkin

Boring Depth: 20.5 feet

GW Encountered: YES

Static GW Level: 10 feet

Surveyed Casing Elev.: 10.72' above MSL
Work Date: 04/05/18

Depth (ft)	Groundwater	PID (ppm)	Sample	Blow Counts	Recovery	USCS Classification	Soil Classification/ Description	Well Construction
1							Gravel Surface	
2		0.0				GM		
3								
4							FILL - Silty GRAVEL with Sand, brown to gray, slightly moist, very fine to very coarse sand, fine to coarse subrounded to subangular gravel. Well graded. Concrete fragments. No distinct odor.	
5								
6								
7		0.0						
8								
9								
10								
11		0.0				SP	SAND, dark gray with some red granules, saturated, poorly graded, trace fine sand and silt. No distinct odor.	
12								
13								
14								
15								
16								
17		0.0				ML	Clayey Silt with SAND, gray to tan, saturated, medium plasticity, coarse Sand lenses as above. Occasional Organic Matter No distinct odor.	
18								
19				8				
20		0.0		8		SP	SAND, dark gray with some red granules, saturated, poorly graded, trace fine sand and silt. No distinct odor.	
21				8				
22							Bottom of borehole at 20.5 ft. Well installed.	
23					Direct Push Recovery Split Spoon Recovery		2-inch diameter. 0.020-inch slot screen from 4 to 19 feet bgs.	
24							Well was completed with concrete from 0.5 to 1 feet bgs, followed by bentonite from 1 to 3 feet bgs, followed by Colorado silica sand from 3 to 19.5 feet bgs.	
25								

Project Name: Swindahl Properties LLC
Project Number: 218-4036

Drilling Contractor: BoreTec
Valleyford, WA
Drilling Method: HSA
Borehole Diameter: 8.25"
Sampler Type: Split Spoon
ECY WELL ID#: BJN096
Licensed Driller: Maclen Escarsega
3160

Site Location: 2218 Marine View Drive, Tacoma, WA

Borehole Location: West Side of Site, West of Work Tents

Logged by: N. Gerkin

Boring Depth: 20.5 feet

GW Encountered: YES

Static GW Level: 10 feet

Surveyed Casing Elev.: 11.02' above MSL
Work Date: 04/05/18

Depth (ft)	Groundwater	PID (ppm)	Sample	Blow Counts	Recovery	USCS Classification	Soil Classification/ Description	Well Construction
1							Gravel Surface	
2		0.0				GM		
3							FILL- Silty GRAVEL with Sand, brown to gray, slightly moist, very fine to very coarse sand, fine to coarse subrounded to subangular gravel. Well graded. No distinct odor.	
4								
5								
6								
7								
8		0.0					FILL - Clayey SILT with Sand, gray, saturated, medium plasticity, Copper Wire present.	
9								
10								
11		0.0				SP	SAND, dark gray with some red granules, saturated, poorly graded, trace fine sand and silt. No distinct odor.	
12								
13								
14								
15								
16								
17		0.0				ML	Clayey Silt with SAND, gray to tan, saturated, medium plasticity, coarse Sand lenses as above. Occassional Organic Matter No distinct odor.	
18								
19				4				
20		0.0		9		SP	SAND, dark gray with some red granules, saturated, poorly graded, trace fine sand and silt. No distinct odor.	
21				5				
22							Bottom of borehole at 20.5 ft. Well installed.	
23							2-inch diameter. 0.020-inch slot screen from 4 to 19 feet bgs.	
24							Well was completed with concrete from 0.5 to 1 feet bgs, followed by bentonite from 1 to 3 feet bgs, followed by Colorado silica sand from 3 to 19.5 feet bgs.	
25								

- Standard Operating Procedures

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SOIL BORING AND WELL INSTALLATION STANDARD OPERATING PROCEDURE

EQUIPMENT (*Items in italic provided by drilling subcontractor, verify according to the site sampling plan they bring the appropriate equipment and material.*)

- Sampling and Analyses Plan (SAP)
- Site-specific sampling plan
- Sample location map
- Sample table
- Safety equipment, as specified in the Health and Safety Plan
- Permanent pens/marker (e.g. Sharpies®)
- Site logbook, boring log and/or sampling form
- Camera
- Candlestick/cones/barricade
- Caution tape
- Trash bags/plastic sheeting
- Assorted tools (e.g. shovels, wrenches, etc.)
- *Annular materials: silica sand, bentonite pellets and chips, grout*
- *Monitoring well materials: 2-inch schedule 40 PVC riser, well screen and end caps*
- *Completion materials: posts or traffic rated steel monuments, concrete mix, concrete forms*
- *Drilling rig (e.g. hollow stem auger, air/mud rotary, direct push, or sonic)*
- *Disposable acetate liners for direct push*
- *Decontamination equipment such as pressure washer to decontaminate rig and bucket with water and phosphate-free soap (e.g. Alconox®, Liquinox®) for split spoon samplers*

Preliminary Activities

Prior to the onset of field activities at the site, Aerotech obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Aerotech marks the borehole locations and contacts the local one call utility locating service at least 2 full business days prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Additionally, borehole locations may be cleared via air-knife and vacuum operations where proposed locations are in close proximity of buried utilities. Fieldwork is conducted under the advisement of a state registered professional geologist. Monitoring well construction will

comply with Monitoring Well Construction: General, 690-240-100 through Well Seals, WAC 173-160.

Drilling

Aerotech contracts a licensed driller to advance each boring and collect soil samples. The specific drilling method (e.g., hollow-stem auger, direct push method, or sonic drilling), sampling method [e.g., core barrel or California-modified split spoon sampler (CMSSS)] and sampling depths are documented on the boring log and may be specified in a work plan. Soil samples are typically collected at the capillary fringe and at 5-foot intervals to the total depth of the boring. To determine the depth of the capillary fringe prior to drilling, the static groundwater level is measured with a water level indicator in the closest monitoring well to the boring location, if available.

The borehole is advanced to just above the desired sampling depth. For CMSSSs, the sampler is placed inside the auger and driven to a depth of 18 inches past the bit of the auger. The sampler is driven into the soil with a standard 140-pound hammer repeatedly dropped from a height of 30 inches onto the sampler. The number of blows required to drive the sampler each 6-inch increment is recorded on the boring log. For core samplers (e.g., direct push), the core is driven 18 inches using the rig apparatus.

Soil Sampling

Soil is collected according to Aerotech's SOIL SAMPLING STANDARD OPERATING PROCEDURE.

Grab Groundwater Sampling from Soil Boring

In the event that undeveloped grab-groundwater samples are necessary for the scope of work, a temporary well screen is placed across the desired interval of the soil boring. The sample can be collected via disposable bailer or peristaltic pump and disposable tubing. Additionally if direct push technology has been utilized for advancing the soil boring, a groundwater sample, is collected from the boring by using Hydropunch™ sampling technology. In the case of using Hydropunch™ technology, after collecting the capillary fringe soil sample, the boring is advanced to the top of the soil/groundwater interface and a sampling probe is pushed to approximately 2 feet below the top of the static water level. The probe is opened by partially withdrawing it and thereby exposing the screen. New polyethylene tubing with a peristaltic pump or decontaminated bailer is used to collect a water sample from the probe. The water sample is then emptied into laboratory-supplied containers constructed of the correct material and with the correct volume and preservative to comply with the proposed laboratory test. The container is slowly filled with the retrieved water sample until no headspace remains and then promptly sealed with a Teflon-lined cap, checked for the presence of bubbles, labeled, entered onto a COC record and placed in chilled storage at 4° Celsius. Laboratory-supplied trip blanks accompany the water samples as a quality assurance/quality control procedure. Equipment blanks may be collected as required. The samples are kept in chilled storage and transported under COC protocol to a client-approved, state-certified laboratory for analysis.

Field Screening Procedures

Aerotech staff place the soil from the middle of the sampling interval into a plastic resealable bag. The bag is then labeled with the sample number. The tip of a photoionization detector (PID) or similar device is inserted through the plastic bag to measure organic vapor concentrations in the headspace. The highest sustained PID measurement is recorded on the boring log. At a minimum, the PID or organic vapor monitoring device is calibrated on a daily basis in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log. Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis. Aerotech trained personnel describe the soil in the bag according to the Unified Soil Classification System and record the description on the boring log, which is included in the final report.

Backfilling of Soil Boring

If a well is not installed, the boring is backfilled from total depth to approximately 5 feet below ground surface (bgs) with either neat cement or bentonite grout using a tremie pipe. The boring is backfilled from 5 feet bgs to approximately 1 foot bgs with hydrated bentonite chips. The borehole is completed from 1 foot bgs to surface grade with material that best matches existing surface conditions and meets local agency requirements. Site-specific backfilling details are shown on the respective boring log.

Monitoring Well Construction

A well (if constructed) is completed using materials documented on the boring log or specified in a work plan. The well is constructed with slotted casing across the desired groundwater sampling depth(s) and completed with blank casing to within 6 inches of surface grade. No further construction is conducted on temporary wells. For permanent wells, the annular space of the well is backfilled with Monterey sand from the total depth to approximately 2 feet above the top of the screened casing. A hydrated granular bentonite seal is placed on top of the sand filter pack. Grout may be placed on top of the bentonite seal to the desired depth using a tremie pipe. The well may be completed to surface grade with a 1-foot thick concrete pad. A traffic-rated well vault and locking cap for the well casing may be installed to protect against surface-water infiltration and unauthorized entry. Site-specific well construction details including type of well, well depth, casing diameter, slot size, length of screen interval and sand size are documented on the boring log or specified in the work plan.

Monitoring Well Development

Following well construction, each monitoring well is developed and surveyed according to Aerotech's MONITORING WELL DEVELOPMENT AND SURVEYING STANDARD OPERATING PROCEDURE.

Well Sampling

Following development, groundwater is collected according to Aerotech's LOW-FLOW GROUNDWATER SAMPLING STANDARD OPERATING PROCEDURE.

Decontamination Procedures

Aerotech and/or the contracted driller decontaminate soil and water sampling equipment between each sampling event with a non-phosphate solution, followed by a minimum of two tap water rinses. Deionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned prior to drilling the borehole and at completion of the borehole.

Waste Treatment and Soil Disposal

Soil cuttings and decontamination fluids generated from the drilling or sampling are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. Unless otherwise specified in the contract with Aerotech, the client is responsible for disposal of investigation derived waste. Should Aerotech be contracted to complete disposal for the client, drums containing investigation derived waste are subsequently transported under manifest to a client- and regulatory-approved facility for disposal.

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SOIL SAMPLING STANDARD OPERATING PROCEDURE

EQUIPMENT

- Sampling and Analyses Plan (SAP)
- Site-specific sampling plan
- Sample location map
- Sample table
- Safety equipment, as specified in the Health and Safety Plan
- Permanent pens/marker (e.g. Sharpies®)
- Site logbook and/or sampling form
- Camera
- Screening equipment (e.g. Photoionization detector (PID))
- Survey stakes or flags
- Tape measure or measuring wheel
- Plastic sheet
- Soil collection device, heavy equipment (e.g. spoons spade shovel, hand auger, hollow stem auger – split spoon sampler, direct push rig – macro core, shelby tube, backhoe)
- Syringes for EPA Method 5035
- Syringe tool for EPA Method 5035 (e.g. En Core® sampler)
- Pre-weighed and preserved sample vials for EPA Method 5035
- Stainless steel and/or plastic bowls (only if homogenizing composite samples)
- Sample containers, precleaned (e.g., I-Chem)
- Chain-of-custody forms, custody seals, sample labels
- Ziploc® Bags
- Insulated cooler
- Ice
- Plastic bags for sample containers and ice
- Decontamination equipment including tap water and/or deionized water and phosphate-free soap (e.g. Alconox®, Liquinox®)

Soil Sampling

Soil samples are preserved in the metal or plastic sleeve used with the California-modified split spoon sampler (CMSSS) or core sampler, in glass jars or other containers according to the test method and regulatory guidelines (e.g., Environmental Protection Agency Method 5035). Sleeves are removed from the sample barrel, and the lowermost sample sleeve is labeled. Soil is collected from the split spoon sample or direct push core sample into appropriate containers based on the planned test method. Besides the use of a drilling rig, soil may also be collected via hand auger or with a scoop or spoon from the surface or a selected interval from an excavation, trench or test pit.

Soil Sample Collection

Aerotech field personnel are to review the SAP for sample locations and analysis as well as obtain photograph(s) of the material before sampling. If the soil sample is to be a discrete sample, collect soil using a clean/decontaminated stainless-steel (organic analyses) or plastic (inorganic analyses) spoon. If the soil sample is to be a composite, collect soil from all locations to be sampled into one stainless-steel (organic analyses) or plastic (inorganic analyses) bowl and homogenize the soil. If the soil sample is to be a discrete sample for volatile analyses, collect soil using a syringe and place into appropriate pre-weighed sample vial (Volatiles samples may not be composited.).

Next, use the syringe, stainless-steel or plastic spoon to transfer soil sample as appropriate into sample container as specified by the analytical test method. Label and manage sample containers. Decontaminate sampling equipment between each sampling event with a non-phosphate solution, followed by a minimum of two tap water rinses. Deionized water may be used for the final rinse. Ensure activities are well documented in the site logbook or on a designated sampling form. (i.e. collection method, presence of sheen or odor and PID measurement.

Field Screening Procedures

Aerotech field staff place soil from sampling interval into a plastic re-sealable bag. The bag is then labeled with the sample number. The tip of a photoionization detector (PID) or similar device is inserted through the plastic bag to measure organic vapor concentrations in the headspace. The highest sustained PID measurement is recorded on the boring log. At a minimum, the PID or organic vapor monitoring device is calibrated on a daily basis in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log. Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis. Aerotech trained personnel describe the soil in the bag according to the Unified Soil Classification System and record the description on the boring log, sampling form or logbook. Selected soil samples for analysis are then placed in a cooler chilled to 4° Celsius and transported to a state-certified laboratory under chain-of custody (COC) protocol.

Extractable Petroleum Hydrocarbons (EPH)/Volatile Petroleum Hydrocarbons (VPH)

To evaluate the potential utilization of site specific cleanup levels (e.g. Ecology's Method B or Method C cleanup levels), Aerotech field personnel will collect additional sample volume to complete EPH/VPH analysis. This test will be completed on samples that are containing petroleum hydrocarbons only, utilizing the previously discussed field screening procedures as well as contaminant source data from previous investigation work.

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MONITORING WELL DEVELOPMENT AND SURVEYING

EQUIPMENT

- Well location map
- Safety equipment, as specified in the Health and Safety Plan
- Permanent pens and markers (e.g. Sharpies®)
- Field notebook and/or sampling form
- Survey equipment
- Surge Block
- 55-Gallon Drums
- 5-Gallon Buckets
- 3/8" Tubing
- DC Power Source
- Whale® Pump
- Water Level Indicator
- Hand Tools (e.g. socket set, screw drivers)
- Watch
- Decontamination equipment including tap water and/or deionized water and phosphate-free soap (e.g. Alconox®, Liquinox®)

Preliminary Activities

Prior to the onset of field activities at the site, Aerotech obtains permission from the client to perform activities and obtains any appropriate permit(s) from potential governing agencies. Aerotech field personnel acquires surge block, tubing, down well pump, water quality monitoring equipment, containers for storing purge water and decontamination fluids and survey equipment, and verifies all are in operating condition. Fieldwork is conducted under the advisement of a state registered professional geologist.

Monitoring Well Development

When a permanent groundwater monitoring well is installed, proper well development is necessary to ensure that complete hydraulic connection is made and maintained between the well and the aquifer material surrounding the well screen and filter pack. Well development should

begin no sooner than 48 to 72 hours after well installation to allow grout to cure prior to improvement.

A surge block is used to move sediments from the filter pack into the well casing. A surge block consists of a rubber and metal plunger attached to Schedule 80 PVC sections of sufficient length to reach the bottom of the well. The surge block is constructed of materials that will not introduce contamination into the well. The surge block is moved up and down the well screen interval and then removed, followed by pumping with a downwell pump to remove any sand and silt brought into the well by the surging action. Care is taken to not surge too strongly with subsequent casing deformation or collapse. Surging will be followed by additional pumping to remove fine materials that may have entered the well during the surging effort.

After surging has been completed and the sand content of the pumped water has decreased, a submersible pump is used to continue well development. The pump should be moved up and down the well screen interval until the obtained water is relatively clear. Well development will continue until the water in the well clarifies. It should be noted that where very fine-grained formations are opposite the screened interval, continued well development until clear water is obtained might be impossible. Decisions regarding when to cease development where silty conditions exist will be made between amongst Aerotech personnel.

During well development, the primary criteria used to evaluate whether the well has been completely developed is water clarity. As mentioned above, clear water can often be impossible to obtain with environmental monitoring wells.

The minimum volume of water purged from the well during development will be approximately a minimum of 3 borehole volumes (wells will typically not reach stabilization of water quality parameters before this condition is achieved and may not have reached stability even after this threshold has been achieved). The above is a general guideline for difficult well development. Development water will be stored in 55-gallon Department of Transportation (DOT) -approved drums.

Surveying

If required, wells are surveyed relative to an established benchmark of known elevation above mean sea level to an accuracy of ± 0.005 foot. The casing is notched or marked on one side to identify a consistent surveying and measuring point.

Decontamination Procedures

Aerotech personnel completing the monitoring well development equipment will also decontaminate between each monitoring well. The decontamination procedure will consist of washing with a non-phosphate solution, followed by a minimum of two tap water rinses. Deionized water may be used for the final rinse.

Waste Storage and Disposal

Decontamination fluids and purge water from well development and sampling activities are stored on site in labeled, DOT-approved storage containers. No containers will be left on-site

without a label indicating the material matrix, accumulation date, project name, project address and Aerotech contact information. Unless otherwise specified in the contract with Aerotech, the client is responsible for disposal of investigation derived waste. Should Aerotech be contracted to complete disposal for the client, drums containing investigation derived waste are subsequently transported under manifest to a client- and regulatory-approved facility for disposal.

AEROTECH

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LOW-FLOW GROUNDWATER SAMPLING STANDARD OPERATING PROCEDURE

EQUIPMENT

- Sampling and Analyses Plan (SAP)
- Site-specific sampling plan
- Sample location map
- Sample table
- Safety equipment, as specified in the Health and Safety Plan
- Permanent pens and markers (e.g. Sharpies®)
- Field notebook and/or sampling form
- Camera
- YSI water quality monitoring equipment (e.g. YSI monitor and flow through cell)
- Sample containers, precleaned (e.g., I-Chem)
- 55-Gallon Drums
- Two 5-Gallon Buckets
- 3/8" Tubing
- Power Source/cables
- Peristaltic or down-well pump
- Water Level Indicator
- Tool box with hand tools (e.g. socket set, screw drivers)
- Trash bags/plastic sheeting
- Candlestick/cones/barricade
- Caution tape
- Scissors/knife
- Paper towels
- Watch
- Decontamination equipment including tap water and/or deionized water and phosphate-free soap (e.g. Alconox®, Liquinox®)
- Chain-of-custody forms, custody seals, sample labels
- Ziploc® Bags
- Insulated cooler
- Ice
- Plastic bags for sample containers and ice

The following protocol and sampling procedures were designed to meet or exceed standards for groundwater monitoring well sampling, as specified by the State of Washington Department of Ecology "*Standard Operating Procedures for Purging and Sampling Monitoring Wells, Version 1.0*," dated and approved on October 4, 2011. These procedures are strictly adhered to by Aerotech field staff:

Cross-Contamination Mitigation Protocol

A sampling table is set up adjacent to the well head in order to protect field equipment from contact with the ground, to prevent or minimize the possible introduction of foreign materials into the wells, and in general in order to mitigate the possibility of cross-contamination. Where previous laboratory data is available, or where visual or olfactory indicators provide initial evidence, well sampling order is arranged to proceed with the least contaminated well, often the upgradient groundwater monitoring wells, and sampling order proceeds by sampling wells associated with successively higher contamination levels. Thus, the wells exhibiting the highest contamination levels are sampled last, in order to minimize the possibility of cross contamination.

A fresh pair of disposable Nitrile gloves is worn at each well. Equipment neither disposable nor dedicated to wells, is washed in a dedicated container prepared with non-phosphate detergent and triple rinsed in a second container prepared with distilled and/or deionized water. Surfaces that cannot be readily submerged for the purpose of decontamination, are sprayed with wash water followed by rinse water, and wiped with a fresh disposable paper towel. For shallow wells that require a peristaltic pump, dedicated tubing is left in each well after sampling, however, for deeper wells that require a submersible pump, dedicated tubing is recovered from wells after each use, and deployed to a designated dedicated clean plastic bag, bearing a label indicating well identification information.

Water Level Measurement

Prior to the well purge process and the collection of groundwater samples, groundwater levels are measured at the north side of the ("TOC") with a piezometer/water level indicator, by slowly lowering the sensor into wells prior to purging, in order to minimize disturbances. The water levels are measured twice, with tape a marked in 0.01 foot increments, in order to reduce possible reading error. Where appropriate, free product thickness is measured with gas level indicator paste or an interface indicator. Upon arrival, each well is visual inspected and the condition of the well and well head are noted.

Groundwater Monitoring Well Purge and Sampling Methodologies

Prior to groundwater sample collection, A dedicated length of high density polyethylene tubing is lowered into each well to a level near the middle of the screened interval. A dedicated length of clean silicone tubing is utilized within the pump mechanism. The wells are purged by means of low flow techniques, during which time groundwater is monitored for physical parameters, including temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP), by means of a multi-parameter device mounted upon a flow cell, until such time as values recorded have stabilized and equilibrium conditions are verified according to State guidelines. This protocol ensures that collected groundwater samples are

representative of in-situ groundwater conditions. Readings are recorded once every 2 to 5 minutes, including water level measurement. The pumping rate shall remain below 1 L/min during monitoring and sampling procedures. This is verified by periodically filling a one-Liter graduated cylinder and recording the rate, adjusting the pump as necessary. The water column within the well should remain within 5% of the static height during the purge and sample process, if this cannot be achieved, the pump rate will be reduced until the water level stabilizes. The following conditions must be met in three consecutive readings prior to sampling:

- | | |
|-------------------------|---|
| • pH | +/- 0.1 standard units |
| • Specific Conductivity | +/- 10.0 mS/cm for values < 1,000 mS/cm |
| | +/- 20.0 mS/cm for values > 1,000 mS/cm |
| • DO | +/- 0.05 mg/L for values < 1 mg/L |
| | +/- 0.2 mg/L for values > 1 mg/L |
| • Temperature | +/- 0.1 degrees Celcius |
| • ORP | +/- 10 mV |

Groundwater samples are collected in containers specified by the laboratory for the analyses established at the Site, and in accordance with State of Washington regulations or guidelines. Sample containers are labeled with site name, well identification, and date of collection information. Each sample is documented on a *Chain of Custody* ("COC") form, and immediately placed in an iced cooler (maintained at 4 degrees Celcius or less) for transport to a certified laboratory for analysis. Please note that any purge water suspected or confirmed to contain concentrations above the MTCA Cleanup Levels is drummed and left on Site.

- Field Documentation



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GROUNDWATER MONITORING WELL LOW FLOW SAMPLING FIELD LOG

FIELD CREW: DRM

PROJECT NAME: Swindahl Properties LLC

DATE: 04/11/18

PROJECT ADDRESS:

2218 Marine View Drive, Tacoma, Washington

MW1		Purge Start:	8:15	Purge Stop:	8:40	Purge V (L):	5.00
Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
07:45	2.41	--	--	--	--	--	--
08:17	2.40	200	10.1	266.3	5.44	6.41	98.9
08:19	2.55	200	9.8	265.0	3.78	6.43	28.2
08:21	2.50	200	9.8	266.1	3.44	6.46	17.3
08:23	2.50	200	9.8	273.0	3.59	6.53	-1.2
08:25	2.50	200	9.8	272.8	4.20	6.58	-13.1
08:27	2.50	200	9.7	271.4	3.55	6.59	-19.8
08:29	2.50	200	9.8	272.5	2.78	6.61	-24.6
08:31	2.50	200	9.8	272.2	1.89	6.66	-28.3
08:33	2.50	200	9.8	272.1	1.77	6.64	-30.5
08:35	2.50	200	9.8	273.9	1.72	6.67	-34.3
08:37	2.50	200	9.8	270.1	1.70	6.67	-38.7
08:39	2.50	200	9.7	272.2	1.68	6.67	-40.7
Ecology Parameter Limits (3 Consecutive Readings)			+/- 0.1	+/- 10	+/- 0.2	+/- 0.1	+/- 10
08:40	SAMPLE	--	--	--	--	--	--

Comments:

MW2		Purge Start:	9:05	Purge Stop:	9:41	Purge V (L):	7.20
Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
07:49	8.70	--	--	--	--	--	--
09:12	9.41	200	11.3	25,843	25.04	7.11	-41.2
09:14	9.60	200	11.2	25,862	29.41	7.23	-42.2
09:16	9.64	200	11.2	25,848	28.52	7.28	-40.5
09:18	9.70	200	11.1	25,820	28.97	7.33	-37.6
09:20	9.71	200	11.2	25,790	26.36	7.37	-33.7
09:22	9.68	200	11.2	25,810	27.78	7.39	-30.4
09:24	9.73	200	11.2	25,821	28.84	7.4	-27.4
09:26	9.76	200	11.1	25,764	30.74	7.45	-23.4
09:28	9.79	200	11.0	25,718	36.44	7.51	-21.2
09:30	9.79	200	10.9	25,575	37.41	7.62	-20.7
09:32	9.78	200	10.9	25,426	38.08	7.73	-19.7
09:34	9.79	200	10.9	25,390	38.87	7.79	-19.5
09:36	9.79	200	10.9	25,336	39.37	7.86	-17.8
09:38	9.79	200	10.9	25,329	39.21	7.92	-12.7
09:40	9.79	200	10.8	25,339	39.44	7.95	-9.5
Ecology Parameter Limits (3 Consecutive Readings)			+/- 0.1	+/- 10	+/- 0.2	+/- 0.1	+/- 10
09:41	SAMPLE	--	--	--	--	--	--

Comments:



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GROUNDWATER MONITORING WELL LOW FLOW SAMPLING FIELD LOG

FIELD CREW: DRM	PROJECT NAME: Swindahl Properties LLC
DATE: 04/11/18	PROJECT ADDRESS: 2218 Marine View Drive, Tacoma, Washington

MW3		Purge Start:	9:51	Purge Stop:	10:16	Purge V (L):	5.63
Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
07:51	9.00	--	--	--	--	--	--
09:57	9.05	225	11.2	24,720	1.90	7.47	27.0
09:59	9.10	225	11.2	24,708	1.28	7.40	18.5
10:01	9.10	225	11.1	24,696	1.08	7.36	14.1
10:03	9.10	225	11.2	24,687	0.97	7.33	11.0
10:05	9.11	225	11.2	24,687	0.86	7.31	7.7
10:07	9.11	225	11.1	24,687	0.86	7.30	5.5
10:09	9.11	225	11.1	24,672	0.8	7.28	3.6
10:11	9.12	225	11.1	24,662	0.68	7.27	2.0
10:13	9.12	225	11.1	24,659	0.66	7.25	0.1
10:15	9.12	225	11.2	24,649	0.66	7.24	0.8
Ecology Parameter Limits (3 Consecutive Readings)			+/- 0.1	+/- 10	+/- 0.2	+/- 0.1	+/- 10
10:16	SAMPLE	--	--	--	--	--	--
Comments:							



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GROUNDWATER MONITORING WELL LOW FLOW SAMPLING FIELD LOG

FIELD CREW: DRM	PROJECT NAME: Swindahl Properties LLC
DATE: 04/11/18	PROJECT ADDRESS: 2218 Marine View Drive, Tacoma, Washington

MW4		Purge Start:	10:34	Purge Stop:	11:30	Purge V (L):	12.60
Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
07:54	6.90	--	--	--	--	--	--
10:36	7.00	225	12.1	3833	7.05	7.17	32.2
10:38	7.24	225	12.1	3787	5.76	7.15	21.3
10:40	7.32	225	12.1	3770	7.88	7.12	12.6
10:42	7.39	225	12.0	3754	11.62	7.11	5.8
10:44	7.45	225	11.9	3706	8.97	7.12	-1.0
10:46	7.50	225	11.9	3681	8.99	7.10	-5.1
10:48	7.53	225	11.8	3623	9.25	7.13	-7.8
10:50	7.61	225	11.7	3564	6.89	7.13	-10.0
10:52	7.68	225	11.6	3517	6.97	7.11	-11.6
10:54	7.85	225	11.5	3524	6.78	7.11	-12.3
10:56	7.87	225	11.6	3560	6.48	7.09	-12.9
10:58	7.92	225	11.6	3553	6.89	7.11	-13.8
11:00	7.94	225	11.6	3602	6.99	7.10	-14.5
11:02	7.95	225	11.7	3648	6.99	7.08	-15.1
11:04	7.98	225	11.8	3704	6.27	7.08	-15.7
11:06	8.00	225	11.7	3746	6.42	7.08	-16.8
11:08	8.06	225	11.8	3780	6.07	7.08	-17.9
11:10	8.09	225	11.8	3808	5.78	7.08	-19.2
11:12	8.13	225	11.9	3838	5.78	7.08	-20.0
11:14	8.14	225	11.9	3853	5.77	7.08	-20.0
11:16	8.17	225	11.8	3909	6.04	7.06	-20.2
11:18	8.19	225	11.9	3914	6.87	7.08	-20.8
11:20	8.22	225	11.8	3953	6.81	7.06	-21.2
11:22	8.25	225	11.8	3988	6.68	7.07	-22.7
11:24	8.27	225	11.9	3999	6.65	7.07	-23.4
11:26	8.32	225	11.9	3926	6.45	7.06	-23.8
11:28	8.37	225	11.9	4029	6.49	7.06	-24.9
Ecology Parameter Limits (3 Consecutive Readings)			+/- 0.1	+/- 10	+/- 0.2	+/- 0.1	+/- 10
11:30	SAMPLE	--	--	--	--	--	--
Comments:							



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GROUNDWATER MONITORING WELL GAUGING RECORD

FIELD CREW: DRM	PROJECT NAME: Swindahl Properties LLC
DATE: 04/11/18	PROJECT ADDRESS: 2218 Marine View Drive, Tacoma, Washington

Well ID	Time	Wellhead Elevation	Depth to Water	Groundwater Elevation	Depth of Well	Well Diameter	Comments
	hh:mm	Feet Above MSL	Feet Below TOC	Feet Above MSL	Feet Below TOC	Inches	
MW1	7:45	11.75	2.41	9.34	18.5	2	Well is new and in great condition
MW2	7:49	10.27	8.70	1.57	18.9	2	Well is new and in great condition
MW3	7:51	10.72	9.00	1.72	19.3	2	Well is new and in great condition
MW4	7:54	11.02	6.90	4.12	19.6	2	Well is new and in great condition

EXPLANATION

MSL = Mean Sea Level

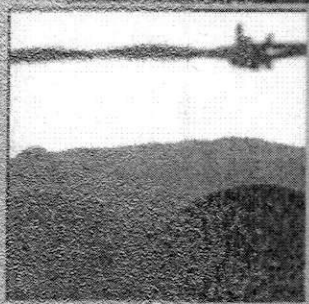
TOC = Top of Casing

-- = Not Measured or Not Calculated

- *Phase I Environmental Site Assessment, Modutech Marine, Inc., Riley Group, Inc., September 2009*

The Riley Group, Inc.

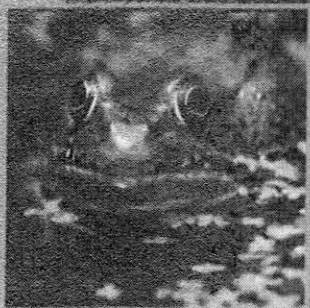
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PHASE I ENVIRONMENTAL SITE ASSESSMENT

**MODUTECH MARINE, INC.
2218 MARINE VIEW DRIVE
TACOMA, WASHINGTON**

SEPTEMBER 11, 2009

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The Riley Group, Inc.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

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SEPTEMBER 11, 2009

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LIST OF APPENDICES

Figure 1	Site Vicinity Map
Figure 2	Site and Vicinity Sketch
Appendix A	Site Photographs
Appendix B	ASTM Definition of Terms
Appendix C	Regulatory Database Report
Appendix D	ASTM Questionnaire & Historical Research Documentation
Appendix E	Site Regulatory Documentation

1 Introduction

The Riley Group, Inc. (RGI) conducted a Phase I Environmental Site Assessment (ESA) of the Modutech Marine, Inc. property located at 2218 Marine View Drive, Tacoma, Pierce County, Washington (hereafter referred to as the Site), Figure 1. The Site currently is occupied by an industrial boat manufacturing and repair facility. Site photographs are included in Appendix A.

Ms. Carol Duris, of Viking Bank (Client), authorized the ESA on August 17, 2009. RGI understands that Client is considered the *user* of the report as defined by the American Society for Testing and Materials (ASTM), Standard Practice E 1527-05, and intends to utilize the Site as collateral on a loan, with no plans for redevelopment.

1.1 PURPOSE

The purpose of the ESA was to identify any *recognized environmental conditions* (RECs) and/or *business environmental risks* (BERs) as defined by ASTM, Standard Practice E 1527-05.

The term "recognized environmental conditions" means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with current environmental regulations. The term is not intended to include de minimus conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

The term "business environmental risks" are risks that can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.

Definitions used herein, as defined by ASTM, are provided in Appendix B for reference.

1.2 SCOPE OF WORK

RGI's scope of work for this Phase I ESA included the following tasks:

- Performed a detailed inspection of the Site and a cursory inspection of the adjoining properties.
- Interviewed knowledgeable persons regarding Site and/or nearby properties.
- Described project area geology and Site location, Site vicinity characteristics and prepared a vicinity and Site map showing Site and nearby significant features.
- Commented on polychlorinated biphenyls (PCBs), hazardous materials, aboveground storage tanks (ASTs), and underground storage tanks (USTs). This scope of work did not include sampling and/or analysis.
- Reviewed historical building department files, property tax records, Sanborn Fire Insurance Maps, city directories, aerial photographs and plat maps, where applicable and available.
- Reviewed State and Federal environmental regulatory databases per ASTM.
- Reviewed regulatory records available at the Washington State Regional Archives Office in Olympia, Washington.
- Prepared this final report presenting our findings and conclusions.

RGI was not provided a 50-year chain of title for the subject Site and one was not reviewed as part of this Phase I ESA.

1.3 SIGNIFICANT ASSUMPTIONS

In evaluating the property, RGI has relied upon representations and information furnished by individuals and agencies noted in the report. RGI assumes that the information provided by these third party sources is accurate, and has no reason to believe otherwise.

Based on a review of regional topography and geomorphology, RGI assumes groundwater beneath the Site flows generally to the southwest, towards the Hylebos Waterway. Based on a review of well logs for the Site vicinity, depth to shallow groundwater is assumed to be approximately 5 feet below ground surface (bgs). However, the groundwater table is likely subject to tidal fluctuations.

1.4 LIMITATIONS AND EXCEPTIONS

This ESA report is based upon information obtained by RGI personnel and upon the condition of the Site and surrounding property on the dates of such visits, supplemented by readily available information and data obtained by RGI and described herein.

RGI accepts no responsibility for any deficiency, misstatements or inaccuracies contained in this report as a result of misstatements, omissions, and misrepresentations or fraudulent acts of persons interviewed. In addition, potentially important interviewees are often not available or cannot be located within a reasonable project time frame. In these instances, RGI accepts no responsibility for any environmental liability that later results from information not readily available during the assessment.

This report was prepared in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing in the same locality and time, and under similar conditions. This report is intended for specific application to the existing property located at 2218 Marine View Drive, Tacoma, Washington, for the exclusive use of the Client, Viking Bank, Modutech Marine, Inc., and their authorized representative(s). No other warranty is implied or intended.

1.5 RELIANCE

No reports or other information regarding the Site or its setting were provided to RGI other than those resources specifically mentioned herein. Reports relied upon by RGI are listed in Section 9.0 of this report.

We have performed our services and prepared this Report in accordance with applicable, generally accepted engineering, environmental or appraisal consulting practices. We make no other warranties, either expressed or implied, as to the character and nature of such services and product.

2 Site Description

2.1 PHYSICAL SETTING SOURCE(S), LOCATION & LEGAL DESCRIPTION

The Site is located on the United States Geologic Survey (USGS) Tacoma North, Washington, 7.5-Minute Topographic Map (Figure 1) at an elevation of approximately 10 feet above mean sea level. The Site and immediate vicinity are generally flat. The vicinity to the northeast slopes sharply towards the Site and the Hylebos Waterway.

The Site is zoned as Shoreline Port Industrial (S10) and Heavy Industrial (M2). The Pierce County tax identification number for the Site is 0321264056. The legal description and metes and bounds of the Site are included in the current Pierce County Tax Assessor documentation, included in Appendix D.

2.2 SITE VICINITY CHARACTERISTICS

The Site is an approximately rectangular-shaped, 5.98-acre property located in the Hylebos Waterway industrial corridor. Typical property use in the Site vicinity is industrial along the waterfront and residential in the upland areas to the northeast.

2.3 SITE GEOLOGY AND HYDROGEOLOGY

The *Geologic map of the Tacoma North 7.5-Minute Quadrangle* mapped the Site as artificial fill (af). As discussed above, depth to shallow groundwater is assumed to be approximately 5 feet below ground surface (bgs). However, the groundwater table is likely subject to tidal fluctuations. Inferred groundwater flow direction is generally to the southwest, towards the Hylebos Waterway.

2.4 CURRENT USES OF THE SITE

The Site is occupied by Modutech Marine, Inc., an industrial boat building and repair facility.

2.5 DESCRIPTION OF SITE STRUCTURES

The Site is occupied by four buildings. The Site buildings are hereafter referred to as the manufacturing building, office building, work shop and spray shop.

The manufacturing building is a single-story, approximately 20,700-square-foot industrial warehouse structure with two mezzanine levels. The building is a wood-framed structure of slab-on-grade construction with a flat roof and corrugated metal siding (Photographs 1 and 2).

The office building is a two-story, approximately 1,000-square-foot structure. The building is a wood-framed structure of slab-on-grade construction with a flat roof (Photograph 1).

The work shop is a single-story, approximately 1,100-square-foot warehouse structure. The building is a wood-framed structure of slab-on-grade construction with a flat roof (Photograph 7).

The spray shop is a single-story, approximately 1,900-square-foot warehouse structure. The building is a wood-framed structure of slab-on-grade construction with a flat roof. An approximately 1,100-square-foot, wood-framed shelter is attached to the south side of the building (Photographs 3 and 10).

The Site also contains two temporary assembly tents located west of the manufacturing building (Figure 2). The tents consist of an aluminum skeleton with a polyethylene cover.

2.6 CURRENT USES OF THE ADJOINING PROPERTIES

Current uses of adjoining properties are summarized as follows:

- Northeast of Site:** Marine View Drive, beyond which is a vacant landscaping strip and Norpoint Way Northeast.
- Southeast of Site:** Hylebos Marina and construction storage yard. No active business was evident on the property.
- Southwest of Site:** The Hylebos waterway. The Site is connected to boat moorage docks and suites located on the waterway (Photograph 4).
- Northwest of Site:** A vacant right-of-way.

3 User Provided Information

3.1 TITLE RECORDS & PREVIOUS REPORTS

No title records or previous environmental reports were provided to RGI by the user for the purposes of this report. Mr. Carl Swindahl of Modutech Marine, Inc. provided three letters pertaining to a consent decree for the Site. These letters are discussed in Section 6.1 below.

3.2 ASTM USER QUESTIONNAIRE

Mr. Carl Swindahl of Modutech Marine, Inc., the Site owner since the early 1990s, completed an ASTM E 1527-05 User Questionnaire on September 1, 2009. Mr. Swindahl indicated that he was not aware of any environmental liens, USTs, ASTs, chemicals or other adverse environmental conditions associated with the Site. He did not provide any contact information for past Site owners. A copy of the completed questionnaire is provided in Appendix D.

4 Site Reconnaissance

RGI performed a Site reconnaissance on August 26, 2009. RGI was accompanied by Mr. Carl Swindahl of Modutech Marine, Inc. during the inspection. RGI did not have access to an intermodal container located west of the work shop building. Mr. Swindahl indicated that the container is utilized for miscellaneous storage and no hazardous materials are stored in the container. Site photographs are provided in Appendix A. A summary of our findings is given below.

4.1 INTERIOR OBSERVATIONS

Office Building

- The Site office building contained typical office furnishings (e.g. desks, chairs, file cabinets, etc.)

Manufacturing Building

- Fiberglass boat hulls are produced in the manufacturing building (Photographs 5 and 6). The forms are made of wood or other suitable materials. Resin (Photograph 9) is applied to the forms with sheets of fiberglass cloth in layers. The resin is hardened with methyl ethyl ketone peroxide (MEKP). Drums of resin and MEKP and sheets of fiberglass cloth were noted throughout the building. Minor resin drips were noted on some of the collection/rinse buckets and on drip-collection panels. Staining on the concrete floors appeared to be de minimus.
- Acetone is used to clean the resin application tools and equipment. The waste acetone/resin mixtures are transferred to a storage area outside, where they are filtered and processed through a still (discussed in Section 4.2 below). Five-gallon containers of acetone were noted throughout the building. No significant acetone staining was noted in the vicinity of the containers.
- The various fiberglass forms and other components are sanded and manipulated in shop areas throughout the building perimeter.
- Small quantities (e.g. pint-size) of paints and solvents/degreasers were stored in lockers at the various shop stations.

Work Shop

- The work shop contained various pneumatic tools and equipment, apparently for assembling the mechanical aspects of the boats (Photograph 7). No assembly work was being performed in the work shop at the time of the inspection.
- No evidence of improper storage or release of hazardous substances or petroleum products were observed inside the work shop building.

Spray Shop

- The spray shop contained various fiberglass forms and panels that were either being finished or spray painted (Photograph 8).
- Tarps appeared to line the entire building.
- No evidence of improper storage or release of hazardous substances or petroleum products were observed inside the work shop building.

4.2 EXTERIOR OBSERVATIONS

- The parking lot area northwest of the office building is paved with asphalt. The boat ramp southeast of the manufacturing building and the exterior yard area between the manufacturing building and the covered storage areas are all concrete paved. The remainder of the Site consists primarily of gravel cover.
- Wooden and fiberglass boat molds and miscellaneous equipment were staged in the northwest corner of the Site work yard and around the work shop building.
- Partially completed boats were being assembled within the temporary tents discussed in Section 2.5 above (Figure 2). The work appeared to consist of manual assembly and sand blasting. The sand blasting operation appeared to be contained. Mr. Swindahl indicated that sand blasting grit is contained and disposed of off-Site by Olsen Trucking.

- Boats that have been brought on-Site for repair are staged northeast of the manufacturing building (Figure 2). The boats appear to be serviced over the unpaved gravel areas. Some minor staining, at least partly due to water runoff, was noted in the staging area.
- Stormwater infiltrates into the unpaved Site surfaces, into stormwater catchbasins located along the shoreline embankment and into catchbasins located in the paved areas of the Site. The catchbasins in the concrete-paved areas are reportedly connected to a closed-loop system for wash water retention. The wash water drains to and is contained within an AST (Photograph 20) in a pump house located on the southeast corner of the Site (Figure 2), where it is reportedly recycled for later use. Dirty water is hauled away as needed for off-Site disposal.
- No evidence of disposal pits, sumps, oil/water separators or septic tanks were observed at the Site. Mr. Swindahl indicated that there are no oil/water separators on the Site (other than the baffles in the catchbasins) and was not aware of any historical septic tanks at the Site.
- No drinking water or groundwater monitoring wells were noted at the Site. Drinking water is provided to the Site by the local utility.
- 55-gallon drums of resin and biodiesel (Photograph 11) were stored in the covered shelter on the southeastern corner of the Site (Figure 2). Significant staining was not noted on the concrete beneath the drums.
- The covered storage area contains a bermed hazardous waste storage area (Photograph 13). A 15-gallon drum of waste paint thinner and 55-gallon drums of waste oil, kerosene, "bad gas," and biodiesel were located within the bermed area. According to Mr. Swindahl, hazardous wastes are picked up by Safety Kleen approximately once per month.
- Also located in the hazardous waste storage area were the resin/acetone filtering apparatus (Photograph 14) and the resin still discussed in Section 4.1 above (Photograph 15). Bulk fiberglass material is initially filtered from the acetone/resin waste mixture, which is then processed in the still. The processed acetone is re-used while the still bottoms are disposed of as hazardous waste. Some resin staining was noted on the concrete in the waste storage area. However, the drips and spills appear to be contained in the bermed, covered area. Due to the viscous nature of the resin, these small drips are not anticipated to leach through the concrete or pose a significant risk to Site soil and/or groundwater quality at this time.
- A steel intermodal container, located south of the waste storage area, serves as a hazardous chemical storage locker (Photographs 10 and 12). Containers up to 5 gallons in size, containing paints, thinners and coatings that are currently in use, were stored in the locker. Some minor staining was noted within the locker. However, no staining or signs of release was noted outside of the locker.
- New containers of lube oil and other petroleum products were being stored in another intermodal container southeast of the hazardous chemical storage locker (Figure 2). No staining or signs of release were noted in the lube oil storage locker.
- Waste oil is stored in a shelter located on the southeast corner of the Site (Figure 2). A waste oil storage AST is situated within a secondary containment unit (Photographs 18 and 19). Empty containers were situated next to the containment in the covered area.

Minor staining in the covered concrete area appeared to be de minimus. Waste oil is reportedly picked up by Arcom approximately every one to two months.

- No other staining, stressed vegetation or any other indications of improper storage or release of hazardous substances or petroleum products were observed.

4.3 POLYCHLORINATED BIPHENYLS (PCBs) SURVEY

The Environmental Protection Agency (EPA) considers PCBs to be a possible human carcinogen. The Toxic Substance Control Act of 1976 (15 USC, s/s 2601, et seq.) prohibited any manufacturing of PCBs in the United States after January 1, 1979. Under Federal Regulation (40 CFR 761.3), the mineral oil contained in untested transformers is assumed to be "PCB-contaminated" (50-499 parts per million PCB). The continued use of this equipment is authorized by the EPA.

Electricity is provided to the Site via pole-mounted transformers located along Marine View Drive. The transformers appeared to contain "No PCBs" labeling. No staining or other indications of release were noted on or around the units.

No other indications of PCBs were observed at the Site. However, Section 6.1 below discusses historical soil sampling at the Site, indicating detections of PCBs in Site fill materials.

4.4 UNDERGROUND AND ABOVEGROUND STORAGE TANK SURVEY (UST/AST)

RGI's UST and AST survey included an inspection, review of historical and regulatory documentation, and interviews with knowledgeable persons regarding the Site.

No evidence of USTs (vent pipes or fill ports) was observed during the inspection. The Site buildings are heated by electricity and natural gas.

The Site utilizes a 500-gallon diesel AST (Photograph 17) for fueling boats and equipment. The AST is portable and used where needed. No staining was noted on or around the AST.

An approximately 500-gallon diesel cubitainer/AST (Photograph 16) was located next to the hazardous waste storage area. The AST also appeared to be portable and exhibited some minor corrosion and staining. No staining was noted around the AST.

5 Interviews

RGI contacted Ms. Debbie Nelson, the Emergency Response Tracker (ERTS) for the Washington Department of Ecology (Ecology), to determine whether any ERTS listings existed for the Site. The ERTS database tracks all emergency responses and environmental complaints made to Ecology since 1990, including hazardous material responses. Ms. Nelson indicated there were no ERTS listings for the Site address. A "SPILLS" database listing for the Site (analogous to ERTS) is discussed in Section 6.1 below.

RGI interviewed Mr. Carl Swindahl of Modutech Marine, Inc., the Site owner, regarding historical Site operations. The Swindahl family has operated on the Site since approximately 1984 and owned the Site since the early 1990s. Mr. Swindahl was not aware of any USTs, environmental liens or adverse environmental conditions on the Site. He indicated that lead-based paints have not been used at the Site in more than a decade. Mr. Swindahl's remarks regarding Site history have been incorporated into the relevant sections this report.

6 Environmental Regulatory Database Review

RGI's environmental regulatory records review consisted of a standard review of Federal and State record databases in a search for properties with existing and/or potential environmental liabilities. RGI and Environmental Data Resources (EDR) of Milford, Connecticut, performed the records search. All records reviewed used search radii in accordance with ASTM parameters. A copy of the EDR database report is included in Appendix C.

6.1 SITE

Commencement Bay Nearshore/Tideflats CERCLIS/NPL

The subject Site is located within the U.S. EPA's Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) and National Priority List (NPL) zone designated as Commencement Bay Nearshore/Tideflats (CBNT). These CERCLIS/NPL areas are also referred to as "Superfund" sites. A detailed discussion of the history of the entire CBNT Superfund site is provided on pages 18 through 20 of the attached EDR report. The Hylebos Waterway properties, which include the subject Site, are located within the Tideflats portion of the CBNT.

RGI reviewed the CBNT-related files pertaining to the subject Site, available at the Washington State Department of Ecology (Ecology) and at the Washington State Archives in Olympia, WA. Based on our review, limited near-surface soil sampling was performed at the Site by Ecology in 1989 and 1991.

Two soil samples were collected from the southeast corner of the Site in 1989, between the southeast corner of the manufacturing building and the waste oil storage area. Both samples contained concentrations of carcinogenic polynuclear aromatic hydrocarbons (cPAHs) above the MTCA Method A Soil Cleanup Level for Unrestricted Land Use (0.1 mg/kg) but below the Method A Soil Cleanup Level for Industrial Properties (2.0 mg/kg).¹

Four soil samples were collected at the Site in 1991 (Mod1, Mod2A, Mod2B and Mod3). Sample Mod1 was collected from a sandblast grit area near the southwest corner of the manufacturing building. The sample was analyzed for Priority Pollutant Metals and contained concentrations of arsenic (30 mg/kg) and cadmium (13 mg/kg), above their respective MTCA Method A Soil Cleanup Levels for Industrial Properties (20 and 2.0 mg/kg, respectively).

Samples Mod2A and Mod2B were collected from the existing ramp area (previously unpaved). The samples reportedly contained a "significant" amount of paint waste due to historical painting of boats in that area. Sample Mod2A was analyzed for Priority Pollutant Metals and contained concentrations of arsenic (46 mg/kg) and cadmium (24 mg/kg), above their respective MTCA Method A Soil Cleanup Levels for Industrial Properties. Elevated lead was also detected (450 mg/kg) below the applicable Method A cleanup level of 1,000 mg/kg. Sample Mod2B was analyzed for semivolatile organic compounds and contained a total cPAH concentration of 3.71 mg/kg, above the applicable MTCA cleanup level.

Sample Mod3 was collected from the northwest corner of the Site equipment storage area. The area reportedly contained fill material, described as "car fluff." The sample was analyzed and

¹ Based on the industrial zoning for the Site and previous notation in the Ecology files, the Site likely qualifies as an "Industrial Property" under MTCA.

found to contain an elevated polychlorinated biphenyls (PCBs) concentration of 9.2 mg/kg, below the applicable MTCA cleanup level of 10 mg/kg.

From 1989 to 1995, Modutech Marine, Inc., allowed Ecology staff to inspect the Site and incorporated Ecology's recommendations into the Site operations. These recommendations included: containing sandblast grit at the Site for off-site disposal, installing a berm around the hazardous waste storage area, removing paint waste from the ramp area, discontinuing boat painting operations in the ramp area, and installation of the wash water recycling system. Sandblast grit was also excavated from the Site in the areas identified on Figure 2. Test pitting was performed at the Site in 1993 and Ecology staff visually observed that the bulk of the grit material had been removed from the former swale area and along the embankment. RGI spoke with Ms. Joyce Mercuri, the Ecology manager at the time, who indicated that the material was visually discernable from the native materials. However, since Ecology's goal at the time was to remove sources of pollution from the Hylebos Waterway uplands, confirmation soil sampling was not requested following the removal at the Site. Ms. Mercuri indicated that confirmation sampling would be required in order to be compliant with MTCA.

On September 18, 2003, EPA entered into a formal consent decree agreement with the potentially responsible parties along the Hylebos Waterway (including the Site owners). Mr. Swindahl provided RGI with copies of three letters, dated from September to October of 2003, documenting that the Site owners (both the Swindahls and Modutech, Inc.) settled their liability for the CBNT with EPA. According to Ms. Mercuri and Mr. Marv Coleman of Ecology, the 2003 consent decree does not mitigate any liability under MTCA. A copy of the consent decree-related letters is provided in Appendix E.

Based on the available information, a release has been identified at the subject Site. Currently, the Site has not yet been listed as a State cleanup site by Ecology (CSCSL site). Arsenic, cadmium and cPAHs have been identified above applicable MTCA cleanup levels. Other potential contaminants of concern identified during the limited sampling at the Site include lead and PCBs. The bulk of the identified contaminants appears to have been removed from the Site. However, MTCA requires that sampling be performed to confirm that remedial efforts have been successful at the Site. The Site's noncompliance with Washington's MTCA Cleanup Regulation is considered a REC and/or BER at this time.

RCRA-CESQG

The subject Site is listed on the Resource Conservation and Recovery Act (RCRA) Conditionally Exempt Small Quantity Generator (CESQG) database. RGI reviewed the available RCRA files from Ecology. Hazardous wastes at the Site were listed as acetone, methyl ethyl ketone (MEK) and "paint wastes." Minor violations were noted in the database and in the Ecology files. Compliance was achieved shortly after each violation notice. The RCRA listing is not considered a REC for the Site at this time.

SPILLS

The subject Site is listed on EDR's SPILLS database (analogous to the ERTS database). The database listing indicates that approximately 200 gallons of diesel fuel was spilled at the Site, resulting in a release to surface waters (the Hylebos Waterway) in 1999. No records were found at Ecology pertaining to the SPILLS listing. The Site is not currently listed on the applicable cleanup database (CSCSL) and no other enforcement action has been found associated with the former spill. Due to the nature of the off-site release (release to the Hylebos Waterway) and lack of regulatory follow-up over the last decade, this is unlikely to pose a significant risk to Site soil and/or groundwater quality at this time.

6.2 ADJOINING/NEARBY PROPERTIES

6.2.1 ADJOINING AND NEARBY PROPERTIES

Pump Station 4103 ROW

The northwest-adjointing property is currently listed on Ecology's Confirmed and Suspected Contaminated Sites List (CSCSL) for groundwater contamination identified near a right-of-way pump station. The extent of the petroleum-affected groundwater is unknown at this time. The property has not yet received a Site Hazard Assessment and been ranked. Based on the regulatory status and proximity of the property to the subject Site, this is considered a REC for the Site at this time.

WA DOT Pit B25

According to the EDR database, a UST was encountered while the Washington State Department of Transportation (DOT) was excavating and grading the hillside located along Norpoint Way Northeast, northeast of the Site. The property is not listed on any of the researched site cleanup databases (e.g. LUST, CSCSL, etc.). Based on the regulatory status and the distance from the subject Site (across Marine View Drive and Norpoint Way Northeast), this is not considered a significant risk to Site soil and/or groundwater quality at this time.

6.2.2 OTHER OFF-SITE PROPERTIES

Several other properties within one mile of the Site were listed on various Federal and/or State environmental regulatory databases. However, due to the nature of the database listings, media affected, property status, distance from the Site and/or assumed groundwater flow direction relative to the Site, these off-Site properties are not considered a risk to Site soil and/or groundwater quality.

7 Historical Records Review

RGI's Site and adjoining properties historical records review included a review of the following:

- Current & Historical Pierce County Tax Assessor Records.
- Historical City of Tacoma Building Plans and Permits.
- Aerial Photographs dated 1931, 1940, 1950, 1961, 1965, 1973, 1989, 1990, 1995, 1996, 1998, 2001, 2002, 2005 and 2006.
- Polk reverse city directories dated 1933, 1937, 1942, 1947, 1951, 1957, 1962, 1967, 1972, 1977, 1982, 1986, 1992, 2001 and 2008.
- Sanborn Fire Insurance map dated 1950.
- Inspection reports from Pierce County and State regulatory agencies.
- Interviews with knowledgeable persons.

RGI also attempted to review historical Kroll and Metsker real estate plat maps. However, coverage was not available for the Site. Based on our review of available sources, the lack of information from these sources is not likely to significantly affect the conclusions of this report. Historical documentation is provided in Appendix D. Historical aerial photographs dated 1961, 1989 and 2001 are included in Appendix D as Figures D-1 through D-3.

7.1 SITE

The earliest listed occupant of the Site was a single-family residence from approximately the early 1930s until approximately 1960. The northern third of the Site may have also been occupied by small offices and/or parking areas for an adjoining logging operation during that time. Historical aerial photograph review suggests that a lumber mill building may have occupied the northern portion of the Site during the 1950s.

The Site was redeveloped with the existing manufacturing building in the mid-1960s. Marine Technical Services, a boat builder, operated on the Site until the existing occupant, Modutech Marine, Inc. occupied the Site in approximately 1984. The Site was converted from septic service (Figure 2) to sewer approximately around that time.

The remainder of the Site buildings were added in approximately the early 1980s. According to Ecology records, discussed above, the concrete pavement south of the manufacturing building and the wash water pump house were added in the early 1990s.

7.2 ADJOINING AND NEARBY PROPERTIES

7.2.1 NORTHEAST OF SITE (ACROSS MARINE VIEW DRIVE)

The property located northeast of the Site has historically been undeveloped and/or occupied by the landscaping between Marine View Drive and Norpoint Way Northeast since at least 1931.

7.2.2 SOUTHEAST OF SITE

The property located southeast of the Site was vacant prior to construction of a single-family residence in the mid-1930s. The property was redeveloped with the existing construction yard buildings and marina in approximately the early 1960s.

7.2.3 SOUTHWEST OF SITE

The Site has historically been bordered by the Hylebos waterway.

7.2.4 NORTHWEST OF SITE

The existing vacated right-of-way was occupied by a logging company from approximately the 1940s to the late 1960s. The right-of-way has been vacant since approximately the early 1970s.

8 Conclusions

RGI has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-05 of the Modutech Marine, Inc. property located at 2218 Marine View Drive, Tacoma, Washington. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report. This assessment has revealed no evidence of RECs in connection with the property except for the following:

- A hazardous release was previously identified on the Site in the form of sand blast grit. The grit was previously deposited in various locations throughout the Site. At Ecology request, the grit was excavated and disposed of off-Site. Visual observation was conducted by Site occupants and Ecology inspectors to determine that the bulk of the grit had been removed from the Site. However, no confirmatory soil or groundwater sampling has been performed. Contaminants of concern confirmed at the Site include arsenic, cadmium, lead, PCBs and carcinogenic PAHs. MTCA requires that sampling be performed to confirm that remedial efforts have been successful at the Site. The Site's noncompliance with Washington's MTCA Cleanup Regulation is a REC and/or BER for the Site.
- The Site has been occupied by a boat manufacturing facility since the mid-1960s. While hazardous materials and wastes appear to be currently handled in accordance with Ecology recommendations, historical chemical handling and/or waste disposal practices (particularly prior to the current ownership) are unknown. Chemicals used and wastes generated at the Site have likely historically included, but are not necessarily limited to: fiberglass resin, petroleum products, chlorinated and non-chlorinated solvents, and/or lead-based paints. Sampling would be necessary to determine whether any historical on-Site activities have adversely affected soil and/or groundwater quality.
- The northwest adjoining property is currently listed on Ecology's Confirmed and Suspected Contaminated Sites List (CSCSL) for groundwater contamination identified near a right-of-way pump station. The extent of the petroleum-affected groundwater is unknown at this time. Additional investigation would be necessary to determine if this off-Site release has adversely affected soil and/or groundwater quality at the subject Site.

9 References

- Environmental Data Resources (EDR). August 18, 2009. *The EDR Radius Map Report*.
- Pierce County Assessor. Undated. *Current Tax Assessor Records*.
- Snohomish-Island Libraries. Online Research Tools. 1950. *Sanborn Fire Insurance Map*.
- Swindahl, Carl. August 26 and September 8, 2009. *Personal Interviews*.
- Tacoma, City of. On-Line govME Interactive Database. 1931, 1940, 1950, 1973, 1990, 1996, 1998, 2001, 2002, 2005 and 2006. *Historical Aerial Photographs*.
- Troost, K.G., and Booth, D.B., in review. *Geologic map of the Tacoma North 7. 5-Minute Quadrangle, Washington, U. S. Geological Survey, Miscellaneous Field Investigation, Scale 1:24,000*.
- United States Geological Survey. 1994. *Tacoma North, Washington 7.5-Minute Topographic Map*.

University of Washington Allen Library. Special Collections. 1933, 1937, 1942, 1947, 1951, 1957, 1962, 1967, 1972, 1977, 1982, 1986, 1992, 2001 and 2008. *Historical Polk Reverse City Directories.*

University of Washington Suzzallo Library. 1961, 1965, 1973, 1989, 1995 and 2001. *Historical Aerial Photographs.*

Washington State Archives, Puget Sound Regional Office. Undated. *Historical Pierce County Tax Assessor Records.*

Washington State Archives, Southwest Regional Office. Undated. *Archived Department of Ecology Records.*

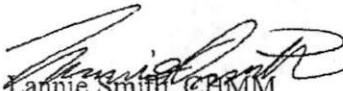
Washington State Department of Ecology. Undated. *Washington State Well Log Viewer.*

10 Signatures of Environmental Professionals

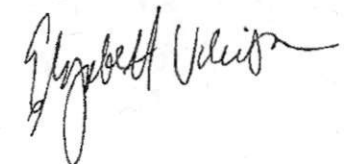
Any questions regarding the work within this report, the presentation of the information, or the interpretation of the data are welcome and should be referred to the undersigned. We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined by §312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Sincerely,

THE RILEY GROUP, INC.



Lannie Smith, CRMM
Senior Project Manager



Elizabeth Uchison, LG, LHG
Senior Hydrogeologist

Elizabeth Uchison, LG, LHG
Senior Hydrogeologist

Report Distribution: Ms. Carol Duris, Viking Bank (3 bound copies & 1 electronic pdf)

11.2 ELIZABETH UCHISON, L.G., L.H.G., SENIOR HYDROGEOLOGIST

Education

B.S. Geology, Michigan State University, East Lansing, Michigan, 1993

M.S. Environmental Science, Northeastern Illinois University, Chicago, Illinois, 2003

Special Training and Certifications

40 hour Hazardous Waste Operations and Emergency Response (HAZWOPER) – 1994

Illinois State Licensed Professional Geologist (License #196-001101)

Washington State Licensed Geologist and Hydrogeologist (License #2494)

Washington State Site Assessor, 2004

Professional Experience

Ms. Uchison has over fifteen years of experience in environmental regulatory compliance and assessments. Ms. Uchison's experience includes performing Phase I and Phase II site assessments, underground storage tank site assessments, soil and groundwater investigations, directing small and large-scale remedial excavation projects, environmental compliance audits, and waste management consulting both within the private and government sectors.

Representative Project Experience

Various Banks and Lending Institutions – Performing Phase I environmental site assessments and compliance audits for several properties throughout the Midwest.

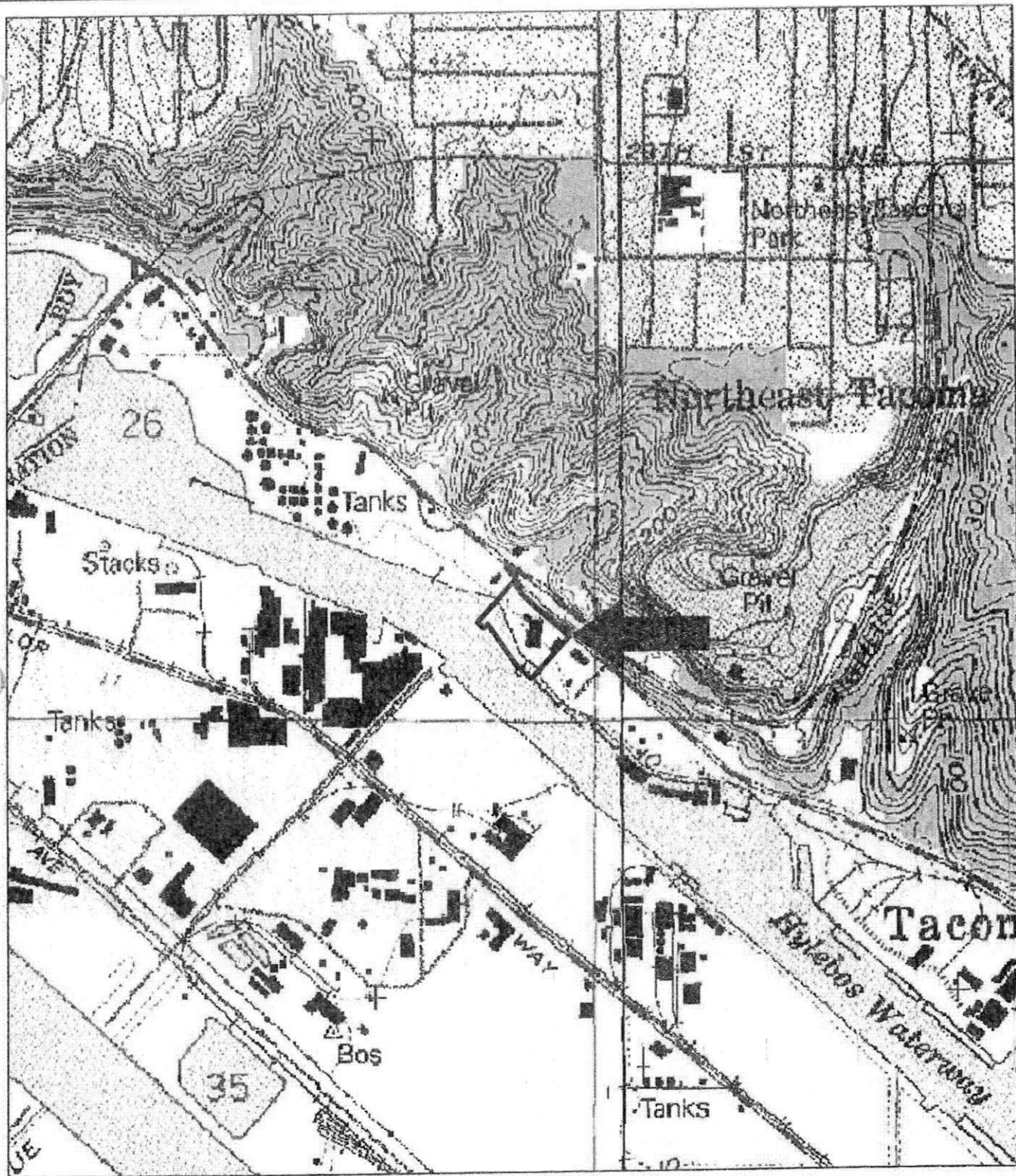
Retail Drycleaners – Conducting Phase I environmental site assessment, Phase II subsurface investigation, and remediation activities at an active retail drycleaners property.

Major Airline Carrier – Performing subsurface soil investigation as well as providing environmental oversight of large-scale remedial excavations in conjunction with major project site redevelopment.

Major Retail Property Developer – Performing subsurface soil and groundwater investigation for the purpose of achieving site closure through the development of site-specific, risk-based cleanup levels.

Various Private Sector Corporations – Performing Phase II soil and groundwater sampling for properties involved in transfers of ownership.

Major Oil Company – Conducting environmental compliance auditing, data room review, and financial liability assessment for various locations across the world in conjunction with an equity transfer transaction.



USGS, 1994, Tacoma North, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=1000'

0 500 1000 2000



The Riley Group, Inc.

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University Place, Washington 98466
Phone: 253.565.0552 • Fax: 253.460.2981

Modutech Marine, Inc.

Figure 1

Project Number

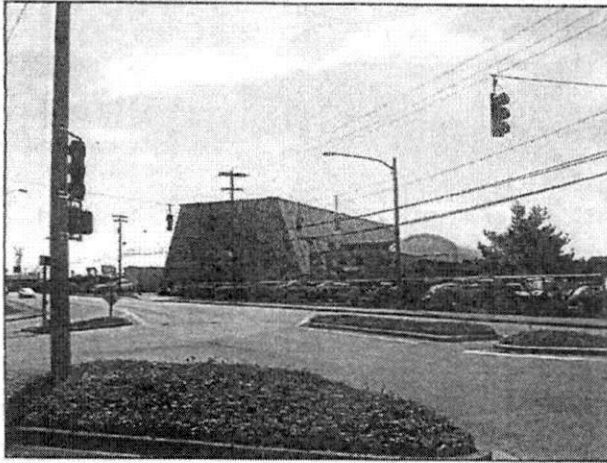
2009-236

Site Vicinity Map

Date Drawn:

09/11/09

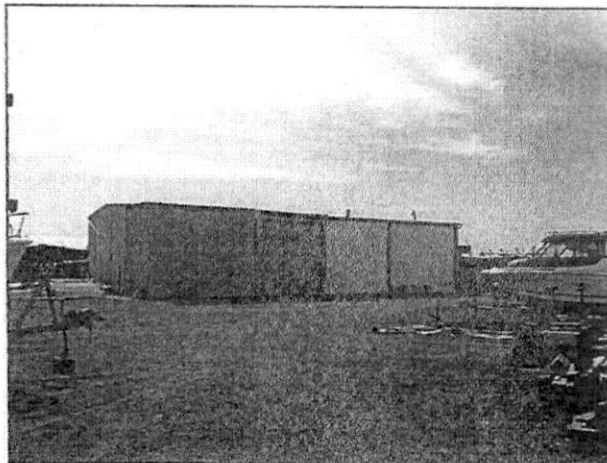
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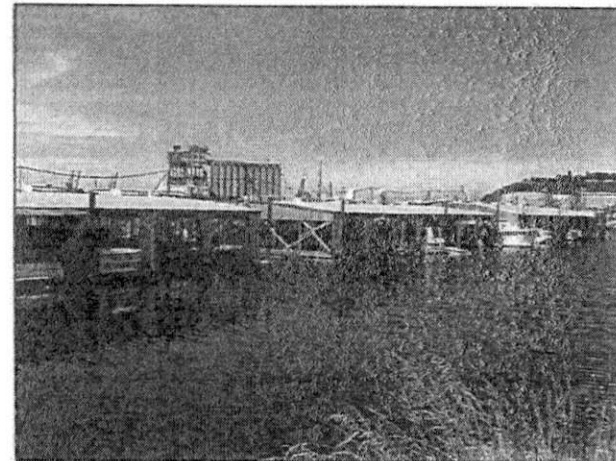
Photograph 1: View of Site, facing south.



Photograph 2: View of Site, facing west.



Photograph 3: View of Site spray shop, facing southeast.



Photograph 4: View of Site docks, facing northwest.



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Modutech Marine, Inc.

Figure A-1

Project Number

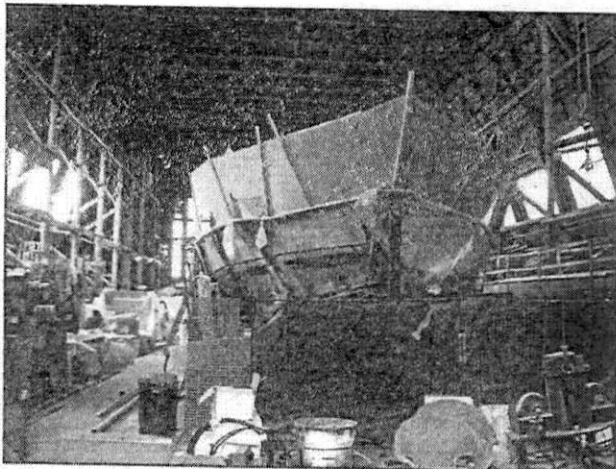
2009-236

Site Photographs

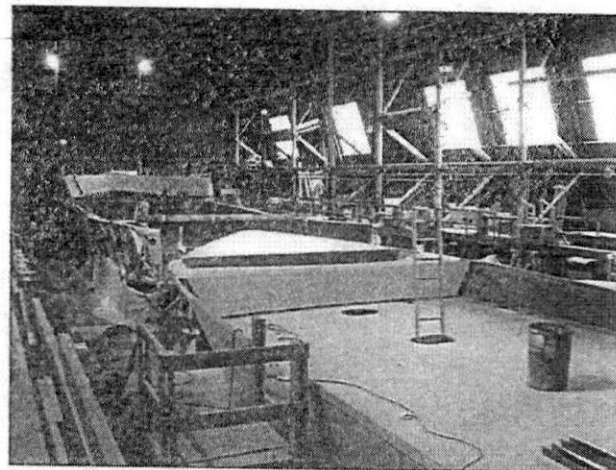
Date Drawn:

09/11/09

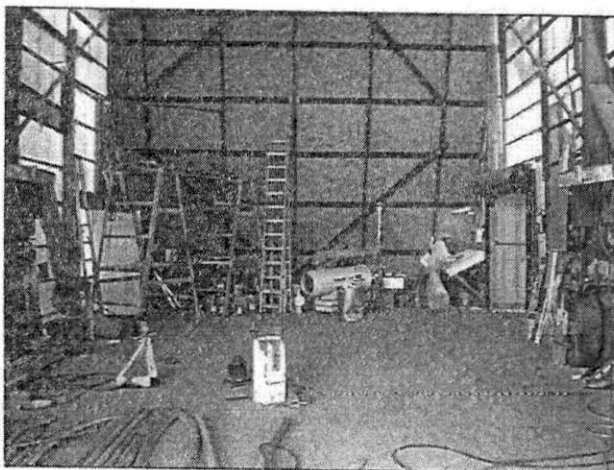
Address: 2218 Marine View Drive, Tacoma, Washington



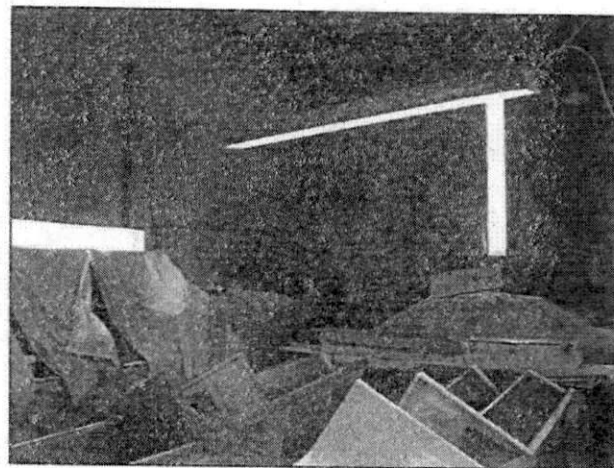
Photograph 5: View of manufacturing building interior, facing southwest.



Photograph 6: View of manufacturing building interior, facing northeast.



Photograph 7: View of workshop interior.



Photograph 8: View of spray shop interior.



The Riley Group, Inc.

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Phone: 253.565.0552 ♦ Fax: 253.460.2981

Modutech Marine, Inc.

Figure A-2

Project Number

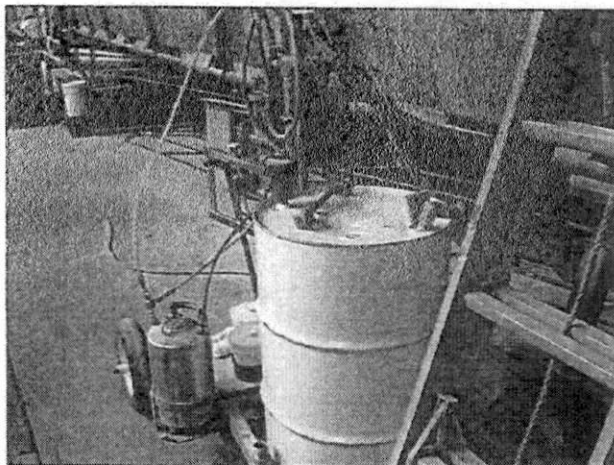
2009-236

Site Photographs

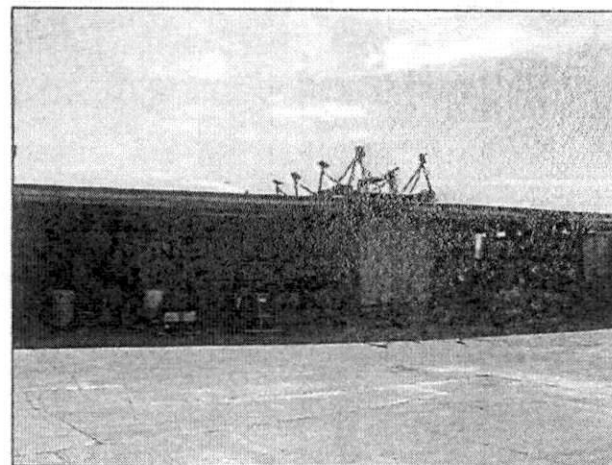
Date Drawn:

09/11/09

Address: 2218 Marine View Drive, Tacoma, Washington



Photograph 9: Resin applicator.



Photograph 10: View of covered storage area, facing south.



Photograph 11: Resin and biodiesel storage drums.



Photograph 12: View of hazardous materials storage locker.



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Modutech Marine, Inc.

Figure A-3

Project Number

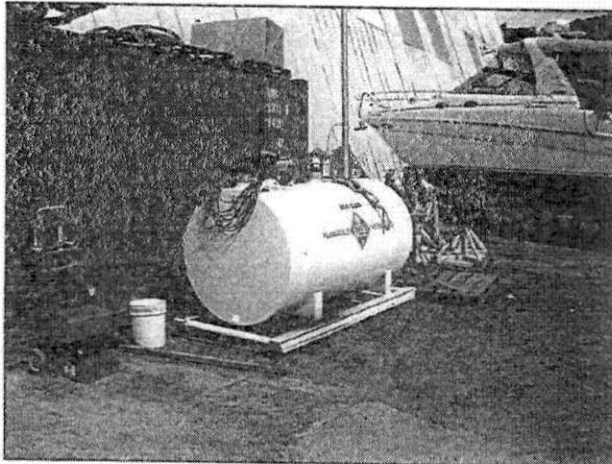
2009-236

Site Photographs

Date Drawn:

09/11/09

Address: 2218 Marine View Drive, Tacoma, Washington



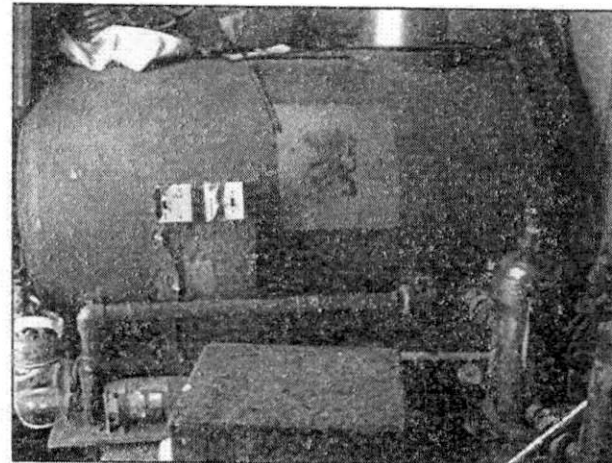
Photograph 17: View of diesel AST, facing northwest.



Photograph 18: View of covered waste oil storage area.



Photograph 19: Close-up view of waste oil storage area. Note secondary containment.



Photograph 20: Wash water recycle station.



The Riley Group, Inc.

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Modutech Marine, Inc.

Figure A-5

Project Number

2009-236

Site Photographs

Date Drawn:

09/11/09

Address: 2218 Marine View Drive, Tacoma, Washington

THE RILEY GROUP, INC.

ASTM DEFINITIONS OF TERMS

Asbestos containing material (ACM)

Any material or product that contains more than 1% asbestos.

Adjoining properties

Any real property or properties the border of which is contiguous or partially contiguous with that of the property or that would be contiguous or partially contiguous but for a street, road, or other public thoroughfare separating them.

Business Environmental Risks (BERs)

Risks that can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated pursuant to ASTM standards.

Drum

A container (typically, but not necessarily, holding 55 gal (208L) of liquid) that may be used to store hazardous substances or petroleum products.

Hazardous substance

A substance defined as a hazardous substance pursuant to CERCLA 42 USC 9601 (14), as interpreted by EPA regulations and the courts; (A) any substance designated pursuant to section 1321 (b)(2)(A) of Title 33, (B) any elements, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC 6921) (but not including any waste the regulation of which under Solid Waste Disposal Act (42 USC 6901 et seq.) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 USC 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise under specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)." (See Appendix XI)

Landfill

A place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term solid waste disposal site and is also known as the garbage dump, trash dump, or similar term.

Lead-Based paint

Paint with lead levels equal to or exceeding 1.0 milligram per square centimeter (mg/cm²) or 0.5% by weight.

Lead-Containing paint

Paint containing any detectable levels of lead.

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THE RILEY GROUP, INC.**LUST Sites**

State lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA give EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.

Property

The real property that is the subject of the environmental site assessment described in this practice. Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

Recognized Environmental Conditions (RECs)

The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Underground Storage Tank (UST)

Any tank, including underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground.

ACRONYMS

EPA-United States Environmental Protection Agency

LBP-Lead-Based Paint

LCP-Lead-Containing Paint

LUST-Leaking Underground Storage Tank

MTCA-Model Toxics Control Act

PCBs-Polychlorinated Biphenyls

PCS-Petroleum-Contaminated Soil

UST-Underground Storage Tank

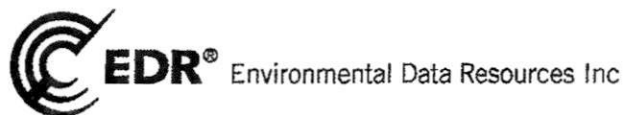
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Tel (425) 415-0551 • Fax (425) 415-0311

2218 Marine View Drive
2218 Marine View Drive
Tacoma, WA 98422

Inquiry Number: 2566161.1s
August 18, 2009

The EDR Radius Map™ Report



440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2218 MARINE VIEW DRIVE
TACOMA, WA 98422

COORDINATES

Latitude (North): 47.274100 - 47° 16' 26.8"
Longitude (West): 122.379100 - 122° 22' 44.8"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 546963.7
UTM Y (Meters): 5235593.0
Elevation: 17 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 47122-C4 TACOMA NORTH, WA
Most Recent Revision: 1994

East Map: 47122-C3 POVERTY BAY, WA
Most Recent Revision: 1994

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
UNKNOWN 2218 MARINE VIEW DR TACOMA, WA	SPILLS	N/A
MODUTECH MARINE 2218 MARINE VIEW DR TACOMA (WRIA 10), WA	NPDES	N/A
MODUTECH MARINE INC 2218 MARINE VIEW DR NE TACOMA, WA 98422	FINDS ALLSITES MANIFEST RCRA-CESQG	WAD988479846

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

AST..... Aboveground Storage Tank Locations
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODL..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
SWTIRE..... Solid Waste Tire Facilities
INDIAN ODL..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs

EXECUTIVE SUMMARY

CDL..... Clandestine Drug Lab Contaminated Site List
HIST CDL..... List of Sites Contaminated by Clandestine Drug Labs

Local Land Records

LIENS 2..... CERCLA Lien Information
LUCIS..... Land Use Control Information System

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
UMTRA..... Uranium Mill Tailings Sites
MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
ICIS..... Integrated Compliance Information System
PADS..... PCB Activity Database System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
RAATS..... RCRA Administrative Action Tracking System
UIC..... Underground Injection Wells Listing
DRYCLEANERS..... Drycleaner List
AIRS..... Washington Emissions Data System
Inactive Drycleaners..... Inactive Drycleaners
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants..... EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 02/02/2009 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
US EPA COMMENCEMENT BAY NEARSHORE	TIDEFLATS INDUSTRIAL SE	0 - 1/8 (0.000 mi.)	0	17

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 01/09/2009 has revealed that there are 5 CERCLIS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
US EPA COMMENCEMENT BAY NEARSHORE	TIDEFLATS INDUSTRIAL SE	0 - 1/8 (0.000 mi.)	0	17
CASCADE TIMBER LOG SORTING YARD	2502 MARINE VIEW DRIVE	NNW 0 - 1/8 (0.110 mi.)	C10	74
SOUND REFINING INC	2628 MARINE VIEW DRIVE	NW 1/4 - 1/2 (0.443 mi.)	K45	212
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MURRAY PACIFIC LOG SORTING YARD	TAYLOR WAY & LINCOLN AV	SW 1/4 - 1/2 (0.294 mi.)	D14	77
THERMAFIBER LLC	2301 TAYLOR WAY	SSW 1/4 - 1/2 (0.333 mi.)	H32	129

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 12/03/2007 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SSA CONTAINERS INC	3320 LINCOLN AVE	SW 1/4 - 1/2 (0.349 mi.)	I36	145

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/25/2009 has revealed that there are 5 CORRACTS sites within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SSA CONTAINERS INC	3320 LINCOLN AVE	SW 1/4 - 1/2 (0.349 mi.)	I36	145
CLEAN CARE CORP	1510 TAYLOR WY	W 1/2 - 1 (0.606 mi.)	L53	269
PETROLEUM RECLAIMING SERVICE I	3003 TAYLOR WAY	SSE 1/2 - 1 (0.652 mi.)	56	310
SOL PRO INC	1825 ALEXANDER AVE	SW 1/2 - 1 (0.658 mi.)	M57	331
BURLINGTON ENVIRONMENTAL LLC T	1701 E ALEXANDER AVE	WSW 1/2 - 1 (0.672 mi.)	N59	398

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 11/12/2008 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SSA CONTAINERS INC	3320 LINCOLN AVE	SW 1/4 - 1/2 (0.349 mi.)	I36	145

Federal Institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 03/31/2009 has revealed that there are 2 US ENG CONTROLS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
US EPA COMMENCEMENT BAY NEARSHOR	TIDEFLATS INDUSTRIAL SE	0 - 1/8 (0.000 mi.)	0	17
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SSA CONTAINERS INC	3320 LINCOLN AVE	SW 1/4 - 1/2 (0.349 mi.)	I36	145

EXECUTIVE SUMMARY

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 03/31/2009 has revealed that there are 2 US INST CONTROL sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
US EPA COMMENCEMENT BAY NEARSHORE TIDEFLATS INDUSTRIAL SE		0 - 1/8 (0.000 mi.)	0	17
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SSA CONTAINERS INC	3320 LINCOLN AVE	SW 1/4 - 1/2 (0.349 mi.)	136	145

State- and tribal - equivalent NPL

HSL: The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

A review of the HSL list, as provided by EDR, and dated 02/18/2009 has revealed that there are 4 HSL sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
1913 MARINE VIEW DR		ESE 1/4 - 1/2 (0.478 mi.)	49	233
OLINE STORAGE YARD		ENE 1/2 - 1 (0.698 mi.)	63	493
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PETROLEUM RECLAIMING SERVICE I	3003 TAYLOR WAY	SSE 1/2 - 1 (0.652 mi.)	56	310
BURLINGTON ENVIRONMENTAL LLC T		WSW 1/2 - 1 (0.677 mi.)	N60	475

State- and tribal - equivalent CERCLIS

CSCSL: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Ecology's Confirmed & Suspected Contaminated Sites List.

A review of the CSCSL list, as provided by EDR, and dated 05/12/2009 has revealed that there are 25 CSCSL sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PUMP STN 4103 ROW 2222 MARINE	ROW 2222 MARINE VIEW DR	NW 0 - 1/8 (0.048 mi.)	4	65
GENERAL METALS OF TACOMA	1902 MARINE VIEW DR	ESE 1/2 - 1 (0.538 mi.)	51	236
1913 MARINE VIEW DR	1913 MARINE VIEW DR	ESE 1/2 - 1 (0.684 mi.)	61	475
OLINE STORAGE YARD		ENE 1/2 - 1 (0.698 mi.)	63	493
BUSBY MARINE & TANK INC	1840 MARINE VIEW DR	ESE 1/2 - 1 (0.783 mi.)	64	496
FOXY CLEANERS	2222 SW 356TH ST	NE 1/2 - 1 (0.988 mi.)	70	535
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SUPERLON PLASTICS CO INC	2116 TAYLOR WAY	SW 1/4 - 1/2 (0.303 mi.)	18	92

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AOL EXPRESS INC	2000 TAYLOR WAY	WSW 1/4 - 1/2 (0.327 mi.)	23	101
THERMAFIBER LLC	2301 TAYLOR WAY	SSW 1/4 - 1/2 (0.333 mi.)	H32	129
SSA CONTAINERS INC	3320 LINCOLN AVE E	SW 1/4 - 1/2 (0.349 mi.)	I34	141
PUYALLUP LAND SETTLEMENT E	TAYLOR WAY	SSW 1/4 - 1/2 (0.350 mi.)	37	198
REICHOLD CHEM INC	2340 TAYLOR WAY	S 1/4 - 1/2 (0.357 mi.)	38	199
TAYLOR WAY & ALEXANDER AVE FIL	1500 BLOCK TAYLOR WAY E	WSW 1/2 - 1 (0.516 mi.)	50	234
ARKEMA INC	2901 TAYLOR WAY	SSE 1/2 - 1 (0.597 mi.)	52	252
CLEAN CARE CORP	1510 TAYLOR WY	W 1/2 - 1 (0.606 mi.)	L54	302
RHONE POULENC BASIC CHEMICAL	2545 LINCOLN AVE	SW 1/2 - 1 (0.637 mi.)	55	304
PETROLEUM RECLAIMING SERVICE I	3003 TAYLOR WAY	SSE 1/2 - 1 (0.652 mi.)	56	310
DON OLIVE LANDFILL	1801 ALEXANDER AVE	SW 1/2 - 1 (0.660 mi.)	M58	393
BURLINGTON ENVIRONMENTAL LLC T	1701 E ALEXANDER AVE	WSW 1/2 - 1 (0.672 mi.)	N59	398
AIRO SERVICES INC	4110 11TH ST E	NW 1/2 - 1 (0.694 mi.)	62	478
GP GYPSUM CORP TACOMA PLANT	1240 ALEXANDER AVE	W 1/2 - 1 (0.822 mi.)	O65	498
GRAYMONT WESTERN US INC	1220 ALEXANDER AVE	W 1/2 - 1 (0.831 mi.)	O66	502
TACOMA PORT PARCEL 4	3533 E 11TH ST	W 1/2 - 1 (0.869 mi.)	67	526
NAVAL RESERVE CENTER TACOMA	1001 ALEXANDER AVE	W 1/2 - 1 (0.953 mi.)	68	529
PORT OF TACOMA	3400 TAYLOR WAY	SSE 1/2 - 1 (0.968 mi.)	69	531

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Ecology's Solid Waste Facilities Handbook.

A review of the SWF/LF list, as provided by EDR, and dated 06/29/2009 has revealed that there are 2 SWF/LF sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SOUND REFINING	2628 MARINE VIEW DR	NW 1/4 - 1/2 (0.443 mi.)	K46	230
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FULL CONTAINER RECOVERY	3403 LINCOLN AVE	SW 1/4 - 1/2 (0.318 mi.)	F21	100

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Ecology's Leaking Underground Storage Tanks Site List.

A review of the LUST list, as provided by EDR, and dated 06/09/2009 has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
YARD 1	3502 LINCOLN AVENUE EAS	SW 1/4 - 1/2 (0.294 mi.)	D15	81
THERMAFIBER LLC/USG INTERIORS	2301 TAYLOR WAY	SSW 1/4 - 1/2 (0.333 mi.)	H31	128
SSA CONTAINERS INC	3320 LINCOLN AVE	SW 1/4 - 1/2 (0.349 mi.)	I36	145
CENEX AG INC	1801 TAYLOR WAY	WSW 1/4 - 1/2 (0.428 mi.)	J44	211

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Ecology's Statewide UST Site/Tank Report.

A review of the UST list, as provided by EDR, and dated 06/09/2009 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WA DOT PIT B25	102 NORPOINT WAY SITE T	NNE 0 - 1/8 (0.069 mi.)	5	66

State and tribal institutional control / engineering control registries

INST CONTROL: Sites that have institutional controls.

A review of the INST CONTROL list, as provided by EDR, and dated 06/03/2009 has revealed that there are 2 INST CONTROL sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
EDMAN CO SIDE 1 MARINE VIEW DR	2502 MARINE VIEW DR SW	NW 1/4 - 1/2 (0.330 mi.)	G26	110
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
THERMAFIBER LLC	2301 TAYLOR WAY	SSW 1/4 - 1/2 (0.333 mi.)	H32	129

State and tribal voluntary cleanup sites

VCP: Sites that have entered either the Voluntary Cleanup Program or its predecessor Independent Remedial Action Program.

A review of the VCP list, as provided by EDR, and dated 06/11/2009 has revealed that there are 2 VCP sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
RW INVESTMENTS LINCOLN AVE	3376 LINCOLN AVE	SW 1/4 - 1/2 (0.329 mi.)	F24	107
FIELDS CORP	2240 TAYLOR WAY	SSW 1/4 - 1/2 (0.330 mi.)	H27	112

ICR: These are remedial action reports Ecology has received from either the owner or operator of the site. These actions have been conducted without department oversight or approval and are not under an order or decree.

A review of the ICR list, as provided by EDR, and dated 12/01/2002 has revealed that there are 4 ICR sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DON OLIN AUTOMOBILE SHREDDER	2150 MARINE VIEW DR.	ESE 0 - 1/8 (0.122 mi.)	11	74
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AOL EXPRESS INC	2000 TAYLOR WAY	WSW 1/4 - 1/2 (0.327 mi.)	23	101

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
THERMAFIBER LLC/USG INTERIORS	2301 TAYLOR WAY	SSW 1/4 - 1/2 (0.333 mi.)	H31	128
GENEX FEED PLANT	1801 TAYLOR WAY	WSW 1/4 - 1/2 (0.428 mi.)	J41	204

State and tribal Brownfields sites

BROWNFIELDS: A listing of brownfields sites included in the Confirmed & Suspected Sites Listing. Brownfields are abandoned, idle or underused commercial or industrial properties, where the expansion or redevelopment is hindered by real or perceived contamination. Brownfields vary in size, location, age, and past use -- they can be anything from a five-hundred acre automobile assembly plant to a small, abandoned corner gas station.

A review of the BROWNFIELDS list, as provided by EDR, and dated 05/12/2009 has revealed that there are 2 BROWNFIELDS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
1913 MARINE VIEW DR		ESE 1/4 - 1/2 (0.478 mi.)	49	233
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
REICHOLD CHEM INC	2340 TAYLOR WAY	S 1/4 - 1/2 (0.357 mi.)	38	199

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

ALLSITES: Information on facilities and sites of interest to the Department of Ecology.

A review of the ALLSITES list, as provided by EDR, and dated 05/28/2009 has revealed that there are 34 ALLSITES sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WA DOT PIT B25	102 NORPOINT WAY SITE T	NNE 0 - 1/8 (0.069 mi.)	5	66
SEAWAY TOWING & SALVAGE INC RE	2228 MARINE VIEW DR	NNW 0 - 1/8 (0.073 mi.)	B6	70
JTC INC	2228 MARINE VIEW DR	NNW 0 - 1/8 (0.073 mi.)	B7	72
SOUND ROCK	2224 MARINE VIEW DR	NNW 0 - 1/8 (0.075 mi.)	B8	72
HATHAWAY EXCAVATING CO	2408 MARINE VIEW DR	NNW 0 - 1/8 (0.102 mi.)	C9	73
DON OLIVE AUTO FLUFF	2120 MARINE VIEW DR	ESE 1/8 - 1/4 (0.172 mi.)	12	75
TACOMA PORT MARINE VW DR	802 MARINE VIEW DR	SE 1/8 - 1/4 (0.211 mi.)	13	76
EDMAN CO SIDE 1 MARINE VIEW DR	2502 MARINE VIEW DR SW	NW 1/4 - 1/2 (0.330 mi.)	G25	109
HYLEBOS MARINA STORAGE YARD	2000 MARINE VIEW DR	SE 1/4 - 1/2 (0.377 mi.)	39	203
BEN KOROVIK	5305 25TH ST NE	NNE 1/4 - 1/2 (0.390 mi.)	40	204
SOUND REFINING INC	2628 MARINE VIEW DRIVE	NW 1/4 - 1/2 (0.443 mi.)	K45	212
1913 MARINE VIEW DR		ESE 1/4 - 1/2 (0.478 mi.)	49	233
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MURRAY PACIFIC LOG SORTING YAR	TAYLOR WAY & LINCOLN AV	SW 1/4 - 1/2 (0.294 mi.)	D14	77
BUFFELEN WOODWORKING CO	1901 TAYLOR WAY	WSW 1/4 - 1/2 (0.298 mi.)	E16	82
SUPERLON PLASTICS CO INC	2116 TAYLOR WAY	SW 1/4 - 1/2 (0.303 mi.)	18	92

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
BURLINGTON ENVIRONMENTAL INC S	CORNER OF TAYLOR & LINC	SW 1/4 - 1/2 (0.308 mi.)	D19	95
VISADOR CO TACOMA DIV	2150 TAYLOR WAY	SSW 1/4 - 1/2 (0.313 mi.)	20	96
FULL CONTAINER RECOVERY	3403 LINCOLN AVE	SW 1/4 - 1/2 (0.318 mi.)	F21	100
BELCO FOREST PRODUCTS	3401 LINCOLN AVE	SW 1/4 - 1/2 (0.319 mi.)	F22	100
AOL EXPRESS INC	2000 TAYLOR WAY	WSW 1/4 - 1/2 (0.327 mi.)	23	101
RW INVESTMENTS LINCOLN AVE	3376 LINCOLN AVE	SW 1/4 - 1/2 (0.329 mi.)	F24	107
GARDNER FIELDS INC	2240 TAYLOR WAY	SSW 1/4 - 1/2 (0.330 mi.)	H28	113
FIELDS CORP	2240 TAYLOR WAY	SSW 1/4 - 1/2 (0.330 mi.)	H30	115
THERMAFIBER LLC	2301 TAYLOR WAY	SSW 1/4 - 1/2 (0.333 mi.)	H32	129
TRENDWEST INC	3403 LINCOLN AVE STE H	SW 1/4 - 1/2 (0.334 mi.)	F33	138
SSA CONTAINERS INC	3320 LINCOLN AVE E	SW 1/4 - 1/2 (0.349 mi.)	I35	143
SSA CONTAINERS INC	3320 LINCOLN AVE	SW 1/4 - 1/2 (0.349 mi.)	I36	145
PUYALLUP LAND SETTLEMENT E	TAYLOR WAY	SSW 1/4 - 1/2 (0.350 mi.)	37	198
REICHOLD CHEM INC	2340 TAYLOR WAY	S 1/4 - 1/2 (0.357 mi.)	38	199
CENEX FEED PLANT	1801 TAYLOR WAY	WSW 1/4 - 1/2 (0.428 mi.)	J41	204
JAKES PALLET REPAIR & SALES	1801 TAYLOR WAY	WSW 1/4 - 1/2 (0.428 mi.)	J42	206
TRI PAK 3	1801 TAYLOR WAY	WSW 1/4 - 1/2 (0.428 mi.)	J43	210
GLACIER PACKAGING	3405 LINCOLN AVE	SW 1/4 - 1/2 (0.473 mi.)	47	231
HYLEBOES MARINE SCRAP YARD	1940 MARINE VIEW DR	SE 1/4 - 1/2 (0.477 mi.)	48	232

CSCSL NFA: The data set contains information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action (NFA) determination. Because it is necessary to maintain historical records of sites that have been investigated and cleaned up, sites are not deleted from the database when cleanup activities are completed. Instead a No Further Action code is entered based upon the type of NFA determination the site received.

A review of the CSCSL NFA list, as provided by EDR, and dated 05/12/2009 has revealed that there are 8 CSCSL NFA sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DON OLIVE AUTO FLUFF	2120 MARINE VIEW DR	ESE 1/8 - 1/4 (0.172 mi.)	12	75
EDMAN CO SIDE 1 MARINE VIEW DR	2502 MARINE VIEW DR SW	NW 1/4 - 1/2 (0.330 mi.)	G25	109

Lower Elevation	Address	Direction / Distance	Map ID	Page
MURRAY PACIFIC LOG SORTING YAR	TAYLOR WAY & LINCOLN AV	SW 1/4 - 1/2 (0.294 mi.)	D14	77
BUFFELEN WOODWORKING CO	1901 TAYLOR WAY	WSW 1/4 - 1/2 (0.298 mi.)	E17	92
VISADOR CO TACOMA DIV	2150 TAYLOR WAY	SSW 1/4 - 1/2 (0.313 mi.)	20	96
AOL EXPRESS INC	2000 TAYLOR WAY	WSW 1/4 - 1/2 (0.327 mi.)	23	101
RW INVESTMENTS LINCOLN AVE	3376 LINCOLN AVE	SW 1/4 - 1/2 (0.329 mi.)	F24	107
FIELDS CORP	2240 TAYLOR WAY	SSW 1/4 - 1/2 (0.330 mi.)	H29	115

Other Ascertainable Records

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 11/12/2008 has revealed that there

EXECUTIVE SUMMARY

are 4 RCRA-NonGen sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
US EPA COMMENCEMENT BAY NEARSHORE	TIDEFLATS INDUSTRIAL SE	0 - 1/8 (0.000 mi.)	0	17
WA DOT PIT B25	102 NORPOINT WAY SITE T	NNE 0 - 1/8 (0.069 mi.)	5	66
SEAWAY TOWING & SALVAGE INC RE	2228 MARINE VIEW DR	NNW 0 - 1/8 (0.073 mi.)	B6	70
TACOMA PORT MARINE VW DR	802 MARINE VIEW DR	SE 1/8 - 1/4 (0.211 mi.)	13	76

CONSENT: Major Legal settlements that establish responsibility and standards for cleanup at NPL (superfund) sites. Released periodically by U.S. District Courts after settlement by parties to litigation matters.

A review of the CONSENT list, as provided by EDR, and dated 01/27/2009 has revealed that there is 1 CONSENT site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
US EPA COMMENCEMENT BAY NEARSHORE	TIDEFLATS INDUSTRIAL SE	0 - 1/8 (0.000 mi.)	0	17

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 04/23/2009 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
US EPA COMMENCEMENT BAY NEARSHORE	TIDEFLATS INDUSTRIAL SE	0 - 1/8 (0.000 mi.)	0	17

INDIAN RESERV: This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

A review of the INDIAN RESERV list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 INDIAN RESERV site within approximately 1 mile of the target property.

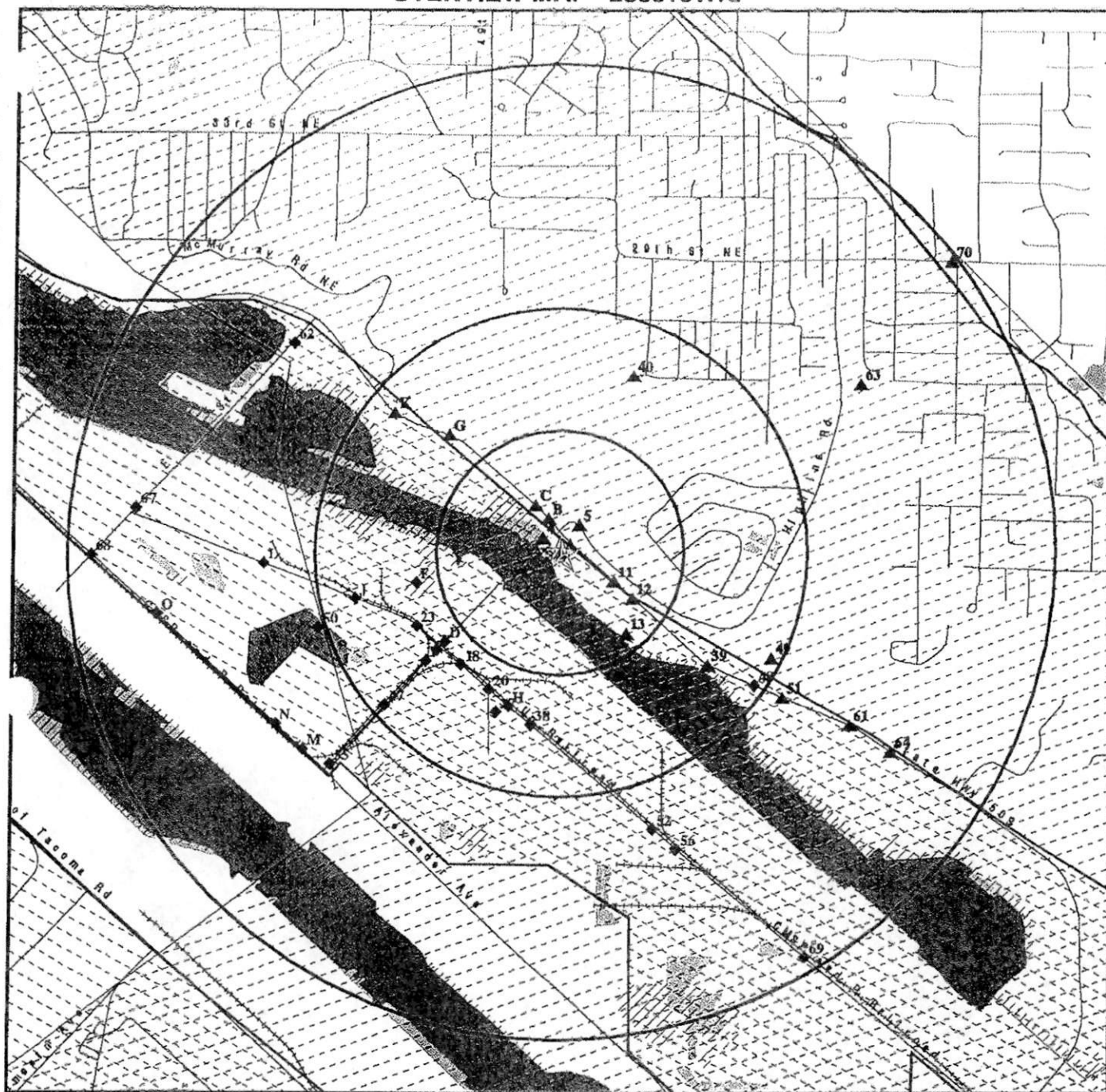
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PUYALLUP INDIAN RESERVATION		0 - 1/8 (0.000 mi.)	0	17

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Databaso(s)</u>
EVERGREEN PIERCE COUNTY TERMINAL	ALLSITES, MANIFEST
PORTAC INC TACOMA	CSCSL, ALLSITES, MANIFEST
AUTO WAREHOUSING CO	ALLSITES
PIERCE COUNTY TERMINAL PORT OF TAC	ALLSITES
BAY CITY MARINE INC	ALLSITES
WA EGY 4500 BLOCK MARINE VIEW DR S	RCRA-LQG, ALLSITES
304TH STREET LANDFILL	FINDS, ALLSITES
EMERALD RECYCLING LINCOLN AVE	FINDS, ALLSITES, MANIFEST
TRUCK RAIL HANDLING INC TRANSFER F	ALLSITES
HORIZON LINES	SPILLS, ALLSITES, MANIFEST
TACOMA MARINE VIEW DRIVE	FINDS, ALLSITES, RCRA-NonGen
PUYALLUP LAND SETTLEMENT C	CSCSL NFA, ALLSITES
PUYALLUP LAND SETTLEMENT D	CSCSL NFA, ALLSITES
SIFCO SELECTIVE PLATING TACOMA FAC	FINDS, ALLSITES, RCRA-CESQG
NORTHSTAR CHEMICAL INC	FINDS, ALLSITES, MANIFEST
SCHNITZER STEEL INDUSTRIES TAC	ALLSITES
PUMP STN 4103 ROW 2222 MARINE VIEW	FINDS, ALLSITES
TACOMA CITY THEA FOSS WATERWAY	ALLSITES, MANIFEST, RCRA-NonGen
UNION PACIFIC RAILROAD TUNNEL	CERCLIS, FINDS
ANDERSON ISLAND COLLECTION EVENT	SWF/LF
MCCHORD INERT WASTE LANDFILL	SWF/LF
ALASKA MARINE LINE	SPILLS
MARINE TERMINALS CORP	SPILLS
PORTAC INC TACOMA	UST
MARINE TERMINAL CORPORATION	RCRA-SQG
EMERALD RECYCLING LINCOLN AVE	RCRA-SQG
HORIZON LINES	RCRA-SQG
NORTHSTAR CHEMICAL INC	RCRA-LQG
PIERCE COUNTY TERMINAL PORT OF TAC	RCRA-NonGen
4700 BLOCK OF MARINE VIEW DR.	ERNS
MARINE TERMINAL	ERNS
5328 MARINEVIEW DRIVE NE	ERNS
RAIN VIEW DRIVE NEAR THE CLIFF HOU	ERNS
4500 BLOCK OF MARINE VIEW DR SPILL	FINDS
HYLAND MARINE	ICIS
PORTAC INC TACOMA	VCP






OVERVIEW MAP - 2566161.1s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- ▨ National Priority List Sites
- ▨ Dept. Defense Sites
- ▨ Indian Reservations BIA
- ▨ County Boundary
- ▨ Oil & Gas pipelines
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- ▨ National Wetland Inventory

SITE NAME: 2218 Marine View Drive
 ADDRESS: 2218 Marine View Drive
 Tacoma WA 98422
 LAT/LONG: 47.2741 / 122.3791

CLIENT: The Riley Group, Inc.
 CONTACT: Anna Jordan
 INQUIRY #: 2566161.1s
 DATE: August 18, 2009 11:27 am

-  Indian Reservations BIA
 Oil & Gas pipelines
 100-year flood zone
 500-year flood zone
 National Wetland Inventory

CLIENT: The Riley Group, Inc.
CONTACT: Anna Jordan
INQUIRY #: 2566161.1s
DATE: August 18, 2009 11:27 am

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>STANDARD ENVIRONMENTAL RECORDS</u>								
<i>Federal NPL site list</i>								
NPL		1.000	1	0	0	0	NR	1
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL		1.000	0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS		0.500	2	0	3	NR	NR	5
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP		0.500	0	0	1	NR	NR	1
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS		1.000	0	0	1	4	NR	5
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF		0.500	0	0	1	NR	NR	1
<i>Federal RCRA generators list</i>								
RCRA-LQG		0.250	0	0	NR	NR	NR	0
RCRA-SQG		0.250	0	0	NR	NR	NR	0
RCRA-CESQG	X	0.250	0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS		0.500	1	0	1	NR	NR	2
US INST CONTROL		0.500	1	0	1	NR	NR	2
<i>Federal ERNS list</i>								
ERNS		TP	NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
HSL		1.000	0	0	1	3	NR	4
<i>State- and tribal - equivalent CERCLIS</i>								
COSL		1.000	1	0	6	18	NR	25
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF		0.500	0	0	2	NR	NR	2
<i>State and tribal leaking storage tank lists</i>								
LUST		0.500	0	0	4	NR	NR	4
INDIAN LUST		0.500	0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
UST		0.250	1	0	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AST		0.250	0	0	NR	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<i>State and tribal institutional control / engineering control registries</i>								
INST CONTROL		0.500	0	0	2	NR	NR	2
<i>State and tribal voluntary cleanup sites</i>								
VCP		0.500	0	0	2	NR	NR	2
ICR		0.500	1	0	3	NR	NR	4
INDIAN VCP		0.500	0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS		0.500	0	0	2	NR	NR	2
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
ODI		0.500	0	0	0	NR	NR	0
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
SWTIRE		0.500	0	0	0	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US CDL		TP	NR	NR	NR	NR	NR	0
ALLSITES	X	0.500	5	2	27	NR	NR	34
CSCSL NFA		0.500	0	1	7	NR	NR	8
CDL		TP	NR	NR	NR	NR	NR	0
HIST CDL		TP	NR	NR	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
<i>Records of Emergency Release Reports</i>								
HMIRS		TP	NR	NR	NR	NR	NR	0
SPILLS	X	TP	NR	NR	NR	NR	NR	0
<i>Other Ascertainable Records</i>								
RCRA-NonGen		0.250	3	1	NR	NR	NR	4
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	1	0	0	0	NR	1
ROD		1.000	1	0	0	0	NR	1

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
UIC		TP	NR	NR	NR	NR	NR	0
MANIFEST	X	0.250	0	0	NR	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
NPDES	X	TP	NR	NR	NR	NR	NR	0
AIRS		TP	NR	NR	NR	NR	NR	0
Inactive Drycleaners		0.250	0	0	NR	NR	NR	0
INDIAN RESERV		1.000	1	0	0	0	NR	1
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	1.000	0	0	0	0	NR	0
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NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

A1 UNKNOWN
Target 2218 MARINE VIEW DR
Property TACOMA, WA

SPILLS S107476453
N/A

Site 1 of 3 in cluster A

Actual:
17 ft.

SPILLS:
edr_fstat: WA
edr_fzip: Not reported
edr_fcity: PIERCE
edr_zip: 98422-4111
Facility ID: 504431
Medium: SURFACE WATER-MARINE
Material Desc: PETROLEUM - DIESEL FUEL
Material Qty: 200
Material Units: GALLON
Date Received: 6/2/1999
Contact Name: POSSIBLY A BOAT MFG BUSINESS

A2 MODUTECH MARINE
Target 2218 MARINE VIEW DR
Property TACOMA (WRIA 10), WA

NPDES S107862565
N/A

Site 2 of 3 in cluster A

Actual:
17 ft.

NPDES:
Facility Type: Boatyard
Latitude: 47.27417
Longitude: 122.37833
Contact Name: Carl Swindahl
Contact Phone Number: 253.272.9319
Permit ID: WAG031016C
Permit Issue Date: 11/2/2005
Facility Size: General Permits
Ecology Contact: Gary Bailey
WRIA: Puyallup-White
Permit Expiration Date: 11/2/2010
Effective Date: 12/2/2005

A3 MODUTECH MARINE INC
Target 2218 MARINE VIEW DR NE
Property TACOMA, WA 98422

FINDS 1004793984
ALLSITES WAD988479846
MANIFEST
RCRA-CESQG

Site 3 of 3 in cluster A

Actual:
17 ft.

FINDS:
Registry ID: 110005356300

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

ALLSITES:

Facility Id: 1631646
Latitude: 47.27399
Longitude: -122.37957
Geographic location identifier (alias facid): 1631646
Facility Name: Modutech Marine Inc
Latitude Decimal Degrees: 47.273989999999998
Longitude Decimal Degrees: -122.37957
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 1631646
Interaction (Aka Env Int) Type Code: WQGIND
Interaction (Aka Env Int) Description: General Permit Industrial
Interaction Status: A
Federal Program Identifier: WAG031016
Interaction Start Date: 3/1/1998
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 1631646
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: A
Federal Program Identifier: WAD988479846
Interaction Start Date: 10/29/1990
Interaction End Date: Not reported

WA MANIFEST:

Facility Site ID Number: 1631646
SWC Desc: Not reported
FWC Desc: Not reported
Form comm: Not reported
Data Year: Not reported
Permit by Rule: No
Treatment by Generator: No
Mixed radioactive waste: No
Importer of hazardous waste: No
Immediate recycler: No
Treatment/Storage/Disposal/Recycling Facility: No
Generator of dangerous fuel waste: No
Generator marketing to burner: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

"Other marketers (i.e., blender, distributor, etc.):" No
Utility boiler burner: No
Industry boiler burner: No
Industrial Furnace: No
Smelter delferal: No
Universal waste - batteries - generate: No
Universal waste - thermostats - generate: No
Universal waste - mercury - generate: No
Universal waste - lamps - generate: No
Universal waste - batteries - accumulate: No
Universal waste - thermostats - accumulate: No
Universal waste - mercury - accumulate: No
Universal waste - lamps - accumulate: No
Destination Facility for Universal Waste: No
Off-specification used oil burner - utility boiler: No
Off-specification used oil burner - industrial boiler: No
Off-specification used oil burner - industrial furnace: No
EPA ID: WAD988479846
Facility Address 2: Not reported
TAX REG NBR: 600033152
NAICS CD: 336612
BUSINESS TYPE: Boat Building
MAIL NAME: Modutech Marine Inc
MAIL ADDR LINE1: 2218 MARINE VIEW DR
MAIL CITY,ST,ZIP: TACOMA, WA 98422-4111
MAIL COUNTRY: UNITED STATES
LEGAL ORG NAME: Modutech Marine Inc
LEGAL ORG TYPE: Private
LEGAL ADDR LINE1: 2218 MARINE VIEW DR
LEGAL CITY,ST,ZIP: TACOMA, WA 98422-4111
LEGAL COUNTRY: UNITED STATES
LEGAL PHONE NBR: (253)272-9319
LEGAL EFFECTIVE DATE: 11/5/1990
LAND ORG NAME: Modutech Marine Inc.
LAND ORG TYPE: Private
LAND PERSON NAME: Carl Swindahl
LAND ADDR LINE1: 2218 MARINE VIEW DR
LAND CITY,ST,ZIP: TACOMA, WA 98422-4111
LAND COUNTRY: UNITED STATES
LAND PHONE NBR: (253)272-9319
OPERATOR ORG NAME: Modutech Marine Inc.
OPERATOR ORG TYPE: Private
OPERATOR ADDR LINE1: 2218 MARINE VIEW DR
OPERATOR CITY,ST,ZIP: TACOMA, WA 98422-4111
OPERATOR COUNTRY: UNITED STATES
OPERATOR PHONE NBR: (253)272-9319
OPERATOR EFFECTIVE DATE: 9/11/1996
SITE CONTACT NAME: Carl Swindahl
SITE CONTACT ADDR LINE1: 2218 MARINE VIEW DR
SITE CONTACT ZIP: TACOMA, WA 98422-4111
SITE CONTACT COUNTRY: UNITED STATES
SITE CONTACT PHONE NBR: (253)272-9319
SITE CONTACT EMAIL: Not reported
FORM CONTACT NAME: Bruce House
FORM CONTACT ADDR LINE1: 2218 MARINE VIEW DR
FORM CONTACT CITY,ST,ZIP: TACOMA, WA 98422-4111
FORM CONTACT COUNTRY: UNITED STATES

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

FORM CONTACT PHONE NBR: (253)272-9319
FORM CONTACT EMAIL: bhouse@nventure.com
GEN STATUS CD: SQG
MONTHLY GENERATION: No
BATCH GENERATION: Yes
ONE TIME GENERATION: No
TRANSPORTS OWN WASTE: No
TRANSPORTS OTHERS WASTE: No
RECYCLER ONSITE: No
TRANSFER FACILITY: No
OTHER EXEMPTION: Not reported
UW BATTERY GEN: No
USED OIL TRANSPORTER: No
USED OIL TRANSFER FACILITY: No
USED OIL PROCESSOR: No
USED OIL REREFINER: No
USED OIL FUEL MRKTR DIRECTS SHIPMENTS: No
USED OIL FUEL MRKTR MEETS SPECS: No

Facility Site ID Number: 1631646
SWC Desc: Not reported
FWC Desc: Not reported
Form comm: Not reported
Data Year: Not reported
Permit by Rule: FALSE
Treatment by Generator: FALSE
Mixed radioactive waste: FALSE
Importer of hazardous waste: FALSE
Immediate recycler: FALSE
Treatment/Storage/Disposal/Recycling Facility: FALSE
Generator of dangerous fuel waste: FALSE
Generator marketing to burner: FALSE
"Other marketers (i.e., blender, distributor, etc.):": FALSE
Utility boiler burner: FALSE
Industry boiler burner: FALSE
Industrial Furnace: FALSE
Smelter defferal: FALSE
Universal waste - batteries - generate: FALSE
Universal waste - thermostats - generate: FALSE
Universal waste - mercury - generate: FALSE
Universal waste - lamps - generate: FALSE
Universal waste - batteries - accumulate: FALSE
Universal waste - thermostats - accumulate: FALSE
Universal waste - mercury - accumulate: FALSE
Universal waste - lamps - accumulate: FALSE
Destination Facility for Universal Waste: FALSE
Off-specification used oil burner - utility boiler: FALSE
Off-specification used oil burner - industrial boiler: FALSE
Off-specification used oil burner - industrial furnace: FALSE
EPA ID: WAD988479846
Facility Address 2: Not reported
TAX REG NBR: 600033152
NAICS CD: 336612
BUSINESS TYPE: Boat Building
MAIL NAME: Modutech Marine Inc
MAIL ADDR LINE1: 2218 MARINE VIEW DR
MAIL CITY,ST,ZIP: TACOMA, WA 98422-4111

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

MAIL COUNTRY: UNITED STATES
LEGAL ORG NAME: Modutech Marine Inc
LEGAL ORG TYPE: Private
LEGAL ADDR LINE1: 2218 MARINE VIEW DR
LEGAL CITY,ST,ZIP: TACOMA, WA 98422-4111
LEGAL COUNTRY: UNITED STATES
LEGAL PHONE NBR: (253)272-9319
LEGAL EFFECTIVE DATE: 11/5/1990
LAND ORG NAME: Modutech Marine Inc.
LAND ORG TYPE: Private
LAND PERSON NAME: Carl Swindahl
LAND ADDR LINE1: 2218 MARINE VIEW DR
LAND CITY,ST,ZIP: TACOMA, WA 98422-4111
LAND COUNTRY: UNITED STATES
LAND PHONE NBR: (253)272-9319
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OPERATOR ORG TYPE: Private
OPERATOR ADDR LINE1: 2218 MARINE VIEW DR
OPERATOR CITY,ST,ZIP: TACOMA, WA 98422-4111
OPERATOR COUNTRY: UNITED STATES
OPERATOR PHONE NBR: (253)272-9319
OPERATOR EFFECTIVE DATE: 9/11/1996
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SITE CONTACT COUNTRY: UNITED STATES
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SITE CONTACT EMAIL: Not reported
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FORM CONTACT COUNTRY: UNITED STATES
FORM CONTACT PHONE NBR: (253)272-9319
FORM CONTACT EMAIL: bhouse@nventure.com
GEN STATUS CD: SQG
MONTHLY GENERATION: FALSE
BATCH GENERATION: FALSE
ONE TIME GENERATION: FALSE
TRANSPORTS OWN WASTE: FALSE
TRANSPORTS OTHRS WASTE: FALSE
RECYCLER ONSITE: FALSE
TRANSFER FACILITY: FALSE
OTHER EXEMPTION: Not reported
UW BATTERY GEN: FALSE
USED OIL TRANSPORTER: FALSE
USED OIL TRANSFER FACLTY: FALSE
USED OIL PROCESSOR: FALSE
USED OIL REREFINER: FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS: FALSE
USED OIL FUEL MRKTR MEETS SPECS: FALSE

Facility Site ID Number: 1631646
SWC Desc: Not reported
FWC Desc: Not reported
Form comm: Not reported
Data Year: 2008
Permit by Rule: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
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Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter deferral: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
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EPA ID: WAD988479846
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MAIL CITY,ST,ZIP: TACOMA, WA 98422-4111
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OPERATOR CITY,ST,ZIP: TACOMA, WA 98422-4111
OPERATOR COUNTRY: UNITED STATES
OPERATOR PHONE NBR: (253)272-9319
OPERATOR EFFECTIVE DATE: 9/11/1996
SITE CONTACT NAME: Carl Swindahl
SITE CONTACT ADDR LINE1: 2218 MARINE VIEW DR
SITE CONTACT ZIP: TACOMA, WA 98422-4111

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

SITE CONTACT COUNTRY: UNITED STATES
SITE CONTACT PHONE NBR: (253)272-9319
SITE CONTACT EMAIL: Not reported
FORM CONTACT NAME: Bruce House
FORM CONTACT ADDR LINE1: 2218 MARINE VIEW DR
FORM CONTACT CITY,ST,ZIP: TACOMA, WA 98422-4111
FORM CONTACT COUNTRY: UNITED STATES
FORM CONTACT PHONE NBR: (253)272-9319
FORM CONTACT EMAIL: bhouse@nventure.com
GEN STATUS CD: SQG
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BATCH GENERATION: True
ONE TIME GENERATION: False
TRANSPORTS OWN WASTE: False
TRANSPORTS OTHERS WASTE: False
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TRANSFER FACILITY: False
OTHER EXEMPTION: Not reported
UW BATTERY GEN: False
USED OIL TRANSPORTER: False
USED OIL TRANSFER FACILITY: False
USED OIL PROCESSOR: False
USED OIL REREFINER: False
USED OIL FUEL MKTR DIRECTS SHIPMENTS: False
USED OIL FUEL MKTR MEETS SPECS: False

Facility Site ID Number: 1631646
SWC Desc: Not reported
FWC Desc: Not reported
Form comm: Not reported
Data Year: Not reported
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
"Other marketers (i.e., blender, distributor, etc.)": False
Utility boiler burner: False
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Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
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Off-specification used oil burner - utility boiler: False
Off-specification used oil burner - industrial boiler: False
Off-specification used oil burner - industrial furnace: False
EPA ID: WAD988479846

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

Facility Address 2: Not reported
TAX REG NBR: 600033152
NAICS CD: 336612
BUSINESS TYPE: Boat Building
MAIL NAME: Modutech Marine Inc
MAIL ADDR LINE1: 2218 MARINE VIEW DR
MAIL CITY,ST,ZIP: TACOMA, WA 98422-4111
MAIL COUNTRY: UNITED STATES
LEGAL ORG NAME: Modutech Marine Inc
LEGAL ORG TYPE: Private
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LEGAL CITY,ST,ZIP: TACOMA, WA 98422-4111
LEGAL COUNTRY: UNITED STATES
LEGAL PHONE NBR: (253)272-9319
LEGAL EFFECTIVE DATE: 11/5/1990
LAND ORG NAME: Modutech Marine Inc.
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LAND COUNTRY: UNITED STATES
LAND PHONE NBR: (253)272-9319
OPERATOR ORG NAME: Modutech Marine Inc.
OPERATOR ORG TYPE: Private
OPERATOR ADDR LINE1: 2218 MARINE VIEW DR
OPERATOR CITY,ST,ZIP: TACOMA, WA 98422-4111
OPERATOR COUNTRY: UNITED STATES
OPERATOR PHONE NBR: (253)272-9319
OPERATOR EFFECTIVE DATE: 09/11/96
SITE CONTACT NAME: Carl Swindahl
SITE CONTACT ADDR LINE1: 2218 MARINE VIEW DR
SITE CONTACT ZIP: TACOMA, WA 98422-4111
SITE CONTACT COUNTRY: UNITED STATES
SITE CONTACT PHONE NBR: (253)272-9319
SITE CONTACT EMAIL: Not reported
FORM CONTACT NAME: Bruce House
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FORM CONTACT CITY,ST,ZIP: TACOMA, WA 98422-4111
FORM CONTACT COUNTRY: UNITED STATES
FORM CONTACT PHONE NBR: (253)272-9319
FORM CONTACT EMAIL: bhouse@nventure.com
GEN STATUS CD: SQG
MONTHLY GENERATION: False
BATCH GENERATION: True
ONE TIME GENERATION: False
TRANSPORTS OWN WASTE: False
TRANSPORTS OTHERS WASTE: False
RECYCLER ONSITE: True
TRANSFER FACILITY: False
OTHER EXEMPTION: Not reported
UW BATTERY GEN: False
USED OIL TRANSPORTER: False
USED OIL TRANSFER FACILITY: False
USED OIL PROCESSOR: False
USED OIL REREFINER: False
USED OIL FUEL MRKTR DIRECTS SHPMNTS: False
USED OIL FUEL MRKTR MEETS SPECS: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

RCRA-CESQG:

Date form received by agency: 01/16/2008

Facility name: MODUTECH MARINE INC
Facility address: 2218 MARINE VIEW DR NE
TACOMA, WA 98422-4111

EPA ID: WAD988479846
Mailing address: 2218 MARINE VIEW DR
TACOMA, WA 98422-4111

Contact: CARL SWINDAHL
Contact address: 2218 MARINE VIEW DR
TACOMA, WA 98422-4111

Contact country: US
Contact telephone: (253)272-9319
Contact email: Not reported
EPA Region: 10

Land type: Private

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: MODUTECH MARINE INC.
Owner/operator address: 2218 MARINE VIEW DR
TACOMA, WA 98422

Owner/operator country: US
Owner/operator telephone: Not reported

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 09/11/1996

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: Yes
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:

Date form received by agency: 12/31/2005
Facility name: MODUTECH MARINE INC
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: MODUTECH MARINE INC
Classification: Not a generator, verified

Date form received by agency: 03/31/1994
Facility name: MODUTECH MARINE INC
Classification: Large Quantity Generator

Date form received by agency: 09/01/1993
Facility name: MODUTECH MARINE INC
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated: SR - -170(3)(b)
Area of violation: Generators - General
Date violation determined: 08/13/2003
Date achieved compliance: 09/12/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/02/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -070
Area of violation: Generators - General
Date violation determined: 04/23/2002
Date achieved compliance: 05/08/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/29/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 08/13/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/12/2003

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MODUTECH MARINE INC (Continued)

1004793984

Evaluation lead agency: State
Evaluation date: 04/23/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/08/2002
Evaluation lead agency: State

IND RES
Region

PUYALLUP INDIAN RESERVATION

INDIAN RESERV CIND100095
N/A

< 1/8
1 ft.

PUYALLUP INDIAN RESERVATI (County), WA

INDIAN RESERV:

Feature: Indian Reservation
Name: Puyallup Indian Reservation
Agency: BIA
State: WA

NPL
Region

US EPA COMMENCEMT BAY NEARSHORE
TIDEFLATS INDUSTRIAL SEC
TACOMA, WA 98422

< 1/8
1 ft.

CERCLIS 1000297462
FINDS WAD980726368
NPL
CONSENT
ROD
US ENG CONTROLS
US INST CONTROL
RCRA-NonGen

CERCLIS:

Site ID: 1000981
Federal Facility: Not a Federal Facility
NPL Status: Currently on the Final NPL
Non NPL Status: Not reported

CERCLIS Site Contact Name(s):

Contact Name: KEVIN ROCHLIN
Contact Tel: (206) 553-2106
Contact Title: Remedial Project Manager (RPM)

Contact Name: NANCY HARNEY
Contact Tel: (206) 553-6635
Contact Title: Remedial Project Manager (RPM)

Contact Name: KAREN KEELEY
Contact Tel: (206) 553-2141
Contact Title: Remedial Project Manager (RPM)

Contact Name: JEFF RODIN
Contact Tel: (206) 553-6709
Contact Title: On-Scene Coordinator (OSC)

Contact Name: KIRA LYNCH
Contact Tel: (206) 553-2144
Contact Title: Remedial Project Manager (RPM)

Contact Name: Tamara Langton

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Contact Tel: (206) 553-2709
Contact Title: Remedial Project Manager (RPM)

Contact Name: JONATHAN WILLIAMS
Contact Tel: (206) 553-1369
Contact Title: Remedial Project Manager (RPM)

CERCLIS Site Alias Name(s):

Alias Name: COMMENCEMENT BAY - NEARSHORE/TIDEFLATS
Alias Address: Not reported
PIERCE, WA
Alias Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Alias Address: ADJ TO RUSTON WAY & TIDEFLATS IND AREA
TACOMA, WA 98402
Alias Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Alias Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
PIERCE COUNTY, WA 98421

Site Description: The Commencement Bay Near Shore/Tide Flats (CB/NT) Superfund site is located in Tacoma, Washington at the southern end of the main basin of Puget Sound. The site includes 10-12 square miles of shallow water, shoreline, and adjacent land, most of which is highly developed and industrialized. The upland boundaries of the site are defined according to the contours of localized drainage basins that flow into the marine waters. The marine boundary of the site is limited to the shoreline, intertidal areas, bottom sediments, and water of depths less than 60 feet below mean lower low water level (MLLW). The nearshore portion of the site is defined as the area along the Ruston shoreline from the Mouth of Thea Foss Waterway to Pt. Defiance. The tideflats portion of the site includes the Hylebos, Blair, Sitcum, Milwaukee, St. Paul, Middle, Wheeler-Osgood, and Thea Foss waterways; the Puyallup River upstream to the Interstate-5 bridge; and the adjacent land areas. Middle Waterway is located between Thea Foss Waterway and the Puyallup River. EPA placed the CB/NT site on the National Priorities List (NPL) of sites requiring investigation and cleanup under EPA's Superfund Program on September 8, 1983. A remedial investigation/feasibility study (RI/FS) was completed by Washington State Department of Ecology (Ecology) in 1988. The RI/FS evaluated contaminants detected in sediments at the CB/NT Superfund site to identify problem chemicals that pose a risk to human health and the environment. The RI/FS concluded that sediments in the nearshore/tideflats area were contaminated with a large number of hazardous substances at concentrations greatly exceeding those found in Puget Sound reference areas. In the RI, a multi-step decision-making process was used to identify problem chemicals, and to identify and prioritize problem areas where these chemicals were present at concentrations that are harmful to humans and wildlife. Contaminated sediments in Middle Waterway have high concentrations of mercury, copper, and polycyclic aromatic hydrocarbons (PAHs). EPA's September 30, 1989 Record of Decision (ROD) for the CB/NT Superfund site selected a remedy involving a combination of five key elements: institutional controls; source control; natural recovery; sediment remedial action; and monitoring to address contaminated sediments in the waterways of the CB/NT site. In 1996, EPA deleted the St. Paul Waterway, the Blair Waterway, and all or part of four properties transferred to the Puyallup Tribe in the Puyallup Land Settlement Agreement from the National Priorities List (NPL) because cleanups had been completed in these areas, or studies had been completed showing that they did not require cleanup. OU 1: Sediment Remediation The Commencement Bay site has been divided into smaller project activities, called operable units (OU), in order to more effectively manage the overall cleanup of the site. In the 1989 ROD, EPA designated two operable units for the cleanup of the nearshore/tideflats portion of Commencement Bay: source

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Databas(e)s

EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

control (OU 5), which focuses on efforts to control upland discharges or releases to the Bay; and sediment remediation (OU 1), which addresses the cleanup of the contaminated marine sediments in Commencement Bay. OUs 2, 4 and 6 address contamination at geographically separate areas at the former ASARCO smelter and Tacoma Tar pits. The purpose of this Explanation of Significant Differences (ESD) is to describe the specific cleanup plans for Middle Waterway. The specific requirements and clarifications provided in the July 1997 and August 2000 ESDs are not repeated here but are applicable to Middle Waterway as well. This ESD describes the manner in which the remedial methods outlined in the ROD will be applied in Middle Waterway and identifies those instances where the selected remedy differs from the ROD. The Washington Department of Ecology (Ecology) had the opportunity to review and comment on the draft ESD for Middle Waterway. While the state is generally supportive of most of the selected cleanup remedies for the waterway, Ecology disagrees with EPA's decision to leave subsurface contamination in place in Sediment Management Unit (SMU) 51a. EPA has included Ecology's comments and responded to Ecology's concerns in the attached Responsiveness Summary. The Puyallup Tribe also had the opportunity to review and comment on the draft ESD. The primary focus of the Tribe's comments was also on SMU 51a and EPA's decision to leave the subsurface contamination in place at the head of Middle Waterway. The Tribe is not supportive of this action. An ESD addressing OU 1 was completed in February 2002. The CB/NT Record of Decision (ROD) sets forth a general cleanup approach for the waterways that comprise the CB/NT site and identifies, based on RI/FS sampling data, problem areas requiring response action. The August 2000 Explanation of Significant Differences (ESD) identified disposal sites (two nearshore confined disposal sites and upland disposal) which would be most appropriate to safely contain dredged sediments. The February 2002 ESD for Middle Waterway better defined the area and volume of sediment exceeding the sediment quality objectives (SQOs), and identified specific areas to be dredged or capped, as well as areas where natural recovery or enhanced natural recovery would be appropriate. The 2002 ESD also identified the disposal site for the contaminated sediments and refined the cost of the remedial action. None of these significant differences fundamentally altered the remedy selected in the ROD. The February 2002 ESD for the Middle Waterway problem area identified cleanup actions to address contamination throughout the entire waterway. The selected remedies for Areas A and B included a combination of dredging and backfilling with clean material, thick capping, surficial capping with habitat mix, enhanced natural recovery, natural recovery and no action. In Area C, located at the head of the waterway, the selected remedy consisted of leaving contaminated subsurface sediments undisturbed in Sediment Management Unit (SMU) 51a with enhanced natural recovery to address the surface sediment contamination in both SMUs 51a and 51b (Area C), and long-term monitoring. No action is required for SMU 52a and 52b. During the public comment period for the draft ESD for Middle Waterway, EPA received numerous comments that did not support leaving the subsurface contamination in place in SMU 51a. Comments received from both the Washington Department of Ecology (Ecology) and the Washington Department of Natural Resources (DNR), indicated the state was not in agreement with the proposed remedy for SMU 51a. The State disagreed with EPA's analysis of the data and asked for more cleanup than EPA deemed necessary to protect human health and the environment. EPA took these concerns into consideration before issuing the final ESD and responded to comments in a Responsiveness Summary, however, EPA's preferred remedy for SMU 51a was not revised in the final ESD. After the final ESD was issued, EPA and the state continued to have discussions about the EPA-selected remedy for SMU 51a. Ecology, in conjunction with DNR (one of the Potentially Responsible Parties [PRPs] in Middle Waterway), has now proposed to do additional removal work in SMU 51a that would be funded by the state. In accordance with Section 40 CFR

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300.515(f) of the National Contingency Plan (NCP), while EPA finds that the proposed enhancement of the selected remedy is not necessary to the EPA selected remedial action, EPA also finds that the enhanced action does not conflict nor is it inconsistent with the EPA-selected remedy. Therefore, EPA has agreed to incorporate the additional cleanup as an enhancement to the selected remedy as allowed by the NCP. This enhancement to the selected remedy is not based on new information or a change in EPA's original interpretation of the data. It reflects the desire on the part of the state and other stakeholders for a more permanent remedy and the state's willingness to fund the entire additional cost associated with the removal of contaminated subsurface sediments in SMU 51a. The Administrative Record documenting the enhanced remedy for SMU 51a will consist of this ESD, and also incorporates by reference the Administrative Record for the February 2002 ESD. The final ESD for the Commencement Bay site was completed March, 2003. After the 2000 ESD was completed, Special Notice Letters were issued in the summer of 2002 to all of the Potentially Responsible Parties (PRPs) in the Thea Foss and Wheeler-Osgood Waterways to conduct remedial action. The City of Tacoma and the three utility-related companies agreed to take responsibility for finalizing the design and performing remedial action in different parts of the waterways. The Utilities took over responsibility for finalizing the remedial design and conducting remedial action at the head of the Thea Foss Waterway (south of Station 70+10) and the City of Tacoma took responsibility for completing the design and conducting the cleanup of the remainder of the Thea Foss Waterway, commonly referred to as the "Mouth" and all of the Wheeler-Osgood Waterway. An ESD addressing the Thea Foss and Wheeler-Osgood Waterway was completed in September 2004.

CERCLIS Assessment History:

Action: PRELIMINARY ASSESSMENT
Date Started: 11/01/1979
Date Completed: 11/01/1979
Priority Level: Higher priority for further assessment

Action: DISCOVERY
Date Started: Not reported
Date Completed: 11/01/1979
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 03/18/1982
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 04/14/1982
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 04/16/1982
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 05/03/1982
Priority Level: Not reported

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Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 05/25/1982
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 06/04/1982
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: 08/01/1982
Date Completed: 12/01/1982
Priority Level: Higher priority for further assessment

Action: SITE INSPECTION
Date Started: 08/01/1982
Date Completed: 12/01/1982
Priority Level: Higher priority for further assessment

Action: TECHNICAL ASSISTANCE
Date Started: 12/06/1982
Date Completed: Not reported
Priority Level: Not reported

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 12/08/1982
Priority Level: Not reported

Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: Not reported
Date Completed: 12/30/1982
Priority Level: Not reported

Action: COMMUNITY INVOLVEMENT
Date Started: Not reported
Date Completed: 04/13/1983
Priority Level: Not reported

Action: FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started: Not reported
Date Completed: 09/08/1983
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 07/27/1984
Priority Level: Not reported

Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/23/1983
Date Completed: 11/01/1984
Priority Level: Not reported

Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: Not reported

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Date Completed: 11/01/1984
Priority Level: Not reported

Action: REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS
Date Started: 05/15/1984
Date Completed: 11/15/1984
Priority Level: Not reported

Action: REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS
Date Started: 02/15/1986
Date Completed: 08/15/1986
Priority Level: Not reported

Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: Not reported
Date Completed: 09/10/1986
Priority Level: Not reported

Action: STATE ORDER
Date Started: Not reported
Date Completed: 12/15/1987
Priority Level: Not reported

Action: REMEDIAL INVESTIGATION
Date Started: 05/20/1987
Date Completed: 12/30/1987
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 11/01/1984
Date Completed: 12/30/1987
Priority Level: Not reported

Action: RECORD OF DECISION
Date Started: Not reported
Date Completed: 12/30/1987
Priority Level: Not reported

Action: ADMINISTRATIVE RECORDS
Date Started: 08/08/1987
Date Completed: 12/31/1987
Priority Level: Admin Record Compiled for a Remedial Event

Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 09/10/1986
Date Completed: 02/10/1988
Priority Level: Stabilized

Action: Special Notice Issued
Date Started: Not reported
Date Completed: 02/23/1988
Priority Level: Not reported

Action: Special Notice Issued
Date Started: Not reported
Date Completed: 02/24/1988

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CDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

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Priority Level:	Not reported
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	04/13/1988
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	04/13/1988
Date Completed:	09/20/1988
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	09/29/1988
Priority Level:	Not reported
Action:	REMOVAL NEGOTIATIONS
Date Started:	02/24/1988
Date Completed:	09/29/1988
Priority Level:	Not reported
Action:	UNILATERAL ADMIN ORDER
Date Started:	Not reported
Date Completed:	09/30/1988
Priority Level:	Not reported
Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	11/30/1988
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	03/08/1989
Priority Level:	Not reported
Action:	REMOVAL NEGOTIATIONS
Date Started:	Not reported
Date Completed:	03/08/1989
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	04/24/1989
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	04/29/1989
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	05/09/1989
Priority Level:	Not reported

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Action: RECORD OF DECISION
Date Started: Not reported
Date Completed: 09/30/1989
Priority Level: Not reported

Action: RECORD OF DECISION
Date Started: Not reported
Date Completed: 09/30/1989
Priority Level: Not reported

Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 07/07/1982
Date Completed: 09/30/1989
Priority Level: Low priority for further assessment

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 09/30/1989
Date Completed: 09/30/1989
Priority Level: Not reported

Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 07/07/1982
Date Completed: 09/30/1989
Priority Level: Not reported

Action: STATE ORDER
Date Started: Not reported
Date Completed: 01/16/1990
Priority Level: Not reported

Action: Special Notice Issued
Date Started: Not reported
Date Completed: 05/18/1990
Priority Level: Not reported

Action: REMOVAL ASSESSMENT
Date Started: Not reported
Date Completed: 07/02/1990
Priority Level: Not reported

Action: STATE ORDER
Date Started: Not reported
Date Completed: 08/22/1990
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 09/11/1990
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 09/11/1990
Priority Level: Not reported

Action: REMOVAL ASSESSMENT
Date Started: Not reported

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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

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Date Completed:	09/17/1990
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	05/18/1990
Date Completed:	09/27/1990
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	09/30/1989
Date Completed:	09/28/1990
Priority Level:	Not reported
Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	11/16/1990
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	09/10/1986
Date Completed:	12/31/1990
Priority Level:	Not reported
Action:	RECORD OF DECISION
Date Started:	Not reported
Date Completed:	12/31/1990
Priority Level:	Not reported
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	01/04/1991
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	01/04/1991
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	01/06/1991
Priority Level:	Not reported
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	01/06/1991
Priority Level:	Not reported
Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	01/30/1991
Priority Level:	Not reported
Action:	CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started:	Not reported
Date Completed:	02/13/1991

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Priority Level:	Not reported
Action:	UNILATERAL ADMIN ORDER
Date Started:	Not reported
Date Completed:	02/14/1991
Priority Level:	Not reported
Action:	REMOVAL NEGOTIATIONS
Date Started:	04/01/1990
Date Completed:	02/14/1991
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	01/04/1991
Date Completed:	03/29/1991
Priority Level:	Not reported
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	03/29/1991
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	03/29/1991
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	09/30/1988
Date Completed:	05/10/1991
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	09/30/1988
Date Completed:	05/10/1991
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	06/24/1991
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	07/01/1991
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	Not reported
Date Completed:	07/16/1991
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	05/10/1991
Date Completed:	07/24/1991
Priority Level:	Not reported

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Action:	REMOVAL ASSESSMENT
Date Started:	Not reported
Date Completed:	07/25/1991
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	Not reported
Date Completed:	07/25/1991
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	Not reported
Date Completed:	07/25/1991
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	Not reported
Date Completed:	07/25/1991
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	Not reported
Date Completed:	07/25/1991
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	Not reported
Date Completed:	07/25/1991
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	04/26/1991
Date Completed:	07/29/1991
Priority Level:	Not reported
Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	07/31/1991
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	08/21/1991
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	08/26/1991
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	03/29/1991
Date Completed:	09/16/1991
Priority Level:	Not reported
Action:	TECHNICAL ASSISTANCE GRANT
Date Started:	09/24/1991

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EDR ID Number
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Date Completed:	Not reported
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	05/10/1991
Date Completed:	09/26/1991
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	05/10/1991
Date Completed:	09/27/1991
Priority Level:	Not reported
Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	09/30/1991
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	10/04/1991
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	10/04/1991
Priority Level:	Not reported
Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	10/07/1991
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	07/24/1991
Date Completed:	10/19/1991
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	07/29/1991
Date Completed:	10/19/1991
Priority Level:	Not reported
Action:	UNILATERAL ADMIN ORDER
Date Started:	Not reported
Date Completed:	10/23/1991
Priority Level:	Not reported
Action:	Explanation Of Significant Differences
Date Started:	Not reported
Date Completed:	11/01/1991
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	08/22/1990
Date Completed:	12/06/1991
Priority Level:	Not reported

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Action: CONSENT DECREE
Date Started: 09/27/1990
Date Completed: 12/13/1991
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 12/30/1991
Priority Level: Not reported

Action: SECTION 106 LITIGATION
Date Started: 04/16/1990
Date Completed: 02/11/1992
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 09/26/1991
Date Completed: 02/11/1992
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 09/27/1991
Date Completed: 02/11/1992
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 02/15/1991
Date Completed: 02/13/1992
Priority Level: Stabilized

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 09/28/1990
Date Completed: 03/11/1992
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE
Date Started: 03/12/1991
Date Completed: 03/20/1992
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 03/20/1992
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 03/20/1992
Priority Level: Not reported

Action: ADMINISTRATIVE RECORDS
Date Started: 08/31/1988
Date Completed: 05/05/1992
Priority Level: Admin Record Compiled for a Remedial Event

Action: CONSENT DECREE
Date Started: 09/16/1991

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Date Completed:	05/18/1992
Priority Level:	Not reported
Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	06/17/1992
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	07/07/1992
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	09/15/1992
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY FEASIBILITY STUDY
Date Started:	01/23/1991
Date Completed:	11/09/1992
Priority Level:	Not reported
Action:	STATE CONSENT DECREE
Date Started:	Not reported
Date Completed:	12/11/1992
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	02/13/1992
Date Completed:	01/04/1993
Priority Level:	Not reported
Action:	TECHNICAL ASSISTANCE
Date Started:	12/06/1990
Date Completed:	02/04/1993
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	06/28/1991
Date Completed:	03/03/1993
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	03/09/1993
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	09/30/1989
Date Completed:	05/19/1993
Priority Level:	Not reported
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	09/27/1989
Date Completed:	06/16/1993
Priority Level:	Low priority for further assessment

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Action:	RECORD OF DECISION
Date Started:	Not reported
Date Completed:	06/16/1993
Priority Level:	Not reported
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	06/21/1993
Priority Level:	Not reported
Action:	Explanation Of Significant Differences
Date Started:	Not reported
Date Completed:	06/24/1993
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	02/01/1993
Date Completed:	06/25/1993
Priority Level:	Not reported
Action:	ADMINISTRATIVE RECORDS
Date Started:	02/15/1992
Date Completed:	06/25/1993
Priority Level:	Admin Record Compiled for a Remedial Event
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	03/20/1992
Date Completed:	06/30/1993
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	09/30/1989
Date Completed:	07/01/1993
Priority Level:	Not reported
Action:	UNILATERAL ADMIN ORDER
Date Started:	Not reported
Date Completed:	08/09/1993
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	08/16/1993
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	02/03/1989
Date Completed:	08/16/1993
Priority Level:	Not reported
Action:	SECTION 104(E) REF LITIGATION
Date Started:	08/13/1992
Date Completed:	08/27/1993
Priority Level:	Not reported
Action:	STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started:	09/18/1990

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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

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Date Completed:	08/31/1993
Priority Level:	Not reported
Action:	STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started:	09/26/1989
Date Completed:	08/31/1993
Priority Level:	Not reported
Action:	STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started:	09/26/1989
Date Completed:	08/31/1993
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	03/29/1991
Date Completed:	10/07/1993
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	06/25/1993
Date Completed:	10/08/1993
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	07/21/1993
Date Completed:	11/29/1993
Priority Level:	Not reported
Action:	Explanation Of Significant Differences
Date Started:	Not reported
Date Completed:	11/29/1993
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	11/29/1993
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	12/21/1993
Date Completed:	Not reported
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	10/28/1993
Date Completed:	12/21/1993
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	06/30/1992
Date Completed:	02/25/1994
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started:	09/29/1988
Date Completed:	03/07/1994
Priority Level:	Stabilized

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	03/23/1994
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	09/01/1993
Date Completed:	03/23/1994
Priority Level:	Not reported
Action:	REMEDIAL ACTION
Date Started:	09/03/1993
Date Completed:	08/31/1994
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	11/16/1990
Date Completed:	09/23/1994
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	04/04/1994
Date Completed:	09/27/1994
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	10/04/1994
Priority Level:	Not reported
Action:	FEASIBILITY STUDY
Date Started:	11/09/1992
Date Completed:	10/04/1994
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	11/22/1994
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	12/23/1994
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	06/21/1994
Date Completed:	01/19/1995
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started:	03/10/1993
Date Completed:	01/20/1995
Priority Level:	Stabilized
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY

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Database(s)

EDR ID Number
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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Date Started: 09/10/1986
Date Completed: 03/24/1995
Priority Level: Not reported

Action: RECORD OF DECISION
Date Started: Not reported
Date Completed: 03/24/1995
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 09/27/1994
Date Completed: 05/02/1995
Priority Level: Not reported

Action: Explanation Of Significant Differences
Date Started: Not reported
Date Completed: 05/09/1995
Priority Level: Not reported

Action: Special Notice Issued
Date Started: Not reported
Date Completed: 06/30/1995
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE
Date Started: 07/11/1995
Date Completed: Not reported
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 07/11/1995
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 01/30/1991
Date Completed: 07/19/1995
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 06/25/1992
Date Completed: 07/21/1995
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 01/15/1993
Date Completed: 08/03/1995
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 05/15/1992
Date Completed: 09/27/1995
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 05/24/1994
Date Completed: 11/02/1995

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Database(s)

EDR ID Number
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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	06/30/1995
Date Completed:	03/06/1996
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	05/01/1992
Date Completed:	05/08/1996
Priority Level:	Not reported
Action:	CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started:	Not reported
Date Completed:	05/31/1996
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	06/24/1996
Priority Level:	Not reported
Action:	STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started:	09/01/1993
Date Completed:	06/30/1996
Priority Level:	Not reported
Action:	STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started:	09/01/1993
Date Completed:	06/30/1996
Priority Level:	Not reported
Action:	STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started:	02/23/1994
Date Completed:	06/30/1996
Priority Level:	Not reported
Action:	Explanation Of Significant Differences
Date Started:	Not reported
Date Completed:	07/02/1996
Priority Level:	Not reported
Action:	NOTICE OF INTENT TO PARTIALLY DELETE
Date Started:	Not reported
Date Completed:	08/28/1996
Priority Level:	Not reported
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	10/02/1996
Priority Level:	Not reported
Action:	CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started:	Not reported
Date Completed:	10/18/1996
Priority Level:	Not reported

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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action:	PARTIAL NATIONAL PRIORITIES LIST DELETION
Date Started:	08/28/1996
Date Completed:	10/29/1996
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	03/06/1996
Date Completed:	01/03/1997
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	01/31/1997
Priority Level:	Not reported
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	01/31/1997
Priority Level:	Not reported
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	01/31/1997
Priority Level:	Not reported
Action:	CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started:	Not reported
Date Completed:	02/19/1997
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	10/02/1996
Date Completed:	04/14/1997
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	04/14/1997
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	09/30/1989
Date Completed:	05/22/1997
Priority Level:	Not reported
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	06/02/1997
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	07/26/1997
Priority Level:	Not reported
Action:	Explanation Of Significant Differences
Date Started:	Not reported

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Database(s)

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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Date Completed: 07/28/1997
Priority Level: Not reported

Action: STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started: 04/10/1989
Date Completed: 10/28/1997
Priority Level: Not reported

Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: Not reported
Date Completed: 11/06/1997
Priority Level: Not reported

Action: REMOVAL NEGOTIATIONS
Date Started: Not reported
Date Completed: 11/06/1997
Priority Level: Not reported

Action: CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started: Not reported
Date Completed: 04/13/1998
Priority Level: Not reported

Action: FIVE-YEAR REVIEW
Date Started: Not reported
Date Completed: 09/29/1998
Priority Level: Not reported

Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: Not reported
Date Completed: 10/13/1998
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 11/13/1998
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 06/25/1998
Date Completed: 12/04/1998
Priority Level: Not reported

Action: NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started: 05/10/1988
Date Completed: 03/31/1999
Priority Level: Search Complete, Viable PRPs

Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: Not reported
Date Completed: 06/09/1999
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 10/13/1998
Date Completed: 09/28/1999
Priority Level: Stabilized

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Database(s)

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE GRANT
Date Started: 09/30/1999
Date Completed: Not reported
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 10/04/1999
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 06/25/1993
Date Completed: 11/03/1999
Priority Level: Interim RA Report

Action: POTENTIALLY RESPONSIBLE PARTY LONG-TERM RESPONSE ACTION
Date Started: 11/03/1999

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Database(s)
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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Date Completed:	Not reported
Priority Level:	Not reported
Action:	FIVE-YEAR REVIEW
Date Started:	Not reported
Date Completed:	12/29/1999
Priority Level:	Not reported
Action:	FIVE-YEAR REVIEW
Date Started:	Not reported
Date Completed:	03/31/2000
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	07/27/1999
Date Completed:	06/23/2000
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	11/12/1991
Date Completed:	06/29/2000
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	12/17/1993
Date Completed:	06/29/2000
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	01/16/1990
Date Completed:	06/29/2000
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY FEASIBILITY STUDY
Date Started:	10/04/1994
Date Completed:	07/14/2000
Priority Level:	Not reported
Action:	RECORD OF DECISION
Date Started:	Not reported
Date Completed:	07/14/2000
Priority Level:	Not reported
Action:	Explanation Of Significant Differences
Date Started:	Not reported
Date Completed:	08/03/2000
Priority Level:	Not reported
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	10/18/2000
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	07/31/1992
Date Completed:	12/22/2000
Priority Level:	Interim RA Report

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Database(s)

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	12/28/2000
Priority Level:	Not reported
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	06/30/1989
Date Completed:	03/31/2001
Priority Level:	Search Complete, Viable PRPs
Action:	STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started:	06/15/1989
Date Completed:	03/31/2001
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	06/30/1989
Date Completed:	03/31/2001
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	06/30/1989
Date Completed:	03/31/2001
Priority Level:	Not reported
Action:	ENGINEERING EVALUATION/COST ANALYSIS
Date Started:	09/07/2000
Date Completed:	06/04/2001
Priority Level:	Not reported
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	06/06/2001
Priority Level:	Not reported
Action:	ENGINEERING EVALUATION/COST ANALYSIS
Date Started:	05/15/2000
Date Completed:	07/06/2001
Priority Level:	Not reported
Action:	REMOVAL NEGOTIATIONS
Date Started:	03/30/2001
Date Completed:	07/24/2001
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	07/24/2001
Priority Level:	Not reported
Action:	COMMUNITY ADVISORY GROUP
Date Started:	01/01/1999
Date Completed:	09/30/2001
Priority Level:	Not reported
Action:	ALTERNATIVE DISPUTE RESOLUTION
Date Started:	12/31/1997

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Database(s)

EDR ID Number
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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Date Completed: 10/01/2001
Priority Level: Not reported

Action: ENGINEERING EVALUATION/COST ANALYSIS
Date Started: 05/15/2000
Date Completed: 12/21/2001
Priority Level: Not reported

Action: Explanation Of Significant Differences
Date Started: Not reported
Date Completed: 02/04/2002
Priority Level: Not reported

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 03/05/2002
Priority Level: Not reported

Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 10/18/2000
Date Completed: 03/05/2002
Priority Level: Not reported

Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: Not reported
Date Completed: 03/21/2002
Priority Level: Not reported

Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 01/16/2001
Date Completed: 03/25/2002
Priority Level: Not reported

Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 04/05/2001
Date Completed: 03/25/2002
Priority Level: Not reported

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 03/25/2002
Priority Level: Not reported

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 03/25/2002
Priority Level: Not reported

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 03/25/2002
Priority Level: Not reported

Action: Special Notice Issued
Date Started: Not reported
Date Completed: 04/15/2002
Priority Level: Not reported

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EDR ID Number
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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action: Notice of Intent by All Parties
Date Started: Not reported
Date Completed: 04/24/2002
Priority Level: Not reported

Action: Notice of Intent by All Parties
Date Started: Not reported
Date Completed: 04/24/2002
Priority Level: Not reported

Action: Notice of Intent by All Parties
Date Started: Not reported
Date Completed: 04/24/2002
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 07/23/2002
Date Completed: Not reported
Priority Level: Not reported

Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 10/24/2001
Date Completed: 09/29/2002
Priority Level: Not reported

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 09/30/2002
Priority Level: Not reported

Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 06/11/2001
Date Completed: 09/30/2002
Priority Level: Not reported

Action: Notice of Intent by All Parties
Date Started: Not reported
Date Completed: 10/07/2002
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 09/26/2001
Date Completed: 02/21/2003
Priority Level: Interim RA Report

Action: OPERATIONS AND MAINTENANCE
Date Started: 02/21/2003
Date Completed: Not reported
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 03/03/2003
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported

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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Date Completed:	03/03/2003
Priority Level:	Not reported
Action:	Explanation Of Significant Differences
Date Started:	Not reported
Date Completed:	03/20/2003
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	04/11/1991
Date Completed:	03/28/2003
Priority Level:	Interim RA Report
Action:	POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started:	06/07/2002
Date Completed:	03/31/2003
Priority Level:	Stabilized
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	09/27/2002
Date Completed:	04/15/2003
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	04/15/2002
Date Completed:	04/15/2003
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	04/24/2003
Date Completed:	Not reported
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	09/29/2002
Date Completed:	05/09/2003
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	09/29/2002
Date Completed:	05/09/2003
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	01/29/2003
Date Completed:	06/01/2003
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	06/12/2003
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	06/12/2003
Priority Level:	Not reported

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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 04/14/1997
Date Completed: 07/28/2003
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 04/15/2003
Date Completed: 08/14/2003
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 04/15/2003
Date Completed: 08/14/2003
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 07/22/2002
Date Completed: 09/15/2003
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 09/15/2003
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 09/29/2002
Date Completed: 09/19/2003
Priority Level: Not reported

Action: FIVE-YEAR REVIEW
Date Started: Not reported
Date Completed: 09/25/2003
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 10/06/2003
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 06/22/1994
Date Completed: 11/10/2003
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 10/07/2002
Date Completed: 12/16/2003
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 09/25/2003
Date Completed: 12/17/2003
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 04/14/2003

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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Date Completed: 04/07/2004
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 05/18/1994
Date Completed: 04/14/2004
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 06/02/2004
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 05/14/2004
Date Completed: 09/15/2004
Priority Level: Not reported

Action: Explanation Of Significant Differences
Date Started: Not reported
Date Completed: 09/30/2004
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 12/19/2000
Date Completed: 09/30/2004
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY LONG-TERM RESPONSE ACTION
Date Started: 06/30/1993
Date Completed: 10/18/2004
Priority Level: Not reported

Action: FIVE-YEAR REVIEW
Date Started: Not reported
Date Completed: 12/29/2004
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 10/15/2002
Date Completed: 02/01/2005
Priority Level: Stabilized

Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 10/15/2002
Date Completed: 02/01/2005
Priority Level: Stabilized

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 02/01/2005
Date Completed: Not reported
Priority Level: Not reported

Action: Lodged By DOJ
Date Started: Not reported
Date Completed: 02/08/2005

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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	01/07/2005
Date Completed:	03/15/2005
Priority Level:	Not reported
Action:	TECHNICAL ASSISTANCE GRANT
Date Started:	03/29/2005
Date Completed:	Not reported
Priority Level:	Not reported
Action:	TECHNICAL ASSISTANCE GRANT
Date Started:	03/29/2005
Date Completed:	Not reported
Priority Level:	Not reported
Action:	TECHNICAL ASSISTANCE GRANT
Date Started:	03/29/2005
Date Completed:	Not reported
Priority Level:	Not reported
Action:	TECHNICAL ASSISTANCE GRANT
Date Started:	03/29/2005
Date Completed:	Not reported
Priority Level:	Not reported
Action:	TECHNICAL ASSISTANCE GRANT
Date Started:	03/29/2005
Date Completed:	Not reported
Priority Level:	Not reported
Action:	OPERATIONS AND MAINTENANCE
Date Started:	04/08/2005
Date Completed:	Not reported
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	07/28/2003
Date Completed:	04/08/2005
Priority Level:	Interim RA Report
Action:	REMOVAL
Date Started:	08/19/2005
Date Completed:	08/20/2005
Priority Level:	Stabilized
Action:	OPERATIONS AND MAINTENANCE
Date Started:	09/12/2005
Date Completed:	Not reported
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	07/16/2004
Date Completed:	09/12/2005
Priority Level:	Interim RA Report
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	01/20/2006
Priority Level:	Not reported

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Database(s)

EDR ID Number
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US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 09/17/1998
Date Completed: 06/26/2006
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 06/26/2006
Date Completed: Not reported
Priority Level: Not reported

Action: OPERATIONS AND MAINTENANCE
Date Started: 09/26/2006
Date Completed: Not reported
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 09/19/2003
Date Completed: 09/29/2006
Priority Level: Final RA Report

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 12/17/2003
Date Completed: 09/29/2006
Priority Level: Final RA Report

Action: OPERATIONS AND MAINTENANCE
Date Started: 09/29/2006
Date Completed: Not reported
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: 11/30/2005
Date Completed: 10/02/2006
Priority Level: Not reported

Action: CONSENT DECREE
Date Started: Not reported
Date Completed: 10/23/2006
Priority Level: Not reported

Action: TECHNICAL ASSISTANCE
Date Started: 05/23/2008
Date Completed: Not reported
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 07/11/1996
Date Completed: 06/25/2008
Priority Level: Not reported

Action: CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started: Not reported
Date Completed: 08/13/2008
Priority Level: Not reported

Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 05/18/1994

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Date Completed: 09/26/2008
Priority Level: Not reported

FINDS:

Registry ID: 110009319996

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and at Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include: Incident Tracking, Compliance Assistance, and Compliance Monitoring.

NPL:

EPA ID: WAD980726368
EPA Region: 10
Federal: N
Final Date: 9/8/1983

Category Details:

NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer <= 10 Feet
Category Value: 10

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population > 0 And <= 1/4 Mile
Category Value: 10

Site Details:

Site Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Site Status: Final
Site Zip: 98421
Site City: PIERCE COUNTY
Site State: WA
Federal Site: No
Site County: PIERCE
EPA Region: 10
Date Proposed: 12/30/82
Date Deleted: Not reported
Date Finalized: 09/08/83

Substance Details:

NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: A020
Substance: CHROMIUM AND COMPOUNDS
CAS #: Not reported
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: A051
Substance: TETRACHLOROETHANE
CAS #: 25322-20-7
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: A051
Substance: TETRACHLOROETHANE
CAS #: 25322-20-7
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: C132
Substance: HYDROCARBONS
CAS #: 308067-53-0
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: C138
Substance: SODIUM CHLORIDE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

CAS #: 7647-14-5
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: C460
Substance: MERCURY
CAS #: 7439-97-6
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: D004
Substance: ARSENIC
CAS #: 7440-38-2
Pathway: AIR PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: D004
Substance: ARSENIC
CAS #: 7440-38-2
Pathway: SURFACE WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U044
Substance: CHLOROFORM
CAS #: 67-66-3
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U044
Substance: CHLOROFORM
CAS #: 67-66-3
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U077
Substance: DICHLOROETHANE, 1,2-
CAS #: 107-06-2
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U131
Substance: HEXACHLOROETHANE
CAS #: 67-72-1
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U211
Substance: CARBON TETRACHLORIDE
CAS #: 56-23-5

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

Site

Database(s)

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U211
Substance: CARBON TETRACHLORIDE
CAS #: 56-23-5
Pathway: SURFACE WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: W001
Substance: HEAVY METALS
CAS #: Not reported
Pathway: GROUND WATER PATHWAY
Scoring: 2

Summary Details:

Conditions at listing October 1981): The Commencement Bay, Nearshore/Tideflats Site covers about 16 acres in Pierce County around Tacoma, Washington. The area is heavily industrialized and includes a copper smelter, pulp mill, and several chemical industries. About 50,000 people live nearby. High levels of arsenic and aluminum are found in soils in heavily populated residential areas, and high levels of arsenic have been found in the urine of nearby school children. A wide range of pollutants is found in the waterways of the tideflats. The land is predominantly privately owned, although a Port Authority is on-site, and an Indian tribe claims much of the area. The extent of past versus on-going contamination is unknown. This is one of two Commencement Bay Sites. They were considered one site when they were first listed. Status July 1983): In April 1983, EPA awarded a 1,357,751 Cooperative Agreement to Washington for a remedial investigation to determine the type and extent of contamination at the site. The work is scheduled to be completed in the first quarter of 1985. In addition, EPA and the State are considering a number of legal actions under other environmental laws.

Site Status Details:

NPL Status: Final
Proposed Date: 12/30/1982
Final Date: 09/08/1983
Deleted Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Narratives Details:

NPL Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
City: PIERCE COUNTY
State: WA

CONSENT:

EPA ID: WAD980726368
Site ID: Not reported
Case Title: U.S. V. ASARCO, INC. (COMMENCEMENT BAY NEARSHORE TIDEFLATS)
Court Num: 91-5528
District: Washington, West
Entered Date: 19920518
Full-text of the consent decree for this site issued by the United States District Court is available from EDR. Contact your EDR Account Executive.

ROD:

Full-text of USEPA Record of Decision(s) is available from EDR.

US ENG CONTROLS:

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421
EPA Region: 10
County: PIERCE
Event Code: Not reported
Actual Date: Not reported

Action ID: 008
Action Name: Explanation Of Significant Differences
Action Completion date: 2/4/2002
Planned Complet. date: 3/30/2002
Operable Unit: 01
Contaminated Media : Sediment
Engineering Control: Cap

Action ID: 008
Action Name: Explanation Of Significant Differences
Action Completion date: 2/4/2002
Planned Complet. date: 3/30/2002
Operable Unit: 01
Contaminated Media : Sediment
Engineering Control: Excavation

Action ID: 008
Action Name: Explanation Of Significant Differences
Action Completion date: 2/4/2002
Planned Complet. date: 3/30/2002
Operable Unit: 01
Contaminated Media : Sediment
Engineering Control: Monitoring

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Databaso(s)

EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Soil
Engineering Control: Monitoring

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Air
Engineering Control: Monitoring

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Debris
Engineering Control: Disposal

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Groundwater
Engineering Control: Monitoring

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Other
Engineering Control: Cap

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Other
Engineering Control: Physical Separation

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Sediment
Engineering Control: Monitoring

Action ID: 006

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Soil
Engineering Control: Cap

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Soil
Engineering Control: Disposal

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Surface Water
Engineering Control: Monitoring

Action ID: 006
Action Name: RECORD OF DECISION
Action Completion date: 3/24/1995
Planned Complet. date: 3/30/1995
Operable Unit: 20
Contaminated Media : Surface Water
Engineering Control: Surface Water Control

Action ID: 007
Action Name: RECORD OF DECISION
Action Completion date: 7/14/2000
Planned Complet. date: 9/30/2000
Operable Unit: 19
Contaminated Media : Groundwater
Engineering Control: Monitoring

Action ID: 007
Action Name: RECORD OF DECISION
Action Completion date: 7/14/2000
Planned Complet. date: 9/30/2000
Operable Unit: 19
Contaminated Media : Groundwater
Engineering Control: Other, (N.O.S.)

Action ID: 007
Action Name: RECORD OF DECISION
Action Completion date: 7/14/2000
Planned Complet. date: 9/30/2000
Operable Unit: 19
Contaminated Media : Sediment
Engineering Control: Cap

Action ID: 007
Action Name: RECORD OF DECISION

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action Completion date: 7/14/2000
Planned Complet. date: 9/30/2000
Operable Unit: 19
Contaminated Media : Sediment
Engineering Control: Disposal

Action ID: 007
Action Name: RECORD OF DECISION
Action Completion date: 7/14/2000
Planned Complet. date: 9/30/2000
Operable Unit: 19
Contaminated Media : Sediment
Engineering Control: Excavation

Action ID: 008
Action Name: Explanation Of Significant Differences
Action Completion date: 2/4/2002
Planned Complet. date: 3/30/2002
Operable Unit: 01
Contaminated Media : Sediment
Engineering Control: Natural Attenuation

Action ID: 008
Action Name: Explanation Of Significant Differences
Action Completion date: 2/4/2002
Planned Complet. date: 3/30/2002
Operable Unit: 01
Contaminated Media : Sediment
Engineering Control: No Action

Action ID: 009
Action Name: Explanation Of Significant Differences
Action Completion date: 3/20/2003
Planned Complet. date: Not reported
Operable Unit: 01
Contaminated Media : Sediment
Engineering Control: Disposal

Action ID: 009
Action Name: Explanation Of Significant Differences
Action Completion date: 3/20/2003
Planned Complet. date: Not reported
Operable Unit: 01
Contaminated Media : Sediment
Engineering Control: Excavation

Action ID: 010
Action Name: Explanation Of Significant Differences
Action Completion date: 9/30/2004
Planned Complet. date: 9/30/2004
Operable Unit: 01
Contaminated Media : Sediment
Engineering Control: Storage - Temporary

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 12/30/1987

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Planned Complet. date: 12/31/1987
Operable Unit: 23
Contaminated Media : Soil
Engineering Control: Disposal

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 12/30/1987
Planned Complet. date: 12/31/1987
Operable Unit: 23
Contaminated Media : Soil
Engineering Control: Solidification/ Stabilization

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Debris
Engineering Control: Decontamination

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Debris
Engineering Control: Disposal

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Debris
Engineering Control: Incineration

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Debris
Engineering Control: Operations & Maintenance (O&M)

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Debris
Engineering Control: Residuals Disposal

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Databaso(s)

EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Operable Unit: 21
Contaminated Media : Debris
Engineering Control: Storage - Temporary

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Sludge
Engineering Control: Disposal

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Sludge
Engineering Control: Impermeable Barrier

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Sludge
Engineering Control: Operations & Maintenance (O&M)

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Surface Water
Engineering Control: Monitoring

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Surface Water
Engineering Control: Operations & Maintenance (O&M)

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Surface Water
Engineering Control: Publicly Owned Treatment Works (POTW)

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Contaminated Media : Surface Water
Engineering Control: Pump And Treat

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 12/31/1990
Planned Complet. date: 6/30/1991
Operable Unit: 21
Contaminated Media : Surface Water
Engineering Control: Surface Water Control

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Debris
Engineering Control: Cap

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Debris
Engineering Control: Disposal

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Debris
Engineering Control: Monitoring

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Other
Engineering Control: Cap

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Other
Engineering Control: Disposal

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Other

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Engineering Control: Monitoring

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Soil
Engineering Control: Cap

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Soil
Engineering Control: Disposal

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 6/16/1993
Planned Complet. date: 6/30/1993
Operable Unit: 22
Contaminated Media : Soil
Engineering Control: Excavation

US INST CONTROL:

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: Explanation Of Significant Differences
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421
EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Swimming Restriction
Actual Date: Not reported
Complet. Date: 8/3/2000
Operable Unit: 01
Contaminated Media : Sediment

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: Explanation Of Significant Differences
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421
EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Covenant
Actual Date: Not reported
Complet. Date: 9/30/2004
Operable Unit: 01
Contaminated Media : Sediment

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

Site

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: Explanation Of Significant Differences
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Deed Notices
Actual Date: Not reported
Comple. Date: 9/30/2004
Operable Unit: 01
Contaminated Media: Sediment

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: Explanation Of Significant Differences
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Easement
Actual Date: Not reported
Comple. Date: 9/30/2004
Operable Unit: 01
Contaminated Media: Sediment

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: Explanation Of Significant Differences
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Equitable servitude
Actual Date: Not reported
Comple. Date: 9/30/2004
Operable Unit: 01
Contaminated Media: Sediment

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: Explanation Of Significant Differences
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Health Advisory
Actual Date: Not reported
Comple. Date: 9/30/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

FDR ID Number
EPA ID Number
Database(s)

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Operable Unit: 01
Contaminated Media : Sediment

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: Explanation Of Significant Differences
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Notice in Newspaper
Actual Date: Not reported
Comple. Date: 9/30/2004
Operable Unit: 01
Contaminated Media : Sediment

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: Explanation Of Significant Differences
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Zoning regulation
Actual Date: Not reported
Comple. Date: 9/30/2004
Operable Unit: 01
Contaminated Media : Sediment

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Swimming Restriction
Actual Date: Not reported
Comple. Date: 9/30/1989
Operable Unit: 01
Contaminated Media : Sediment

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Inst. Control: Access Restriction, Fencing
Actual Date: Not reported
Comple. Date: 6/16/1993
Operable Unit: 22
Contaminated Media : Debris

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Institutional Controls, (N.O.S.)
Actual Date: Not reported
Comple. Date: 6/16/1993
Operable Unit: 22
Contaminated Media : Debris

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Access Restriction, Fencing
Actual Date: Not reported
Comple. Date: 6/16/1993
Operable Unit: 22
Contaminated Media : Other

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Institutional Controls, (N.O.S.)
Actual Date: Not reported
Comple. Date: 6/16/1993
Operable Unit: 22
Contaminated Media : Other

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Access Restriction, Fencing
Actual Date: Not reported
Compleat. Date: 6/16/1993
Operable Unit: 22
Contaminated Media : Soil

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Institutional Controls, (N.O.S.)
Actual Date: Not reported
Compleat. Date: 6/16/1993
Operable Unit: 22
Contaminated Media : Soil

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: Not reported
Compleat. Date: 3/24/1995
Operable Unit: 20
Contaminated Media : Groundwater

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421

EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: Not reported
Compleat. Date: 3/24/1995
Operable Unit: 20
Contaminated Media : Other

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

Site

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421
EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: Not reported
Comple. Date: 3/24/1995
Operable Unit: 20
Contaminated Media : Soil

EPA ID: WAD980726368
Site ID: 1000981
Name: COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS
Action Name: RECORD OF DECISION
Address: ADJ TO RUSTON WAY & TIDEFLATS IND. AREA
TACOMA, WA 98421
EPA Region: 10
County: PIERCE
Event Code: Not reported
Inst. Control: Institutional Controls, (N.O.S.)
Actual Date: Not reported
Comple. Date: 7/14/2000
Operable Unit: 19
Contaminated Media : Groundwater

RCRA-NonGen:

Date form received by agency: 12/31/1990
Facility name: US EPA COMMENCEMENT BAY NEARSHORE
Site name: USEPA-COMMENCEMENT BAY SITE
Facility address: TIDEFLATS INDUSTRIAL SECT
TACOMA, WA 98422
EPA ID: WAD980726368
Mailing address: MAILSTOP HW-113
1200 SIXTH AVE
SEATTLE, WA 98101
Contact: MICHAEL STONER
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (206) 442-2710
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: US EPA
Owner/operator address: 1200 6TH AVE STE 113
SEATTLE, WA 98101
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 08/26/1988

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

US EPA COMMENCEMENT BAY NEARSHORE (Continued)

1000297462

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: Unknown
Transporter of hazardous waste: Unknown
Treater, storer or disposer of HW: No
Underground injection activity: Unknown
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: Unknown
Used oil processor: Unknown
Used oil refiner: Unknown
Used oil fuel marketer to burner: Unknown
Used oil Specification marketer: Unknown
Used oil transfer facility: Unknown
Used oil transporter: Unknown
Off-site waste receiver: Commercial status unknown

Historical Generators:

Date form received by agency: 08/26/1988
Facility name: US EPA COMMENCEMENT BAY NEARSHORE
Classification: Not a generator, verified

Violation Status: No violations found

4
NW
< 1/8
0.048 mi.
253 ft.

PUMP STN 4103 ROW 2222 MARINE VIEW DR
ROW 2222 MARINE VIEW DR
TACOMA, WA 98422

CSCSL S108969319
N/A

Relative:
Higher

Actual:
20 ft.

CSCSL:

Facility ID: 1806706
Facility Type: Not reported
Region: Southwest
Ecology Status Code: 1
Entered Date: 1/18/2008
Updated Date: 1/18/2008
Brownfield Status: 0
Rank Status: Not reported
PSI Status: 1
Clean Method: Not reported
Drinking Water Type: Not reported
Cleanup Standard: Not reported
Acres Remediated: Not reported
Latitude: 47.274556
Longitude: -122.379861
Lat/Long: 47.274556 / -122.379861
Lat/Long (dms): 47 16 28.402 / -122 22 47.5
Media Status Desc: 1/18/2008
Affected Media: Groundwater
Affected Media Status: Confirmed
Pesticides: Not reported
Petroleum Products: Confirmed
Phenolic Compounds: Not reported
Reactive Wastes: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

PUMP STN 4103 ROW 2222 MARINE VIEW DR (Continued)

S108969319

Corrosive Wastes: Not reported
Radioactive Wastes: Not reported
Asbestos: Not reported
Responsible Unit: SOUTHWEST
Arsenic Code: Not reported
MTBE Code: Not reported
UXO Code: Not reported
Dioxin: Not reported
Non-Halogenated Solvents: Not reported
Base/Neutral/Acid Organics: Not reported
Halogenated Organic Compounds: Not reported
EPA Priority Pollutants - Metals and Cyanide: Not reported
Metals - Other non-priority pollutant metals: Not reported
Polychlorinated biPhenyls (PCBs): Not reported
Polynuclear Aromatic Hydrocarbons (PAH): Not reported
Conventional Contaminants, Organic: Not reported
Conventional Contaminants, Inorganic: Not reported
Tributyl Tin Contaminant Group: Not reported
Bioassay/Benthic Failures Contaminant Group: Not reported
Wood Debris Contaminant Group: Not reported
Other Deleterious Substance Group: Not reported
Ecology Site Status (MTCA cleanup process): Awaiting SHA

5
NNE
< 1/8
0.069 mi.
362 ft.

WA DOT PIT B25
102 NORPOINT WAY SITE TRAILER
TACOMA, WA 98422

FINDS 1000394613
UST WAD981774649
ALLSITES
RCRA-NonGen

Relative:
Higher

FINDS:

Registry ID: 110005344840

Actual:
37 ft.

Environmental Interest/Information System

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RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

UST:

Facility ID: 72599616
Site ID: 3654
Lat Deg: 47
Lat Min: 17
Lat Sec: 11.1372000000119
Long Deg: -122
Long Min: 22

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

WA DOT PIT B25 (Continued)

1000394613

Long Sec: 55.4448000000139
UBI: Not reported
Phone Number: 2063833585

Tank ID: 37316
Tank Name: 2
Install Date: 12/31/1964
Capacity: Not reported
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Steel
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

Tank ID: 37340
Tank Name: 4
Install Date: 12/31/1964
Capacity: Not reported
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Steel
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

WA DOT PIT B25 (Continued)

1000394613

Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

Tank ID: 37383
Tank Name: 3
Install Date: 12/31/1964
Capacity: Not reported
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Steel
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

Tank ID: 37440
Tank Name: 1
Install Date: 12/31/1964
Capacity: Not reported
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Steel
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

WA DOT PIT B25 (Continued)

1000394613

Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

ALLSITES:

Facility Id: 72599616
Latitude: 47.286427
Longitude: -122.382068
Geographic location identifier (alias facid): 72599616
Facility Name: WA DOT PIT B25
Latitude Decimal Degrees: 47.286427000000003
Longitude Decimal Degrees: -122.382068
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 6
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 72599616
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: I
Federal Program Identifier: 3654
Interaction Start Date: 6/8/1998
Interaction End Date: 3/22/2000

Geographic Location Identifier (Alias Facid): 72599616
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Identifier: WAD981774649
Interaction Start Date: 4/18/1988
Interaction End Date: 12/31/1997

RCRA-NonGen:

Date form received by agency: 04/27/1998
Facility name: WA DOT PIT B25
Facility address: 102 NORPOINT WAY SITE TRAILER
TACOMA, WA 98422
EPA ID: WAD981774649
Mailing address: 5720 CAPITOL BLVD
TUMWATER, WA 98504
Contact: GARY L LOZIER
Contact address: 5720 CAPITOL BLVD
TUMWATER, WA 98504
Contact country: US
Contact telephone: (360)357-2653
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: WA DOT FACILITIES HAZMAT
Owner/operator address: 5720 CAPITOL BLVD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WA DOT PIT B25 (Continued)

1000394613

TUMWATER, WA 98504

Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 06/04/1996
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

B6
NNW
< 1/8
0.073 mi.
384 ft.

SEAWAY TOWING & SALVAGE INC RECYCLE YARD
2228 MARINE VIEW DR
TACOMA, WA 98421

FINDS 1001226281
ALLSITES WAH000002451
RCRA-NonGen

Relative:
Higher

Actual:
26 ft.

Site 1 of 3 in cluster B

FINDS:

Registry ID: 110005391165

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ALLSITES:

Facility Id: 14559319
Latitude: 47.16551
Longitude: -122.23004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUND ROCK (Continued)

1007079331

Quality Programs.

ALLSITES:

Facility Id: 2160365
Latitude: 47.266593069
Longitude: -122.36551846
Geographic location identifier (alias facid): 2160365
Facility Name: SOUND ROCK
Latitude Decimal Degrees: 47.26659305999998
Longitude Decimal Degrees: -122.36551846
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 2160365
Interaction (Aka Env Int) Type Code: WQGSWI
Interaction (Aka Env Int) Description: General Permit Storm Water Ind
Interaction Status: A
Federal Program Identifier: SO3001691
Interaction Start Date: 9/20/2002
Interaction End Date: Not reported

C9
NNW
< 1/8
0.102 mi.
537 ft.

HATHAWAY EXCAVATING CO
2408 MARINE VIEW DR
TACOMA, WA 98422

FINDS 1007079302
ALLSITES N/A

Relative:
Higher

FINDS:

Registry ID: 110015560052

Actual:
37 ft.

Environmental Interest/Information System

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ALLSITES:

Facility Id: 2238175
Latitude: 47.268534694
Longitude: -122.3699589
Geographic location identifier (alias facid): 2238175
Facility Name: HATHAWAY EXCAVATING CO
Latitude Decimal Degrees: 47.268534690000003
Longitude Decimal Degrees: -122.3699589
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

HATHAWAY EXCAVATING CO (Continued)

1007079302

Geographic Location Identifier (Alias Facility): 2238175
Interaction (Aka Env Int) Type Code: WQGSWI
Interaction (Aka Env Int) Description: General Permit Storm Water Ind
Interaction Status: A
Federal Program Identifier: SO3001651
Interaction Start Date: 9/20/2002
Interaction End Date: Not reported

C10
NNW
< 1/8
0.110 mi.
582 ft.

CASCADE TIMBER LOG SORTING YARD #1
2502 MARINE VIEW DRIVE
TACOMA, WA 98421

CERCLIS 1000166147
WAD981763162

Relative:
Higher

CERCLIS:

Site ID: 1001085
Federal Facility: Not a Federal Facility
NPL Status: Site is Part of NPL Site
Non NPL Status: Not reported

Actual:
34 ft.

CERCLIS Site Alias Name(s):

Alias Name: CASCADE TIMBER CO.
Alias Address: Not reported
WA

Site Description: 8.2 ACRE SITE LOC'D ON NORTHERN BANK OF HYLEBOS WATERWAY IN THE NW 1/4, SE 1/4
SECTION 26, T21N R3E

CERCLIS Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 02/27/1985
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: 11/12/1987
Date Completed: 11/12/1987
Priority Level: Addressed as part of an existing NPL site

Action: PRELIMINARY ASSESSMENT
Date Started: 11/12/1987
Date Completed: 11/12/1987
Priority Level: Higher priority for further assessment

11
ESE
< 1/8
0.122 mi.
642 ft.

DON OLIVE AUTOMOBILE SHREDDER RESIDUE
2150 MARINE VIEW DR.
TACOMA, WA 98421

ICR S103506717
N/A

Relative:
Higher

ICR:

Date Ecology Received Report: 01/31/95
Contaminants Found at Site: Metals, PCB's
Media Contaminated: Surface water, Soil
Waste Management: Landfill

Actual:
36 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HATHAWAY EXCAVATING CO (Continued)

1007079302

Geographic Location Identifier (Alias Facid): 2238175
Interaction (Aka Env Int) Type Code: WQGSWI
Interaction (Aka Env Int) Description: General Permit Storm Water Ind
Interaction Status: A
Federal Program Identifier: SO3001651
Interaction Start Date: 9/20/2002
Interaction End Date: Not reported

C10
NNW
< 1/8
0.110 mi.
582 ft.

CASCADE TIMBER LOG SORTING YARD #1
2502 MARINE VIEW DRIVE
TACOMA, WA 98421

CERCLIS 1000166147
WAD981763162

Site 2 of 2 in cluster C

Relative:
Higher

CERCLIS:
Site ID: 1001085
Federal Facility: Not a Federal Facility
NPL Status: Site is Part of NPL Site
Non NPL Status: Not reported

Actual:
34 ft.

CERCLIS Site Alias Name(s):

Alias Name: CASCADE TIMBER CO.
Alias Address: Not reported
WA

Site Description: 8.2 ACRE SITE LOC'D ON NORTHERN BANK OF HYLEBOS WATERWAY IN THE NW 1/4, SE 1/4
SECTION 26, T21N R3E

CERCLIS Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 02/27/1985
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: 11/12/1987
Date Completed: 11/12/1987
Priority Level: Addressed as part of an existing NPL site

Action: PRELIMINARY ASSESSMENT
Date Started: 11/12/1987
Date Completed: 11/12/1987
Priority Level: Higher priority for further assessment

11
ESE
< 1/8
0.122 mi.
642 ft.

DON OLIVE AUTOMOBILE SHREDDER RESIDUE
2150 MARINE VIEW DR.
TACOMA, WA 98421

ICR S103506717
N/A

Relative:
Higher

ICR:
Date Ecology Received Report: 01/31/95
Contaminants Found at Site: Metals, PCB's
Media Contaminated: Surface water, Soil
Waste Management: Landfill

Actual:
36 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

DON OLIVE AUTOMOBILE SHREDDER RESIDUE (Continued)

S103506717

Region: South Western
Type of Report Ecology Received: Interim cleanup report
Site Register Issue: 93-46
County Code: 27
Contact: Not reported
Report Title: Not reported

12
ESE
1/8-1/4
0.172 mi.
907 ft.

DON OLIVE AUTO FLUFF
2120 MARINE VIEW DR
TACOMA, WA 98422

FINDS 1007080838
CSCSL NFA N/A
ALLSITES

Relative:
Higher

FINDS:

Registry ID: 110015575616

Actual:
47 ft.

Environmental Interest/Information System

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CSCSL NFA:

Facility/Site Id: 1264
NFA Type: Cleanup completed, not on HSL
NFA Date: 2/11/2004
Rank: Not reported
Alternate Name: Not reported

ALLSITES:

Facility Id: 1264
Latitude: 47.27441
Longitude: -122.37906
Geographic location identifier (alias facid): 1264
Facility Name: DON OLIVE AUTO FLUFF
Latitude Decimal Degrees: 47.274410000000003
Longitude Decimal Degrees: -122.37906
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 4
Coordinate Point Geographic Position Code: 99
Location Verified Code: Y

Geographic Location Identifier (Alias Facid): 1264
Interaction (Aka Env Int) Type Code: SCS
Interaction (Aka Env Int) Description: State Cleanup Site
Interaction Status: I
Federal Program Identifier: Not reported
Interaction Start Date: 1/1/1900
Interaction End Date: 2/11/2004

Geographic Location Identifier (Alias Facid): 1264
Interaction (Aka Env Int) Type Code: SEDIMENT
Interaction (Aka Env Int) Description: Sediments

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DON OLIVE AUTO FLUFF (Continued)

1007080838

Interaction Status: A
Federal Program Identifier: Not reported
Interaction Start Date: 1/1/1900
Interaction End Date: Not reported

13
SE
1/8-1/4
0.211 mi.
1116 ft.

TACOMA PORT MARINE VW DR
802 MARINE VIEW DR
TACOMA, WA 98422

FINDS 1000334245
ALLSITES WAD981764103
RCRA-NonGen

Relative:
Higher

FINDS:

Registry ID: 110005341200

Actual:
21 ft.

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:

Facility Id: 6184133
Latitude: 47.2721
Longitude: -122.37742
Geographic location identifier (alias facid): 6184133
Facility Name: Tacoma Port Marine Vw Dr
Latitude Decimal Degrees: 47.272100000000002
Longitude Decimal Degrees: -122.37742
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 6184133
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Identifier: WAD981764103
Interaction Start Date: 4/8/1987
Interaction End Date: 2/21/1989

RCRA-NonGen:

Date form received by agency: 04/08/1987
Facility name: TACOMA PORT MARINE VW DR
Facility address: 802 MARINE VIEW DR
TACOMA, WA 98422
EPA ID: WAD981764103
Mailing address: PO BOX 1837
TACOMA, WA 98401-1837
Contact: LESLIE SACHA
Contact address: PO BOX 1837

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TACOMA PORT MARINE VW DR (Continued)

1000334245

Contact country: TACOMA, WA 98401-1837
Contact telephone: US
(253)383-5841
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: TACOMA PORT
Owner/operator address: PO BOX 1837
TACOMA, WA 98401
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 04/08/1987
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

D14 MURRAY PACIFIC LOG SORTING YARD #1
SW TAYLOR WAY & LINCOLN AVE E
1/4-1/2 TACOMA, WA 98421
0.294 mi.
1550 ft. Site 1 of 3 in cluster D

Relative:
Lower

Actual:
8 ft.

CERCLIS:
Site ID: 1000800
Federal Facility: Not a Federal Facility
NPL Status: Site is Part of NPL Site
Non NPL Status: Not reported

Site Description: 10 ACRE SITE IS LOCATED ON THE S BANK OF THE HYLEBOS WATER WAY

CERCLIS Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 02/27/1985

CERCLIS 1000354119
FINDS WAD089335160
UST
CSCSL NFA
ALLSITES
RCRA-NonGen



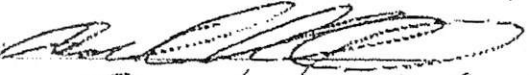
The Riley Group Inc.

ASTM USER QUESTIONNAIRE

ASTM E 1527-05 states that in order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*") the user must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete. Please answer the following questions to the best of your knowledge. Please attach additional sheets/documentation as necessary.

Site Address: 2218 Marine View Drive, Tacoma, WA RGI Contact Lannie Smith

- NO 1) Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?
- NO 2) Are you aware of any property use limitations such as *engineering controls*, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?
- NO 3) As a user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in a similar business to the current or former occupants of the property or an adjoining property and, therefore, have knowledge of the chemicals and processes used by this type of business?
- N-A 4) Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? As the user, if you intend to address this issue separately from our Phase I Environmental Site Assessment (e.g. as part of a property appraisal) please indicate "N/A" here:
- NO 5) Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user:
- (a) Do you know the past uses of the property? Please include approximate dates, if possible.
Only Boat Building 1964 to 1984
- NO (b) Do you know of specific chemicals that are present or were once present at the property?
- NO (c) Do you know of spills or other chemical releases that have taken place at the property?
- NO (d) Do you know of any environmental cleanups that have taken place at the property?
- NO (e) Are you aware of any current or former: aboveground or underground storage tanks, sumps, oil/water separators, hydraulic hoists, disposal pits, drywells, other wells and/or septic tanks at the property?
- NO 6) As a user of this ESA on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property? (Use separate sheet if necessary).
- NO 7) Do you have any contact information for past owners of the property? (If so, please provide on separate sheet).

Signature: Date: 9-1-09Printed Name: Carl Swindal

Serving the Pacific Northwest

Main Office: 17522 Bothell Way NE, Bothell, WA 98011

Tel (425) 415-0551 • Fax (425) 415-0311

www.riley-group.com



□ = Approximate Site Location



The Riley Group, Inc.

7406 - 27th Street West, Suite 301
University Place, Washington 98466
Phone: 253.565.0552 ♦ Fax: 253.460.2981

Modutech Marine, Inc.

Figure D-1

Project Number

2009-236

1961 Aerial Photograph

Date Drawn:

09/11/09

Address: 2218 Marine View Drive, Tacoma, Washington



□ = Approximate Site Location



The Riley Group, Inc.

7406 - 27th Street West, Suite 301
University Place, Washington 98466
Phone: 253.565.0552 ♦ Fax: 253.460.2981

Modutech Marine, Inc.

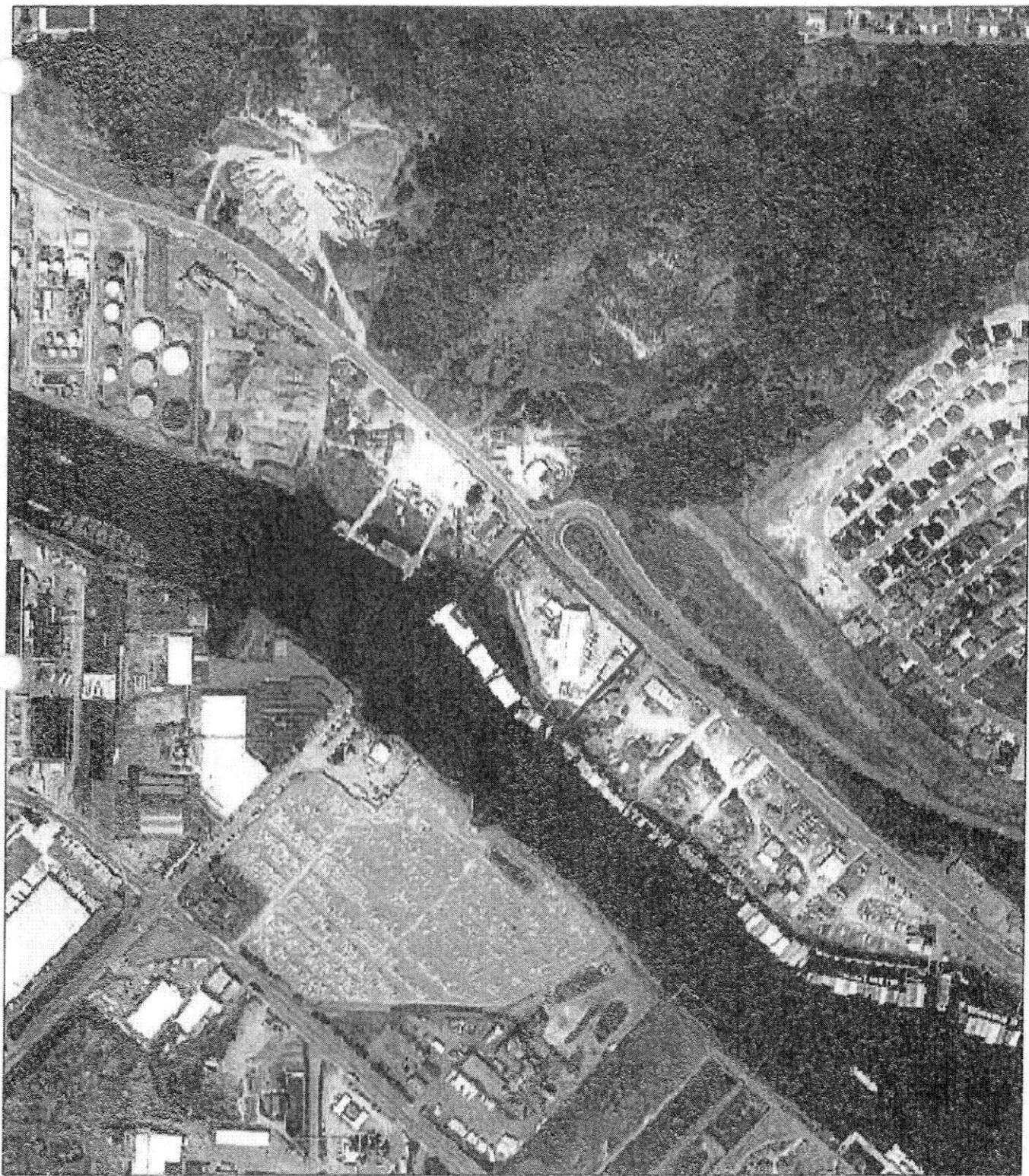
Figure D-2


Project Number
2009-236

1989 Aerial Photograph

Date Drawn:
09/11/09

Address: 2218 Marine View Drive, Tacoma, Washington



 = Approximate Site Location



The Riley Group, Inc.

7406 - 27th Street West, Suite 301
University Place, Washington 98466
Phone: 253.565.0552 ♦ Fax: 253.460.2981

Modutech Marine, Inc.

Figure D-3

Project Number

2009-236

2001 Aerial Photograph

Date Drawn:

09/11/09

Address: 2218 Marine View Drive, Tacoma, Washington

**MCGAVICK
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ATTORNEYS AT LAW

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K. Michael Jennings
Malcolm C. Lindquist

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Angela L. Olsen
Barbara Jo Sylvester
Joseph P. Zehnder

Of Counsel
Ray Graves
Lawrence B. McNertney
William P. Bergsten
Robert L. Beale
Gregory H. Pratt

Leo A. McGavick
(1904-1994)

September 19, 2003

Carl Swindahl
Modutech Marine
2218 Marine View Drive
Tacoma, WA 98422

Re: Entry of Consent Decree
Hylebos Waterway Superfund Site

Dear Carl,

On September 18, 2003 Judge Burgess signed the Hylebos Waterway consent decree between EPA and the PRPs, bringing to a close one more chapter in this endless saga. Under the terms of the consent decree, the parties must make their payment within 45 days from the date the decree was entered, which would be Sunday, November 2nd. Accordingly, I recommend that you make sure the payments for Modutech and for you as the property owner are deposited with the escrow account not later than Friday, October 31st. Modutech's payment is \$24,988 and your payment is \$8,828.

As a quick reminder, pursuant to the consent decree, the PRPs set up an escrow account with KeyBank. Payment is made directly to KeyBank, to the attention of Linda Hayes, KeyBank National Association, 1101 Pacific Ave, Tacoma, WA 98402. I suggest that you tender two separate checks in the respective amounts (one corporate; one personal) and that you identify the case number (3:03-cv-05107-FDB) in the "memo" section of the check. The checks are payable to "Hylebos Waterway Problem Areas Escrow Account." Before you actually send the money, please call me so I can make sure all of the appropriate procedures are followed and notices given. Alternatively, if you want to simply give me the checks, I will prepare the necessary cover letters and notices.

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Of Counsel
Ray Graves
Lawrence B. McNorthney
William P. Bergsten
Robert L. Beale
Gregory H. Pratt

Leo A. McGavick
(1904-1994)

October 24, 2003

Linda J. Hayes
KeyBank National Association
1101 Pacific Avenue
Tacoma, WA 98402


Re: Modutech Marine Inc.
Hylebos Waterway Problem Areas Escrow Account
United States vs. Mary Jane Anderson, et al.
3:03-cv-05107-FDB

Dear Ms. Hayes:

Enclosed please find a check payable to the Hylebos Waterway Problem Areas Escrow Account in the amount of \$24,988.00. This payment is tendered on behalf of Modutech Marine, Inc., a named defendant in the above-referenced matter, and it represents Modutech Marine's full settlement payment.

Please contact the undersigned if you have any questions regarding this matter.

Very truly yours,


Gregory A. Jacoby

GAJ:dck
Enclosures
cc: Modutech Marine Inc.
M15487\ltri\Keybank102403.doc

**MCGAVICK
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ATTORNEYS AT LAW

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(1904-1994)

October 24, 2003

Linda J. Hayes
KeyBank National Association
1101 Pacific Avenue
Tacoma, WA 98402

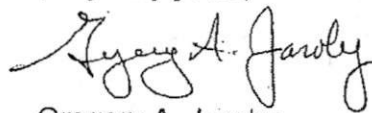
Re: Carl and Elaine Swindahl
Hylebos Waterway Problem Areas Escrow Account
United States vs. Mary Jane Anderson, et al.
3:03-cv-05107-FDB

Dear Ms. Hayes:

Enclosed please find a check payable to the Hylebos Waterway Problem Areas Escrow Account in the amount of \$8,828.00. This payment is tendered on behalf of Carl and Elaine Swindahl, named defendants in the above-referenced matter, and it represents the Swindahls' full settlement payment.

Please contact the undersigned if you have any questions regarding this matter.

Very truly yours,



Gregory A. Jacoby

GAJ:dck

Enclosure

cc: Carl and Elaine Swindahl

M:\15487\ltr2Keybank102403.doc

DEPARTMENT OF ECOLOGY
URBAN BAY ACTION TEAM

MEMORANDUM

7/12/94

TO: Modutech Marine File

FROM: Joyce Mercuri

RE: Status of voluntary grit cleanup

Modutech Marine, Inc. is a boat construction and repair facility that has operated at 2218 Marine View Drive since 1983. At one time, waste sandblast grit from sand blasting of boat hulls was spread on roads and surfaces in certain areas of the site. Ecology sampled grit deposits near the shoreline and near the sandblast shed in February 1991, and detected copper, lead, zinc, mercury, LPAH, HPAH, phenol, and bis (2-ethylhexyl) phthalate. Ecology also reported detecting 9.2 ug/kg of PCBs in a sample at the northwest corner of the property in an area which appeared to contain "auto-fluff". The site is currently unpaved. Storm water from the north part of the site enters the Hylebos Waterway through a swale which discharges just south of Tacoma storm outfall No. 23. At this time there are no other stormwater structures on the site.

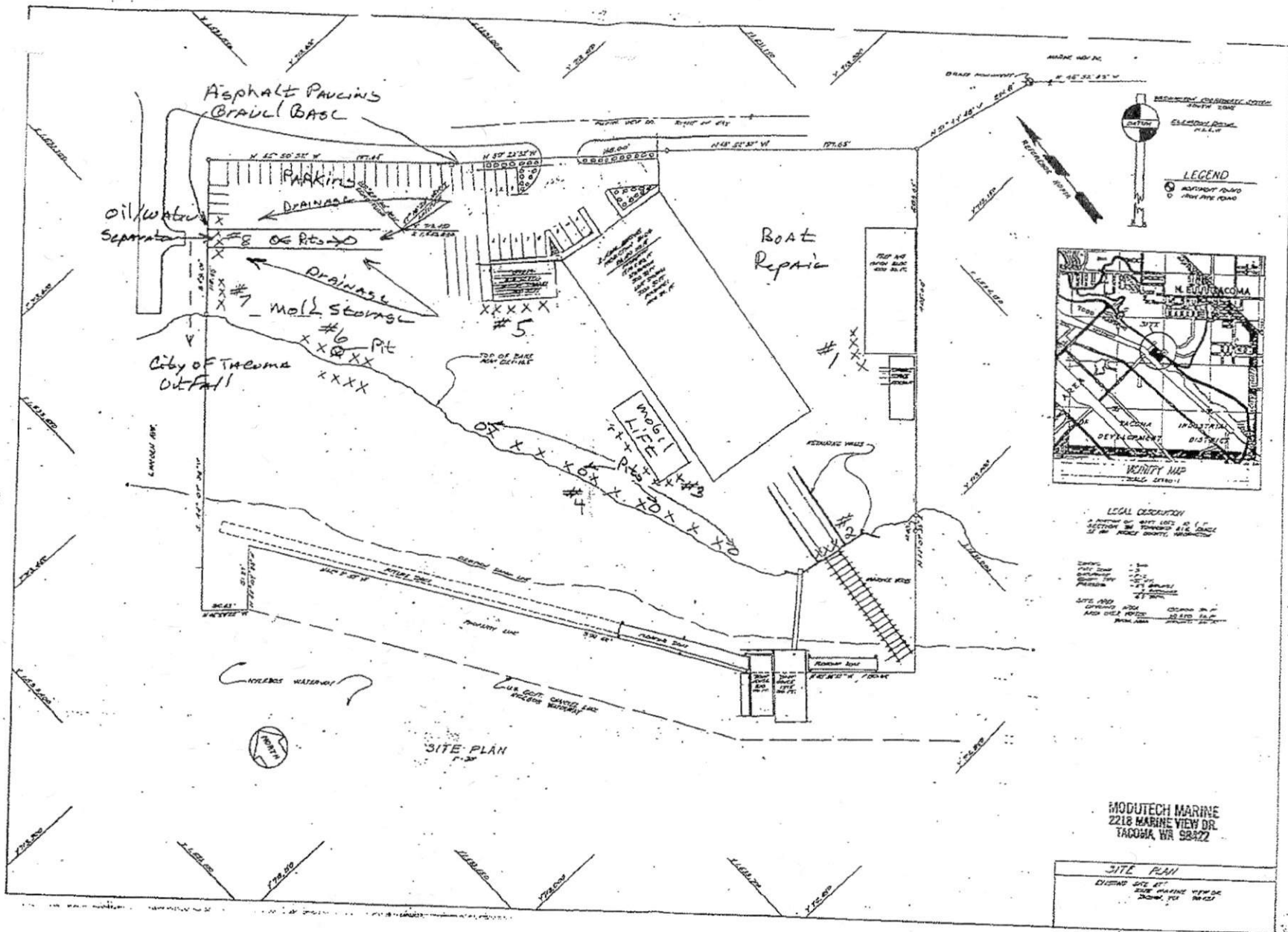
Ecology inspectors confirmed the presence of sandblast grit on the site during an inspection of 6/17/92. In a letter of August 28, 1992, Ecology requested Modutech to take measures to stop contaminants from spent sandblast grit from reaching the Hylebos Waterway. Modutech agreed to remove spent grit from the site, clean up residual grit on the marine railway and along the intertidal bank area of the site, and implement best management practices for grit management and boat work. Ecology also commented on a shoreline development permit for Modutech in a letter of January 6, 1992, requesting that the permit be conditioned with requirements to identify and remediate any sandblast grit which may be uncovered through site improvement activities. The shoreline development permit is for retention of covered moorage, paving the parking area, developing a stormwater swale, and developing a 3:1 slope vegetated buffer zone along the shoreline. In a January 6 letter to Modutech, Ecology asked Modutech to provide a plan of action for dealing with any grit which is discovered during bank regrading. Modutech is certain that no grit other than what has been removed was ever deposited within the bank area, and that no more grit will be discovered during bank regrading. However, if any grit is discovered, measures will be taken to remove and dispose of it appropriately.

An Ecology site inspection of December 30, 1992 showed that Modutech had removed several truckloads of grit from an old dump area at the north end of the site, from the roadway along the shore, and from around the boat prep shed and sandblast shed. The bulk of the grit, at the north end of the site, had been removed with a backhoe until clean packed sand was observed, then the area was backfilled with clean gravel. The grit along the roadway and around the sheds had been removed with an industrial vacuum. Some surface grit in

the northwest corner of the site was also vacuumed. Grit around the marine railway had also been cleaned up at the time of the December 30 inspection.

In a letter of January 6, 1993, Ecology requested Modutech to dig test pits within the proposed drainage swale and along part of the shoreline which is slated to be regraded to a 3:1 slope for the vegetated buffer zone. Ecology observed test pits within the swale area on August 26, 1993, and within the vegetated buffer zone area on September 21, 1993. No sandblast grit was observed. By the time of the August, 1993 inspection, residual sandblast grit in the intertidal zone had also been removed. In the last site inspection, of May 25, 1994, Ecology observed that the last of the sandblast grit on the site was scraped up and was awaiting removal. This area of grit was immediately behind the office, in a boat mold storage area. The boat molds had been moved and the grit removed with a vacuum. The remainder of sandblast grit on the site, which was within a boat mold storage area away from the shoreline, was cleaned up in spring of 1994.

An Ecology site inspection report from February 1991 noted that "auto fluff" had been observed in the northwest corner of the property. This was sampled and found to contain 9.2 mg/kg of PCBs. The MTCA Method A, Industrial Cleanup level is 10 mg/kg. Ecology inspectors looked for visual indications of the auto fluff during site inspections on June 17, 1992 and December 30, 1992. No auto fluff was observed. However, the area where the fluff was originally identified was covered by fiberglass boat molds, so access is difficult. Modutech reported "digging around" in that area when removing the large stockpile of sandblast grit, and did not observe any auto fluff.



uck Clarke
XXXXXXXXXXXX
DIRECTOR OF ECOLOGY
Director



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504-6811 • (206) 753-2353

August 28, 1992

Mr. Carl Swindahl
Modutech Marine, Inc.
2218 Marine View Drive
Tacoma, WA 98422-4183

Dear Mr. Swindahl:

I have enclosed the report from my inspection at Modutech Marine on 6/17/92. I apologize for the delay in sending it. Ecology's task is to find and control ongoing sources of pollution to Commencement Bay waterways, to prevent recontamination of the waterway sediments after they are cleaned up.

On your site, spent sandblast grit appears to be a major problem. Spent grit can be washed from the site via stormwater or metals leached out and transported through ground water. An option may be to remove the grit from the shoreline and drainage courses and pave the yard to prevent stormwater transport of grit or leaching through ground water. Another option may be to remove the grit from the yard altogether, including scraping up the grit beneath the gravel. The sandblast grit next to the concrete slab at the marine railway is contaminated with paint residues and metals and should also be removed. Any material which designates as dangerous waste should be disposed of properly.

At this time, my primary concern is to prevent the spent grit from reaching the waterway. However, the spent sandblast grit in the soils of the site may also violate the cleanup standards of the Model Toxics Control Act (MTCA). If you do plan to leave the spent grit on site (beneath the pavement), then some assurance must be made that future activities at the site will not cause a release of toxic chemicals to the environment. An example is a deed restriction requiring appropriate controls for any future disturbance of the pavement that may re-expose the soils.

To avoid continuing problems with spent sandblast grit or other pollutants, please review the recommendations in the inspection report. It is my understanding that any work in the shoreline costing less than \$2,500.00 does not require a shoreline permit. However, in light of other outstanding shoreline permit issues at your site, I suggest you contact Peter Katich before work to remove the grit is resumed.

Mr. Carl Swindahl, President
Page 2
August 28, 1992

While I do understand that there are unresolved shoreline permit issues at your site that may prevent immediate cleanup of the sandblast grit, Ecology needs some assurance that this source of sediment contamination will be stopped. Therefore, please let me know by September 25 what your plans are for dealing with the spent sandblast grit. If you have any questions please call me at 586-4692.

Sincerely,

A handwritten signature in cursive script that reads "Joyce Mercuri".

Joyce Mercuri
Urban Bay Inspector

JM:km
Enclosure

cc: Karen Keeley, EPA
Peter Katich, Tacoma Land Use Div.

MODUTECH MARINE
4/16/91

TO: Modutech Marine File

FROM: Lynn Gooding *LG*

SUBJECT: Review of Sample Analyses

Modutech Marine was inspected on February 26, 1991 by Lynn Gooding and Mary Beth Hayes of Ecology. Samples were collected in three areas of the facility and analyzed for various parameters. Sample MOD 1 was collected outside of sheds used for sandblasting and appeared to be mostly sandblast grit. MOD 1 was analyzed for priority pollutant metals. Samples MOD 2A and 2B were collected at the crane way in a tidally influenced area. The sample appeared to contain a significant amount of paint waste. MOD 2A was analyzed for priority pollutant metals and MOD 2B was analyzed for semi-volatile organics (BNA's). Sample MOD 3 was collected in the northwest corner of the property in an area which appeared to have "car fluff" deposited. MOD 3 was analyzed for PCB's. The following outlined the analyses results for the Modutech Marine samples.

MOD 1/MOD 2A- PRIORITY POLLUTANT METALS ANALYSIS (ug/g) ppm

PARAMETER	MOD 1	MOD 1/SPLIT	MOD 2A	MOD 2A/SPLIT
Mercury +	< 0.011	< 0.010	1.76	1.80
Antimony +	2.29	2.29	12.6	-
Lead +	6.00	5.92	450.	-
Selenium	0.30	0.30	3.12	-
Arsenic +	(30.)	(25)	(46)	-
Thallium	1.75	1.98	1.42	-
Beryllium	<3.8	-	< 7.1	-
Cadmium	(13.)	-	(24)	-
Chromium	128.	-	122.	-
Copper +	2,800	-	23,000	-
Nickel +	69.	-	42.	-
Silver	< 0.76	-	< 1.4	-
Zinc +	304.	-	7,080.	-
Tin	< 15.	-	350.	-
Total Solids (%)	89.9	-	36.5	-

(Note: + = a priority chemical for the waterway segment, bold indicates that the level exceeds the sediment cleanup objectives listed in the ROD)

The high metals content in both samples are probably due to sandblast grit and anti-fouling paints. Modutech takes their used sandblast grit and spreads it around the yard and boats are hydro-blasted along the crane way area.

SED. CLEANUP OBJECTIVE (ROD)

59
150
450
-
57
-
-
5.1
-
390
140
6.1
410
-

EXCEED

(X)

(=)

(X)

(X)

(X)

MOD 2B - SEMI VOLATILE ORGANIC ANALYSIS (ug/Kg)

PARAMETER	MOD 2B	Sediment SCO Cleanup Objective	Clean up standard, Method A
X Phenol +	520	420	
X Dibenzofuran	550	540	
LPAHs			
Naphthalene	480	2,100	
2-Methylnaphthalene	330	670	
X Acenaphthene	610	500	
X Fluorene	930	540	
X Phenanthrene	8,200	1,500	
X Anthracene	2,600	960	
X Total LPAHs	13,150	5,200	
HPAHs +			
X Fluoranthene	21,000	2,500	
X Pyrene	6,400	3,300	
Benzo(ghi)perylene	590	720	
X *Benzo(a)anthracene	9,100	1,600 ¹⁶	
X *Chrysene	10,000	2,800 ²⁴	
X *Benzofluoranthenes	13,000	3,600 ³⁶	
*Benzo(a)pyrene	1,100	1,600	
X *Indeno(1,2,3-cd)pyrene	1,600	690	
X *Dibenz(a,h)anthracene	1,400	230	
X *=Carcinogenic PAHs Total	36,200		20,000
X Total HPAHs	64,190	17,000	
Phthalates			
X Dimethyl	67,000	160	
X Butylbenzyl	5,100	900	
X Bis(2-ethylhexyl)	20,000	1,300	
Di-n-octyl	1,100	6,200	
X Di-n-butyl	2,800	1,400	

(The bold figures indicate parameters which exceeded the Sediment Cleanup Objectives and are priority chemicals for the problem area)

MOD 3 - POLYCHLORINATED BIPHENYLS ANALYSIS (ug/Kg)

PCB #	MOD 3	REPLICATE 1	REPLICATE 2	STANDARD - METHOD A
1254	4,600	4,300	3,700	
1262	4,600	5,400	4,000	
TOTAL	9,200	9,700	7,700	10,900 1000

(PCBs are a priority chemical for the waterway)

RECOMMENDATION: THIS FACILITY SHOULD GO TO LIST 3

$$9200 \text{ PPB} = 9.2 \text{ mg/kg}$$

$$\text{Method A} = 1.0 \text{ mg/kg} = 1000 \text{ ug/kg}$$

- *Focused Phase II Subsurface Investigation, Modutech Marine, Inc., Riley Group, Inc., November 2009*



The Riley Group, Inc.

November 10, 2009

Ms. Carol Duris
Viking Bank
13613 Meridian East, Suite 160
Puyallup, WA 98373

**Re: Focused Phase II Subsurface Investigation
Modutech Marine, Inc.
2218 Marine View Drive
Tacoma, Washington
RGI Project #2009-236b**

Dear Ms. Duris:

This letter report summarizes The Riley Group, Inc.'s (RGI's) Focused Phase II Subsurface Investigation (Phase II) findings for the above-referenced property located at 2218 Marine View Drive in Tacoma, Washington (Figure 1).

The Focused Phase II investigation was performed at the request of Ms. Carol Duris of Viking Bank (Client). The scope of work for this project was performed in accordance with our *Focused Phase II Subsurface Investigation Proposal* dated October 12, 2009.

PROJECT BACKGROUND

RGI completed a Phase I Environmental Site Assessment (ESA) of the subject Site for the Client in September, 2009. Among our findings and conclusions, RGI included the following findings:

- Previous investigations were conducted at the Site by the Washington State Department of Ecology (Ecology) while assessing potential on-site sources of pollution to the adjoining Hylebos Waterway. During their investigation, Ecology encountered sandblast grit from historical on-Site operations, which was deposited at various locations throughout the Site.
- A shallow sandblast grit sample collected by Ecology near the southwest corner of the Site manufacturing building was found to contain elevated concentrations of arsenic and cadmium.
- A shallow soil sample collected by Ecology southeast of the Site manufacturing building contained elevated concentrations of carcinogenic polynuclear aromatic hydrocarbons (cPAHs).
- A shallow soil sample collected by Ecology from the northwest corner of the Site contained elevated concentrations of polychlorinated biphenyls (PCBs).

SERVING THE PACIFIC NORTHWEST

North Puget Sound - Corporate Office
17522 Bothell Way NE, Suite A
Bothell, WA 98011
Phone 425.415.0551 • Fax 425.415.0311

South Puget Sound Office
7406 - 27th Street West, Suite 301
University Place, WA 98466
Phone 253.565.0552 • Fax 253.460.2981

Eastern Washington & Oregon Office
1838 South Washington Street
Kennewick, WA 99337
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www.riley-group.com

- Ecology previously noted spilled paint along the boat ramp, where hull painting and blasting reportedly occurred. A shallow soil sample collected by Ecology from the ramp area contained elevated concentrations of arsenic, lead and cadmium.

RGI's complete findings and conclusions are provided in our *Phase I Environmental Site Assessment Report*, dated September 11, 2009. On October 13, 2009, the Client authorized RGI to perform this Focused Phase II Subsurface Investigation.

SCOPE OF SERVICES

The Scope of Services performed for this project was as specified by the Client. The goal of the investigation was to sample and analyze soils at the above-mentioned locations for the specified contaminants of concern. The scope of work included the following tasks:

- Performed public and private utility locating in an attempt to identify the location(s) of buried utility lines servicing the Site.
- Advanced four direct push test probes in the suspect areas discussed above, to a maximum depth of 6 feet below ground surface (bgs).
- Collected soil samples at all test probe locations for laboratory analysis of specified contaminants of concern. At Client request, groundwater sampling was excluded from this scope of work.
- Compared analytical results to Ecology's routine Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340).
- Prepared this letter report presenting our findings and conclusions.

REGULATORY ANALYSIS OF SITE CONDITIONS UNDER MODEL TOXICS CONTROL ACT (MTCA)

Washington's hazardous release cleanup law, the Model Toxics Control Act (RCW 70.105D), mandates that site cleanups protect human health and the environment. The MTCA Cleanup Regulation (WAC173-340) defines the approach for establishing cleanup requirements for individual sites, including the establishment of cleanup standards and selection of cleanup actions.

The MTCA regulation provides three options for establishing generic and site-specific cleanup levels for soil and groundwater. Method A cleanup levels have been adopted for specific purposes and are intended to provide conservative cleanup levels for sites undergoing routine site characterization or cleanup actions or those sites with relatively few hazardous substances. Method B and C cleanup levels are set using a site risk assessment, which focus on the use of "reasonable maximum exposure" assumptions based on site-specific characteristics and toxicity of the contaminants of concern.

For purposes of comparison, analytical laboratory data for this project are compared to the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (considered protective of drinking water). The MTCA Method A Soil Cleanup Levels are summarized in the attached Table 1.

FOCUSED PHASE II SUBSURFACE INVESTIGATION

On October 21, 2009, RGI advanced a total of four test probes (SP1 through SP4) to a maximum depth of 6 feet bgs (Figure 2). Each test probe was advanced at the approximate four locations identified above, where elevated concentrations of the specified contaminants of concern were previously intercepted.

Test probes were advanced using a truck-mounted direct push probe rig owned and operated by Pacific Northwest Probe under subcontract to RGI. Test probe logs will be kept in our files and are available upon request.

All probing and sampling equipment were cleaned prior to commencing probing and in between sampling and boring locations. All field sampling and decontamination procedures were performed in accordance with RGI's standard sampling and decontamination protocols.

Soil Sampling

During all drilling activities, soil samples were collected, inspected, and classified by RGI's field geologist. Soil conditions encountered were described using the Unified Soil Classification System (USCS). Native soils beneath the Site generally consisted of varying depths of silty, fine- to medium-grained sand with gravel overlying a silty, fine-grained sand with trace gravel. Both layers appeared to represent different generations of fill material.

A total of 8 discrete soil samples were collected during this project. In general, samples were collected of surficial and deeper fill material, respectively. Soil samples were screened in the field for the presence of volatile organic compounds (VOCs) using a portable gas analyzer equipped with a photo-ionization detector (PID). No elevated PID field screening results were noted.

Based on our field observations, select soil samples were submitted for laboratory analyses of Client-specified contaminants of concern, listed below. Samples were selected based on the historical detections of the specified contaminants of concern. Samples SP1-1 and SP2-0.5 were collected from beneath the existing concrete pavement and selected based on the previous detection of cPAHs and metals, respectively, in shallow soils. Samples SP3-3 and SP4-3 were collected from the deeper fill layer, which was reportedly overlain by the previously excavated sandblast grit.

Analytical Laboratory Analysis

Selected soil samples collected during this project were submitted to Libby Environmental, Inc. of Olympia, Washington, for one or more of the following laboratory analyses:

- Carcinogenic PAHs by EPA Test Method 8270C.
- PCBs by EPA Test Method 8082.
- MTCA-Regulated Metals¹ by EPA Test Method 7000 Series & 7471.

¹ Arsenic, Cadmium, Chromium, Lead and/or Mercury.

Laboratory Analytical Results

Analytical results and field screening data, summarized in the attached Table 1, are discussed below. Copies of the analytical laboratory reports and associated sample chain of custody forms are included in Appendix A.

Soil Analytical Results

No PAHs, PCBs, arsenic, cadmium, lead or silver were detected in the soil samples submitted from the Site. Chromium concentrations of 6 milligrams per kilogram (mg/kg) and 14 mg/kg, within expected natural background thresholds and below the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (19 and 2,000 mg/kg, as applicable).

CONCLUSIONS

Based on our subsurface investigation findings, the specified contaminants of concern were not detected in the soils analyzed from the Site.

LIMITATIONS


This report is the property of The Riley Group, Inc., Viking Bank and its authorized representatives or affiliates and was prepared in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions. This report is intended for specific application to the Modutech Marine, Inc. property located at 2218 Marine View Drive in Tacoma, Washington. No other warranty, expressed or implied, is made.

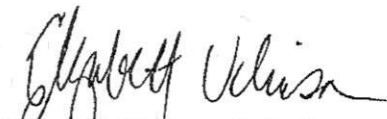
The analyses and recommendations, if any, presented in this report are based upon data obtained from our review of available information at the time of preparing this report, our test pits excavated or test borings drilled on-site, or other noted data sources. Conditional changes may occur through time by natural or man-made process on this or adjacent properties. Additional changes may occur in legislative standards, which may or may not be applicable to this report. These changes, beyond RGI's control, may render this report invalid, partially or wholly. If variations appear evident, The Riley Group, Inc. should be requested to reevaluate the recommendations in this report.

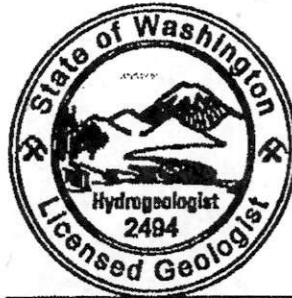
We trust that this letter report meets your current project needs and appreciate the opportunity to be of service. Please contact us if you have any questions or need additional information.

Sincerely,

THE RILEY GROUP, INC.


Lianne Smith, CHMM
Senior Project Manager


Elizabeth Uchlison, L.G., L.H.G.
Senior Hydrogeologist



Elizabeth Ann Uchlison

Attachments

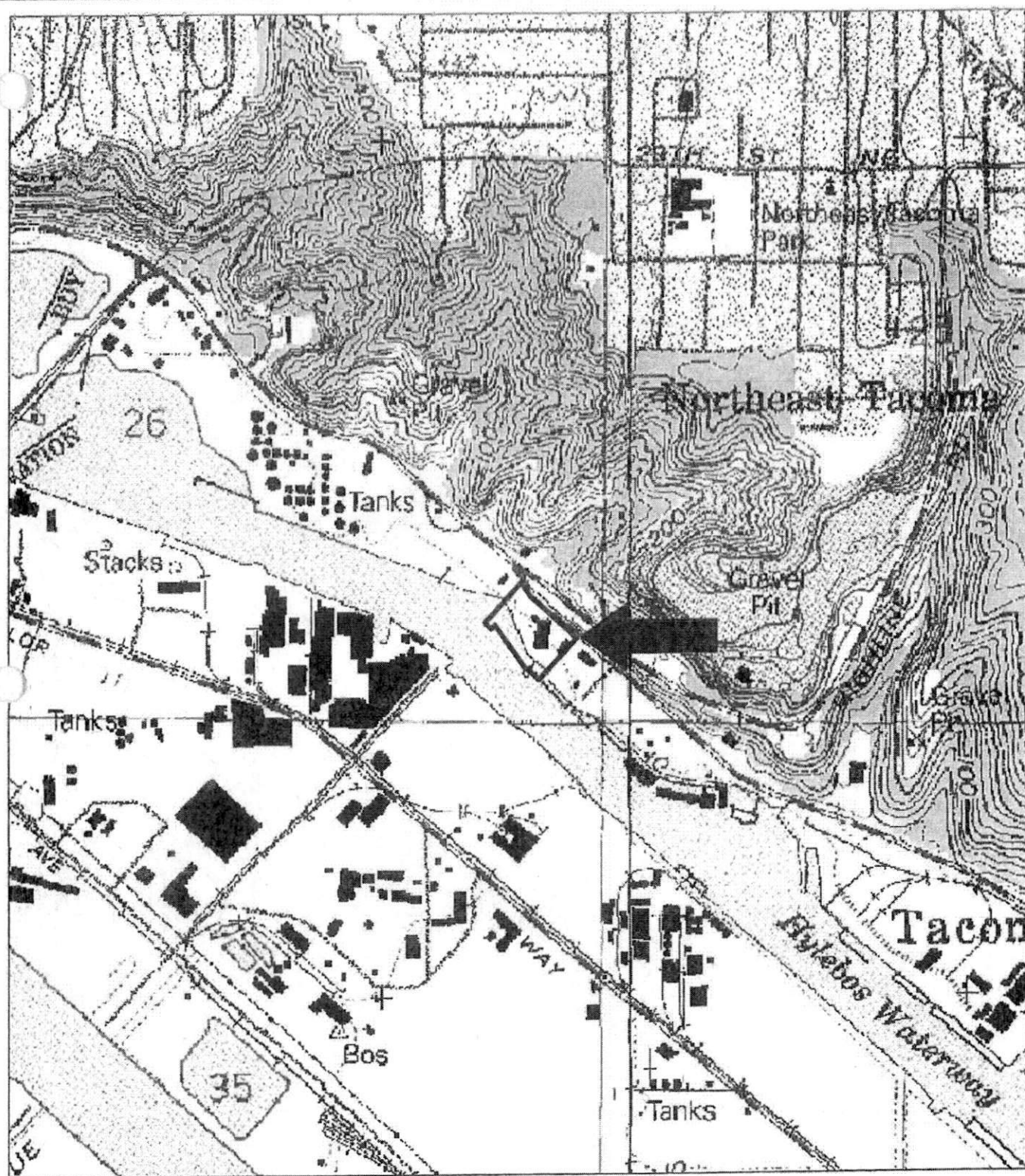
Figure 1 – Site Vicinity Map

Figure 2 – Test Probe Location Map

Table 1 – Summary of Subsurface Soil Sample Analytical Results

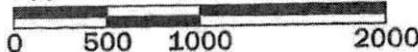
Appendix A – Analytical Laboratory Reports & Chains of Custody

Report Distribution Ms. Carol Duris, Viking Bank (three bound copies and electronic PDF)



USGS, 1994, Tacoma North, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=1000'



The Riley Group, Inc.
7406 - 27th Street West, Suite 301
University Place, Washington 98466
Phone: 253.565.0552 ♦ Fax: 253.460.2981

Modutech Marine, Inc.

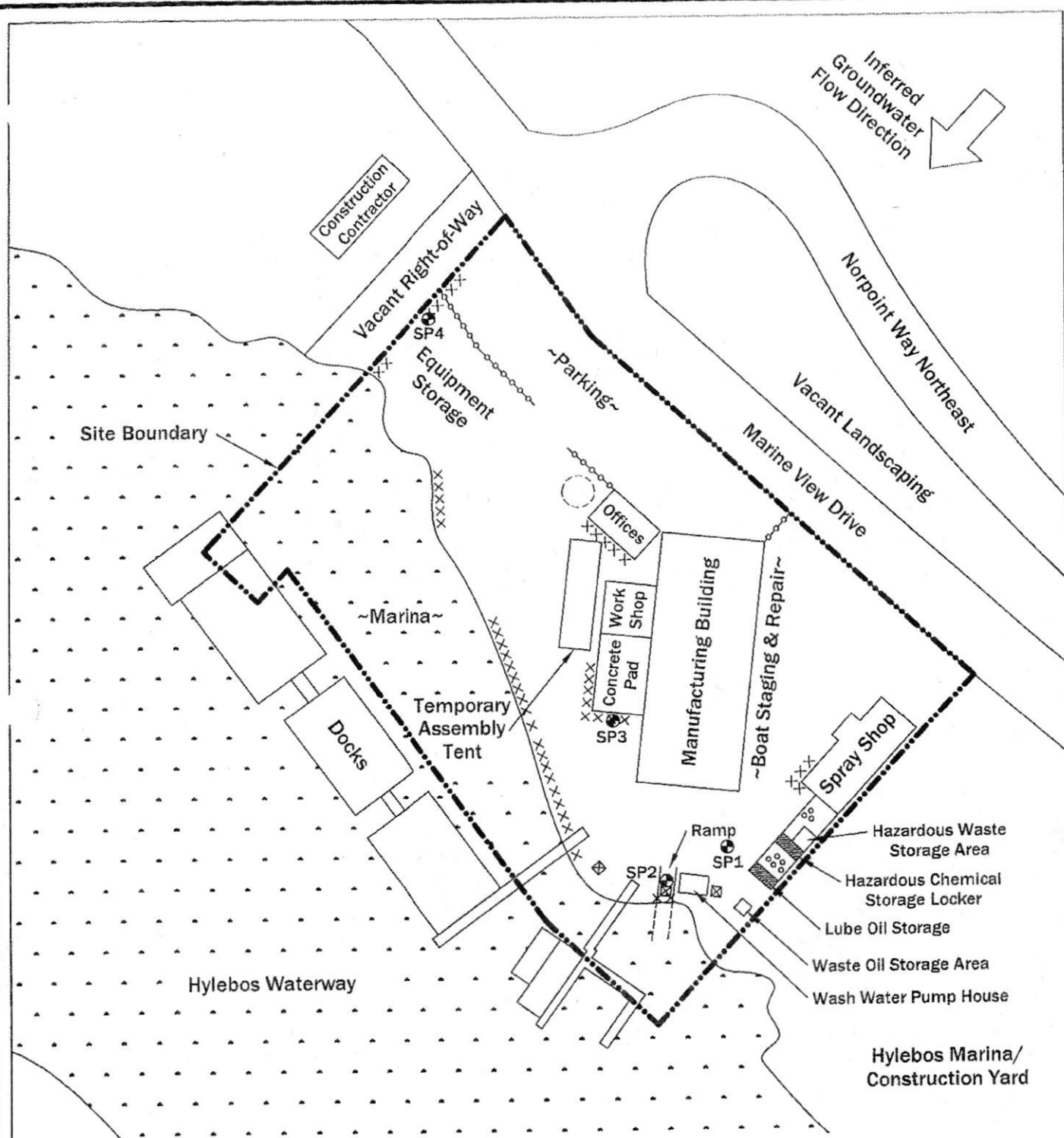
Figure 1

Project Number
2009-236B

Site Vicinity Map

Date Drawn:
11/10/09

Address: 2218 Marine View Drive, Tacoma, Washington



- = Boring Location by RGI on 10/21/09.
- ☒ = Wash Water Catch Basin
- xxx = Approximate Location of Former Suspect Fill Areas
- = Approximate Location of Former Septic Tank
- = Drum

Approximate Scale: 1"=120'

0 60 120 240



The Riley Group, Inc.
 7406 - 27th Street West, Suite 301
 University Place, Washington 98466
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Modutech Marine, Inc.		Figure 2
Project Number 2009-236B	Site and Surrounding Area	Date Drawn: 11/10/09
Address: 2218 Marine View Drive, Tacoma, Washington		

Table 1. Summary of Soil Sample Analytical Laboratory Results

Modutech Marine, Inc.

2218 Marine View Drive, Tacoma, Washington

The Riley Group, Inc. Project #2009-236B

Sample Number	Sample Depth	Sample Date	PID	PAHs	PCBs	MTCA 5 Metals				
						As	Cd	Cr	Pb	Hg
SP1-1	1	10/21/09	0.0	ND	----	----	----	----	----	----
SP1-3.5	3.5	10/21/09	0.0	----	----	----	----	----	----	----
SP2-0.5	0.5	10/21/09	0.0	----	----	ND<5.0	ND<1.0	6	ND<5.0	ND<0.5
SP2-4	4	10/21/09	0.0	----	----	----	----	----	----	----
SP3-1	1	10/21/09	0.0	----	----	----	----	----	----	----
SP3-3	3	10/21/09	0.0	----	----	ND<5.0	ND<1.0	14	ND<5.0	ND<0.5
SP4-1	1	10/21/09	0.0	----	----	----	----	----	----	----
SP4-3	3	10/21/09	0.0	----	ND	ND<5.0	ND<1.0	----	ND<5.0	----
MTCA Method A Soil Cleanup Levels				Analyte Specific	1	20	2	19/2,000 ¹	250	2

All results and detection limits are given in mg/kg; equivalent to parts per million (ppm).

Sample Depth = Soil sample depth interval in feet below ground surface (bgs).

PID = Photoionization Detector.

PAHs (Polycyclic Aromatic Hydrocarbons) determined using EPA Test Method 8270C.

PCBs (Polychlorinated Biphenyls) determined using EPA Test Method 8082.

MTCA 5 Metals (As = Arsenic, Cd = Cadmium, Cr = Chromium, Pb = Lead, Hg = Mercury) determined using EPA Method 7000 Series and 7471.

ND = Not Detected at noted analytical detection limit.

---- = Not analyzed or not applicable.

¹ The lower cleanup level applies to hexavalent chromium (Cr VI). The higher cleanup level applies to trivalent chromium (Cr III).

MTCA Cleanup Level, Ecology Model Toxics Control Act Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1).

Bold & yellow highlighted results (if any) indicate concentrations that exceed MTCA Method A Soil Cleanup Levels.



Libby Environmental, Inc.

4139 Libby Road N.E., Olympia, WA 98506-2518

RECEIVED NOV 04 2009

October 30, 2009

Lannie Smith
The Riley Group
17522 Bothell Way NE
Suite A
Bothell, WA 98011

Dear Mr. Smith:

Please find enclosed the analytical data report for the Modutech Project located in Washington. Soil samples were analyzed for Metals by EPA Method 7000 Series on October 21, 2009 and PCB (Polychlorinated Biphenyls) by EPA Method 8082 on October 22, 2009.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed. All soil samples are reported on a dry weight basis.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
President
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@aol.com

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

MODUTECH MARINE PROJECT

Washington State

The Riley Group

Client Project #2009-236B

Libby Project No.L091021-5

Analyses of Metals in Soil by EPA Method 7000 Series

Sample Number	Date Analyzed	Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Arsenic (mg/kg)
Method Blank	10/21/09	nd	nd	nd	nd
SP3-3	10/21/09	nd	nd	6	nd
SP3-3 Dup	10/21/09	nd	nd	15	nd
SP2-0.5	10/21/09	nd	nd	14	nd
Practical Quantitation Limit		5.0	1.0	5.0	5.0

"nd" Indicates not detected at the listed detection limits.

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

MODUTECH MARINE PROJECT

Washington State

The Riley Group

Client Project #2009-236B

QA/QC for Metals in Soil by EPA Method 7000 Series

Sample Number	Date Analyzed	Lead (% Recovery)	Cadmium (% Recovery)	Chromium (% Recovery)	Arsenic (% Recovery)
LCS	10/21/09	86%	91%	101%	81%
SP3-3 MS	10/21/09	81%	99%	106%	91%
SP3-3 MSD	10/21/09	69%	84%	97%	123%
RPD	10/21/09	16%	16%	9%	30%
Practical Quantitation Limit		5.0	1.0	5.0	5.0

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%

ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

MODUTECH MARINE PROJECT

Washington State

The Riley Group

Client Project #2009-236B

Libby Project No.L091021-5

Analyses of Mercury in Soil by EPA Method 7471

Sample Number	Date Analyzed	Mercury (mg/kg)
Method Blank	10/25/09	nd
SP3-3	10/25/09	nd
SP2-0.5	10/25/09	nd
SP2-0.5 Dup	10/25/09	nd
Practical Quantitation Limit		0.5

"nd" Indicates not detected at the listed detection limits.

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

MODUTECH MARINE PROJECT

Washington State

The Riley Group

Client Project #2009-236B

QA/QC for Mercury by EPA Method 7471

Sample Number	Date Analyzed	Mercury (mg/kg)
LCS	10/25/09	106%
SP2-0.5 MS	10/25/09	108%
SP2-0.5 MSD	10/25/09	108%
RPD	10/25/09	0%
Practical Quantitation Limit		0.5

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%

ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

MODUTECH MARINE PROJECT

Washington State

The Riley Group

Client Project #2009-236B

Libby Project No.L091021-5

Analyses of PCB (Polychlorinated Biphenyls) in Soil by EPA Method 8082

Sample Descripti	PQL	Method Blank	LCS	SP4-3	SP4-3 Dup	SP4-3 MS
Date Sampled		N/A	10/21/09	10/21/09	10/21/09	10/21/09
Date Analyzed		10/22/09	10/22/09	10/22/09	10/22/09	10/22/09
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor 1016	0.10	nd	108%	nd	nd	98%
Aroclor 1221	0.10	nd		nd	nd	
Aroclor 1232	0.10	nd		nd	nd	
Aroclor 1242	0.10	nd		nd	nd	
Aroclor 1248	0.10	nd		nd	nd	
Aroclor 1254	0.10	nd		nd	nd	
Aroclor 1260	0.10	nd	105%	nd	nd	94%
Surrogate Recovery						
TCMX		81	132	117	120	111
DCBP		87	107	98	104	108

"nd" Indicates not detected at listed detection limit.

"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Deanna Donovan

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

MODUTECH MARINE PROJECT

Washington State

The Riley Group

Client Project #2009-236B

Libby Project No.L091102-1

Analyses of Metals in Soil by EPA Method 7000 Series

Sample Number	Date Analyzed	Lead (mg/kg)	Cadmium (mg/kg)	Arsenic (mg/kg)
Method Blank	11/6/09	nd	nd	nd
SP4-3	11/6/09	nd	nd	nd
SP4-3 Dup	11/6/09	nd	nd	nd
Practical Quantitation Limit		5.0	1.0	5.0

"nd" Indicates not detected at the listed detection limits.

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

MODUTECH MARINE PROJECT

Washington State

The Riley Group

Client Project #2009-236B

QA/QC for Metals in Soil by EPA Method 7000 Series

Sample Number	Date Analyzed	Lead (% Recovery)	Cadmium (% Recovery)	Arsenic (% Recovery)
LCS	11/6/09	113%	118%	82%
SP4-3 MS	11/6/09	int	67%	int
SP4-3 MSD	11/6/09	int	80%	int
RPD	11/6/09		18%	
Practical Quantitation Limit		5.0	1.0	5.0

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%

ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

Lib Environmental, Inc.

Chain of Custody Record

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 10/21/09 Page: 1 of 1

Client: The Riley Group

Project Manager: Linnie Smith

Address: 7400 - 27th St W

Project Name: Modutech Marine

Phone: (253) 565-0552 Fax:

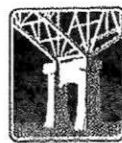
Location: 2188 Marine View Dr.

Client Project # 2009-226R

Collector: Anna Jordan Date of Collection: 10/21/09

Sample Number	Depth	Time	Sample Type	Container Type													Field Note/# Containers
					VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	PAH 8270	PCB's 8082	MTCA 5 Metals			
1 SP4-1	1	9:15	Soil	4oz jar													HOLD
2 SP4-3	3	9:15															
3 SP3-1	1	9:35															HOLD
4 SP3-3	3	9:40															
5 SP2-0.5	0.5	9:55															
6 SP2-4	4	10:00															HOLD
7 SP1-1	1	10:15															
8 SP1-3.5	3.5	10:15	↓	↓													HOLD
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	

Relinquished by:	Date / Time	Received by:	Date / Time	Sample Receipt:	Remarks:
<u>Anna Jordan</u>	<u>10/21/09 12:16</u>	<u>[Signature]</u>	<u>10/21/09 12:16</u>		
Relinquished by:	Date / Time	Received by:	Date / Time	Good Condition?	
				Cold?	
Relinquished by:	Date / Time	Received by:	Date / Time	Seals Intact?	
				Total Number of Containers	TAT 24HR 48HR 5-Day



Fremont

Analytical

2930 Westlake Ave N Suite 100
Seattle, WA 98109
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Libby Environmental
Attn: Sherry Chilcutt
4139 Libby Road NE
Olympia, WA 98506

RE: Modutech Marine
Fremont Project No: CHM091022-2

October 26th, 2009

Sherry:

Enclosed are the analytical results for the **Modutech Marine** soil sample (Sample ID: SP1-1) received by Fremont Analytical on October 22nd, 2009

Examination of this sample was conducted for the presence of the following:

- **Polyaromatic Hydrocarbons in Soil by EPA Method 8270C**

This application was performed under Washington State Department of Ecology accreditation parameters. All appropriate Quality Assurance / Quality Control method parameters have been applied.

Please contact the laboratory if you should have any questions about the report.

Thank you for using Fremont Analytical!

Sincerely,

Michael Dee
Sr. Chemist / Principal
mikedee@fremontanalytical.com



Analysis of Polyaromatic Hydrocarbons in Soil by EPA Method 8270C

Project: Modutech Marine

Client: Libby Environmental

Client Project #: N/A

Lab Project #: CHM091022-2

EPA 8270C (mg/kg)	MRL	Method Blank	LCS	Duplicate		MS	MSD	RPD %
				SP1-1	SP1-1	SP1-1	SP1-1	
Date Extracted		10/26/09	10/26/09	10/26/09	10/26/09	10/26/09	10/26/09	
Date Analyzed		10/26/09	10/26/09	10/26/09	10/26/09	10/26/09	10/26/09	
Matrix				Soil	Soil	Soil	Soil	
Naphthalene	0.1	nd		nd	nd			
1-Methylnaphthalene	0.1	nd		nd	nd			
2-Methylnaphthalene	0.1	nd		nd	nd			
Acenaphthene	0.1	nd	96%	nd	nd	113%	100%	12%
Acenaphthylene	0.1	nd		nd	nd			
Fluorene	0.1	nd		nd	nd			
Phenanthrene	0.1	nd		nd	nd			
Anthracene	0.1	nd		nd	nd			
Fluoranthene	0.1	nd		nd	nd			
Pyrene	0.1	nd	81%	nd	nd	86%	78%	10%
Benzo(a)anthracene	0.08	nd		nd	nd			
Chrysene	0.08	nd		nd	nd			
Benzo(b)fluoranthene	0.08	nd		nd	nd			
Benzo(k)fluoranthene	0.08	nd		nd	nd			
Benzo(a)pyrene	0.08	nd		nd	nd			
Indeno(1,2,3-cd)pyrene	0.08	nd		nd	nd			
Dibenzo(a,h)anthracene	0.08	nd		nd	nd			
Benzo(g,h,i)perylene	0.1	nd		nd	nd			
Total PAH Carcinogens				0.0	0.0			

Total PAH Carcinogens Defined as:

Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene & Dibenzo(a,h)anthracene

Surrogate Recovery

(Surr 1) 2-Fluorobiphenyl	101%	96%	106%	106%	105%	101%
(Surr 2) p-Terphenyl	112%	99%	106%	110%	110%	108%

"nd" Indicates not detected at listed reporting limits

"int" Indicates that interference prevents determination

"J" Indicates estimated value

"MRL" Indicates Method Reporting Limit

"LCS" Indicates Laboratory Control Sample

"MS" Indicates Matrix Spike

"MSD" Indicates Matrix Spike Duplicate

"RPD" Indicates Relative Percent Difference

Samples may be run under SIM

Acceptable RPD is determined to be less than 30%

Acceptable Recovery Limits:

Surrogates = 65% to 135%

LCS, LCSD, MS, MSD = 50% to 150%

Surrogate Concentration = 0.5 mg/kg

Spike Concentration = 1.0 mg/kg

Libby Environmental, Inc.

Chain of Custody Record

CHM091022-2

4139 Libby Road NE
Olympia, WA 98505

Ph: 360-352-2110
Fax: 360-352-4154

Client

Address

Phone

Client Project #

Date

Project Manager

Project Name

Location

Collector

Page

Date of Collection

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH/ICID	NWTPH/Ox	NWTPH/Ex	PAH 8270	PCRs 8192	MTC 4.5 Mupls	Field Note # Containers
1 SPI-1			Soil	4oz Jar							X				
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															

Relinquished by

Date / Time

Received by

Date / Time

Sample Receipt

Remarks

Relinquished by

Date / Time

Received by

Date / Time

Good Condition?

✓

Cold?

✗

Seals Intact?

n/a

Total Number of Containers

1

TAT 24HR 48HR 5-Day