



**PERIODIC REVIEW REPORT
FINAL**

**Graymont Western US Inc.
Facility Site ID#: 42939835**

**1220 Alexander Avenue
Tacoma, Washington 98421**

Southwest Region Office

TOXICS CLEANUP PROGRAM

February 2013

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1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup conditions and monitoring data to ensure that human health and the environment are being protected at the Graymont Western US Inc. facility (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC).

Cleanup activities at this Site were conducted under the Voluntary Cleanup Program (VCP). The cleanup actions resulted in concentrations of total petroleum hydrocarbons (TPH) exceeding MTCA Method A cleanup levels remaining at the Site. The MTCA Method A cleanup levels for soil and groundwater are established under WAC 173-340-740(2) and WAC 173-340-720(6) respectively. WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- Whenever the department conducts a cleanup action.
- Whenever the department approves a cleanup action under an order, agreed order or consent decree.
- Or, as resources permit, whenever the department issues a no further action (NFA) opinion.
- And one of the following conditions exists:
 - (a) Institutional controls or financial assurance are required as part of the cleanup.
 - (b) Where the cleanup level is based on a practical quantitation limit.
 - (c) Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site.
- (b) New scientific information for individual hazardous substances or mixtures present at the Site.
- (c) New applicable state and federal laws for hazardous substances present at the Site.
- (d) Current and projected Site use.
- (e) Availability and practicability of higher preference technologies.
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site History

The Site is located in the City of Tacoma in Pierce County, Washington (Vicinity Map - Appendix 6.1). Following remedial actions, a Restrictive Covenant (RC) was recorded for the Site on August 1, 2001 and a no further action (NFA) determination was issued by Ecology on September 2, 2002. Additional activities were conducted at the Site in 2007 and 2008, and a revised Environmental Covenant (EC) was recorded on April 7, 2009.

The Graymont property is bounded by Port of Tacoma to the west, Alexander Avenue to the east, US Gypsum to the south, and the Blair Waterway to the west. The nearest surface water is the Blair Waterway.

The available information indicates that the Graymont Western property was a part of undeveloped Tacoma Tide-flats which was filled in early part of 1940s. This property reportedly was used by a nearby shipbuilding firm and the U.S. Navy as a lay down/storage yard during and after World War II. The lime plant was constructed in early 1960s and since then it is being operated under different ownerships.

Graymont produces lime for commercial sale. Operations at the plant include barge loading and unloading (from a dock on the Blair Waterway), limestone storage, lime production using a coal-fired kiln, and lime packaging and shipment. A portion of the lime produced at the facility is further processed to produce precipitated calcium carbonate (PCC). The PCC is shipped off-Site for commercial use. Stormwater and process water generated by the facility's operations are managed and treated in a series of treatment and settling ponds located on the western portion of the Site.

2.2 Site Investigations and Remedial Activities

2.2.1 Activities Concluded in 2002

Petroleum contamination was first identified at the Site in August 1993 when contaminated soil was encountered during cleaning of a process water treatment pond at what was then the Continental Lime, Inc., Tacoma Plant (Continental Lime became Graymont Western). However, based on the available information, the exact cause(s) and source(s) of soil and groundwater contamination are unknown. Subsequent investigation identified several areas on the Site with elevated concentrations of TPH and other petroleum-related compounds in subsurface soil. The detected TPH concentrations were ranged from 2,200 milligrams per kilogram (mg/Kg) to 82,000 mg/Kg. However, these results were based on the Hydrocarbon Identification Analytical Method (HCID, 418.1), which also includes the non-TPH related organics. The soil contamination was limited to the smear zone at the upper boundary of the groundwater table.

Where possible, the contaminated soil was removed and disposed of at an off-Site facility. However, some of the affected soil could not be removed because it was covered by production equipment and buildings. Monitoring wells were installed within and downgradient of the contaminated areas.

Periodic groundwater monitoring between 1993 and 1996 found that concentrations of TPH and other petroleum-related compounds in groundwater were relatively low and declining. The findings of the investigation were reported to Ecology in a Remedial Investigation Report. The report concluded that no further remedial action or groundwater monitoring was necessary and that the residual soil contamination would be managed through institutional controls. A RC for the affected portions of the property was filed on April 7, 2001, and Ecology issued a NFA letter on September 2, 2002.

2.2.2 Activities Concluded in 2009

In September 2006, Graymont determined a planned stormwater management sump in the center of the Site was situated in an area covered by the 2001 RC and informed Ecology of their intent to excavate soil and install a sump in the area. Ecology requested submittal of a work plan to collect and analyze soil samples from the excavation to document current conditions and to characterize the excavated soil for proper disposal. As part of the submittal, Graymont also re-entered the VCP to allow Ecology to review the work planned for the area covered by the RC. The sump was excavated and constructed according to plan; no visual evidence of petroleum contamination was encountered during excavation, and concentrations of TPH in the excavation and spoil pile samples were below MTCA Method A residential cleanup levels for soil. Therefore, no special handling or off-Site disposal of the spoils was necessary. However, subsurface soil at a second sump location located north of the RC area, near the northern lime storage area, contained visual evidence of contamination and strong petroleum odors. Graymont reported the presence of the contaminated soil at this location to Ecology in October 2006. The TPH-gasoline (120 mg/Kg - 280 mg/Kg), TPH-diesel (8,300 mg/Kg – 8,600 mg/Kg), and TPH-oil (7,900 mg/Kg – 9,200 mg/Kg) concentrations exceeded MTCA Method A cleanup levels. A figure showing the extent of soil contamination and results of soil samples are included as Appendix 6.3 and 6.4, respectively.

In response to the finding of the unexpected contamination, Ecology directed Graymont to conduct an investigation to define additional areas to be included in the RC and to characterize current groundwater conditions, especially along the adjacent Blair Waterway. A remedial investigation/feasibility study (RI/FS) was conducted by CH2MHill in 2008. TPH-gasoline (2000 µg/L) and Trichloroethene (TCE, 0.3 µg/L) were detected in groundwater at concentrations slightly above MTCA Method A and Method B cleanup levels of 1000 µg/L and 0.11 µg/L, respectively, in three wells at the Site. The RI/FS concluded that monitored natural attenuation (MNA) was an acceptable remedy for the additional groundwater contamination encountered at the Site.

Ecology determined that MNA was an acceptable remedial action to address groundwater contamination at the Site. However, it was determined that the existing deed restriction did not

cover the additional soil contamination. In addition, a long-term groundwater monitoring plan was required to be included in the deed restriction.

A new EC was recorded on April 7, 2009. This Covenant included a long-term groundwater monitoring plan. The plan requires the sampling of four wells at the Site for petroleum hydrocarbons, volatile organic compounds, methane, ethane, sulfate, and ferrous iron. It was determined that one monitoring event per year was sufficient to monitor the progress of MNA at the Site.

The results of long-term groundwater monitoring (2008 through 2011) showed a decreasing trend of TPH-G concentration (1.8 mg/L-1.1 mg/L). In addition, the TPH-G concentration of 0.553 mg/L during the 2012 sampling round was below MTCA Method A cleanup level of 1 mg/L. Results of groundwater monitoring, well locations and approximate groundwater flow direction are presented in Appendix 6.5.

Graymont Western has completed the constructed a 300-foot long barrier wall including three pumping wells in August 2012 to stop the migration of high pH groundwater into the Blair Waterway. As a result, the Site hydrogeologic conditions expected to change once the pumping wells operation begin. More frequent groundwater elevations will be conducted in all monitoring wells to evaluate the change in the hydrogeologic conditions at the Site.

2.3 Institutional Controls

The first institutional control, in the form of a RC, was recorded for the Site in 2001. The RC imposes the following limitations:

1. No groundwater may be taken for any use from the real property without prior approval from Ecology.
2. The Property contains TPH (WTPHG, WTPHD) contaminated soil located in four areas as outlined on Exhibit B. The first area is located near the east edge of the secondary settling pond and includes the area around the cooler. The second area is located around the #6 Precipitated Calcium Carbonate (PCC) storage silo. The third area is located east of the PCC plant near the railroad spur. The fourth area is around three PCC tanks located northeast of the PCC plant. The Owner shall not alter, modify, or remove the existing structures or uncontaminated soil layer on the Property in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Some examples of activities that require prior approval from Ecology include drilling, digging, bulldozing, earthwork, or grading below the existing structures or clean soil layer.
3. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

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4. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.
 5. The Owner of the real property must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.
 6. The Owner must restrict leases on the Property to uses and activities consistent with the RC and notify all lessees of the restrictions on the use of the Property.
 7. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this RC. Ecology may approve any inconsistent use only after public notice.
 8. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the Property, and to inspect records that are related to the Remedial Action.
 9. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this RC shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only after public notice and the consent of Ecology.

The RC is available as Appendix 6.6.

In 2009, a second institutional control, in the form of a EC, was recorded for the Site. The passage of the Uniform Environmental Covenants Act now requires that deed restrictions are referred to as Environmental Covenants (EC) rather than RC. The Covenant recorded in 2009 contains the following limitations:

1. The Property contains TPH as gasoline and diesel (TPH-G, TPH-D) contaminated soil located as outlined in Exhibit A. The area includes subsurface soil from the south-west corner of the coal storage tent through the PCC plant to the east side of the settling pond.

The Owner shall not alter, modify, or remove the existing structures or uncontaminated soil layer on the Property in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Some examples of activities that require prior approval from Ecology include drilling, digging, bulldozing, earthwork, or grading below the existing structures or clean soil layer.

Monitored natural attenuation (MNA) will be conducted to address the groundwater contamination. A long term Groundwater Monitoring Plan is included as Exhibit B. As noted in the plan, one monitoring event per year will be sufficient to monitor the progress of MNA at the Site. Since the highest concentrations of TPH-G in groundwater occurred in the winter, the annual event will take place during the winter (December to February period).

Field, laboratory, and evaluation results will be compiled and incorporated into an annual groundwater monitoring report. This report will include a summary of conditions at the Site, field and laboratory data tables, the assessment of MNA progress, and any recommendations for changes to the monitoring program. The report will be submitted approximately 60 days after completion of field sampling activities.

No groundwater may be taken for any use from the Property.

2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.
3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.
4. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.
5. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.
6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.
7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.
8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be

of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

In addition, the 2009 EC includes a long-term groundwater monitoring plan. This plan requires one groundwater monitoring event every winter to evaluate the progress of MNA. The EC is available as Appendix 6.7.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

Based upon the Site visit conducted on September 12, 2012, the buildings and asphalt cover at the Site continue to provide an adequate barrier to direct exposure pathways (ingestion, contact) to contaminated soils. The asphalt appears in satisfactory condition. The Site is still operating as an industrial lime processing facility. Site access is restricted to the public. All Site visitors must go through safety awareness training before accessing the property. A photo log is available as Appendix 6.8.

The deed restrictions for the Site have been recorded and remain active. The RC/EC require long-term groundwater monitoring, prohibit activities that will result in the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibit any use of the property that is inconsistent with the Covenant. The Covenants serve to assure the long-term property use and integrity of the remedial action.

3.2 New scientific information for individual hazardous substances for mixtures present at the Site

There is no new relevant scientific information for the petroleum contaminants related to the Site.

3.3 New applicable state and federal laws for hazardous substances present at the Site

WAC 173-340-702(12) (c) [2001 ed.] provides that,

“A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment.”

Although cleanup levels have changed for several petroleum hydrocarbon compounds as a result of modifications to MTCA in 2001, contamination remains at the Site above MTCA Method A cleanup levels.

3.4 Current and projected Site use

The Site is currently used for industrial purposes. There have been no changes in current or projected future Site or resource uses.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances. While higher preference cleanup technologies may be available, they are not likely practicable at this Site.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below MTCA Method A cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

- The cleanup actions completed at the Site appear to be protective of human health.
- Soil and groundwater cleanup levels have not been met at the Site; however, under WAC 173-340-740(6) (d), the cleanup action is determined to comply with cleanup standards, since the long-term integrity of the containment system is ensured and the requirements for containment technologies in WAC 173-340-360(8) have been met.
- RC and EC are in place for the property and will be effective in protecting public health from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, Ecology has determined that remedial actions conducted at the Site continue to be protective of human health or the environment. The requirements of the RC and EC are being satisfactorily met and additional remedial actions are not warranted at this time. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the cap is maintained.

4.1 Next Review

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

5.0 REFERENCES

Bison Engineering, Inc. *Remedial Investigation Report*. January 17, 1997.

Bison Engineering, Inc. *Quarterly Monitoring Report, Winter Quarter 1997*.
July 17, 1997.

Ecology. *Restrictive Covenant*. August 1, 2001.

Ecology. *No Further Action Determination Letter*. September 5, 2002.

CH2M Hill. *Analytical Results from Work in Restrictive Covenant Area*.
December 13, 2006.

CH2M Hill. *Supplemental Groundwater Investigation and Feasibility Study*. February 2008.

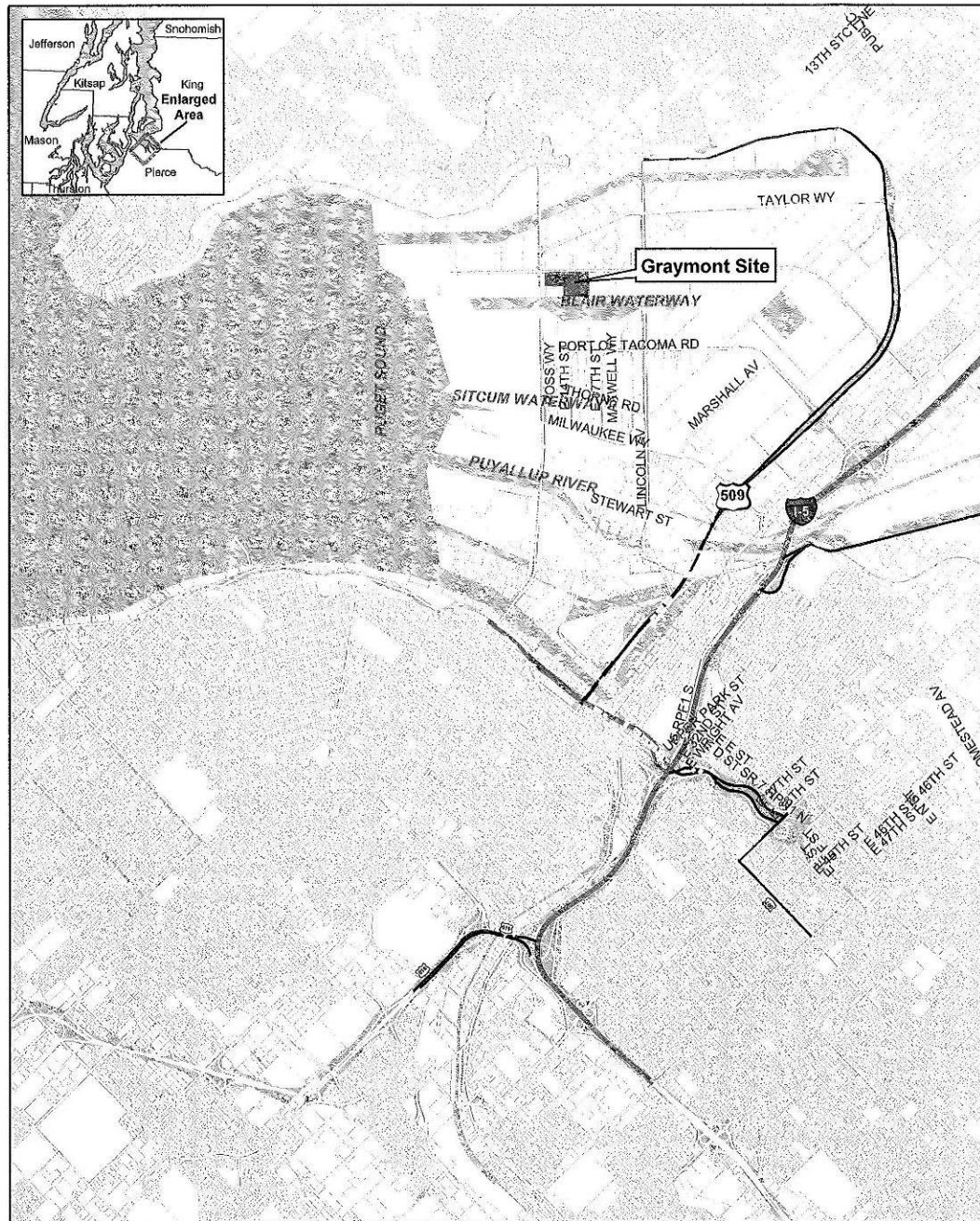
Ecology. *Environmental Covenant*. April 7, 2009.

Ecology. *No Further Action Determination Letter*. October 1, 2009.

Ecology. *Site Visit*. September 12, 2012

6.0 APPENDICES

6.1 Vicinity Map



Legend
Graymont Site
Parcel Boundaries



0 0.25 0.5 1 Miles

Figure 1-1
Site Location Map
Supplemental Groundwater Investigation Report
Graymont Western US, Inc., Tacoma, Washington

File Path: \\simba\proj\GraymontWesternUS\inc\348459ArsenicEval\GIS\Layouts\Fig1-1_SiteLocation.mxd, Date: 09/04/07

6.2 Site Plan

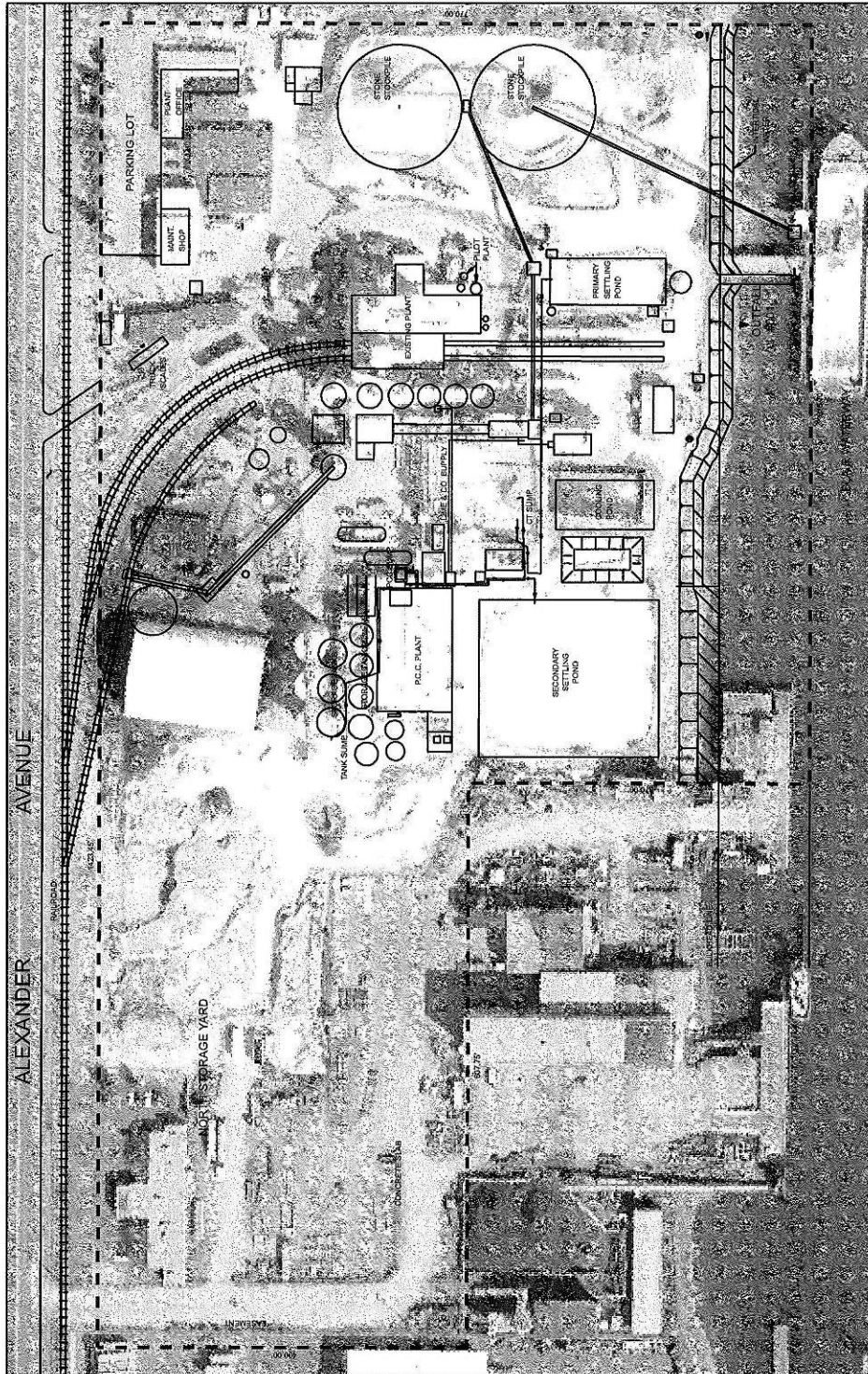


Figure 1-4
 2002 Aerial Photograph
 Supplemental Groundwater Investigation Report
 Graymont Western US, Inc., Tacoma, Washington

6.3 Extent of Soil Contamination

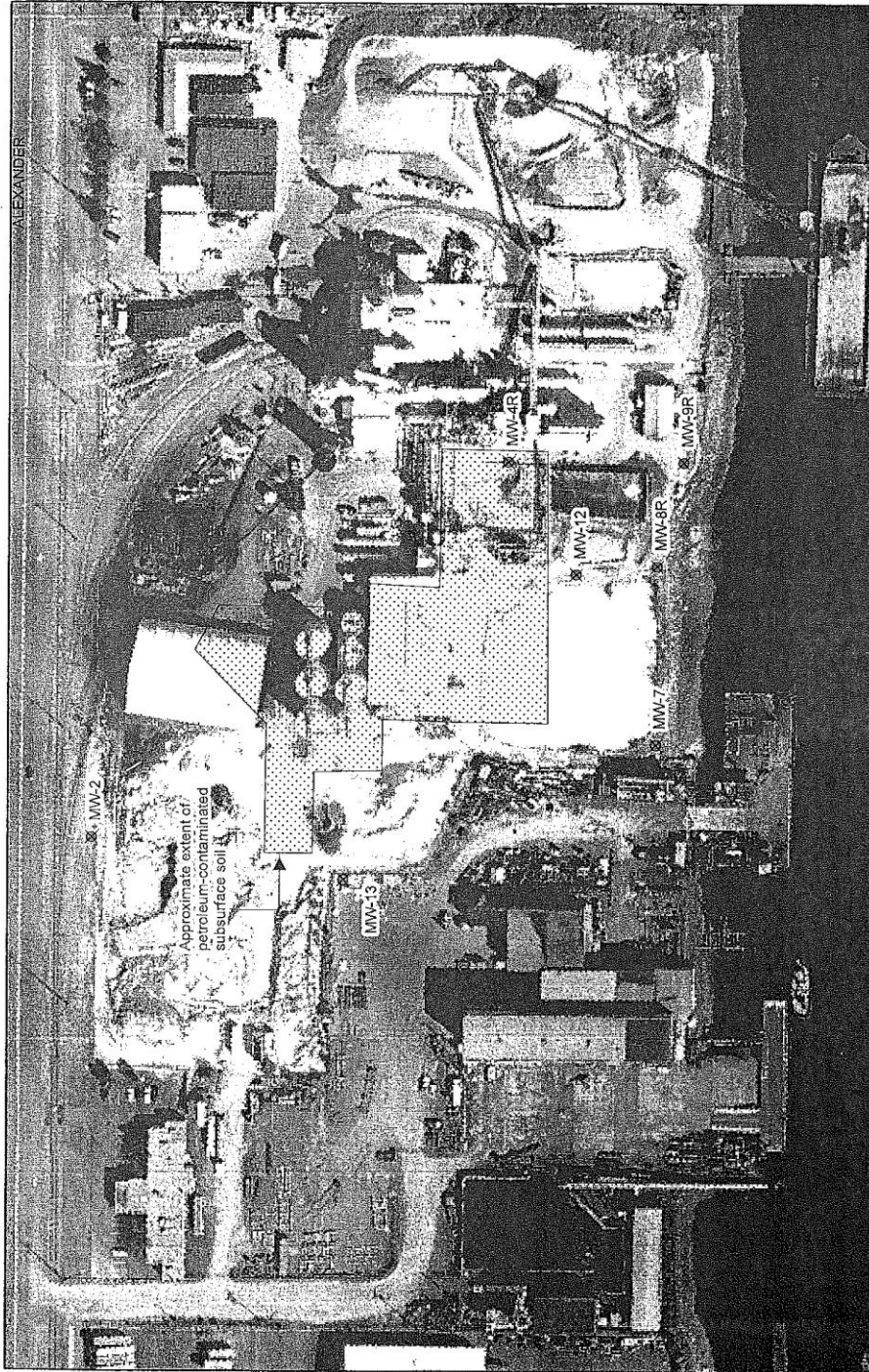


Figure 4-1
Approximate Extent of Petroleum Contamination - Soil
Supplemental Groundwater Investigation Report
Graymont Western US, Inc., Tacoma, Washington

File Path: \\samba\proj\Graymont\WesternUS\inc\348459\ArabicEva\GIS\Layouts\Fig4-1_Soil_contam.mxd, Date: 08/04/07

6.4 Soil Sample Results

TABLE 4-1
 TPH Concentrations in Soil
 Supplemental Groundwater Investigation Report
 Graymont Western US, Inc., Tacoma, WA

Boring No.	Sample ID	Sample Date	Depth (ft bgs)	Concentration (mg/kg)			
				TPH (418.1) 2000	TPH-D (NWTPH-Dx) 2000	TPH-Motor Oil (NWTPH-Dx) 2000	TPH-G (NWTPH-Gx) 100
MTCA Method A Cleanup Level							
1	SB1	8/30/1993	5	42,000	--	--	--
1	SB2	8/30/1993	10	53	--	--	--
2	SB3	8/30/1993	5	46	--	--	--
2	SB4	8/30/1993	10	<20	--	--	--
3	SB5	8/30/1993	10	<20	--	--	--
4	SB6	8/30/1993	5	<20	--	--	--
4	SB7	8/30/1993	10	<20	--	--	--
5	SB8	8/30/1993	5	<20	--	--	--
5	SB9	8/30/1993	10	410	--	--	--
6	SB10	8/30/1993	5	15,000	--	--	--
6	SB11	8/30/1993	10	<20	--	--	--
7	SB12	8/30/1993	5	<20	--	--	--
7	SB13	8/30/1993	10	13,000	--	--	--
8	SB14	8/30/1993	5	6,000	--	--	--
8	SB15	8/30/1993	10	4,100	--	--	--
8W	SB76	11/15/1993	5	17,000	--	--	--
8W	SB77	11/15/1993	10	710	--	--	--
8S	SB78	11/15/1993	5	13,000	--	--	--
8S	SB79	11/15/1993	10	<20	--	--	--
8E	SB80	11/15/1993	5	730	--	--	--
8E	SB81	11/15/1993	10	<20	--	--	--
8N	SB82	11/15/1993	5	7,100	--	--	--
8N	SB83	11/15/1993	10	470	--	--	--
9	SB16	9/7/1993	5	97	--	--	--
9	SB17	9/7/1993	10	12,000	--	--	--
10	SB18	9/7/1993	5	65	--	--	--
10	SB19	9/7/1993	10	2,300	--	--	--
11	SB22	9/7/1993	5	<20	--	--	--
11	SB23	9/7/1993	10	5,700	--	--	--
12	SB24	9/7/1993	5	73	--	--	--
12	SB25	9/7/1993	10	17,000	--	--	--
13	SB26	9/7/1993	5	2,700	--	--	--
13	SB27	9/7/1993	10	20,000	--	--	--
14	SB28	9/8/1993	5	<20	--	--	--
14	SB29	9/8/1993	10	750	--	--	--
15	SB30	9/8/1993	5	<20	--	--	--
15	SB31	9/8/1993	10	<20	--	--	--
16	SB32	9/8/1993	5	<20	--	--	--
16	SB33	9/8/1993	10	<20	--	--	--
16	SB34	9/8/1993	12	<20	--	--	--
17	SB35	9/8/1993	5	<20	--	--	--
17	SB36	9/8/1993	10	<20	--	--	--
18	SB37	9/8/1993	5	<20	--	--	--
18	SB38	9/8/1993	10	<20	--	--	--
19	SB39	9/8/1993	5	<20	--	--	--
20	SB40	9/8/1993	5	<20	--	--	--
20	SB41	9/8/1993	10	<20	--	--	--
21	SB42	9/8/1993	16.5	<20	--	--	--
22	SB43	10/18/1993	5	110	--	--	--

TABLE 4-1
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Boring No.	Sample ID	Sample Date	Depth (ft bgs)	Concentration (mg/kg)			
				TPH (418.1)	TPH-D (NWTPH-Dx)	TPH-Motor Oil (NWTPH-Dx)	TPH-G (NWTPH-Gx)
22	SB44	10/18/1993	10	62	--	--	--
23	SB45	10/18/1993	5	38	--	--	--
23	SB46	10/18/1993	10	180	--	--	--
24	SB47	10/18/1993	5	3,100	--	--	--
24	SB48	10/18/1993	10	3,600	--	--	--
25	SB49	10/18/1993	5	2,200	--	--	--
25	SB50	10/18/1993	10	19,000	--	--	--
26	SB51	10/18/1993	5	470	--	--	--
26	SB52	10/18/1993	10	3,100	--	--	--
27	SB53	10/18/1993	5	82,000	--	--	--
27	SB54	10/18/1993	10	2,200	--	--	--
28	SB55	10/18/1993	5	4,100	--	--	--
28	SB56	10/18/1993	10	67	--	--	--
29	SB57	10/18/1993	5	64	--	--	--
29	SB58	10/18/1993	10	52	--	--	--
30	SB59	10/19/1993	5	130	--	--	--
30	SB60	10/19/1993	10	57	--	--	--
31	SB65	10/19/1993	5	27	--	--	--
31	SB66	10/19/1993	10	72	--	--	--
32	SB61	10/19/1993	5	220	--	--	--
32	SB62	10/19/1993	10	170	--	--	--
33	SB63	10/25/1993	5	66	--	--	--
33	SB64	10/25/1993	10	17	--	--	--
34	SB65	10/25/1993	10	18,000	--	--	--
35	SB66	10/25/1993	5	4,300	--	--	--
35	SB67	10/25/1993	10	35,000	--	--	--
36	SB68	10/25/1993	10	7,200	--	--	--
38	SB70	11/15/1993	5	170	--	--	--
38	SB71	11/15/1993	10	<20	--	--	--
39	SB72	11/15/1993	5	<20	--	--	--
39	SB73	11/15/1993	10	<20	--	--	--
40	SB74	11/15/1993	5	<20	--	--	--
40	SB75	11/15/1993	10	<20	--	--	--
SP2	SP2	9/17/1993	6	<20	--	--	--
SP3	SP3	9/23/1993	7	160	--	--	--
SP4	SP4	9/23/1993	7	180	--	--	--
SP5	SP5	9/23/1993	7	560	--	--	--
SP6	SP6	9/23/1993	7.5	510	--	--	--
SP7	SP7	9/23/1993	9.5	350	--	--	--
SP8	SP8	9/23/1993	9.5	12,000	--	--	--
SP9	SP9	9/23/1993	9.5	22,000	--	--	--
SP10	SP10	9/23/1993	9.5	340	--	--	--
SP11	SP11	9/23/1993	9.5	37,000	--	--	--
SP12	SP12	9/23/1993	9.5	250	--	--	--
SP13	SP13	9/23/1993	9.5	29,000	--	--	--
MW1	MW1-5	9/7/1993	5	<20	--	--	--
MW1	MW1-10	9/7/1993	10	49	--	--	--
MW2	MW2-5	9/7/1993	5	<20	--	--	--
MW2	MW2-10	9/7/1993	10	<20	--	--	--
MW3	MW3-5	9/8/1993	5	<20	--	--	--

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 TPH Concentrations in Soil
 Supplemental Groundwater Investigation Report
 Graymont Western US, Inc., Tacoma, WA

Boring No.	Sample ID	Sample Date	Depth (ft bgs)	Concentration (mg/kg)			
				TPH (418.1)	TPH-D (NWTPH-Dx)	TPH-Motor Oil (NWTPH-Dx)	TPH-G (NWTPH-Gx)
MW3	MW3-10	9/8/1993	10	54	--	--	--
MW4	MW4-5	9/8/1993	5	150	--	--	--
MW4	MW4-10	9/8/1993	10	<20	--	--	--
MW5	MW5-5	10/19/1993	5	150	--	--	--
MW5	MW5-10	10/19/1993	10	33	--	--	--
MW5	MW5-15	10/19/1993	15	24	--	--	--
MW6	MW6-20	10/19/1993	20	36	--	--	--
MW6	MW6-25	10/19/1993	25	30	--	--	--
MW6	MW6-30	10/19/1993	30	24	--	--	--
MW7	MW7-5	11/15/1993	5	<20	--	--	--
MW7	MW7-10	11/15/1993	10	<20	--	--	--
MW7	MW7-15	11/15/1993	15	<20	--	--	--
MW9	MW9-5	11/15/1993	5	<20	--	--	--
MW9	MW9-10	11/15/1993	10	<20	--	--	--
MW9	MW9-15	11/15/1993	15	<20	--	--	--
MW10	MW10-10	11/16/1993	10	<20	--	--	--
MW10	MW10-15	11/16/1993	15	92	--	--	--
MW10	MW10-20	11/16/1993	20	<20	--	--	--
MW10	MW10-25	11/16/1993	25	<20	--	--	--
Sump base	GLP-EX-B01	10/24/2006	7	--	<60	<120	<24
East sidewall	GLP-EX-E01	10/24/2006	5	--	110	340	<23
North sidewall	GLP-EX-N01	10/24/2006	5	--	<61	<120	<24
South sidewall	GLP-EX-S01	10/24/2006	2	--	<58	<120	<23
West sidewall	GLP-EX-W01	10/24/2006	5	--	<56	<110	<22
TP1	TP1-1206	12/6/2006	5	--	200	250	<20
TP2	TP2-1206	12/6/2006	5	--	8,600	1,700	120
TP3	TP3-1206	12/6/2006	5	--	<50	<100	<20
TP4	TP4-1206	12/6/2006	5	--	<50	<100	<20
TP5	TP5-1206	12/6/2006	5	--	<50	<100	<20
TP6	TP6-1206	12/6/2006	5	--	<50	<100	<20
TP7	TP7-1206	12/6/2006	5	--	<50	<100	<20
TP8	TP8-1206	12/6/2006	5	--	8,300	7,900	230
TP8	TP9-1206 (FD)	12/6/2006	5	--	970	9,200	280

analyte detected at concentration greater than MTCA A cleanup level

ft - feet

bgs - below ground surface

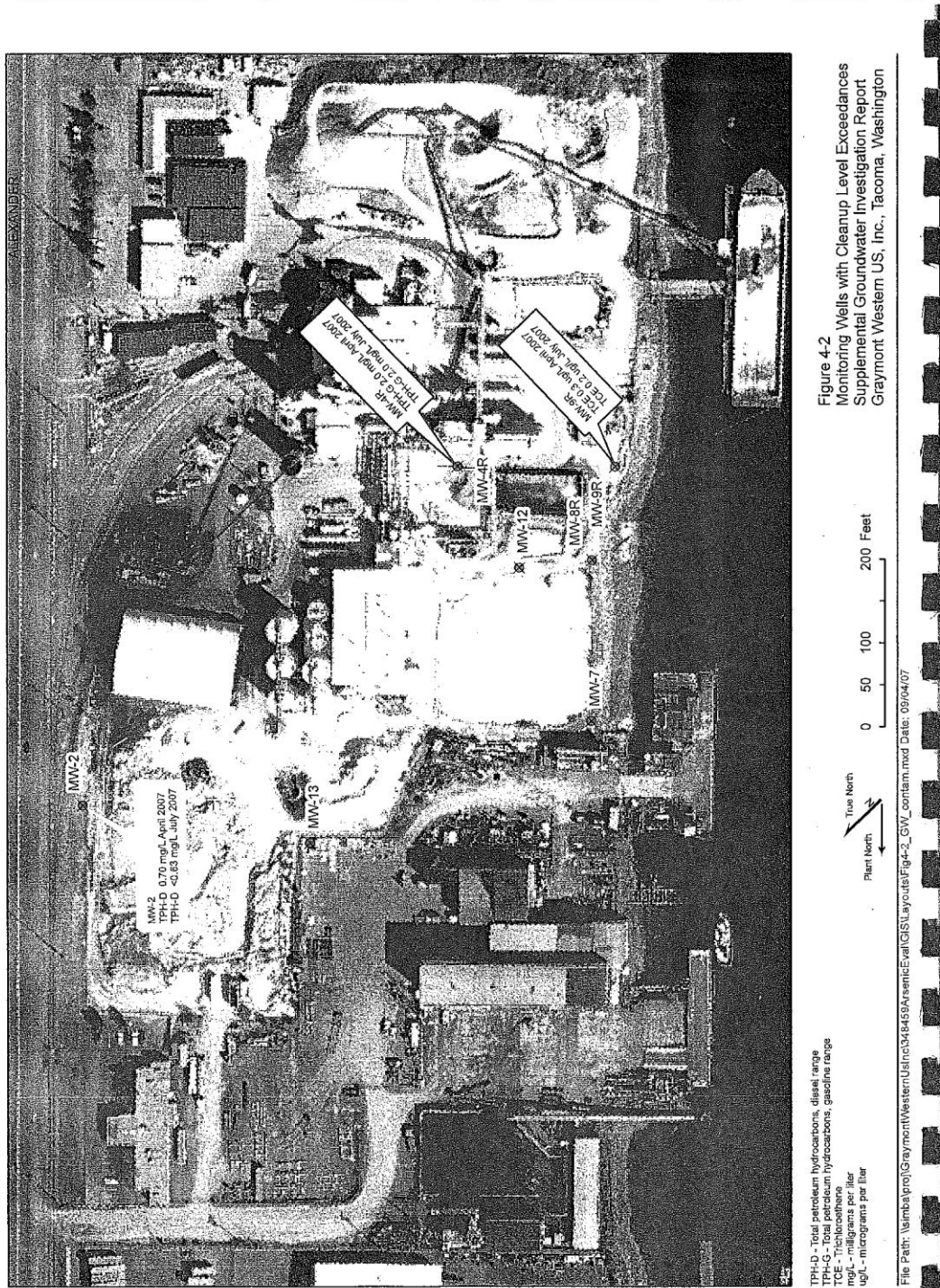
FD - field duplicate

MTCA - Model Toxics Control Act

< - analyte not detected, value is reporting limit for analysis

-- - analyte not reported

6.5 Groundwater Monitoring Results and Well Locations



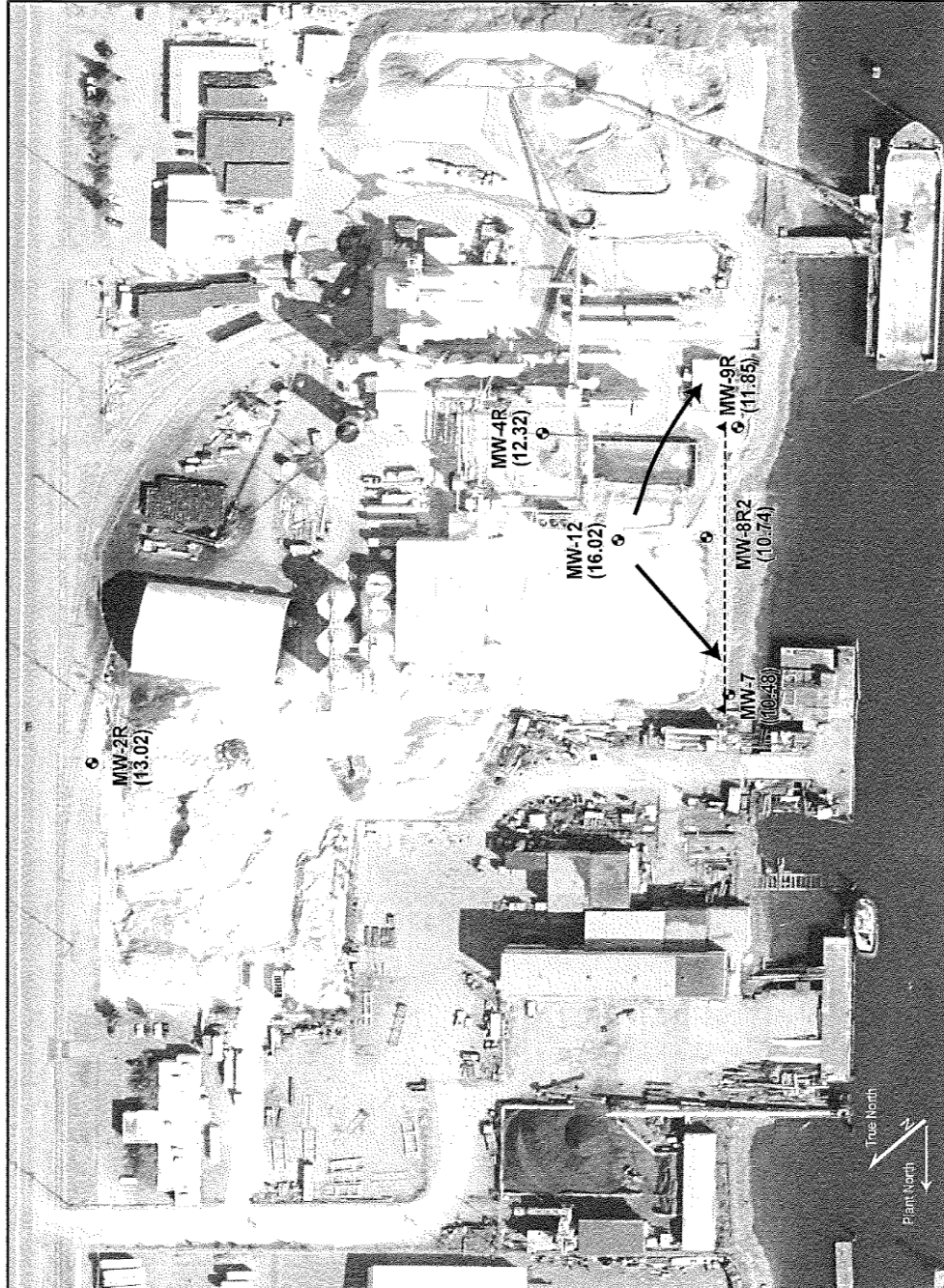


Figure 2
Groundwater Elevations
(November 7, 2012)
 Long-Term Groundwater Monitoring
 Graymont Western US Inc., Tacoma, Washington

Legend

- ⊕ Monitoring Well Location
- (16.02) Groundwater Elevation (ft NAVD 88)
- ▲--- Barrier Wall
- ↑ Groundwater Flow Direction

NOTE: Groundwater elevation for MW-2R is approximate; top of casing elevation has not been surveyed

435359.01.02.02_ES01301300286455A_Fig2_GW_Elevations_Nov7-2012_31m13.dwg

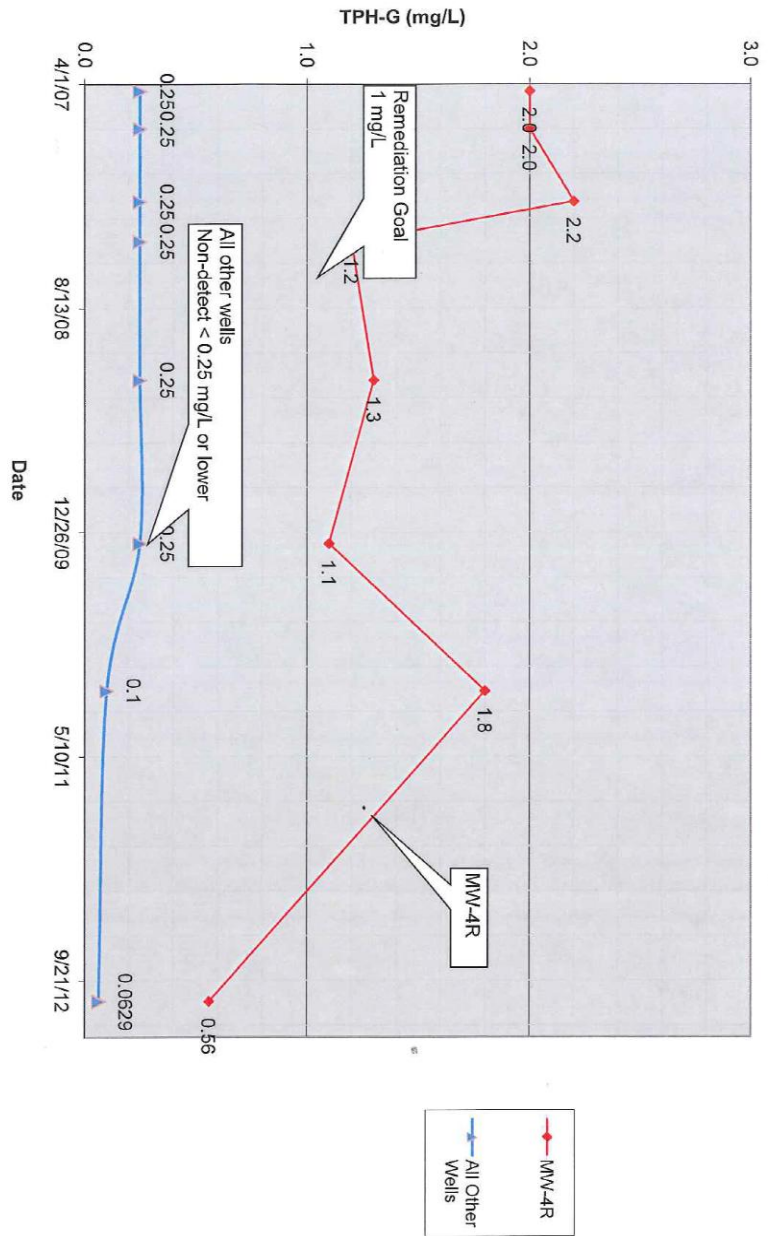


Figure 3
TPH-Gasoline (2007 - 2012)
Graymont Western US Inc., Tacoma, WA

6.6 2001 Restrictive Covenant

200108010772 6 pg
8-1-2001 12:10pm \$13.00
PIERCE COUNTY, WASHINGTON

RECEIVED
AUG 10 2001

GRAYMONT WESTERN US
TACOMA PLANT

Name & Return Address:

GRAYMONT WESTERN US Inc.
1220 Alexander Ave.
TACOMA, WA. 9842
ATTN: RON ECCLES

Please print legibly or type information.

Document Title (Or transaction contained therein) <p>Covenant</p>
Grantor(s) (Last name first, then first name, middle name) <p>Graymont Western US Inc.</p> <p>Additional Names on Page ___ of Document</p>
Grantee(s) (Last name first, then first name, middle name) <p>Washington, State of Dept. of Ecology</p> <p>Additional Names on Page ___ of Document</p>
Legal Description (Abbreviated: i.e., lot, block & subdivision name or number OR section/township/range and quarter/quarter section) <p>Complete Legal Description on Page ___ of Document</p>
Auditor's Reference Number(s)
Assessor's Property Tax Parcel/Account Number(s)
The Auditor/Recorder will rely on the information provided on this cover sheet. The staff will not read the document to verify the accuracy or completeness of the indexing information provided herein. IF YOU REPRODUCE THIS FORM, BE SURE MARGINS REMAIN 3 INCHES AT THE TOP AND 1 INCH ON SIDES AND BOTTOM. gpcovst.lst 2/98

RESTRICTIVE COVENANT
Graymont Western US Inc., Tacoma Plant
Tacoma, Washington

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Graymont Western US Inc. (formerly Continental Lime Inc.), its successors and assigns, and the Washington State Department of Ecology, its successors and assigns (hereafter "Ecology").

An independent remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the property is described in the following report: *Remedial Investigation Report prepared by Bison Engineering, Inc. for Continental Lime Inc.* This document is on file at Ecology's Southwest Regional Office.

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of Total Petroleum Hydrocarbon (WTPHG, WTPHD) which exceed the Model Toxics Control Act Method A Residential Cleanup Level for soil and Groundwater Cleanup Standards established under WAC 173-340-740 and 720 respectively.

The undersigned, Graymont Western US Inc., is the fee owner of real property in the County of Pierce, State of Washington. The real property is described in the legal description (attached as Exhibit A).

Graymont Western US Inc. makes the following declaration as to limitations, restrictions, and uses to which the portions of the real property as shown on the site plan (attached as Exhibit B and hereafter referred to as "Property") may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1. No groundwater may be taken for any use from the real property without prior approval from Ecology.

Section 2. The Property contains TPH (WTPHG, WTPHD) contaminated soil located in four areas as outlined on Exhibit B. The first area is located near the east edge of the secondary settling pond and includes the area around the cooler. The second area is located around the #6 Precipitated Calcium Carbonate storage silo. The third area is located east of the PCC plant near the railroad spur. The fourth area is around three PCC tanks located northeast of the PCC plant. The Owner shall not alter, modify, or remove the existing structures or uncontaminated soil layer on the Property in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Some examples of activities that require prior approval from Ecology include drilling, digging, bulldozing, earthwork, or grading below the existing structures or clean soil layer.

6.7 2009 Environmental Covenant



RECEIVED
JUN 25 2009
Washington State
Department of Ecology

Name & Return Address:

Graymont Western US Inc
3950 S. 700 E. Suite 301
Salt Lake City, Ut 84107

Please print legibly or type information.

Document Title(s)	Graymont Western, Tacoma Plant Restrictive Covenant
Grantor(s)	Graymont Western US Inc. 0 Additional Names on Page 1 of Document
Grantee(s)	State of Washington, Department of Ecology 0 Additional Names on Page 1 of Document
Legal Description (Abbreviated: i.e., lot, block & subdivision name or number OR section/township/range and quarter/quarter section)	
Complete Legal Description on Page	2 of Document
Auditor's Reference Number(s)	200108010772
Assessor's Property Tax Parcel/Account Number(s)	0321274000
<p>The Auditor/Recorder will rely on the information provided on this cover sheet. The Staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.</p> <p>I am requesting an emergency nonstandard recording for an additional fee as provided in RCW 36.18.010. I understand that the recording processing requirements may cover up or otherwise obscure some part of the text of the original document.</p>	
Signature of Requesting Party (Required for non-standard recordings only)	Gpeovst.doc rev 4/02

Graymont Western US, Inc.

Restrictive (Environmental) Covenant

After Recording Return to:
Scott Rose
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775

Environmental Covenant

Grantor: Graymont Western US Inc.
Grantee: State of Washington, Department of Ecology
Legal: Latitude 47°16'16" Longitude 122°23'48"
Tax Parcel Nos.: 0321274000
Cross Reference: 200108010772

Grantor, Graymont Western US Inc., hereby binds Grantor, its successors and assigns to the land use restrictions identified herein and grants such other rights under this environmental covenant (hereafter "Covenant") made this 29th day of October, 2008 in favor of the State of Washington Department of Ecology (Ecology). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, 2007 Wash. Laws ch. 104, sec. 12.

This Declaration of Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Graymont Western US, Inc., its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following document[s]:

*Remedial Investigation Report prepared by Bison Engineering, Inc. for Continental Lime Inc.
Supplemental Groundwater Investigation and Feasibility Study Report by CH2M HILL for
Graymont Western US, Inc.*

These documents are on file at Ecology's Southwest Regional Office.

This Covenant is required because the Remedial Action resulted in residual concentrations of Total Petroleum Hydrocarbons as gasoline and diesel (TPHG, TPHD) which exceed the Model Toxics Control Act Method A Residential Cleanup Levels for Soil and Groundwater Cleanup Standards established under WAC 173-340-740 and 720.

The undersigned, Graymont Western US, Inc., is the fee owner of real property (hereafter "Property") in the County of Pierce County, State of Washington, that is subject to this Covenant. The Property is legally described as follows:

Commencing at the point of intersection of the extension of the southeasterly line of East 11th Street and the southwesterly line of Alexander Avenue;
Thence southeasterly with said southwesterly line of Alexander Avenue, 120 feet, more or less, to the southeasterly line of Lot 26, Block 9, of State Land Commissioner's Replat of Blocks 13 thru 48, inclusive, Tacoma Tideland (formerly in King County), commonly known as Ashton's Replat, filed December 23, 1918, situate in the city of Tacoma, County of Pierce, State of Washington, said point being the true point of beginning;
Thence continuing southeasterly with said southwesterly line 1,423.45 feet to a point;
Thence southwesterly parallel to the southeasterly line of East 11th Street, a distance of 770 feet to the northeasterly pierhead line of the Port Industrial Waterway;
Thence northwesterly along northeasterly pierhead line of Port Industrial Waterway a distance of 815.70 feet;

Thence northeasterly parallel to the southeasterly line of East 11th Street, a distance of 370 feet to a point;
Thence northwesterly parallel to the southwesterly line of Alexander Avenue a distance of 607.75 feet to a point on the southeasterly line of Lot 13, Block 9, said State Land Commissioner's Replat;

Thence northeasterly with southeasterly lines of Lots 13 thru 26, inclusive, in said Block 9, 400 feet to the true point of beginning.
Situate in the County of Pierce, State of Washington.

Graymont Western US, Inc. makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations

shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1. The Property contains TPH as gasoline and diesel (TPHG, TPHD) contaminated soil located as outlined in Exhibit A. The area includes subsurface soil from the south-west corner of the coal storage tent through the PCC plant to the east side of the settling pond.

The Owner shall not alter, modify, or remove the existing structures or uncontaminated soil layer on the Property in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Some examples of activities that require prior approval from Ecology include drilling, digging, bulldozing, earthwork, or grading below the existing structures or clean soil layer.

Monitored natural attenuation (MNA) will be conducted to address contamination. A Long-Term Groundwater Monitoring Plan is included as Exhibit B. As noted in the plan, one monitoring event per year will be sufficient to monitor the progress of MNA at the site. Since the highest concentrations of TPHG in groundwater occurred in the winter, the annual event will take place during the winter (December to February period).

Field, laboratory, and evaluation results will be compiled and incorporated into an annual groundwater monitoring report. This report will include a summary of conditions at the site, field and laboratory data tables, the assessment of MNA progress, and any recommendations for changes to the monitoring program. The report will be submitted approximately 60 days after completion of field sampling activities.

No groundwater may be taken for any use from the Property.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.


Section 5. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

GRAYMONT WESTERN U.S., INC.



Scott Mork
Director, Western US Production

Dated: Feb 23, 2009

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY



Rebecca S. Lawson, P.E., LHG
Section Manager
Toxics Cleanup Program
Southwest Regional Office

Dated: 3/9/2009

Auditor's notation
to facilitate
scanning process

STATE OF Utah
COUNTY OF Salt Lake

On this 23rd day of February, 2009, I certify that Scott Mark personally appeared before me, acknowledged that he/she is the Director of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he/she was authorized to execute said instrument for said corporation.

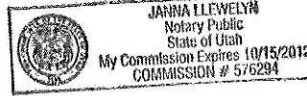
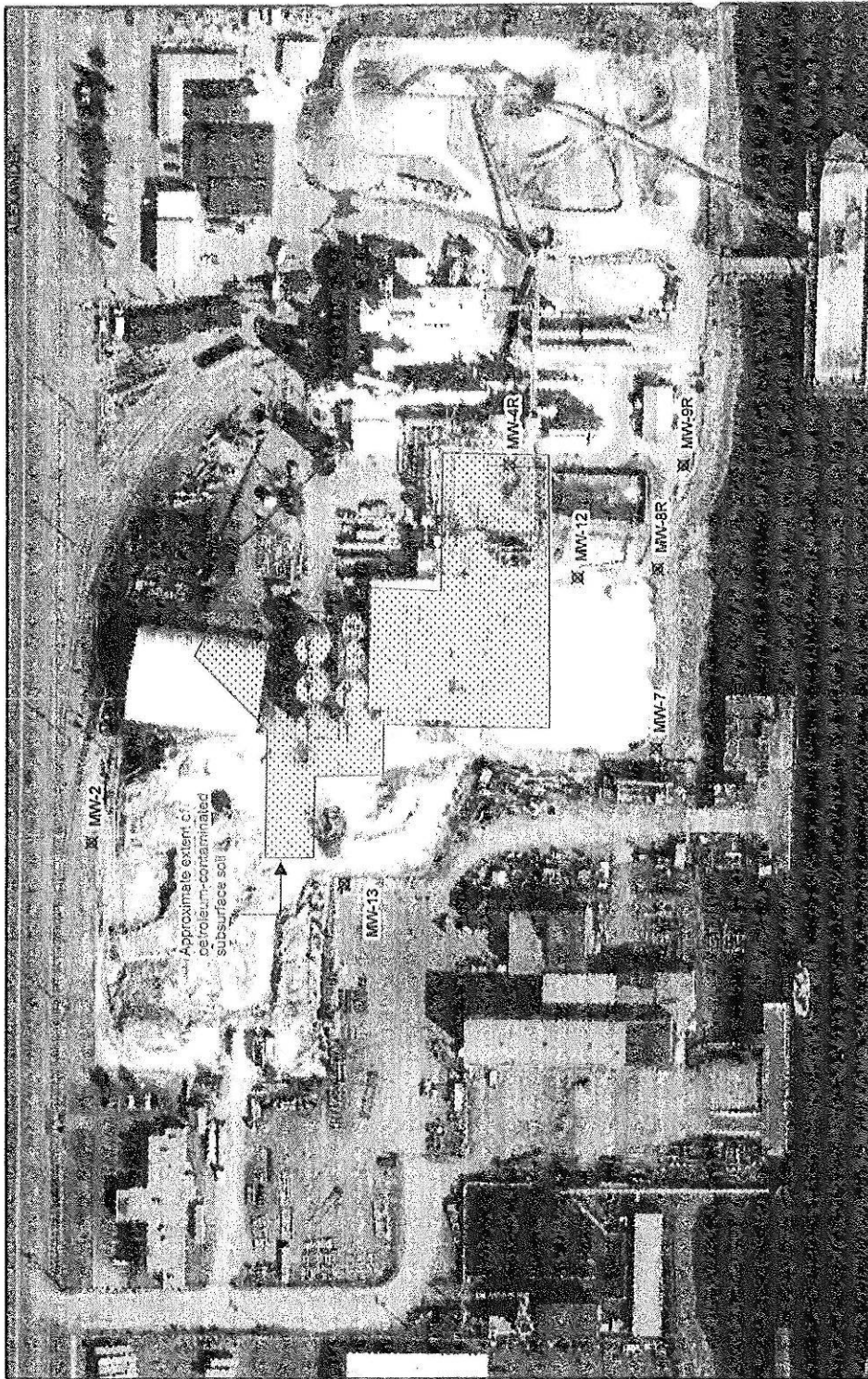
 Janna Llewellyn
Notary Public in and for the State of Utah
Utah, residing at Salt Lake County
My appointment expires 10/15/2012.

Exhibit A
Site Map of Contaminated Areas

Auditor's notation
to facilitate
scanning process



6.8 Photo log

Photo 1: Main Plant – from the east



Photo 2: Original Restrictive Covenant Area – from the northwest



Photo 3: Waterfront at Edge of Secondary Settling Pond – from the northwest



Photo 4: Monitoring Well at Waterfront South of Secondary Setting Pond – from the south

