

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
AGREED ORDER NO. DE 2953  
FIRST AMENDMENT

RECEIVED  
NOV 14 2011  
WA State Department  
of Ecology (SWRO)

In the Matter of Remedial Action by:

Bryan and Kathleen Kolb, husband and ) AGREED ORDER  
wife. ) NO. DE 2953

Site: Brumfield Twidwell Property, 301 East Pioneer, Montesano , WA. FSID #94658144.

To: Bryan Kolb and Kathleen Kolb  
2103 Harrison Avenue Northwest, #2-653  
Olympia, WA 98502

I. Amendment

Agreed Order No. DE 2953, signed March 27, 2006, is hereby amended to include a Final Cleanup Action Plan (CAP) and Environmental Covenant for the Site (which will supersede a restrictive covenant Filed 6/16/2006 and to allow implementation of the CAP. The CAP is included as Exhibit A and a Model Environmental Covenant is included as Exhibit B, and are integral and enforceable parts of the Order. This amendment does not replace or change the existing requirements of the Agreed Order, which shall remain in effect.

II. Background

Agreed Order No. DE 2953, signed March 27, 2006, required Brian and Kathleen Kolb (Kolb) to prepare a draft and final Remedial Investigation Report and Feasibility Study (RI/FS), based on a previously submitted RI/FS Work Plan, and to prepare a draft Cleanup Action Plan for the Site. Kolb had already mobilized to perform some soil cleanup and tank removal. They were permitted to continue their work while the administrative process proceeded. The RI for the site concluded that soils at the site that were contaminated above MTCA cleanup standards for gasoline range petroleum hydrocarbons (contaminants of concern, or COCs) had been removed to the extent practicable after advancing several additional borings and constructing additional wells. The additional work appears to have established the extent of the soil and groundwater contamination. It also concluded that groundwater at certain locations on the site continues to contain gasoline range petroleum hydrocarbons above MTCA cleanup standards.

The Feasibility Study completed for the Site evaluated alternatives for cleanup of gasoline range petroleum hydrocarbons in groundwater. The preferred remedial alternative has been identified as Soil Source Removal with Disposal, Groundwater Treatment, and Monitoring for Natural Attenuation. The CAP provides documentation to support the cleanup effort and summarizes information describing the products and techniques to be used for the cleanup of the Site.

Groundwater monitoring will be performed quarterly to determine the progress made as a result of the injection treatments. Groundwater monitoring will continue until four consecutive quarterly samples demonstrate that concentrations of COCs are below the remedial action cleanup levels identified for the Site.

Kolb provided Ecology with a report *Final Remedial Investigation/Feasibility Study Report* dated October 6, 2011. Additionally, Kolb provided Ecology with a *DRAFT Cleanup Action Plan* dated July 20, 2011. After receiving comments from Ecology on the draft CAP, Kolb provided Ecology with a *FINAL Cleanup Action Plan* dated September 26, 2011.

II. Work to be Performed

It is hereby ordered that Kolb:

1. Enter the Ecology approved Cleanup Action Plan as an integral and enforceable part of Agreed Order DE 2953.
2. File an Environmental Covenant consistent with the Model Environmental Covenant attached as Exhibit B.

Schedule:

1. The Final Cleanup Action Plan will be entered as a function of Ecology signing this Agreed Order Amendment at the end of the required 30 day comment period, unless public comment results in the need to generate a Responsiveness Summary. If the latter occurs, signing and entry would occur upon Ecology issuing a Responsiveness Summary.
2. An Environmental Covenant shall be filed by the owner of the property at which the site is located with the Grays Harbor County Auditor in accordance with WAC 173-340-440 within 30 days of entry of this Amendment.

Effective Date of this Amendment: January 4, 2012

By: Rebecca S. Lawson

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

By: Bryan Kolb

Bryan Kolb Bryan Kolb 11-10-11

Name: Kathleen Kolb  
Kathleen R. Kolb

**EXHIBIT A**

**DRAFT FINAL CLEANUP ACTION PLAN**



ASSOCIATED  
ENVIRONMENTAL  
GROUP, LLC

September 26, 2011

Mr. Marv Coleman  
Department of Ecology  
SWRO Toxics Cleanup Program  
P.O. Box 47775  
Olympia, Washington 98504-7775

**RE: FINAL Cleanup Action Plan**

Former Brumfield – Twidwell Site (Ecology Agreed Order AE DE2953)  
301 East Pioneer Avenue  
Montesano, WA 98563

Dear Mr. Coleman:

Associated Environmental Group, LLC (AEG) has prepared this Proposed Cleanup Action Plan (CAP) for your consideration of remedial action at the former Brumfield-Twidwell facility, located at 301 East Pioneer Avenue in Montesano, Grays Harbor County, Washington (herein referred to as the Site). The scope of work (SOW) section of this CAP describes the property, environmental conditions, remedial action objectives, and the appropriate cleanup action standards selected under the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA). It also describes the Performance Groundwater Monitoring/Sampling Events that will be conducted at the Site.

AEG plans to submit the Final Remedial Investigation/Feasibility Study (RI/FS) report to Ecology in September 2011 as part of the Agreed Order mandate for this Site. A review of this document in conjunction with this proposed CAP is recommended for full details on the Site's background. A description of previous environmental investigations and interim remedial action completed at the Site is provided in the Draft Final RI/FS report.

**CONCEPTUAL SITE MODEL**

The conceptual site model reflects the findings of previous environmental investigations and presents an exposure assessment for the Site. The exposure assessment involved evaluating the distribution of the dissolved and adsorbed phases of gasoline range petroleum hydrocarbons in soil and groundwater onsite and at adjacent downgradient locales, potential pathways, and potential receptors. The conceptual site model is used to support an evaluation of feasible remediation technology for the cleanup of petroleum contaminated soil (PCS) and impacted groundwater at the Site and impacted areas off-property.

The primary conceptual release model for the Site consists of gasoline fuel leakage from the leaking underground storage tanks associated with the operation of the former Brumfield-Twidwell

facility and subsequent incorporation of spilled gasoline fuel into the subsurface soils and groundwater.

In addition, groundwater analytical results, groundwater potentiometric maps, and subsurface investigations conducted at the Pick-Rite Thriftway property (located directly west and downgradient of the Site) by AEG indicate that the lateral western extent of dissolved phase gasoline petroleum hydrocarbons impact extends from the central-southwest area of the Site (in the vicinity of the previous underground storage tanks) to off-property areas west-southwest of the property including areas on Sylvia Street, and near the eastern property boundary of the Pick-Rite Thriftway property (near the eastern entrance to the grocery store).

Contaminant distribution and groundwater elevations (based on surveyed groundwater elevation data measured at the Site and off-property areas) indicate the direction of groundwater migration is generally to the south-southwest at the Site and nearby vicinity area. Presence of cohesionless soils at the Site including silty sand to sandy gravel enabled the vertical migration of dissolved phase gasoline range petroleum hydrocarbons to where groundwater was encountered (at approximately 11 feet to 13 feet bgs) and beyond the vadose zone. Contaminants may also spread laterally to the west and south-southwest area of the Site due to the gradient of groundwater flow in the area and due potentially to the presence of utility corridors on Sylvia Street.

Petroleum hydrocarbons impact is also present at the eastern property boundary of the Pick-Rite Thriftway property (directly west-southwest of the Site) at well PRMW-9. The eastern area of the Pick-Rite property, as represented by monitoring well PRMW-9 will represent the western distal end of the plume associated with the Site (refer to Figure 1, *Site Plan Former Brumfield-Twidwell & Off-Property Areas*).

The constituents of concern (COCs) at the Site and associated offsite areas downgradient to the west-southwest include the following:

- Gasoline range TPH – associated with gasoline fuel leaked from the Site’s previous leaking USTs (associated with the former Brumfield-Twidwell facility);
- Gasoline fuel associated VOC as per Ecology MTCA Cleanup Regulation Table 830–1, *Required Testing for Petroleum Releases*:
  - ❖ Specific aromatic hydrocarbons including benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), total naphthalenes, 1-2 dibromoethane (EDB), and 1-2 dichloroethane (EDC); and
- Total lead.

## REMEDIAL ACTION OBJECTIVE

The objective of the remedial action/CAP is to remediate and restore the groundwater quality at the northwest corner of the Site (well BTMW-2) and associated off-property downgradient areas (as represented by wells BTMW-5, BTMW-6, and PRMW-9) to concentrations below Ecology MTCA Method A groundwater cleanup levels and minimize the potential for exposure to humans and the environment. Table 1, *Summary of Groundwater Analytical Results – Former Brumfield-Twidwell & Pick Rite*, presents analytical results for all monitoring wells at the Site and the two offsite wells at the Pick Rite Property (PRMW-9 and PRMW-10). Elevated concentrations of gasoline range TPH and selected VOC constituents are above Ecology MTCA Method A groundwater cleanup levels at only BTMW-2 and PRMW-9 as of 2011. These constituents of concern were above cleanup levels at BTMW-5 and BTMW-6 in 2008 and 2009, respectively.

## PROPOSED REMEDIAL ACTION

Ecology MTCA Method A cleanup levels are designed for facilities undergoing routine cleanup actions that involve relatively few hazardous substances (WAC 173-340-700(5)(a)). The conditions for using Ecology MTCA Method A cleanup levels are met at this Site because numerical standards are available for all indicator hazardous substances in all media of concern (WAC 173-340-704(1)(b)). In addition, Method A cleanup levels are appropriate because only two hazardous analytes, gasoline range TPHs and its volatile constituents, primarily benzene, have been identified at concentrations above cleanup levels (WAC 173-340-700(2)). Therefore, Ecology MTCA Method A groundwater cleanup levels will be used at the Site and off-property areas since the conditions for using this Method are met.

**Table 1. Selected MTCA Cleanup Levels for Site Remediation**

Media	Contaminants	Cleanup Levels	Reference
Groundwater	TPH-Gasoline	800 µg/L	MTCA Method A
	Benzene	5 µg/L	MTCA Method A

Based on the conceptual site model, the selected remediation technologies for the cleanup action at the Site will involve a staged approach to in-situ bioremediation comprising of chemical oxidation and aerobic biodegradation of petroleum hydrocarbon. The primary components of this remedial action are as follows:

- In-Situ chemical oxidation using Regenesis RegenOx to reduce sorbed and soil-matrix bound petroleum hydrocarbon in the vadose zone and saturated zone, as well as the dissolved phase in groundwater.
- Regenesis Oxygen Releasing Compound<sup>2</sup> (ORC) will be used to accelerate the microbial degradation of remaining petroleum hydrocarbon impacted vadose zone and groundwater.

RegenOx chemical oxidation involves injecting an oxidizer and activator directly into the source area, impacted soil areas, and the petroleum hydrocarbon plume onsite. The oxidants in the RegenOx are a mixture of sodium percarbonate, sodium carbonate, sodium silicate and silica gel. The oxidant chemicals react with the contaminants producing innocuous substances such as carbon dioxide (CO<sub>2</sub>), water (H<sub>2</sub>O), and inorganic chloride.

RegenOx directly oxidizes contaminants and generates a range of highly oxidizing free radicals that remediates the constituents of concern - gasoline range petroleum hydrocarbon and its associated volatile organic compounds. These reactions can be propagated in the presence of RegenOx for periods of up to 30 days on a single injection.

ORC will also be applied by direct injection into the source zone and the petroleum hydrocarbon plume onsite. ORC is a phosphate-intercalated magnesium peroxide, that when hydrated, produces a controlled release of oxygen for periods of up to 12 months on a single application. This controlled release of oxygen assists in accelerating the naturally occurring aerobic contaminant biodegradation in groundwater and saturated soils.

#### RegenOx/ORC Rationale

Following preliminary screening of other feasible remedial technologies, RegenOx followed by an injection of ORC was selected because additional soil excavation was deemed impractical at the Site. In addition, RegenOx/ORC are more tailored for remediation at properties where the relative permeability of soils ranges from semi-pervious to pervious with hydraulic conductivity values ranging from 10<sup>-5</sup> to 1 cm/s and presence of high groundwater table, as compared to other remedial technologies such as soil vapor extraction/air sparging (SVE/AS) and groundwater extraction for hydrocarbon remediation.

Furthermore, the selection of this remedial action approach for the Site was undertaken based on the following considerations: remedial action objectives for the Site, feasibility analyses, regulatory requirements, and the Site and Pick-Rite's commercial operations. Enhanced bioremediation via ORC was selected as a secondary remedial technology to address the remaining petroleum hydrocarbon impacts to achieve the required regulatory cleanup levels for groundwater.

The specific RegenOx/ORC injection/application was designed using typical parameters based on the type of soil identified during the previous Site work. The in-situ hydraulic conductivity was estimated at 10<sup>-5</sup> to 1 cm/s. The injection spacing was then chosen based on specific criteria considered for the minimum effective area. A conservative injection spacing recommendation of approximately 20 feet for RegenOx and 10 feet for ORC was determined based on site specific characteristics, the nature of the constituents of concern, and the estimated area for applying

RegenOx and ORC into the vadose zone and saturated zone of the impacted area and nearby vicinity.

RegenOx product will be injected by a direct push probe drilling rig and a pump hopper using the “bottom up” injection method where the probe will be driven down and RegenOx will be injected at pre-determined intervals as the probe is slowly brought up toward ground surface. RegenOx is a chemical oxidation technology developed by Regenesis and consists of two parts that, when mixed cause controlled chemical reactions in the subsurface that can effectively remediate petroleum hydrocarbons in soil and groundwater.

Regenesis’ ORC Advanced product will also be injected by a direct push probe drilling rig and a pump hopper using the “bottom up” injection method where the probe will be driven down and ORC Advanced will be injected in pre-determined intervals as the probe is slowly brought up toward ground surface. ORC Advanced is an oxygen release technology developed by Regenesis that produces a sustained oxygen release when combined with water and remediates the contamination through biological means. The sustained biological reaction created in the subsurface by the injection of ORC Advanced can last up to 12 months on a single application (Regenesis).

The proposed in-situ bioremediation will focus on the following areas: 1) around well BTMW-2, located at the northwest corner of the Site; 2) around well BTMW-6, located on the western side of Sylvia Street; and 3) around well PRMW-9, located at the eastern entrance to Pick Rite grocery store. RegenOx/ORC injection points will be set in these areas at depths of 2 feet to 10 feet and at lateral intervals of approximately 7 to 10 feet (depending on the bioremediation product).

Case studies of similar impacted facilities engaged in bioremediation via RegenOx have shown that this remedial action technology is effective in gross reduction of the contaminant mass by oxidizing the sorbed contamination and changing the contaminant mass equilibrium (by increasing its solubility) which result in a shift from a sorbed phase to a dissolved phase. Application of ORC Advanced to the more soluble partially oxidized contaminants (as a result of RegenOx) would expedite the rate of aerobic biodegradation. Due to the changes in the contaminants and soil matrix chemistry, a “*temporary increase in the soluble fractions may occur post-application*” (Regenesis, 2009).

As per the agreement with the Ecology Site Manager, four Performance Monitoring Groundwater Sampling events are proposed after the completion of in-situ bioremediation activities. The completion of the fourth groundwater monitoring and sampling event will represent the final



activities for the proposed remedial action and also as the final environmental investigation activities conducted for the Site and for associated off-property areas.

The proposed cleanup actions and further groundwater investigations will be conducted as part of the Agreed Order to meet the MTCA requirements for remedial action at the Site and associated off-property areas and to obtain a Satisfaction Determination from Ecology. The MTCA requirements for substantial equivalence under Section 515 of Chapter 173-340 of the Washington Administrative Code (WAC 173-340-515) will be met, including providing Ecology with information on the Site cleanup action.

### **COMPLIANCE MONITORING OF GROUNDWATER**

The MTCA regulations, WAC 173-340-720(8), require that groundwater cleanup levels be attained in all groundwater monitoring locales from the point of compliance to the outer boundary of the contamination plume. The point of compliance for groundwater that will meet the MTCA groundwater cleanup level is throughout the plume and will be measured in groundwater monitoring wells specifically at selected wells onsite.

Compliance with groundwater cleanup levels at the western boundary of the Site and off-property areas will be measured at wells PRMW-9 and MW-6. Monitoring well PRMW-10 will serve as the southern boundary compliance well with well BTMW-2 as the northern compliance point. Monitoring wells BTMW-5 and BTMW-6 will represent the central off-property areas of concern. By measuring the compliance monitoring wells at these locales, AEG will be able to confirm that the proposed remediation of combined in-situ bioremediation processes of RegenOx chemical oxidation and ORC Advanced aerobic biodegradation in addition to natural attenuation will achieve MTCA groundwater cleanup levels.

AEG will also monitor the natural attenuation of constituents of concern through ongoing assessment of field parameters. Natural attenuation is the reduction in concentration of compounds in soil or groundwater over time or distance from the source due to naturally occurring physical, chemical, and biological processes, such as biodegradation, dispersion, dilution, adsorption, and volatilization. Therefore, field parameters such as dissolved oxygen and oxygen-reduction-potential will be monitored at the selected monitoring wells.

The five core wells (BTMW-2, BTMW-5, BTMW-6, PRMW-9, and PRMW-10) will be monitored and sampled for four compliance groundwater monitoring/sampling events after the completion of bioremediation.

The tasks for the four Compliance Monitoring/Sampling Events are as follows:

- Groundwater samples will be analyzed for gasoline range organics as per MTCA Cleanup Regulation Table 830-1, *Required Testing for Petroleum Releases*. The analyses would include:
  - ❖ Gasoline range TPHs by Northwest Method NWTPH-Gx;
  - ❖ VOCs including BTEX, methyl tertiary-butyl ether (MTBE), total naphthalenes, 1-2 dibromoethane (EDB), and 1-2 dichloroethane (EDC) via EPA Method 8260B; and
  - ❖ Total lead via EPA Method 7421.
- Prepare and submit a report documenting the depth-to-water, groundwater migration direction, and summarizing analytical results of the compliance groundwater monitoring/sampling activities after each monitoring event. A total of four reports will be generated. All reports generated by AEG will be reviewed by a WA State licensed hydrogeologist.
- All data generated will be submitted to Ecology in accordance with WAC 173-340-840(5) in both written and electronic format.

## CLOSING

Before proceeding with the proposed Cleanup Action Plan, AEG requests your approval, on behalf of Mr. Bryan Kolb, of the proposed remedial action for the Site and associated off-property areas. Please contact the undersigned at (360) 352-9835 with questions, comments, and/or your approval.

Sincerely,  
Associated Environmental Group, LLC



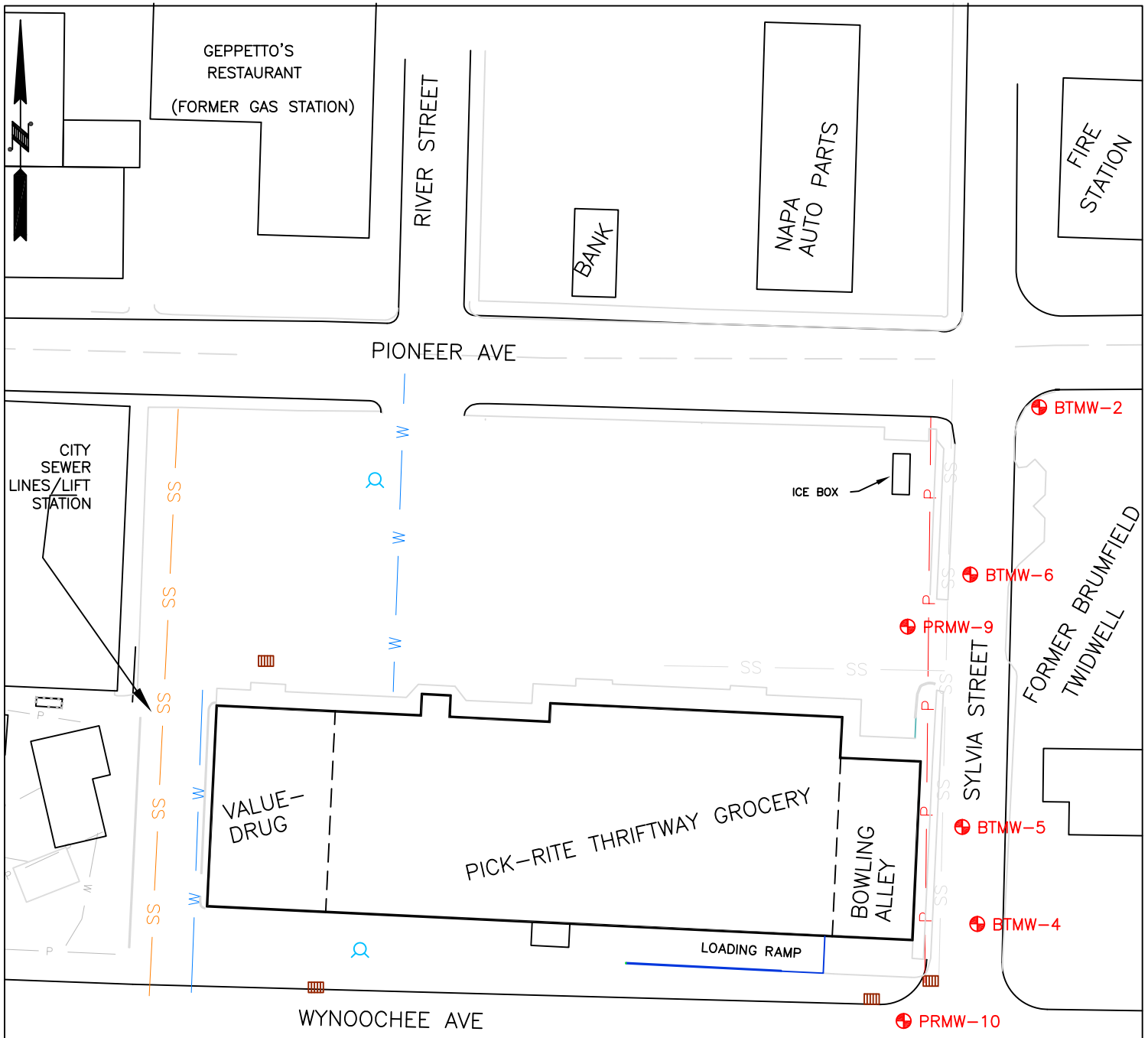
Yen-Vy Van, P.G., P. H.G.  
Principal Hydrogeologist



Michael S. Chun, RSA  
General Manager/Principal

Enclosures: Figure 1, *Site Plan Former Brumfield-Twidwell & Off-Property Areas*  
Table 1, *Summary of Groundwater Analytical Results – Former Brumfield-Twidwell & Pick Rite*

cc: Bryan Kolb



DRAWING SCALE: 1" = 80'

**LEGEND**

- ⊕ BTMW-2 Monitoring Well on B-Twidwell Site
- ⊕ PRMW-9 Monitoring Well on Pick Rite Site
- P — POWER (UNDERGROUND)
- W — WATER LINE
- SS — SEWER LINE

**Notes:**

- (1) The locations of all features shown are approximate.
- (2) This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document.

Reference: Drawing created from surveyor's drawing by PACIFIC GEOMATIC SERVICES, Inc and notes provided by AEG, LLC.



**ASSOCIATED ENVIRONMENTAL GROUP, LLC**  
 1018 CAPITOL WAY S, Suite 201  
 Olympia, WA 98501  
 (360) 352-9835 Fax (360) 352-8164

**FIGURE 1 – SITE PLAN  
 FORMER BRUMFIELD-TWIDWELL  
 & OFF-PROPERTY AREAS**

**FORMER BRUMFIELD-TWIDWELL**  
 301 E PIONEER AVE  
 MONTESANO, WA

Project# 05-200	Date: 7/20/2011
File:	Sheet 2 OF 3

**Table 1 Summary of Groundwater Analytical Results - Former Brumfield-Twidwell & Pick-Rite  
Former Brumfield-Twidwell Property & Off-Property Monitoring Wells  
Montesano, WA**

Sample Number <sup>1</sup>	Date	BTEX <sup>2</sup> (µg/L)				Gasoline <sup>3</sup> (µg/L)	Table 830-1 Constituents <sup>2</sup> (µg/L)				
		Benzene	Toluene	Ethylbenzene	Total Xylenes		1,2-Dichloroethane (EDC)	1,2-Dibromoethane (EDB)	Total Naphthalenes	MTBE	Total Lead <sup>4</sup>
BTMW-1*	2/8/2006	<1.0	<1.0	<1.0	<1.0	<100	--	--	--	--	--
	8/17/2006	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<0.01	<5.0	<5.0	<1.0
	1/9/2007	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<0.01	<5.0	<5.0	<1.0
	3/15/2007	<1.0	<1.0	<1.0	<1.0	<100	--	--	--	--	--
BTMW-2	2/8/2006	<b>550</b>	810	<b>1,280</b>	<b>10,100</b>	<b>58,000</b>	--	--	--	--	--
	8/17/2006	<b>136</b>	176	323	<b>1,570</b>	<b>1,970</b>	<1.0	<0.01	101	<5.0	<b>21</b>
	1/9/2007	<b>357</b>	482	<b>1,430</b>	<b>9,400</b>	<b>7,820</b>	<1.0	<0.01	88.5	<5.0	9
	3/15/2007	<b>355</b>	495	<b>828</b>	<b>4,970</b>	<b>24,600</b>	--	--	--	--	--
	4/1/2008	<b>12.8</b>	211	<b>503</b>	<b>4,040</b>	<b>7,730</b>	<1.0	<0.01	73.5	<5.0	7.3
	4/9/2009	<b>LNAPL present</b>									
	5/12/2010	<1.0	<1.0	<1.0	6.4	160	<1.0	<0.01	<5.0	<5.0	<5.0
	5/12/2011	1.1	5.8	36.5	477	<b>2,650</b>	<1.0	<0.01	11.6	<5.0	<5.0
BTMW-3*	2/8/2006	<1.0	<1.0	2.7	24	120	--	--	--	--	--
	8/17/2006	<1.0	<1.0	4.4	17	175	<1.0	<0.01	<5.0	<5.0	<1.0
	1/9/2007	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<0.01	<5.0	<5.0	<1.0
	3/15/2007	<1.0	<1.0	<1.0	<1.0	<100	--	--	--	--	--
BTMW-4*	2/8/2006	<1.0	<1.0	<1.0	<1.0	<100	--	--	--	--	--
	8/17/2006	<1.0	<1.0	2.1	12	100	<1.0	<0.01	<5.0	<5.0	10
	1/9/2007	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<0.01	<5.0	<5.0	<1.0
	3/15/2007	<1.0	<1.0	<1.0	<1.0	<100	--	--	--	--	--
BTMW-5	4/26/2006	4.0	10.2	5.3	25	<b>1,100</b>	--	--	--	--	--
	8/17/2006	<1.0	<1.0	1.3	20	101	<1.0	<0.01	<5.0	<5.0	<1.0
	1/9/2007	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<0.01	<5.0	<5.0	<1.0
	3/15/2007	<1.0	<1.0	<1.0	<1.0	<100	--	--	--	--	--
	4/1/2008	1.2	12.3	33.2	284	<b>1,040</b>	<1.0	<0.01	<5.0	<5.0	6.0
	4/8/2009	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<0.01	<5.0	<5.0	<5.0
	5/12/2010	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<0.01	<5.0	<5.0	<5.0
	5/12/2011	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<0.01	<5.0	<5.0	<5.0
BTMW-6	4/26/2006	<b>45</b>	41	170	365	<b>3,390</b>	--	--	--	--	--
	8/17/2006	<b>7.1</b>	7.9	1.5	116	611	<1.0	<0.01	8.0	<5.0	13
	1/9/2007	4.0	3.9	37	107	380	<1.0	<0.01	<5.0	<5.0	<1.0
	3/15/2007	4.99	7.3	33	70	450	--	--	--	--	--
	4/1/2008	1.8	8.5	143	211	<b>1,500</b>	<1.0	<0.01	8.2	<5.0	<1.0
	4/8/2009	1.3	4.1	168	120	<b>2,060</b>	<1.0	<0.01	55.5	<5.0	<5.0
	5/12/2010	<1.0	<1.0	11.5	16.3	320	<1.0	<0.01	16.3	<5.0	<5.0
	5/12/2011	<1.0	<1.0	<1.0	1.8	498	<1.0	<0.01	14	<5.0	<5.0
PRMW-9 <sup>6</sup>	12/1/2010	<b>43.6</b>	75.8	232	413	<b>4,133</b>	--	--	--	--	--
	3/8/2011	<b>35.8</b>	63.2	500	<b>13,300</b>	<b>5,180</b>	--	--	--	--	--
	6/9/2011	<1	34.4	450	<b>1,460</b>	<b>9,240</b>	--	--	--	--	--
PRMW-10 <sup>6</sup>	12/1/2010	<1	<2	<1	<3	<100	--	--	--	--	--
	3/8/2011	<1	<2	<1	<3	<100	--	--	--	--	--
	6/9/2011	<1	<2	<1	<3	<100	--	--	--	--	--
PQL		1.0	1.0	1.0	1.0	100	1.0	0.01	5.0	5.0	1.0 or 5.0
Method A Cleanup Levels		5	1,000	700	1,000	800 <sup>5</sup>	5	0.01	160	20	15

Notes:

<sup>1</sup> Approximate monitoring well locations are shown in Figure 5

<sup>2</sup> Analyzed by EPA Method 8021B.

<sup>3</sup> Analyzed by Northwest Method NWTPH-Gx

<sup>4</sup> Analyzed by EPA Method 7421

<sup>5</sup> Cleanup level with presence of benzene

<sup>6</sup> PRMW-9 & PRMW-10: monitoring wells on Pick-Rite Thriftway and Wynoochee Ave. ROW

µg/L = micrograms per liter

"<" not detected above laboratory detection limits.

MTBE = methyl tertiary-butyl ether

-- = not analyzed for this constituent

Bold indicates the detected concentration exceeds MTCA Method A cleanup levels

\* = ceased groundwater monitoring/sampling activities at this well

**EXHIBIT B**

**MODEL ENVIRONMENTAL COVENANT**

## Model Restrictive (Environmental) Covenant

After Recording Return to:

\_\_\_\_\_  
Department of Ecology  
[fill in regional address]

### Environmental Covenant

**Grantor:** [land owner]

**Grantee:** State of Washington, Department of Ecology

**Legal:** [fill in brief legal description]

**Tax Parcel Nos.:** [fill in]

**Cross Reference:** [if amendment, recording number of original covenant]

Grantor,           [land owner]          , 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 , day of \_\_\_\_\_, 200\_\_ 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 [NAME OF PROPERTY OWNER], 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]:

[INSERT THE DATE AND TITLE FOR CLEANUP ACTION PLAN and other documents as applicable].

These documents are on file at Ecology's [Insert Office Location] Office.

+++++++Select the appropriate scenario for the property+++++++

SCENARIO 1:

This Covenant is required because the Remedial Action resulted in residual concentrations of [SPECIFICALLY LIST SUBSTANCE(S)] which exceed the Model Toxics Control Act Method [LIST APPLICABLE METHOD] Cleanup Level(s) for [SOIL, GROUNDWATER, ETC.] established under WAC 173-340-\_\_\_\_\_.

++++and/or++++

SCENARIO 2:

This Restrictive Covenant is required because a conditional point of compliance has been established for [SOIL, GROUNDWATER, ETC.]SCENARIO 3:

If the Remedial Action does not fit within Scenarios 1 and/or 2 and you believe that the property still needs a Restrictive Covenant, contact the AG's office.

+++++

The undersigned, [NAME OF PROPERTY OWNER], is the fee owner of real property (hereafter "Property") in the County of [NAME OF COUNTY], State of Washington, that is subject to this Covenant. The Property is legally described [AS FOLLOWS: (insert legal description language)] -or- [IN ATTACHMENT A OF THIS COVENANT AND MADE A PART HEREOF BY REFERENCE (attach document containing legal description)].

[NAME OF PROPERTY OWNER] 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. (This Section must describe with particularity the restrictions to be placed on the property.)

1. If the property was remediated to industrial soil cleanup standards, then use the following sentence: "The Property shall be used only for traditional industrial uses, as described in RCW 70.105D.020(23) and defined in and allowed under the [CITY -or- COUNTY] of [\_\_\_\_\_]'s] zoning regulations codified in the [OFFICIAL NAME OF ZONING REGULATION] as of the date of this Restrictive Covenant."

2. If the groundwater contains hazardous substances above cleanup levels, then use the following sentence: "No groundwater may be taken for [LIST THE PROHIBITED USES, E.G., DOMESTIC, AGRICULTURAL, OR ANY USE] from the Property."

3. If the soil contains hazardous substances above cleanup levels, then describe prohibited activities as follows:

a. For contaminated soil under a structure use the following sentence: "A portion of the Property contains [SPECIFICALLY LIST SUBSTANCE(S)] contaminated soil located [SPECIFICALLY DESCRIBE WHERE THE SOIL IS LOCATED, I.E., UNDER THE SOUTHEAST PORTION OF BUILDING 10]. The Owner shall not alter, modify, or remove the existing structure[s] 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."

b. Example language for contaminated soil under a cap: "Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the capped areas include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork."

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.

**[NAME OF GRANTOR]**

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**[Name of Signatory]**  
**[Title]**

Dated: \_\_\_\_\_

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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**[Name of Person Acknowledging Receipt]**  
**[Title]**

Dated: \_\_\_\_\_

**[INDIVIDUAL ACKNOWLEDGMENT]**

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, I certify that \_\_\_\_\_ personally appeared before me, and acknowledged that **he/she** is the individual described herein and who executed the within and foregoing instrument and signed the same at **his/her** free and voluntary act and deed for the uses and purposes therein mentioned.

\_\_\_\_\_  
Notary Public in and for the State of  
Washington, residing at \_\_\_\_\_.  
My appointment expires \_\_\_\_\_.

**[CORPORATE ACKNOWLEDGMENT]**

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, I certify that \_\_\_\_\_ personally appeared before me, acknowledged that **he/she** is the \_\_\_\_\_ 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.

\_\_\_\_\_  
Notary Public in and for the State of  
Washington, residing at \_\_\_\_\_.  
My appointment  
expires \_\_\_\_\_.

**[REPRESENTATIVE ACKNOWLEDGEMENT]**

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, I certify that \_\_\_\_\_ personally appeared before me, acknowledged that **he/she** signed this instrument, on oath stated that **he/she** was authorized to execute this instrument, and acknowledged it as the

\_\_\_\_\_ [type of authority] of \_\_\_\_\_ [name of party being represented] to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

\_\_\_\_\_  
Notary Public in and for the State of  
Washington, residing at \_\_\_\_\_.  
My appointment expires \_\_\_\_\_.

Exhibit A  
Legal Description