



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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March 31, 2016

Mr. Paul Supple
Atlantic Richfield Company
4 Centerpointe Drive
Suite 200 Room 4-222
LaPalma, California 90623

Re: No Further Action at the following Site:

- **Site Name:** ARCO 6016
- **Site Address:** 8247 Pacific Ave., Tacoma, Pierce County, Washington
- **Facility/Site No.:** 13593356
- **Cleanup Site No.:** 7990
- **VCP Project No.:** SW1431

Dear Mr. Supple:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the ARCO 6016 facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

NO. Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release :

- Petroleum into the soil and groundwater.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

- Response to Further Action Letter, Antea Group, November 16, 2015.

These documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You may make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **no further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action.

The Site is located on the northeast corner of the intersection of South 84th Street and Pacific Avenue South in Tacoma, Washington (Figure 1). It has been an ARCO station since at least 1970.

The currently operating gasoline service facility consists of a convenience store and two dispensing islands under a canopy south of the underground storage tanks (USTs). The UST complex currently in use was installed in 1989 after removal of the previous tanks.

Topographically, the Site is flat. Pavement covers the vast majority of the Site. The surrounding area is mixed residential and commercial.

Subsurface lithology consists of dense to very dense silty sands with gravel to a maximum depth explored of 22.5 feet below ground surface (bgs). The Site is underlain by a relatively low transmissive shallow perched aquifer. Depth to groundwater ranges from approximately 1.5 feet to 9.9 feet bgs. The groundwater flow direction is inferred to be to the northwest.

In response to Ecology's suggestion, on May 7 and 8, 2014, five soil borings were advanced at the Site to assess areas of formerly located contamination (Figure 2). Soil samples were collected and analyzed for Total Petroleum Hydrocarbons-Gasoline (TPH-G), benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tert-butyl ether (MTBE), and lead. Extractable Petroleum Hydrocarbons and Volatile Petroleum Hydrocarbons were collected to allow for Site-specific cleanup levels calculations. These calculation worksheets are shown on Tables 1 and 2. All results were either non-detect at appropriate detection levels or were below applicable Method A cleanup levels.

On April 30, 2015, one boring was advanced at the Site and completed as monitoring well MW-7. Soil samples and a groundwater sample were collected and analyzed for, TPH-G, BTEX, MTBE, and lead. The groundwater sample was also analyzed for dissolved lead. One soil sample was analyzed for Extractable Petroleum Hydrocarbons and Volatile Petroleum Hydrocarbons. All results were either non-detect at appropriate detection levels or were below applicable Method A cleanup levels.

Lead has been analyzed in soil samples and found to be well below the Method A cleanup level of 250 mg/kg.

Groundwater has been monitored since 1994. The sampling round of the existing wells on February 13, 2014 found only a detection of total lead (Pb) at 32 micrograms per liter (µg/l) in monitoring well MW-5. Two more rounds of sampling were done at MW-5. The samples were analyzed for total Pb and dissolved Pb. All detections were below the Method A cleanup level. The last detection of contamination above Method A cleanup levels was in 1996. Approximately 22 rounds of groundwater sampling have been completed since without any detections of contamination above clean levels with the vast majority of them below detection levels.

In response to Ecology's request for soil vapor sampling, Antea responded with the above cited report. The report detailed the lack of need for this sampling and cited several references to support their case.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

a. Cleanup levels

MTCA Method B Cleanup Levels for unrestricted land use for soil and groundwater have been used to characterize the Site. Two values were derived from the two most recent soil samples (Tables 1 and 2). The lower of the two values are shown below:

The Method B cleanup levels used are:

Soil:

TPH-Gasoline	3,466 mg/kg
Benzene	18.2 mg/kg
Toluene	6,400 mg/kg
Ethylbenzene	8,000 mg/kg
Total Xylenes	16,000 mg/kg

Groundwater:

TPH-Gasoline	800 ug/l
Benzene	5 ug/l
Toluene	1000 ug/l
Ethylbenzene	700 ug/l
Total Xylenes	1000 ug/l
Lead	15 µg/l

b. Points of compliance

Standard points of compliance for the Site are used.

The Points of Compliance are:

Soil -Direct Contact: For soil cleanup levels based on human exposure via direct contact, the point of compliance is: "...*throughout the Site from ground surface to 15 feet below the ground surface.*"

Soil- Leaching: For sites where soil cleanup levels are based on the protection of groundwater: "...*the point of compliance is throughout the Site*

Groundwater: For groundwater, the standard point of compliance as established under WAC 173-340-720(8) is: "...*throughout the site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the site.*"

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

Cleanup actions at the Site have consisted of excavation of impacted soil with disposal at permitted disposal facilities.

Groundwater monitoring wells were installed to allow sampling and thus ascertain impacts to groundwater.

Injection of oxygen releasing compound into petroleum-impacted monitoring wells.

4. Cleanup.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site.

Cleanup actions to date have consisted of two different phases of excavation of contaminated soil. Confirmation soil samples indicated that soil above Method A cleanup levels remained in place. Contaminated soil was taken to Fife Sand and Gravel in Fife, Washington, and TPS Technologies in Tacoma, Washington.

During one phase of excavation, approximately 520 gallons of groundwater was pumped out of the excavation and disposed of at Chempro, Inc., in Kent, Washington.

Groundwater has been monitored since 1994. Oxygen releasing compound was injected into wells MW-1 and MW-6 to enhance degradation of petroleum. No hydrocarbons above cleanup levels have been detected in groundwater since 1996.

Confirmation samples of soil and groundwater collected in 2014 and 2015 found no contamination above Method A cleanup levels.

The need for soil vapor sampling was addressed and found not to be an issue during the screening phase.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

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Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (#SW1431).

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (360) 407-6263 or e-mail at Carol.Johnston@ecy.wa.gov.

Sincerely,



Carol A. Johnston
SWRO Toxics Cleanup Program

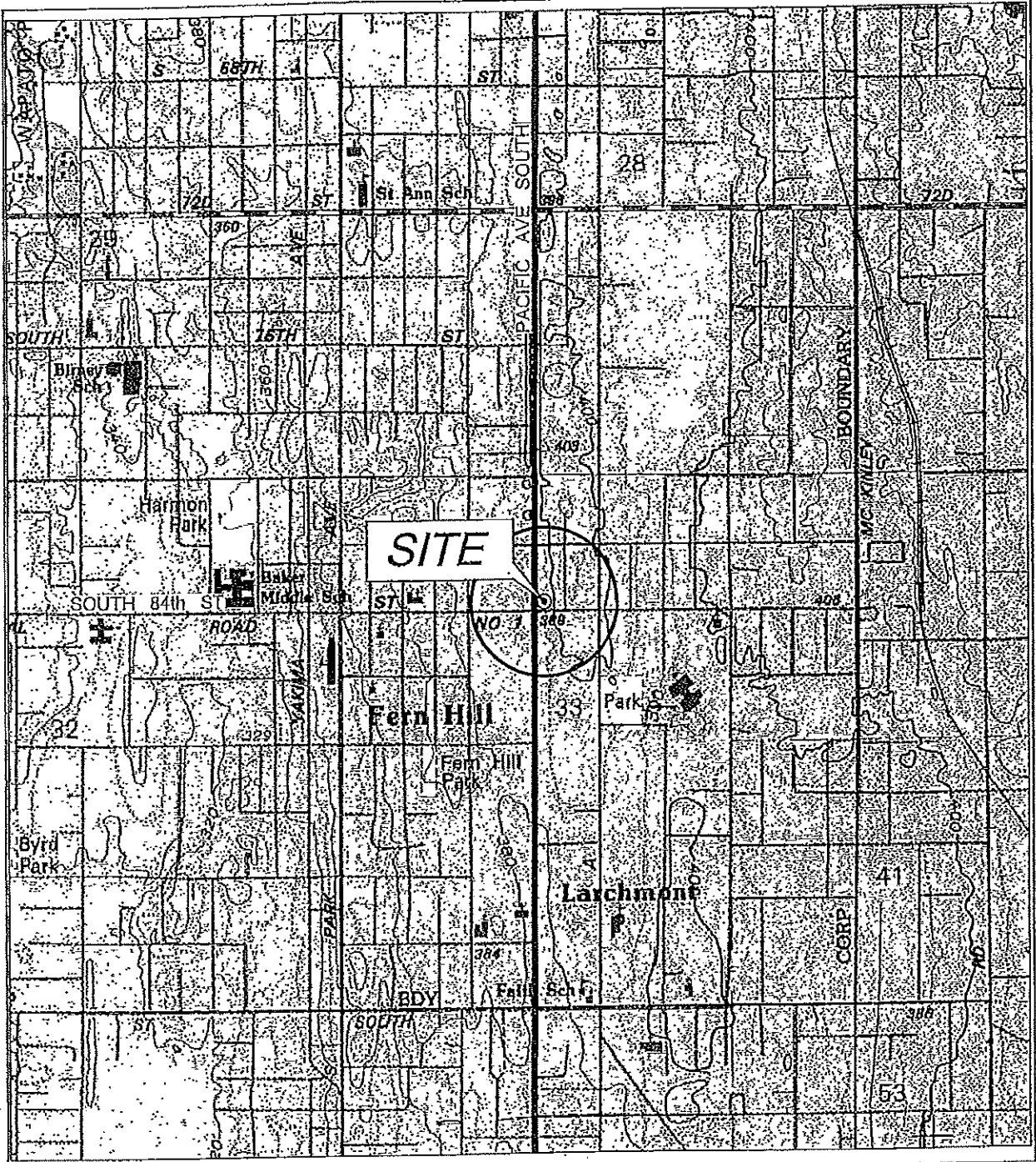
CAJ:anf

Enclosures 2 figures, 2 tables

By Certified Mail: 9171082133393970394228

cc: Mackie Stock, Antea Group
Rob Olsen, TPCHD
Nick Acklam, Ecology
Matthew Alexander, Ecology

Enclosure



GENERAL NOTES:
 BASE MAP FROM TERRAIN NAVIGATOR PRO
 TACOMA SOUTH, WA. QUADRANGLE
 7.5 MINUTE TOPOGRAPHIC MAP
 PHOTOREVISED 1994



QUADRANGLE LOCATION

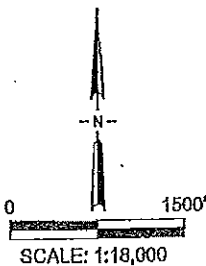


FIGURE 1

SITE LOCATION MAP
 ARCO FACILITY NO. 6016
 8247 PACIFIC AVENUE SOUTH
 TACOMA, WA.

PROJECT NO. 060160A101	DRAWN BY K. MARTIN
FILE NO. 6016-SLM	PREPARED BY G. CRAWFORD
DATE 31 JAN 11	REV. 0
	REVIEWED BY



LEGEND:

- AGB-7 SOIL BORING LOCATION
- MW-7 MONITORING WELL LOCATION
- PRODUCT LINE TRENCH LOCATION
- AGB-1 ABANDONED BORING LOCATION
- V-1 FORMER VAPOR EXTRACTION WELL

SOIL ANALYTICAL DATA

SAMPLING DATE
SAMPLING IDENTIFICATION

MW-2		MW-7	
4/20/15	2	4/20/15	2
B	<0.019	B	<0.019
T	<0.044	T	<0.044
E	<0.044	E	<0.044
X	<0.044	X	<0.044
MTBE	NA	MTBE	NA
TPH-G	4.4	TPH-G	4.4
Pb-T	5.7	Pb-T	5.7

NA NOT ANALYZED



FIGURE 2
SOIL ANALYTICAL MAP
5/7/14, 5/8/14, & 4/30/15
ARCO FACILITY NO. 8016
8247 PACIFIC AVENUE SOUTH
TACOMA, WASHINGTON

PROJECT NO.	08016E143	DRAWN BY	K. MARTIN
FILE NO.	AR-8016c	PREPARED BY	T. ROBERTS
DATE	15 JUN 15	REV. LATER MW7 SOI	SK/PSB/SSS



AGB-4		AGB-5	
5/8/14	2.5	5/8/14	2.5
B	<0.019	B	<0.019
T	<0.044	T	<0.044
E	<0.044	E	<0.044
X	<0.044	X	<0.044
MTBE	4.8	MTBE	4.8
TPH-G	2.2	TPH-G	2.2
Pb-T	2.2	Pb-T	2.2

AGB-3		AGB-4	
5/7/14	2.5	5/7/14	2.5
B	<0.019	B	<0.019
T	<0.044	T	<0.044
E	<0.044	E	<0.044
X	<0.044	X	<0.044
MTBE	4.5	MTBE	4.5
TPH-G	2.2	TPH-G	2.2
Pb-T	2.2	Pb-T	2.2

AGB-2		AGB-3	
5/7/14	2.5	5/7/14	2.5
B	<0.019	B	<0.019
T	<0.044	T	<0.044
E	<0.044	E	<0.044
X	<0.044	X	<0.044
MTBE	4.5	MTBE	4.5
TPH-G	2.4	TPH-G	2.4
Pb-T	2.4	Pb-T	2.4

AGB-7		AGB-8	
5/8/14	2.5	5/8/14	2.5
B	<0.019	B	<0.019
T	<0.044	T	<0.044
E	<0.044	E	<0.044
X	<0.044	X	<0.044
MTBE	4.8	MTBE	4.8
TPH-G	2.3	TPH-G	2.3
Pb-T	2.3	Pb-T	2.3

AGB-3		AGB-4	
5/7/14	2	5/7/14	2
B	<0.017	B	<0.017
T	0.055	T	0.055
E	0.45	E	0.45
X	<0.049	X	<0.049
MTBE	<0.043	MTBE	<0.043
TPH-G	4.8	TPH-G	4.8
Pb-T	2.5	Pb-T	2.5

MW-7		MW-8	
4/20/15	3	4/20/15	3
B	<0.019	B	<0.019
T	<0.044	T	<0.044
E	<0.044	E	<0.044
X	<0.044	X	<0.044
MTBE	NA	MTBE	NA
TPH-G	4.4	TPH-G	4.4
Pb-T	5.7	Pb-T	5.7

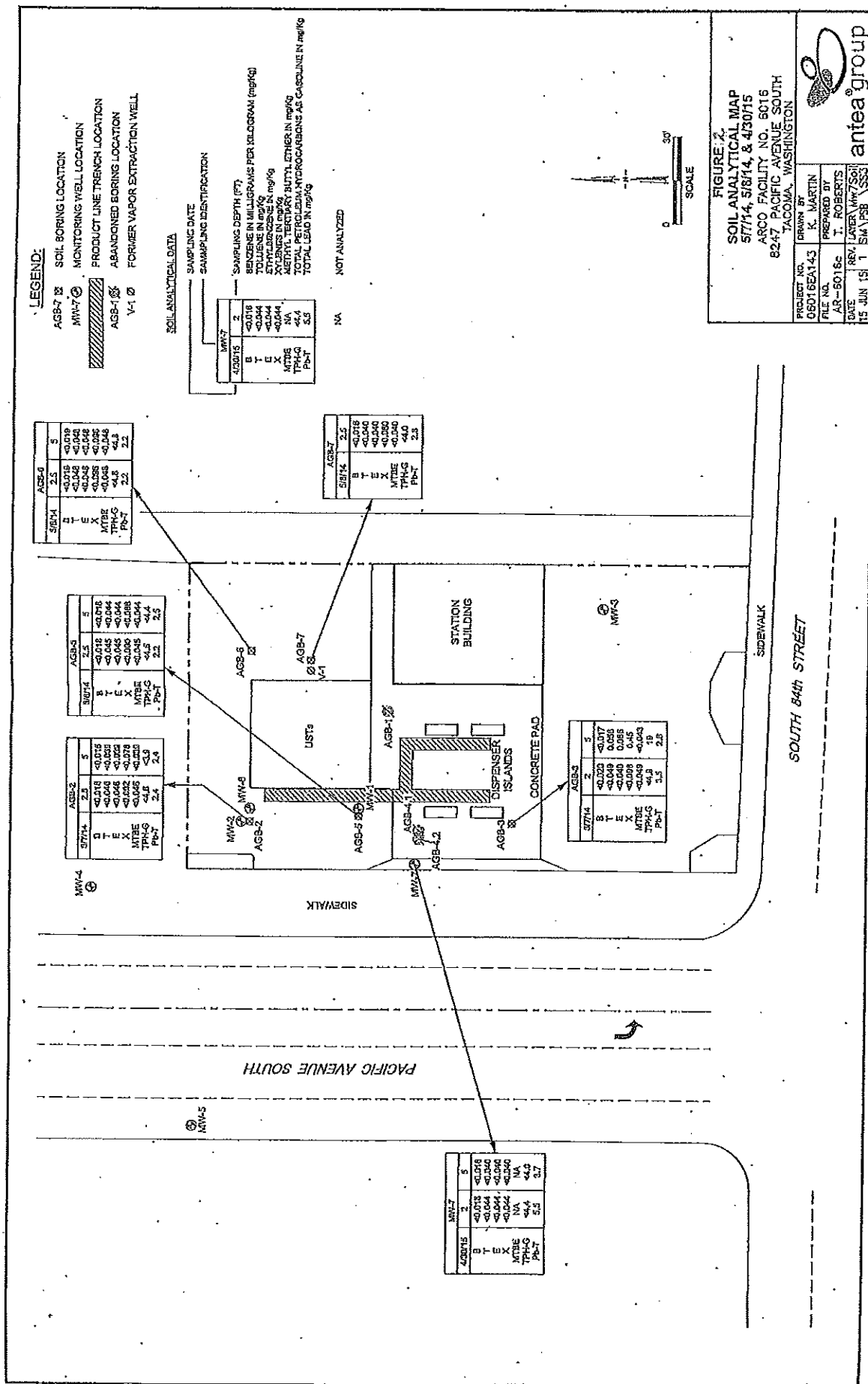


TABLE 1

Washington State Department of Ecology, Toxics Cleanup Program: Soil Cleanup Level for TPH Sites - Main Data Entry Form and Calculation Summary

A1 Soil Cleanup Levels: Worksheet for Soil Data Entry: Refer to WAC 173-340-720, 740,745, 747, 750

1. Enter Site Information

Date: 05/07/14

Site Name: ARCO 6016

Sample Name: AGB-3-5

2. Enter Soil Concentration Measured

Chemical of Concern or Equivalent Carbon Group	Measured Soil Conc dry basis mg/kg	Composition Ratio %
Petroleum EC Fraction		
AL_EC>5-6	0.37	1.17%
AL_EC>6-8	0.36	1.14%
AL_EC>8-10	1.5	4.74%
AL_EC>10-12	3.2	10.12%
AL_EC>12-16	0.55	1.74%
AL_EC>16-21	6.3	19.92%
AL_EC>21-34	6.2	19.60%
AR_EC>8-10	5.5	17.39%
AR_EC>10-12	5.4	17.07%
AR_EC>12-16	0.55	1.74%
AR_EC>16-21	0.55	1.74%
AR_EC>21-34	0.55	1.74%
Benzene	0.0045	0.01%
Toluene	0.056	0.18%
Ethylbenzene	0.086	0.27%
Total Xylenes	0.45	1.42%
Naphthalene	0	0.00%
1-Methyl Naphthalene	0	0.00%
2-Methyl Naphthalene	0	0.00%
n-Hexane	0	0.00%
MTBE	0	0.00%
Ethylene Dibromide (EDB)	0	0.00%
1,2 Dichloroethane (EDC)	0	0.00%
Benzo(a)anthracene	0	0.00%
Benzo(b)fluoranthene	0	0.00%
Benzo(k)fluoranthene	0	0.00%
Benzo(a)pyrene	0	0.00%
Chrysene	0	0.00%
Dibenz(a,h)anthracene	0	0.00%
Indeno(1,2,3-cd)pyrene	0	0.00%
Sum	31.6265	100.00%

3. Enter Site-Specific Hydrogeological Data

Total soil porosity:	0.43	Unitless
Volumetric water content:	0.3	Unitless
Volumetric air content:	0.13	Unitless
Soil bulk density measured:	1.5	kg/L
Fraction Organic Carbon:	0.001	Unitless
Dilution Factor:	20	Unitless

4. Target TPH Ground Water Concentration (if adjusted)

If you adjusted the target TPH ground water concentration, enter adjusted value here: ug/L

Notes for Data Entry

Set Default Hydrogeology

Clear All Soil Concentration Data Entry Cells

Restore All Soil Concentration Data cleared

REMARK: With MDL values.

Washington State Department of Ecology, Toxics Cleanup Program: Soil Cleanup Level for TPH Sites - Main Data Entry Form and Calculation Summary

A2 Soil Cleanup Levels: Calculation and Summary of Results. Refer to WAC 173-340-720, 740, 745, 747, 750

Site Information

Date: 5/7/2014
 Site Name: ARCO 6016
 Sample Name: AGB-3-5
 Measured Soil TPH Concentration, mg/kg: 31,627

1. Summary of Calculation Results

Exposure Pathway	Method/Goal	Protective Soil TPH Conc, mg/kg	With Measured Soil Conc		Does Measured Soil Conc Pass or Fail?
Protection of Soil Direct Contact: Human Health	Method B	4,048	2.48E-10	7.81E-03	Pass
	Method C	72,533	3.32E-11	4.36E-04	Pass
Protection of Method B Ground Water Quality (Leaching)	Potable GW: Human Health Protection	40	9.95E-07	8.29E-01	Pass
	Target TPH GW Conc. @ 500 ug/L	57	NA	NA	Pass

2. Results for Protection of Soil Direct Contact Pathway: Human Health

	Method B: Unrestricted Land Use	Method C: Industrial Land Use
Protective Soil Concentration, TPH mg/kg	4,048.14	72,532.57
Most Stringent Criterion	HI=1	HI=1

Soil Criteria	Protective Soil Concentration @Method B				Protective Soil Concentration @Method C			
	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @
HI=1	YES	4.05E+03	3.17E-08	9.99E-01	YES	7.25E+04	7.61E-08	1.00E+00
Total Risk = 1E-5	NO	1.28E+06	1.00E-05	3.15E+02	NO	9.53E+06	1.00E-05	1.31E+02
Risk of Benzene = 1E-6	NO	1.28E+05	1.00E-06	3.15E+01	NA			
Risk of cPAHs mixture = 1E-6	NA	NA	NA	NA				
EDB	NA	NA	NA	NA				
EDC	NA	NA	NA	NA				

3. Results for Protection of Ground Water Quality (Leaching Pathway)

3.1. Protection of Potable Ground Water Quality (Method B): Human Health Protection

Most Stringent Criterion	HI=1
Protective Ground Water Concentration, ug/L	374.43
Protective Soil Concentration, mg/kg	39.60

Ground Water Criteria	Protective Potable Ground Water Concentration @Method B				Protective Soil Conc, mg/kg
	Most Stringent?	TPH Conc, ug/L	RISK @	HI @	
HI=1	YES	3.74E+02	1.24E-06	1.00E+00	3.96E+01
Total Risk = 1E-5	NO	1.23E+03	1.00E-05	3.00E+00	4.15E+02
Total Risk = 1E-6	YES	3.10E+02	1.00E-06	8.32E-01	3.18E+01
Risk of cPAHs mixture = 1E-5	NA	NA	NA	NA	NA
Benzene MCL = 5 ug/L	NO	1.06E+03	6.29E-06	2.62E+00	2.28E+02
MTBB = 20 ug/L	NA	NA	NA	NA	NA

3.2. Protection of Ground Water Quality for TPH Ground Water Concentration previously adjusted and entered

Ground Water Criteria	Protective Ground Water Concentration			Protective Soil Conc, mg/kg
	TPH Conc, ug/L	Risk @	HI @	
Target TPH GW Conc = 500 ug/L	5.00E+02	1.76E-06	1.32E+00	5.68E+01

Washington State Department of Ecology, Toxics Cleanup Program: Soil Cleanup Level for TPH Sites - Main Data Entry Form and Calculation Summary

A1 Soil Cleanup Levels: Worksheet for Soil Data Entry: Refer to WAC 173-340-720, 740,745, 747, 750**1. Enter Site Information**

Date: 05/08/14

Site Name: ARCO 6016

Sample Name: AGB-6-2.5

2. Enter Soil Concentration Measured

Chemical of Concern or Equivalent Carbon Group	Measured Soil Conc	Composition
	dry basis mg/kg	Ratio %
Petroleum EC Fraction		
AL_EC >5-6	0.13	2.62%
AL_EC >6-8	0.06	1.21%
AL_EC >8-10	0.06	1.21%
AL_EC >10-12	0.27	5.44%
AL_EC >12-16	0.55	11.08%
AL_EC >16-21	0.55	11.08%
AL_EC >21-34	1.4	28.21%
AR_EC >8-10	0.06	1.21%
AR_EC >10-12	0.21	4.23%
AR_EC >12-16	0.55	11.08%
AR_EC >16-21	0.55	11.08%
AR_EC >21-34	0.55	11.08%
Benzene	0.0021	0.04%
Toluene	0.0042	0.08%
Ethylbenzene	0.0012	0.02%
Total Xylenes	0.0158	0.32%
Naphthalene	0	0.00%
1-Methyl Naphthalene	0	0.00%
2-Methyl Naphthalene	0	0.00%
n-Hexane	0	0.00%
MTBE	0	0.00%
Ethylene Dibromide (EDB)	0	0.00%
1,2 Dichloroethane (EDC)	0	0.00%
Benzo(a)anthracene	0	0.00%
Benzo(b)fluoranthene	0	0.00%
Benzo(k)fluoranthene	0	0.00%
Benzo(a)pyrene	0	0.00%
Chrysene	0	0.00%
Dibenz(a,h)anthracene	0	0.00%
Indeno(1,2,3-cd)pyrene	0	0.00%
Sum	4.9633	100.00%

Notes for Data Entry

Set Default Hydrogeology

Clear All Soil Concentration Data Entry Cells

Restore All Soil Concentration Data cleared

REMARK: With MDL values.

3. Enter Site-Specific Hydrogeological Data

Total soil porosity:	0.43	Unitless
Volumetric water content:	0.3	Unitless
Volumetric air content:	0.13	Unitless
Soil bulk density measured:	1.5	kg/L
Fraction Organic Carbon:	0.001	Unitless
Dilution Factor:	20	Unitless

4. Target TPH Ground Water Concentration (if adjusted)

If you adjusted the target TPH ground water concentration, enter adjusted value here: ug/L

A2 Soil Cleanup Levels: Calculation and Summary of Results. Refer to WAC 173-340-720, 740, 745, 747, 750

Site Information

Date: 5/8/2014
 Site Name: ARCO 6016
 Sample Name: AGB-6-2.5
 Measured Soil TPH Concentration, mg/kg: 4,963

1. Summary of Calculation Results

Exposure Pathway	Method/Goal	Protective Soil TPH Conc, mg/kg	With Measured Soil Conc		Does Measured Soil Conc Pass or Fail?
			RISK @	HI @	
Protection of Soil Direct Contact: Human Health	Method B	3,466	1.16E-10	1.43E-03	Pass
	Method C	45,445	1.55E-11	1.09E-04	Pass
Protection of Method B Ground Water Quality (Leaching)	Potable GW: Human Health Protection	69	4.68E-07	4.98E-02	Pass
	Target TPH GW Conc. @ 500 ug/L	4,782	NA	NA	Pass

2. Results for Protection of Soil Direct Contact Pathway: Human Health

	Method B: Unrestricted Land Use	Method C: Industrial Land Use
Protective Soil Concentration, TPH mg/kg	3,465.77	45,444.51
Most Stringent Criterion	HI =1	HI =1

Soil Criteria	Protective Soil Concentration @Method B				Protective Soil Concentration @Method C			
	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @
HI =1	YES	3.47E+03	8.07E-08	1.00E+00	YES	4.54E+04	1.42E-07	1.00E+00
Total Risk = 1E-5	NO	4.29E+05	1.00E-05	1.24E+02	NO	3.21E+06	1.00E-05	7.05E+01
Risk of Benzene = 1E-6	NO	4.29E+04	1.00E-06	1.24E+01	NA			
Risk of cPAHs mixture = 1E-6	NA	NA	NA	NA				
BDB	NA	NA	NA	NA				
BDC	NA	NA	NA	NA				

3. Results for Protection of Ground Water Quality (Leaching Pathway)

3.1. Protection of Potable Ground Water Quality (Method B): Human Health Protection

Most Stringent Criterion	Benzene MCL = 5 ug/L
Protective Ground Water Concentration, ug/L	148.77
Protective Soil Concentration, mg/kg	69.11

Ground Water Criteria	Protective Potable Ground Water Concentration @Method B				Protective Soil Conc, mg/kg
	Most Stringent?	TPH Conc, ug/L	RISK @	HI @	
HI=1	NO	2.69E+02	1.79E-05	1.00E+00	2.17E+02
Total Risk = 1E-5	NO	1.98E+02	1.00E-05	6.79E-01	1.13E+02
Total Risk = 1E-6	YES	3.47E+01	1.00E-06	1.03E-01	1.06E+01
Risk of cPAHs mixture = 1E-5	NA	NA	NA	NA	NA
Benzene MCL = 5 ug/L	YES	1.49E+02	6.29E-06	4.88E-01	6.91E+01
MTBE = 20 ug/L	NA	NA	NA	NA	NA

3.2. Protection of Ground Water Quality for TPH Ground Water Concentration previously adjusted and entered

Ground Water Criteria	Protective Ground Water Concentration			Protective Soil Conc, mg/kg
	TPH Conc, ug/L	Risk @	HI @	
Target TPH GW Conc = 500 ug/L	5.00E+02	9.83E-05	3.23E+00	4.78E+03

