#### DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000 711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

October 25, 2016

Mr. Scott Zorn Arcadis-US, Inc. 2000 Powell St. #700 Emeryville, CA 94608

Re: Arcadis Multi-Site Agreement Termination

Dear Mr. Zorn:

The Department of Ecology (Ecology) would like to thank you for partnering with the Voluntary Cleanup Program (VCP) on the Multi Site Agreement (MSA) from July 1, 2011 through May 2016. Ecology appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Per your letter dated April 26, 2016, Arcadis selected to end the MSA as of May 26, 2016. Per Section 11(d) of the Arcadis Multi-Site Voluntary Cleanup Program Agreement the Ecology Project Managers, Sonia Fernández and Tamara Cardona, have prepared a final report regarding the status of each site listed in the MSA that has not received a No Further Action (NFA) determination. A list of the sites (Enclosure A), a map (Enclosure B), and a compilation of the reports (Enclosure C) are included with this letter.

It is VCP policy to send a Status Request letter to all Sites that are part of the program but have not requested an opinion letter within the last year. Ecology understands that the essence of the MSA was to have informal technical discussions that would help move the Sites towards cleanup. However, some of the Sites that were part of the MSA were not discussed within the past year or more. For these sites, you may receive a Status Request letter after termination of this agreement. If Arcadis intends to maintain those Sites active in the VCP, submission of the current status and a request for an opinion letter may be necessary to maintain active status. If the site is terminated from the VCP, please remember that you may re-enter at any time by submitting an individual VCP application for each site.

Some Sites, specifically NW2456 (Arco 5373) and NW2431 (Midway AM/PM) appear to be near site closure. Ecology recommends that a final Remedial Investigation/ Feasibility Study and Cleanup Action report that includes an adequate disproportionate cost analysis is submitted promptly for evaluation. Please refer to the *Remedial Investigation Report*, *Feasibility Study and Cleanup Action Plan* checklists when developing reports (checklists are available at http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm).

Ecology has concerns about the following ten Sites where contamination has not been fully delineated or that continue to have free product. These sites are listed below:

VCP Number	Site Name		
NW2432	Southcenter AM/PM		
NW2440	ARCO 4368		
NW2441	ARCO 11066		
NW2447	ARCO 0977		
NW2449	ARCO 01166		
NW2453	ARCO 0822		
NW2454	ARCO 6214		
NW2460	ARCO AM PM Lake Forest Park		
NW2463	West Seattle ARCO		
NW2466	Dravus 76		

Ecology expects that Arcadis prioritizes these sites for additional investigation and cleanup. Of particular concern is the site named Arco 11066 (NW2441). Contamination at this location has not been fully delineated, many of the ground water monitoring wells contain free product, and sensitive populations are a short distance from the site (school at the north boundary of the property). The full extent of the contamination needs to be investigated, including any potential preferential pathways to ground water and vapors, and cleanup options proposed and implemented.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the MSA. As the cleanup of the Sites progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Sites meet those requirements.

If you have any questions regarding this opinion, please contact me at 425-649-7209 or at lbar461@ecy.wa.gov.

Sincerely,

Louise Bardy VCP Unit Manager

Toxics Cleanup Program, NWRO

TC: sf

Enclosures: [A] Arcadis MSA Site List

[B] Arcadis MSA Site Map

[C] Arcadis MSA Site Summaries

# Enclosure A Arcadis Multi Site Agreement Site List

Arcadis Multi Site Agreement Site List

ISIS Site Name	VCP Number	Facilities Site ID	Site Address	City	Type of Opinion Issued	Date Opinion Issued
ARCO 5544	NW2430	84544811	19918 68th Ave S	Kent	No opinion issued	
Midway AM/PM	NW2431	63477446	24001 Pacific Highway	Kent	No opinion issued	
Southcenter AM/PM	NW2432	11572949	5800 Southcenter Blvd	Tukwila	No opinion issued	
East Hill AM/PM	NW2433	72568627	10402 S E 256 <sup>th</sup>	Kent	Further Action Likely	5/2/2011
ARCO 5377	NW2434	3112128	13131 Bothell Everett Hwy	Everett	No opinion issued	
ARCO Station 06199	NW2435	51612598	125 Samish Way	Bellingham	Opinion on remedial action	9/23/2015
ARCO 5238	NW2436	21164679	175 Rainier Ave South	Renton	NFA	11/2/2011
ARCO 5237	NW2437	34172585	13325 - 100th Ave	Kirkland	Opinion on remedial action	1/26/2016
ARCO 5236	NW2438	13652871	14656 Ambaum	Burien	Opinion on potability	10/22/2013
ARCO 5218	NW2439	63713485	7200 E Marginal Way S	Seattle	No opinion issued	
ARCO 4368	NW2440	6368772	17605 108th Ave	Renton	Opinion on remedial action	10/21/2015
ARCO 11066	NW2441	33216169	2421 148th Ave NE	Bellevue	No opinion issued	
ARCO 6217	NW2442	26773589	12903 NE 20th Street	Bellevue	NFA	10/1/2012
ARCO 5567	NW2443	26779691	401 Ellingson Road	Pacific	Opinion on remedial action	12/30/2015
ARCO 5445	NW2444	76386549	665 23rd Avenue	Seattle	Opinion on remedial action	4/26/2016

**Arcadis Multi Site Agreement Site List** 

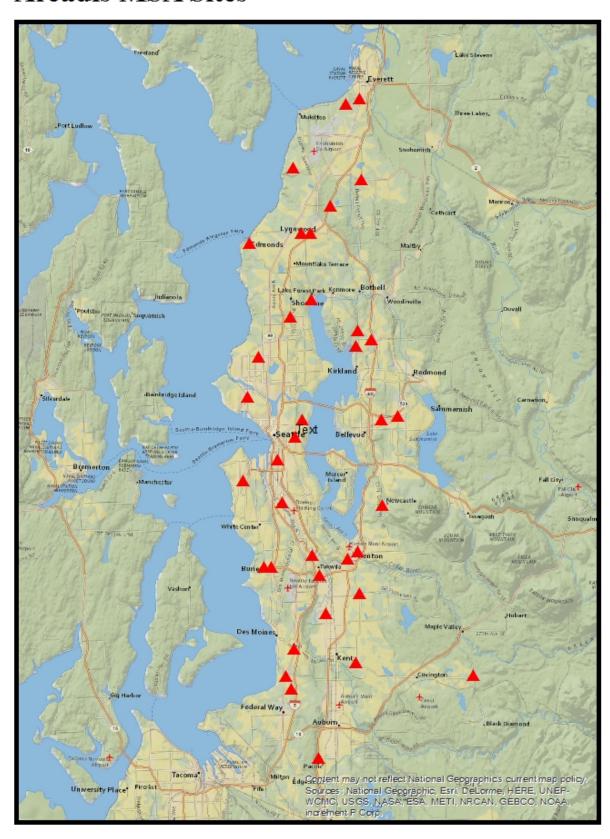
ISIS Site	VCP	Facilities	Site Address	City	Type of	Date
Name	Number	Site ID			Opinion Issued	Opinion Issued
ARCO 5363	NW2445	88316721	27202 Pacific Hwy South	Federal Way	Opinion on remedial action	1/26/2016
ARCO 4090	NW2446	2685238	2200 Fourth Ave. South	Seattle	Opinion on remedial action	6/23/2016
ARCO 0977	NW2447	21567246	155 NW 85th St	Seattle	No opinion issued	
ARCO 0986	NW2448	13248556	1439515th NE	Seattle	Opinion on remedial action	5/9/2016
ARCO 01166	NW2449	17784728	14653 First Ave South	Seattle	Further Action	12/19/2011
ARCO 11264	NW2450	34281791	301 Mukilteo Blvd	Everett	No opinion issued	
ARCO 4393	NW2451	67979269	1515 164th Ave SW	Lynnwood	No opinion issued	
ARCO 862	NW2452	96246385	3701 196th St SW	Lynnwood	Opinion on remedial action	3/26/2014
ARCO 0822	NW2453	67151754	202 Fifth Ave S	Edmonds	No opinion issued	
ARCO 6214	NW2454	94656129	4812 196th St	Lynnwood	No opinion issued	
ARCO 5581	NW2455	80819415	830 Moore St	Sedro Woolley	NFA	12/12/2011
ARCO 5373	NW2456	79369527	2125 E College Way	Mt Vernon	No opinion issued	
ARCO 5665	NW2457	87563423	3825 Harbor Point Blvd	Mukilteo	NFA	2/1/2012
ARCO 11265	NW2458	98267547	4102 Rucker Ave	Everett	NFA	4/6/2012
Maple Valley BP	NW2459	12272	26923 M V B D Rd #128	Maple Valley	NFA	10/1/2012

**Arcadis Multi Site Agreement Site List** 

ISIS Site Name	VCP Number	Facilities Site ID	Site Address	City	Type of Opinion	Date Opinion
Turne	1 (dilloci				Issued	Issued
ARCO AM PM Lake Forest Park	NW2460	11251569	17001 Bothell Way NE	Seattle	Opinion on remedial action	9/4/2015
Newcastle AM PM	NW2461	55853537	6966 Coal Creek Parkway	New Castle	NFA	10/3/2011
ARCO 6031	NW2462	79226415	11450 N E 124th St	Kirkland	Opinion on remedial action	10/26/2015
West Seattle ARCO	NW2463	99437681	4580 Fauntleroy Way SW	Seattle	No opinion issued	
ARCO 11063	NW2464	11142678	9800 NE 116th	Kirkland	Opinion on remedial action	9/23/2015
ARCO 11068	NW2465	64882187	28718 Military Rd	Federal Way	No opinion issued	
Dravus 76	NW2466	66428986	1517 West Dravus St	Seattle	Further Action	5/1/2012
ARCO 5207	NW2467	17426998	401 Park Avenue N	Renton	Opinion on remedial action	8/2/2016
Peterson Tukwila	NW2468	3546329	13310 Interurban Ave S	Tukwila	Opinion on remedial action	12/9/2015
ARCO 4329/Arboretum Court 1	NW2469	8349034	3127 E Madison St	Seattle	Further Action	11/23/2015
Totals						
Total number of sites			40			
Total number of NFAs			7			
Total number of opinions (including NFAs)			26			
Total number of active sites remaining		33				

# Enclosure B Arcadis Multi Site Agreement Site Map

### **Arcadis MSA Sites**



# Enclosure C Arcadis Multi Site Agreement Site Summaries

#### LIST OF ACRONYMS

**AS** Air sparge

**BTEX** Benzene, toluene, ethylbenzene and xylenes

CSM Conceptual site model FS Feasibility Study

**Ecology** Washington State Department of Ecology

**EDC** 1-2 Dichloroethane

**DCA** Disproportionate cost analysis

DPE Dual phase extraction
 MTBA Methyl-tertiary-butyl ether
 MTCA Model Toxics Control Act
 NA Not applicable or not available

**NFA** No further action

**PAH** Polycyclic aromatic hydrocarbons

**RI** Remedial investigation

**ROW** Right of way

**SVE** Soil vapor extraction

TEE Terrestrial ecological evaluation
TPH Total petroleum hydrocarbon

TPHd Total petroleum hydrocarbon in the diesel range
TPHg Total petroleum hydrocarbon in the gasoline range

**TPHo** Total petroleum hydrocarbon in the oil range

UST Underground storage tank
VOC Volatile organic compound

WAC Washington Administrative Code

Site Description NW2463				
Site Name	West Seattle ARCO			
Address	4580 Fauntleroy Way SW, Seattle, WA			
VCP Number:	NW2463			
Facility ID	99437681			
Current Use	Active retail gas statio			
COC's by Media	Soil: TPHg, TPHd, TPHo, BTEX, and PAHs. Ground water: TPHg, TPHd, TPHo, BTEX, MTBE, and lead.			
Sources of Contamination	Attributed to releases from the USTs, conveyance piping, and dispenser islands.			
Date Listed	1993			
Site Hazard Ranking	Not ranked.			
Known Issues				
Free Product	Present in MW-4 and VE-1.			
Vapor Intrusion	Not evaluated.			
TEE	Not conducted.			
<b>Sensitive Populations</b>	Not evaluated.			
Site Characterization Complications (utilities, overhead wires, current gas station, etc.).	Active gas station.			
<b>Ecological Impacts</b>	Not evaluated.			
Remediation				
Remediation Completed	<ul> <li>Passive LNAPL recovery since discovery in 1995.</li> <li>Enhanced LNAPL recovery conducted in 2012.</li> <li>AS/SVE system installed in 2014 and started operation in 4/2016.</li> </ul>			

Administrative				
Opinion Letter Date NA				
Issues Identified in Letter NA				
Comments/Other				

#### Comments/Othe

- Site has not been fully characterized yet.
- Not discussed in MSA meetings.
- LNAPL still present in VE-1 and MW-4
- Groundwater still above MTCA for TPHg, TPHd, BTEX, and lead.

#### Area View

