



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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July 7, 2014

MR. CHARLES CARMEL  
ATLANTIC RICHFIELD COMPANY  
P.O. BOX 1257  
SAN RAMON, CA 94583

**Re: Opinion pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the following Hazardous Waste Site:**

- **Name:** ARCO Station 0980
- **Address:** 10822 Roosevelt Way NE, Seattle, Washington
- **Facility/Site No.:** 68996432
- **VCP Project No.:** NW2729
- **Cleanup Site ID No.:** 10186

Dear Mr. Carmel:

Thank you for submitting documents regarding your proposed remedial action for the **ARCO Station 0980** facility (Site) for review by the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). 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.

This letter constitutes an advisory opinion regarding a review of submitted documents/reports pursuant to requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release(s) at the Site:

- Total petroleum hydrocarbons in the gasoline-ranges (TPH-G), benzene, toluene, ethylbenzene and xylenes (BTEX), methyl tert-butyl ether (MTBE) and lead into the Soil
- TPH-G, BTEX, MTBE and lead into the Ground Water

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does



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not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on Ecology.

Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed remedial actions:

1. Innovex Environmental Management, Inc., 2014. *Request for Opinion, Monitoring Well Sampling and Analysis Reduction, ARCO Facility No. 980, 10822 Roosevelt Way NE, Seattle, Washington 98125*. April 3.

The report listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Appointments can be made by calling the NWRO resource contact at (425) 649-7235 or sending an email to: [nwro\\_public\\_request@ecy.wa.gov](mailto:nwro_public_request@ecy.wa.gov).

The Site is defined by the extent of contamination caused by the following release(s):

- TPH-G, BTEX, MTBE and lead into the Soil
- TPH-G, BTEX, MTBE and lead into the Ground Water

The Site is more particularly described in Enclosure A to this letter, which includes a detailed Site diagram. The description of the Site is based solely on the information contained in the documents listed above.

Based on a review of supporting documentation listed above, pursuant to **requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following releases at the Site, Ecology has determined:**

- The following modifications to the Site ground water sampling program have been recommended by Innovex:
  - Discontinue ground water sampling in monitoring wells MW-2, MW-5, MW-8 and MW-10 following completion of Remedial Investigation-Feasibility Study activities.
  - Discontinue analysis of ground water samples for total and dissolved lead for all wells.

Each of the proposed modifications is addressed below:

- Prior to recent sampling events in 2012 and 2013, ground water samples were collected from MW-2, MW-5, MW-8 and MW-10 using non-purge methods which Ecology does not recognize as representative. Ecology does not concur with discontinuing collection of ground water samples from these wells.
- Monitoring wells MW-8 and MW-10 are both downgradient of wells where contamination exceeding MTCA Method A has been detected in ground water on the Site and on an adjacent parcel which the Site extends onto. The locations of these wells are considered strategic for delineating the lateral extent of petroleum hydrocarbons dissolved in ground water on the Site.
- Because of the non-purge techniques used in historical quarterly ground water sampling rounds, Ecology also does not concur with discontinuing analysis for total and dissolved lead.
- Ecology requests that a Rose diagram be submitted to show trends in the direction of the hydraulic gradient. A consistent ground water flow direction is useful in determining which monitoring wells on the Site are representative.
- BP has discontinued ground water sampling in the following wells:
  - MW-1 in 2012
  - MW-3, MW-6 and MW-7 in 2009
  - VP-1 in 2012
  - VP-2 in 2009
  - BV-1 in 1998
  - BV-3 and BV-4 in 2000
  - BV-5 in 2001
  - BV-6 in 1995
  - BV-7 in 2001
  - SVE-1 in 2009
  - SVE-2 in 2000
  - SVE-3 in 2012
  - AS-1, AS-2 and AS-3 in 1995

Discontinuation of sampling in these wells was based on a consistent lack of detected compounds in analytical results for samples collected using non-purge ground water sampling methods. Ecology agrees that wells originally intended and designed for other purposes such as soil vapor extraction and bioventing should not be used as monitoring wells.

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Monitoring wells MW-1 and MW-3 are most likely upgradient monitoring wells but data from these wells is considered useful in insuring that contamination from off-Site sources is not migrating onto the Site. Monitoring wells MW-6 and MW-7 are directly downgradient of the USTs and a pump island.

- Ecology requires a minimum of four consecutive quarters of ground water sampling data in order to consider whether sampling locations meet the substantive requirements of MTCA.

**This opinion does not represent a determination by Ecology that a proposed remedial action will be sufficient to characterize and address the specified contamination at the Site or that no further remedial action will be required at the Site upon completion of the proposed remedial action.** To obtain either of these opinions, you must submit appropriate documentation to Ecology and request such an opinion under the VCP. **This letter also does not provide an opinion regarding the sufficiency of any other remedial action proposed for or conducted at the Site.**

Please note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site 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 Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (425) 649-7064 or [hvic461@ecy.wa.gov](mailto:hvic461@ecy.wa.gov).

Sincerely,



Heather Vick, LHg  
NWRO Toxics Cleanup Program

cc: Sonia Fernandez, VCP Coordinator, Ecology