



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
*P.O. Box 47600 • Olympia, Washington 98504-7600*  
*(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006*

December 7, 2015

Ms. Carrie Pederson  
PLIA  
330 Desmond Drive  
Lacey, WA 98504

**Re: Opinion Pursuant to WAC 173-340-515(5) on the Proposal to Revise Scope of Work for the Following Hazardous Waste Site:**

- **Site Name:** Horse Heaven Hills
- **Site Address:** 101 Merlot Drive, Prosser WA 99350
- **Facility/Site No.:** 28995469
- **VCP Project No.:** CE0411
- **Cleanup Site ID No:** 12353

Dear Ms. Pederson:

Thank you for submitting documents regarding your proposed remedial action for the Horse Heaven Hills 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 diesel-range petroleum hydrocarbons (TPH-D) into the soil and groundwater
- Total oil-range petroleum hydrocarbons into the groundwater (TPH-O)
- Benzene into the soil and groundwater
- Polynuclear aromatic hydrocarbons (PAHs) into the soil and groundwater
- Total xylenes into the soil

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 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 action(s):

1. Delineation of Subsurface Petroleum Hydrocarbon Contamination, Horse Heaven Hills Plaza, 101 Merlot Drive, Prosser, WA 99350 by Blue Mountain Envir. & Consulting Co., Inc of May 5, 2014
2. Groundwater Monitoring Well Sampling Report, Horse Heaven Hills Plaza, 101 Merlot Drive, Prosser, WA 99350 by Blue Mountain Envir. & Consulting Co., Inc of June 2, 2015
3. Groundwater Monitoring Well Sampling Report, Horse Heaven Hills Plaza, 101 Merlot Drive, Prosser, WA 99350 by Blue Mountain Envir. & Consulting Co., Inc of August 11, 2015
4. December 4, 2015 Memo Request for a Teleconference from Annica Brown – Vertex with Nnamdi Madakor- Ecology and Rory Galloway of G-Logics Inc.

The report listed above will be kept in the Central Files of the Central Regional Office of Ecology (CRO) for review by appointment only. You can make an appointment by calling the CRO resource contact at (509) 575-2490.

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

- Total diesel-range petroleum hydrocarbons (TPH-D) into the soil and groundwater
- Total oil-range petroleum hydrocarbons into the groundwater (TPH-O)
- Benzene into the soil and groundwater
- Polynuclear aromatic hydrocarbons (PAHs) into the soil and groundwater
- Total xylenes into the soil

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(s) at the Site.**

**Ecology is unable to approve your Revised Scope of Work at this time for the following reasons:**

1. **Three New Wells, 2<sup>nd</sup> paragraph, Dec 4, 2015 Memo for Teleconference;**  
“Additionally, the groundwater-sampling results show a continual downward trend, with the most-recent results (August 11, 2015) showing that DRO concentrations are below cleanup levels in all seven wells (only two wells had detectable concentrations). This data tells me the conducted remedial work has been largely successful in addressing the soil and groundwater contamination... **With this information, do you believe the three wells are currently needed?”**

**Comment:**

Date	MW-5 ug/l	MW-6 ug/l	CUL ug/l –TPH-d
8/15/14	1100	2600	500
2/11/15	730		500
5/6/15		840	500

Historic data noted above show that TPH-d detected at MW-5 and MW-6 had exceedances above MTCA cleanup level of 500 ug/l at those locations. Fate and transport dynamics suggest that the front of the plume above cleanup levels of 500 ug/l have moved beyond these monitoring points and as a result, MW-5 and MW-6 may no longer represent points of compliance for this site; additional investigation beyond these locations are needed to fully delineate the extent of TPH-d south/southeast of the Site.

Ecology contends that the current data at MW-5 (8/11/15 – 160 ug/l) and MW-6 (8/11/15 – 130 ug/l) that shows TPH-d concentrations below the CUL of 500 ug/l reflects the condition of the residual tail of the plume at those locations and not the extent of the site that has been remediated.

Additional investigation (e.g., hydro-punch) is needed beyond MW-5 and MW-6 south/southeast of the site: to determine if additional wells are needed (number and location) to delineate the extent of TPH-d and to confirm/refute/re-establish as necessary, the true points of compliance at this site pending performance monitoring for an NFA determination.

Please propose locations for a suite of hydro-punch sampling points along the south/southeast of the site beyond MW-5 and MW-6.

2. **Well Resampling;**

**Comment:** Ecology will not recommend any well sampling at this time until the above data gaps are addressed to ensure that the appropriate points of compliance monitoring wells are being sampled towards an NFA determination.

**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 (360) 407-7244.

Sincerely,



NNAMDI I. MADAKOR

Nnamdi Madakor P.HG, P.G., VCP Statewide Coordinator  
HQ – VCP Policy & Technical Manager  
Toxic Cleanup Program

cc: Annica Brown, Vertex (email only)  
Lisa Sweitzer, Ecology (email only)  
Frosti Smith, Ecology (email only)  
Rory Galloway, G-Logics Inc. (email only)  
Christensen I LLC, Grandview