



STATE OF WASHINGTON
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

August 25, 2014

Jon Phillips
6101 Carnegie Blvd. #180
Charlotte, NC 28209

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

- **Name:** Fed Ex Ground Distribution Center
- **Address:** 188th Avenue and NE 73rd Street, Redmond, WA 98052
- **Facility/Site No.:** 11311
- **VCP No.:** NW2766
- **Cleanup Site ID No.:** 12174

Dear Mr. Phillips:

Thank you for submitting documents regarding your proposed remedial action for the Fed Ex Ground Distribution Center 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 releases at the Site:

- Diesel range petroleum hydrocarbons (TPH-d), and oil range petroleum hydrocarbons (TPH-o) into soil
- Benzene, toluene, ethylbenzene and xylenes (BTEX) into soil
- Carcinogenic polycyclic aromatic hydrocarbons (cPAH) into soil
- Arsenic, chromium and lead into 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



Mr. Phillips
August 25, 2014
Page 2

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 actions:

1. Treadwell & Rollo, *Work Plan – Fed Ex Distribution Center*, dated April 24, 2014.
2. Treadwell & Rollo, *Soil Management Completion Report*, dated July 5, 2013.
3. Langan Engineering, *Level One and Level Two Hydrogeologic Assessment Report*, June 28, 2012.

The reports 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 or sending an e-mail to nwro_public_request@ecy.wa.gov.

The Site is defined by the extent of contamination caused by the following releases:

- TPH-d and TPH-o into soil
- BTEX into soil
- cPAHs into soil
- Arsenic, chromium and lead into 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 at the Site, Ecology has determined:**

- Ecology agrees with the planned installation of monitoring well MW-3 in the area where the thickest fill material is anticipated to ascertain ground water conditions under the fill material. Ecology understands the proposed location is approximate and geologic cross-sections will be prepared to determine the appropriate location. Ground water monitoring wells MW-1 and MW-2 are not sufficient to characterize ground water. Both ground water monitoring wells MW-1 and MW-2 are screened at similar depths, however, depth to ground water encountered at location MW-1 was approximately 26.5 feet below ground surface (bgs) and at location MW-2 was approximately 60 feet bgs, indicating the wells are most likely screened in different hydrostratigraphic horizons. As a result, one

additional monitoring well will not be sufficient to characterize ground water at the Site. Perched water bearing zones must also be characterized. Ecology recommends a minimum of one upgradient and three downgradient wells to assess ground water conditions in the perched and deeper aquifers at this Site, because is located within the City of Redmond's Critical Aquifer Recharge Area zone 3 (10-year travel time), and at the edge of the zone 2 (1-year travel time) at the northeast Property boundary. The standard point of compliance for ground water is throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected.

- A conceptual Site model has not been submitted to Ecology nor have any cross-sections. Ecology recommends preparing these prior to siting monitoring well locations and establishing a plan for monitoring. This should include the number of wells necessary to properly assess ground water conditions at the Site.
- The Soil Sampling and Analysis Plan (Appendix B of the *Soil Management Completion Report*) states that lateral delineation samples will be collected every 5 feet from the confirmed contaminated soil until clean sidewall samples confirm lateral extent and that the vertical extent would be delineated by collecting one soil sample at one-foot increments starting one foot below the depth of the deepest contaminated sample identified during the previous subsurface investigation. Ecology agrees that this method for delineation is acceptable. However, as the data has been presented, soil samples from locations PB-2 and PB-3 are both composite samples which are not representative of soil conditions at a discrete depth. It appears a sample was not collected at 7 feet bgs, as would be expected to confirm vertical extent. Representative soil samples are needed from below the vertical extent of contamination of each associated excavation to confirm petroleum hydrocarbon-contaminated soil has been remediated to below cleanup levels.
- A Terrestrial Ecological Evaluation (TEE) may be required unless it is determined the Site qualifies for an exclusion. The TEE decision-making process must be documented as per WAC 173-340-7490. A TEE process interactive user's guide can be found at: <http://www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm>

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.**

Mr. Phillips
August 25, 2014
Page 4

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 425.649.7097 or e-mail at desc461@ecy.wa.gov.

Sincerely,



Diane Escobedo
Site Manager
NWRO Toxics Cleanup Program

DE: de

cc: Peter Cusack, Treadwell and Rollo
Sonia Fernandez, VCP Coordinator, Ecology