



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

May 17, 2017

Estate of Maxine DeLauro  
c/o Angela Prince  
2750 N. Fork Hornet Creek Rd  
Council, ID 83612

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

- **Site Name:** Crystal Cleaners
- **Address:** 520 Griffin Ave, Enumclaw, WA
- **Cleanup Site ID:** 12516
- **Facility/Site No.:** 29544148
- **VCP Project No.:** NW3065

Dear Ms. Prince:

Thank you for submitting documents regarding your remedial action for the (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:

- Tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cDCE) and vinyl chloride to the ground water
- Total petroleum hydrocarbons in the diesel range (TPH-d) to 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 not have the authority to settle with any person potentially liable under MTCA except in



Ms. Angela Prince  
May 17, 2017  
Page 2

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 Site:

1. The Riley Group Inc., *Preliminary Phase II Subsurface Investigation*, October 28, 2013.
2. The Riley Group, Inc., *Phase I Environmental Site Assessment*, August 29, 2013.

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 sending an e-mail to: [nwro\\_public\\_request@ecy.wa.gov](mailto:nwro_public_request@ecy.wa.gov).

The Site is more particularly described in Enclosure A to this letter. The description of the Site is based on the information contained in the documents listed above. Additionally, the following reference was used:

Whittaker, Stephan G., Local Hazardous Waste Management King County, WA,  
*Evaluation of DF2000 Dry Cleaning Solvent in Acute Fish Toxicity Test*, May 2014.

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 releases at the Site, Ecology has determined:**

- Additional investigation is necessary to locate the source area(s) and determine the lateral and vertical extent of contamination in soil and ground water. The results thus far suggest that soil under the building may be impacted. The preliminary ground water results confirm a release occurred in the south and/or southeastern portions of the building. Soil samples need to be collected and analyzed for contaminants of concern to assess impacts to soil.
- The installation of ground water monitoring wells is necessary to characterize the nature and extent of ground water contamination. Ground water elevation data should be collected to establish ground water flow direction and gradient. Ecology concurs that results from the preliminary subsurface investigation can be used to determine the placement of permanent monitoring wells.

- Ecology recommends assessing the condition of the sewer line to identify any cracks or leaking joints. This information can be useful in identifying pathways for contaminant migration.
- Ecology agrees that based on the ground water analytical results, the age of the building and high water table, there is a potential for vapor intrusion into the on-Site building. Further vapor assessment is necessary.
- Whole product analysis using method NWTPH-Dx needs to be completed. DF-2000 has been in use at the facility since 2003, which has carbon lengths that fall primarily between C-10 and C-12. The TPH as Stoddard solvent analysis reported falls below the range that would be expected if there has been a release of DF-2000. Both soil and ground water samples should be analyzed within the appropriate carbon range to detect a potential DF-2000 release.
- Ecology agrees the damaged monitoring well located on the south side of the building is a potential conduit for contaminants to enter the subsurface. Washington state law requires property owners properly decommission abandoned ground water wells. Decommissioning must be one by a water well driller licensed in Washington State (as per Washington RCW 18.1014).
- A Terrestrial Ecological Evaluation (TEE) has not been completed for the Site. The Site may qualify for the undeveloped land exclusion. The TEE form can be found at <http://www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm>. If the Site appears to qualify for this exclusion, describe any undeveloped land in the vicinity of the Site and submit the TEE exemption checklist with a map showing the 500-foot radius surrounding the Site boundary.

**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.

Ms. Angela Prince  
May 17, 2017  
Page 4

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 an 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 [diane.escobedo@ecy.wa.gov](mailto:diane.escobedo@ecy.wa.gov).

Sincerely,



Diane Escobedo  
Site Manager  
Toxics Cleanup Program

Enclosure: (1) A – Site Description

cc: Sonia Fernandez, VCP Coordinator, Ecology

# Site Description

*This section provides Ecology's understanding and interpretation of Site conditions, and is the basis for the opinions expressed in the body of the letter.*

**Site:** The Site is defined by the release of tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cDCE), vinyl chloride and total petroleum hydrocarbons in the diesel range (TPH-d) to ground water associated with the operation of a dry cleaning facility. The Site is located at 420 Griffin Avenue in Enumclaw, Washington (Property).

**Area and Property Description:** The Property corresponds to King County parcel numbers 2420069401 and 2420069149 which total 0.33 acres in size. The Property is occupied by a one-story 2,250-square foot wood-frame commercial building constructed in 1969. The Property is located in a triangular-shaped commercial block. The storefront is located on Griffin Street. Roosevelt Avenue is located to the south and Blake Street to the west. Ron's Auto Repair is located to the north, a Mexican restaurant to the east, a Pizza Hut to the south and an electrical contractor/auto sales facility to the west.

**Property History and Current Use:** A hen house structure in the northwest corner of the Property was identified on the 1914 and 1927 Sanborn fire insurance maps. The 1943 Sanborn map shows a residence located in the southeast corner. The Property was most likely first developed for commercial use in 1969. The dry cleaning facility has operated under the name Crystal Cleaners has operated since at least 1972, possibly earlier.

**Contaminant Source and History:** Up until 2003, PCE was used as a dry cleaning solvent at Crystal Cleaners. In 2003, a closed-loop dry cleaning machine that utilized a hydrocarbon based solvent, DF-2000, was installed. DF-2000 is a complex mixture of aliphatic hydrocarbons with carbon chain lengths predominantly between C-10 and C-12. The current dry cleaning machine that uses DF-2000 replaced a machine that used PCE.

**Physiographic Setting:** The city of Enumclaw is located on the Enumclaw Plateau between the Green River to the north and the White River to the south. The Site slopes slightly towards the south and is located at approximately 747 feet above mean sea level.

**Surface/Storm Water System:** The closest surface water body to the Site is Boise Creek located approximately 3500 feet to the Property. Catch basins are located on the northwest and southeast corners of the Property.

**Ecological Setting:** A gravel parking lot is located on the western portion of the Property. Asphalt covers the Property east of the building. Small shrubs and trees border portions of the Property. The Property is located in a commercial area of Enumclaw. A terrestrial ecological evaluation has not been submitted for this Site.

**Geology:** The geology underlying the Property is mapped as lahar deposits related to Mt. Rainier consisting of unsorted to poorly-sorted generally unstratified mixtures of cobbles and boulders

Ms. Angela Prince  
May 23, 2017  
Page 2

supported by a matrix of sand or silty sand. Soil encountered during drilling generally consisted of sandy silt, silty sand and silty gravel. The maximum depth explored was 10 feet below ground surface (bgs).

**Ground Water:** The depth to ground water encountered during drilling was from 2.2 to 5.7 feet bgs. Based on regional topography, the inferred ground water flow direction is towards the south. However, the ground water flow direction and gradient have not been established.

**Water Supply:** The City of Enumclaw water supply system includes four ground water sources at three sites to the east of the city – Boise Springs, PC Johnson Wellfield and Watercress Springs. According to Ecology's Facility Site database, the Site is located within a five and ten year wellhead protection zone. The nearest drinking water well, located approximately 0.6 miles south, is classified as a Group D domestic well.

**Release and Extent of Soil and Ground Water Contamination:** Soil samples collected during the October 2013 investigation were screened in the field, but not analyzed for contaminants of concern. Therefore the extent of contamination in soil is unknown. TPH-d, PCE, TCE, cDCE and vinyl chloride were detected in ground water south and east of the facility. The dry cleaning machine, floor drain and sewer line are located in the southern portion of the building and are all potential sources of contamination.