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DEPARTMENT OF ECOLOGY
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June 23, 2020

Becky Uchimura
CMBA LLC 6
13219 NE 10th Place
Bellevue, WA 98005

**Re: No Further Action at the following Site:**

- **Site Name:** Ace Cleaners
- **Site Address:** 26921 Maple Valley-Black Diamond Road SE, Maple Valley, Washington 98038
- **Facility/Site No.:** 72431371
- **Cleanup Site ID No.:** 15024
- **VCP Project No.:** NW3241

Dear Becky Uchimura:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Ace Cleaners facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

## Issue Presented and Opinion

**Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.**

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and it's implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

## Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following potential release(s):

- Chlorinated solvents, Tetrachloroethylene (PCE) into Soil.
- PCE and Trichloroethylene (TCE) into Indoor Air.

**Enclosure A** includes a detailed description and diagrams of the Site, as currently known to Ecology.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other Sites.

## Basis for the Opinion

This opinion is based on the information contained in the documents listed below. These documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact at (425) 649-7235 or sending an email to nwro_public_request@ecy.wa.gov.

- Associated Environmental Group, LLC (AEG), *Phase II Environmental Site Assessment – Ace Cleaners*. January 25, 2019.
- AEG, *Remedial Investigation / Feasibility Report*. August 8, 2019.
- AEG, *Technical Memorandum – Ace Cleaners*. May 13, 2020.

This opinion is void if any of the information contained in those documents is materially false or misleading.

## Analysis of the Cleanup

Ecology has concluded that **no further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

### 1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish Cleanup Standards and select a cleanup action. The Site is described below and in detail in Enclosure A.

**Characterization Activities**:

The following characterization and cleanup activities have commenced on the Site to date. These activities are described in further detail in Enclosure A – Source of Contamination & Contamination Extent:

- In July 2018, Orion Environmental Compliance and Consulting (Orion), sampled indoor air in the interior of the former dry cleaning facility. Orion used a single summa canister. Sampling protocols and procedures were in accordance with industry standards. Indoor air analytical results exhibited PCE & TCE were detected at 2.23- & 2.65-micrograms per cubic meter ($\mu g/m^3$), above the respective cleanup level (CUL) for TCE (AEG, January 2019).

- In September 2018, AEG installed a vapor mitigation system/sub-slab depressurization system (SSD), (AEG, August 2019). The system was reportedly non-operational until approximately March 2019 (AEG, *Personal Communication*, November 13, 2019).
- In November 2018, AEG conducted a Phase Two Environmental Site Assessment (PHII), including the advancement of five soil borings (B-1 to -5) in the building interior. AEG advanced the interior soil borings to approximately 10-feet below ground surface (bgs). AEG reportedly did not encounter groundwater. AEG detected PCE in all soil samples collected during this investigation. PCE detections ranged from 0.08- to 0.73-milligrams per kilogram (mg/Kg), (AEG, August 2019).
- In December 2018, AEG advanced two exterior deeper soil borings to approximately 40-feet bgs (B-6 & -7), in an effort to assess groundwater conditions. AEG encountered groundwater at approximately 30-feet bgs (AEG, August 2019). Groundwater analysis did not exhibit detectable concentrations of chlorinated solvents above the respective laboratory method detection limits (MDLs).
- In January 2019, AEG sampled indoor and up-gradient, ambient air. Analytical results exhibited detectable indoor air TCE concentrations above the respective MTCA CUL, with TCE at 1.9 micrograms per liter ($\mu g/m^3$), (AEG, August 2019). This sample was collected when the SSD was non-operational.
- In April 2019, AEG conducted an additional indoor air sampling event, exhibiting TCE at a concentration below the respective MDL. However, the laboratory MDL was greater than the respective indoor air CUL.
- In February 2020, AEG sampled indoor and ambient air, again with the SSD turned off. All air samples exhibited detections of PCE & TCE below the respective CULs.

In summary, on-Site soil is characterized and groundwater appears to not be impacted. Additionally, indoor air appears to be in compliance with Cleanup Standards.

**Exposure Pathways**:

Soil-Direct Contact:
This pathway is *incomplete*. It appears as if residual chlorinated solvent-impacted soil remain on-Site at depths less than 15-feet bgs above the respective MTCA Method A CULs.

However, AEG demonstrated groundwater is in compliance with cleanup standards, therefore eliminating the soil-leaching and groundwater pathways. As such, a MTCA Method B CUL for Direct Contact was deemed appropriate. Residual PCE concentrations were determined to range between 0.08- to 0.73-mg/Kg, well below the respective MTCA Method B CULs.
Soil-Leaching:

This pathway is *potentially-complete*. Chlorinated solvents have not been detected in groundwater above the applicable MTCA CULs. Additionally, there is a significant distance from residual impacted soil and the water table, which is at approximately 30-feet bgs.

Soil-Vapor:
This pathway is currently *incomplete*. In February 2020, AEG sampled ambient as well as indoor air, exhibiting compliance with Cleanup Standards.

In addition, AEG installed a SSD system to mitigate soil vapors collecting beneath the building foundation (installed September 2018, operational March 2019).

Groundwater:
This pathway is *incomplete*. As indicated above and in detail in Enclosure A, chlorinated solvents have not been detected in groundwater above the respective MTCA Method A CULs.

Surface Water:
This pathway is *incomplete*. Rock Creek is located approximately ½-mile to the west of the Site.

Ecological:
This pathway is *incomplete*. AEG completed a terrestrial ecological evaluation (TEE), and the Site qualified for an exclusion.

**2. Establishment of Cleanup Standards.**

Ecology has determined the CULs and points of compliance (POCs) you established for the Site meet the substantive requirements of MTCA.

**a. Cleanup Levels**
The following CULs were used to evaluate the Site.

The Soil MTCA Method B CULs are:

| | |
|---|---|
| PCE | 480 milligrams per kilogram (mg/Kg) |

The Indoor Air MTCA Method B CULs are:

| | |
|---|---|
| PCE | 9.62 µg/$m^3$ (micrograms per cubic-meter) |
| TCE | 0.37 µg/$m^3$ |

**b. Points of Compliance**

Based on the conceptual Site model (CSM), Ecology determined the following points of compliance apply to the Site:

- Soil - Direct Contact: For soil CULs based on human exposure via direct contact, the point of compliance is: "*…throughout the Site from ground surface to 15-feet below the ground surface.*"

- Indoor Air / Soil -Vapor: For soil vapor, the standard POC as established under WAC 173-340-750(6) is: *"Cleanup levels established under this section shall be attained in the ambient air throughout the Site."*

**3. Selection of Cleanup Action.**

Ecology has determined the cleanup actions completed at the Site meet the substantive requirements of MTCA.

To date, the following cleanup actions have commenced:

- Soil and grab groundwater sampling.
- Passive soil gas survey.
- Installation of a SSD system.
- Sub-slab, ambient & indoor air sampling.

**4. Cleanup.**

Ecology determined the cleanup actions performed meet the Cleanup Standards established for the Site in accordance with MTCA.

Performance groundwater, soil, and indoor sampling demonstrate compliance with Cleanup Standards and a No Further Action determination is recommended at this time.

## Listing of the Site

Based on this opinion, Ecology will remove the Site from our Confirmed and Suspected Contaminated Sites List (CSCSL).

## Limitations of the Opinion

**1. Opinion does not settle liability with the state.**

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

**2. Opinion does not constitute a determination of substantial equivalence.**

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

**3. State is immune from liability.**

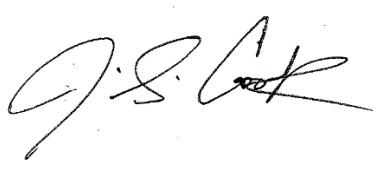
The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

## Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (360) 407-6834 or e-mail at jason.cook@ecy.wa.gov.

Sincerely,



J.G. Cook, LG
HQ Toxics Cleanup Program

Enclosures (1): A – Description and Diagrams of the Site

cc: Scott Rose, AEG
Sandra Caldwell, Ecology
Sonia Fernandez, Ecology
Tra Thai, Ecology

# Enclosure A

# Description and Diagrams of the Site

# Site Diagrams

# Site Description

**Site:**
The Site is located at 26921 Maple Valley-Black Diamond Road SE, Maple Valley, Washington 98038. The Site is comprised of a single King County Parcel, (no. 2722069057), totaling 2.14-acres, and is incorporated into the City of Maple Valley.

**Property Historical and Current Use:**
Currently, the Site is currently used for commercial/retail purposes and is occupied by a variety of commercial business (i.e. restaurants, nail salon, computer retailers, etc.). The Site is improved with a single commercial building totaling 24,700 square-feet, asphalt-paved parking, & landscaping, with 13 retail spaces. The retail facility was constructed in 1985 (King County Department of Assessment, November 2019).

**Surface/Storm Water System:**
No surface water features are located on the Site. Rock Creek is located approximately 1/2-mile to the west of the Site.

It is assumed stormwater is conveyed to the municipal separate storm sewer system operated and maintained under the NPDES Phase Two Municipal Stormwater Permit for the City of Maple Valley.

**Soils and Geology:**
The Site and much of the Puget Sound Region is underlain by alluvial Quaternary sediments deposited during multiple glacial episodes. The sediments consist of interlayered alluvial clays, silts, sands, & gravels. These alluvial sediments are typically situated over glacial till, primarily comprised of consolidated silts, sands & gravels.

Soils encountered at the Site generally consist of sandy-gravel to approximately 40-feet bgs (AEG, August 2019).

**Groundwater:**
Groundwater at the Site is encountered between approximately 30- to 36-feet bgs (AEG, August 2019). Based on topography, AEG presumes the groundwater flow direction is towards the east, towards Rock Creek, which is located approximately 1/2-mile to the west of the Site (AEG, August 2019).

**Source of Contamination & Contamination Extent:**
The primary source of contamination reportedly originates from a release(s) as a consequence of improper installation, malfunction, or usage of a former on-Site dry cleaning machine, and/or improper containment and storage of dry cleaning chemicals, resulting in spillage and leakage of chlorinated solvents/VOCs into soil and indoor air beneath the Site. The dry cleaning operation reportedly operated from approximately 1992 to 2016 (AEG, August 2019).

In July 2018, Orion Environmental collected an indoor air sample using a Summa canister.

Analytical results exhibited detections of PCE & TCE, with concentrations of PCE & TCE at 2.23 & 2.65 µg/$m^3$.

In September 2018, AEG installed a vapor mitigation system/SSD system, in an effort to mitigate soil vapors (AEG, August 2019).

In November & December 2018, AEG advanced a total of seven soil borings. AEG advanced five of the soil boings in the interior of the former dry cleaning facility. These borings (B-1 to -5) were advanced to approximately 10-feet bgs. The remaining two borings (B-6 & -7) were advanced to approximately 40-feet bgs (AEG, August 2019). AEG did not encounter groundwater in the shallow, interior borings. AEG encountered groundwater in the deeper borings between 30- to 36-feeet bgs. Groundwater analytical results exhibited chlorinated solvent concentrations below the respective laboratory MDLs. PCE was the only constituent detected in soil above the respective CUL, with concentrations ranging between 0.08 to 0.49 mg/Kg (AEG, August 2019).

In January 2019, AEG collected an additional indoor and up-wind ambient air sample. AEG detected TCE above the respective MTCA CUL at a concentration of 1.9 µg/$m^3$ (AEG, August 2019).

In April 2019, AEG collected an additional indoor air sample. AEG indicated indoor air constituents were not detected above the laboratory MDLs. However the methodology used did not resolve to the respective CULs, as such, additional indoor air sampling is warranted.

In February 2020, AEG sampled indoor and ambient air. PCE & TCE detections were below the respective MTCA CULs. As such, all impacted media were determined to be in compliance with Cleanup Standards.