



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

May 10, 2017

Electronic Copy

Mr. Jeff Hogan
CAH Investments, Inc.
5312 Pacific Highway E
Fife, WA 98424

Re: Request for Site Status Update: Edgewood Shopping Center, 717 Meridian Avenue East, Milton (Edgewood), Washington (FSID 1360).

Mr. Hogan:

The Washington State Department of Ecology (Ecology) has recently performed a review of cleanup progress at the following three sites in Milton, Washington:

- Edgewood Shopping Center, located at 717 Meridian Avenue East (Facility Site ID [FSID] 1360) and referred to herein as “the subject Property/Site”
- Former ProCleaners, located at 2800 Milton Way (FSID 32484475), and
- Surprise Lake Shopping Center, located at 900 Meridian Avenue East (FSID 13780).

As a result of this review, Ecology is contacting you to express concerns over a lack of current information regarding tetrachloroethylene (PCE) and related chlorinated volatile organic compounds (CVOCs) beneath the subject Site and to request an update on the current status of monitoring and remediation activities that was occurring as of August 2001.

The Pierce County Assessor’s website lists “CAH Investments, Inc.” as the current owner of the subject Property (parcel number 0420032115).

Site Background

During the fall of 1994, Ecology was notified of a release of PCE from the Site as a result of a groundwater investigation performed by GeoEngineers, Inc. (GeoEngineers) during late 1994¹. As a result, the Site was added to Ecology’s Confirmed or Suspected Contaminated Sites List (CSCL) on October 12, 1994, where it has remained as “Cleanup Started” status since that time.

Subsequent environmental investigations conducted during 1995 discovered concentrations of PCE and trichloroethylene (TCE) in both Site-soil and -groundwater above their respective MTCA Method A Cleanup Levels (CULs).

¹ Tacoma-Pierce County Health Department. *Site Hazard Assessment – Edgewood Shopping Center Site*. July 22, 1996.

These investigations attributed the source of the PCE contamination to discharges of dry-cleaning solvents to the on-Site septic system by previous operators.

As a result of these findings, further investigation and remediation (air-sparge/soil-vapor extraction [AS/SVE]) activities were initiated to address CVOCs beneath the Site.

During February of 1996, a municipal supply well (Well # 2, ACN751; “Leighton #2”), operated by the Mt. View-Edgewood Water Company, and located approximately 600 feet north of the subject Site, was sampled by GeoEngineers. This supply well is currently listed as “active”, though designated for “emergency” use, according to the Washington State Department of Health’s Source Water Assessment Program’s website². Information obtained for the Leighton #2 well indicate that this well is installed to a depth of 397 feet below ground surface (bgs) and constructed with 10 feet of slotted casing (screen) from 387 to 397 ft bgs. Analysis of the groundwater samples collected from this supply well revealed dissolved-phase TCE above laboratory detection limits up to 3.2 micrograms per liter (µg/l) at the time of sampling.

Based on the above information, the Tacoma-Pierce County Health Department (TPCHD) performed a Site Hazard Assessment (SHA) and assigned a ranking of 2 to the Site using the Washington Ranking Method (WARM). A copy of this SHA, dated July 22, 1996, is provided as **Attachment 1**.

According to Ecology’s records, groundwater quality at the Site was last monitored during February of 2001 as part of an ongoing, independently-conducted CVOC monitoring and remediation program. Analytical results associated with that February 2001 sampling event revealed concentrations of CVOCs above their associated MTCA Method A values (up to 230 mg/l in downgradient monitoring location MW-5) at multiple monitoring locations immediately adjacent to, and downgradient from, the Site³.

Additionally, in a letter from Citation Management Group, Inc. (Citation) to Ecology, dated August 9, 2001 (**Attachment 2**), Citation noted “*declining concentrations of PCE in ground water since remediation commenced at the site in 1996.*” In their August 2001 letter, Citation also suggested that groundwater remediation efforts at the Site were ongoing and that continued implementation of these efforts were anticipated (“*we believe that our continued operation of the remediation system will result in additional removal of PCE from ground water beneath the site with the goal of achieving cleanup*”).

As a result of the above information, Ecology is requesting the additional Site monitoring activities and documentation, as described below, in accordance with the regulations set forth under Washington Administrative Code (WAC) 173-340-450(8).

² <https://fortress.wa.gov/doh/eh/maps/SWAP/index.html>

³ GeoEngineers, Inc. *Quarterly Ground Water Monitoring Results – February 2001 Sampling Event*. March 30, 2001.

Mr. Jeff Hogan

May 10, 2017

Page 3

This information will enable Ecology to evaluate the current nature and extent of CVOC impacts beneath the Site, assess whether *adequate protection of human health and the environment* has been achieved, and whether additional cleanup and abatement actions will be needed to mitigate such threats, if present.

Request for Current Groundwater Quality Data and Information

To evaluate the current nature and extent of CVOCs in groundwater beneath the Site, Ecology is requesting that a groundwater monitoring event be performed **in conjunction with** the Surprise Lake Shopping Center and former Pro Cleaners facility. Ecology has recently contacted these parties in regards to this request and a copy of those transmittals are included herein as **Attachments 3 and 4**, respectively.

Additionally, please provide copies of **any reports or data** related to the Site beyond those noted herein. Ecology will accept either hard or electronic copies of these reports and records. Please address any Site documentation to the undersigned, using the contact information provided below.

Failure to comply with the above requirements may result in formal enforcement of regulatory requirements and/or actions by Ecology, as established in WAC 173-340.

Mr. Jeff Hogan
May 10, 2017
Page 4

Contact Information

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 transmittal, please contact me by phone at (360) 407-0276 or e-mail at Jeremy.Hughes@ecy.wa.gov.

Sincerely,



Jeremy Hughes, L.G.
SWRO Toxics Cleanup Program

Attachments (4)

1. Site Hazard Assessment, dated July 22, 1996
2. Letter from Citation Management Group, dated August 9, 2001
3. Review of the July 28, 2016 Cleanup Action Completion Report for the Surprise Lake Shopping Center (former VibraClean Facility) Site, May 8, 2017
4. Required Actions for Continued VCP Enrollment, Former ProCleaners Site, May 10, 2017

By Certified Mail: [91 7199 9991 7037 0279 8007]

cc: Mike Dunne – Milton Associates, LLC
Stephen Spencer - ECI Environmental Consulting
Mr. Jonathan Cheng - Surprise Lake Square LLC
Jeffrey Borum - TOR Environmental Inc.
William Halbert - Insight Geologic
Nicholas Acklam - Ecology
Ecology Site File

CSID 742

**WORKSHEET 1
SUMMARY SCORE SHEET**

Note: This document currently has no provision for sediment scoring route.

Site Name/Location (Street, City, County, Section/Township/Range, TCP ID Number):

Edgewood Shopping Center
717 Meridian St. East (Rt. 161)
Edgewood (Milton), WA 98354-9329
Pierce County
T-20N, R-4E, Section-3
TCP ID: S-27-6205-000

Site Description (Include management areas, substances of concern, and quantities):

Site Description/History:

The subject site was developed as a strip-mall type shopping center in the early 1960's. Since that time, various retail stores and dry-cleaning businesses have operated at the facility. From the early 1960's until the late 1980's each of the facilities individual retail spaces were serviced by a complex series of on-site septic systems. In the late 1980's the property was connected to sanitary sewer and all the septic system components were reportedly destroyed or abandoned in place.

In early 1994 the owners of the Edgewood Shopping Center, Citation Management Services (CAH), pursued a loan to remodel the facility. Because of potential liability issues, the lending institution requested that CAH have a "Phase I Environmental Assessment" conducted for the property. As requested, CAH retained the Environmental consulting firm of M&M Environmental (M&M) to conduct the assessment. During the early stages of M&M's assessment, an investigation report was reviewed which had been previously completed for a BP Oil service station located just west of the site. Because the report indicated chlorinated solvents were present in the groundwater at that location, and because the Edgewood Shopping Center was located hydraulically up-gradient, M&M identified the dry-cleaning facility as a possible source of the chlorinated solvents. As a result, M&M recommended that a groundwater investigation be conducted at the property before continuing with the Phase I assessment.

In late 1994 CAH acted on M&M's recommendation and retained the environmental consulting services of GeoEngineers, Inc. (GE), to evaluate the groundwater conditions beneath the subject site. GE's initial study included the installation of three on-site groundwater monitoring wells and limited sampling of the site's shallow groundwater. The results of GE's initial study confirmed M&M's concerns that chlorinated solvents were present in the groundwater beneath the site. CAH responded to GE's findings by contacting the Washington State Department of Ecology (Ecology), as per WAC 173-340-300 (2), and notifying the Department that a release had occurred. On October 12, 1994 the Edgewood Shopping Center was added to Ecology's Site Information System (SIS database), of suspected or confirmed contaminated sites and recommended for a Site Hazard Assessment (SHA).

In 1995 GE returned to the site and conducted two additional subsurface soil and groundwater investigations in an attempt to further define the potential source, and extent of the subsurface contamination. Based on the results of the supplemental investigations, GE concluded that the source of the contamination was attributed to discharges that had

previously occurred from the facilities different dry-cleaning businesses, to the site's former septic systems. A plume of dissolved tetrachloroethene (PCE) and trichloroethene (TCE) was identified in the shallow groundwater aquifer that extended westward from the former septic system locations. Concentrations of PCE and TCE in both the soil and groundwater was identified at levels which exceeded their respective Model Toxics Control Act (MTCA), Method A Cleanup Levels. Based on the findings of the first three studies, GE's recommendations to CAH were to: 1) remediate the contaminated source soils by vapor extraction; 2) further investigate the septic tank areas for free-phase product; 3) evaluate the water quality in the deeper aquifer and 4) install two pilot air sparging wells for testing and data collection.

In February 1996 GE and CAH received permission from the Mt. View Edgewood Water District to sample their unused water supply well, Leighton #2, located approximately 600 feet north of the site. The well is approximately 400 feet deep with the lower ten feet of the well being screened. During the pump test/sampling event, two groundwater samples were collected. The laboratory analysis results reported that trichloroethene was detected in both samples however, the concentrations were below its respective MTCA Method A Cleanup Level for groundwater.

The SHA was initiated by the Tacoma-Pierce County Health Department (TPCHD) in early 1996 to fulfill data requirements for subsequent scoring/ranking of the site under the Washington Ranking Method. Due to extensive existing analytical data, and additional investigative information provided by GE, the SHA Program determined that further site sampling was beyond the scope of the SHA. As a result, the ranked value for the site was based on the laboratory analysis data and other information which was documented by GeoEngineers during their 1994 and 1995 investigations.

Special Considerations (Include limitations in site file data or data which cannot be accommodated in the model, but which are important in evaluating the risk associated with the site, or any other factor(s) over-riding a decision of no further action for the site):

ROUTE SCORES:

Surface Water/Human Health: NS Surface Water/Environ.: NS

Air/Human Health: NS Air/Environmental: NS

Ground Water/Human Health: 65.7

WARMSSH
Rev. 7/12/94

OVERALL RANK: 2

Asset Management for Commercial and Residential Properties
August 9, 2001

Washington State Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, Washington 98504-7775

Attention: Martha Maggi

Subject: Edgewood Square Shopping Center
Edgewood, Washington

RECEIVED

AUG 17 2001

Washington State
Department of Ecology



Executive Offices
5312 Pacific Highway E.
Fife, Washington 98424
Ph. 253-922-3173
Fax 253-922-3174

Dear Ms. Maggi:

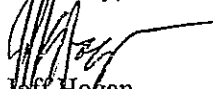
Thank you for your recent letter documenting our telephone conversations. Enclosed, please find our most recent ground water monitoring report for the Edgewood Square Shopping Center, as requested. The data table and supporting figures in the report document the declining concentrations of PCE in ground water since remediation commenced at the site in 1996. We believe that our continued operation of the remediation system will result in additional removal of PCE from ground water beneath the site with the goal of achieving cleanup.

We appreciate your acknowledgement of other potential sources of chlorinated solvents in the area of our site, particularly with respect to the potential of affecting the Mt. View-Edgewood water supply well to the east of our site. We would be reluctant at this time to embark on an evaluation of deep aquifers on our own, without some coordinated effort with other users of chlorinated solvents in the area and prior to fully remediating the shallow aquifer at our site. It is our belief that, in addition to being a very costly investigation, the data produced while sampling deeper aquifers beneath our property in the absence of data from surrounding properties may lead to a potentially flawed conclusion that our site is the source of contamination in the deeper aquifer.

CAH Investments, as the owners of the Edgewood Square Shopping Center, have undertaken investigation and remediation of soil and ground water at the site as an Independent Remedial Action. It is our desire to continue independently until we achieve our remediation goals which are Ecology's Method A cleanup levels for soil and ground water. At that time, we will submit an application and supporting documentation to Ecology for review and closure under the Voluntary Cleanup Program. We understand that Ecology may request additional data following their review. At that time, we will be prepared to discuss the data requests with you and develop a plan to obtain the appropriate data.

We appreciate your careful consideration of our planned course of action. Please contact us if you have additional questions or if we may provide additional information.

Sincerely,


Jeff Hogan
Vice President - Development
Citation Management Group

Mailing Address: P.O. Box 597
Puyallup, Washington 98371-0181



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

May 8, 2017

Electronic Copy

Mr. Jonathan Cheng
Surprise Lake Square LLC
2445 5th Ave Ste 210
San Diego, CA 92101

**Re: Review of the July 28, 2016 Cleanup Action Completion Report for the
Surprise Lake Shopping Center (former VibraClean Facility) Site**

- **Site Address:** 900 Meridian Street E Milton, 98354
- **Facility/Site No.:** 1378
- **Cleanup Site No.:** 744
- **VCP Project No.:** SW1577

Dear Mr. Cheng:

The Washington State Department of Ecology (Ecology) received your request for review and subsequent opinion of the July 28, 2016 Cleanup Action Completion Report for the Surprise Lake Shopping Center (former VibraClean Facility), located at 900 Meridian Street East in Milton, Washington (Facility). This letter provides a summary of our review of that document, and the supporting reports noted below, and requests additional Site information. We are providing the following commentary and opinions under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Description of the Site

The **Site** is defined by the nature and extent of contamination associated with the historic release(s) of tetrachloroethylene (PCE) from the former VibraClean facility (**Facility**), located in the Surprise Lake Shopping Center at 900 Meridian Street East in Milton, Washington (tax parcel ID 042004-8017; **Property**). It should be noted that potential contaminants associated with the Site also include the partial-breakdown products trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), cis-1,2 dichloroethene (cis-1,2 DCE), trans- 1,2 dichloroethene (trans-1,2 DCE), and vinyl chloride (VC).

Please note the parcel(s) of real property associated with this Site are also located within the projected boundaries of the Tacoma Smelter Plume facility (# 62855481). At this time, we have no information that those parcel(s) are actually affected. This opinion does not apply to any contamination associated with the Tacoma Smelter Plume facility.

Mr. Jonathan Cheng
May 8, 2017
Page 2

Please note that the Edgewood Cleaners facility, located in the Edgewood Shopping Center at 725 Meridian Avenue East in Edgewood, Washington (FSID 1360) and the former ProCleaners facility, located in the Milton Plaza Shopping Center at 2800 Milton Way in Milton, Washington (FSID 32484475) also affects the parcel(s) of real property associated with this Site.

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

Basis for the Opinion

The opinions and evaluations presented herein are based on the information contained in the following documents:

1. Pacific Crest Environmental (Pacific Crest), 2016. *Cleanup Action Completion Report*. July 28. (Pacific Crest 2016b; Cleanup Action Report);
2. Pacific Crest, 2016. *Limited Subsurface Investigation Report*. July 28. (Pacific Crest 2016a; 2016 Investigation Report);
3. Associated Earth Sciences, Inc. (AES), 2016. *Removal Action Completion Report*. June 2. (AES 2016; Removal Action Report);
4. Environmental Associates, Inc. (EAI), 1995. *Supplemental Environmental Study*. August 31. (EAI 1995).

The above documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

The opinions and evaluations presented here are void if any of the information contained in those documents is materially false or misleading.

Evaluation of Recent Site Cleanup and Characterization Activities

June 2, 2016 Removal Action Completion Report

Summary

According to the *Removal Action Completion Report*, dated June 2, 2016, remedial excavation activities were performed in February of 2016 to address PCE-affected soil immediately beneath the former VibraClean facility.

As a result of these activities, approximately 85 cubic yards of excavated soil, in addition to an unknown volume of PCE-impacted floor slab material, was removed and transported off-Site for subsequent disposal. As part of the February 2016 remedial excavation activities, 31 soil samples were collected from the floor and sidewalls of the excavation area for analysis of volatile organic compounds (VOCs) by EPA Method 8260C.

Following completion of the February 2016 remedial excavation activities, groundwater samples were collected from select Site monitoring locations (MW-4, MW-7A, MW-9, and MW-10) on April 12, 2016. PCE concentrations in the samples obtained during this sampling event ranged from 4.1 micrograms per liter ($\mu\text{g/l}$) at monitoring location MW-7A, located immediately downgradient from the Facility, to 33 $\mu\text{g/l}$ at MW-4, located immediately upgradient from the Facility. The Removal Action Report concluded that these data were consistent with migration of dissolved-phase PCE from an upgradient source.

The Removal Action Completed Report concluded that, *“all of the final confirmation soil samples collected from the excavation limits did not contain detectable PCE concentrations exceeding the MTCA Method A cleanup level for unrestricted land use”* and that *“based on data obtained during the removal action, approximately 1 foot of uncontaminated and undisturbed soil remains between the maximum depth of PCE-contaminated soil and the seasonal high groundwater level for the shallow water-bearing zone.”* The Removal Action Report also suggested that the detected PCE concentrations in groundwater beneath the Property were likely associated with upgradient (i.e. off-Site) sources of this constituent, based on the April 2016 groundwater monitoring results, and were unrelated to historic operations at the former VibraClean facility.

Ecology Opinion

1. Ecology acknowledges that soil samples collected from within the excavation limits did not exhibit concentrations of PCE above the associated MTCA Method A Cleanup Level (CUL) of 0.05 mg/kg and that vertical delineation of PCE in shallow soil (2 to 4 feet below ground surface [ft bgs]) have likely been achieved immediately beneath the former Facility; however, further soil sampling is needed to determine the lateral extent of CVOCs in the area immediately east and northeast of confirmation soil sample S-10, where PCE was detected at a concentration of 0.096 milligrams per kilogram (mg/kg) at 2 ft bgs. Soil sample S-10 was located along the eastern sidewall of the excavation area, beyond which additional samples do not appear to have been collected (AES 2016). Ecology also acknowledges that structural elements likely precluded further excavation east and northeast of sample location S-10; however, further characterization and delineation beneath this area of the Property will be required before Ecology can issue a determination of “No Further Action” (NFA) for the Site.

2. Regarding AES' conclusion, as presented in the Removal Action Report, that "*the relatively low PCE concentrations detected in ground water samples obtained downgradient of the Vibraclean facility are associated with the upgradient PCE-plume known to be in the area migrating beneath the Vibraclean facility*", sufficient rationale or discussion in support of this assertion was not provided. Ecology; however, recognizes the presence of those off-Site sources of CVOCs immediately upgradient of the Property. Additional discussion of these sources is presented in Opinions 5 and Comment 9, below.
3. Ecology is requesting site hydrographs for all monitoring locations comprising the Site well network to evaluate AES' assertion that "*approximately 1 feet of uncontaminated and undisturbed soil remains between the maximum depth of PCE-contaminated soil and the seasonal high ground water level for the shallow water-bearing zone.*" These hydrographs should consist of plots of groundwater elevations through time for a) individual monitoring locations and b) all monitoring locations, collectively, to assess for similarities or inconsistencies in hydraulic behavior between monitoring locations. These hydrographs will also be used to evaluate for the potential of multiple water-bearing zones beneath the Site and assist in the attribution of individual monitoring locations to these individual zones.

Additionally, Ecology is requesting all available Site boring and well construction logs in support of the above assessment.

July 28, 2016 Limited Subsurface Investigation Report

Summary

In February and July 2015, Pacific Crest and their subcontractors performed further investigation activities at the Site to evaluate for the following:

- Indications of releases of PCE from the Facility by advancing and sampling three soil borings (SB-1 through SB-3) within the Facility footprint on July 27, 2015;
- Nature and extent of chlorinated VOCs (CVOCs) in soil and groundwater beneath the Site by advancing and collecting soil samples from four soil borings prior to being completed as monitoring wells (MW-5A, MW-6A, MW-7A and MW-12) during the period February 4 through 11, 2015;

- Nature and extent of CVOCs in groundwater beneath the Site through performance of a groundwater sampling event, using both existing and newly installed Site monitoring locations, on February 23 and 24, 2015; and Groundwater geochemical conditions, using a limited set of dissolved-phase indicator parameters (methane, ethane, and ethene), to assess the potential for monitored natural attenuation (MNA) to reduce concentrations of PCE and related partial-breakdown products in groundwater beneath the Site during the February 2015 monitoring event.

In addition to the above activities, hydraulic slug testing was performed at monitoring locations MW-4 and MW-8 during February of 2015; however, the rationale for this testing, or a discussion as to how the associated test results were used, was not presented in the 2016 Investigation Report.

Based on the results of the above activities, the following conclusions were presented in the 2016 Investigation Report:

- The source of PCE in shallow soil (i.e. 2-4 ft bgs) beneath the Property was attributed to the use of chlorinated solvents by the former VibraClean facility;
- The source of dissolved-phase CVOCs beneath the Property is the result of migration from upgradient, off-Site sources (i.e. the Milton Plaza and Edgewood dry-cleaning facilities), based on relatively higher concentrations of PCE in upgradient monitoring wells and downgradient location of the Facility; and
- Detections of methane, ethene, and ethane in the groundwater samples collected from the on-Site monitoring network during February of 2015 indicate the presence of ongoing natural attenuation of CVOCs in Site groundwater.

Ecology Opinion

4. Ecology concurs with Pacific Crest's conclusion that PCE in shallow soil (2-4 ft bgs) are likely to historical dry cleaning operations at the former VibraClean facility.
5. As noted in Opinion 2, above, Ecology acknowledges the presence of off-Site sources of CVOCs immediately upgradient of the Property. Further, Ecology understands that these off-Site sources are likely contributing to the dissolved-phase PCE mass present in groundwater beneath the Property. However, additional information will be needed (see Ecology's request in Opinion 3, above) to resolve the issue of whether the sorbed-phase CVOCs present in shallow soil beneath the Facility, attributed to the former VibraClean facility, has impacted shallow groundwater beneath the Site.

6. Though Ecology concurs with Pacific Crest's conclusion that the presence of methane, ethene, and ethane in groundwater beneath the Site are consistent with the occurrence of biologically-mediated degradation of CVOCs, geochemical indicator parameter data previously collected from Site groundwater is insufficient to fully characterize the potential for natural attenuation processes to address CVOCs in Site groundwater. Future evaluations of natural attenuation processes for CVOCs in Site groundwater should consider and discuss the following: groundwater oxidation-reduction (redox) conditions; all potential bio-transformation and daughter products associated with the biodegradation of PCE (trichloroethylene [TCE], the dichloroethene [DCE] isomers 1,1-DCE, cis-1,2-DCE, and trans-1,2-DCE, vinyl chloride, ethene, and ethane); and the appropriate suite of field and analytical parameters for assessing groundwater geochemistry at natural attenuation sites where chlorinated solvents are present (e.g. dissolved oxygen [DO], oxidation-reduction potential [ORP], alkalinity, total organic carbon, dissolved hydrogen, chloride, nitrite, nitrate, sulfate, ferrous iron, methane). It should be noted that such geochemical evaluations comprise one of three primary lines of evidence for natural attenuation.

As presented in EPA's *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water* (EPA/600/R-98/128; September 1998), three primary lines of evidence have been identified to support the documentation of natural attenuation of chlorinated solvents. These lines of evidence are 1) stable to decreasing contaminant concentration trends over time at appropriate locations; 2) geochemical indicator parameter data consistent with ongoing attenuation through either abiotic (e.g. advection, dilution, dispersion, and adsorption) or biological (i.e. biodegradation) processes and associated ability for Site groundwater to facilitate such processes (i.e. assimilative capacity); and 3) the direct demonstration of biologically-mediated attenuation processes under existing Site conditions (i.e. microcosm studies or environmental molecular diagnostic [EMD] and related molecular biological tools [MBTs]).

July 28, 2016 Cleanup Action Completion Report

Summary

As part of the Voluntary Cleanup Program (VCP) application package for the Site, Pacific Crest submitted the *Cleanup Action Completion Report*, dated July 28, 2016 for Ecology review. This purpose of the Cleanup Action Report was to summarize previous investigation and cleanup action activities completed at the Site in support of a request for an NFA determination from Ecology.

In addition to summarizing previous Site investigation and cleanup action activities, the Cleanup Action Report documents reported PCE releases and associated impacts related to the two other dry cleaning facilities, located upgradient of the Property, noted above (Edgewood Cleaners and the former ProCleaners).

The Cleanup Action Report reiterated the findings of the Removal Action Completed Report and stated that *“laboratory analysis of soil samples collected from the final limits of the excavation confirmed that residual concentrations of PCE in soil were below MTCA Method A Cleanup Level, and that the PCE impacted soil was confined to the vadose zone.”* Additionally, in Section 3.2.3 of the Cleanup Action Report, the following language was provided:

“Under the ‘plume’ clause of MTCA (RCW 70.105D.020(22)(iv)), the current and former owners and operators of the SLSC Property do not appear to meet the definition of owner or operator under MTCA for cleanup of the concentrations of CVOCs that have come to be located on the SLSC Property through migration of groundwater from a source off of the property.

Clarification of Ecology’s Plume Clause is presented in the below opinion.

Ecology Opinion

7. Regarding applicability of the “plume clause” (RCW 70.105D.020(22)(iv)) to PCE-affected groundwater beneath the Site, exemption from ‘owner/operator’ status can be granted if *“the person can demonstrate that the hazardous substance has not been used, placed, managed, or otherwise handled on the property in a manner likely to cause or contribute a release of the hazardous substance that has migrated onto the property”* and *“the person has not caused or contributed to the release of the hazardous substance”* (RCW 70.105D.020(22)(iv)(A) and (B), respectively).

Based on the documented release of PCE to soil attributed to historic dry cleaning operations at the Facility (Pacific Crest 2016a), as well as the documented mis-handling (*“...good housekeeping was not practiced...”*) and previous practice of disposing PCE into Facility sewage drains (EAI 1995), the Site is precluded from exemption under subsections RCW 70.105D.020(22)(iv)(A) and (B) and, by extension, MTCA’s “plume clause”.

Establishment of Cleanup Standards

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action; however, additional areas of the Site remain to be sufficiently characterized. These data-gaps are described in Ecology Opinion 1, above.

As described in Section 3.2.2 (Selection of Cleanup Standards) of the Cleanup Action Report, MTCA Method A CULs are presently being used for the CVOCs “*for the media of concern*” (soil, groundwater, and air) at the Site. Standard points of compliance, as established in WAC 173-340-720, are currently being used for the Site. For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance shall be established in the soils throughout the Site from the ground surface to 15 feet bgs. For groundwater, the point of compliance shall be established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site - future groundwater characterization activities planned for the Site should account for this determination.

Selection of Cleanup Actions

As described in the Removal Action and Cleanup Action Reports, the cleanup action for the Site consisted of excavation and removal of approximately 85 cubic yards of CVOC-affected soil to a maximum depth of 7 ft bgs beneath the Facility. Though these activities appear to have successfully addressed impacted soil within the excavation limits, further soil sampling is needed to determine the lateral extent of CVOCs in the area immediately east and northeast of confirmation soil sample S-10, as noted in Ecology Opinion 1, above.

According to the Cleanup Action Report, a cleanup action for CVOCs in groundwater has not been selected due to the presumed applicability of MTCA’s “plume clause” exemptions to the Site. As discussed in Ecology Opinion 7, above, the Site does not fulfill the criteria described in RCW 70.105D.020(22)(iv) and, therefore, selection of a cleanup action for CVOC-affected groundwater beneath the Site is required.

Additional Comments and Requests for Information

8. In accordance with WAC 173-340-7490, an evaluation regarding the need to perform a Terrestrial Ecological Evaluation (TEE) at sites where a release of a hazardous substance has occurred is necessary. Ecology does not have record that a TEE has been performed for the Site. Please note that any future NFA requests should either be accompanied or preceded by a TEE or information documentation rationale for the exclusion thereof. Ecology cannot issue a NFA determination for the Site until a TEE has been performed.

9. Regarding the upgradient contributions of dissolved-phase CVOCs impacting the Site, Ecology acknowledges the commingled nature and widespread distribution of these contaminants. Though information regarding the current CVOC-plume extent and geometry is not available, Ecology presumes that these impacts extend from the Edgewood Cleaners property to the west and southwest of this location, and south of the Surprise Lake Shopping Center. However, as noted in Opinion 5 above, groundwater impacts resulting from the use of PCE at the former VibraClean facility have yet to be fully disproved.

To evaluate the current nature and extent of CVOCs in groundwater beneath and immediately upgradient of the Site, Ecology recommends that a second, multi-site sampling event be performed in conjunction with the Former ProCleaners and Edgewood Shopping Center facilities. Ecology is currently in the process of contacting those parties in regards to this request and will provide a copy of those transmittals to the addressees listed below.

10. Please note that, in accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted simultaneously in both written and electronic formats. According to the policy, any reports containing sampling data that are submitted for Ecology review are considered incomplete until the electronic data has been entered into Ecology's Environmental Information Management system (EIM). Please ensure that data generated during on-Site activities is submitted pursuant to this policy. A recent review of Ecology's database does not show Site data collected as part of the 2016 Removal Action, specifically data collected from borings SB-1 through SB-3 and confirmation soil samples S-1 through S-12 and B-1 through B-9. For additional information regarding electronic format requirements, see the website <http://www.ecy.wa.gov/eim>.

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 proposed will be substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. Opinion is limited to proposed cleanup.

This letter does not provide an opinion on whether further remedial action will actually be necessary at the Site upon completion of your proposed cleanup. To obtain such an opinion, you must submit a report to Ecology upon completion of your cleanup and request an opinion under the VCP.

4. 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).

Mr. Jonathan Cheng
May 8, 2017
Page 11

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). As you conduct your cleanup, please do not hesitate to request additional services. We look forward to working with you.

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, please contact me by phone at (360) 407-0276 or e-mail at jhug461@ecy.wa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Hughes', with a long horizontal flourish extending to the right.

Jeremy Hughes, L.G.
SWRO Toxics Cleanup Program

JJH: kb

By Certified Mail: [91 7199 9991 7037 0279 7864]

cc: Jeffrey Borum – TOR Environmental Inc.
Nicholas Acklam - Ecology
Matthew Alexander - Ecology



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

May 10, 2017

Mr. Mike Dunne
Milton Associates, LLC
2102 E Main Street
Suite 104
Puyallup, WA 98372-3205

Re: Required Actions for Continued VCP Enrollment

- **Site Name:** Former ProCleaners
- **Site Address:** 2800 Milton Way
- **Cleanup Site ID:** 11856
- **VCP Project Number:** SW1250

Dear Mr. Dunne:

The Washington State Department of Ecology (Ecology) has recently performed a review of cleanup progress at the following three sites in Milton, Washington:

- Former ProCleaners, located at 2800 Milton Way; Facility Site ID (FSID) 32484475, referred to herein as “the Site”;
- Surprise Lake Shopping Center, located at 900 Meridian Street East; FSID 1378; and
- Edgewood Shopping Center, located at 725 Meridian Street East; FSID 1360.

As a result of this review, Ecology is contacting you to express concerns over current concentrations of chlorinated volatile organic compounds (CVOCs) in both soil and groundwater beneath the subject Site and whether these concentrations are protective of human health and the environment under Model Toxics Control Act (MTCA) Cleanup Regulations. Additionally, due to the large volume of work occurring within the VCP, sites must also demonstrate ongoing progress towards site cleanup in order to remain enrolled in this program.

In accordance with the regulations set forth under WAC 173-340-450, Ecology is requesting additional monitoring and technical reporting actions, as described below. This information will enable Ecology to evaluate the nature and extent of CVOC impacts beneath the Site, associated threats to human health and the environment, and whether additional cleanup and abatement actions will be needed to mitigate such threats, if present.

Request for Current Groundwater Quality Data

According to Ecology's records, groundwater quality beneath the Site was last monitored during February of 2015 as part of a multi-site sampling event performed in conjunction with the Surprise Lake Shopping Center. Analytical results associated with the February 2015 sampling event revealed concentrations of CVOCs above their associated MTCA Method A values at multiple monitoring locations immediately adjacent to the Site.

To evaluate the current nature and extent of CVOCs in groundwater beneath the Site, Ecology recommends that a second, multi-site sampling event be performed in conjunction with the Surprise Lake and Edgewood Shopping Centers. Ecology has recently contacted the Surprise Lake Shopping Center in regards to this request and a copy of that transmittal is included herein as Attachment 1. Ecology is also contacting representatives of the Edgewood Shopping Center regarding their current, respective site status. A copy of that transmittal is also provided as Attachment 2.

Required Actions for Continued Enrollment in the VCP

To demonstrate ongoing progress towards site cleanup and to maintain enrollment within the VCP, Ecology is **requiring a response, due to Ecology within 60 days from issuance of this letter, regarding your intent and proposal to perform additional Site characterization or cleanup activities.** Please submit two hard copies of this document to the recipient listed below, along with an electronic version of this deliverable.

Failure to comply with the above requirements will result in your termination from the VCP and consideration for formal regulatory actions by Ecology.

Mr. Mike Dunne

May 10, 2017

Page 3

Contact Information

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 transmittal, please contact me by phone at (360) 407-0276 or e-mail at Jeremy.Hughes@ecy.wa.gov.

Sincerely,



Jeremy Hughes, L.G.
SWRO Toxics Cleanup Program

Enclosures [2]:

1. Review of the July 28, 2016 Cleanup Action Completion Report for the Surprise Lake Shopping Center (former VibraClean Facility) Site, May 8, 2017
2. Request for Site Status Update: Edgewood Shopping Center, May 10, 2017

By certified mail: [91 7199 9991 7037 0287 2011]

cc: Stephen Spencer - ECI Environmental Consulting
Mr. Jonathan Cheng - Surprise Lake Square LLC
Jeffrey Borum - TOR Environmental Inc.
William Halbert - Insight Geologic
Ki Son Song – Edgewood Cleaners
Nicholas Acklam - Ecology
Ecology Site File