



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1250 W Alder St • Union Gap, WA 98903-0009 • (509) 575-2490

March 31, 2016

Bradley & Holly Sharp
Sharps Automotive Service
PO Box 127
Moxee WA 98936

Re: Opinion on an Investigation Work Plan for the following Site

Site Name: Sharps Automotive Service
Site Address: 208 E Moxee Ave, Moxee
Facility/Site No.: 3257529
Cleanup/Site No.: 5314
VCP Project No.: CE0432

Dear Mr. & Mrs. Sharp:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed Investigation Work Plan for the Sharps Automotive Service 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

If the Work Plan is implemented, will further remedial action be necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action will be necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the proposed Investigation Work Plan meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its 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 release:

- Petroleum hydrocarbons and associated chemicals into soil, groundwater, and air.

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 following documents:

- White Shield, 1994. *UST Closure/Interim Action Report for Sharp's Automotive Service, 208 E Moxee Ave., Moxee, WA.* December 1994.
- White Shield, 1995. *Exploratory Drilling and Monitoring Well Installation for Sharp's Automotive Service, 208 E Moxee Ave., Moxee, WA.* August 1995.
- White Shield, 1995. *Laboratory Results for Groundwater Samples, Sharp's Automotive Service, 208 E Moxee Ave., Moxee, WA.* November 1995.
- Kennedy/Jenks, 2016. *Site Investigation Work Plan for Sharp's Automotive, 208 E Moxee Ave., Moxee, WA.* January 2016.
- Department of Ecology Correspondence File, 1995-Present.

Those documents are kept at the Central Regional Office (CRO) of Ecology for review by appointment only. You can make an appointment by calling the CRO resource contact, at (509) 454-7658.

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

Summary of Site History and Characterization Activities

A service station with fuel pumps and automotive repair services, has been operating at the Site since at least the early 1960s. Three Underground Storage Tanks (USTs), dispenser, and piping were removed in 1994. The tanks were described as a 4,000-gallon gasoline tank, 2,000-gallon diesel tank, and a 500-gallon unregistered tank with unknown contents.

Gasoline, and to a nominal extent diesel, contamination was discovered in the UST excavation. 182 cubic yards (cy) of Petroleum Contaminated Soil (PCS) was excavated and transported to a property located at 220 Beane Road in Moxee. No records pertaining to the fate of this soil has been submitted to Ecology.

A significant amount of PCS was left in the excavation as evidenced by sidewall soil samples. The maximum reported concentration of gasoline-range petroleum hydrocarbons was 15,000 mg/kg; collected from the west end of the diesel tank. 15,000 mg/kg falls within the range of residual soil saturation concentrations above which Non-Aqueous Phase Liquid (NAPL) is present and potentially mobile.

Amendments to promote bioremediation were sprayed in the excavation prior to backfilling with clean soil.

Four groundwater monitoring wells were installed in 1995, and three monitoring events have been performed to date (July/November 1995 and October 2011). Concentrations of petroleum compounds exceeding MTCA Method A Cleanup levels are present in groundwater at the Site.

Analysis of the Proposed Work Plan

Ecology has concluded that additional investigation activities will be necessary to evaluate data gaps, characterize the Site, establish cleanup standards, and select a cleanup action.

The stated objective of the Proposed Remedial Investigation Work Plan is “to evaluate the potential for offsite impacts” (Kennedy/Jenks, 2016). The Work Plan proposes to:

- Evaluate the Vapor Intrusion (VI) exposure pathway for the residences located southwest of the Site
- Confirm the direction of the hydraulic gradient
- Obtain information on the distribution of petroleum contamination in soil and groundwater
- Obtain additional subsurface geological and hydrogeological information.

Ecology has the following comments and recommendations:

1. Several data gaps have been identified by Ecology, and will need to be addressed prior to the selection of a cleanup action.
 - a. The history and usage of the Sharps Automotive Service property and surrounding properties has not been thoroughly documented. The date of the first known usage of the property as a service station, as well as the age of the removed USTs, are unknown.

- b. All potential Contaminants of Concern (COCs), associated with petroleum releases, have not been evaluated for the Site. Future investigations should include all testing required for gasoline and diesel releases under MTCA and listed in Table 830-1.
 - c. Neither the contents nor origin of the 500 gallon UST, discovered under the sidewalk at the eastern corner of the property in 1994, were discussed in the reports. A circa 1931, Sanborn map shows an auto repair business located adjacent to the Site towards the east. It is possible the UST was used as a waste oil tank for the repair business. Future investigations should include testing for waste oil releases as required under MTCA and listed in Table 830-1.
 - d. Exhibit B of the Real Estate Purchase and Sale Agreement between R.H. Smith Distributing Company and the Sharps, dated 02/06/1987, states a total of four gasoline USTs were present on the property at the time of the sale. Three USTs were removed in 1994. It is unclear if the 500 gallon UST was one of the four, and if so, where the fourth tank is located.
 - e. An evaluation of potential preferential transport pathways has not been performed or proposed. This is particularly important in order to evaluate or exclude the VI pathway.
2. In reference to the Work Plan objective to evaluate the potential for off-site impacts –
- Off-“Property” impacts were confirmed during the 1995 soil and groundwater investigation and subsequent groundwater monitoring events. Groundwater samples collected from MW-4 in 2011 had concentrations of gasoline and ethylbenzene exceeding 1% of their Effective Solubilities; suggesting free-phase NAPL is present in addition to the documented dissolved-phase plume.

Additionally, the 1995 subsurface log prepared during the installation of Soil Boring #7/MW-4, indicates petroleum contaminated soil was encountered between 6.5 and 8 feet below ground surface (ft bgs). No soil samples were collected at this location.

Reminder: A Site (aka a Facility) is defined as (a) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, or aircraft, or (b) any site or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located (RCW 70.105D.020(8)). A Site is **not** defined by the parcel or property boundary.

3. In reference to the proposed VI exposure pathway evaluation –
 - a. Ecology believes this evaluation may be premature due to the limited understanding of the nature and extent of contamination at the Site (refer to the discussion of datagaps above). The vertical and lateral extent of contamination in the sorbed phase (soil), dissolved phase (groundwater), and NAPL should be evaluated first in order to select appropriate methods and locations, and obtain meaningful data.
 - b. The soil vapor sampling depths and number of samples is unclear as described. Section 2.2 discusses sampling at “two depth intervals” and “at one of the target sampling depths.” Additional clarification regarding VI sampling is necessary; with particular attention focused on the representativeness of the information collected.
 - c. VI exposure potential of the on-property and nearby businesses should also be evaluated.
 - d. Please refer to EPA’s most recent VI guidance documents in conjunction with Ecology’s recently updated toxicity values and screening levels when performing the VI evaluation. Ecology published an updated table (April 2015) which replaces Table B-1 in Appendix B of the October 2009, *draft Guidance for Evaluating Soil Vapor Intrusion in Washington State*.
4. The Work Plan does not provide a comprehensive description or illustration of the current understanding of the Site.

In order to evaluate the adequacy of work performed or proposed, a Conceptual Site Model (CSM) is necessary to convey the current understanding of the Site. At a minimum, a figure showing the known extent of contamination and concentrations (both vertical and lateral) in relationship to current and historical Site features, is necessary.

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.

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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).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. 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 (509) 454-7839 or e-mail at Jennifer.Lind@ecy.wa.gov.

Sincerely,


Jennifer Lind
Site Manager
CRO Toxics Cleanup Program

cc: Matt Alexander, ECY HQ
Carrie Pederson, Pollution Liability Insurance Agency
Ty Schreiner, Kennedy/Jenks Consulting