



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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March 6, 2014

Mr. James Hogan
ECC Horizon
8383 Craig Street, Suite 110
Indianapolis, IN 46250

Re: Opinion Pursuant to WAC 173-340-515(5) on the Vapor Intrusion Investigation for the Following Hazardous Waste Site:

- **Name:** Cherry Street Cleaners
- **Address:** 2510 E. Cherry St., Seattle WA 98122
- **Facility/Site No.:** 4765174
- **VCP No.:** NW2009
- **Cleanup Site No.:** 4175

Dear Mr. Hogan:

Thank you for submitting documents regarding your proposed remedial action for the **Cherry Street Cleaners** (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 release(s) at the Site:

- Chlorinated volatile organic compounds (cVOCs), specifically, tetrachloroethene (PCE), trichloroethene (TCE), cis-dichloroethene (c-DCE) and vinyl chloride (VC), into soil and groundwater.

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



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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 action(s):

1. *Vapor Intrusion Assessment – Islamic School of Seattle*, dated December 27, 2013, prepared by ECC Horizon.
2. *2012-2013 Annual Report Former Cherry Street Cleaners*, dated June 28, 2013, prepared by ECC Horizon.

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 email to nwro_public_request@ecy.wa.gov.

The Site is defined by the extent of contamination caused by the following release(s):

- Chlorinated volatile organic compounds (cVOCs) into soil and groundwater.

Based on a review of supporting documentation listed above, Ecology notes:

On November 30, 2012, ECC Horizon conducted a *Vapor Intrusion Study* at the Islamic School of Seattle, located adjacent to the Site at 720 25th Street. This study was not intended to serve as a full building vapor intrusion assessment (VIA). Rather, it was an abbreviated assessment focused toward the southern edge of the Islamic School building (closest to the Cherry Street Cleaners facility) to determine if a full building VIA would be necessary. During this investigation five indoor air samples and six subslab samples were taken with the following results:

- PCE was detected in indoor air samples IA-13, IA-15 and IA-17, respectively at concentrations of $0.81 \mu\text{g}/\text{m}^3$, $0.41 \mu\text{g}/\text{m}^3$ and $0.57 \mu\text{g}/\text{m}^3$, all of which were significantly **below** the corresponding Carcinogenic Indoor Air Screening Levels (CIASL) of $9.6 \mu\text{g}/\text{m}^3$.
- PCE was detected in subslab samples SV-21 through SV-24 at concentrations of $210 \mu\text{g}/\text{m}^3$, $240 \mu\text{g}/\text{m}^3$, $230 \mu\text{g}/\text{m}^3$ and $300 \mu\text{g}/\text{m}^3$, respectively, all of which **exceed** the corresponding Soil Gas Screening Levels (SGSL) of $96 \mu\text{g}/\text{m}^3$.

On October 15, 2013, Ecology issued an opinion letter determining that the vapor intrusion assessment for the Islamic School building should be performed again under worst-case

scenario. This scenario specifically required that the heating, ventilation, and air conditioning (HVAC) system be shut down and all windows and doors to the building be closed (to the extent practical) for at least 48 hours prior to the sampling event as well as throughout the duration of sampling. This procedure is intended to prevent any dilution or biasing of the indoor air and subsurface concentrations during the sampling event.

On November 3, 2013, ECC Horizon performed this worst-case scenario VIA following Ecology's draft Guidance for Evaluating Soil Vapor Intrusion and collected nine subsurface samples and seventeen indoor air samples. Additional samples collected included two field duplicates and two outdoor ambient samples. Of the thirty samples only one sample contained concentrations of TCE above MTCA Method B CIASLs. However the Summa canister which contained this sample had been compromised and was rejected as detailed in the November 2013 report. Of significant note is that this sample was located on the second floor of the building, samples from the first floor and surrounding second floor rooms contained concentrations of TCE below the CIASL.

Benzene was detected above its CIASL in 10 indoor air samples with a concentration as high as $0.63 \mu\text{g}/\text{m}^3$. It was also detected in both ambient outdoor air samples at $0.35 \mu\text{g}/\text{m}^3$. When corrected for the outdoor air contamination, the highest indoor air sample result complies with the CIASL of $0.32 \mu\text{g}/\text{m}^3$. Additionally, benzene is not associated with historical dry cleaning operations and is therefore not a chemical of concern associated with the Site.

Ecology also notes that the former Cherry Street Cleaners building was demolished in July 2013. Its removal may have triggered off-gassing of the underlying soil, thereby releasing vapors that were previously entrapped beneath the concrete. In addition the building may have itself served as an off-gassing source of cVOCs given that dry cleaning solvents were handled within the facility for decades. The physical removal of the building and its associated concrete foundation may have eliminated the continual off-gassing source from impacting the surrounding air and soil gas pores with dry cleaning solvent.

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 release(s) at the Site, Ecology has determined:**

- ECC Horizon appropriately performed the VIA following Ecology's draft Guidance for Evaluating Soil Vapor Intrusion.
- Ecology concurs with ECC Horizon conclusion that vapor intrusion is not occurring at the Islamic School of Seattle and that this pathway is incomplete.

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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.

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) 649-4446 or email at damy461@ecy.wa.gov.

Sincerely,



Dale Myers
Site Manager
Toxics Cleanup Program

cc: Sonia Fernandez, VCP Coordinator, Ecology