



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

*Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000  
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November 26, 2013

Mr. John Drake  
Washington Industries, Inc.  
17742 Talbot Road  
Edmonds, WA 98026

**Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Interim Action for the  
Following Hazardous Waste Site:**

- **Name:** Northwest Plating
- **Address:** 825 South Dakota Street, WA 98108
- **Cleanup Site ID:** 1361
- **Facility/Site No.:** 2231
- **VCP No.:** NW2769

Dear Mr. Drake:

Thank you for submitting documents regarding your proposed remedial action for the **Northwest Plating facility** (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:

- Volatile organic compounds (VOCs) including trichloroethene (TCE), tetrachloroethene (PCE), cis-1,2 dichloroethene and vinyl chloride in soil, groundwater and air
- Cadmium, hexavalent chromium, nickel and zinc in soil and groundwater
- Cyanide in soil and groundwater
- Methylene chloride in soil

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).



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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 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. Environmental Partners Inc., *Work Plan for Vapor Intrusion Mitigation System Installation, Washington Industries, Inc. and Perine Properties*, dated June 28, 2013.
2. Environmental Partners Inc., *Vapor Intrusion Assessment, Washington Industries Inc. and Perine Properties*, dated May 17, 2013.
3. Hart Crowser, *Historical Site Cleanup Summary, Northwest Plating Site*, dated October 3, 2012.
4. Sound Earth Strategies, Inc., *Groundwater Quality Evaluation, Perine Property*, dated July 28, 2011.
5. Sound Earth Strategies, Inc., *Air Quality Evaluation, Perine Property*, dated July 28, 2011.
6. Sound Earth Strategies, Inc., *Phase I Environmental Site Assessment*, dated January 27, 2011.
7. Herrera Environmental Consultants, Inc., *Ground Water Quality Investigation*, dated May 21, 1999.
8. GeoEngineers, *Phase 2 Environmental Site Assessment, Northwest Plating Company*, dated June 20, 1990.
9. GeoEngineers, *Phase 1 Environmental Site Assessment, Northwest Plating Company*, dated May 5, 1989.

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

- Volatile organic compounds (VOCs) including trichloroethene (TCE), tetrachloroethene (PCE), cis-1,2 dichloroethene and vinyl chloride in soil, groundwater and air
- Cadmium, hexavalent chromium, nickel and zinc in soil and groundwater

- Cyanide in soil and groundwater
- Methylene chloride in soil

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:**

Washington Industries requested an advisory opinion regarding the installation of a Vapor Intrusion Mitigation System (VIMS) on the adjacent property to the south (Perine property). Ecology approves the *Work Plan for Vapor Intrusion Mitigation System Installation* on the basis that it should help mitigate vapor intrusion threats on the adjacent Perine-Danforth Company building located to the south of the Northwest Plating facility. Based on sub-slab air and indoor air concentrations of VOCs, Ecology agrees mitigation measures are needed as an interim mitigation action to address indoor air quality and bring indoor vapor concentrations to levels that are protective of human health until further remedial action successfully attains groundwater and soil cleanup levels. Ecology has the following comments and recommendations:

- Ecology agrees that, as stated in Environmental Partners Incorporated's (EPI) *Work Plan for Vapor Intrusion Mitigation System*, Site characterization is incomplete. Further sampling is needed to assess current subsurface conditions and determine the vertical and lateral extent of contamination in soil, groundwater and air. A Remedial Investigation/Feasibility Study (RI/FS) needs to be completed. Data gathered during Site characterization as part of the RI/FS will be used to establish cleanup levels and determine an appropriate cleanup action plan for the Site.
- The proposed vapor intrusion mitigation system (VIMS) may reduce VOC contamination in indoor air in the Perine-Danforth building. However, sub-slab vapor data is limited to the northern portion of the Perine property building. Additional sampling is necessary to determine the extent of VOC contamination beneath the Perine property building.
- Groundwater and soil gas VOC contamination from the former Northwest Plating facility has been confirmed above MTCA Method B cleanup levels as far as 300 feet down gradient of the northwest property boundary, potentially impacting additional off-property buildings. An understanding of the three-dimensional extent of the VOC plume in shallow groundwater and vadose zone soil is needed to determine the extent of vapor intrusion issues. Further Site characterization is needed to identify all buildings potentially impacted by vapor intrusion. Vapor assessment may be needed for additional off-property buildings. Ecology agrees that, the former Northwest Plating building, which is currently vacant, would require mitigation of vapor intrusion issues or further cleanup prior to future occupancy of the building.

- Until Site characterization is complete and cleanup levels have been established, Method B air cleanup levels may be used to determine if the VIMS is effectively reducing indoor air contamination to levels that are protective of human health. The *Vapor Intrusion Assessment* report, defines remediation levels as a concentration that triggers the requirement for a mitigating action. Mitigation is necessary if it is determined that soil and groundwater contamination is resulting in indoor air quality that is harmful to human health. Remediation levels are developed as part of a cleanup plan, which takes into account all contaminated media throughout the Site, not just a portion of the Site. Once Site characterization is complete and the boundaries of the MTCA Site have been defined, a cleanup action plan can be developed and, if needed, remediation levels can be used to determine the protectiveness of a proposed remedy. Alternate reasonable maximum exposure scenarios can be used when performing cleanup actions to help assess the protectiveness to human health of a cleanup action alternative that incorporates remediation levels and uses engineered controls and/or institutional controls to limit exposure to the contamination remaining onsite (WAC 173-340-708 (3) (d)). Land uses other than residential and industrial (for example, commercial) may be used as a basis for an alternate reasonable maximum exposure scenario for the purpose of assessing the protectiveness of a remedy (WAC 173-340-708 (3) (ii)).

**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.

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If you have any questions regarding this opinion, please contact me at (425) 649-7097 or e-mail at desc461@ecy.wa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Diane Escobedo", with a stylized flourish at the end.

Diane Escobedo  
Site Manager  
Toxics Cleanup Program

cc: Thomas Morin, Environmental Partners, Inc.  
Sonia Fernandez, VCP Coordinator, Ecology