



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

August 31, 2011

Mr. Ross Simmons
Stantec Consulting Corporation
7730 SW Mohawk Street
Tualatin, Oregon 97062

Re: Opinion pursuant to WAC 173-340-515(5) on Remedial Investigation and Feasibility Study for the following Hazardous Waste Site:

- Name: US Marine Bayliner Marine
- Address: 17825 59th Avenue NE, Arlington WA
- Facility/Site No.: 51332889
- VCP No.: NW2270

Dear Mr. Simmons:

Thank you for submitting documents regarding your Remedial Investigation and Feasibility Study for the US Marine Bayliner Marine 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 release(s) at the Site:

- Tetrachloroethylene (PCE) in Ground Water.

Enclosure A includes a detailed description and diagram 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 following documents:

1. Remedial Investigation and Feasibility Study Former Bayliner Marine, dated April 12 2011, prepared by Stantec.

Those 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 425.649.7239.

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 **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 above and in **Enclosure A**.

- The data generated from your investigation has fully characterized the nature and extent of contamination in groundwater.
- The data generated from your investigation at the Bayliner facility has demonstrated that the groundwater plume has not migrated beyond the facilities property boundary;
- The data generated from your investigation at the Bayliner facility has demonstrated that soil has not been impacted by PCE;

2. **Establishment of cleanup standards.**

Ecology has determined the cleanup level does meet the substantive requirements of MTCA.

Current Site uses include businesses to which the public has access; therefore unrestricted land use is the appropriate basis for development of soil cleanup levels. The following potential exposure/risk pathways were appropriate to consider:

- Human health protection from direct soil contact pathway exposure
- Human health protection from soil-to-groundwater pathway exposure
- Human health protection from soil-to-air pathway exposure
- Human health protection from soil-to-surface water pathway exposure
- Terrestrial ecological protection

Because the site has relatively few contaminants, Method A was used to develop cleanup levels for the Site contaminants of concern.

Groundwater cleanup levels were selected as the WAC 173-340 Method A Table 720-1 value of 5 $\mu\text{g}/\text{L}$ for Tetrachloroethylene (PCE).

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site does not meet the substantive requirements of MTCA.

Alternative #3 – Source-Area In Situ Chemical Oxidation and Institutional Control

- Ecology concurs with the estimated restoration time frame for Alternative#3 of 2 years. **Two-three years is a reasonable restoration time frame.**
- Brunswick has not yet demonstrated that it may not be practicable at the former Bayliner Marine Site to achieve the groundwater cleanup level of 5 $\mu\text{g}/\text{L}$ throughout the Site within a reasonable time frame. **Specifically refer to WAC 173-340-720(8)(c).**
- **In Ecology's opinion, Alternative #3 – Source-Area In Situ Chemical Oxidation and Institutional Control**, is a viable Interim Action. This Interim Action may lead to the final cleanup action if that data generated from this Interim Action supports that decision. Brunswick must demonstrate that it is not practicable at the former Bayliner Marine Site to achieve the groundwater cleanup level of 5 $\mu\text{g}/\text{L}$ throughout the Site before Ecology will approve of the use of monitoring wells MW-5 and MW-7 as conditional points of compliance, or placing an Institutional Control on the Site.

4. **Cleanup.**

Ecology has determined the cleanup you performed does not meet any cleanup standards at the Site.

- **To date, no remedial activities have been performed within the source area of the PCE Plume**

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).

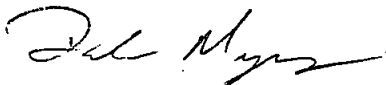
Mr. Ross Simmons
August 31, 2011
Page 5

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 425.649.4446 or e-mail at damy461@ecy.wa.gov.

Sincerely,



Dale R. Myers
Site Manager
NWRO Toxics Cleanup Program
dm/kh

Enclosures: 1

cc: Mr. David Selig
Brunswick Corporation
1 North Field Court
Lake Forest, IL 60045

Lane Powell PC
1420 Fifth Avenue, Suite 4100
Seattle, WA 98101-2338

Enclosure A

Description and Diagrams of the Site

1. Site/Property description

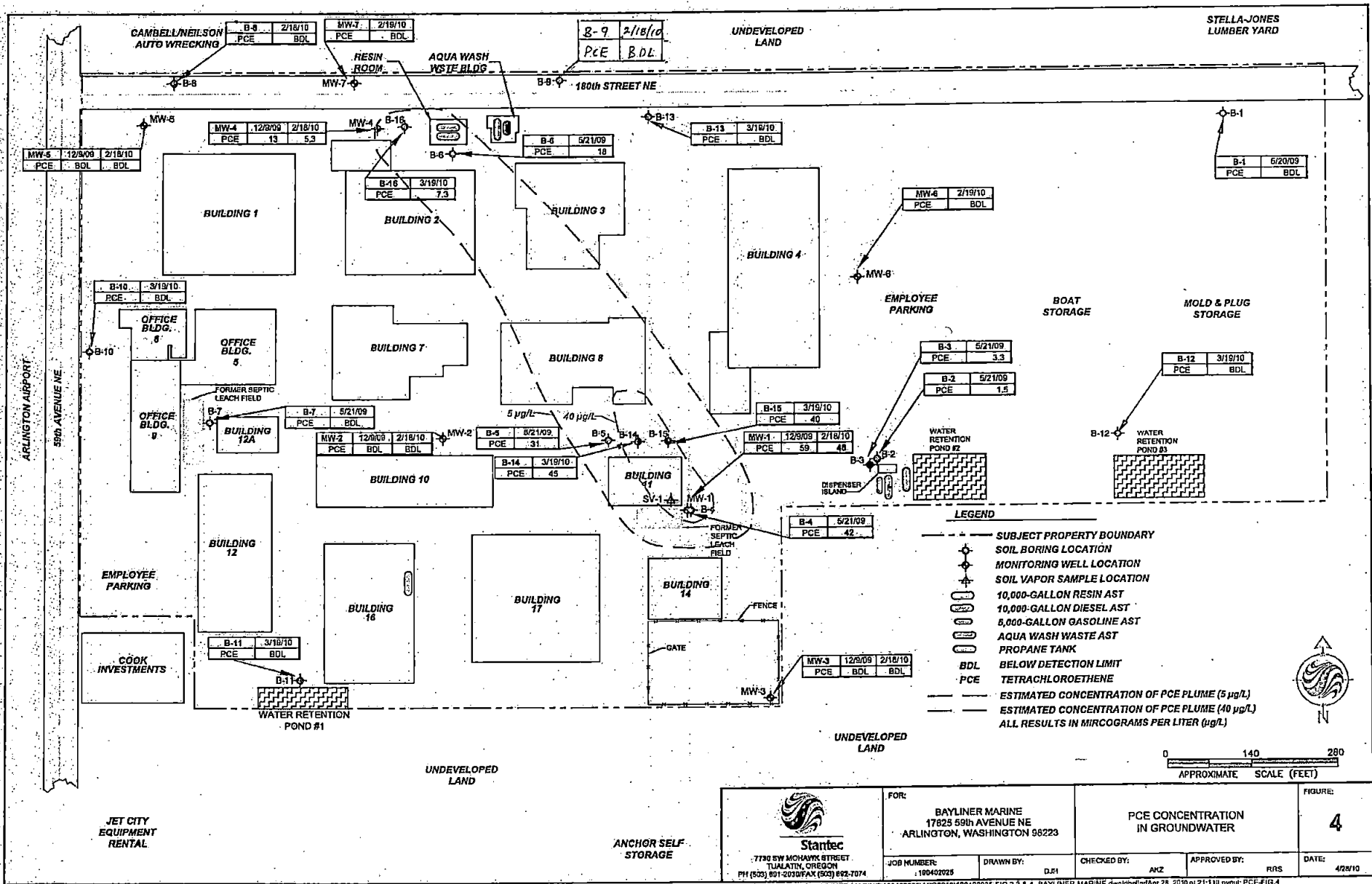
The former Bayliner Marine facility is located at 17825 59th Avenue NE in Arlington and occupies approximately 32.8 acres of land. The facility occupies Snohomish County Tax parcels 31052200401300, 310522402100 & 310522402800 (Township 31N, Range 03E, Section 22, NW ¼ of SE ¼). The facility is located in a predominately Industrial area of Arlington east of the Arlington Municipal Airport.

During a due diligence study for a potential sale of the property performed in early 2009 Stantec Consulting Corporation (Stantec) identified an area of shallow groundwater impacted with tetrachloroethylene (PCE) at concentrations above the MTCA Method A Groundwater cleanup level. No other volatile organic compounds were detected any other samples. The source of the PCE contamination is not known and PCE is reportedly to have not been used by Bayliner Marine in any of their manufacturing processes. However, the highest concentration of PCE in groundwater (42ug/L) was found in the area of a former septic system leach field.

Subsequent Environmental Investigations performed between April 2009 and April 2010 fully characterized the nature and extent of PCE contamination in groundwater. Based upon the data it appears that the PCE plume does not extend beyond the property boundary nor was PCE detected in any of the soil samples submitted for analysis.

2. Geology/Hydrology

The area of the facility is a broad valley that filled with glacial outwash and river alluvium during, and after, the retreat of the last glaciers. These deposits are generally coarse-grained sands and gravels believed to be about 150-feet thick. These deposits are underlain by a layer of glacial till that separates the subsurface aquifer from the deeper confined water bearing zones. Specifically at this Site coarse-grained sandy gravel is present to depths of 15-feet to 25-feet below ground surface (bgs), underlain by finer sand deposits to at least 50-feet bgs. Depth to groundwater ranges seasonally from approximately 15-feet bgs to approximately 22-feet bgs, with a hydraulic gradient predominately to the northwest.



 Stantec 7730 SW MONMOUTH STREET TUALATIN, OREGON PH (503) 891-2030 FAX (503) 692-7074	FOR: BAYLINER MARINE 17825 59th AVENUE NE ARLINGTON, WASHINGTON 98223	PCE CONCENTRATION IN GROUNDWATER		FIGURE: 4
	JOB NUMBER: 180402025	DRAWN BY: DJH	CHECKED BY: AKZ	APPROVED BY: RRS

FILEPATH: \\C:\CLIENTS\BAYLINER MARINE\180402025\APR2010\180402025-FIG 2,3 & 4-BAYLINER MARINE.dwg (sheet of Apr 28, 2010 at 2:11) Layer: PCE-FIG.4