



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

October 18, 2009

Mr. Terry Mathern  
3600 Port of Tacoma Road, Suite 302  
Tacoma, WA 98424

**Re: Further Action at the following Site:**

- **Site Name:** Portac Inc. Sawmill Site
- **Site Address:** 4215 N. Frontage Road, SR509, Tacoma, WA 98424
- **Facility/Site No.:** 1215
- **VCP Project No.:** SW1016

Dear Mr. Mathern:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Portac Inc. Sawmill property (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**

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Is further remedial action necessary to clean up contamination at the Site?

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

This opinion is based on an analysis of whether the remedial action 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**

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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:

- Pentachlorophenol, oil-range total petroleum hydrocarbons, and arsenic in the Groundwater
- Pentachlorophenol, oil-range total petroleum hydrocarbons, and arsenic in the Soil.
- Pentachlorophenol, oil-range total petroleum hydrocarbons, and arsenic in the Sediment.

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



Please note that 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. However, please be advised that Ecology considers the sawmill area and adjacent log yard to both be part of the Portac Site. For the purpose of this opinion letter, Ecology is providing an opinion on the recent sawmill remedial action.

### **Basis for the Opinion**

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This opinion is based on the information contained in the following documents:

1. Wapato Creek Sediment Sampling and Analysis Results, 4215 North Frontage Road, SR 509, Portac, Inc. Sawmill and Log Yard Site, Tacoma, Washington dated September 17, 2009 by Hart Crowser.
2. Portac Catch Basin Sampling and Analysis Memo, Former Portac, Inc. Facility, 4215 North Frontage Road, SR 509, Tacoma, Washington dated June 8, 2009 by Hart Crowser.
3. Lumber Mill Demolition Environmental Cleanup and Testing, Portac, Inc., 4215 North Frontage Road, SR 509, Tacoma, Washington dated February 18, 2009 by Whitman Environmental Sciences.
4. Draft Logyard Ramp Demolition, Portac, Inc., 4215 North Frontage Road, SR 509, Tacoma, Washington dated January 16, 2009 by Whitman Environmental Sciences.
5. Facility Closure Assessment Second Phase, Former Portac, Inc. Facility, 4215 North Frontage Road, SR 509, Tacoma, Washington dated November 3, 2008 by Camp Dresser & McKee Inc.
6. Facility Closure Assessment, Former Portac, Inc. Facility, 4215 North Frontage Road, SR 509, Tacoma, Washington dated August 7, 2008 by Camp Dresser & McKee Inc.

These 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.

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

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## Analysis of the Cleanup

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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 not sufficient to establish cleanup standards and select a cleanup action. The Site is described below.

The Portac, Inc. (Portac) Site is located at the northeastern corner of the intersection of SR 509 and E. Alexander Avenue, in Tacoma, Pierce County, Washington. Portac has operated a saw mill on a portion of the Site since the early 1970s. The other portion of the Site is a former log storage yard that was also operated by Portac. The Site is approximately 10 feet above mean sea level and approximately 900 feet southeast of the Blair Waterway. Wapato Creek borders the Site on the west and drains into the Blair Waterway. The Site has storm water drains that drain to Wapato Creek. The geology of the area is generally sand and silty sand fill underlain by tidal marsh and mudflat deposits of the Puyallup River delta. The fill is likely from materials dredged during the construction of the Blair Waterway and hydraulically placed behind dikes. The tidal marsh sediments are underlain by a complex sequence of interbedded sand and silt deposited by the Puyallup River. The log yard area is slightly higher in elevation than the former mill area mainly due to the use of ASARCO slag as ballast material. Portac paved over and re-engineered the drainage of the log yard in 1989 to comply with a pre-MTCA consent order. Groundwater is present under the Site at approximately 8 to 12 feet below ground surface (bgs) and has been historically documented to flow towards the west (Wapato Creek). Recent groundwater measurements collected by Camp Dresser & McKee, Inc. (CDM) noted both westerly and southwesterly flow direction under a low horizontal hydraulic gradient. The most recent measurements collected by Whitman Environmental Sciences (Whitman) noted a west to northwesterly flow direction under a low horizontal hydraulic gradient.

Past uses at the Site where potential for environmental impact could occur included spraying and dipping of lumber with pentachlorophenol (PCP), movement of lumber out of the buildings on a "green chain" (oil-range hydrocarbons), and the centralized hydraulic system that operated much of the equipment in the buildings, including two hydraulic pump rooms where large spills of hydraulic fluid were reported over the time the mill was in operation. The mill was closed in February 2008.

CDM conducted preliminary closure investigations on the Site in April and June 2008. As part of their investigations, CDM drilled soil borings near the former dip tank, and two former spray booths. Soil and groundwater were tested for PCP, 3-iodo-2-propynyl butyl carbamate (IPBC), ammonia, petroleum hydrocarbons, benzene, toluene, ethylbenzene, and xylenes (BTEX), arsenic, cadmium, and lead. Groundwater sampling confirmed the presence

of free-phase hydrocarbons adjacent to the dip tank, and dissolved PCP and total petroleum hydrocarbon (TPH) concentrations exceeding the MTCA Method A/B Cleanup Levels in that area. TPH as diesel and oil (TPH-Dx and TPH-O, respectively) were detected in the soil near the dip tank at concentrations greater than the MTCA Method A Cleanup Levels.

Investigations conducted in the area of the former machine shop and fueling area did not find evidence of soil or groundwater impacts exceeding MTCA Method A Cleanup Levels.

The Port of Tacoma contracted Hart Crowser to conduct a storm water catch basin sampling program in February 2009. The three catch basins on the former mill portion of the Site were selected for the collection of sediment samples and were submitted for analysis of total metals, including arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc, TPH-D, TPH-O, gasoline-range TPH (TPH-G), polycyclic aromatic hydrocarbons (PAHs), and PCP. In general, analytical results from this catch basin investigation detected elevated concentrations of metals, petroleum hydrocarbons, PAHs, and PCPs. The catch basins are located near historical operations of interest. Since the outfall of the storm water drainage network on the former mill Site discharges directly into Wapato Creek to the west, Hart Crowser recommended additional sediment testing in the creek. This work was conducted on July 23, 2009 and included sampling locations in Wapato Creek, including the downstream property boundary (north of the northernmost storm water outfall), immediately downstream of the southernmost property storm water outfall, immediately downstream of the former dip tank area, the upstream property boundary, and upstream of the property near Alexander Avenue East to provide a representative background sample beyond the tidal influence. These samples were submitted for analysis of arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc, TPH-D, TPH-O, TPH-G, and PCP. The results indicated the presence of metals, TPH-D, and TPH-O in the sediments collected in Wapato Creek. TPH-G and PCP were not detected in any of the sediment samples. The results were compared to the sediment quality standards and only one sample (collected near the discharge point of the southernmost outfall on the Site) exceeded the screening level of 57 milligrams/kilogram (mg/kg) for arsenic.

Based on a review of the above-listed reports, Ecology has the following comments:

1. Groundwater flow directions have been noted to vary slightly from southwest, to westerly, to northwesterly over time. Ecology recommends that groundwater contour maps be prepared quarterly and that both high and low tide measurements be collected. Both high and low tide levels should be plotted each quarter to properly define the flow direction and horizontal hydraulic gradient at the Site.
2. If the groundwater flow direction and gradient are deemed to differ from those recently documented, additional investigation in the areas where groundwater continues to be impacted may be required to re-evaluate the extent of the impacts.

3. The Hart Crowser catch basin sampling and analysis report prepared for the Port of Tacoma noted that following their catch basin sampling event, the storm water system on the Site was cleaned by Portac. Ecology requests any information relating to this cleaning event, including any analytical data and waste disposal certificates.
4. It was noted that the catch basin sediments collected from the Site were impacted by PAHs. Sediment samples should be collected from Wapato Creek for PAHs to identify potential impacts from the catch basin sediments.
5. In accordance with WAC 173-340-7490, a Terrestrial Ecological Evaluation (TEE) needs to be completed for the Site. Please fill out the TEE form and submit it to Ecology. The form can be found on our website at <http://www.ecy.wa.gov/biblio/ecy090300.html>.
6. 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 a written and electronic format. For additional information regarding electronic format requirements, see the website <http://www.ecy.wa.gov/eim>. Be advised that 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. Please ensure that data generated during on-site activities by all consultants is submitted pursuant to this policy. **Data must be submitted to Ecology in this format for Ecology to issue a No Further Action determination.** Be advised that Ecology requires up to two weeks to process the data once it is received.

2. **Establishment of cleanup standards.**

Ecology has determined the cleanup levels and points of compliance you established for the Site does not meet the substantive requirements of MTCA.

a. **Cleanup levels.**

The Site is a former log storage yard, wood treating facility, and mill. Site soils and groundwater were evaluated against the MTCA Method A Cleanup Levels (CUL) for unrestricted land use for petroleum related constituents and metals. Site soils and groundwater were evaluated against MTCA Method B Cleanup Levels for pentachlorophenol. Site sediments were evaluated against the Washington State Sediment Management Standards.

b. **Points of compliance.**

Standard points of compliance are being proposed for the Site; however, additional

investigation into the direction and horizontal hydraulic gradient in groundwater are required prior to determining points of compliance.

**3. Selection of cleanup action.**

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

The selection of soil excavation and removal is sufficient to meet the substantive requirements of MTCA for soil; however, groundwater continues to be impacted by PCP and TPH-O above their respective MTCA Cleanup Levels.

Ecology recommends that the contaminants of concern, including total metals, PAHs, PCP, TPH-D, and TPH-O, continue to be tested quarterly to establish trends in concentrations to select the appropriate cleanup action for groundwater.

**4. Cleanup.**

Ecology has determined the cleanup you performed does not meet the cleanup standards established for the Site.

Whitman was contracted to oversee the building removal and subsequent soil excavation and groundwater investigations. During the demolition and excavations at the dip tank area, a total of 1130 tons of soil were excavated and removed from the Site. Confirmation samples collected from the sidewalls and base of the excavation did not exceed MTCA Method A/B Cleanup Levels for PCP, TPH, or dioxins. During the investigation of the two former PCP spray booths at the saw mill and planer buildings, PCP was identified in groundwater at concentrations exceeding the MTCA Method B Cleanup Level.

Soils tested at the saw mill PCP spray area did not exceed the MTCA Method B Cleanup Levels. Soils encountered at the planer building PCP spray area did exceed the MTCA Method B Cleanup Levels and were excavated and removed from the Site. A total of 128 tons of soil were removed. Confirmation soil samples from the base and sidewalls of the excavation were tested and were found to be below the MTCA Method B Cleanup Level for PCP. Demolition activities in the saw mill encountered soil impacted by hydraulic oil. This soil was excavated and removed from the Site. A total of approximately 745 tons of TPH-impacted soil was removed. Confirmation soil samples from the sidewalls and base of the excavation did not exceed the MTCA Method A Cleanup Level for TPH-O. Groundwater samples collected from the network of monitoring wells on the Site identified concentrations of PCP greater than the MTCA Method B Cleanup level at both the former dip tank area and the former spray booth area of the planer building. The groundwater in the area of the dip tank also exceeded the MTCA Method A Cleanup Level for TPH-O.

Whitman also oversaw the removal of the log ramp area. The ramp was built with a mix of clean fill and ASARCO slag. As part of Portac's lease with the Port of Tacoma, the log ramp was removed down to the grade of the former mill area so the area could be used for temporary vehicle storage. The ramp removal began on September 9, 2008. Materials were segregated according to type and tested to check for levels of arsenic and lead. Those materials that were below the MTCA Method A Cleanup Levels for lead and arsenic (20 mg/kg and 250 mg/kg, respectively) were stockpiled and reused. A total of approximately 2473 tons of wood waste, slag, and soil containing elevated concentrations of arsenic were removed from the Site and disposed of at the LRI landfill in Graham, Washington. Confirmation samples collected from the extents of the excavation indicated that soils impacted with arsenic greater than the MTCA Method A Cleanup Level remained at the base of the excavation. Portac and the Port of Tacoma decided to stop further excavation and restore the area to slope from the higher elevation log yard on the north and east sides to the former mill area on the south and west. The graded area was paved with approximately 4 inches of asphalt in November 2008.

### **Limitations of the Opinion**

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**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. Terry Mathern  
October 18, 2009  
Page 8

### Contact Information

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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](http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm). If you have any questions about this opinion, please contact me at (360) 407-7263 or via email at [tmid461@ecy.wa.gov](mailto:tmid461@ecy.wa.gov).

Sincerely,



Thomas Middleton L.H.G.  
SWRO Toxics Cleanup Program

TMM/ksc: Portac Sawmill site Tacoma site fa

Enclosures:

Figure 1 – Site Location Map

Figure 2 – Mill Site Plan

Figure 13 – Groundwater Contour Map (May 2009) – Whitman Env. Sciences

Figure 4 – Potentiometric Surface Map Low Tide (Sept 2008) Camp Dresser & McKee

Figure 5 – Potentiometric Surface Map High Tide (Sept 2008) Camp Dresser & McKee

Tables 2,3,4,6,8,9 and 12 – Soil Analytical Summaries - Whitman Enc. Sciences

Tables 5,13 – Groundwater Analytical Summaries - Whitman Enc. Sciences

Table 11 – Summary of Groundwater Measurements – Whitman Enc. Sciences

By certified mail: (7008 2810 0001 3941 1542)

cc: Daniel Whitman  
Mr. Bill Evans, Port of Tacoma  
Rob Olsen, Pierce Co Health Dept  
Scott Rose – Ecology  
Dolores Mitchell – Ecology (w/o enclosures)