



WASHINGTON STATE  
DEPARTMENT OF  
E C O L O G Y

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Southwest Regional Office  
Toxics Cleanup Program  
PO Box 47775  
Olympia, WA 98504-7775  
360-407-6240

## TRANSMITTAL MEMO

Date: July 12, 2006

TO: Steve Misiurak  
City of Gig Harbor

RE: *Eddon Boat Park*  
*SW0688*

Subject: Explanation of Timeline

**NOTE:** The date on the determination letter reflects the date the decision was made and the billing process began. We do not release determination letters until payment has been received.

Ecology Determination date: June 29, 2006

Ecology Billing Sent: June 30, 2006

Your Payment Processed: July 11, 2006

Ecology Determination letter mailed/sent: July 12, 2006





STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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

**CERTIFIED MAIL**

June 29, 2006

Steve Misiurak  
City of Gig Harbor  
3510 Grandview Street  
Gig Harbor, Washington 98335

**Re: Opinion pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the following Hazardous Waste Site:**

- Name: Eddon Boat Park
- Address: 3711 and 3805 Harborview Drive, Gig Harbor, WA
- Facility/Site No.: 1301959
- VCP No.: SWO688

*(Response to Technical Memorandum No. 3)*

Dear Mr. Misiurak:

Thank you for submitting documents regarding your proposed remedial action for the Eddon Boat Park (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 whether your proposed remedial action is likely to be sufficient to meet the specific substantive 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:

AHA-1 Area

- Petroleum Hydrocarbons in Soil
- Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil





Heating Oil Aboveground Storage Tank

- Petroleum Hydrocarbons in Soil
- Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil

AG-9 Area

- Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil

Sitewide

- Petroleum Hydrocarbons in Groundwater
- Carcinogenic Polycyclic Aromatic Hydrocarbons in Groundwater
- Semi-volatile Organic Compounds in Groundwater
- Metals in 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 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.

For the current Opinion Letter, Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed remedial action(s):

1. June 12, 2006, Anchor Environmental, L.L.C. Technical Memorandum No. 3, Work Plan for Proposed Investigation Activities, Eddon Boat Park, 3711 and 3805 Harborview Drive, Gig Harbor, WA.

The reports listed above will be kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. Appointments can be made by calling the SWRO resource contact, Leslie Koziara, at (360) 407-6365.

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

- Petroleum Hydrocarbons in Soil
- Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil
- Metals in Soil
- Semi-volatile Organic Compounds in Sediments

- Carcinogenic Polycyclic Aromatic Hydrocarbons in Sediments
- Polychlorinated Biphenyls in Sediments
- Metals in Sediments
- Tributyltin in Sediments
- Petroleum Hydrocarbons in Groundwater
- Carcinogenic Polycyclic Aromatic Hydrocarbons in Groundwater
- Semi-volatile Organic Compounds in Groundwater
- Metals in Groundwater

The Site is more particularly described in Enclosure A to this letter which includes a detailed Site diagram. The description of the Site is based solely on the information contained in the referenced documents.

Based on a review of your proposed remedial action and supporting documentation listed above, Ecology has determined that the proposed interim remedial action **is likely to be sufficient to meet the specific substantive 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 provided that the additional changes in the following paragraph are made to the work plan for monitoring the following release(s) at the Site:**

AHA-1 Area

- Petroleum Hydrocarbons in Soil
- Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil

Heating Oil Aboveground Storage Tank

- Petroleum Hydrocarbons in Soil
- Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil

AG-9 Area

- Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil

Sitewide

- Petroleum Hydrocarbons in Groundwater
- Carcinogenic Polycyclic Aromatic Hydrocarbons in Groundwater
- Semi-volatile Organic Compounds in Groundwater
- Metals in Groundwater

**Please revise the work plan to incorporate the following comments:**

1. All groundwater analyses for polynuclear (polycyclic) aromatic hydrocarbons (PAHs) should include the full 8270 (semi-volatile organic compound) list as well as a separate low-level analysis for carcinogenic PAHs (cPAHs) using 8270-Specific Ion Methodology (SIM).
2. AG-9 Area. Carcinogenic PAHs were previously detected at location AG-9 at a depth of 8- to- 10-feet below ground surface (bgs). The work plan states that a soil sample will be collected from the groundwater monitoring well at this location at a depth of 8- to- 10-feet bgs. Due to grading at the site, ground surface elevations may have changed. Please verify the ground surface elevation of the proposed monitoring well near AG-9 and modify sampling depths accordingly. Also, if contamination is detected in the equivalent 8- to- 10-feet bgs sample, additional analyses will be necessary to determine the depth of contamination. Therefore, it is recommended that additional samples be collected at depths greater than 10-feet bgs (equivalent) and be held in archive. All soil samples from the AG-9 Area analyzed for polynuclear (polycyclic) aromatic hydrocarbons (PAHs) should include the full 8270 (semi-volatile organic compound) list as well as a separate low-level analysis for carcinogenic PAHs using the 8270-Specific Ion Methodology (SIM).
3. Above-ground Heating Oil Tank. Samples for PAH analyses from the vicinity of the above-ground heating oil tank should consist of a low-level analysis for carcinogenic PAHs using the 8270-Specific Ion Methodology (SIM).
4. AHA-1 Area. The number of confirmation samples collected should be as per the October 2005 Opinion Letter. All soil samples from the AHA-1 Area should be analyzed for the following analyses:
  - a. Full 8270 (semi-volatile organic compound) list
  - b. Separate low-level analysis for carcinogenic PAHs using the 8270-Specific Ion Methodology (SIM).

- c. Petroleum hydrocarbons by the hydrocarbon identification method (HCID) with follow-up total petroleum hydrocarbon analyses if hydrocarbons are detected.
- d. Also, the excavation bottom sample for volatile organics compounds analysis should be collected and prepared using EPA Method 5035A.

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 in both a written and electronic format. Additional information regarding electronic format requirements, see the website <http://www.ecy.wa.gov/eim>. All laboratory analyses shall be performed by the State of Washington Certified Laboratory for each analytical method used.

**This opinion does not represent a determination by Ecology that the 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 an independent remedial action report to Ecology upon completion of the remedial action 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.



Mr. Steve Misiurak  
June 29, 2006  
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If you have any questions regarding this opinion, please contact me at (360) 407-6247  
or via e-mail at [stee461@ecy.wa.gov](mailto:stee461@ecy.wa.gov).

Sincerely,



Steve Teel, LHG  
Hydrogeologist  
Toxics Cleanup Program  
Southwest Regional Office

ST/ksc:SW0688 Eddon Opinion on Proposed RA

Enclosures

Cc: John J. Renda, R.G., Anchor Environmental, L.L.C.  
David Templeton, Anchor Environmental LLC  
Lewis Bud Whitaker, Inspectus  
Mark Larsen, RETEC  
Chuck Cline - Ecology  
Joyce Mercuri - Ecology  
Robert Warren - Ecology

### ENCLOSURE A

The property is on the shore of Gig Harbor, in the town of Gig Harbor. It is generally sloping toward shore, with some flat areas. There were two bulkheads (at 90 degree angles) present between upland and tideflat at south end, then the shoreline is unprotected north in front of the house to the dock and marine railway. Primary use of the north end of the site was for a boat repair facility, which included two marine railways, a boat repair building, and a dock (facilities still present). A single family residence is adjacent to the boat facility to the south. There were two additional buildings in the south part of the site (both now demolished) – one of the buildings (known as the antique shop “Pandoras”) was built around 1950, and was used for an undetermined amount of time as a City maintenance shop. The second building (age unknown - formerly used by Wild Birds Unlimited) was originally used as the office for a former gravel loading operation that operated at the site. There was a sloping driveway associated with former gravel operation that runs between the two buildings at the south end, and terminates in a below-grade concrete enclosure where trucks used to park for receiving gravel. There was reportedly a crane used for loading gravel between the barges and the trucks, but its location has not been identified. There was an above-ground 500 gallon heating oil tank located at the southwest corner of the boat building, and there was an underground heating oil tank on the north side of the house. The City of Gig Harbor intends to convert the property to a park, but they do intend to preserve the historic boat repair building and marine railways. The house may be removed. Park development plans have not been finalized.

Originally the VCP was submitted by a previous property owner for this land, plus the 2 parcels to the North. That VCP was refunded because in 2004, the City of Gig Harbor purchased the two subject parcels, and the VCP was resubmitted by the City. The parcels include tidelands and it does not appear that there are other property owners of the tidelands. The following parcel information was obtained from the Pierce County Tax Assessor’s web site:

3805 Harborview Drive: Assessor’s Parcel Number (APN) 0221053074; 0.95 acres

3711 Harborview Drive: APN 0221053050; 1.91 acres

The Site appears to primarily consist of the two-parcel property, a small area of land on the adjacent parcel to the north of the boat repair building - where a hand auger sample indicates some CPAH are present above the MTCA, Method A cleanup

standard for unrestricted land use, and adjacent sediments. However, the total area of affected sediments has not yet been defined.

Although Gig Harbor is known to be affected by the Tacoma Smelter Plume, results for arsenic from surface soil samples were not elevated, indicating this site is apparently not affected by area wide contamination.

The following environmental concerns are present in the **uplands** portion of the site. **Environmental concerns in the site's sediments management units will be summarized in a separate site summary form.** A previous Opinion Letter was issued on October 19, 2005.

**Uplands Soil Contamination:** Previous uplands soil characterization identified the following areas of concern:

AHA-1 Area: A sample from location AHA-1 (1.5- to- 3-foot depth) had a concentration of 384 total carcinogenic polycyclic aromatic hydrocarbons (CPAHs); this value exceeds the Model Toxics Control Act (MTCA) Method A Cleanup Level for unrestricted land use. This sample location is just outside of a door on the north wall of the boat repair building, where it is reported that some disposal or storage of chemicals occurred in the past. *Assessment and remediation of this area needs to be performed.*

Heating Oil Underground Storage Tank: A sample from location AG-5 (1.0- to- 2.5-foot depth) near the heating oil underground storage tank (UST) adjacent to a residence (former Hoppen house) had a concentration of 417 total CPAHs; this value exceeds the MTCA Method A Cleanup Level for unrestricted land use. This UST was subsequently removed; upon removal of the tank, approximately 0.5-feet of water was present at the bottom of the 4-foot deep excavation. Soil samples were collected on the north, south, east, and west sidewalls (2.5-foot depth), at the bottom center, and a five-point composite from the soil stockpile for analysis of petroleum hydrocarbon identification (HCID), total petroleum hydrocarbons – gasoline range (TPH-G), total petroleum hydrocarbons – diesel range (TPH-D), and semi-volatile organic compounds. A water sample was also collected. All of the sidewall samples were below the Cleanup Level. However, the soil and water samples from the bottom of the excavation exceeded the Cleanup Level for TPH-G and TPH-D and the soil stockpile sample exceeded the level for cPAHs. The water from the excavation bottom was pumped to a 55-gallon drum for disposal and

the excavation was deepened an additional 3-feet and a bottom sample was collected; all results for the above constituents were below the cleanup level. Water was initially not present at the bottom of the excavation but after a period of four days, water was present. A sample of this water showed no detectable TPH-G, TPH-D, or cPAH results.

Heating Oil Aboveground Storage Tank: A heating oil aboveground storage tank (AST) was formerly present at the west end of the boat building. Petroleum hydrocarbon contamination was reported from a soil boring adjacent to the AST (boring HB3). The previous Opinion Letter stated that additional characterization in this area was necessary. *Assessment and remediation of this area still needs to be performed.*

AG-8 Area: A sample from location AG-8 (0- to- 0.5-foot depth) in the gravel parking area behind the former city maintenance building had concentrations of TPH-O (2,160 milligrams per kilogram [mg/kg]) and lead (586 mg/kg) that exceeded the MTCA Method A Cleanup Level for unrestricted land use (cPAHs were not detected). The next sample, from the 1.5 – 3 foot depth, contained only 4 mg/kg lead. Nearby sample AG-7 5 (0- to- 0.5-foot depth) also contained detectable TPH-O (1330 mg/kg); however, this result is below the Cleanup Level of 2000 mg/kg. A 13-foot area was excavated around the AG-8 location to a depth of 2-feet below grade. Discrete confirmation soil samples were collected from the sidewalls (three samples) the bottom (two samples) for TPH and lead; all results were below the Cleanup Level.

Orchard Area: In the previous Opinion Letter, Ecology recommending collecting samples for lead and arsenic analysis from the orchard. During a March 13, 2006 site visit, it was agreed that a 5-point composite sample from 0- to- 0.5-feet below ground surface (and below the sod) would probably be adequate. The analytical results from this composite sample were all below the Cleanup Level.

Lower Terrace: During the March 13, 2006 site visit, Ecology expressed a concern regarding potential residual soil contamination from past practices at the former city maintenance building and/or from a discarded above-ground oil storage tank that had been discovered during brush-clearing work. To address these concerns, three shallow test pits were excavated during the site visit to check for visual indications of contamination or improper disposal. Three oil filters were discovered in one of the test pits. On March 29, 2006,

three test pits were excavated from this area and one confirmation sample was collected from each pit for TPH – Hydrocarbon Identification Method (HCID), volatile organic compounds (VOCs), cPAHs, and metals. All results were below the Method A Cleanup Level for Unrestricted Uses.

Crane Area: In the previous Opinion Letter, Ecology requested that the location of the gravel loading crane should be identified and sampled. During a site visit in February 2006, it was agreed that Ecology would revisit the site after brush clearing was completed to assess if further investigation in the crane area was necessary. During the March 13, 2006 site visit Ecology inspected the former crane area and determined that no further investigation was necessary.

AG-9 Area: A sample from location AG-9 (8.0- to- 10-foot depth) had a concentration of 378 total cPAHs; this value exceeds the MTCA Method A Cleanup Level for unrestricted land use. The source of the cPAH contamination at AG-9 was tentatively identified as creosote and therefore may be from a buried timber. *Assessment and remediation of this area needs to be performed.*

**Groundwater:** Groundwater was obtained from five of the push probe borings (AG-4, -5, -6, -9, and -10). Since the pathway of concern for shallow groundwater on this site is most likely to be discharge to surface water, groundwater concentrations were compared to the appropriate water quality criteria (Washington State Marine Water Quality Criteria (WAC 173-201A), and the Clean Water Act Section 304 criteria for human health if available). However, a potability evaluation of groundwater should be performed to determine if drinking water standards apply.

- Selected metals results in groundwater at AG-4, -6, and -9 are above Marine Water Quality Criteria (WAC 173-201A). Locations AG-6 and -9 exceed these criteria for zinc and lead; locations AG-4, and -6 exceed the copper criteria; and mercury was above the criteria at AG-6.
- Arsenic is slightly above the 5 parts per billion (ppb) Federal drinking water standard in AG-6 (6.7 ppb).
- Metals in groundwater are above the Federal human health criteria (Section 304 Clean Water Act, and/or National Toxics Rule) for arsenic in surface water (AG-4, -6, and -9) and mercury (AG-6).
- TPH is present in boring AG-9, at the south end of the site, slightly above the Method A standard for groundwater.

*Groundwater monitoring wells should be installed so that additional assessment of groundwater concentrations can be performed.*

Cleanup work at the site is sufficient to address soil contamination at the heating oil underground storage tank, AG-8 area, orchard area, lower terrace, and the crane area. The workplan proposes to perform further uplands soil characterization and/or remediation at the AHA-1 area, heating oil above-ground storage tank, and the AG-9 area. The workplan also proposes to install three groundwater monitoring wells to further define the type and extent of groundwater contamination.

**ATTACHMENT (from consultant report)**

Figure 1, Proposed Investigation Activities.



