



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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August 2, 2005

Mr. Ross W. Dunning, P.E.
Kennedy/Jenks Consultants
32001 32nd Avenue South, Suite 100
Federal Way, WA 98001

Dear Mr. Dunning:

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

- Name: Harborview Park Site
- Address: 1621 Mukilteo Boulevard, Everett, WA 98203
- VCP No.: NW 1218

Thank you for submitting the proposed *Remedial Action Plan, Harborview Park Site, Everett, Washington, July 2005* 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 cleanup action is likely to be sufficient to meet the substantive requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC. 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.

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Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed cleanup action and, as applicable, any remedial actions previously conducted at the Site:

1. *Remedial Action Plan, Harborview Park Site, Everett, Washington, July 2005, by Kennedy/Jenks Consultants;*
2. *Preliminary Site Assessment, Former Bunker C Fuel Oil Storage Site, Mukilteo, Washington, May 15, 1997, by GeoEngineers;*
3. *Site Investigation Report, Harborview Park Site, Everett, Washington, September 1999, by Kennedy/Jenks Consultants;*
4. *Site Investigation Report and Preliminary Remedial Evaluation, Harborview Park, January 19, 2004, by Kennedy/Jenks Consultants;*
5. *Sediment Sampling and Analysis Plan, Harborview Park, Everett, Washington, May 2005, by Kennedy/Jenks Consultants; and*
6. Response to Washington State Department of Ecology Comment Memo, 1 June 2005 Harborview Park Sediment Sampling and Analysis Plan dated May 2005, June 17, 2005, by Kennedy/Jenks Consultants.

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 may be made by calling the NWRO resource contact at 425-649-7190.

The Site is defined by the extent of contamination caused by the following releases:

- Total Petroleum Hydrocarbons in soil; and
- Polynuclear Aromatic Hydrocarbons in soil.

The Site slopes steeply to the north toward Possession Sound. That portion of the site from the shoreline to the base of the slope is referred to as "the lowland area". Upslope from lowland area, the terrace area that supported the former aboveground storage tanks, is the "upland area".

Additional investigations have been proposed for the beach area and offshore sediments. Cleanup action for these two areas, if necessary, will be addressed in the remedial action plan for the beach area and offshore sediments.

The results of the investigation identified the presence of petroleum hydrocarbon compounds representative of Bunker C in soil at the site. At the lowland area in the vicinity of the drainage ditch, petroleum hydrocarbons were found at concentrations greater than MTCA Methods A/B criteria in soil samples obtained from depths up to two feet below ground surface. Potentially contaminated areas such as beneath the active railroad tracks were not investigated. At the upland area, Bunker C contaminated soils are present in pockets scattered throughout between the ground surface and 2.5 feet below ground surface. Deeper pockets of Bunker C contaminated soils are present at depths up to eight feet in the eastern portion of the site, 15 feet below ground surface beneath perimeter road, six feet below the ground surface in the north-central portion of the site, and six feet below ground surface along the northeastern boundary of the wetland.

The Remedial Action Plan proposes the following cleanup actions:

- For the lowland drainage ditch area, excavation to approximately 18 inches below ground surface, lined with low-permeability geotextile and covered with quarry spalls.
- For the upland area, excavation to a depth of two feet below ground surface throughout the terrace. In areas with deeper contamination, excavation to a maximum depth of 10 feet below ground surface. "Soil exceeding cleanup levels remaining after excavation would be contained beneath a vegetative cover, and institutional controls would be implemented."

Based on a review of your proposed cleanup action and supporting documentation listed above, **Ecology has determined that the proposed cleanup action is not likely to be sufficient to meet the substantive requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the contamination at the Site.**

Based upon the information listed above, Ecology has determined:

The disproportionate cost analysis presented in the Remedial Action Plan is inadequate. To comply with WAC 173-340-360(3) (e), please provide cost estimates, reflective of current fair market values and benefits for various cleanup alternatives for the lowland drainage ditch area and for the upland area. A base case for both of these areas is soil cleanup to comply with the 15 feet below ground surface point of compliance for the direct contact pathway.

Additionally, please review/response to the following Ecology comments on the Remedial Action Plan.

1. Section 1.0, page 1-1, line 28: "The soil exceeding cleanup levels requiring removal from the former AST area is expected to extend to depths of

approximately 8 feet below present grade at some locations.”

This depth, eight feet below ground surface, is in conflict with the maximum excavation depth of 10 feet below ground surface specified in Section 3.3.1 for Option 2. Please review/clarify.

2. Section 3.3, page 3-2, line 14: “As discussed previously, the proposed action in the lowland area is to excavate the ditch”

For clarity, please amend to identify this section as lowland cleanup action.

3. Section 3.3.1, page 3-3, line 14: “Selection of the Preferred Cleanup Action”.

For clarity, please amend to identify this section as upland cleanup action.

4. Section 3.3.1, page 3-4, line 5: “Soil exceeding cleanup levels remaining . . . and institutional controls would be implemented“

Would the “cleaned” area outside of the “Wetland Mitigation Planting Plan” area be covered by vegetation? If yes, please identify the type(s) of vegetation and maintenance requirements in the compliance-monitoring plan.

Please identify the types of institutional controls and the maintenance requirements. Because of the presence of residual contamination, a restrictive covenant will need to be recorded with the appropriate local land-use agency.

5. Section 3.3.1.3, page 3-9, line 7: “Option 2 can be implemented within a few months, and permitting is currently underway.”

“Restoration time frame” is defined in MTCA as “the period of time needed to achieve the required cleanup levels at the points of compliance established for the site.” For the site, the point of compliance is the soils throughout the site from the ground surface to fifteen feet below the ground surface. Because of the post cleanup residual contamination, especially in the lowland ditch drainage area, the restoration time frame for the selected cleanup actions is considerable rather than as months as stated in the plan. The Remedial Action Plan incorrectly used this term interchangeably as the “implementation time frame”. Please revise reflecting the correct definition.

6. Section 4.1, page 4-2, line 4: "1.0 mg/kg for total cPAH . . ."

Table 1 identifies a cPAHs cleanup level of 0.1 mg/kg. Please review/revise.

7. Section 4.2, page 4-3, line 4, "Quarterly groundwater monitoring is proposed for 1 year after soil removal activities."

Depending on the results of the cleanup actions and groundwater monitoring, groundwater monitoring may be extended beyond the proposed one-year period. To verify the cleanup action attained cleanup standards, i.e., performance monitoring, four consecutive quarterly monitoring results below the state criteria are needed for the groundwater no further action determination. Please review/clarify.

8. Appendix A, page A-3, line 1: "Performance Monitoring Sampling and Analysis Plan"

Presented in the following is performance monitoring requirements necessary for a no further action determination.

- Upland Soil – Soil sampling results compliance with the specified cleanup levels. As-built documents confirming cover placement per the excavation plan.
- Upland Ground Water – Four consecutive quarterly monitoring results below the state criteria.
- Lowland Drainage Ditch – As-built documents confirming excavation and cover placement.
- Institutional Control – Copy of the deed restriction placed on the property.

9. Appendix A, page A-8, line 9: "Confirmational Monitoring"

Because of the post cleanup residual contamination, please discuss the conformational monitoring per WAC 173-340-410(1) (c). Specifically, please address the long-term monitoring requirement per WAC 173-340-410(3).

To protect against re-contamination of the environment, especially the beach and offshore sediments from residual contamination from the lowland drainage ditch area, the plan shall contain contingency plans and trigger levels, which if reached, will trigger implementation of the contingency plan at this site. Furthermore, should contingency plan be triggered at this site, Ecology will withdraw the no

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further action determination until confirmation of the additional cleanup action has attained cleanup standards.

10. Drawing C-1, General Notes 9: "A minimum of 6" of clean topsoil . . ."

"Imported" clean topsoil? Please clarify.

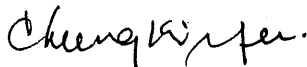
Please also note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

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 360-407-6991.

Sincerely,



Chung Ki Yee
SC&UST Toxics Cleanup Program

CKY: lt

cc: Nnamdi Madakor, Ecology
Dale R. Myers, VCP Administrator, NWRO

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