



February 23, 2017

**822.005.01.05**

Edmonds School District No. 15  
Business & Operations Office  
20420 - 68th Ave. W.  
Lynnwood, WA 98036-7400

Attention: Mr. Stewart Mhyre

**PRELIMINARY CLEANUP ACTION APPROACH  
EDMONDS SCHOOL DISTRICT  
FORMER MAINTENANCE AND TRANSPORTATION FACILITY  
2927 ALDERWOOD MALL BOULEVARD  
LYNNWOOD, WASHINGTON**

Dear Mr. Mhyre:

PES Environmental, Inc. (PES) has prepared this letter to summarize the anticipated cleanup action alternative to address environmental contamination present on the Edmonds School District's Former Maintenance and Transportation Facility (Property) located in Lynnwood, Washington. The anticipated cleanup action was developed based on the available information presented in the preliminary Remedial Investigation (RI) Report and is subject to the analysis and conclusions reached in our Feasibility Study. The overall objective of the cleanup action summarized below will be to obtain, if possible, an unrestricted No Further Action (NFA) opinion letter from the Washington Department of Ecology (Ecology) pursuant to the requirements of the Model Toxics Control Act (MTCA) and its implementing regulations (Chapter 173-340 Washington Administrative Code [WAC]).

**PRELIMINARY CLEANUP ACTION SUMMARY**

Based on the preliminary RI information, cleanup actions will be required at two general areas within the Property: (1) the eastern portion of Lot 4 (Lot 4E), and (2) the central portion of Lot 7. The primary contaminants of concern are Total Petroleum Hydrocarbons (TPH) as gasoline (TPH-G), diesel (TPH-D), and oil (TPH-O), with lower concentrations of select volatile organic compounds (VOCs) also present in the southwestern portion of Lot 4E. In both areas, contamination exceeding applicable cleanup levels (CULs) appears to be limited to shallow soil and groundwater (generally less than 15 feet deep).

The preliminary cleanup action identified for implementation at the Property includes the following components:

1. Demolition of the remaining building foundations to facilitate excavation of contaminated soil;

2. Removing and stockpiling unsaturated soil (i.e., located above the seasonally high water table) above areas where soil and/or groundwater exceeding CULs is present. A portion of the unsaturated soil will require offsite disposal, while the remainder may be used as backfill;
3. Excavation of saturated soil (i.e., located below the seasonally high water table) and the groundwater contained within the saturated soil from areas exceeding CULs. This will include removing:
  - a. Approximately 8,500 tons soil from Lot 4E; and
  - b. Approximately 5,300 tons of soil from Lot 7, including over 900 tons of soil that contains asbestos containing material (ACM) debris;
4. Dewatering of the excavation areas as necessary to facilitate the excavation activities. Groundwater removed during excavation dewatering would be pumped into temporary storage tanks and treated as necessary prior to discharge to the sanitary sewer;
5. Removal of the existing underground storage tanks (USTs) and associated piping on Lot 4E, including removal of contaminated soil and groundwater encountered during the UST and piping removal activities;
6. Collection and analysis of soil samples from the limits of the remedial excavations (e.g., bottom and sidewalls) to document that all soil exceeding CULs has been effectively removed; and
7. Backfilling the excavations with chemically amended backfill to facilitate bioremediation of any residual contamination in groundwater that may flow back through the excavations.

After completing the cleanup actions listed above, groundwater monitoring downgradient of the excavated areas would be conducted quarterly for one year to document that CULs have been met. At this point, the documentation of the cleanup action would be submitted to Ecology with a request for an NFA determination. It is not expected that an environmental covenant would be required following the successful implementation of the cleanup action because all contamination exceeding applicable CULs will be removed.

Other cleanup action alternatives, including limited hot spot excavation and *in situ* treatment, were evaluated in the cleanup action development process and will be further evaluated in the final Feasibility Study. In the preliminary analysis, however, these alternative approaches were not selected either because they were substantially more expensive than the selected cleanup action without providing adequate additional environmental benefit, and/or because meeting environmental cleanup standards necessary to receive an unrestricted NFA determination from Ecology was considered unlikely.

## PRELIMINARY CLEANUP ACTION COSTS

A *preliminary* estimate of cleanup costs associated with the cleanup action described above was developed based on previous experience with similar sites and is summarized below:

- **Capital Costs** – \$3,400,000 to \$4,400,000. This estimate includes taxes, permitting/engineering, and a 20% contingency.
- **Monitoring and Reporting Costs** – \$200,000 to \$300,000. Includes post-cleanup monitoring, reporting to Ecology, and monitoring well abandonment costs.
- **Overall Cleanup Action Cost Range** – \$3,600,000 to \$4,700,000.

## LIMITATIONS

This summary is based on information currently available to PES and is provided without warranty of any kind. The Feasibility Study (FS) Report that will fully evaluate the development and selection of the final cleanup action for the Property is ongoing and, an FS Report is expected to be submitted to Ecology by early June 2017. The reader is instructed to refer to the RI Report for information related to the nature and extent of contamination, and conduct its own due diligence concerning the Property, site conditions, and regulatory status. Any warranty, either expressed or implied as to any of the foregoing or other information provided herein is expressly disclaimed.

Please contact us if you have any questions.

Sincerely,

**PES ENVIRONMENTAL, INC.**



Daniel Balbiani, P.E.  
Principal Engineer



Brian O'Neal, P.E.  
Associate Engineer