

Site Hazard Assessment Recommendation for No Further Action

**Dole Northwest Fruit Birchmount Orchard
3717 Crestview St.
Wenatchee, Chelan County 98801
Facility Site ID No. 83451357
Township 23N Range 20E Section 17
Lat 47.484⁰ N Long 120.356⁰ W
April 2, 2010**

Background and Site Description

The 2.5 acre site is located north of the Wenatchee city limits approximately one mile north of Highway 2. Topography slopes moderately to the south. The Wenatchee River is approximately 1.5 miles south and the Columbia River is approximately two miles east of the site. A few private wells are located within two miles of the site, but public drinking water wells are located more than six miles to the north near Rocky Reach dam. In 1993 Sage Earth Sciences was contracted to remove three underground storage tanks (USTs) which were used for storage of diesel and gasoline for orchard operations.

Tank Removal, Soil Sampling, and Analysis

Following removal of the USTs, soil samples were taken from each excavation and analyzed for Total Petroleum Hydrocarbons-Gasoline (TPH-Gx) and Total Petroleum Hydrocarbons-Diesel (TPH-Dx). Results of the analyses showed that the soil was contaminated with petroleum hydrocarbons at levels exceeding Model Toxics Control Act (MTCA) Method A levels. Approximately 600 cubic yards of petroleum-impacted soil was excavated from the vicinity of the USTs and stockpiled at the site. Clean fill was used to backfill the excavations.

Remediation Procedure, Results and Conclusions

Bioremediation was chosen as the most feasible alternative for treatment of the excavated petroleum-impacted soils. Three bioremediation pads were constructed with geotextile liners between the soil surface and the contaminated soil to prevent downward movement of contaminants. The excavated soil was evenly spread over the three pads to a depth of approximately two feet. Monitoring of the soil on the bioremediation pads occurred approximately monthly. Four composite samples were collected from each pad and sent to Pacific Northern Analytical in Redmond, WA for analysis of petroleum hydrocarbons. After one year the petroleum hydrocarbon levels decreased to levels below MTCA Method A. After the targeted cleanup levels were met, the remediated soils were used as fill material at various locations on the property.

Recommendation

Based on the results of this SHA and the results from ERM-Enviroclean Northwest's 1994 report, it is recommended that this site receive no further action under MTCA, based on WAC 173-340-310(5)(d)(ii): that a hazardous release has occurred at some time in the past at this site, but does not pose a significant threat to human health or the environment.

References used for report

1. ERM-Enviroclean Northwest, Inc. report dated September, 1994
2. Water well reports on file at Chelan-Douglas Health District
3. Washington Department of Ecology Well Log Image system.
4. Washington Department of Health Source Water Assessment Program Maps.
5. Site visit by Chelan-Douglas Health District on March 26, 2010



Dole Northwest Fruit Birchmount Orchard March 26, 2010