



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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

CERTIFIED MAIL

December 8, 2005

Jennifer Olson
Landau Associates
950 Pacific Avenue, Suite 515
Tacoma, WA 98407

Re: No Further Action Determination under WAC 173-340-515(5) for the following Hazardous Waste Site

- Name: Campus Glen Subdivision of Meridian Campus Development
- Address: Northwest intersection of Willamette Drive NE and Campus Glen Drive, NE, Thurston County, Washington
- Facility/Site No.: 4986926
- VCP No.: SW0723

Dear Ms. Olson:

Thank you for submitting your independent remedial action report for the Campus Glen Subdivision for review by the State of Washington 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 further remedial action is necessary at the Site 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.



Ecology's Toxics Cleanup Program has reviewed the following information regarding the Site:

- Cleanup Action Plan and Site Characterization, Meridian Campus Development, Lacey, Washington, Landau Associates, June 16, 2005
- City of Lacey subdivision plats for Campus Glen (3717093) and Campus Glen Division 2 (3742628).

The documents 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 at (360) 407-6365.

The Site is defined as the Campus Glen Subdivision and Campus Glen Division 2 properties, where soils became contaminated with arsenic from atmospheric deposition from the smokestack emissions of the former Asarco copper smelter in Ruston, Washington. This site consists of properties within the areawide contamination zone identified by Ecology as the Tacoma Smelter Plume.

The Site is more particularly described in Enclosure A to this letter, which includes plat maps, legal descriptions, detailed Site diagrams, and rationale for this determination of no further action. The description of the Site is based solely on the information contained in the documents listed above.

Based on a review of the independent remedial action report and supporting documentation listed above, **Ecology has determined that the independent remedial action(s) conducted at the Site are 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.** Therefore, pursuant to WAC 173-340-515(5), Ecology is issuing this opinion that **no further remedial action is necessary** at the Site under MTCA.

Based on this no further action determination, Ecology will update the status of the Site on its site database and remove the Site from the Confirmed and Suspected Contaminated Sites List (CSCS list). The site has is listed on the CSCS list as the Campus Glen Subdivision, and is a 'daughter' site to the Meridian Campus site, which is in turn listed as a 'daughter' site to the Tacoma Smelter Plume.

This no further action determination does not apply to any other release(s) or potential release(s) of contaminant(s) that may impact any other portion of any property impacted by this Site, or any other property owned or operated by Meridian Campus Development Partners, LLC.

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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 and further remedial action may be required at the Site.

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 successfully completing cleanup under the Voluntary Cleanup Program (VCP). If you have any questions regarding this opinion, please contact me at (360) 407-6260.

Sincerely,



Joyce Mercuri, Site Manager
SWRO Toxics Cleanup Program

JM/ksc:Campus Glenn NFA Opinion Letter

Enclosures: Enclosure A

Cc: Loren Dunn, Riddell Williams
Chuck Cline, Department of Ecology
Bob Warren, Department of Ecology
Marian Abbett, Department of Ecology
Trish Akana, Department of Ecology (SW0723)

ENCLOSURE A

Meridian Campus: Campus Glen Subdivision No Further Action Determination

1. Site Information

Meridian Campus is located within Township 18 North, Range 1 West, Section 1, and Township 19 North, Range 2 West, Section 36. The Campus Glen Subdivision (City of Lacey Plats 3717093 and 3742628) and is located at the southwest corner of the Meridian Campus Development, at the northwest intersection of Willamette Drive NE and Campus Glen Drive, NE. The property was undeveloped, forested land prior to being cleared and graded for housing development.

2. Affected media:

The affected media on this site is soil. Surface soils from several nearby tracts in the Meridian Campus development area were sampled and analyzed for arsenic and lead, and some sample locations were found to contain levels of arsenic above the MTCA, Method A unrestricted use cleanup standard of 20 ppm. The highest level of arsenic found was 50.7 parts per million. No samples were above the MTCA, Method A unrestricted use cleanup standard for lead. Based on the known profile of soils contaminants from in the Tacoma Smelter Plume, soils were not analyzed for other other chemicals. Three depth profile sample sets were obtained within the Meridian Campus development area and it was discovered that contaminants are limited to the top six inches of soil. This is consistent with results in other studies of the Tacoma Smelter Plume. Based on site history, there is no reason to believe other contaminants may be present at this site.

Groundwater investigations were not performed on this property because Ecology has determined that there is an extremely low likelihood of groundwater contamination from the Tacoma Smelter Plume (TSP) soil contamination, and this site meets the profile for TSP contaminants (metals limited to top 6 inches of soils).

3. Cleanup method used:

Method A, soils, unrestricted land use

4. Describe cleanup activities (for each media) and if contamination remains on-site (including confirmational sampling/analysis, points of compliance, etc...):

The top one - to - three feet of soils from the Campus Glen tract were removed. Eight discrete samples from 0 to 6 inches deep were obtained, for a sampling ratio of approximately 1 sample per 4 acres. This is considered to be an appropriate density of sampling given the nature of the Tacoma Smelter Plume contamination and the depth of excavation. Confirmation samples ranged in concentration from non-detect to 4.69 ppm arsenic. All confirmation samples were non-detect for lead.

Approximately 40,000 cubic yards of soils from the Campus Glen tract were stockpiled on an adjacent property in the Meridian Campus development. The stockpile had been moved twice prior to sampling and the soil had been mixed during the process of moving it. The stockpile was divided into ten sections, and a four-point composite was obtained from each section, from between 2 to 18 inches in depth. All of the stockpile samples met the MTCA, Method A cleanup levels, ranging from 8.47 to 16.5 ppm for arsenic, and 3.97 to 17.2 ppm lead.

TABLE 2
SOIL ANALYTICAL RESULTS
MERIDIAN CAMPUS

| Sample Number | Method | Laboratory | Lab ID | Sample Date | Arsenic (mg/kg) | Lead (mg/kg) |
|---|--------|------------|-----------|-------------|--------------------|-----------------|
| Depth Profile Samples | | | | | | |
| WP-1DP-6 ^a | ICP-MS | STL | 126321-7 | 2/1/2005 | 13.4 | 10.1 |
| WP-1DP-6 | ICP | STL | 126106-19 | 2/1/2005 | 25.3 | 16.2 |
| WP-1DP-12 | ICP-MS | STL | 126321-1 | 2/1/2005 | 2.55 | 5.15 |
| WP-1DP-18 | ICP-MS | STL | 126321-2 | 2/1/2005 | 1.96 | 4.12 |
| MF7-2DP-6 | ICP | STL | 126106-20 | 2/1/2005 | 21.2 | 15.8 |
| MF7-2DP-12 | ICP-MS | STL | 126321-3 | 2/1/2005 | 5.02 | 9.88 |
| MF7-2DP-18 | ICP-MS | STL | 126321-4 | 2/1/2005 | 4.37 | 5.16 |
| MF4-3DP-6 | ICP | STL | 126106-21 | 2/1/2005 | 23 | 15.3 |
| MF4-3DP-12 | ICP-MS | STL | 126321-5 | 2/1/2005 | 2.15 | 3.89 |
| MF4-3DP-18 | ICP-MS | STL | 126321-6 | 2/1/2005 | 2.01 | 3.4 |
| SF2-4DP-6 | ICP | STL | 126106-22 | 2/1/2005 | 5.49 | 2.4 |
| Stockpile Sample Results | | | | | | |
| SP-1-Comp | ICP | STL | 126106-1 | 2/1/2005 | 12.2 | 12.7 |
| SP-2-Comp | ICP | STL | 126106-2 | 2/1/2005 | 13.4 | 11.5 |
| SP-3-Comp | ICP | STL | 126106-3 | 2/1/2005 | 9.65 | 6.87 |
| SP-4-Comp | ICP | STL | 126106-4 | 2/1/2005 | 9.56 | 6.23 |
| SP-5-Comp | ICP | STL | 126106-5 | 2/1/2005 | 11.5 | 8.12 |
| SP-6-Comp | ICP | STL | 126106-6 | 2/1/2005 | 16.5 | 17.2 |
| SP-7-Comp | ICP | STL | 126106-7 | 2/1/2005 | 10.2 | 8.05 |
| SP-8-Comp | ICP | STL | 126106-8 | 2/1/2005 | 11.9 | 9.00 |
| SP-9-Comp | ICP | STL | 126106-9 | 2/1/2005 | 8.46 | 3.97 |
| SP-10-Comp | ICP | STL | 126106-10 | 2/1/2005 | 12.3 | 10.7 |
| Campus Glen Confirmation Samples | | | | | | |
| CG-1CN-6 | ICP | STL | 126106-11 | 2/1/2005 | 4.19 | 3.77 ND |
| CG-2CN-6 | ICP | STL | 126106-12 | 2/1/2005 | 3.87 | 3.52 ND |
| CG-3CN-6 | ICP | STL | 126106-13 | 2/1/2005 | 3.97 ND | 3.97 ND |
| CG-4CN-6 | ICP | STL | 126106-14 | 2/1/2005 | 4.51 | 3.44 ND |
| CG-5CN-6 | ICP | STL | 126106-15 | 2/1/2005 | 3.63 | 3.52 ND |
| CG-6CN-6 | ICP | STL | 126106-16 | 2/1/2005 | 4.69 | 4.27 ND |
| CG-7CN-6 ^a | ICP-MS | STL | 126106-17 | 2/1/2005 | 1.68 | 3.97 ND |
| CG-7CN-6 | ICP | STL | 126106-17 | 2/1/2005 | 31.2 | 3.97 ND |
| CG-8CN-6 | ICP | STL | 126106-18 | 2/1/2005 | 4.21 ND | 4.21 ND |

Characterization Sample Statistics

| | | |
|-----------------------------|------|------|
| Number of Samples | 56 | 56 |
| Mean Concentration: | 18.5 | 35.5 |
| Geometric Mean | 15.8 | 24.9 |
| 95th Upper Confidence Limit | 22.0 | 46.9 |

Notes:

Dup = duplicate sample.

a = Sample was re-run by ICP-MS

ND = Result is the reporting limit, sample was non-detect at the reporting limit

For Cleanup