



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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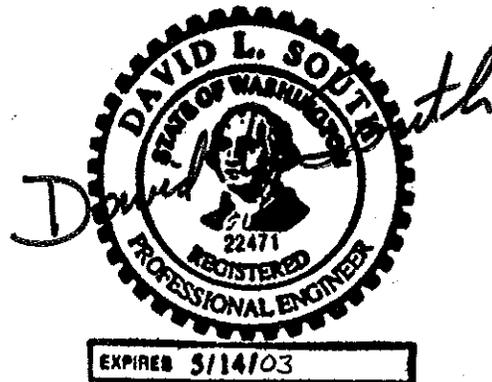
Professional Engineer's Statement  
Everett Smelter Cleanup  
March 17, 2003

Sampling and soil remediation were carried out at the following homes within the Everett Smelter Site during the period September 2002 to January 2003:

<u>Address</u>	<u>Owner</u>
Jeffrey G. Martz	108 Skyline Drive
William Udman and Alice Shaefer	203 Skyline Drive
Sam Bagley	206 Skyline Drive
Marion O. Lamb	209 Skyline Drive
Beverly Innes	212 Bridgeway
Gertrude L. Vaughn	216 Bridgeway
Scott Schroeder	222 Bridgeway
Mark M. Leonard	226 Bridgeway
Jean M. Burt	232 Bridgeway

Based on the results of testing and inspections, it is my opinion that the soil remediation carried out at these homes was performed in substantial compliance with the plans, specifications, and related documents governing the work.

Remediation work remaining to be done at these homes includes addressing crawl spaces as necessary and carpet and duct cleaning.



**Washington Department of Ecology**  
**Everett Smelter Site**  
**2002 Cleanup**

**Details of Cleanup Activities**

The Department of Ecology (Ecology) selected 9 homes within the Everett Smelter Site for cleanup in 2002. Cleanup activities were conducted between September 4, 2002 and January 29, 2003. The cleanup was conducted according to the *Everett Smelter Site: Integrated Final Cleanup Action Plan and Final Environmental Impact Statement for the Upland Area*.

This report describes the cleanup actions that were conducted, what arsenic-contaminated soil was removed and where it remains for the following location:

Property Owner        Sam Bagley

Address                206 Skyline Drive  
                              Everett, WA 98201

Snohomish County  
State of Washington  
Tax Parcel No.        # 005203-000-005-00

For the purposes of sampling to determine the depth to which excavation would be required, this property was divided into three Decision Units, A, B and C, as shown on the attached map. The following is a summary of the work done to remediate the property within each of the decision units.

Decision Unit: A

Results of pre-cleanup sampling indicated 24 inches of soil would have to be excavated in this decision unit. Attachment B shows that below 24 inches, results of composite and discrete sample analyses are below the remediation level of 150 parts per million (ppm) and 500 ppm respectively. However, because the soil below 24 inches contains arsenic above the cleanup level of 20 ppm, a geofabric marker was placed.

Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 24 inches, except as noted below. The paved driveway, walkway along the front of the house and the wood deck at the front door were not removed during excavation. At the request of the owner, all of the plants in the landscape area (M-1 to

206 Skyline Drive  
Everett, WA 98201

M-5) as well as the plants north of the front door were left in place. Soil in the planting beds was removed to the extent possible without damaging the plants. Under shrubs and small trees, soil was removed from the top of the roots to the drip line. Beyond the drip line, soil was removed to a depth of 18 inches. A French drain was installed to provide a channel for water from sub-surface drains in the back yard and the downspouts on the north side of the house to the storm sewer on Skyline Drive. The French drain starts at the northwest corner of the house, continues along the north side to the northeast corner of the front yard. The French drain continues south towards the driveway along the edge of the landscape area, then connects to a French drain along Skyline Drive. A second French drain was installed which starts at the northeast corner of the house, continues along the front of the house and the north side of the driveway then connects to the French drain along Skyline Drive. A plastic water service line provided by the owner was placed along the driveway between the water meter box and the edge of the paved walkway where the copper water line enters the house.

After placing a geofabric marker, the Decision Unit and landscape areas were backfilled with clean material and topsoil as described in the *Specifications for Everett Residential Soil Remediation*. Sod was planted and the landscape areas were topped with bark.

#### Decision Unit: B

Results of pre-cleanup sampling indicated 24 inches of soil would have to be excavated in this decision unit. Attachment B shows that below 24 inches, results of composite and discrete sample analyses are below the remediation levels of 150 parts per million (ppm) and 500 ppm, respectively. However, because the soil below 24 inches contains arsenic above the cleanup level of 20 ppm, a geofabric marker was placed. Portions of the wood fence north of the house were removed by the owner. In order to gain access to the back yard, the contractor removed additional sections of the fence and Skagit Farmers Supply was called to move two propane tanks to the patio. The timber edging for the gravel path in south part of the yard leading from the driveway to the landscape area was temporarily removed.

Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 24 inches, except as noted below. The paved patio and the block wall were not removed during excavation. At the request of the owner, all of the trees in the landscape area (sampling locations L-1 to L-5) were left in place. Within the drip line of the trees, soil was removed from the top of the roots. Beyond the drip line, soil was removed to a depth of 18 inches. French drains were placed at the bottom of the excavation along the base of the block wall, along the paved patio and through the center of the yard. All of the drains, as well as the downspout on the northwest corner of the house, were connected to the French drain near sampling location B-6. This drain continues along the north side of the house into the front yard. A rock wall was built to allow restoration of the area north of the house to its original grade.

After placing a geofabric marker, the Decision Unit was backfilled with clean material and topsoil as described in the *Specifications for Everett Residential Soil Remediation*.

206 Skyline Drive  
Everett, WA 98201

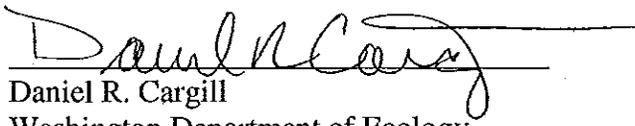
The timber edging for the gravel path from the driveway to the landscape area was replaced and the gravel path was restored with crushed rock over commercial-grade weed barrier. The landscape area was backfilled with topsoil. Sod and groundcover were planted and the wood fence and propane tanks restored to their original locations.

Decision Unit C:

Results of pre-cleanup sampling indicated 24 inches of soil would have to be excavated in this decision unit. Attachment B shows that below 24 inches, results of composite sample analyses are below the remediation level of 150 parts per million (ppm). However, because the soil below 24 inches contains arsenic above the cleanup level of 20 ppm, a geofabric marker was placed.

Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 24 inches.

After placing a geofabric marker, the Decision Unit was backfilled with clean material, as described in the *Specifications for Everett Residential Soil Remediation*. After placing the topsoil, sod was planted.

  
Daniel R. Cargill  
Washington Department of Ecology

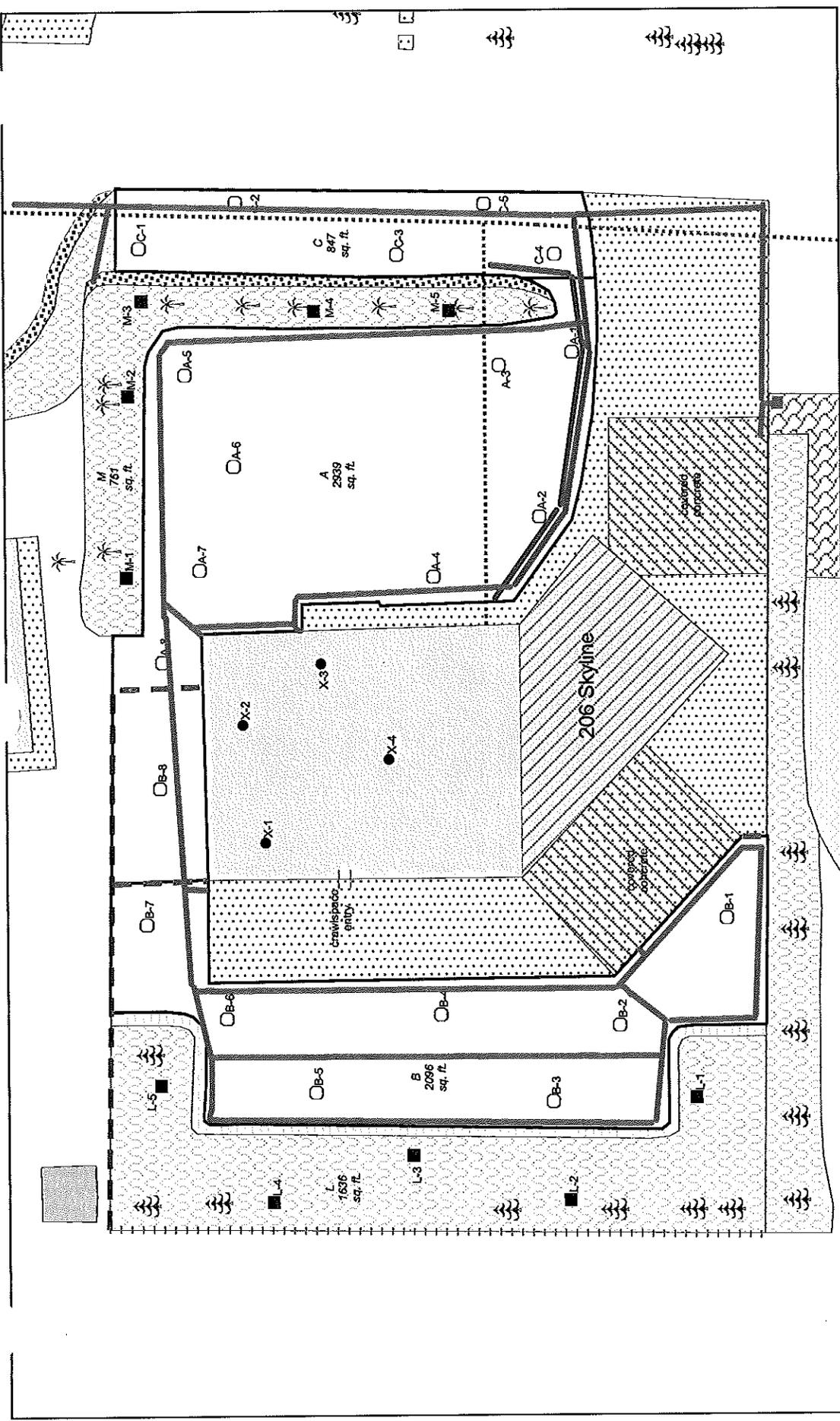
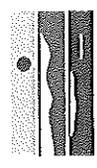
April 3, 2003

DRC:dc

Attachments: A. Site Map  
B. Graphs of Arsenic Concentration vs. Depth  
C. Explanation of graphs

Note: If the attachments listed above do not accompany this document, copies may be obtained from Ecology. Please contact Central Records at Ecology's Northwest Regional Office (NWRO), at (425) 649-7190 for information on obtaining copies.

cc: Ecology Central Files, NWRO  
Everett Public Library  
Asarco Information Center, Everett  
Northeast Everett Community Organization  
Northwest Everett Neighborhood Association  
City of Everett Public Works  
Snohomish PUD  
Office of the Attorney General  
Ecology Contract Officer  
Ecology On-site Coordinator



Scale: 1"= 20'

# 206 Skyline (Home 39)

## Everett Smelter Homesite Cleanup

Source: Snohomish Health District

- LEGEND**
- Decision Unit Samples
  - Landscape Samples
  - Crawspace Samples
  - ▬ Sub surface drains
  - ▬ Plastic Water line
  - ▬ Pre-existing drain line