



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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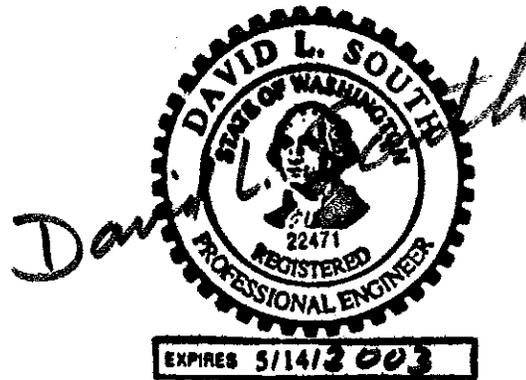
**Professional Engineer's Statement  
Everett Smelter Cleanup, 2000-2001**

Sampling and soil remediation were carried out at the following homes within the Everett Smelter Site during the years 2000 and 2001:

<u>Address</u>	<u>Owner</u>
Muriel Jones	110 Bridgeway
Andrew Michels	235 Bridgeway
Jeanette Mempa	236 Bridgeway
Thomas, Christine & Ronnie	240 Bridgeway
Martha Watkins	244 Bridgeway
Joanne Felmer	2803 Medora Way
Terry Tavares & Linda Guy-Tavares	2811 Medora Way
Duane & Edna Rapelje	2817 Medora Way
Dave & Rene Goodrich	2818 Medora Way
Ron & Bonnie Sylvester	2830 Medora Way
Anh Black	528 Hawthorne
Steve & Sherrie Wamba	415 Legion Drive
Gary & Darlene Bunger & Sandra Kane	112 Skyline Drive
Michael Paeth	116 Skyline Drive
Randy Hall	212 Skyline Drive
Willy Pompey	215 Skyline Drive
Dorothy Larson	218 Skyline Drive
Bob & Peggy Redline	221 Skyline Drive
Michael & Sheila Crehan	222 Skyline Drive
Kurt Bertilson	230 Skyline Drive
Louise Hiller	302 Skyline Drive
Margie Hogle	303 Skyline Drive
Fred Brown	307 Skyline Drive
Jackie Robinett	308 Skyline Drive
Al Vandebosch	316 Skyline Drive
Al Sorenson	320 Skyline Drive
Jo Newland	323 Skyline Drive
John & Christina Bull	328 Skyline Drive

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 evaluation of crawl space data and addressing crawl spaces as necessary and carpet and duct cleaning. Some plant replacement also remains to be done and will be done this Spring.



# Washington Department of Ecology Everett Smelter Site 2000-2001 Cleanup

## Details of Cleanup Activities

The Department of Ecology (Ecology) targeted the cleanup of the yards of 24 homes, within the Everett Smelter Site, during the 2000-2001 biennium. 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: Steve and Sherrie Wamba

Address:  
415 Legion Drive  
Everett, WA 98201

Snohomish County  
State of Washington  
Tax Parcel No. # 4971-000-011-0103

This property was divided by Ecology into three Decision Units, A, B, and C, as shown on the attached map, for purposes of pre-cleanup sampling and decision-making regarding the depth to which excavation was required. The following is a summary of the work done in the remediation of the property within each of the decision units.

### Decision Unit: A

Results of pre-cleanup sampling indicated 18 inches of soil were to be excavated from within this decision unit. Attachment B shows that below 18 inches, results of composite sample analyses are below the remediation levels of 60 and 150 parts per million (ppm). However, because the soil below 18 inches contains arsenic levels above the cleanup level of 20 ppm, a geofabric marker was placed.

The owners requested that the final grade of the front yard be level, as opposed to the original grade, which sloped downward from the front of the house toward the sidewalk.



This was accomplished by excavating to 18 inches in the east half of the yard, and to only 12 inches in the west half of the yard. An extra thickness of backfill was then placed in the west half, behind a block retaining wall constructed by the owner, to create a nearly level yard. Field measurements by the Ecology on-site coordinator confirmed that a minimum of 18 inches of backfill material was placed over the bottom of the excavation. The excavation was sloped 1:1 away from the driveway, the sidewalk along Legion Drive, and the front walk in order to maintain the structural integrity of those structures. All plants, bushes, and trees were removed, with the exception of the maple tree in the northeast corner of the front yard. The excavation sloped along the top of the root structure of that tree. After excavation of the decision unit was completed, a geofabric maker was placed, and backfilling with clean backfill material was carried out, as described in the *Specifications for Everett Residential Soil Remediation*. Topsoil was then placed, and new sod was planted. At the owner's request, replacement bushes and trees will be planted in the spring of 2001.

#### Decision Unit: B

Results of pre-cleanup sampling indicated 24 inches of soil were to be excavated from within 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 levels 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 the excavation was sloped 1:1 away from the house foundation in order to maintain its structural integrity. All plants, bushes, and trees were removed. Along the east side of the property, the excavation sloped along the root structure of the large evergreen trees on the property directly to the east. After excavation of the decision unit was completed, backfilling with clean backfill material was carried out, as described in the *Specifications for Everett Residential Soil Remediation*. Topsoil was then placed, and new sod was planted. A portion of the decision unit was finished with crushed rock. At the owner's request, replacement bushes and trees will be planted in the spring of 2001.

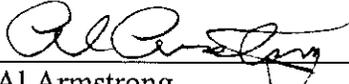
#### Decision Unit: C

Results of pre-cleanup sampling indicated 24 inches of soil were to be excavated from within 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 levels 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 the excavation was sloped 1:1 away from the house



foundation in order to maintain its structural integrity. All plants, bushes, and trees were removed. Along the east side of the property, the excavation sloped along the root structure of the large evergreen trees on the property directly to the east. After excavation of the decision unit was completed, backfilling with clean backfill material was carried out, as described in the *Specifications for Everett Residential Soil Remediation*. At the owner's request, the entire decision unit was finished with crushed rock.

  
Al Armstrong  
Washington Department of Ecology

December 18, 2000

Note: As of December 18, 2000, replacement trees or bushes had not been planted. Replacement bushes and trees were delivered March 8, 2001. The owner elected to do the planting.

  
Dan Cargill  
Washington Department of Ecology

April 9, 2001

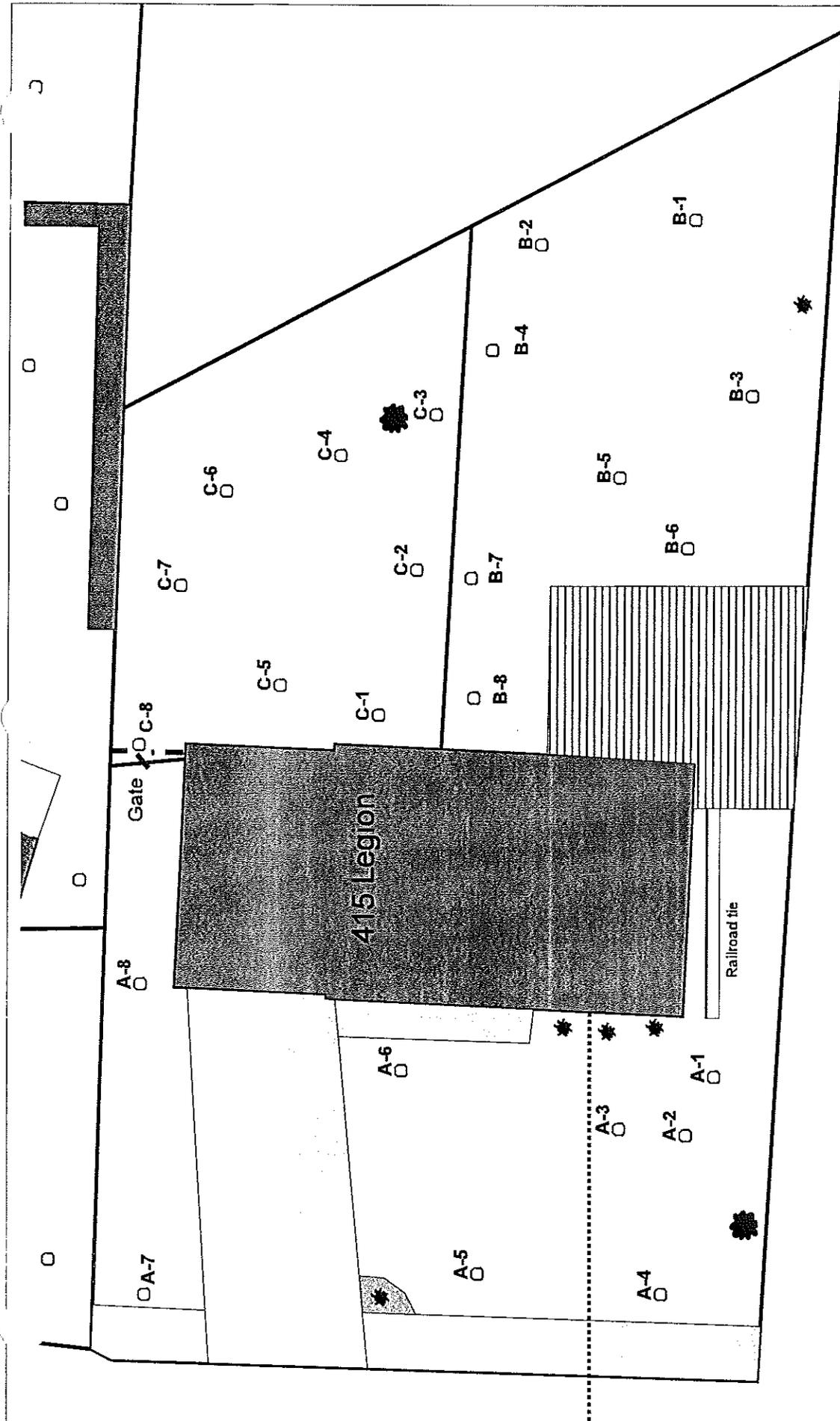
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Attachments: Site Map  
Graphs of Arsenic Concentration vs. Depth (1 page)  
Graph Explanation

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

cc: Ecology Central Files, NWRO  
Mary Sue Wilson, Assistant Attorney General  
Mike Young, Snohomish Health District  
City of Everett  
Snohomish PUD  
Northeast Everett Community Organization  
Northwest Everett Neighborhood Association





**415 Legion**  
 Everett Smelter Homesite Cleanup  
 Source: Snohomish Health District



Not to scale

○ DU Samples



