STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office, 3190 - 160th Ave S.E. • Bellevue, Washington 98008-5452 • (206) 649-7000

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:

Address	Owner
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 Vandenbosch	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.

DAVID L. SOUTH
STATE OF WASHINGTON
22471
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES 5/14/2003

Washington Department of Ecology
Everett Smelter Site
2000-2001 Cleanup

Details of Cleanup Activities

The Department of Ecology (Ecology) targeted the yards of 28 homes within the Everett Smelter Site for cleanup in 2000 and 2001. Cleanup activities were conducted between August 2000 and March 2001, and again between July and November, 2001. 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 not removed and where it remains for the following location:

Property Owner: Martha Watkins

Address: 244 Bridgeway
Everett, WA 98201

Snohomish County
State of Washington
Tax Parcel No. # 005203-000-038-00

This property was divided by Ecology into two Decision Units, A and B, 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 30 inches of soil were to be excavated from within this decision unit. Attachment B shows that below 30 inches, results of composite sample analyses are below the remediation level of 150 parts per million (ppm). However, because the soil below 30 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 30 inches. Except for the rhododendron near the front door, all plants and soils were excavated. Within the dripline of the rhododendron, the existing topsoil was removed to the top of the root ball. During excavation, two large trees, the walkway from the driveway to the front door and the front steps were removed. The excavation

was sloped approximately 1:1 away from the foundation of the existing home, walkway and driveway to protect the integrity of the structures. Soils adjacent to the driveway were excavated to a depth of approximately 6 inches below grade to lay the base course of the new Keystone block walls. The Keystone block walls were constructed to restore the property to its original grade. The walkway from the front stairs to the back yard was not removed. After placing a geofabric marker, the decision unit was filled with clean backfill material and topsoil, as described in the *Specifications for Everett Residential Soil Remediation*, and then covered with sod. Portions of the driveway that were damaged or had to be removed during excavation were repaved and the entire driveway was sealed. Replacement bulbs and tubers were planted in November 2001.

Decision Unit: B

Results of pre-cleanup sampling indicated 12 inches of soil were to be excavated from within this decision unit. Attachment B shows that below 12 inches, results of composite sample analyses are below the remediation levels of 60 and 150 ppm and discrete analyses were below the remediation level of 150 ppm. However, because the soil below 12 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 12 inches. The excavation was sloped approximately 1:1 away from the foundation of the existing home and walkway to protect the integrity of the structures. In order to facilitate excavation, the clothesline poles were removed. Upon the completion of excavation, the poles were replaced. An old septic tank was uncovered and subsequently backfilled with sand. French drains were installed along the west property line and along the west side of the house. These were connected to a plastic drain pipe placed along the south side of the house and connected to the drainage for the block wall on the south side of the driveway. The downspouts for the gutters on the south side of the house were also connected to this pipe. After placing a geofabric marker, the decision unit was filled with clean backfill material and topsoil, as described in the *Specifications for Everett Residential Soil Remediation*, and then covered with sod.

January 9, 2002

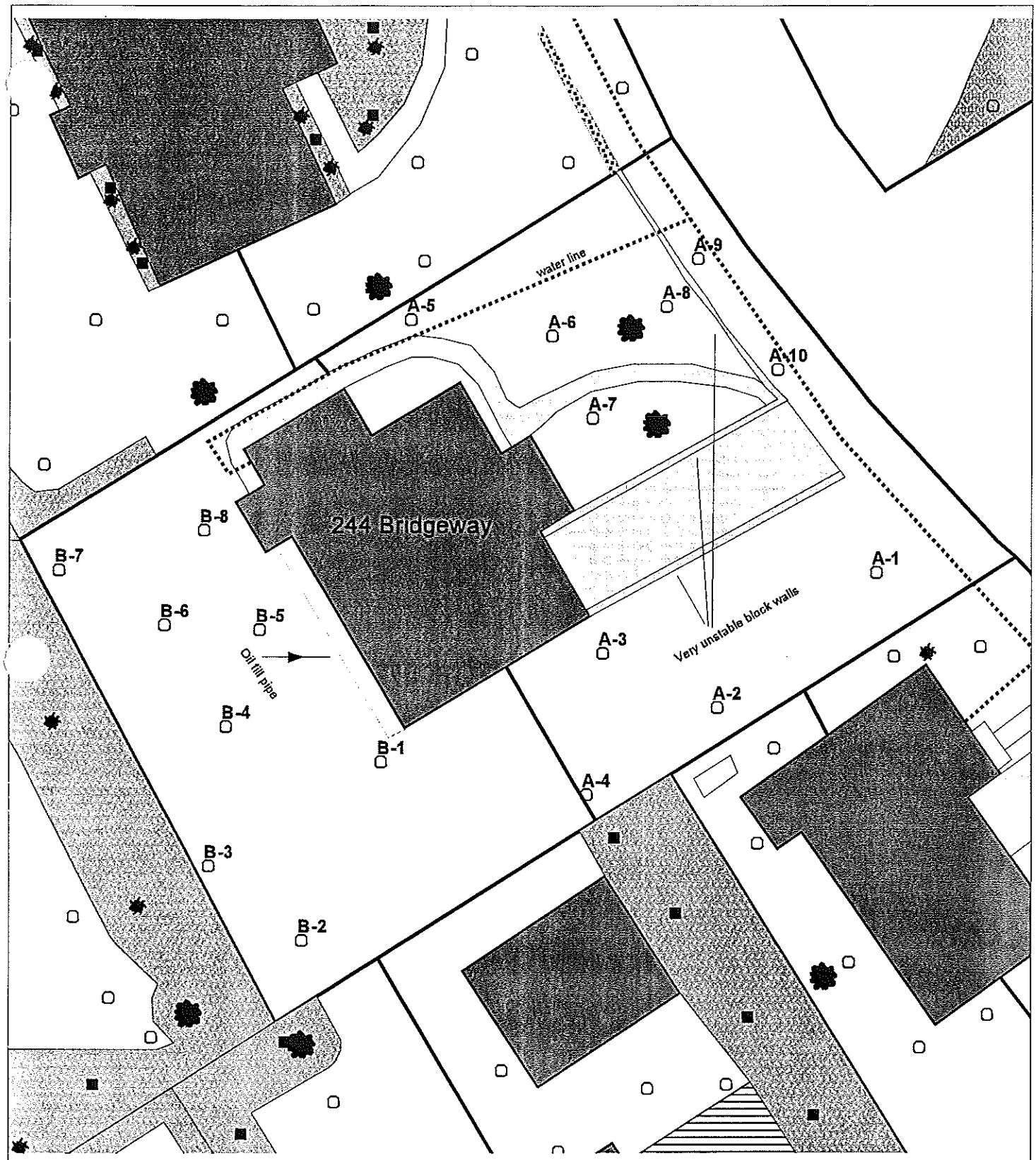
Dan Cargill
Washington Department of Ecology

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
Office of the Attorney General
Snohomish Health District
City of Everett Public Works
Everett Public Library
Snohomish PUD
Northeast Everett Community Organization
Northwest Everett Neighborhood Association
Asarco Information Center, Everett



244 Bridgeway

Everett Smelter Homesite Cleanup

Source: Snohomish Health District

DU Samples

N

Not to scale

SAIC