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: Ronnie and Christine Thomas

Address: 240 Bridgeway
Everett, WA 98201

Snohomish County
State of Washington
Tax Parcel No. # 005203-000-037-00

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 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). Because the soil below 24 inches contains arsenic levels below the cleanup level of 20 ppm, a geofabric marker was not necessary.

Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 24 inches. The excavation was sloped approximately 1:1 away from the

foundation of the house, the driveway and the concrete walkway from the driveway to the front door to protect the integrity of the structures. The rockery separating the upper and lower levels of the front yard was removed to facilitate access. At the owners' request, the rhododendron in the flower bed east of the front door was not removed. Soil was removed from the top of the root ball to the dripline. Beyond the dripline, the remaining portions of the flower bed (M1 – M3) were excavated to a depth of 12 inches. Most of the walkway running from the front steps to the driveway was not removed. The three-foot long section closest to the driveway was excavated and replaced. The rockery that had been removed was replaced in order to restore the yard to its original grade. A septic tank was uncovered while excavating the gravel driveway on the north side of the house. The tank was pumped out and backfilled with sand. While excavating the existing gravel driveway and removing soils behind the failing cinder-block wall of the adjacent property, the concrete driveway was damaged. The gravel portion of the driveway was restored to its original condition. In the paved areas of the driveway, the broken concrete and contaminated soil was removed, the excavation was backfilled with crushed rock, compacted and re-paved with concrete and asphalt. Plastic drain pipe was placed to discharge water to the street from the gutters, the sub-surface drainage in the back yard and the drainage behind the rockery wall. The Decision Unit was backfilled with clean material, as described in the *Specifications for Everett Residential Soil Remediation.* After placing the topsoil, sod and shrubs were planted.

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 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. The excavation was sloped 1:1 away from the foundation of the house and the garage to protect the integrity of the structures. At the owners' request, the climbing rose south of the back door and adjacent to the house was not removed. Soil was removed as close to the root ball as possible. A French drain was installed behind the garage and shed, extending east along the south side of the shed, then running north to connect to the drainage pipe at the base of the Keystone Block wall along the northern property line. French drains were also placed along the western property line and along the western side of the house. These were connected to the plastic drain pipes that run through the south yard, under the rock wall and discharge to the street. The footing drain along the southwest and south side of the house was replaced with plastic drain lines. The downspouts from the gutters were connected to the footing drain and the line was connected to the drain behind the rock wall. 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 and shrubs were planted.

January 9, 2002

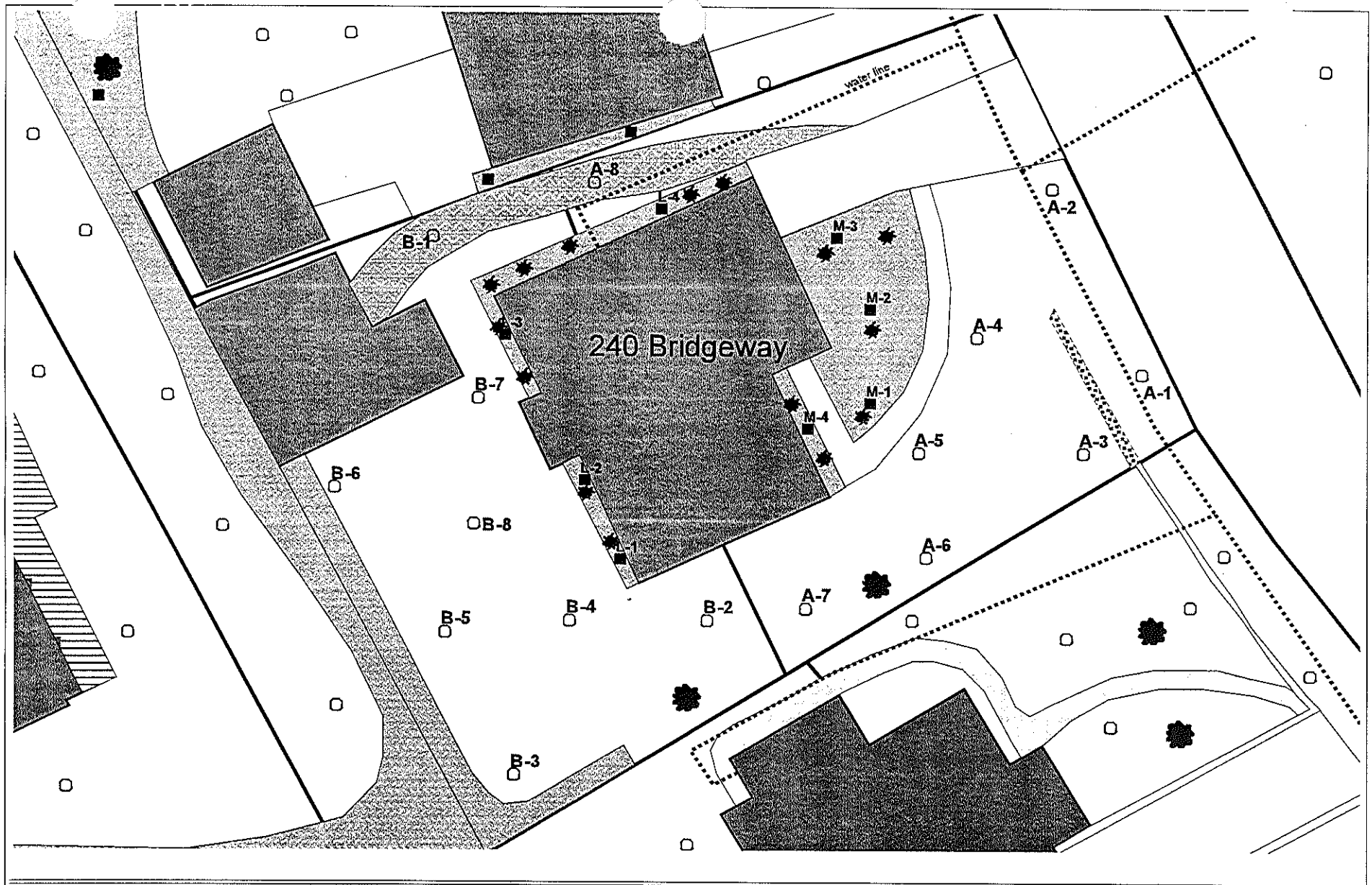
Dan Cargill
Washington Department of Ecology

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



240 Bridgeway

Everett Smelter Homesite Cleanup

Source: Snohomish Health District

■ Landscape Samples
○ DU Samples

N

Not to scale