June 8, 2006

Mr. Chad Moore
Brown Dog LLC
C/O URESCO Construction Materials, Inc
8246 South 194th Street
Kent, Washington 98032

Addendum
Sampling and Analysis Plan
Maralco Restoration Project
7730 South 202nd Street
Kent, Washington
URS Job No. 33757742

Dear Mr. Moore:

This letter is an addendum to the *Sampling and Analysis Plan/Quality Assurance Project Plan, Maralco Restoration Project, 7730 South 202nd Street in Kent, Washington (SAP/QAPP)* prepared by URS Corporation (URS) and dated September 9, 2005. The *SAP/QAPP* describes the procedures for collecting samples from an aluminum dross stockpile and conducting laboratory analyses for waste determination purposes at the former Maralco Aluminum Company, Inc. site (site/subject property). The *SAP/QAPP* was submitted September 9, 2005 and was approved by the Washington State Department of Ecology (Ecology) prior to initiation of field activities at the site.

## PURPOSE AND SCOPE

In October 2005, URS conducted a waste determination investigation of the aluminum dross stockpile at the subject site in general accordance with the *SAP/QAPP*. Representative samples of the dross were collected from equivalent volumes (cells/decision units) throughout the stockpile, both laterally and vertically. Prior to sampling, the stockpile was subdivided into approximately equal volumes and 17 soil boring locations were established (Figure 2). Sampling intervals were determined based on the expected thickness of the dross stockpile within each decision unit.

Of the 44 decision units identified by URS in the *SAP/QAPP*, samples were successfully recovered from 39 using a Geoprobe direct-push drill rig. The drill rig encountered refusal prior to penetrating the stockpile to the target depths for the deepest sample intervals at five locations (B-6, B-8 through B-11) (Figure 2). The sampling and analysis program described in this addendum will collect and analyze samples from the five remaining decision units to determine if these portions of the pile currently exhibit dangerous waste characteristics. The purpose of this addendum is to summarize the field procedures that differ from those outlined in the *SAP/QAPP*, the locations and depths where samples will be collected, and the initial laboratory analytical tests that will be performed on the samples.

## DRILLING AND SAMPLING PROCEDURES

URS will retain Cascade Drilling, Inc. (Cascade) of Woodinville, Washington, a licensed drilling company, to complete five soil borings through the dross stockpile using a track-mounted hollow-stem auger drill rig. The hollow-stem auger drill rig is more powerful than the direct-push drill rig and is expected to easily penetrate the stockpile to the desired target depths.

Within each of the five cells, the drill rig will attempt to occupy new boring locations in close proximity to the former borings (B-6, B-8 through B-11) completed in October 2005. The soil borings will be advanced to the total depth of the stockpile. Samples of the dross will be collected continuously across the estimated intervals provided in Table 1 using a Dames & Moore split-spoon sampler. The upper bounds of these intervals are equivalent to the approximate depths at which refusal was encountered in the borings advanced in October 2005. Dross will not be collected from depths shallower than the upper bounds of the estimated sample intervals, as this would be representative of decision units already sampled in October 2005.

Based on the final determined thickness of the stockpile at each of the boring locations, a portion of the sampled interval will be selected for chemical analysis. The selected portion is intended to be representative of the dross within the decision unit at or near the bottom of the stockpile. Based on this criterion and the sample volume necessary for performing all the scheduled analyses, it is anticipated that the bottom 4 to 6 feet of dross sampled from each boring will be selected for analysis. Should the final determined stockpile thickness vary significantly from that expected, multiple borings may need to be advanced within each cell to recover the necessary volume of dross for sample collection.

With the exception of the drilling technique and sample depths, the sampling activities will be conducted in accordance with the methods and procedures discussed in the *SAP/QAPP*. The field screening procedures established in the *SAP/QAPP* will also be performed for each of the samples. All down-hole drilling tools will be properly decontaminated between boring locations. The decontamination rinsate water will be disposed of on the surface of the stockpile. Soil cuttings from the borings will be disposed of on the surface of the stockpile or used to backfill the borehole.

## ANALYTICAL METHODS

The dross samples will be analyzed for ammonia, chloride, and selected metals, as described in the *SAP/QAPP*. The analyses to be performed on the samples are summarized in Table 1. Samples will be evaluated for possible bioassay testing based on the results of the laboratory analyses and the book designation calculations described in the *SAP/QAPP* and discussions with Ecology staff.

## SCHEDULE AND REPORTING

URS has scheduled the field work for June 13, 2006 and, if necessary, June 14, 2006. Ecology was notified of the field schedule by email on May 26, 2006. It is understood that Ecology is planning to be on-site to observe the field activities and may collect split samples from the soil borings. Mr. Matt Hommeyer will be directing this work for URS in the role of Project Geologist/Site Safety Officer, and he may be accompanied in the field by other URS staff. Mr. Hommeyer will also be assuming the role of URS QA Manager for this project. He may be contacted by phone at (206) 790-9006.

The results of this addendum waste determination investigation will be included with the final *Dross Sampling and Waste Determination* report.

We trust this update meets your current information needs. If you have any questions of comments, please feel free to contact us at (206) 438-2700.

Respectfully submitted,
URS CORPORATION

Matt Hommeyer
Geologist

James H. Flynn, L.Hg.
Senior Hydrogeologist

Attachments:

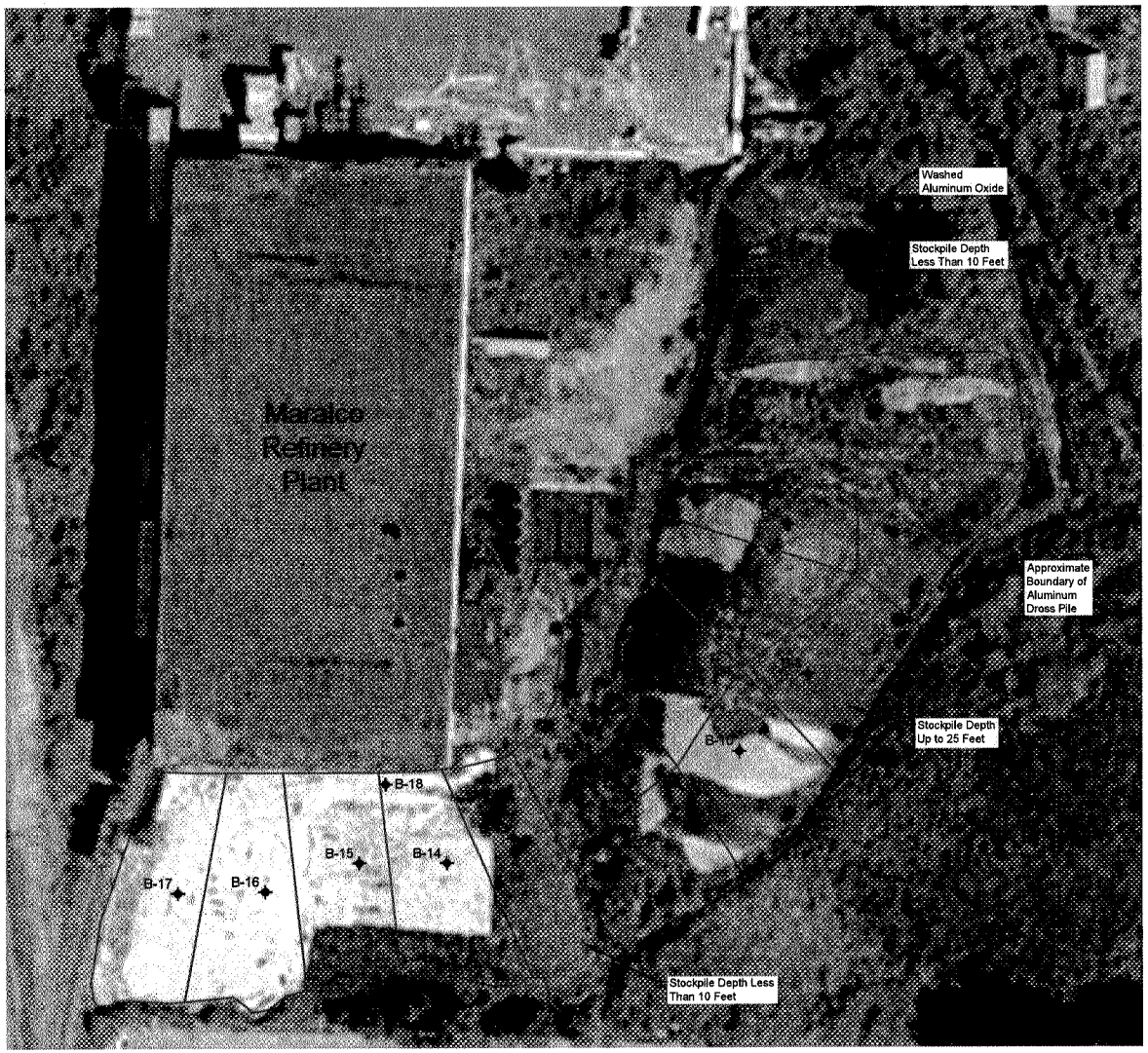
Table 1 – Decision Unit Summary
Figure 1 – Site Location
Figure 2 – Dross Stockpile Decision Units

Cc: Ms. Victoria Sutton, Ecology
Mr. Norm Peck, Ecology

**Table 1**
**Decision Unit Summary**
**Addendum Waste Determination Investigation**
**Maralco Restoration Project**
**Kent, Washington**

| Sample Location (Cell Name) | Sample Designation | Estimated Stockpile Thickness (feet) | Proposed Sample Interval (feet below stockpile surface) | Field Screening[1] | Analytical Methods | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Total Metals[2] | TCLP Metals[3] | Ammonia | Chloride | Fish Bioassay | Rat Bioassay |
| | | | | | EPA 6000 | EPA 1311 & 6000/7000 | EPA 350.3 | EPA 300.0 | Ecology 80-12 | Ecology 80-12 |
| B-6 | B-6-D | 25 | 12-25 | X | X | X | X | X | TBD | TBD |
| B-8 | B-8-D2 | 25 | 14-25 | X | X | X | X | X | TBD | TBD |
| B-9 | B-9-D | 20 | 16-20 | X | X | X | X | X | TBD | TBD |
| B-10 | B-10-D | 20 | 16-20 | X | X | X | X | X | TBD | TBD |
| B-11 | B-11-D | 20 | 14-20 | X | X | X | X | X | TBD | TBD |

Notes:
[1] = Samples will be field screened for the presence of ammonia and phosphine (Draeger tubes) and for hydrogen sulfide, methane, oxygen, and carbon monoxide (4-gas meter).
[2] = Analytes: copper, nickel, potassium, sodium, and zinc
[3] = Analytes: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver
TCLP = Toxic Characteristic Leaching Procedure
TBD = To be determined based on the concentrations of metals, salt, and ammonia, following discussion with Ecology.




**LEGEND**

- ✦ Approximate Boring Location
- ——— Decision Unit Lateral Boundary

N

0 30 60

SCALE IN FEET

Job No. 33757742

URS

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Figure 2

## Dross Stockpile Decision Units

Former Maralco Aluminum Site
Kent, Washington