

Memorandum

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From: Scott Miller, SLR

Date: November 4, 2013

Subject: DRAFT Second Amendment to the Phase 2 Remedial Investigation Work Plan

Addendum to Final Work Plan for Remedial Investigation/Feasibility Study and

Draft Cleanup Action Plan

JELD-WEN, inc. Former Nord Door Site

300 West Marine View Drive, Everett, Washington

This memorandum is an amendment to the Phase 2 Remedial Investigation Work Plan, Addendum to Final Work Plan for Remedial Investigation/Feasibility Study (RI/FS) and Draft Cleanup Action Plan (CAP) (Phase 2 RI Work Plan, SLR 2011). This amendment presents a scope of work for additional upland soil exploration and soil and groundwater sampling to evaluate the fill material present in the former fish net storage area also known as the knoll area on the southern end of the Former Nord Door Site, located at 300 West Marine View Drive in Everett, Washington. The Site is located at 300 West Marine View Drive in Everett, Washington. The work is being conducted under an Agreed Order with Ecology for RI/FS study and Draft CAP, dated January 2, 2008.

BACKGROUND

The knoll area is a historical tidal mudflat which was filled with imported materials in the mid-1960s. The source of the fill material is unknown. Prior Geoprobe borings (GP-334 and GP-335) placed in this area identified the fill material to extend to an approximate depth of 10 to 12 feet below ground surface (bgs). Ash was encountered at an approximate depth of 3.5 to 7 feet bgs one of the previous borings in the knoll area.

SCOPE OF WORK

The scope of work for this investigation will consist of the completion of approximately eight testpit trenches and four Geoprobe borings in the knoll area. The proposed work will include one day to clear vegetation in the work area, two days for completion of the test-pitting activities, and one day to complete the Geoprobe investigation. The attached figure shows the approximate locations of the proposed test-pit trenches. The test-pit locations and lengths shown on the November 4, 2013 Second Amendment to the Phase 2 RI Work Plan Page 2

attached figure are approximate. Portions of the trenches will be extended vertically to the interface of the fill material and the native mudflat material, which is expected to range from approximately 10 to 20 feet bgs depending on location. In areas where fill extends beyond the reach of the excavator, a Geoprobe will be used to complete borings into the native mudflat material. The actual test-pit locations, length, and depth will be based on access and field conditions at the time of the field work. Geoprobe borings will be placed in areas of deeper fill and in locations of interest identified through the test pit investigation. Ecology and SLR will work cooperatively in the field to select appropriate sampling locations and depths.

Soil in the test pits and continuous soil cores from the Geoprobe borings will be field screened for indications of contamination using visual observations and a hand-held photoionization detector (PID). It is estimated that eight soil samples will be collected from soil in the test-pits exhibiting field-evidence of impacts. If no field evidence of impacts is identified, one representative soil sample will be collected from each test pit. The eight soil samples will be submitted for analysis of TPH-HCID by NWTPH methods with follow-up analysis for NWTPH-Gx or NWTPH-Dx pending the results of the HCID analysis, polychlorinated biphenyls (PCBs) by EPA Method 8082, and volatile organic compounds (VOCs) by EPA Method 8260. Additionally, up to three soil samples will be collected for dioxin/furan analysis (EPA Method 1613B) from sample locations showing indications of boiler ash. Enough sample volume will be collected from each sample location to allow for additional analysis of constituents such as semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), or metals, if warranted based on field observations or the findings of the initial analysis. No soil sampling is anticipated from the Geoprobe boring locations; however, soil samples may be collected if the soil cores identify fill material that appears distinctly different that soil encountered in the test pits. SLR will be prepared with extra sampling jars to allow for the collection of additional samples if warranted by conditions encountered in the field.

One groundwater sample will be collected from each Geoprobe boring for analysis of TPH-HCID with follow-up analysis for NWTPH-Gx or NWTPH-Dx based on the results of the HCID analysis, and VOCs. One groundwater sample will be collected from each Geoprobe boring and held for possible dioxin/furan analysis (EPA Method 1613B) pending the results of the soil analysis. Enough sample volume will be collected from each boring location to allow for additional analysis of constituents such as SVOCs, PAHs, or metals, if warranted based on the findings of the initial analysis.

With the exception of dioxin/furan, all samples will be submitted to ESC Lab Sciences analytical laboratory. Samples submitted for analysis of dioxins/furans will be submitted to SGS North America.

A sampling and analysis plan (SAP) for the upland investigation and a site-specific Health and Safety Plan were included as appendixes to the RI Work Plan. The methods and procedures described in these plans for soil and groundwater sample collection will be utilized during the proposed sampling. Sampling equipment will be decontaminated between each location using the procedures described in the SAP. Test-pit trenches will be backfilled with the material removed upon the completion of each trench.

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The test pit investigation described in this Work Plan has been tentatively scheduled for November 12th through 14th, 2013. The Geoprobe investigation has been tentatively scheduled for November 18th, 2013.

Figure 1 – Proposed Test Pit Trench Locations



Image Aquired from Snohomish Public Works Department, 1969

TEST PIT LOCATION

TEST PIT TRENCH LOCATIONS AND LENGTHS SHOWN ARE APPROXIMATE. ACTUAL TEST-PIT TRENCH LOCATIONS WILL BE BASED ON ACCESS AND FIELD CONDITIONS AT THE TIME OF THE FIELD WORK. THE LOCATION AND LENGTH MAY VARY.

0 85 170 255 FEET



FORMER NORD DOOR 300 MARINE VIEW DRIVE EVERETT, WASHINGTON

Report

AMENDMENT TO RI WORK PLAN

Drawing

PROPOSED TEST-PIT TRENCH LOCATIONS

Date September 27, 2013

File Name F1_SITEMAP

Scale AS SHOWN

Project No.

Fig. No.

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