

September 3, 2019

Mr. Mahbub Alam
Environmental Engineer, Toxics Cleanup Program
Department of Ecology
PO Box 47600
Olympia, WA 98504

Re: August 2019 Addendum to Source Control Evaluation Work Plan to Assess Data Gaps for Completion of RI/FS for Former E.A. Nord Facility, Everett, Washington (FS ID 2757)

Dear Mahbub,

SLR International Corporation (SLR) has prepared the following addendum to the December 2017 Source Control Evaluation (SCE) Work Plan to Assess Data Gaps for Completion of the Remedial Investigation (RI)/Feasibility Study (FS) for the Former E.A. Nord Door facility. The Former E.A. Nord Door facility (i.e. JELD-WEN Cleanup Site; FS ID 2757) is located at 300 West Marine View Drive in Everett, Washington (Site). This August 2019 Work Plan Addendum presents proposed investigation areas, sampling activities, and laboratory analyses as part of data gap assessment following SCE and RI activities. The field activities will be completed per the Washington Department of Ecology-approved SCE Work Plan and accompanying Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP), as applicable.

1. INVESTIGATION AREAS

The scope of work presented in this August 2019 Work Plan Addendum was based on communications and discussions with Ecology following submittal of the Summary Report - 2019 Data Gap Assessment, the January 2019 SCE Summary Report, and upon Ecology's review of the October 2016 Final Draft RI/FS. The proposed sampling locations are presented on **Figure 1** and described below.

In general, proposed investigation areas were selected to further assess potential data gaps from the 2019 Data Gap Assessment/seep sampling/initial SCE activities and historical upland assessments included as part of the RI.

PCB delineation on and near the Knoll Area

Data Gap: Need to verify the presence and trend of contamination. Need to verify PCB impacts observed at the following locations sampled as part of the 2019 Data Gap Assessment: Seep-S-16, MW-13, MW-14, and GP-801.

Proposed Additional Assessment: Three permanent groundwater monitoring wells (MW-18 to MW-20) will be installed for collection of groundwater samples for PCB congeners per low-flow purging and sampling method. MW-18 will be located adjacent to the City of Everett's property, near the sidewalk elevation and outside of the fill material used to create the elevated knoll area. MW-19 will be located between former Geoprobe boring location GP-801 and the shoreline. MW-20 will be located south of the existing office building and west of catch basin CB-26. Groundwater sampling per SPME method will also be conducted at four seep locations (Seep-S-3, Seep-S-16, Seep-S-17, Seep-S-18) and at two existing monitoring well locations (MW-13 and MW-14).

2. SAMPLING ACTIVITIES

Groundwater Monitoring Well Installation

Three (3) groundwater monitoring wells will be installed with a Hollow-Stem Auger (HSA) drilling rig at the proposed locations. The HSA drilling will be completed via a blank drilling method (i.e. no split spoons) to the appropriate depth for well construction based on observations from previous adjacent borings. It is anticipated that wells will be completed to approximately 13 to 15 feet bgs, similar to other shallow groundwater monitoring wells at the Site.

In general, the groundwater monitoring wells will be installed with a 10-foot section of slotted well screen with a silica sand filter pack, bentonite seal, and concrete surface seal. Monitoring wells will be installed in accordance with Chapter 173-160 Washington Administrative Code (WAC).

Soil cuttings and decontamination water will be stored on-site in 55-gallon steel drums pending off-site disposal as investigation derived waste (IDW).

Groundwater Monitoring Well Development

Following construction of the groundwater monitoring wells, the wells will be developed per surge and pumping methods per Environmental Protection Agency (EPA) guidance not sooner than 24 hours after construction. Development water will be stored on-site in 55-gallon steel drums pending off-site disposal as IDW.

Surveying

Monitoring well locations and top-of-casing (TOC) elevations will be surveyed by a Washington-licensed land surveyor and tied to existing monitoring well elevation measurements.

Groundwater Monitoring Well Sampling – Low-Flow Method

Following development of the newly installed groundwater monitoring wells, a sampling event will be conducted. Groundwater monitoring and sampling activities will be performed per the October 2016 *Groundwater Monitoring and Sampling Work Plan* that is utilized for the on-going quarterly groundwater sampling program. Sampling events will include depth-to-water measurements, groundwater purging with recording of stabilization parameters (per EPA low-flow procedures), and groundwater sample collection.

Groundwater Sampling – SPME Method

In addition to the traditional low-flow sampling event proposed for the newly installed groundwater monitoring wells, a sampling event will be conducted utilizing in situ Solid-Phase Micro-extraction (SPME) sampling devices.

The SPME sampling device consists of a glass fiber core coated with a polymer sorbent and simple, slotted deployment apparatus. A SPME sampling device will be submerged within the screened PVC casing in the proposed monitoring wells. The SPME sampling device will be placed at a depth that ensures the device is continuously submerged for the duration of the sample collection interval. For the seep sample locations, a temporary PVC well screen will be inserted at the observed seep location.

The SPME sampling devices will remain at each of the proposed sample locations for approximately one month.

3. LABORATORY ANALYSES

SPME sampling devices will be prepared by Anchor QEA and will be submitted to SGS Laboratory in Wilmington, NC (Ecology Accreditation No. C913-18) for analysis of Polychlorinated Biphenyl (PCB) Congeners per EPA 1668A method.

4. SCHEDULE

SLR anticipates initiating field activities for this scope of work in September 2019, pending access and availability of SPME sampling devices and subcontractors.

Sincerely,
SLR International Corporation

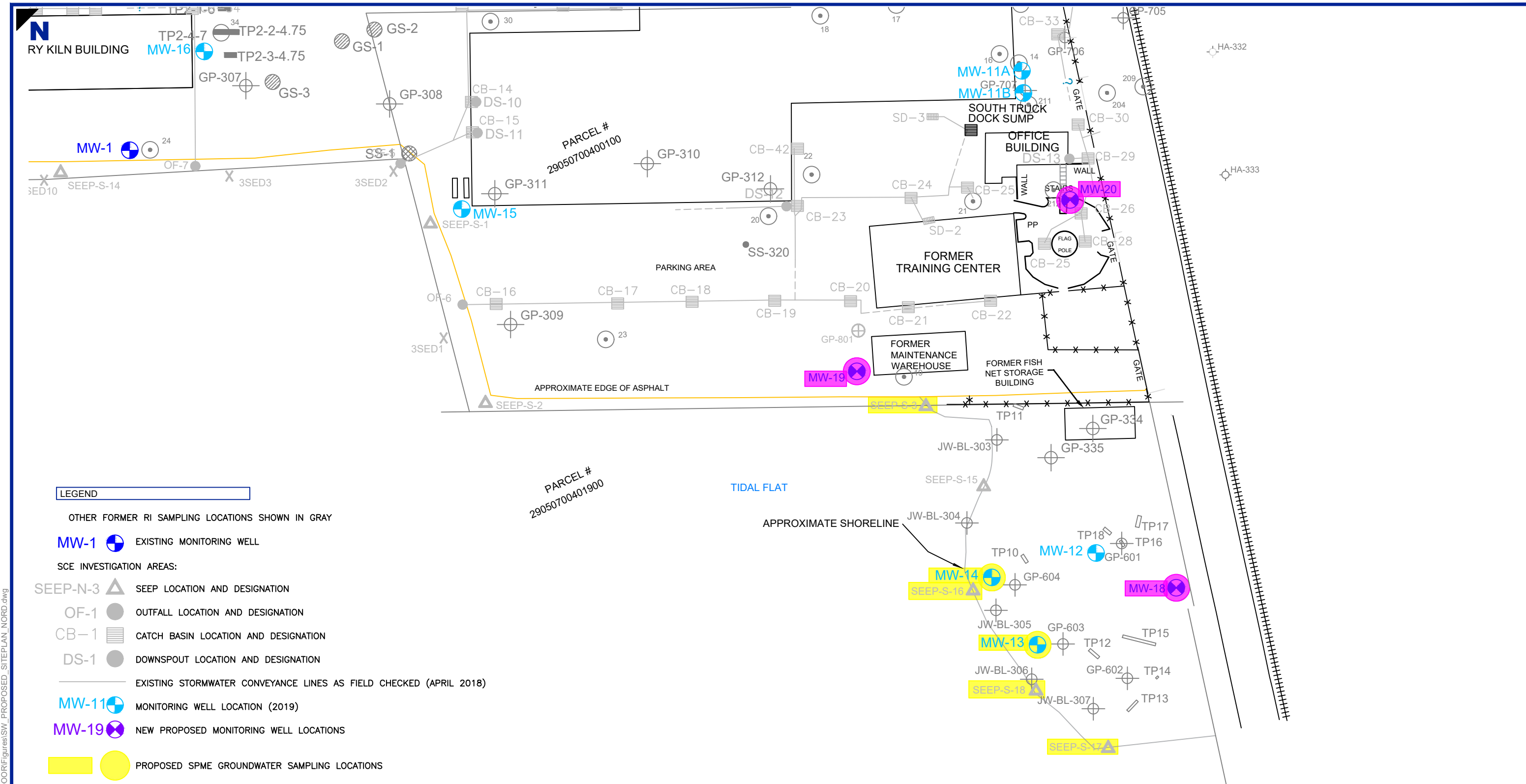


R. Scott Miller, P.E.
Managing Principal



Chris Kramer
Senior Scientist

cc Dwayne Arino, JELD-WEN Inc.
Enc. Figure 1



LEGEND

- OTHER FORMER RI SAMPLING LOCATIONS SHOWN IN GRAY
- MW-1 EXISTING MONITORING WELL
- SCE INVESTIGATION AREAS:
- SEEP-N-3 SEEP LOCATION AND DESIGNATION
- OF-1 OUTFALL LOCATION AND DESIGNATION
- CB-1 CATCH BASIN LOCATION AND DESIGNATION
- DS-1 DOWNSPOUT LOCATION AND DESIGNATION
- EXISTING STORMWATER CONVEYANCE LINES AS FIELD CHECKED (APRIL 2018)
- MW-11 MONITORING WELL LOCATION (2019)
- MW-19 NEW PROPOSED MONITORING WELL LOCATIONS
- PROPOSED SPME GROUNDWATER SAMPLING LOCATIONS
- PROPOSED LOW-FLOW GROUNDWATER SAMPLING LOCATION

NOTES

THE BUILDINGS, SURFACE UTILITIES, EDGE OF PAVEMENT, AND APPROXIMATE SHORELINE SHOWN ON THIS MAP ARE BASED ON A 2006 SURVEY PERFORMED BY WH PACIFIC.



FORMER E.A. NORD SITE
300 WEST MARINE VIEW DRIVE
EVERETT, WASHINGTON

Report
AUGUST 2019 ADDENDUM TO SCE WORK PLAN

Drawing
PROPOSED SAMPLING LOCATIONS AND
PROPOSED MONITORING WELL LOCATIONS

Date	September 2019	Scale	AS SHOWN	Fig. No.	1
File Name	SW_PROPOSED_SITEPLAN_NORD	Project No.	108.00228.00059		

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