CITY OF PORTLAND
ENVIRONMENTAL SERVICES
1120 SW Fifth Ave, Suite 613, Portland, Oregon 97204 ▪ Mingus Mapps, Commissioner ▪ Dawn Uchiyama, Interim Director

Memorandum

Date: 8/23/22

To: Tim Spencer, Project Manager
ODEQ NWR Solid Waste Program

From: Taryn Meyer
COP/BES Coordinated Site Assessment Program

RE: Reedway Environmental Surface Soil Assessment and Soil Pile Removal Closure Report

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Background:

The City of Portland's Bureau of Environmental Services (BES), Coordinated Site Assessment (CSA) Program, conducted environmental soil sampling and analysis for the Reedway Soil Pile Removal for BES Engineering and Facilities, Oregon Department of Environmental Quality (ODEQ) Northwest Region (NWR) solid Waste program, and Office of Management and Finance (OMF) Safe Rest Village program (SRV).

The purpose of this letter report is to provide confirmation of the removal of the soil piles and information on the environmental assessment of contaminants of concern in soil surfaces left in place in areas where soil piles were stored, to determine if they contain contaminants of concern above Oregon Department of Environmental Quality Risk Based Concentration for Urban Residential use. This letter report compiles, all of the left in place soil analytical data collected for the various tasks completed since the purchase of the property and the most recent soil analytical data collected for the construction of the Reedway Safe Rest Village.

Soil samples were collected by Hahn and Associates for the Phase II Environmental Site Assessment for the City of Portland purchase of the property in 2000 (B-1 through B-10) **Figure 1**.

During the East Lents Floodplain restoration project in 2011 organic (grass, shrub, weeds, and other vegetation) surface material in areas of excavation were stripped and separated from underlying soil to be disposed of at SE 107th and Reedway, a property owned by BES, for storage while organic stripping material degraded to soil. DEQ approved the soil/strippings be stored for a few years but ultimately would require disposal at an approved facility.

East Lents Flood plain restoration soil piles (50,000 CY) were sampled and analyzed for disposal in a report provided by Evren Northwest, 2014 (**Appendix A**). The contaminant of concern was primarily total lead, assumed to be from demolition of old houses with lead-based paint surfaces. Lead Levels were detected between 32.8 mg/kg and 71.4 mg/kg. Illegally dumped smaller piles from unknown sources were sampled and analyzed. Various contaminants of concern were detected above ODEQ Cleanfill and Risk-Based screening values.

The smaller illegally dumped soil piles amassed around the foot of the larger piles from unknown sources were removed and disposed of at a Subtitle-D landfill. The Soil Removal report was provided by GSI, 2016 for BES and DEQ (**Appendix B**). Post illegal dumped soil pile removal closure samples were collected to confirm soil contaminants were below DEQ RBCs in the stored area (North DU1 and South DU2) **Figure 1**.

DEQ approved the removal of the large soil piles and disposal of the material at Colvin Sand and Gravel under a Solid Waste Letter of Approval (**Appendix C**). This material is no longer on site. Composite soil samples were collected and analyzed for contaminants of concern in locations where soil piles previously existed (samples SP1-E-CL, SP1-W-CL, SP2-N-CL, SP2-S-CL, SP3-CL) **Figure 1**.

Additional soil samples were collected June 2022 to determine if potential contaminants of concern exist in areas of the site planned for development of a safe rest village for the Community Shelter Program (SRV-1, SRV-DU-2, SRV-DU-3, SRV-DU-4, SRV-DU-5) **Figure 1**.

Field Activities:

BES', Engineering Services and their Contractor Landis and Landis removed all the stripping piles and disposed of them at Colvin Sand and Gravel located at 15245 NE Arndt Rd, Aurora under an ODEQ Solid Waste Letter of approval (**Appendix C**) between August 18, 2020 to September 9, 2020. The construction dailies and photos describing the removal of the East Lents stripping piles are in **Appendix D**.

Coordinated Site Assessment personnel conducted environmental soil sampling on March 15th, 2021. Prior to starting fieldwork, the decision units (DUs) areas, previously identified in the Evren report, were located in the field on the site and a nine-point composite sample was collected in each area SP1-E-CL, SP1-W-CL, SP2-N-CL, SP2-S-CL, SP3-CL. The DU locations are shown in **Figure 1**. All samples were

collected using a hand auger to bore to approximately six inches below ground surface and soil was collected and composited as one sample.

A composite sample (DU-5 0-3 and DU-5 3-5) was collected for the Springwater Wetlands project as a preliminary sample at four locations at the site to represent the entire property on Oct 18th, 2019.

CSA collected additional soil samples for the safe rest village on June 16, 2022, to further characterize the entire site planned for development and follow up on the Springwater Wetlands sample by collecting more targeted samples representing smaller areas. A hand auger was advanced to three feet below ground surface in the area planned for utilities. Refusal was encountered at three feet due to gravels and cobbles. A vertical composite sample was collected (SRV-1). Samples SRV-DU-2 (SW quadrant), SRV-DU-3 (SE quadrant), SRV-DU-4 (NE quadrant), and SRV-DU-5 (NW quadrant) are a nine-point composite representing the four decision units in the four quadrants of the property marked in green on **Figure 1**.

Soil Samples:

A total of 14 soil samples were collected as closure samples after pile removal or for characterization of the site for future development of the Reedway Safe Rest Village. The soil samples were labeled according to their decision unit and depth in inches.

CSA personnel donned clean nitrile gloves to collect the samples. The soil samples were immediately placed into 4-ounce glass sample jars with no headspace and capped with Teflon lids. The sample jars were then labeled and placed in a chilled container for delivery to the City of Portland Water Pollution Control Laboratory (WPCL). Chain-of-custody forms were completed and taken to the laboratory with the samples.

Soil samples were analyzed for Total Metals EPA Method SW-846 (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc), semivolatile organic compounds (SVOC) EPA method 8260, Polychlorinated biphenyls (PCBs) EPA method 8082, and Pesticides EPA method 8081 and the WPCL laboratory reports are in **Appendix E**.

Results:

Oregon DEQ Background Cleanfill Criteria and Oregon DEQ Risked Based Concentration (RBC) screening levels (Urban residential) for soil ingestion, dermal contact, and inhalation were used to screen the material for disposal purposes and health and safety.

Results are provided in the Summary of Laboratory Results in **Table 1 and Table 2.**

PCBs and Pesticides

PCBs were not detected above method reporting limits in any of the samples tested.

Pesticides were detected in the Springwater Wetland samples DU-5 below cleanfill screening values.

Metals

Metals were detected in all samples collected. All metals detection were below ODEQ RBCs for direct contact for urban residential use for soil ingestion, dermal contact, and inhalation. Lead was detected above ODEQ upland cleanfill screening levels in most samples. Arsenic, copper, and zinc were also detected above ODEQ upland cleanfill screening levels in sample SP1-W-CL.

SVOCs

Various SVOCs were detected in several samples above method detection levels, but below cleanfill screening levels with the exception of benzo(a)pyrene. Benzo(a)pyrene was detected above cleanfill screening levels in several samples and above Urban residential RBCs in sample SRV-1 and SRV-DU-3 collected for the Reedway SRV characterization.

Conclusions:

Three safe rest village decision units (SRV-DU-2, SRV-DU-3, SRV-DU-5) had lead detections slightly above ODEQ total lead cleanfill levels (**Table 1**). Soil excavated in these areas will require disposal at a subtitle-D landfill if removed from the site. None of the metal levels exceed ODEQ RBCs for urban residential use or for worker health and safety.

Three safe rest village decision units (SRV-DU-3, SRV-DU-4, SRV-DU-5) had detections of benzo(a)pyrene above ODEQ cleanfill screening levels (**Table 2**) and soil excavated in these areas requires disposal at a subtitle-D landfill, (**Figure 1**), Sample SRV-1 exceeded benzo(a)pyrene ODEQ cleanfill and ODEQ Urban residential screening values and soil excavated for construction of utilities in this area will require disposal at a subtitle-D landfill. All soil excavated and removed from the site requires disposal at a subtitle-D landfill.

SRV-DU-3 exceeded Oregon DEQ RBCs for Soil Ingestion, dermal contact, and inhalation for urban residential use for benzo(a)pyrene (**Table 2**) and steps should be made to eliminate the exposure pathway by excavating surface soils or by providing a cap of soil, asphalt, or another restrictive layer.

If any unanticipated contaminated media (identified by odor, sheen, or other field test) is encountered during construction, please contact the CSA program immediately and follow COP Standard Construction Specifications for contaminated media in section 00291. Any material removed from the site having a chemical odor, stained, or possessing sheen will require disposal at a subtitle-d landfill.

Recommendations:

Acquire a disposal permit from a Subtitle-D disposal facility prior to construction of the Reedway Safe Rest Village if soils are excavated and removed from the site.

Limitations:

The purpose of this investigation is to report the findings of sampling and analysis. The survey is intended to identify contamination related to environmental conditions at the subject site. The samples collected only indicate the presence or absence of contaminants in the discrete grab sample. The sampling locations target the most likely locations for contamination, but contamination may exist in areas not sampled. The focus of this survey is on hazardous substances likely associated with the historic activities conducted within the subject site. In this context, the term hazardous substance includes the chemicals listed as hazardous substances in the Code of Federal Regulations, Oregon Administrative Rules, and petroleum products. This survey is in effect as of August 23, 2022.

Please contact me if you have further questions or if other suspect materials are encountered during site activities. I may be reached at 503-823-8155.

Cc Eli Callison
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