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Jim Orr, RG
Oregon Department of Environmental Quality
NW Region Cleanup Program
700 NE Multnomah Street, Suite 600
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September 12, 2025

Transmitted via email

Subject: **Focused Interim Remedial Action – South Parking Area**
Lawrence Oil Company Bulk Plant (AKA St. Helens Pacific Pride)
845 N. Columbia River Hwy, Saint Helens, Oregon
ECSI # 6720 OERS # 2024-2684

Mr. Orr:

The following presents actions currently underway at the site to backfill the south parking area (SPA) and implement concurrent focused interim remedial actions at the Lawrence Oil Company (LOC) facility in St Helens. This document presents the interim actions that were discussed during our site visit on September 10, 2025. The SPA is illustrated on Figure 1 (attached). The primary purpose of the interim actions is to inhibit or prevent the direct southern migration of subsurface water through the SPA and possibly into the wetland. Surface and perched/ponded subsurface water from a relatively large portion of the site migrates to the SPA due to the presence and slope of the underlying basalt bedrock. Therefore, a multi-pronged approach is needed to minimize any potential impact of this water. Both surface and subsurface water will be diverted away from the SPA and the wetland using standard conventional means.

Project Background

The site is a bulk petroleum fuel storage facility with above-ground tanks and a cardlock dispensing area. In late October 2024, diesel was released to the ground surface at the SPA from a defective oil-water separator (OWS) that has since been repaired. Product recovery efforts were implemented immediately using vacuum removal and absorbent booms and pads. On November 7th and 8th, 2024, Martin S. Burck Associates (MSBA) directed excavation cleanup activities at

the SPA in general accordance with the DEQ-approved work plan titled "Work Plan for Interim Excavation Cleanup and Storm Drain Repair" dated November 5th, 2024. The cleanup targeted shallow gravel, rock, and soil containing product and the highest concentrations of PHCs in the SPA. An estimated 200 cubic yards of material containing diesel was excavated to an approximate depth of 1-2 feet below surface grade within the cleanup area shown on Figure 1. The soil was stockpiled near the northeast property boundary and disposed of at the Wasco County Landfill. Product was vacuumed from the surface of the ponded/perched water during the excavation cleanup. Subsequent to the excavation cleanup, residual product on the perched/ponded water within the SPA was contained with booms and removed with absorbent pads until it was no longer observed. The residual product was primarily observed along the northern edge of the excavation area. During the dry summer months, the perched/ponded water dissipated, leaving the excavation cleanup area essentially dry.

Focused Interim Remedial Action

Prior to the release (October 2024), LOC planned to raise the level of the SPA using earth blocks along the southern edge and importing crushed rock. In early September 2025, LOC initiated the backfilling and restoration of the SPA so it can again be used for equipment parking. This work was initiated in the fall when the perched/ponded water was at a minimum and before the rainy season filled the area with water. Upon review of the site conditions and circumstances, MSBA determined that potentially substantial benefit could be achieved by implementing several basic remedial actions in conjunction with the backfill operation. The objectives of the remedial actions include the following and are illustrated on Figure 1 and Figure 2, attached.

1) Minimize subsurface water from entering the SPA from beneath the asphalt to the north,
2) Prevent surface water from entering the SPA from the north, and
3) Prevent surface and subsurface water from entering the wetland from the SPA,

Subsurface water at this site is defined as perched water migrating beneath the asphalt toward the southeast and into the SPA below the surface. Most of the subsurface water comes from the surface water that flows off the hillside to the west, infiltrates the basalt rubble at the base of the hill, and migrates beneath the asphalt toward the SPA. Some of the water from the hillside flows over the surface and onto the asphalt. This surface water also enters the SPA near its northwest corner. This is based on years of observations by LOC and was confirmed by MSBA during the winter months of 2024. In order to minimize surface water from flowing off the hillside and onto the asphalt, LOC has historically diverted it away from the asphalt via a ditch and low point pumping station. This water has been diverted to the area west of the warehouse building, where it infiltrates the native basalt rubble. The historic surface water diversion efforts by LOC will be maintained and improved where possible to more effectively minimize the surface and subsurface waters that

might otherwise enter the SPA. This water diversion was incorporated into the approved NPDES permit that is currently in effect for the site.

Surface water has historically flowed from portions of the asphalt surface into the SPA and the parking area north of the office building. In order to prevent surface water from entering the SPA, a slightly raised asphalt berm will be added to the edge of the asphalt from the northeast corner of the warehouse building to the vicinity of the office building. The NPDES permit will be amended to reflect this change.

In order to prevent surface and subsurface water from entering directly into the wetland area from the SPA, several barrier features will be implemented, including a pond liner, a clay-filled trench, a subsurface clay layer, and a clay berm. A petroleum-rated pond liner will be installed adjacent to the earth blocks to prevent any water from flowing through the cracks. A narrow trench-like feature will be excavated adjacent to the blocks to bedrock or undisturbed native clayey soil, removing any rock or loose material/debris. The shallow trench-like feature will be backfilled with clean clayey soil derived from a nearby quarry to minimize or prohibit the migration of subsurface water beneath the blocks. A sewer pipe runs east/west through the approximate middle of the SPA, dividing it into northern and southern areas. A limited amount of rocky material surrounding the pipe was left undisturbed to avoid potential damage. A clay berm will be constructed over and envelope the pipe to minimize or prevent subsurface water from migrating from the northern area to the south. Loose material and debris will be removed from each side of the pipe before the clay berm is installed. A subsurface clay layer approximately 12 inches thick will be placed on the bottom of the southern area to further inhibit or prevent surface or subsurface water from migrating beneath the blocks into the wetland.

After the clay berm and subsurface layer are completed, the remainder of the northern and southern SPA will be backfilled with imported clean gravel to grade, matching approximately the existing asphalt surface. The finished gravel surface will slope gently toward the center from the north and south with an overall gradual slope toward the east. In the unlikely event of surface water runoff within the SPA, it will be conveyed toward the east and into the drainage ditch adjacent to the highway for which it was intended. The NPDES permit will be amended to reflect this modification.

Subsurface Soil Amendment

MSBA acknowledges that some degree of residual petroleum hydrocarbons (PHCs) will remain after the SPA is reconstructed. In order to promote and enhance the natural attenuation of those PHCs, 400 pounds of oxygen-releasing compound or ORC from Regenesis will be applied as an amendment to the subsurface prior to backfilling. Approximately 100 lbs will be applied to the southern area beneath the subsurface clay later, and 300 lbs will be applied to the northern area.

This is intended as a soil amendment and is not designed to fully or completely remediate all residual PHCs. However, MSBA anticipates that a significant degree of natural attenuation will occur, which will be documented by future compliance sampling conducted as part of the monitoring and closure process.

Remarks and Signature:

The information/conclusions contained in this plan were arrived at in accordance with currently accepted professional geologic and environmental practices at this time and location. No warranties are intended or implied. This plan was prepared solely for the Lawrence Oil Company. Martin S. Burck Associates, Inc. is not responsible for the independent interpretations, conclusions, or actions of others derived from or based on the information presented herein.

Information and opinions presented in this plan are based on the collection and review of data from limited portions of the site, subsurface, and surroundings. Martin S. Burck Associates, Inc. is not responsible for conditions or specific portions of the site that are not investigated, for conditions that are not reported or properly presented, and for future activities or investigations that may alter the current condition or understanding of the site.

Please contact me at (541) 387-4422 if you have any questions.

Sincerely,
Martin S. Burck Associates, Inc.

Martin S. Burck

9/12/2025

Martin S. Burck, LG/RG
Licensed/Registered Geologist OR, WA, CA

Date

Attachments: Figure 1 – Plan View
Figure 2 – South Parking Area Cross Section A – A'

Expires: 2/28/2026

Perched Water Flow Direction

Surface Water Flow Direction

A'

Asphalt Berm
Surface Water Diversion

Asphalt

Columbia River Hwy

Edge of Asphalt

Influent

Oil-Water Separator

Discharge

Approximate Cleanup Excavation Area

Gravel Surface

Office Parking

Warehouse

Sewage Holding Tank

Concrete Loading Dock

Gravel Surface

South Parking Area

Office

Sewer Utility

Native Silt Clay Surface

Subsurface Clay Barrier

Clay Berm

Sewer Tank Pump Station

A

Earth Blocks

Pond Liner

Clay Filled Trench

Native Silt Clay Surface

Drainage Ditch

Top of Embankment

Wetland

NORTH

0 10 20

Approximate Scale (feet)

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FIGURE 1

PLAN VIEW

Lawrence Oil Company Bulk Plant
845 N. Columbia River Hwy
Saint Helens, Oregon

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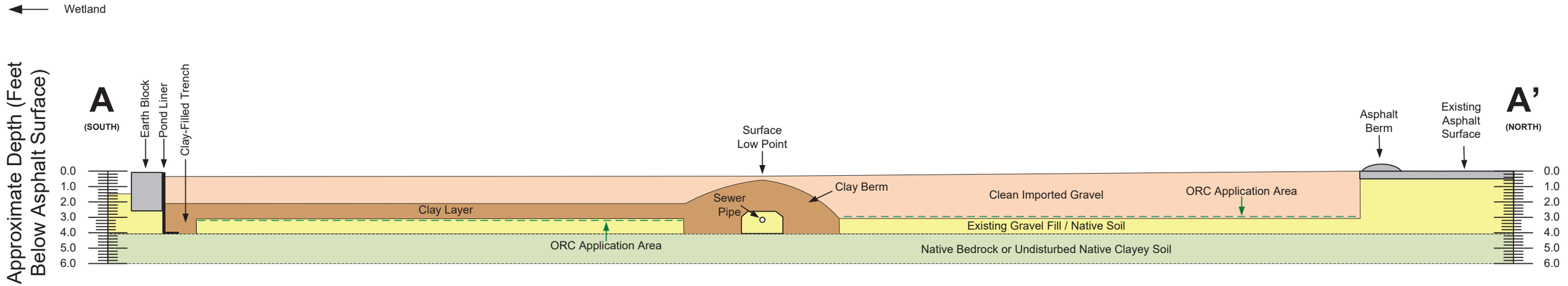

0 5 10

Approximate Horizontal Scale (feet)

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FIGURE 2

SOUTH PARKING AREA CROSS SECTION A - A'

Lawrence Oil Company Bulk Plant
845 N. Columbia River Hwy
Saint Helens, Oregon

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