State of Oregon
Department of Environmental Quality **Memorandum**

Date: February 22, 2024

To: file

From: Tracy J England
Eastern Region Cleanup Program

Copies: Ann Farris
Eastern Region Cleanup Program

Sara Slater
Eastern Region Water Quality Program

Subject: La Pine Card Lock – LUST 09-22-0035; discharge of treated groundwater from groundwater treatment system

The La Pine Card Lock (site) has been operating a groundwater treatment system to remediate a subsurface release of diesel fuel since Spring 2022. In January 2024, the site received an unusually high amount of precipitation resulting in surface water runoff impacting the treatment system. To address the excess water, the site has proposed construction of an infiltration trench to manage treated groundwater. In light of this proposal, DEQ's Cleanup Program and Water Quality Program worked with the site to determine what testing of the treated groundwater is needed prior to discharge.

Water quality rules (OAR 340-045-0015) state that without first obtaining a permit from the Director, no person shall construct, install, or operate a facility, or conduct any activity that would cause an increase in the discharge of wastes to the waters of the state, or which would otherwise alter the physical, chemical, or biological properties of any waters of the state in any manner not already lawfully authorized.

Under ORS 465.315(3), however, DEQ may exempt the requirement to obtain a permit associated with work conducted under the review of the Cleanup Program, provided the substantive requirements of such a permit are met. DEQ's Cleanup and Water Quality Programs have determined that water from the dewatering operation can be discharged to the subsurface provided that the substantive requirements of the Underground Injection Control (UIC) Program are met.

This memo describes the permit requirements, and the measures that will be taken to meet them.

Project description

The La Pine Card Lock is located at 50882 US Highway 97 in La Pine, Deschutes County, Oregon, near the intersection of US Highway 97 and Oregon Highway 31. The site operates as a bulk petroleum storage and cardlock facility including one 12,000-gallon gasoline underground storage tank (UST), one dual-compartment UST containing a 5,000-gallon gasoline compartment and a 7,000-gallon diesel compartment, one 20,000-gallon diesel aboveground storage tank (AST), one 3,000-gallon kerosene AST, and one 20,000-gallon propane AST.

A Phase II Environment Site Assessment was completed in January 2022. The subsurface investigation established that soil and groundwater are impacted from a release of diesel in the vicinity of the UST nest. Light non-aqueous phase liquid (LNAPL) was present at the approximate static water level between the UST nest and office/warehouse building. In early 2022, 6 monitoring wells and 6 recovery wells were installed. Soil and water samples taken during the installation of the wells indicates that contamination is limited to petroleum and petroleum constituents. Samples were analyzed for semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), and petroleum hydrocarbons.

The recovery wells were equipped with pneumatic pumps which included floating product skimmers. LNAPL recovery was initiated site-wide by April 2022. The initial thickness of LNAPL in recovery wells varied from 0.3 to 0.75 inches; after continuous operation of the recovery system, LNAPL was still present but at immeasurable thickness in all recovery wells by November 2022. Recovery wells continue to operate.

Representatives of DEQ's Cleanup Program and Water Quality Program met on February 22, 2024 to discuss how to treat and discharge of the water from the dewatering operation in a manner that provides adequate environmental protection and minimizes disruption of the recovery system.

The effluent from the treatment system has been sampled. Samples were analyzed for TPH, BTEX, VOCs, PAHs, and SVOCs. No petroleum compounds were present in the samples at concentrations above the method detection limit. Effluent from the treatment system must meet the Safe Drinking Water standards prior to discharge. The treated water will be sampled quarterly to ensure compliance with the requirements of this permit exemption.

The treatment system is expected to operate, as necessary, through the duration of the project. The site proposes to discharge the treated water through a perforated pipe to a constructed infiltration trench, where it will percolate into the subsurface. The rate of discharge of treated water may not exceed the infiltration capacity of the trench. The

infiltration trench will be on site property adjacent to US Highway 97. At the conclusion of the project, the infiltration trench will be removed and the excavation restored to pre-excavation conditions.

Basis for Permit Exemption

Under provisions of ORS 465.315(3), the on-site portion of any removal or remedial action approved by DEQ is exempted from permitting requirements of ORS Chapters 459, 466, 468, 468A, or 468B. Without affecting substantive requirements, no state or local permit shall be required for, and no procedural requirements shall apply to, the portion of any removal or remedial action conducted onsite, unless the permit or procedural requirement is necessary to preserve or obtain federal authorization of a state program or the person performing the removal or remedial action elects to obtain the permit or comply with the procedural requirements. Operation of the groundwater treatment system described above will generate a treated water waste stream that meets the substantive requirements specified by the UIC program for the treated effluent for discharge into the subsurface via infiltration trench.

The La Pine Card Lock is working with DEQ's Cleanup Program under a Cost Recovery Agreement signed on January 31, 2022. DEQ will oversee site activities to verify that the substantive requirements of the UIC program are met and that activities are conducted in a manner that is protective of public health, safety and welfare, and the environment.