Oregon
Tina Kotek, Governor

Department of Environmental Quality
Northwest Region
700 NE Multnomah Street, Suite 600
Portland, OR 97232
(503) 229-5696
FAX (503) 229-6124
TTY 711

September 10, 2024

Shaoli Zhao
11410 SE CASCADE VIEW DR
Happy Valley, OR 97086

sent via e-mail (winniezhao2008@gmail.com)

RE: **Conditional** No Further Action Determination
Former Dry Cleaner - Fuller Road
10543 SE Fuller Road
Milwaukie, Oregon
ECSI #6538

Dear Shaoli Zhao:

The Oregon Department of Environmental Quality (DEQ) reviewed the available information for the above-referenced property, including a December 1, 2022, *Additional Site Investigation with Risk-Based Evaluation* prepared by Evren Northwest, Inc., and a March 25, 2024, *Site Assessment Report* prepared by Alpha Environmental. Clackamas County records show the subject property is comprised of one tax lot – 12E32AA00600. DEQ has determined that investigation and remedial action to address environmental contamination is adequate, and no further action is required with conditions, including engineering controls that apply to potential future development and institutional controls. This determination is based on the DEQ regulations and the facts as we now understand them including, but not limited to the following:

- The .37-acre subject property contains a single-story concrete slab-on-grade building. The building is occupied by a restaurant to the north and an embroidery shop to the south. The property was developed as an orchard by the mid-1930s. By 1955, a possible residential structure was present in the central west of the site. In 1967, the previous structure was removed, and the current commercial building was constructed. A dry cleaner using perchloroethene (PCE) operated between the 1980s and 2000s. A dry well that reportedly receives roof runoff is located on the north side of the building.
- An abandoned septic tank located approximately 10 feet east of the northeast side of the building, and associated piping to the building, apparently received PCE from the dry-cleaning operations as indicated by high PCE and trichloroethene (TCE, a breakdown product of PCE) levels found in adjacent soil gas samples. PCE, TCE and vinyl chloride were detected in the septic tank sample. Chloroform, related to chlorine, a common cleaning product, also was detected in soil gas above DEQ human health risk-based concentrations (RBCs) for residential use.
- Soil gas and sub-slab vapor samples were collected in June 2022. Relatively high levels of TCE (up to 13,698 micrograms per meter cubed [ug/m^3]) and PCE (up to 18,300 ug/m^3) were detected in soil gas adjacent to the septic tank, with low to moderate levels detected in sub-slab vapor samples from beneath the building.
- On October 19, 2022, the septic tank was pumped, cleaned and abandoned by filling with approximately 10 cubic yards of controlled density fill. An approximately 550-gallon heating oil tank located along the outside of the south building wall also was decommissioned by filling with controlled density fill. Soil samples collected below each end of the tank did not suggest a release had occurred. A Certificate of Voluntary Heating Oil Tank Decommissioning documenting the clean closure was received by DEQ and assigned File No. HOTD-48527.
- In October 2022, groundwater was collected from a boring advanced to a depth of 42 feet at the septic tank area. TCE, chloroform and bromodichloromethane were detected above RBCs for tap

water ingestion. Indoor air samples were collected approximately one week following septic tank abandonment. TCE was detected above its residential RBC but below the RBC for occupational use. Chloroform was detected in indoor air above occupational and residential RBCs but was attributed to chlorine cleaning products in use in the building.

- Additional air testing was completed in June 2023 and February 2024 to assess seasonal variability in indoor air concentrations. The maximum detected PCE and TCE concentrations over both events were above their respective residential RBCs, but below RBCs for occupational use. Similar to the initial air testing in 2022, chloroform was detected in indoor air above occupational and residential RBCs but was attributed to chlorine cleaning products in use in the building.
- Residual contamination based on elevated soil gas concentrations exists near the northeastern edge of the building in the septic tank area. Soil gas has migrated beneath the building, likely facilitated by the septic piping trench that acts as a preferential vapor migration pathway. Testing beneath the building is limited to sub-slab soil gas testing, so other sources (e.g. former dry cleaner machine, bathroom) cannot be ruled out. TCE, which is generated in the subsurface during breakdown of PCE, and is not used in Site operations, has been detected in indoor air, suggesting some vapor intrusion into the building space from the subsurface is occurring.
- The Site property is zoned retail commercial (RTL). Zoning allows residential use as an accessory use. A municipal water supply is readily available. There are no known groundwater supply wells being used on the subject property or surrounding properties, and future groundwater use at the property is unlikely.
- Inhalation of indoor air and direct contact with soil by construction or excavation workers are the primary human health pathways of concern. There are no surface water bodies on the property. The nearest surface water body is Phillips Creek located approximately one-half mile to the south. Most of the site is covered with hardscape. There is no native vegetation or natural habitat; therefore, a formal ecological risk screening was not completed.
- Concentrations of PCE and TCE in soil gas exceed applicable RBCs for vapor intrusion. However, indoor air and sub-slab vapor samples from beneath the building show concentrations below applicable RBCs.
- On May 1, 2024, DEQ published a public notice concerning the proposed No Further Action determination with conditions for the property in the Oregon Secretary of State's *Bulletin* and in *The Oregonian*. No comments were received.
- To ensure conditions at the property remain protective, there will be a prohibition on residential use or redevelopment of the property without DEQ-approved engineering controls to manage soil vapors prior to or concurrent with development. The Owner may conduct additional remediation and/or further testing per DEQ-approved plans to demonstrate that vapor intrusion is not a pathway of concern and that a vapor control system unnecessary for the property to be protective of human health. In addition, a DEQ-approved contaminated media management plan (CMMP) will be required for future intrusive work at the property. These requirements are memorialized in an Easement and Equitable Servitude (EES) between the property owner and DEQ that was recorded on the property deed in Clackamas County records on August 29, 2024.
- The dry well should be registered with DEQ's underground injection control program.

Based on the available information, the property requires no further action under the Oregon Environmental Cleanup Law, ORS 465.200 et seq. unless new or previously undisclosed information becomes available, there are changes in Site development or land and water uses, or contamination is discovered.

Site information and reports supporting this No Further Action decision can be viewed at:
Web documents for Former Dry Cleaner Fuller Road

DEQ recommends keeping a copy of all the documentation associated with this evaluation with the permanent facility records. If you have any questions, please Mark Pugh at 503 229-5587 or mark.pugh@deq.oregon.gov.

Sincerely,

Kevin Parrett, Manager
Northwest Region Cleanup Program

e-copy: Jim Cooper, Alpha Environmental
Derek Sandoz, DEQ WQ