



Technical Memorandum

To: Katie Marwitz, City of Eugene

Date: February 12, 2025

From: Julianna Wetmore, MFA and Merideth D'Andrea, MFA Project No.: M0076.12.001

Re: Review of DEQ No Further Action Designations for the Riverfront Research Property (Tax Lot 1703322405300)

Maul Foster & Alongi (MFA) has prepared this memorandum on behalf of the City of Eugene summarizing our review of regulatory agency records for Tax Lot 1703322405300 (the Property), including a screening of available historical data relative to current regulatory criteria for complete or potentially complete pathways. Files provided by the Oregon Department of Environmental Quality (DEQ) for the Property are included in Attachment A.

Background

According to the DEQ files, between 1984 and 2006 the University of Oregon completed investigation and cleanup activities at the Property under a voluntary cleanup program (VCP) agreement with DEQ (DEQ 2010). The portions of the Property that were assessed are known as P-A and P-B (see Figure). The P-A property was then subdivided into the upland portion and the riverbank portions for decision-making during the assessment and cleanup activities. In 2001, the P-B portion of the Property was issued a no further action (NFA) determination (DEQ 2001). On October 2010, the P-A (Upland) Site was issued a conditional NFA determination (DEQ 2010). This NFA indicated that the upland portion of the Property was adequately assessed and that contamination in the soil and groundwater was known and concentrations were below applicable regulatory screening levels for complete pathways, with the exception of groundwater exposure for construction and excavation workers. The 2010 conditional NFA letter stated the following:

- Historical contamination was the result of petroleum products and byproducts of the adjacent manufactured gas plant (MGP) site impacting soil and groundwater at the Property.
- Impacted shallow soils were removed from the western portion of the Property, however, some residual contamination is present below screening levels for construction and excavation worker exposure.
- Groundwater monitoring was completed at the Property, and results indicated that contamination is limited to the western portion of the Property that was believed to only pose a risk to future construction and excavation workers as no other complete pathways had screening level exceedance.
- The contamination exposure could be controlled through implementation of a Site Management Plan, to require safe work practices for future construction and excavation work.
- The Property owner would be required to have future construction or excavation work at the Property conform to the requirements of the Site Management Plan.

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- The Property would continue to be listed in DEQ's inventory of confirmed release sites as long as residual contamination is present exceeding screening levels for complete exposure pathways or as long as institutional or engineering controls are required at the Property.

In April 2015, a partial NFA was issued for the P-A (Riverbank) Site (DEQ 2015). The NFA determination letter indicated that additional ecological receptors were included in the assessment of residual contamination. This additional review was performed to ensure that no additional actions were required for the cleanup to be considered protective of the environment. The determination indicated that the remaining contamination was not an unacceptable risk to surface water or riverbank sediment ecological receptors.

The DEQ files indicate that residual contamination is present on the Property, however, at the time of the NFA determinations in 2001, 2010, and 2015, the known contaminant was below applicable screening levels for site receptors (DEQ 2024). Deed restrictions requiring the use of a Site Management Plan (PBS 2009), and the presence of residual contamination are considered controlled recognized environmental conditions (CRECs) for the Property.

MFA's review of the Site Management Plan determined that while the plan addresses general soil management considerations and references exceedances of naphthalene and benzo(a)pyrene in the groundwater monitoring wells, it lacks specific information regarding the locations of soil exceedances.

Updated Risk-Based Screening of Analytical Data

MFA reviewed the DEQ provided documents cited in the partial NFA letter for Riverfront Research Park – Parcel P/A, Riverfront Portion (DEQ 2015) and the Environmental Investigations through August 1993 report (Squier Associated 1993). The results of this review determined that there were no sample locations on this portion of the Property and therefore an updated risk screening could not be conducted for the P-A riverbank.

Additionally, after reviewing the 2001 NFA report for the P-B portion of the Property (DEQ 2001), MFA determined that there were no sample locations on this portion of the Property either. The previous NFA was inclusive of a larger area, and sampling data was limited to the eastern segment of the P-B area (off-Property). Consequently, an updated risk screening could not be conducted for the P-B portion of the Property.

The only historical data available was limited to the P-A upland portion of the Property (See Figure 3 in Attachment B). Data collected during previous investigations conducted between 1984 and 2006 described in the 2010 conditional NFA and Draft Staff Report (DEQ 2009) were compared to the following applicable DEQ risk-based concentrations (RBCs) (DEQ 2023) (i.e., screening criteria for complete or potentially complete pathways):

- Ingestion, dermal contact, and inhalation (soil direct contact) for occupational, construction, and excavation workers
- Volatilization to outdoor air for occupational receptors (soil and groundwater)
- Groundwater in excavation for construction and excavation workers (groundwater)

Volatilization to indoor air was excluded from this updated risk screening as the Property is currently undeveloped and future use is unlikely to include occupied buildings.

P-A Upland Risk Screening Results

The following is a summary of changes identified in the risk-screening for sampling locations on the P-A upland portion of the Property.

- Detected concentrations of polycyclic aromatic hydrocarbons (PAHs) from historical sample UO-WP-T5-2' exceeded the direct-contact RBC for occupational workers for benzo(a)pyrene and dibenzo(a,h)anthracene (See Figure 5, Attachment B). This sample had previously exceeded the direct-contact RBC for construction workers.
- Detected concentrations of total petroleum hydrocarbons (TPH) from historic samples UO-SS-S2-5' (TPH by SM 418.1M) and WP-EXC2-N-1' (oil-range hydrocarbons) exceeded the direct-contact RBC for construction workers (See Figure 5, Attachment B). Previously, there were no exceedances at these locations.
- Carcinogenic PAHs (cPAHs) were assessed at locations where PAHs were analyzed. The sample UO-WP-T5-2' exceeded the RBC for soil ingestion, dermal contact, and inhalation for both construction worker and occupational receptors (See Figure 5, Attachment B).
- There were no new exceedances identified in the historic groundwater samples. Additionally, benzo(a)pyrene is no longer considered a chemical of concern, as the groundwater RBC for exposure to construction and excavation workers increased, and there is no longer an exceedance of the current RBC (DEQ 2023).

Recommendations

In general, it is recommended that the Site Management Plan (PBS 2009) prepared in November of 2009 be updated to provide more detail (i.e., figures) showing locations with exceedances and including newly discovered information. The plan should be revised to exclude benzo(a)pyrene as a constituent of concern in groundwater. Additionally, TPH and PAHs in soil should be included in the revised plan as constituents of concern at the locations described above.

Attachments

References

Limitations

Figure

Attachment A – DEQ File Review Documents

Attachment B – Historical Figures

References

- DEQ. 2001. Letter RE: No Further Action Determination, Area P-B of Western Parcel University of Oregon Riverfront Research Park. Oregon Department of Environmental Quality: Eugene, OR. March 2001.
- DEQ. 2009. *Draft Staff Report Conditional No Further Action Recommendation for the Area P-A Upland Portion of the Western Parcel – Riverfront Research Park, University of Oregon Eugene, Oregon*. Oregon Department of Environmental Quality: Western Region Office. September.
- DEQ. 2010. Letter RE: Conditional No Further Action Determination, UO Riverfront Research Park. Oregon Department of Environmental Quality: Eugene, OR. October 29.
- DEQ. 2015. *Letter RE: Partial No Further Action Determination for Riverfront Research Park – Parcel P/A*. Oregon Department of Environmental Quality: Eugene, OR. April 23.
- DEQ. 2023. *Table: Risk-Based Concentrations for Individual Chemicals*. Oregon Department of Environmental Quality, Environmental Cleanup Program. August.
- DEQ. 2024. Public Project Records – Facility Info, Riverfront Research Park. Accessed May 2024. <https://ordeq-edms-public.govonline.saas.com/app/pub-rcd/projects/review/9/899;tab=printNarrative>
- PBS. 2009. *Site Management Plan Western Parcel of the Riverfront Research Park Project*. PBS Engineering + Environmental. November.
- Squier Associated. 1993. *Environmental Investigations Through August 1993, Riverfront Research Park University of Oregon*. Squier Associates Inc., Environmental/Geotechnical Consultants. September.

Limitations

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Figure



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Appendix A – DEQ File Review Documents



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Appendix B – Historical Figures



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