



Oregon

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via electronic delivery (email)

David Breen
Port of Portland
PO Box 3529
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Re: Draft Basin 1 CMMP
Portland International Airport
ECSI # 3324

David Breen:

DEQ Cleanup completed review of your letter titled *Management of PFAS-Containing Materials on Basin 1 Source Control Project at PDX*, dated June 26, 2025. The document outlines the Port of Portland's plans for management of PFAS-contaminated soil and groundwater expected to be encountered/generated during Basin 1 construction, notably replacing stormwater pipes and infilling of Ditch A. Work is planned for 2026 and is expected to significantly reduce or eliminate the infiltration of PFAS-contaminated groundwater into stormwater features in the historical fire training areas at PDX. Our comments follow. A more detailed Environmental Management Plan is expected for development prior to project work commencing.

General #1. Please include a schedule or otherwise discuss the proposed start date and duration of planned work.

General #2. A major element of the work is not discussed: measures that will need to be taken during pipe replacement (former fire training areas) and pipe installation (Ditch A) to prevent the release of contaminated in-place soil, sediment, or groundwater into storm drainage system infrastructure, the point of discharge being Columbia Slough. We would expect the EMP to discuss, for example, use of check dams or sediment traps to prevent contaminated sediment being released during work. Alternatively, these features may be dry as the result of dewatering. Please include a high-level discussion in the CMMP, with the expectation that detailed information will be necessary in the EMP.

General #3. This or the forthcoming EMP should illustrate the full extent of pipe replacement and ditch filling work in the context of the existing shallow groundwater plume.

Screening Levels, Page 2. A decision of hazardous substance designation for 6 PFAS chemicals is expected by DEQ's Environmental Quality Commission in September 2025. DEQ is

developing Risk-Based Concentrations (RBCs) for these chemicals as part of a larger RBC updating effort. RBCs for the direct contact (residential and industrial) and drinking water exposure pathways are expected to align with EPA's Regional Screening Levels. Rather than using the 60-fold dilution attenuation factor for the leaching-to-groundwater RBCs, DEQ intends to apply either no dilution (for sites with source areas exceeding 0.5 acres) or a 20-fold dilution (for site with source areas smaller than 0.5 acres); this represents a decrease from the proposed dilution factor in the CMMP from 60 to 20. DEQ is developing RBCs for receptors and exposure pathways not addressed by EPA including soil direct contact for Construction Workers and Excavation Workers and Groundwater in Excavation. We recommend that you include language in the CMMP acknowledging the need for flexibility as RBCs and Clean Fill Screening Levels (CFSL) are issued by DEQ.

Screening Levels, Page 2 and Table 1. DEQ's CFSL are based on the lowest of residential and leaching to groundwater values (EPA or DEQ) and ecological screening values. Given the industrial use of the site and absence of current ecological screening values, DEQ is comfortable with the use of leaching to groundwater values for designation of Clean Fill provided that the lowest of EPA and DEQ values be used and that concentrations are below those for residential exposure.

Given that some soil concentrations exceed industrial RSLs (and, based on our preliminary analysis are expected to exceed DEQ construction worker RBCs when issued), a CMMP or EMP would typically include a Health and Safety Plan (HASP). DEQ's primary concern would be worker exposure to contaminated dirt and dust assuming that inhalation or ingestion of contaminated groundwater will not occur.

Source Control Project.

- HDPE plastics may contain PFAS. PFAS-free HDPE products should be sourced, if feasible, to reduce unintended leaching to stormwater.
- There is a typographic error in the penultimate paragraph of the section; "ng/L" is defined as "micrograms per liter" rather than nanograms per liter.

Soil Re-Use/Disposal Options, Pages 5 and 6.

- The Level 1 criterion is acceptable.
- The Level 2 and 3 criteria are acceptable with the following qualifications:
 - Soil with detectable contamination should not be placed *in any location* where runoff to surface water features, drainage features, or sensitive environments such as wetlands might occur.
 - DEQ is unlikely to support reuse of contaminated soil outside of the designated work area.
- Level 4. DEQ does support reuse of soil with concentrations above occupational screening values outside of the work areas, or inside the work area excepting below hardscape.
- Level 5. When PFAS are present above targeted removal/potential hot spot levels, we agree that disposal at a Subtitle C is appropriate. In some cases, and subject to landfill approval, disposal at a lined Subtitle D landfill with active leachate collection system may be acceptable.

Interim On-site Soil Storage, Page 8.

- Identify the expected duration of contaminated soil stockpiling.
- If soil stockpiling is utilized, in particular for soil exceeding occupational screening values, piles will need to be both lined and covered. They also may be subject to a Solid Waste Letter of Authorization under DEQ's Materials Management program.
- In the last sentence, text presumably should say that "...it is unlikely that the Port will *rely* on this option..." (italics added). Please clarify also which option is unlikely – SA85, Southwest Quad, or both.

Construction Dewatering Treatment/Discharge Options, Pages 9 and 10.

- The information presented in this section for groundwater management is generally acceptable; however, DEQ reserves all final decision-making to after review of detailed information to be presented in the forthcoming Basin 1 Environmental Management Plan (EMP).
- If DEQ PFAS rulemaking is approved in September 2025, six PFAS chemicals will be regulated (PFOA, PFOS, PFHxS, PFNA, GenX, and PFBS). At that point, we would expect "regulatory focus" to include all of these compounds.
- Analytical testing will be necessary to confirm that water discharged to ground surface, post-treatment, has been adequately treated. To address the problem of long analytical times for EPA Method 1633 analysis, the Port should consider both "proof of concept" sampling and other analytical methods (EPA 8327 and/or ASTM D8421) as were utilized at the PDF Fuel Facility.
- We look forward to receiving more information in the EMP regarding dewatering locations, volumes, duration of pumping, etc.

Table 1.

- Please include a figure to accompany this table showing the location of soil samples cited.
- Most of the Potential Hot Spot Levels presented in the table are based on a multiplier of 10x, the exception being for PFOA (100x). Please discuss/explain. DEQ also notes that while identified as Targeted Removal Levels or TRLs in text, they are called Potential Hot Spot Levels in Table 1. Clarify whether there is a difference.

Table 2.

- Please include PFAS values for at least the compounds with EPA Maximum Contaminant Levels.

Other. We recommend that the CMMP acknowledge and the forthcoming EMP discuss the potential for construction worker contact with PFAS- and petroleum-contaminated soil, some of which exceeds current occupational RSLs, and potentially forthcoming DEQ RBCs for construction/excavation worker exposure. Typically, this would be addressed in the form of a Health and Safety Plan or HASP.

Please submit a revised management plan considering the comments presented above. I can be reached at (503) 229-5417 or dan.hafley@deq.oregon.gov if you have questions or comments.

Sincerely,



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Cc: ECSI# 3324 File

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