



# Oregon

Tina Kotek, Governor

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October 8, 2024

*via electronic delivery*

Sarah Frederick  
U.S. Environmental Protection Agency  
1200 6<sup>th</sup> Avenue  
Seattle, WA 98101

RE: Quality Assurance Project Plan for Phase II Site Assessment  
Texaco Bulk Plant (former) – Klamath Falls  
2450 Altamont Drive  
Klamath Falls, Klamath County, OR  
ECSI #2931

Dear Sarah:

Thank you for the opportunity to review the *Quality Assurance Project Plan* for the Texaco Bulk Plant (former) – Klamath Falls, dated September 13, 2024, prepared by Eastern Research Group, Inc. (ERG) on behalf of U.S. EPA. DEQ understands the proposed Phase II Site Assessment scope of work outlined in the QAPP is being funded by EPA's Targeted Brownfield Assessment Program on behalf of Klamath County who owns the property. DEQ has reviewed the QAPP and provides the following comments for consideration.

### Specific Comments:

1. *Section 2.3.2.* "Known Petroleum Contaminated Soil and Groundwater" bullet point. The last paragraph states petroleum contaminated soil (PCS) was treated onsite using a mobile evaporative desorption unit (EDU); however, the EDU was not available during remedial actions. Instead of following the DEQ-approved interim remedial action measure work plan, the previous owner (Brady Environmental Inc.) treated soil by passive aeration, which allows evaporation of volatile contaminants into the atmosphere. Recommend revising the information to accurately describe prior remedial method.
2. *Section 2.3.3.* Proposed future site use does not include residential receptors. The property is zoned "CG" for General Commercial. Per the county's zoning designation for CG (attached), conditional uses of the Site include a manufactured home park. DEQ recommends screening against DEQ's risk-based concentrations (RBCs) for residential receptors unless the Site is rezoned to exclude residential uses.
3. *Section 2.4.* The QAPP proposes use of direct push technology to advance soil borings up to a depth of 15 feet below ground surface (bgs). Previous remedial measures indicated the excavator met refusal at approximately 8 to 9 feet bgs. Proposed assessment objectives may not be met if proposed drilling equipment is used. Please review proposed drilling technology to confirm it is appropriate for scope of work to be conducted.

Additionally, groundwater is reportedly shallow (~5 feet bgs). Collection of soil samples at depth may be limited by shallow groundwater encountered in the soil borings and may not be

representative of potential contamination in vadose zone soils, if collected below the water table. See DEQ Comment #5.b. below.

4. *Section 2.5.* PFAS compounds listed for soil and groundwater analysis do not match the list included in Appendix A. Please clarify which PFAS compounds will be included for analysis. DEQ recommends that the full suite of 40 PFAS compounds targeted by EPA Method 1633 method be analyzed and reported. Please revise Section 2.5 to say "...including (but not limited to)..." or to cite the method for target analytes.
5. *Table 2-5.* DEQ has the following comments:
  - a. Grab samples are proposed to be sampled "from depth." Recommend clarifying samples will be collected from depth (above the water table) and/or from areas with notable signs of contamination.
  - b. DEQ's RBCs for occupational receptors is based on potential exposure to contamination in soils above 3 feet bgs. Collection of "...up to one sample..." per soil boring is proposed and, depending on soil sample depth, may be insufficient for evaluating risk for applicable site receptors. DEQ recommends collection of soil from two sample depths from within each soil boring, if the presence of shallow groundwater does not limit collection of two sample depths from vadose zone soils. If groundwater is present at depths that prevent collection of subsurface soil samples (greater than 3 feet bgs), DEQ recommends the soil sample be collected from 0 to 3 feet bgs.
  - c. IDW in Table 2-5 does not include PFAS in the analyte list; inclusion of PFAS may be appropriate depending on the specific requirements of the target landfill(s) receiving IDW. DEQ recommends that the landfill(s) be contacted directly to determine their requirements, if any, for PFAS-contaminated waste. If no requirement exists, then PFAS do not need to be included in the analyte list for soil and groundwater IDW.
  - d. Polychlorinated biphenyls are listed in the Notes below the Table but are not a potential contaminant of concern. Please clarify or delete reference.
6. *Section 3.1.1.2.* Soil sampling will be conducted to evaluate potential soil exposure pathways. See DEQ Comment 5.b. above and revise accordingly.
7. *Section 3.1.1.3.* The first paragraph references collection of dripline samples along the "school" instead of the former warehouse building. This description appears to be in error. Please review and revise as appropriate.
8. *Section 3.1.1.6.* Lead-based paint will be identified through collection of paint samples for laboratory analysis. Additional information regarding sample collection or handling is not discussed. DEQ recommends a sufficient number of paint chip samples be collected per painted surface to have reliable and representative data for future abatement, if required.
9. *Section 3.1.3.1.* Three soil samples will be collected for PFAS analysis. The text states the soil borings proposed for PFAS sampling are the "two northern-most soil borings." Three borings are proposed on the northern portion of the Site: one near the former warehouse building and two near the former ASTs. Please revise to specify which soil borings on the northern portion of the Site will be included for PFAS sampling.
10. *Section 3.1.3.4.* Table 2-5 and previous text indicate *two* soil vapor samples will be collected. The text in this section references one sample whereas other areas of the QAPP reference two samples

to be collected, unless shallow groundwater prohibits advancing soil vapor borings to a depth sufficient to facilitate sample collection. Please review and revise as appropriate.

11. *Section 4.1.* If significant deviations from the QAPP occur during field work, in addition to the EPA Project Manager, DEQ requests the DEQ cleanup project manager also be notified via email.
12. *Appendix A.* The tables for surface and subsurface soil reference DEQ's lead in soil screening level of 400 milligrams per kilogram (mg/kg) for residential receptors. This screening value has been revised to reflect EPA's January 2024 [revised residential screening levels](#) for lead in soil. DEQ is applying the revised screening levels based on the EPA guidance. DEQ recommends updating the table to reflect the more conservative residential RBC(s). Further, please note DEQ's direct contact RBCs for occupational, construction and excavation workers are being reevaluated and are expected to be lowered in the near future. If the updated RBCs are released before the draft report is submitted for review, DEQ will notify the project team to apply the revised screening levels accordingly.

As noted in Comment #4, Appendix A includes a partial list of PFAS when compared to the list of 40 chemicals targeted by Method 1633. Further, PFAS RSLs are available from EPA for additional target PFAS not included in Appendix A (i.e., perfluorodecanoic acid, perfluoroundecanoic acid, and perfluorododecanoic acid). DEQ recommends that the analyte list include all 40 target PFAS, and RSL screening be expanded to include the above-mentioned chemicals.

Thank you for your consideration of the comments above and inclusion of our recommendations in a revised QAPP. If you have any questions or concerns, or would like to discuss the above comments, please feel free to contact me at (503) 229-5585 or [kara.e.master@deq.oregon.gov](mailto:kara.e.master@deq.oregon.gov).

Respectfully,



Kara Master, Project Manager  
Northwest Region Cleanup Section

Attachment: Zoning Designation

Ecc: Molly Vaughn, EPA Region 10  
Brook McKeown, ERG  
Sarah Weppner, Alta  
Rick Vaughn, Klamath County  
Terry Wells, Klamath County  
Brian Church, DEQ  
Allen Clements, DEQ

DEQ file - ECSI #2931

## **ARTICLE 52.4 GENERAL COMMERCIAL (CG)**

### **52.410 - PURPOSE**

The purpose of this zone is to establish and maintain places for a full range of retail goods and services available to a large area.

### **52.420 - PERMITTED USES**

The following uses shall be permitted subject to site plan review of Article 41, and all other applicable standards, criteria, rules, and statutes governing such uses:

- A. Administrative Service
- B. Emergency Services
- C. Essential Services
- D. Medical Services
- E. Parking Services
- F. Agricultural Supplies and Services
- G. Auto Sales/Rentals/Service
- H. Auto Repairs
- I. Auto Service Station
- J. Building and Garden Sales
- K. Entertainment Facilities
- L. Farm Equipment Sales/Rentals/Service
- M. Fleet Storage
- N. Food and Beverage Sales
- O. Food and Beverage Service
- P. General Merchandise Sales
- Q. Heavy Equipment Sales/Rentals/Service
- R. Home Furnishings and Appliances
- S. Manufactured Dwelling Sales
- T. Personal Services
- U. Professional Offices
- V. Repair Services

- W. Retail Sales
- X. Warehousing, Storage and Distribution - light
- Y. Custom Manufacturing
- Z. Accessory Buildings and Uses
- Aa. Mini Storage Facility
- Bb. Motels/Hotels within the Klamath Falls UGB
- Cc. Indoor Sports and Recreation

**52.430 - CONDITIONAL USES**

The following uses may be permitted subject to standards listed in this article and if the provisions of Article 44 are satisfied:

- A. Community Assembly
- B. Schools
- C. Cultural Services
- D. Extensive Impact Services and Utilities
- E. Churches
- F. RV Parks
- G. Heavy Equipment Repairs
- H. Large Animal Veterinary Services
- I. Kennel
- J. Truck Stop
- K. Auto Wrecking Yard
- L. Worker Residential
- M. Manufactured Home Park
- N. Towing Facility

**52.440 - PROPERTY DEVELOPMENT STANDARDS**

- A. Minimum Lot Size - 5,000 square feet
- B. Lot Size and Shape - See Article 61
- C. Building Heights and Setbacks - See Article 62

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ORD 45.0	Adopt February 16, 1984	
ORD 45.31 Art. 52.4	Adopt February 15, 1995	
ORD 45.33 Art. 52.420(Bb) & 430(F)	Adopt May 13, 1996	
ORD 45.36 Art. 52.430(O)	Adopt November 10, 1998	
ORD 45.50 Art. 52.440(I)	Adopt June 4, 2008	Periodic Review Task 22
ORD 45.87 Art. 52.420(Cc)	Adopt Oct. 6, 2016	

- D. Fences, Walls and Screening - See Article 64
- E. Landscaping - See Article 65
- F. Signs - See Article 66
- G. Parking - See Article 68
- H. Access - See Article 71
- I. Building size limitations for commercial uses on unincorporated commercial lands in Klamath County:
  - 1. New Commercial Uses.
    - a. Urban Growth Boundaries – No building size limitations.
    - b. Goal 14 Exception Areas – No building size limitations unless specified by the exception.
    - c. Urban Unincorporated Communities Designated Pursuant to OAR Chapter 660, Division 22 – Building size shall not exceed 8,000 square feet of floor space per building.
    - d. Unincorporated Communities Designated Pursuant to OAR Chapter 660, Division 22 – Building size shall not exceed 4,000 square feet of floor space per building.
    - e. Rural Lands Not Included in a - d Above – Building size shall not exceed 3,500 square feet of floor space per building.
  - 2. Existing Commercial Uses.
    - a. Urban Growth Boundaries – No building size limitations.
    - b. Goal 14 Exception Areas – No building size limitations unless specified by the exception.
    - c. Urban Unincorporated Communities Designated Pursuant to OAR Chapter 660, Division 22 – Klamath County has no designated Urban Unincorporated Communities as of the effective date of this Ordinance.
    - d. Unincorporated Communities Designated Pursuant to OAR Chapter 660, Division 22 – A lawfully established commercial use that existed prior to December 13, 2005 may expand to occupy a maximum of 5,000 square feet of floor space per building, or an additional 50% of the floor space currently occupied, whichever is greater.

- e. Rural Lands Not Included in a - d Above – A lawfully established commercial use that existed prior to December 13, 2005 may expand to occupy a maximum of 4,000 square feet of floor space per building, or an additional 50% of the floor space currently occupied, whichever is greater.
3. Commercial Uses Primarily Designed to Serve Resource Industries (e.g. Farming, Ranching, Forestry or Mineral Extraction).
- a. Urban Growth Boundaries – No building size limitations.
  - b. Goal 14 Exception Areas – No building size limitations unless specified by the exception.
  - c. Urban Unincorporated Communities Designated Pursuant to OAR Chapter 660, Division 22 – Notwithstanding paragraphs 1 and 2 of this subsection commercial uses primarily designed to serve resource industries are not subject to any building size limitation when permitted through a Type II Administrative Review. Such uses may be permitted through a Type I Administrative Review when building size does not exceed 8,000 square feet.
  - d. Unincorporated Communities Designated Pursuant to OAR Chapter 660, Division 22 – Notwithstanding paragraphs 1 and 2 of this subsection commercial uses primarily designed to serve resource industries are not subject to any building size limitation when permitted through a Type II Administrative Review. Such uses may be permitted through a Type I Administrative Review when building size does not exceed 4,000 square feet.
  - e. Rural Lands Not Included in a - d Above – Notwithstanding paragraphs 1 and 2 of this subsection commercial uses primarily designed to serve resource industries are not subject to any building size limitation when permitted through a Type II Administrative Review. Such uses may be permitted through a Type I Administrative Review when building size does not exceed 3,500 square feet.
4. New or Expanded Commercial Uses Intended to Serve the Rural Area or the Needs of the Traveling Public.
- a. Urban Growth Boundaries – No building size limitations.
  - b. Goal 14 Exception Areas – No building size limitations unless specified by the exception.

- c. Urban Unincorporated Communities Designated Pursuant to OAR Chapter 660, Division 22 – Notwithstanding paragraphs 1 and 2 of this subsection commercial uses primarily designed to serve resource industries are not subject to any building size limitation when permitted through a Type II Administrative Review. Such uses may be permitted through a Type I Administrative Review when building size does not exceed 8,000 square feet.
  - d. Unincorporated Communities Designated Pursuant to OAR Chapter 660, Division 22 – Notwithstanding paragraphs 1 and 2 of this subsection commercial uses primarily designed to serve resource industries are not subject to any building size limitation when permitted through a Type II Administrative Review. Such uses may be permitted through a Type I Administrative Review when building size does not exceed 4,000 square feet.
  - e. Rural Lands Not Included in a-d Above – Notwithstanding paragraphs 1 and 2 of this subsection commercial uses primarily designed to serve the Rural Area or the Needs of the Traveling public are not subject to any building size limitation when permitted through a Type II Administrative Review. Such uses may be permitted through a Type I Administrative Review when building size does not exceed 3,500 square feet.
- J. For any proposed development which fails to satisfy the relevant standards of subsection I. above; Klamath County shall require an exception to Goal 14.
- K. All non-commercial uses that lawfully existed prior to the adoption of this Ordinance shall be considered lawful established non-conforming uses, which may be restored to their prior lawfully approved size if destroyed or substantially damaged.