



PUBLIC HEALTH DIVISION
Center for Health Protection, Drinking Water Services

Tina Kotek, Governor

Oregon
Health
Authority

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March 1, 2024

David John
NPS Oregon Caves National Monument O&M
19000 Caves HWY.
Cave Junction, OR 97523

**Re: Surface Water Treatment (PR#29-2024)
NPS Oregon Caves National Monument O&M (PWS ID#95706)
Conditional Approval**

Dear David Johns:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new surface water intake and treatment for NPS Oregon Caves National Monument O&M. On February 22nd, DWS received drawings, calculations, product information and a plan review fee of \$825.

The project includes the review of new surface water intake, pre-existing filtration, disinfection, water storage and distribution system. The water system is located at the Oregon Caves National Park operations and maintenance facility, north of the Oregon Caves Monument near Cave Junction, Oregon.

The project shall adhere to all applicable DWS Oregon Administrative Rules (OAR). The submitted plan review material has been reviewed and the following items were noted as specific conditions of final approval:

General-

- Per OAR 333-061-0050(1), only materials designed for potable water service and meeting NSF Standard 61: Drinking Water System Components - Health Effects or equivalent shall be used in those elements of the water system which are in contact with potable water.

Surface water and groundwater under direct surface water influence source facilities-

- Per OAR 333-061-0050(3), the surface water intake structure shall be constructed to meet the applicable portions of subsection (a) through (d) of the rule. Provide as-built information (i.e., drawings, photos, etc.) demonstrating applicable portions of this rule have been met. The Lake Creek water source, at the new surface water intake location, will be required to perform Long Term 2 Enhanced Surface Water Treatment Rule (LT2) monitoring per OAR 333-061-0036. This monitoring should be started as soon as possible and coordinated with the water system's direct regulator.

Water treatment facilities (other than disinfection)-

- Per OAR 333-061-0050(4)(c), the existing surface water filtration shall demonstrate it can successfully treat the seasonal water quality variation of the proposed new Lake Creek surface water source per the applicable subsections (A) through (J). A pilot study period will need to successfully demonstrate the existing filtration can successfully produce compliant finished water turbidity during the new water sources seasonal extremes.

Facilities for disinfection and disinfectant residual maintenance-

- Per OAR 333-061-0050(5), the existing chlorination system shall demonstrate it meets the applicable portions of subsection (a) through (l) of this rule. Upon substantial completion of the project, provide as-built information (i.e., drawings, photos, product information, etc.) demonstrating how these rules have been met. The water system will need to submit a proposal and perform a disinfection tracer study demonstrating the actual baffling factor and minimum contact time available in its existing clearwell.

Finished water storage-

- Per OAR 333-061-0050(6), the existing finished water storage tanks and clearwell storage tank shall meet the applicable portions of subsection (a) through (b) of this rule. Provide as-built information (i.e., drawings, photos, product data, etc.) demonstrating the existing water storage tanks meet the applicable portions of this rule.

Distribution systems-

- Per OAR 333-061-0050(8), the existing distribution system shall meet the applicable portions of subsection (a) through (l) of this rule. Provide as-built information (i.e., drawings, photos, product information, etc.) on the water distribution demonstrating the system meets the applicable portions of this rule.

Disinfection of facilities-

- Per OAR 333-061-0050(10), following construction or installation of new facilities and repairs to existing facilities, those portions of the facilities which will be in contact with water delivered to users must be cleaned and flushed with potable water and disinfected according to AWWA Standards C651 through C654 before they are placed into service.

Capacity Requirements for Public Water Systems-

- If the water system has not already done so, coordinate the capacity requirements of OAR 333-061-00061 with your direct water system regulator.

Cross Connection Control Requirements-

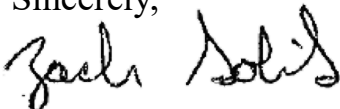
- Per OAR 333-061-0070, demonstrate any high hazard areas/operations, defined by Table 42, have cross connection control per the applicable portions of subsection (1) through (18) of this rule isolating that are from the rest of the water system.

Until we receive verification that the conditions have been met and final approval has been issued, the intake and surface water treatment is not approved for use.

Upon completion of the project, the engineer must verify in writing that construction was completed according to the submitted plans. If substantial changes are made, a set of as-built drawings must be submitted. Documentation demonstrating how the above conditions were met should reference Plan Review #29-2024 and can be emailed to me at zachariah.cunningham-golik@oha.oregon.gov.

If you have any questions, please feel free to call me at 541-231-9077.

Sincerely,



Zach Golik, PE
Regional Engineer
Drinking Water Services

CC: Julie Wray, DWS Portland
Kent Downs, DWS Springfield