Public Health Division

Center for Health Protection, Drinking Water Services



Tina Kotek, Governor

November 26, 2025

Aaron Hansen Pioneer Villa 33180 HWY 228 Halsey, OR 97348

sent by email only

Re: Well, chlorination, and storage (PR#160-2025)

Pioneer Villa (PWS ID#91700) Conditional Approval

Dear Aaron Hansen:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well, disinfection, secondary chemical treatment and water storage for the Pioneer Villa. On October 21, 2025, DWS received notice the project was ready for a conditional approval review based on previously submitted plan review information and a fee of \$825.

The project includes the construction of a new groundwater well, chlorine disinfection, elective filtration, secondary contaminant chemical treatment and new finished water storage. The new infrastructure will be connected to the existing distribution system. The work will take place at the Pioneer Villa Truck Stop at the southeast corner of the I-5 HWY and Halsey-Sweet Home HWY.

The plans are approved subject to the following conditions:

Well-

- The as-built well location does not meet setback requirements from private roadways on the property. Public or private roadways may be allowed within 100 feet of a confined well, provided the well is protected against contamination from surface runoff or hazardous liquids which may be spilled on the roadway and is protected from unauthorized access. Demonstrate how the well is protected against contaminated roadway. Reference OAR 333-061-0050(2)(a)(D).
- The as-built well location does not meet setback from vehicle storage and new

proposed chemical disposal location associated with what appears to be secondary contaminant treatment waste discharge. Sanitary hazards are not allowed within 100 feet of a well which serves a public water system unless waived by the Authority. Reference OAR 333-061-0050(2)(a)(E). Coordinate with the Oregon Department of Environmental Quality (DEQ) for approved methodology of approved chemical waste disposal from any water treatment systems.

- Before a well is placed into operation as the source of supply at a public water system, laboratory reports as required by OAR 333-061-0036 shall be submitted by the water supplier. Provide raw water sampling per requirements of the public water system classification. Reference OAR 333-061-0050(2)(a)(I).
- Piping arrangements shall include provisions for pumping the total flow from the well to waste. Demonstrate this construction standard is met. Reference OAR 333-061-0050(2)(a)(K)(vi).
- A method of determining the total output of each well shall be provided.
 Demonstrate this construction standard is met. Reference OAR 333-061-0050(2)(a)(K)(vii).
- The slab shall be sloped to drain away from the casing. Demonstrate this construction standard is met. Reference OAR 333-061-0050(2)(a)(K)(viii).
- The ground surface around the well slab shall be graded so that drainage is away from the well. Demonstrate this construction standard is met. Reference OAR 333-061-0050(2)(a)(K)(ix).
- Before a well is placed into operation as the source of supply for a public water system, the following documents shall be submitted by the water supplier:
 - Reports of laboratory analyses on contaminants in the water as required by OAR 333-061-0036.
 - o Performance data on the pumps and other equipment.
 - o Proposals for disinfection as required by section (5) of this rule, if applicable.
 - o Reports on determination of potential direct influence by surface
 - o water into groundwater source as prescribed in section (3) of this rule.

Reference OAR 333-061-0050(2)(a)(N)(v).

Facilities for disinfection and disinfectant residual maintenance-

- The installation of proposed chlorine disinfection before and after the proposed secondary treatment shall demonstrate it is applied in proportion to water flow. Reference OAR 333-061-0050(5)(c)(B).
- Provisions shall be made to alert the water supplier before the chlorine supply is exhausted. Demonstrate this construction is met. Reference OAR 333-061-0050(5)(e).
- Sample taps shall be provided before and after disinfectant application as specified

- in subsection (4)(a)(E) of this rule. Demonstrate a sample table has been installed after both chlorine application points. Reference OAR 333-061-0050(5)(f).
- Testing equipment shall be provided to determine the chlorine residual. Demonstrate the public water system has testing equipment. Reference OAR 333-061-0050(5)(g).

Finished water storage-

- Ground-level reservoirs shall be constructed on undisturbed soil, bedrock or other stable foundation material capable of supporting the structure when full.
 Demonstrate that a licensed professional with expertise in structure foundation design has verified this construction standard has been met. Reference OAR 333-061-0050(6)(a)(B).
- The finished water storage capacity shall be increased to accommodate fire flows when fire hydrants are provided. Demonstrate this construction standard has been met, if applicable. Reference OAR 333-061-0050(6)(a)(H).
- Finished water storage facilities shall have watertight roofs. Demonstrate this construction standard has been met. Reference OAR 333-061-0050(6)(a)(I).
- When the access manhole is on the roof of the reservoir there shall be a curbing around the opening and a lockable watertight cover that overlaps the curbing.
 Demonstrate this construction standard has been met. Reference OAR 333-061-0050(6)(a)(J).
- Screened vents shall be provided above the highest water level to permit circulation of air above the water in finished water storage facilities. Demonstrate this construction standard has been met. Reference OAR 333-061-0050(6)(a)(L).
- A silt stop shall be provided at the outlet pipe. Demonstrate this construction standard has been met. Reference OAR 333-061-0050(6)(a)(N).
- Bypass piping around the pressure tanks shall be provided to permit operation of the system while the tank is being maintained or repaired. Demonstrate this construction standard has been met. Reference OAR 333-061-0050(6)(b)(B).
- All pressure tanks shall be provided with a drain, a pressure gauge, an air blow-off valve, means for adding air and pressure switches for controlling the operation of the pump(s). Demonstrate this construction standard has been met. Reference OAR 333-061-0050(6)(b)(D).
- Pressure tanks shall be constructed of steel or an alternative material provided the tank is NSF 61 certified and shall be designed for pressure at least 50 percent greater than the maximum system pressure anticipated. Demonstrate this construction standard has been met. Reference OAR 333-061-0050(6)(b)(E).

Disinfection of facilities-

 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. Demonstrate this construction standard has been met. Reference OAR 333-061-0050(10)(a).

Product Acceptability Criteria-

 All new chemicals and infrastructure in direct contact with the potable water of the public water system shall conform with this rule. Demonstrate these criteria are met with as-built work. Reference OAR 333-061-0087.

In addition to these conditions, I have the following comment:

 Proposed treatments for secondary contaminants (i.e., iron and hardness) have not been reviewed as part of this plan review. That said, the treatments for secondary contaminant treatments shall be designed, installed, and operated to not cause primary contaminant exceedances in the finished water. Until we receive verification that the conditions have been met and final approval has been issued, the well, disinfection and storage 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 #160-2024 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

Jack Solis

CC: Nick Alviani, DWS Springfield

Stephen Kirkley, Linn County Environmental Health