



January 5, 2024

Doug Argo, PE
HECO Engineers
32 N Main St.
Payette, Idaho 83661

**Re: Proposed Wells, Plan Review #134-2023, City of Nyssa, PWS ID #4100579
Site Plan Evaluation**

Dear Doug:

Thank you for your submittal of plan review information to the Oregon Health Authority's Drinking Water Services (DWS). On October 9, 2023, our office received the well site plan and proposed well drilling specifications. On October 11, 2023 the transmittal for the plan review fee of \$3,300 was received. The proposed project consists of drilling two new wells in the existing Idaho wellfield to approximate depths of 60 feet below ground surface (bgs), with seals to approximately 25 feet bgs.

The proposed well construction was reviewed by our staff hydrogeologist who provided the following comments:

The estimated depth to water-bearing zone is 11 feet bgs based on the city's existing wells #1-5, and is anticipated to be in an unconfined aquifer. The casing seal depth will depend on the type of material encountered during the drilling process and the final depth of the well. Based on the information provided in the driller's logs for wells #1-5, the proposed well will most likely be constructed into an unconsolidated formation without or with significant clay beds. See the Oregon Water Resources Department (OWRD) minimum Well Construction Standards for the Sealing of Wells in Unconsolidated Formations Without Significant Clay Beds in [OAR 690-210-0130](#), and the Sealing of Water Supply Wells in Unconsolidated Formations with Significant Clay Beds in [OAR 690-210-0140](#). The proposed seal depth of 25 feet bgs should meet the OWRD minimum construction standards for a well constructed into an unconsolidated formation. Please note that the proposed wells will need to meet both OWRD's and Idaho's Well Construction Standards.

I also have the following comments:

1. I note that the city does not own all of the property within the 100-foot setback areas or have perpetual restrictive easements as required by [OAR 333-061-0050\(2\)\(a\)\(B\)](#). The neighboring property is used for farming, and it is my understanding the owner declined to provide information on what chemicals, if any, are used on the crops. Chemical use including pesticides and fertilizers within the setback area and is not allowed per [OAR 333-061-0050\(2\)\(a\)\(E\)](#). Due to the lack of property ownership or easements and the potential sanitary hazard of chemical use within the setback areas, **the site plan and proposed well locations cannot be approved at this time.**
2. A waiver from the setback standards is not possible in this case, as the proposed wells will draw from an unconfined aquifer that is highly sensitive.
3. Should the city obtain ownership of the property encompassing the 100-foot setback areas or obtain perpetual restrictive easements, please provide documentation so the site plan can be re-evaluated.

If you have any questions or would like this in an alternate format, please feel free to call me at (541) 966-0900 or email at william.h.goss@oha.oregon.gov .

Sincerely,



William Goss, P.E.
Regional Engineer

c: Julie Wray, OHA–DWS, Portland, OR

Jonathan Rudders, PG/LG, LHG, CWRE, GeoEngineers, Inc., Spokane, WA (pdf copy only)
Duane Petty, City of Nyssa