



April 26, 2019

Jessica Penetar, PE Cascade Earth Sciences 3511 Pacific Blvd SW Albany, OR 97321

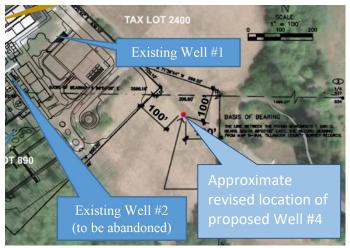
Re: Nestucca Valley Elementary School (PWS ID #90595) New Well #4 Site Plan Approval (PR #44-2019)

Dear Ms. Penetar:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well on behalf of the Nestucca Valley Elementary School in Tillamook County. On March 12, 2019, our office received plans showing the location of a new well proposed for the school. A plan review fee of \$825 was received on March 18, 2019. The project includes drilling a new well to serve the school as shown in the schematics on page 3 of this letter.

On April 24th, 2019, I provided a Well Evaluation letter indicating the original site plan was not able to be approved due to the location of the bus parking lot (considered a hazard to wells) within 100-ft of the well and addressing the potential for a construction waiver from the hazard setback requirements (see April 24th letter for more details regarding the setback issues).

Based on a revised site plan which was emailed to me on April 25th, 2019, the revised site plan for the new well #4 is approved. The revised site plan shown (in part) to the right allows for the new well to be located 100-ft away from any hazard (including the bus parking lot) and within the existing land owned by the school as well as a new parcel at the eastern corner of tax lot 2400 and tax lot 890 to be acquired by the District to achieve the 100-ft radius of control (ownership) around the proposed well #4.

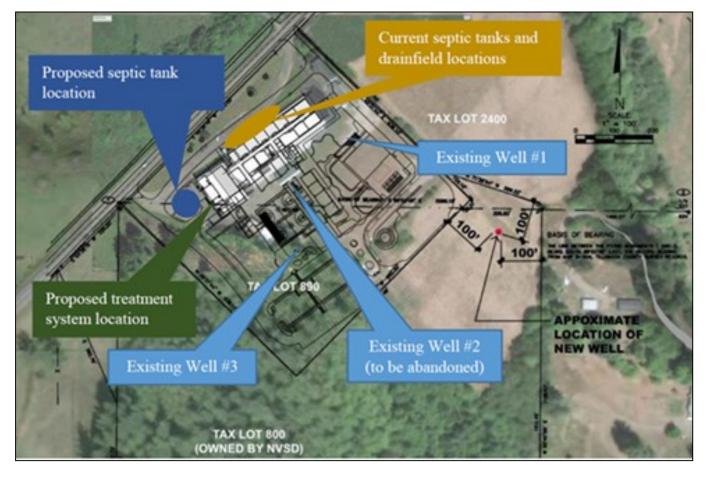


800 NE Oregon Street, Ste 640 Portland, OR 97232 Phone: (971) 673-0405 Fax: (971) 673-0694 www.healthoregon.org/DWP Page 2 of 5 Nestucca Valley Elementary School (PWS #90595) – New Well #4 Site Plan Approval (PR#44-2019) April 26, 2019

Our geologist, Tom Pattee, reviewed the original well construction site plan and noted the following:

"Based on the well logs for the existing Nestucca Valley Elementary School wells, the water-bearing zone in this area is associated with a sand and gravel deposit that is roughly 80 to 90-ft below ground. The aquifer at this location is likely to be unconfined, therefore the 100-ft radius around the proposed well site should be clear of any sanitary/chemical hazards. The depth of the casing seal should be determined in accordance with Oregon Water Resources Department [WRD] standards [OAR Chapter 690, Division 200]. OHA Drinking Water Services recommends sealing the well casing 5-ft into the silt/clay and gravel layer directly above the targeted water-bearing zone described in well logs TILL918 and TILL919 as occuring at a depth of roughly 41 to 61-ft below ground."

This information is anticipated to apply to the new well location (shown in larger detail below) and should be shared with the well driller.



Page 3 of 5 Nestucca Valley Elementary School (PWS #90595) – New Well #4 Site Plan Approval (PR#44-2019) April 26, 2019

Once the well is drilled, please submit:

- 1. The well driller's report (well log).
- 2. Well pumping test information including static water level, pumping rate, drawdown and rate of recover.
- 3. GPS coordinates for the drilled well and map showing the well location, 100-ft radius around the well, lot lines, aerial photo, and any hazards that may be within that 100-ft radius. This map may be similar to the one shown on page 4.
- 4. Pump information.
- 5. Raw (Untreated) Water Quality Data including coliform bacteria, IOCs (including nitrate, nitrite and arsenic), SOCs, VOCs and radionuclides. These are to be taken from the new well's raw water sample tap at the wellhead.
- 6. Engineered plans that show the above-well structure detail including the well house, concrete slab, drainage, pump-to-waste piping and plans and specifications for reconnection of the well to the water system.
- 7. A copy of the Water Right Permit from WRD, if a water right permit is required.

The above items should reference Plan Review #44-2019 and can be emailed to me at <u>evan.e.hofeld@state.or.us</u> or mailed to:

Attn: Evan Hofeld OHA-Oregon Drinking Water Program PO BOX 14450 Portland, OR 97293-0450

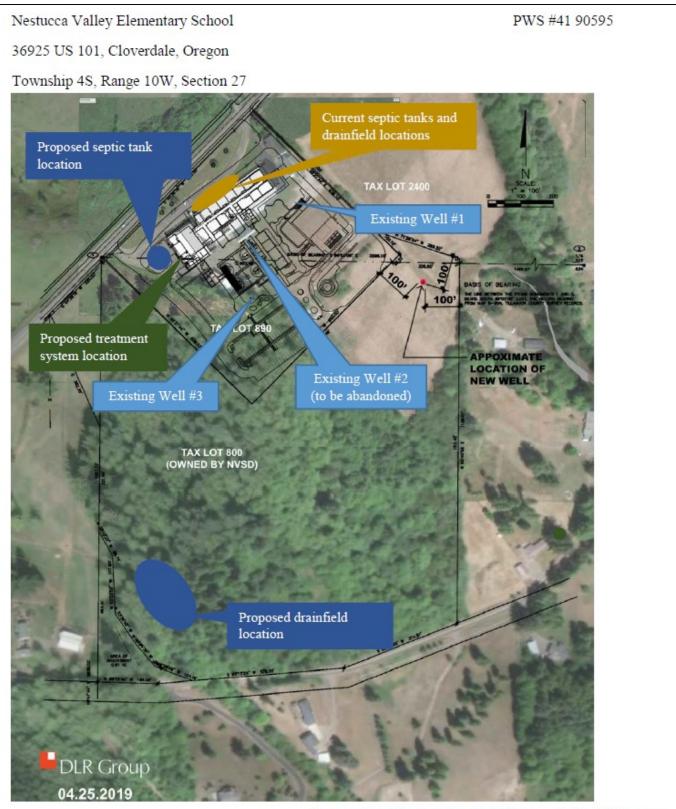
If you have any questions, please feel free to call me at 971-673-0419.

Sincerely,

EronAffel

Evan Hofeld, Regional Engineer OHA - Drinking Water Services

cc: Bob Hurliman, Nestucca Valley Elementary – PO Box 99, Cloverdale, OR 97112 Annette Pampush, Tillamook County Environmental Health Page 4 of 5 Nestucca Valley Elementary School (PWS #90595) – New Well #4 Site Plan Approval (PR#44-2019) April 26, 2019



Prepared by: Jessica Penetar, PE Cascade Earth Sciences

Page 5 of 5 Nestucca Valley Elementary School (PWS #90595) – New Well #4 Site Plan Approval (PR#44-2019) April 26, 2019

• Reply Re
Nestucca Valley Elementary Well Site Plan Revised.pdf
Hi Evan, After some discussions with the District, they are acquiring a small parcel of land at the eastern corner of tax lot 2400 and tax lot 890, as shown in the attached plan. The acquisition should be completed in early May. Therefore, we have moved the proposed well location slightly to incorporate the required setbacks of 100 feet from the property lines and the parking lot. Please let me know if you have any questions. Thank you. Jessica Penetar, PE Project Engineer Cascade Earth Sciences 3511 Pacific Bivd SW Albany, OR 97321 Phone (541) 812-6621 Mobile (609) 927-1195 lessica.penetar@valuent.com www.vallevirigation.com From: Hofeld Evan E [mailto:EVAN E HOFED@dhsoha.state.or.us] Sent: Wednesdy, April 24, 2019 935 AM
To: Penetar, Jessica A. < <u>Jessica.Penetar@valmont.com</u> > Co: 'Annette Pampush' <apampush@co.tillamook.or us="">; Salis Karyl L <<u>KARYL L SALIS@dhsoha.state.or us></u>; PATTEE Tom <<u>Tom PATTEE@dhsoha.state.or us></u>; GENTRY Carrie L <<u>Carrie L GENTRY@dhsoha.state.or us></u> Subject: Site Plan Evaluation Letter - Nestuce Valley Elem. (90595) - New Well #4 (PR 44-2019) (External E-Mail)</apampush@co.tillamook.or>
DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.
Hi Jessica, Thank you for your patience in awaiting this site plan evaluation letter (attached along with the plans and waiver request you submitted). I've had several discussions with our geologist (Tom Pattee), plan review coordinator (Carrie Gentry), and Technical Services Unit manager (Kari Salis) and we cannot approve a construction waiver request until the well is constructed (i.e., until we know the exact location, construction, and geologi), however, it is likely that the waiver will be granted provided the parking lot is paved, curbing is provided to prevent runoff, and the lot slopes away from the wellies at the table at the table as teaback radius around the well (i.e., developed to prevent vehic) related containnants like oil or any stormwater runoff that has been collected from being applied or draining onto the soils within 100-ft of the well). Please note, that the 100-ft bazeds setback also applies to fertilizer and pesticides that may be applied to maintain current or future athletic fields within 100-ft of the well (the application of these is definitely prohibited within 100-ft of unconfined wells). See OAR 333-061-0050(2)(a)(E) – (F) below for more hazard setback requirements.
Since the proposed plan does not currently meet the setback requirements and no waiver can be granted at this time, I cannot issue a Site Plan Approval. I realize this is sort of a catch-22, however, there have been instances like this in the past in which the design engineer has determined what would need to be done to achieve the waiver (i.e., how the hazard can be mitigated in a manner we would approve as you have done) and gone ahead and taken the risk. of drilling the well without knowing for sure that the actual constructed well would be adequate for us to grant the waiver (i.e., you never know what you are going to get until the drilling/pump tests/etc. is done). I hope you can understand our position and please feel free to contact me at any time if you wish to discuss this further.
Evan Hofeld Regional Engineer OREGON HEALTH AUTHORITY Public Health Division