NORTHERN NEVADA
Public Health

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SEWAGE, WASTEWATER, AND SANITATION (SWS)

HEARING ADVISORY BOARD
MEETING MINUTES

Members
Matthew Buehler, Chair
Kenneth Lund
John Adams
Chad Carnes, P.E.
Chris Reede
Matt Smith- Alternate
Julianne Zotter, P.E.- Alternate

Thursday, March 6, 2025
5:30 p.m.
Washoe County Administration Complex,
Building B
Health District South Conference Room

1001 East Ninth Street
Reno, NV

5:30 p.m.

1. ***Roll Call and Determination of Quorum**

   The following members and staff were present:

   Members present: Matthew Buehler
   Kenneth Lund
   John Adams
   Julianne Zotter, P.E.- Alternate
   Chad Carnes, P.E.- Recused

   Staff present: Latricia Lord
   Matt Simpson
   David Kelly
   DDA Dania Reid

   Members absent: Chris Reede
   Matt Smith – Alternate

2. ***Pledge of Allegiance**

   Those present pledged allegiance to the flag.

3. ***Public Comment**

   As no public comment was presented, the public comment period was closed.

4. **Approval of Agenda –** March 6, 2025
   Mr. Adams moved to approve the agenda of the March 6, 2025, Sewage, Wastewater, and Sanitation (SWS) Board regular meeting. Second by Mr. Lund, motion approved unanimously.

5. **Approval of Draft Minutes** – January 20, 2025
   Mr. Adams moved to approve the minutes of the January 20, 2025, Sewage, Wastewater, and Sanitation Board regular meeting. Second by Mr. Lund, motion approved unanimously.

6. **Public Hearing** – to determine whether to recommend approval to the District Board of Health for a variance for APN 087-044-17, from sections 100.025, Table 3 and 100.100, Table 4 of the Northern Nevada Public Health Regulations Governing Sewage, Wastewater, and Sanitation. The variance requests permission to install a Mode 3 Orenco AX20 treatment system with an Orenco GeoFlow subsurface drip. The variance also requests reduced setbacks from impervious soils and high seasonal ground water. Additionally, the variance requests to have no requirement to install fill for the repair area due to financial hardship. – **(For possible action)**

   Staff Representative: Matt Simpson

Mr. Simpson reviewed the staff report and the pertinent regulations surrounding the protection of groundwater. He discussed the required setbacks from groundwater and the soil percolation rate range for the different types of septic systems currently allowed in the regulations. Mr. Simpson explained this property is very restrictive in terms of a septic system, with high seasonal ground water at surface and a very slow percolation rate. He reviewed the only type of system that has been permitted without a variance to be a sand filter with engineered fill. Mr. Simpson stated the Mode 3 Orenco Advanced Treatment System is NSF/ANSI 245 Certified and has UV disinfection and that it should provide treatment equal to or greater than a sand filter system and be the basis for allowing a reduced setback to groundwater. He described the Orenco sub-surface drip system bed and that it is adequately sized. Mr. Simpson stated he recognizes the need for additional treatment systems such as this and that in the future, NNPH would like to change the regulations to allow these types of system without a variance.

Mr. Lund asked what the risks are associated with this type of system.

Mr. Simpson stated this type of system requires regular maintenance from licensed personnel and access to replacement parts to function properly. He explained that as this industry grows this risk is likely to be reduced. Mr. Simpson explained that given the benefits of having these types of systems and the outlined conditions of approval, NNPH would be in support of this proposal.

Mr. Simpson continued and reviewed the request to not install repair area fill and why staff did felt that it would be ok to allow this at the time of repair install.

Mr. Buehler asked if there is a timeline for maintenance or is it on an as needed basis. Mr. Simpson explained that there is maintenance done 30 days after installation and then regular annual maintenance after that.

Mr. Buehler asked if the drip line would be covered or exposed to the open air. Mr. Simpson explained that the drip line would be placed 24 inches deep and since treatment and disinfection would take place in the Orenco system prior to making it to the field, this would not pose a risk to the public.

Ms. Zotter asked if there would be conditions of approval to prevent the homeowner or any future homeowner from planting or placing anything on top of the field that has potential to damage it. Mr. Carnes explained that a document, recorded to the deed, outlining the restrictions for what can be done on or over the top of the mound in order to preserve and protect the functionality of the drip system.

Mr. Carnes addressed some of the other concerns surrounding this system. He explained that the backfill over the top of the drip line has been increased to 24 inches to prevent freezing. He noted the minimum required depth is 12 inches. Mr. Carnes continued to describe some of the challenges of installing a sand filter bed system at this location. The cost of hauling and importing septic sand and fill material to cold springs is costly. Mr. Carnes explained that Orenco has a local office with full-time service technicians. Mr. Carnes also feels that the maintenance contract is an important part of this design.

Ms. Zotter asked if the initial installation and yearly maintenance costs would add up overtime to be similar to the cost of a sand filter system. Mr. Carnes indicated that he had discussed this with the properties owner and said that this cost can be budgeted out.

Mr. Adams brought up some concerns about lifestyle and the overuse of the septic system. Mr. Carnes indicated he had cautioned the owner that the system is only designed for normal household use. Mr. Carnes described discussions with Orenco and said that they would like to see sampling required to ensure the system is working as designed. He also recommends that the system be installed by qualified Orenco installers to ensure it has been done properly.

Mr. Lund asked if the system has an alarm and source of power is for the Orenco System. Mr. Carnes said there is no plan for auxiliary generators. The system is also equipped with an alarm the same as a sand filter lift station.

Mr. Adams wants the homeowner to be aware this system is a first for this area and that a requirement for proper maintenance will need to be a part of this variance, partly to ensure that any future homeowners are aware of the maintenance requirements. Mr. Carnes stated that he had recommended to the homeowner that the grading work for the repair area be installed at the same time if they are financially able. Mr. Adams voiced concerns of installing a repair field in the wintertime with wet ground would be very difficult.

Mr. Lund asks the board what additional language they should add to the conditions of approval. Mr. Buehler asked if maintenance records should be kept for longer than 5 years. Mr. Kelly explains that it is within the Boards purview to make any changes to the condition of approval that they deem necessary. He outlines 5 possible additional conditions that were discussed, 1. Preventing trees and rocks over the drip mound/protecting the mound. 2. Sampling requirements. Mr. Kelly stated that limited testing may be of benefit, but NNPH does not have the resources to require lifelong sampling of the system.

Mr. Lund asked if there is an expected life span of this Orenco system. Mr. Kelly stated this system may break down but can be repaired. With proper maintenance and repair the system should be able to last indefinitely.

Mr. Kelly continued with the additional conditions of approval. 3. Auxiliary power. 4. Fill required for the secondary field and 5. Monitoring port installation. Mr. Kelly stated that the plans clearly indicate, for future property owners, what would be required if a repair field was needed. He does not feel that the preparation work needed installing the repair field would not impose a significant delay of the installation if needed.

Mr. Adams asked if Orenco has requirements for sampling. Mr. Kelly stated he would look at NSF testing standards for sampling and follow those recommendations.

Mr. Adams asked if the field has a monitoring tube like a sand filter system. Mr. Kelly summarized Mr. Carnes recommendation to have two monitoring ports added to the design. Mr. Kelly noted this could be an additional condition of approval for the Board to consider.

Mr. Lund recommended that the Board consider a motion of approval with the current conditions and any additional conditions the board would like.

Some discussion was held on the best course of action and how to proceed with a motion. Ms. Zotter stated that auxiliary power would not be a requirement as there is additional capacity in the septic tank and Orenco tank, the other board members agreed. Mr. Adams said that the repair field does not need to be constructed at this time, the other board members agreed.

The Board discussed and clarification was had about the difference between sampling to determine system function, monitoring tubes to see if the effluent is dispersing, and maintenance records kept for five years.

Mr. Kelly stated that there should be some trust in the NSF certification and that sampling is not necessary but ultimately up to the board. Mr. Buehler asked if 5-year sampling is too much. Ms. Zotter recommended quarterly sampling for one year, the board agreed.

Mr. Lund moved to approve variance and listed all conditions the Board had agreed to. The motion was seconded by Mr. Adams. Motion passed unanimously.

Mr. Buehler closed the public hearing.

Conditions of Approval

1. A maintenance contract is required with periodic monitoring for the Orenco wastewater treatment system. After the initial system check and maintenance, a minimum of annual maintenance and certification is required with records kept for a minimum of 5 years. Records must be made available to NNPH upon request.
2. All instances of system non-function must be reported to NNPH for review and repaired immediately. In the event of failure to maintain or lack of system function, NNPH may require sampling and/or impose restrictions on the property based on the functionality of the treatment system, up to and including additional repair.
3. The variance, with all conditions of approval, must be recorded to the property with language that does not allow for the removal without NNPH approval or connection to municipal sewer.
4. The recorded documents must include clear language prohibiting the building or planting over the system or area of the secondary field.

5. Quarterly sampling of influent and effluent would be required quarterly for 1 year according to parameters set by NNPH staff.
6. The design will include monitoring ports to allow for monitoring of soils receiving effluent.

Motion

Motion made by Mr. Lund "Move to present to the District Board of Health a recommendation for approval of Variance Case # H25-0001VARI (Benedickt) to allow the proposed advanced treatment system with a reduced vertical setback to groundwater and installation into soils with percolation rates outside of what is allowed by regulation, including [all conditions listed above]."

Second by Mr. Adams. Motion passed unanimously. Mr. Buehler closed the public hearing.

9. *Public Comment

As there were no public comment requests, closed the public comment period.

10. Adjournment –

At 6:40 p.m., Mr. Buehler adjourned the meeting.