

Sewage, Wastewater and Sanitation Hearing Advisory Board Meeting Notice and Agenda

Members

Matthew Buehler, Chair

Kenneth Lund

John Adams

Chad Carnes, P.E.

Christopher Reede

Matt Smith – Alt.

Julianne Zotter, P.E., Alt.

March 6, 2025

5:30 p.m.

Northern Nevada Public Health
Conference Rooms A&B (Building B)
1001 East Ninth Street
Reno, NV

An item listed with asterisk (*) next to it is an item for which no action will be taken.

5:30 p.m.

1. ***Roll Call and Determination of Quorum**
2. ***Pledge of Allegiance**
3. ***Public Comment**

Action may not be taken on any matter raised during this public comment period until the matter is specifically listed on an agenda as an action item. All public comment is limited to three minutes per person. Members of the public may submit public comment by either attending the meeting in person or submitting comments in writing. Comments submitted in writing must be submitted to smhopkins@nnph.org no later than 4:00 p.m. on the day before the scheduled meeting.

4. **Approval of Agenda – (For possible action)**
March 6, 2025
5. **Approval of Draft Minutes – (For possible action)**
January 30, 2025

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

BENEDICKT, TAYLOR
17590 E Aspen Cir
Reno, NV 89508

7. *Public Comment

Action may not be taken on any matter raised during this public comment period until the matter is specifically listed on an agenda as an action item. All public comment is limited to three minutes per person. Members of the public may submit public comment by either attending the meeting in person or submitting comments in writing. Comments submitted in writing must be submitted to smhopkins@nnph.org no later than 4:00 p.m. on the day before the scheduled meeting.

8. Adjournment – (For possible action)

Possible Changes to Agenda Order and Timing: Items on the agenda may be taken out of order, combined with other items, withdrawn from the agenda, moved to the agenda of another later meeting, moved to or from the Consent section, or they may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time but may be heard later. Items listed in the Consent section of the agenda are voted on as a block and will not be read or considered separately unless withdrawn from the Consent agenda.

Special Accommodations: The Sewage, Wastewater and Sanitation Board Meetings are accessible to the disabled. Disabled members of the public who require special accommodations or assistance at the meeting are requested to notify Environmental Health Services in writing at the Northern Nevada Public Health, 1001 East Ninth Street, Building B, Reno, NV 89512, by calling 775.328.2434 option 8, or by email to smhopkins@nnph.org, at least 24 hours prior to the meeting.

Public Comment: During the “Public Comment” items, anyone may speak pertaining to any matter either on or off the agenda, to include items to be heard on consent, by filling out a “Request to Speak” form and/or submit comments for the record to the Recording Secretary. For the remainder of the agenda, public comment will only be heard during items that are marked FOR POSSIBLE ACTION. All public comment should be addressed to the Sewage, Wastewater and Sanitation Hearing Advisory Board and not an individual member. The Board asks that your comments are expressed in a courteous manner. Any public comment for hearing items will be heard before action is taken on the item and must be about the specific item being considered by the Board. Public comment and presentations for individual agenda items are limited as follows: fifteen minutes each for staff and applicant presentations, five minutes for a speaker representing a group, and three minutes for individual speakers unless extended by questions from the Board or by action of the Chair. Reasonable efforts will be made to hear all public comment during the meeting.

All public comment is limited to three minutes per person. Unused time may not be reserved by the speaker nor allocated to another speaker.

Response to Public Comment: The Sewage, Wastewater, and Sanitation Hearing Advisory Board can deliberate or take action only if a matter has been listed on an agenda properly posted prior to the meeting. During the public comment period, speakers may address matters listed or not listed on the published agenda. The *Open Meeting Law* does not expressly prohibit responses to public comments by the Sewage, Wastewater, and Sanitation Hearing Advisory Board. However, responses from the Board members to unlisted public comment topics could become deliberation on a matter without notice to the public. On the advice of legal counsel and to ensure the public has notice of all matters the Sewage, Wastewater, and Sanitation Hearing advisory Board will consider, Board members may choose not to respond to public comments, except to correct factual inaccuracies, ask for Health District Staff action or to ask that a matter be listed on a future agenda. The Sewage, Wastewater, and Sanitation Hearing Advisory Board may do this during the public comment item. (No discussion among Board Members will take place on the item)”

Posting of Agenda; Location of Website:

Pursuant to NRS 241.020, Notice of this meeting was posted at the following locations:

Northern Nevada Public Health, 1001 E. 9th St., Reno, NV
Downtown Reno Library, 301 S. Center St., Reno, NV
Reno City Hall, 1 E. 1st St., Reno, NV
Sparks City Hall, 431 Prater Way, Sparks, NV
Washoe County Administration Building, 1001 E. 9th St, Reno, NV
Northern Nevada Public Health Website: www.nnph.org
State of Nevada Website: <https://notice.nv.gov>

How to Get Copies of Agenda and Support Materials: Supporting materials are available to the public at the Northern Nevada Public Health located at 1001 E. 9th Street, in Reno, Nevada. Ms. Susan Hopkins, Office Specialist for Environmental Health Services is the person designated to respond to requests for supporting materials. Ms. Hopkins is located at the Northern Nevada Public Health and may be reached by telephone at (775) 328-2434 option 8 or by email at smhopkins@nnph.org. Supporting materials are also available at the Northern Nevada Public Health Website www.nnph.org pursuant to the requirements of NRS 241.020.

**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- Alternate

Thursday, January 30, 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
Chad Carnes, P.E.

Staff present: David Kelly
Josh Philpott
Latricia Lord
DDA Dania Reid

Members absent: Chris Reede
Matt Smith – Alternate
Julianne Zotter, P.E.– 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 – January 30, 2025

Mr. Carnes moved to approve the agenda of the January 20, 2025, Sewage, Wastewater, and Sanitation (SWS) Board regular meeting. Second by Mr. Adams, motion approved unanimously.

5. Approval of Draft Minutes – October 3, 2024

Mr. Lund moved to approve the minutes of the October 3, 2024, Sewage, Wastewater, and Sanitation Board regular meeting. Second by Mr. Adams, motion approved unanimously.

6. Public Hearing – Hearing to determine whether to recommend approval to the District Board of Health for a variance for APN's 077-090-13 & 077-090-14 from section 040.030 of the Northern Nevada Public Health Regulations Governing Sewage, Wastewater, and Sanitation. The variance requests permission to reduce the minimum lot size from 5 acres to 2.5 acres for private septic systems in a newly developed subdivision. – **(For possible action)**

Staff Representative: David Kelly

Mr. Kelly reviewed the staff report, the history of the project and the variance request to allow for the reduction of the minimum lot size from 5 acres to 2.5 acres for private septic systems in a newly developed subdivision. He discussed the origins of the regulation and indicated that the variance hearing is the first step in the process which would also require approval of the Washoe County Planning Department. He indicated that the intent of the regulation is to ensure that density of the septic systems within a subdivision does not exceed one septic per 5 acres. He stated that the parcels proposed in the new subdivision would have one septic per 2.5 acres on homesites, with an additional 2.5 acres of open space per parcel. Mr. Kelly states this would meet the density requirement of the regulation and the actual open space being created would include additional acreage that would effectively decrease the density to more than 5 acres per septic system.

He discussed additional design requirements in the area due to the presence of a flood plain and the possibility of engineered systems being installed due to the fast soil speeds found in the area. One of the benefits that NNPH felt that existed in the proposal is that the reduced parcel size would allow for all created parcels, and their eventual septic systems, would be able to be placed outside of the 100-year flood plain. Mr. Kelly discussed the possibility that through the planning process, slight changes could be made to the maps and reiterates that the goal of this hearing is to obtain approval for the variance from the acreage requirement and not specifically of the currently proposed parcel map.

Mr. Lund asked for clarification on the hearing being in regard to the reduction in lot size and the included open space versus the particulars of any specific parcel created by the project. Mr. Kelly responded by saying that Mr. Lund's interpretation was correct.

Mr. Buehler asked Mr. Kelly if anything like this had been done before.

Mr. Kelly stated that many projects are proposed to his department seeking to reduce lot sizes but are typically a challenge to approve due to the inability of the developer to prove that the reduced density will not create greater impact to groundwater since more septic systems would be considered to have a greater impact. Mr. Kelly again states that this isn't needed in this case as the density requirement of the regulations is being met.

Mr. Lund asked Mr. Kelly if it was his opinion that there would not be a negative impact to public health based upon approval of the parcel map. Mr. Kelly responded by saying that in regard to the regulations, no greater impact would be created by the proposed subdivision because the proposed density of the septic systems met the intent of the regulations and that all normal setback requirements and design specs would also have to be followed. Mr. Carnes discussed his experience with soils and perc tests in the area of the proposed subdivision and stated that the developer needs to be aware that engineered sand filters may be required on these lots and that could create a larger cost for construction.

Mr. Kelly responded by saying that in his discussions with the developer the soil speeds and possibility of needing engineered systems was covered and the developer is aware of the additional septic regulations regarding the construction of such systems.

Mr. Lund asked about the flood zone boundaries located in the area of the project. It was clarified that the proposed parcels all fell outside of the flood zone.

Mr. Munson from Venture Engineering responded to Mr. Lund's question by discussing buffer zones already in place with the county that would require a 300' buffer and the developer has chosen to create a majority of the open space within those buffer zones. He further discussed that they weren't concerned about having to install engineered sand filter systems as they are more prevalent now and the cost of construction is becoming more economical.

Mr. Buehler asked if Mr. Kelly believed approving this project would result in additional developers coming along and trying to do something similar to this proposal. He clarified his statement by asking if this could possibly be something that could be changed in the regulations based on how this project works out.

Mr. Kelly stated that working this into the regulations could be a good idea. Changing the regulations to a density-based rule versus a specific lot size requirement could eliminate the need for this type of variance. He does believe that the variance process allows for other departments and people to express their thoughts and concerns and that provides value to the process for the board to discuss and consider as well.

Mr. Lund and Mr. Adams had a brief discussion on density offsets and getting the septic systems out of the floodplain.

Mr. Kelly responded to Mr. Lund and Mr. Adams by saying that the density issue will remain a development consideration until someone is able to get a sewer line and treatment plant in the area that can eliminate the need for the septic systems.

Mr. Carnes made the motion to approved. Ken Lund seconded the motion. Motion passed unanimously.

Mr. Buehler proposed adding a condition which says the open space must be held in perpetuity and that no further development take place until municipal sewer was available. He stated that this must be approved by NNPH and added to the final map. Discussion ensued as to how to propose this condition

DDA Reid gave the option to rescind the previous motion or create a second motion adding the condition proposed by Mr. Buehler.

Mr. Lund restated the previous motion and amended it to add the condition that language be included stating that future development would require a connection to municipal sewer and/or approval by NNPH and that those conditions must be added to the final map. Mr. Adams seconded the motion. Motion passed unanimously.

DDA Reid clarified that the record will now reflect that one amended motion has passed.

Mr. Lund asked for clarification on if the language was clear enough to ensure the open space had to be a minimum of 2.5 acres. Some discussion ensued. Mr. Kelly indicated to Mr. Lund that the intent was clear in staff's mind and that NNPH would be directly involved in the Planning; the final map would not be signed by NNPH without the sufficient acreage being held open to meet the 1 septic per five (5) acre density requirement. Mr. Lund indicated his concerns were satisfied with this response.

Mr. Buehler closed the public hearing.

Conditions of Approval

The Board did not make any conditions of approval.

Motion

Motion made by Mr. Lund "Move to present to the District Board of Health a recommendation for approval of Variance Case H24-0004VARI Palomino Farms LLC to allow a reduction in parcel size for the Palomino Farms subdivision to a minimum of 2.5 acres, with another 2.5 acres held open in perpetuity and adding the following language and not be allowed to have future development without connection to municipal sewer and/or approval from Northern Nevada Public Health. This condition must be recorded on the Final Map. 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 6:00 p.m., Mr. Buehler adjourned the meeting.

Staff Report
Board Meeting Date: March 6, 2025

TO: Sewage, Wastewater, and Sanitation Hearing Advisory Board

FROM: Matthew Simpson, Environmental Health Specialist
775-567-2709, msimpson@nnph.org

SUBJECT: Variance Case H25-0001VARI; Variance to multiple sections of the regulation, including a reduced setback to ground water and impervious soils as stated in SWS 100.025, Table 3 and 100.100, Table 4 at Parcel 087-044-17, 17590 E. Aspen Cir, Reno, NV 89508. Additionally, requesting no requirement to install fill for the repair area due to financial hardship.

SUMMARY

This staff report summarizes the Environmental Health Services Division's (EHS) review of the submitted variance application for your decision to recommend or deny approval to the District Board of Health (DBOH) a variance for the installation of an alternative septic treatment system from Orenco with a reduced setback to ground water and to be placed in soil outside the allowable percolation rates. The variance is for 17590 E. Aspen Circle, APN 087-044-17, owned by Taylor Benedickt.

Previous Action

There has been no previous action with this variance request. If the variance is approved, the project will go through the normal Building permit application process.

Background

The Northern Nevada Public Health (NNPH) Regulations Governing Sewage, Wastewater, and Sanitation (regulations) require that septic systems maintain a vertical setback to ground water to protect from potential contamination. The regulations require that standard septic systems maintain 4' separation and engineered sand filter systems maintain a 2' separation. In addition, the regulations require that systems are installed in soils that are able to disperse water from the system, as measured by the soil percolation rate. In general, the allowable percolation rates are between 5 and 60 minutes per inch for standard systems and between 5 and 90 minutes per inch for engineered sand filter systems. As indicated, these regulatory requirements can be found in sections 100.025, Table 3 and 100.100, Table 4.

Site conditions for the parcel are challenging. NNPH staff have inspected a test trench and identified high seasonal groundwater levels at the surface. Additionally, percolation testing by a licensed engineer has indicated a very slow percolation rate of 480 minutes per inch. These conditions are extremely restrictive with regard to the placement of a septic system. The only type of system that NNPH has permitted without a variance in these types of conditions has been an engineered sand filter with a minimum of 4' of engineered fill, at least 2' of which would have to be above the ground to maintain 2' vertical separation to the groundwater call. Additionally, NNPH would require that any groundwork needed for the repair area by constructed at the time of the primary install to ensure that it was ready in the event of failure. The applicant is requesting to install a different type of advanced treatment system, and not have to do any needed preparation work for the repair area in advance due to financial hardship.

The variance proposal is to install a Mode 3 Orenco Systems Advantex AX20 Treatment System, with UV disinfection. This system is NSF/ANSI 245 certification, which requires a minimum of 50% nitrogen reduction. Nitrate is one of the biggest risks to groundwater from septic systems. For comparison, single pass sand filters as are used in Washoe County are generally thought to reduce nitrogen levels by approximately 40%. In addition to nitrogen reduction, the testing of the proposed system has shown it reduces other potential contaminants by the same or greater levels than a sand filter. After treatment, the effluent will discharge via a drip system and percolate through 2' of soil. Staff has reviewed the system literature and feels that if functioning properly, the system will treat effluent adequately for a reduced vertical setback to groundwater.

In regard to the slow percolation rates of the native soil, the design includes two calculations to demonstrate that the system will work. First, the size of the bed is calculated on the actual percolation rate of 480. In theory, that by itself should be sufficient to allow for dispersal. In addition, the design engineer provided an additional calculation that demonstrates that at 480 minutes per inch, the bed can disperse 3 inches of water a day, or 8,610 gallons. With the expected usage of 1000 gallons per day, staff does not see an issue with dispersal into the native soils.

Staff recognize the need to allow additional types of treatment systems beyond the sand filters currently allowed by regulation. It is the intent to make changes to the regulations to allow for these types of systems in the future without a variance. These alternative treatment systems and services are becoming more widely available and accepted by different jurisdictions. The ability to use proven treatment systems will also alleviate the issue with the limited availability of the correct sand for sand filters and possibly reduce installation costs for homeowners.

There are also some concerns, such as the availability of licensed maintenance personnel or replacement parts. These types of systems require maintenance to function correctly. However, as more of these systems are put into place, the industry should grow and reduce those concerns. In the interim, staff have designed specific conditions of approval to reduce the associated risks of lack of maintenance. With the benefits that these types of technologies will bring and the conditions of approval in place, staff are supportive of the proposal.

The final request of the variance is to not have to install fill for the repair area at time of primary installation. Depending on site conditions and how difficult the preparation work needed for the repair, it is the practice of EHS to require that the repair area be made ready so as to reduce the time needed to install a repair when needed. In this case, staff is comfortable that the installation of the fill will not unnecessarily delay installation of a repair.

Findings of Fact

The Board must consider the following when making a recommendation on this variance to the DBOH:

1. Will the proposed variance result in contamination of water to the extent it cannot be used for its existing or expected use?

Reply: This type of system is NSF 245 certified and will provide comparable treatment to a sand filter system. Provided that the conditions of approval are met and routine maintenance is performed, the system should function as intended and the effluent discharge to groundwater should be clean or cleaner than a sand filter. Therefore it should not pose an increased threat to groundwater contamination.

2. Will the proposed variance pose a threat to public health?

Reply: There are two primary ways that sewage can pose a threat to public health, direct exposure and groundwater contamination in areas with domestic wells. Sewage discharged underground should not allow for direct exposure as long as the field functions, the same as

any onsite sewage disposal system. As indicated in question #1, the system should also not cause a groundwater contamination issue as long as the system is maintained and functions properly. All other setbacks and design to regulatory requirements designed to be protective of public health.

3. Are there other reasonable alternatives?

Reply: NNPH regulations allow for a passive sand filtration system to be installed in soils between 60-90 minutes per inch and only a 2-foot vertical setback to groundwater. When there are slower percolation rates of the soils, the other option would be removal of soils and replacement with engineered fill materials. Engineers have designed systems to meet these requirements in the past. With high seasonal ground water at surface a mounded system with 4' of engineered fill would be required to maintain separation from impervious soils. EHS would accept a standard sand filter with fill and an appropriate design on this property. While specific estimates of these other options were not provided with the variance application, the costs of construction are known to be quite high.

Conditions of Approval

EHS staff are recommending the following 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.

Recommendation

Staff recommends the Sewage, Wastewater and Sanitation (SWS) Hearing Board support the presented 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.

Possible Motion

Should the SWS Hearing Board wish to approve the variance application, the three possible motions would be:

1. "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 recommended conditions."; OR

2. “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, without conditions.”; OR
3. “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, with the following conditions (if the Board wishes to impose conditions, they would list them here).”

The SWS Board may also formulate their own motion or request additional information from the applicant if desired.

**NORTHERN NEVADA PUBLIC HEALTH
ENVIRONMENTAL HEALTH SERVICES DIVISION**
1001 East Ninth Street • Bldg B • Reno, Nevada 89512
Telephone (775) 328-2434 • Fax (775) 328-6176
www.NNPH.org
HealthEHS@NNPH.org
**APPLICATION FOR VARIANCE
TO THE REGULATIONS GOVERNING SEWAGE,
WASTEWATER, AND SANITATION**

Office Use Only

Fee Paid _____
Date Paid _____
Cash/CC/Check _____
Receipt No. _____
Date Appl. Received _____
Considered Comp. _____

DATE February 11, 2025 PROJECT NAME 17590 E. Aspen Circle

OWNER

Name Taylor Benedickt

Address [REDACTED]

Phone [REDACTED]

Email Address [REDACTED]

ENGINEER

Name Carnes Engineering & Consulting

Address 9581 Long River Drive

Reno, Nevada 89506

Phone (775) 997-3862

Email Address crnsconsulting@aol.com

The following items must be submitted with this application:

JOB ADDRESS 17590 E. Aspen Circle

SIZE OF PARCEL 1.849 /Acre

COPY OF LEGAL DESCRIPTION AND VERIFICATION OF CURRENT VESTING ON TITLE

EXISTING PARCEL(S) APN(S) 087-044-17 LOT _____ BLOCK _____

REASON FOR VARIANCE REQUEST It is financially un-feasible to construct a sand filter bed system.

Applicant would like to construct Orenco Systems Advantex AX20 treatment system with drip bed dispersal.

It is requested that placement of fill for secondary field be waived due to financial hardship in importing material.

SECTION(S) OF REGULATIONS TO BE VARIED Sws 100.080 thru 100.105

IF A PARCEL MAP: PROJECT NAME _____

APN(S) _____ LOT _____ BLOCK _____

IF TENTATIVE MAP: PROJECT NAME _____

NUMBER OF PROPOSED LOTS _____ LOTS REQUIRING VARIANCES _____

LOT DESCRIPTION(S) _____

Prepare and submit this original application with 9 copies and 10 copies of a construction plot plan with specifications drawn to scale (minimum 1 inch = 30 feet) and include the required following requirements:

- Vicinity map.
- The direction of North.
- A diagram of the location of roadways, easements or areas subject to vehicular traffic, material storage or large animal habitation.

... continued from previous page

- ❑ A diagram of the location and distance to any well and on-site sewage disposal system within 150 feet of the subject property (if none, so indicate).
- ❑ A diagram of the distances from the proposed on-site disposal system to any proposed or existing on-site well.
- ❑ A diagram of the location of any percolation hole or test trench(es) on the property.
- ❑ A diagram to scale of the location of all proposed on-site sewage disposal system components, including a delineated area for future replacement of disposal trench(es).
- ❑ A diagram of the distance to any available sewer system (if none, so indicate).
- ❑ The number of bedrooms in the proposed building.
- ❑ The maximum slope across the disposal area.
- ❑ A diagram of the lot dimensions and total lot area.
- ❑ The location of water supply lines.
- ❑ A diagram of all structures on site.
- ❑ A diagram of all existing and proposed drainage improvements.
- ❑ A diagram of the location of any watercourse and/or natural drainage channel within 150 feet of the property (if none, so indicate).
- ❑ Soil logs and percolation test results, including calculations and actual field data (if required).
- ❑ Sewage loading calculations and application rates.
- ❑ System sizing calculations.
- ❑ Pertinent geological and hydrogeological information.
- ❑ Construction drawings, cross-sections and specifications of the proposed system.
- ❑ Certification by an engineer that the proposed system is properly designed to function for at least ten (10) years (engineer's seal).
- ❑ Submit a completed Notice of Special On-Site Requirements. We will give you the form after variance is approved by the District Board of Health.

BE PREPARED TO SUBMIT:

- ❑ Other information may be required to enable the Board to adequately consider the application.

THE SUBMITTED DATA, DOCUMENTS AND DESIGNS MUST DEMONSTRATE WHETHER:

1. The proposed system will significantly and/or adversely impact any water so that the water may no longer be used for its existing or expected beneficial use.
2. The proposed system will be detrimental or pose a danger to the public health, safety or create or contribute to a public health hazard.
3. Other reasonable alternatives for compliance with these regulations are available to the applicant. State the alternatives considered, including reasons for rejection.

ALL INFORMATION MUST BE PROVIDED AND THIS APPLICATION MUST BE PROPERLY COMPLETED PRIOR TO SUBMITTAL. FAILURE TO DO SO MAY RESULT IN SIGNIFICANT DELAYS TO THE PROCESSING OF THIS VARIANCE REQUEST.

Joe Lombardo
Governor



Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH
Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical Officer

February 9, 2023

Mark Schaefer
Orenco Systems, Inc
814 Airway Ave
Sutherlin, Oregon, 97479

RE: ORENCO SYSTEMS, INC. Model AX20-RT Treatment system. Size: 1000 gallons

The above-referenced system has been reviewed and approval is given for the Orenco AX20-RT 1000 Gallon water treatment systems in the state of Nevada with the following conditions and meet all applicable requirements of NAC 444 for Aerobic Wastewater Treatment Units.

1. Plans for the installation of the AX20-RT Treatment System must be prepared by a State of Nevada Registered Professional Engineer. The design engineer will be responsible for overseeing the construction and installation of the system. The engineer shall, within 30 days after the date on which the construction of the system is completed, submit a letter to the administrative authority stating that the system was constructed in accordance with the approved plans.
2. The design plans for an aerobic wastewater treatment unit must include a schematic detailing a 24-hour operating alarm system for the aerobic wastewater treatment unit.
3. A maintenance agreement for an annual inspection for the life span of the system must be submitted with the application to construct. [NAC 444.8314]
4. The system must
 - a. Producing effluent which has levels of total suspended solids and biological oxygen demand that are each 30 milligrams or less per liter.
 - b. An aerobic wastewater treatment unit that produces effluent with a level of total suspended solids or biological oxygen demand that is more than 30 milligrams per liter must be repaired or replaced in accordance with this section and [NAC 444.8316](#) and [444.8318](#) before the unit may be used.
5. The system must meet NSF International requirements pursuant to its Standard 40 system. Deviation from that will require the system to be re-reviewed. [NAC 444.8316]

Please contact Southern Nevada Health District (Clark County) and Washoe County Health District (Washoe) for additional requirements their agencies may have to use the system within their jurisdiction.

If you have any questions, please call me at (775) 546-5530.

Sincerely

A handwritten signature in blue ink, appearing to read "Teresa Hayes".

Teresa Hayes, Environmental Health Program Manager

Joe Lombardo
Governor



Richard Whitley,
MS
Director

DEPARTMENT OF
HEALTH AND HUMAN SERVICES



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



Cody Phinney,
MPH
Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical
Officer

August 4, 2023

Mark Schaefer
Orenco Systems, INC
814 Airway Ave
Sutherlin, Oregon 97479

RE: ORENCO SYSTEMS, INC. Model Meander Tank with Pump Discharge. Size: 1000 gal

To Whom it May Concern,

The above-referenced system has been reviewed and approval is given for the Orenco Systems Meander Tank with Pump Discharge. The above-referenced tanks have been placed on the Health Division-approved Septic Tank Manufacturers List. Please contact Washoe County Health District, Carson City Health & Human Services, and the Southern Nevada Health District for additional requirements their agencies may have to use the system within their jurisdiction.

If you wish to apply to use the other units in Nevada, please submit additional applications using the online application system. Information on how to access the application system is at <http://www.dpbh.nv.gov>

For questions please contact our main line at 775-684-5280.

Sincerely,

A handwritten signature in blue ink that reads "Sharon Johnson".

Sharon Johnson REHS
Environmental Health Specialist IV, Supervisor

Joe Lombardo
Governor



Richard Whitley,
MS
Director

DEPARTMENT OF
HEALTH AND HUMAN SERVICES



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



Cody Phinney,
MPH
Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical
Officer

August 4, 2023

Mark Schaefer
Orenco Systems, INC
814 Airway Ave
Sutherlin, Oregon 97479

RE: ORENCO SYSTEMS, INC. Model Meander Tank 1500 Gravity 1000/500 Baffle. Size: 1500 gal

To Whom it May Concern,

The above-referenced system has been reviewed and approval is given for the Orenco Systems Meander Tank 1500 Gravity 1000/500 Baffle. The above-referenced tanks have been placed on the Health Division-approved Septic Tank Manufacturers List. Please contact Washoe County Health District, Carson City Health & Human Services, and the Southern Nevada Health District for additional requirements their agencies may have to use the system within their jurisdiction.

If you wish to apply to use the other units in Nevada, please submit additional applications using the online application system. Information on how to access the application system is at <http://www.dpbh.nv.gov>

For questions please contact our main line at 775-684-5280.

Sincerely,

A handwritten signature in blue ink that reads "Sharon Johnson".

Sharon Johnson REHS
Environmental Health Specialist IV, Supervisor

STATE OF NEVADA

JIM GIBBONS
Governor

RICHARD WHITLEY, MS
Administrator

MICHAEL J. WILLDEN
Director



State Health Officer

DEPARTMENT OF HEALTH AND HUMAN
SERVICES
HEALTH DIVISION
BUREAU OF HEALTH PROTECTION SERVICES

February 12, 2008

Nicholas Noble
Orenco Systems
814 Airway Ave.
Sutherlin, OR 97479

RE: ADVANTEX AX20 NITROGEN REMOVAL WASTEWATER TREATMENT UNIT
In reply, please refer to project number (NV-2466-07-JLP)A

Dear Mr. Noble:

The above referenced systems have been reviewed and approval is given to use the Advantex AX20 nitrogen removal wastewater treatment unit in the state of Nevada with the following conditions:

1. The capacity of the treatment tank will determine the maximum number of bedrooms within the single family dwelling served by the system.
2. The Orenco fiberglass tanks have not been approved for use within the state by the Nevada State Health Division and may only be used in conjunction with the Advantex AX20 system.
3. Plans for the installation of an Advantex AX20 nitrogen removal wastewater treatment unit must be prepared by a State of Nevada Registered Professional Engineer.
4. Based on the 9 month test conducted by NSF International, the Advantex AX20 nitrogen removal wastewater treatment unit produces an effluent with an average total nitrogen level of 12 mg/L when the influent average total nitrogen level was 33 mg/L. This represents an average total nitrogen reduction of 64%.

Please contact Southern Nevada Health District and Washoe County District Health for additional requirements their agencies may have to use the system within their jurisdiction. Please contact Alex Lanza at the Nevada Division of Environmental Protection for additional requirements they may have to use the system to serve commercial structures.

If you have any questions, please call me at (775) 687-7537.

Sincerely,

Joseph Pollock
Public Health Engineer
Bureau of Health Protection Services

cc: Alex Lanza, NDEP
JLP/NV-2466-07A

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YVONNE SYLVA
Administrator

VACANT
State Health Officer

STATE OF NEVADA
DEPARTMENT OF HUMAN RESOURCES
HEALTH DIVISION
BUREAU OF HEALTH PROTECTION SERVICES

September 19, 2003

Angela Bounds
Orenco Systems, Inc.
814 Airway Ave.
Sutherlin, OR 97479

RE: **ADVAN TEX AX20 WASTEWATER TREATMENT SYSTEM**
In reply, please refer to project number (NV-0734-04-JLP)A

Dear Ms. Bounds:

The above referenced project has been reviewed and approval is given to use the Advan Tex AX20 Wastewater Treatment System in the state of Nevada with the following conditions:

1. Plans for the installation of an Advan Tex AX20 Wastewater Treatment System must be prepared by a State of Nevada Registered Professional Engineer.
2. The Health Division may approve only those applications that have a design flow rate of less than 5,000 gallons per day and have subsurface discharge of the effluent. Applications not meeting this criteria must be approved and permitted by the Nevada Division of Environmental Protection (NDEP).

Please contact Clark County District Health and Washoe County District Health for additional requirements their agencies may have to use the system within their jurisdiction.

If you have any questions, please call me at (775) 687-6615, extension 226.

Sincerely,

Joseph Pollock
Public Health Engineer
Bureau of Health Protection Services

cc: Jim Balderson, Supervisor, Public Health Engineering

JLP/NV-0734-04A

“Building and Strengthening Public Health through Communication and Partnerships”

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Carson City, NV 89701-5405
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Joe Lombardo
Governor



Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH
Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical Officer

February 9, 2023

Mark Schaefer
Orenco Systems, Inc
814 Airway Ave
Sutherlin, Oregon, 97479

RE: ORENCO SYSTEMS, INC. Model AX20-RT Treatment system. Size: 1000 gallons

The above-referenced system has been reviewed and approval is given for the Orenco AX20-RT 1000 Gallon water treatment systems in the state of Nevada with the following conditions and meet all applicable requirements of NAC 444 for Aerobic Wastewater Treatment Units.

1. Plans for the installation of the AX20-RT Treatment System must be prepared by a State of Nevada Registered Professional Engineer. The design engineer will be responsible for overseeing the construction and installation of the system. The engineer shall, within 30 days after the date on which the construction of the system is completed, submit a letter to the administrative authority stating that the system was constructed in accordance with the approved plans.
2. The design plans for an aerobic wastewater treatment unit must include a schematic detailing a 24-hour operating alarm system for the aerobic wastewater treatment unit.
3. A maintenance agreement for an annual inspection for the life span of the system must be submitted with the application to construct. [NAC 444.8314]
4. The system must
 - a. Producing effluent which has levels of total suspended solids and biological oxygen demand that are each 30 milligrams or less per liter.
 - b. An aerobic wastewater treatment unit that produces effluent with a level of total suspended solids or biological oxygen demand that is more than 30 milligrams per liter must be repaired or replaced in accordance with this section and [NAC 444.8316](#) and [444.8318](#) before the unit may be used.
5. The system must meet NSF International requirements pursuant to its Standard 40 system. Deviation from that will require the system to be re-reviewed. [NAC 444.8316]

Please contact Southern Nevada Health District (Clark County) and Washoe County Health District (Washoe) for additional requirements their agencies may have to use the system within their jurisdiction.

If you have any questions, please call me at (775) 546-5530.

Sincerely

A handwritten signature in blue ink, appearing to read "Teresa Hayes".

Teresa Hayes, Environmental Health Program Manager

Joe Lombardo
Governor



Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH
Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical Officer

March 20, 2023

Mark Schaefer
Orenco Systems, Inc
814 Airway Ave
Sutherlin, Oregon, 97479

RE: ORENCO SYSTEMS, INC. Model AX25-RT Treatment system. Size: 1250 Gallons

The above-referenced system has been reviewed and approval is given for the Orenco AX25-RT 1250 Gallon water treatment systems in the State of Nevada with the following conditions and meet all applicable requirements of NAC 444 for Aerobic Wastewater Treatment Units.

1. Plans for the installation of the AX25-RT Treatment System must be prepared by a State of Nevada Registered Professional Engineer. The design engineer will be responsible for overseeing the construction and installation of the system. The engineer shall, within 30 days after the date on which the construction of the system is completed, submit a letter to the administrative authority stating that the system was constructed in accordance with the approved plans.
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Teresa Hayes, Environmental Health Program Manager

Joe Lombardo
Governor



Richard Whitley, MS
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Lisa Sherych
Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical Officer

March 20, 2023

Mark Schaefer
Orenco Systems, Inc
814 Airway Ave
Sutherlin, Oregon, 97479

RE: ORENCO SYSTEMS, INC. Model AX25-RT Treatment system. Size: 1500 Gallons

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Joe Lombardo
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Teresa Hayes, Environmental Health Program Manager

Joe Lombardo
Governor



Richard Whitley, MS
Director

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March 20, 2023

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Sutherlin, Oregon, 97479

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Teresa Hayes, Environmental Health Program Manager

Joe Lombardo
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Richard Whitley,
MS
Director

DEPARTMENT OF
HEALTH AND HUMAN SERVICES
NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



Cody Phinney,
MPH
Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical
Officer

August 4, 2023

Mark Schaefer
Orenco Systems, INC
814 Airway Ave
Sutherlin, Oregon 97479

RE: ORENCO SYSTEMS, INC. Model Meander Tank with Pump Discharge. Size: 1000 gal

To Whom it May Concern,

The above-referenced system has been reviewed and approval is given for the Orenco Systems Meander Tank with Pump Discharge. The above-referenced tanks have been placed on the Health Division-approved Septic Tank Manufacturers List. Please contact Washoe County Health District, Carson City Health & Human Services, and the Southern Nevada Health District for additional requirements their agencies may have to use the system within their jurisdiction.

If you wish to apply to use the other units in Nevada, please submit additional applications using the online application system. Information on how to access the application system is at <http://www.dpbh.nv.gov>

For questions please contact our main line at 775-684-5280.

Sincerely,

Sharon Johnson

Sharon Johnson REHS
Environmental Health Specialist IV, Supervisor

Joe Lombardo
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Richard Whitley,
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DEPARTMENT OF
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NEVADA DIVISION of PUBLIC
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Cody Phinney,
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Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical
Officer

August 4, 2023

Mark Schaefer
Orenco Systems, INC
814 Airway Ave
Sutherlin, Oregon 97479

RE: ORENCO SYSTEMS, INC. Model Meander Tank 1500 Gravity 1000/500 Baffle. Size: 1500 gal

To Whom it May Concern,

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Sincerely,

Sharon Johnson

Sharon Johnson REHS
Environmental Health Specialist IV, Supervisor

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YVONNE SYLVA
Administrator

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State Health Officer

STATE OF NEVADA
DEPARTMENT OF HUMAN RESOURCES
HEALTH DIVISION
BUREAU OF HEALTH PROTECTION SERVICES

September 19, 2003

Angela Bounds
Orenco Systems, Inc.
814 Airway Ave.
Sutherlin, OR 97479

RE: ADVAN TEX AX20 WASTEWATER TREATMENT SYSTEM
In reply, please refer to project number (NV-0734-04-JLP)A

Dear Ms. Bounds:

The above referenced project has been reviewed and approval is given to use the Advan Tex AX20 Wastewater Treatment System in the state of Nevada with the following conditions:

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2. The Health Division may approve only those applications that have a design flow rate of less than 5,000 gallons per day and have subsurface discharge of the effluent. Applications not meeting this criteria must be approved and permitted by the Nevada Division of Environmental Protection (NDEP).

Please contact Clark County District Health and Washoe County District Health for additional requirements their agencies may have to use the system within their jurisdiction.

If you have any questions, please call me at (775) 687-6615, extension 226.

Sincerely,

A handwritten signature in black ink, appearing to read "J Pollock".

Joseph Pollock
Public Health Engineer
Bureau of Health Protection Services

cc: Jim Balderson, Supervisor, Public Health Engineering

JLP/NV-0734-04A

"Building and Strengthening Public Health through Communication and Partnerships"

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State Health Officer

DEPARTMENT OF HEALTH AND HUMAN
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February 12, 2008

Nicholas Noble
Orenco Systems
814 Airway Ave.
Sutherlin, OR 97479

RE: ADVANTEX AX20 NITROGEN REMOVAL WASTEWATER TREATMENT UNIT
In reply, please refer to project number (NV-2466-07-JLP)A

Dear Mr. Noble:

The above referenced systems have been reviewed and approval is given to use the Advantex AX20 nitrogen removal wastewater treatment unit in the state of Nevada with the following conditions:

1. The capacity of the treatment tank will determine the maximum number of bedrooms within the single family dwelling served by the system.
2. The Orenco fiberglass tanks have not been approved for use within the state by the Nevada State Health Division and may only be used in conjunction with the Advantex AX20 system.
3. Plans for the installation of an Advantex AX20 nitrogen removal wastewater treatment unit must be prepared by a State of Nevada Registered Professional Engineer.
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Please contact Southern Nevada Health District and Washoe County District Health for additional requirements their agencies may have to use the system within their jurisdiction. Please contact Alex Lanza at the Nevada Division of Environmental Protection for additional requirements they may have to use the system to serve commercial structures.

If you have any questions, please call me at (775) 687-7537.

Sincerely,

Joseph Pollock
Public Health Engineer
Bureau of Health Protection Services

cc: Alex Lanza, NDEP
JLP/NV-2466-07A

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Fax (775) 289-6935

Health Protection Services
100 Frankie Street
P.O. Box 667
Tonopah, NV 89049-0667
(775) 482-3997



System Services Agreement Terms and Conditions

Parties: Huston Sales & Distribution, LLC
("HSD" Service Provider) 7667 Patrina Way,
Sparks, Nevada 89436
info@hustonsalesdist.com

And: Taylor Benedickt
("Customer") 18543 Spicer Lake Court
Reno, Nevada 89508
775-203-0205

Property: 17590 E. Aspen Circle / APN: 087-045-10
Reno, Nevada 89508

Date: January 15, 2025
Effective Date of Service: Upon completion of Installation & Initial Startup.

NOW, THEREFORE, in consideration of the terms, provisions, covenants and conditions contained herein, the parties hereto agree as follows:

1.0 Performance of Services.

1.1 HSD shall perform the following services.

- a. Periodic Monitoring and Maintenance of Orenco's wastewater treatment system. New systems need to be checked and maintained within 30 days of initial installation, followed by two follow-up visits in the first year of operation.
- b. Periodic Monitoring and Maintenance of GeoFlow Subsurface Drip System (SDS) as effluent discharge.
- c. Each visit includes a report of findings update of system's performance.
- d. Alarm Response Program.

1.2 Periodic Monitoring, Maintenance and Reporting shall be performed during normal business hours Monday through Friday (excluding national holidays) on a pre-scheduled basis and as HSD deems necessary or advisable.

1.3 HSD's performance of Periodic Monitoring and Maintenance may include repair, replacement or addition of parts used in the System, as HSD shall determine in its sole discretion.

1.4 HSD may but shall not be required to provide Services hereunder if the Customer or End-user makes alterations or modifications to the System, misuses the System, attaches devices to it not supplied by its original supplier, or performs or attempts to perform any type of maintenance services on the System or any portion thereof. In the event that modification of the system is discovered, HSD will immediately report findings to the Customer.

1.5 During the Term hereof, Customer shall provide HSD with access to the System, including electrical controls & disconnects, and with sufficient workspace required to perform the Services.

2.0 **Definitions.** For purposes of this Agreement, the following definitions shall apply:

2.1 "System" shall mean only the sewer and /or effluent waste water system described on the attached Schedule A.

2.2 "Periodic Monitoring and Maintenance" shall mean the maintenance services described on Schedule B attached hereto and by this reference specifically make a part hereof to be performed by HSD on and with respect to the System.

2.3 "Annual Compliance Report" shall mean preparing periodic Maintenance Summary Sheets or special reports.

2.4 "Alarm Response Program" shall mean a program to allow Customer to Contact HSD 24 hours a day to request repairs.

2.5 "Inspection, Testing, and As-Built Preparation" shall mean final review of installed unit, written certification that the unit is working as designed, and preparation of as-built documents for future needs. Copies to be provided to Customer and maintained copies at HSD place of business.

2.6 "Additional Services" shall mean any services provided by HSD to Customer in addition to those listed in paragraph 1.1

2.7 "Effective Date" shall mean the date of this Agreement as written above.

2.8 “Normal Business Hours” shall mean Monday through Friday from 8.00 a.m.-5.00 p.m. Pacific Time, excluding national holidays and the Friday following Thanksgiving.

2.9 “Unit(s)” shall mean individual on lot pumping or filter packages.

2.10 “Sites” shall mean the individual residential parcel.

2.11 “End-user abuse” shall mean misuse of the system causing damage or failure that would not occur through normal operation. e.g. turning off power to the system causing an overflow OR severing of service lateral causing discharge or spill OR discharging of solid waste into the interceptor tanks, causing excessive system pump outs.

3.0 Term of Agreement. This Agreement shall be for a period of One (1) year after the Effective Date, unless otherwise terminated or canceled by either party as provided herein.

4.0 Charges.

4.1 The charges which the Customer shall pay HSD for the performance of the Services shall be set forth on Schedule C. HSD may increase all or any of the charges for those Services shown on Schedule A by giving the Customer written notice at least thirty (30) days before each yearly anniversary of the Effective Date of this Agreement.

4.2 HSD’s responsibility to provide service is limited to the on-lot portion of the collection system. The collection mains and services outside of the individual properties will remain the responsibility of the Customer. Charges for “End user abuse” will be charged to the Customer, who will be responsible for collecting fees from the individual End-users.

4.3 The charges which the Customer shall pay HSD for the performance of Additional Services or “End user abuse” shall be at HSD standard rates for time and travel. The current standard rates for time and travel are set forth on Schedule C.

4.4 All charges shall be due and payable within thirty (30) days of the Customer’s receipt of HSD’s invoice, therefore. The Customer shall pay HSD a late payment charge of 1.5% per month, or the maximum rate permitted by applicable law, whichever is less, on any unpaid amount for each calendar month or fraction thereof that any payments to HSD are in arrears.

5.0 Certification of System. The Customer shall permit HSD to inspect any existing unit to determine if it is in good working order. Based on such inspection, HSD may

either (i) require the Customer to perform such maintenance or upgrade on the unit as HSD may deem necessary, or (ii) perform such maintenance or upgrade the unit itself. Any such maintenance services provided by HSD under this Section 5 shall be billed by HSD to the Customer at HSD's standard rates for time, materials and travel. HSD will provide notification of rejection to owner within 24 working hours of rejection. Failure to upgrade may cause HSD, at its sole discretion, to reject the inclusion of the unit as part of this agreement, or alternatively may propose a different fee structure for monitoring and maintenance of the unit.

5.1 HSD shall include Orenco in all service records distribution. Any and all upgrades or replacement of Orenco components will be installed by an Orenco approved installation provider.

6.0 Warranty. HSD and Orenco warrants that the Services and Additional Services shall be performed in a good and workmanlike manner and that HSD and Orenco will correct any System errors, malfunctions, or defects directly caused by HSD and Orenco's failure to perform the Services and Additional Services in such manner. HSD and Orenco do not warrant that the System will meet the Customer's needs or be free of failure, errors, malfunctions or defects or that the Customer's use of the System will be uninterrupted. Except and to the extent expressly provided otherwise in this Agreement, and in lieu of all other warranties, there are no warranties of any kind, either expressed, implied or statutory, including but not limited to warranties of quality, performance, non-infringement, merchantability or fitness for particular purpose, nor are there any warranties created by course of dealing, course of performance or trade usage. The foregoing exclusions and disclaimers are an essential part of this Agreement.

7.0 Limitation of Liability. The sole liability of HSD under this Agreement shall be to correct any errors, malfunctions or defects in the System directly caused by HSD failure to perform the Services and Additional Services in a good and workmanlike manner pursuant to Section 6 above; provided, however, in no event shall HSD's liability to the Customer hereunder exceed the total amounts paid to HSD hereunder by the Customer. In no event shall HSD be liable to the Customer or any other third-party claimant for any indirect, special, punitive, consequential or incidental damages or lost profits arising out of or related to this Agreement or the performance or breach thereof, whether based upon a claim or action of contract, warranty, negligence or strict liability or other tort, breach of any statutory duty, indemnity, or contribution or otherwise, even if HSD has been advised of the possibility of such damages.

8.0 Indemnity. The Customer agrees to indemnify and hold HSD free and harmless from and against any and all claims, demands, liabilities, actions, losses and damages of whatsoever kind or nature arising out of or relating to HSD's performance of Services

or Additional Services under this Agreement. To protect the Customer against the claims of HSD: on account of the obligations assumed by the Customer under this Section 8.0, the Customer shall maintain during the term of this Agreement at the Customer's cost, comprehensive general liability insurance with a responsible company with limits of not less than \$10,000 for injury to one person, \$20,000 for injury to two or more persons and one occurrence, and \$50,000 for damage to property, and shall name HSD as an additional insured. Certificates evidencing such insurance and bearing endorsements requiring ten (10) days' written notification to HSD prior to any change or cancellation shall be furnished to HSD.

9.0 Termination / Cancellation.

- 9.1 This Agreement may be terminated or cancelled in the following circumstances:
- a. By either party at any time and for any or no reason upon thirty (30) days' prior notice from one party to the other.
 - b. Upon written notice by one party effective as of the effective date thereof if the other party is in default of any provision of this Agreement and such default is not cured by the defaulting party within fifteen (15) days after the effective date of said notice from the non-defaulting party.
 - c. Upon written notice by one party effective as of the date of the voluntary filing by the other party or, if not dismissed within ninety (90) days, the filing against the other party, of a petition in bankruptcy or a petition for reorganization, any assignment by such other party for the benefit of creditors, the appointment of a receiver or a trustee for such other party, or the placement of such other party's assets in the hands of a trustee or receiver.
 - d. By HSD immediately and without notice in the event that any permit, license or certificate required by law or regulation to be held by Customer is for any reason denied, revoked or not renewed.
- 9.2 In the event of any termination or cancellation of this Agreement by HSD, HSD shall have the right to:
- a. Declare all amounts owed to HSD to be immediately due and payable:
 - b. Cease performance of all Services and Additional Services without liability to the Customer.

- 9.3 In the event of any termination or cancellation of this Agreement by the Customer, the Customer shall have the right to:
- a. Deny HSD access to its premises and to the System, except that HSD shall have the right to enter the Customer's premises to repossess all materials, parts, and other items owned by HSD: and
 - b. Discontinue utilizing HSD for the performance of Services and Additional Services.

10. Miscellaneous Provisions.

- 10.1 This Agreement is personal in nature and may not be delegated, assigned or transferred by either party without the prior written consent of the other party.
- 10.2 This Agreement terminates and supersedes all other agreements between the parties and constitutes the entire understanding between them. This Agreement cannot be change, modified, or varied except by written instrument duly executed by both parties, except that HSD may increase the charges for Services without execution of a written instrument as provided in Section 4.1 above.
- 10.3 The failure of either party to insist on strict performance of this Agreement by the other shall not be construed as a waiver of the right to insist on such performance and no waiver by either party to any breach by the other of any provision hereof shall be deemed a waiver of any other prior or subsequent breach.
- 10.4 The laws of the State of Nevada shall govern this Agreement.
- 10.5 If any suit or action is filed by any party to enforce this Agreement or otherwise with respect to the subject matter of this Agreement, the prevailing party shall be entitled to recover reasonable attorney fees incurred in preparation or in prosecution or defense of such suit or action as fixed by the trial court, and if any appeal is taken from the decision of the trial court, reasonable attorney fees as fixed by the appellate court.
- 10.6 This Agreement shall be binding upon and inure to the benefit of the successors and assigns of HSD and the Customer.
- 10.7 Time is of the essence for each and every provision of this Agreement.

10.8 The schedules referenced in this Agreement are a part of this Agreement as if fully set forth in this Agreement.

10.9 Any notice or other communication required or permitted to be given under this Agreement shall be in writing and shall be mailed by certified mail, return receipt requested, postage prepaid, addressed to the parties at the addresses shown on the first page of this Agreement. Any notice or other communication shall be deemed given at the expiration of the second day after the date of deposit in the United States mail. The addresses to which notice, or other communications shall be mailed may be changed from time to time by giving written notice to the other party as provided in Section 10.9.

HSD
Huston Sales and Distribution, LLC
7667 Patrina Way,
Sparks, Nevada 89436

CUSTOMER
Customer

Signature

__ Stephen Huston ____
Printed Name

Date

Taylor Benedictt

Signature

__ Taylor Benedictt ____
Printed Name

__ 2/10/2025 ____
Date

*Contract contingent on approval on completion of construction.



Schedule A Description of System

Individual private residential System.

Orenco Wastewater Treatment System

- Orenco Advantex AX 20 Treatment System, Mode 3B with Advantex UV disinfection Unit.
- Universal Biotube- Pump Vault. 24" cartridge
- Float Assembly: 22" Stem, AX
- PF300511 Effluent pump, ½ Hp, 30 gpm 115 V, 60Hz.
- Advantex Filter Standard, 20 sqft, w/vent
- Vericomm AX20B1 Control panel
- 3" Recirculation splitter valve w/ quick disconnect
- MPV Advantex AX 20 Panel Mode B, 115 V.
- M1000 P Septic Tank

GeoFlow Subsurface Drip Systems (SDS)

- Geo Controller Or Orenco Controller.
- Solenoid Valves
- Air Vacuum Breakers
- Wasteflow Pressure regulators
- Geoflow Headworks (Vortex filter, Field flush valve, air vent, Filter Flush valve, and pressure gauge. Located at each station inside a insulated headwork box.
- Wasteflow PC drip line.

Schedule B
Description of Services

Orenco Wastewater Systems

1. Periodic Monitoring and Maintenance

- a. HSD will ensure that the units are continually monitored, and maintenance personnel dispatched when necessary. VeriComm telemetry controls will be installed on each unit. This feature will control the unit, signal an alarm by calling for service, track flows to locate potential inflow events, and proactively notify the maintenance entity of any abnormal occurrence. Therefore, the use of Vericomm will provide 24/7-unit monitoring. Fees for this service are set forth in Schedule C.

- b. As part of the base fee, HSD will visit the site during initial operation startup. A second site visit occurs within 30-45 days from the initial operation start up, followed by two additional site visits during the first year to monitor and verify system is in good operational order. At the end of the first year of operation HSD and Customer will enter into a yearly contract as outlined in item 1. Above.

2. Annual & Maintenance Reports

Annual Compliance Report shall mean preparing periodic Maintenance Summary Sheets or special reports.

3. Alarm Response Program

This program ensures there is access to HSD maintenance personnel 24 hours per day, 7 days per week for service calls or to address complaints from Customer. HSD personnel will respond to alarm calls during normal business hours whenever possible, however, they will be available at any time, day or night for the maintenance needs of the System. The fees for this service are covered in Schedule C.

HSD will respond immediately, 24 hours per day, 7 days per week to address any report of suspect wastewater surfacing. HSD shall report any instance of wastewater surfacing orally (by telephone) within 24 hours of discovery. During normal business hours the Customer will be notified and then the Department of Environmental Quality Regional office shall be called.

Geoflow SDS System

As part of the base fee, HSD will review the GeoFlow System as outlined in the Orenco Periodic Monitoring and Maintenance outlined in item 2. Below is an outline of the GeoFlow system components to be reviewed and tested.

- Review System components. Open and flush spin filters and clean cartridges.
- Open and flush valves and flush fields for 3-5 minutes by activating pump in manual position.
- Check the pressure in the drip field by use of pressure gauge on the Schraeder valve located in the air vents and by reading the pressure gauge located in the Wasteflow Headworks box.
- Periodically remove and clean air vents, field flush valves.
- Review and check condition of drip field.

Schedule C
Huston Sales and Distribution
Standard Labor Rates / Effective January 2025

Yearly Contract:

HSD first year of service as outlined in *Periodic Monitoring & Maintenance* item 2 above: \$1,100.00.

Addition of \$ to include 24/7 monitoring service as outlined in item 1.
For a total yearly cost of \$.00

Standard Rates:

- | | |
|--|-------------------|
| 1. 24/7 Vericomm unit monitoring. | \$ TBD Annual |
| 2. On-site maintenance call – standard working hours | \$175.00 per hour |
| 3. On-site maintenance call – Off hours | \$230.00 per hour |
| 4. On-site maintenance call- Overtime or Holiday hours | \$350.00 per hour |
| 5. Hourly cost for on-site repairs. | \$175.00 per hour |

Hourly rates include truck with tools, travel up to 60 miles round trip.
Sites beyond mileage limit are subject to \$0.75 cents per mile portal to portal from Sparks NV Office.

Huston Sales and Distribution LLC, (HSD) is a subsidiary of Huston High Desert Excavation, LLC, (HHDE) a Nevada licensed A&B contractor: NSCB: 0090478-A & 0091394-B. HHDE is a certified Orenco Wastewater System Installer.

