

Attachment 1

PLZ-2024-083
Desert Hills Dairy
CUP

Applicant's
Photos

Attachment C:
Photolog

Photolog



Figure 1: Picture Locations



Photo 1

Photolog



Photo 2



Photo 3 – looking towards the lagoon area

Photolog



Photo 4



Photo 5

Photolog

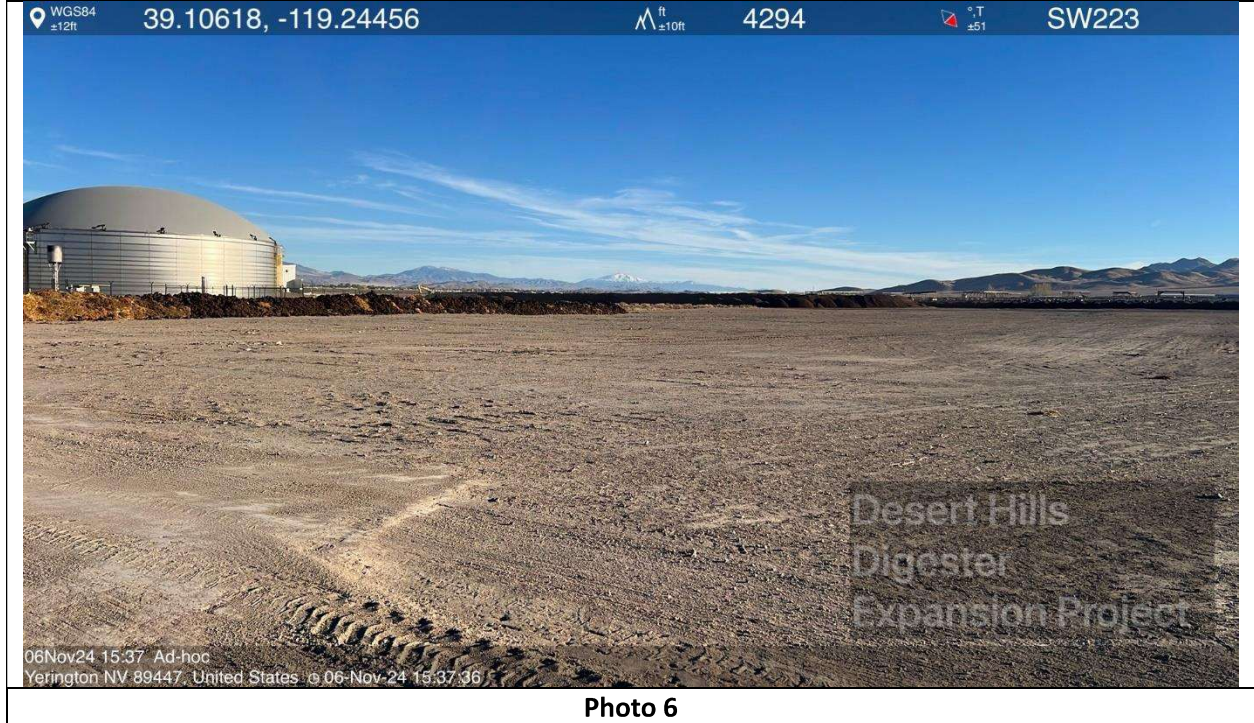


Photo 6

Attachment 2

PLZ-2024-083
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Applicant's Description

Project Description

Dominion Energy is proposing to expand their existing anaerobic digester system (a.k.a. Desert Hills Dairy Renewable Natural Gas RNG) to produce methane located at the north end of the Desert Hills Dairy LLC facility located at 350 Campbell Lane, Yerington, NV. The existing digester system is located at Lat/Long 39° 6'20.15"N and 119°14'34.28"W (WGS 84). The expansion would occur to the west side of the existing system. See **Attachment A: Maps and Site Layouts** for locations of the site and subsequent layouts for the expansion of the system.

This expansion would include manure pretreatment equipment, adding a digester tank(s) or covered anaerobic lagoon, additional dewatering equipment, biogas conditioning and upgrading equipment, and an additional flare. The anaerobic digester tank have a liquid volume of approximately 1.8 million gallons and the lagoon option has a liquid volume of approximately 35.6 million gallons. This system produces methane which is utilized as renewable natural gas (RNG) and is trucked offsite to the gas pipeline interconnect, located in Stagecoach, NV.

For the digester tank option, the project would encompass an expansion of approximately 2.5 acres of the approximate 4.3 acres of the existing facility and feedstock pretreatment area for a total disturbance of approximately 6.8 acres for the completed facility. Within the permanent facility footprint, empty areas will be utilized for construction area to store materials, equipment, and a temporary office during the building of the additional plant equipment.

If a lagoon option is put into the final design, it would encompass approximately 6 acres in addition to the existing facility. Piping would then connect the existing facility to the lagoon area. Construction areas would be staged in the agreed lease areas for the lagoon and/or for the existing digester facility.

Construction is estimated to begin in the 2nd quarter of 2025 and end in the 2nd quarter of 2026 and building activities are scheduled to occur 6 days a week (max) during 10-hour shifts and will be limited to daylight hours. Nighttime commissioning work could occur during evening hours but will be limited and temporary.

County Planning Goals and Findings

The following section is an evaluation of Lyon County's planning policies and how the Project aligns with the County's policy goals. The findings are also used for the Commission to evaluate the impact of the conditional use on its compatibility with surrounding properties and neighborhoods to mitigate potential impacts of the use at a particular location.

- A. The proposed use at the specified location is consistent with the policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations;

- *Per Policy LU 3.1 Diverse Economic Base*, the Project is dependent upon the current dairy operations. Therefore, this Project complements the existing agricultural operations of the dairy. In addition, the Project can also offer more employment opportunities for locals in the area.
 - *Per Policy LU 4.1 Encourage the Continuation of an Agricultural Lifestyle in appropriate rural areas of the County*, the Project has a symbiotic relationship with the dairy by providing an alternative for manure handling practices which in turn create an economic savings for the dairy. The Project also generates new income streams for the dairy from the land lease and manure purchases. In addition, the water is reclaimed and reused in the dairy's operations of barn flushing which helps the dairy preserve any water rights they for their current operation of the dairy facility. This project allows for the dairy to continue its dairy operations while having consistent manure handling practices in accordance to keeping an agricultural lifestyle in this rural area.
 - *Per Policy LU 5.1 Encourage Resource-Sensitive Growth and Sustainable Design*, the Project addresses the waste product (dairy manure) by the dairy to create pipeline quality natural gas, thus supporting the County's renewable energy source goals. Water is also reclaimed during the RNG process and is returned to the dairy for use in barn flushing operations.
- B. The proposed use is compatible with the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods;
- The RNG Project is co-located at an existing dairy operation and would not be expanding outside the current dairy boundaries, thus, not impeding surrounding agricultural land and/or neighborhoods.
- C. The proposed use will not generate vehicular traffic which cannot be accommodated by the existing, planned or conditioned roadway infrastructure;
- The Project will utilize the existing dairy operations by accessing the RNG site via Campbell Lane. The RNG facility is small and has limited onsite personnel. The Project would not require modifications to the existing road infrastructure to facilitate operation of the facility. During construction, there may be more equipment brought in on the existing roadways but will be temporary and limited. Extra personnel needed for the construction of the project (i.e. craft) will probably be shuttled in to reduce traffic and impacts to the roads. This Project will not substantially alter existing vehicular traffic as part of operations.

- D. The proposed use incorporates roadway improvements, traffic control devices or mechanisms, or access restrictions to control traffic flow or divert traffic as needed to mitigate the development impacts;
- Since the RNG facility and subsequent Project will have limited onsite personnel, it is not expected to require modification to the existing road infrastructure. With the RNG facility located to the north of the dairy, existing access restrictions can be utilized to control the flow of traffic in and out of the area.
- E. The proposed use incorporates features to address adverse effects, including visual impacts and noise, of the proposed conditional use on adjacent properties;
- The Project will incorporate the expansion of the current RNG facility. Heights of tanks will be at elevations similar to current tanks and will not impact visually to the surrounding area. Noise impacts will also be minimal since the closest Sensitive Noise Receptor (residential house) is approximately a ½ mile from the RNG facility and the noise from operation cannot be heard when approaching the site and is indistinguishable from the existing dairy operations.
- F. The proposed conditional use complies with all additional standards imposed on it by the particular provisions of this chapter and all other requirements of this title applicable to the proposed conditional use and uses within the applicable base zoning district, including but not limited to, the adequate public facility policies of this title; and
- The current dairy facility is located in the Title 10 Zoning of RR-5 (Title 15 RR-20) which is described as:
private property under irrigated cultivation or irrigated pasture generally larger than 40 acres. Residential uses may be clustered or transferred away from agricultural lands to conserve large intact agricultural lands. Agricultural related commercial and limited industrial uses and other limited commercial and tourist commercial uses compatible with the agricultural use of the land and rural character.
- The Project complies and is compatible with the conditional use of the existing dairy facility and complements the dairy operations by providing an alternative handling process of the dairy waste (manure) while water reclamation helps the dairy retain any water rights they currently have. This is also in alignment with the Land Use Goals (Policy LU 1.1) by keeping with the current rural requirements and uses of the property.
- G. The proposed conditional use will not be materially detrimental to the public health, safety and welfare, and will not result in material damage or prejudice to other properties in the vicinity. (Ord. 603, 11-1-2018)
- The Project is subject to various regulatory programs designed to protect public safety, the environment, and the local community which includes the following:
 - NV DEP Chemical Accident Prevention Program (CAPP)

**Desert Hills Dairy Renewable Natural Gas RNG Expansion
Supplemental Information**



- NV DEP Air Permit Program
- EPA Risk Management Plans
- Occupational Safety and Health Association (OSHA)

Supplemental Information Attachments:

Attachment A: Maps and Site Layouts

Attachment B: Elevations

Attachment C: Photolog

Attachment D: Property Information

Attachment 3

PLZ-2024-083
Desert Hills Dairy
CUP

Lyon County Planning
Department
emails from 2020
-No ADR or CUP required-

From: [Tim Naylor](#)
To: "[Catherine Herrera](#)"; kmartin@vanguardrenewables.com
Cc: [Tom Haren](#); [Jodi Reed](#)
Subject: FW: Anerobic Digest System - 8320 HWY 50
Date: Thursday, October 22, 2020 4:13:04 PM
Attachments: [image002.png](#)

Catherine

Please see the evaluation of Lyon County regarding land use requirements. Lyon County confirms that they will not require an ADR for the digesters located on the dairies.

Thanks

Tim Naylor

AGPROprofessionals

3050 67th Avenue, Suite 200
Greeley, CO 80634
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970-535-9854 fax
(303) 870-0013 mobile
www.agpros.com



From: Rob Pyzel <rpyzel@lyon-county.org>
Sent: Thursday, October 22, 2020 12:43 PM
To: Tim Naylor <tnaylor@agpros.com>
Cc: Tom Haren <tharen@agpros.com>; Jodi Reed <jreed@agpros.com>; Lysa Humildad <lhumildad@lyon-county.org>
Subject: Re: Anerobic Digest System - 8320 HWY 50

Thank you for forwarding the site plans showing the locations and size of the proposed digesters at Smith Valley Dairy and Desert Hills Dairy.

After reviewing the site plans for both new structures, it is my opinion that neither structure rises to the level of requiring an administrative design review by Lyon County Community Development Department as either an addition to the existing structures at each facility or as a new structure for both facilities. Both should proceed through the building permit review process through the Lyon County Building Department. But no additional review other than the building permits will be required by the Lyon County Planning Department.

Please attach a copy of this email to both building permit applications to avoid any

questions about the determination by the PLanning Department.
Thank you,

Rob Pyzel, Planner
Lyon County Planning Department
(775) 246-6135; X-2473
rpyzel@lyon-county.org

Definition of caveat emptor: a principle in commerce: without a warranty the buyer takes the risk.

On Thu, Oct 22, 2020 at 11:01 AM Tim Naylor <tnaylor@agpros.com> wrote:

Rob

Attached are the site plans for the dairy digesters at SVD and DHD. They are located next to and part of the manure management system and waste water ponds for each dairy. In Colorado they are considered a part of the manure management system similar to a centrifuge for solid separation.

As a side note, on January 29, 2020, Tom Haren and Chad Turner met with Jeff Page and Mr. Page confirmed the 2017 opinion regarding the digester development for requiring a building permit. I realize that time has past and you are in the process of updating codes but I would ask that the review and discussion be considered in your evaluation.

Thanks

Tim Naylor

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From: Rob Pyzel <rpyzel@lyon-county.org>

Sent: Friday, October 16, 2020 4:27 PM

To: Tim Naylor <tnaylor@agpros.com>; Tom Haren <tharen@agpros.com>

Subject: Re: Anerobic Digest System - 8320 HWY 50

Thank you!

If you can shoot over two legible pdf, then I will review them quickly and make a determination.

Rob Pyzel, Planner
Lyon County Planning Department
(775) 246-6135; X-2473
rpyzel@lyon-county.org

Definition of caveat emptor: a principle in commerce: without a warranty the buyer takes the risk.

On Fri, Oct 16, 2020 at 3:21 PM Tim Naylor <tnaylor@agpros.com> wrote:

Thanks, we will get you the site plan.

Tim Naylor

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From: Rob Pyzel <rpyzel@lyon-county.org>

Sent: Friday, October 16, 2020 4:10 PM

To: Tim Naylor <tnaylor@agpros.com>; Andrew Hammond <andrew@elementengineer.com>; Tom Haren <tharen@agpros.com>; Lysa Humildad <lhumildad@lyon-county.org>; Jeff Page <jpage@lyon-county.org>; Danny Sommers <danny@farrwestengineering.com>; Joel Brown <jbrown@lyon-county.org>

Cc: cfoster@ceibuilders.com; Kerry Page <kpage@lyon-county.org>

Subject: Fwd: Anerobic Digest System - 8320 HWY 50

Tim;

We have adopted a new land use and development code since October 9, 2017. The question in 2017 was whether a Special Use Permit (a public hearing development review before the Planning Commission and Board of Commissioners) would be necessary under the previous land use and development code (Title 10) for the installation of the digesters at an existing dairy.

Under the new land use and development code (Title 15), an administrative design review (ADR) is typically required for certain uses, new buildings in non-residential zoning districts and building remodels/additions in non-residential zoning districts that are deemed necessary by staff. There would not be a public hearing before either the Planning Commission or the Board of Commissioners. We are processing minor code amendments that better define what triggers an ADR, but it has only been before the Planning Commission and has not yet been adopted by the Board of Commissioners.

We would like to follow the path described in the October 9, 2017 email, but I needed to see the size and locations of the digesters before I made a recommendation to the Acting Community Development Director/County Manager.

Thank you,

Rob Pyzel, Planner
Lyon County Planning Department
(775) 246-6135; X-2473
rpyzel@lyon-county.org

Definition of caveat emptor: a principle in commerce: without a warranty the buyer takes the risk.

On Fri, Oct 16, 2020 at 2:32 PM Tim Naylor <tnaylor@agpros.com> wrote:

Rob

Please see the attached document you provided in 2017 regarding manure digesters as part of an existing dairy operation. The CDD recommendation was that if it is proposed as part of an existing dairy operation, then a building permit application should be required. Since the digesters are above ground tanks the NDEP will require notice of location of the tanks but the CAFO permits do not need to be modified.

We have proceeded with the development of the digesters based on the evaluation provided.

Please contact me if you would like to discuss.

Thanks

[Tim Naylor](#)

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From: Rob Pyzel <rpyzel@lyon-county.org>
Sent: Friday, October 16, 2020 3:17 PM
To: Tim Naylor <tnaylor@agpros.com>
Cc: Lysa Humildad <humildad@lyon-county.org>; Danny Sommers <danny@farrwestengineering.com>; Joel Brown <jbrown@lyon-county.org>; Andrew Hammond <andrew@elementengineer.com>; Tom Haren <tharen@agpros.com>
Subject: Re: Anerobic Digest System - 8320 HWY 50

I spoke with Ms. Foster at CEI Builders. She was going to send me a pdf of the site plan for both dairies so that I can determine whether or not we can deem the digesters at the dairies as accessory to the dairy operations and potentially avoid requiring an administrative design review for both dairies prior to the County being able to issue the building and grading permits.

I have not yet received the site plans from Ms. Foster.
Thank you,

Rob Pyzel, Planner
Lyon County Planning Department
(775) 246-6135; X-2473
rpyzel@lyon-county.org

Definition of caveat emptor: a principle in commerce: without a warranty the buyer takes the risk.

On Fri, Oct 16, 2020 at 2:12 PM Tim Naylor <tnaylor@agpros.com> wrote:

Thank you Lysa, we are working with Andrew Hammond with Element Engineering (copied in this email). I have asked that Mr. Hammond contact Mr. Sommers to review the drainage analysis needs.

Thanks again.

Tim Naylor

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From: Lysa Humildad <lhumildad@lyon-county.org>
Sent: Friday, October 16, 2020 2:55 PM
To: Tim Naylor <tnaylor@agpros.com>
Cc: Danny Sommers <danny@farrwestengineering.com>; Joel Brown <jbrown@lyon-county.org>; Rob Pyzel <rpyzel@lyon-county.org>
Subject: Anerobic Digest System - 8320 HWY 50

Good afternoon Tim,

Per our telephone conversation I have attached the estimated fees for building permits for the three projects in Lyon County.

I have also attached a copy of the Administrative Design Review from the Planning Department for your convenience.

As far as a drainage analysis, please contact Danny Summers with Farr West Engineering (I have cc'd him in this email along with our Plans Examiner, Joel Brown).

Lastly, in regard to a grading permit, generally, the Building Permit includes grading, however, if you wish to obtain a Grading Permit ahead of the Building Permit, please contact Rob Pyzel (also cc'd here) in Planning.

Please let me know if you have any other questions or need any further assistance from me.

Thank you,

Lysa Humildad
Lyon County Building Department
Administrative Assistant


27 S. Main St
Yerington, NV 89447
(775) 463-6591

