



**FACTSHEET**  
**(pursuant to NAC 445A.236)**

**Permittee Name:** OLSEN BROTHERS DAIRY DBA HILLSIDE DAIRY

4170 BASS RD  
FALLON, NV 89406

**Permit Number:** NS2016505

**Permit Type:** GROUNDWATER DISCHARGE

**Designation:** GROUNDWATER

**New/Existing:** EXISTING

**Location:** HILLSIDE DAIRY, CHURCHILL  
4170 BASS RD, FALLON, NV 89406  
LATITUDE: 39.42713310, LONGITUDE: -118.807643  
TOWNSHIP: T18N, RANGE: R28E, SECTION: S14

| Outfall / Well Num | Outfall / Well Name                          | Location Type    | Well Log Num | Latitude    | Longitude   | Receiving Water     |
|--------------------|--|------------------|--------------|-------------|-------------|---------------------|
| 001                | DAIRY TOTALS                                 | Internal Outfall |              | 39.427133   | -118.807644 | WATERS OF THE STATE |
| 002                | LAGOON 1                                     | Internal Outfall |              | 39.41962590 | -118.810760 | WATERS OF THE STATE |
| 003                | LAGOON 2                                     | Internal Outfall |              | 39.41904570 | -118.811758 | WATERS OF THE STATE |
| 004                | MONITORING WELL-COMMERCIAL WELL              | Monitoring Well  |              | 39.42590660 | -118.804677 | WATERS OF THE STATE |
| 005                | STORMWATER DISCHARGE                         | External Outfall |              | 39.42004710 | -118.811246 | WATERS OF THE STATE |
| 006                | CORRAL/SEPERATOR MANURE TESTING AND TRANSFER | External Outfall |              | 39.42004710 | -118.811246 | WATERS OF THE STATE |
| 007                | MONITORING WELL-CORRAL AREA                  | Monitoring Well  |              | 39.42590660 | -118.804677 | WATERS OF THE STATE |
| 008                | MONITORING WELL-FIELD AREA                   | Monitoring Well  |              | 39.42590660 | -118.804677 | WATERS OF THE STATE |

**Permit History/Description of Proposed Action**

The Permittee, Olsen Brothers Dairy dba Hillside Dairy, has applied for the renewal of groundwater discharge permit NS2016505 for the ranch and associated cattle operation located at 4170 Bass Road, in Fallon, within Churchill County, Nevada.

This permit was first issued on May 1, 2016, and expired on April 30, 2021; the permit has been administratively continued since.

**Facility Overview**

Hillside Dairy, first established in 1915, is located approximately 3.5 miles south of the junction of Highway 50 and Allen Road, at 4170 Bass Road, Fallon. The dairy consists of a single facility owned and operated by the Permittee.

Hillside Dairy is defined as a concentrated animal feeding operation (CAFO) because the dairy reports to confine at least 700 mature dairy cows, for 30 days or more, in a 12-month period, in an area devoid of vegetation during the normal growing season. As a CAFO, Hillside Dairy is required to contain, without discharge, all manure and process wastewater from the production area. An exception to this is a precipitation overflow resulting from an episode greater than a 25-year, 24-hour storm event. To qualify for this exception, the production area must be properly designed, constructed, operated, and maintained to contain manure, direct precipitation, and runoff from a qualifying storm event. Precipitation related runoff from land application areas, where manure has been applied in accordance with the Nevada Division of Environmental Protection (the Division) reviewed Nutrient Management Plan (NMP), is exempt from permitting requirements. CAFOs that land apply manure and/or process wastewater are required to comply with an NMP. CAFOs are regulated primarily through adherence to these nutrient application rates and NMP compliance items. Precipitation related runoff from land application areas where manure and/or process water have been applied in accordance with the Division-reviewed NMP is exempt from permitting requirements.

The NMP is based on the number of confined cattle stated above and an available land application area of 620 acres actively irrigated annually as identified in the NMP and owned by the dairy. Manure produced at the facility is estimated at 2,291 tons annually. Solid manure applications are based on soil and manure testing and on crop nutrient uptakes as outlined in the Division reviewed NMP. Routine mortalities are picked up by a commercial rendering facility. The nutrient management plan (NMP) was developed by Natural Resources Conservation Service (NRCS).

The dairy construction is industry typical with open corrals constructed with barbed wire and rebar, earthen feed aprons and feed bunks, feed alleys and cow movement alleys, feed storage areas and associated storage structures, maintenance facilities and waste management/control structures. The facility has reported that it will confine approximately 3,000 milking cows, 400 dry cows, and 1,000 heifers on site. Manure generated by the dairy in excess of crop production needs and land availability will be stockpiled or composted within the footprint of the production area in a manner that is compliant with all permit requirements. Manure may also be transferred to other agricultural users. The waste storage facilities, which include the manure separation basins and lined lagoons, and storage calculations were prepared and designed by Nevada NRCS. Process wastewater/manure generated by the dairy operations will flow via pipeline to dual concrete "weeping wall" manure settling basins. When manure is added to the basins, liquids drain through the weeping wall into a decant area while retaining solids in the basin. The liquid is then directed to one of two 60-mil high-density polyethylene (HDPE) lined lagoons. The newly constructed lagoons have a total net storage capacity of 8,099,748 gallons. The lagoon storage period was defined conservatively as October through April. Storage capacity of the basins was based on amount of wastewater produced by the dairy, freeboard, seasonal precipitation minus evaporation, and the 25-year, 24-hour design storm. The two lagoons are located to the southwest of the feeding aprons and outbuildings, being Lagoon 1 (Outfall 002) and Lagoon 2 (Outfall 003). The operating depth of each is 7-feet with a 1-foot freeboard. Each lagoon includes a 3-bay solids separator, which is cleaned monthly by excavator/frontend loader. The lagoons are operated as facultative / anaerobic per design.

Wash areas are confined to the milking barn and are limited to the chemicals used in the milking operations. Other locations with chemical handling, such as vehicle maintenance areas, are covered to protect from precipitation, and are monitored to prevent any runoff into surface water.

Hillside Dairy's NMP was last reviewed and approved by the Division on August 2014. The Technical, Compliance, and Enforcement (TCE) Branch, of the Bureau of Water Pollution Control, requires NMP's be updated every permit cycle which equates to every five (5) years; therefore, an updated NMP should have been submitted with the renewal application.

## **Outfall Summary**

Outfall 001 – This internal outfall is for the sum of flow and dairy totals (e.i. # of animals).

Outfall 002 – This external outfall is for Lagoon 1.

Outfall 003 – This external outfall is for Lagoon 2.

Outfall 004 – This upgradient external outfall was originally for the monitoring well, that was never drilled, so now is in the dairy’s commercial well, as permitted under the Division of Water Resources Permit 63290, Certificate 16343.

Outfall 005 - This newly added outfall is for stormwater discharge.

Outfall 006 – This downgradient, external outfall is for the manure/corral separator for manure testing and transfer.

Outfall 007 - This is a new downgradient monitoring well south of the corrals.

Outfall 008 - This is a new downgradient monitoring well outfall south of the irrigated fields.

**Discharge Characteristics**

Hillside Dairy has requested a 30-day average discharge limit of 30,000 gallons per day (gpd). The flow rate is for the discharge of wastewater for irrigation from the lagoons.

**Effluent Characterization**

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from November 2019 to October 2024, was reviewed as part of this permit renewal process. The averaged effluent characteristics were as follows:

Outfall 001:

|                                  |  |
|----------------------------------|--|
| Animals, total no.:              | 2,772 head of cattle                       |
| Flow Rate, gallons per day (GPD) | : 27,196                                   |
| Manure, Removed (Tons):          | 1,125 tons with 1 reportable instance      |
| Manure, Total (Tons):            | 2,290 averaged with 4 reportable instances |

Outfall 002:

|                            |                                 |
|----------------------------|---------------------------------|
| BOD, 5-day (mg/L):         | 1,200                           |
| Chloride (mg/L);           | 310 with 1 reportable instance  |
| Nitrogen (mg/L):           | 600 with 1 reportable instance  |
| pH (S.U. – standard units) | 8.08 with 1 reportable instance |
| TDS (mg/L):                | 5,000                           |
| TSS (mg/L):                | 1,400                           |

Outfall 003:

|                    |                                  |
|--------------------|----------------------------------|
| BOD, 5-day (mg/L): | 1,400 with 1 reportable instance |
| Chloride (mg/L):   | 260 with 1 reportable instance   |
| Nitrogen (mg/L):   | 580 with 1 reportable instance   |
| pH (S.U.):         | 8.09 with 1 reportable instance  |
| Phosphorus (mg/L): | 64 with 1 reportable instance    |
| TDS (mg/L):        | 5,200 with 1 reportable instance |
| TSS (mg/L):        | 1,300 with 1 reportable instance |

Outfall 004:

No reportable discharges within the past 5 years

Outfall 006:

No reportable discharges within the past 5 years

**Pollutants of Concern**

Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Common pollutants of concern are BOD-5, Chloride, Fecal Coliform, Nitrogen, pH, Phosphorus, Total Dissolved Solids (TDS) and Total Suspended Solids (TSS).

**Receiving Water**

The receiving water is groundwaters of the State. Depth to water varies from 25 feet to 128 feet within the area surrounding the facility; thus, requiring the installation of two monitoring wells (see Summary of Changes section for additional information) along with the continued reporting from the upgradient commercial well.

**Compliance History**

The facility was in compliance during the November 2019 to October 2024 reporting period.

**Proposed Effluent Limitations**

During the period beginning on the effective date of this permit, the Permittee is authorized to discharge manure and process wastewater to: 1) Land application areas, reported at 620.1 acres, in accordance with a Division reviewed Nutrient Management Plan, and

2) Waters of the State in response to storm events or a chronic precipitation event that exceeds the 25-year, 24-hour storm design, provided that the facilities and their production areas are properly designed constructed, operated and maintained to contain manure, pollutants, direct precipitation and the runoff from a 25-year, 24-hour storm event.

**Groundwater Monitoring Wells Table for Sample Location 004 (Upgradient Monitoring Well-Commercial Well) To Be Reported Annually**

| Parameter  | Discharge Limitations |               |                                   | Monitoring Requirements |            |                       |             |
|--|-----------------------|---------------|-----------------------------------|-------------------------|------------|-----------------------|-------------|
|  | Base                  | Quantity      | Concentration                     | Monitoring Loc          | Sample Loc | Measurement Frequency | Sample Type |
| Chloride (as Cl)   | Daily Maximum         |               | M&R Milligrams per Liter (mg/L)   | Groundwater             | 004        | Annual                | DISCRT      |
| Depth to water level ft below landsurface <sup>[1]</sup> | Daily Minimum         | M&R Feet (ft) |                                   | Groundwater             | 004        | Annual                | DISCRT      |
| Nitrogen, total  | Daily Maximum         |               | <= 10 Milligrams per Liter (mg/L) | Groundwater             | 004        | Annual                | DISCRT      |
| pH   | Value                 |               | M&R Standard Units (SU)           | Groundwater             | 004        | Annual                | DISCRT      |
| Solids, total dissolved                                  | Daily Maximum         |               | M&R Milligrams per Liter (mg/L)   | Groundwater             | 004        | Annual                | DISCRT      |
| Water level relative to mean sea level <sup>[2]</sup>    | Daily Maximum         | M&R Feet (ft) |                                   | Groundwater             | 004        | Annual                | DISCRT      |

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater.
2. Groundwater elevation above mean sea level (AMSL).

**Groundwater Monitoring Wells Table for Sample Location 007 (Downgradient Monitoring Well-Corral Area) To Be Reported Quarterly**

| Parameter  | Discharge Limitations |               |                                 | Monitoring Requirements |            |                       |             |
|--|-----------------------|---------------|---------------------------------|-------------------------|------------|-----------------------|-------------|
|  | Base                  | Quantity      | Concentration                   | Monitoring Loc          | Sample Loc | Measurement Frequency | Sample Type |
| Chloride (as Cl)   | Daily Maximum         |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 007        | Annual                | DISCRT      |
| Depth to water level ft below landsurface <sup>[1]</sup> | Daily Minimum         | M&R Feet (ft) |                                 | Groundwater             | 007        | Annual                | DISCRT      |
| Nitrogen, total  | Daily Maximum         |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 007        | Annual                | DISCRT      |
| pH   | Value                 |               | M&R Standard Units (SU)         | Groundwater             | 007        | Annual                | DISCRT      |
| Solids, total dissolved                                  | Daily Maximum         |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 007        | Annual                | DISCRT      |
| Water level relative to mean sea level <sup>[2]</sup>    | Daily Maximum         | M&R Feet (ft) |                                 | Groundwater             | 007        | Annual                | DISCRT      |

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater.
2. Groundwater elevation above mean sea level (AMSL)

**Groundwater Monitoring Wells Table for Sample Location 008 (Downgradient Monitoring Well-Field Area) To Be Reported Quarterly**

| Discharge Limitations                                    |               |               |                                 | Monitoring Requirements |            |                       |             |
|--|---------------|---------------|---------------------------------|-------------------------|------------|-----------------------|-------------|
| Parameter  | Base          | Quantity      | Concentration                   | Monitoring Loc          | Sample Loc | Measurement Frequency | Sample Type |
| Chloride (as Cl)   | Daily Maximum |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 008        | Annual                | DISCRT      |
| Depth to water level ft below landsurface <sup>[1]</sup> | Daily Minimum | M&R Feet (ft) |                                 | Groundwater             | 008        | Annual                | DISCRT      |
| Nitrogen, total  | Daily Maximum |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 008        | Annual                | DISCRT      |
| pH   | Value         |               | M&R Standard Units (SU)         | Groundwater             | 008        | Annual                | DISCRT      |
| Solids, total dissolved                                  | Daily Maximum |               | M&R Milligrams per Liter (mg/L) | Groundwater             | 008        | Annual                | DISCRT      |
| Water level relative to mean sea level <sup>[2]</sup>    | Daily Maximum | M&R Feet (ft) |                                 | Groundwater             | 008        | Annual                | DISCRT      |

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater.
2. Groundwater elevation above mean sea level (AMSL).

**CAFO Discharge Limitations Table for Sample Location 001 (Dairy Totals) To Be Reported Monthly**

| Discharge Limitations           |                |                                  |                | Monitoring Requirements   |            |                       |             |
|---------------------------------|----------------|----------------------------------|----------------|---------------------------|------------|-----------------------|-------------|
| Parameter                       | Base           | Quantity                         | Concentration  | Monitoring Loc            | Sample Loc | Measurement Frequency | Sample Type |
| Animals, total estimated no. of | 30 Day Average |                                  | M&R Number (#) | Internal Monitoring Point | 001        | Monthly               | CALCTD      |
| Flow rate <sup>[1]</sup>        | 30 Day Average | <= 30000 Gallons per Day (gal/d) |                | Internal Monitoring Point | 001        | Weekly                | METER       |

Notes (CAFO Discharge Limitations Table):

1. This is the limitation of the discharge from the lagoons for irrigation usage.



**CAFO Discharge Limitations Table for Sample Location 001 (Dairy Totals) To Be Reported Quarterly**

| Discharge Limitations                   |                 |          |                | Monitoring Requirements   |            |                       |             |
|---|-----------------|----------|----------------|---------------------------|------------|-----------------------|-------------|
| Parameter                               | Base            | Quantity | Concentration  | Monitoring Loc            | Sample Loc | Measurement Frequency | Sample Type |
| Manure, wet tons total <sup>[1]</sup>   | Quarterly Total |          | M&R Tons (ton) | Internal Monitoring Point | 001        | Quarterly             | ESTIMA      |
| Manure, wet tons removed <sup>[2]</sup> | Daily Maximum   |          | M&R Tons (ton) | Internal Monitoring Point | 001        | Quarterly             | ESTIMA      |

Notes (CAFO Discharge Limitations Table):

1. Total of all site manure generated during the quarter.
2. Sum of all manure transferred offsite or to other parties.

### CAFO Discharge Limitations Table for Sample Location 002 (Lagoon 1) To Be Reported Semi Annually

| Discharge Limitations    |               |          |                                 | Monitoring Requirements |            |                           |             |
|--------------------------|---------------|----------|---------------------------------|-------------------------|------------|---------------------------|-------------|
| Parameter                | Base          | Quantity | Concentration                   | Monitoring Loc          | Sample Loc | Measurement Frequency     | Sample Type |
| BOD, 5-day               | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 002        | Semiannual <sup>[1]</sup> | DISCRT      |
| Chloride (as Cl)         | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 002        | Semiannual <sup>[1]</sup> | DISCRT      |
| Nitrogen, total          | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 002        | Semiannual <sup>[1]</sup> | DISCRT      |
| pH                       | Value         |          | M&R Standard Units (SU)         | Prior to Irrigation     | 002        | Semiannual <sup>[1]</sup> | DISCRT      |
| Phosphorus, total (as P) | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 002        | Semiannual <sup>[1]</sup> | DISCRT      |
| Solids, total dissolved  | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 002        | Semiannual <sup>[1]</sup> | DISCRT      |
| Solids, total suspended  | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 002        | Semiannual <sup>[1]</sup> | DISCRT      |

#### Notes (CAFO Discharge Limitations Table):

1. Semi-annual measurements shall be conducted in the 2nd quarter and 4th quarter of each calendar year.

### CAFO Discharge Limitations Table for Sample Location 003 (Lagoon 2) To Be Reported Semi Annually

| Discharge Limitations    |               |          |                                 | Monitoring Requirements |            |                           |             |
|--------------------------|---------------|----------|---------------------------------|-------------------------|------------|---------------------------|-------------|
| Parameter                | Base          | Quantity | Concentration                   | Monitoring Loc          | Sample Loc | Measurement Frequency     | Sample Type |
| BOD, 5-day               | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 003        | Semiannual <sup>[1]</sup> | DISCRT      |
| Chloride (as Cl)         | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 003        | Semiannual <sup>[1]</sup> | DISCRT      |
| Nitrogen, total          | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 003        | Semiannual <sup>[1]</sup> | DISCRT      |
| pH                       | Value         |          | M&R Standard Units (SU)         | Prior to Irrigation     | 003        | Semiannual <sup>[1]</sup> | DISCRT      |
| Phosphorus, total (as P) | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 003        | Semiannual <sup>[1]</sup> | DISCRT      |
| Solids, total dissolved  | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 003        | Semiannual <sup>[1]</sup> | DISCRT      |
| Solids, total suspended  | Daily Maximum |          | M&R Milligrams per Liter (mg/L) | Prior to Irrigation     | 003        | Semiannual <sup>[1]</sup> | DISCRT      |

#### Notes (CAFO Discharge Limitations Table):

1. Semi-annual measurements shall be conducted in the 2nd quarter and 4th quarter of each calendar year.

### CAFO Discharge Limitations Table for Sample Location 005 (External Outfall) To Be Reported Annually<sup>[1][2]</sup>

| Parameter                | Discharge Limitations |                                      |   | Monitoring Requirements |            |                       |             |
|--------------------------|-----------------------|--------------------------------------|---|-------------------------|------------|-----------------------|-------------|
|                          | Base                  | Quantity                             | Concentration   | Monitoring Loc          | Sample Loc | Measurement Frequency | Sample Type |
| BOD, 5-day               | Daily Maximum         |                                      | M&R Milligrams per Liter (mg/L)                                 | Receiving Water         | 005        | Report                | DISCRT      |
| Chloride (as Cl)         | Daily Maximum         |                                      | M&R Milligrams per Liter (mg/L)                                 | Receiving Water         | 005        | Report                | DISCRT      |
| Coliform, fecal general  | Daily Maximum         |                                      | M&R Most Probable Number per 100ml T (MPN/100mL) <sup>[3]</sup> | Receiving Water         | 005        | Report                | DISCRT      |
| Phosphorus, total (as P) | Daily Maximum         |                                      | M&R Milligrams per Liter (mg/L)                                 | Receiving Water         | 005        | Report                | DISCRT      |
| Flow rate                | Daily Maximum         | M&R Million Gallons per Day (Mgal/d) |   | Receiving Water         | 005        | Report                | DISCRT      |
| Nitrogen, total          | Daily Maximum         |                                      | M&R Milligrams per Liter (mg/L)                                 | Receiving Water         | 005        | Report                | DISCRT      |
| pH, maximum              | Daily Maximum         |                                      | M&R Standard Units (SU)   | Receiving Water         | 005        | Report                | DISCRT      |
| pH, minimum              | Daily Minimum         |                                      | M&R Standard Units (SU)   | Receiving Water         | 005        | Report                | DISCRT      |
| Solids, total dissolved  | Daily Maximum         |                                      | M&R Milligrams per Liter (mg/L)                                 | Receiving Water         | 005        | Report                | DISCRT      |
| Solids, total suspended  | Daily Maximum         |                                      | M&R Milligrams per Liter (mg/L)                                 | Receiving Water         | 005        | Report                | DISCRT      |

#### Notes (CAFO Discharge Limitations Table):

1. See Part B, Section B.CO.19 for further instructions.
2. The Permittee shall report the date and time of each discharge and collect a sample, at the point where the overflow first reaches a water of the State (Waters of the State are defined in NRS 445A.415), within 30 minutes of first knowledge of the stormwater discharge. If sampling is not possible within the first 30 minutes due to dangerous weather conditions, the Permittee shall collect a sample as soon as possible after suitable conditions occur. The reason for the delay in collecting the sample shall be documented.
3. CFU / 100 mL or MPN / 100 mL.

**CAFO Discharge Limitations Table for Sample Location 006 (Corral/Seperator Manure Testing And Transfer) To Be Reported Annually**

| Discharge Limitations                   |               |          |                                     | Monitoring Requirements   |            |                       |             |
|---|---------------|----------|-------------------------------------|---------------------------|------------|-----------------------|-------------|
| Parameter                               | Base          | Quantity | Concentration                       | Monitoring Loc            | Sample Loc | Measurement Frequency | Sample Type |
| Manure, wet tons removed <sup>[2]</sup> | Annual Total  |          | M&R Tons (ton)                      | Internal Monitoring Point | 006        | Annual                | CALCTD      |
| Nitrogen, total                         | Daily Maximum |          | M&R Milligrams per Kilogram (mg/kg) | Internal Monitoring Point | 006        | Annual                | COMPOS [1]  |
| Phosphorus, total (as P)                | Daily Maximum |          | M&R Milligrams per Kilogram (mg/kg) | Internal Monitoring Point | 006        | Annual                | COMPOS [1]  |

Notes (CAFO Discharge Limitations Table):

1. For a representative result, a composite sample, made up of manure from each corral, as well as any manure storage areas, shall be analyzed once each year.
2. Total wet tons removed and transferred to a third party during the previous year.

**Crop Rotation Table**

| Crop In Year   |              |      |      |      |      |      |      |
|--|--------------|------|------|------|------|------|------|
| Field  | Area (acres) | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
| NATURAL RESOURCE CONSERVATION SERVICE (NRCS)<br>PREPARED NUTRIENT MANAGEMENT PLAN (NMP) ON FILE. | 620.10       |      |      |      |      |      |      |

**CAFO Nutrient Management Plan (NMP) Table**

| Field   | Area (acres) | Crop   | Design Yield (tons/acre) | Hazard Class | Liquid Applied (Million Gallons) | Nitrogen Applied (lbs/acre) | Irrigation Method | Other N Sources | Application Timing |
|---|--------------|--------|--------------------------|--------------|----------------------------------|-----------------------------|-------------------|-----------------|--------------------|
| NATURAL RESOURCE CONSERVATION SERVICE (NRCS) PREPARED NUTRIENT MANAGEMENT PLAN (NMP) ON FILE. | 620.10       | VARIES | 0                        |              | 0                                | 0                           | FLOOD             | VARIES          | VARIES             |

**Summary of Changes From Previous Permit**

The coordinates for the facility and associated outfalls were updated to reflect actual locations and listed below and are based on Latitude and Longitudinal descriptions:

Facility: Lat 39.4271331, Long -118.8076436

Outfall 001 (Sum Total, same as Facility): Lat 39.4271331, -118.8076436

Outfall 002 (Lagoon 1) Lat 39.4196259, Long -118.8107606

Outfall 003 (Lagoon 2): Lat 39.4190457, Long -118.8117584

Outfall 004 (Upgradient Monitoring Well/Commercial Supply Well): Lat 39.4259066, Long -118.8046778

Outfall 006 (Manure Separation and Testing): Lat 39.4200471, Long -118.8122465

The following outfalls were added with location to be determined by Permittee:

Outfall 005 was added for a stormwater discharge measuring location.

Outfalls 007 and 008 - based on current reporting requirements set forth by the Division, two additional monitoring wells are to be drilled (one south of the corral area and the other south of the irrigated field areas). This new requirement was discussed with the Permittee on January 14, 2025. He is going to discuss options for drilling and location with the NCRS.

**Technology Based Effluent Limitations**

Technology based requirements of a CAFO that confine dairy cows may not discharge manure or process wastewater pollutants into waters of the State from the production area. The only exception to the no discharge standard is an overflow that occurs because of a storm, or chronic precipitation event, event from a facility that is designed, constructed, operated, and maintained to contain all manure and process wastewater plus the runoff from a 25-year, 24-hour storm event.

**Water Quality Based Effluent Limitations**

Water quality based effluent limitations are not applicable to this permit.

**Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)**

Water quality based effluent limitations are not applicable to this permit.

**Rationale for Permit Requirements**

Monitoring requirements for the parameters specified in the permit are being established to ensure that the

Permittee has appropriate manure and process wastewater data to comply with the Division reviewed Nutrient Management Plan and to determine any potential impacts to Waters of the State that may occur in response to related discharges or seepage.

**Basis for Effluent Limitations**

Monitoring of total nitrogen, total phosphorus, pH, chloride, 5day biochemical oxygen demand, total suspended solids, fecal coliform, and total dissolved solids of the discharge is required because these are the constituents most likely to be present in the discharge.

The 30-day averages for total manure removed and total of all site manure generated for Outfall 001 has been changed to a daily maximum and a quarterly total, respectively. The measurement frequency for these totals is once every three months and as such a 30-day average cannot be calculated.

Monitoring requirements for the constituents specified in the permit for monitoring wells 1 thru 4 are included to determine any potential impacts to groundwater that may occur in response to related discharges or seepage.

**Anti-backsliding**

None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit.

**Antidegradation**

The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada’s water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the Code of Federal Regulations (CFR) § 131.12. The objective of the Division’s antidegradation regulation is to prevent degradation of Nevada’s surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable. There are currently no specific water quality standards that have been formally adopted by the State for groundwater, however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from discharges within the compliance limits of the proposed permit.

**Special Conditions**

See Special Approvals/Conditions Table.

SA – Special Approvals / Conditions Table

| Item # | Description   |
|--------|---|
| 1      | Part A, Section A.6 does not apply to this permit. A Certified Operator is not required for this facility.  |
| 2      | Part B.CO.23 - Soil sampling shall be conducted in accordance with Part IX of the Division reviewed Nutrient Management Plan (NMP) and results shall be submitted to the Division as part of the annual report. |
| 3      | Part C, Section C.2 - does not apply to this permit. Operations and Maintenance of this facility are specifically identified in the Division reviewed NMP.  |



| Item # | Description  |
|--------|--|
| 4      | Part C, Section C.13 - does not apply to this permit. This section is for biosolids management from treatment facilities. Manure management at this facility is specifically addressed in the Division reviewed NMP.   |
| 5      | As indicated in the NMP Part III:<br><u>Collection Function Requirements</u> - The total storage period based on a 5 month storage period is made up of process water (40 ac-ft), runoff from the 25-year, 24-hour storm event and direct precipitation on the lagoons is (15.4 ac-ft) for a total of 55.4 ac-ft. Sludge storage and extra working capacity is 16.9 ac-ft. The total operational capacity of the lagoons is 72.3 acre-feet.<br><u>Transfer Function Requirements</u> - Manure may be stockpiled in and around the pens and in places of the facility's production area that drain to the wastewater impoundments. Manure may also be transferred to a third party. |
| 6      | The Hillside Dairy NMP is based on the "narrative rate approach" and provides for changes to crop rotation without permit modification provided the crop and nutrient application parameters are identified in the NMP.  |
| 7      | Part B, Section B.CO.4 - does not apply to this permit. Applies to Swine, Poultry and Veal Calf operations only.   |
| 8      | Groundwater monitoring sampling for this facility is intended to set baseline data for this agricultural intensive use area. Therefore Part B.MW.3 will not apply to this permit at this time. After no less than two years of data has been received NDEP will conduct a minor modification to this permit and, based on the data collected, groundwater monitoring limits will be set and the monitoring frequency maybe changed. NDEP will then reevaluate whether or not Part B.MW.3 will apply to this permit.  |

#### Discharges From Future Outfalls/ Planned Facility Changes

There are no discharges currently planned from future outfalls or facility changes.

#### Corrective Action Sites

There are no Bureau of Corrective Actions remediation sites within a one mile radius of the discharge location and lagoon areas (separate reviews of each area were performed).

#### Wellhead Protection Program

The nearest Public Water Supply (PWS) well is located approximately 3 miles to the north of the outfall. The outfall is not located within a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well, or within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

| Item # | Description   | Due Date  |
|--------|---|-----------|
| 1      | 180 days prior to the expiration of this permit, the Permittee shall submit, with their renewal application, an updated Nutrient Management Plan that will address the CAFO activities for the next permit term.  | 10/4/2029 |
| 2      | The Permittee shall submit to the Division a Monitoring Well Program  | 7/28/2025 |
| 3      | The first quarter of monitoring well water quality data, for the two new wells, is due on, or before, July 28, 2026. After no less than two years of water quality data submittals NDEP will set appropriate water quality limits in order to observe any degradation of the water. | 7/28/2026 |

**Deliverable Schedule:**

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

| Item # | Description  | Interval      | First Scheduled Due Date |
|--------|--|---------------|--------------------------|
| 1      | Quarterly Discharge Monitoring Reports                         | Quarterly     | 7/28/2025                |
| 2      | Semi-Annual Discharge Monitoring Reports                       | Semi Annually | 7/28/2025                |
| 3      | Annual Report  | Annually      | 1/28/2026                |
| 4      | Quarterly Report for New Monitoring Wells (Outfalls 007 & 008) | Quarterly     | 4/28/2026                |

**Procedures for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at <https://ndep.nv.gov/posts>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **3/1/2025**, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination:**

The Division has made the tentative determination to issue/re-issue the proposed 5-year permit.

Prepared by: **Melissa Marr**  
 Date: **1/22/2025**  
 Title: **Staff II Engineer**