



STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

FACTSHEET (Pursuant to NAC 445A.236)

PERMITTEE NAME: Nevada Department of Corrections
Carson City, Nevada
P.O. Box 7000
Carson City, Nevada 89702-7000

PERMIT NUMBER: NV0023574

LOCATION: Dairy & Wild Horse Holding Facility
1721 Snyder Avenue
Carson City, Nevada

COORDINATES: Latitude: 39° 06' 17" N; Longitude: 119° 44' 30" W
Township 14N, Range 20E, Section 4 MDB&M

PUBLIC WATER SUPPLY: This facility is located approximately 5,000 feet from a public water supply well.

CORRECTIVE ACTIONS SITES: There are no Bureau of Corrective Actions remediation sites located within a five-mile radius of this facility.

WELLHEAD PROTECTION AREA: This facility is not located within a Drinking Water Protection Area (DWPA).

GENERAL:

The Permittee has applied for renewal of its National Pollution Discharge Elimination System (NPDES) water pollution control permit, NV0023574 to continue to operate a dairy and wild horse holding facility. The facility has been designed to hold approximately **185 dairy cows** and **1500 wild horses** in open confinement. The operation is defined as a Concentrated Animal Feeding Operation (CAFO) because it proposes to confine the listed number of animals for at least 45 days or more in a 12-month period in an enclosed area without vegetation during the normal growing season.

Land application of process water and solid manure has not been practiced at this facility for several years; thus, a Nutrient Management Plan (NMP) is not required. The Permittee, however, is operating under an agency approved Operations and Maintenance (O&M) plan which sets conditions for the hauling of the solid manure off site; process water produced in this facility is discharged to the Carson City sanitary sewer for treatment. The Permittee does not propose to discharge any process water, but is required to contain all precipitation and production area runoff resulting from a **25-year, 24-hour storm event**.

Manure produced by this CAFO shall be transferred to the previously approved composting entity -

Full Circle Compost - Permit SW274REV02; this composting operation produces “Class A” compost for sales. Private party manure transfers are also allowed under the conditions established in **Section I.A.8 and Section I.A.9** of the permit.

Dry weather discharges of manure and/or process wastewater to Waters of the United States are prohibited. The Permittee shall visually monitor the outfall every six hours during wet weather discharges, by observing the receiving surface water at the point of discharge to determine if there is any visible effect to the receiving water from the discharge. Any unnatural turbidity, color, oil film, odor, floating solids, foams, settleable solids, suspended solids, deposits, etc. shall be reported concurrently with the monthly discharge monitoring reports. Documentation of the outfall observances shall be maintained at the facility.

FLOW:

All process water generated by this facility will be discharged to the Carson City sanitary sewage facility.

OPERATIONAL MONITORING:

During the period beginning on the effective date of this permit and lasting until the permit expires, the Permittee is required to monitor the following operational parameters as specified below in **Table 1 - Operational Monitoring**. Samples shall be taken from:

- a. Main corrals - Monitoring Point - **MP001**;

b. Table 1: Operational Monitoring

Parameters	Discharge Limitations	Monitoring Requirements		
		Sample Location	Measuring Frequency	Sample Type
Number of animals ¹	Monitor & Report	a.	Weekly	Count
Type of animals ¹	Monitor & Report	a.	Weekly	Count
Manure production, (tons)	Monitor & Report	a	Weekly	Estimate

c. Applicable Definitions:

- 1. Report 30 day average,
- 2. **MGD:** Million gallons per day.

This facility must be operated in accordance with the Operations and Maintenance (**O&M**) Manual, which must be approved by the Division. The **O&M** Manual shall be updated whenever there is a change in the operation of the facility.

DISCHARGE EVENT MONITORING:

Discharge water samples shall be monitored as specified below in **Table 2 - Discharge Event**

Monitoring. Samples shall be taken from:

- a. Storm related discharge into Waters of the United States Carson River - **Outfall - 0001.**

b. Table 2: Discharge Event Monitoring

Parameters	Discharge Limitations	Monitoring Requirements		
		Sample Location	Measuring Frequency	Sample Type
Volume of Discharge (MG) ^{1,3}	Monitor & Report	a	Each discharge ²	Estimate
pH (standard units) ³	Monitor & Report	a	Each discharge ²	Discrete
Chlorides (mg/L, mg/kg) ³	Monitor & Report	a	Each discharge ²	Discrete
Total Dissolved Solids (mg/L, mg/kg) ³	Monitor & Report	a	Each discharge ²	Discrete
Total Suspended Solids (mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
5-day Biochemical Oxygen Demand (mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
Total Nitrogen (mg/L, mg/kg) ³	Monitor & Report	a	Each discharge ²	Discrete
Fecal Coliform (CFU or MPN/100 mL) ³	Monitor & Report	a	Each discharge ²	Discrete

c. Table 2: Applicable Definitions:

1. Approximation,
2. The Permittee shall collect the sample within 30 minutes of the first knowledge of the discharge. If sampling in that period is unreasonable due to adverse weather conditions, collect the sample as soon as possible after suitable conditions occur, and document the reason for delay. Also, report the date and time of each discharge along with sample location,
3. Testing protocol in case of a discharge event - the Permittee is only authorized discharges from storm events in excess of a **25-year, 24-hour storm event.**

4. Definitions:

mg/L:	Milligram per liter	CFU:	Colony Forming Unit
MPN:	Most Probable Number	N:	As nitrogen
mL:	Milliliter	P:	As phosphorus (P) or P205
MG:	Million gallons		

MANURE TESTING & TRANSFER PROTOCOL:

At a minimum of once per month, the Permittee shall scrape and clean all animal pens at the facility to remove excess manure. All manure generated at this facility shall be transferred to other parties; no land application of manure or process wastewater shall be authorized by this permit. No manure or process wastewater may be applied at a site owned, rented, or leased by the Permittee. For all manure or process wastewater sold, given away, or otherwise transferred to another party, the Permittee shall comply with the all permit conditions.

Manure shall be analyzed as established in **Table 3: Manure Testing & Transfer Protocol** prior to its transfer to any party. Test results shall be provided to the receiving parties at the time of the actual manure transfer:

a. Main corrals - Monitoring Point - **MP001**,

b. **Table 3: Manure Testing & Transfer Protocol.**

Parameters	Discharge Limitations	Monitoring Requirements		
		Sample Location	Measuring Frequency	Sample Type
Material Transferred to Other Parties (tons) ¹	Monitor & Report	a	Each transfer event ¹	Estimate ²
Total Phosphorus - P (mg/kg)	Monitor & Report	a	Annually	Composite
Total Nitrogen - N (mg/Kg)	Monitor & Report	a	Annually	Composite

c. **Definitions:**

1. Manure testing shall be done prior to any transfer to other parties; a copy of test results shall be provided to parties receiving the manure,
2. Tons - Based on truck loads or similar.
3. **mg/kg:** Milligrams per kilogram, **N:** As nitrogen, **P:** As phosphorus (P) or P205

MANURE TRANSFER REQUIREMENTS: If the manure or process water is sold, given away, or otherwise transferred to another party, the Permittee shall comply with the following conditions:

- a. Maintain records showing the date and amount of manure and/or process water that leaves the permitted facility;
- b. Record the name and address of the recipient;
- c. Provide the recipient(s) with representative information that includes the most recent analysis of the nutrient content of the manure; and
- d. Manure transfer records shall be retained on-site for a period of at least five years, and shall be submitted to the Division upon request.
- e. This part applies to manure that may be transferred to **Full Circle Compost - Permit SW274REV02** or any other facility for composting.
- f. This part applies to manure that may be transferred to any facility or private entity in any amount.

RECEIVING WATER CHARACTERISTICS:

This facility does not propose to discharge; all process water generated by this operation will be sent to the sewage collection system and treated by the Carson City wastewater treatment facility. A groundwater monitoring program was implemented at this operation in order to prevent its degradation.

PROPOSED GROUNDWATER MONITORING AND LIMITATIONS:

Discrete groundwater samples shall be collected to confirm the effective protection of groundwater under the established discharge conditions of this permit. During the period on the effective date of this permit, and lasting until the permit expires, all existing, and any new monitoring wells shall be sampled for the parameters and frequency listed in **Table 4: Monitoring Well Testing Protocol**:

- a. Each monitoring well - **MP001**

b. Table 4: Monitoring Wells Testing Protocol

Parameter	Limit	Monitoring Requirements		
		Sample Location	Frequency	Sample Type
Depth to Ground Water (ft)	Monitor & Report	Monitoring Wells 5 & 6 ^{1,2}	Quarterly	Discrete
Total Nitrogen - (mg/L)	10	Monitoring Wells 5 & 6 ^{1,2}	Quarterly	Discrete
Total Dissolved Solids - (mg/L)	Monitor & Report	Monitoring Wells 5 & 6 ^{1,2}	Quarterly	Discrete
Total Chlorides - (mg/L)	Monitor & Report	Monitoring Wells 5 & 6 ^{1,2}	Quarterly	Discrete
pH - (Standard pH Units)	6.0 to 9.0	Monitoring Wells 5 & 6 ^{1,2}	Quarterly	Discrete

c. Table 4: Applicable Definitions

1. Monitoring wells - MW5 & MW6;
2. Monitoring Well 7 (MW7) - shall be installed and monitored according to the conditions established in **Section I.A. 11 - Nitrogen Action Levels**;
3. **Other Definitions:** mg/L: Milligrams per liter SU: Standard pH Units ft: feet

- d. Groundwater monitoring wells shall be conspicuously labeled, capped to prevent migration of surface contaminants to the groundwater and locked to restrict access.

NITROGEN ACTION LEVELS:

The detection of concentrations of total Nitrogen in groundwater samples for monitoring well 5 (MW5) and/or monitoring well 6 (MW6) invoke the following limitations and response requirements:

- a. If the total Nitrogen concentration in either **MW5** or **MW6** increases to 10.0 mg/L or higher for 3 consecutive quarters, a new Monitoring Well 7 (**MW7**) shall be installed at the location previously approved by the Division.
- b. **MW7** shall be installed within 90 days of notification by the Division.
- c. If installed, **MW7** shall be monitored and tested as established in **Section I.A. 10** of the permit.

- d. If the total Nitrogen concentration in **MW7** increases to 10.0 mg/L or higher for 3 consecutive quarters, the Permittee shall submit a “Nitrogen Mitigation Plan” to the Division for approval within 60 days. This Nitrogen mitigation plan shall include a comprehensive ground water study to establish Nitrogen sources and actions to minimize their impacts to groundwater.
- e. The approved Nitrogen mitigation plan shall be incorporated by the Permittee within 30 days of approval by the Division.

SCHEDULE OF COMPLIANCE:

The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the **Administrator**, including in said implementation and compliance, any additions or modifications which the **Administrator** may make in approving the schedule of compliance.

- a. The Permittee shall achieve and/or maintain compliance with all effluent limitations upon issuance of the permit;
- b. **By August 25th, 2012** the Permittee shall submit to **NDEP** two copies of an updated **Operations & Maintenance manual (O & M)** for this facility;
- c. **By August 25th, 2012**, the Permittee shall submit to **NDEP** an updated Animal Mortality Management Plan (**AMMP**) as defined in **Section I.A. 15** of the permit.

RATIONALE FOR PERMIT REQUIREMENTS:

Historical ground water monitoring data show ground water levels to be approximately 12 feet below ground surface. Ground water quality is generally low in nitrogen. Monitoring well number 5 is the only monitoring well showing a nitrogen level of approximately 5.5 mg/L. A section on “Nitrogen Action Levels” was added to address ground water quality issues that may arise from this operation.

Operational requirements for the parameters are specified in Table 1: Operational Monitoring. Discharge limitations and monitoring are established in Table 2: Discharge Event Monitoring. Manure transfer and ground water monitoring conditions are established in Table 3: Manure Testing & Transfer Protocol and Table 4: Monitoring Wells Testing Protocol; these permit sections are proposed to prevent pollution and to determine any potential impact to Waters of the State that may occur in response to a discharge.

PROPOSED DETERMINATION:

The Division has made the tentative determination to renew the proposed Concentrated Animal Feeding Operation discharge permit for a period of five (5) years.

PROCEDURES FOR PUBLIC COMMENT:

The notice of the Division’s intent to issue a discharge permit to the applicant, subject to the conditions contained within the permit, is being sent to the **Nevada Appeal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the

Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **June 25th, 2012 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator 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 determines 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**.

The application and proposed permit are on file and may be copied or copies may be obtained by writing or by calling **Alexi Lanza, P.E.**, Bureau of Water Pollution Control at **(775)687-9468**; fax: **(775)687-4684**; or email: **alanza@ndep.nv.gov**. This notice and the fact sheet can be viewed online at the following web address: **<http://ndep.nv.gov/admin/public.htm>**

Prepared by:

Alexi Lanza, P.E.

Nevada Division of Environmental Protection
Bureau of Water Pollution Control - Permits Branch
March 2012