



NEW MEXICO

ENVIRONMENT DEPARTMENT



Ground Water Quality Bureau
1190 Saint Francis Drive / PO Box 5469
Santa Fe, NM 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov

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GROUND WATER QUALITY BUREAU

**DISCHARGE PERMIT – RENEWAL
EXISTING DAIRY FACILITY with a LAND APPLICATION AREA
Issued under 20.6.2 and 20.6.6 NMAC**

Facility Name: Big Sky/Desertland Dairy
Discharge Permit No: DP-833
Facility Location: 17700 South Stern Dr., Vado
 Section 27, 28 and 33 Township 25S, Range 3E

County: Doña Ana
Facility Owner/Operator: DeRuyter Family Management Trust/
 George Segura, Managing Member

Permittee Name: Edward DeRuyter
Mailing Address: P.O. Box 10
 Mesquite, NM 88048

Permitting Action: Renewal
Source Classification: Agriculture- Dairy

Permit Issuance Date: DATE
Permit Expiration Date: DATE

NMED Permit Contact: Aracely Tellez
Telephone Number/Email: (505) 629-8864/Aracely.tellez@state.nm.us

MICHELLE HUNTER
Chief, Ground Water Quality Bureau

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PART A **GENERAL INFORMATION**

A100 **Introduction**

- A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal (Discharge Permit), **DP-833**, to Edward DeRuyter (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 to -17, and the New Mexico Ground and Surface Water Protection Regulations, 20.6.2 NMAC and the Supplemental Permitting Requirements for Dairy Facilities (Dairy Rule), 20.6.6 NMAC. NMED's purpose in issuing this Discharge Permit is to control the discharge of water contaminants from the Big Sky/Desertland (dairy facility) for the protection of groundwater and those segments of surface water gaining from groundwater inflow, for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health.
- B. The Permittee is discharging up to 70,000 gallons per day (gpd) of effluent from the Big Sky/Desertland Dairy. This discharge or leachate may move directly or indirectly into groundwater of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter (mg/L) or less of total dissolved solids (TDS) within the meaning of 20.6.2.3104 and 20.6.2.3101(A) NMAC. These discharges may contain water contaminants or toxic pollutants elevated above the standards of 20.6.2.3103 NMAC in compliance with the terms and conditions of this Discharge Permit.
- C. The Permittee is authorized to discharge water contaminants pursuant to this Discharge Permit which contains requirements authorized or specified by the Dairy Rule on condition that the Permittee complies with the Dairy Rule and this Discharge Permit, which are enforceable by NMED.

A101 **Terms of Permit Issuance**

- A. **Permit Duration** - Pursuant to WQA 74-6-5(I) and 20.6.2.3109(H) NMAC, the term of a Discharge Permit shall be for the fixed term of **five years** from the effective date of the Discharge Permit.
- B. **Permit Fees** - As a discharge permit associated with a dairy facility, the Permittee shall remit an annual permit fee payment equal to one-tenth of the applicable permit fee from table 1 of 20.6.2.3114 NMAC on the first occurrence of August 1 after the effective date of this Discharge Permit, and annually thereafter until expiration or termination of this Discharge Permit [20.6.6.9(A) NMAC].
- C. **Permit Renewal** - To renew this Discharge Permit, the Permittee shall submit, in accordance with 20.6.6.10 NMAC, an application and any associated fees for renewal, renewal and modification, or renewal for closure at least one year before the discharge permit expiration date, unless closure of the facility is approved by NMED before that date.
- D. **Transfer of Ownership** - This Discharge Permit is being issued to Edward DeRuyter (Permittee) as identified in **Section A100** above. In accordance with 20.6.6.8 NMAC, the

Permittee, any listed owner(s) of record, and any [other] holder(s) of an expired discharge permit are responsible for complying with the conditions listed herein and the Dairy Rule. If during the duration of this Discharge Permit a change in the list of responsible persons is required, transfer of ownership shall be completed in accordance with 20.6.6.34 NMAC as described further in Item D of **Part C101** of this Discharge Permit.

A102 Applicable Regulations

- A. **Scope** - This Discharge Permit applies solely for the regulation of process wastewater or stormwater generated as a result of dairy facility operations and does not include regulation of domestic wastewater at the facility [20.6.6.20(Y) NMAC]. Domestic wastewater generated at the facility is treated or disposed of pursuant to 20.7.3 NMAC LW permit DA080439.
- B. The Permittee is discharging from a facility that meets the definition of “dairy facility.” 20.6.2.3000 through 20.6.2.3114 NMAC and Part 20.6.6 NMAC (Dairy Rule) apply to discharges specific to dairy facilities and their operations.
- C. The discharge from the dairy facility is not subject to any of the exemptions of 20.6.2.3105 NMAC.
- D. Groundwater quality as observed in on-site monitoring wells is subject to the criteria of 20.6.2.3101 and 20.6.2.3103 NMAC unless otherwise specified in this Discharge Permit.
- E. Complying with the applicable requirements of 20.6.2 and 20.6.6 NMAC does not relieve a dairy facility’s owner, operator or Permittee from complying with the requirements of other applicable local, state and federal regulations or laws.

A103 Additional Information Requirements

- A. **No Further Action Required.** The Permittee has satisfied the requirements of 20.6.6.10 and 20.6.6.12 NMAC prior to the effective date of this Discharge Permit.

A104 Facility: Physical Description

- A. This dairy facility meets the definition of “existing facility.”
- B. This dairy facility is located at 17700 South Stern Dr., Vado, approximately six miles south-southeast of Mesquite, in Sections 27, 28, and 33 Township 25S, Range 3E, in Doña Ana County.
- C. This dairy facility is comprised of the following wastewater system components as identified in the application date January 19, 2021 and the administrative record which includes the original Discharge Permit issued in June 29, 1992, subsequently renewed and modified on August 30, 1997 and April 5, 2007, amended on January 1, 2008 and renewed and modified on January 18, 2017, as of the effective date of this Discharge Permit:
 - 1. Wastewater impoundments:

- a. **Wastewater Pond South** – a synthetically-lined retention impoundment for storage of wastewater prior to land application. This impoundment, constructed in 1982, is located immediately northwest of the Big Sky Feedlot and south of the Big Sky Stormwater Pond. It has a storage capacity of 12.69 ac-ft and is lined with 40 mil HDPE.
 - b. **Wastewater Pond North** – a synthetically-lined retention impoundment for storage of wastewater prior to transfer to the Wastewater Pond South. This pond was constructed in 1982 and is located immediately northwest of the Big Sky Wastewater Pond South. It has a storage capacity of 1.97 ac-ft and is lined with 40 mil HDPE.
 - c. **Desertland South Combination WW/Storm Pond** – a synthetically-lined retention impoundment used to store wastewater and stormwater prior to transfer to Wastewater Pond South. The pond was lined with 40 mil HDPE in 2006 and is located along the west side of the Desertland Dairy corrals. It has a storage capacity of 7.58 ac-ft.
2. Stormwater impoundments:
- a. **Big Sky Stormwater Pond** – a synthetically-lined retention impoundment used to store stormwater for evaporation or transfer to the Wastewater Pond South. This pond was lined with a 40 mil HDPE in June of 2006 and is located immediately west of the Big Sky Dairy corrals. It has a storage of 8.28 ac-ft.
 - b. **Big Sky F/L Stormwater Pond** – a synthetically-lined retention impoundment used to store stormwater for evaporation or transfer to the Wastewater Pond South. This pond was lined with 40 mil HDPE in 2007 and is located immediately south of the Wastewater Pond South. It has a storage capacity of 5.09 ac-ft.
 - c. **Desertland North Calf Stormwater Pond** – a synthetically-lined retention impoundment used to store stormwater for evaporation or transfer to the Wastewater Pond South. This pond was lined with 40 mil HDPE in 2007 and is located immediately south of the composting area. It has a storage capacity of 4.26 ac-ft.
3. Fields within the land application area:
- a. **Pivot Field** – 57 acres, located just inside the northern boundary of the dairy. It has been receiving wastewater since 1998, which is applied by a center pivot.
 - b. **Sprinkler Field** – 103 acres, located just south of the Pivot Field, west of the Big Sky Dairy animal confinement area. It has been receiving wastewater since 1992, which is applied by sprinkler sets.
 - c. **Field F-G** – 26.1 acres, located immediately west of the Desertland South Combination WW/Storm Pond, and Field G covers 13.8 acres, located immediately west of Field F. It has been receiving wastewater since 1983, which is applied by flood irrigation.

These system components are identified as potential sources of groundwater contamination. A list of all wastewater system components authorized to discharge under this Discharge Permit is provided in **Section B100**.

- A. Groundwater most likely to be affected at this dairy facility is at a depth of approximately 11 feet and had a pre-discharge total dissolved solids concentration of 4,020 milligrams per liter.
- B. Data collected from on-site monitoring wells document groundwater contamination attributed to one or more wastewater system components at this dairy facility. Groundwater quality standards for *NO₃*, *Cl*, and *TDS* have been exceeded according to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC.
- C. *There are three ephemeral arroyos within the bounds of the facility. There are no perennial surface waters existing within the bounds of the facility. The closest surface water system is the Rio Grande, approximately 1 mile west of the Big Sky/Desertland Dairy: The Rio Grande River is 1,885 miles (3,034 km) long, and the fourth longest river system in the United States. Its headwaters originate in the San Juan Mountains in Colorado, and it flows through New Mexico, Texas and Mexico to the Gulf of Mexico.*

PART B FACILITY SPECIFIC REQUIREMENTS

B100 Facility: Authorized Discharge

- A. The Permittee is authorized to discharge water contaminants as part of facility operations subject to the following requirements:
 1. The Permittee is authorized to discharge up to 70,000 gpd of wastewater from the production area. At Big Sky Dairy wastewater flows to a pipeline running from the milking barn to a 224ft³ capacity concrete lined sump south of the Big Sky barn. Wastewater is pumped through Screen Separator 1. Wastewater then flows to the east settling cell of the concrete separator and then is pumped over Screen Separator 2. It then flows to Wastewater Pond North for storage prior to transfer to Wastewater Pond South for storage prior to land application. At Desertland Dairy, Wastewater flows from the barn to a round 126ft³ capacity concrete lined sump south of the Desertland barn. It is then pumped through the Desertland Dairy Screen Separator to a synthetically lined combination wastewater/stormwater impoundment for storage prior to transfer. Wastewater from this impoundment is pumped to the Big Sky Dairy Wastewater Pond South for storage prior to land application. The Permittee land applies wastewater by center pivot, sprinkler irrigation and flood irrigation to up to 200 acres of irrigated cropland under cultivation.
 2. The Permittee is authorized to use the following impoundments for the following purposes in accordance with 20.6.6.20(B) NMAC:
 - a. **Wastewater Pond North** – authorized to receive wastewater for storage prior to land application. This impoundment **exists** as of the effective date of this Discharge Permit.
 - b. **Wastewater Pond South** – authorized to receive wastewater for storage prior to land application. This impoundment **exists** as of the effective date of this Discharge Permit.

- c. **Big Sky Stormwater Pond** – authorized to receive stormwater for evaporation or transfer to land application. This impoundment system **exists** as of the effective date of this Discharge Permit.
 - d. **Big Sky F/L Stormwater Pond** – authorized to receive stormwater for evaporation or transfer to land application. This impoundment system **exists** as of the effective date of this Discharge Permit.
 - e. **Desertland South Combination WW/Stormwater Pond** - authorized to receive wastewater and stormwater for storage prior to transfer. This impoundment **exists** as of the effective date of this Discharge Permit.
 - f. **Desertland North Combination WW/Stormwater Pond** - authorized to receive stormwater for evaporation or transfer to land application. This impoundment system **exists** as of the effective date of this Discharge Permit.
3. NMED authorizes the Permittee to apply wastewater and stormwater to fields within the land application area in accordance with Subsections B, C and I of 20.6.6.21 NMAC. The land application area is comprised of the following fields for a total land application area of 200 acres.
- a. **Pivot Field** – authorized by the last Discharge Permit (January 18, 2017) to receive wastewater/stormwater and *has* received wastewater/stormwater as of the effective date of this Discharge Permit.
 - b. **Sprinkler Field** – authorized by the last Discharge Permit (January 18, 2017) to receive wastewater/stormwater and *has* received wastewater/stormwater as of the effective date of this Discharge Permit.
 - c. **Field F-G** – authorized by the last Discharge Permit (January 18, 2017) to receive wastewater/stormwater and *has not* received wastewater/stormwater as of the effective date of this Discharge Permit.
- B. This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges, such as spills or leaks must be reported to NMED in a corrective action conducted pursuant to by 20.6.2.1203 NMAC.
- C. The Permittee shall provide written notice to NMED regarding any changes to the status of wastewater discharges at the facility in accordance with 20.6.6.20(A) NMAC as summarized in **Table B1** below:

Table B1
NMED Required Notification for Authorized Discharge

Activity	Notification of Estimated Date	Verification of Actual Date
Cessation of wastewater discharge	Not required	Within 30 days of cessation of discharge
Recommencement of Discharge	Minimum 30 days prior to recommencement	Within 30 days of recommencement

B101 **Facility: Existing System Controls**

- A. The Permit requires the following existing system controls at this dairy facility as described below:
1. **Impoundment(s)** - The Permittee shall maintain operations of the existing impoundment(s) as listed in **Section A104** above in accordance with conditions listed in **Table B2** to achieve compliance with the Dairy Rule. The wastewater impoundment system shall be designed to achieve compliance with the storage capacity requirements of Subsection D of 20.6.6.17 NMAC.
 2. **Flow Meter(s)** - The dairy facility was existing as of the effective date of the Dairy Rule (December 31, 2011) and measures the volume of (1) wastewater discharged from the production area and (2) wastewater and stormwater discharged to the land application area using the following flow meters:
 - a. **Big Sky Meter** – located on the south side of the Big Sky barn to measure the volume of freshwater going into the barn.
 - b. **Big Sky Washpan 1 Meter** – located on the south side of the Big Sky barn to measure the volume of all fresh water going into the barn.
 - c. **Big Sky Washpan 2 Meter** – located on the south side of the Big Sky barn to measure the volume of freshwater going into the barn.
 - d. **Desertland Pit Meter** – located [on the south side of the Desertland barn to measure the volume of freshwater going in the barn.
 - e. **Desertland Washpan Meter** – located on the south side of the Desertland barn to measure the volume of freshwater going into the barn.
 - f. **Wastewater Meter** – located at the bern of Wastewater Pond North, to measure the volume of wastewater discharged from the Wastewater Pond North to each field in the land application area.
 3. **Manure Solids Separator** - The dairy facility was existing as of the effective date of the Dairy Rule (December 31, 2011) and employs [the following] manure solids separation system:
 - a. **Screen Separator 1** – inclined screen separator receiving washwater from Big Sky barn that then flows to the east settling cell of the concrete separator located south of Big Sky barn.
 - b. **Screen Separator 2** – inclined screen separator receiving washwater from Desertland barn that then flows into Wastewater Pond North, located on the northwest side of Wastewater Pond North.
 - c. **2 celled Concrete Separator** – located next to Screen Separator 2 at Big Sky Dairy.
 - d. **Desertland Dairy Screen** – inclined screen separator, located west of Desertland barn and pens, receiving washwater from Desertland sump that then flows into synthetically lined combination wastewater/stormwater impoundment.

- e. **Desertland Dairy Concrete Separator** – located next to Desertland Dairy Screen Separator.
4. **Monitoring Wells** - The dairy facility was existing as of the effective date of the Dairy Rule (December 31, 2011) and uses [the following] monitoring wells to supply data representative of groundwater quality:
- a. **833-02** – hydrologically sidegradient (west) of the Sprinkler Field, west of the Big Sky Dairy parlor.
 - b. **833-04** – hydrologically downgradient of the Pivot Field, at the northwest corner of the Sprinkler Field.
 - c. **833-05** – hydrologically downgradient of the Wastewater Pond South, near the Southeast corner.
 - d. **833-06** – hydrologically downgradient of the east portion of the Sprinkler Field, on the north side of the Hay Storage Area.
 - e. **833-07** – hydrologically downgradient (south) of Big Sky F/L Stormwater Pond
 - f. **833-08** – hydrologically downgradient of the Big Sky Stormwater Pond, West of the Big Sky parlor.
 - g. **833-09** – hydrologically downgradient of the Desertland North Calf Stormwater Pond, northwest of the Desertland Dairy parlor.
 - h. **833-10** – hydrologically downgradient of the Desertland South Combination WW/Stormwater Pond, southwest of the Desertland Dairy parlor.
- B. A total of 6 monitoring wells is documented at or near this dairy facility. With the exception of the monitoring wells listed below, all facility monitoring wells are subject to the facility-specific monitoring requirements outlined in **Section B102** as well as any general monitoring requirements outlined in **Table C1** of this Discharge Permit:
1. **DAD-05** – located at the southwest corner of Field F, used to help delineate the central nitrate plume in the regional aquifer.
 2. **DAD-06** – located near the northeast corner of the Pivot Field, used to help delineate the central nitrate plume in the regional aquifer.
 3. **DAD-15** – located across Interstate 10 from Big Sky Dairy scale office, used to help delineate the eastern cross-gradient of the nitrate plume in regional aquifer.
 4. **DAD- 19** – located at the south end of the Big Sky Stormwater Pond, used to help delineate the vertical definition of the central nitrate plume in the regional aquifer.
 5. **DAD-24** – located in the central region of Big Sky Dairy to help delineate the vertical definition of the central nitrate plume in the regional aquifer.

6. **DAD-25** – located in the central region of Big Sky Dairy to delineate the central nitrate plume in the regional aquifer.

Monitoring wells, DAD-05, DAD-06, DAD-15, DAD-19, DAD-24 and DAD-25 are monitored pursuant to the “Stipulated Agreement Doña Ana Dairies Stage 2 Abatement Plan,” and are therefore exempt from the monitoring requirements listed in this Discharge Permit; however, routine groundwater sampling from these wells may be required pursuant to the facility abatement plan.

B102 Facility: Conditions for Operation

- A. **Impoundment(s)** - The Permittee shall manage all impoundments at the dairy facility in accordance with 20.6.6 NMAC and the conditions summarized in **Table B2** below.

**Table B2
 Impoundment(s)**

Engineering, Surveying and Construction and/or Improvements
a) None required.
Operations and Maintenance of All Impoundments
a) Maintain operation of the following existing impoundments in compliance with this section: Wastewater Pond North, Wastewater Pond South, Desertland South Combination WW/Storm Pond, Big Sky Stormwater Pond, Big Sky F/L Stormwater Pond, and Desertland North Calf Stormwater Pond . b) Maintain the existing wastewater storage impoundment system to contain the maximum daily discharge volume of 70,000 gpd authorized by this Discharge Permit for a minimum period of 21 days to accommodate when land application is not feasible, while preserving two feet of freeboard as required by 20.6.6.17(D) NMAC. [20.6.6.21(A) NMAC] c) Maintain impoundments to prevent conditions which could affect the structural integrity of the impoundments and associated liners in accordance with 20.6.6.20(P) NMAC. d) Repair or replace the faulty pipe(s) or fixture(s) within 72 hours of discovery of an unauthorized discharge. [20.6.6.20(Q) NMAC]
Inspection and Monitoring All Impoundments
e) Visually inspect impoundments and surrounding berms on a monthly basis to ensure proper condition and control vegetation growing around the impoundments in a manner that is protective of the liners. [20.6.6.20(P) NMAC] f) Visually inspect pipes and fixtures on a weekly basis for evidence of leaks or failure. In areas where pipes and fixtures cannot be visually inspected because they are buried, visually inspect the area directly surrounding the features for evidence of leaks or failure (e.g., saturated surface soil, surfacing wastewater, etc.). [20.6.6.20(Q) NMAC] g) Estimate or measure the volume of all wastewater discharged to the wastewater or combination wastewater/stormwater impoundment(s) using flow meters. [Subsection C of 20.6.6.24 NMAC] h) Annually collect representative wastewater samples from impoundments used to store wastewater prior to land application in accordance with Subsection C of 20.6.6.25 NMAC and analyze for nitrate as nitrogen, total Kjeldahl nitrogen, chloride, total sulfur and total dissolved solids pursuant to 20.6.6.24(B) NMAC.
Recordkeeping and Reporting All Impoundments

**Table B2
 Impoundment(s)**

<p>i) Report any unauthorized discharges to NMED pursuant to 20.6.2.1203 NMAC.</p> <p>j) Unless otherwise specified in this Discharge Permit, submit all monitoring information quarterly as part of the required <u>Quarterly Monitoring Report</u> in accordance with the general reporting schedule listed in Table C1 of this Discharge Permit.</p> <p>k) Report wastewater sample results to NMED annually as part of the next scheduled <u>Quarterly Monitoring Report</u>. [Subsection C of 20.6.6.25]</p> <p>l) Notify NMED within 24 hours of discovery of any observed impoundment condition(s) that may impact the structural integrity of a berm or liner or that may result in an unauthorized discharge. [Subsection P 20.6.6.20 NMAC]</p> <p>m) Maintain written records at the dairy facility of all facility inspections including repairs and replacements.</p>

B. **Land Application Area Management** - The Permittee shall manage all land application areas at the dairy facility in accordance with 20.6.6 NMAC and the conditions summarized in **Table B3** below.

**Table B3
 Land Application Area Management**

Engineering and Surveying
<p>a) Any irrigation or supply wells located within the land application area shall have a surface pad constructed in accordance with the recommendations of Subsection G of 19.27.4.29 NMAC and a permanent well cap or cover pursuant to Subsection I of 19.27.4.29 NMAC. [Subsection N of 20.6.6.21 NMAC]</p>
Operations and Maintenance All Land Application Areas
<p>b) Land apply wastewater/stormwater uniformly to all fields within the land application area as authorized in Section B100 and a planned rate consistent with an approved NMP. [Subsection B of 20.6.6.21 NMAC]</p> <p>c) Land apply wastewater/stormwater only to field(s) within the land application area receiving fresh irrigation water. Wastewater/stormwater are intended as sources of crop nutrients and shall not be used as a primary source to meet the water consumptive needs of a crop.</p> <p>d) Land apply, as required, manure solids and composted material to the land application area in accordance with an approved NMP. [Subsection S of 20.6.6.20 NMAC]</p> <p>e) As required, blend wastewater with fresh water using any of the methods provided in Subsection D of 20.6.6.21 NMAC.</p> <p>f) Minimize ponding within the land application area. [Subsection B of 20.6.6.21 NMAC]</p> <p>g) Per an approved NMP, remove crops from fields within the land application area by mechanical harvest.</p> <ul style="list-style-type: none"> - Pivot field – crops shall be harvested mechanically - Sprinkler field – crops shall be harvested mechanically - Field F-G – crops shall be harvested mechanically <p>Crops may be grazed prior to and between mechanical harvest and nitrogen removal, however nitrogen removal credit cannot be taken for grazing activities unless a grazing plan is developed and submitted as part of an approved NMP.</p>

Table B3
Land Application Area Management

<p>h) Utilize flow meters (Table B6) installed on one or more discharge or transfer line(s) to monitor and record the volume of wastewater and/or stormwater distributed to the land application area. [Subsections G and H of 20.6.6.21 NMAC]</p> <p>i) Per section L of 20.6.6.21 NMAC, utilize and maintain backflow prevention devices as summarized in Table B7 of this Discharge Permit.</p> <p>j) Per Section K of 20.6.6.21 NMAC, maintain in good repair any irrigation ditches used to transfer/distribute flow to land application area(s). Any damage shall be repaired within a reasonable time frame.</p>
<p style="text-align: center;">Inspection and Monitoring All Land Application Areas</p>
<p>k) Visually inspect irrigation ditches on a monthly basis to ensure proper maintenance. [Subsection K of 20.6.6.21 NMAC]</p> <p>l) Perform routine soil sampling in each field within the land application area in accordance with Subsections K and L of 20.6.6.25 NMAC. Report analytical results and provide a map depicting the soil sampling locations within each field annually to NMED as part of the Quarterly Monitoring Report due May 1.</p> <ul style="list-style-type: none">• For fields that have never before received wastewater, collect soil samples immediately before initial wastewater application and annually thereafter.• For fields currently receiving or having received wastewater, collect soil samples annually regardless of whether the field is cropped, remains fallow, or has recently received wastewater or stormwater. <p>m) Annually collect a sample of irrigation water supplied from each well or a group of physically connected wells and analyze for nitrate as nitrogen and total Kjeldahl nitrogen, pursuant to Subsection B of 20.6.6.24 NMAC. Report results to NMED as part of the Quarterly Monitoring Report due May 1. If the results are consistent for the first five years of annual sampling, sampling frequency may be reduced to once every other year. [Subsection E of 20.6.6.25 NMAC]</p> <p>n) Collect and analyze a composite sample of plant material representative of each type of crop harvested from each field in the land application area over the course of the year in accordance with Subsection I of 20.6.6.25 NMAC. The Permittee may use the most recent book values included in the NMSU/NRCS 590 jobsheet or data obtained from the USDA PLANTS Database as an alternative method to estimate the nitrogen concentration of harvested crops. Report results to NMED as part of the next scheduled Quarterly Monitoring Report.</p> <p>o) Annually collect a composite sample to calculate actual nitrogen content values of on-site manure solids or estimate the nitrogen content of the manure solids applied to each field of the land application area at 25 pounds/ton. [Subsection D of 20.6.6.25 NMAC] Collect and analyze sample in accordance with the requirements listed in Subsection D of 20.6.6.25 NMAC: Report results to NMED as part of the next scheduled Quarterly Monitoring Report.</p>
<p style="text-align: center;">Recordkeeping and Reporting All Land Application Areas</p>
<p>p) Submit annual updates to the approved NMP to NMED as part of the Quarterly Monitoring Report due May 1. [Subsection I of 20.6.6.21 NMAC]</p> <p>q) If blending, maintain an accurate written record of the volume of fresh water added to the wastewater to properly calculate the overall volume of wastewater applied under an approved NMP.</p> <p>r) Maintain and submit land application data sheets (LADS) for each authorized field within the land application area in accordance with Subsection G of 20.6.6.25 NMAC. Submit completed sheets or a statement that land application did not occur to NMED as part of each Quarterly Monitoring Report.</p> <p>s) Maintain a log recording for fluid volume(s) being land applied that includes the following:</p> <ul style="list-style-type: none">• date and location of each discharge

**Table B3
 Land Application Area Management**

<ul style="list-style-type: none"> • flow meter readings immediately prior to and after each discharge • calculated total volume of each discharge reported in gallons and acre-feet <p>Submit a copy of the current log to NMED as part of each Quarterly Monitoring Report. [Subsection B of 20.6.6.25 NMAC]</p> <p>t) Maintain a log recording for all additional fertilizers applied to each field within the land application area that includes the following:</p> <ul style="list-style-type: none"> • date of fertilizer application • type and form of fertilizer • fertilizer analysis • amount of fertilizer applied (pounds/acre) to each field • amount of nutrients applied (pounds/acre) to each field <p>Submit a copy of the current log to NMED as part of each Quarterly Monitoring Report. [Subsection F of 20.6.6.25 NMAC]</p> <p>u) Maintain an inspection log on-site regarding maintenance of land application infrastructure. Provide log to NMED upon request. [Subsection K of 20.6.6.21 NMAC]</p> <p>v) Estimate the annual volume of fresh water applied to each field within the land application area: Report results to NMED as part of the Quarterly Monitoring Report due May 1. [Subsection E of 20.6.6.25 NMAC]</p> <p>w) Per Subsection H of 20.6.6.25 NMAC, submit crop yield documentation and plant and harvest dates of each crop grown to NMED as part of the next scheduled Quarterly Monitoring Report.</p> <p>x) Per Subsection J of 20.6.6.25 NMAC, submit a nitrogen removal summary report to NMED as part of the next scheduled Quarterly Monitoring Report.</p>
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C. **Stormwater Management** - The Permittee shall manage stormwater at the dairy facility in accordance with 20.6.6 NMAC and the conditions summarized in **Table B4** below.

**Table B4
 Stormwater Management
 Engineering and Surveying**

Engineering and Surveying
a) None required.
Operations and Maintenance
<p>b) Implement stormwater management by observing the facility for the presence of standing liquid after every precipitation event as follows: [20.6.2.3109 NMAC]</p> <ul style="list-style-type: none"> • Maintain stormwater conveyance [Subsection H of 20.6.6.20 NMAC] • Divert stormwater to minimize stormwater ponding and infiltration. [Subsection H of 20.6.6.20 NMAC] • Maintain diversions for facility stormwater run-on and run-off to prevent ponding within areas used for manure and compost stockpiling [Subsection S of 20.6.6.20 NMAC] <p>c) Apply stormwater to fields within the land application area in accordance with Table B3 of this Discharge Permit.</p>

**Table B4
 Stormwater Management**

d) Per Subsection K of 20.6.6.21 NMAC, maintain in good repair any irrigation ditches used to transfer/distribute flow to land application area(s). Any damage shall be repaired within a reasonable time frame.
Inspection and Monitoring
e) Visually inspect irrigation ditches on a monthly basis to ensure proper maintenance. [Subsection K of 20.6.6.21 NMAC]
f) Visually inspect all facility pipes and fixtures on a weekly basis for evidence of leaks or failure. [Subsection Q of 20.6.6.20 NMAC]
g) Collect and analyze stormwater samples on a quarterly basis from each evaporative stormwater impoundment. Analyze samples for nitrate as nitrogen, total Kjeldahl nitrogen, chloride, total sulfur and total dissolved solids pursuant to Subsection B of 20.6.6.24 NMAC. [Subsection D of 20.6.6.24 NMAC]
Recordkeeping and Reporting
h) None required.

- D. **Manure Solids Separator** - The Permittee shall employ manure solids separation at the dairy facility in accordance with Subsection F 20.6.6.20 NMAC and the conditions summarized in **Table B5** below.

**Table B5
 Manure Solids Separator**

Engineering and Surveying
a) None required.
Operations and Maintenance
b) Regularly remove all manure solids (and any composted material) from the separation system(s) for appropriate disposal per Subsection S of 20.6.6.20 NMAC.
c) Collect and contain all manure solids and leachate generated from those solids as part of the manure solids separation system on an impervious surface prior to disposal.
Inspection and Monitoring
d) None required.
Recordkeeping and Reporting
e) None required.

- E. **Flow Meters** – Pursuant to Subsection 20.6.6.20 and 20.6.6.21 NMAC, the Permittee shall employ a flow metering system that uses flow measurement devices (flow meters) to measure the volume(s) of 1) wastewater discharged from the production area and 2) wastewater and stormwater transferred and land applied at the dairy facility. All flow meters employed at a dairy facility shall be managed in accordance with applicable sections of 20.6.6 NMAC and the conditions listed in **Table B6** below.

**Table B6
 Flow Meters**

Engineering and Surveying
a) None required.
Operations and Maintenance
b) The following flow meter(s) are approved for continued use in compliance with Subsection J of 20.6.6.20 NMAC: Big Ky Pit Meter, Big Sky Washpen 1 Meter, Big Sky Washpen 2 Meter, Desertland Pit Meter, Desertland Washpen Meter, and Wastewater Meter.
c) All flow meters shall be calibrated in accordance with the manufacturer's requirements prior to installation or reinstallation following repair. [Subsection J of 20.6.6.20 NMAC]
Inspection and Monitoring
d) Using flow meter(s) installed on the fresh water supply line(s), measure the volume of all sources contributing to the wastewater discharged to the impoundment(s) authorized to contain wastewater. Readings from flow meter(s) on water supply lines are used to estimate wastewater volumes discharged to wastewater or combination wastewater/stormwater impoundment(s) without adjustments or deductions to the meter readings. [Subsection N of 20.6.6.20 NMAC]
e) Using flow meter(s) installed on the discharge line(s), directly measure the volume of all wastewater or combination wastewater/stormwater discharged to each field within the land application area. Record readings immediately prior to and after each discharge and calculate the total volume of each discharge in both gallons and in acre-feet. [Subsection A of 20.6.6.25 NMAC]
f) Using flow meter(s) installed on the transfer line(s), directly measure the volume of all stormwater discharged to each field within the land application area. Record readings immediately prior to and after each discharge and calculate the total volume of each discharge in both gallons and in acre-feet. [Subsection B of 20.6.6.25 NMAC]
g) Visually inspect flow meters on a weekly basis for evidence of malfunction. If a visual inspection indicates a flow meter is not functioning to measure flow, the Permittee shall initiate repair or replacement of the meter within seven days of discovery. [Subsection O of 20.6.6.20 NMAC]
Recordkeeping and Reporting
h) Maintain copies of the manufacturer's certificate of calibration and the manufacturer's recommended maintenance schedule at the facility.
i) Record of meter readings at intervals not to exceed monthly. The average daily discharge volume for each recording interval shall be calculated by dividing the difference between the meter readings by the number of days between meter readings. [Subsection C of 20.6.6.24 NMAC]
j) Record meter readings (without adjustments or deductions) and submit in the Quarterly Monitoring Report [Subsection N of 20.6.6.20 NMAC]. Include the date, time and units of each measurement, and calculations for the average daily volumes of wastewater discharged to the impoundments, reported in gallons per day. [Subsection C of 20.6.6.24 NMAC]
k) For meters requiring repair, submit a report to NMED on the quarter following the repair that includes a description of the malfunction, a statement verifying the repair, and a copy of the manufacturer's or repairer's certificate of calibration.
l) For meters requiring replacement, submit a report to NMED on the quarter following the replacement that includes plans for the device pursuant to Subsection C of 20.6.6.17 NMAC, a copy of the manufacturer's certificate of calibration, and a copy of the manufacturer's recommended maintenance schedule.

- F. **Backflow Prevention Device(s)** - Per Section 20.6.6.21 NMAC, the Permittee shall protect all water wells used within a land application distribution system from contamination by wastewater or stormwater backflow by installing and maintaining backflow prevention methods or devices. The backflow prevention system(s) employed at a dairy facility shall be managed in accordance with the conditions listed in **Table B7** below.

Table B7
Backflow Prevention

Engineering and Surveying
a) None required.
Operations and Maintenance
b) Maintain all backflow prevention methods or devices in compliance with Subsection L of 20.6.6.21 NMAC.
c) Repair or replace a malfunctioning check valve device within 30 days of discovery, and use of all wastewater supply lines associated with the check valve device shall cease until repair or replacement has been completed. [Subsection M of 20.6.6.21 NMAC]
Inspection and Monitoring
d) Inspect each check valve device monthly when the well is in operation. [Subsection M of 20.6.6.21 NMAC]
Recordkeeping and Reporting
e) Submit annually copies of the inspection and maintenance records for each check valve device associated with the backflow prevention program for the previous year to NMED as part of the Quarterly Monitoring Report due May 1 . [Subsection M of 20.6.6.21 NMAC]

- G. **Monitoring Well(s)** - Per Subsection A of 20.6.6.23 NMAC, a Permittee is required to install a sufficient number of monitoring wells at appropriate depths and locations to monitor groundwater quality upgradient of a dairy facility and hydrologically downgradient of each source of groundwater contamination: wastewater, stormwater, and combination wastewater/stormwater impoundments, and fields within the land application area. The approved groundwater monitoring well system at a dairy facility is detailed in **Table B8** below.

Table B8
Groundwater Monitoring Wells

Engineering and Surveying
a) None required
Operations and Maintenance
b) Operate and maintain the following facility groundwater monitoring well(s) in compliance with Subsection A of 20.6.6.23 NMAC and this section of this Discharge Permit: 833-02, 833-04, 833-05, 833-06, 833-07, 833-08, 833-09, and 833-10 .
c) Verify all facility monitoring wells are permanently identified in accordance with Subsection C of 20.6.6.23 NMAC.
Inspection and Monitoring
d) Perform quarterly groundwater sampling in accordance with Subsection F of 20.6.6.23 NMAC to comply with the required monitoring reporting schedule listed in Table C1 .

Table B8
Groundwater Monitoring Wells

<p>e) Analyze collected groundwater sample(s) according to the methods listed in Subsection B of 20.6.6.24 and Subsection B of 20.6.2.3107 NMAC. Pursuant to Subsection B of 20.6.6.24 NMAC, sample constituents that require analysis and reporting to NMED include: nitrate as nitrogen, total Kjeldahl nitrogen, chloride, sulfate and total dissolved solids. [Subsection G of 20.6.6.23 NMAC].</p> <p>f) one downhole inspection of each monitoring well identified in this Discharge Permit. NMED shall establish the inspection date and provide at least 60 days' notice to the Permittee by certified mail. The Permittee shall have any existing dedicated pumps removed at least 48 hours prior to NMED inspection to allow adequate settling time of any sediment agitated as a result of pump removal.</p> <p>g) Should a facility not have existing dedicated pumps, but decide to install pumps in any of the monitoring wells, NMED shall be notified at least 90 days prior to pump installation so that a downhole well inspection can be scheduled prior to pump placement. [20.6.2.3107 NMAC]</p>
Recordkeeping and Reporting
<p>h) A Quarterly Monitoring Report shall be filed with NMED in accordance with the general reporting schedule listed in Table C1. Each Quarterly Monitoring Report shall contain, at a minimum, the following information: [Subsection G of 20.6.6.23 NMAC]</p> <ul style="list-style-type: none">• Facility map with location and number of each well in relation to the contamination source it is intended to monitor• Depth-to-shallowest groundwater measurements• Field parameter measurements and parameter stabilization log• Analytical results (including the laboratory quality assurance and quality control summary report)• Groundwater elevation contour maps utilizing elevation contours of 2 ft or less in accordance with Subsection L of 20.6.6.23 NMAC

B103 **Facility: Contingency Plan**

- A. In the event NMED or the Permittee identifies any failures of the Discharge Permit or system not specifically noted herein, NMED may require the Permittee to develop for NMED approval a contingency or corrective action plan and schedule to cope with the failure(s) [20.6.2.3107.A(10) NMAC].
- B. Facility conditions that will invariably require Permittee action under one or more contingency plans include:
1. **Exceedance of groundwater quality standards** – Constituent concentration(s) in one or more groundwater samples collected from a monitoring well intended to monitor contamination sources at a dairy facility including impoundments exceed (1) one or more of the groundwater standards of 20.6.2.3103 NMAC and (2) reported constituent concentration(s) in one or more groundwater samples collected from the upgradient monitoring well for four consecutive quarters.
 2. **Ineffective groundwater monitoring well(s)** – One or more monitoring well(s) required by 20.6.6.23 NMAC are (1) not located hydrologically downgradient of the contamination

- source(s) intended to monitor, (2) not completed pursuant to 20.6.6.23 NMAC or (3) contains insufficient water to monitor groundwater quality effectively.
3. **Exceedance(s) of permitted maximum daily discharge volume** - The maximum daily discharge volume authorized by this Discharge Permit is exceeded by more than ten percent for any four average daily discharge volumes within any 12-week period.
 4. **Insufficient impoundment capacity** - A survey, capacity calculations, or settled solids thickness measurements indicate an existing impoundment is not capable of meeting the capacity requirements required by Subsection D of 20.6.6.17 NMAC.
 5. **Inability to maintain required freeboard**- A minimum of two feet of freeboard cannot be preserved in one or more wastewater impoundment(s).
 6. **Impoundment(s) structural integrity compromised** - Any damage to the berms or the liner of an impoundment or any condition that exists that may compromise the structural integrity of the impoundment.
 7. **Spills, leaks, unauthorized discharge** – Any spill or release that is not authorized under this Discharge Permit.
- C. If a contingency or corrective action plan is required, the Permittee shall comply with the requirements of Sections 20.6.2.1203 and 20.6.6.27 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.2.1203 and 20.6.6.27 NMAC. The Permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC.

B104 Facility: Contingency Plan

- D. In the event NMED or the Permittee identifies any failures of the Discharge Permit or system not specifically noted herein, NMED may require the Permittee to develop for NMED approval a contingency or corrective action plan and schedule to cope with the failure(s) [20.6.2.3107.A(10) NMAC].
- E. Facility conditions that will invariably require Permittee action under one or more contingency plans include:
1. **Exceedance of groundwater quality standards** – Constituent concentration(s) in one or more groundwater samples collected from a monitoring well intended to monitor contamination sources at a dairy facility including impoundments exceed (1) one or more of the groundwater standards of 20.6.2.3103 NMAC and (2) reported constituent concentration(s) in one or more groundwater samples collected from the upgradient monitoring well for four consecutive quarters.
 2. **Ineffective groundwater monitoring well(s)** – One or more monitoring well(s) required by 20.6.6.23 NMAC are (1) not located hydrologically downgradient of the contamination source(s) intended to monitor, (2) not completed pursuant to 20.6.6.23 NMAC or (3) contains insufficient water to monitor groundwater quality effectively.

3. **Exceedance(s) of permitted maximum daily discharge volume** - The maximum daily discharge volume authorized by this Discharge Permit is exceeded by more than ten percent for any four average daily discharge volumes within any 12-week period.
 4. **Insufficient impoundment capacity** - A survey, capacity calculations, or settled solids thickness measurements indicate an existing impoundment is not capable of meeting the capacity requirements required by Subsection D of 20.6.6.17 NMAC.
 5. **Inability to maintain required freeboard**- A minimum of two feet of freeboard cannot be preserved in one or more wastewater impoundment(s).
 6. **Impoundment(s) structural integrity compromised** - Any damage to the berms or the liner of an impoundment or any condition that exists that may compromise the structural integrity of the impoundment.
 7. **Spills, leaks, unauthorized discharge** – Any spill or release that is not authorized under this Discharge Permit.
- F. If a contingency or corrective action plan is required, the Permittee shall comply with the requirements of Sections 20.6.2.1203 and 20.6.6.27 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.2.1203 and 20.6.6.27 NMAC. The Permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC.

PART C GENERAL CONDITIONS

C100 Introduction

- A. NMED has reviewed the discharge permit application for the proposed renewal and has determined that the provisions of the Dairy Rule and applicable groundwater quality standards will be met in accordance with this Discharge Permit. General conditions for all Discharge Permits issued by the Ground Water Quality Bureau pursuant to NMAC 20.6.2 as well as specific conditions as applied to the operation and maintenance of a dairy facility with use of a land application area pursuant to 20.6.6 NMAC are summarized on **Table C1**. Unless otherwise specified in Parts A or B of this Discharge Permit, both the general discharge permit conditions (as listed in this part) and facility-specific conditions as listed in **Part B** are mandated to assure continued compliance.

**Table C1
 General Discharge Permit Conditions for a Dairy Facility:
 Existing with a Land Application Area**

Engineering and Surveying
a) Comply with the requirements of Section 20.6.6.17 NMAC and submit to NMED all information or documentation required by the applicable portions of Section 20.6.6.17 NMAC.
Operations and Maintenance

Table C1
General Discharge Permit Conditions for a Dairy Facility:
Existing with a Land Application Area

<p>b) Comply with the requirements of Sections 20.6.6.20 and 20.6.6.21 NMAC, and submit to NMED all information or documentation required by the applicable portions of Sections 20.6.6.20 and 20.6.6.21 NMAC.</p> <p>c) Operate in a manner such that standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC are not violated.</p> <p>d) Manage disposal of all manure solids and composted material generated at the facility in accordance with Subsection S of 20.6.6.20 NMAC.</p> <p>e) Repair or replace compromised pipe(s) or fixture(s) within 72 hours of discovery. [Subsection Q of 20.6.6.20 NMAC]</p> <p>f) Manage all animal mortalities at the facility in compliance with Subsection W of 20.6.6.20 NMAC.</p>
<p style="text-align: center;">Inspection and Monitoring</p>
<p>g) Wastewater - Comply with the requirements of Sections 20.6.6.24 and 20.6.6.25 NMAC, and submit to NMED all information or documentation required by the applicable portions of Sections 20.6.6.24 and 20.6.6.25 NMAC.</p> <p>h) Stormwater - Comply with the requirements of Sections 20.6.6.24 and 20.6.6.25 NMAC, and submit to NMED all information or documentation required by the applicable portions of Sections 20.6.6.24 and 20.6.6.25 NMAC.</p> <p>i) Groundwater - Comply with the requirements of Section 20.6.6.23 NMAC and submit to NMED all information or documentation required by the applicable portions of Section 20.6.6.23 NMAC.</p> <p>j) Visually inspect all facility pipes and fixtures on a weekly basis for evidence of leaks or failure. [Subsection Q of 20.6.6.20 NMAC]</p>
<p style="text-align: center;">Recordkeeping and Reporting</p>
<p>k) Maintain written records at the dairy facility of any inspection(s), repairs and maintenance conducted on facility infrastructure as related the wastewater management system.</p> <p>l) Generate monitoring reports that contain monitoring data and information collected pursuant to the Dairy Rule and as described in applicable sections of this Discharge Permit.</p> <p>m) Retain required records for a minimum period of 10 years from the date of any sample collection, measurement, report or application in accordance with Section 20.6.6.33 NMAC.</p> <p>n) Unless otherwise identified in this Discharge Permit, submit monitoring reports to NMED quarterly according to the following schedule: [Subsection A of 20.6.6.24 NMAC]</p> <ul style="list-style-type: none">• January 1 through March 31 (first quarter) – report due by May 1• April 1 through June 30 (second quarter) – report due by August 1• July 1 through September 30 (third quarter) – report due by November 1• October 1 through December 31 (fourth quarter) – report due by February 1 <p>o) Provide written notice to NMED regarding any changes to the presence of lactating cows at the facility to achieve compliance with Subsection A of 20.6.6.20 NMAC as follows:</p> <ul style="list-style-type: none">• Verify with NMED within 30 days of the actual removal/reintroduction <p>p) Within 90 days of any addition or change to the dairy facility which affect one or more items listed in Subsection U of 20.6.6.20 NMAC, update and resubmit a facility map pursuant to Subsection C of 20.6.6.17 NMAC. [Subsection V of 20.6.6.20]</p>

C101 **Legal**

- A. Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders [20.6.2 NMAC].
- B. Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a Discharge Permit Modification in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated or the standards of Section 20.6.2.3103 NMAC are being or may be violated. NMED may require more stringent requirements to protect groundwater quality if a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality. NMED may require the Permittee to implement abatement of water pollution and remediate groundwater quality.
- C. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6-10 WQA, 74-6-10.1 WQA]
- D. Pursuant to WQA 74-6-10.2(A-F), NMED shall assess criminal penalties for any person who knowingly violates or knowingly causes or allows another person to:
 - 1. Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA;
 - 2. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or
 - 3. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978.
- E. The Permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice in accordance with 20.6.2.3111 NMAC, prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof. The transferee(s) shall notify NMED, in writing, of

the date of transfer of ownership and provide contact information for the new owner(s) pursuant to Subsection B of 20.6.6.12 NMAC. Submit to NMED notification of the transfer within 30 days of the ownership transfer date. [20.6.6.34 NMAC]

- F. Pursuant to WQA 74-6-5(o), the Permittee has a right to appeal the conditions and requirements as outlined in this Discharge Permit through filing a petition for review before the WQCC. Such petition shall be in writing to the WQCC within thirty (30) days of the receipt of this Discharge Permit. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review.

C102 General Inspection and Entry Requirements

- A. Nothing in this Discharge Permit shall limit in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]
- B. The Permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]:
1. Enter at regular business hours or at other reasonable times upon the Permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.
 2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.
 3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, or under any federal or WQCC regulation.
 4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

C103 General Record Keeping and Reporting Requirements

- A. The Permittee shall maintain a written record of the following:
1. Amount of wastewater, effluent, leachate or other wastes discharged pursuant to this Discharge Permit. [20.6.2.3107.A NMAC]
 2. Operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; to measure flow rates, to monitor water quality, or to collect other data required by this Discharge Permit. Per Section A of 20.6.2.3107 NMAC, this record shall include:
 - a. Repair, replacement or calibration of any monitoring equipment

- b. Repair or replacement of any equipment used in the Permittee's waste or wastewater treatment and disposal system.
 3. Any spills, seeps, and/or leaks of effluent, and of leachate and/or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]
- B. The Permittee shall maintain at its facility a written record of all data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit. The following information shall be recorded and shall be made available to NMED upon request:
 1. The dates, exact place and times of sampling or field measurements;
 2. The name and job title of the individuals who performed each sample collection or field measurement;
 3. The date of the analysis of each sample;
 4. The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample;
 5. The analytical technique or method used to analyze each sample or take each field measurement;
 6. The results of each analysis or field measurement, including raw data;
 7. The results of any split sampling, spikes or repeat sampling; and
 8. A description of the quality assurance (QA) and quality control (QC) procedures used.
- C. The Permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The Permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]

C104 **Modifications and/or Amendments**

- A. The Permittee shall notify NMED of any changes to the Permittee's wastewater treatment and disposal system, including any changes in the wastewater flow rate or the volume of wastewater storage, or of any other changes to operations or processes that would result in any significant change in the discharge of water contaminants. The Permittee shall obtain NMED's approval, as a modification to this Discharge Permit pursuant to Subsections E, F, or G of 20.6.2.3109 NMAC, prior to any increase in the quantity discharged, or any increase in the concentration of water contaminants discharged, above those levels approved in this Discharge Permit [20.6.2.3107.C NMAC].
- B. The Permittee shall file plans and specifications with NMED for the construction of a wastewater system and for proposed changes that will change substantially the quantity or quality of the discharge from the system. The Permittee shall file plans and specifications prior to the commencement of construction. Changes to the wastewater system having a minor effect on the character of the discharge shall be reported as of January 1 and June 30 of each year to NMED. [20.6.2.1202 NMAC]

Part D **MISCELLANEOUS**

D100 **Supporting On-Line Documents**

- A. Copies of the following documents can be downloaded from NMED's web site under Ground Water Quality Bureau or requested from the Bureau.
 - 1. Documents found at:
<https://www.env.nm.gov/gwqb/forms/>
 - a. Notice of Intent to Discharge
 - 2. Documents found at:
<https://www.env.nm.gov/gwqb/dairy/>
 - a. Application for a New Discharge Permit (dairy facility only)
 - b. Application for Discharge Permit Renewal and/or Modification (dairy facility only)
 - c. Application for Discharge Permit Renewal for Closure (dairy facility only)
 - 3. Documents found at:
<https://www.env.nm.gov/gwqb/gw-regulations/>
 - a. Regulation 20.6.2 NMAC - Ground and Surface Water Protection
 - b. Regulation 20.6.6 NMAC - Supplemental Permitting Requirements for Dairy Facilities (Dairy Rule)
 - c. Monitoring well construction and abandonment guidelines
 - d. Synthetically lined lagoons - liner material and site preparation guidelines

D101 **Definitions**

- A. **“abatement plan”** means a description of any operational, monitoring, contingency and closure requirements and conditions for the prevention, investigation and abatement of water pollution, and includes Stage 1, Stage 2, or Stage 1 and 2 of the abatement plan, as approved by the secretary
- B. **“commission”** means:
 - 1. the New Mexico water quality control commission (WQCC), or
 - 2. NMED, when used in connection with any administrative and enforcement activity
- C. **“dairy facility”** means the production area and the land application area, where the discharge and associated activities will or do take place
- D. **“Dairy rule”** means 20.6.6 NMAC, as amended
- E. **“NMED”, “agency”, or “division”** means the New Mexico Environment Department or a constituent agency designated by the **commission**
- F. **“discharge permit”** means a discharge plan approved by NMED
- G. **“discharge permit modification”** means a change to the requirements of a discharge permit that result from a change in the location of the discharge, a significant increase in the quantity of the discharge, a significant change in the quality of the discharge; or as required by the secretary
- H. **“discharge permit renewal”** means the re-issuance of a discharge permit for the same, previously permitted discharge
- I. **“discharge plan”** means a description of any operational, monitoring, contingency, and closure requirements and conditions for any discharge of effluent or leachate which may move directly or indirectly into groundwater
- J. **“discharge site”** means the entire site where the discharge and associated activities will take place
- K. **“discharge volume”** means the measured daily volume of wastewater actually discharged within the production area. This definition does not include the volume of wastewater discharged to a land application area (if applicable).
- L. **“disposal”** means to abandon, deposit, inter or otherwise discard a fluid as a final action after its use has been achieved
- M. **“existing dairy facility”** means a dairy facility that is currently discharging, or has previously discharged and has not been issued a notice from NMED verifying that closure and post-closure monitoring activities have been completed

- N. **"fluid"** means material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state
- O. **"flow meter"** means a device used to measure the volume of water, wastewater or stormwater that passes a particular reference section in a unit of time
- P. **"freeboard"** means the vertical distance between the elevation at the lowest point of the top inside edge of the impoundment and the design high water elevation of the water level in the impoundment
- Q. **"groundwater"** means interstitial water which occurs in saturated earth material and which is capable of entering a well in sufficient amounts to be utilized as a water supply
- R. **"impoundment"** means any structure designed and used for storage or disposal by evaporation of wastewater, stormwater, or a combination of both wastewater and stormwater. A multiple-cell impoundment system having at least one shared berm or barrier whose smallest cells have a cumulative constructed capacity of 10 percent or less of the constructed capacity of the largest cell shall be considered a single impoundment for the purposes of the Dairy Rule. A wastewater or stormwater transfer sump or a solids settling separator is not an impoundment
- S. **"manure"** means an agricultural waste composed of excreta of animals, and residual bedding materials, waste feed or other materials that have contacted excreta from such animals
- T. **"maximum daily discharge volume"** means the total daily volume of wastewater (expressed in gallons per day) authorized for discharge by a discharge permit. This definition does not include the volume of wastewater discharged to a land application area (as applicable)
- U. **"owner of record"** means an owner of property according to the property records of the tax assessor in the county in which the discharge site is located at the time the application was deemed administratively complete
- V. **"permittee"** means a person who is issued or receives by transfer a discharge permit for a dairy facility or, in the absence of a discharge permit, a person who makes or controls a discharge at a dairy facility.
- W. **"production area"** means that part of the animal feeding operation that includes the following: the animal confinement areas; the manure, residual solids and compost storage areas; the raw materials storage areas; and the wastewater and stormwater containment areas. The animal confinement areas include but are not limited to open lots, housed lots, feedlots, confinement barns, stall barns, free stall barns, milkrooms, milk centers, cowyards, barnyards, hospital pens and barns, and animal walkways. The manure, residual solids and compost storage areas include, but are not limited to, storage sheds, stockpiles, static piles, and composting piles. The raw materials storage areas include, but are not limited, to feed silos, silage storage areas, feed storage barns, and liquid feed tanks. The wastewater and stormwater containment areas include, but are not limited to, settling separators,

impoundments, sumps, run-off drainage channels, and areas within berms and diversions which prohibit uncontaminated stormwater from coming into contact with contaminants

- X. **“responsible person”** means a person who is required to submit a discharge permit or who submits a discharge permit
- Y. **“secretary”** or **“director”** means the secretary of the New Mexico Environment Department or the director of a constituent agency designated by the **commission**
- Z. **“spillway”** means a structure used for controlled releases from an impoundment designed to receive stormwater, in a manner that protects the structural integrity of the impoundment
- AA. **“stormwater”** means direct precipitation and run-off that comes into contact with water contaminants within the production area of a dairy facility
- BB. **“TDS”** means total dissolved solids as determined by the "calculation method" (sum of constituents), by the "residue on evaporation method at 180 degrees" of the "U.S. geological survey techniques of water resource investigations," or by conductivity, as the secretary may determine
- CC. **“toxic pollutant”** means a water contaminant or combination of water contaminants in concentration(s) which, upon exposure, ingestion, or assimilation either directly from the environment or indirectly by ingestion through food chains, will unreasonably threaten to injure human health, or the health of animals or plants which are commonly hatched, bred, cultivated or protected for use by man for food or economic benefit; as used in this definition injuries to health include death, histopathologic change, clinical symptoms of disease, behavioral abnormalities, genetic mutation, physiological malfunctions or physical deformations in such organisms or their offspring; in order to be considered a toxic pollutant a contaminant must be one or a combination of the potential toxic pollutants listed below and be at a concentration shown by scientific information currently available to the public to have potential for causing one or more of the effects listed above; any water contaminant or combination of the water contaminants in the list below creating a lifetime risk of more than one cancer per 100,000 exposed persons is a toxic pollutant. The list of **toxic pollutants** recognized by NMED can be found in 20.6.2.7(T) NMAC.
- DD. **“unauthorized discharge”** means a release of wastewater, stormwater or other substances containing water contaminants not approved by a discharge permit
- EE. **“wastewater”** means water, that has come into contact with water contaminants as a result of being directly or indirectly used in the operations of a dairy facility including, but not limited to, the following: washing, cleaning, or flushing barns or other roof-covered production areas; washing of animals; spray-cooling of animals (except in open lots); and cooling or cleaning of feed mills and equipment. Wastewater does not include overflow from the drinking water system or stormwater unless overflow or stormwater that is collected is comingled with wastewater, or it comes into contact with water contaminants as a result of being directly or indirectly used in dairy facility operations

- FF. **“wastes”** means sewage, industrial wastes, or any other liquid, gaseous or solid substance which will pollute any waters of the state

- GG. **“water”** means all water including water situated wholly or partly within or bordering upon the state, whether surface or subsurface, public or private, except private waters that do not combine with other surface or subsurface water

- HH. **“water contaminant”** means any substance that could alter if discharged or spilled the physical, chemical, biological or radiological qualities of water; **“water contaminant”** does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954

- II. **“water pollution”** means introducing or permitting the introduction into water, either directly or indirectly, of one or more water contaminants in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property

D102 **Acronyms**

CQA	construction quality assurance
CQC	construction quality control
DP	discharge permit
FEMA	federal emergency management administration
FIRM	flood insurance rate map
gpd	gallon per day
mg/L	milligram per liter
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMP	Nutrient Management Plan
NMSA	New Mexico Statutes Annotated
TDS	total dissolved solids
WQA	New Mexico Water Quality Act
WQCC	Water Quality Control Commission