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**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Ground Water Quality Bureau

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James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

January 15, 2020

Allen Squire, Owner
Southwind Dairy
85 E. Ottawa Road
Hagerman, NM 88232

RE: Discharge Permit Renewal and Modification, DP-776, Southwind Dairy

Dear Mr. Squire:

On May 10, 2019, the New Mexico Environment Department (NMED) proposed renewal and modification of the Ground Water Discharge Permit for Southwind Dairy, DP-776, pursuant to Subsection H of 20.6.2.3108 NMAC. A draft Discharge Permit for renewal and modification was sent to you at that time. In response, NMED received comments from the facility on May 21, 2019. All of the comments were considered by NMED and some were incorporated into the enclosed Discharge Permit. The permittee may file a petition with the New Mexico Water Quality Control Commission (WQCC) requesting a variance from site specific requirements of 20.6.6 NMAC.

NMED's response to the facility comments are as follows:

1. Field 1 has been removed from the discharge permit.
2. Soil sampling in field LAA-4 will be allowed and is discussed in Section k of Table B3 of the permit.
3. The location of the stormwater pond has been corrected.

NMED issues the enclosed Discharge Permit Renewal and Modification DP-776, to Al Squire, Owner (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, the Ground and Surface Water Protection Regulations, 20.6.2 NMAC, and the Supplemental Permitting Requirements for Dairy Facilities (Dairy Rule), 20.6.6 NMAC.

The Discharge Permit contains requirements that shall be complied with by the permittee and are enforceable by NMED pursuant to Sections 20.6.2.3104 and 20.6.6.8 NMAC, WQA, and NMSA 1978 §§74-6-5 and §74-6-10. The discharge shall be managed in accordance with all applicable requirements

of the Dairy Rule and this Discharge Permit. Issuance of this Discharge Permit does not relieve the permittee of the responsibility to comply with the WQA, 20.6.2 and 20.6.6 NMAC, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

You will be invoiced under separate cover for the remaining permit fee balance of \$2,875.00.

Pursuant to Subsection I of NMSA 1978 § 74-6-5, the term of this Discharge Permit shall be for the fixed term of five years. The term of this Discharge Permit will end on **January 14, 2025**.

Pursuant to Subsection A of 20.6.6.10 NMAC, you are required to submit an application for renewal or renewal/modification to NMED **one year prior** to the end of the Discharge Permit term.

If you have any questions, please contact Marc Bonem at (505) 827-2791 or Nancy McDuffie, Manager of the Agriculture Compliance Section, at (505) 222-9523. Thank you for your cooperation during this Discharge Permit review.

Sincerely,

A handwritten signature in black ink, appearing to read "Michelle Hunter", with a stylized flourish at the end.

Michelle Hunter, Chief
Ground Water Quality Bureau

MH:NM/mb

Encs: Discharge Permit Renewal and Modification, DP-776
Land Application Data Sheet (LADS; also available at the following website:
<https://www.env.nm.gov/gwqb/forms/>
Fertilizer Log

cc: Nancy McDuffie, Agriculture Compliance Section Manager (electronic copy + permit)
Michael Kesler, District Manager, NMED District III (electronic copy + permit)
John Romero, Office of the State Engineer (electronic copy + permit)
Loney Ashcraft, Ashcraft Consulting, ashcraftloney@gmail.com (electronic copy + permit)
ACS Reading File



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**GROUND WATER QUALITY BUREAU
DISCHARGE PERMIT – RENEWAL AND MODIFICATION
EXISTING DAIRY FACILITY with a LAND APPLICATION AREA
Issued under 20.6.2 and 20.6.6 NMAC**

TEMPO AI#:	2432
GWQB Discharge Permit No:	DP-776
Facility Name:	Southwind Dairy
Permittee Name:	Allen Squire, Owner
Mailing Address:	65 E Ottawa Rd., Hagerman, NM 88232
Permitting Action:	Renewal and Modification
Source Classification:	Agriculture - Dairy
Facility Location:	85 E. Ottawa Rd. Sections 14, 15, and 23, Township 14S, Range 25E
County:	Chaves
Agriculture Compliance Contact	Marc Bonem
Phone No.	(505) 827-2791

EFFECTIVE DATE: January 15, 2020

TERM ENDS: January 14, 2025

Michelle Hunter
Chief, Ground Water Quality Bureau

[Subsection H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.I]

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PART A GENERAL INFORMATION

A100 Introduction

- A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), **DP-776**, to Allen Squire, Owner (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, 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 Southwind Dairy (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 130,000 gallons per day (gpd) of effluent from the Southwind 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 Section 20.6.2.3104 and Subsection A of 20.6.2.3101 NMAC. The discharge may contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC.
- 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 Subsection H of 20.6.2.3109 NMAC, the term of a Discharge Permit shall be for the fixed term of **five (5) years** from the effective date of the Discharge Permit. Modification to an existing Discharge Permit does not change these terms.
- B. **Permit Modification** - Modifications to existing DP-776 represented herein consists of an increase in the maximum daily discharge volume from 96,000 to 130,000 gpd and an increase in the land application area from 331 acres to 356 acres.
- C. **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 [Subsection A of 20.6.6.9 NMAC].
- D. **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 (1) year before the discharge permit expiration date, unless closure of the facility is approved by NMED before that date.

- E. **Transfer of Ownership** - This Discharge Permit is being issued to Allen Squire (permittee) as identified in **Section A100** above. In accordance with Section 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 parties is required, transfer of ownership shall be completed in accordance with Section 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 [Subsection Y of 20.6.6.20 NMAC]. Domestic wastewater generated at the facility is treated or disposed of pursuant to Liquid Waste permits: RO940103, RO040077, and RO 150086.
- B. The permittee is discharging from a facility that meets the definition of “dairy facility.” Sections 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 Section 20.6.2.3105 NMAC.
- D. Groundwater quality as observed in on-site monitoring wells is subject to the criteria of Sections 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 Sections 20.6.6.10 and 20.6.6.12 N MAC 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 85 East Ottawa Road, approximately 5.5 miles west of Hagerman, in Sections 14, 15, and 23, Township 14S, Range 25E, Chaves County. The facility includes the parcels: 4-143-082-065-409-000000, 4-143-082-297-392-000000, 4-143-082-363-423-000000, 4-143-082-280-488-000000, 4-143-082-313-488-000000, 4-142-082-399-330-000000, 4-143-082-397-123-000000, and 4-143-084-141-015-000000.
- C. This dairy facility is comprised of the following wastewater system components as identified in the application dated December 11, 2009 and the administrative record (which includes the original Discharge Permit which was issued on March 28, 1991 and subsequently renewed and

modified on August 31, 1994, March 20, 2000, and September 26, 2005 as of the effective date of this Discharge Permit:

1. Combination Wastewater /Stormwater impoundments:
 - a. **Storage Pond** – a synthetically-lined retention impoundment used to store wastewater and stormwater prior to land application. The Storage Pond is centrally located at the facility, at the southeast corner of the corral. Constructed approximately in 2008, the Storage Pond is constructed with 40-mil HPDE and has a storage capacity of 38.6 Ac-ft.
 - b. **Settling Pond** – an unlined retention impoundment used to collect wastewater and stormwater prior to transfer to the Storage Pond. The Settling Pond is centrally located at the facility, at the southeast corner of the corral, adjacent north of the Storage Pond. Constructed prior to 1994, the Settling Pond is constructed with compacted native earth and has a storage capacity of 7.1 Ac-ft.
2. Stormwater impoundments:
 - a. **Runoff Pond** - an unlined retention impoundment used to store stormwater prior to land application. The Runoff Pond is located west of the corrals at the apex of LAA-2, at the northeast corner of the corral. Constructed prior to 2010, the Runoff Pond has a storage capacity of 4.66 Ac-ft.
3. Fields within the land application area:
 - a. **Field 1** – covers nine acres and is located adjacent east of the Storage Pond along Ottawa Road. Field 1 has been actively receiving wastewater since 2005 by flood irrigation.
 - b. **Field 2** – covers 76 acres and is located at the center of the facility north of Ottawa Road. Field 2 has been actively receiving wastewater since 2005 center pivot irrigation.
 - c. **Field 3** – covers 145 acres and is located at the east of the facility along Vineyard Road. Field 3 has been actively receiving wastewater since 2005 by center pivot irrigation.
 - d. **Field 4** – covers 126 acres and is located south of Ottawa Road and southeast of neighboring Secondwind Dairy. Field 4 has been actively receiving wastewater since 2005 by center pivot 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**.

A105 Facility: Documented Hydrogeologic Conditions

- A. Groundwater most likely to be affected at this dairy facility is at a depth of approximately 178 feet and had a pre-discharge total dissolved solids concentration of approximately 1,000 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 total dissolved solids, chloride, and nitrate (NO₃-N) have been exceeded according to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC.

- C. There are no perennial surface waters existing within the bounds of the facility. The closest surface water system to the facility is the Rio Felix, adjacent north, which is classified as an ephemeral stream.

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 130,000 gpd of wastewater from the production area. Wastewater parlor flows to a concrete sump, then is pumped through a screen solids separator to an unlined settling impoundment, then to a synthetically lined wastewater impoundment for storage. Wastewater is land applied by flood and center pivot irrigation to up to 356 acres of irrigated cropland under cultivation.
 2. The permittee is authorized to use the following impoundments for the following purposes in accordance with Subsection B of 20.6.6.20 NMAC:
 - a. **Storage Pond** – authorized to receive wastewater and stormwater for storage prior to land application. This impoundment *exists* as of the effective date of this Discharge Permit
 - b. **Settling Pond** – authorized to receive wastewater and stormwater for collection prior to transfer to the Storage Pond. This impoundment *exists* as of the effective date of this Discharge Permit.
 - c. **Runoff Pond** – authorized to receive stormwater for storage prior to land application. This impoundment system *exists* as of the effective date of this Discharge Permit.
 3. The permittee is authorized 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 356 acres.
 - a. **Field 1** – was authorized by the last Discharge Permit prior to the effective date of the Dairy Rule (December 31, 2011) to receive wastewater and/or stormwater and *has* received wastewater and/or stormwater as of the effective date of this Discharge Permit.
 - b. **Field 2** – was authorized by the last Discharge Permit prior to the effective date of the Dairy Rule (December 31, 2011) to receive wastewater and/or stormwater and *has* received wastewater and/or stormwater as of the effective date of this Discharge Permit.
 - c. **Field 3** – was authorized by the last Discharge Permit prior to the effective date of the Dairy Rule (December 31, 2011) to receive wastewater and/or stormwater and *has* received wastewater and/or stormwater as of the effective date of this Discharge Permit.
 - d. **Field 4** – was authorized by the last Discharge Permit prior to the effective date of the Dairy Rule (December 31, 2011) to receive wastewater and/or stormwater and *has* received wastewater and/or 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, violate Section 20.6.2.3104 NMAC and must be reported to NMED and remediated as required by Section 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 Subsection A of 20.6.6.20 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 following existing system controls at this dairy facility shall be required as described below:
- Impoundments** - The permittee shall maintain operations of the existing impoundments 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.
 - Flow Meters** - 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:
 - Separator Meter** – located near the separator to measure the volume of wastewater discharged from the production area to Settling Pond.
 - Cropland Meter** – located at the northeast corner of the Storage Pond to measure the volume of wastewater/stormwater applied to each field in the land application area.
 - Transfer Meter** – located on the discharge line of any portable pump used to transfer stormwater from the Storm (Runoff) Pond the Settling Pond.
 - 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:
 - Manure Solids Separator** – an inclined-screen solids separator.
 - 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. **MW- 1S** – hydrologically upgradient of all contamination sources at the dairy facility and located at the northwest corner of the facility
- b. **MW- 1AA** – hydrologically downgradient of the Settling Pond, located at the northeast corner of the Settling Pond
- c. **MW- 2** - hydrologically cross-gradient of Field 2, located southeast of Field 2
- d. **MW- 4** – hydrologically downgradient of the facility, located at the northeast corner of Field 3
- e. **MW- 5** - hydrologically downgradient of the Storage Pond, located near the northeast corner of the Storage Pond
- f. **RA-1259 POD 6** - a plume capture well, to remediate groundwater, as assessed by MW-2

B102 Facility: Conditions for Operation

- A. **Impoundments** - 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
Impoundments**

Engineering, Surveying and Construction and/or Improvements
a) None required.
Operations and Maintenance of All Impoundments
b) Maintain operation of the following existing impoundments in compliance with this section: Storage Pond, Settling Pond, and Stormwater Pond.
c) Maintain the existing wastewater storage impoundment system to contain the maximum daily discharge volume of 130,000 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 Subsection D of 20.6.6.17 NMAC. [Subsection A of 20.6.6.21 NMAC]
d) Maintain impoundments to prevent conditions which could affect the structural integrity of the impoundments and associated liners in accordance with Subsection P of 20.6.6.20 NMAC.
e) Repair or replace the faulty pipe(s) or fixture(s) within 72 hours of discovery of an unauthorized discharge. [Subsection Q of 20.6.6.20 NMAC]
Inspection and Monitoring All Impoundments
f) 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. [Subsection P 20.6.6.20 NMAC]
g) 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.). [Subsection Q of 20.6.6.20 NMAC]
h) Estimate or measure the volume of all wastewater discharged to the wastewater or combination wastewater/stormwater impoundments using flow meters. [Subsection C of 20.6.6.24 NMAC]
i) 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,

Table B2
Impoundments

total Kjeldahl nitrogen, chloride, total sulfur and total dissolved solids pursuant to Subsection B of 20.6.6.24 NMAC.
Recordkeeping and Reporting All Impoundments
j) Report any unauthorized discharges to NMED pursuant to 20.6.2.1203 NMAC.
k) Unless otherwise specified in this Discharge Permit, submit all monitoring information quarterly as part of the required Quarterly Monitoring Report in accordance with the general reporting schedule listed in Table C1 of this Discharge Permit.
l) Report wastewater sample results to NMED annually as part of the next scheduled Quarterly Monitoring Report. [Subsection C of 20.6.6.25]
m) 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]
n) Maintain written records at the dairy facility of all facility inspections including repairs and replacements.

- 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
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]
Operations and Maintenance All Land Application Areas
b) Land apply wastewater and/or 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]
c) Land apply wastewater and/or stormwater only to fields within the land application area receiving fresh irrigation water. Wastewater and/or 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.
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] – 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] The permittee may substitute the rate incorporated in most recent NMSU/ NRCS 590 jobsheet to estimate the nitrogen content of manure solids applied to each LAA.
e) As required, blend wastewater with fresh water using any of the methods provided in Subsection D of 20.6.6.21 NMAC.
f) Minimize ponding within the land application area. [Subsection B of 20.6.6.21 NMAC]
g) Per an approved NMP , remove crops from fields within the land application area by mechanical harvest. [Subsection J of 20.6.6.21 NMAC]
h) Crops may be grazed prior to and between mechanical harvests 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 .

Table B3
Land Application Area Management

- i) 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]
- j) Per Subsection L of 20.6.6.21 NMAC, utilize and maintain backflow prevention devices as summarized in **Table B7** of this Discharge Permit.

Inspection and Monitoring All Land Application Areas

- k) 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**.
- 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.
 - In lieu of monitoring well installation, the facility shall manage **Field-4** in accordance with the approved NMP and shall conduct annual soil sampling in accordance with Subsection L of 20.6.6.25 NMAC. Nitrate concentrations in the bottom third foot of the soil profile shall not exceed 50 ppm as recommended by NMSU publication *Interpreting Soil Tests: Unlock the Secrets of Your Soil* (copy enclosed). If nitrate concentrations exceed 50 ppm the facility shall reduce wastewater application until soil sampling results indicate that the bottom third foot of the soil profile no longer exceed 50 ppm.
- l) 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]
- m) Quarterly collect a sample of water from **RA-1259 POD 6** 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**.
- 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**.
- 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**.

Recordkeeping and Reporting All Land Application Areas

- 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]
- 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**.
- 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**.
- s) Maintain a log recording for fluid volume(s) being land applied that includes the following:

Table B3
Land Application Area Management

<ul style="list-style-type: none"> • date and location of each discharge • flow meter readings immediately prior to and after each discharge • calculated total volume of each discharge reported in gallons and acre-feet
t) Submit a copy of the current log to NMED as part of each <u>Quarterly Monitoring Report</u> . [Subsection B of 20.6.6.25 NMAC]
u) Maintain a log recording for all additional fertilizers applied to each field within the land application area that includes the following: <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
v) Submit a copy of the current log to NMED as part of each <u>Quarterly Monitoring Report</u> . [Subsection F of 20.6.6.25 NMAC]
w) 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]
x) Estimate the annual volume of fresh water applied to each field within the land application area: Report results to NMED as part of the <u>Quarterly Monitoring Report</u> due May 1 . [Subsection E of 20.6.6.25 NMAC]
y) 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 <u>Quarterly Monitoring Report</u> .
z) Per Subsection J of 20.6.6.25 NMAC, submit a nitrogen removal summary report to NMED as part of the next scheduled <u>Quarterly Monitoring Report</u> .

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
a) None required.
Operations and Maintenance
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] <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]
c) Transfer stormwater collected in unlined stormwater impoundment to the Storage Pond in accordance with Subsection I of 20.6.6.20 NMAC. Operational pumps shall be available on-site at all times to enable transfer.

Table B4
Stormwater Management

Inspection and Monitoring
d) 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]
Recordkeeping and Reporting
e) 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 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 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 meters are approved for continued use in compliance with Subsection J of 20.6.6.20 NMAC: Separator Meter and Cropland 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

Table B6
Flow Meters

<p>d) Using flow meter installed on the discharge line (Separator Meter), directly measure the volume of all wastewater discharged to the impoundment authorized to contain wastewater. [Subsection N of 20.6.6.20 NMAC]</p> <p>e) Using flow meter (Cropland Meter) installed on the discharge lines, 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]</p> <p>f) Using flow meter installed on the transfer line or other approved method, 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]</p> <p>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]</p>
Recordkeeping and Reporting
<p>h) Maintain copies of the manufacturer's certificate of calibration and the manufacturer's recommended maintenance schedule at the facility.</p> <p>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]</p> <p>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]</p> <p>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.</p> <p>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.</p>

- F. **Backflow Prevention Devices** - 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.

Table B7
Backflow Prevention

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 <u>Quarterly Monitoring Report</u> due May 1 . [Subsection M of 20.6.6.21 NMAC]

- G. **Monitoring Wells** - 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) Survey all facility groundwater monitoring wells upon installation in accordance with Subsection B of 20.6.6.17 NMAC.
Operations and Maintenance
b) Operate and maintain the following facility groundwater monitoring wells in compliance with Subsection A of 20.6.6.23 NMAC and this section of this Discharge Permit: MW-1S, MW-1AA, MW-2, MW-4, and MW-5 .
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 .
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]
f) Prior to the expiration date of this Discharge Permit, NMED shall have the option to perform 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.
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]
Recordkeeping and Reporting

Table B8
Groundwater Monitoring Wells

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]

- 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: Conditions for Closure

- A. The permittee shall comply with the requirements of Section 20.6.6.30 NMAC and shall submit to NMED all information or documentation required by the applicable portions of Section 20.6.6.30 NMAC.
- B. For permanent closure, the following closure actions shall be completed upon permanent cessation of wastewater discharge:
1. Notify NMED of closure plans within 30 days of cessation.
 2. Provide NMED with a **Disposal Plan** for closure activities: Implement **Disposal Plan** upon NMED approval.
 3. Remove all manure solids and compost from surface areas.
 4. Empty all facility impoundments of wastewater within 6 months of cessation.
 5. Empty all facility impoundments of stormwater within 1 year of cessation.
 6. Complete removal of manure solids from wastewater impoundments within 2 years of cessation
 7. Perforate or remove impoundment liner(s), as applicable, re-grade impoundments with clean fill, and blend area with surrounding surface topography to prevent ponding within 2 years of cessation
 8. Dispose all wastes according the approved **Disposal Plan**.
 9. Perform post-closure monitoring at facility monitoring wells, **MW-1S, MW-1AA, MW-2, MW-4, and MW-5** for a minimum of eight consecutive groundwater sampling events to confirm that the standards of 20.6.2.3103 NMAC are not exceeded and the total nitrogen concentration in groundwater is less than or equal to 10 mg/L. If monitoring results show a failure of or both of these conditions, the permittee shall implement contingency requirements pursuant to 20.6.6.27 NMAC (**Section B103**).

B104 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.

PART C GENERAL CONDITIONS

C100 Introduction

- A. The NMED has reviewed the discharge permit application for the proposed modification and 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	
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.
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.
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.
e)	Repair or replace compromised pipe(s) or fixture(s) within 72 hours of discovery. [Subsection Q of 20.6.6.20 NMAC]
f)	Manage all animal mortalities at the facility in compliance with Subsection W of 20.6.6.20 NMAC.
Inspection and Monitoring	
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.
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.
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.
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]
Recordkeeping and Reporting	
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.
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.
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.
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]
	<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

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

- July 1 through September 30 (third quarter) – report due by **November 1**
 - October 1 through December 31 (fourth quarter) – report due by **February 1**
- 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:
- Verify with NMED within 30 days of the actual removal/reintroduction
- 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]

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. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality, and that more stringent requirements to protect groundwater quality may be required by NMED. The permittee may be required 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), criminal penalties shall be assessed 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. Prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof, 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. 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. Notification of the transfer shall be submitted to NMED 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 be construed as limiting 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/>

- c. Notice of Intent to Discharge

2. Documents found at:

<https://www.env.nm.gov/gwqb/dairy/>

- d. Application for a New Discharge Permit (dairy facility only)
e. Application for Discharge Permit Renewal and/or Modification (dairy facility only)
f. Application for Discharge Permit Renewal for Closure (dairy facility only)

3. Documents found at:

<https://www.env.nm.gov/gwqb/gw-regulations/>

- g. Regulation 20.6.2 NMAC - Ground and Surface Water Protection
h. Regulation 20.6.6 NMAC - Supplemental Permitting Requirements for Dairy Facilities (Dairy Rule)
i. Monitoring well construction and abandonment guidelines
j. 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 NMED 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 NMED of environment 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 Subsection WW of 20.6.2.7 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

