



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

July 14, 2022

Titus Vanderploeg, Owner
Bosque Dairy
2025 Camino de Chavez
Bosque Farms, NM 87068

RE: Draft Discharge Permit Renewal for Closure, DP-1032, Bosque Dairy

Dear Titus Vanderploeg:

The New Mexico Environment Department (NMED) hereby provides notice to you of the proposed approval of Ground Water Discharge Permit Renewal, DP-1032, (copy enclosed), pursuant to 20.6.2.3108.H NMAC. NMED will publish notice to the public of the availability of the draft Discharge Permit in the near future and will forward a copy of that notice to you.

Prior to making a final ruling on the proposed Discharge Permit, NMED will allow 30 days from the date the public notice is published in the newspaper for any interested party, including the Discharge Permit applicant, i.e., yourself, to submit written comments and/or a request a public hearing. Written comments and/or hearing requests for dairy facilities shall be postmarked on or before the end of the comment period, and submitted to the Ground Water Quality Bureau at the address above.

Pursuant to 20.6.2.3108.K NMAC, requests for a hearing shall set forth the reasons for a hearing. For a dairy facility Discharge Permit that includes additional conditions pursuant to 20.6.6.10.H NMAC, the request for hearing shall identify the conditions being disputed, and shall identify the specific reasons said conditions are being disputed. Hearing requests that do not meet the requirements of 20.6.2.3108.K NMAC and 20.6.6.15 NMAC are subject to denial by the Secretary. Hearings are presided over by the Secretary or a hearing officer appointed by the Secretary.

Please contact me at 505-660-8376 or Jaben.richards@state.nm.us with questions or concerns. Written comments and/or a written request for hearing must be received, or the draft Discharge Permit will become final. Thank you for your cooperation during the review process.

Sincerely,

Jaben Richards
Team Leader

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Ground Water Quality Bureau | 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469

Telephone (505) 827-2900 | www.env.nm.gov/gwqb/

Enc: Draft Discharge Permit Renewal for Closure, DP-1032

cc: Nancy McDuffie, GWQB ACS Manager
Sam Carver, Glorieta Geoscience, Inc carver@glorietageo.com
ACS Reading File



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

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

DISCHARGE PERMIT – RENEWAL FOR CLOSURE
EXISTING DAIRY FACILITY with EVAPORATION ONLY
Issued under 20.6.2 and 20.6.6 NMAC

Facility Name: Bosque Dairy
Discharge Permit No: DP-1032
Facility Location: 459 E NM 116, Bernardo, NM 87006
Section 14, Township 03N, Range 01E

County: Socorro
Permittee Name: Titus Vanderploeg
Mailing Address: 2025 Camino De Chavez,
Bosque Farms, NM 87068

Permitting Action: Renewal for Closure
Source Classification: Agriculture- Dairy

Permit Issuance Date: DATE
Permit Expiration Date: DATE

NMED Permit Contact: Jaben Richards
Telephone Number/Email: (505) 660-8376/Jaben.richards@state.nm.us

JUSTIN BALL
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 for Closure (Discharge Permit), DP-1032, to Titus Vanderploeg (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Water Ground and Surface Water Protection Regulations, 20.6.2 NMAC and Supplemental Permitting Requirements for Dairies (Dairy Rule) 20.6.6 NMAC. NMED's purpose in issuing this Discharge Permit to Bosque Dairy (dairy facility) is to promote the protection of public health and groundwater resources (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) by requiring controls on the presence and distribution of water contaminants associated with former dairy facility operations and permanent closure activities and by providing oversight of post-closure monitoring.
- B. Under prior authorization of DP-1032, last issued on December 1, 2017, the Permittee was authorized a maximum daily discharge volume of 3,000 gallons per day (gpd) of effluent from the Bosque Dairy. Pursuant to site conditions, the discharge may have contained water contaminants or toxic pollutants elevated above the standards of 20.6.2.3103 NMAC.
- C. The dairy facility permanently ceased discharging on July 3, 2021. Even after cessation of active discharge, the discharge or leachate retains the potential to 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.
- D. The Permittee is authorized to perform closure activities and post-closure monitoring 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. The obligation of the Permittee to implement facility closure and post-closure requirements survives the expiration of this Discharge Permit. If closure or post-closure activities specified herein have not been completed by the Permittee prior to the expiration of this Discharge Permit and/or the Permittee has not received from NMED a notice of Discharge Permit termination, the Permittee must request from NMED a renewal of this Discharge Permit as described in Item C below.
- 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

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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 at least one year before the discharge permit expiration date, unless permanent closure and cessation of all post-closure monitoring requirements has been approved by NMED before that date.
- D. **Transfer of Ownership** - This Discharge Permit is being issued to Titus Vanderploeg (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

- E. **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.
- A. The Permittee is requesting closure of 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. Permanent closure of the dairy facility shall be managed in accordance with all applicable requirements of the Dairy Rule and this Discharge Permit.
- B. The discharge from the dairy facility is not subject to any of the exemptions of 20.6.2.3105 NMAC.
- C. 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.
- D. 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 20.6.6.13 NMAC prior to the effective date of this Discharge Permit.

A104 Facility: Physical Description

- A. This dairy facility meets the definition of “existing facility.”

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- B. This dairy facility is located at 459 E NM 116, approximately 4.5 miles north of Bernardo, in Section 14, T03N, R01E, Socorro County.
- C. On the effective date of this Discharge Permit, the dairy facility is comprised of the following wastewater system components as identified in the application and the administrative record:
1. Wastewater impoundments:
 - a. **Lagoon 1** – a clay lined retention impoundment used to store wastewater for disposal by evaporation. Lagoon 1 has a capacity of approximately 50 acre feet and is located northwest of the milking parlor in the northwest corner of the facility. Lagoon 1 was constructed overtop of two earthen-lined wastewater impoundments in 2002.
 - b. **Lagoon 2** - an “L” shaped synthetically lined lagoon used to store wastewater for disposal by evaporation. Lagoon 2 has a capacity of approximately 11.5 ac-ft and is located in the southeast corner of the facility.
 2. Stormwater impoundments:
 - a. **Runoff Pond 1** - an unlined retention impoundment used to collect stormwater for transfer to the wastewater impoundment system for disposal by evaporation. Runoff Pond 1 has a capacity of approximately 1.8 acre feet and is located northwest of Lagoon 2.
 - b. **Runoff Pond 2** – an unlined retention impoundment used to collect stormwater for transfer to the wastewater impoundment system for disposal by evaporation. Runoff Pond 1 has a capacity of approximately 0.75 acre feet and is located northeast of Lagoon 2.

These system components are identified as potential sources of groundwater contamination and require closure as identified in this Discharge Permit. A summary of all wastewater system components authorized to release/receive discharge under prior issuance(s) of this Discharge Permit is provided in **Section A106**.

A105 Facility: Existing System Controls

- A. During operation, the Permit required the following existing system controls at this dairy facility as described below:
1. **Impoundment(s)**: As listed in Item C above
 2. **Flow Meter(s)**:
 - a. **Sump Meter** - located on the sump discharge line to measure the volume of wastewater discharged from the production area to Lagoon 1 or Lagoon 2.
 3. **Manure Solids Separator**:
 - a. No manure solids separator exists at this facility.
 4. **Monitoring Wells** - The dairy facility used the following monitoring wells to supply data representative of groundwater quality:

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- b. **MW-1** - hydrologically up-gradient of all contamination sources at the dairy facility and located north of Lagoon 1
- c. **MW-2** - hydrologically downgradient of Lagoon 1 and located off the southeastern corner of the Lagoon 1.
- d. **MW-3** - hydrologically downgradient of Lagoon 2 and located off the southeastern corner of the Lagoon 2.

These system controls shall either require continued operation and maintenance during closure or post-closure activities or termination and removal as identified in this Discharge Permit.

A106 Facility: Documented Hydrogeologic Conditions

- A. Groundwater most likely to be affected at this dairy facility is at a depth of approximately 47.75 feet and had a pre-discharge total dissolved solids concentration of approximately 770 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 nitrate-N and total dissolved solids (TDS) have been exceeded according to the criteria of 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 Grande located less than one mile east of the facility. The Rio Grande is 1,885 miles (3,034 km) long, and is the fourth longest river system in the United States. Its headwaters originate in the San Juan Mountains of Colorado, and it flows through New Mexico and along the boundary between Texas and Mexico to the Gulf of Mexico.

A107 Facility: Discharge Permit History and Prior Authorization

- A. The original Discharge Permit issued on October 23, 1995 and subsequently renewed and/or modified on June 30, 2001 and December 1, 2017, respectively. DP-1032, last issued on December 1, 2017, authorized the Permittee to discharge water contaminants as part of facility operations subject to the following requirements:
 - 1. Discharge up to 3,000 gpd of wastewater from the production area. Wastewater flowed to a concrete sump to either a clay or synthetically lined wastewater impoundment for disposal by evaporation.
 - 2. Utilize the following impoundments in accordance with 20.6.6.20.B NMAC as follows:
 - a. **Lagoon 1** – was authorized to receive wastewater and stormwater for disposal by evaporation. This impoundment exists and remains unclosed as of the effective date of this Discharge Permit.

- b. **Lagoon 2** – was authorized to receive wastewater and stormwater for disposal by evaporation. This impoundment exists and remains unclosed as of the effective date of this Discharge Permit.
 - c. **Runoff Pond 1** – was authorized to receive stormwater prior to transfer to the wastewater impoundment system for disposal by evaporation.
3. The following impoundment(s) as listed in **Section A104** above, although built, *were never* authorized for use under DP-1032 and exist unclosed as of the effective date of this Discharge Permit: **Runoff Pond 2**.

PART B FACILITY SPECIFIC REQUIREMENTS

B100 Facility: Conditions for Closure

- A. **Impoundment(s) and Pond(s)** - The Permittee shall permanently close all impoundments, and ponds at the dairy facility as identified in **Sections A104 and A105** above in accordance with 20.6.6 NMAC and the conditions summarized in **Table B1** below.

Table B1
Impoundment(s), Pond(s), and Settling Basin(s) Closure Requirements

Engineering and Surveying	
a) None required.	
Operations and Maintenance	
b) Within six (6) months of the effective date of this Discharge Permit [DATE] empty and dispose of all wastewater from the following impoundments in accordance with an approved <u>Disposal Plan: Lagoon 1</u> . [20.6.6.30.A NMAC]	
c) Within one (1) year of the effective date of this Discharge Permit [DATE] , empty and dispose of all combination wastewater/stormwater or stormwater from the following impoundments, and ponds in accordance with an approved <u>Disposal Plan: Lagoon 2, Runoff Pond 1, and Runoff Pond 2</u> . [20.6.6.30.A NMAC]	
d) Upon emptying each impoundment and pond, remove all supporting infrastructure and any associated system controls used to supply or transfer wastewater and or stormwater to/from the impoundments and ponds and/or settling basin and dispose of in accordance with an approved <u>Disposal Plan</u> .	
e) Within two (2) years of the effective date of this Discharge Permit [DATE], remove and dispose of manure solids from the following facility impoundments and ponds in accordance with an approved <u>Disposal Plan: Lagoon 1, Lagoon 2, Runoff Pond 1, and Runoff Pond 2</u> . [20.6.6.30.A NMAC]	
f) Within two (2) years of the effective date of this Discharge Permit [DATE] , perforate or remove all liner material from the following facility impoundments and dispose of any wastes generated in accordance with an approved <u>Disposal Plan: Lagoon 2</u> . [20.6.6.30.A NMAC]	
g) Using clean fill for which a borrow source is appropriated, fill and re-grade all emptied impoundments, ponds, and/or settling basins to blend into the surrounding pre-existing surface topography within two (2) years of the effective date of this Discharge Permit [DATE] to prevent any subsequent ponding of stormwater in the area. [20.6.6.30.A NMAC]	
h) Send photo documentation of properly closed Impoundments and Settling Ponds to NMED.	

Table B1
Impoundment(s), Pond(s), and Settling Basin(s) Closure Requirements

<p>i) Until all wastewater has been removed from an impoundment or pond and the feature filled and re-graded to reflect surrounding topography, maintain the feature such that:</p> <ul style="list-style-type: none"> • storage capacity preserves a minimum of two feet of freeboard at all times as required by 20.6.6.17.D NMAC. [20.6.6.22 NMAC] • conditions which could affect the structural integrity of the feature or any associated feature liner are prevented. [20.6.6.20.P NMAC] • any associated faulty pipe(s) or fixture(s) are repaired or replaced within 72 hours of discovery to mitigate or prevent an unauthorized discharge. [20.6.6.20.Q NMAC]
Inspection and Monitoring
<p>j) Until all wastewater has been removed, continue to collect and analyze composite wastewater samples from each impoundment used for disposal of wastewater by evaporation in accordance with 20.6.6.26 NMAC to maintain compliance with the general monitoring and reporting requirements specified for a dairy facility (Table C1). Wastewater samples shall be collected semi-annually and analyzed for nitrate as nitrogen, total Kjeldahl nitrogen, chloride, total sulfur, and total dissolved solids pursuant to 20.6.6.24.B NMAC.</p>
Recordkeeping and Reporting
<p>k) Report any unauthorized discharges to NMED pursuant to 20.6.2.1203 NMAC.</p> <p>l) Unless otherwise specified in this Discharge Permit, continue to submit all required monitoring information quarterly as part of the Quarterly Monitoring Report in accordance with the general reporting schedule listed in Table C1 of this Discharge Permit.</p> <p>m) Until all wastewater is removed:</p> <ul style="list-style-type: none"> • notify NMED within 24 hours of discovery of any observed condition(s) that may impact the structural integrity of a berm or liner or that may result in an unauthorized discharge. [20.6.6.20.P NMAC] • continue to report composite wastewater sample results to NMED semi-annually as part of the Quarterly Monitoring Reports due May 1 and November 1. [20.6.6.26 NMAC] <p>n) Maintain written records at the dairy facility of any facility inspections performed during closure activities including repairs or replacements.</p>

- B. **Manure Solids and Compost** - The Permittee shall permanently remove from the surface of the dairy facility all residual manure solids and compost in accordance with 20.6.6.30 NMAC and the conditions summarized in **Table B2** below.

Table B2
Manure Solids and Compost Closure Requirements

Engineering and Surveying
<p>a) None required.</p>
Operations and Maintenance
<p>b) Remove and dispose of offsite all manure solids stored or otherwise present on the surface of the dairy facility within two (2) years of the effective date of this Discharge Permit [DATE] in accordance with an approved Disposal Plan. [20.6.6.30.A NMAC]</p>

Table B2
Manure Solids and Compost Closure Requirements

c) Divert stormwater run-on and run-off in these areas to minimize ponding and or excessive erosion (See Table B4).
Inspection and Monitoring
d) Inspect areas as part of post-closure monitoring to document <ul style="list-style-type: none"> • structural integrity of any emplaced stormwater conveyance structures or BMPs • the presence of standing liquid or excessive erosion after a precipitation event
Recordkeeping and Reporting
e) Provide to NMED a summary of the implemented closure measures as specified in this table and any associated monitoring and sampling data collected in the Quarterly Monitoring Report (see Table C1 of this Discharge Permit).

- C. **Monitoring Well(s)** – As part of closure, a Permittee may be required to either install one or more additional groundwater monitoring wells for post-closure monitoring (per 20.6.6.30.A NMAC) and/or plug and abandon one or more existing groundwater monitoring wells (per 20.6.6.30.C NMAC). The groundwater monitoring well system approved for closure of this dairy facility is detailed in **Table B3** below.

Table B3
Monitoring Well Requirements for Closure

Engineering and Surveying
a) None required.
Operations and Maintenance
b) Operate and maintain the following existing facility groundwater monitoring well(s) in compliance with 20.6.6.23.A NMAC and this section of this Discharge Permit: MW-1, MW-2, and MW-3 .
c) Verify all facility monitoring wells are permanently identified in accordance with 20.6.6.23.C NMAC.
Inspection and Monitoring
d) Continue to perform quarterly routine groundwater sampling of all wells in accordance with 20.6.6.23.F NMAC to comply with the required monitoring reporting schedule listed in Table C1 . Monitoring of these wells shall, at a minimum, continue until all closure measures as specified in Section B100 of this Discharge Permit have been completed and confirmation of closure completion has been received from NMED. Any post-closure monitoring requirements for the dairy facility are specified in Section B101 of this Discharge Permit.
e) Analyze collected groundwater sample(s) according to the methods listed in 20.6.6.24.B and 20.6.2.3017.B NMAC. Pursuant to 20.6.6.24.B NMAC, sample constituents that require analysis and reporting to NMED include: nitrate as nitrogen, total Kjeldahl nitrogen, chloride, sulfate and total dissolved solids. [20.6.6.23.G 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.

Table B3
Monitoring Well Requirements for Closure

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
g) A Quarterly Monitoring Report shall continue to 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: [20.6.6.23.G NMAC] <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 20.6.6.23.L NMAC

- D. **Stormwater Management** - During implementation of both closure measures and post-closure monitoring, 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 During Closure and Post-Closure

Engineering and Surveying
h) None required.
Operations and Maintenance
i) Implement stormwater management by: [20.6.2.3109 NMAC] <ul style="list-style-type: none"> • Maintain stormwater conveyance [20.6.6.20.H NMAC] • Divert stormwater to minimize stormwater ponding and infiltration. [20.6.6.20.H NMAC] • Maintain diversions for facility stormwater run-on and run-off to prevent ponding within areas used for manure and compost stockpiling [20.6.6.20.S NMAC]
Inspection and Monitoring
j) None required.
Recordkeeping and Reporting
k) None required.

B101 Facility: Conditions for Post-Closure Monitoring and Maintenance

- A. Pursuant to 20.6.6.30.B NMAC, the Permittee may initiate post-closure monitoring and maintenance at a dairy facility following completion of and confirmation by NMED that the requirements of **Section B100** have been adequately met.
- B. **Groundwater Monitoring** - The Permittee is required to perform post-closure groundwater monitoring in accordance with 20.6.6.30.B NMAC and **Table B5** below.

Table B5
Post-Closure Groundwater Monitoring Requirements

Engineering and Surveying
a) None required.
Operations and Maintenance
b) Operate and maintain the following facility groundwater monitoring well(s) for post-closure monitoring in compliance with 20.6.6.23.A NMAC and this section of this Discharge Permit: MW-1, MW-2, and MW-3.
Inspection and Monitoring
<p>c) Perform routine groundwater sampling of all post-closure monitoring wells in accordance with 20.6.6.23.F NMAC to comply with the required monitoring reporting schedule listed in Table C1: MW-1, MW-2, and MW-3. Post-closure monitoring at a dairy facility shall continue until a minimum of eight consecutive groundwater sampling events 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 failure of one or both of these conditions, the Permittee shall implement contingency requirements pursuant to 20.6.6.27 NMAC (Section B102).</p> <p>d) Analyze collected groundwater sample(s) according to the methods listed in 20.6.6.24.B and 20.6.2.3017.B NMAC. Pursuant to 20.6.6.24.B NMAC, sample constituents that require analysis and reporting to NMED include: nitrate as nitrogen, total Kjeldahl nitrogen, chloride, sulfate and total dissolved solids. [20.6.6.23.G NMAC]</p> <p>e) 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.</p> <p>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>f) A Quarterly Monitoring Report shall continue to 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: [20.6.6.23.G 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)

Table B5
Post-Closure Groundwater Monitoring Requirements

- Groundwater elevation contour maps utilizing elevation contours of 2 ft or less in accordance with 20.6.6.23.L NMAC

- C. **Stormwater Management** - During implementation of post-closure monitoring, the Permittee shall continue to manage stormwater at the dairy facility in accordance with 20.6.6 NMAC and the conditions as summarized in **Table B4** presented in **Section B100** of this Discharge Permit.
- D. **Well Plugging and Abandonment** - Upon written notification by certified mail from NMED that post-closure monitoring at the facility as specified in **Table B5** of this Discharge Permit may cease, the Permittee shall abandon all facility well(s) in accordance with the conditions specified in 20.6.6.30.C NMAC and **Table B6** below.

Table B6
Post-Closure Well Plugging and Abandonment Requirements

Engineering and Surveying
a) None required.
Operations and Maintenance
b) Within ninety (90) days of receipt of written notification from NMED, the Permittee shall properly plug and abandon the following 3 existing monitoring well(s): MW-1 , MW-2 , and MW-3 . Well[s] shall be plugged and abandoned pursuant to 19.27.4 and 20.6.6.30.C NMAC and in accordance with NMED's <i>Monitoring Well Construction and Abandonment Guidelines</i> and any other applicable local, state, and federal regulations. Documentation describing the plug and abandonment procedures, including photographic documentation, shall be presented in a Post-Closure Well Abandonment Report .
Inspection and Monitoring
c) None required.
Recordkeeping and Reporting
d) Provide to NMED a Post-Closure Well Abandonment Report within 60 days of completion of well plugging activities. The Post-Closure Well Abandonment Report shall provide information equivalent to the plugging record requirements of 19.27.4 NMAC. [20.6.6.30.C NMAC]

B102 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 may occur as part of closure or post-closure and 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. **Spills, leaks, unauthorized discharge** - Any spill or release that is not authorized under this Discharge Permit.

If a contingency or corrective action plan is required, the Permittee shall comply with the requirements of 20.6.2.1203, 20.6.6.27 and 20.6.6.29 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of 20.6.2.1203, 20.6.6.27 and 20.6.6.29 NMAC. The Permittee may be required to abate water pollution pursuant to 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 20.6.2.4103 NMAC.

PART C GENERAL CONDITIONS

C100 Introduction

- A. NMED has reviewed the permit application for the proposed closure 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 closure and post-closure of a dairy facility with means for wastewater disposal by evaporation only 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 conditions as listed in this part and the facility-specific conditions as listed in **Part B** of this Discharge Permit are mandated to achieve permanent closure of the facility.
- B. For closure, the Permittee shall comply with the requirements of 20.6.6.30 NMAC and shall submit to NMED all information or documentation required by the applicable portions of 20.6.6.30 NMAC.

Table C1
General Discharge Permit Conditions for Dairy Facility Closure:
Existing Dairy Facility with Evaporation Only

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

Table C1
General Discharge Permit Conditions for Dairy Facility Closure:
Existing Dairy Facility with Evaporation Only

Operations and Maintenance
<p>b) Comply with the requirements of 20.6.6.20 and 20.6.6.22 NMAC, and submit to NMED all information or documentation required by the applicable portions of 20.6.6.20 and 20.6.6.22 NMAC.</p> <p>c) Operate in a manner such that standards and requirements of 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 20.6.6.20.S NMAC.</p>
Inspection and Monitoring
<p>e) Comply with the requirements of 20.6.6.23, 20.6.6.24 and 20.6.6.26 NMAC, and submit to NMED all information or documentation required by the applicable portions of such sections.</p>
Recordkeeping and Reporting
<p>f) 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>g) 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>h) Retain required records for a minimum period of 10 years from the date of any sample collection, measurement, report or application in accordance with 20.6.6.33 NMAC.</p> <p>i) Unless otherwise identified in this Discharge Permit, submit monitoring reports to NMED quarterly according to the following schedule: [20.6.6.24.A 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

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 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 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

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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
 1. 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 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 20.6.6.12(B) 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]

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- 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 20.6.2.3107.A NMAC, this record shall include:
 - a. Repair, replacement or calibration of any monitoring equipment; and
 - 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 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]

Part D MISCELLANEOUS

D100 Supporting On-Line Documents

- A. Copies of the following documents can be downloaded from NMED's web site under Forms.

<https://www.env.nm.gov/forms/>

1. Notice of Intent to Discharge
2. Application for a New Discharge Permit (dairy facility only)
3. Application for Discharge Permit Renewal and/or Modification (dairy facility only)
4. Application for Discharge Permit Renewal for Closure (dairy facility only)

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 (if applicable), 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