



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

January 7, 2022

Carlos Villalpando, Manager
J&M Dairy
288 East Ojibwa
Dexter, NM 88230

RE: Draft Discharge Permit Renewal for Closure, DP-765, J&M Dairy

Dear Carlos Villalpando:

The New Mexico Environment Department (NMED) hereby provides notice to you of the proposed approval of Ground Water Discharge Permit Renewal for Closure, DP-765, (copy enclosed), pursuant to Subsection H of 20.6.2.3108 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 Subsection K of 20.6.2.3108 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 Subsection H of 20.6.6.10 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 Subsection K of 20.6.2.3108 NMAC and Section 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

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

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-765
Stage 1 Abatement Plan J&M Dairy
cc: Nancy McDuffie, GWQB ACS Manager
Steve Jetter, Glorieta Geoscience, Inc., steve@glorietageo.com
Jay Lazarus, Glorieta Geoscience, Inc., lazarus@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

Draft: January 7, 2022

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

Facility Name: J&M Dairy
Discharge Permit No: DP-765
Facility Location: 456 North 13th Street, Artesia
Sections 18 & 20, Township 16S, Range 26E

County: Eddy
Facility Owner/Operator: Carlos Villalpando, Manager
Permittee Name: Abel Villalpando, Owner
Mailing Address: 288 East Ojibwa
Dexter, NM 88230

Permitting Action: Renewal
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 D. BALL
Acting Chief, Ground Water Quality Bureau

TABLE OF CONTENTS

Part A	GENERAL INFORMATION.....	1
A100	Introduction	1
A101	Terms of Permit Issuance	1
A102	Applicable Regulations	2
A103	Additional Information Requirements	3
A104	Facility: Physical Description	3
A105	Facility: Documented Hydrogeologic Conditions	4
A106	Facility: Existing System Controls	4
A107	Facility: Discharge Permit History and Prior Authorization.....	6
Part B	FACILITY SPECIFIC REQUIREMENTS.....	6
B100	Authorization for Land Application During Closure	6
B101	Facility: Conditions for Closure.....	7
B102	Facility: Conditions for Post-Closure Monitoring and Maintenance.....	10
B103	Facility: Contingency Plan.....	10
Part C	GENERAL CONDITIONS.....	11
C100	Introduction.....	11
C101	Legal.....	12
C102	General Inspection and Entry Requirements	13
C103	General Record Keeping and Reporting Requirements	14
Part D	MISCELLANEOUS	15
D100	Supporting On-Line Documents	15
D101	Definitions.....	15
D102	Acronyms.....	18

LIST OF TABLES

Table B1	Impoundment Closure Requirements	7
Table B2	Land Application Area Management During Closure	8
Table B3	Manure Solids and Compost Closure Requirements	8
Table B4	Monitoring Well Requirements for Closure.....	9
Table B5	Stormwater Management During Closure and Post-Closure	10
Table C1	General Discharge Permit Conditions for Dairy Facility Closure	12

PART A GENERAL INFORMATION

A100 Introduction

- A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal for Closure (Discharge Permit), DP-765, to Abel Villalpando (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 J&M 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-765, last issued before the effective date of the Dairy Rule on November 28, 2012, the Permittee was authorized a maximum daily discharge volume of 90,000 gallons per day (gpd) of effluent from J&M 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. In addition to the previous Discharge permit, the facility has also been regulated pursuant to the Stage 1 Abatement Plan of J&M Dairy as approved on April 21, 2006 to abate groundwater contamination at the Site pursuant to 20.6.2.4103 and 20.6.2.4104 NMAC.
- C. The dairy facility permanently ceased discharging prior to Abel Villalpando purchasing the facility on February 24, 2015. 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. These discharges may contain water contaminants or toxic pollutants elevated above the standards of 20.6.2.3103 NMAC in compliance with the terms and conditions of this Discharge Permit.
- 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, this Discharge Permit, and the 2006 Stage 1 Abatement Plan of J&M Dairy 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 is 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 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 Abel Villalpando (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 parties is required, transfer of ownership shall be completed in accordance with 20.6.6.34 NMAC as described further in Item D of **Part C101** of this Discharge Permit.

A102 Applicable Regulations

- A. **Scope** - This Discharge Permit applies solely for the regulation of process wastewater or stormwater generated as a result of former dairy facility operations and closure and post-closure monitoring activities 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.
- B. 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.
- C. The discharge from the dairy facility is not subject to any of the exemptions of 20.6.2.3105 NMAC.
- D. Groundwater quality as observed in on-site monitoring wells is subject to the criteria of 20.6.2.3101 and 20.6.2.3103 NMAC unless otherwise specified in this Discharge Permit.
- E. Complying with the applicable requirements of 20.6.2 and 20.6.6 NMAC does not relieve a dairy facility’s owner, operator or Permittee from complying with the requirements of other applicable local, state and federal regulations or laws.

A103 Additional Information Requirements

- A. The Permittee shall have 90 days from the effective date of this Discharge Permit (by **DATE**) to submit all the necessary information to comply with 20.6.6.10 and 20.6.6.13 NMAC.
- B. The Permittee shall submit the necessary information by completing the application form for Renewal for Closure located at the following address:

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

- C. The following sections of the application form for Renewal for Closure shall be completed, and the form shall be signed by the Permittee and notarized prior to submission:
 - 1. Part II.B.3 provide monitoring well logs and locations for MW-1, MW-2, MW-3, MW-4, MW-6, MW-7, MW-8U, and MW-13U, as pursuant to 20.6.6.23.A and B NMAC.

A104 Facility: Physical Description

- A. This dairy facility meets the definition of “existing facility.”
- B. This dairy facility is located at 456 North 13th Street, approximately four miles north of Artesia, in Sections 18 and 20, Township 16S, Range 26E, in Eddy 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 impoundment:
 - a. **Lagoon** – a clay lined storage impoundment used to store wastewater prior to land application. The Lagoon is located southeast of the corrals and parlor, constructed at an unknown date, the Lagoon is lined with clay and has a current storage capacity of 3.3 acres. After cessation of discharge, the Wastewater Lagoon does not retain any wastewater.
 - 2. Stormwater impoundments:
 - a. **Stormwater Pond** – a clay lined retention impoundment used to receive stormwater prior to land application or transfer to the Wastewater Lagoon. The Stormwater Pond is located to the northeast of the corrals. Constructed at an unknown date, lined with clay, and has a storage capacity of 10.69 Ac-ft.
 - 3. Fields within the land application area:
 - a. **Field 1** – 65 acres, located between the corrals and Field 2. Field 1 received wastewater discharge between 10/13/2009 and 2/24/2015. Wastewater was applied by a center pivot.
 - b. **Field 2** – 123 acres, located to the east of Field 1. Field 2 received wastewater discharge between 10/13/2009 and 2/24/2015. Wastewater was applied by a center pivot.

These system components are identified as potential sources of groundwater contamination and may 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 A107**.

A105 Facility: Documented Hydrogeologic Conditions

- A. Groundwater most likely to be affected at this dairy facility is at a depth of approximately 32 feet and had a pre-discharge total dissolved solids concentration of 2,250 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 have been exceeded according to the criteria of 20.6.2.3101 and 20.6.2.3103 NMAC.
 1. The Permittee shall continue to adhere to the terms for Stage 1 Abatement Plan of J&M Dairy as approved on April 21, 2006 to abate groundwater contamination at the Site pursuant to 20.6.2.4103 and 20.6.2.4104 NMAC. Within 90 days of the effective date of this Discharge Permit (**by DATE**) the permittee shall provide a comprehensive analysis of groundwater abatement activities at J&M Dairy. The analysis shall include review of the progress made towards reducing the nature and extent of the impacted groundwater plume in the lower saturated zone, including at a minimum, trend analysis of water quality and associated water level trends in monitoring wells. Based on results of the analysis, the permittee shall propose measures to address abatement of the remaining groundwater plume in the lower saturated zone, including replacement wells to define the plumes extent. This enforcement action shall remain in full force and effect unless the Permittee submits a revised Stage 1 Abatement plan within 60 days (**by DATE**) of the effective date of this permit.
- C. There are no perennial surface waters existing within the bounds of the facility. The closest surface water system to the facility is the Pecos River located approximately three and a half miles to the east.

A106 Facility: Existing System Controls

- A. During operation, this dairy facility employed the following system controls pursuant to operational requirements:
 2. **Impoundments**: Lagoon and Stormwater Pond.
 3. **Flow Meters**:
 - a. **Flow Meter 1** – located on the discharge line between the parlor sump and the wastewater storage impoundment to measure the volume of wastewater discharged from the production area to the wastewater storage impoundment.
 - b. **LAA Flow Meter** – located on the discharge line from the wastewater storage impoundment to measure the volume of wastewater discharged to each field in the land application area.

- c. **SW Flow Meter** – located on the pipeline between the Stormwater Pond and the land application area to measure the volume of stormwater applied to each field in the land application area.
- 4. **Manure Solids Separator:**
 - a. **Manure Solids Separator** – a passive solids separator.
- 5. **Monitoring Wells** - The dairy facility used the following monitoring wells to supply data representative of groundwater quality:
 - b. **MW-2** – located in the lower saturated zone, hydrologically downgradient of the Wastewater Impoundment and located southeast corner of the Wastewater Impoundment. This well is dry.
 - c. **MW-3** – located in the lower saturated zone, hydrologically downgradient of Field 1 and located south of Field 1. This well is dry.
 - d. **MW-4** – located in the upper saturated zone, hydrologically downgradient of Field 1 and located south of Field 1. This well is dry.
 - e. **MW-6** – located in the lower saturated zone, hydrologically downgradient of Field 1 and located southwest of Field 1. This well is dry.
 - f. **MW-8U** – located in the upper saturated zone, hydrologically upgradient of all contamination sources at the dairy facility and located west of the corrals. This well is dry.
 - g. **MW-13U** – located in the upper saturated zone, hydrologically downgradient of LAA-2 and LAA-3 and located southeast of LAA-2 and northeast of LAA-3. This well is dry.

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

- B. As of the effective date of this Discharge Permit, a total of 19 monitoring wells are documented at or near this dairy facility as identified in the application and/or the administrative record. Of these 19 monitoring wells, only 5 can be sampled consistently, thus, all facility monitoring wells that are not dry or damaged are subject to monitoring requirements set forth in the terms of the Stage 1 Abatement Plan of J&M Dairy as approved on April 21, 2006. These wells are:
 - 1. **MW-1** – located in the upper saturated zone and located west of the Lagoon.
 - 2. **MW-7** – located in the lower saturated zone, hydrologically downgradient of the Lagoon and located west of the Lagoon.
 - 3. **MW-8L** – located in the lower saturated zone, west of the corrals. This well is dry.
 - 4. **MW-9U** – located in the upper saturated zone, northeast of the Stormwater Pond.
 - 5. **MW-9L** – located in the lower saturated zone, northeast of the Stormwater Pond. MW-9L is dry.
 - 6. **MW-10U** – located in the upper saturated zone, north of Field 2. MW-10U was destroyed.

7. **MW-10L** – located in the lower saturated zone, north of Field 2. MW-10L was destroyed.
8. **MW-10L2** – located in the lower saturated zone, north of Field 2. MW-10L2 cannot be located and is assumed destroyed.
9. **MW-12U** – located in the upper saturated zone, south of Field 2. This well is damaged.
10. **MW-12L** – located in the lower saturated zone, south of Field 2.
11. **MW-13L** – located in the lower saturated zone, southeast of Field 2. This well is dry.
12. **MW-14** – located in the lower saturated zone, east of the corrals.

A107 Facility: Discharge Permit History and Prior Authorization

- A. The original Discharge Permit issued on February 28, 1991 and subsequently modified on July 5, 1991, renewed on May 20, 1996 and April 3, 2002, and renewed and modified on November 28, 2012, respectively. DP-765, last issued on November 28, 2012, authorized the Permittee to discharge water contaminants as part of facility operations subject to the following requirements:
 1. Discharge up to 90,000 gpd of wastewater from the production area. Wastewater flowed to a concrete sump and was pumped to a manure-lined wastewater impoundment for storage prior to land application.
 2. Utilize the following impoundments in accordance with 20.6.6.20(B) NMAC as follows:
 - a. **Lagoon** - was authorized to receive wastewater for storage prior to land application. This impoundment **exists** and remains unclosed as of the effective date of this Discharge Permit.
 - b. **Stormwater Pond** – was authorized to receive stormwater for storage prior to land application. This impoundment **exists** and remains unclosed as of the effective date of this Discharge Permit.
 3. 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 was comprised of the following fields for a total land application area of 188 acres:
 - a. **Field 1** – was authorized to receive wastewater and stormwater.
 - b. **Field 2** – was authorized to receive wastewater and stormwater.

PART B FACILITY SPECIFIC REQUIREMENTS

B100 Authorization for Land Application During Closure

- A. Pursuant to 20.6.6.30(A) NMAC, the Permittee is hereby authorized to continue to apply wastewater, stormwater, and manure solids and compost to fields within the land application area after permanent cessation of discharge operations in accordance with B, C and I of 20.6.6.21 NMAC as follows: **Field 1 and Field 2**. Authorization to discharge to these fields is being solely granted for the purposes of completing closure measures as specified in

20.6.6.30 NMAC and shall be redacted upon NMED confirmation of completion of the required closure measures listed in **Table B1** and **Table B3** of this Discharge Permit.

B101 Facility: Conditions for Closure

- A. **Impoundment** - The Permittee shall permanently close the impoundment at the dairy facility as identified in **Section A104** above in accordance with 20.6.6 NMAC and the conditions summarized in **Table B1** below.

Table B1
Impoundment Closure Requirements

Engineering and Surveying	
a) None required.	
Operations and Maintenance	
b) Within 180 days of the effective date of this Discharge Permit [by DATE], remove and dispose of manure solids from the following facility impoundment in accordance with conditions specified in Table B2 of this Discharge Permit: Lagoon . [20.6.6.30(A) NMAC]	
c) Using clean fill for which a borrow source is appropriated by, fill and re-grade the emptied impoundment to blend into the surrounding pre-existing surface topography within one (1) year 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]	
d) Send photo documentation to NMED of the properly closed Impoundments and Settling Basins.	
Inspection and Monitoring	
e) None required.	
Recordkeeping and Reporting	
f) Report any unauthorized discharges to NMED pursuant to 20.6.2.1203 NMAC.	
g) 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.	
h) Until all wastewater is removed: <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] 	
i) Maintain written records of any facility inspections performed during closure activities including repairs or replacements. Keep records at the facility or make them available to NMED upon request.	

- B. **Land Application Area Management** - The Permittee shall continue to manage all land application areas at the dairy facility in accordance with 20.6.6 NMAC and the conditions summarized in **Table B2** below.

Table B2
Land Application Area Management During Closure

Engineering and Surveying
a) None required.
Operations and Maintenance All Land Application Areas
b) None required.
Inspection and Monitoring All Land Application Areas
c) None required.
Recordkeeping and Reporting All Land Application Areas
d) To achieve compliance with applicable sections of 20.6.6.21 NMAC, the Permittee shall submit a Disposal Plan within 30 days [DATE].
e) Land application and closure activities shall be performed in a manner that is consistent an approved Disposal Plan.
f) Unless otherwise specified in this Discharge Permit, continue to submit all required monitoring or recordkeeping information quarterly or as part of the next scheduled Quarterly Monitoring Report in accordance with the general reporting schedule listed in Table C1 of this Discharge Permit.
g) Maintain an inspection log regarding maintenance of land application infrastructure. Provide log to NMED upon request. [20.6.6.21(K) NMAC]

- C. **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 B3** below.

Table B3
Manure Solids and Compost Closure Requirements

Engineering and Surveying
a) Include, for NMED approval, a Disposal Plan to achieve compliance with 20.6.6.30(A) NMAC, within 30 DAYS of effective date of this Discharge Permit.
Operations and Maintenance
b) Manure solids and compost shall be removed from surface areas at the dairy facility and applied to the designated land application area, as authorized by a discharge permit and transferred off-site for proper disposal as authorized by an approved Disposal Plan.
Inspection and Monitoring
c) None required.
Recordkeeping and Reporting
d) Provide to NMED a summary of completed closure measures according to the implementation schedule in the approved Disposal Plan and any associated monitoring and sampling data collected in the Quarterly Monitoring Report (see Table C1 of this Discharge Permit).

- D. **Monitoring Wells** – 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) and/or plug and abandon one or more existing groundwater monitoring wells per 20.6.6.30(C). The groundwater monitoring well system approved for closure of this dairy facility is detailed in **Table B4** below.

Table B4
Monitoring Well Requirements for Closure

Engineering and Surveying
a) None required.
Operations and Maintenance
<p>b) Within (90) days of the effective date of this Discharge Permit (by DATE), the Permittee shall properly plug and abandon the following 13 existing monitoring wells in accordance with 20.6.6.30(C) NMAC: MW-2, MW-3, MW-4, MW-6, MW-8U, MW-8L, MW-9L, MW-10U, MW-10L, MW-10L2, MW-12U, MW-13U, and MW-13L. Wells shall be plugged and abandoned pursuant to 19.27.4 NMAC and 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 Well Abandonment Report.</p> <p>c) Operate and maintain all other existing facility groundwater monitoring wells, listed in A106.B of this permit, in compliance with the Stage 1 Abatement Plan of J&M Dairy as approved on April 21, 2006</p> <p>d) Verify all facility monitoring wells are permanently identified in accordance with 20.6.6.23(C) NMAC.</p>
Inspection and Monitoring
<p>e) Continue to perform groundwater sampling of the wells listed in A106.B of this permit in accordance with the Stage 1 Abatement Plan of J&M Dairy. 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, 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, and confirmation of closure completion has been received from NMED.</p> <p>f) The permittee shall abate groundwater pollution until monitoring indicates that water quality standards have been achieved and maintained as set forth in Subsection D of 20.6.2.4103 NMAC</p> <p>g) Analyze collected groundwater samples according to the methods listed in 20.6.6.24(B) and 20.6.2.3107.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>h) 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>i) 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
j) Provide to NMED a Well Abandonment Report within 60 days of completion of well plugging activities.

- E. **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 B5** below.

Table B5
Stormwater Management During Closure and Post-Closure

Engineering and Surveying
a) None required
Operations and Maintenance
b) 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. [Subsection H of 20.6.6.20 NMAC] • Before removal is complete, 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
c) None required
Recordkeeping and Reporting
d) None required

B102 Facility: Conditions for Post-Closure Monitoring and Maintenance

- A. Pursuant to 20.6.6.30(B), 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 B4** above.
- 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 B5** 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 B4** of this Discharge Permit may cease, the Permittee shall abandon all facility wells in accordance with the conditions specified in 20.6.6.30(C) NMAC and **Table B4** above.

B103 Facility: Contingency Plan

- A. In the event NMED or the Permittee identifies any failures of the Discharge Permit or system not specifically noted herein, NMED may require the Permittee to develop for NMED approval a contingency or corrective action plan and schedule to cope with the failure(s) [20.6.2.3107.A(10) NMAC].

B. Facility conditions that 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 Sections 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 Sections 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 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 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 use of a land application area pursuant to 20.6.6.30 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

Engineering and Surveying
a) None required
Operations and Maintenance
b) None required
Inspection and Monitoring
c) None required
Recordkeeping and Reporting
d) Records of any inspection(s), repairs and maintenance conducted on facility infrastructure as related the former wastewater management system shall be maintained at the dairy facility or be available for NMED review.
e) Continue to 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.
f) 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.
g) Unless otherwise identified in this Discharge Permit, submit monitoring reports to NMED quarterly according to the following schedule: [20.6.6.24(A) NMAC]
h) January 1 through March 31 (first quarter) – report due by May 1
i) April 1 through June 30 (second quarter) – report due by August 1
j) July 1 through September 30 (third quarter) – report due by November 1
k) 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. 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, 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]

- C. 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.
- D. 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 20.6.6.12(B) NMAC. Notification of the transfer shall be submitted to NMED within 30 days of the ownership transfer date. [20.6.6.34 NMAC]
- E. 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 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
1. Application for a New Discharge Permit (dairy facility only)
2. Application for Discharge Permit Renewal and/or Modification (dairy facility only)
3. 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

draft