



**NEW MEXICO  
ENVIRONMENT DEPARTMENT**



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**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

October 24, 2014

Lee Boyd, Vice President  
Boyd Brothers, Inc. Dairy  
11 Lebo Lane  
Lovington, NM 88260

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Lee Boyd, Vice President  
Boyd Brothers, Inc.  
11 Lebo Lane  
Lovington, NM 88260

PS Form 3800, June 2002

**RE: Discharge Permit Renewal and Modification, DP-988, Boyd Brothers Inc. Dairy**

Dear Mr. Boyd:

On March 22, 2013, the New Mexico Environment Department (NMED) proposed renewal of the Ground Water Discharge Permit for **Boyd Brothers Inc. Dairy**, DP-988, pursuant to Subsection H of 20.6.2.3108 NMAC. A draft Discharge Permit Renewal and Modification was sent to you at that time. In response, NMED received comments from the facility on April 15, 2013. All of the comments were considered by NMED and some were incorporated into the enclosed Discharge Permit. Comments requesting permit revisions not in accordance with the requirements of 20.6.6 NMAC are not addressed by this Discharge Permit. The permittee may file a petition with the New Mexico Water Quality Control Commission (WQCC) requesting a variance from site specific requirements of 20.6.6 NMAC.

NMED issues the enclosed Discharge Permit Renewal and Modification, DP-988, to Boyd Brothers, Inc. (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the WQCC Regulations, 20.6.2 and 20.6.6 NMAC.

The Discharge Permit contains requirements that shall be complied with by the permittee and are enforceable by NMED pursuant to Sections 20.6.2.3104 and 20.6.6.8 NMAC, WQA, and NMSA 1978 §74-6-5 and §74-6-10. The discharge shall be managed in accordance with all applicable requirements of the Dairy Rule and this Discharge Permit. Issuance of this Discharge Permit does not relieve the permittee of the responsibility to comply with the WQA, WQCC

Lee Boyd, DP-988  
October 24, 2014  
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Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

You will be invoiced under separate cover for the remaining permit fee balance of \$575.00.

Pursuant to Subsection I of NMSA 1978 § 74-6-5, the term of this Discharge Permit shall be for the fixed term of five years. The term of this Discharge Permit will end on October 24, 2019.

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

If you have any questions, please contact Gary Westerfield, Agricultural Waste Team Leader at (505) 827-2713 or Jennifer Pruett, at (505) 827-0652. Thank you for your cooperation during this Discharge Permit review.

Sincerely,



Jerry Schoeppner, Chief  
Ground Water Quality Bureau

JS:gw

Encs: Discharge Permit Renewal and Modification, DP-988

cc: ✓ Agricultural Waste Team Leader, NMED-GWQB (permit)  
✓ District Manager, NMED District III (permit – electronic copy)  
✓ NMED Hobbs Field Office (permit)  
✓ John Romero, Office of the State Engineer (permit – electronic copy)

**GROUND WATER DISCHARGE PERMIT - RENEWAL AND MODIFICATION  
EXISTING DAIRY FACILITY with a LAND APPLICATION AREA  
Boyd Brothers, Inc. Dairy, DP-988**

**I. INTRODUCTION AND SUMMARY**

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), DP-988, to Boyd Brothers, Inc. (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 and 20.6.6 NMAC.

NMED's purpose in issuing this Discharge Permit is to control the discharge of water contaminants from Boyd Brothers, Inc. Dairy (dairy facility) for the protection of ground water and those segments of surface water gaining from ground water inflow, for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health.

The activities which produce the discharge, the location of the discharge, and the quantity, quality and flow characteristics of the discharge are briefly described as follows:

A maximum daily discharge volume of 3,000 gallons per day (gpd) of wastewater may be discharged from the production area. Wastewater flows to a concrete-sided sump and is pumped through a solids separator (required to be installed) to a synthetically lined wastewater impoundment (required to be installed) for storage. Wastewater is land applied by center pivot on up to 111.8 acres of irrigated cropland under cultivation. The modification consists of a change in the location of the discharge with the addition of a synthetically lined wastewater impoundment and a decrease in land application area from 352 to 111.8 acres. The discharge contains water contaminants or toxic pollutants which may be elevated above the standards of Section 20.6.2.3103 NMAC.

The dairy facility is located southeast of the intersection of Boyd Road and County Road 116, approximately nine miles northeast of Lovington, in Sections 34 and 35, Township 14S, Range 36E, Lea County. Ground water most likely to be affected is at a depth of approximately 93 feet and had a pre-discharge total dissolved solids concentration of approximately 400 milligrams per liter.

The original Discharge Permit was issued on March 25, 1996, and subsequently renewed and modified on March 9, 2004. The application consists of the materials submitted by the permittee dated January 26, 2009, and materials contained in the administrative record associated with issuance of this Discharge Permit. The discharge shall be managed in accordance with all applicable requirements of the Dairy Rule (20.6.6 NMAC) and this Discharge Permit.

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

The following acronyms and abbreviations may be used in this Discharge Permit:

Abbreviation	Explanation	Abbreviation	Explanation
Cl	chloride	NO <sub>3</sub> -N	nitrate-nitrogen
gpd	gallons per day	S	Sulfur
LADS	land application data sheet(s)	SO <sub>4</sub>	Sulfate
mg/L	milligrams per liter	TDS	total dissolved solids
NMAC	New Mexico Administrative Code	TKN	total Kjeldahl nitrogen
NMED	New Mexico Environment Department	WQA	New Mexico Water Quality Act
NMP	Nutrient management plan	WQCC	Water Quality Control Commission
NMSA	New Mexico Statutes Annotated		

## II. FINDINGS

In issuing this Discharge Permit, NMED finds:

1. The permittee is discharging from a facility that meets the definition of “dairy facility” and is subject to the Dairy Rule (20.6.6 NMAC). This dairy facility meets the definition of “existing dairy facility”.
2. The permittee is discharging effluent or leachate from the dairy facility that may move directly or indirectly into ground water within the meaning of Section 20.6.2.3104 NMAC.
3. The permittee is discharging effluent or leachate from the dairy facility that may move into ground water of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter or less of total dissolved solids within the meaning of Subsection A of 20.6.2.3101 NMAC.
4. The discharge from the dairy facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.
5. The dairy facility was existing as of the effective date of the Dairy Rule (December 31, 2011) and does not measure the volume of wastewater discharged to wastewater impoundment(s) using a flow meter installed on the discharge line(s) from all wastewater sources to the wastewater impoundment(s).
6. This Discharge Permit contains requirements associated with the following potential contaminant sources as identified in the application and the administrative record as of the effective date of this Discharge Permit:

- a) Wastewater Impoundments
  - i. **Wastewater Impoundment** - authorized for use and required to be constructed by this Discharge Permit.
- b) Fields within the Land Application Area
  - i. **TL Pivot**- authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule.
  - ii. **Juanitos Pivot** - authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule.
  - iii. **Scott's House Pivot** – not authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule, but has not received wastewater or stormwater as of the effective date of this permit.
  - iv. **Far East Pivot** not authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule, but has not received wastewater or stormwater as of the effective date of this permit.
  - v. **Production Area and Residences** – not authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule; approximately 63 acres; has not received wastewater and/or stormwater as of the effective date of this Discharge Permit.
  - vi. **Pasture** – not authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule; approximately 60 acres south of the production area and TL Pivot; has not received wastewater and/or stormwater as of the effective date of this Discharge Permit.
  - vii. **Pecan Orchard** – not authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule; approximately 50 acres south-southeast of Juanitos Pivot; has not received wastewater and/or stormwater as of the effective date of this Discharge Permit.
  - viii. **West Pivot Corners** – not authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule; approximately 35 acres of land contiguous with TL and Juanitos Pivots; has received wastewater and/or stormwater as of the effective date of this Discharge Permit.
  - ix. **East Pivot Corners** – not authorized for use by this Discharge Permit; was authorized for use by the last Discharge Permit issued prior to the effective date of the Dairy Rule; 80 acres of land contiguous with Scott's House and Far East Pivots; has not received wastewater and/or stormwater as of the effective date of this Discharge Permit.

### III. APPLICABLE RULES

Sections 20.6.2.3000 through 20.6.2.3114 NMAC and Part 20.6.6 NMAC (Dairy Rule) apply to discharges specific to dairy facilities and their operations.

### IV. DISCHARGE PERMIT REQUIREMENTS

The permittee is authorized to discharge water contaminants pursuant to this Discharge Permit which contains requirements authorized or specified by the Dairy Rule. The permittee shall comply with the Dairy Rule and this Discharge Permit, which are enforceable by NMED. The permittee is authorized to discharge water contaminants subject to the following requirements:

#### AUTHORIZATION TO DISCHARGE

1. The permittee is authorized to discharge up to 3,000 gpd of wastewater from the production area. Wastewater flows to a concrete-sided sump and is pumped through a solids separator (required to be installed/constructed) to a synthetically lined wastewater impoundment (required to be constructed) for storage. Wastewater is land applied by center pivot to up to 352 acres of irrigated cropland under cultivation.
2. The permittee is authorized to use the following impoundments for the following purposes in accordance with Subsection B of 20.6.6.20 NMAC.
  - a) **Wastewater Impoundment** – authorized to receive wastewater for storage prior to land application. This impoundment is required to be synthetically lined and required to be constructed by this Discharge Permit.
3. The permittee is authorized to apply wastewater and stormwater to all fields within the land application area in accordance with Subsections B, C and I of 20.6.6.21 NMAC. The land application area consists of the following fields for a total land application area of 352 acres.
  - a) **TL Pivot** – consists of 48 acres; applied by center pivot. This field was authorized by the last Discharge Permit prior to the effective date of the Dairy Rule (December 31, 2011) to receive wastewater and/or stormwater and has received wastewater and/or stormwater as of the effective date of this Discharge Permit.
  - b) **Juanito's Pivot** – consists of 64 acres; applied by center pivot. This field was authorized by the last Discharge Permit issued prior to the effective date of the Dairy Rule (December 31, 2011) to receive wastewater and/or stormwater and has received wastewater and/or stormwater as of the effective date of this Discharge Permit.

**-DAIRY RULE TRANSITION REQUIREMENTS**

4. The permittee shall have 90 days from the effective date of this Discharge Permit (to **January 22, 2015**) to submit all the necessary information to comply with Sections 20.6.6.10 through 20.6.6.13 NMAC, in accordance with Subsection D of 20.6.6.35 NMAC. The permittee shall submit the necessary information by completing the application form for Renewal and/or Modification located at the following address:
- <http://www.nmenv.state.nm.us/gwb/NMED-GWQB-dairies.htm>

The following sections of the application form for renewal and/or modification shall be completed, and the form shall be signed by the permittee and notarized prior to submission.

- a) Introduction – *Applicant’s Signature and Notary Certification only*
- b) Part I.A
- c) Part II.A.1
- d) Part II.A.2(a) and (b)
- e) Part II.B.1 through 7
- f) Part II.C
- g) Part II.D.2
- h) Part II.D.3(a)
- i) Part II.E.1 and 2
- j) Part II.F
- k) Part IV.A
- l) Part IV.B
- m) Part IV.C

**ENGINEERING AND SURVEYING REQUIREMENTS**

5. The permittee shall comply with the requirements of Section 20.6.6.17 NMAC and shall submit to NMED all information or documentation required by the applicable portions of Section 20.6.6.17 NMAC.
6. The permittee shall complete the following items and submit documentation to NMED as summarized in the following table:

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
A.	<b><u>Impoundment Plans and Specifications:</u></b> Submit construction plans and specifications for installation of a wastewater impoundment(s) to achieve compliance with the storage capacity requirements of Subsection D of 20.6.6.17 NMAC.	<b>January 22, 2015</b>	20.6.6.17.C(1) NMAC
B.	<b><u>Manure Solids Separation Plans and Specifications – New Wastewater System:</u></b>		

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
	Submit plans and specifications for manure solids separation as a component of the newly designed wastewater storage system to achieve compliance with Subsection F of 20.6.6.20 NMAC]	<b>January 22, 2015</b>	20.6.6.17.C(4) NMAC
C.	<p><b><u>Flow Metering Plans:</u></b></p> <p>To achieve compliance with Subsection J of 20.6.6.20 NMAC, submit a description of the location and installation/construction information for a flow meter(s) to measure the following:</p> <ul style="list-style-type: none"> <li>• the volume of wastewater discharged from all wastewater sources to the impoundment(s)*</li> <li>• the volume of wastewater discharged from the wastewater storage impoundment to each field in the land application area</li> </ul> <p>*Alternatively, to achieve compliance with Subsection J of 20.6.6.20 NMAC, submit a description of the location and installation/construction information for a flow meter(s) installed on the fresh water supply line(s) to measure the volume of all sources contributing to the wastewater discharged to the impoundment(s).</p>	<b>January 22, 2015</b>	20.6.6.17.C(7) NMAC

**OPERATIONAL REQUIREMENTS**

- The permittee shall comply with the requirements of Sections 20.6.6.20 and 20.6.6.21 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.6.20 and 20.6.6.21 NMAC.
- The permittee shall provide written notice to NMED regarding any changes to the presence of lactating cows and/or the status of wastewater discharges at the facility in accordance with Subsection A of 20.6.6.20 NMAC (summarized in the table below).

Activity	Notification of Estimated Date	Verification of Actual Date
Removal of Lactating Cows	Not required	Within 30 days of removal
Reintroduction of Lactating Cows	Not required	Within 30 days of reintroduction
Cessation of wastewater discharge	Not required	Within 30 days of cessation of discharge
Recommencement of Discharge	Minimum 30 days prior to recommencement	Within 30 days of recommencement

9. The permittee shall install and use the following flow meter(s) in accordance with Subsections J, K, L and N of 20.6.6.20 NMAC, and Subsections G and H of 20.6.6.21 NMAC.
- a) **Parlor Discharge Meter** – to be located on the discharge line between the sump and the wastewater impoundment to measure the volume of wastewater discharged from the production area to the Wastewater Impoundment.

- OR -

- Parlor Supply Line Meter** – to be located on the water supply line for the parlor to measure the volume of all fresh water contributing to the wastewater discharged to the Wastewater Impoundment; providing an estimate of the volume of wastewater generated from the production area.
- b) **LAA Meter** – to be located on the discharge line from the wastewater impoundment to measure the volume of wastewater discharged from the Wastewater Impoundment to each field in the land application area.

Confirmation of flow meter installation shall be completed in accordance with Subsection J of 20.6.6.20 NMAC.

10. The permittee is authorized, pursuant to Subsection S of 20.6.6.20 NMAC, to land apply manure solids and composted material to the land application area. Manure solids and composted material shall be applied in accordance with the Nutrient Management Plan (NMP) required by Subsection I of 20.6.6.21 NMAC.
11. The permittee is authorized to blend wastewater with fresh irrigation water for land application using any of the methods provided in Subsection D of 20.6.6.21 NMAC. Fresh water may be added to a wastewater impoundment prior to land application in accordance with Subsection D of 20.6.6.21 NMAC.
12. The permittee shall remove crops from the following fields within the land application area using the following methods in accordance with Subsection I and J of 20.6.6.21 NMAC. Crops may be grazed prior to and between mechanical harvests, however, nitrogen removal credit shall not be taken for grazing activities unless a grazing plan is developed and submitted in accordance with Subsections I and J of 20.6.6.21 NMAC.
- a) **TL Pivot** – crops shall be harvested mechanically.
- b) **Juanito's Pivot** – crops shall be harvested mechanically.

The permittee shall submit an application for Discharge Permit Modification to NMED for any proposed changes to the method(s) of crop removal for any field within the land application area as required by Subsection K of 20.6.6.21 NMAC.

13. The permittee shall complete the following items and submit documentation to NMED as summarized in the following table:

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
A.	<p><b><u>Impoundment Construction or Improvement:</u></b></p> <p>i) Complete construction of a new impoundment to achieve compliance with the Dairy Rule, in accordance with construction plans and specifications, and supporting design calculations.</p> <p>ii) Submit the Construction Certification Report verifying construction pursuant to Subsection C of 20.6.6.17 NMAC.</p>	<p><b>October 24, 2016</b></p> <p><b>Within 90 days of completed impoundment construction.</b></p>	20.6.6.20.E NMAC
B.	<p><b><u>Manure Solids Separator Installation – New System:</u></b></p> <p>i) Complete construction of a manure solids separator associated with the new wastewater storage system.</p> <p>ii) Submit confirmation of solids separator construction.</p>	<b>Prior to discharging to the new system.</b>	20.6.6.20.F NMAC
C.	<p><b><u>Flow Meter Installation:</u></b></p> <p>i) Complete installation of flow meter(s).</p> <p>ii) Submit confirmation of installation.</p>	<p><b>March 23, 2015</b></p> <p><b>April 22, 2015</b></p>	20.6.6.20.J NMAC
D.	<p><b><u>Scaled Map of Dairy Facility – Updates:</u></b></p> <p>Following completion of any additions or changes to the dairy facility which affect the items listed in Subsection U of 20.6.6.20 NMAC, the permittee shall update and resubmit the facility map.</p>	<b>Within 90 days of any addition or change.</b>	20.6.6.20.V NMAC
E.	<p><b><u>Nutrient Management Plan:</u></b></p> <p>Develop and submit annual updates to the NMP.</p>	<b>Annually:</b> May 1	20.6.6.21.I NMAC
F.	<p><b><u>Backflow Prevention:</u></b></p> <p>i) Complete installation of backflow prevention methods or devices.</p> <p>ii) Submit confirmation of installation.</p>	<p><b>January 22, 2015</b></p> <p><b>April 22, 2015</b></p>	20.6.6.21.M NMAC
G.	<p><b><u>Backflow Prevention by Reduced Pressure Principle Backflow Prevention Assembly – Inspection and Maintenance:</u></b></p> <p>Submit copies of inspection and maintenance records and test results for each RP device, should the device be used to satisfy the requirements of Subsection M of 20.6.6.21 NMAC.</p>	<b>Annually:</b> May 1	20.6.6.21.N NMAC

**GROUND WATER MONITORING REQUIREMENTS**

14. The permittee shall comply with the requirements of Section 20.6.6.23 NMAC and shall submit to NMED all information or documentation required by the applicable portions of Section 20.6.6.23 NMAC.
15. Monitoring wells shall be constructed and completed in accordance with Subsection D of 20.6.6.23 NMAC.
16. Monitoring wells shall be permanently identified in accordance with Subsection C of 20.6.6.23 NMAC.
17. The permittee shall complete the following items and submit documentation to NMED as summarized in the following table:

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
A.	<p><b><u>Ground Water Monitoring – New Wastewater Impoundments:</u></b></p> <p>Install the following monitoring wells within 75 feet hydrologically downgradient of the top inside edge of each <u>new</u> wastewater impoundment:</p> <p>i) MW-3, hydrologically downgradient of Wastewater Impoundment.</p>	<p><b>Prior to discharging wastewater into the impoundment or within 120 days of impoundment completion, whichever occurs first.</b></p>	<p>20.6.6.23.A(1) NMAC</p>
B.	<p><b><u>Ground Water Monitoring – Existing Land Application Area:</u></b></p> <p>Install the following monitoring wells within 50 feet hydrologically downgradient of the downgradient boundary of <u>existing</u> fields within the land application area:</p> <p>i) MW-4, hydrologically downgradient of TL Pivot. ii) MW-5, hydrologically downgradient of Juanito’s Pivot.</p>	<p><b>February 21, 2015</b></p>	<p>20.6.6.23.A(4) (b) NMAC</p>
C.	<p><b><u>Ground Water Monitoring – Upgradient:</u></b></p> <p>Install a monitoring well, MW-2, hydrologically upgradient of all contamination sources at the dairy facility.</p>	<p><b>February 21, 2015</b></p>	<p>20.6.6.23.A(5) NMAC</p>
D.	<p><b><u>Ground Water Sampling and Reporting – Routine:</u></b></p> <p>Collect and analyze ground water samples quarterly from all monitoring wells identified in this Discharge Permit. Sampling shall be performed and results submitted in accordance with Subsection F of 20.6.6.23 NMAC.</p>	<p><b>Quarterly</b></p>	<p>20.6.6.23.G NMAC</p>

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
E.	<p><b><u>Ground Water Sampling – New Monitoring Wells:</u></b></p> <p>Collect ground water samples from monitoring wells required to be installed <i>within 120 days of the effective date of the Discharge Permit</i>. Sampling shall be performed in accordance with Subsection F of 20.6.6.23 NMAC using the monitoring wells required to be installed in the following locations:</p> <ul style="list-style-type: none"> <li>i) MW-2, hydrologically upgradient of all contamination sources at the dairy facility.</li> <li>ii) MW-4, hydrologically downgradient of TL Pivot.</li> <li>iii) MW-5, hydrologically downgradient of Juanito’s Pivot.</li> </ul>	<p><b>March 23, 2015</b></p>	<p>20.6.6.23.H NMAC</p>
F.	<p><b><u>Ground Water Sampling – New Monitoring Wells for New Impoundments:</u></b></p> <p>Collect ground water samples from monitoring wells required to be installed <i>within the term of the Discharge Permit</i>, (i.e., associated with the newly constructed impoundments). Sampling shall be performed in accordance with Subsection F of 20.6.6.23 NMAC using the monitoring wells required to be installed in the following locations:</p> <ul style="list-style-type: none"> <li>i) MW-3, hydrologically downgradient of Wastewater Impoundment.</li> </ul>	<p><b>Within 30 days of well completion.</b></p>	<p>20.6.6.23.H NMAC</p>
G.	<p><b><u>Monitoring Well Survey and Ground Water Flow Determination:</u></b></p> <p>Survey monitoring wells (for both location and depth to water) required to be installed <i>within 120 days of the effective date of the Discharge Permit</i> to a USGS benchmark.</p> <p>Survey monitoring wells (for both location and depth to water) required to be installed <i>within the term of the Discharge Permit</i> to a USGS benchmark.</p>	<p><b>March 23, 2015</b></p> <p><b>Upon well completion, to be included in the well completion report.</b></p>	<p>20.6.6.23.I NMAC</p>
H.	<p><b><u>Monitoring Well Completion Report:</u></b></p> <p>Submit a monitoring well completion report for monitoring wells required to be installed <i>within 120 days of the effective date of the Discharge Permit</i>. The report shall include information from all monitoring wells.</p>	<p><b>April 22, 2015</b></p>	<p>20.6.6.23.J NMAC</p>
I.	<p><b><u>Monitoring Well Completion Report – Monitoring Wells for New Fields:</u></b></p> <p>Submit a monitoring well completion report for monitoring wells required to be installed <i>within the term of the Discharge Permit</i> (i.e., installed prior to land application on a newly activated field). The report shall include information from all monitoring wells.</p>	<p><b>Within 60 days of well completion.</b></p>	<p>20.6.6.23.J NMAC</p>

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
J.	<p><b><u>Monitoring Well Completion Report – Monitoring Wells for New Impoundments:</u></b></p> <p>Submit a monitoring well completion report for monitoring wells required to be installed <i>within the term of the Discharge Permit</i> (i.e., associated with the newly constructed impoundments). The report shall include information from all monitoring wells.</p>	<b>Within 60 days of well completion.</b>	20.6.6.23.J NMAC
K.	<p><b><u>Ground Water Elevation Contour Maps:</u></b></p> <p>Develop and submit ground water elevation contour maps on a quarterly basis using data collected from all monitoring wells used for ground water monitoring at the dairy facility.</p>	<b>Quarterly</b>	20.6.6.23.L NMAC

**MONITORING REQUIREMENTS**

18. The permittee shall comply with the requirements of Sections 20.6.6.24 and 20.6.6.25 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.6.24 and 20.6.6.25 NMAC.
19. The permittee shall submit monitoring reports to NMED on a quarterly schedule that contain monitoring data and information collected pursuant to the Dairy Rule and submitted in accordance with Subsection A of 20.6.6.24 NMAC.

Quarterly monitoring reports shall be submitted according to the following schedule:

- 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**

20. The permittee shall perform the following monitoring and submit to NMED the required documentation in monitoring reports as summarized in the following table:

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
A.	<p><b><u>Wastewater Volume Measurement and Reporting:</u></b></p> <p>Using a flow meter(s) installed on the discharge line(s), measure the volume of all wastewater discharged to the impoundment(s) authorized to contain wastewater. Submit the information.</p> <p style="text-align: center;"><b>Or</b></p> <p><b><u>Wastewater Volume Estimation and Reporting:</u></b></p> <p>Using a flow meter(s) installed on the fresh water supply line(s), measure the volume of all sources contributing to the</p>	<b>Quarterly</b>	20.6.6.24.C NMAC

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
	wastewater discharged to the impoundment(s) authorized to contain wastewater. Submit the meter readings (without adjustments or deductions in accordance with Subsection N of 20.6.6.20 NMAC)		
B.	<b><u>Flow Meter Field Calibration:</u></b> Perform flow meter field calibrations annually and submit a flow meter field calibration report.	<b>Annually:</b> May 1	20.6.6.24.E NMAC
C.	<b><u>Volume of Wastewater and Wastewater/Stormwater Land Applied – Measurement and Reporting:</u></b> Measure the volume of all wastewater discharges to each field within the land application area using a flow meter(s) and submit the information.	<b>Quarterly</b>	20.6.6.25.A NMAC
D.	<b><u>Wastewater to be Land Applied – Sampling and Reporting:</u></b> The permittee shall collect a representative wastewater sample (consisting of eight subsamples) from each wastewater or combination wastewater/stormwater impoundment. Analyze each representative wastewater sample on a quarterly basis and submit results.	<b>Quarterly</b>	20.6.6.25.C NMAC
E.	<b><u>Manure Solids – Nitrogen Content:</u></b> Should a permittee choose to use actual nitrogen content values of on-site manure solids for the purpose of applying to the land application area, the permittee shall collect and analyze samples annually, and submit results.	<b>Quarterly</b>	20.6.6.25.D NMAC
F.	<b><u>Irrigation Water – Sampling, Volume Applied and Reporting:</u></b> Collect and analyze fresh irrigation water samples on an annual basis from each irrigation well associated with the land application area. Estimate the annual volume of irrigation water applied to each field from each well. Submit estimated volumes and analytical results.	<b>Annually:</b> May 1	20.6.6.25.E NMAC
G.	<b><u>Fertilizer Application Reporting:</u></b> Maintain and submit a log of all additional fertilizer applied to each field within the land application area.	<b>Quarterly</b>	20.6.6.25.F NMAC
H.	<b><u>Land Application Data Sheets:</u></b> Complete and submit land application data sheets (LADS) for each field within the land application area.	<b>Quarterly</b>	20.6.6.25.G NMAC
I.	<b><u>Crop Yield Documentation:</u></b> Submit crop yield documentation and plant and harvest dates of each crop grown.	<b>Quarterly</b>	20.6.6.25.H NMAC

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
J.	<b><u>Nitrogen Concentration of Harvested Crop:</u></b> Determine the percent total nitrogen and dry matter of each harvested crop and submit results.	<b>Quarterly</b>	20.6.6.25.I NMAC
K.	<b><u>Nitrogen Removal Summary of Harvested Crop:</u></b> Develop and submit a nitrogen removal summary for each crop grown on each field within the land application area.	<b>Quarterly</b>	20.6.6.25.J NMAC
L.	<b><u>Soil Sampling – Initial Event in a Discharge Permit Term:</u></b> Collect and analyze <u>initial</u> soil samples from each field in the land application area for the first soil sampling event during the first year following the effective date of this Discharge Permit. Submit the results.	<b>May 1, 2015</b>	20.6.6.25.K NMAC
M.	<b><u>Soil Sampling – Routine:</u></b> Collect and analyze <u>routine</u> soil samples annually from each field in the land application area beginning the year following the initial sampling event. Submit the results.	<b>Annually: May 1</b>	20.6.6.25.L NMAC

**CONTINGENCY REQUIREMENTS**

21. The permittee shall comply with the requirements of Section 20.6.6.27 NMAC and shall submit to NMED all information or documentation required by the applicable portions of Section 20.6.6.27 NMAC.

**CLOSURE REQUIREMENTS**

22. The permittee shall comply with the requirements of Section 20.6.6.30 NMAC and shall submit to NMED all information or documentation required by the applicable portions of Section 20.6.6.30 NMAC.

**GENERAL REQUIREMENTS**

23. The permittee shall operate in a manner such that standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC are not violated.
24. The permittee shall retain required records for a minimum period of 10 years from the date of sample collection, measurement, report or application in accordance with Section 20.6.6.33 NMAC.

25. Transfer of a Discharge Permit for a dairy facility shall be completed in accordance with Section 20.6.6.34 NMAC.
26. To renew this Discharge Permit, the permittee shall submit an application for renewal, renewal and modification, or renewal for closure at least one year prior to the expiration date of the Discharge Permit in accordance with Section 20.6.6.10 NMAC.
27. In accordance with Subsection A of 20.6.6.9 NMAC, the permittee shall remit a permit fee payment equal to one-tenth of the applicable permit fee from Table 1 of Section 20.6.2.3114 NMAC on the first occurrence of August 1 after the effective date of the Discharge Permit, and annually thereafter until expiration or termination of the Discharge Permit.

## V. ADDITIONAL CONDITIONS

In addition to the requirements of 20.6.6 NMAC, the permittee shall comply with the following conditions as authorized by Subsection H of 20.6.6.10 NMAC pursuant to Section 74-6-5 WQA. A hearing may be requested on additional conditions in accordance with Section 20.6.6.15 NMAC.

1. The permittee shall continue to collect and analyze ground water samples quarterly from the following wells previously used for monitoring. Sampling shall be performed and results submitted in accordance with Subsections F and G of 20.6.6.23 NMAC.
  - a) **MW-1**, located approximately 53 feet east of the concrete-sided sump and intended to be hydrologically downgradient of the sump. The sump is constructed with a native rock bottom of unknown permeability. Wastewater in the sump has the potential to contaminate groundwater at the facility.

## VI. PERMIT ISSUANCE

Pursuant to WQA 74-6-5(I), the term of this Discharge Permit shall be for the fixed term of five years from the effective date of the Discharge Permit.

Issued by: New Mexico Environment Department

Effective Date: **October 24, 2014**

Expiration Date: **October 24, 2019**

  
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JERRY SCHOEPPNER  
Chief, Ground Water Quality Bureau  
New Mexico Environment Department