



NEW MEXICO
ENVIRONMENT DEPARTMENT



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RYAN FLYNN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

October 20, 2014

Randy Vander Dussen
Rajen Dairy #2
948 Curry Rd. O
Clovis, NM 88101

RE: Discharge Permit Renewal and Modification, DP-878, Rajen Dairy #2

Dear Mr. Vander Dussen:

On March 22, 2013, the New Mexico Environment Department (NMED) proposed renewal of the Ground Water Discharge Permit for **Rajen Dairy #2**, DP-878, 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 19, 2013. All of the comments were considered by NMED. 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 878, to Randy Vander Dussen/ Owner (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

Randy Vander Dussen, Owner, DP-878
October 20, 2014
Page 2 of 2

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 \$1725.00.

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 20, 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 Nancy McDuffie at (505) 222-9523 or Gary Westerfield, Agricultural Waste Team Leader, at (505) 827-2713. Thank you for your cooperation during this Discharge Permit review.

Sincerely,



Jerry Schoeppner, Chief
Ground Water Quality Bureau

JS:KK/nm

Encs: Discharge Permit Renewal and Modification, DP-878

cc: Agricultural Waste Team Leader, NMED-GWQB (permit)
District Manager, NMED District I (permit – electronic copy)
NMED Clovis Field Office (permit)
John Romero, Office of the State Engineer (permit – electronic copy)
Glorieta Geoscience, Inc., PO Box 5727, Santa Fe, NM 87502 (permit)

**GROUND WATER DISCHARGE PERMIT - RENEWAL AND MODIFICATION
EXISTING DAIRY FACILITY with a LAND APPLICATION AREA
Rajen Dairy #2, DP-878**

I. INTRODUCTION AND SUMMARY

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), DP-878, to Randy Vander Dussen (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 Rajen Dairy #2 (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 72,000 gallons per day (gpd) of wastewater may be discharged from the production area. Wastewater gravity flows to a concrete-lined sump and is pumped over the first of two incline screen solids separators into a clay-lined wastewater/stormwater combination impoundment for storage prior to land application. Wastewater is pumped from the impoundment over a second incline screen separator into an aboveground tank for land application by center pivot irrigation to up to 540 acres of irrigated cropland under cultivation. Wastewater from the combination clay-lined impoundment is also recycled for use in a flush alley system. The modification consists of decreasing the land application area from 650 acres to 540 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 at 1157 Curry Road 7, approximately two miles southwest of Clovis, in Sections 34, 35 and 36, Township 2N, Range 35E, Curry County. Ground water most likely to be affected is at a depth of approximately 316 feet and had a pre-discharge total dissolved solids concentration of approximately 180 milligrams per liter.

The original Discharge Permit was issued on November 2, 1992, and subsequently renewed and modified on March 4, 1999, and June 4, 2004. The application consists of the materials submitted by the permittee dated May 18, 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 ₃ -N | nitrate-nitrogen |
| gpd | gallons per day | S | Sulfur |
| LADS | land application data sheet(s) | SO ₄ | 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 Discharge Permit for this facility last issued on June 4, 2004, (before the effective date of the Dairy Rule of December 31, 2011) required the wastewater impoundment system to have the capacity to store the volume of wastewater discharged at the maximum daily discharge volume, for a minimum of 60 days, plus stormwater runoff generated from the facility, while preserving two feet of freeboard.

6. 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). As of the effective date of this Discharge Permit, the dairy facility uses a supply meter to estimate the volume of wastewater generated in the production area. The meter measures the volume of all fresh water contributing to the wastewater discharged from the production area.
7. 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) Combination Wastewater/Stormwater Impoundments
 - i. **Wastewater Lagoon** - authorized for use by this Discharge Permit.
 - b) Stormwater Impoundments
 - i. **Storm Runoff Lagoon** - authorized for use by this Discharge Permit.
 - c) Fields within the Land Application Area
 - i. **Field 6** - authorized for use by this Discharge Permit.
 - ii. **Field 7** - authorized for use by this Discharge Permit.
 - iii. **Field 8** - authorized for use by this Discharge Permit.
 - iv. **Field 12** - authorized for use by this Discharge Permit.
 - v. **Field 13** - authorized for use by this Discharge Permit.
 - vi. **Field F** - 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; however, the field has not received wastewater/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 72,000 gpd of wastewater from the production area. Wastewater gravity flows to a concrete-lined sump and is pumped over

the first of two incline screen solids separators into a clay-lined wastewater/stormwater combination impoundment for storage prior to land application. Wastewater is pumped from the impoundment over a second incline screen separator into an aboveground tank for land application by center pivot irrigation to up to 540 acres of irrigated cropland under cultivation. Wastewater from the combination clay-lined impoundment is also recycled for use in a flush alley system.

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 Lagoon** – authorized to receive wastewater and stormwater for storage prior to land application. This impoundment exists as of the effective date of this Discharge Permit and is clay-lined. This impoundment is located south of the parlor and main corral system and west of the commodities storage buildings. Stormwater runoff from the main corral system collects in this impoundment.
 - b) **Storm Runoff Lagoon** – authorized to collect stormwater for transfer to the Wastewater Lagoon or for application to fields within the land application area. This impoundment exists as of the effective date of this Discharge Permit and is unlined. This impoundment is located south of the production area and northeast of Field 13. Stormwater runoff from the southern corral area and the commodities storage area collects in this impoundment.

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 540 acres.
 - a) **Field 6** – consists of 120 acres; application 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/stormwater and has received wastewater/stormwater as of the effective date of this Discharge Permit. This field is located west of Field 7, and was previously known as Land Application Area E.
 - b) **Field 7** – consists of 120 acres; application 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/stormwater and has received wastewater/stormwater as of the effective date of this Discharge Permit. This field is located west of Field 8, and was previously known as Land Application Area D.
 - c) **Field 8** – consists of 120 acres; application 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/stormwater and has received wastewater/stormwater as of the effective date of this Discharge Permit. This field is located west of Field 12 and the production area, and was previously known as Field A3 and Land Application Area C.
 - d) **Field 12** – consists of 60 acres; application 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/stormwater and has received wastewater/stormwater as of the effective date of this Discharge Permit. This field is located west the production area, and was previously known as Field A1 and Land Application Area B.

- e) **Field 13** – consists of 120 acres; application 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/stormwater and has received wastewater/stormwater as of the effective date of this Discharge Permit. This field is located south of the production area and Field 12, and was previously known as Field A2 and Land Application Area A.

DAIRY RULE TRANSITION REQUIREMENTS

4. The permittee shall have 90 days from the effective date of this Discharge Permit (**by January 18, 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 5, and 7
- f) Part II.C
- g) Part II.D.2
- h) Part II.D.3(a)
- i) Part II.E.3
- 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.

OPERATIONAL REQUIREMENTS

6. 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.
7. 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 |

8. The permittee is authorized and required to transfer stormwater collected in the unlined stormwater impoundment(s) to the wastewater impoundment(s) or the distribution system for the land application area in accordance with Subsection I of 20.6.6.20 NMAC.
9. Pursuant to Subsection D of 20.6.6.35 NMAC, the permittee shall have 90 days from the effective date of this Discharge Permit (**by January 18, 2015**) to submit documentation in accordance with Subsection M of 20.6.6.20 NMAC to demonstrate that the existing flow meter(s) meets the requirements of Subsection M of 20.6.6.20 NMAC.
10. The permittee is authorized to use the following existing flow meter(s) provided that the requirements of Subsection M of 20.6.6.20 NMAC have been met.
 - a) **LAA Meter** – located at the second screen separator and aboveground tank on the discharge line to the land application area; measures the volume of wastewater/stormwater discharged from Wastewater Lagoon to each field in the land application area.
11. The permittee is authorized to use the following existing flow meter(s) pursuant to the alternative requirements of Subsection N of 20.6.6.20 NMAC [provided that the requirements of Subsection M of 20.6.6.20 NMAC have been met].
 - a) **Parlor Supply Meter** – located on the incoming water parlor supply line; measures the volume of all fresh water contributing to the wastewater discharged

to Wastewater Lagoon; providing an estimate of the volume of wastewater generated from the milking parlor.

12. 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.
13. 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.
14. 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) **Field 6** – crops shall be harvested mechanically.
 - b) **Field 7** – crops shall be harvested mechanically.
 - c) **Field 8** – crops shall be harvested mechanically.
 - d) **Field 12** – crops shall be harvested mechanically.
 - e) **Field 13** – 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.

15. 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><u>Scaled Map of Dairy Facility – Updates:</u></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> | <p>Within 90 days of any addition or change.</p> | <p>20.6.6.20.V NMAC</p> |
| B. | <p><u>Nutrient Management Plan:</u></p> <p>Develop and submit annual updates to the NMP.</p> | <p>Annually: May 1</p> | <p>20.6.6.21.I NMAC</p> |

| Item No. | Action Required and Submittal Due to NMED | Due Date | Citation |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------|
| C. | <p><u>Backflow Prevention:</u></p> <p>i) Complete installation of backflow prevention methods or devices.</p> <p>ii) Submit confirmation of installation.</p> | <p>January 18, 2015</p> <p>April 18, 2015</p> | 20.6.6.21.M NMAC |
| D. | <p><u>Backflow Prevention by Reduced Pressure Principle</u> <u>Backflow Prevention Assembly – Inspection and Maintenance:</u></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> | Annually: May 1 | 20.6.6.21.N NMAC |

GROUND WATER MONITORING REQUIREMENTS

16. 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.

| Item No. | Action Required and Submittal Due to NMED | Due Date | Citation |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------|
| A. | <p><u>Ground Water Monitoring – Existing Combination Wastewater/Stormwater Impoundments:</u></p> <p>Install the following monitoring wells within 75 feet hydrologically downgradient of the top inside edge of each <u>existing</u> combination impoundment:</p> <p>i) MW-1A, hydrologically downgradient of the clay-lined combination wastewater/stormwater impoundment (replaces the supply well known as MW-1).</p> | February 17, 2015 | 20.6.6.23.A(2) NMAC |
| B. | <p><u>Ground Water Monitoring – Existing Stormwater Impoundments:</u></p> <p>Install the following monitoring wells within 75 feet hydrologically downgradient of the top inside edge of each <u>existing</u> stormwater impoundment:</p> <p>MW-3, hydrologically downgradient of Storm Runoff Lagoon.</p> | February 17, 2015 | 20.6.6.23.A(3) NMAC |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|
| C. | <p><u>Ground Water Monitoring – Existing Land Application Area:</u></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: MW-2A, hydrologically downgradient of Field 13 (replaces the supply well known as MW-2). MW-4, hydrologically downgradient of Field 12. MW-5, hydrologically downgradient of Field 8. MW-6, hydrologically downgradient of Field 7. MW-7, hydrologically downgradient of Field 6.</p> | February 17, 2015 | 20.6.6.23.A(4) (b) NMAC |
| D. | <p><u>Ground Water Monitoring – Upgradient:</u></p> <p>Install a monitoring well, MW-8, hydrologically upgradient of all contamination sources at the dairy facility.</p> | February 17, 2015 | 20.6.6.23.A(5) NMAC |
| E. | <p><u>Ground Water Sampling and Reporting – Routine:</u></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> | Quarterly | 20.6.6.23.G |
| F. | <p><u>Ground Water Sampling – New Monitoring Wells:</u></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"> i) MW-1A, hydrologically downgradient of the clay-lined combination wastewater/stormwater impoundment. ii) MW-2A, hydrologically downgradient of Field 13. iii) MW-3, hydrologically downgradient of Storm Runoff Lagoon. iv) MW-4, hydrologically downgradient of Field 12. v) MW-5, hydrologically downgradient of Field 8. vi) MW-6, hydrologically downgradient of Field 7. vii) MW-7, hydrologically downgradient of Field 6. viii) MW-8, hydrologically upgradient of all contamination sources at the dairy facility. | March 19, 2015 | 20.6.6.23.H NMAC |
| G. | <p><u>Monitoring Well Survey and Ground Water Flow Determination:</u></p> <p>Survey monitoring wells required to be installed <i>within 120 days of the effective date of the Discharge Permit</i> to a USGS benchmark.</p> | March 19, 2015 | 20.6.6.23.I NMAC |
| H. | <p><u>Monitoring Well Completion Report:</u></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> | April 18, 2015 | 20.6.6.23.J NMAC |

| | | | |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------|
| I. M o n | <u>Ground Water Elevation Contour Maps:</u> 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. | Quarterly | 20.6.6.23.L NMAC |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------|

Monitoring wells shall be constructed and completed in accordance with Subsection D of 20.6.6.23 NMAC.

17. Monitoring wells shall be permanently identified in accordance with Subsection C of 20.6.6.23 NMAC.
18. The permittee shall complete the following items and submit documentation to NMED as summarized in the following table:

MONITORING REQUIREMENTS

19. 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.
20. 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**

21. 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. | <u>Wastewater Volume Estimation and Reporting:</u> Using a flow meter(s) installed on the fresh water supply line(s), measure the volume of all sources contributing to the wastewater discharged to the impoundment(s) authorized to contain wastewater. Submit the meter readings (without adjustments or deductions in accordance with Subsection N of 20.6.6.20 NMAC). | Quarterly | 20.6.6.24.C NMAC |
| B. | <u>Stormwater Sampling and Reporting:</u> Collect and analyze stormwater samples on a quarterly basis | Quarterly | 20.6.6.24.D |

| Item No. | Action Required and Submittal Due to NMED | Due Date | Citation |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------|
| | from each stormwater impoundment and submit results. | | NMAC |
| C. | <u>Flow Meter Field Calibration:</u> Perform flow meter field calibrations annually and submit a flow meter field calibration report. | Annually: May 1 | 20.6.6.24.E NMAC |
| D. | <u>Volume of Wastewater and Wastewater/Stormwater Land Applied – Measurement and Reporting:</u> Measure the volume of all wastewater discharges to each field within the land application area using a flow meter(s) and submit the information. | Quarterly | 20.6.6.25.A NMAC |
| E. | <u>Wastewater to be Land Applied – Sampling and Reporting:</u> 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. | Quarterly | 20.6.6.25.C NMAC |
| F. | <u>Manure Solids – Nitrogen Content:</u> 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. | Quarterly | 20.6.6.25.D NMAC |
| G. | <u>Irrigation Water – Sampling, Volume Applied and Reporting:</u> 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. | Annually: May 1 | 20.6.6.25.E NMAC |
| H. | <u>Fertilizer Application Reporting:</u> Maintain and submit a log of all additional fertilizer applied to each field within the land application area. | Quarterly | 20.6.6.25.F NMAC |
| I. | <u>Land Application Data Sheets:</u> Complete and submit land application data sheets (LADS) for each field within the land application area. | Quarterly | 20.6.6.25.G NMAC |
| J. | <u>Crop Yield Documentation:</u> Submit crop yield documentation and plant and harvest dates of each crop grown. | Quarterly | 20.6.6.25.H NMAC |

| Item No. | Action Required and Submittal Due to NMED | Due Date | Citation |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------|
| K. | <u>Nitrogen Concentration of Harvested Crop:</u> Determine the percent total nitrogen and dry matter of each harvested crop and submit results. | Quarterly | 20.6.6.25.I NMAC |
| L. | <u>Nitrogen Removal Summary of Harvested Crop:</u> Develop and submit a nitrogen removal summary for each crop grown on each field within the land application area. | Quarterly | 20.6.6.25.J NMAC |
| M. | <u>Soil Sampling – Initial Event in a Discharge Permit Term:</u> 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. | May 1, 2015 | 20.6.6.25.K NMAC |
| N. | <u>Soil Sampling – Routine:</u> 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. | Annually: May 1 | 20.6.6.25.L NMAC |

CONTINGENCY REQUIREMENTS

22. 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

23. 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.
24. Only upon written notification by certified mail from NMED, shall the permittee abandon the following well(s) previously used for monitoring in accordance with Subsection C of 20.6.6.30 NMAC. The permittee is not required to perform routine ground water sampling from the following well(s); however, NMED may collect ground water samples from the well(s) pursuant to Subsection D of 20.6.2.3107 NMAC.
- a) **MW-1** located at south-southwest of the production area and north of Field 13.

The well abandonment report shall be submitted to NMED within 60 days of completion of well plugging activities.

GENERAL REQUIREMENTS

25. 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.
26. 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.
27. Transfer of a Discharge Permit for a dairy facility shall be completed in accordance with Section 20.6.6.34 NMAC.
28. 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.
29. 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. This Discharge Permit does not contain additional conditions.

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 20, 2014**

Expiration Date: **October 20, 2019**

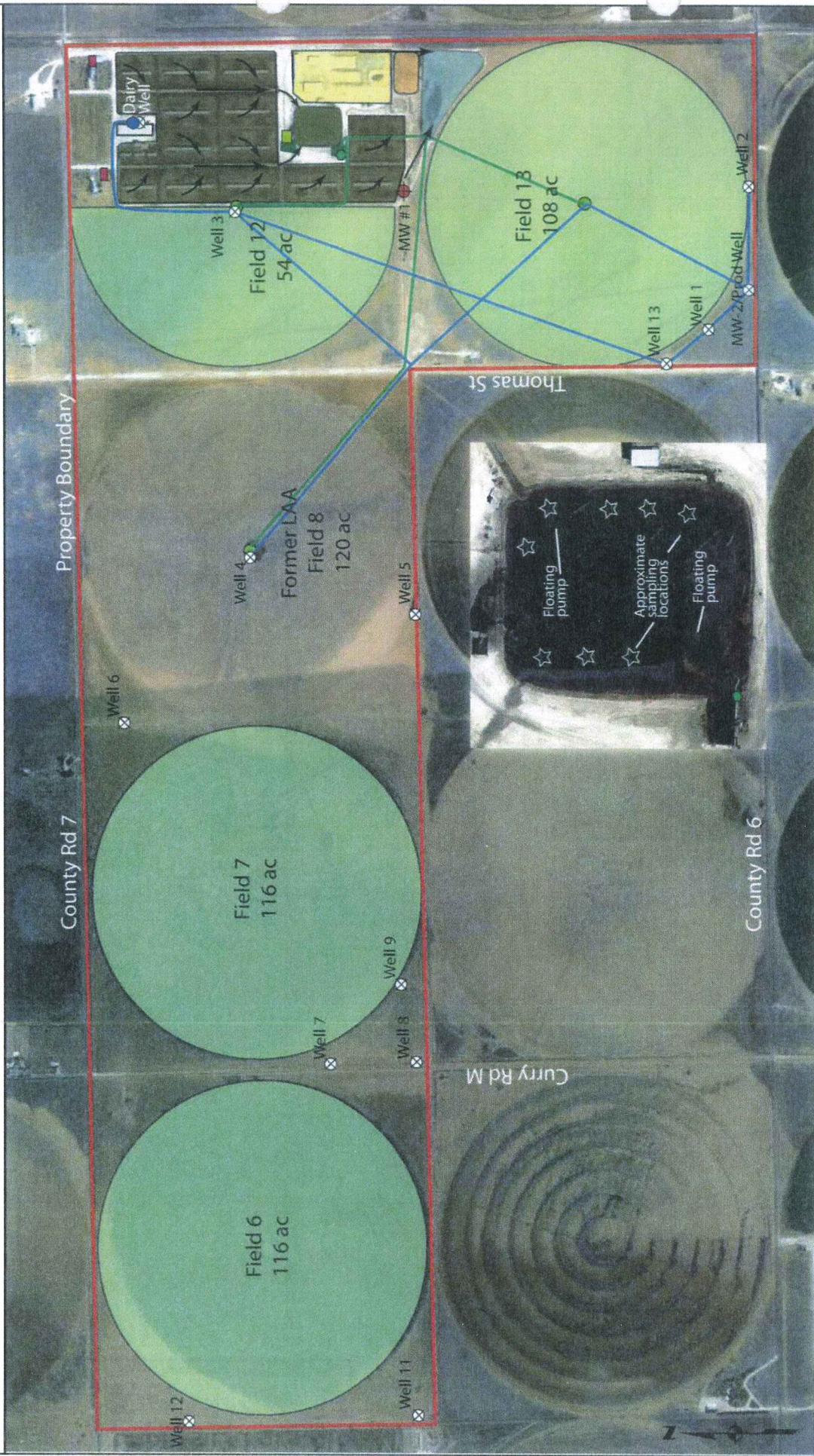


JERRY SCHOEPPNER
Chief, Ground Water Quality Bureau
New Mexico Environment Department

T2N, R35E, Sec 34, 35, and 36
Curry County

Rajen 2 Dairy, DP-878

1157 CR 7
Clovis, NM 88101
(575) 760-1001



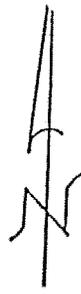
Legend

| | | | | | |
|--|-----------------------|--|-------------------------|--|---------------------------|
| | Land application area | | Septic tank | | Mixing tank/air gap |
| | Corrals, calf pens | | Manure storage | | Greenwater meter |
| | Greenwater lagoon | | Stormwater pond | | Fresh water pipeline |
| | Commodity storage | | Monitoring well | | Fresh water meter |
| | | | Supply well | | Direction of surface flow |
| | | | Separator | | |
| | | | Green water pipeline | | |
| | | | Sump with transfer pump | | |

0 750 1,500 3,000 Feet

GLORIETA GEOFSCIENCE, INC.
 P.O. Box 5725 Santa Fe, NM 87505
 (505) 833-1218
 www.glorietageo.com

WELL "C"
1124.9
IRREG. WELL
WS = 826.18



WELL "A"
1110.1
ABANDONED
IRREG. WELL
WS = 830.74

3899.0'

3993.5'

Hydraulic Gradient

930

929

928

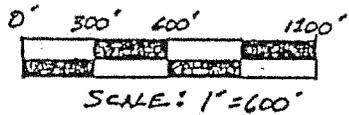
9270

926

925

924.8"

WELL "B"
1100.0
IRREG. WELL
WS = 823.08



NOTE: ALL ELEVATIONS ARE
TAKEN TO THE TOP
OF WELL CASINGS.
Hydraulic Gradient
by Orlando Pacheco 9/12/96

MONITOR WELL LOCATIONS AT:
BOERSMA'S A+T DAILY

SURVEY BY
Pettisrow & Assoc.

CLIENT:
CUST WYANT

DATE OF FIELD WORK: 8-09-96

DATE OF PLAT: 8-11-96