



**NEW MEXICO
-ENVIRONMENT DEPARTMENT**



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Governor

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RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

August 22, 2014

Jordan Pareo, Owner
Pareo Dairy
P.O. Box 489
Veguita, NM 87062

RE: Discharge Permit Renewal, DP-865, Pareo Dairy

Dear Mr. Pareo:

On June 21, 2013, the New Mexico Environment Department (NMED) proposed renewal of the Ground Water Discharge Permit for **Pareo Dairy**, DP-865, pursuant to Subsection H of 20.6.2.3108 NMAC. A draft Discharge Permit Renewal was sent to you at that time. In response, NMED received comments from the facility on July 22, 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 DP 865, Jordan Pareo, 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

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Jordan Pareo, Own Pareo Dairy PO Box 489 Veguita, NM 8706	
PS Form 3800, August 2006	

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Jordan Pareo, Owner, DP-865
August 22, 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.

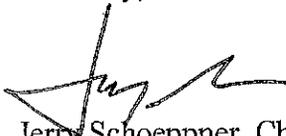
You will be invoiced under separate cover for the remaining permit fee balance of \$1150.00.

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 August 22, 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/njm

Encs: Discharge Permit Renewal, DP-865

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

**GROUND WATER DISCHARGE PERMIT - RENEWAL
EXISTING DAIRY FACILITY with an EVAPORATIVE DISPOSAL SYSTEM
Pareo Dairy, DP-865**

I. INTRODUCTION AND SUMMARY

The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal (Discharge Permit), DP-865, to Jordan Pareo (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 Pareo 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 11,000 gallons per day (gpd) of wastewater may be discharged from the production area. Wastewater flows from the parlor through a two-cell concrete-lined solids settling separator into a synthetically lined impoundment system for disposal by evaporation. The synthetically lined impoundment system consists of one wastewater impoundment and one combination wastewater/stormwater impoundment. 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 1433 Hwy 304, approximately one mile north of Veguita, in Sections 31 and 32, Township 4N, Range 2E (projected), in the Casa Colorada and Belen Land Grants, Socorro County. Ground water most likely to be affected is at a depth of approximately 18 to 28 feet and had a pre-discharge total dissolved solids concentration of approximately 330 to 400 milligrams per liter.

The original Discharge Permit was issued on September 10, 1992 and subsequently renewed, renewed and modified, or modified on February 21, 1995, November 7, 1997 and July 9, 2003. The application consists of the materials submitted by the permittee dated May 29, 2008 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

Abbreviation	Explanation	Abbreviation	Explanation
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 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 July 9, 2003 (before the effective date of the Dairy Rule of December 31, 2011) required the wastewater impoundment system to have the capacity to dispose of the maximum daily discharge volume (expressed in gallons per day) by evaporation 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 measures the volume of wastewater discharged to a wastewater impoundment(s) using a flow meter installed on the discharge line(s) from all wastewater sources to the wastewater impoundment(s).

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) Wastewater Impoundment
 - i. **Lagoon 1** - authorized for use by this Discharge Permit.
 - b) Wastewater and Combination Wastewater/Stormwater Impoundments
 - i. **Lagoon 2** - authorized for use by this Discharge Permit.
 - c) Stormwater Impoundments
 - i. **Stormwater Pond** - authorized for use by 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 11,000 gpd of wastewater from the production area. Wastewater flows from the parlor through a two-cell concrete-lined solids settling separator into a synthetically lined impoundment system for disposal by evaporation. The synthetically lined impoundment system consists of one wastewater impoundment and one combination wastewater/stormwater impoundment.
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) **Lagoon 1** – authorized to receive wastewater for disposal by evaporation. This impoundment exists as of the effective date of this Discharge Permit and is synthetically lined with 40-mil HDPE. Wastewater flows from the settling separator into this impoundment and this impoundment flows in Lagoon 2. This impoundment is located west of the parlor.
 - b) **Lagoon 2** – authorized to receive wastewater and stormwater for disposal by evaporation. This impoundment exists as of the effective date of this Discharge Permit and is synthetically lined with 60-mil HDPE. Wastewater flows from Lagoon 1 into this impoundment. This impoundment is located west of the main corrals and north of Lagoon 1.

- c) **Stormwater Pond** – authorized to receive stormwater for transfer to the synthetically lined impoundment system. This impoundment system exists as of the effective date of this Discharge Permit and is unlined. This impoundment is located west of the heifer corrals located at the south end of the production area.

DAIRY RULE TRANSITION REQUIREMENTS

3. The permittee shall have 90 days from the effective date of this Discharge Permit (**by November 20, 2014**) 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)
- e) Part II.B.1, 2, 4, 5, and 7
- f) Part II.C
- g) Part II.D.2
- h) Part II.D.3(a) and (b)
- i) Part II.E.3
- j) Part IV.B
- k) Part IV.C

ENGINEERING AND SURVEYING REQUIREMENTS

4. 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

5. The permittee shall comply with the requirements of Sections 20.6.6.20 and 20.6.6.22 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.6.20 and 20.6.6.22 NMAC.

6. 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

7. The permittee is authorized and required to transfer stormwater collected in the unlined stormwater impoundment(s) to the wastewater impoundment(s) in accordance with Subsection I of 20.6.6.20 NMAC.
8. 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 November 20, 2014**) 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.
9. 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) **Parlor Discharge Flow Meter** – located on the discharge line between the parlor and the solids settling separator; measures the volume of wastewater discharged from the production area to the synthetically lined lagoon system.
10. The permittee shall remove all manure solids and composted material from the dairy in accordance with Subsection S of 20.6.6.20 NMAC.
11. 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.	<u>Impoundment Construction or Improvement:</u> i) Submit the Construction Certification Report verifying construction pursuant to Subsection C of 20.6.6.17 NMAC.	Within 90 days of completed impoundment construction.	20.6.6.20.E NMAC

Item No.	Action Required and Submittal Due to NMED	Due Date	Citation
B.	<p><u>Flow Meter Installation:</u></p> <p>i) Complete installation of flow meter(s).</p> <p>ii) Submit confirmation of installation.</p>	<p>January 19, 2015</p> <p>February 18, 2015</p>	<p>20.6.6.20.J NMAC</p>
C.	<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>

GROUND WATER MONITORING REQUIREMENTS

12. 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.
13. Monitoring wells shall be constructed and completed in accordance with Subsection D of 20.6.6.23 NMAC.
14. Monitoring wells shall be permanently identified in accordance with Subsection C of 20.6.6.23 NMAC
15. 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 November 20, 2014**) to submit the information required by Paragraph (6) of Subsection A of 20.6.6.23 NMAC to verify that monitoring wells in existence as of the effective date of this Discharge Permit and prior to the effective date of the Dairy Rule (December 31, 2011) are appropriate for continued use for ground water monitoring.

The permittee is authorized to use the following monitoring well(s) provided that the requirements of Paragraph (6) of Subsection A of 20.6.6.23 NMAC are met.

- a) **MW-4**, hydrologically downgradient of Lagoon 2; located west of Lagoon 2 towards the southern end of the impoundment.
 - b) **MW-5**, hydrologically upgradient of all contamination sources at the dairy facility; located north of the production area.
16. 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>Ground Water Monitoring – Existing Wastewater Impoundments:</u></p> <p>Install the following monitoring wells within 75 feet hydrologically downgradient of the top inside edge of each <u>existing</u> wastewater impoundment:</p> <p>i) MW-3A, hydrologically downgradient of Lagoon 1 (replaces MW-3).</p>	December 20, 2014	20.6.6.23.A(1) 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>i) MW-1A, hydrologically downgradient of Stormwater Pond (replaces MW-1).</p>	December 20, 2014	20.6.6.23.A(3) NMAC
C.	<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 NMAC
D.	<p><u>Ground Water Sampling – New Monitoring Wells:</u></p> <p>Collect ground water samples in accordance with Subsection F of 20.6.6.23 NMAC from the following newly installed monitoring wells required to be installed in the following locations:</p> <p>i) MW-3A, hydrologically downgradient of Lagoon 1. ii) MW-1A, hydrologically downgradient of Stormwater Pond.</p>	January 19, 2015	20.6.6.23.H NMAC
E.	<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>	January 19, 2015	20.6.6.23.I NMAC
F.	<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>	February 18, 2015	20.6.6.23.J NMAC
G.	<p><u>Ground Water Elevation Contour Maps:</u></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>	Quarterly	20.6.6.23.L NMAC

MONITORING REQUIREMENTS

17. The permittee shall comply with the requirements of Sections 20.6.6.24 and 20.6.6.26 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.6.24 and 20.6.6.26 NMAC.
18. 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**

19. 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 Measurement and Reporting:</u> 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.	Quarterly	20.6.6.24.C NMAC
B.	<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
C.	<u>Wastewater to be Evaporated – Sampling and Reporting:</u> Analyze wastewater samples on a semi-annual basis collected from each impoundment used for disposal of wastewater by evaporation, and submit results.	Semi-annually: May 1 November 1	20.6.6.26 NMAC

CONTINGENCY REQUIREMENTS

20. The permittee shall comply with the requirements of Sections 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 20.6.6.27 and 20.6.6.29 NMAC.

CLOSURE REQUIREMENTS

21. 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.
22. 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 west of Stormwater Pond.
 - b) **MW-2** – located east of Stormwater Pond.
 - c) **MW-3** – located southwest of Lagoon 1.

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

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.

Pareo Dairy, DP-865

August 22, 2014

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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: **August 22, 2014**

Expiration Date: **August 22, 2019**



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