



MICHELLE LUJAN GRISHAM  
GOVERNOR

JAMES C. KENNEY  
CABINET SECRETARY

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

September 9, 2022

William A. Kluth, General Manager  
Tagawa Greenhouses, Inc.  
17999 Weld County Road 4  
Brighton, CO 80603  
Sent via email on the date of this letter to [bkluth@tagawas.com](mailto:bkluth@tagawas.com)

**RE: Draft Discharge Permit Renewal, DP-1144, Tagawa Greenhouse - Estancia**

Dear William Kluth:

The New Mexico Environment Department (NMED) hereby provides notice to Tagawa Greenhouses, Inc. of the proposed approval of Ground Water Discharge Permit Renewal, DP-1144, (copy enclosed), pursuant to Subsection H of 20.6.2.3108 NMAC. NMED will publish notice of the availability of the draft Discharge Permit in the near future for public review and comment and will forward a copy of that notice to you.

Prior to making a final ruling on the proposed Discharge Permit, NMED will allow 30 days from the date the public notice is published in the newspaper for any interested party, including the Discharge Permit applicant, i.e., yourself, to submit written comments and/or a request a public hearing. A hearing request shall set forth the reasons why a hearing is requested. NMED will hold a hearing in response to a timely hearing request if the NMED Secretary determines there is substantial public interest in the proposed Discharge Permit.

Please review the enclosed draft Discharge Permit carefully. Please be aware that this Discharge Permit may contain conditions that require the permittee to implement operational, monitoring or closure actions by a specified deadline.

Please submit written comments or a request for hearing to my attention at the address below, through the online portal accessible at <https://nmed.commentinput.com/comment/search> or via email to [sarah.schnell@state.nm.us](mailto:sarah.schnell@state.nm.us) or [acs.general@state.nm.us](mailto:acs.general@state.nm.us). If NMED does not receive written comments or a request for hearing during the public comment period, the draft Discharge Permit will become final.

Thank you for your cooperation during the review process. Feel free to contact me with any questions at [sarah.schnell@state.nm.us](mailto:sarah.schnell@state.nm.us).

Sincerely,

Sarah F. Schnell, Geoscientist

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

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

Telephone (505) 827-2900 | [www.env.nm.gov/gwqb/](http://www.env.nm.gov/gwqb/)

Groundwater Quality Bureau

Enc: Draft Discharge Permit Renewal, DP-1144

cc: Jaben Richards, GWQB ACS Acting Manager  
Alysha Archuleta, Site Manager [ararchuleta@tagawas.com](mailto:ararchuleta@tagawas.com)  
ACS Reading File



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***Draft: September 9, 2022***

**GROUND WATER QUALITY BUREAU  
DISCHARGE PERMIT –RENEWAL  
Issued under 20.6.2 NMAC**

**Facility Name:** Tagawa Greenhouse- Estancia  
**Discharge Permit No:** DP-1144  
**Permittee Name:** William Kluth, General Manager  
**Facility Owner/Operator:** Tagawa Greenhouses, Inc.  
**Mailing Address:** 17999 Weld County Road 4  
Brighton, CO 80603

**Facility Location:** 1459 Highway 542, Estancia  
Section 10, T05N, R08E

**County:** Torrance

**Permitting Action:** Renewal  
**Source Classification:** Agriculture – Greenhouse

**Permit Issuance Date:** DATE  
**Permit Expiration Date:** DATE

**NMED Permit Contact:** Sarah F. Schnell  
**Telephone Number/Email:** (505) 660-8368 / [sarah.schnell@state.nm.us](mailto:sarah.schnell@state.nm.us) or  
(505) 827-2900 / [acs.general@state.nm.us](mailto:acs.general@state.nm.us)

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**JUSTIN BALL**  
Chief, Ground Water Quality Bureau  
New Mexico Environment Department

## TABLE OF CONTENTS

Part A	GENERAL INFORMATION.....	1
A100	Introduction .....	1
A101	Terms of Permit Issuance .....	1
A102	Applicable Regulations .....	2
A103	Facility: Physical Description .....	2
A104	Facility: Documented Hydrogeologic Conditions .....	3
Part B	DISCHARGE REQUIREMENTS.....	3
B100	Facility: Authorized Discharge .....	3
B101	Existing System Controls.....	4
B102	Conditions for Operation.....	4
B103	Facility: Conditions for Closure .....	11
B104	Facility: Contingency Plan .....	13
Part C	GENERAL Terms and CONDITIONS .....	15
C100	Legal.....	15
C101	General Inspection and Entry Requirements .....	17
C102	General Record Keeping and Reporting Requirements .....	17
C103	Modifications and/or Amendments .....	18
Part D	MISCELLANEOUS .....	18
D100	Acronyms .....	18

## LIST OF TABLES

Table B1 General Discharge Permit Conditions: .....	5
Table B2 Impoundment(s) .....	5
Table B3 Land Application Area Management .....	7
Table B4 Solids Management .....	8
Table B5 Flow Meters .....	8
Table B6 Groundwater Monitoring Wells.....	10

## **PART A    GENERAL INFORMATION**

### **A100    Introduction**

- A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal (Discharge Permit) **DP-1144**, to William Kluth (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Ground and Surface Water Protection Regulations, 20.6.2 NMAC. NMED's purpose in issuing this Discharge Permit is to control the discharge of water contaminants from Tagawa Greenhouse – Estancia (Facility) for the protection of groundwater and those segments of surface water gaining from groundwater inflow, for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health.
- B. The Permittee is discharging up to 49,999 gallons per day (gpd) of effluent from the Tagawa Greenhouse. This discharge or leachate may move directly or indirectly into groundwater of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter (mg/L) or less of total dissolved solids (TDS) within the meaning of Subsection A of 20.6.2.3101 NMAC, without exceeding standards of 20.6.2.3103 NMAC for any water contaminant.
- C. In issuing this Discharge Permit, NMED has determined that the Permittee has met the requirements of Subsection C of 20.6.2.3109 NMAC. Pursuant to Section 20.6.2.3104 NMAC, it is the Permittee's responsibility to comply with the terms and conditions of this Discharge Permit; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

### **A101    Terms of Permit Issuance**

- A. **Permit Duration** - Pursuant to WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of a Discharge Permit shall be for the fixed term of **five years** from the effective date of the Discharge Permit.
- B. **Permit Fees** – Payment of permit fees is due at the time of Discharge Permit approval. Permit fees shall be paid in a single payment or shall be paid in equal installments on a yearly basis over the term of the Discharge Permit. Single payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date. Initial installment payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date; subsequent installment payments shall be remitted to NMED no later than the anniversary of the Discharge Permit effective date. Permit fees are associated with issuance of this Discharge Permit. Nothing in this Discharge Permit relieves the Permittee of the obligation to pay all permit fees assessed by NMED. A Permittee that ceases discharging or does not commence discharging from the facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. An approved Discharge Permit shall be suspended or terminated if the facility fails to remit an installment payment by its due date. [Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]

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- C. **Permit Renewal** - To renew this Discharge Permit, the Permittee shall submit, in accordance with 20.6.2.3106 NMAC, an application and any associated fees for renewal, renewal and modification, or renewal for closure at least 120 days before the discharge permit expiration date, unless closure of the facility is approved by NMED before that date.
- D. **Transfer of Ownership** - This Discharge Permit is being issued to William Kluth as identified in **Section A100** above. In accordance with Section 20.6.2.3111 NMAC, the Permittee, any listed owner(s) of record, and any [other] holder(s) of an expired discharge permit are responsible for complying with the conditions listed herein. If during the duration of this Discharge Permit a change in the list of responsible parties is required, transfer of ownership shall be completed in accordance with Section 20.6.2.3111(A).

#### **A102 Applicable Regulations**

- A. **Scope** - This Discharge Permit applies solely for the regulation of process wastewater or stormwater generated from facility operations and does not include regulation of domestic wastewater at the facility. Domestic wastewater generated at the facility is treated or disposed of pursuant to 20.7.3 NMAC and LW permit #002382.
- B. The discharge from the facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.
- C. Groundwater quality as observed in on-site monitoring wells is subject to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC unless otherwise specified in this Discharge Permit.
- D. Complying with the applicable requirements of 20.6.2 NMAC does not relieve a facility's owner, operator or Permittee from complying with the requirements of other applicable local, state and federal regulations or laws.

#### **A103 Facility: Physical Description**

- A. This facility is located at 1459 Highway 542, approximately 6 miles Southwest of Estancia, in Section 10, T05N, R08E, Torrance County.
- B. This facility is comprised of the following wastewater system components as identified in the application dated July 14, 2022, and the administrative record which includes the original Discharge Permit issued on June 16, 1997, and subsequently renewed and modified on August 24, 2006, and renewed and modified on August 18, 2017 as of the effective date of this Discharge Permit:
  - 1. Wastewater impoundments:
    - a. **Lagoon** – a synthetically-lined impoundment for the purpose of receiving and storing wastewater prior to discharge to the LAA, located approximately 125 feet southwest of the greenhouses. The Lagoon is lined with 60-mil HDPE and has a capacity of 8.9 acre-feet.

2. Fields or tracts within the land application area or surface disposal area:
  - a. **South Pivot** –8-acre field for land application, irrigated via center pivot, and located approximately 400 feet south of the greenhouses. This field has received wastewater since 2005.

These system components identified are potential sources of groundwater contamination. **Section B100** lists all wastewater system components authorized to discharge under this Discharge Permit.

**A104 Facility: Documented Hydrogeologic Conditions**

- A. Groundwater most likely to be affected at this facility is at a depth of approximately 101 feet and had a total dissolved solids concentration of 372 milligrams per liter.

**PART B DISCHARGE REQUIREMENTS**

**B100 Facility: Authorized Discharge**

- A. NMED authorizes the Permittee to discharge water contaminants as part of facility operations subject to the following requirements:
  1. The Permittee is authorized to discharge up to 49,999 gpd of wastewater from the production area. Wastewater flows to a sump (cistern) and is pumped to a synthetically lined combination wastewater impoundment for storage/or disposal by evaporation. Wastewater is land applied by center pivot irrigation to up to 8 acres of irrigated cropland under cultivation.
  2. The Permittee is authorized to use the following impoundments for the following purposes in accordance with Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC:
    - a. **Lagoon** – authorized to receive wastewater for storage prior to land application / surface disposal. This impoundment **exists** as of the effective date of this Discharge Permit
  3. The Permittee is authorized to apply wastewater to fields within the land application area in accordance with Subsection C of 20.6.2.3109 NMAC. The land application area is comprised of the following field for a total area of 8 acres.
    - a. **South Pivot** – This field was authorized by the last Discharge Permit (August 18, 2017) to receive wastewater and *has* received wastewater of the effective date of this Discharge Permit.
- B. This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges, such as spills or leaks must be reported to NMED in a corrective action conducted pursuant to Section 20.6.2.1203 NMAC.

#### **B101 Existing System Controls**

A. The following existing system controls at this facility shall be required as described below:

1. **Impoundment(s)** - The Permittee shall maintain operations of the existing impoundment(s) as listed in **Section A103** above in accordance with conditions listed in **Table B2** to achieve compliance with this Discharge Permit. The wastewater impoundment system shall be designed to achieve compliance with the storage capacity requirements of Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC.
2. **Flow Meter(s)** - The facility measures the volume of (1) wastewater discharged from the production area and (2) wastewater discharged to the land application area using the following flow meters:
  - a. **Discharge Meter** - located at the sump (cistern) to measure the volume of wastewater discharged from the production area to the lagoon. [Subsection A of 20.6.2.3107 NMAC]
  - b. **Lagoon Meter** - located at the lagoon to measure the volume of wastewater discharged from the lagoon to the Land Application Area.
3. **Monitoring Wells** - The facility uses the following monitoring wells to supply data representative of groundwater quality [Subsection A of 20.6.2.3107 NMAC]:
  - a. **North Well** – intended to be hydrologically upgradient of the facility and located north of the facility within the north field.
  - b. **MW-1** - intended to be located hydrologically downgradient of and on the eastern berm of the impoundment.
  - c. **MW-2** - intended to be located hydrologically downgradient of and on the eastern berm of the impoundment.
  - d. **Gordon Well** - intended to be located hydrologically up-gradient of the facility. Located west of the facility at the center of Gordon field.

#### **B102 Conditions for Operation**

- A. NMED has reviewed the permit application for the proposed facility and has determined that the provisions of the applicable groundwater quality standards will be met in accordance with this Discharge Permit. General conditions for all Discharge Permits issued by the Ground Water Quality Bureau pursuant to NMAC 20.6.2 are summarized on **Table B1**. Unless otherwise specified in Parts A or B of this Discharge Permit, both the general conditions for a facility discharge permit (as listed in this part) and facility-specific conditions as listed are mandated to assure continued compliance.



**Table B1**  
**General Discharge Permit Conditions:**

<b>Engineering and Surveying</b>
a) None required.
<b>Operations and Maintenance</b>
b) Operate in a manner such that standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC are not violated.
c) Maintain all signage indicating that the wastewater at the facility is not potable. All signage shall be printed in English and Spanish and shall remain visible and legible.
d) Repair or replace compromised pipe(s) or fixture(s) within 72 hours of discovery.
<b>Inspection and Monitoring</b>
e) Visually inspect all facility pipes and fixtures on a weekly basis for evidence of leaks or failure. [20.6.2.3107 NMAC]
<b>Recordkeeping and Reporting</b>
f) Maintain written records at the facility of any inspection(s), repairs and maintenance conducted on facility infrastructure as related the wastewater management system.
g) Conduct the monitoring, reporting, and other requirements in accordance with the monitoring requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
h) Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC
i) Unless otherwise identified in this Discharge Permit, submit monitoring reports to NMED annually according to the following schedule: [Subsection A of 20.6.2.3107 NMAC] <ul style="list-style-type: none"><li>• January 1 through December 31 – report by <b>August 1</b></li></ul>
j) Retain required records for a minimum period of five years from the date of any sample collection, measurement, report or application in accordance with 20.6.2.3107 NMAC, 74-6-5 WQA.

- B. **Impoundment(s)** - The Permittee shall manage all impoundments at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in **Table B2** below.

**Table B2**  
**Impoundment(s)**

<b>Engineering, Surveying and Construction and/or Improvements</b>
a) None required.
<b>Operations and Maintenance of All Impoundments</b>
b) Maintain impoundments to prevent conditions which could affect the structural integrity of the impoundments and associated liners. Such conditions include or may be characterized by the following:

**Table B2**  
**Impoundment(s)**

<ul style="list-style-type: none"><li>• Erosion damage</li><li>• Animal burrows or other damage</li><li>• The presence of large debris or large quantities of debris in the impoundment</li><li>• Evidence of seepage</li><li>• Evidence of berm subsidence</li><li>• The presence of vegetation, including aquatic plants, weeds, woody shrubs or trees growing within five feet of the top inside edge of a sub-grade impoundment, within five feet of the toe of the outside berm of an above-grade impoundment, or within the impoundment itself. Vegetation growing around the impoundment shall be routinely controlled by mechanical removal in a manner that is protective of the impoundment liner.</li></ul> <p>c) The Permittee shall preserve a minimum of two feet of freeboard between the liquid level in the impoundment(s) and the elevation of the top of the impoundment liner. In the event that the Permittee determines that two feet of freeboard cannot be preserved in the impoundment, the Permittee shall enact the contingency plan set forth in this Discharge Permit. Repair or replace the faulty pipe(s) or fixture(s) within 72 hours of discovery of an unauthorized discharge.</p>
<b>Inspection and Monitoring All Impoundments</b>
<p>d) Visually inspect impoundments and surrounding berms on a monthly basis to ensure proper condition and control vegetation growing around the impoundments in a manner that is protective of the liners.</p> <p>e) Visually inspect pipes and fixtures on a weekly basis for evidence of leaks or failure. In areas where pipes and fixtures cannot be visually inspected because they are buried, visually inspect the area directly surrounding the features for evidence of leaks or failure (e.g., saturated surface soil, surfacing wastewater, etc.).</p> <p>f) The Permittee shall collect a composite wastewater sample on a semi-annual basis from each impoundment. The composite sample(s) shall consist of a minimum of six equal sub-samples collected around the entire perimeter of the impoundment and thoroughly mixed. The composite sample(s) shall be analyzed for TKN, NO<sub>3</sub>-N, TDS and Cl. Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results shall be submitted to NMED in the <b>Annual</b></p>
<b>Recordkeeping and Reporting All Impoundments</b>
<p>g) Report any unauthorized discharges to NMED pursuant to 20.6.2.1203 NMAC.</p> <p>h) Unless otherwise specified in this Discharge Permit, submit all monitoring information in accordance with the general reporting schedule listed in Table B1 of this Discharge Permit.</p> <p>i) Notify NMED within 24 hours of discovery of any observed impoundment condition(s) that may impact the structural integrity of a berm or liner or that may result in an unauthorized discharge. [20.6.2.3107 NMAC]</p> <p>j) Maintain written records at the facility of all facility inspections including repairs and replacements.</p>

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- C. **Land Application Area Management** - The Permittee shall manage all land application areas at the facility in accordance with 20.6.2.3101 NMAC and the conditions summarized in **Table B3** below.

**Table B3**  
**Land Application Area Management**

<b>Engineering and Surveying</b>	
a)	Any irrigation or supply wells located within the land application area shall have a surface pad constructed in accordance with the recommendations of Subsection G of 19.27.4.29 NMAC and a permanent well cap or cover pursuant to Subsection I of 19.27.4.29 NMAC.
<b>Operations and Maintenance All Land Application Areas</b>	
b)	The Permittee shall discharge wastewater to each field within the land application area such that the amount of total nitrogen discharged does not exceed 200 pounds per acre in any 12-month period. Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. Wastewater shall be distributed evenly throughout the entire disposal area. Excessive ponding shall be prevented.
<b>Inspection and Monitoring All Land Application Areas</b>	
c)	The Permittee shall visually inspect the PVC piping on a monthly basis to ensure proper maintenance. Any damage to PVC piping shall be repaired within 30 days of discovery. The Permittee shall document all inspection findings and repairs made in a log kept on-site that is available to NMED upon request.
d)	In the event that a cross-connection with fresh water exists, the Permittee shall institute a backflow prevention method to protect wells and public water supply systems from contamination by wastewater prior to discharging to the land application area. Backflow prevention shall be achieved by a total disconnect (physical air gap separation between the discharge pipe and the liquid surface at least twice the diameter of the discharge pipe), or by a reduced pressure principal backflow prevention assembly (RP) installed on the line between the fresh water supply wells or public water supply and the wastewater delivery system. Backflow prevention shall be maintained at all times.
e)	RP devices shall be inspected and tested by a certified backflow prevention assembly tester at the time of installation, repair or relocation and at least on an annual basis thereafter. The backflow prevention assembly tester shall have successfully completed a 40-hour backflow prevention course based on the University of Southern California's Backflow Prevention Standards and Test Procedures, and obtained certification demonstrating completion. A malfunctioning RP device shall be repaired or replaced within 30 days of discovery, and use of all supply lines associated with the RP device shall cease until repair or replacement has been completed. Copies of the inspection and maintenance records and test results for each RP device associated with the backflow prevention program shall be maintained at a location available for inspection by NMED.
<b>Recordkeeping and Reporting All Land Application Areas</b>	
f)	The Permittee shall complete Surface Disposal Data Sheets (SDDS; copy enclosed) on a monthly basis that document the amount of nitrogen applied to the land application area during the most recent 12 months. The SDDS shall reflect the total nitrogen concentration from the most recent wastewater analysis and the measured discharge volumes to the land application area for each month. The SDDS shall be completed with information above or shall include a statement that

**Table B3**  
**Land Application Area Management**

wastewater disposal did not occur. The SDDS shall be submitted to NMED in the **Annual Monitoring Report**.

- D. **Solids Management** - The Permittee shall manage all solids at the facility in accordance with 20.6.2.3101 NMAC and the conditions summarized in **Table B4** below.

**Table B4**  
**Solids Management**

Engineering and Surveying
a) None required.
Operations and Maintenance
b) The Permittee shall store and remove solids separated from the wastewater in a manner and frequency necessary to prevent the contamination of groundwater. Solids removed from the sump or impoundment shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations. <b>Disposal of solids on the land application area is prohibited.</b> Prior to off-site disposal, any solids stored at the facility shall be managed to minimize the generation and infiltration of leachate by diverting stormwater run-on and run-off and by preventing the ponding of water within solids stockpiling.
Inspection and Monitoring
c) The Permittee shall inspect the cistern (sump) on a quarterly basis and clean as needed to prevent pump failure. The Permittee shall maintain a record of sump inspections, repairs and cleanings. Solids generated in the processing area shall be stored and transported off-site in accordance with the conditions of this Discharge Permit.
Recordkeeping and Reporting
d) The Permittee shall, at all times, have the log of sump inspections, repairs, and cleanings available for NMED review.

- E. **Flow Meters** – Pursuant to 20.6.2.3107 (A) and 20.6.2.3109 (C), the Permittee shall employ a flow metering system that uses flow measurement devices (flow meters) to measure the volume(s) of 1) wastewater discharged from the production area and 2) wastewater transferred and land applied at the facility. All flow meters employed at the facility shall be managed in accordance with the conditions listed in **Table B5** below.

**Table B5**  
**Flow Meters**

Engineering and Surveying
a) None required.
Operations and Maintenance

**Table B5**  
**Flow Meters**

b) All flow meters shall be calibrated in accordance with the manufacturer's requirements prior to installation or reinstallation following repair.
<b>Inspection and Monitoring</b>
f) The Permittee shall measure the monthly volume of wastewater discharged to the impoundment. The Permittee shall obtain readings from a totalizing flow meter ( <b>Discharge Meter</b> ) located on the discharge line between the processing area and the impoundment on a monthly basis and calculate the monthly and average daily volume discharged to the impoundment. The monthly meter readings, and calculated monthly and average daily discharge volumes shall be submitted to NMED in the <b>Annual Monitoring Report due August 1 of each year</b> .
g) The Permittee shall measure the monthly volume of wastewater discharged from the impoundment to the land application area. The Permittee shall obtain readings from a totalizing flow meter ( <b>Lagoon Meter</b> ) located on the discharge line between the impoundment and the land application area on a monthly basis and calculate the monthly and average daily discharge volume. The monthly volume discharged shall be used on the LADS or SDDS to calculate nitrogen loading. The monthly meter readings, and calculated monthly and average daily discharge volumes shall be submitted to NMED in the <b>Annual Monitoring Report due August 1 of each year</b> .
h) Visually inspect flow meters on a weekly basis for evidence of malfunction. If a visual inspection indicates a flow meter is not functioning to measure flow, the Permittee shall initiate repair or replacement of the meter within 30 days of discovery.
<b>Recordkeeping and Reporting</b>
i) Within 30 days of meter installation or replacement, submit a <b>Confirmation of Installation</b> report to NMED that includes: a description of the device type, manufacturer, meter identification, location, record drawings, and a copy of the manufacturer's certificate of calibration and a copy of the manufacturer's recommended maintenance schedule.
j) Maintain copies of the manufacturer's certificate of calibration and the manufacturer's recommended maintenance schedule at the facility.
k) Record of meter readings at intervals not to exceed monthly. The average daily discharge volume for each recording interval shall be calculated by dividing the difference between the meter readings by the number of days between meter readings.
l) Record meter readings (without adjustments or deductions) and submit in the <b>Annual Monitoring Report due August 1 of each year</b> . Include the date, time and units of each measurement, and calculations for the average daily volumes of wastewater discharged from the processing area, reported in gallons per day.
m) For meters requiring repair, submit a report to NMED with the subsequent monitoring report following the repair that includes a description of the malfunction, a statement verifying the repair, and a copy of the manufacturer's or repairer's certificate of calibration.
n) For meters requiring replacement, submit a report to NMED with the subsequent monitoring report following the replacement that includes plans for the device, a copy of the manufacturer's certificate of calibration, and a copy of the manufacturer's recommended maintenance schedule.
o) The Permittee shall maintain a log of repairs. The log shall be available, at all times, for NMED inspection.

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- F. **Monitoring Well(s)** - Pursuant to 20.6.2.3107 (A) and 20.6.2.3109 (C), the Permittee is required to install monitoring wells at appropriate depths and locations to monitor groundwater quality. The approved groundwater monitoring well system at the facility is detailed in **Table B6** below.

**Table B6**  
**Groundwater Monitoring Wells**

<b>Engineering and Surveying</b>	
a) None required.	
<b>Operations and Maintenance</b>	
b) None required.	
<b>Inspection and Monitoring</b>	
c) Perform semi-annual groundwater sampling for all facility monitoring wells as identified in Section B101 A.3 and analyze the samples for dissolved TKN, NO <sub>3</sub> -N, TDS and Cl. Groundwater sample collection, preservation, transport, and analysis shall be performed according to the following procedure:	
<ul style="list-style-type: none"> <li>• Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest hundredth of a foot.</li> <li>• Purge three well volumes of water from the well prior to sample collection.</li> <li>• Obtain samples from the well for analysis.</li> <li>• Properly prepare, preserve and transport samples.</li> <li>• Analyze samples in accordance with the methods authorized in this Discharge Permit.</li> </ul>	
Depth-to-most-shallow groundwater measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED in the <b>Annual Monitoring Report</b> .	
d) The Permittee shall develop groundwater elevation contour maps using the top of casing elevation data from the monitoring well survey and semi-annual depth-to-most-shallow groundwater measurements obtained from the groundwater monitoring wells required by this Discharge Permit.	
The groundwater elevation contour map shall depict the groundwater flow direction based on the groundwater elevation contours. Groundwater elevations between monitoring well locations shall be estimated using common interpolation methods. A contour interval appropriate to the data shall be used, but in no case shall the interval be greater than two feet. Groundwater elevation contour maps shall depict the groundwater flow direction, using arrows, based on the orientation of the groundwater elevation contours, and the location and identification of each monitoring well and contaminant source. The groundwater elevation contour map shall be submitted to NMED in the <b>Annual Monitoring Report</b> .	
e) Prior to the expiration date of this Discharge Permit, NMED shall have the option to perform one downhole inspection of each monitoring well identified in this Discharge Permit. NMED shall establish the inspection date and provide at least 60 days' notice to the Permittee by certified	

**Table B6**  
**Groundwater Monitoring Wells**

mail. The Permittee shall have any existing dedicated pumps removed at least 48 hours prior to NMED inspection to allow adequate settling time of any sediment agitated as a result of pump removal.

**Recordkeeping and Reporting**

- f) A **Semi-Annual Monitoring Report** shall be filed with NMED in accordance with the general reporting schedule listed in **Table B1**. Each **Semi-Annual Monitoring Report** shall contain, at a minimum, the following information:
- Facility map with location and number of each well in relation to the contamination source it is intended to monitor
  - Depth-to-shallowest groundwater measurements
  - Field parameter measurements and parameter stabilization log
  - Analytical results (including the laboratory quality assurance and quality control summary report)
  - Groundwater elevation contour maps utilizing elevation contours of 2 ft or less

**B103 Facility: Conditions for Closure**

- A. Upon closure of the facility, the Permittee shall perform the following closure measures:
- B. Upon written notification by certified mail from NMED, the Permittee shall abandon the following well(s) previously used for monitoring in accordance with Sections 20.6.2.3109 NMAC and 20.6.2.3107 NMAC.
1. **North Well** – intended to be hydrologically upgradient of the facility and located north of the facility within the north field.
  2. **MW-1** - intended to be located hydrologically downgradient of and on the eastern berm of the impoundment.
  3. **MW-2** - intended to be located hydrologically downgradient of and on the eastern berm of the impoundment.
  4. **Gordon Well** - intended to be located hydrologically up-gradient of the facility. Located west of the facility at the center of Gordon field.

Well[s] shall be plugged and abandoned in pursuant to 19.27.4 NMAC and in accordance with NMED's *Monitoring Well Construction and Abandonment Guidelines* and any other applicable local, state, and federal regulations. Documentation describing the plug and abandonment procedures, including photographic documentation, shall be presented in a **Well Abandonment Report**. The **Well Abandonment Report** shall be submitted to NMED within 60 days of completion of well plugging activities.

- C. For permanent closure, the following closure actions shall be completed upon permanent cessation of wastewater discharge:
1. Within 60 days of ceasing discharging to the impoundment(s), the line leading to the impoundment(s) shall be plugged so that a discharge can no longer occur.
  2. Within 60 days of ceasing discharging to the impoundment(s), wastewater shall be evaporated or drained from the impoundment and any other wastewater system components and disposed of in accordance with all local, state, and federal regulations. OR discharged from the impoundment and any other wastewater system components to the land application area, as authorized by this Discharge Permit. The discharge of accumulated solids (sludge) from the impoundment to the land application is prohibited.
  3. Within 90 days of ceasing discharging to the impoundment(s), the Permittee shall submit a sludge removal and disposal plan to NMED for approval. The Permittee shall initiate implementation of the plan within 30 days following approval by NMED. The sludge removal and disposal plan shall include the following information.
    - a) The estimated volume and dry weight of sludge to be removed and disposed, including measurements and calculations.
    - b) Analytical results for samples of the sludge taken from the impoundment for TKN, NO<sub>3</sub>-N, percent total solids, and any other parameters tested (reported in mg/kg, dry weight basis).
    - c) The method(s) of sludge removal from the impoundment(s).
    - d) The method(s) of disposal for all of the sludge (and its contents) removed from the impoundment(s). The method(s) shall comply with all local, state and federal regulations, including 40 CFR Part 503. *Note: A proposal that includes the surface disposal of sludge may be subject to Ground Water Discharge Permitting requirements pursuant to 20.6.2.3104 NMAC that are separate from the requirements of this Discharge Permit.*
    - e) A schedule for completion of sludge removal and disposal not to exceed two years from the date discharge to the impoundment(s) ceased.
  4. Within one year following completion of the sludge removal and disposal, the Permittee shall complete the following closure measures.
    - a) Remove all lines leading to and from the impoundment(s), or permanently plug and abandon them in place.
    - b) Remove or demolish any other wastewater system components and re-grade area with suitable fill to blend with surface topography, promote positive drainage and prevent ponding.
    - c) Perforate or remove the impoundment liner(s).
    - d) Fill the impoundment(s) with suitable fill.
    - e) Re-grade the impoundment site to blend with surface topography, promote positive drainage and prevent ponding.



5. The Permittee shall continue groundwater monitoring until the requirements of this condition have been met and groundwater monitoring confirms for a minimum of eight (8) consecutive quarterly groundwater sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded and toxic pollutants are not present in groundwater.

If monitoring results show that a groundwater quality standard in Section 20.6.2.3103 NMAC is exceeded, the total nitrogen concentration in groundwater exceeds 10 mg/L, or a toxic pollutant as defined in Section of 20.6.2.7 NMAC is present in groundwater, the Permittee shall implement the contingency plan required by this Discharge Permit.

6. Following notification from NMED that post-closure monitoring may cease, the Permittee shall plug and abandon the monitoring well(s) in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.1, March 2011.
7. When all closure and post-closure requirements have been met, the Permittee may request to terminate the Discharge Permit [20.6.2.3109 NMAC, 20.6.2.3107. NMAC].

**B104 Facility: Contingency Plan**

- A. In the event NMED or the Permittee identifies any failures of the Discharge Permit or system not specifically noted herein, NMED may require the Permittee to develop for NMED approval a contingency or corrective action plan and schedule to cope with the failure(s) [20.6.2.3107.A(10) NMAC].
- B. Facility conditions that will invariably require Permittee action under one or more contingency plans include:

1. **Exceedance of groundwater quality standards** – In the event that groundwater monitoring indicates that a groundwater quality standard identified in Section 20.6.2.3103 NMAC is exceeded; the total nitrogen concentration in groundwater is greater than 10 mg/L; or a toxic pollutant (defined in Subsection WW of 20.6.2.7 NMAC) is present in a groundwater sample and in any subsequent groundwater sample collected from a monitoring well required by this Discharge Permit, the Permittee shall enact the following contingency plan:

Within 60 days of the subsequent sample analysis date, the Permittee shall propose measures to ensure that the exceedance of the standard or the presence of a toxic pollutant will be mitigated by submitting a corrective action plan to NMED for approval. The corrective action plan shall include a description of the proposed actions to control the source and an associated completion schedule. The plan shall be enacted as approved by NMED.

Once invoked (whether during the term of this Discharge Permit; or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements), this condition shall apply until the Permittee has fulfilled the requirements of this condition and groundwater monitoring confirms for a minimum of two years of consecutive groundwater sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded and toxic pollutants are not present in groundwater.

2. **Ineffective groundwater monitoring well(s)** – In the event that information available to NMED indicates that a well(s) is not constructed in a manner consistent with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011*; contains insufficient water to effectively monitor groundwater quality; or is improperly located the Permittee shall install a replacement well(s) and shall survey the replacement monitoring well(s) within 120 days following notification from NMED.

Replacement well location(s) shall be approved by NMED prior to installation and completed in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011*. The Permittee shall submit construction and lithologic logs, survey data and a groundwater elevation contour map to NMED within 60 days following well completion.

Upon completion of the replacement monitoring well(s), the monitoring well(s) requiring replacement shall be properly plugged and abandoned. Well plugging, abandonment and documentation of the abandonment procedures shall be completed in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011*, and all applicable local, state, and federal regulations. The well abandonment documentation shall be submitted to NMED within 60 days of completion of well plugging activities.

3. **Exceedance(s) of permitted maximum daily discharge volume** - The maximum daily discharge volume authorized by this Discharge Permit is exceeded by more than ten percent for any four average daily discharge volumes within any 12-week period the Permittee shall submit a corrective action plan to reduce the discharge volume for NMED approval.
4. **Exceedance(s) of Nitrogen Loading Limits** - In the event that the SDDS show that the amount of nitrogen in wastewater applied to [any zone within] the land application/surface disposal area in any 12-month period exceeds 200 pounds per acre, the Permittee shall propose the reduction of nitrogen loading to the land application/surface disposal area by submitting a corrective action plan to NMED for approval. The plan shall include a schedule for completion of corrective actions and shall be submitted within 90 days following the end of the monitoring period in which the exceedance occurred. The Permittee shall initiate implementation of the plan following approval by NMED.
5. **Insufficient impoundment capacity** – In the event a survey, capacity calculations, or settled solids thickness measurements indicate an existing impoundment is not capable of meeting the capacity the Permittee shall submit a corrective action plan for NMED approval.

The plan may include, but is not limited to, proposals for constructing an additional impoundment, reducing the discharge volume, removing accumulated solids, changing wastewater management practices, or installing an advanced treatment system. The corrective action plan shall include a schedule for implementation through completion of corrective actions. The corrective action plan schedule shall propose completion not to exceed one year from the submittal date of the initial corrective action plan. The

Permittee shall initiate implementation of the plan following approval by NMED. Should the corrective action plan include removal of accumulated solids, solids shall be removed from the impoundment in a manner that is protective of the impoundment liner. The plan shall include the method of removal, and locations and methods for storage and disposal (or land application, if authorized) of the solids.

6. **Inability to maintain required freeboard** - A minimum of two feet of freeboard cannot be preserved in one or more wastewater impoundment(s).

In the event that two feet of freeboard cannot be restored within a period of 72 hours following discovery, the Permittee shall propose actions to be immediately implemented to restore two feet of freeboard by submitting a short-term corrective action plan to NMED for approval. Examples of short-term corrective actions include: removing excess wastewater from the impoundment through pumping and hauling; or reducing the volume of wastewater discharged to the impoundment. The plan shall include a schedule for completion of corrective actions and shall be submitted within 15 days following the date when the two feet of freeboard limit was initially discovered. The Permittee shall initiate implementation of the plan following approval by NMED.

7. **Impoundment(s) structural integrity compromised** - Any damage to the berms or the liner of an impoundment or any condition that exists that may compromise the structural integrity of the impoundment.

The Permittee shall propose the repair or replacement of the impoundment liner(s) by submitting a corrective action plan to NMED for approval. The plan shall be submitted to NMED within 30 days after discovery by the Permittee or following notification from NMED that significant liner damage is evident. The corrective action plan shall include a schedule for completion of corrective actions and the Permittee shall initiate implementation of the plan following approval by NMED.

8. **Spills, leaks, unauthorized discharge** – Any spill or release that is not authorized under this Discharge Permit. the Permittee shall comply with the requirements of Sections 20.6.2.1203 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.2.1203 NMAC.

- C. The Permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmation of groundwater contamination.

## **PART C    GENERAL TERMS AND CONDITIONS**

### **C100    Legal**

- A. Nothing in this Discharge Permit in any way, relieves the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders [20.6.2 NMAC].
- B. Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a Discharge Permit Modification in the event NMED determines that the requirements of 20.6.2 NMAC

are being or may be violated or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality, and NMED may require more stringent actions to protect groundwater quality. NMED may require the Permittee to implement abatement of water pollution and remediate groundwater quality.

- C. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the 20.6.2 NMAC, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6-10 WQA, 74-6-10.1 WQA]
- D. Pursuant to WQA 74-6-10.2(A-F), NMED may assess criminal penalties for any person who knowingly violates or knowingly causes or allows another person to:
  - 1. Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA;
  - 2. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or
  - 3. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978.
- E. The Permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice in accordance with 20.6.2.3111 NMAC, prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof. The transferee(s) shall notify NMED, in writing, of the date of transfer of ownership and provide contact information for the new owner(s) pursuant to Subsection B of 20.6.2.3111 NMAC. Submit to NMED notification of the transfer within 30 days of the ownership transfer date. [20.6.2.3111 NMAC]
- F. Pursuant to WQA 74-6-5(o), the Permittee has a right to appeal the conditions and requirements as outlined in this Discharge Permit through filing a petition for review before the WQCC. Such petition shall be in writing to the WQCC within thirty (30) days of the receipt

of this Discharge Permit. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review.

**C101 General Inspection and Entry Requirements**

- A. Nothing in this Discharge Permit limits in any way, the inspection and entry authority of NMED under the WQA, 20.6.2 NMAC, or any other applicable law or regulation. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]
- B. The Permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]:
  - 1. Enter at regular business hours or at other reasonable times upon the Permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
  - 2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
  - 3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
  - 4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

**C102 General Record Keeping and Reporting Requirements**

- A. The Permittee shall maintain a written record of the following:
  - 1. Amount of wastewater, effluent, leachate or other wastes discharged pursuant to this Discharge Permit. [20.6.2.3107.A NMAC]
  - 2. Operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; to measure flow rates, to monitor water quality, or to collect other data required by this Discharge Permit. Per Section A of 20.6.2.3107 NMAC, this record shall include:
    - a. Repair, replacement or calibration of any monitoring equipment
    - b. Repair or replacement of any equipment used in the Permittee's waste or wastewater treatment and disposal system.
  - 3. Any spills, seeps, and/or leaks of effluent, and of leachate and/or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]
- B. The Permittee shall maintain at its facility a written record of all data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit.

The following information shall be recorded and shall be made available to NMED upon request:

1. The dates, exact place and times of sampling or field measurements;
  2. The name and job title of the individuals who performed each sample collection or field measurement;
  3. The date of the analysis of each sample;
  4. The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample;
  5. The analytical technique or method used to analyze each sample or take each field measurement;
  6. The results of each analysis or field measurement, including raw data;
  7. The results of any split sampling, spikes or repeat sampling; and
  8. A description of the quality assurance (QA) and quality control (QC) procedures used.
- C. The Permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The Permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]

#### **C103 Modifications and/or Amendments**

- A. The Permittee shall notify NMED of any changes to the Permittee's wastewater treatment and disposal system, including any changes in the wastewater flow rate or the volume of wastewater storage, or of any other changes to operations or processes that would result in any significant change in the discharge of water contaminants. The Permittee shall obtain NMED's approval, as a modification to this Discharge Permit pursuant to Subsections E, F, or G of 20.6.2.3109 NMAC, prior to any increase in the quantity discharged, or any increase in the concentration of water contaminants discharged, above those levels approved in this Discharge Permit [20.6.2.3107.C NMAC].
- B. The Permittee shall file plans and specifications with NMED for the construction of a wastewater system and for proposed changes that will change substantially the quantity or quality of the discharge from the system. The Permittee shall file plans and specifications prior to the commencement of construction. Changes to the wastewater system having a minor effect on the character of the discharge shall be reported as of January 1 and June 30 of each year to NMED. [20.6.2.1202 NMAC]

### **Part D MISCELLANEOUS**

#### **D100 Acronyms**

Draft: September 9, 2022

CL.....	chloride
CQA .....	construction quality assurance
CQC.....	construction quality control
DP .....	discharge permit
FEMA .....	Federal Emergency Management Administration
FIRM .....	flood insurance rate map
gpd .....	gallon per day
LADS .....	land application data sheet(s)
mg/L .....	milligram per liter
mL.....	milliliters
NMAC .....	New Mexico Administrative Code
NMED .....	New Mexico Environment Department
NMP .....	Nutrient Management Plan
NMSA .....	New Mexico Statutes Annotated
NO <sub>3</sub> -N .....	nitrate as nitrogen
SDDS.....	surface disposal data sheet(s)
TDS .....	total dissolved solids
TKN.....	total Kjeldahl nitrogen
WQA.....	New Mexico Water Quality Act
WQCC.....	Water Quality Control Commission