



**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

August 30, 2022

William Russom, Project Manager  
U.S. Bureau of Reclamation  
193 Pinon Drive  
Chama, New Mexico 87575

**RE: Draft Discharge Permit, DP-1944, El Vado Dam Seepage Modification**

Dear William Russom:

The New Mexico Environment Department (NMED) hereby provides notice to the U.S. Bureau of Reclamation of the proposed approval of Ground Water Discharge Permit, DP-1944 (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, via email to [gerald.knutson@state.nm.us](mailto:gerald.knutson@state.nm.us) or to [pps.general@state.nm.us](mailto:pps.general@state.nm.us), or directly into the NMED Public Comment Portal at <https://nmed.commentinput.com/comment/search>. If NMED does not receive written comments or a request for hearing during the public comment period, the draft Discharge Permit will become final.

William Russom

DATE

Page 2 of 2

Thank you for your cooperation during the review process. Feel free to contact me with any questions at (505) 660-7189.

Sincerely,

Gerald Knutson, Environmental Scientist & Specialist A

enc: Draft Discharge Permit, DP-1944

cc: Carpi USA, Project Manager, [david.van-horsen@carpitech.com](mailto:david.van-horsen@carpitech.com)  
Tami C. Knight, CHMM, [tknight@envirotech-inc.com](mailto:tknight@envirotech-inc.com)



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***Draft: August 30, 2022***

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

**Facility Name:** El Vado Dam Seepage Modification  
**Discharge Permit Number:** DP-1944  
**Facility Location:** El Vado Dam, State Road 112  
Tierra Amarilla, New Mexico

**County:** Rio Arriba

**Permittee:** William Russom, Project Manager  
**Mailing Address:** U.S. Bureau of Reclamation  
193 Pinon Drive  
Chama, New Mexico 87575

**Facility Contact:** Carpi USA, Project Manager  
**Telephone Number/Email:** (213) 663-9959 / david.van-horsen@carpitech.com

**Permitting Action:** New  
**Permit Issuance Date:** DATE  
**Permit Expiration Date:** DATE

**NMED Permit Contact:** Gerald Knutson, Environmental Scientist & Specialist A  
**Telephone Number/Email:** (505) 660-7189 / gerald.knutson@state.nm.us  
(505) 827-2900 / pps.general@state.nm.us

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

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Date

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## ATTACHMENTS

Discharge Permit Summary  
Groundwater Discharge Permit Guidance for Synthetically Lined Lagoons – Liner  
Material and Site Preparation, Revision 0.0, May 2007

## **I. INTRODUCTION**

The New Mexico Environment Department (NMED) issues this groundwater discharge permit (Discharge Permit or DP-1944) to the U.S. Bureau of Reclamation (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) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from the El Vado Dam Seepage Modification (Facility) in order to protect 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. It is NMED's determination in issuing this Discharge Permit that the Permittee has met the requirements of Subsection C of 20.6.2.3109 NMAC. The Permittee is responsible for complying with the terms and conditions of this Discharge Permit pursuant to Section 20.6.2.3104 NMAC; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

Described below are the activities that produce the discharge, the location of the discharge, and the quantity, quality, and flow characteristics.

The Permittee manages industrial discharges of a volume up to 8,250 gallons per day (gpd) to a synthetically lined impoundment for solids settling and to an unlined impoundment for disposal by evaporation/percolation.

The discharge may contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC and is not subject to the exemption at Subsection 20.6.2.3105.A NMAC.

The Facility is located at El Vado Dam, State Road 112, approximately 12.3 miles southwest of Tierra Amarilla, in the Tierra Amarilla Land Grant, Township T28N, Range 02E, in Rio Arriba County. A discharge at the Facility is most likely to affect groundwater at a depth of approximately 45 feet and having a pre-discharge total dissolved solids (TDS) concentration of approximately 1,020 milligrams per liter.

The application (i.e., discharge plan) consists of the materials submitted by the Permittee dated April 28, 2022, and materials contained in the administrative record prior to issuance of this Discharge Permit. The Permittee shall manage this discharge in accordance with all conditions and requirements of this Discharge Permit.

The Permittee shall manage the discharge in accordance with all conditions and requirements of this Discharge Permit.

NMED reserves the right to require a Discharge Permit modification in the event NMED determines that the Permittee is or may be violating, or is likely to violate in the future, the requirements of 20.6.2 NMAC or the standards of Section 20.6.2.3103 NMAC. NMED reserves this right pursuant to Section 20.6.2.3109 NMAC. An NMED requirement to modify the Discharge Permit may result from a determination by the department that structural controls and/or management practices approved under this Discharge Permit are insufficiently protective of groundwater quality and human health. NMED reserves the right to require the Permittee implement abatement of water pollution and remediate groundwater quality.

NMED 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.

This Discharge Permit may use the following acronyms and abbreviations.

Abbreviation	Explanation	Abbreviation	Explanation
CAP	Corrective Action Plan	NMED	New Mexico Environment Department
CFR	Code of Federal Regulations	NMSA	New Mexico Statutes Annotated
Cl	chloride	NO <sub>3</sub> -N	nitrate-nitrogen
EPA	United States Environmental Protection Agency	QA/QC	Quality Assurance/Quality Control
gpd	gallons per day	TDS	total dissolved solids
LAA	land application area	TKN	total Kjeldahl nitrogen
mg/L	milligrams per liter	total nitrogen	= TKN + NO <sub>3</sub> -N
mL	milliliters	WQA	New Mexico Water Quality Act
NMAC	New Mexico Administrative Code	WQCC	Water Quality Control Commission

## II. FINDINGS

In issuing this Discharge Permit, NMED finds the following.

1. The Permittee is discharging effluent or leachate from the Facility so that such effluent or leachate may move into groundwater of the State of New Mexico that has an existing concentration of 10,000 mg/L or less of 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.
2. The Permittee is discharging effluent or leachate from the Facility directly or indirectly into groundwater pursuant to this Discharge Permit and Sections 20.6.2.3000 through 20.6.2.3114 NMAC.

3. The discharge from the Facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

### III. AUTHORIZATION TO DISCHARGE

The Permittee is responsible for ensuring that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein pursuant to 20.6.2.3104 NMAC.

This Discharge Permit authorizes the Permittee to discharge up to 8,250 gpd of industrial wastewater from the grouting of the El Vado Dam to a synthetically lined sedimentation impoundment with clarified wastewater discharging to an unlined impoundment for disposal by evaporation/percolation.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection D of 20.6.2.3109 NMAC]

### IV. CONDITIONS

NMED issues this Discharge Permit for the discharge of water contaminants subject to the following conditions.

#### A. OPERATIONAL PLAN

#	Terms and Conditions
1.	The Permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 2 and 4 NMAC.  [Subsection C of 20.6.2.3109 NMAC]
2.	The Permittee shall operate in a manner that does not violate standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC.  [20.6.2.3101 NMAC, 20.6.2.3103 NMAC, Subsection C of 20.6.2.3109 NMAC]

#### *Operational Actions with Implementation Deadlines*

#	Terms and Conditions
3.	Within 60 days following the issuance date of this Discharge Permit ( <b>by DATE</b> ), the Permittee shall submit an up-to-date diagram of the layout of the entire Facility to NMED. The diagram shall include the following elements: <ul style="list-style-type: none"><li>• a north arrow;</li><li>• the issuance date of the diagram;</li></ul>

#	Terms and Conditions
	<ul style="list-style-type: none"><li>• all components of the grouting collection system;</li><li>• all components of the wastewater disposal system; and</li><li>• all wastewater sampling locations.</li></ul> <p>The Permittee shall ensure that any element that cannot be directly shown due to its location inside of existing structures, or because it is buried without surface identification, shall be on the diagram in a schematic format and identified as such.</p> <p>[Subsection C of 20.6.2.3106 NMAC, Subsection A of 20.6.2.3107 NMAC]</p>
4.	<p>Within 60 days following the issuance date of this Discharge Permit (<b>by DATE</b>), the Permittee shall submit record drawings to NMED that bear the seal and signature of a licensed New Mexico professional engineer (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) for the constructed synthetically lined impoundment (sedimentation impoundment) and unlined impoundment (evaporation/percolation impoundment).</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3109 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>

### ***Operating Conditions***

#	Terms and Conditions
5.	<p>The Permittee shall install and maintain fences around the Facility to restrict access by the general public and animals. The fences shall consist of a minimum of six-foot chain link or field fencing and locking gates. The Permittee shall maintain the fences to serve the stated purpose throughout the term of this Discharge Permit.</p> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>
6.	<p>The Permittee shall install and maintain signs indicating that the wastewater at the Facility is not potable. The Permittee shall post signs at the Facility entrance and other areas where there is potential for public contact with wastewater. The Permittee shall print signs in English and Spanish and shall ensure the signs remain visible and legible for the term of this Discharge Permit.</p> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>
7.	<p>The Permittee shall maintain the sedimentation impoundment liner to avoid conditions that could affect the liner or the structural integrity of the impoundment. Characterization of such conditions may include the following:</p>



#	Terms and Conditions
	<ul style="list-style-type: none"><li>• erosion damage;</li><li>• animal burrows or other damage;</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;</li><li>• the presence of large debris or large quantities of debris in the impoundment;</li><li>• evidence of seepage; or</li><li>• evidence of berm subsidence.</li></ul> <p>The Permittee shall routinely control vegetation growing around the impoundment by mechanical removal that is protective of the impoundment liner.</p> <p>The Permittee shall visually inspect the impoundment and surrounding berms on a monthly basis to ensure proper maintenance. In the event that inspection reveals any evidence of damage that threatens the structural integrity of an impoundment berm or liner, or that may result in an unauthorized discharge, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit.</p> <p>The Permittee shall create and maintain a log of all impoundment inspections which describes the date of the inspection, any findings and repairs and the name of the person responsible for the inspection. The Permittee shall make the log available to NMED upon request.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
8.	<p>The Permittee shall maintain the evaporation/percolation impoundment to avoid conditions that could affect the structural integrity of the impoundment. Characterization of such conditions may include the following:</p> <ul style="list-style-type: none"><li>• erosion damage;</li><li>• animal burrows or other damage;</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;</li><li>• the presence of large debris or large quantities of debris in the impoundment;</li><li>• evidence of seepage; or</li><li>• evidence of berm subsidence.</li></ul> <p>The Permittee shall control vegetation growing around the impoundment by mechanical removal that is protective of the impoundment.</p>

#	Terms and Conditions
	<p>The Permittee shall visually inspect the impoundment and surrounding berms on a monthly basis to ensure proper maintenance. In the event that inspection reveals any evidence of damage that threatens the structural integrity of an impoundment berm, or that may result in an unauthorized discharge, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit.</p> <p>The Permittee shall create and maintain a log of all impoundment inspections which describes the date of the inspection, any findings and repairs and the name of the person responsible for the inspection. The Permittee shall provide the log to NMED upon request.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
9.	<p>The Permittee shall preserve a minimum of two feet of freeboard, i.e., the liquid level in the sedimentation impoundment and the elevation of the lowest-most top of the impoundment liner.</p> <p>In the event that the Permittee determines that it cannot preserve two feet of freeboard in the impoundment, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
10.	<p>The Permittee shall preserve a minimum of two feet of freeboard, i.e., the liquid level in the evaporation/percolation impoundment and the elevation of the lowest-most top of the impoundment berm.</p> <p>In the event that the Permittee determines that it cannot preserve two feet of freeboard in the impoundment, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
11.	<p>The Permittee shall inspect the synthetically lined sedimentation impoundment semi-annually and measure the thickness of the settled solids.</p> <p>The Permittee shall measure the thickness of settled solids in accordance with the following procedure.</p> <ul style="list-style-type: none"><li>a) The division of the total surface area of the treatment impoundment into nine equal sub-areas.</li><li>b) One measurement (to the nearest half foot) using a settled solids measurement device (e.g., core sampler) per sub-area.</li></ul>

#	Terms and Conditions
	<p>Calculation of the average of the nine measurements.</p> <p>In the event that the measured settled solids exceed one-third of the maximum liquid depth in the impoundment, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit.</p> <p>The Permittee shall create and maintain a log of all impoundment inspections which describes the findings, repairs, and removals, the date of the inspection, and the name of the person responsible for the inspection. The Permittee shall make the log available to NMED upon request.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>

## **B. MONITORING AND REPORTING**

#	Terms and Conditions
12.	<p>The Permittee shall conduct the monitoring, reporting, and other requirements listed below in accordance with the monitoring requirements of this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
13.	<p><b>METHODOLOGY</b> - 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.</p> <p>[Subsection B of 20.6.2.3107 NMAC]</p>

### ***Due Dates for Monitoring Reports***

14.	<p>Quarterly monitoring - The Permittee shall perform monitoring and other Permit required actions during the following periods and shall submit quarterly reports to NMED by the following due dates:</p> <ul style="list-style-type: none"><li>• January 1<sup>st</sup> through March 31<sup>st</sup> – <b>due by May 1<sup>st</sup></b>;</li><li>• April 1<sup>st</sup> through June 30<sup>th</sup> – <b>due by August 1<sup>st</sup></b>;</li><li>• July 1<sup>st</sup> through September 30<sup>th</sup> – <b>due by November 1<sup>st</sup></b>; and</li><li>• October 1<sup>st</sup> through December 31<sup>st</sup> – <b>due by February 1<sup>st</sup></b>.</li></ul> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
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**Facility Monitoring Conditions**

#	Terms and Conditions
15.	<p>The Permittee shall on a monthly basis measure the volume of wastewater discharged to the evaporation/percolation impoundment during the period.</p> <p>To determine the discharge volume, the Permittee shall obtain readings from a totalizing flow meter located on the discharge line from the sedimentation impoundment to the evaporation/percolation impoundment on a monthly basis and calculate the monthly and average daily volume discharged to the impoundment. The Permittee shall submit monthly meter readings, calculated monthly discharge volumes and average daily discharge volumes to NMED in the quarterly monitoring reports.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
16.	<p>The flow meter shall be capable of having its accuracy verified under working (i.e., real-time in-the-field) conditions. The Permittee shall develop a field verification method for each flow meter and shall utilize that method to check the accuracy of each respective meter. The Permittee shall perform the field calibration, at a minimum, once within 90 days of the issuance date of this Discharge Permit (<b>by DATE</b>). The Permittee shall also perform field calibrations upon repair or replacement of the flow measurement device.</p> <p>The Permittee shall calibrate the flow meter to its manufacturer's recommended specification which shall be no less accurate than plus or minus 10 percent of actual flow, as measured under field conditions. An individual knowledgeable in flow measurement shall perform field calibration and the installation/operation of the device in use. The Permittee shall prepare a flow meter calibration report for each flow measurement device calibration event. The flow meter calibration report shall include the following information.</p> <ol style="list-style-type: none"><li>The location and meter identification.</li><li>The method of flow meter field calibration employed.</li><li>The measured accuracy of each flow meter prior to adjustment indicating the positive or negative offset as a percentage of actual flow as determined by an in-field calibration check.</li><li>The measured accuracy of each flow meter following adjustment, if necessary, indicating the positive or negative offset as a percentage of actual flow of the meter.</li><li>Any flow meter repairs made during the previous year or during field calibration.</li><li>The name of the individual performing the calibration and the date of the calibration.</li></ol> <p>The Permittee shall maintain records of flow meter calibration(s) at a location accessible for review by NMED during Facility inspections.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>

#	Terms and Conditions
17.	<p>The Permittee shall visually inspect the flow meter on a monthly basis for evidence of malfunction. The Permittee shall maintain a log of the inspections that includes a date of the inspection, findings and repairs, and the name of the inspector. The Permittee shall make the log available to NMED upon request.</p> <p>If a visual inspection indicates a flow meter is not functioning as required by this Discharge Permit, the Permittee shall repair or replace the meter within 30 days of discovery. For <i>repaired</i> meters, the Permittee shall submit a report to NMED with the next monitoring report following the repair that includes a description of the malfunction; a statement verifying the repair; and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. For <i>replacement</i> meters, the Permittee shall submit a report to NMED with the next monitoring report following the replacement that includes a design schematic for the device and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
18.	<p>The Permittee shall collect samples of industrial wastewater discharging from the sedimentation impoundment to the evaporation/percolation impoundment on a quarterly basis and analyze the samples for:</p> <ul style="list-style-type: none"><li>• TDS;</li><li>• Cl;</li><li>• Sulfate (SO<sub>4</sub>); and</li><li>• pH.</li></ul> <p>In the event that no effluent discharge occurs during the entire quarterly period, the Permittee shall report “no discharge”.</p> <p>The Permittee shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittee shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the quarterly monitoring reports.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
19.	<p>Once during the term of this Discharge Permit, the Permittee shall collect a grab sample of industrial wastewater discharging from the sedimentation impoundment to the evaporation/percolation impoundment and analyze the non-filtered sample for total petroleum hydrocarbons using modified EPA Method 8015 (full range).</p>

#	Terms and Conditions
	<p>The Permittee shall ensure the sample is properly prepared, preserved, transported, and analyzed in accordance with the method authorized in this Discharge Permit. The Permittee shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the subsequent monitoring report.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>

**C. CONTINGENCY PLAN**

#	Terms and Conditions
20.	<p>In the event that groundwater exceeds a groundwater protection standard identified in Section 20.6.2.3103 NMAC as a result of this discharge during the term of this Discharge Permit, upon closure of the Facility or during the implementation of post-closure requirements, the Permittee shall submit to NMED a CAP that proposes, at a minimum, contaminant source control measures and an implementation schedule. The Permittee shall implement the CAP as approved by NMED.</p> <p>The NMED may require the Permittee to abate water pollution consistent with the requirements and provisions of Section 20.6.2.4101, Section 20.6.2.4103, Subsections C and E of 20.6.2.4106, Section 20.6.2.4107, Section 20.6.2.4108, and Section 20.6.2.4112 NMAC.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>
21.	<p>In the event that an inspection reveals significant damage has occurred or is likely to affect the structural integrity of the sedimentation impoundment or liner or their ability to contain contaminants, the Permittee shall propose the repair or replacement by submitting a CAP to NMED for approval. The Permittee shall submit the CAP to NMED within 30 days after discovery of the damage or following notification from NMED that significant damage is evident. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall initiate implementation of the CAP following approval by NMED.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
22.	<p>In the event that an inspection performed by the Permittee of an impoundment reveals significant damage has occurred or is likely to affect the structural integrity of the evaporation/percolation impoundment or its ability to contain contaminants, the Permittee shall propose the repair or replacement of the impoundment by submitting a CAP to NMED for approval. The Permittee shall submit the CAP to NMED within 30 days after discovery of the damage or following notification from NMED that significant</p>

#	Terms and Conditions
	<p>damage is evident. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall initiate implementation of the Plan following approval by NMED.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
23.	<p>In the event that an impoundment cannot preserve a minimum of two feet of freeboard, the Permittee shall take actions to restore the required freeboard as authorized by this Discharge Permit and all applicable local, state, and federal regulations.</p> <p>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 restore two feet of freeboard by submitting a short-term CAP to NMED for approval. Examples of short-term corrective actions include the pumping and hauling of excess wastewater from the impoundment or reducing the volume of wastewater discharged to the impoundment. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall submit the CAP within 15 days following the date the Permittee or the NMED discover the exceedance. The Permittee shall implement the CAP following NMED approval.</p> <p>In the event that the short-term corrective actions fail to restore two feet of freeboard, the Permittee shall submit to NMED a proposal for permanent corrective actions in a long-term CAP. The Permittee shall submit the long-term CAP within 90 days following failure of the short-term CAP. Examples corrective actions include the installation of an additional storage impoundment or a significant and permanent reduction in the volume of wastewater discharged to the impoundment. The Permittee shall ensure the long-term CAP includes a schedule for completion of corrective actions. The Permittee shall implement the CAP following NMED approval.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
24.	<p>In the event the solids accumulation exceeds one-third of the maximum liquid depth in the sedimentation impoundment, the Permittee shall propose a plan for the removal and disposal of the solids. The Permittee shall submit the solids removal and disposal plan to NMED for approval within 120 days following discovery and includes the following information.</p> <ul style="list-style-type: none"><li>a) A method for removal of the solids to a depth of less than six inches throughout the treatment impoundment in a manner that is protective of the impoundment liner.</li><li>b) A description of how the Permittee will contain, transport, and dispose of the solids in accordance with all local, state, and federal regulations.</li><li>c) A schedule for completion of the solids removal and disposal project.</li></ul>

#	Terms and Conditions
	<p>The Permittee shall initiate implementation of the plan following approval by NMED.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
25.	<p>In the event that a release occurs that is not authorized under this Discharge Permit (commonly known as a “spill”), the Permittee shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below. A release is defined as such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property.</p> <p>Within <u>24 hours</u> following discovery of the unauthorized discharge, the Permittee shall verbally notify NMED and provide the following information.</p> <ol style="list-style-type: none"> <li>The name, address, and telephone number of the person or persons in charge of the Facility, as well as of the owner and/or operator of the Facility.</li> <li>The name and address of the Facility.</li> <li>The date, time, location, and duration of the unauthorized discharge.</li> <li>The source and cause of unauthorized discharge.</li> <li>A description of the unauthorized discharge, including its estimated chemical composition.</li> <li>The estimated volume of the unauthorized discharge.</li> <li>Any actions taken to mitigate immediate damage from the unauthorized discharge.</li> </ol> <p>Within <u>one week</u> following discovery of the unauthorized discharge, the Permittee shall submit written notification to NMED providing the information listed above and any pertinent updates.</p> <p>Within <u>15 days</u> following discovery of the unauthorized discharge, the Permittee shall submit a CAP to NMED describing any corrective actions previously taken and corrective actions to be taken relative to the unauthorized discharge. The CAP shall include the following information.</p> <ol style="list-style-type: none"> <li>A description of proposed actions to mitigate damage from the unauthorized discharge.</li> <li>A description of proposed actions to prevent future unauthorized discharges of this nature.</li> <li>A schedule for completion of proposed actions.</li> </ol> <p>In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, NMED may</p>



#	Terms and Conditions
	<p>require the Permittee to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC.</p> <p>The Permittee shall not construe anything in this condition as relieving them of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC.</p> <p>[20.6.2.1203 NMAC]</p>
26.	<p>In the event that NMED or the Permittee identifies any failures of the discharge plan, i.e., the application, or this Discharge Permit not specifically noted herein, NMED may require the Permittee to submit a CAP and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a discharge permit modification to achieve compliance with 20.6.2 NMAC.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>

#### D. CLOSURE PLAN

##### *Permanent Facility Closure Conditions*

#	Terms and Conditions
27.	<p>The Permittee shall perform the following closure measures in the event the Facility is proposed to be permanently closed.</p> <p>Within <u>60 days</u> of ceasing to discharge to the impoundments, the Permittee shall plug the impoundment influent lines so that a discharge can no longer occur.</p> <p>Within <u>60 days</u> of ceasing to discharge to the impoundments, the Permittee shall evaporate or drain all wastewater from the impoundment and any other wastewater system component and disposed of it in accordance with all local, state, and federal regulations.</p> <p>Within <u>90 days</u> of ceasing to discharge to the impoundments, the Permittee shall submit a solids removal and disposal plan to NMED for approval. The Permittee shall implement the plan within 30 days following approval by NMED. The solids removal and disposal plan shall include the following information.</p> <ul style="list-style-type: none"><li>a) The method of solids <i>removal</i> from the impoundments.</li><li>b) The method of <i>disposal</i> for all solids removed from the impoundments. The method shall comply with all local, state, and federal regulations.</li><li>c) A schedule for completion of solids removal and disposal not to exceed two years from the date discharge to the impoundments ceased.</li></ul>

#	Terms and Conditions
	<p>Within <u>one year</u> following completion of solids removal and disposal, the Permittee shall complete the following closure measures.</p> <ol style="list-style-type: none"><li>Remove all lines leading to and from the impoundments, or permanently plug and abandon the lines in place.</li><li>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.</li><li>Remove and dispose of the impoundment liners at a solid waste facility.</li><li>Fill the impoundments with suitable fill.</li><li>Re-grade the impoundment site and the locations of ancillary equipment, e.g., influent piping, to blend with surface topography, promote positive drainage, and prevent ponding.</li></ol> <p>When the Permittee has met all closure and requirements and verified appropriate actions with date stamped photographic evidence or an associated NMED inspection, the Permittee may submit to NMED a written request, including photographic evidence, for termination of the Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection D of 20.6.2.4103 NMAC, 40 CFR Part 503]</p>

**E. GENERAL TERMS AND CONDITIONS**

#	Terms and Conditions
28.	<p>RECORD KEEPING - The Permittee shall maintain a written record of the following:</p> <ul style="list-style-type: none"><li>Information and data used to complete the application for this Discharge Permit;</li><li>Information, data, and documents demonstrating completion of closure activities;</li><li>Any releases (commonly known as “spills”) not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC;</li><li>The operation, maintenance, and repair of all facilities/equipment used to treat, store, or dispose of wastewater;</li><li>Facility record drawings (plans and specifications) showing the actual construction of the Facility and bear the seal and signature of a licensed New Mexico professional engineer;</li><li>Copies of logs, inspection reports, and monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit;</li><li>The volume of wastewater or other wastes discharged pursuant to this Discharge Permit;</li><li>Wastewater quality data collected pursuant to this Discharge Permit;</li></ul>

#	Terms and Conditions
	<ul style="list-style-type: none"> <li>• The maintenance, repair, replacement, or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit; and</li> <li>• Data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit, including the following: <ul style="list-style-type: none"> <li>○ the dates, locations, and times of sampling or field measurements;</li> <li>○ the name and job title of the individuals who performed each sample collection or field measurement;</li> <li>○ the sample analysis date of each sample;</li> <li>○ the name and address of the laboratory, and the name of the signatory authority for the laboratory analysis;</li> <li>○ the analytical technique or method used to analyze each sample or collect each field measurement;</li> <li>○ the results of each analysis or field measurement, including raw data;</li> <li>○ the results of any split, spiked, duplicate, or repeat sample; and</li> <li>○ a copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used.</li> </ul> </li> </ul> <p>The Permittee shall maintain the written record at a location accessible to NMED during a Facility inspection for the lifetime of the Discharge Permit. The Permittee shall make the record available to the department upon request.</p> <p>[Subsections A and D of 20.6.2.3107 NMAC]</p>
29.	<p>SUBMITTALS - The Permittee shall submit both a paper copy and an electronic copy of all notification and reporting documents required by this Discharge Permit, e.g., monitoring reports. The Permittee shall submit paper and electronic documents to the NMED Permit Contact identified on the Permit cover page.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
30.	<p>INSPECTION and ENTRY - The Permittee shall allow NMED to inspect the Facility and its operations that are subject to this Discharge Permit and the WQCC regulations. NMED may upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which any maintained records required by this Discharge Permit, the regulations of the federal government, or the WQCC are located.</p> <p>The Permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations.</p>

#	Terms and Conditions
	<p>No person shall construe anything in this Discharge Permit as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other local, state, or federal regulations.</p> <p>[Subsection D of 20.6.2.3107 NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]</p>
31.	<p><b>DUTY to PROVIDE INFORMATION</b> - The Permittee shall, upon NMED's request, allow for NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records.</p> <p>[Subsection D of 20.6.2.3107 NMAC]</p>
32.	<p><b>MODIFICATIONS and/or AMENDMENTS</b> - In the event the Permittee proposes a change to the Facility or the Facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated, or discharged by the Facility, the Permittee shall notify NMED prior to implementing such changes. The Permittee shall obtain NMED's approval (which may require modification of this Discharge Permit) prior to implementing such changes.</p> <p>[Subsection C of 20.6.2.3107 NMAC, Subsections E and G of 20.6.2.3109 NMAC]</p>
33.	<p><b>PLANS and SPECIFICATIONS</b> - In the event the Permittee proposes to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the Permittee shall submit construction plans and specifications of the proposed system or process unit to NMED for approval prior to the commencement of construction.</p> <p>In the event the Permittee implements changes to the wastewater system authorized by this Discharge Permit that result in only a minor effect on the character of the discharge, the Permittee shall report such changes (including the submission of record drawings where applicable) to NMED prior to implementation.</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>
34.	<p><b>CIVIL PENALTIES</b> - Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil</p>

#	Terms and Conditions
	<p>penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit.</p> <p>[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10 and 74-6-10.1]</p>
35.	<p>CRIMINAL PENALTIES - No person shall:</p> <ul style="list-style-type: none"><li>• Make any false material statement, representation, certification, or omission of material fact in an application, record, report, plan, or other document filed, submitted, or maintained under the WQA;</li><li>• Falsify, tamper with, or render inaccurate any monitoring device, method, or record maintained under the WQA; or</li><li>• Fail to monitor, sample, or report as required by a permit issued pursuant to a state or federal law or regulation.</li></ul> <p>Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15.</p> <p>[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]</p>
36.	<p>COMPLIANCE with OTHER LAWS - Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with any other applicable federal, state, and/or local laws, regulations, zoning requirements, nuisance ordinances, permits or orders.</p> <p>[NMSA 1978, § 74-6-5.L]</p>

#	Terms and Conditions
37.	<p>RIGHT to APPEAL - The Permittee may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues raised and the relief sought. Unless the Permittee files a timely petition for review, the decision of NMED shall be final and not subject to judicial review.</p> <p>[20.6.2.3112 NMAC, NMSA 1978, § 74-6-5.O]</p>
38.	<p>TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this Facility or any portion thereof, the Permittee shall:</p> <ul style="list-style-type: none"><li>• Notify the proposed transferee in writing of the existence of this Discharge Permit;</li><li>• Include a copy of this Discharge Permit with the notice; and</li><li>• Deliver or send by certified mail to NMED a copy of the notification and proof that the proposed transferee has received such notification.</li></ul> <p>The Permittee shall continue to be responsible for any discharge from the Facility, until both ownership and possession of the Facility have been transferred to the transferee.</p> <p>[20.6.2.3111 NMAC]</p>
39.	<p>PERMIT FEES - The Permittee shall be aware that the payment of permit fees is due at the time of Discharge Permit approval. The Permittee may pay the permit fees in a single payment or they may pay the fee in equal installments on a yearly basis over the term of the Discharge Permit. The Permittee shall remit single payments to NMED no later than 30 days after the Discharge Permit issuance date. The Permittee shall remit initial installment payments to NMED no later than 30 days after the Discharge Permit issuance date; with subsequent installment payments remitted to NMED no later than the anniversary of the Discharge Permit issuance date.</p> <p>Permit fees are associated with <u>issuance</u> of this Discharge Permit. No person shall construe anything in this Discharge Permit as relieving 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. NMED shall suspend or terminate an approved Discharge Permit if the Permittee fails to remit an installment payment by its due date.</p> <p>[Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]</p>



## New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

### Facility Information

**Facility Name** El Vado Dam Seepage Modification  
**Discharge Permit Number** DP-1944  
**Legally Responsible Party** William Russom, Project Manager  
U.S. Bureau of Reclamation  
193 Pinon Drive  
Chama, New Mexico 87575  
(575) 756-2175

### Treatment, Disposal and Site Information

**Primary Waste Type** Industrial  
**Facility Type** Evaporative/Percolative

#### Treatment Methods

Type	Designation	Description & Comments
Impoundment	Sedimentation Impoundment	A synthetically lined impoundment measuring 100 feet by 50 feet by 3 feet.
Impoundment	Evaporation/Percolation Impoundment	An unlined impoundment with gravel measuring 29 feet by 29 feet by 2 feet.

#### Flow Metering Locations

Type	Designation	Description & Comments
Totalizing Flow Meter	Discharge Meter	Clamp-on ultrasonic flow meter located on the discharge pipe between the sedimentation impoundment and the evaporation/percolation impoundment.

**Depth-to-Ground Water** 45 feet  
**Total Dissolved Solids (TDS)** 1,020 mg/L

### Permit Information

<b>Current Action</b>	<b>Original Permit Issuance</b>
Application Received	April 28, 2022
Public Notice Published	[not yet published]
Permit Issued (Issuance Date)	[issuance date]
Permitted Discharge Volume	8,250 gallons per day



## New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

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### NMED Contact Information

**Mailing Address**

Ground Water Quality Bureau  
P.O. Box 5469  
Santa Fe, New Mexico 87502-5469

**GWQB Telephone Number**

(505) 827-2900

**NMED Lead Staff**

Gerald Knutson

**Lead Staff Telephone Number**

(505) 660-7189

**Lead Staff Email**

gerald.knutson@state.nm.us or pps.general@state.nm.us

draft



## **Groundwater Discharge Permit Guidance for Synthetically Lined Lagoons – Liner Material and Site Preparation**

This guidance document represents minimum liner material and site preparation requirements for wastewater treatment, storage and evaporation lagoons. These requirements do not apply to lagoons storing hazardous wastes or high strength waste. The Ground Water Quality Bureau may impose additional requirements (e.g., double-lined lagoons with leak detection) for facilities discharging hazardous or high strength waste to lagoons through the development of specific Discharge Permit conditions for such facilities.

### **Liner Material Requirements:**

1. The liner shall be chemically compatible with any material that will contact the liner.
2. The liner material shall be resistant to deterioration by sunlight if any portion of the liner will be exposed.
3. Synthetic liner material shall be of sufficient thickness to have adequate tensile strength and tear and puncture resistance. Under no circumstances shall a synthetic liner material less than 40 mils in thickness be accepted. Any liner material shall be certified by a licensed New Mexico professional engineer and approved by the New Mexico Environment Department (NMED) prior to its installation.

### **Lagoon Design and Site Preparation Requirements:**

1. The system shall be certified by a licensed New Mexico professional engineer and approved by NMED prior to installation.
2. Inside slopes shall be a maximum of 3 (horizontal): 1 (vertical), and a minimum of 4 (horizontal); 1 (vertical).
3. Lagoon volume shall be designed to allow for a minimum of 24 inches of freeboard.
4. The liner shall be installed with sufficient liner material to accommodate shrinkage due to temperature changes. Folds in the liner are not acceptable.
5. To a depth of at least six inches below the liner, the sub-grade shall be free of sharp rocks, vegetation and stubble. In addition, liners shall be placed on a sub-grade of sand or fine soil. The surface in contact with the liner shall be smooth to allow for good contact between liner and sub-grade. The surface shall be dry during liner installation.
6. Sub-grade shall be compacted to a minimum of 90% of standard proctor density.
7. The minimum dike width shall be eight feet to allow vehicle traffic for maintenance.
8. The base of the pond shall be as uniform as possible and shall not vary more than three inches from the average finished elevation.
9. Synthetic liners shall be anchored in an anchor trench in the top of the berm. The trench shall be a minimum of 12 inches wide, 12 inches deep and shall be set back at least 24 inches from the inside edge of the berm.
10. If the lagoon is installed over areas of decomposing organic materials or shallow groundwater, a liner vent system shall be installed.
11. Any opening in the liner through which a pipe or other fixture protrudes shall be properly sealed. Liner penetrations shall be detailed in the construction plans and record drawings.
12. A synthetic liner shall not be installed in temperatures below freezing.
13. The liner shall be installed or supervised by an individual that has the necessary training and experience as required by the liner manufacturer.
14. All manufacturer's installation and field seaming guidelines shall be followed.
15. All synthetic liner seams shall be field tested by the installer and verification of the adequacy of the seams shall be submitted to NMED along with the record drawings.
16. Concrete slabs installed on top of the synthetic liner for operational purposes shall be completed in accordance with manufacturer and installer recommendations to ensure liner integrity.