

State of New Mexico  
Energy, Minerals and Natural Resources Department

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**Michelle Lujan-Grisham**  
Governor

**Melanie A. Kenderdine**  
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**Benjamin Shelton**  
Deputy Secretary (Acting)

**Gerasimos Razatos**, Division Director (Acting)  
Oil Conservation Division



**BY ELECTRONIC AND CERTIFIED MAIL**

September 25, 2024

Dan Guillotte  
MorningStar Operating LLC  
400 W. 7th Street  
Fort Worth, TX 76102  
[dguillotte@txoenergy.com](mailto:dguillotte@txoenergy.com)

**RE: Discharge Permit GW-312 for MorningStar Operating LLC – Buckeye CO<sub>2</sub> Plant**

Dear Mr. Guillotte:

Pursuant to 20.6.2.3109 NMAC, the New Mexico Oil Conservation Division (OCD) hereby issues Discharge Permit GW-312 to MorningStar Operating LLC (MorningStar), Buckeye CO<sub>2</sub> Plant. MorningStar must notify the OCD if it intends to expand the facility, increase production, and/or modify a process that would result in a significant modification in the discharge of water contaminants.

This permit expires on **September 25, 2029**. Pursuant to 20.6.2.3106(G) NMAC, if MorningStar submits a renewal application at least 120 days before the discharge permit expires, and is not in violation of the permit, then the existing discharge permit will not expire until OCD has approved or disapproved the renewal application.

MorningStar must pay a permit fee of \$4,000.00 by check made payable to the "Water Quality Management Fund" no later than thirty (30) days after receipt of this letter at the following mailing address:

Oil Conservation Division  
Attn: Environmental Administrative Permitting Supervisor  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

If you have any questions, please contact Leigh Barr at (505) 795-1722 or by email at [LeighP.Barr@emnrd.nm.gov](mailto:LeighP.Barr@emnrd.nm.gov).

Regards,

Gerasimos Razatos  
OCD Director (Acting)

MorningStar Operating LLC  
Buckeye CO<sub>2</sub> Plant

GW-312  
September 25, 2024

Discharge Permit GW-312  
MorningStar Operating LLC – Buckeye CO<sub>2</sub> Plant

1. **GENERAL PROVISIONS:**

- A. PERMITTEE AND PERMITTED FACILITY:** The Oil Conservation Division (OCD) within the Energy, Minerals and Natural Resources Department hereby issues Discharge Permit GW-312 (Discharge Permit) to MorningStar Operating LLC – Buckeye CO<sub>2</sub> Plant, (Permittee), located in the SW  $\frac{1}{4}$  of SE  $\frac{1}{4}$  of Section 36, Township 17 South, Range 34 East in Lea County (32.784532N, 103.508311W).

The Permittee processes 60 million standard cubic feet per day of carbon dioxide (CO<sub>2</sub>) rich gas along with entrained hydrocarbons and water. The facility utilizes the Ryan-Holmes process to recover hydrocarbons from the CO<sub>2</sub> rich gas stream. After the hydrocarbons are removed, the CO<sub>2</sub> gas stream (plus methane, ethane, and hydrogen sulfide) is piped offsite for reinjection (i.e., enhanced oil recovery). The facility collects liquid waste and contact stormwater via drain systems and injects it into the Glorieta/Paddock formation via OCD permitted injection wells.

Groundwater most likely to be affected by a spill, leak, or accidental discharge is estimated to be at a depth from 115- 120 feet below ground surface and contains a total dissolved solids concentration of approximately 325 milligrams per liter.

The issuance of this Discharge Permit does not relieve the Permittee from the responsibility of complying with the provisions of the Water Quality Act, any applicable regulations or water quality standards of the Water Quality Control Commission (WQCC), or any applicable federal laws, regulations, or standards.

- B. SCOPE OF PERMIT:** OCD has been granted authority to administer the Water Quality Act (Chapter 74, Article 6 NMSA 1978) as it applies to compressor stations by statute and by delegation from the WQCC pursuant to Section 74-6-4(E) NMSA 1978.

The Water Quality Act and the rules promulgated under that Act protect groundwater and surface water of the State of New Mexico by providing that, unless otherwise allowed by rule, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into groundwater unless such discharge is pursuant to an approved discharge permit (See WQCC Regulations: 20.6.2.3104 NMAC and 20.6.2.3106 NMAC).

This Discharge Permit does not convey any property rights of any sort nor any exclusive privilege and does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state, federal, or local laws, rules, or regulations.

The Permittee shall operate in accordance with the Discharge Permit conditions to comply with the Water Quality Act and the rules issued pursuant to that Act, so that neither a hazard to public health nor undue risk to property will result (See 20.6.2.3109C NMAC); so that no discharge will cause or may cause any stream standard to be violated (See 20.6.2.3109H(2) NMAC); so that no discharge of any water contaminant will result in a

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hazard to public health (See 20.6.2.3109H(3) NMAC); and, so that the numerical standards specified of 20.6.2.3103 NMAC are not exceeded.

- C. DISCHARGE PERMIT CONDITIONS:** The Permittee agrees to the specific provisions set out in this document, and the commitments made in the approved Discharge Permit Application and the attachments to that application, which are incorporated into this Discharge Permit by reference.
- D. DEFINITIONS:** Terms not specifically defined in this Discharge Permit shall have the same meanings as those in the Water Quality Act or the rules adopted pursuant to the Act, as the context requires.
- E. FEES:** Pursuant to 20.6.2.3114 NMAC, every facility that submits a discharge permit application for initial approval or renewal shall pay the permit fees specified in Table 1 and the filing fee specified in Table 2 of 20.6.2.3114 NMAC. The required filing fee is \$100; OCD has received this fee. The permit fee of \$4,000 (Gas Processing Plants) is due within 30-days of permit issuance. Checks must be payable to the "Water Quality Management Fund" and not to the OCD and sent to the below mailing address:
- Oil Conservation Division  
Attn: Environmental Administrative Permitting Supervisor  
1220 South St. Francis Dr.  
Santa Fe, NM 87505
- F. EFFECTIVE DATE, EXPIRATION, RENEWAL CONDITIONS, AND PENALTIES FOR OPERATING WITHOUT A DISCHARGE PERMIT:** This Discharge Permit is effective from the date the Permittee receives the discharge permit, all fees are paid, or until the permit is terminated. This Discharge Permit shall **expire on September 25, 2029**. The Permittee shall submit an application for renewal no later than 120 days before the Discharge Permit expiration date, pursuant to 20.6.2.3106(G) NMAC. If a Permittee submits a renewal application at least 120 calendar days before the Discharge Permit expires, and is following the approved Discharge Permit, then the existing Discharge Permit will not expire until OCD has approved or disapproved the renewal application. A discharge permit continued under this provision remains fully effective and enforceable. Operating with an expired discharge permit may subject the Permittee to civil and/or criminal penalties (See Section 74-6-10.1 NMSA 1978 and Section 74-6-10.2 NMSA 1978).
- G. MODIFICATIONS:** The Permittee shall notify the OCD of any facility expansion, production increase, or process modification that would result in any significant modification in the discharge of water contaminants (See 20.6.2.3107C NMAC). OCD may require the Permittee to submit a permit modification pursuant to 20.6.2.3109E NMAC and may modify or terminate a permit pursuant to Section 74-6-5(M) through (N) NMSA 1978.
- H. TRANSFER OF DISCHARGE PERMIT:** Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of the Facility, the transferor shall notify the transferee in writing of the existence of this Discharge Permit and shall deliver or send by certified mail to the OCD a copy of such written notification, together with a certification or other proof that such notification has been received by the transferee pursuant to 20.6.2.3111 NMAC. Upon receipt of such notification, the transferee shall inquire into all the provisions and requirements contained in the Discharge Permit, and the

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transferee shall be charged with notice of all such provisions and requirements as they appear of record in OCD's file(s) concerning the Discharge Permit. Upon assuming either ownership or possession of the Facility, the transferee shall have the same rights and responsibilities under the Discharge Permit as were applicable to the transferor (See 20.6.2.3111 NMAC).

Transfer of the ownership, control, or possession of the Facility does not relieve the transferor of responsibility or liability for any act or omission which occurred while the transferor owned, controlled, or was in possession of the Facility (See 20.6.2.3111E NMAC).

- I. CLOSURE/POST CLOSURE PLAN AND FINANCIAL ASSURANCE:** The Permittee shall submit an updated Closure/Post Closure Plan within 120-days of any Facility expansion, production increase, or process modification that would significantly change the previously approved Closure/Post Closure Plan or in the event OCD determines a modification reported under Permit Condition 1.G requires an updated Closure/Post Closure Plan.

The Closure/Post Closure Plan must meet the requirements of 20.6.2.3107(A)(11) NMAC and provide an acceptable cost estimate to conduct closure and post closure activities. Within 30-days of OCD approval of the Closure/Post Closure Plan, the Permittee must submit the required financial assurance on an OCD-prescribed form, or form otherwise acceptable to the OCD, made payable to the OCD.

- J. COMPLIANCE AND ENFORCEMENT:** If the Permittee violates or is violating a condition of this Discharge Permit, OCD may issue a compliance order requiring compliance immediately or within a specified time-period, suspending or terminating this Discharge Permit, and/or assessing a civil penalty (See Section 74-6-10 NMSA 1978). The OCD may also commence a civil action in district court for appropriate relief, including injunctive relief (See Section 74-6-10(A)(2) NMSA 1978 and Section 74-6-11 NMSA 1978). The Permittee may be subject to criminal penalties for discharging a water contaminant without a discharge permit or in violation of a condition of a discharge permit; making 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 Water Quality Act; falsifying, tampering with or rendering inaccurate any monitoring device, method or record required to be maintained under the Water Quality Act; or failing to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation (See Section 74-6-10.2 NMSA 1978).

**2. GENERAL FACILITY OPERATIONS:**

- A. CONTINGENCY PLAN (SPILL PREVENTION):** The Permittee shall implement its contingency plan to cope with failure of the Discharge Permit or system.
- B. INSPECTION AND MAINTENANCE PLAN:** The Permittee shall implement its inspection and maintenance plan to prevent a failure of the Discharge Permit or system.
- C. OPERATIONAL MONITORING:** As applicable, the Permittee shall comply with its approved monitoring programs pursuant to 20.6.2.3107 NMAC.

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- D. RECORD KEEPING:** The Permittee shall maintain monitoring/reporting records required by this Discharge Permit at its Facility office for a minimum of five years and shall make those records available for inspection by OCD.
- E. POST-CLOSURE MONITORING:** The Permittee shall comply with its approved post-closure monitoring program pursuant to 20.6.2.3107 NMAC (Continuation of monitoring after cessation of operations).
- F. CLOSURE:** After completing abatement of all groundwater and vadose zone contamination required under Permit Condition 2.H, the Permittee shall perform the following closure measures:
- Remove or plug all lines leading to and from the extraction wells so that a discharge can no longer occur.
  - Remove all remediation system components from the site, if applicable.
  - After receiving notification from the OCD that post-closure may cease, the Permittee shall plug and abandon any monitoring well(s).
  - Restore the associated land surface.
- G. RELEASE REPORTING:** The Permittee shall report any release event, regardless of the amount, that meets the criteria of 20.6.2.1203.A NMAC within 24-hours of discovery either by verbal or written communication. A subsequent written notification of the release shall be reported within 7 days utilizing OCD's Form C-141; all Form C-141s must be reported via OCD's E-Permitting system. Form C-141 submissions reporting releases pursuant to 20.6.2.1203.A NMAC must clearly note on the face of the filing that the report relates to a release under a Discharge Permit (DP) and identify the DP number.

Note, 20.6.2.1203.A NMAC requires notification and corrective action for any discharge from any facility of oil or other water contaminant, in 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.

The Permittee must also report unauthorized releases in accordance with any other regulation, such as 19.15.29 NMAC. Also, the Permittee shall report any additional commitments made in its approved contingency plan. If the Permittee determines that any groundwater constituent exceeds the standards specified at 20.6.2.3103 NMAC, then the Permittee shall report a release to OCD.

- 1. Corrective Action:** The Permittee shall undertake such corrective actions as are necessary and appropriate to contain and remove or mitigate the damage caused by the release along with the filing/notification of subsequent correction action reports via OCD's E-Permitting System on Form C-141, or other approved method with the OCD.
- H. ABATEMENT:** Pursuant to 20.6.2.4105(A)(6) NMAC, the Permittee is exempt from the requirement to obtain and implement an Abatement Plan if abatement is conducted under the authority of an approved groundwater discharge plan. This Discharge Permit requires that abatement be consistent with the requirements and provisions of Sections 20.6.2.4101, 20.6.2.4103, Subsections C and E of Section 20.6.2.4106, Sections 20.6.2.4107 and 20.6.2.4112 NMAC, and in accordance with an approved Facility Wide Groundwater Monitoring Work Plan (FWGMWP), if applicable.

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- I. COMPLETION AND TERMINATION:** Pursuant to 20.6.2.4112 NMAC, abatement shall be considered complete when the standards and requirements set forth in Section 20.6.2.4103 NMAC are met. At that time, the Permittee shall submit an abatement completion report, documenting compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC, to OCD for approval. The abatement completion report shall also propose any changes to long term monitoring and site maintenance activities, if needed, to be performed after termination of abatement activities.
- J. OTHER REQUIREMENTS:**
- 1. Inspection and Entry:** The Permittee shall allow any authorized representative of the OCD, upon the presentation of proper credentials, to:
    - a. Enter the Facility at reasonable times;
    - b. Inspect and copy records required by this Discharge Permit;
    - c. Inspect any treatment works, monitoring, and analytical equipment;
    - d. Sample any wastes, groundwater, surface water, stream sediment, plants, animals, or vadose zone material including vadose zone vapors;
    - e. Use the Permittee's monitoring systems and wells to collect samples; and,
    - f. Gain access to off-site property not owned or controlled by the Permittee, but accessible to the Permittee through a third-party access agreement, provided it is allowed by the agreement.
  - 2. Advance Notice:** The Permittee shall provide OCD with at least four (4) working days advanced notice of any sampling to be performed pursuant to this Discharge Permit, or any well plugging, and abandonment at the Facility.
  - 3. Plugging and Abandonment:** The Permittee shall propose to plug and abandon a monitor well by email or mail to OCD for approval, along with approval from the State Engineer. The proposed action shall be designed to prevent water pollution that could result from water contaminants migrating through the well or borehole. The proposed action shall not take place without written approval from OCD.
  - 4. Underground Process/Wastewater Lines:** The Permittee shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. The Permittee shall notify OCD by email or mail prior to the construction and/or modification of underground process and wastewater pipelines that would result in any significant modification in the discharge of water contaminants (See 20.6.2.3107.C NMAC). The Permittee shall also implement their mechanical integrity testing program on an annual basis for the underground fluid line(s) that run from the Facility to the production battery; any noted releases shall comply with Permit Condition 2.G.
- K. ANNUAL REPORT:** The Permittee shall hereafter submit a report to the OCD on or before August 30<sup>th</sup> of each year for the previous calendar year. This report shall include all components of an Annual Groundwater Monitoring Report and a summary Section demonstrating compliance with this Discharge Permit. This Section shall include the following:



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- a. A summary of all major Facility activities or events;
  - b. A summary of all leaks, spills, and releases and corrective actions taken;
  - c. A summary of any new discoveries of groundwater and/or vadose zone contamination. Include recommendations for further investigation and/or abatement.
  - d. A summary of any WQCC constituents found to exceed the groundwater standards.
  - e. A summary of all waste and wastewater disposed of, sold, or treated on-site;
  - f. A summary of the annual mechanical integrity testing of underground line(s).
  - g. A summary of fluids detected in any leak detection system;
  - h. Closure of any UIC Class V wells;
  - i. Conclusions and recommendations; and
  - j. The Permittee shall submit this report via OCD's E-Permitting System for OCD review.
- L. BELOW GRADE TANK(S):** All below grade tanks shall be approved by the OCD prior to installation or upon modification and must meet the design and construction specifications of 19.15.17.11(I) NMAC. All below grade tanks shall be inspected monthly. If the inspection and/or leak detection system suggests a leak has been detected, the tank shall be emptied immediately; the tank shall either be repaired or replaced prior to continued use. A leak or release indicating contamination from the below grade tank(s) shall comply with Permit Condition 2.G.
- M. CLASS V WELLS:** Pursuant to 20.6.2.5002B NMAC, leach fields and other wastewater disposal systems at OCD regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are Underground Injection Control (UIC) Class V injection wells. This Discharge Permit does not authorize the Permittee to use any UIC Class V injection well for the disposal of industrial waste at the Facility. Pursuant to 20.6.2.5005 NMAC, the Permittee shall close any UIC Class V industrial waste injection wells at its Facility that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes (*e.g.*, septic systems, leach fields, dry wells, *etc.*) within 90 calendar days of the issuance of this Discharge Permit. The Permittee shall document the closure of any UIC Class V wells used for the disposal of non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes in its Annual Report. The Permittee must obtain a UIC Permit from the New Mexico Environment Department (NMED) for other Class V wells, including wells used only for the injection of domestic wastes.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS

Action 387200

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID:	330132
	Action Number:	387200
	Action Type:	[UF-DP] Discharge Permit (DISCHARGE PERMIT)

CONDITIONS

Created By	Condition	Condition Date
joel.stone	None	9/26/2024