

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION**

**APPLICATION OF APACHE CORPORATION
FOR AN ADJUDICATION HEARING TO
CONTEST THE DIVISION'S CONDITIONS OF
APPROVAL ON APACHE CORPORATION'S
SCOPE OF WORK FOR ADDITIONAL
INVESTIGATION, LEA COUNTY, NEW MEXICO,**

**ORDER NO. R-23728
CASE NO. 24912**

FINAL COMMISSION ORDER

This matter, having come before the Oil Conservation Commission ("Commission") on the referral of the Oil Conservation Division Director pursuant to Sections 70-2-6(B) and 70-2-11(B) NMSA 1978 of the Oil and Gas Act ("the Act"), and the Commission, having considered the testimony and other evidence of the parties presented before it at a hearing before the Commission on January 16 and 17, 2025, and having considered the closing statements of both parties, hereby finds, concludes, and orders as follows:

A. FINDINGS OF FACT SUPPORTED BY A PREPONDERANCE OF THE EVIDENCE:

1. The inception of this matter occurred when a release, or releases, of produced water was first reported to the Oil Conservation Division ("the Division") by Apache Corporation ("Apache") in July 2019. The report, on Division Form C-141, noted Apache as the responsible party.

2. The reported release occurred at a location known as the East Blinebury Drinkard Unit #037 ("the Site"), arising from oil and gas operations by Apache conducted pursuant to permit API 30-025-06556 ("the Permit"). However, according to its witness Larry Baker, it "had no idea what was lost."

3. As reflected in the aforementioned report, Apache solely owned and operated the Site and infrastructure thereon.

4. In this initial disclosure, Apache stated that it undertook all actions required to stop the release, contain the release, and secure and remediate the Site as required pursuant to 19.15.29.8.C NMAC.

5. In December 2019, based on the information before it at the time, the Division approved Apache's work plan for the Site, which included, *inter alia*, the installation of five (5) monitoring wells, including the aforementioned windmill.

6. Apache submitted a closure report to the Division dated February 9, 2021. *Apache Exhibit A-5*. It noted a "produced Water Spill." It disclosed exceedances of chloride in a majority of its soil samples and well samples. It described the area affected by the release as "approximately 25,000 square feet or 0.57 acres." It also proposed a remediation plan that consisted of limited soil excavation.

7. Based on subsequent soil samples from Apache that reflected increased chloride exceedances, in August, 2020, the Division approved modification of Apache's remediation plan, including the installation of several additional monitoring wells.

8. Beginning in June, 2022, the Division received correspondence from a neighboring landowner expressing concern that the approved remediation and closure plan would allow contamination of local groundwater, including sources of fresh water. *Division Exhibit 2*.

9. From July 2022 to shortly before Apache's request for a hearing, Apache provided additional data from its existing monitoring wells that reflected elevated levels of chlorides and total dissolved solids ("TDS") above normal exceedances, consistently

increasing in both scope and amount from what was previously disclosed previously to the Division. The most recent disclosures by Apache occurred in late 2024, again reflecting continuing increases in both scope and amount of chloride and TDS exceedances, including chloride exceedances over twenty times the established limits for groundwater. *Testimony of Brandon Powell, Tr. at 339.*

10. Chlorides do not break down in the environment.

11. In contrast to Apache's initial characterization of the scope of the release, the area contaminated from the release currently contains approximately 2.6 million square feet, or approximately 60 acres.

12. Based on the expertise of the Commission, the aforementioned exceedances reflect injury and damage to neighboring land, and a danger and threat to local sources of fresh water, public health, and the environment.

13. Apache cannot explain or identify the source contamination causing the exceedances of chloride and TDS from samples within the impacted area. Nor can the Division identify the source of the release or releases, or fully delineate the contamination on the Site.

14. Apache cannot estimate the volume of produced water necessary to cause the level of contamination observed in the ground water samples. In particular, Apache cannot explain or estimate the release volume causing the 'spike' in samples taken in October of 2024. Nor can Apache rule out a current and active release based on the increasing exceedances, or otherwise explain the cause of these increasing exceedances.

15. Apache does not contend that the release, or releases, have been contained.

16. Apache cannot explain what it concedes are "puzzling" non-tandem

patterns of chloride and TDS exceedances, which usually appear in tandem.

17. From approximately July 2022 through May, 2024, the Division and Apache attempted to reach consensus on a new scope of work that would fully address the Division's concerns regarding contamination and remediation, with increasing numbers of monitoring wells proposed by both sides. This process culminated in a final submission by Apache in approximately September 2024. The Division rejected Apache's proposal as not addressing all the Division's concerns. Apache then elected to pursue an appeal. The Division Director then referred the appeal to the Commission pursuant to Section 70-2-6(B) of the Act.

18. Based on the expertise of the Commission and its review of the evidence before it, the source or sources of groundwater contamination, and the likely future extent of the contamination from those sources, cannot be ascertained at this time with a reasonable degree of scientific certainty and requires additional monitoring as provided in this order.

19. The information currently available does not allow a full characterization of the contamination at the Site.

20. In light of the aforementioned and undisputed release or releases by Apache as the responsible party, and the exceedances resulting therefrom, the following final conditions of approval ("Final COA") attached as **Exhibit A** to this Order shall be a condition of the Permit. The Final COA is reasonably necessary to minimize further injury and damage to neighboring land, to reasonably assess the danger and threat to local sources of fresh water, public health, and the environment, and to provide additional water and soil samples which are necessary to identify sources of contamination that may be migrating to

groundwater and to facilitate a remediation plan.

21. The proposed wells in the Final COA are located to include areas either where the horizontal extent of the chloride plume is not fully delineated or within large gaps between existing wells with elevated samples, or to otherwise provide more predictive information regarding the extent of future contamination in the judgment of the Commission. In the individual wells listed as **1a** through **1m** in **Exhibit A**, the Commission provides additional justification for each location.

22. The Final COA differs from the Division's proposal in its closing argument in two respects. First, the Division's proposed well at "1b" was withdrawn by the Division but is included in the Final COA and moved 200 ft East of the windmill. Second, the well proposed by the Division at "1k" (now "1j" in **Exhibit A**) shall be moved to 200 ft Southwest of TMW 19.

23. The Final COA otherwise adopts the Division's proposal, including the strikethroughs included therein.

24. Based on the procedural basis of this appeal, the Commission does not consider at this time what further abatement and remediation may be required as a condition of the Permit, or whether the release or releases presented in this hearing constituted major or minor releases as defined at 19.15.29.7.A and B NMAC. Rather, the Commission is approving a scope of work that includes a monitoring plan that will facilitate a full assessment of the extent of the release or releases, and that will ultimately facilitate a proper remediation plan. Prior to that determination, and due to substantial gaps in knowledge of the release(s), continued investigation is necessary. The Final COA is reasonably calculated to provide such knowledge.

B. CONCLUSIONS OF LAW:

1. Pursuant to NMSA 1978, Section 70-2-6(B) of the Act, the Division and the Commission shall have “concurrent jurisdiction...to the extent necessary for the Commission to perform its duties as required by law.”

2. Pursuant to NMSA 1978, Section 70-2-12(B)(7) (15) and (21) of the Act, the Commission, in exercising its aforementioned concurrent jurisdiction, shall:

(7) to require wells to be drilled, operated and produced in such manner as to prevent injury to neighboring leases or properties...

(15) to regulate the disposition, handling, transport, recycling, treatment and disposal of produced water during, or for reuse in, the exploration, drilling, production, treatment or refinement of oil or gas, including disposal by injection pursuant to authority delegated under the federal Safe Drinking Water Act, in a manner that protects public health, the environment and fresh water resources...

(21) to regulate the disposition of nondomestic wastes resulting from the exploration, development, production or storage of crude oil or natural gas to protect public health and the environment.

3. Pursuant to 19.15.29.8.A NMAC, releases arising from oil and gas operations are prohibited.

4. Pursuant to 19.15.29.8.B NMAC, the operator responsible for a release shall remediate it.

5. Pursuant to 19.15.29.8.C NMAC, such remediation requires the following immediate actions:

(1) **Source elimination and site security.** The responsible party must take appropriate measures to stop the source of the release and limit access to the site as necessary to protect human health and the environment.

(2) **Containment.** Once the site is secure, the responsible party must contain the materials released by construction of berms or dikes, the use of absorbent pads or other containment actions to limit the area affected by the release and prevent potential fresh water contaminants from migrating to watercourses or areas that could pose a threat to public health and

environment. The responsible party must monitor the containment to ensure that it is effectively containing the material and not being degraded by weather or onsite activity.

(3) **Site stabilization.** After containment, the responsible party must recover any free liquids and recoverable materials that can be physically removed from the surface within the containment area. The responsible party must deliver material removed from the site to a division-approved facility.

(4) **Remediation.** The responsible party may commence remediation immediately.

6. Pursuant to 19.15.29.8 NMAC, Apache is the operator responsible for the release and the responsible party.

7. Pursuant to 19.15.29.11.C NMAC:

If the division determines that more information is needed to understand the character of the release and its potential impact on fresh water, public health and the environment, the division may request the responsible party submit additional information. Should the division request additional information, it must do so in writing to the responsible party within 30 days from receipt of the characterization report or remediation plan with what specific information the division is requesting and reasons why the additional information is needed. The responsible party has 14 days to respond to a written request for additional information. If the responsible party disagrees with the request for additional information, it may consult with the division, or file an application for hearing pursuant to 19.15.4 NMAC within 30 days of the issuance of the request for additional information.

8. To the extent that the Division requested more information from Apache after Apache repeatedly updated its information regarding chloride and TDS exceedances, the Division did so pursuant to 19.15.29.11.C NMAC.

9. The Final COA attached as **Exhibit A** is reasonably necessary to satisfy the Commission's obligations pursuant to Section 70-2-12(B), subparagraphs (7) (15) and (21) of the Act, as cited above, and to facilitate compliance with the above-cited rules at 19.15.29 NMAC.

10. This order does not preclude further amendments to the Permit in

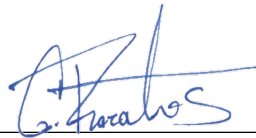
accordance with the Act.

C. ORDER:

1. The Final COA attached as **Exhibit A** hereto shall be enforceable by the Division pursuant to 19.15.5.11 NMAC.

2. Pursuant to Section 70-2-25 of the Act, within twenty (20) days after entry of this order, a party of record adversely affected may file with the Commission an application for rehearing in respect of any matter determined by the order or decision, setting forth the respect in which the order or decision is believed to be erroneous. The commission shall grant or refuse the application in whole or in part within ten days after the application is filed, and failure to act on the application within that period shall be deemed a refusal and final disposition of that application. In the event the rehearing is granted, the commission may enter a new order or decision after rehearing as may be required under the circumstances. A party of record to the rehearing proceeding dissatisfied with the disposition of the application for rehearing may appeal to the district court pursuant to the provisions of Section 39-3-1.1 NMSA 1978.

SO ORDERED.



Gerasimos Razatos, Acting Chairman
New Mexico Oil Conservation Commission

EXHIBIT A – FINAL CONDITIONS OF APPROVAL

As part of Permit API 30-025-06556, Apache Corporation must commence the following within ninety (90) days of the date of this Order. The coordinates for each additional monitoring well are included in conditions 1. (a through n).

- 1a. TMW-30 shall be installed approximately 430 feet east of the TMW-28 well proposal, and 50 feet south. Better defining background concentrations. (32.482591, -103.120003)
- 1b. TMW-31 shall be installed approximately 200 feet east of the Windmill.
- 1c. TMW-32 shall be installed approximately 275 feet east of TMW-12. Reduces distance between adjacent wells for more precise characterization. (32.481354, -103.119876)
- 1d. TMW-33 shall be installed approximately 415 feet southwest of TMW-22. Reduces the distance between TMW-21 and TMW-13 for more precise characterization. (32.480643, - 103.118728)
- 1e. TMW-34 shall be installed approximately 350 feet west of TMW-14. Achieves more characterization near TMW-17 which conveys a high chloride level. (32.479492, - 103.120080)
- 1f. TMW-35 shall be installed approximately 190 feet northeast of TMW-15. Addresses more necessary characterization near TMW-17 (32.479341, - 103.119302)
- 1g. TMW-36 shall be installed approximately 175 feet southwest of TMW-17. Addresses need for more characterization near TMW-17 (32.478749, -103.120871)
- 1h. TMW-37 shall be installed approximately 275 feet southeast of TMW-17. Addresses need for more characterization near TMW-17. (32.478577, -103.119850)
- 1i. TMW-38 shall be installed approximately 300 feet northwest of proposed TMW-26.
More characterization and assessment needed in the southeast region of the release area. (32.477683, -103.119429)
- 1j. TMW-40 shall be installed approximately 200 feet southeast of TMW-19. Addresses lack of characterization and assessment between MW-19 and MW-18
- 1k. TMW-41 shall be installed approximately 275 feet east of TMW-24. Addresses lack of characterization and assessment between TMW-24 and TMW-23 (32.476499, - 103.121560)

11. TMW-42 shall be installed approximately 220 feet east of TMW-23. Addresses lack of characterization and assessment between TMW-25 and TMW-26 (32.476456, - 103.119774)
 - 1m. TMW-42 shall be installed approximately 75 feet NE of TMW-13. Addresses lack of characterization between TMW-13 and TMW-22. (32.4811185, -103.1189847)
2. The windmill well must be sampled and analyzed for barium in the next round of groundwater monitoring.
 3. All additional monitoring wells must be logged by a qualified person and have soil sample analyses for TPH, chloride, and BTEX by EPA Methods 8260, EPA Method 300 and EPA Method 8015. Five (5) foot interval composite samples are acceptable.
 4. Drilling for all wells is required to commence within ninety (90) days from this date of this Order.
 5. Add an additional well located approximately halfway between the Windmill well and TMW-17.
 6. Add an additional well located 200' directly due west of TMW-19.
 7. Include general chemistry water analysis on all samples including Cation/Anion results to understand TDS exceedances that are not chloride related.
 8. In the next sampling event, sample all wells for the following 20.6.2.3103 NMAC constituents; (add all constituents with exceedances or which were not yet tested for)
 - a. Barium, Cyanide, Boron, due to exceedances of their regulatory limits.
 - b. Pentachlorophenol, atrazine, Ethylene dibromide (EDB) also known as 1,2-Dibromoethane as these constituents were either not previously analyzed or had reporting limits and/or minimum detection limits that are above the regulatory limits.
 - c. Temperature and pH must be analyzed for in the field as they were reported out of hold time.
 9. Apache shall complete and sample each additional well within thirty days of completion of drilling.
 10. Apache must continue taking quarterly sampling and provide the results to the Division via the online permitting system. Results received by Apache must be submitted within 30 days, even if the report is still pending or waiting on additional results.
 11. Apache shall include all field notes and calibration logs for field equipment used during groundwater monitoring events in all subsequent reports submitted through the OCD permitting system.