State of New Mexico Energy, Minerals and Natural Resources Department

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Gerasimos Razatos NMOCD Director (Acting) Gerasimos Razatos, Division Director (A Oil Conservation Division



Mr. Joseph Wiley, PG EHS Remediation Project Manager El Paso Natural Gas Company, LLC 1001 Louisiana Street, Room 1445B Houston, TX 77002 NMOCD Abatement Plan Case #AP – 101 Incident ID #nAPP2110635360

RE: Recommendation on Former El Paso Natural Gas Company, LLC Jal No. 4 Plant Petition for Alternative Abatement Standards for closure under alternative abatement standards for the standards set forth in Subsections A and B of 19.15.30.9 NMAC

Mr. Razatos,

The New Mexico Oil Conservation Division (OCD) has completed its review of the petition submitted by El Paso Natural Gas Company (EPNGC) requesting alternative abatement standards (AAS) for chloride, total dissolved solids (TDS), and benzene at the Jal No. 4 Plant. This petition, received by OCD on December 30, 2024, was submitted pursuant to Paragraph 3 of Subsection E of 19.15.30.9 NMAC and is based on monitored natural attenuation (MNA) as the proposed remedial strategy.

After careful evaluation, OCD has determined that the request for AAS fails to meet the criteria set forth under 19.15.30.9(F) NMAC for the following reasons:

1. The Petition Does Not Demonstrate That Compliance with Current Standards is Infeasible (19.15.30.9(F)(a))

Finding:

EPNGC has not sufficiently demonstrated that compliance with the existing abatement standards is infeasible through the maximum use of technology within its economic capability, nor that there is no reasonable relationship between the economic and social costs and benefits of compliance.

Rationale:

• The Water Quality Control Commission (WQCC) regulations emphasize the protection of groundwater for present and future domestic and agricultural use (NMAC 20.6.2.3101). The petition focuses solely on the operator's economic burden without sufficiently addressing broader societal and environmental costs of leaving contamination in place.

- EPNGC has monitored groundwater since 1989, with 31 monitoring wells and multiple groundwater recovery wells in operation. These prior remediation efforts demonstrate that further remediation using available technologies remains technically feasible.
- The petition fails to present a comprehensive alternatives analysis that considers additional remedial strategies, such as:
 - Expanded groundwater extraction and treatment (e.g., increased recovery well deployment, pump and treat systems).
 - Reverse osmosis or ion exchange for chloride and TDS removal.
 - Hydrogeological barriers or engineered solutions to control plume migration.

Until all feasible methods are properly assessed, OCD cannot determine that achieving abatement standards is infeasible or that alternative standards are justified.

2. The Proposed Alternative Abatement Standards Are Not Technically Achievable or Justifiable (19.15.30.9(F)(b))

Finding:

The petition proposes AAS based on a 60-year timeline for groundwater natural attenuation, which is unreasonably long and lacks sufficient evidence to confirm the effectiveness of MNA as a standalone remedy.

Rationale:

- MNA is not an active remediation strategy and relies on natural geochemical processes to degrade contaminants over time. While this may be viable for certain contaminants, the petition does not provide sufficient data proving that:
 - Chloride and TDS will attenuate within a reasonable timeframe.
 - Benzene, a toxic and carcinogenic compound, will not persist at levels hazardous to human and ecological health.
- No contingency measures are outlined in the event that MNA fails to reduce contaminants as predicted.
- Groundwater modeling uncertainty: The petition's modeling simulations for 2043 and 2053 lack independent validation, and fail to account for changing hydrogeological conditions, such as drought or increased groundwater demand.
- Inadequate monitoring framework: The petition does not sufficiently detail how groundwater conditions will be tracked over 30+ years to ensure compliance.

Until EPNGC provides additional evidence that natural attenuation is a technically robust and enforceable solution, the proposed AAS cannot be accepted.

3. The Proposal Fails to Ensure Protection of Public Health and Property (19.15.30.9(F)(c))

Finding:

The petition does not adequately mitigate future risks to human health and property, particularly regarding:

- Long-term exposure risks from benzene exceeding regulatory limits.
- Potential well interference affecting future land and water use.
- The uncertainty of institutional controls over time.

Rationale:

- The petition relies on deed restrictions and groundwater use prohibitions to limit exposure. However, institutional controls are not a permanent remedial measure and are subject to future changes in ownership, enforcement challenges, and local water demands.
- Several registered water wells, including CP 00329, CP 000352, CP 000342, and CP 000343, exist within the potential migration pathway. The status of these wells remains unclear, and groundwater contamination may impair future use of these resources.
- The proposed AAS for benzene (0.015 mg/L) exceeds the regulatory standard (0.01 mg/L), posing a potential hazard to any future water users.

Given these risks, the petition does not sufficiently ensure that public health and property will not be negatively impacted, as required by 19.15.30.9(F)(c) NMAC.

Determination

For the reasons outlined above, the request for Alternative Abatement Standards (AAS) is hereby denied. EPNGC has failed to provide:

- 1. Definitive proof that compliance with current abatement standards is infeasible.
- 2. Sufficient technical justification for the proposed AAS.
- 3. Adequate assurances that the plan will not harm public health, property, or groundwater resources.

If EPNGC wishes to pursue an alternative abatement approach, OCD strongly recommends submission of a revised proposal that:

- Includes a detailed comparative analysis of all feasible remedial technologies.
- Establishes more stringent monitoring and contingency plans.
- Addresses the long-term effectiveness and enforceability of institutional controls.

Per 19.15.30.8 (F) (d), If the division's environmental bureau chief recommends disapproval of any or all of the proposed alternative abatement standards, the petitioner may submit a request to the director, within 15 days after the recommendation's receipt, for a public hearing on those standards.

If you have any questions, please contact Rosa Romero by email at RosaM.Romero@emnrd.nm.gov.

Regards,

RosaM Romaro

Rosa Romero Environmental Bureau Chief

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

CONDITIONS

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C	7046
1001 Louisiana Street	Action Number:
Houston, TX 77002	435881
	Action Type:
	[IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	None	2/26/2025

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