

EXHIBIT A

Documented Plugging, Reclamation, and Produced-Water Cleanup Costs on New Mexico Oil & Gas Wells

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Purpose: This Exhibit summarizes documented, real-world costs associated with well plugging, surface reclamation, and contamination cleanup on New Mexico oil and gas wells, based on public records from the Oil Conservation Division (OCD), the Energy, Minerals and Natural Resources Department (EMNRD), the New Mexico Legislative Finance Committee (LFC), and the New Mexico Environment Department (NMED).

These records demonstrate that:

1. Average plugging costs substantially exceed historic bonding levels;
2. Surface reclamation and contamination cleanup frequently equal or exceed plugging costs; and
3. Multi-well and contamination-impacted sites routinely generate six- and seven-figure liabilities, far exceeding the proposed \$150,000 per-lease minimum bond.

I. Documented Plugging Costs (State-Contracted Data)

Average and Range of Plugging Costs

The New Mexico Legislative Finance Committee reports that in Fiscal Year 2024, the average cost to plug an orphan oil or gas well was approximately \$163,000, with individual plugging costs ranging from approximately \$31,000 to \$778,000 per well, depending on well depth, condition, and technical complexity.¹

Separately, the Energy, Minerals and Natural Resources Department's Oil Conservation Division reports an average plugging cost of approximately \$125,000 per well, with a documented plugging-only cost range of approximately \$50,386 to \$320,481 per well, based on state-contracted orphan well projects.²

Both agencies emphasize that these figures reflect plugging activities only and do not include full surface reclamation, infrastructure removal, or contamination remediation, which can substantially increase total site-level cleanup costs.³

¹ New Mexico Legislative Finance Committee, *Policy Spotlight: Orphaned Wells* (2024), at 6–8. https://www.nmlegis.gov/Entity/LFC/Documents/Program_Evaluation_Reports/LFC%20Policy%20Spotlight%20-%20Orphaned%20Wells%20-%20Final.pdf

² Energy, Minerals and Natural Resources Department, Oil Conservation Division, *Orphan Well & Financial Assurance Update* (Dec. 1, 2023), at 3–4. <https://www.nmlegis.gov/handouts/RHMC%20120123%20Item%202%20EMNRD%20OCD%20-%20Orphan%20Well%20%26%20Financial%20Assurance.pdf>

³ *Id.*; see also LFC, *Policy Spotlight: Orphaned Wells*, supra note 1.

II. Surface Reclamation and Contamination Cleanup Costs

Reclamation and Remediation Costs Beyond Plugging

The Oil Conservation Division reports that assessment, remediation, and surface reclamation for a “typical well pad with minor issues” averages approximately \$35,000 per site, in addition to the cost of plugging the well.⁴

OCD and EMNRD further caution that sites involving significant contamination, extensive infrastructure removal, or produced-water impacts can result in total remediation and reclamation costs reaching the millions of dollars, depending on site conditions and the nature of the release.⁵

Produced-Water Contamination as a Major Cost Driver

The New Mexico Environment Department has documented that oil and gas produced-water in New Mexico routinely contains extremely high total dissolved solids (salinity), volatile organic compounds including benzene, heavy metals, radionuclides, and per- and polyfluoroalkyl substances (PFAS).⁶ These constituents persist in soil and groundwater and are not amenable to simple surface reclamation.

Where produced-water releases occur, remediation commonly requires excavation and off-site disposal of contaminated soils, rather than in-place treatment or revegetation, substantially increasing cleanup costs beyond well plugging and basic surface restoration.⁷

Consistent with NMED’s findings, the Oil Conservation Division has identified produced-water impacts as among the most expensive categories of surface damage addressed through the Oil and Gas Reclamation Fund, often exceeding the cost of plugging the associated well.⁸

Taken together, these public records establish that produced-water contamination represents a foreseeable, recurring, and high-cost liability on oil and gas leases, and that financial assurance mechanisms limited to plugging or nominal surface reclamation materially understate the true fiscal risk to state trust lands.

III. Multi-Well and Site-Level Liabilities

Aggregated Site Costs

⁴ EMNRD/OCD, *Orphan Well & Financial Assurance Update*, supra note 2, at 4.

⁵ *Id.* at 4–6.

⁶ New Mexico Environment Department, *PFAS in Produced Water: Preliminary Findings and Technical Discussion* (2023).
<https://www.env.nm.gov/pfas/>

⁷ *Id.*

⁸ EMNRD/OCD, *Orphan Well & Financial Assurance Update*, supra note 2.

The New Mexico Legislative Finance Committee and the Oil Conservation Division document that plugging, remediation, and reclamation at sites containing multiple wells can result in total costs in the millions of dollars.⁹ Such elevated costs are particularly likely where:

- multiple wells are present on a single lease or pad;
- surface or subsurface infrastructure must be removed or decommissioned;
- access roads and well pads require recontouring and revegetation to meet reclamation standards; and
- produced-water contamination or other surface releases are present.¹⁰

IV. Synthesis of Public Cost Evidence

Based on the sources above:

- Average plugging costs alone commonly exceed \$125,000–\$163,000 per well, with documented outliers approaching \$800,000 per well;
- Surface reclamation and contamination cleanup add tens of thousands of dollars for minor sites and hundreds of thousands to millions of dollars for contaminated sites;
- Total site-level liability for leases with multiple wells or produced-water impacts regularly exceeds \$1,000,000; and
- The proposed \$150,000 per-lease minimum bond is insufficient to cover:
 - full plugging and reclamation of a single modern well; or
 - any multi-well or contamination-impacted site.

V. Conclusion

This public record demonstrates that cost-based bonding, risk multipliers, and produced-water-specific financial assurance are necessary to align financial assurance requirements with actual cleanup liabilities on State Trust Lands and to protect trust beneficiaries from unfunded environmental debt.

⁹ LFC, *Policy Spotlight: Orphaned Wells*, supra note 1, at 8–11.

¹⁰ EMNRD/OCD, *Orphan Well & Financial Assurance Update*, supra note 2, at 4–6.