An Act to Enhance NM Water Protections & Establish a Produced Water Barrel Fee of \$0.05 to Fund the Plugging and Remediation of Abandoned Oil and Gas Wells

The oil and gas industry in New Mexico is producing oceans of hazardous waste - 2.3 billion barrels of produced "water" in 2023 - and they are running out of solutions for disposal. Oil and gas waste is already contaminating New Mexico air, land and water through risky underground disposal wells, ubiquitous surface spills and discharges throughout the oil field during transport, and at least 1700¹ abandoned wells that emit methane and contaminate nearby land and water, with many thousands more classified as inactive and soon to be abandoned.



Efforts to permit industrial oilfield waste treatment and reuse projects without protective scientific treatment and quality standards will only further endanger New Mexico's water and public health.

What do these proposed amendments accomplish?

- 1. The bill amends the Water Quality Act to ensure that off oil-field research into treatment and reuse of oil and gas waste is conducted in a manner protective of existing water resources and human health while allowing for *bona fide* research via permitted bench scale research conducted in accredited laboratories.
- 2. The bill amends the Tax Administration Act to establish a \$0.05 fee per barrel of produced water generated in New Mexico to fund the cost of plugging and remediation of abandoned wells. The State Land Office projected an \$8.1 billion² gap between bonds and actual remediation costs, a number that continues to increase as financial assurances still do not meet the actual costs of remediation.

Why are these amendments necessary?

Efforts to Authorize a Produced Water Treatment and Reuse Industry Endanger our Health and Water Produced water, a byproduct of oil and gas extraction, contains a complex mix of organic and inorganic compounds, making its management and reuse a challenging task. Reusing produced water can offer benefits such as conserving freshwater resources and reducing disposal needs, but it also raises significant concerns:

- Produced water often contains high levels of salinity, heavy metals, hydrocarbons, naturally occurring radioactive materials (NORM), as well as toxic organic and inorganic compounds, including PFAS.
- Exposure to untreated or inadequately treated produced water can pose health risks to humans, including carcinogenic and endocrine disrupting effects, including birth defects.
- Improper reuse or disposal of produced water can lead to soil and water contamination, including infiltration into groundwater and release of volatile organic compounds (VOCs) into the atmosphere.
- Reuse projects in other states have led to widespread dangerous ecosystem contamination, including aquatic death and significant radioactive contamination of land and water.
- Treatment plant projects in other states have resulted in worker injury and death.
- Characterization of produced water composition is in the nascent stage and standards for treatment and quality cannot be developed until such characterization is complete. Until the science for safe reuse is proven, there must be no reuse of produced water off the oilfield.
- The New Mexico Oil & Gas Association and the New Mexico Produced Water Research Consortium testified at the recent wastewater reuse hearing that "there are no existing technologies available right now commercially that will treat these huge volumes" of produced water at a reasonable price.³

¹ https://www.doi.gov/sites/default/files/fy-2023-orphaned-wells-congressional-report.pdf

² https://www.propublica.org/article/the-rising-cost-of-the-oil-industrys-slow-death

³ WQCC 23-84, TR., 5/17/2024, (Hightower) at 293-294; WQCC 23-84, TR., 8-8-2024 (McCurdy) at 32-33; See also, NMED, WQCC 23-84, TR., 5/14/24, (Herman) at 103.

Inadequate Financial Assurance Bonding in New Mexico has resulted in a growing legacy of abandoned well sites polluting our air, land and water, and continually increasing costs to taxpayers.

Inadequate bonding requirements and industry abuses result in the transfer of low and underperforming wells to subsidiaries that ultimately declare bankruptcy, leading to more than 1700 abandoned wells in New Mexico, with many thousands more inactive but unplugged. These abandoned wells pose enormous risks to the public:

- Abandoned wells release methane, a potent greenhouse gas, and can contaminate land and groundwater with carcinogenic and radioactive pollutants.
- Taxpayers bear the financial burden of addressing abandoned well, and delayed action increases cleanup costs exponentially. The State Land Office estimated that the gap between financial assurance bonds on file and the actual cost of plugging and remediation exceeds \$8.1 billion.
- Delayed action increases cleanup costs exponentially, and improper plugging of abandoned wells can lead to devastating consequences. In October 2024, after 5 earthquakes in Reeves County, Texas 36 miles from the New Mexico border a 100 ft. geyser of chemical-laden produced water erupted and was finally sealed after 19 days. It will take months to "clean up". The health of residents are at risk from hydrogen sulfide, hydrocarbons and other toxins (arsenic, radium, and salt). There is a real and present danger from more blowouts.

What specific measures are included in these amendments?

- Allows for bench scale research projects. "Bench-scale project" means a small project or study conducted in an accredited laboratory. Required scientific protocols must be followed.
- Requires permits for all off oil field produced water use with a bench-scale research project and requires the NM Environment Department to issue rules for the permit process.
- Prohibits any permits for discharge of produced water.
- Prohibits treated wastewater originating from produced water sources to be used on agriculture, irrigation, potable water supplies, aquifer recharge, industrial processes, for environmental restoration, or in road construction maintenance, roadway ice or dust control or any other construction.
- Amends the Tax Administration Act to impose a \$0.05 per barrel fee on produced water.
- Allocates funds from per barrel fee to EMNRD for plugging and remediation of abandoned wells.

How will this bill benefit the people of New Mexico?

- Protects public health and the environment by reducing methane emissions and groundwater contamination.
- Removes ambiguity in existing regulations regarding produced water reuse and provides clear statutory guidance essential for ensuring environmental protection and public safety.
- Generates funding for plugging of abandoned wells and proactive remediation measures more cost-effective than reactive cleanup efforts.
- Minimally impacts oil and gas producers while promoting economic stability through job creation and industry accountability.

Learn more and take action at DefendNMWater.org

