## Comment on OCD new rules on Produced Water

The New Mexico Oil Conservation Division (OCD) has announced proposed amended regulations in keeping with HB 546, which passed during the 2019 Legislature. Marathon Oil was the primary author of HB 546, the Fluid Oil & Gas Waste Act, with input from the New Mexico Environment Department. It allows treated "produced water" also known as wastewater resulting from hydraulic fracturing that may contain radiation, carcinogens and other toxic substances to be used for "road construction maintenance, roadway ice or dust control, or other construction or in the application of treated produced water to land, for activities unrelated to the exploration, drilling, production, treatment and refinement of oil or gas." HB 546 swept through the 2019 legislature at the end of the session and Governor Lujan Grisham signed it into law.

The Oil Conservation Division's proposed regulations seem benign, but within the rules lurk disturbing details:

The rules would allow oil and gas (O&G) companies to use and transport "produced water" when drilling and fracking, provided that public health, the environment, and fresh water are protected. Unfortunately, there exist no standards or safeguards to actually protect public health, the environment, and fresh water from "produced water."

The rules would allow the oil and gas industry to discharge or otherwise dump its toxic waste outside of oil and gas producing areas. Although the rules would allow this only where approved by the NM Water Quality Control Commission, they explicitly imply that the Commission will at some point adopt rules that actually allow the dumping of "produced water" onto lands and in streams. This is a scary proposition considering that there are no known methods to safely treat this waste.

What is Produced "Water"? It's not water, it's toxic waste.

While billed as regulating "produced water," the fluids regulated under the proposed rules are anything but water. As reports across the U.S. have found, this "water" is actually a waste byproduct of the fracking process -- a toxic cocktail of radioactive materials, heavy metals, proprietary fracking chemicals, and other contaminants that are known to be carcinogenic and dangerous to human health and the environment.

Why did the Oil and Gas industry write this bill?

The constant flow of freshwater needed for fracking is ever harder to come by in New Mexico's parched region, which lies in the Chihuahuan Desert and receives only about 13 inches of precipitation a year. Drilling a single well in the Permian Basin required more than 11 million gallons of water per day in 2016, enough to fill 17 Olympic size swimming pools, up from 1.3 million gallons in 2011— a 770% increase. As the easier-to-reach oil deposits have been tapped out, companies have had to drill ever-longer wells— and the longer the well, the more water needed to force out the hydrocarbons.

For every barrel of oil extracted four barrels of wastewater are created! In 2018, New Mexico's share of the Permian Basin generated 42 billion gallons of oil and gas wastewater, according to the New Mexico Environment Department. For scale, this amount of water could cover over 8,000 football fields with a foot of water, each and every day. In five years, the Permian is forecast to generate 32 million barrels of produced water per day. By 2030, that number could rise to 38 million barrels daily. Companies dump the contaminated wastewater into disposal wells or into illegal "abandoned" areas. It is becoming increasingly costly and difficult to dispose of this toxic waste.

Overall, the Oil Conservation Division's rules were designed to alleviate these toxic waste byproduct pressures on the oil and gas industry. If the state is genuinely concerned with limited quantities of fresh water the answer is simple: stop using fresh water for fracking. Our precious water is for drinking and agriculture, not poisoning. Water is life. Rather than help New Mexico transition away from reliance on oil and gas, and the use of precious fresh water for drilling, the environment department's rules would create a new market for the sale of waste, a new commodity for the O&G industry to sell, further threatening our health and the environment. New Regulations Must Respect the Science

It is incumbent upon the OCD to take a "hard look" at the existing science that warns against allowing the use of wastewater from oil and gas wells to be used at all outside the oil fields before adopting new rules. For instance, spreading fracked wastewater, which contains high levels of the carcinogenic element radium, inorganic salts, and oil and gas hydrocarbons, on unpaved roads to control dust is a threat to human health and the environment. Lab experiments have demonstrated that nearly all of the metals from these wastewaters leach from roads after rain events, likely reaching ground and surface water. In Pennsylvania, from 2008 to 2014, spreading O&G wastewaters released over four times more radium, a known carcinogen, than O&G wastewater treatment facilities and 200 times more radium than spill events. Consequently, Pennsylvania and four other states have banned road spreading of wastewater from hydraulically fractured wells.

The State of New Mexico and the OCD are already failing New Mexicans Governmental agencies have already failed to protect human health and the environment from the dangers of the state's oil and gas addiction. While the O&G companies that own the fracking wells are responsible for the accidents and poor management that lead to regular and repeated spills and releases of toxic waste, it is undeniable that New Mexico has failed to hold industry accountable and provide proper oversight and enforcement of existing rules.. The number of well inspections has decreased by 28% between the administrations of Governor Martinez (42,880 inspections in 2018) and Governor Lujan Grisham (31,043 inspections in 2019). Indeed many of these companies are repeat violators of basic environmental regulations and are allowed to continue to operate. The division issued just 1,620 violations in FY19, 78 percent of the number issued in FY18, despite significant increases in oil and gas production this year. The OCD attributes fewer inspections and a lack of compliance with permits and regulations to compliance officer vacancies. However, somehow OCD continues to process most approved drilling permits within 10 business days.

EMNRD and OCD have not established appropriate regulatory procedures and have failed to enforce the ones they have — to comply with the constitutional mandated public trust doctrine "expressed" in Article XX, Section 21 of the New Mexico Constitution, that reads: The protection of the state's beautiful and healthful environment is hereby declared to be of fundamental importance to the public interest, health, safety [,] and the general welfare. The [L]egislature shall provide for control of pollution and control of despoilment of the air, water[,] and other natural resources of this state, consistent with the use and development of these resources for the maximum benefit of the people.

Given the current shameful history of widespread contamination by the O&G industry and the careless and/or willful actions and/or inactions and the failures of these governmental agencies to adequately oversee, regulate, penalize, impose violations to address and prevent spills and releases of toxic waste already occurring on a regular basis in the O&G fields, it would be a violation of the New Mexico Constitution and our laws to consider expanding the use of O&G wastewater outside the O&G fields.

We oppose the proposed amendments to the "produced water" regulations and instead demand:

Establishment of regulatory standards for the following contaminants commonly found in fracked waste: Ethyl benzene, Toulene, Xylenes, Methylene Chloride, Formaldehyde, Polycyclic Aromatic Hydrocarbons, Radon and other volatile organic compounds based on science; Establishment of regulatory standards for radiation poisoning and monitoring and enforcement in the O& G industry;

A Requirement to Increase Monitoring and Actual Enforcement of oil and gas companies, especially those who repeatedly offend and violate regulations, and to increase penalties for repeat contamination offenses, including the threat of disallowing any further well permits; Injunctive relief requiring the suspension of well permits until there are enough inspectors and efficient and effective inspections.

Delay in amendments to the Produced Water Rule until a thorough and adequate review of scientific data has been completed.

Respectfully, Elaine Cimino Common Ground Rising Director

In solidarity with New Energy Economy