NM Oil Conservation Commissioners
Wendell Chino Building, 3rd Floor
Attn: Sheila Apodaca, Clerk
Re: Case No. 23580
1220 South St. Francis Drive
Santa Fe, NM 87505

October 30, 2024

Dear Commissioners,

I am writing to ask you to approve the Application to amend the Commission's rules to address PFAS, Case No. 23580, because PFAS and PFOA pose a significant and growing threat to our health. Please use your authority to protect New Mexicans from these forever chemicals. Once contaminated, there is no going back.

Sincerely,

Douglas S Kurtz
4915 Chippewa Trail
Las Cruces, NM 88011

From: Connie Anderson
To: Apodaca, Sheila, EMNRD
Subject: [EXTERNAL] Public Comment - Case No. 23580 - PFAS Rulemaking
Date: Thursday, November 14, 2024 9:59:13 AM

Dear Oil Conservation Commissioners,

I am writing today to submit my public comment regarding Case No. 23580 regarding the rulemaking on PFAS in oil and natural gas operations.

I encourage the OCC to not let fear influence your decisions but rely on facts and science to direct your rulemaking.

PFAS are everywhere in our daily lives, including household items like nonstick cookware, water-repellent clothing, and some cosmetics. There are many industries that need to take a serious look at limiting and ultimately removing PFAS from their products, however, the oil and natural gas industry has already done that. Very limited amounts of specific PFAS were previously used in friction reducing and surfactant agents, the industry has moved away from using PFAS and is supportive of legislation regulating its use in fracking.

Even the EPA doesn't include the oil and natural gas industry on their lists industries targeted for rulemaking, data review, and monitoring PFAS. Why? Because PFAS are not common in oil and natural gas operations.

Oil and natural gas operators care about safety and protecting the environment. That's why PFAS are not intentionally used in fracking operations in our state.

The oil and natural gas industry already provides details about chemicals used in the fracking process and is happy to certify that PFAS is not used in fracking operations. As the most highly regulated industry at the federal and state level, there is simply no need for additional rulemaking on this matter.

I ask that you let data and science be your guide and see through the attempts to tie PFAS with the oil and natural gas industry as you proceed in the rulemaking process.

Sincerely,
Connie Anderson

Dear Oil Conservation Commissioners,

I am submitting my public comment regarding Case No. 23580, which addresses rulemaking on PFAS in oil and natural gas operations.

I encourage the OCC to base decisions on facts and science rather than fear.

PFAS are prevalent in everyday products, including items like nonstick cookware, water-repellent clothing, and some cosmetics. While many industries should seriously consider reducing or eliminating PFAS, the oil and natural gas industry has already moved in that direction. Historically, limited amounts of specific PFAS were used in friction-reducing and surfactant agents, but the industry has since shifted away from PFAS and supports legislation regulating its use in fracking.

Even the EPA does not include the oil and natural gas industry on its lists of industries targeted for rulemaking, data review, or PFAS monitoring. This is because PFAS are not common in oil and natural gas operations.

Oil and natural gas operators prioritize safety and environmental protection. As a result, PFAS are not intentionally used in fracking operations in our state.

The industry already discloses chemicals used in the fracking process and is committed to certifying that PFAS are not used. Given that it is one of the most highly regulated industries at both federal and state levels, there is no need for additional rulemaking on this matter.

I respectfully ask that data and science guide your decisions and that attempts to link PFAS with the oil and natural gas industry are carefully examined as you proceed with rulemaking.

Sincerely,

Alison Riley
Director of Public Policy
New Mexico Chamber of Commerce

From: Elaine Cimino
To: Apodaca, Sheila, EMNRD
Subject: [EXTERNAL] Online Public Comment OCD Case No. 23580
Date: Sunday, November 10, 2024 11:32:55 AM

I intend to speak to address the commission on or after 11 am Nov 12 if possible to give online comments.

The public oral comments copy as follows:

Hello, my name is Elaine Cimino C I M I N O director of Common Ground Rising. Please see Common Ground Rising's the submitted written report.

I'm here to emphasize the urgent need to prohibit PFAS and close trade secret loopholes that allow toxic chemicals to threaten the health and environment of New Mexicans. I lived in La Cieneguilla for ten years, near the Santa Fe River, in a row of houses impacted by nitrate pollution that caused "Blue Baby Syndrome" in infants. Despite this known hazard, no investigation was conducted into other contaminants that could have seeped into our aquifer from nearby sludge fields and wastewater treatment plants. This exposure has had lasting impacts on my health, including autoimmune issues. And I'm deeply concerned for my former neighbors, their children, and grandchildren who continue to face these unresolved health risks.

In 2004, I witnessed a sludge truck illegally dumping waste into a ditch that flowed directly into the Santa Fe River. When I reported it, instead of state police, representatives from the company arrived, along with the sheriff who circled my car but took no action. This incident exemplifies the enforcement failures that communities like La Cieneguilla face.

Unfortunately, Rio Rancho has also suffered from these practices. In 2018, 288 truckloads of radioactive TENORM sludge were illegally dumped at the Rio Rancho Municipal Landfill, toxic waste from the Rio West Sandoval brine wells. This waste was also used for dust control during construction, allowing dangerous particles to become airborne and increasing exposure risks. Despite the seriousness of this contamination, the site has not been cleaned up, and those responsible have not been held accountable.

These incidents highlight the compounding risks that toxic waste and PFAS present across New Mexico, especially given our fractured geology, which makes contaminants even more likely to spread into our drinking water. With nearly half of New Mexico's population on Medicaid, these health impacts fall hardest on vulnerable communities. Continuing to allow PFAS use will lead to escalating healthcare costs and environmental degradation that ultimately strain our economy.

It’s time to prohibit PFAS, close trade secret loopholes, and prioritize the health and safety of all New Mexicans. Thank you.

Elaine Cimino

I am sending written comments in a separate email please include in package to commissioners.

Thanks

Nothing is more perishable than our relationship with the Earth."

"In a time where every living system is declining and the rate of decline is accelerating, we must figure out what it means to be a human on Earth and remain humane in the process."-Elaine Cimino

"Our lives begin to end the day we become silent about things that matter."

-Martin Luther King Jr.

Common Ground Rising Written Comments OCD Hearing — Elaine Cimino

Case No. 23580 with the Oil Conservation Commissioners: Report on the Necessity of PFAS Regulation in New Mexico Oil and Gas Operations

Introduction

This report advocates for the prohibition of PFAS in oil and gas activities within New Mexico, underscoring the critical need for regulatory actions due to the cumulative health and environmental impacts of these "forever chemicals." PFAS contamination poses significant risks to public health, water resources, and environmental stability. Moreover, the use of trade secret protections hinders full transparency, depriving the public and regulators of essential information needed to safeguard New Mexico's groundwater—a primary water source for much of the state.

Health Impacts of PFAS Exposure

Scientific Consensus on PFAS Toxicity Persistent Toxicity and Health Risks

PFAS chemicals, including perfluoroalkyl and polyfluoroalkyl substances, are synthetic compounds known for their extreme toxicity at minuscule levels and tendency to accumulate in the environment and human body. Research has linked PFAS exposure to kidney and testicular cancers, thyroid disease, high cholesterol, pre-eclampsia, and other severe health conditions. These findings align with studies such as those published in *The Lancet*, which connect increased cancer rates to long-term exposure to toxic chemicals. (PFAS One Pager (3))(fracking-with-forever-c…). [1]

PFAS in New Mexico Wells

Previously unpublicized data from Physicians for Social Responsibility (PSR) shows that PFAS were used in at least 227 oil and gas wells in New Mexico. Between 2013 and 2022, more than 3,600 wells across the state were injected with surfactants—a class of chemicals that includes PFAS. However, due to trade secret claims, details about the specific chemicals and their quantities remain undisclosed, hindering public knowledge of the full extent of PFAS contamination risks. (PFAS One Pager (3))(fracking-with-forever-c…). [2]

Groundwater Contamination and Geologic Vulnerabilities

With approximately 87% of New Mexico's public water sourced from groundwater, the potential for contamination of these supplies poses a critical risk. The Environmental Protection Agency (EPA) has outlined numerous pathways for fracking-related chemicals, including spills, leaks through cracked well casings, and migration into aquifers.[3] In New Mexico, this risk is amplified by the state's highly fractured

geology, particularly in the Rio Grande Valley and surrounding mountainous areas, where injection operations are often planned. These fractures create natural pathways that increase the likelihood of contaminants, including PFAS, seeping into drinking water sources Given PFAS's persistence in groundwater, contamination could have long-term effects, threatening human health and ecosystems across the state. (PFAS One Pager (3)).

Local Health Implications in New Mexico

PFAS have already severely impacted New Mexican communities. Notably, PFAS contamination near Holloman Air Force Base has led to high levels of water contamination, forcing some residents to rely on bottled water. The severe, cumulative health risks tied to PFAS underscore the importance of restricting these chemicals in all industrial applications, particularly in oil and gas operations where exposure pathways multiply.(PFAS One Pager (3))

Cumulative Environmental and Health Impacts of PFAS in Oil and Gas Operations

Groundwater Contamination

With approximately 87% of New Mexico's public water sourced from groundwater, PFAS contamination of these supplies could have catastrophic consequences. The Environmental Protection Agency (EPA) has identified numerous exposure pathways for fracking-related chemicals, including spills, injection of fracking fluid into groundwater, and leaching through wells with cracked casing. Given the long-lasting presence of PFAS in the environment, any contamination in groundwater can persist indefinitely, accumulating over years and impacting human and ecosystem health alike. (fracking-with-forever-c…)(Water-Update-September-…)

Multiple Pathways of PFAS Exposure in Oil and Gas Operations

The oil and gas industry uses millions of gallons of water mixed with sand and various chemicals under high pressure to fracture underground rock formations and release trapped oil and gas. PFAS, known for their slipperiness and water-repellent properties, are used in some cases to reduce friction in these operations. However, this process opens multiple pathways for PFAS to migrate into groundwater and soil, including:

- Injection into Wells with Structural Issues: PFAS can enter aquifers through cracked casings or cement, putting local water supplies at risk.
- Wastewater Spills and Disposal: PFAS-laden wastewater is often disposed of through underground injection wells or taken to centralized waste treatment facilities. This wastewater can migrate into groundwater through improperly sealed wells, creating long-term exposure risks(fracking-with-forever-c…)(Water-Update-September-…).

- Use in Road Applications: PFAS-containing wastewater has been spread on roads for de-icing and dust suppression, a practice that risks leaching PFAS into nearby soil and waterways, further expanding the contamination footprint(fracking-with-forever-c…).

Each exposure pathway increases the likelihood of PFAS entering water sources, posing a continuous threat to New Mexico's residents who rely on these resources for drinking and agriculture. This cumulative impact heightens the need for stringent regulations that ban PFAS use in oil and gas operations statewide.

Environmental Justice and Health Equity Concerns

PFAS contamination disproportionately impacts rural, low-income, and Indigenous communities who rely on local water resources. Communities near known contamination areas, like La Cieneguilla and Clovis, face significant health risks and challenges in obtaining safe water supplies. Banning PFAS in oil and gas operations is critical not only for environmental health but also for social equity and environmental justice.[4]

The oil and gas industry uses millions of gallons of water mixed with sand and various chemicals under high pressure to fracture underground rock formations and release trapped oil and gas. PFAS, known for their slipperiness and water-repellent properties, are used in some cases to reduce friction in these operations. However, this process opens multiple pathways for PFAS to migrate into groundwater and soil, including:

- **Injection into wells with structural issues** that may allow PFAS to leak into aquifers.
    - **PFAS in New Mexico Wells**
      Research by Physicians for Social Responsibility has documented the use of PFAS in at least 227 oil and gas wells in New Mexico. Between 2013 and 2022, companies injected PFAS-containing surfactants into more than 3,600 wells across the state. These surfactants, a broad class of chemicals to which PFAS belong, are primarily used to reduce friction in well operations. However, due to trade secret claims, the specific chemicals and quantities used remain undisclosed. This lack of transparency prevents both regulators and the public from understanding the full extent of PFAS contamination risk.
- **Spills of PFAS-laden wastewater** during or after fracking, often exacerbated by inadequate waste treatment facilities that struggle to process these contaminants. The spills and the sludge dumping is a generational problem that has existed for over 30 years plus. (fracking-with-forever-c…)(Water-Update-September-…).
- **Example of Local Environmental Justice PFAS Concerns**
  I lived in La Cieneguilla, southwest of the Santa Fe Airport for ten years, close to the Santa Fe river, in a row of houses impacted by known nitrate pollution, which caused "Blue Baby Syndrome" in infants. Despite this was an historic known hazard because the city's illegal practices, no investigation was ever conducted into other contaminants potentially seeping into

our aquifer from nearby sludge field and wastewater treatment plant. This exposure has had lasting impacts on my health, including autoimmune issues. I remain deeply concerned for my neighbors, their children, and their grandchildren, who continue to live with these unresolved health risks.

- In 2004, I witnessed a sludge truck illegally dumping waste into a ditch that flowed directly into the Santa Fe River, across from the Santa Fe Wastewater Treatment Plant which was closed for discarding toxic sludge waste. I reported it to the state police, hoping they would issue a citation. Instead of law enforcement, Richard Cook arrived with a couple of roughnecks. Shortly after, the sheriff arrived and circled my car, as well as Richard and his "team".
- I reported the incident to the New Mexico Environment Department (NMED), but this story underscores a larger problem: illegal actions like this occur, exploiting loopholes in the management of toxic waste labeled as "sludge." Of which we do not know what is in the proprietary toxic waste. Such loopholes allow toxic waste to be dumped into municipal landfills and sludge fields, putting our communities and environment at risk an ongoing issue for over 30 years because of deregulation policies.
- This example illustrates how contaminants like PFAS can migrate through our environments and into our communities, turning the entire state into a frontline area of exposure. With 45-50% of New Mexico's population relying on Medicaid, the health impacts of these toxins fall disproportionately on vulnerable communities. If we continue to allow PFAS contamination, the resulting health issues will drive up healthcare costs that ultimately get passed on to taxpayers, adding strain to our economy and state budgets. The fossil fuel industry's practices should not come at the expense of public health and our state's economic stability.
- **Another instance of sludge dumping on roads and in municipal landfills that needs to be brought to the commission's attention occurred at the Rio Rancho Municipal Landfill.** In 2018, 288 truckloads of radioactive TENORM sludge, toxic waste from the Rio West Sandoval brine wells, were illegally dumped there. Comments regarding this incident were submitted during the Water Quality Control Commission hearing this past year. This illegal dump has not been cleaned up, nor have the culprits from Alpha Southwest Trucking been fined or held accountable.
- During the reconstruction of the evaporation ponds in the Rio West Brine Well project, TENORM toxic waste was used for dust control. TENORM contamination attaches to dust particles, which can then be inhaled, posing serious health risks. The temporary permit for this activity was not made public, and the road was closed, preventing entry to the site at the time of the illegal dumping, which was overseen by the NMED Ground Water Bureau.

Our communities have experienced a history of complicity between regulatory bodies and industry, and trust in government protections has been repeatedly violated.

How can people trust a government that has failed to protect the health and safety of the historic community in La Cieneguilla, as well as the residents of Rio Rancho, NM, by allowing potential contamination of their drinking water supply?

The Trade Secret Gambit: Barriers to Transparency

Obstacles to Public Health Protection

Under current rules, oil and gas companies can classify specific chemicals used in operations as "trade secrets," thus exempting them from public disclosure. This lack of transparency prevents health experts, regulators, and community members from understanding the full scope of PFAS usage and potential exposure risks. In cases where PFAS is injected into wells under the guise of trade secrets, it becomes nearly impossible for the public to hold companies accountable for contamination events. For example, data from FracFocus reveals that numerous wells in Ohio have utilized trade secret designations to obscure the use of PFAS. (fracking-with-forever-c…).

Trade Secrets and Regulatory Evasion

While oil and gas operators argue that chemical disclosures would compromise proprietary information, evidence from states like Colorado demonstrates that full disclosure does not hinder industry operations. Colorado requires the disclosure of chemicals in fracking operations without slowing down production, indicating that New Mexico could implement similar policies to protect public health without economic disruption(PFAS One Pager (3)).

Moreover, records show that trade secret exemptions in Ohio allowed companies to inject unknown quantities of chemicals—including probable PFAS—across hundreds of wells. This widespread use of trade secrets could mean that large amounts of PFAS or similar hazardous chemicals are being released into the environment under minimal oversight (fracking-with-forever-c…).

Despite oil and gas companies **injecting more than 3,600 NM wells with surfactants**, a class of chemicals that include multiple PFAS the details remain a trade secret.

Implications for Public Health and Regulation

Under the current system, companies can claim trade secret protections to avoid disclosing the specific identities of PFAS used in oil and gas extraction, placing public health at risk. By contrast, states like Colorado have enacted policies requiring the full disclosure of chemicals in fracking operations, demonstrating that transparency does not hinder industrial operations. New Mexico could adopt similar policies, mandating full disclosure to safeguard public health without compromising economic activity(fracking-with-forever-c…).

Conclusion: A Vital Responsibility to Protect New Mexico's Health and Environment and The Urgent Need for PFAS Regulation in New Mexico's Oil and Gas Industry

The Oil Conservation Division (OCD) holds a pivotal responsibility to protect the environment and health of New Mexico's residents. Deciding to prohibit PFAS in oil and gas operations is a necessary and urgent measure to safeguard our drinking water, public health, and ecological future. As this report shows, PFAS contamination presents profound risks, particularly given New Mexico's reliance on groundwater, its highly fractured geology, and the vulnerability of communities already burdened by pollution. The proven toxicity, persistence, and cumulative impacts of PFAS demand proactive action.

Permitting the continued use of PFAS—while maintaining trade secret loopholes that shield critical information from public view—places New Mexicans at unnecessary and irreversible risk. If allowed, PFAS will persist in our groundwater, soil, and air, leading to increased exposure and severe health consequences, including cancer, reproductive harm, and immune disorders. These health impacts extend beyond individuals, creating enormous strain on our healthcare system and long-term economic costs that affect all residents.

Our communities have long endured a history of regulatory failures and industry complicity, which has deeply eroded trust in government protections. It's time for meaningful action to protect the health and safety of New Mexicans. The ongoing threats to our drinking water, public health, and environment demand that we prohibit PFAS, enforce accountability, and close loopholes that allow toxic waste to endanger our communities. The Oil Conservation Division has a critical responsibility to put public well-being above industrial interests and ensure a safe, healthy future for all New Mexicans.

Endnotes:

1. Differences in cancer rates among adults born between 1920 and 1990 in the USA: an analysis of population-based cancer registry data. Sung, Hyuna et al., *The Lancet Public Health*, Volume 9, Issue 8, e583 - e593.
2. *Fracking with Forever Chemicals in New Mexico*. Physicians for Social Responsibility, April 2023. https://psr.org/wp-content/uploads/2023/04/fracking-with-forever-chemicals-in-new-mexico.pdf
3. U.S. Environmental Protection Agency. *Hydraulic fracturing for oil and gas: impacts from the hydraulic fracturing water cycle on drinking water resources in the United States*. Washington, DC: Office of Research and Development; 2016, at ES-3, 4-8, 6-39. Accessed Sept. 5, 2022, at https://www.epa.gov/hfstudy
4. U.S. Environmental Protection Agency. *Saving Water in New Mexico*. June 2013. Accessed Dec. 23, 2022, at

https://www.epa.gov/sites/default/files/2017-02/documents/ws-ourwater-new-mexico-statefact-sheet.pdf
5. U.S. Environmental Protection Agency. *Getting up to Speed on Ground Water Contamination*. August 2015, at C2. Accessed Dec. 23, 2022, at https://www.epa.gov/sites/default/files/2015-08/documents/mgwc-gwc1.pdf
6. https://uttoncenter.unm.edu/resources/state-water-task-force/mlg-water-plan.pdf

New Mexico Oil Conservation Commission
November 11, 2024

To the Members of the Commission:

Thank you for the opportunity to make public comment on O.C.C. Case No. 23580, Application of WildEarth Guardians to Amend the Commission's Rules to Address PFAS, Amendments to 19.15.2, 19.15.7, 19.15.14, 19.15.16, and 19.15.25 NMAC.

The proposed amendments, which greatly strengthen state oversight of chemical hazards in oil and gas operations, establish essential protections for New Mexico's residents, oilfield workers, and natural environment, including vulnerable and irreplaceable surface and groundwater resources. I write to express my support for the provisions of this rule, which will:

> —Prohibit the use of **per- and polyfluoroalkyl substances (PFAS)** and **undisclosed chemicals** in oil and gas operations.
>
> —Require the **full disclosure of chemicals** used in downhole [underground] oil and gas operations.
>
> —Provide for community notification of oilfield chemical hazards, by requiring oil and gas operators to provide complete and current listings of chemicals used in downhole operations to all potentially-impacted parties within a specified radius of a well site. Potentially-impacted parties include local residents and business owners; local and tribal governments; schools and child care providers; operators of wells and public water systems (surface and groundwater); operators of state parks, recreation areas, and habitat and wildlife areas; health care professionals; and first responder agencies including police, fire, and emergency services providers.

In order to establish the strongest possible oversight of oilfield chemical hazards, I ask the Commission to adopt the following measures in bringing forward this rule:

1. Define PFAS broadly. The final rule should use language that reflects the state's intent to prohibit the use of per- and polyfluoroalkyl substances *as a chemical class,* rather than prohibiting the use of a pre-defined group of individual PFAS. Prohibiting the use of groups of individual PFAS, while perhaps more acceptable to industry, opens the door to the dangerous phenomenon of *regrettable substitution*, in which one industrial chemical, having been recognized (and regulated) as hazardous, is merely replaced with a similar, yet unregulated chemical, which itself is later revealed to be equally (or even more) hazardous.[1-3]

To provide robust and durable protection from the hazards of per- and polyfluoroalkyl substances in New Mexico oil and gas operations, the amendments to NMAC 19.15.2.7 should define the term "PFAS" in a way that *explicitly includes all members of this class* of persistent, bio-accumulative, organofluorine chemical compounds. I believe the definition contained in WildEarth Guardians' original petition:

> "PFAS chemicals" means perfluoroalkyl and polyfluoroalkyl substances, which are a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom.

which is similar to the definition recently adopted by the State of Colorado in parallel legislation, better emphasizes the state's intent to regulate PFAS as a class, and is therefore preferable to the abbreviated

definition in WildEarth Guardians' amended New Mexico petition, ("PFAS chemicals" means a perfluoroalkyl or polyfluoroalkyl substance with at least one fully fluorinated carbon atom).[4]

Adopting a broad working definition of "PFAS" that treats per- and polyfluoroalkyl substances as a class will work to facilitate a comprehensive ban on these chemicals in New Mexico oil and gas operations, preventing operators from serially substituting one hazardous PFAS for another, under penalty of law.

2. Require rigorous testing and environmental monitoring. I urge the Commission to ensure industry compliance with this rule by establishing rigorous requirements for oilfield environmental monitoring. Given the sheer number and chemical complexity of PFAS compounds that may be present in fracking fluids and contaminate soil, surface water, and groundwater, the Commission should amend NMAC 19.15.16.17 to require the use of *nontargeted* analytical methods that can capture the full spectrum of per- and polyfluoroalkyl substances during environmental monitoring, rather than *targeted* analytical methods that detect the presence of individual PFAS, such as those commonly found in US consumer products, for example.

In technical testimony, an environmental industry consultant has advocated for the use of targeted EPA methods such as EPA 537.1, 533, 8327, and 1633 during environmental monitoring. Only the nontargeted methods discussed above, however, would be capable of detecting the full spectrum of PFAS prohibited under the amended regulation—including any unusual, "next-generation," or emerging PFAS that might be developed for and used exclusively in New Mexico oil and gas operations.[5-8]

History is replete with examples of the dangers of industry self-regulation. A program of rigorous, independent third-party PFAS testing that employs nontargeted analytical methods will effectively verify compliance with the present rulemaking, ensuring strong, comprehensive (and necessary) accountability for chemical suppliers and oilfield operators. Comprehensive, nontargeted analytical methods should be the first line of defense for PFAS environmental monitoring.

3. Ensure that the provisions of the rule are applicable to <u>both new and currently permitted</u> oil and gas operations, including (a) the prohibition on the use of PFAS and undisclosed chemicals in oil and gas operations; and (b) the requirements for full chemical disclosure, community notification, and environmental monitoring. To prevent irreversible impacts to surface and groundwater, a program of regular and comprehensive environmental monitoring, including (but not limited to) nontargeted PFAS testing, should be instituted at ***<u>all active wells</u>*** in the state of New Mexico.

With prospects for robust regulation of PFAS and other hazardous oilfield chemicals increasingly uncertain at the federal level, state entities must do everything within their power to enact strong protections for New Mexico residents, workers, and natural resources. The proposed amendments to New Mexico Administrative Code—which unite prohibitions on the use of PFAS and undisclosed chemicals in the oilfield with robust requirements for chemical disclosure, community notification, and environmental monitoring—provide strong and effective protection for New Mexico residents, workers, and surface and groundwater resources.

In closing, I wish to note that while this rulemaking creates urgent and necessary protections from oilfield chemical hazards, it does nothing to mitigate the grave climate impacts of New Mexico's escalating oil and gas extraction activities. The state's **crude oil production has increased more than 10-fold** since 2010, reaching 2.09 million barrels per day in August 2024. During the same period, New Mexico natural gas production increased 2.5 to 3-fold, exceeding 3 trillion cubic feet annually in 2023.[9-10]

The pace and extent of fossil fuel extraction simply cannot continue if the world is to have any hope of averting the gravest effects of climate disaster. The most direct and effective means of mitigating the hazards addressed in this rulemaking is to **take swift and concerted action to reduce oil and gas extraction** and over-reliance on the use of fossil fuels.

Thank you again for the opportunity to provide comment on this rulemaking.

Sincerely,

Katherine Shera
Santa Fe, NM 87501

References

1. Avoiding regrettable substitutions: green toxicology for sustainable chemistry. Maertens A, Golden E, Hartung T. ACS Sustain Chem Eng. 2021 Jun 14;9(23):7749-7758. doi: 10.1021/acssuschemeng.0c09435.

2. "Most chemical substitutions are regrettable." Stieger, Greta. Food Packaging Forum. 20 Dec 2016. Accessed 11 Nov 2024.

3. "Stop playing whack-a-mole with hazardous chemicals." Allen, Joseph. *The Washington Post.* 15 Dec 2016.

4. House Bill 22-1348, Concerning Enhanced Oversight of Chemicals Used in Oil and Gas Production, And, by Connection Therewith, Making an Appropriation. State of Colorado. 8 June 2022.
The definition of PFAS adopted herein reads, "'Perfluoroalkyl and polyfluoroalkyl substances' or 'PFAS chemicals' means a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom."

5. See, for example: Uncovering per- and polyfluoroalkyl substances (PFAS) with non-targeted ion mobility spectrometry-mass spectrometry analyses. Kirkwood-Donelson KI, Dodds JN, Schnetzer A, Hall N, Baker ES. Sci Adv. 2023 Oct 27;9(43):eadj7048. doi:10.1126/sciadv.adj7048.

6. Development of a US EPA method to determine total organic fluorine in drinking water by combustion ion chromatography (CIC). Jones J, Tettenhorts DR. US EPA Office of Research and Development. Presented at American Chemical Society Conference, San Francisco, CA. 13-18 Aug 2023.

7. Tracking down unknown PFAS pollution: The direct TOP assay in spatial monitoring of surface waters in Germany. Göckener B, Fliedner A, Weinfurtner K, Rüdel H, Badry A, Koschorreck J. Sci Total Environ. 2023 Nov 10:898:165425. doi: 10.1016/j.scitotenv.2023.165425.

8. Total oxidizable precursor (TOP) assay—best practices, capabilities, and limitations for PFAS site investigation and remediation. Ateia M, Chiang D, Cashman M, Acheson C. Environ Sci Technol Lett. 2023 Mar 9;10(4):292-301. doi: 10.1021/acs.estlett.3c00061.

9. "New Mexico Field Production of Crude Oil" US Energy Information Administration. Accessed 11 Nov 2024.

9. API Dashboard: "New Mexico Natural Gas Gross Withdrawals and Production, Annual, 1973-2024." US Energy Information Administration. 20 June 2024. Accessed 11 Nov 2024.

10. "New Mexico: Profile Analysis." US Energy Information Administration. 20 June 2024. Accessed 11 Nov 2024.