Colorado's HB22-1348 and What it Means for New Mexico

Comments to the New Mexico Legislature Radioactive and Hazardous Materials Committee

By Dusty Horwitt, JD
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September 2, 2025

Premanufacture Notice for Fluorinated Alkylamino Acrylic Copolymer Assessed under EPA's New Chemicals Program in 2010-2011

PMN2010P3

SANITIZED SUBMISSION

PMN Page 3

Part I – GENERAL INFORMATION						
Section A – SUBMITTER IDENTIFICATION						
Mark (X) the "Confidential" box next to any subsection you claim as confidential						
1a.	**Person Submitting Notice (in U.S.)**					Confidential
Name of Authorized Official	(first) XXX			(last) XXX		
Position	XXX					
Company	XXX					X
Mailing Address (number & street)	XXX					
City	XXX	State		Postal Code	XXX	
email	XXX					
b.	**Agent (if Applicable)**					Confidential
Name of Authorized Official	(first)			(last)		

Figure 1. "Sanitized" premanufacture notice for chemicals with EPA case numbers P-11-0091, P-11-0092, P-11-0093 showing that the chemicals' submitter withheld its own name as confidential. The term "sanitized" means that confidential business information has been withheld from the public version of the document.

Premanufacture Notice for Fluorinated Alklyamino Acrylic Copolymer

PMN2010PSA

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PMN Page 5a

c. Please identify which method you used to develop or obtain the specified chemical identity information reported in this notice (check one)					CBI
Method 1 (CAS Inventory Expert Service - a copy of the identification report obtained from CAS Inventory Expert Service must be submitted as an attachment to this notice)	X	IES Order Number	152725-1	**Method 2** (other source)	
Enter Attachment filename for Part I, Section B, 2. c.			CAS - Inventory Expert Service (2010) #1 (public).pdf		
d. The currently correct Chemical Abstracts (CA) name for the polymer that is consistent with TSCA inventory listings for similar polymers					X
XXX					
CAS Registry Number (if a number already exists for the substance)			XXX		

Figure 2. "Sanitized" premanufacture notice for chemicals with EPA case numbers P-11-0091, P-11-0092, P-11-0093 showing that the chemicals' submitter withheld the chemicals' Chemical Abstracts Service registry numbers – the surest identifier for a chemical's identity – as confidential.

EPA's Health Concerns for Fluorinated Acrylic Alkylamino Copolymer

Health:

Health Summary: Absorption is nil all routes based on physical/chemical properties. There is concern for lung toxicity from cationic binding to lung membranes.

For the potential incomplete incineration/environmental degradation product, based on test data for the analogue [redacted] concerns are liver toxicity, blood toxicity, and male reproductive toxicity [rat 28-day oral NOAEL = 50 mg/kg, LOAEL = 150 mg/kg with liver toxicity; rat 90-day oral LOAEL = 10 mg/kg based on decreased body weight in males at all doses and liver toxicity and anemia at 200 mg/kg; there were toxic effects on the testes in 2 males in the 90-day oral study that were judged by the reviewer to be indicative of the potential for male reproductive toxicity. There is also concern for immunosuppression and oncogenicity based on data for [redacted].

Test Data: (-) Salmonella with and without activation; (-) E. coli with and without activation; rat oral LD0 = 5000 mg/kg; slight eye irritation in rabbits, cleared by 48 h; slight skin irritation in rabbits, cleared by 24 h; (-) for skin sensitization in a mouse local lymph node assay at 20% ai

Consent Order for Fluorinated Acrylic Alkylamino Copolymer

EPA is concerned that these perfluorinated degradation products may be released to the environment from incomplete incineration of the PMN substances at low temperatures. EPA has preliminary evidence, including data on other [ ], that suggests that, under some conditions, the PMN substances could degrade in the environment. EPA has concerns that these degradation products will persist in the environment, could bioaccumulate or biomagnify, and could be toxic (PBT) to people, wild mammals, and birds based on data on analog chemicals,

including PFOA and [ ]. The presumed perfluorinated degradants for these PMN substances include [ ]. There is limited toxicological data in animals on [or precursors, which is summarized below.

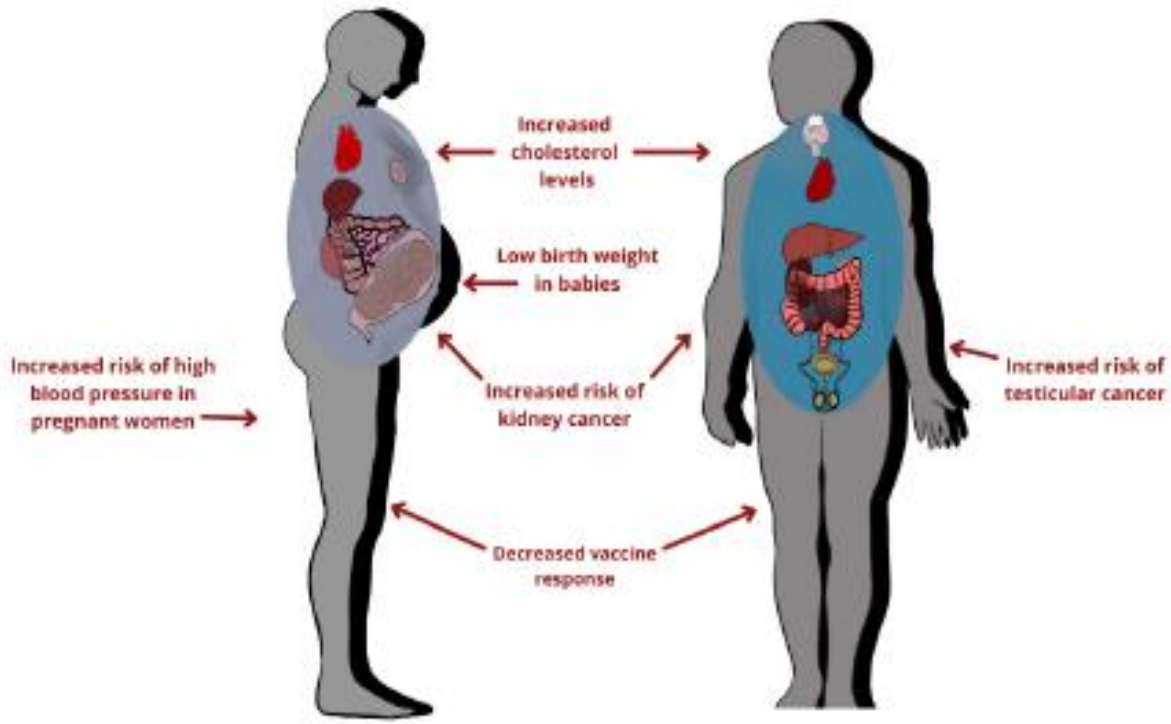
PFOA is expected to persist for years in the environment. Biodegradation and photolysis tests of analogous substances indicate little or no biodegradation or photolysis of perfluoroalkyl compounds. Bioaccumulation concerns are based on the measured presence of certain perfluoroalkyl compounds, including PFOA, in wildlife and in human blood samples. Toxicity studies on PFOA indicate developmental, reproductive and systemic toxicity in various species. Cancer may also be of concern. These factors, taken together, raise concerns for potential adverse chronic effects in humans and wildlife. For additional information about PFOA, consult

Concerns About PFAS (“Forever Chemicals”)

- Don’t break down in the environment
- Toxic at microscopic concentrations
- Spread easily in water
- Linked to multiple negative health impacts

POTENTIAL HEALTH EFFECTS OF PFAS EXPOSURE

HEALTH IMPACTS OF PFAS CHEMICALS



PSR PHYSICIANS FOR SOCIAL RESPONSIBILITY

Source: U.S. Environmental Protection Agency, Agency for Toxic Substances and Disease Registry

Image by Astra Robles

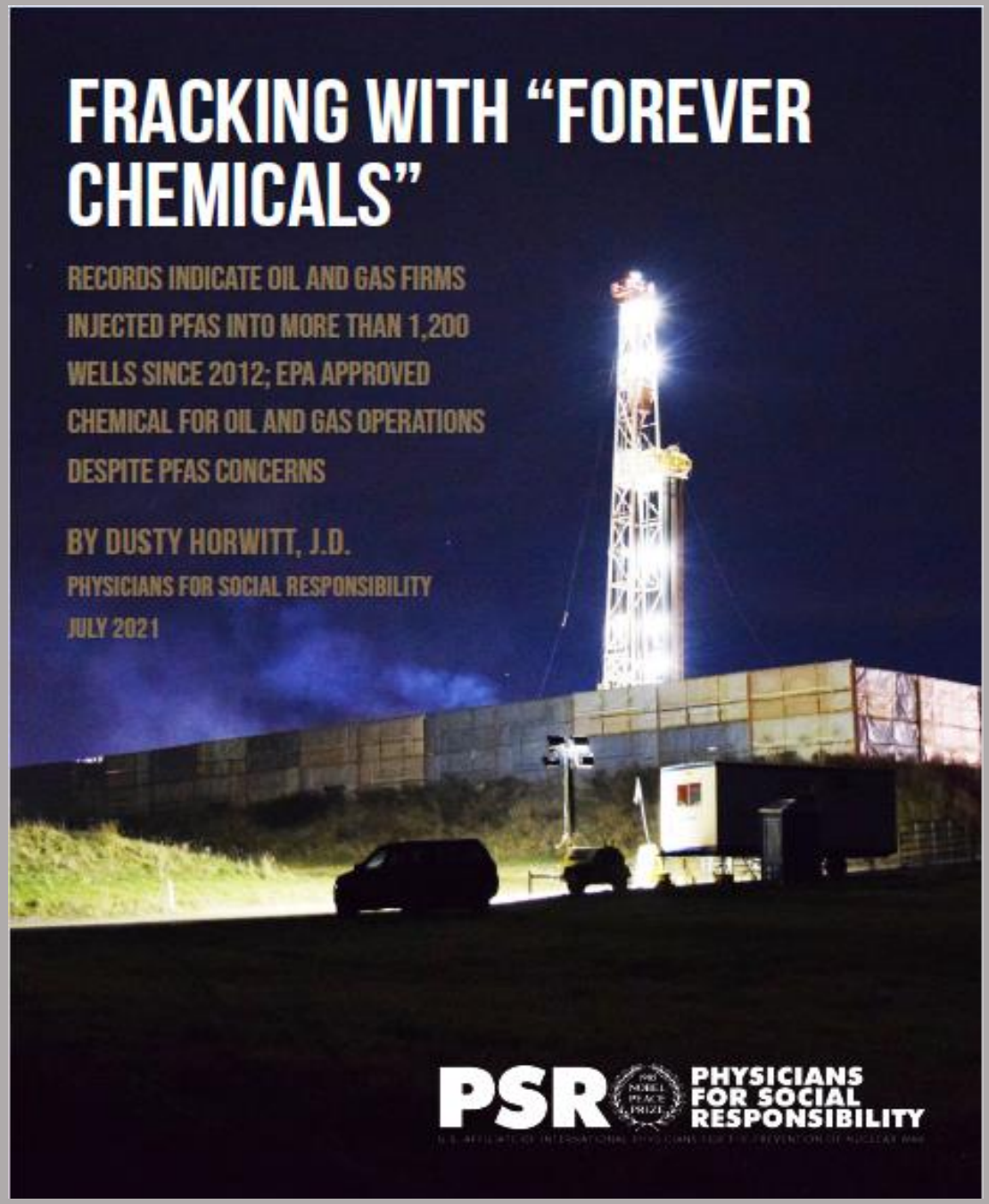
In 2011, EPA Approves Fluorinated Acrylic Alkylamino Copolymer for Commercial Use

EPA's regulation is lax:

- No requirement for follow-up testing to see if chemicals broke down into a substance similar to PFOA as regulators feared
- No requirement for tracking to determine where chemicals are being used, or if these substances are contaminating the environment
- No requirement that use of the chemicals be prohibited within a certain distance of drinking water sources, homes, or schools

State lawmakers and regulators may be the only line of defense against pollution from these and other oil and gas chemicals

FRACKING WITH "FOREVER CHEMICALS"



RECORDS INDICATE OIL AND GAS FIRMS INJECTED PFAS INTO MORE THAN 1,200 WELLS SINCE 2012; EPA APPROVED CHEMICAL FOR OIL AND GAS OPERATIONS DESPITE PFAS CONCERNS

BY DUSTY HORWITT, J.D.
PHYSICIANS FOR SOCIAL RESPONSIBILITY

JULY 2021

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The New York Times https://www.nytimes.com/2021/07/12/climate/epa-pfas-fracking-forever-chemicals.html

E.P.A. Approved Toxic Chemicals for Fracking a Decade Ago, New Files Show

The compounds can form PFAS, also known as "forever chemicals," which have been linked to cancer and birth defects. The E.P.A. approvals came despite the agency's own concerns about toxicity.

By Hiroko Tabuchi

Published July 12, 2021 Updated July 26, 2021

For much of the past decade, oil companies engaged in drilling and fracking have been allowed to pump into the ground chemicals that, over time, can break down into toxic substances known as PFAS — a class of long-lasting compounds known to pose a threat to people and wildlife — according to internal documents from the Environmental Protection Agency.

The E.P.A. in 2011 approved the use of these chemicals, used to ease the flow of oil from the ground, despite the agency's own grave concerns about their toxicity, according to the documents, which were reviewed by The New York Times. The E.P.A.'s approval of the three chemicals wasn't previously publicly known.

The records, obtained under the Freedom of Information Act by a nonprofit group, Physicians for Social Responsibility, are among the first public indications that PFAS, long-lasting compounds also known as "forever chemicals," may be present in the fluids used during drilling and hydraulic fracturing, or fracking.

Concerns about Oil and Gas Chemicals Extend Beyond PFAS

Fracking chemicals

EPA in 2016 report on fracking and drinking water found more than 1,600 chemicals associated with fracking and that "effects associated with chronic oral exposure [ingestion through drinking water] to these chemicals include carcinogenicity [for benzene and radium], neurotoxicity, immune system effects, changes in body weight, changes in blood chemistry, liver and kidney toxicity, and reproductive and developmental toxicity." PSR has found PFAS use in fracking and a peer-reviewed paper has found PFAS has at least been proposed for use in fracking.

Drilling chemicals, used in drilling which precedes fracking

EPA has found health risks including developmental toxicity and formation of tumors; Ohio has disclosed use of xylene in a well where a fire led to chemical spills; Oklahoma State U. extension service has reported use of petroleum distillates which often contain BTEX. A peer-reviewed paper has found that PFAS has at least been proposed for use in drilling.

Other chemicals such as those used for enhanced oil recovery

2008 oil and gas industry paper reported use of PFAS for enhanced oil recovery in Colorado and a peer-reviewed paper has found PFAS has at least been proposed for use in enhanced oil recovery.

Underground Pollution Pathways for Fluids in Oil and Gas Wells (EPA 2016 Report on Fracking and Drinking Water)

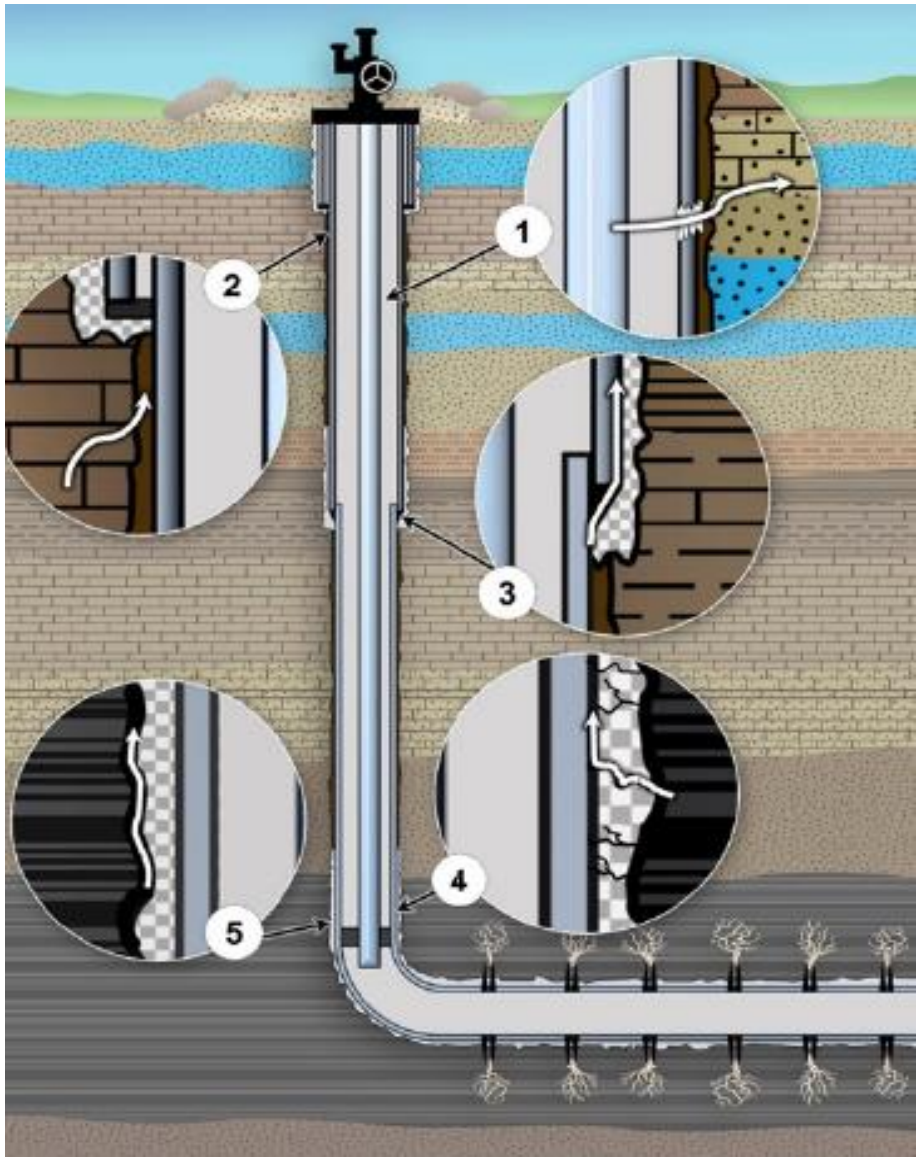


Figure ES-6. Potential pathways for fluid movement in a cemented well. These pathways (represented by the white arrows) include: (1) a casing and tubing leak into the surrounding rock, (2) an uncemented annulus (i.e., the space behind the casing), (3) microannuli between the casing and cement, (4) gaps in cement due to poor cement quality, and (5) microannuli between the cement and the surrounding rock. This figure is intended to provide a conceptual illustration of pathways that can be present in a well and is not to scale.

Above-Ground Spills, Leaks of O&G Chemicals Can Pose Risks

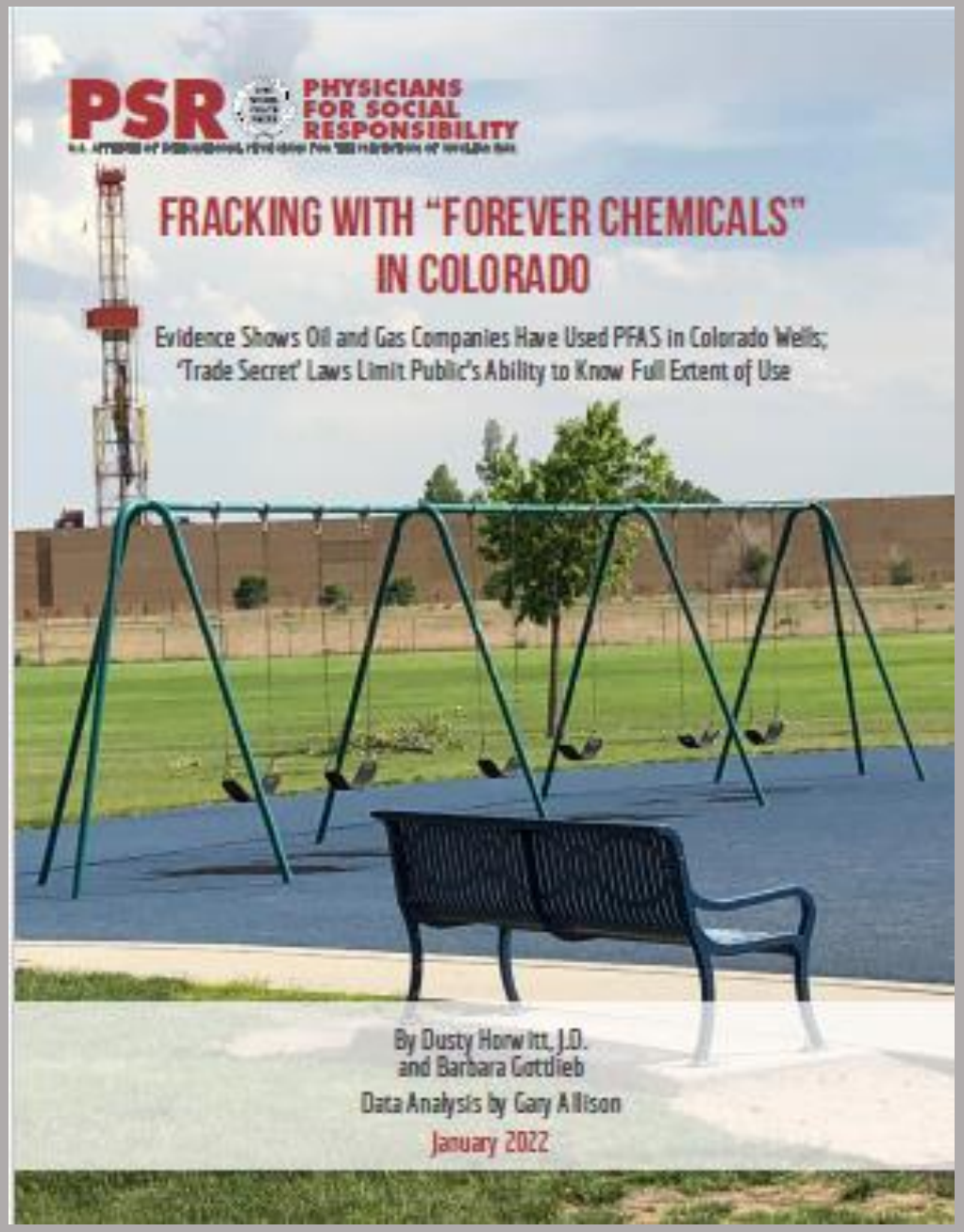
Oil and gas wastewater is dumped from a truck into one of a series of unlined pits at the R360 waste disposal facility outside Hobbs, New Mexico, 2019. Photo credit: Melissa A. Troutman.

Airborne Emissions of Oil and Gas Chemicals

A poorly lit flare at Rustler Breaks SWD #6/ API #30-015-45034, a San Mateo Midstream facility in Eddy County, New Mexico, Sept. 2022. Photo credit Charlie Barrett, Earthworks.

Studies Over Past Decade Show Elevated Health Risks Associated with Living Near Oil and Gas Wells

- For pregnant women, gestational hypertension (high blood pressure), eclampsia (a pregnancy-related high blood pressure disorder that can induce seizures or coma), and pre-term birth
- Low birthweight babies (low birthweight is a leading contributor to infant death in the United States)
- Congenital heart defects in babies
- Blood cancer diagnoses in those from birth to 24 years old
- Hospitalization for childhood asthma
- Hospitalization and death from heart attacks
- Most health studies we are aware of have not focused on New Mexico, but in a 2021 survey of health symptoms of 80 residents of the Counselor Chapter of Navajo Nation, more than 60 percent reported 11 symptoms during the year after drilling began near their homes, including sore throat, cough, and sinus problems.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PHYSICIANS FOR SOCIAL RESPONSIBILITY
FRACKING WITH "FOREVER CHEMICALS" IN COLORADO
Evidence Shows Oil and Gas Companies Have Used PFAS in Colorado Wells; 'Trade Secret' Laws Limit Public's Ability to Know Full Extent of Use
By Dusty Horwitt, J.D. and Barbara Gottlieb
Data Analysis by Gary Allison
January 2022

Key Findings of Fracking with ‘Forever Chemicals’ in Colorado (2022)

- Between 2011 and 2021, oil and gas companies used PFAS (PTFE) for fracking in almost 300 wells in Colorado

- Between 2011 and 2021, companies claimed trade secret privileges for fracking chemicals used in more than 12,000 wells across 31 Colorado counties

- These trade secret chemicals totaled more than 400 million pounds

Provisions of HB22-1348 Codified at C.R.S. 34-60-132

- Requires written declaration that chemical products used underground contain no intentionally added PFAS
- Requires disclosure on a public website of an alphabetical list of ALL individual chemicals used underground in each oil and gas well covered by law; chemicals include those used for drilling, fracking, or other purposes
- Applies to underground operations in oil and gas wells ongoing as of July 31, 2023 or that occurred after that date. Disclosure on the public website must generally occur within 150 days after underground operations begin
- Oil and gas companies must disclose individual chemicals but CAN keep chemical formulas as trade secrets similar to the way in which food makers must reveal their ingredients but not their recipes
- Requires disclosure of chemicals by chemical manufacturers if other companies in supply chain cannot disclose
- Mandates sharing of chemical disclosure list with members of community including residents within a half mile of wells, first responders, and public water providers
- Key omission from HB22-1348: chemical disclosure prior to underground operations

Chemical Disclosure Under HB22-1348: A Closer Look

- “Disclosers” including service providers, operators, vendors and, if necessary, chemical manufacturers share chemical product names and their ingredients with Energy & Carbon Management Commission (ECMC)

- Operators share lists of chemical products used “downhole” or underground in each oil and/or gas well

- ECMC publishes on its website a list of individual chemical ingredients used underground in each well

May 2025

OIL & GAS CHEMICALS STILL SECRET IN COLORADO

Little Compliance with 2022 Law Designed to Prevent Toxic Exposures

By Dusty Horwitt, J.D.

Data Analysis by Gary Allison

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Physicians for Social Responsibility

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COLORADO

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FRACTRACKER
ALLIANCE

We Assessed Compliance with HB22-1348 by Comparing New Disclosure System with Existing Fracking Disclosures to FracFocus

- FracFocus is a national repository of well-by-well use of fracking chemicals only
- Each state decides whether oil and gas companies must disclose fracking chemicals to FracFocus; Colorado and New Mexico have mandated such disclosure
- When states require disclosure to FracFocus, state rules apply such as the ability to conceal chemical identities or that chemicals to be disclosed are only those on Safety Data Sheets – a requirement in New Mexico which will likely leave the public at least partially uninformed because Safety Data Sheets have gaps in disclosure
- Because FracFocus includes fracking chemicals and HB22-1348 requires disclosure of all underground chemicals, all chemicals disclosed to FracFocus for a Colorado O&G well should appear in Colorado's disclosures for that well

Implementation of C.R.S. 34-60-132, May 2025, Key Findings

- The website disclosed chemicals used in only 439 of at least 1,114 oil and gas wells (39 percent) for which disclosure was required. In 675 of these wells, no disclosure was available.

- Of the 31 companies operating the 1,114 wells, 20, including industry giant Chevron, had no disclosures on ECMC's website. If the companies were responsible for lack of chemical disclosure associated with the wells, fines could exceed $37 million.

- Trade secret chemicals in the 675 oil and gas wells for which no disclosure was available totaled an estimated 30 million pounds or more. All of these chemicals should have been disclosed on the ECMC's website but none of them were.

- No indication that drilling chemicals were disclosed

Table 1. Lack of Chemical Disclosure on State Website for at Least 675 Colorado Oil & Gas Wells Subject to C.R.S. 34-60-132 Listed by Well Operator and Minimum Fines for Non-compliance Which Could Apply to Each Well Operator if the Operator Were Responsible (as of May 1, 2023)

Oil & Gas Well Operator Name According to FracFocus Database	Number of Colorado Oil & Gas Wells for Which Chemical Disclosure Was Past Due on ECMC Website	Total Minimum Accumulated Fine
PDC Energy	220	$11,497,400
Noble Energy, Inc.	141	$6,379,600
Crestone Peak Resources	89	$5,548,000
Bayswater Exploration & Production, LLC	70	$3,842,400
EXTRACTION OIL & GAS LLC	24	$1,109,200
Bison IV Operating LLC	20	$1,481,000
Caerus Oil and Gas LLC	18	$1,333,600
Chevron USA Inc.	16	$1,396,800
Civitas North LLC	11	$846,600
HighPoint Operating Corporation	9	$176,400
Bonanza Creek Energy, Inc.	8	$201,600
Laramie Energy LLC	7	$679,000
POCO Operating	6	$416,400
Nickel Road Operating LLC	5	$477,000
GMT EXPLORATION	5	$212,600
TEP Rocky Mountain LLC	4	$392,000
Evergreen Natural Resources LLC	4	$380,200
MDS Energy Development LLC	4	$354,400
Prairie Operating Company	4	$6,400
Fulcrum Energy Operating LLC	3	$250,800
Summit Oil & Gas	2	$101,400
NueVida Resources	2	$32,000
Anadarko Petroleum Corporation	1	$26,200
Anschutz Exploration Corporation	1	$3,000
Verdad Resources LLC	1	$2,000
Total	**675**	**$37,166,000**

Date	Event
June 2022	HB22-1348 signed into law
July 31, 2023	Disclosure requirements go into effect for underground operations occurring on or after that date, with a 150-day reporting grace period
December 28, 2023	Deadline passes for online system and first disclosures
May 2024	First operator disclosures registered at ECMC
September 2024	ECMC website goes online

*Timeline and analysis of compliance with

May 1, 2025	PSR/Sierra Club/FracTracker report finds that **60%** of wells do not have published ECMC disclosures for fracking chemicals with the 150-day deadline. Probably none were submitted for drilling chemicals.
June 1, 2025	Following a rash of disclosures of fracking chemicals after the PSR report, 376 wells (or **33%**) are still not compliant. Apparently, 100% of drilling chemicals and post-completion chemicals are not yet disclosed.
July 1, 2025	The non-compliant rate for *fracking chemical* disclosures is down to **9%**. However, there is no sign of *drilling* disclosures.
August 1, 2025	The non-compliant rate for *fracking chemical* disclosures is **3%**. There is no sign of *drilling* disclosures.

Next Steps in Colorado

- Ensure all chemicals used underground in oil and gas wells are publicly disclosed
- Examine compliance with community notification requirement
- Future considerations: strengthen the law with requirement to test flowback for chemicals to ensure compliance as requested in 2023 letter to ECMC from scientists and environmental groups

Implications for New Mexico

PSR PHYSICIANS FOR SOCIAL RESPONSIBILITY

FRACKING WITH "FOREVER CHEMICALS" IN NEW MEXICO

Evidence Shows Oil and Gas Companies Have Used PFAS in New Mexico Wells; Water Risks Especially High for Groundwater-Dependent State

By Dusty Horwitt, J.D.
and Barbara Gottlieb

Data Analysis by Gary Allison

April 12, 2023

Table 9. Wells on NM Federal, State, and Tribal Land Fracked with PFAS and Possible PFAS, 2013-2022

Type of fracking chemical injected	No. Wells in state	Total Mass in state (lbs.)	No. Wells on Federal Land	Total Mass Federal Land (lbs.)	No. Wells on State Land	Total Mass State Land (lbs.)	No. Wells on Tribal Land	Total Mass Tribal Land (lbs.)
	9066	--	4468	--	2350	--	192	--
Trade Secret chemicals	8293	243,000,000	4072	115,000,000	2153	54,600,000	186	2,040,000
Trade Secret surfactants	3681	19,300,000	1813	10,900,000	954	4,740,000	86	230,000
Fluoro-surfactants	24	965	12	790	10	164	0	0.0
65545-80-4	34	6,400	8	1,370	17	3,060	0	0.0
PTFE	227	2,610	113	1,650	53	552	3	data not available

Efforts in New Mexico to Replicate Colorado's HB22-1348

- HB 222 – Introduced in New Mexico House of Representatives in 2025 but was not enacted

- Rulemaking petition submitted in 2023 by WildEarth Guardians to Oil Conservation Commission to replicate HB22-1348 through regulations; this effort is ongoing