



To: House Energy & Environment Committee

From: The Alliance for Collective Action

Re: Testimony in Support of HB24-1359 – Public Notification of Hazardous Chemical Releases

Date: 3/27/2024

The Alliance for Collective Action is an environmental nonprofit working across sectors to build a more climate-resilient and equitable future. Our Coalition for a Regenerative Future has over 400 members across the state of Colorado, with the majority of our membership residing in Colorado's Front Range. Many of our members live within close proximity to oil and gas fracking wells, putting them at greater risk of exposure when there are spills that release toxic chemicals into the environment. We commend the sponsors for the introduction of this commonsense legislation that will improve environmental justice for Colorado communities, and urge you to vote yes on House Bill 24- 1359.

The recorded spills from 2023 alone underscore the need for greater transparency of oil and gas-related incidents. Last year there were 1,192 spills or releases recorded, with 927 of these incidents occurring in densely populated areas along the Front Range. Companies are getting away with having incidents that release dozens of toxic chemicals including benzene, hydrogen sulfide, and sulfur dioxide into the environment close to where Colorado residents live, work and play, without having to disclose this information to the public. Colorado residents have a right to know when these incidents occur and the potential risks posed to them. Enacting robust notification systems outlined in this bill will increase transparency while also holding operators accountable for their incidents.

The bill will create an opt-in text message notification system to residents within 2000 feet of an affected structure, for incidents exceeding 100 gallons. Such real-time alerts provide vital information including the incident's location, date & time, duration, and the identification of toxic chemicals involved. This empowers individuals to make informed decisions about their safety and well-being by educating on both acute symptoms and long-term health impacts associated with exposure.

The bill will also establish a comprehensive website to catalog all toxic releases, searchable by county and date, enhancing transparency and accessibility of information.

This platform not only facilitates public awareness but also serves as a valuable resource for researchers, physicians, policymakers, and emergency responders.

Furthermore, the bill includes provisions to improve compliance requirements and consequences for non-compliance if operators do not report their spills to the appropriate agencies and to the public. These measures ensure accountability and adherence to reporting standards, which is critical for effective response and mitigation efforts.

By requiring annual training for medical personnel and the public on hazardous chemical exposure, alongside multilingual notifications and website translations by 2026, the bill ensures that information reaches all members of affected communities, regardless of language barriers or background.

The Alliance for Collective Action fully supports the HB24-1359 for its comprehensive measures aimed at improving public awareness, transparency, and requiring local public health and emergency management departments to act when these incidents occur. We urge policymakers to prioritize the passage of this legislation, safeguarding the health and well-being of Colorado communities.

Sincerely,

Jane Allen, Assistant Director, Climate & Energy Resilience  
The Alliance for Collective Action

Significant Deficiencies in the Bill include:

1. **Health, Safety and Welfare:** Public health, safety and welfare assurance must be a prerequisite for any CCS/CCUS/DAC programs (Carbon capture, utilization and storage/sequestration, Direct Air Capture), not a “to be determined”. Health risks must be studied, assessed and addressed prior to, and not subsequent to, the green-lighting of any such programs or the awarding of exclusive authority to any state agency,
2. **Costs to Ratepayers and Taxpayers:** Will Xcel and other utilities be passing costs, such as new carbon capture infrastructure and increased coal and other fossil fuel energy input costs affiliated with carbon capture, to ratepayers? Any CCS legislation such as this should include a provision that the cost of capture, including associated costs of the applied fuels in a DAC process, CO<sub>2</sub> transport and storage, must be less than the social cost of that carbon or the carbon benefits achieved from deploying solar and wind electricity generation, whichever is less.
3. **Unjust Forced Pooling:** CO<sub>2</sub> is not an essential energy source or commodity for Coloradans. Its only significant commercial value is for use in enhanced oil recovery (EOR), a dubious shell-game process that simply exchanges one form of carbon for another, but for which the industry claims carbon sequestration credit. Serious climate change action must involve a rapid transition away from fossil fuels. Therefore, there is no justification for forced pooling at any percentage. There is no such thing as “just and reasonable” forced pooling when removing basic home ownership, property, and mineral rights from Coloradans.
4. **Risking Human Life with “Pore Space” Near Homes and People:** Unlike natural gas, carbon dioxide is heavier than air. Any leakage represents the silent, lethal threat of human suffocation and death. When a [carbon pipeline ruptured in Mississippi in 2020](#), people up to a mile away passed out, cars stalled, and rescuers described conscious victims as “zombies.” (See also the [1986 Lake Nyos leak](#), in which a CO<sub>2</sub> cloud traveled 17 miles and suffocated 1,746 African villagers and 3,500 livestock.) Therefore, under no circumstances should pore space be used for CO<sub>2</sub> storage in areas of human population. The CDPHE and independent experts (not the ECMC) should determine a minimum safe distance between underground CO<sub>2</sub> storage sites and any human presence.
5. **Alarming ECMC Mission Creep into CDPHE’s legitimate jurisdiction:** We should be reducing and restricting the ECMC’s authority over Colorado’s future energy economy, not expanding it, as this bill does. Moreover, this bill puts the CDPHE in an inferior, advisory position to the ECMC, when health, safety, and welfare should be prioritized per SB-181. The bill provides that oversight of carbon capture occurs only retroactively and then only as determined by the director. The public is excluded from every step of the process. Beyond considerations of health, safety, and welfare, the public’s interest is also excluded from cumulative impacts considerations, especially for DI communities, as well as permitting and oversight.

-Harv Teitelbaum  
Board Co-Chair  
PSR Colorado (Physicians for Social Responsibility)

Steven J Douglas  
10970 Unity Parkway  
Commerce City, CO 80022  
March 26, 2024

Dear to whom it may concern,

I am writing to express my strong support, on my own behalf, independent of Commerce City, the City Council for HB24-1359, the Public Notice of Hazardous Chemical Releases, also known as the Community Right to Know Act. As a resident of Commerce City, I am deeply concerned about the frequent toxic spills that have been occurring in our neighborhoods, often without our knowledge.

Furthermore, the bill will facilitate communication between affected residents and the medical community, ensuring that healthcare providers have accurate information to diagnose and treat potential health effects resulting from exposure to toxic chemicals.

I believe that access to timely and comprehensive information is essential for safeguarding public health and promoting transparency and accountability within the Oil & Gas industry. The creation of a centralized website to track spills and provide educational resources will further enhance community awareness and preparedness.

I urge you to support HB24-1359 and prioritize the well-being of Colorado residents by ensuring that they have the right to know about hazardous chemical releases in their communities. Thank you for your attention to this matter.

Sincerely,

Mayor Douglas



# FracTracker Report in Support of Oil and Gas Spill Public Health Alerts (HB 24-1359)

Author: Kyle Ferrar, Western Program Director, [Ferrar@FracTracker.org](mailto:Ferrar@FracTracker.org), (415) 890-3722

March 25, 2024

Spills from the oil and gas industry represent a clear present threat to public health for communities living near oil and gas extraction operations.<sup>1</sup> [A report by Physicians for Social Responsibility shows that Colorado continues to allow oil and gas operators to use polyfluoroalkyl substances \(PFAS\), or “forever chemicals”, specifically polytetrafluoroethylene \(PTFE\), in their drilling and hydraulic fracturing operations.](#)<sup>2</sup> When these fracking chemicals and the hydrocarbons that include BTEX chemicals (benzene, toluene, ethylbenzene, and xylenes) spill, they put communities at risk of a variety of health impacts known to be caused by these chemicals.

## **Communities should be immediately informed of spills that increase their health risks.**

This is particularly important for communities that live near oil and gas extraction operations, as spills of toxic chemicals are common in the oil and gas industry. Oil and gas wastewater and crude spills often contaminate groundwater, soils, surface waters, and local and regional air quality. Communities deserve to be immediately alerted when hazardous spills occur. **HB 24-1359 is a necessary bill to address this major gap in risk communication.**

The maps and analysis presented below show the locations of more than 3,700 oil and gas spills that have been reported to the Colorado Oil and Gas Conservation Commission (COGCC) since 2020. The maps highlight where these spills are known to have contaminated groundwater. Additional maps show that some of the health impacts that have been linked to oil and gas activity are most common in Colorado where these spills are occurring.

**The analysis finds that at least 54% of the spills that were reported to the COGCC in 2023 were located within 2,000 feet of a home.**

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<sup>1</sup>

<https://www.fractracker.org/2023/08/how-spills-holes-and-cracks-release-fracking-chemicals-into-the-environment/>

<sup>2</sup> <https://www.fractracker.org/2022/01/new-report-fracking-with-forever-chemicals-in-colorado/>

# COGCC Oil and Gas Industry Spills

**In 2022, the counts of frac wastewater and produced water spills increased 163%, compared to 2021.**<sup>3</sup> The use of PFAS in Colorado operations puts not only the groundwater and soils near the drilling pads at risk of PFAS contamination, but all sites where spills occurred. **The total reported volume of oil-drilling related materials spilled increased 24% in 2022 as well.**

FracTracker mapped the locations of oil and gas spills reported to the COGCC.<sup>4</sup> Spills data with lat/lon coordinates was downloaded from the Daily Activity Dashboard. Data was filtered for 2023 spill incidents and overlaid on a FracTracker Alliance database of the current 2,000-foot public health setback zone in Colorado.

The COGCC Daily Activity Dashboard dataset documents that 1,186 oil and gas industry spills were reported to the COGCC in 2023. In total, 3,749 spills have been reported to the COGCC since this dataset began aggregating the data in 2020. Additionally, the Colorado spills data identifies 70 spill events that were known to have contaminated groundwater resources, and 12 that contaminated surface waters. **In 2022, half of all Colorado spills occurred in Weld County, which had 241 oil and gas related spills—155 more spills than Garfield, the county with the next highest number of spills.**<sup>5</sup> Spills create a direct pathway via environmental media contamination to expose communities to toxic oil and gas wastes.<sup>6</sup> This can include sources of drinking water for Colorado communities.<sup>7</sup> These events are mapped below in Figure 1.

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<sup>3</sup> <https://westernpriorities.org/resource/2022-spills-tracker/>

<sup>4</sup> <https://ecmc.state.co.us/dashboard.html#/dashboard>

<sup>5</sup> <https://westernpriorities.org/resource/2022-colorado-spills/>

<sup>6</sup> <https://www.fractracker.org/2023/08/how-spills-holes-and-cracks-release-fracking-chemicals-into-the-environment/>

<sup>7</sup> <https://www.fractracker.org/2016/09/groundwater-threats-in-colorado/>

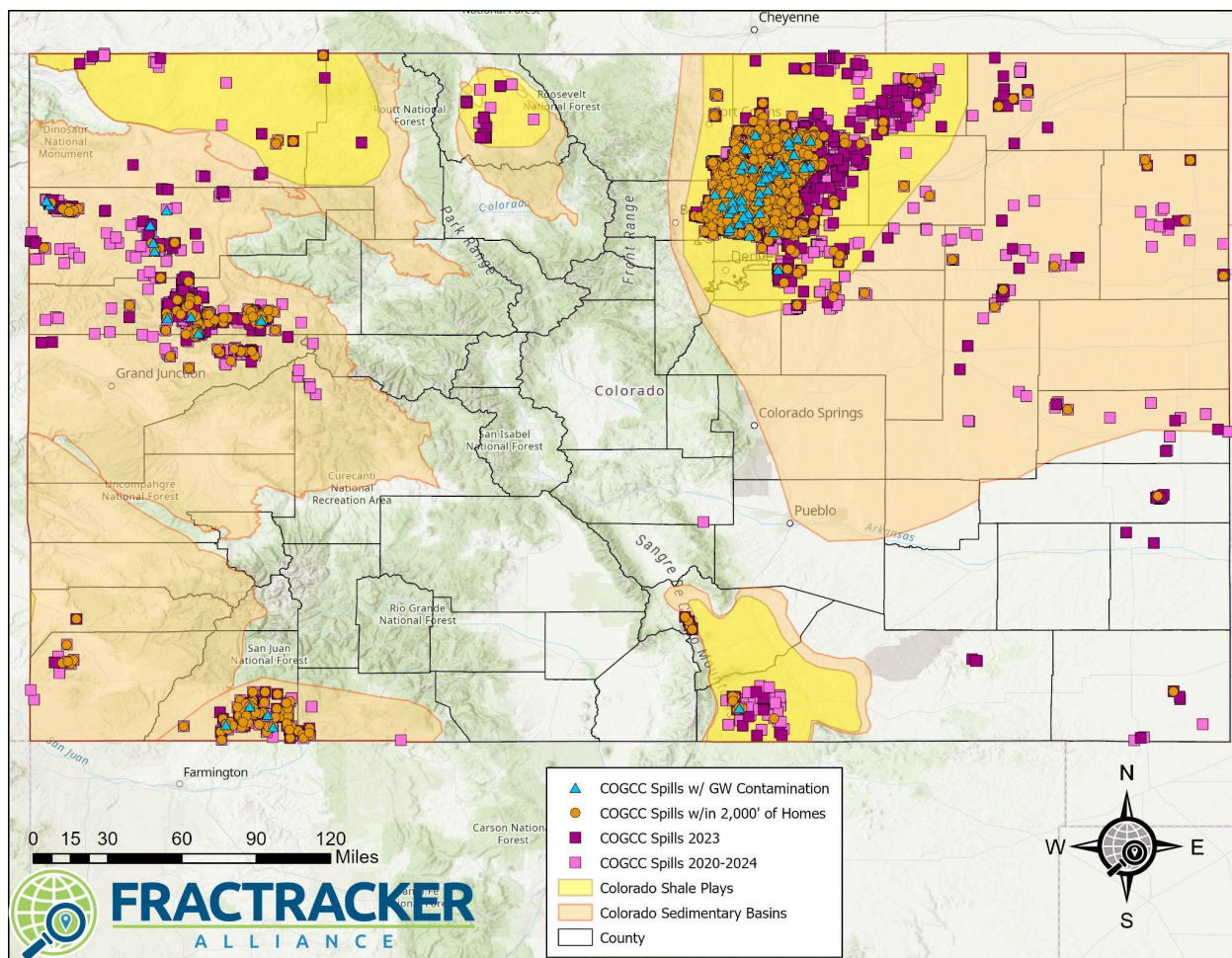


Figure 1. Map of oil and gas industry spills in Colorado. The oil and gas industry is required to report spills to the COGCC. The COGCC aggregates the spills data. The data is mapped.

## Spill Counts Within 2,000 Feet of Homes

Using GIS techniques, FracTracker Alliance screened the locations of COGCC oil and gas spills for proximity to homes. By using Microsoft Open Streetmap datasets in addition to many hours of ground-truthing and tracing of satellite imagery, FracTracker Alliance created map layers identifying the areas of Colorado that are located within the 2,000' public health setback zone.<sup>8,9</sup> This dataset was used to screen the COGCC dataset of oil and gas spills. **The results of the analysis show that 54% (640) of the spills reported in 2023 were within the 2,000-foot setback zone. Additionally, 54% (2,039) of the spills in the full dataset spanning 2020-2024 were also within the setback zone.**

<sup>8</sup> <https://wiki.openstreetmap.org/wiki/Colorado>

<sup>9</sup> <https://dnr.colorado.gov/press-release/colorado-oil-gas-conservation-commission-unanimously-adopts-sb-19-181-new-mission>

# Health Risks

In the maps below (Figures 2-6), FracTracker Alliance plotted the incidence counts of health impacts that were recorded by the Colorado Department of Public Health and the Environment. The maps focus on the specific ICD-10 codes that have been associated with living proximal to higher densities of oil and gas drilling and completion operations. The maps show that many of these health impacts in Colorado are disparately impacting the communities closest to oil extraction operations in the state. These are the same areas where the majority of spills from oil and gas drilling and completion operations are occurring (see above, the map in Figure 1).

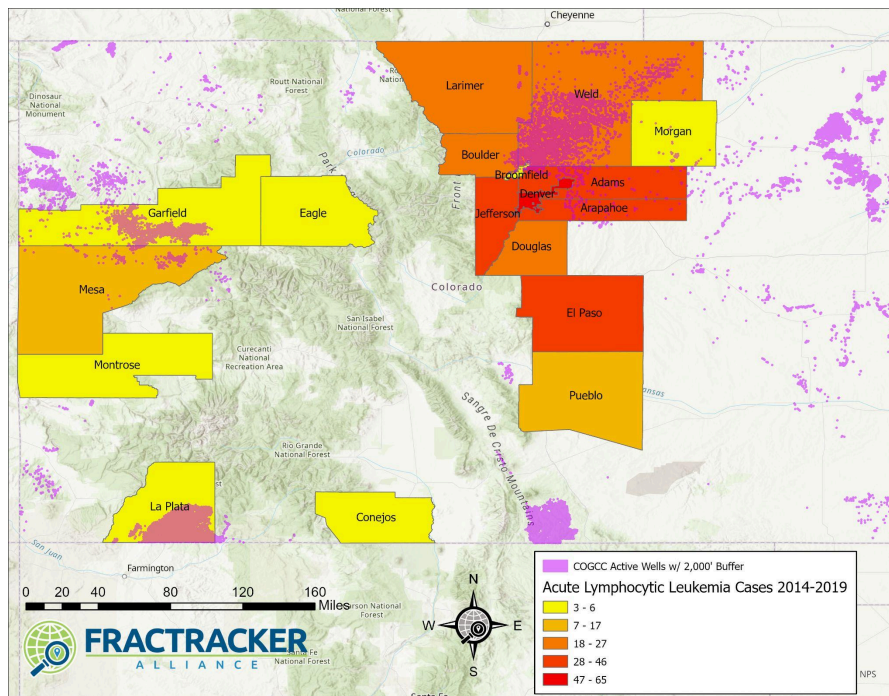


Figure 2. Map of Acute Lymphocytic Cancer Incidence. The map shows incidence counts of acute lymphocytic cancer cases and overlays the counts by county on the map of oil and gas extraction operations in Colorado.

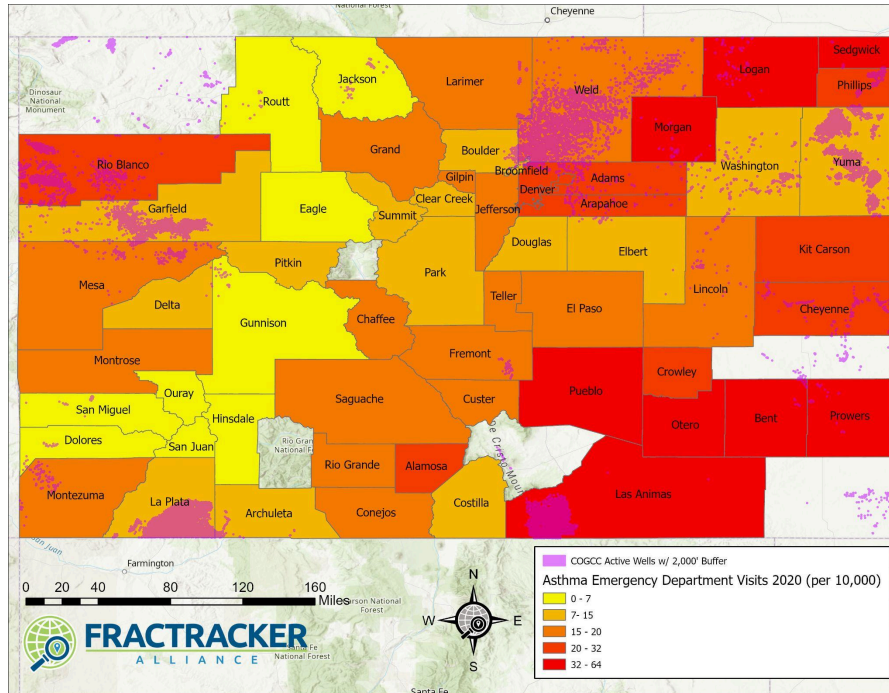


Figure 3. Map of Asthma Emergency Department Visit Incidence. The map shows incidence counts of asthma emergency department visits and overlays the counts by county on the map of oil and gas extraction operations in Colorado.

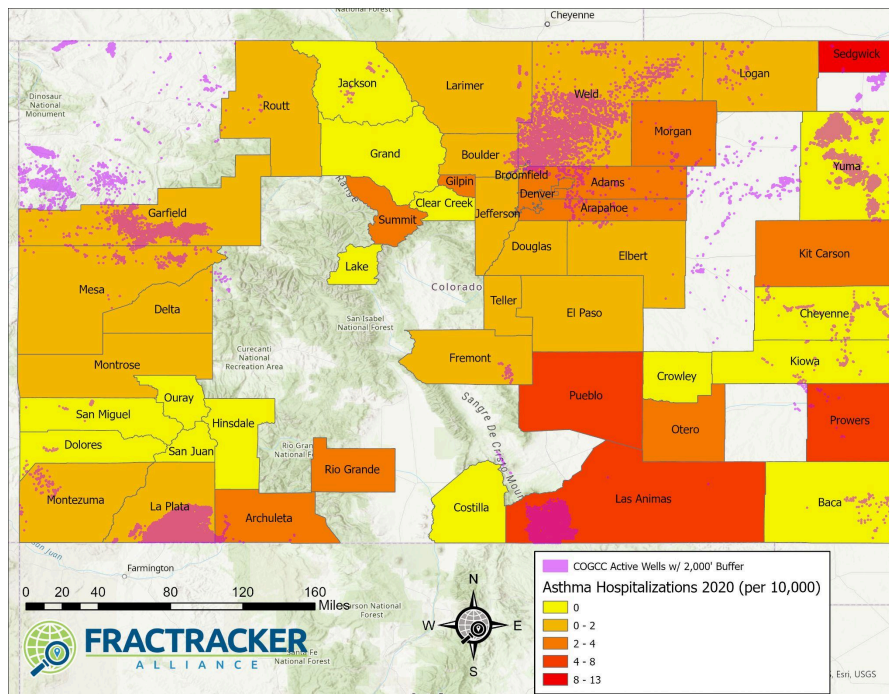


Figure 4. Map of Asthma Hospitalizations Incidence. The map shows incidence counts of asthma hospitalizations and overlays the counts by county on the map of oil and gas extraction operations in Colorado.

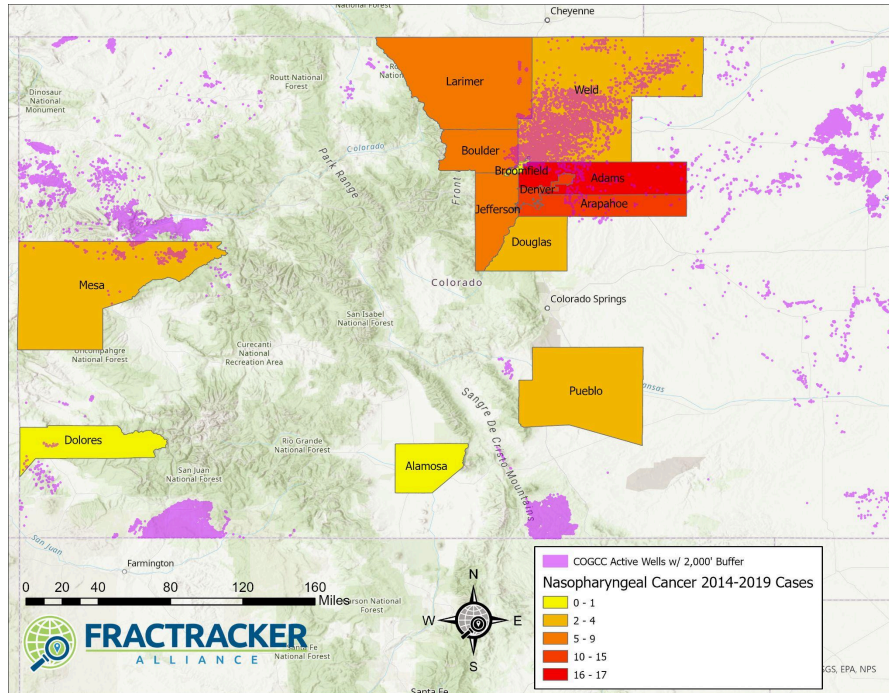


Figure 5. Map of Nasopharyngeal Cancer Incidence. The map shows incidence counts of nasopharyngeal cancer cases and overlays the counts by county on the map of oil and gas extraction operations in Colorado.

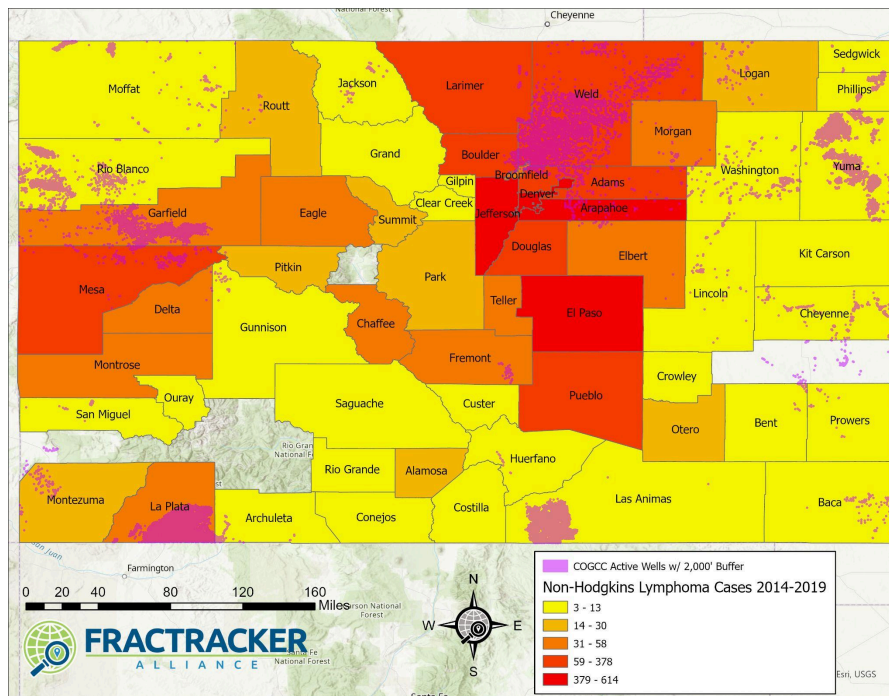


Figure 6. Map of Non-Hodgkin's Lymphoma Incidence. The map shows incidence counts of non-hodgkin's lymphoma cases and overlays the counts by county on the map of oil and gas extraction operations in Colorado.

Dear House Energy and Environment Committee Members,

My name is Lori Brunswig and I'm currently on the Board of Physicians for Social Responsibility Colorado. I am not a health care provider but joined the Board because I'm concerned that our public health is seriously at risk. I have a degree in Civil Engineering and served eight years on the City of Fort Collins Water Board. These experiences allowed me to understand the complexities of oil and gas extraction. I'm far from being an expert on oil and gas but I can read maps, I can understand scientific documents, and I'm driven to understand why information is not readily available.

I'm asking for your support on **SB24-1359 – The Community Right to Know Act** – because this bill is personal to me. My children started getting sick about 2005 during their middle school years – my daughter was diagnosed with asthma and my son with chronic sinus infections that kept him from attending school for two years. I had no idea then why they became ill and doctors couldn't tell me why so I decided to research the science myself.

I learned from the FRAPPE report<sup>1</sup> that oil and gas extraction contributes 40% of the chemical toxins that lead to ozone formation in the bad air we breathe along the Northern Front Range. I also learned that in Fort Collins, residents are harmed simply because we are upwind of a massive Oil & Gas boom in Weld County. The closer you live to the foothills, the poorer the air quality is.<sup>2</sup> The following graphic shows why this is true.

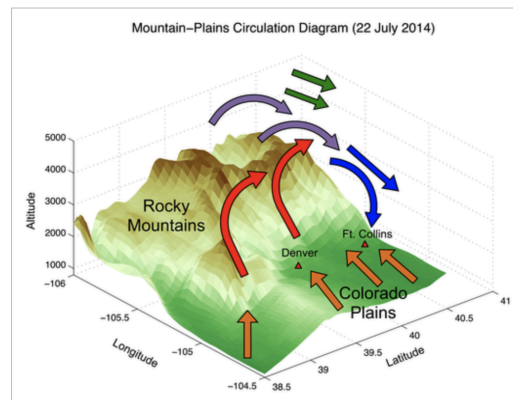


Figure 1

[Open in figure viewer](#) | [PowerPoint](#)

Differential insolation and thermal gradients between the Rocky Mountains and the Colorado Plains create daytime upslope flow that draws air from the plains toward the eastern ridge of the Rocky Mountains (orange arrows). This flow transports O<sub>3</sub> and other pollutants from the Front Range urban corridor and adjacent plains toward the foothills where they accumulate (red arrows) to higher elevations along the eastern slopes of the Rocky Mountains. The elevated flow (purple arrows) can interact with the weak synoptic winds (green arrows) and be recirculated back over the DNFR within the upper portion of a mountain-plains solenoid. The polluted air in the return flow aloft (blue arrow) can be carried eastward from the Front Range or can be mixed downward over the plains to further degrade the near-surface air quality.

Now, almost twenty years later, my son continues to struggle with sinus infections and allergies and my daughter can't visit Colorado without having an asthma attack. Not only is it a serious life-changing health event, but NOT getting information from the State and medical practitioners is like salt in a wound.

As a Mom, I feel terrible that my kids now have permanent health problems just because they grew up in West Fort Collins. Had I understood the situation, I could have made better decisions to protect my kids' health. The saying, "What you don't know won't hurt you" is NOT true – what we don't know can and will hurt us and sometimes kill us.

**Citizens in Colorado should be able to depend on hearing from experts like our doctors, CDPHE, County Health Departments, and/or City Emergency Management departments for information about local threats to our health.** Unfortunately, as oil and gas extraction activities creep closer to urban areas, we are finding ourselves uninformed or misinformed about how to protect our families from these harms.

**Informing people of the facts doesn't cause panic, it's NOT understanding what's happening in our community and hearing secondhand information that may be inaccurate, that causes panic.**

Citizens have a Right to Know when their health is at risk from significant Oil & Gas spills and air releases within their communities. Citizens of Colorado and their medical providers have the same right to know about significant chemical releases via public notifications, as is provided to workers under the Federal Right to Know Law.

**Considering the CDPHE's mission statement is, "Advancing Colorado's health and protecting the places where we live, learn, work, and play", it is clearly evident that The Community Right to Know Act must be supported by CDPHE.**

#### References

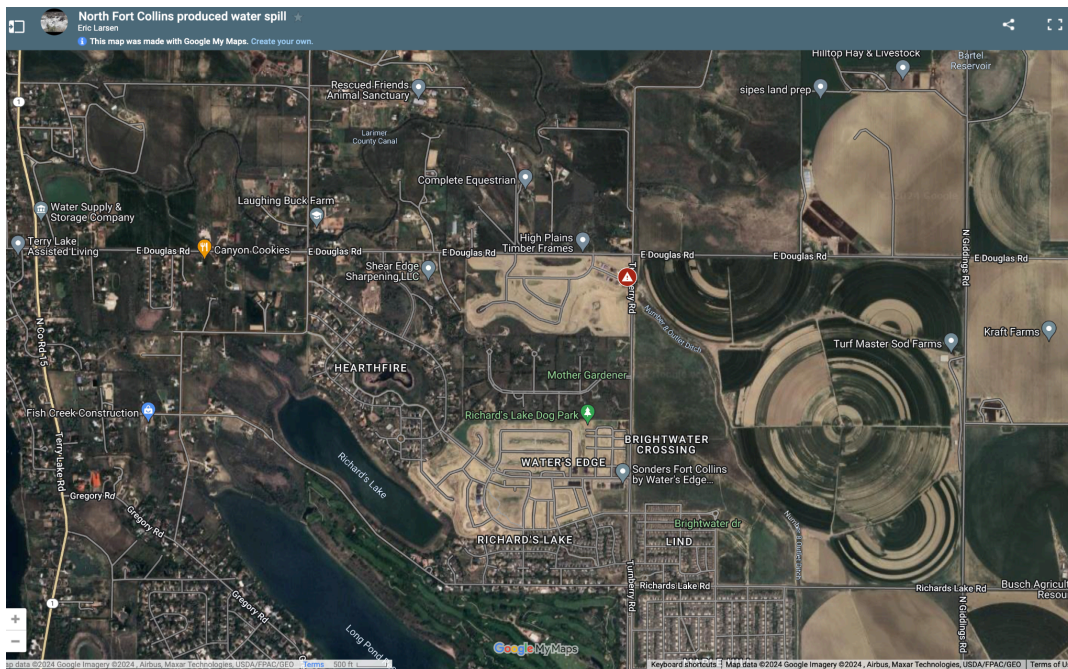
1. Flocke, F., Pfister, G., Crawford, J. H., Pickering, K. E., Pierce, G., Bon, D., & Reddy, P. (2020). Air quality in the Northern Colorado Front Range Metro Area: The Front Range Air Pollution and Photochemistry Experiment (FRAPPÉ). *Journal of Geophysical Research: Atmospheres*, 125, e2019JD031197. <https://doi.org/10.1029/2019JD031197>
2. Sullivan, J. T., et al. (2016), Quantifying the contribution of thermally driven recirculation to a high-ozone event along the Colorado Front Range using lidar, *J. Geophys. Res. Atmos.*, 121, 10,377–10,390, doi:10.1002/2016JD025229.

**The following three examples below show how Colorado citizens and their children can be harmed when NOT informed of risks.**

### **Example 1.**

#### **North Fort Collins Oil & Gas related problems and lack of information provided:**

The area below in North Fort Collins is where Prospect Energy operates. A small red triangle at Douglas and Turnberry Rd is where the most recent frack wastewater “spill” was found on October 31, 2023.



#### **The area of concern,**

- Is in the middle of a housing development being built.
- As more people move into the same area where Oil & Gas activity is occurring, the potential for accidents causing serious health impacts or death increases exponentially.

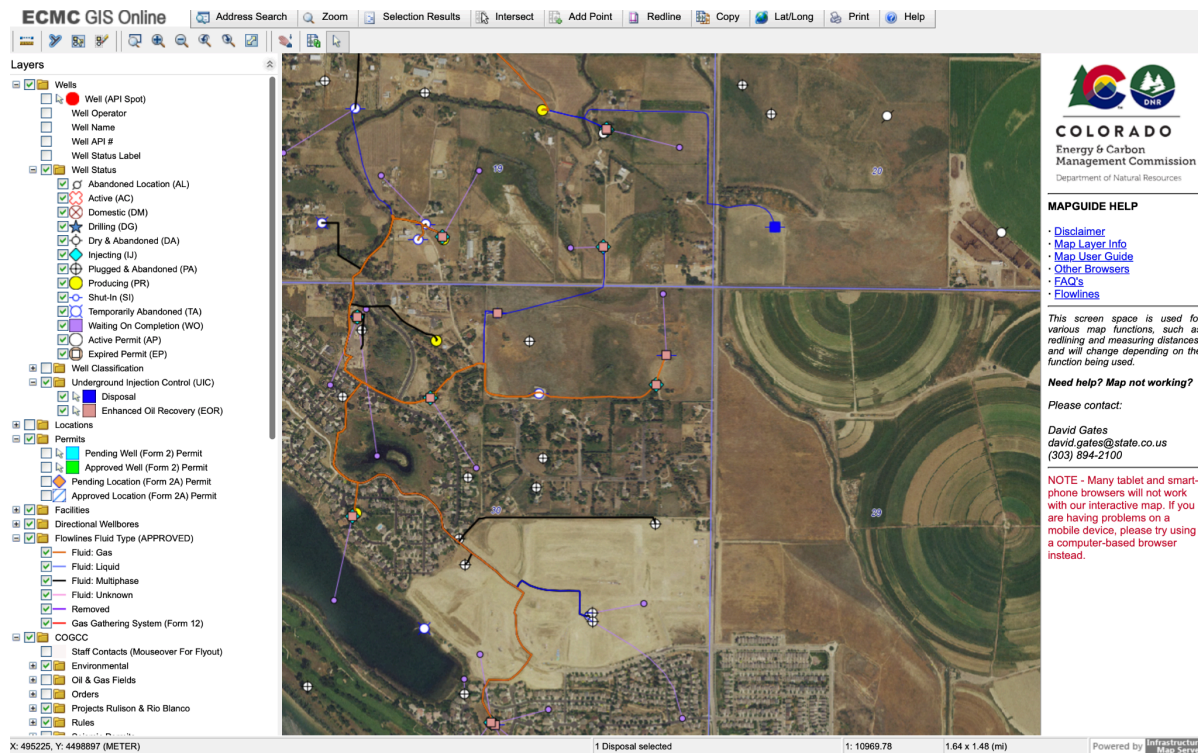
**There are numerous newspaper articles detailing the harmful impacts of Prospect Energy on citizens nearby.**

- *Oil company hasn't replaced leaking tanks near Fort Collins despite months of complaints*, Jacy Marmaduke, Fort Collins Coloradoan, Dec 6, 2021

- CDPHE issued a rare IMMEDIATE NOTICE OF VIOLATION on Dec 6, 2021 ([view it here](#)) but without a subscription to the Fort Collins Coloradoan, citizens never see it.
- *Operator replaces leaking tanks at oil site near Fort Collins, but concerns persist*, Jacy Marmaduke, Fort Collins Coloradoan, Feb. 3, 2022
- *Recurring negligence: Larimer County files complaint against oil company after fire*, Jacy Marmaduke. Fort Collins Coloradoan, published May 31, 2022
- *State orders Prospect Energy oil and gas facility north of Fort Collins to shut down*, Bethany Osborn, Fort Collins Coloradoan, published Aug. 25, 2022
- *Cleanup underway after leak at Prospect Energy oil and gas site north of Fort Collins*, Bethany Osborn, Fort Collins Coloradoan Oct. 28, 2022
- *Prospect Energy's shuttered site north of Fort Collins can reopen after state-ordered changes*, Miles Blumhardt, Fort Collins Coloradoan, Dec. 1, 2022
- *Oil and gas company's ruptured pipe contaminates soil, ditch, in north Fort Collins*, Prospect Energy spilled 200 barrels (8,400 gallons) of produced water, (frack wastewater) and one barrel of oil. by Pat Ferrier, Nov. 3, 2023

**This same location from the ECMC online GIS mapping program shows:**

- extensive underground pipes carrying oil, gas, and frack wastewater are now located under new homes
- plugged wells, abandoned wells, several oil recycling units, an underground injection control unit, and several underground horizontal wellbores are located in the immediate area.



## **Some of the quotes from the articles:**

- **“[Von] Bortz has grown increasingly frustrated since 2018 when he started experiencing bouts of nausea, headaches, and dizziness. He and [his physician] believe his symptoms are connected to his proximity to the oil and gas site.” Dec 6, 2021**
- **“Earthworks Colorado field advocate, Andrew Klooster, has been working with Bortz for about a year to document pollution at the site and has submitted repeated complaints to the state. ‘Leaks kept returning at the site despite several attempts by Prospect to patch and repair the tanks’.” Feb. 3, 2022**
- **“[Larimer County] Commissioner John Kefalas said, ‘We need to take some action,’ at the May 16 [2022] work session, adding that the Air Pollution Control Division keeps ‘saying they’re going to enforce things, and they keep investigating. I don’t know what it’s going to take for them to assess (appropriate) penalties or possibly do, at some point, a cease-and-desist’.” May 31, 2022**
- **“I’ve been fighting this battle for a long time. Bortz said he called state officials Tuesday after smelling the familiar potent stench of rotten egg.” “They need to be held accountable for the poison they’re putting into the air.” Aug 25, 2022**
- **“Residents near the Krause site reported strong odors of hydrogen sulfide on Oct. 23 and 24. Hydrogen sulfide produces an odor often associated with a rotten egg smell and can cause significant health issues to humans if they are exposed to the gas for a long period of time.” Oct 28, 2022**
- **“While the resulting leak was found in a field next to the Krause site, which is located on North Larimer County Road 13 north of Douglas Road, state officials confirmed the water flow line break was from another Prospect Energy site. That site is located near the Hearthfire neighborhood east of State Highway 1 and south of Douglas Road but has water [frack wastewater] lines that run underground surrounding the site.” Nov. 3, 2023**

Clearly, from these articles, Prospect Energy is a repeat offender but these articles also show that **CDPHE is NOT protecting the health and well-being of the residents impacted by this company despite hundreds of complaints for more than five years of toxic air and ongoing frack wastewater releases. No one should have to be “fighting this battle for a long time”.**

CDPHE has systematically failed to protect citizen’s health even after repeated opportunities. If the State can’t protect citizens from ONE oil & gas company, how are they protecting all the other front-line communities facing impacts from multiple companies?

**This bill HB24-1359 - The Community Right to Know Act – is essential to protect the health of Coloradans because,**

- **Oil & Gas activity continues to creep into neighborhoods along the Front Range potentially impacting the health and safety of citizens; and**
- **No one loses when public health takes center stage.**

## **Example 2. Colorado Regulation 42**

**Buried in Regulation 42, we discover basic groundwater quality protection is EXEMPT for the Oil & Gas industry in Colorado - in hundreds of places – where they are allowed to dump their oil and gas wastewater.**

The link to Regulation 42 is:

<https://www.coloradosos.gov/CCR/GenerateRulePdf.do?ruleVersionId=8815&fileName=5%20CCR%201002-42>

### **Unanswered questions in this regulation are:**

- How was groundwater in these areas labeled “Limited Use and Quality”,
- Do residents in these areas and do future residents in these areas know they live and/or own land in a Regulation 42 area,
- How are residents in these Regulation 42 areas, who use well water, supposed to protect themselves? (They don’t know they need to test for oil and gas contaminants.)
- How could CDPHE help protect the health and safety of these people?

When wastewater is dumped in groundwater in Colorado, it not only impacts us, but it eventually finds its way through eastern Colorado to Nebraska and Kansas, then Missouri, down the Mississippi, and into the Gulf of Mexico, impacting millions. **All water is connected.**

**The state agency that is supposed to protect public health and the environment, the Colorado Department of Public Health and Environment, has not provided public notifications to the community regarding this dumping and does NOT explain what this means.**

I want to highlight what this regulation says on page 24.

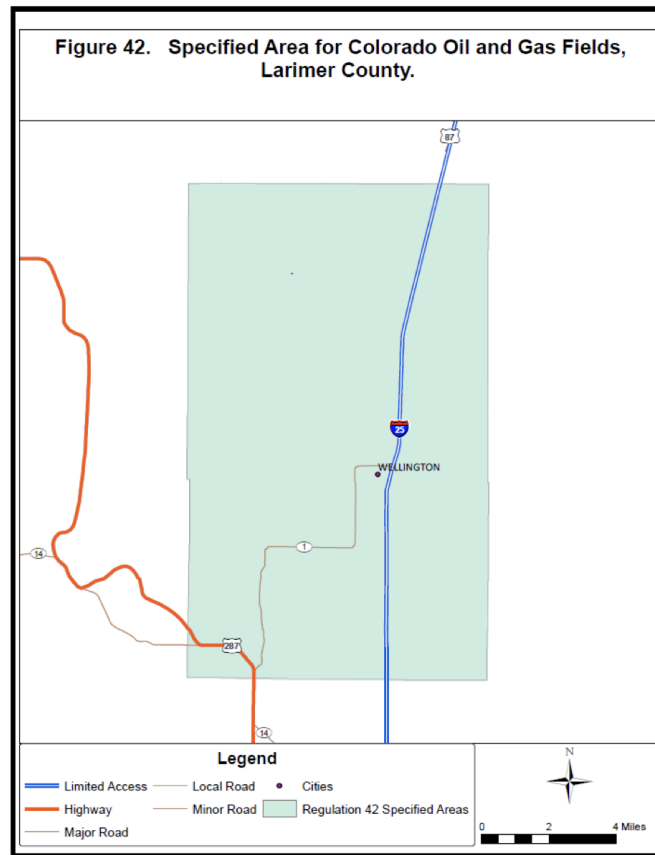
“The groundwater organic chemical standards included in Table A of the Section 41.5.C.3 of the **Basic Standards for Groundwater (5 CCR 1002-41) for benzene, toluene, ethylbenzene, xylenes, and benzo(a)pyrene will NOT apply to the groundwater in the Entrada Sandstone and Muddy Sandstone (J Sand) within the specified area.** This exception applies to these compounds only when their source is crude oil, condensate, or produced water, or wastes that are intrinsically derived from primary field operations associated with the exploration, development, or production of crude oil and natural gas.”

**The BTEX chemicals? How has this happened to us? Why weren’t we told about Reg. 42 areas?**

Colorado's Regulation 42 permits O&G companies to dump their frack wastewater in areas where they are not required to protect basic groundwater quality standards. In Larimer County, this regulation is allowing:

- The dumping of toxic frack wastewater near housing developments in North Fort Collins by Prospect Energy at about 20 sites through Underground Injection Control Units.
- Wellington Operating dumps minimally processed oil and gas frack wastewater into open unlined pits that drain into the Box Elder Creek alluvial. This water surfaces south of these pits before it flows downstream through Wellington, Colorado. As of May 2021, Wellington Operating discharged, since April 2006, over 161,712,581 gallons or 496.3-acre feet of water to the Boxelder Creek alluvium.

The map below from page 93 of this Regulation shows one of the two Larimer County Regulation 42 sites, #42





**Allowing this practice without informing citizens who live in these areas raises important questions:**

1. Are the citizens of CO provided advance notification of these laws before they become law?
2. How can citizens in affected communities near these dumping (Regulation 42) areas receive advance notifications so that they can take measures to protect their health and safety?
3. What measures can be taken to develop greater communication and trust between the State organizations, such as CDPHE, and whole communities, who feel threatened by these dumping practices?

**With the Community Right to Know Act any release over 126 gallons would require a notification to the public within 2000' of the incident and to the medical community nearby. Citizens need to be informed about the potential health risks of dumping oil and gas wastewater where people live and doctors need to know so they recognize the symptoms of exposure and provide appropriate treatment.**

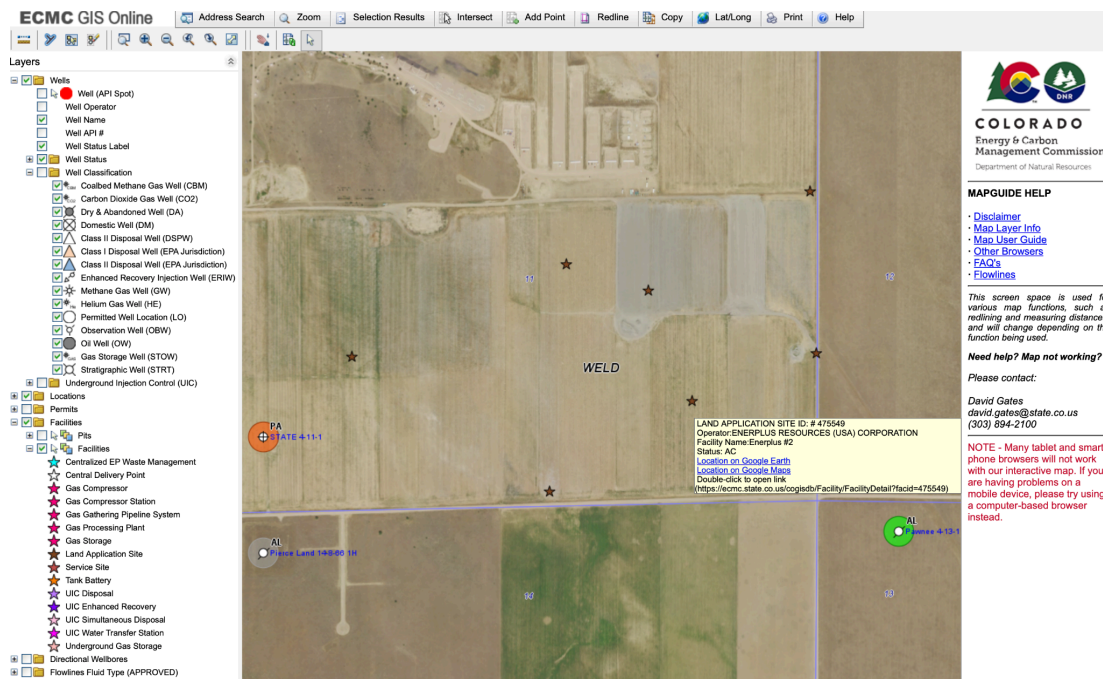
### **Example 3. Land Application(s) for O&G disposal**

After learning about Maine's PFAS problem that Land Application caused, this struck a nerve. In Maine, State Legislators have realized this problem and they are informing residents and anyone else who wants to google it. They have banned any products sold in Maine that contain PFAS and they provide a regularly updated map showing locations where PFAS are found in Maine. They also are providing support to farmers impacted by these land applications.

#### **What's wrong with the Land Application of oil and gas wastewater?**

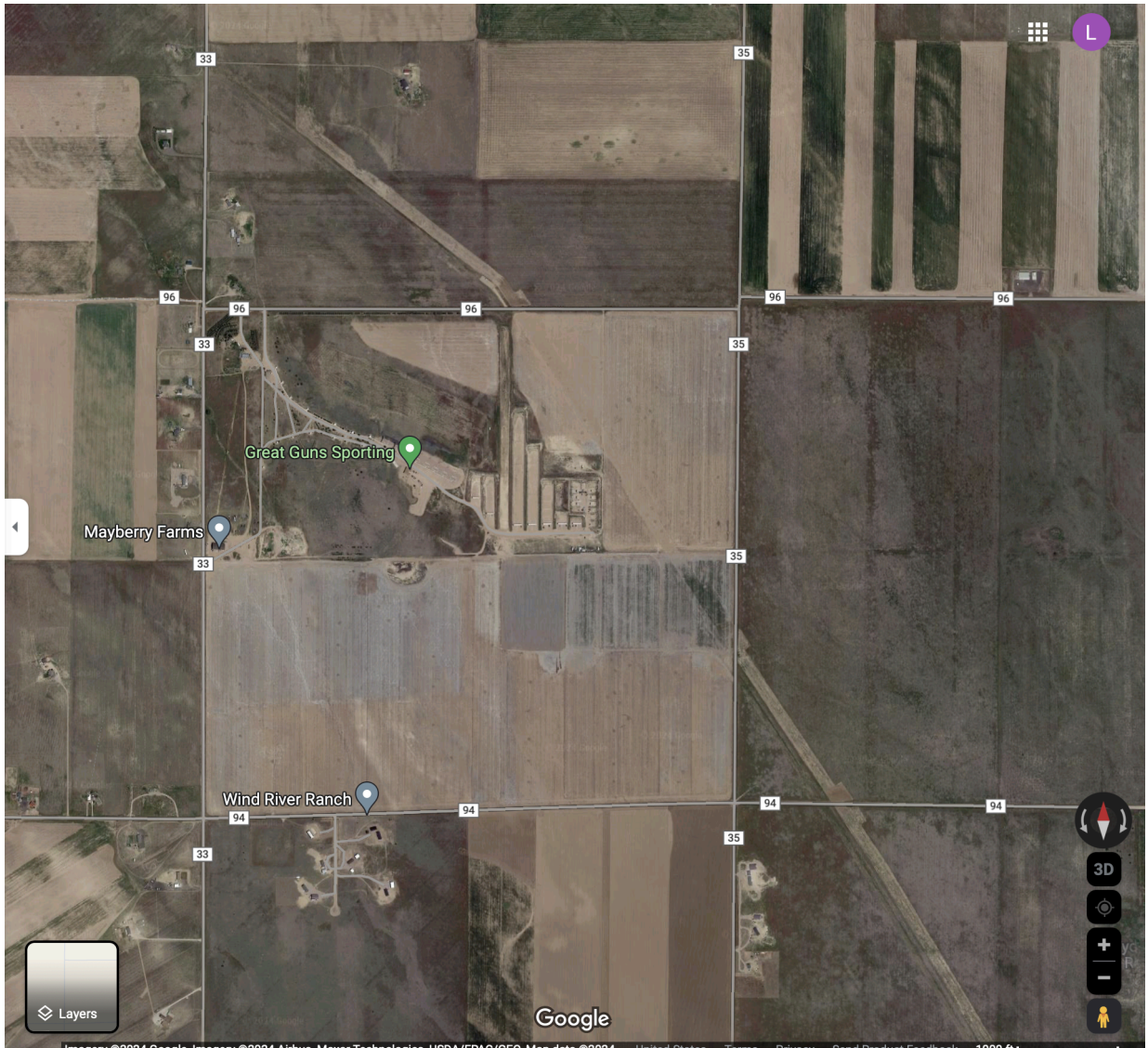
- Large trucks carrying oil and gas wastewater drive into these areas and then spray the contents over the area without informing nearby residents or displaying signs marking these areas as Land Application Sites for frack wastewater.
- Frack wastewater is very salty, it's toxic and leaves the gray streaks you can see in the images below where it's applied. This can be seen from space via Google Maps.
- This wastewater is contaminated with oil, hundreds of man-made chemicals including PFAS, dissolved metals, radon 226 and 228, the BTEX chemicals, and other highly toxic substances. These substances are in frack wastewater and will cause cancer and other serious health impacts at very low levels.

The following screenshot is the location of a Land Application Site in Weld County taken from the ECMC online GIS map.



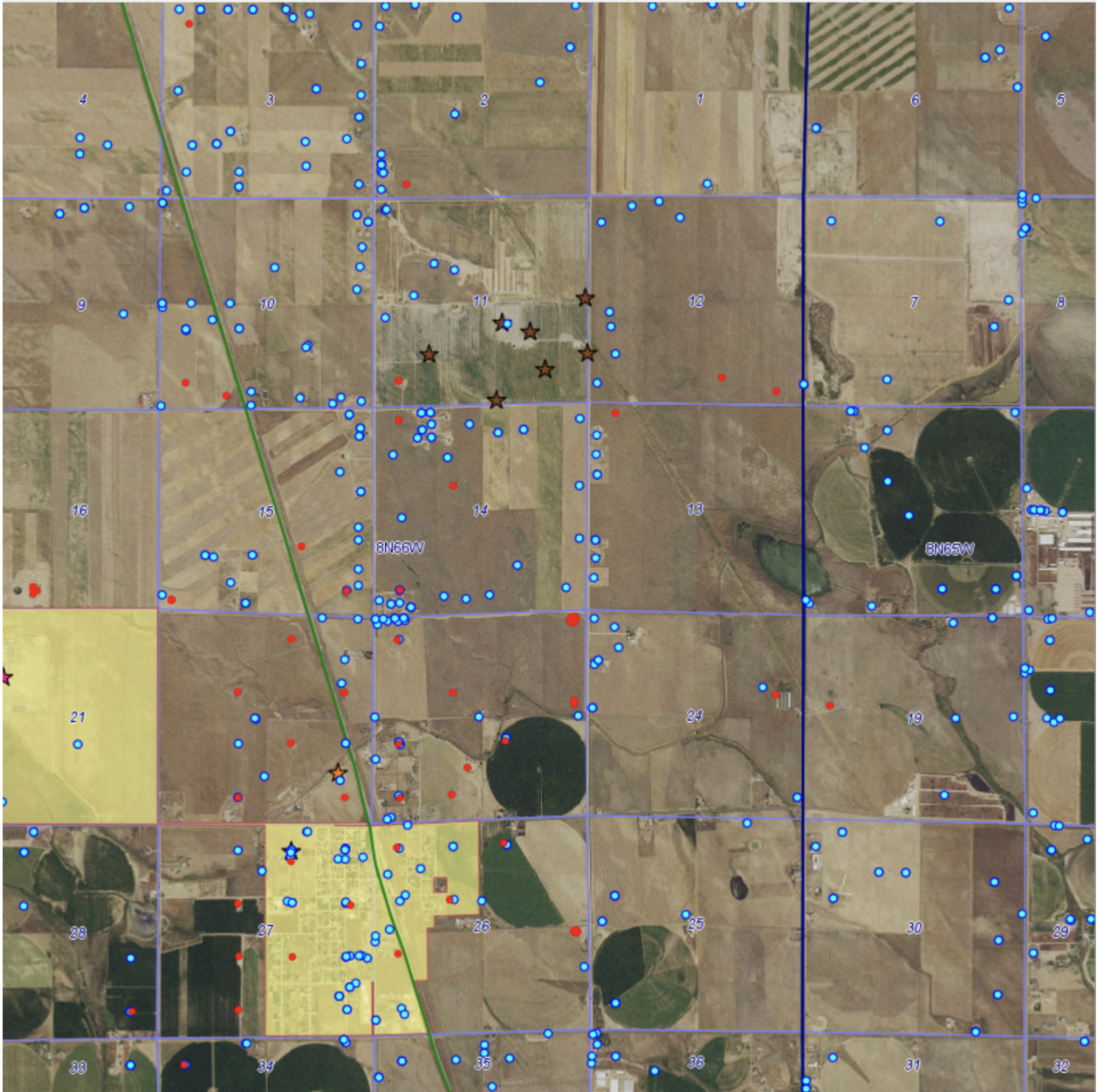
### We learn from this image:

- Brown Stars are where land application sites are located. There are hundreds of these sites in Colorado; although, not all are still open.
- It is unclear from the ECMC website whether the closed sites have been remediated or not but, if not, the toxic nature of the frack wastewater that was spread on the ground remains in the soil.
- A yellow note pops up when using the pointer that gives more details at each Brown Star. One of the three sites is owned by Enerplus Resources Corporation and the other two are owned by Extraction Oil and Gas Inc. show they are OPEN for more land applications.
- This area, where land spreading is occurring, is not fenced and there are no signs warning people it is a Land Application site for frack wastewater and/or stay away.
- This frack wastewater being sprayed on land can and will leach down into the water table below and contaminate the well water of the people living out there. Do nearby residents realize they and their family members might be exposed to the frack wastewater contaminants simply because this wastewater is sprayed on nearby land by the oil and gas industry?
- Notice how barren the scene above appears? Nothing seems to exist but oil and gas even on the ECMC's newest map version, which is 2021. From the Google Maps image below, we know people live in this area.



Although remote, this area includes a new development called Wind River Ranch just across the road to the South. Great Guns Sporting, is a large outdoor public shooting club. Numerous other small ranches are located along these County roads and they are all using well water.

See the small blue dots in the image below. This is where domestic water wells are located. Notice the Brown Stars near domestic water wells.



From the ECOM website, Document #403448238 shows that levels of arsenic found in the soils are NOT within 1.5X the allowable limits in the soils on Extraction O&G land application site #449314. It's unclear if other contaminants were found.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? No

**SOURCE REMOVAL SUMMARY**

Describe how source is to be removed.

There will be no source removal at this time.

**REMEDICATION SUMMARY**

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

A statistical analysis was conducted and current data suggests the concentration of arsenic collected on the spreadfield are not within 1.25X background levels. Background arsenic samples were collected off the spreadfield where spreading did not occur. Additional data is warranted to determine the statistical variation of arsenic within the spreadfield compared to background concentrations. A site figure will be submitted on a supplemental form 27 showing additional background locations. Semi-annual sampling of the spreadfield will be scheduled pending landowner approval to determine variability of arsenic concentrations at 0-6 inches and 3 feet below ground surface. Samples will be submitted to a certified laboratory for analysis of arsenic only. Contingent on soil sample results the approximate timeframe to achieve a no further action will be December 30, 2026.

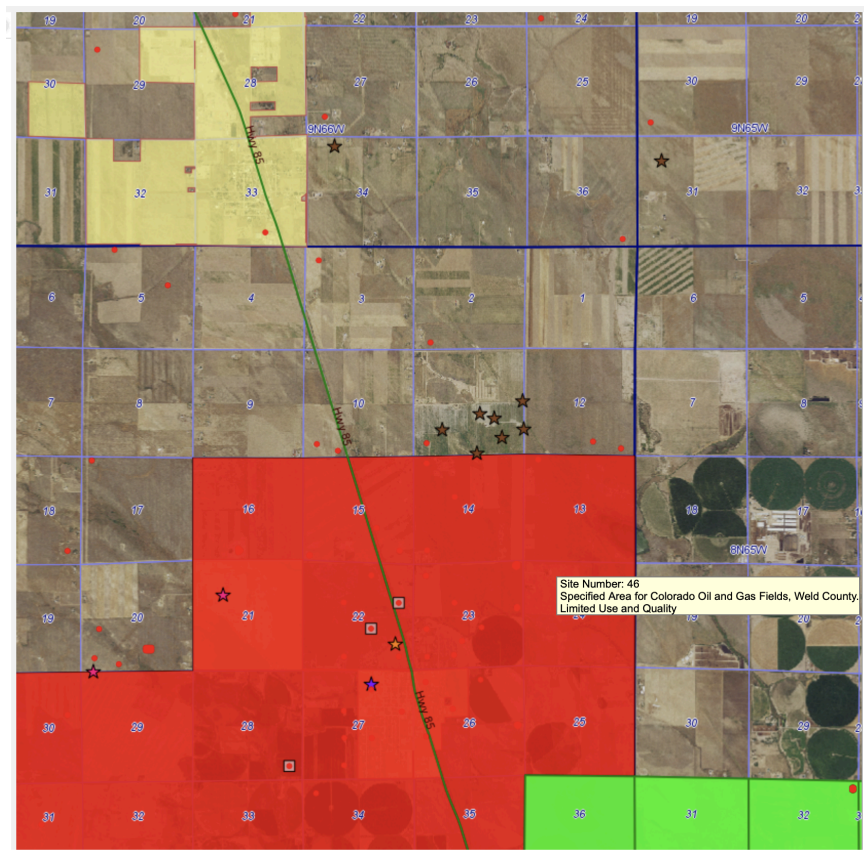
**Soil Remediation Summary**

In Situ  Ex Situ

Bioremediation ( or enhanced bioremediation ) Excavate and offsite disposal

Chemical oxidation If Yes: Estimated Volume (Cubic Yards)

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Also, the location of the Brown Stars mentioned in Example 2 is NOT in a Regulation 42 site (area in red). Is this because the State doesn't view these Land Application sites as harmful or polluting? The science on this practice shows us otherwise.

The three examples above are but drops in the bucket of significant concerns for public health and safety that this industry creates. Thousands of these examples of harm exist in Colorado and are waiting to be uncovered. Some people are directly harmed and know it while some people never learn why they and their children are sick until years later, if then.

People can't protect themselves if they lack the information they need to protect their own health. If the State, County, and Local governments are unwilling to tell us, The Community Right to Know Act - HB1359 will inform communities with information officials have now but make it nearly impossible for the average citizen to find.

This brings me back to why we need a public record of these sites – one that the public can access and understand without an engineering degree and years of research to find. It's time to STOP HIDING THE INFORMATION and IGNORING THE REALITY THAT OUR HEALTH IS BEING IMPACTED BECAUSE WE ARE NOT INFORMED.

**The Community Right to Know Act would eliminate the need to beg for information and we shouldn't have to.**

Please vote for HB1359. This bill is long overdue. Thank you for reading my letter. I sincerely appreciate your attention to these concerns and I welcome any questions you might have.

Lori Brunswig  
1901 Ridgewood Road  
Fort Collins, CO 80526  
[Lbrunswig@comcast.net](mailto:Lbrunswig@comcast.net)  
970-443-5983

## Community Right to Know HB24-1359

Position of both Colorado Rising and PSR Colorado (Physicians for Social Responsibility):

On the evening of Dec 22, 2017, an explosion and fire at an Extraction Oil site in Windsor was widely reported. What wasn't reported was the subsequent conclusion of atmospheric scientists, based on readings from monitoring stations, that the site had been venting toxic chemicals all day prior. And that those toxic plumes, containing ethane, propane, benzene and toluene, had carried over heavily-populated areas between Windsor and Ft. Collins. The operator was not required to disclose, and therefore, families were not aware of the toxic exposures, or given any information on why they might be experiencing ill health effects or what to do about them.

According to a FrackTracker Alliance report, "Spills from the oil and gas industry represent a clear present threat to public health for communities living near oil and gas extraction operations." The report goes on to reveal that since 2020, more than 3700 oil and gas spills were reported to the COGCC (now ECMC), numbers that are increasing yearly. According to FrackTracker's analysis of Colorado spill data maps, "at least 54% of the spills that were reported to the COGCC in 2023 were located within 2,000 feet of a home." (Note that "reported" spills likely do not indicate the true, full number of actual spills and releases.)

"What's that smell?" "Why is my nose bleeding?" "Why am I dizzy?" HB24-1359 is designed to inform Colorado citizens, especially our most vulnerable and DI communities, along with our doctors, when toxic chemicals are spilled within 2000 feet of where people live.

"But you'll just scare people."

Ignorance is not bliss. People want to be informed of what's affecting the health of their children and their family. The argument that people are better off being kept ignorant about health threats and information is self-serving and false. When nutritional labelling on food was first proposed, the food industry claimed that the information would just frighten and scare people. But numerous surveys, such as recent ones from Europe, show

that, while not always consulted by consumers, labelling is nonetheless considered to be a valued, much appreciated resource.

“But it will be too expensive to implement.”

Outlandish dollar figures and employee hire numbers are being disseminated by oil and gas allies such as the CDPHE and ECMC. These numbers are, again, self-serving and false. Automated alert and call-in systems, such as phone tree number-selection referrals to standardized websites, can greatly decrease the need for direct employee interaction with concerned citizens. These disinformation campaigns represent the true frighten-and-scare tactics, not the actual programs informing citizens.

If anything, these inflated cost expectations represent CDPHE’s unintended acknowledgment of the significant, unmet public health needs that this bill will address.

Policy makers might also wish to revisit the mandated mission statements of both the CDPHE and the ECMC/COGCC:

CDPHE: “Advancing Colorado’s health and protecting the places where we live, learn, work, and play.”

ECMC/COGCC: “...protects public health, safety, welfare, the environment and wildlife resources.”

“Protecting health” is the top responsibility of both these agencies, not expediency or evasion of that responsibility. HB24-1359 is a vital, long-delayed advance in the evolution of the public’s right-to-know about the environmental threats and exposures that have long contributed to cancers, including childhood leukemia, as well as birth defects, increased hospitalizations, endocrine disruption, and much, much, more, as reported in the Compendium of health effects from oil and gas operations.

We call on all Legislators to support this vital measure on behalf of all citizens of Colorado.

Signed,

Harv Teitelbaum

Board Co-Chair, PSR Colorado (Physicians for Social Responsibility)

Board President, Colorado Rising

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Board President, Colorado Rising

**Toxicologically Relevant Information Regarding Impacted Organs and Systems for Chemicals Listed in Bill HB24-1359**

5-FLUOROOROTIC ACID; skin, eyes, respiratory system, gastrointestinal system

ACETALDEHYDE; eyes, respiratory system, kidney/renal system, central nervous system, reproductive system

ACETYLENE; central nervous system, respiratory system

ACROLEIN; eyes, skin, respiratory system, cardiovascular system

BENZENE; eyes, skin, respiratory system, blood, central nervous system, bone marrow

BUTENE; central nervous system, eyes, skin (frostbite)  
Including CIS-2-BUTENE, TRANS-2 BUTENE

BUTYRALDEHYDE; eyes, respiratory system, skin

CARBON MONOXIDE; cardiovascular system, respiratory system, blood, central nervous system

CHLOROMETHANE; central nervous system, liver, kidney/renal system, reproductive system, stomach tumors

CYCLOHEXANE; eyes, skin, respiratory system, central nervous system, thymus

CYCLOPENTANE; eyes, skin, respiratory system, central nervous system

DIMETHYLBUTANE; eyes, skin, central nervous system, peripheral nervous system, respiratory system, reproductive system  
Including 2,2 DIMETHYLBUTANE, 2,3 DIMETHYLBUTANE

DIMETHYLPENTANE; respiratory system, central nervous system, cardiovascular system, blood, immune system, liver, kidney/renal system  
Including 2,3 DIMETHYLPENTANE, 2,4 DIMETHYLPENTANE

ETHANE; skin (frostbite), central nervous system, respiratory system; asphyxiant

ETHYLBENZENE; eyes, skin, respiratory system, central nervous system, liver, kidney/renal system

ETHYLCYCLOHEXANE; central nervous system

ETHYLENE; respiratory system, central nervous system

ETHYLENE GLYCOL; eyes, skin, respiratory system, central nervous system

ETHYLTOLUENE; liver, kidney/renal system, respiratory system, central nervous system, skin, eyes

Including M-ETHYLTOLUENE, O-ETHYLTOLUENE,  
P-ETHYLTOLUENE

FORMALDEHYDE, eyes, skin, respiratory system

FRUCTOOLIGOSACCHARIDE; gastrointestinal system, liver

GLYCOL DIBROMIDE; eyes, skin, respiratory system, liver, kidney/renal system, reproductive system

GLYCOL DICHLORIDE; eyes, skin, kidney/renal system, liver, central nervous system, cardiovascular system

GLYCOL MONOETHYL ETHER; eyes, respiratory system, gastrointestinal system, reproductive system, hematopoietic system

GLYCOL NITRATE; skin, cardiovascular system, blood, liver, kidney/renal system

HEXENE; gastrointestinal system, central nervous system

HYDROGEN SULFIDE; eyes, respiratory system, central nervous system

ISOBUTANE; central nervous system

ISOPENTANE; central nervous system, skin, gastrointestinal system, respiratory system

ISOPRENE; blood, eyes, skin, central nervous system, respiratory system

ISOPROPYLBENZENE; eyes, skin, respiratory system, central nervous system

M-DIETHYLBENZENE; eyes, central nervous system

METHYL BUTENE; blood, immune system, liver, kidney/renal system,  
respiratory system, central nervous system, cardiovascular system  
Including 2 METHYL - 2 BUTENE

METHYLCYCLOHEXANE; eyes, skin, respiratory system, central nervous  
system, gastrointestinal system  
Including CIS-1, 3-METHYLCYCLOHEXANE,  
TRANS-1,2-DIMETHYLCYCLOHEXANE,  
TRANS-1,3-DIMETHYLCYCLOHEXANE

METHYLHEPTANE; respiratory system, central nervous system, cardiovascular  
system, blood, immune system, liver, kidney/renal system  
Including 2 METHYLHEPTANE, 3 METHYLHEPTANE

METHYLHEXANE; central nervous system, respiratory system, cardiovascular  
system, C, blood, immune system, liver, kidney/renal system  
Including 2 METHYLHEXANE, 3 METHYLHEXANE

METHYLNAPHTHALENE; skin, eyes

METHYLPENTANE; central nervous system  
Including 2 METHYLPENTANE

METHYLPENTENE; blood, immune system, liver, kidney/renal system,  
respiratory system, central nervous system, cardiovascular system  
Including 3 METHYLPENTENE

N-BUTANE; central nervous system

N-DECANE; peripheral nervous system, blood

N-DODECANE; skin, respiratory system, central nervous system

N-HEPTANE; skin, respiratory system, central nervous system

N-HEXANE, eyes, skin, respiratory system, central nervous system, peripheral nervous system

N-NONANE; eyes, skin, respiratory system, central nervous system

N-OCTANE; eyes, skin, respiratory system, central nervous system

N-PENTANE; eyes, skin, respiratory system, central nervous system

N-PROPYLBENZENE; respiratory system, eyes, central nervous system, cardiovascular system

N-UNDECANE; eyes, skin

NAPTHALENE; blood, kidney, eyes, liver, respiratory system

O-ETHYLTOLUENE; = eyes, skin, respiratory system, central nervous system, liver

Including 2-ETHYLTOLUENE

O-XYLENE; eyes, skin, respiratory system, central nervous system, gastrointestinal system, blood, liver, kidney/renal system

P-DIETHYLBENZENE; eyes, skin, respiratory system, central nervous system  
1,4-DIEHTYLBENZENE

P-ETHYLTOLUENE; eyes, skin, respiratory system, central nervous system  
Including 4-ETHYLTOLUENE

PENTENE; blood, immune system, liver, kidney/renal system, C=A, central nervous system, respiratory system, eyes, skin

Including CIS-2-PENTENE, TRANS-2-PENTENE

PROPANE; cardiovascular system, skin (frostbite), central nervous system, respiratory system; asphyxiant

PROPYLENE OXIDE; eyes, skin (frostbite), respiratory system; asphyxiant

SULFUR DIOXIDE; eyes, skin, respiratory system

STYRENE; eyes, skin, respiratory system, central nervous system, liver

TOLUENE; eyes, skin, respiratory system, central nervous system, liver, kidney/renal system

TRIMETHYLBENZENE; peripheral nervous system, central nervous system, eyes, blood, skin, respiratory system

Including 1,2,3 TRIMETHYLBENZENE, 1,2,4 TRIMETHYLBENZENE, 1,3,5 TRIMETHYLBENZENE

TRIMETHYLPENTANE; respiratory system, central nervous system, cardiovascular system, blood, immune system, liver, kidney/renal system, gastrointestinal system

Including 2,2,4 TRIMETHYL, 2,3,4 TRIMETHYLPENTANE

XYLENE. eyes, skin, respiratory system, central nervous system, gastrointestinal system, blood, liver, kidney/renal system

Including M-XYLENE/P-XYLENE

COVERED AIR TOXICS, AS DEFINED IN SECTION 25-7-141 (2)(b)

Including HYDROGEN CYANIDE; central nervous system, cardiovascular system, thyroid, blood

HAZARDOUS AIR POLLUTANTS, AS DEFINED IN SECTION 13 25-7-103 (13)

HEAVY METALS, INCLUDING ANTIMONY, CADMIUM, CHROMIUM, COBALT, COPPER, LEAD, MANGANESE, MERCURY, NICKEL, SILVER, THALLIUM, AND ZINC

PFAS CHEMICALS, AS DEFINED IN SECTION 25-5-1302 (7)

TOXIC AIR CONTAMINANTS, AS DEFINED IN SECTION 27 25-7-109.5 (1)(i)

I appreciate the opportunity to express why I support The Community Right to know bill.

While bike riding on a frequently used area by residents along Turnberry Road in Fort Collins the first week of November 2023 I observed 2 men using an unmarked pump truck working on the ditch along the road. They appeared to be workers in usual attire performing maintenance work. They drove off, leaving fresh wet dirt from the ditch on the paved shoulder. I rode through the dirt that they had dredged up from the ditch, not giving it much thought.

Later that week on Friday Nov. 3rd, an article in the Coloradoan reported that a spill was discovered on 10/31/23 : it read “about 200 barrels of highly concentrated saltwater leaked from an injection flow line operated by Prospect Energy in north Fort Collins,” contaminating soil and a nearby ditch.” It was then that I realized the work I saw happening on the ditch a on my bike ride was a contaminated site from the ruptured Oil & Gas pipe; and that I may had been exposed to something potentially unsafe and unhealthy as I rode over the dirt.

I was stunned that this dirt was left along the road without warning people to avoid it. I would have avoided the area if I was informed of the contamination in some way. The area was not roped off or signage placed informing residents that this was a hazardous area to stay away from. It was not until several days after the incident, that the public had information about this spill. And it was our local newspaper that provided the information to the public.

We lack legislation to alert citizens of chemical spills in areas where they live, & what chemicals were released. The common industry term “Produced Water” does not inform us what chemicals are in this water.

HB 24-1359 will help address this problem by providing the public with information through a web site, that identifies where & when a spill occurs, & what chemicals were released. It will give us the opportunity to be proactive about our health.

This bill is a step in the right direction. I urge you to support this much needed bill to protect all of us.

In the future I hope we address timeliness on this issue utilizing a public notification system. This is needed so we can avoid exposing ourselves unknowingly to spill areas when they occur.

Thank you for your time.

*Aileen*

Aileen Sherrin Hanson  
Larimer County, CO