House Environmental Resources & Natural Protection Committee

Public Hearing Agenda:

"Setback Requirements for Unconventional Gas Wells/ HB 1946"
Monday, November 17th, 2025
10:00am – 12:00pm
Room G-50, Irvis Office Building

10:00am – 10:10am	Call to Order Roll Call Opening Remarks
10:10am – 10:55am	Cindy Fisher Township Supervisor Cecil Township, Washington County Michele Stonemark Resident Cecil Township Lois Bower – Bjornson Southwestern Pennsylvania Field Organizer Clean Air Council
10:55am – 11:10am	Dr. Edward Ketyer President Physicians for Social Responsibility
11:10am – 11:25am	Patrick Henderson Vice President, Government Affairs and Communication Marcellus Shale Coalition
11:25am – 11:40am	Melissa Ostroff Pennsylvania Policy and Field Advocate Earthworks
11:40am – 11:50am	Closing Remarks
12:00pm	Adjournment

My name is Michelle Stonemark and I live in Cecil Township, approx. 523 feet from the George Augustine unconventional well pad owned by Range Resources.

The pad was approved in 2017 based on an old oil and gas ordinance in place in Cecil Township. My family and I fought the pad, but we lost in court. Since Cecil township recently updated its oil and gas ordinance, I will refer to the previous ordinance as the "old ordinance"

Cecil Township developed the old oil and gas ordinance in 2009 based on state minimum standards and input from industry leaders. I would like to touch upon two huge factors in that ordinance that affected my family. The setbacks and the noise.

I'll begin with the setbacks. Cecil Township used the state minimum setback of 500. When they began drilling the Augustine well pad in 2020 they drilled 4 wells. It was a little over 500' from my home, 600' from my parent's home and a little over 800' from a neighborhood of 250 homes to the south of the pad.

In 2020 and 2021 Range Resources used their "Green Fleet" while they conducted an air study at the Augustine well pad. We suffered from months of sleepless nights because of the noise; spent countless days unable to let our children play outside because of the smells in the air. We suffered from nose bleeds, headaches, and nausea. One terrible aspect was the flaring, which looked like a giant flame thrower shooting a large stream fire into the sky just behind our home. The startup of the flaring would create a boom loud enough to wake us from our sleep, and the hissing would keep us awake for several hours a night. The flaring would light up our entire home and during that time the air around us smelled distinctly different: an industrial smell of chemicals and terrible odors that we have not experienced before or since. It would burn off some kind of smoke that we could see and smell in the air. However, Range would later produce their long-term air quality study and claim that our air was fine.

The noise from drilling was constant, and most likely contributed to our headaches. There was a constant low sounding rumbl that could be felt and heard in our beds at night. We would complain to our township, and Range would come out to our house with sound monitors and determine that they were in compliance with our ordinance.

The biggest issue during that time was the anxiety we all felt. It was like living in constant fear. We would hear a loud noise that sounded like gun shots, massive clanging in the middle of the nights and lived in fear that something was wrong at the pad that would cause

us harm. When we would call Range's 24/7 response line, they would take hours or sometimes days to get back to us. We never knew if things were safe and functioning as expected or if there was a reason to worry. I would like to remind you all where you were in 2020 and 2021. A vast majority of the time they were drilling and fracking, we were trapped in our homes by the pandemic which was already a time of high anxiety for everyone.

After the last well was fracked, things settled down for a while, but we would still hear constant truck traffic and pipes clanging during all hours of the night.

Then Range returned in 2023 to begin 5 new wells. They did not bring their "green fleet" and they did not conduct an air study during that time.

What we experienced during the first wave of drilling was magnified exponentially. The smells, the trucks, and especially the noise all seemed to increase. This round of drilling was nothing short of unbearable. The old Cecil ordinance only required Range Resources to remain under a certain level of decibels called DBAs. Those are the sounds that you hear most commonly like someone talking or a vacuum cleaner. What the old ordinance did not account for were DBCs which are low frequency sounds. Imagine sitting at a red light and a car with its bass on very high pulls up next to you. That thumping sound can be felt in your chest and head, and the change in your cupholder will rattle. Those are DBCs. And that is what was being emitted from the Augustine well pad. On average the city of Pittsburgh will experience DBCs between 60 and 70. We live in a rural area on private property and the Augustine well pad was averaging between 80 and 90 DBCs daily. Our house would literally vibrate. Pictures shook on walls, tools would clang in the garage and water would shake in a glass on the table. We couldn't sleep in certain rooms in the house including our master bedroom. Our kitchen was the worst room in the house and we couldn't spend more than a few minutes in there. Dishes would rattle and the noise just pumped in our chests. Again we would complain, Range would put out a sound monitor but they were in compliance. No one suffered more than my eldest daughter, who would feel as though she had bugs crawling on her or felt like she was coming out of her skin.

Remember, as a family we still had the other effects as well, sleepless nights, the horrible smells outside, the huge fireballs in the air and the constant fear and anxiety. The nausea and headaches were almost a daily occurrence.

At this point I began having representatives from Cecil township to my home so they could experience it themselves. Several Cecil Township supervisors and employees stood in my kitchen and immediately complained they could feel it in their head and chests after only a few minutes.

I advocated heavily for increased setbacks and started sharing videos and pictures of my experience with other Cecil Township residents. With help from the Cecil Township supervisors, some of whom voted for the Augustine well pad to begin with, the process began to update our township oil and gas ordinance. During that time, Range's own air study was proven flawed under oath by their expert. After several months of hearings, and overwhelming residential support and testimony from several experts in the industry, The Board of Supervisors passed a new oil and gas ordinance in late 2024. The new ordinance increased setbacks to 2500 feet from residents and included specific provisions for DBCs; the low frequency sounds. While this new ordinance will not help my family, it will protect thousands of other residents in Cecil from going through the same ordeal.

That being said, it should not vary township to township. That's why I've been heavily advocating for increased setbacks across the state of Pennsylvania. Increasing the setbacks would not only help to protect residents from the bright lights, heavy flaring, awful smells and massive truck traffic, but it would also make a huge difference in the noise problems associated with unconventional drilling.

My name is Cindy Fisher and I am a current Cecil Township Supervisor. I have been a Cecil Township Supervisor for the past 12 years. I was re-elected in November 2025 for my 3rd 6 year term. Dealing with Oil and Gas development has dominated a large portion of my time as a supervisor for the past 12 years.

Washington County where Cecil Township is located is the epicenter of Oil and Gas development. The first Marcellus Shale well was drilled in Washington County in 2004. The first well pad in Cecil Township was the Troyer pad drilled in 2009. While Oil and Gas development is often spoken of in a positive light it comes with definite down sides specifically for those of us who live in close proximity to pads, compressor stations, processing plants and such.

From the beginning Cecil Township has experienced issues with Oil and Gas development. In early 2014, Cecil Township dealt with a leaking impoundment that ultimately resulted in the company that owned it being assessed the largest DEP fine in history – 4.15 million dollars. The DEP also required the closure and remediation of that impoundment.

Township Supervisors are often the first people that residents reach out to if there are issues. They reach out with road complaints, truck traffic complaints, air quality issues, water issues, noise complaints and many more. I have stood in residents homes while they cried because they couldn't take the vibrations, noise, or smells anymore. Oil and Gas development is a 24/7 operation and often keeps those in close proximity up at night. I have had to learn to read DEP permits, scientific studies, maps, engineering documents, etc just to be able to try to help our residents.

In 2019 and 2020 the first what I call "next generation" well pad was drilled in Cecil Township. These well pads are bigger, louder, more invasive and more detrimental to the surrounding neighbors than any other oil and gas development we experienced before it. Often when testifying at conditional use hearings in the township representatives from Oil and Gas companies describe them as temporary. This is inaccurate. The well pad I described earlier that started in 2019 is still in active drilling stage in 2025. They have drilled 9 wells and have already notified the township that they intend to come back for 5 more wells next year on this pad. Nearly 6 years of drilling, with many more years to come, is not temporary.

Cecil Township has 5 well pads in the township with more than 30 wells on them. With these wells come issues. As I said earlier noise, truck traffic, vibration, air quality issues, water contamination just to name a few. The township is often ill equipped to deal with the complaints we get and unfortunately the DEP is not a reliable level of protection for our

residents. We also often cannot trust the studies, documents, and information provided to us by the Oil and Gas companies.

In 2024 Cecil Township Board of Supervisors had gotten so many complaints from residents living in close proximity to Oil and Gas development with no resolutions from the companies that we decided to revisit our 500 foot setbacks. Initially going into the hearings I had no idea where we would go or what would change if anything at all. We listen to hours upon hours of residents testimony from doctors, to scientists, to professors and more. We listened to residents who currently live 500 feet from well pads, 1000 feet from well pads, and 1500 feet from well pads and every one of them said the same thing. There was a direct impact on their health and wellbeing from being so close to this industrial development.

We had the opportunity to also hear testimony from representatives from Oil and Gas companies and "experts" that they brought in to show the safety of the industry. Although, I don't think their expert testimony went the way they expected it to. I'll give you an example – in spring of 2024 I had the opportunity to cross examine expert Dr. Christopher Long. He has a degree from Harvard in Environmental Health and a Masters Degree from MIT in Environmental Engineering. He is also a board-certified toxicologist (DABT)- or so he says. Initially, when I read his report prior to the hearing I was impressed. He clearly has a lot of high-profile degrees and has done a lot of studies, including The Fort Cherry Study which is relied on by the industry to show safety on a regular basis. But as I dug into the studies and read the reports things weren't adding up. Ill start at the beginning, his "board certification for toxicology is simply a paper certification. He's not a medical doctor, analytic chemist, epidemiologist, or any other scientist that would become "board certified". There's actually no specific degree requirement to take the board certification test he took to stand before our board and tell us that oil and gas development is safe in close proximity to our residents homes.

In the Fort Cherry study that he conducted he tested for VOCs, but didn't mention them all in the study. When I asked him why on the stand he said he only included the ones that he was asked to include by the company that paid for the study. He left out some of the most harmful VOCS. He also noted in the study that the method he used to test for the VOC acrolein wasn't a proper scientific method.

At Cecil Township's Augustine well pad he claimed that they do 24/7 air monitoring. However, when I looked at the data I noticed that they only report the air data every 6 days. I

wondered why - it seemed odd to me. So, I looked up the methodology that they used (TO-15). That methodology requires the canisters that they are using to collect data/VOCs be left out no longer than 24 hours. After 24 hours the VOCs begin to diminish in the canister and the data is inaccurate. So I asked Dr. Long about this. I didn't actually know the answer or what he was going to say. He confirmed that they leave the canisters out for 6 days before collecting them. This was clearly in violation of the methodology and would clearly make the results invalid but they still to this day continue to rely on that data to show safety. I won't walk through the entire cross examination, but I can provide it for anyone who wants to watch it - it is about 30 min long. At the end of the testimony I asked Dr. Long if he would recommend our residents live in close proximity to Oil and Gas development. He declined to answer the question.

After nearly 9 months of hearings Cecil Township Board of Supervisors in a 3-0-2 vote passed a setback of 2500 feet from occupied structures with the option for residents to sign a waiver to allow it closer (it cannot exceed the state setback of 500 feet). If they know the risks and choose to allow development closer than they would be permitted to do so. We do however have an obligation to protect the health, safety, and welfare of the residents who do not want to live in close proximity to Oil and Gas development and we could not in good conscience vote to allow it any closer than 2500 feet.

Immediately after enacting the ordinance Cecil was met with lawsuits by two large companies in the industry, as well as more open records requests than our small township staff can deal with. I believe the goal of this is to try to force us to back down from our position of protecting residents with greater setbacks by forcing us to spend money on legal fees they think we can't afford. In a lot of other municipalities these tactics have worked.

At the end of the day it comes down to this. I have spent a significant amount of time learning about things I need to know about to be able to help residents in Cecil Township. Other municipalities and other supervisors may not do this. To be frank, it shouldn't be my job. That is why I am here today to ask you to take the same stance Cecil did and protect all residents in Pennsylvania with increase the setbacks.

PA House Environmental Committee Hearing - 11/17/25 10:00 AM
Setback Requirements for Unconventional Gas Wells/ HB 1946
Room G-50 Irvis Office Building, Harrisburg, PA 17120

Slide 1: My name is Ned Ketyer. I am a pediatrician from Southwestern PA, now retired from clinical practice. I am medical advisor to Environmental Health Project, president of Physicians for Social Responsibility Pennsylvania, and member of the AAP Council on Environmental Health & Climate Change.

Today I'm going to show you some of the peer-reviewed public health research on fracking in the context of proximity, which will make the case for expanded, health-protective setbacks in PA.

Unless you live near fracking, it's hard to appreciate just how close the infrastructure is to homes and businesses, and to schools and medical clinics. Even living here in Washington County, it's sometimes hard to see some of the infrastructure because so much is hidden by hills and trees and other foliage. So you have to try and get a view from Space by using a satellite map tool.

Slide 2: I'm going to use one well pad in Washington County near where I live as an example. Washington County is the most heavily fracked county in PA. And just to get your bearings of where Washington County is, you can see the City of Pittsburgh and the three rivers to the northeast of these concentric circles surrounding the well pad in question, Pittsburgh International Airport to the north, the PA-WV border to the west, and the City of Washington, PA to the south.

We're going to look at the Range Resources Augustine Well Pad in Cecil Township, Washington County. This year, Cecil Township supervisors passed a new ordinance that requires a 2,500 foot buffer from homes and 5,000 foot buffer from schools, daycares, senior facilities, hospitals, and other sensitive buildings. Range Resources is currently suing the township over the new ordinance.

Slide 3: Zooming in, I want to point out that the Augustine Well Pad contains 8 fracked gas wells, 8 compressors, and 6 condensate tanks, with plenty of room to add more in the future. Most shale gas well pads in PA have multiple wells on them. One well pad being developed near my house has been permitted to hold more than 3 dozen wells.

The edge of the well pad is 525 feet from the closest home. I have visited this home several times. Between the constant odors, the noise, and the vibrations, the family that lives there has been symptomatic. About 1,000 feet from the well pad is the parking lot of a popular commercial business, and 930 feet away is the edge of a large residential community with >230 single-family homes.

Slide 4: Very good epidemiological research tells us that PA's current setback distance of 500 feet is too close. Within 1 km (0.6 miles) of a fracked gas well in PA, which fits into this 1 mile circle:
— Weinberger at EHP found residents in southwestern PA complaining of a variety of adverse health symptoms they thought were due with living close to a fracked gas well, including headaches, sore throat, burning eyes, nasal congestion, cough, wheezing, difficulty breathing, and stress.
— McKenzie studied residents living within 1 km of a fracked gas well in Colorado and found that their risk of developing subacute and chronic health symptoms and cancer was significantly higher compared to people living further away.
— Willis found an association between living within 1 km of a fracked gas well and gestational hypertension and eclampsia in pregnant women.
— Tang found associations with birth defects 1 km away — neural tube defects (anencephaly and spina bifida), stomach defects, and congenital heart defects (aortic valve stenosis, hypoplastic left heart syndrome, pulmonary valve atresia or stenosis).
— Clark at Yale University discovered that young children living within 2 km (1.2 miles) of a fracked gas well in PA had 2-3 times the risk of developing ALL.
— Evelyn Talbott at the University of Pittsburgh in tandem with PADOH found that children living within 1 mile of a fracked gas well in southwestern PA had 5-7 times the risk of developing lymphoma compared to children living further away.

Slide 5: Within a 3-mile circle from a fracked gas well in PA, Currie and Hill both found a higher risk of adverse birth outcomes — low birth weight and prematurity — in newborn babies. Cushing found the same thing and attributed it to flaring at gas wells. Willis studied mental health impacts in residents living inside of 2 miles in Canada and the US, including in PA, and found a high degree of stress.

Slide 6: Even 10 km or 6 miles away from fracking, health damage is being seen with more adverse birth outcomes, birth defects, migraine headaches, and mental health impacts that can be severe. These risks reach people living in populated areas of Cecil Township, but also McDonald, Canonsburg, and in Bridgeville in Allegheny County.

Slide 7: Researchers have found health damage as far away as 10 miles from a fracked gas well, with residents suffering birth defects, high blood pressure and signs of heart disease. Pitt researchers found 4-5 times higher risk of asthmatics experiencing severe asthma exacerbations if they lived within this 10-mile circle, putting Robinson Township, all of Bridgeville, Heidelberg, and most of Carnegie in Allegheny County at risk, as well as most of Peters Township (where I live), North Strabane, Canonsburg, Houston, and the northern part of Little Washington. So a lot of people are at risk from this one 8-bore well pad in Cecil Township.

Beyond 10 miles and people are still at risk with radioactive particles detected 12 miles away and greenhouse gas emissions driving climate change.

Slide 8: These next two slides from the Protective Buffers campaign summarize what I've just covered. All of these health symptoms and poor health outcomes have been associated with living within 10 miles of a single active fracked gas well.

Slide 9: Many of these studies were conducted in Pennsylvania. All the studies have been peer-reviewed and published.

Tens of thousands of Pennsylvanians live close to fracked gas sites. Many of us live inside of multiple concentric circles that increase my health risk and the risk to my neighbors and their children.

It's also important to note that the research shown on this slide does not represent all the studies linking fracking to adverse health impacts - they are just those that are correlated with proximity to fracked gas wells. Together, these studies identify a range of impacts up to 10 miles away from a wellpad.

Slide 10: I recently used Google Earth to find and label shale gas sites near my neighborhood in Washington County. I didn't include the many sites in Allegheny County, Westmoreland County, Greene County, or in West Virginia. I also did not include the thousands of conventional oil and gas wells that can be very hard to find on a satellite map but are also a threat to people living near them.
— The pink balloons are well pads (again, with multiple wells on them).
— Yellow balloons are compressors, both large, stand-alone compressor stations as well as compressors stacked on active well pads.
— White balloons are the three large cryogenic and gas processing facilities.
— Red balloons with a "P" are pipeline pigging stations.
— White circles are open frack water impoundments.

I wanted to see where the Canon-McMillan schools were located in relation to all this fracking infrastructure. Those school buildings are indicated by the yellow thumb tacks, and you can see just how close they are. Canon Mac is the school district that was discovered to have a large number of students who developed Ewing sarcoma and a bunch of other rare and serious cancers. Looking at this map is shocking to me as a pediatrician and a father. No one should be surprised that kids who live and learn nearby are getting sick.

Slide 11: The area inside this 10-mile circle around the Augustine well pad contains more than 54 well pads holding 269 unconventional gas wells, 5 compressor stations with more compressors located on well pads, multiple pipeline pigging sites, a large commercial landfill that has received fracking waste, 3 enormous cryogenic gas processing plants, and hundreds of residential neighborhoods, and dozens of schools, day care centers, medical clinics and hospitals. Now take each fracked gas site — each pink balloon, each yellow balloon, each white circle — and imagine the overlap of concentric circles showing greater and greater risk from very serious health consequences. When we look at the aggregate of all the emissions and pollution and waste that comes off all of these sites, we can begin to see with our own eyes and understand why people exposed to this industry are getting sick with symptoms and

illnesses we already know are linked to fossil fuels. And here's the thing: no one should be surprised.

Now ask yourself, would you build or buy a house 500 feet from a fracked gas well pad? Would you move your family to 1,000 feet from a fracking site? 2,000 feet? I'm gonna guess that knowing what we know about living close to fracking infrastructure, your answer — really the only responsible answer as a parent anyway — is no, you wouldn't.

500 feet is way too close. So is 2,000 feet. That much should be obvious. Fracking should not operate close to where people live and work, where children learn and play, where parents expect their kids will stay healthy and thrive in their homes and communities.

Don't be complicit. Be champions and protect public health. Expand the setbacks.

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11/17/25

ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012

The Medical Case for Expanded, Health-Protective Setbacks from Shale Gas Development in Pennsylvania

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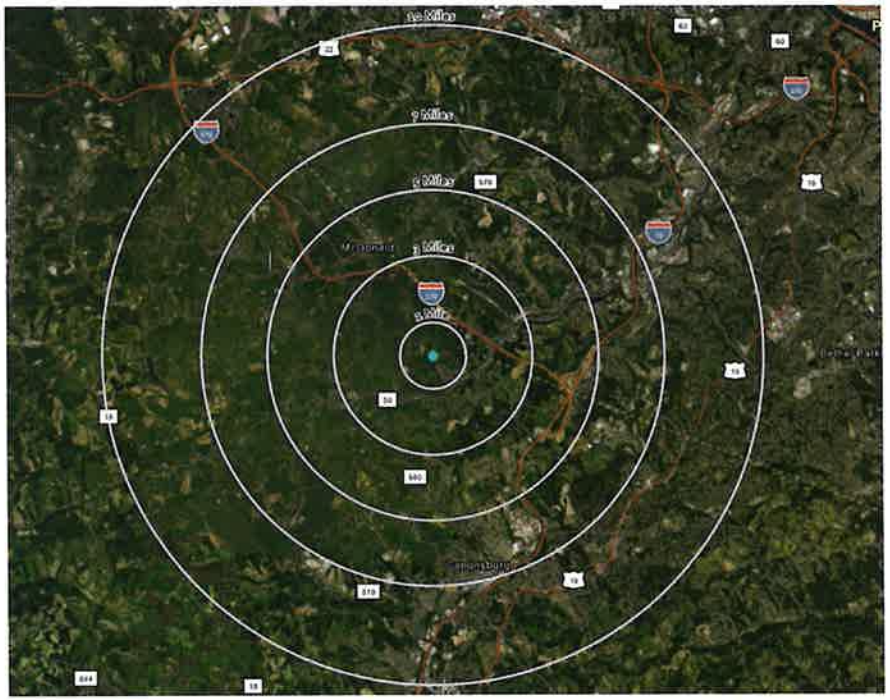


ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012

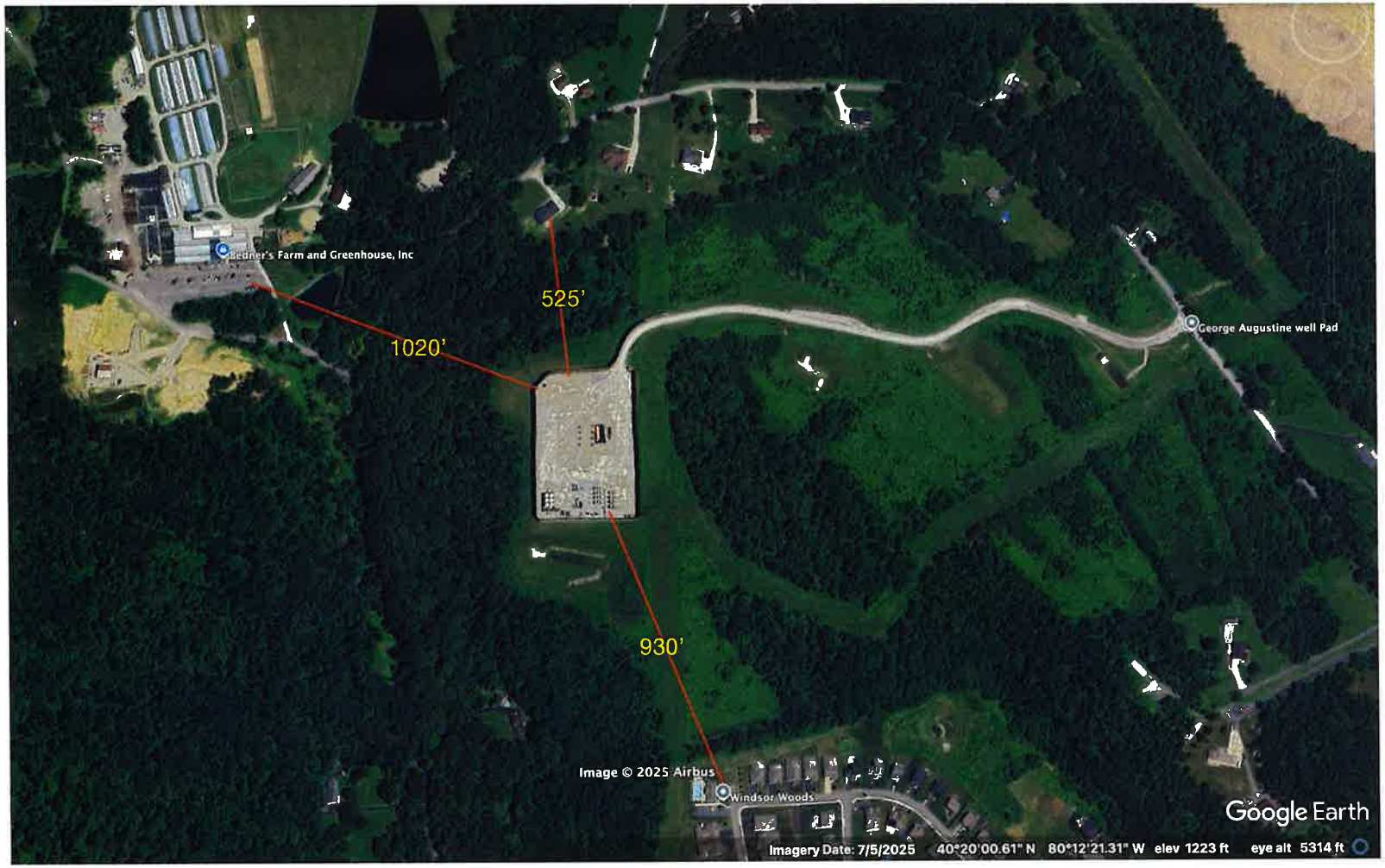
Range Resources

Augustine Well Pad

Cecil Township

Washington County, PA

ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012



Range Resources

Augustine Well Pad

Cecil Township

Washington County, PA

- 8 wells
- 8 compressors
- 6 condensate tanks

ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012

0.6 mi (1 km):

Adverse health symptoms
- Weinberger, et al (EHP), 2017
- Rabinowitz, et al 2015

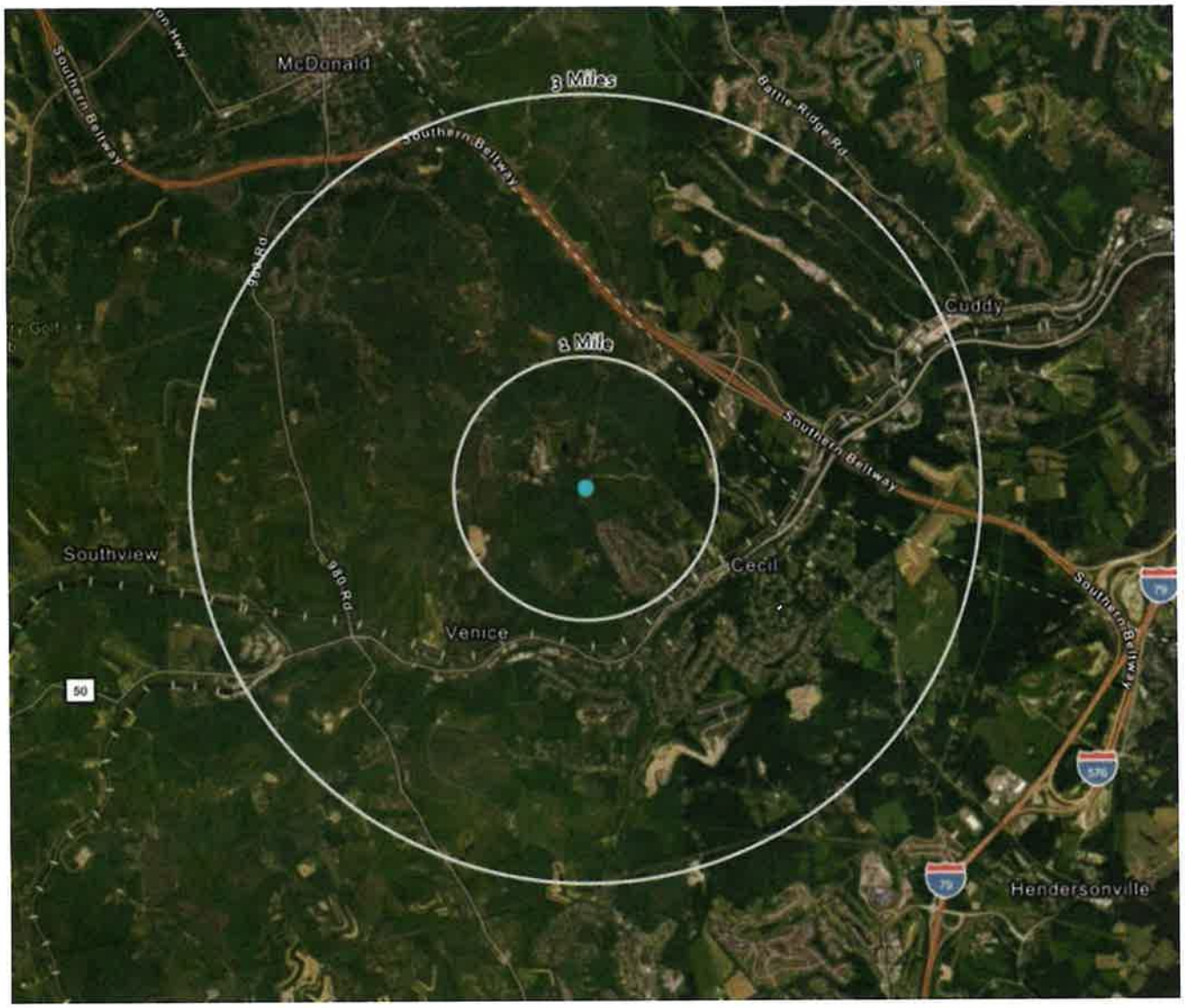
Subacute/Chronic Sx and Cancer Risk
- McKenzie, et al, 2012

Gestational Hypertension/eclampsia
- Willis, et al 2021

Birth defects (NTD, CHD, gastroschisis)
- Tang, et al, 2021

1 mile:

Cancer in children
- Clark, et al, 2022, Leukemia
- Talbott, et al (Pitt 2023) Lymphoma



ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012

2 miles:

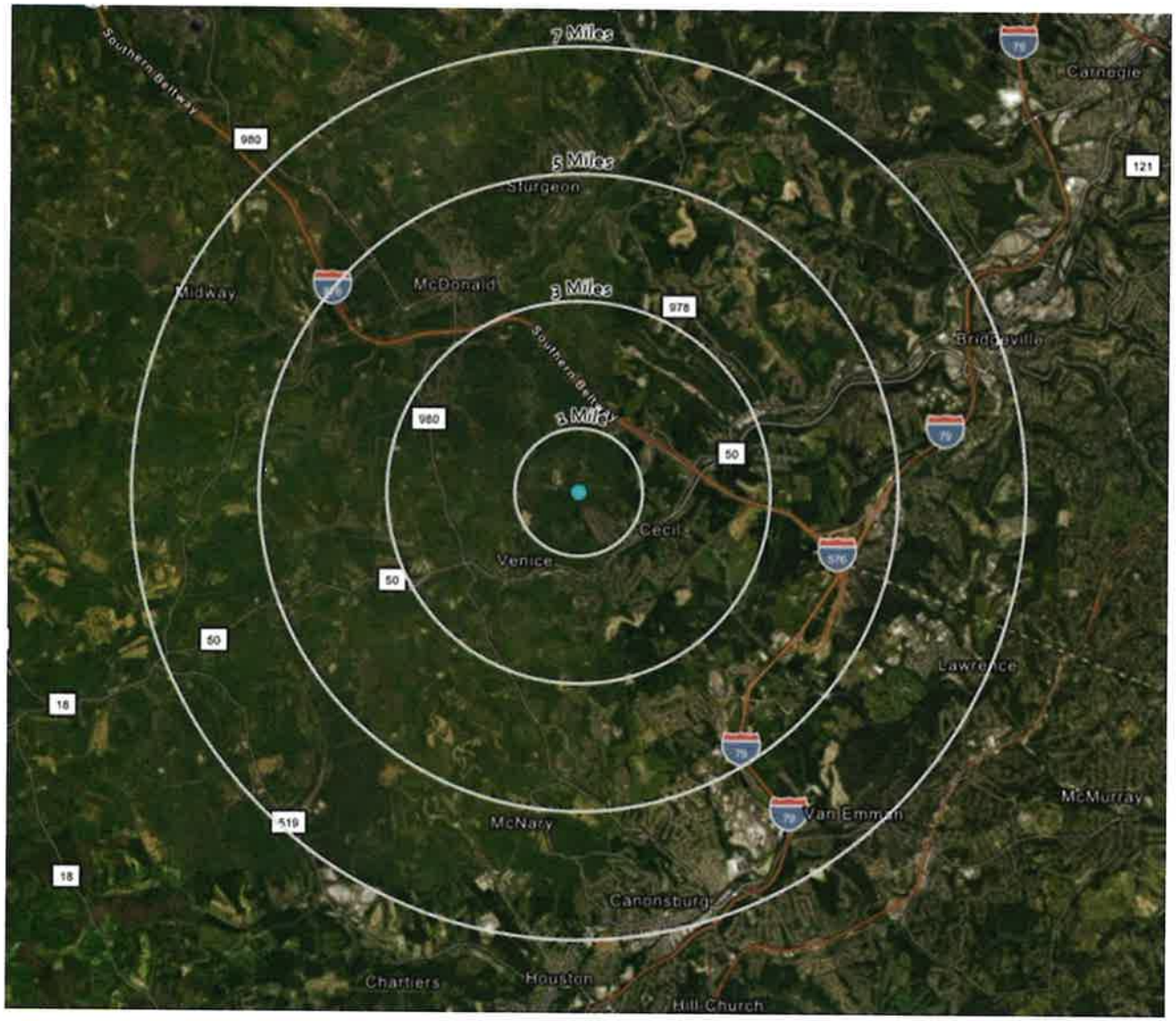
Negative fetal health effects
Currie, et al, 2017

Adverse birth outcomes (LBW, prematurity)
Hill, 2018

Stress
Willis, et al (2024) (High perceived stress up to 1.2 miles)

3 miles:

Adverse birth outcomes
Cushing, et al, 2020



ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012

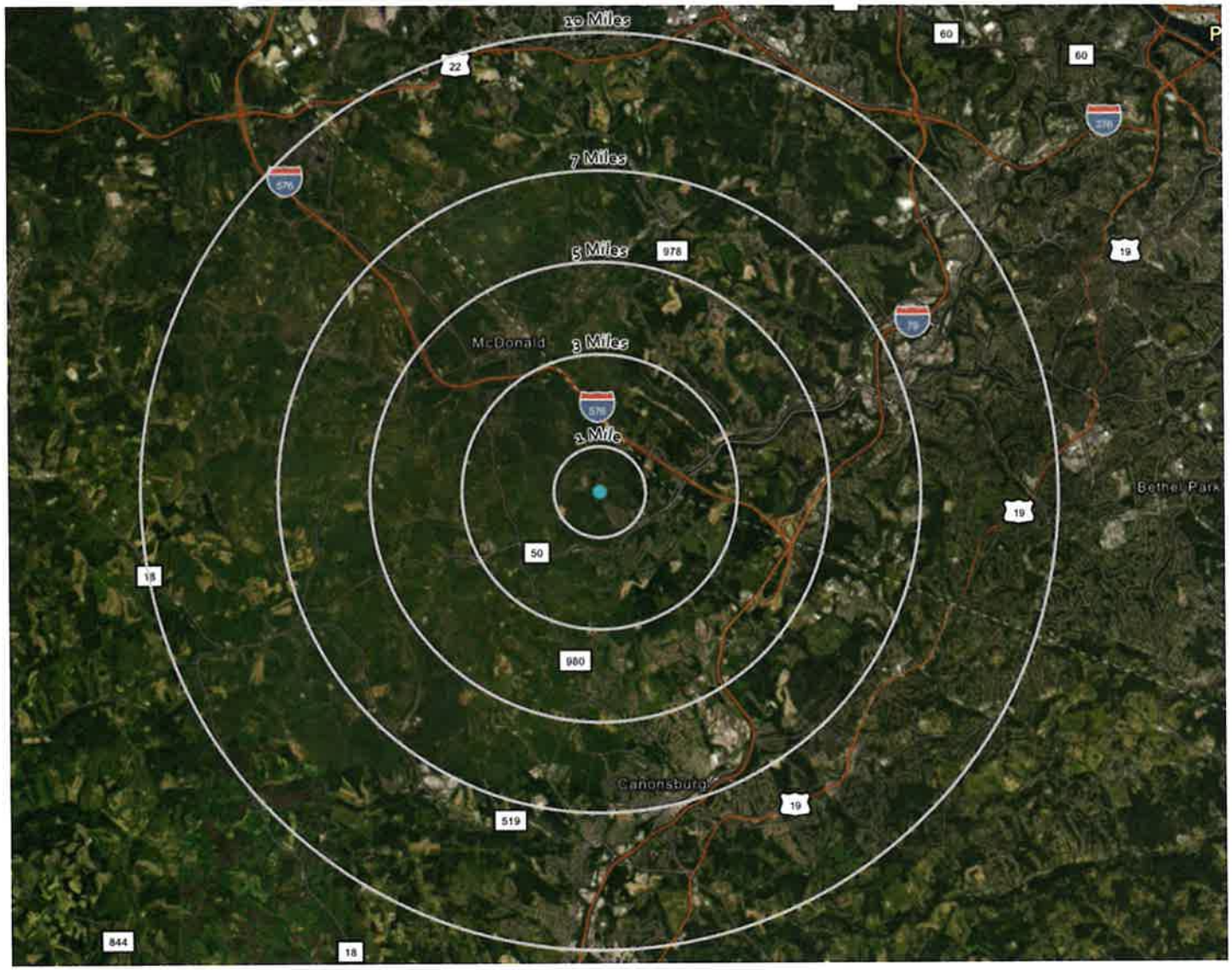
6 miles (10 km):

Adverse birth outcomes (prematurity, SGA)
Cairncross, et al, 2022

Neurological visits for migraines
Esler, et al, 2021

Birth defects (NTD, limb reductions)
Gaughan, et al, 2023

Depression
Willis, et al, 2024, moderate to severe depression up to 6 miles from UOGD



ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012

10 miles:

Birth defects
McKenzie, et al, 2014, CHD, NTDs

Hypertension, heart disease indicators
McKenzie, et al, 2019)

Congenital Heart Disease
McKenzie, et al, 2019)

Asthma
Buchanich, et al (Pitt, 2023)

Poor birth outcomes
Stacy, et al, 2015 SGA, LBW
Buchanich, et al (Pitt, 2023)

> 10 miles:

Radioactive particles detected
Li, et al 2020 — 12 miles

Climate change
Compendium 9 edition

No Safe Distance

3,281 feet (0.6 mile, 1 km):
- Headaches
- Fatigue
- Upper & lower respiratory issues
- Stress and anxiety
- Skin rashes
- Birth defects
- Adverse birth outcomes
- Pregnancy-related complications
- COVID-19 cases and mortality
- Childhood cancer mortality
- Cancer
- Short-term and long-term health impacts

5,280 feet (1 mile, 1.6 km):
- Atrial fibrillation (heart arrhythmia) in older adults and women
- Childhood cancer

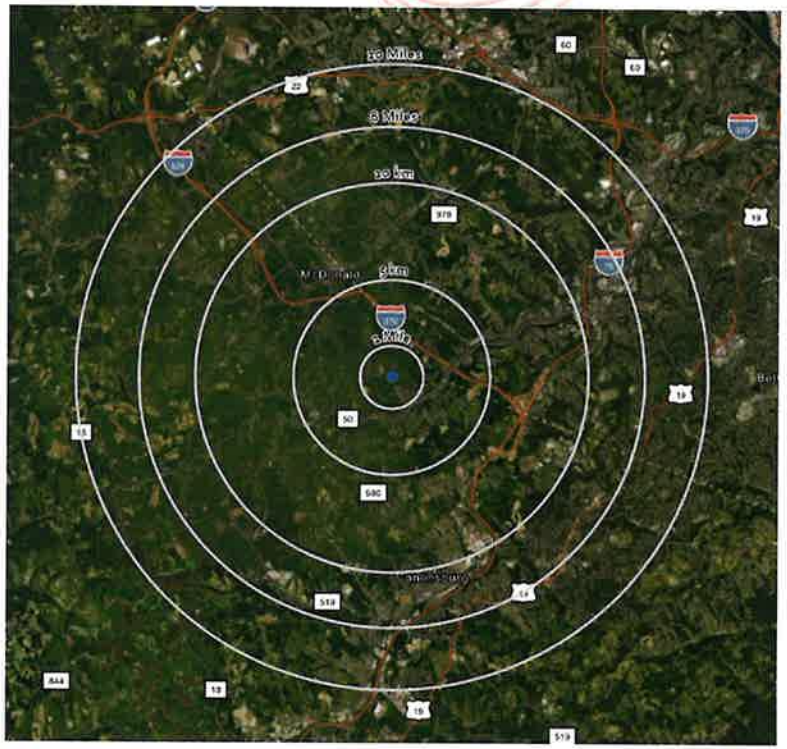
1.2 - 1.9 miles (2-3 km):
- Respiratory symptoms
- Stroke
- Stress
- Adverse birth outcomes
- Childhood cancer

3.1 miles (5 km):
- Adverse birth outcomes
- Pregnancy-related complications

6 miles (10 km):
- Neurological visits for migraines
- Birth defects
- Adverse birth outcomes
- Depression

8 miles (13 km):
- Childhood leukemia

10 miles (16 km):
- Congenital heart defects
- Adverse birth outcomes
- Asthma attacks



PROTECTIVE BUFFERS PA

No Safe Distance - References

3,281 feet (0.6 mile, 1 km):

Headaches
- Weinberger, et al, 2017

Fatigue
- Weinberger, et al, 2017

Stress/Anxiety
- Weinberger, et al, 2017

Upper and Lower Respiratory Issues
- Rabinowitz, et al, 2015
- Weinberger, et al, 2017

Skin Rashes
- Rabinowitz, et al, 2015

Birth defects
- Tang, et al, 2021
- Hill & Ma, 2022

Adverse birth outcomes
- Hill, 2024

Pregnancy-related complications
- Willis, et al, 2022
- Hill, 2024

COVID-19 Cases and Mortality
- Archer, et al, 2024

Childhood cancer mortality
- Hoang, et al, 2024

Cancer
- McKenzie, et al, 2012

Short-term and Long-term Health Effects
- McKenzie, et al, 2012

5,280 feet (1 mile, 1.6 km):

Atrial Fibrillation (Heart Arrhythmia) in Older Adults and Females
- McKenzie, et al, 2024

Childhood Cancer
- Talbott, et al, 2023, Lymphoma

1.2 - 1.9 miles (2-3 km):

Respiratory Symptoms
- Brown, et al, 2019

Stroke
- Hu, et al, 2022

Stress
- Willis, et al, 2024

Adverse birth outcomes
- Hill, 2018
- Currie, et al, 2017

Childhood Cancer
- Clark, et al, 2022, Leukemia

3.1 miles (5 km):

Adverse birth outcomes and pregnancy-related complications
- Hill, 2024
- Cushing, et al, 2020

6 miles (10 km):

Neurological visits for migraines
- Esler, et al, 2021

Birth defects
- Gaughan, et al, 2023

Adverse birth outcomes
- Cairncross, et al, 2022

Depression
- Willis, et al, 2024

8 miles (13 km):

Childhood leukemia
- McKenzie, et al, 2025

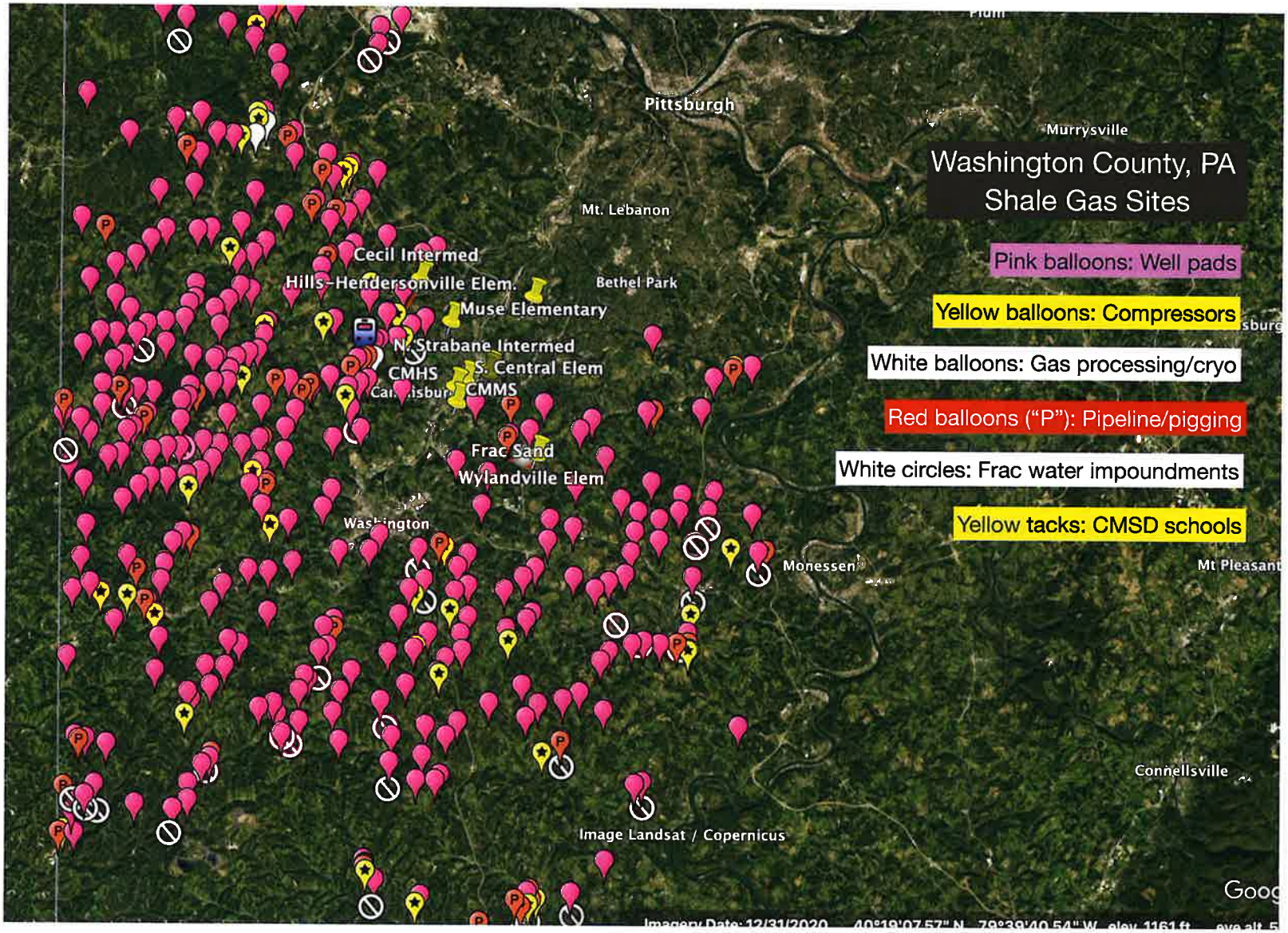
10 miles (16 km):

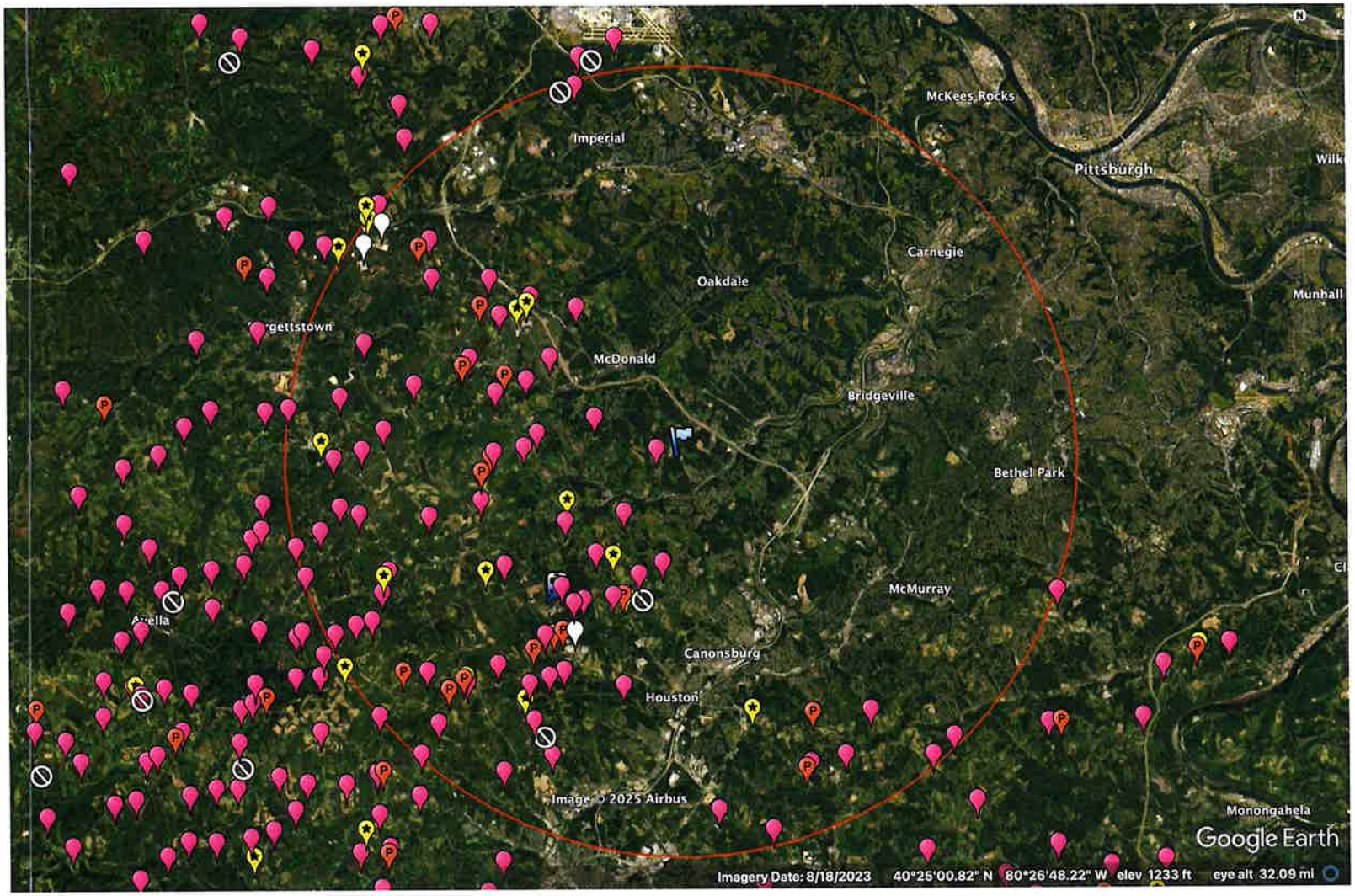
Congenital heart defects
- McKenzie, et al, 2019
- McKenzie, et al, 2014

Adverse birth outcomes
- Stacy, et al, 2015
- Buchanich, et al, 2023

Asthma Attacks
- Buchanich, et al, 2023

PROTECTIVE BUFFERS PA


Washington County, PA
Shale Gas Sites
Pink balloons: Well pads
Yellow balloons: Compressors
White balloons: Gas processing/cryo
Red balloons ("P"): Pipeline/pigging
White circles: Frac water impoundments
Yellow tacks: CMSD schools
Pittsburgh
Murrysville
Mt. Lebanon
Bethel Park
Cecil Intermed
Hills-Hendersonville Elem.
Muse Elementary
N. Strabane Intermed
S. Central Elem
CMHS
CMMS
Frac Sand
Wylandville Elem
Washington
Monessen
Mt Pleasant
Connellsville
Image Landsat / Copernicus



ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012

Augustine Well Pad
Cecil Township, PA

Within 10 miles:

- 54 well pads (269 wells)
- 5 compressor stations
- Arden Landfill
- 3 cryogenic gas processing plants
- Hundreds of residential neighborhoods
- Dozens of schools and day care centers

ENVIRONMENTAL HEALTH PROJECT
DEFENDING PUBLIC HEALTH SINCE 2012

The Medical Case for Expanded, Health-Protective Setbacks from Shale Gas Development in Pennsylvania

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President, Physicians for Social Responsibility PA

AAP Council on Environmental Health & Climate Change

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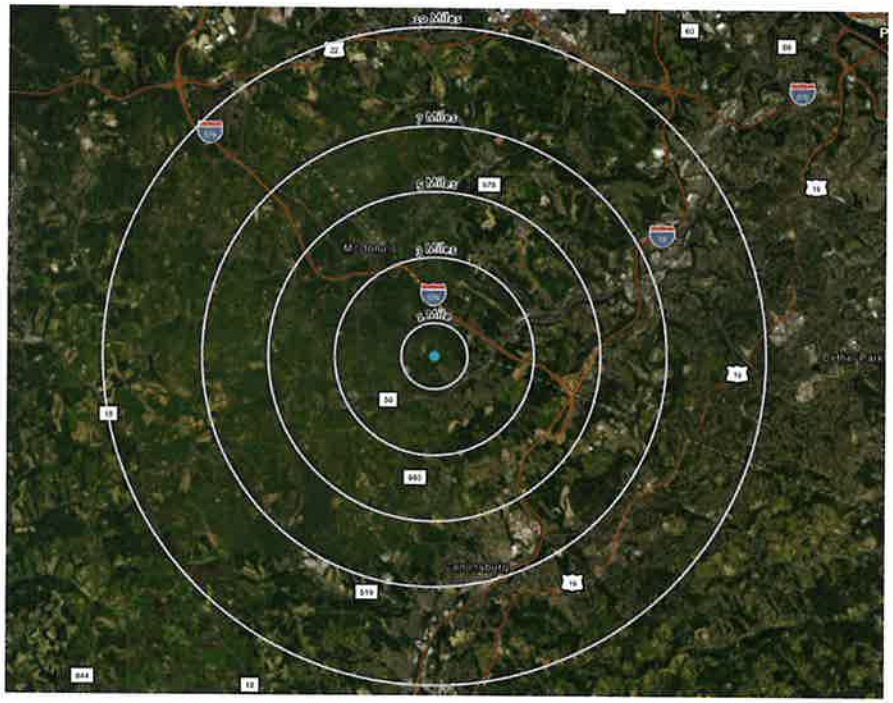


MARCELLUS SHALE COALITION

Testimony of

Patrick Henderson
Marcellus Shale Coalition
Before the
House Environmental and Natural Resource Protection Committee

November 17, 2025

Good morning, Chairman Vitali and Chairman Rader. My name is Patrick Henderson and I serve as Vice President of Government Affairs and Communications for the Marcellus Shale Coalition (MSC).

The MSC is a state-wide trade association representing more than 150 energy companies from the upstream, midstream, and downstream sectors, and those who supply goods and professional services to the industry, including our partners in the skilled building trades. Our members are fully committed to working with local, county, state and federal government officials to facilitate the safe development of natural gas resources in the Marcellus, Utica and related formations.

On behalf of the MSC and its members, we appreciate the opportunity to share this testimony regarding House Bill 1946, related to banning future natural gas development by expanding setback distances for unconventional natural gas well sites and related infrastructure.

Introduction

House Bill 1946 is premised upon a 2020 Grand Jury report which exhibited a jarring lack of understanding regarding how natural gas development is conducted and the statutory and regulatory requirements already in place. The report and accompanying recommendations were so egregious that former Governor Tom Wolf's Department of Environmental Protection publicly stated that it did "*a disservice to the citizens of the Commonwealth*" and that many aspects of the report "*were factually and legally inaccurate.*"

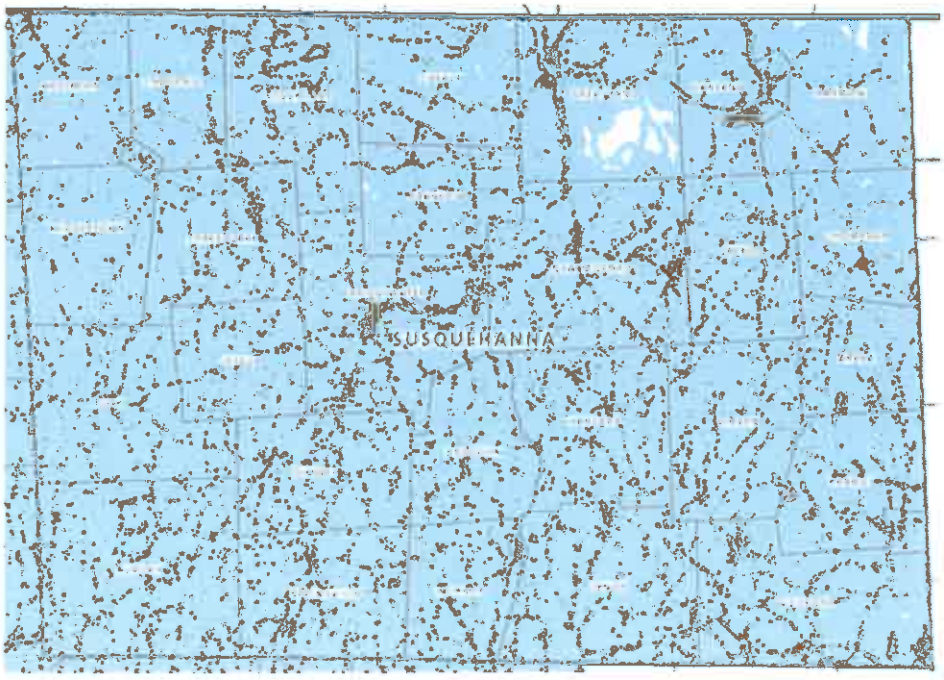
While House Bill 1946 ostensibly is about expanding setbacks between unconventional natural gas wells and certain features or resources, the reality is that it is nothing but a backdoor ban on new unconventional natural gas development. This fact is indisputable.

To illustrate this, members of the MSC with operations in various regions of Pennsylvania's shale play used standard GIS mapping tools to measure the impact of a proposed 2,500 feet (and 5,000 feet for schools, hospitals and select other facilities) setback would be within leading production counties of the Commonwealth.

The following chart illustrates the percentage of land off limits for development as proposed under the setback distances contained in House Bill 1946:

County	Percent of Land Banned Under HB 1946
Allegheny	99.9%
Armstrong	100%
Beaver	99.9%
Bradford	97.9%
Butler	100%
Fayette	93%
Greene	100%
Indiana	99%
Jefferson	96%
Lycoming	86.5%
Somerset	96%
Sullivan	87.1%
Susquehanna	99.5%
Tioga	88.3%
Washington	99.8%
Westmoreland	96%
Wyoming	92.6%

As this committee knows, many of these counties are extremely rural. Yet even these rural counties would face development bans of up to 99% of their surface land. Consider this map of Susquehanna County – one of the largest natural gas producing counties in the state:



Every light and dark blue area within this map would be prohibited from surface development. This also does not factor in other critical elements of the development process, including whether the non-prohibited areas are leased for development, have access to infrastructure, or even have recoverable natural gas resources underlying the surface. As geologic data and experience have shown, natural gas resources are not evenly distributed across the entire Commonwealth.

Current Setbacks

It is important to understand the purpose of setbacks (beyond their manipulation by some to ban the industry). Setbacks serve as a reasonable buffer between well development activity (well pad construction; installation of stormwater management controls; drilling; completion; well site restoration) and a public or private resources (stream, occupied building, water well). They are not a substitute for a comprehensive and robust regulatory regimen, or for the industry's best practices that supplement and often serve as the basis for the regulatory requirements.

Aside from those states which have adopted punitive setback distances to effectively ban the industry, Pennsylvania currently has the most stringent setback distances of any of the five largest hydrocarbon producing states in the nation.

As part of its legislative efforts to modernize Pennsylvania's shale gas requirements through Act 13 of 2012, the General Assembly increased significantly the setback distances between a vertical unconventional well and water wells (500 feet), existing buildings (500 feet), streams, springs and wetlands (300 feet), and public water supplies (1,000 feet). Additionally, a separate 100 feet setback must be maintained from the edge of the well pad and any stream, spring, wetland or body of water.

These setback distances complement the significant well site and well bore construction standards in place to protect the environment and public health. The host of legislative and regulatory requirements that govern every step of the unconventional well development process are among the most stringent in the nation, including the requirement for multiple layers of steel casing and cementing to protect the aquifer and drinking water supplies, as illustrated below:

Grandfathering

As committee members know, unconventional well pads are designed to host multiple wells in relative close proximity to each other so as to minimize the surface footprint of the well pad. Not all wells are drilled concurrently, as market conditions significantly influence when it makes sense to invest the capital necessary for each well. It is, therefore, quite common for an operator to return to a well pad to drill additional wells.

When Act 13 of 2012 was enacted, the General Assembly recognized this reality and grandfathered in these pads from the new and expanded setback distances. This allowed future wells to be drilled in a manner that minimized new earth disturbance, while subjecting new well pads to the increased setbacks. It is worth noting that House Bill 1946 does not allow for such grandfathering, resulting in significant, stranded investment for operators who have already expended money on constructing a well pad that cannot be fully developed. Make no mistake, however, given that HB 1946 is clearly a de facto ban, even if such a grandfathering clause was included, it would do little to ameliorate the devasting impacts of this legislation.

Poor Drafting Compounds Poor Policy

House Bill 1946 amends the well location restrictions of Section 3215 subsection (A) by authorizing a waiver of certain setback distances, provided that the Department of Environmental Protection is satisfied that additional measures proposed by the applicant are protective of the environment. However, House Bill 1946 also creates a new paragraph (4) under subsection (B) which essentially repeats the setback distance restrictions for streams, wetlands, buildings and water wells and then states unequivocally "The department may not waive the distance restrictions."

The language within House Bill 1946 is inconsistent, confusing and poorly drafted and creates a false impression that PA DEP may waive distance restrictions. However, it is clear from a statutory construction perspective, the language within new paragraph (4) prohibits distance setbacks restrictions from being waived.

White Paper

Working with its member companies, the MSC developed the attached White Paper, which analyzes in greater detail the impact of a proposed 2,500/5,000 feet setback. It is clear that some of the most rural and remote areas of the Commonwealth – areas which retain outstanding environmental attributes with respect to air and water quality despite nearly two decades of development – will be off limits for future development.

The MSC offers this White Paper as part of the record of this Committee's proceedings.

Conclusion

House Bill 1946 is not a serious proposal worthy of this Committee's time and consideration. It is a frontal attack on the private property rights of Pennsylvanians; on the men and women in our

building trades who rely upon the industry for their livelihood; the interests of our national security; and the interests of ratepayers concerned about energy affordability.

Its premise is belied by two decades of operational experience and industry evolution, which demonstrates that a well-regulated industry that insists on operational excellence is compatible with meeting the energy needs of Pennsylvanians.

Thank you for the opportunity to testify today and I look forward to your questions.

Analysis of Proposals to Expand Setback Distances for Unconventional Natural Gas Development up to 5,280 Feet

Original Purpose of Setbacks

Setbacks serve as a reasonable buffer between well development activity and a public or private resource over the life of a well. Setbacks complement a robust permitting and inspection regimen, along with industry's best practices and standards.

What are the Primary Means of Protecting Natural Resources and Public Health?

Pennsylvania employs a comprehensive statutory and regulatory framework to ensure that exploration, production and transportation of natural gas resources is done in a manner protective of the environment and public health.

Pennsylvania's primary statute for regulating natural gas development is Act 13 of 2012. This Act updated the Oil and Gas Act to modernize the well drilling, completion and production standards applicable to shale gas wells in Pennsylvania. To fulfill these statutory requirements, a host of permits are required of operators, accompanied by criteria specific to the facet of development. These permits and accompanying regulations are revised on a regular basis to ensure maximum protection for the environment and public health. Examples of permits include:

- An erosion and sediment control permit to construct the well pad, pipeline and related infrastructure.
    - This permit ensures proper and safe construction of the well site to protect from runoff and any earth-moving related impacts to environmental resources.
- A well drilling permit to drill and operate the well.
    - This permit and related regulations include comprehensive well construction and operating standards, such as casing and cementing the well to protect water supplies and aggressive monitoring inspections of the wellbore's mechanical integrity.
- An air quality permit, or adherence to robust operating and emission control criteria if the well will operate below applicable permit emission thresholds.
    - This permit ensures that all aspects of operations adhere to air quality and emissions standards.
- Waste permits to process or handle or transport liquid waste.
    - These permits ensure all waste is tested, handled, transported, and reused or disposed of in accordance with all laws and existing public health and safety standards.
- Strict regulations governing production fluids and secondary containment for activities on the well site. Operators also routinely test well water before drilling, and by law face a rebuttable presumption standard should a water supply appear to be impacted. This standard was significantly expanded in 2012 to reflect modern shale gas development.
- County and/or municipal requirements, as applicable.

Additional Pennsylvania statutes, such as the Clean Streams Law, the Air Pollution Control Act, the Waste Management Act, the Radiation Protection Act, and others also apply to the industry. Additional requirements of operators for both surface and subsurface activities are found in regulations promulgated by the PA Department of Environmental Protection (25 Pa. Code Chapter 78a).

Current Setback Distances in PA

Under Act 13 of 2012, the General Assembly significantly expanded setback distances in Pennsylvania. Currently, setback distances from a vertical wellbore and a resource include:

- 300 feet from streams, springs, wetlands and bodies of water
- 500 feet from a water well and existing building
- 1,000 feet from a public drinking water supply intake

PA's current setbacks are the strictest among the top five natural gas producing states in the nation.

Legislative Proposals

Legislation was introduced in the state Senate and state House of Representatives last session and is anticipated to be re-introduced in the 2025-2026 session. These bills would increase existing setback distances while imposing new setback distances, as follows:

- From 500 feet to 2,500 feet for an existing water well or building.
- From 1,000 feet to 2,500 feet for a public drinking water supply intake, except a reservoir.
- From 1,000 feet to 5,000 feet for a reservoir.
- From 500 feet to 5,000 feet from a school, hospital, compressor station, tank or storage facility.

Regulatory Proposal

The Washington, D.C. based Environmental Integrity Project, along with the Clean Air Council, submitted a rulemaking petition (the Regulatory Proposal) to the Environmental Quality Board (EQB). If accepted for further study by the EQB and acted upon by the PA Department of Environmental Protection (PA DEP), the Regulatory Proposal would seek to impose expanded setback distances via a regulation, sidestepping the need for legislative approval. The MSC does not believe that the EQB has the statutory authority to adopt the Regulatory Proposal.

As submitted, the Regulatory Proposal would impose new setback distances, as follows:

- From 300 feet to 750 feet for a stream, spring, wetland or body of water.
- From 500 feet to 3,281 feet for a private water well.
- From 500 feet to 3,281 feet for an existing building.
- From 1,000 feet to 3,281 feet for a reservoir, public water well or surface water intake.
- From 500 feet to 5,280 feet for school, daycare, hospital or other structure serving vulnerable populations.

Neutralizing Existing Well Pads and Infrastructure

A typical unconventional well pad may host numerous (perhaps more than 10) wells on the pad over its lifetime. This multi-well approach minimizes surface disturbances, including pipeline right of ways and access roads, while maximizing efficient development of the resource.

Notably, unlike Act 13 which applied increased setbacks to newly constructed well pads, these proposals would prohibit any well from being drilled within these setback distances after its effective date.

This restriction would render thousands of existing well pads already connected to existing infrastructure incapable of hosting additional wells thereby permanently stranding the remaining untapped resource that the well pad was designed to develop. As a result, property owners who have leased or are contemplating leasing their oil and natural gas rights would be prohibited from realizing royalties through the development of their property.

Analysis of Impacts of Legislative and Regulatory Proposals

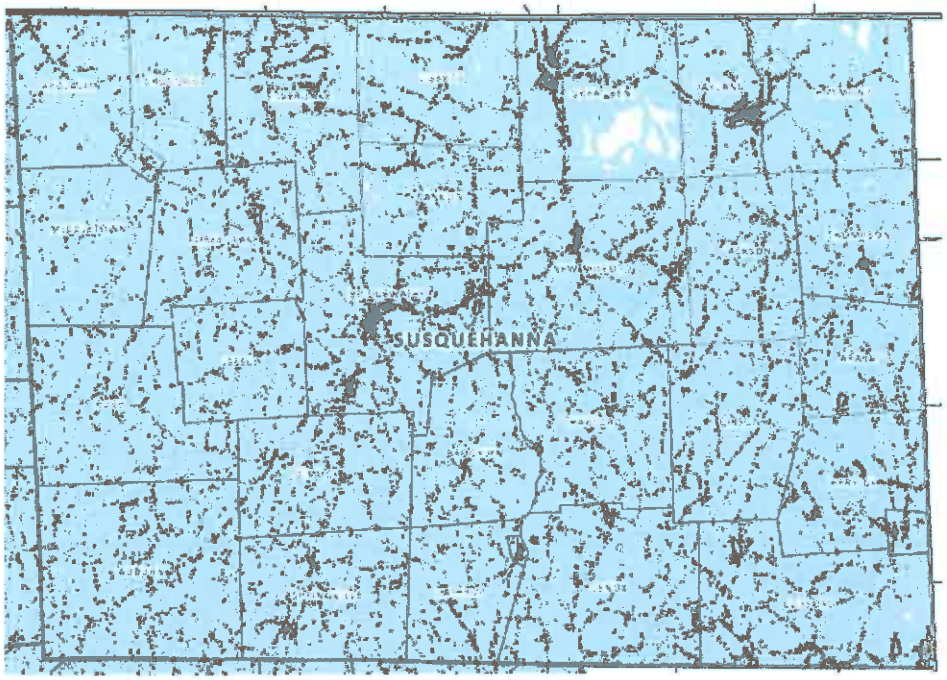
The proposed setback distances would prohibit the construction and development of unconventional natural gas wells in an overwhelming majority of the Commonwealth where unconventional natural gas is currently being produced safely and responsibly. This shortsighted approach will deprive tens of thousands of property owners who own oil and gas rights from realizing the financial benefit of their own property, is not justified or supported by any scientific or health data and would threaten energy production and therefore national security in the United States.

For example, an MSC analysis of the proposed legislation demonstrates that for some of the top producing counties in Pennsylvania, an overwhelming percentage of the county would be precluded from hosting an unconventional natural gas well. The following table illustrates this analysis:

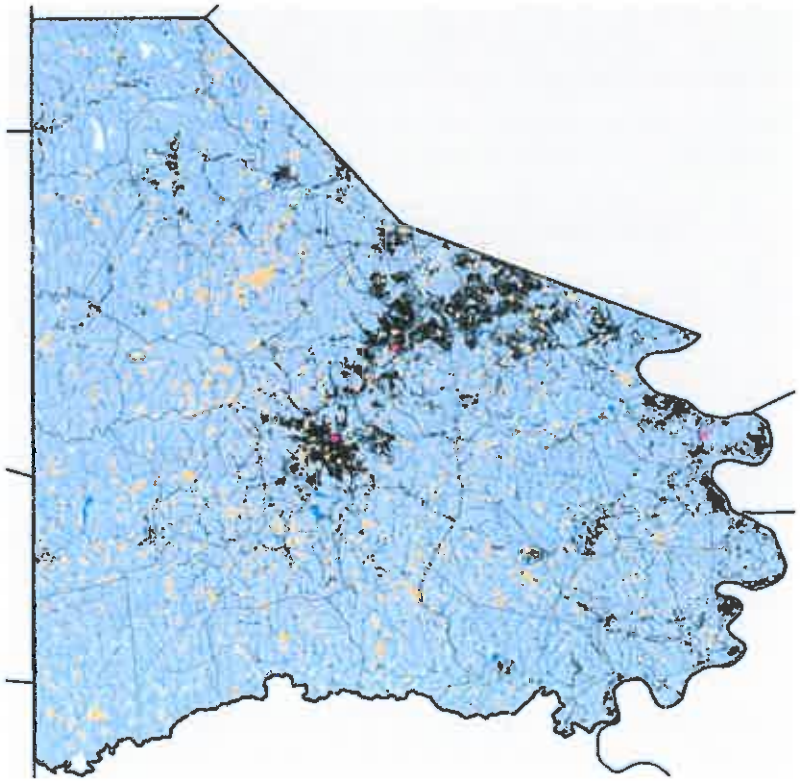
County	Percent of Land Banned Under EQB Petition*
Allegheny	99.9%
Armstrong	100%
Beaver	99.9%
Bradford	97.9%
Butler	100%
Fayette	93%
Greene	100%
Indiana	99%
Jefferson	96%
Lycoming	86.5%
Somerset	96%
Sullivan	87.1%
Susquehanna	99.5%
Tioga	88.3%
Washington	99.8%
Westmoreland	96%
Wyoming	92.6%

**Percent of land refers to total land in county, not land actually available for development. See "Other Factors Limiting Amount of Developable Acreage" for additional context.*

SUSQUEHANNA COUNTY



WASHINGTON COUNTY



Blue areas represent land banned from development under proposed legislation.

Other Factors Limiting Amount of Developable Acreage

It is worth noting that just because a limited amount of acreage may fall outside of the proposed setback distances does not mean that this acreage can be developed.

There are other factors, including geologic limitations of the resource, lack of legal surface access, or insufficient infrastructure to gather, process and transport natural gas or other considerations which may neutralize any acreage remaining outside of the proposed setback distances. For example, while 35% of land in Lycoming County *may appear* to still be available for development, in reality – when factoring in state parks and forests (under a leasing moratorium) and the lack of any developable Marcellus acreage in the southern portion of the county – ***less than 1.5% of developable land in Lycoming County would actually be available for exploration and production under the proposed setback distances***.

Impacts of a Natural Gas Development Ban

Increased setback distances are meant to prohibit further natural gas development and deprive property owners of their oil and gas rights. The consequences of doing so would be costly:

- Declining domestic energy production
- Increased electricity costs to consumers
- Decreased reliability of our energy grid
- Increased reliance on foreign dictatorships
- Increased threats to our energy – and thereby national – security
- Lost income for Pennsylvania royalty owners
- Precipitous decline in tax revenues collected from the industry, including:
    - Impact Fee revenue, which has generated over $2.5 Billion to support local governments and environmental investments across Pennsylvania.
    - Personal income, corporate net income, sales and use and other business taxes which have generated billions of dollars to fund schools, hospitals, health care, public safety and other critical services.
- Jobs and capital investment devastated, threatening the livelihoods of 480,000 Pennsylvanians – many within the skilled trades unions – and pushing entire industries, service companies and downstream manufacturers out of Pennsylvania.

Pennsylvania citizens and consumers want affordable, clean, domestic energy. Pennsylvania-produced natural gas delivers on each of these needs. Increasing setbacks is a misguided policy that threatens our national security and prosperity while impeding the property rights of Pennsylvania citizens.

EARTHWORKS

Pennsylvania House Environmental and Natural Resource Protection Committee
HB 1946 Hearing
Monday, November 17, 2025

Testimony: Melissa Ostroff, MPH, Pennsylvania Policy and Field Advocate, Earthworks

My name is Melissa Ostroff, and I am the Pennsylvania Policy and Field Advocate with Earthworks. Earthworks' mission is to protect communities and the environment from the adverse impacts of mineral and energy development while promoting sustainable solutions. Earthworks is part of the Protective Buffers PA coalition, a collaborative effort between frontline residents and environmental groups advocating for greater distances between fracking infrastructure and the places where people live, work, and play.

There is no substitute for distance when it comes to protecting people from the health impacts of fracking. While Earthworks supports pollution controls to reduce emissions, we know that pollution controls can and do fail. They also cannot completely eliminate exposure to pollution for nearby residents, which is often invisible. We recognize the hundreds of peer-reviewed studies that demonstrate proximity to shale gas extraction is associated with poor health outcomes. As a result, Earthworks supports HB 1946 and its goal of increasing setback distances for shale gas wells and infrastructure.

In my role at Earthworks, I use my education and background in public health and optical gas imaging to shine a light on the impacts of invisible pollution from the oil and gas industry. I received my certification as an optical gas imaging thermographer alongside employees from the oil and gas industry through the Infrared Training Center. The Environmental Protection Agency defines optical gas imaging (OGI) as "making visible emissions which may otherwise be invisible to the naked eye." OGI was approved as an alternative work practice for oil and gas sector leak detection and repair by the EPA in 2008. OGI cameras are used throughout the oil and gas industry to detect methane and other hydrocarbon emissions.

The FLIR GF 320 optical gas imaging camera that I use in my role at Earthworks is designed to detect gasses that absorb infrared radiation in the range of 3.2 - 3.4 micrometers. The camera's filter only allows infrared energy between these wavelengths to transmit through to the detector. Most hydrocarbons, including methane and volatile organic compounds (VOCs) like benzene, toluene, ethylbenzene, and xylene, absorb energy near 3.3 micrometers. While the camera cannot quantify emissions or speciate between different hydrocarbons, the narrow range of the filter provides indisputable evidence of otherwise invisible hydrocarbon releases from the industry. As a result, OGI cameras are the industry and regulatory standard for detecting methane and VOCs that are emitted from oil and gas equipment.

Earthworks has been using OGI technology to inspect oil and gas facilities for over a decade in multiple states across the country. In my role, I have conducted fieldwork in 23 counties across Pennsylvania. The footage Earthworks has captured shows air pollution from unconventional oil and gas development regularly goes beyond facility fencelines and moves in the direction of nearby homes. While this pollution is not visible to the naked eye, our camera provides visual evidence that communities living in close proximity to well pads and other fracking infrastructure are breathing in pollution from the industry.

Two weeks ago I conducted fieldwork in Washington County, where I filmed pollution from two well pads that were actively being fracked. On paper, both well pads should be among the “cleanest” examples of fracking in the state, at least according to how they are marketed to the public and policymakers. That is because they each were using so-called “electrified” fracking engines. However, these engines are run using gas-turbine generators, and as you can see from the first well pad, these generators produce a lot of pollution. This particular well pad is located directly next to a residential property, and the plume I filmed was traveling in the direction of the home. Would you want your children playing in this yard?

The second well pad I filmed is part of CNX’s so-called “Radical Transparency” program. CNX has made numerous claims stating that its fracking operations pose "no material impact" to health and are "inherently good" for communities. However, optical gas imaging shows that even one of their “radically transparent” well pads outfitted with an “electrified” fracking engine still emits invisible hydrocarbon pollution that can be seen from hundreds of feet away. Why are we allowing industrial facilities like this one to be placed just over the fence from schools and homes?

Unconventional gas development cannot happen without significant air pollution, even under what could be marketed as the “best of circumstances.” Pollution from generators such as those in my videos is usually not even calculated into permits because the equipment isn’t stationary. Additionally, fugitive emissions and leaks due to equipment malfunctions are a frequent problem in the oil and gas industry – something Earthworks has documented numerous times at well sites across the country. What the optical gas imaging camera makes clear is that this air pollution – whether intentional or accidental – does not care about fencelines. In Pennsylvania, new well pads continue to be built in areas that are already densely developed with fracking infrastructure, leading to cumulative impacts. According to the Oil and Gas Threat Map developed by Earthworks and FracTracker Alliance, nearly 1.5 million Pennsylvanians already live within ½ mile of active oil and gas production facilities.

When we build well pads, compressor stations, and other oil and gas infrastructure next to homes, schools, churches, and parks, Pennsylvania residents continue to be exposed to pollution from this industry. Setback distance requirements must reflect reality by ensuring that industrial facilities such as these are kept at a safe distance from the places where Pennsylvanians – especially children and other vulnerable residents – live, learn, and recreate. A large and growing body of research, much of it originating within Pennsylvania, clearly shows both the acute and the chronic health consequences of living in proximity to oil and gas

development. This reality was echoed in the recommendations of Pennsylvania's 43rd Statewide Grand Jury report over five years ago. The setbacks proposed in this bill are the minimum necessary to protect the health and safety of all Pennsylvanians, and I urge you to seriously consider this legislation. Public health must be the top priority when it comes to Pennsylvania's siting of oil and gas facilities. As our optical gas imaging cameras have been making clear for years, and as I have shared in this chamber before, what we don't see can hurt us.

PRINTER'S NO. 2455

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 1946 Session of 2025

INTRODUCED BY VITALI, WAXMAN, HILL-EVANS, K.HARRIS, PROBST, RABB, HOHENSTEIN, WEBSTER, KENYATTA AND FRANKEL, OCTOBER 14, 2025

REFERRED TO COMMITTEE ON ENVIRONMENTAL AND NATURAL RESOURCE PROTECTION, OCTOBER 16, 2025

AN ACT

Amending Title 58 (Oil and Gas) of the Pennsylvania Consolidated Statutes, in development, further providing for well location restrictions.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

Section 1. Section 3215(a) and (b) of Title 58 of the Pennsylvania Consolidated Statutes are amended and the section is amended by adding a subsection to read:

§ 3215. Well location restrictions.

(a) General rule.--Wells may not be drilled within 200 feet, or, in the case of an unconventional gas well, [500] 2,500 feet, measured horizontally from the [vertical well bore] perimeter of the well pad to a building or water well, existing when the copy of the plat is mailed as required by section 3211(b) (relating to well permits) without written consent of the owner of the building or water well. Unconventional gas wells may not be drilled within [1,000] 2,500 feet measured horizontally from the

[vertical well bore] perimeter of the well pad to any existing water well, surface water intake, reservoir or other water supply extraction point used by a water purveyor [without the written consent of the water purveyor. If consent is not obtained and]. If the distance restriction would deprive the owner of the oil and gas rights of the right to produce or share in the oil or gas underlying the surface tract, the well operator [shall be granted] may submit a request for a variance from the distance restriction [upon submission of]. As part of the variance request, the well operator shall submit a plan identifying the additional measures, facilities or practices as prescribed by the department to be employed during well site construction, drilling and operations. [The variance] If the department is satisfied that the plan adequately addresses these additional measures, facilities or practices, the variance shall be granted and shall include additional terms and conditions required by the department to ensure safety and protection of affected persons and property, including insurance, bonding, indemnification and technical requirements. Notwithstanding section 3211(e), if a variance request has been submitted, the department may extend its permit review period for up to 15 days upon notification to the applicant of the reasons for the extension.

(b) Limitation.--

(1) No well site may be prepared or well drilled within 100 feet or, in the case of an unconventional well, [300] 750 feet from the [vertical well bore or 100 feet from the edge of the well site, whichever is greater,] perimeter of the well pad, measured horizontally from any solid blue lined stream, spring or body of water as identified on the most

current 7 1/2 minute topographic quadrangle map of the United States Geological Survey.

(2) The edge of the disturbed area associated with any unconventional well site must maintain a [100-foot] 750-foot setback from the edge of any solid blue lined stream, spring or body of water as identified on the most current 7 1/2 minute topographic quadrangle map of the United States Geological Survey.

(3) No unconventional well may be drilled within [300] 750 feet of any wetlands greater than one acre in size, and the edge of the disturbed area of any well site must maintain a [100-foot] 750-foot setback from the boundary of the wetlands.

(3.1) Except as provided under paragraph (3.2), no unconventional well or related unconventional drilling infrastructure shall be located within 2,500 feet of a building, water well or water supply.

(3.2) No unconventional well or related unconventional drilling infrastructure shall be located within 5,000 feet of a school, hospital, long-term care facility, child-care facility or facility that houses or serves individuals with intellectual or developmental disabilities.

(4) The department [shall] may not waive the distance restrictions [upon submission of a plan identifying additional measures, facilities or practices to be employed during well site construction, drilling and operations necessary to protect the waters of this Commonwealth. The waiver, if granted, shall include additional terms and conditions required by the department necessary to protect the waters of this Commonwealth. Notwithstanding section

3211(e), if a waiver request has been submitted, the department may extend its permit review period for up to 15 days upon notification to the applicant of the reasons for the extension].

* * *

(h) Definition.--For purposes of this section, the term "related unconventional drilling infrastructure" shall include any of the following:

(1) A compressor station.

(2) A pit or impoundment containing drilling cuttings, flowback water, produced water or hazardous materials, chemicals or waste.

(3) A tank containing hazardous materials, chemicals, condensate, waste, flowback or produced water.

(4) Any equipment or structure used for the storage or handling of water, chemicals, fuels, hazardous materials or solid waste on a well site.

Section 2. This act shall take effect in 60 days.

HOUSE OF REPRESENTATIVES
DEMOCRATIC COMMITTEE BILL ANALYSIS

Bill No:	HB1946 PN2455	**Prepared By:**	Evan Franzese (717) 783-4043,6359
Committee:	Environmental & Natural Resource Protection	**Executive Director:**	Evan Franzese
Sponsor:	Vitali, Greg		
Date:	11/7/2025		

A. Brief Concept

Increases setbacks for unconventional gas wells.

C. Analysis of the Bill

HB 1946 would amend Title 58 (Oil and Gas) to increase setbacks for unconventional oil and gas wells and related infrastructure. This bill would also generally prohibit the department from waiving distance restrictions.

Unconventional Well Setback Distance

Increases setbacks from the perimeter of the well pad to a **building or water well** from 500 feet to 2,500 feet.

Increases setbacks from the perimeter of the well pad to a **water supply extraction point** (including water wells, surface water intakes, or reservoirs) from 1,000 feet to 2,500 feet.

Removes exemption for water supply extraction points if written consent is received from the water purveyor.

Allows well operators to request a variance from DEP, which shall be granted if the department is satisfied that the plan adequately addresses additional safety measures.

Increases setbacks from the perimeter of the well pad or edge of the disturbed area to a **wetland, stream, spring or body of water** from 100/300 feet to 750 feet.

- Covered bodies of water are based on USGS maps.

Unconventional Well Drilling Infrastructure Setbacks

Establishes setbacks for unconventional wells and related infrastructure as follows:

2,500 feet from a building, water well or water supply.

5,000 feet from a school, hospital, long-term care facility, child-care facility or facility that houses individuals with intellectual disabilities.

Definitions

Related unconventional drilling infrastructure shall be defined to include:

- A compressor station.
- A pit or impoundment containing drilling cuttings, flowback water, produced water or hazardous materials, chemicals or waste.
- A tank containing hazardous materials, chemicals, condensate, waste, flowback or produced water.
- Any equipment or structure used for the storage or handling of water, chemicals, fuels, hazardous materials or solid waste on a well site.

Effective Date:

60 days

G. <u>Relevant Existing Laws</u>

Currently under Title 58 (Oil and Gas), the setbacks for unconventional natural gas well sites are:

- 500 feet from any building and
- 1,000 feet from any water well, surface water intake, reservoir or other water supply extraction point.

These setbacks are based on distance from the vertical well bore. Operators are able to drill closer with the written consent of the owners of the building or water purveyor.

Additionally, current law requires DEP to waive distance restrictions if the well operator submits a mitigation plan. Waivers shall include additional terms and conditions as required by the department.

Additional Limitations

Under current state law, the following setback requirements also apply:

- 300 feet from the vertical well bore or 100 feet from the edge of the well site, whichever is greater, from certain bodies of water identified by USGS topographic maps.
- 100 feet from the edge of the disturbed area, from certain bodies of water identified by USGS topographic maps.
- 300 feet from the unconventional well, for any wetland greater than one acre.
- 100 feet from the edge of the disturbed area, for any wetland greater than one acre from the border of the wetlands.
- No unconventional well may be drilled within any floodplain if the well site will have a pit containing drilling cuttings, flowback water, or hazardous materials within the floodplain, or a tank containing hazardous materials within the floodway.
- In addition, the department may establish additional protective measures for storage of hazardous chemicals and materials intended to be used or that have been used on an unconventional well drilling site within 750 feet of certain bodies of water identified by USGS topographic maps.

E. Prior Session (Previous Bill Numbers & House/Senate Votes)

This legislation is similar to HB 170 (Otten) from last session, which was referred to the House Environmental Resources and Energy Committee but received no further consideration. HB 170 was previously introduced as HB 1465 during the 2021-2022 Legislative Session.