

Pennsylvania House of Representatives

RE: Setback Distances for Natural Gas Well Sites and Related Infrastructure

HB 170

October 26, 2023

Thank you for the opportunity to hear from voices in the frack zone as you consider greater setbacks for compressor stations, gas well pads, and areas that include pits, impoundments, storage tanks, flowback water, produced water, condensate, solid waste, drilling cuttings, and materials including chemicals, fuels or other waste associated with fracking (HB170).

Since 2003 Pennsylvania has allowed Marcellus shale gas development to take hold of the state as it fracked its way to being the second largest natural gas producer in the United States after Texas.

When fracking began in my area, Washington County, the company Range Resources (Range) created a catchphrase- "Drilling Is Just the Beginning!" It was plastered on billboards, newspaper ads and on local TV commercials. Our community was targeted because of the shale gas under our feet. It was also targeted because of the rural setting with large farms. Landmen descended on the agricultural zoned land first and began to spread their lies. This was the beginning.

We learned too late that the gas industry hired army and marine veterans with combat experience in psychological warfare- psych-ops- to influence communities where companies wanted to drill. Industry even had a handbook which instructed landmen on how to spin the truth and mislead the public to get leases signed. It read,

"Tell the landowner that all their neighbors have signed. Even if the neighbors have not, this often will push an undecided landowner in favor of signing. Remember, the first visit is the most crucial. They will not know if their neighbors have signed... Once they have signed, then you can show those leases to undecided neighbors for added pressure."

(See attached)

Landmen told us that drilling was just another type of farming by extracting the natural resources under our land. They promised farmers wealth and prosperity with a lease to drill. They promised that no harm would come from drilling, claiming it only involved water, sand and chemicals like those found under our kitchen sinks. They also claimed that the gas industry was heavily regulated by the state and federal government. They told us it would be safe to live close to their activity.

Pennsylvania's Marcellus stage was set years ago.

My neighbors and I witnessed gas company's attorneys bully our local officials into permitting the industry in areas that put us in harm's way.

Lease holding residents of Washington County received bully-style letters urging them to pressure the local officials to keep industry happy and to push pro-drilling agendas.

While this was occurring locally, at the state level, documents reveal that the industry formed Marcellus Shale Coalition (MSC) wrote a White Paper in 2008. In 2009, MSC co-chairs Ray Walker (COO of Range) and Rich Weber (COO of Atlas Energy) urged the Department of Environmental Protection (DEP) and the governor's office to change its Marcellus Shale Application Addendum (Addendum) making it favorable for industry.

"On Friday, February 27, 2009, a conference call was held with members of the Marcellus Shale

Executive Committee (MSEC), the Governor's office and DEP senior staff. The purpose of

the call was to see if the parties could reach conceptual agreement on the Marcellus Shale Committees (MSC) proposal to eliminate the Marcellus Shale Application Addendum (MSAA) and to replace certain components of the MSAA with stand-alone approvals”

(Page 95 of 116 in attached pdf)

MSC focused on four major areas in their suggested changes to the Addendum.

1. Impoundment construction
2. Erosion and sedimentation control (E/S)
3. Wastewater disposal
4. Water withdrawal for fracking

It does not appear that there was ever a discussion about potential risks to public health with this move. It seems it was and continues to be about making it easier for industry to do business in PA. Documents reveal that MSC did not want county conservation districts involved in any part of the E/S permitting process. They wanted the state’s Bureau of Oil and Gas Management to handle these permit reviews and approvals. This move removed the county conservation teams, who know the lands best, out of any permitting authority and tied their hands even as problems occurred.

“The new general permit would be a registration process and not a permitting process. It would be reviewed for administrative completeness by BOGM. The County Conservation Districts would only be involved with inspections; not permitting or review of the notice of intent of coverage.”

(Page 96 of 116 in attached pdf)

Families across Washington County have experienced negative E/S impacts on their property from gas development located nearby. Greater setbacks may prevent this.

Were you aware that the MSC was allowed to negotiate with DEP and the governor’s office certain items in the state’s permitting process that seems to have removed protections to Pennsylvanians?

Industry mislead Pennsylvanians

- Industry did not tell us that Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) are emitted from the massive and ever-expanding compressors stations near us. Industry told us it was only water vapor.
- Industry did not tell us that their solid waste created from drilling and fracking would be radioactive. DEP has known about this for over a decade.
- Industry did not tell us that the wastewater impoundments with flowback solids could contain radium 226 or 228. The state has known about this for over a decade -DEP emails show that in some cases they decided to manage it by “winging it”.

From: Socash, Stephen
Sent: Wednesday, April 24, 2013 9:17 AM
To: Olsen, Jeffrey
Subject: RE: Flowback Solids from Centrifuge

Excellent response, thanks, Steve

Stephen Socash | Chief, Division of Municipal and Residual Waste
Department of Environmental Protection | Bureau of Waste Management
Rachel Carson State Office Building
400 Market St. | Hbg PA 17101
Phone: 717.787.7381 | Fax: 717.787.1904
www.dep.state.pa.us

From: Olsen, Jeffrey
Sent: Tuesday, April 23, 2013 1:52 PM
To: Popichak, Robert
Cc: Socash, Stephen; Barnhart, James; Forbeck, Michael
Subject: RE: Flowback Solids from Centrifuge

Bob,
While the TENORM submittal procedures are still in flux we have been advocating a 901.1 Gamma Specific test on any waste which can be expected to activate alarms set at 10 uR/hr above background. A suggestion might be to run the 901.1 on representative wastes and follow with a gamma scan. Let them equate the average scanned readings to the 901.1 results and as long as the scans remain relatively constant, let them assume pCi/g are no higher than their original results. You might also base the required frequency of chemical characterizations on the consistency of the waste. If the take a few chemical samples over time and they seem relatively consistent then they probably don't need to characterize every load. They should however be providing a hand scan on every load going for disposal just to confirm the radioactivity. If something doesn't jibe, characterize the load. Currently our most conservatively set sampling requirement with Hydro Reoover requires them to re-characterize at least every three months. Someday all of this will be spelled out, but for now we're winging it. Get back to me with any questions.
Jeff

From: Popichak, Robert
Sent: Tuesday, April 23, 2013 8:20 AM
To: Socash, Stephen; Olsen, Jeffrey; Swarm, H. Scott; Barnhart, James
Cc: Morway, Deborah; Shearer, Dwight; Bockser, Barbara
Subject: Flowback Solids from Centrifuge
Importance: High

Steve, Jeff, Scott, and Jim,
Happy Tuesday!

I'm looking for some guidance here. I got a call from a consultant working with a Marcellus processor in Ohio. They centrifuge "produced water" through a centrifuge and generate a clay-like waste for disposal. They are calling it RWC 807 and are asking for analytical parameters and frequency—15 tons per day is their generation rate.

Do any of you have any clue if this would be radioactive? Do we need 901.1?

Since they are doing processing from multiple well sites and drillers, what frequency should they test? My guess would be a total Form U set without pesticides and herbicides...



Observer Reporter May 1, 2014

Mount Pleasant Township residents living near the Carter impoundment, operated by Range Resources, called the state Department of Environmental Protection after seeing a blue container with “radioactive” written across the side.

- Industry did not tell us that this radioactive material would be stored on site for months at a time and near Fort Cherry Schools as in the above picture.
- Industry did not tell us that the radioactive material would be mixed with other wastes and would be dumped into the Municipal or Residual Waste landfills near us, continuing to expose locals forever. Landfill alarms sounded.
- Industry did not tell us that they would be using Forever Chemicals when they fracked near our water wells and springs.

Industry didn't go to communities that were wealthy. Industry later admitted that they avoided the neighbors with big houses of wealthy and influential people that would have the money to fight fracking. Instead, industry targeted lower income areas. [Industry avoids the wealthy.](#)

So, we watched our rural communities go from farming to fracking.

- Barns became compressor stations
- Silos became condensate tanks
- Fences became pipelines
- Ponds no longer held fish or clean water for livestock but held toxic frackwater
- Pigs aren't animals any longer, but are pipes that flare and vent into our air.
- Our sky isn't lit during full and harvest moons but glows from industry's flares on well pads, compressor stations and processing plants.



PENNSYLVANIA LOWLIGHTS

- > Range Resources royalties settlement
- > \$4.15 million penalty from DEP for leaky impoundment dams, largest DEP fine ever
- > Spill and fish kill in premier county park
- > Children gagged, can't say "frac" for life



[Fracking harms us](#)

The Federal Emergency Management Agency (FEMA) and the Pennsylvania Emergency Management Agency (PEMA) encourage counties to adopt hazard mitigation plans to take cost-effective action to “eliminate or reduce the long-term risk to life and property from natural and technical hazards.”

Washington County’s All Hazard Mitigation Plan (Plan) recognizes the inherent hazards that communities face from natural gas development. The Plan identifies a **zone of vulnerability as those located within 3,000 feet** of an unconventional oil or gas well. DEP calls this buffer its “zone of culpability” to well pad incidents.

[Washington County Hazard Mitigation Plan](#)

I encourage the PA House of Representatives to protect those in the zone of vulnerability by increasing industry setbacks significantly!

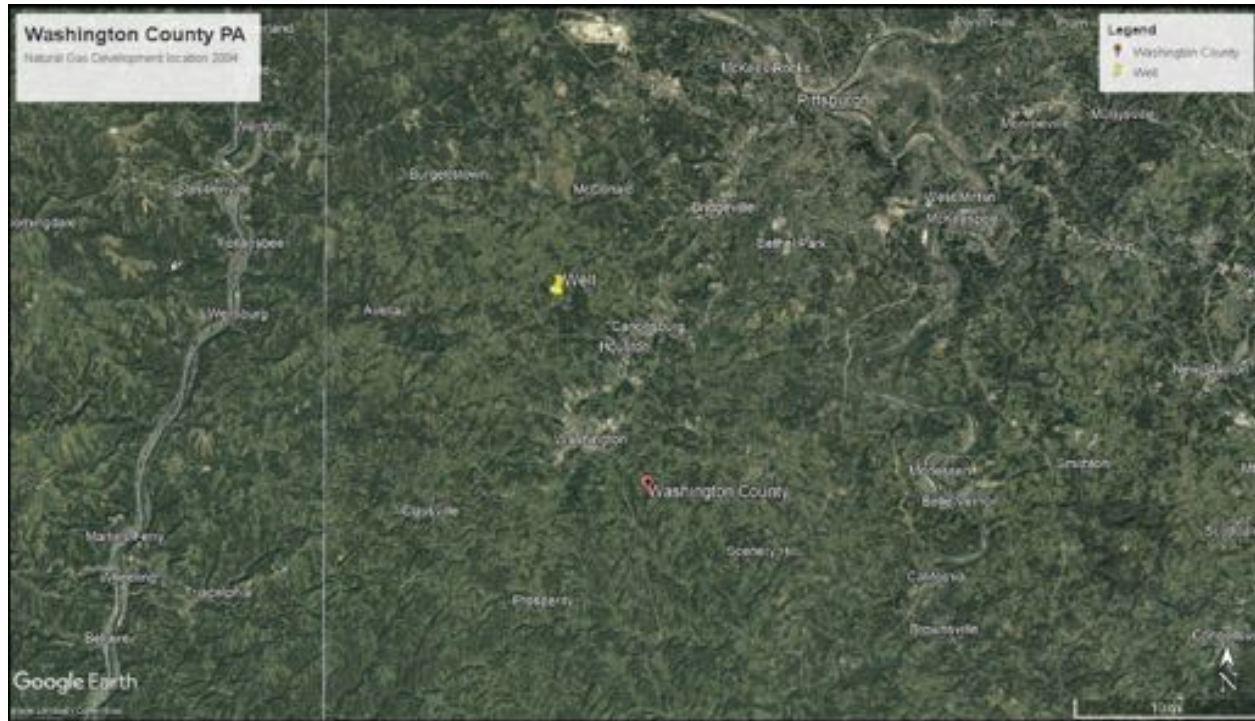
In addition to well pad explosions, leaks or other incidents, there is now mounting evidence showing a link between natural gas development at well pads and health problems especially among the youth and elderly. Some commonly reported health problems include asthma, low birth weight, endocrine system issues, headaches, nose bleeds, cancers and premature death.

- A 2020 Grand Jury Report on fracking recommended extending protective buffers from homes, schools, childcare centers, nursing homes, and other sensitive receptors.
- A 2022 Yale School of Public Health study revealed that children living in close proximity to gas wells are more likely to contract childhood leukemia than those living further away.
- A 2022 [Harvard study](#) found that the elderly living downwind of gas well pads have a higher risk of premature death than those living further away.
- A [2023 University of Pittsburgh School of Public Health study](#) found that children living within 1 mile of a well pad have 5 to 7 times the chance of developing lymphoma, a rare cancer, compared to children living without well pads within 5 miles.

What we have learned over the past 20 years from the gas industry is that fracking is not just water, sand and household chemicals and the extraction does not just bring up natural gas, but wastewater and radioactive waste from deep in the Earth. We have also learned that compressor stations emit tons of volatile organic compounds (VOCs) including benzene, toluene, and formaldehyde. It also emits radon, and Hazardous Air Pollutants (HAPs) such as nitrogen oxides (NOx), and lead. Living, working, playing, being hospitalized or worshipping close to these facilities is bad for one's health. And Pennsylvania's current setbacks are inadequate.

My county has been hit the hardest.

We are home to the first fracked well in 2004 in Mt Pleasant Township, Washington County and we continue to be the most fracked county in all 67 counties of the state.



- We were once a mostly rural county. We have lost massive chunks of meadows, pastures and forests. The county is now riddled with industrial spot zones.
- Most if not all compressor stations and other processing plants sit on land that is now owned by out-of-state gas companies. These plants are located very close to homes, schools, playgrounds, parks and even hospitals.
- The massive buildout of compressor stations and other processing plants and well pads in my county have devoured hundreds of acres close to homes, farms and schools.



- A 2012 USGS study, [*Landscape Consequences of Natural Gas Extraction in Bradford and Washington Counties, Pennsylvania, 2004-2010*](#), shows that many hectares of “agricultural and forested areas in our counties are being converted to natural gas extraction disturbances.”

Marcellus shale development in Pennsylvania comes not only at a cost of losing agricultural and forest areas but also appears to cost Pennsylvanian’s their health.

Dave Matijevich and Robin Walker of Smith Township live 1,200 feet from MarkWest/Marathon’s (MW) Three Brothers compressor station. For the past seven years, they have voiced complaints about the sound, vibrations and odors emitted by the nearby compressor station.



- In 2020 Robin was diagnosed with a blood plasma cancer that affects bones called multiple myeloma.
- [A 2020 Pittsburgh Post-Gazette \(PG\)](#) article pointed out that the Three Brothers compressor station in Smith Township, Washington County emitted 1.2 tons of benzene in 2018, making it the third largest source of benzene - a known carcinogen- in the seven-county southwestern Pennsylvania region, behind the Clairton Coke Works and Monessen Coke Works.
- PG article also states that the Multiple Myeloma Foundation points to research showing higher myeloma risks are associated with exposure to benzene.

In addition to multiple myeloma, Washington County is home to several cases of rare childhood cancers including Ewing Sarcoma in addition to several other ailments affecting children in the area such as Fort Cherry School District. This fact was featured in a PG series, [*The Human Toll*](#).

Serena Warner, a Fort Cherry student lives near Range well pads and MarkWest's Cibus-Imperial compressor stations complex in Robinson Township, Washington County. Warner suffers from severe asthma and Von Willebrand disease, a blood-clotting disorder. The well pad and stations pictured below are 1,700 feet away from Warners.



HUMAN TOLL PART 2



The Cibus-Imperial Compressor Station Complex in Robinson, Washington County. (Andrew Rush)



- [A 2023 University of Pittsburgh School of Public Health study](#) found that exposure from well pad development can create asthma exacerbations in those living even several miles away. Warner is surrounded by three well pads.

Fort Cherry schools are all in one location where grades, Kindergarten through 12th grade attend on Fort Cherry Road Mount Pleasant Township, Washington County.

The 'Fort', as the kids call it, is surrounded by several well pads and compressor stations nearby. So, if students aren't exposed to pollution from the gas industry near their homes, they are exposed to it while at school at least 180 days of the year, let alone any after school activities taking place at the Fort.

According to the PG *Human Toll* stories, parents of several Fort Cherry students said that their children have had unexplained headaches, asthma exacerbations and nosebleeds at the Fort.



March 30, 2017 – Yonker wells being drilled near Ft Cherry school campus.
Photo: MARCELLUS AIR

Currently, Range's Yonker well pad is of concern for the Fort as Range proposes to add wastewater processing to the pad.



As I stated above, radioactive fracking waste was stored at a pad near Fort Cherry schools in 2014. That site was over a mile from the schools. Yet, today the same company is planning to create a waste storage area on another well pad even closer to the school.

In 2023, Range made application to add a waste permit called WMGR123 to their drilling site. Remember - "Drilling Is Just The Beginning."



Range's Yonker well pad- WMGR123 application for waste processing/storage

- **TRUCK SCANNING ZONE** for radioactive material located on the pad near Fort Cherry Schools
- **RAD DESIGNATED ISOLATION ZONE** - Located on the pad near Fort Cherry Schools

Range wants to add twenty vertical 350 bbl capacity storage tanks and equipment for wastewater processing and storage for more fracking in neighboring townships. Maps in the application show Range's designated areas for the radioactive material.

This pad is **3,700 feet** from the Fort Cherry Elementary Center.

Here we go again.

This is too close to our school. Better buffers would better protect our children, teachers and the staff. Waste processing should not be occurring near schools or in agricultural and residential areas. Radioactive waste should not be anywhere near schools.

In conclusion, I hope I have been able to show you that there is a need to improve Section 3215 of Title 58 (Oil and Gas) of the PA Consolidated Statutes by increasing setbacks for compressor stations, gas well pads, and areas that include pits, impoundments, storage tanks, flowback water, produced water, condensate, solid waste, drilling cuttings, and materials including chemicals, fuels or other waste associated with fracking (HB170).

I encourage the Pennsylvania House of Representatives to protect Pennsylvanian's by considering my recommendations.

Please abide by **Article 1, Section 27 of the Pennsylvania Constitution, the Environmental Rights Amendment** which gives us a right to clean air, pure water and the preservation of the natural, scenic, historic and esthetic values of the environment.

Stop letting the gas industry sacrifice our health and the land of our Commonwealth.

Sincerely,

Cathy Lodge
Outreach Team Member
Environmental Integrity Project
257 Meinrad Drive
Bulger, PA 15019
412-848-3936