



June 2, 2022 – Lisa Graves Marcucci testimony before the PA Senate Democratic Policy Committee - *Pennsylvania’s Shale Gas Boom, How Policy Decisions Failed to Protect Public Health, and What We Can Do to Correct It.*

Thank you for the opportunity to speak with you today. My name is Lisa Graves Marcucci and I am the PA Coordinator of Community Outreach for the Environmental Integrity Project (EIP). EIP is a non-profit organization dedicated to ensuring the effective enforcement of state and federal environmental laws to protect public health and the environment.

EIP has three goals:

1. To illustrate through objective facts and figures how the failure to enforce or implement environmental laws increases pollution and harms public health;
2. To hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and
3. To help local communities obtain the protections of environmental laws.

EIP was founded by former U.S. Environmental Protection Agency (EPA) enforcement attorneys, including a former Director of EPA’s Office of Civil Enforcement.

We are most proud of the work we do with frontline communities directly impacted by the shale gas buildout. These residents and their communities need the help and we are happy to provide it in the form of fact-finding that can lead to better protections.

Since the Marcellus shale gas boom took off in western Pennsylvania over ten years ago, the Commonwealth has emerged as the second largest oil and gas producer in the United States – leapfrogging ahead of Louisiana and Oklahoma, long known for their gas production, and closing in rapidly on the number one producer, Texas. Pennsylvania’s natural gas output has grown forty-fold since 2010, and production for the entire Appalachian region (Pennsylvania included) is predicted to continue its increase through the middle of this century.

Unbridled natural gas production has triggered an expansive, massive, and continuing physical infrastructure buildout that includes gas wells and drilling sites, pipelines, compressor stations, pigging operations, as well as various other facilities such as liquified natural gas (LNG) plants and ethylene crackers designed to unleash a flood of newly manufactured plastics across the region. The impact of the buildout over time is obvious in parts of the country like Texas and Louisiana, where skylines and waterways are lined with vast stretches of petrochemical plants and refineries, and the landscape is scarred with pipeline routes. Unfortunately, Pennsylvania is on the brink of a similar fate.

Sadly, the industrialization of many of our communities – a good number of them historically rural farming communities – are being affected in ways that were not foreseen when the buildout began. The promise of jobs and money was the focal point for so many, including state decision makers, and little to

no consideration was given to potential risks, particularly to human health, or the social and economic costs of those health and environmental risks. Policies that could and should have addressed such risks were not in place at the start of the boom and important protections remain missing. Environmental justice communities, in particular, have been left in the dust.

Through our work, we have identified key problem areas for which the implementation of new policies could achieve more transparency, more accountability and lower threats to human health and the environment. Those key problem areas include:

Piecemealed permitting is a major problem. No other industrial operation has been or would be allowed to seek incremental permit approvals, but that is exactly what the shale gas industry is doing, to the detriment of the communities in which they seek to operate. For example, a well pad is never a standalone operation. Once a well pad is approved, the web of industrialized supporting infrastructure begins to grip those same communities. The well pads bring with them gathering and transmission lines, compressor stations, pigging operations, processing plants and in some cases, rail load out operations and plastics production facilities that operate much like refineries. Initial permit applications at local and state levels often have not fully revealed the full capacity buildout of the intended operations, meaning decisions are made with a very limited view of what will actually be necessary to complete industry's actual operations. Local communities, in particular, are kept in the dark until it is too late. They are never given the opportunity to consider the full impacts their decision on one well pad might mean for their community in the short and long term. And, in most cases, once a local permit is granted for one portion of the shale gas operation, there is no opportunity for the local officials and their constituents to learn of any planned modifications or expansions of the originally permitted facility. There need to be requirements for all permitting procedures – local and state – for full disclosure of the entirety of the operation, including all supporting and connected infrastructure and the full extent of known planned expansions.

Local protection is needed via land use ordinances and zoning. In a series of PA Supreme Court decisions, it has been made clear that local land use is not only a right but a responsibility of local government. Local rules say “where” shale gas operations can take place while the PA DEP determines “how” these facilities operate. Before these PA Supreme Court decisions, communities throughout the Commonwealth were forced to allow these highly industrialized operations to be permitted on farms, near schools, daycares and other sensitive populations. It is now clear that local oversight is the most important frontline defense to ensure protection of public health, safety and welfare. EIP and other partner organizations are working with community members, elected officials and solicitors as part of an on-going educational outreach effort to communicate the importance of local land use protection and urging that those protections be added.

PA DEP permit review can be inadequate. Although there are some hardworking and dedicated Pennsylvania Department of Environmental Protection (PA DEP) staff members, the fact is the Department has suffered some of the most severe budget cuts while at the same time the shale gas operations have been expanding. DEP's Oil and Gas Program suffered some of the deepest cuts, with its staffing reduced from 226 to 190 employees during the years 2006 to 2018. In 2018, the program also ran a deficit of \$600,000 per month.¹

While Pennsylvania's environmental budgets were being slashed, shale gas production in the state jumped from half a billion cubic feet per day in 2008 to more than 18.7 billion cubic feet per day as of

June 2019, a thirty-seven-fold increase.² The industry has expanded at breakneck speed – faster than in any other state.

With fewer PA DEP staff and increased permitting, mistakes are bound to happen and EIP has found several important examples:

- **EIP appealed a permit issued by the PA DEP for the MarkWest Smith compressor station in Washington County because it did not properly account for emissions or include limits to ensure that emissions will stay below “major source” levels.** Specifically, EIP’s expert report prompted PA DEP and MarkWest to admit to us that they failed to include in the permit all 15 pneumatic controllers that have been emitting as much as 10.5 tons per year of VOCs, an admission that proved our central claim that the permit and application had not accounted properly for emissions from the facility. EIP’s appeal resulted in the PA DEP requiring MarkWest to submit a new application with all emission sources, including the previously omitted 15 pneumatic controllers, to be submitted for review. Without EIP’s legal challenge to this particular permit, this facility would have continued operating with an inadequate permit that failed to properly account for dangerous emissions.
- **As a result of EIP’s community-based work in Economy Borough, Beaver County, PA a significant error was brought to the attention of the PA DEP and the Pennsylvania Fish and Boat Commission (PFBC) and could result in the protection of an important local watershed and a threatened fish species, the Southern Redbelly Dace.** PennEnergy Resources’ water withdrawal plan has been denied once and has recently been sent another technical deficiency letter highlighting some of the concerns raised by citizen comments sent to the PA DEP by the Big Sewickley Creek Watershed Association. Rep. Rob Matzie also raised similar concerns and asked that the permit be denied, again. Because of EIP’s work with frontline community members in raising serious concerns, the PA DEP and PFBC are taking another closer look at PennEnergy’s application. Without these added checks and balances, it is likely an inadequate permit would have been issued putting a threatened fish species and the Big Sewickley Creek Watershed at serious risk.
- **And, finally, EIP lead an effort that questioned the PA DEP’s reissuance of general permit WMGR123 for processing, transporting, and storing oil and gas liquid wastes.** We were glad to learn in early 2021 that PA DEP had incorporated into the final WMGR123 permit many of the improvements we requested in comments submitted in summer of 2020 for augmenting public participation. However, we were shocked to learn that—on the very same day and shortly after —PA DEP issued 49 approvals under this permit *without* following the new participation requirements.
 - On February 4, 2021, EIP drafted a letter that many partner organizations joined urging PA DEP to immediately redress its failure to provide proper public notification by re-noticing all 49 permits and providing a 60-days of public comment for each. The letter resulted in several news stories and unexpected support from the *Pittsburgh Post-Gazette’s* Editorial Board.
 - February 16, 2021, the PA DEP entered into a settlement agreement with EIP and five partner organizations, agreeing to re-notice and provide 60-days of public comment for all 49 permits. PA DEP also agreed to issue a directive to regional staff that all future applications under this general permit must undergo similar requirements. PA DEP further committed to considering all public comments and making modifications to the previously approved authorizations where appropriate.

However, the legislature took steps, once again, to strip away transparency regarding the placement of oil and gas fracking wastewater by creating a loophole permit by which “temporary” storage would not require prior public comment opportunity. What will ultimately happen to the increasing volumes of fracked wastewater temporarily stored at these facilities is uncertain, but the potential risks to health and environmental safety due to the movement, transfer, and storage of this waste material that is often toxic and radioactive *without the public having a right to weigh in to keep dangerous materials out of their communities*, are high.

In each of these instances, poor permitting disclosures and oversight could have resulted in increased pollution risks for these communities. Without the involvement of groups like EIP, important checks and balances – including public opportunities to comment on complete applications and permits – public health risks could increase. And, as community members have testified, no one, including the PA DEP, is considering the cumulative impact of risks posed in PA communities as a result of the massive shale buildout. The time has come for important policy changes to catch up with the rapidly and ever-expanding shale gas operations. Common sense changes are key to healthier communities across the Commonwealth.

For our part, we would like to recommend starting with full disclosure of all planned development and buildout. Everyone throughout the Commonwealth, particularly those living in the directly impacted communities, should have a right to know exactly what industry plans to impose on them.

Continuing educational outreach must be done to urge new or updated oil and gas land use zoning ordinances, which is the most important frontline protection for communities.

It is essential that we properly fund and staff the PA DEP so that the work of objective oversight, enforcement and accountability can be assured.

And, finally, and most importantly, it is long overdue that the PA DEP is required to consider any new, modified or expansion permits by first examining what is already operating in those same communities. **There needs to be a robust evaluation of what the cumulative impacts might be. The siloed approach of PA DEP permitting each facility in a vacuum and ignoring the other environmental pollution sources threatening the health of the community must end.**

Thank you.

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^[1] Pennsylvania Department of Environmental Protection, “Permitting Reform White Paper,” January, 2018.2018. http://files.dep.state.pa.us/LicensingPermitsCertification/PermitDecisionGuaranteePortalFiles/Permitting_Reform_01262018.pdf

^[2] The Threat to Pennsylvania’s Environment Posed by “Energize PA” Bills, September 23, 2019 <https://environmentalintegrity.org/news/the-threat-to-pennsylvanias-environment-posed-by-energize-pa-bills/>

Additional (six) supporting exhibits included