The Right to Say Where

How Zoning Can Help Protect Pennsylvania Communities Impacted by Oil and Gas Operations







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THE ENVIRONMENTAL INTEGRITY PROJECT

The Environmental Integrity Project (http://www.environmentalintegrity.org) is a nonprofit organization established in March of 2002 by former EPA enforcement attorneys to advocate for effective enforcement of environmental laws. EIP has three goals: 1) to provide objective analyses of how the failure to enforce or implement environmental laws increases pollution and affects 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 protection of environmental laws.

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I. Introduction

Municipal governments are on the "front lines" of oil and gas development in Pennsylvania, and their decisions with respect to zoning directly affect the lives of residents. Municipal zoning authority takes two primary forms. First, the enactment and revision of zoning ordinances limits oil and gas uses to specific locations within a municipality and under specific circumstances. Second, under the ordinance, oil and gas uses may be permitted as conditional uses or special exceptions, which require public hearings and approval. Together, this authority allows Pennsylvania communities to determine where and under what conditions oil and gas development can occur within the municipality.

This survey provides information about the rights and responsibilities of municipalities, identifies the "Top Ten" most important zoning protections related to oil and gas uses, analyzes and summarizes the ordinances of more than twenty municipalities, and compares the ordinances to determine which municipalities are most protective. In 2020, the Environmental Integrity Project (EIP) issued a guide that reviewed and compared the zoning laws and actions of 31 municipalities, primarily in western Pennsylvania. The current edition covers 24 additional municipalities, including several that have been directly impacted by large pipeline projects.

Together, these two reports aim to provide Pennsylvania residents with information to better understand their rights, as well as the responsibilities of the local officials charged with representing their interests. In short, local residents and officials can help determine where oil and gas activities are allowed and ensure that core safeguards are in place for these operations. For example, Rostraver Township in Westmoreland County, recently voted unanimously to deny a proposed permit application from Olympus Energy to construct a large well pad. The year before, residents in West Deer Township in Allegheny County persuaded the board of supervisors to unanimously deny a similar project proposed for their community. When protective zoning ordinances are in place and residents are afforded an opportunity present information about the health and environmental impacts of oil and gas projects, municipal officials are better equipped to meet their obligations to protect natural resources and communities.

A. The Importance of Zoning

Since the early 1900s, local governments have designated specific geographic areas within their jurisdictions for specific purposes. Although zoning requirements vary greatly across counties or regions, most requirements:

 Establish distinct zoning districts with defined primary purposes, including residential, commercial, agricultural, or industrial.

¹ Environmental Integrity Project, A Right to Clean Air and Pure Water: A Survey of Local Zoning Requirements for Oil and Gas in Pennsylvania (Mar. 27, 2020), https://environmentalintegrity.org/reports/a-right-to-clean-air-and-pure-water/.

- Specify the types of activities that can occur and structures that may and may not be built within each zone.
- Set out requirements on how certain activities or "uses" must be conducted within each zoning districts such as hours of operation, distance from water resources, and the size of allowed structures.

Before the shale gas boom began, most Pennsylvania residents and some elected officials rarely leveraged the Pennsylvania Municipalities Planning Code (MPC), adopted in 1968, to give local governments authority over land use and planning. But in recent years, the MPC has taken center stage as oil and gas drilling, processing, and pipelines have significantly altered landscapes and communities.

Many residents long accustomed to living in rural and suburban areas are now forced to contend with the public health and environmental impact of industrial activities located close to their homes and schools. For their part, local officials face the daunting task of reviewing an ever-expanding number of complex and technical permit applications along with the specter of industry lawsuits should applications be curtailed or denied.

Under current Pennsylvania law, all land uses must be allowed. However, municipalities can implement common sense safeguards to locate oil and gas drilling and industrial facilities in appropriate areas. Simply put, local governments have the right to say "where" oil and gas operations can be located, which is critical to protect communities from adverse impacts.

B. Local Rights and Responsibilities

Pennsylvania municipalities that put in place protective zoning ordinances—and are willing to enforce them—have the ability to influence development decisions wherever people live, work, go to school, and recreate. By seizing the opportunities presented by recent court and local decisions, municipalities can minimize problems such as traffic, noise, light, accidents, and air and water pollution.

On the other hand, municipalities that have maintained outdated and limited zoning ordinances—or lack any zoning at all—have little recourse when oil and gas companies build wells and facilities close enough to homes, schools, and natural areas to impact health, quality of life, and the environment.

Times have changed since shale gas development arrived in Pennsylvania without adequate state and local oversight. Today, there are far more opportunities to take action to hold industry accountable for harmful impacts, and decision makers at all levels of government have the authority and responsibility to adopt policies to protect communities. Fortunately, a growing number of municipal officials are willing to exercise their authority to better protect residents, quality of life, and natural resources.

C. Municipalities Included in Survey

The following municipalities were included in our survey:

Allegheny	Beaver	Berks	Butler	Chester	Huntingdon	Lebanon	Washington	West- moreland
West Deer Township	Greene Township	Brecknock Township	Forward Township	Upper Uwchlan Township	Shirley Township	West Cornwall Township	Amwell Township	Derry Township
Collier Township	New Sewickley Township		Oakland Township	West Whiteland Township	Penn Township		Hopewell Township	Hempfield Township
	Potter Township			West Goshen Township			Independenc e Township	Murrysville Township
							Nottingham Township	Penn Township
								Rostraver Township
								Salem Township

For each of the municipalities listed in the table above, EIP has provided information related to local officials and zoning ordinances related to oil and gas uses. The municipality summaries include current elected leaders and officials associated with planning commissions and zoning hearing boards. With respect to zoning ordinances, the municipality summaries include an overview of the zoning ordinance, including (1) a use table for various oil and gas development uses; (2) a description of required setbacks; (3) a list of additional permits that must be provided as part of the application; (4) any additional studies and plans required for the application; (5) the penalty amount for violations; and (6) any other related requirements or noteworthy restrictions.

II. Legal Background

The Environmental Rights Amendment, part of the Pennsylvania Constitution, and Act 13 provide important background for the ways in which municipalities have sought to address oil and gas development in their zoning ordinances. Act 13 is legislation through which the Pennsylvania General Assembly sought to preempt and restrict municipalities' ability to zone for oil and gas uses. The Environmental Rights Amendment is a state constitutional provision under which the Pennsylvania Supreme Court overturned parts of Act 13, and which guides and places important obligations on how municipalities exercise their zoning power.

A. Act 13

In 2012, the Pennsylvania General Assembly passed and Governor Tom Corbett signed into law Act 13, the first major overhaul of the Oil and Gas Act of 1984.² Act 13's declared intent was to permit optimal development of the Commonwealth's oil and gas resources while protecting the safety of personnel and facilities; the safety of residents near such facilities; and the natural resources and environmental rights secured by the Constitution of Pennsylvania.³

The sections of Act 13 that are the most relevant to municipal zoning are sections 3303 through 3309. Those sections declare that Act 13 preempts and supersedes all local regulation of oil and gas operations regulated by statewide environmental acts. Additionally, in an effort to create uniformity across the Commonwealth, Act 13 commands all political subdivisions to allow well and pipeline development in every zoning district with only minimally protective requirements.

This feat of legislative overreach set off legal challenges that ultimately reaffirmed local authority over land use. Most notably, Robinson Township in Washington County, along with several other plaintiffs, sued to challenge Act 13 on several constitutional grounds, including the Environmental Rights Amendment under Article I, Section 27, discussed below. The Pennsylvania Commonwealth Court ruled in favor of Robinson Township and struck down as unconstitutional the provisions of Act 13 that preempted municipalities' ability to regulate and zone oil and gas operations by requiring such operations in all zoning districts, and it enjoined, or prohibited, the Commonwealth from enforcing those provisions. The Commonwealth Court's decision largely rested on substantive due process under Article I, Section 1.4

On appeal, the Pennsylvania Supreme Court affirmed the Commonwealth Court's decision, but in a split decision on different grounds. The lead plurality opinion, written by Chief Justice Castille, relied on the Environmental Rights Amendment.⁵ Although the parties had primarily briefed the case on the basis of the substantive due process claim, the plurality saw the Environmental Rights Amendment issue as dispositive and therefore analyzed the case on those grounds first. Finding the provisions of Act 13 to be in violation of the Commonwealth's duties as a trustee under the Environmental Rights Amendment, the plurality opted not to offer an opinion on the substantive due process argument. Justice Baer concurred in the judgment of the Court and much of its opinion but wrote a concurring opinion that instead relied on the substantive due process arguments to decide the case and affirm the Commonwealth Court.⁶

Even though Act 13's preemption provisions are no longer in effect, their imprint is still visible on many municipalities' zoning codes. Namely, many municipalities amended their ordinances to comply with Act 13 but have not updated their ordinances since the Pennsylvania Supreme Court's decision. Some mention Act 13 directly and attempt to establish only as much protection as Act 13 would have allowed. Other ordinances do not mention it expressly, but its presence during the

² Pa. General Assembly, Act 13 (Feb. 14, 2012).

³ 58 Pa. C.S. § 3202.

⁴ See Robinson Twp. v. Commonwealth, 52 A.3d 463, 480-85 (Pa. Commw. Ct. 2012).

⁵ See Robinson Twp. v. Commonwealth, 83 A.3d 901, 985 (Pa. 2013) (plurality).

⁶ Id. at 1,001 (Baer, J. concurring).

drafting or amendment of the ordinance is notable by the inclusion or lack of inclusion of various protections. Finally, there are also municipalities in which industry-friendly elected officials revised their ordinances in the aftermath of the Pennsylvania Supreme Court's decision in order to enact the goals of Act 13 on a local level.

B. The Pennsylvania Constitution's Environmental Rights Amendment

The constitutional authority for the Pennsylvania Supreme Court's decision to overturn Act 13—Article I, Section 27 of the Pennsylvania Constitution, also known as the Environmental Rights Amendment—has since taken on an important role as the basis for litigation. Residents and public-interest groups have attempted to challenge zoning ordinances and land use decisions that favor oil and gas uses to the detriment of the rights protected by the Article I, Section 27.

Article I, Section 27 of the Pennsylvania Constitution provides the people of Pennsylvania with two rights: first, the "right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment," and second, that "Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people."

This first right "places a limitation on the state's power to act contrary to this right, and while the subject of this right may be amenable to regulation, any laws that unreasonably impair the right are unconstitutional." With respect to the second right as to the common ownership of natural resources and the role of the Commonwealth and all local governments under it as the trustee over this trust, "[t]he plain meaning of the terms conserve and maintain implicates a duty to prevent and remedy the degradation, diminution, or depletion of our public natural resources. As a fiduciary, the Commonwealth has a duty to act toward the corpus of the trust—the public natural resources—with prudence, loyalty, and impartiality."

Consequently, "this environmental trust thus imposes two basic duties on the Commonwealth as the trustee. First, the Commonwealth has a duty to prohibit the degradation, diminution, and depletion of our public natural resources, whether these harms might result from direct state action or from the action of private parties." "Second, the Commonwealth must act affirmatively via legislative action to protect the environment." These trustee duties apply equally to state and local government authorities in Pennsylvania. 12

C. Notable Court Decisions

⁷ See Pa. Const. art. I, § 27.

⁸ See Pa. Envtl. Def. Found. v. Commonwealth (PEDF), 161 A.3d 911, 931 (Pa. 2017) (quoting Robinson Twp. v. Commonwealth, 83 A.3d 901, 951 (Pa. 2013)).

⁹ *Id.* at 932 (quoting *Robinson Twp.*, 83 A.3d at 956-57 (plurality)).

¹⁰ *Id.* at 933 (citing *Robinson Twp.*, 83 A.3d at 957).

¹¹ Id. (citing Robinson Twp., 83 A.3d at 958).

 $^{^{12}}$ Id. at 919 (quoting Robinson Twp., 83 A.3d at 963), 931 n.23 (quoting Robinson Twp., 83 A.3d at 956-57).

There has yet to be an on-point decision by the Supreme Court applying the constitutional merits of *Robinson Township* and *PEDF* to an ordinance or land use decision by a local government. There have been several notable decisions, but each so far has managed to avoid reaching the constitutional merits.

For example, in *Gorsline v. Board of Supervisors of Fairfield Township*, the Pennsylvania Supreme Court overturned a local government's decision to authorize an oil and gas use, but avoided the constitutional question by finding that the decision violated the ordinance itself.¹³ While the Court did not reach the constitutional issue, it did make a finding helpful to future litigation: oil and gas well development is a "purely industrial use."¹⁴

The *Snyder Brothers, Inc. v. Public Utilities Commission* case was mainly focused on the issue of when extraction fees can be applied to a company's operations. Yet in deciding the case, the Court acknowledged the industrial nature and adverse impacts of operations and referenced the Robinson Township case that affirmed local zoning rights and overturned sections of Act 13.

The Court's decision stated that, "...the process of drilling and operating an unconventional gas well utilizing the fracking process—an industrial land use—has significant effects on the communities in which it occurs," and a agreed with the plurality in *Robinson Township* that communities in which drilling and extraction occur suffer "...environmental and habitability costs associated with this particular industrial use: air, water, and soil pollution; persistent noise, lighting, and heavy vehicle traffic; and the building of facilities incongruous with the surrounding landscape." ¹⁵

In EQT Production v. Borough of Jefferson Hills, the Pennsylvania Supreme Court determined that the testimony of residents about real-world impacts of industrial development was relevant to decisionmaking on oil and gas project applications. At stake was EQT Production's proposed construction of a 16-well unconventional shale gas pad. The project would have been the first oil and gas facility in a densely populated suburban area, leading residents to raise concerns at a public hearing about pollution, truck traffic, and the impact of the project on their health and property values. Residents from nearby Union Township also testified about the harm that EQT had already caused from similar drilling projects in their community.

EQT argued that the Union Township residents' testimony was "speculative." The Pennsylvania Supreme Court ruled that the testimony was relevant, stating that, "[t]he testimony of the Union Township objectors as to the foul stenches, intense vibrations, loud and penetrating sounds, and increased levels of traffic and air and light pollution they continuously endured, in and around their homes, was both relevant and probative in establishing the potential adverse impacts which Jefferson Borough residents ... reasonably could expect." ¹⁶

¹³ 186 A.3d 375, 389 (Pa. 2018).

¹⁴ *Id.* at 388.

¹⁵ Snyder Brothers Inc. v. Public Utility Commission, 198 A.3d 1056, 1074 (Pa. 2018) (citing Robinson Twp., 83 A.3d at 979).

¹⁶ EQT Production and ET Blue Grass Clearing LLC v. Borough of Jefferson Hills, 208 A.3d 1010, 1028 (Pa. 2019).

In addition to these Supreme Court decisions, a lower court recently upheld the unanimous decision by the West Deer Township Board of Supervisors to deny a proposal from Olympus Energy to construct a large well pad. ¹⁷ At the public hearing, residents submitted evidence of Olympus Energy's prior failure to comply with laws designed to protect public health and the environment. ¹⁸ The Township's denial of the conditional use application was based, in part, on consideration of the evidence of Olympus Energy's history of environmental violations. ¹⁹ On appeal, the Court of Common Pleas of Allegheny County upheld the denial, noting that the residents "established that the proposed use would endanger the health, safety, morals, and welfare of the Township." Olympus Energy has appealed this decision to the Pennsylvania Commonwealth Court, and the decision is currently pending.

Although the Pennsylvania Supreme Court has not taken up this constitutional issue with respect to local zoning decisions recently, there have been several negative decisions by the Pennsylvania Commonwealth Court—some of which seemingly contravene the *Robinson Township*, *PEDF*, and *Gorsline* precedent—for which the Pennsylvania Supreme Court has declined to grant appeal.²¹

III. Emerging Issues

There are several emerging issues and opportunities with respect to local efforts to minimize health and environmental harm associated with oil and gas operations. First, municipalities have extremely limited jurisdiction over gas pipelines and towns and residents alike have more opportunities to address the risks posed by these projects through participation in state-level permit proceedings at the Public Utilities Commission and Department of the Environment. Second, overlay districts may be used as a tool to allow inappropriate and unsafe siting of oil and gas uses. Finally, residents should consider participating in the county process to ensure that local Hazard Mitigation Plans both identify and address hazards from oil and gas operations.

A. Pipelines and Municipal Rights

In the early years of the Marcellus Shale boom, the risks of drilling and hydraulic fracturing in deep shale rightfully grabbed the spotlight. But it didn't take long for the focus to shift to the large industrial facilities that move and process the gas and create new products like ethane for plastics. The planning and construction of large pipelines to transport both finished gas and gas liquids have raised health and safety concerns, as well as questions about the applicability of zoning requirements.

¹⁷ Olympus Energy, LLC v. West Deer Township Board of Supervisors, No. SA 22-000022, 5 (Ct. Common Pleas Allegheny Cty., Aug. 23, 2022).

¹⁸ *Id*. at 4.

¹⁹ *Id.* at 1-2.

²⁰ *Id.* at 4-5.

 ²¹ See, e.g., Frederick v. Allegheny Twp. Zoning Hearing Bd., 196 A.3d 677 (Pa. Commw. Ct. 2018),
 appeal denied, 208 A.3d 462 (Pa. 2019); Delaware Riverkeeper Network v. Middlesex Twp. Zoning Hearing Bd.,
 No. 2609 C.D. 2015, Not Reported in A.3d, 2019 WL 2605850 (Pa. Commw. Ct. June 26, 2019), appeal denied,
 No. 248 WAL 2019, 2019 WL 7183337 (Pa. Dec. 26, 2019); Protect PT v. Penn Twp. Zoning Hearing Bd. 220
 A.3d 1174 (Pa.Cmwlth. 2019), appeal denied 660 Pa. 14 (Pa. 2020).

Pipeline projects generally span numerous counties and municipalities, and jurisdiction over the location and operation of the pipelines themselves is not a local matter.²² Instead, that authority is held by the state Public Utility Commission (PUC) and, in the case of interstate projects, the Federal Energy Regulatory Commission (FERC).²³ As the Pennsylvania Supreme Court has noted, municipalities are "ill-equipped to comprehend the needs of the public beyond their jurisdiction" and would likely "exercise that power with an eye toward the local situation and not with the best interests of the public at large as the point of reference."²⁴

Nonetheless, municipalities do retain zoning control over the location and operation of buildings associated with the pipelines, such as the pump and valve stations that regulate pressure. ²⁵ One caveat to municipal zoning authority over pump stations and other pipeline-related buildings is that the Municipal Planning Code allows a corporation to petition the PUC to classify a building itself as a public utility "necessary for the convenience or welfare of the public." ²⁶ However, if an operator invokes this clause, the PUC would be required to conduct a review to determine the validity of a corporation's claim about the building and to hold a public hearing on the matter. ²⁷

Major Pipeline Projects Pose Local Risks

Oversight and accountability at all levels of government is important for gas pipelines given the serious risks posed by these projects. For example, ETC Northeast, a subsidiary of Energy Transfer, built the Revolution Pipeline, which runs over 40 miles across Allegheny, Beaver, Butler, and Washington Counties to link gas supply areas with two large processing plants. Construction on Revolution had barely begun when the Pennsylvania Department of Environmental Protection (DEP) fined the company nearly \$31 million for a 2018 explosion and hundreds of violations related to land damage and soil instability. The PUC also reached a settlement with ETC over the explosion and associated fire, which included a \$1 million penalty and extensive safety requirements. Put the set of the set of

²² Federal Energy Regulatory Commission, Natural Gas Pipelines, <a href="https://www.ferc.gov/industries-data/natural-gas/overview/natural-gas-data/natural-g

pipelines#:~:text=FERC%20itself%20has%20no%20jurisdiction,needed%20pipelines%20and%20related%20facilities

 $^{^{23}}$ Id

²⁴ Duquesne Light Co. v. Upper St. Clair Twp., 105 A.2d 287, 293 (Pa. 1954).

²⁵ Delaware River Keeper Network, et al. v. Sunoco Pipeline LP, 179 A.3d 670 (Pa. Cmmw. 2018).

²⁶ Section 619, Exemption, Pennsylvania Municipalities Planning Code, Act of 1968, P.L.805, No.247 as reenacted and amended, https://dced.pa.gov/download/pennsylvania-municipalities-planning-code-act-247-of-1968/?wpdmdl=56205&ind=1560959920736.

²⁷ *Id*.

²⁸ DEP, Revolution Pipeline Project (April 2019),

http://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/RevolutionPipeline/Revolution%20Information%20Sheet%20-%20April%202019.pdf; Anya Litvak, Energy Transfer given \$30M penalty for Beaver County pipeline explosion, Pittsburgh Post-Gazette, 2/2/20, <a href="https://www.post-pupeline.com/h

gazette.com/business/powersource/2020/01/03/Energy-Transfer-30M-penalty-pipeline-explosion-permit-ban-Revolution-Mariner-East/stories/202001030137.

²⁹ "PUC Approves Nearly \$2 Million Settlement for Safety Probe of 2018 Pipeline Failure and Fire in Beaver County," PUC press release, 11/18/21, https://www.puc.pa.gov/press-release/2021/puc-approves-nearly-2-million-settlement-for-safety-probe-of-2018-pipeline-failure-and-fire-in-beaver-county.

The Mariner East 2 Pipeline run by Sunoco Pipeline, an Energy Transfer subsidiary, traverses 17 counties and nearly 90 municipalities. It transports natural gas liquids from processing facilities in the western part of Pennsylvania, as well as Ohio and West Virginia, to Sunoco's Marcus Hook Industrial Complex in Delaware County. Much of the project follows the route of Mariner East 1, a small gas pipeline constructed decades ago. However, Mariner East 2 has required installation of much larger-diameter pipe, the expansion of older and construction of new pump stations, and activity in additional locations. In addition, Mariner East 2 is designed to carry hazardous and highly explosive liquids such as ethane, propane, and butane.

In 2022, Pennsylvania's Attorney General convicted Energy Transfers for 50 environmental crimes associated with the Revolution and Mariner East 2 pipeline, including repeatedly contaminating waterways and ignoring safety protocols and construction plans.³¹

Shell's Falcon Pipeline traverses Allegheny, Beaver, and Washington Counties to bring ethane from natural gas processing plants in Pennsylvania and Ohio to Shell's petrochemical facility in Beaver County.³² Early in the project, Shell received warnings from state and federal regulators that there were deficiencies in permit applications and proposed construction measures.³³ In 2022, DEP fined Shell for spilling industrial waste and polluting streams and wetlands on numerous occasions during construction and initiated a state and federal investigation into risks posed by the company's potential use of defective corrosion materials.³⁴

Efforts to Enforce Zoning Ordinances

Despite jurisdictional constraints, some community members and environmental organizations have attempted to enforce zoning ordinances against pipelines with generally unsuccessful results. For example, in 2014, West Goshen Township in Chester County amended its zoning code to directly address pipelines and associated facilities. During this process, the Township adopted new standards for the construction and operation of utilities and pipeline facilities, which were classified as conditional uses in industrial zoning districts.³⁵

In 2017, the Delaware Riverkeeper Network and local residents filed a lawsuit asserting that construction of the Mariner East 2 pipeline violated West Goshen's zoning ordinance because it

³⁰ DEP, Sunoco Pennsylvania Pipeline Project/ Mariner East II (Feb. 2017),

https://www.dep.pa.gov/Business/ProgramIntegration/Pennsylvania-Pipeline-Portal/pages/mariner-east-ii.aspx.

³¹ Environmental Crimes Section, Office of the Attorney General, Energy Transfer Criminal Conviction Fact Sheet, (Aug. 5, 2022), https://www.attorneygeneral.gov/wp-content/uploads/2022/08/2022-08-05-energy-transfer-fact-sheet.pdf.

³² DEP, Shell Falcon Ethane Pipeline, https://www.dep.pa.gov/Business/ProgramIntegration/Pennsylvania-Pipeline-Portal/Pages/Shell.aspx.

³³ Erica Jackson, FracTracker Alliance, "Ongoing Concerns over Shell's Falcon Pipeline," 8/24/21, https://www.fractracker.org/2021/08/ongoing-safety-concerns-over-shells-falcon-pipeline/.

³⁴ Erica Jackson, FracTracker Alliance, "Falcon Pipeline Begins Operations Following Violations of Clean Streams Law," 11/17/22, https://www.fractracker.org/2022/11/falcon-pipeline-online-begins-operations-following-violations-of-clean-streams-law/.

³⁵ Township of West Goshen Code §§ 84-39(18)(b), 84-56(B), adopted 9/2/14 by ordinance no. 4-2014.

occurred in a residential zone (rather than in one of the designated industrial zones). ³⁶ In 2018, the Pennsylvania Commonwealth Court ruled against the plaintiffs, primarily on the basis that longstanding case law prevents Townships from regulating a public utility through zoning ordinances. ³⁷ The case did not address whether municipalities are preempted from enforce zoning codes with respect to public utility buildings because both parties agreed the pipeline was not a building. ³⁸

Residents in West Cornwall Township in Lebanon County have also challenged municipal officials to enforce local zoning provisions in the case of the Mariner East 2. For example, DEP issued a permit to expand operations at the Cornwall pump station in 2017.³⁹ Residents appealed the Township's issuance of a conditional use permit for the pump station without adhering to the requirement in the zoning ordinance for a full public comment and hearing process. In 2019, the Pennsylvania Commonwealth Court ruling led to several public hearings and Energy Transfer reapplying for the permit.⁴⁰ Unfortunately, the Township issued a new conditional use permit in 2021 without the new safety and notification requirements that residents had requested.⁴¹

Due to jurisdictional constraints, municipalities and residents are likely to have the most success in securing more protective environmental and safety conditions for pipelines by participating in state-level permitting proceedings at the Public Utilities Commission or Department of the Environment.

B. Overlay Zoning

Municipalities sometimes add overlay districts to zoning codes. As the name suggests, overlay districts are a "layer" developed for a single and specific purpose that can cross over several zoning districts. For example, overlay districts may be created to protect scenic views, historic features, or a natural area.

Overlay zoning enables municipalities to add or change specific requirements without having to alter all parts of the zoning code applicable to the standard zoning districts that exist alongside the overlay. While overlay districts are generally presumed to make zoning more protective, this isn't always the case.

For example, Penn Township in Westmoreland County is no stranger to oil and gas drilling, but more recent proposals to construct large, industrial-scale shale gas pads have prompted opposition

³⁹ Permit number 38-03062, DEP Southcentral Regional Office, 9/15/17.

³⁶ The Delaware Riverkeeper Network, et. al. v. Sunoco Pipeline LP, 179 A.3d 670, 675 (Pa. Cmmw. 2018).

³⁷ *Id.* at 699.

³⁸ *Id.* 695.

⁴⁰ Doug Lorenzen, Pamela Bishop, Phillip J. Stober, and Concerned Citizens of Lebanon County v. West Cornwall Township Zoning Hearing Board and Sunoco Pipeline, L.P., Commonwealth Court of Pennsylvania, decided 10/23/19; and "Chris Coyle, W. Cornwall supervisors hear public comment on pipeline pump station application," LebTown, 6/3/21.

⁴¹ West Cornwall Township, Sunoco Conditional Use Hearing Findings, 8/9/2021, *available at* https://westcornwalltwp.com/township-meeting-notes/.

by residents concerned about impacts to their air, water, and neighborhoods.⁴² The Township's Mineral Extraction Overlay (MEO) district, which is part of the zoning code adopted in 2016, has garnered particular attention.⁴³

In establishing the MEO, Penn Township sought to adopt a set of standards solely for oil and gas activities. However, the MEO comprises parts of the Rural Resource Zoning District, which is designated for residential use and has become more populated in recent years. In effect, there is a clear contradiction between the uses in the MEO and the core, original purpose of the underlying zoning districts because the overlay allows the Township to permit industrial uses in a residential zone.

Proposals for unconventional wells and facilities, compressor stations, and gas processing plants in the MEO must be approved as Special Exception uses. ⁴⁴ Among other things, this requires the Township to hold a public hearing and allows the Zoning Hearing Board to add more requirements for operators. The MEO's extension over both residential and industrial areas—which potentially allows development on much of the Township's land area—has made the application process particularly controversial. ⁴⁵

Protect PT (Penn-Trafford), a concerned residents' group, filed a lawsuit on the basis that oil and gas development is a heavy industrial activity and is therefore incompatible with the residential purposes of the zoning districts the MEO covers. In 2019, the Pennsylvania Commonwealth Court rejected arguments that oil and gas development pose a risk to the health and the environment of residents, ruling in favor of the Township and upholding the MEO.⁴⁶ Nonetheless, the effect of the MEO is similar to what is called "spot zoning," which is inappropriately used to allow development in certain areas that would otherwise be prohibited under the zoning code as a whole.

Going forward, unconventional oil and gas operations in the MEO may also be contested because the zoning ordinance requires that these activities not harm residents. Specifically, Penn Township has stated that development activities may not "violate the citizens of Penn Township's right to clean air and pure water as set forth in Art. 1, Sec. 27, of the Pennsylvania Constitution (The Environmental Rights Amendment). The applicant shall have the burden to demonstrate that its operations will not affect the health, safety or welfare of the citizens of Penn Township or any other potentially affected landowner."⁴⁷

In 2019, Jefferson Hills Borough in Allegheny County prevailed in its efforts to deny the development of a large unconventional oil and gas well site. As discussed above, the Pennsylvania Supreme Court issued a precedent-setting ruling that upheld the local determination that the

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⁴² See Protect PT (Penn-Trafford) legal advocacy overviews, https://www.protectpt.org/legal-advocacy

⁴³ Penn Township, Westmoreland County, Municipal Code Chapter 190, including §190-407, https://ecode360.com/9968279.

⁴⁴ Penn Township, Westmoreland County, Municipal Code Chapter 190, § 641(A).

⁴⁵ See Penn Township Commissioners memo responding to questions about the pending zoning ordinance, 1/21/15, https://ecode360.com/documents/PE1662/public/172346583.pdf.

⁴⁶ Protect PT, Appellant, v. Penn Township Zoning Hearing Board, v. Olympus Energy LLC, Apex Energy (PA), LLC, and The Township of Penn. PA Commonwealth Court, No. 1632 C.D. 2018, filed 11/14/19.

⁴⁷ Penn Township zoning ordinance, §190-641(D).

proposed drilling would likely cause nearby residents to suffer from resulting odors, noise, traffic, and air and light pollution.⁴⁸

Given Jefferson Borough's experience denying a shale gas well permit in a residential area, it is not surprising that local officials subsequently proposed to remove from its zoning code the Oil and Gas Development Overlay Districts adopted in 2014. While they were in force, the overlays allowed oil and gas wells as conditional uses in residential, commercial, and industrial zoning districts, as well as compressor stations and processing plants in industrial ones.

Now, any future oil and gas development allowed in Jefferson Hills Borough will be restricted to the Heavy Industrial zoning district. In reversing course, Jefferson Hills recognized the true purpose of overlays, and removed overlay districts that would have provided less rather than more protection for residents and the environment.

C. **Hazard Mitigation Plans**

Oil and gas operations can cause chemical and waste spills, "routine" and accidental releases of air and water pollution, and truck accidents. County-level Hazard Mitigation Plans (HMPs), which aim to identify and address risks to public health, safety, and property, can be an important local tool to minimize harm associated with the rapid and expansive buildout of oil and gas operations in combination with protective zoning ordinances.

In order to receive federal grant funds for, for example, flood mitigation and fire management, counties are required to update HMPs every five years and review them annually so that they "reflect changes in development, progress in local mitigation efforts, and changes in priorities." 49 Local HMPs "must be regularly reevaluated and revised so that [the Commonwealth's] communities' exposure to hazards is always accurately understood."50

The process of regular review provides opportunities for public participation, including to raise ongoing or emerging concerns that should be integrated into HMPs. For example, during review of a risk assessment, a county can identify and describe both longstanding and new hazards faced by communities, including hazards associated with oil and gas operations.⁵¹

The Pennsylvania Emergency Management Agency (PEMA) supports HMP updates, including through a hazard identification and risk evaluation tool that prompts communities to consider hazards it may not have previously assessed but that have the potential to cause significant impacts.⁵² The tool includes conventional and unconventional oil and gas wells, gas and liquid pipelines, and hazardous materials releases.⁵³

⁴⁸ EQT Production Co. v. Borough of Jefferson Hills, 208 A.3d 1010 (PA Supreme Court 2019).

⁴⁹ 44 C. F.R. §§ 201.3(d), 201.6 (d)(3).

⁵⁰ PA Emergency Management Agency, All-Hazard Mitigation Planning Standard Operating Guide, 2020, p. 1, https://www.pema.pa.gov/Mitigation/Planning/Pages/default.aspx.

⁵¹ 44 C.F.R. § 201.6(c)(2). The HMP must also "assess each [municipality's] risks where they vary from the risks facing the entire [county]." Id.

⁵² PA Emergency Management Agency, All-Hazard Mitigation Planning Standard Operating Guide, 2020, p. 66, https://www.pema.pa.gov/Mitigation/Planning/Pages/default.aspx. ⁵³ *Id*.

Just as with zoning ordinances, some municipalities have paid greater attention to oil and gasrelated hazards while others continue to ignore or downplay them. For example, Chester County updated the population and pipeline mapping information in its 2021 HMP, ensuring a more reliable profile of the vulnerability to pipeline-related hazards.⁵⁴ On the other hand, Washington County's 2021 HMP included the same number of wells to evaluate risk as in the 2015 plan, effectively underestimating risks from the hundreds of new wells drilled in the intervening years.⁵⁵ Residents should consider participating in their county's HMP process to ensure public health and environmental hazards from oil and gas operations are accurately accounted for and minimized in the HMP.

IV. Findings: 24 Pennsylvania Communities

Based on our review of the 24 municipalities in our survey, we have made certain findings as to what makes a "good" zoning ordinance with respect to oil and gas uses, as well as particular strategic areas worth targeting for improvement.

A. The Top 10 Zoning Protections

EIP has identified ten general categories of provisions contained in zoning ordinances that can help protect residents and ensure that a municipality is better able to minimize harm from oil and gas development. Some of these provisions are "bare minimums" that most municipalities have in place, while others are more comprehensive requirements that only the "best" municipalities in our survey had enacted.

First, a municipality must have a zoning ordinance that designates districts for different purposes. This is a basic premise of zoning—and a prerequisite for enacting many of the other key provisions. Yet one-quarter (6 of 24) municipalities in the current survey lack any zoning whatsoever: Forward and Oakland Townships in Butler County; Shirley and Penn Townships in Huntingdon County; and Derry and Shirley Townships in Westmoreland County.

Second, a zoning ordinance should identify and define specific oil and gas uses and zone for them accordingly. While this may seem obvious, there are many municipalities that simply never updated their ordinances in order to account for the shale gas boom and the host of new oil and gas uses associated with it. More than half of the municipalities in the current survey (14 of 24) specify oil and gas uses (12 in zoning codes and two in other limited ordinances).

While drilling may be mentioned in an ordinance, a growing number of municipalities are located in areas of Pennsylvania where "oil and gas uses" now include large facilities like gas processing plants and compressor stations. To the extent that a municipality wishes to address the activities associated with specific oil and gas uses, (e.g., drilling, wastewater impoundments, gas processing

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⁵⁴ Chester County Draft 2021 HMP, §4.3.5-6-4.3.5-10.

⁵⁵ Washington County Draft 2021 HMP, Table 4.3.12-2. In the prior HMP, Washington County reported that "between 2009 and 2013, 1,289 permits for natural gas drilling were issued" (Washington County Draft 2015 HMP, p. 158). Thus, almost 683 more unconventional well permits have been issued in Washington County in the last five years than in the previous five-year cycle.

plants and compressor stations, and temporary employee housing), it should update its ordinance to include those uses.

Third, a municipality should limit oil and gas uses to industrial districts. An ordinance that does not specify oil and gas uses could potentially still be protective, provided that the ordinance generally limits operations to industrial zoning districts. While there is ongoing debate around the premise that all oil and gas uses are inherently industrial, the Pennsylvania Supreme Court has stated that they are. ⁵⁶ Yet because many municipalities haven't updated their ordinances in years, they still allow for oil and gas uses in most or all zoning districts.

However, in the current survey we found that several municipalities make a distinction in their zoning ordinances between oil and gas wells and certain types of facilities. For example, Penn and Murrysville Township in Westmoreland County restrict compressor stations and processing plants to industrial or business zones, while still allowing drilling in residential areas. In the lead up to the construction of Shell's ethane processing and polyethylene production plant, Potter Township in Beaver County added a new category of use to its zoning ordinance and restricts "petrochemical facilities" to industrial areas.

Fourth, a municipality should not allow oil and gas uses in residential districts. These districts are where most people live and spend time outdoors, and are likely to be impacted by noise, light, traffic, and other aspects of oil and gas development. Yet in our survey, only one-quarter of the municipalities (6 of 24) had explicit restrictions on oil and gas uses in all residential districts: Collier Township in Allegheny County; Greene and Potter Townships in Beaver County; West Goshen Township in Chester County; Hopewell Township in Washington County; and Rostraver Township in Westmoreland County.

Fifth, a municipality should classify oil and gas operations as conditional uses and special exceptions rather than permitted uses. This step means that local officials must undergo a more in-depth permit application review and concrete decision-making process, including holding public hearings and considering testimony and other evidence from community members. Where oil and gas uses are conditional uses or special exceptions, planning is much better, more thoughtful, and more protective of health, quality of life, and the environment.

Unlike permitted uses, where the use is considered a right of the applicant provided they submit the required documentation, hearings for conditional uses and special exceptions place a heavier evidentiary burden on the applicant, allow for public participation, and give municipalities more power to place conditions on the project to account for impacts. Half of the municipalities in our survey (12 of 24) defined most or all oil and gas uses as conditional or special exception use rather than permitted uses.

Sixth, a municipality should require appropriate setbacks of oil and gas operations. Setbacks require a minimum distance between the oil and gas use and residential structures, rights of way, water bodies, and other areas. This serves to protect the health and safety of residents, while also reducing other negative impacts on residents and natural resources.

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⁵⁶ Gorsline v. Board of Supervisors for Fairfield Township, 186 A.3d 375, 389 (PA Supreme Court 2018), https://casetext.com/case/gorsline-v-bd-of-supervisors-of-fairfield-twp-3.

Just over half (13 of 24) of the municipalities in the survey required setbacks for at least one type of oil and gas use. However, there is considerable variation in the required distance and the aspects to which the setbacks apply (e.g., conventional versus unconventional wells and buildings versus wetlands). Some other municipalities required a minimum lot size for oil and gas uses, which can address some of the same issues as setbacks but with considerably less precision.

Seventh, a municipality should require the submission of certain permits, studies, and documentation with an application for an oil and gas use. Spelling out the required contents of an application ensures that the proponent has obtained the required air and water permits from the state or county permitting agency, conducted necessary impact studies, and clearly documented project plans.

Several of the municipalities in the survey required proponents to prepare specific analyses on a range of impacts. For example, Collier Township in Allegheny County requires a full environmental impact study, including an analysis of radioactive materials and site restoration plans. West Deer Township in Allegheny County requires applicants to conduct tests on all water wells, springs, and surface waters within 1,000 feet of oil and gas well sites. Hopewell Township in Washington County requires applicants to conduct a study on the radius of blast impacts from drilling and seismic exploration. In Westmoreland County, Murrysville Township requires a noise management plan and Rostraver Township a chemical storage plan.

Eighth, a municipality should require that an applicant has adequate insurance or bonding. This step is critical to ensuring that operators pay for any damage they cause, rather than placing the burden on the public. Bonding should account for both disasters and routine impacts like damage to roadways from trucks. Yet less than half (10 of 24) of the municipalities surveyed included any sort of insurance or bonding in permit application requirements. Only a few municipalities specified minimum insurance coverage amounts, for example Greene Township in Beaver County (\$10 million per occurrence), Hopewell Township in Washington County (\$25 million per occurrence), and Rostraver Township in Westmoreland County (\$3 million per occurrence).

Ninth, a municipality should have the ability to levy and enforce fines for violations of the ordinance or other municipal requirements, such as noise and traffic limits. Over half (14 of 24) of the municipalities in the survey provide the authority for such fines, but most were limited to approximately \$500-600 per day.

Tenth, a municipality should evaluate potential activities in their community and consider adopting other specific requirements and restrictions to minimize harm. For example, some municipalities require joint maintenance agreements with operators for roads and or that the operator will reimburse the municipality for the cost of hiring a consultant to review application materials. Some municipalities have limited the extent to which oil and gas operators can locate water or waste impoundments at well sites as impoundments frequently spill or leak wastes into waterways or groundwater. Others require engines and compressor stations to be enclosed in buildings in order to reduce noise.

B. Examples of Progress: Municipalities Adapt to Changing Times

1. Hopewell Township, Washington County

Residents of Hopewell Township have learned about oil and gas impacts the hard way. Located at the epicenter of the Marcellus Shale boom's earliest phase, Hopewell experienced the rapid spread of wells and waste impoundments across agricultural and residential areas. The outcome has been considerable degradation of health and air and water quality.⁵⁷

Fortunately, Hopewell Township took these harsh lessons to heart and adopted a zoning ordinance in 2018.⁵⁸ The ordinance defines oil and gas development as a conditional use in the zoning districts where it is allowed, which is agricultural and industrial areas. Wells, compressor stations, processing plants, and waste impoundments are prohibited outright in residential zoning districts. Hopewell's ordinance also establishes setbacks ranging from 200 - 1,000 feet from property lines.

As noted above, the conditional use process increases the transparency of permitting and ability of the public to engage in the permitting process via mandatory public hearings for each application. In Hopewell's ordinance, it also triggers a thorough review of permit applications and requires operators to take harm-reduction measures such as limiting noise and pollution, providing safety preparedness plans, and securing liability insurance and road maintenance bonds. ⁵⁹

2. West Goshen Township, Chester County

Located in eastern Pennsylvania, West Goshen Township does not have oil and gas wells, but it is very familiar with the impacts of pipeline development. The Township's zoning ordinance dates back to 1972. ⁶⁰ However, the Township amended its zoning in 2014 to specifically address public utility and gas and liquid pipeline facilities such as pump and valve stations. ⁶¹ This forward-looking move helps address the intense impacts of projects underway and the continued push for more shale gas drilling and transportation statewide.

West Goshen's ordinance limits pipeline facility development to industrial zoning districts, defines uses as conditional use, and requires operators to take harm-reduction measures such as emergency planning, limited on-site waste storage, and prevention of air and water pollution, odors, and dust. In addition, West Goshen requires that any pipeline facilities handling gas or hazardous liquids have a minimum setback from all occupied structures equal to the "pipeline impact radius." 62

⁵⁷ "Pennsylvania DEP fines Range Resources \$4.15 million for Violating Environmental Regulations," PR Newswire, 9/18/14, https://www.prnewswire.com/news-releases/pennsylvania-dep-fines-range-resources-415-million-for-violating-environmental-regulations-275638111.html. See also June Chappel's testimony in Shalefield Stories (2014), https://environmentamerica.org/wp-content/uploads/2014/02/ShalefieldStoriesnp 1 0.pdf.

⁵⁸ Hopewell Twp., Washington County, Chapter 320 of Town Code, available at https://ecode360.com/33570991.

⁵⁹ Hopewell Twp. Zoning code §320-602 on permitting and additional requirements in §320-1012.

⁶⁰ Township of West Goshen Code, Chapter 84, adopted 12/13/72, available at https://ecode360.com/10796167.

⁶¹ Township of West Goshen Code §84-39(18)(b) on public utility and pipeline facilities, adopted 9/2/14 by ordinance no. 4-2014; requirements are in §84-56(B).

⁶² Township of West Goshen Code, §84-56(B)(18); the definition of "pipeline impact radius" in the zoning ordinance indicates that this distance is to be calculated according to state and federal regulations.

In the face of the Mariner East 2 pipeline project, West Goshen asserted its zoning authority with regard to a pump station called Boot Road. Following a 2015 legal settlement with the Township and concerned residents, Sunoco was required to install additional safety equipment at the station. When Sunoco violated the settlement agreement in 2017 by using non-authorized land to expand the pump station, West Goshen Township filed a lawsuit with the Pennsylvania Public Utility Commission against the company—and won. 4

3. Rostraver Township, Westmoreland County

Rostraver is no stranger to oil and gas development, with well sites, a large landfill that accepts industry waste, and its location along the Mariner 2 pipeline. Yet residents would likely have faced a much worse situation had Rostraver not amended its zoning ordinance in 2011—just a few years into the shale boom—to specifically address oil and gas activities.⁶⁵

Rostraver's ordinance offers key protections, such as limits on traffic, chemical storage, and noise levels. Relatively unusual is Rostraver's early decision to not allow development in any residential areas and instead restrict well sites to agricultural and industrial zoning districts and facilities to industrial ones. Rostraver also chose to define all oil and gas uses as "special exceptions," adding more layers of information, transparency, and scrutiny to the permitting process.

This key requirement recently helped community members defeat a proposal from Olympus Energy to construct a large well site close to homes and a popular commercial area. Due to the required public hearing process, individuals and organizations were able to provide testimony about the projects harmful impacts to public health and the environment. As a result, the Rostraver Township Zoning Hearing Board was forced to consider information on the detrimental impacts of drilling, specific risks posed by the project, and the legal precedent for municipal denial of similar well pad applications. In 2022, the Board voted unanimously to deny Olympus Energy's application. 66

C. Examples of Refusal: Municipalities Ignore Damage

1. Amwell Township, Washington County

Shale gas operators set their sights on Amwell Township from the start of the Marcellus Shale boom. The result has been hundreds of wells, compressor stations, and waste impoundments, as well as a spiderweb of pipelines and gathering lines.

⁶³ Settlement Agreement between Sunoco Pipeline LP, West Goshen Township, and Concerned Citizens of West Goshen Township, 2015, https://www.westgoshen.org/DocumentCenter/View/312/2015-Settlement-Agreement-PDF.

⁶⁴ Summary of PUC Decision & Order Regarding West Goshen Township vs. Sunoco Logistics, 9/20/18, https://www.westgoshen.org/259/Sunoco-Mariner-I-II---Documents-Litigati

⁶⁵ Rostraver Township, Westmoreland County, Municipal Code amending ordinance 617, 6/1/11, https://pennstatelaw.psu.edu/ file/aglaw/Ordinances/Rostraver Township.pdf.

⁶⁶ Liam Belan, "Zoning board denies Olympus well pad request," Mon Valley Independent, 2/9/23.

Amwell has the dubious distinction of being a Township that has completely neglected to update its zoning code despite the rapid explosion of growth of oil and gas operations in the region. Amwell's code was adopted in 1975, when gas production in Pennsylvania was over 8,000 percent less than it is today.⁶⁷ The code doesn't even specify "oil and gas" or related infrastructure or consider risks to health and safety from development and industrial activities.

For years, some Amwell residents complained to the Pennsylvania Department of the Environment about degradation of water supplies and other health and environmental impacts. Their experiences have been widely documented by researchers and the media in reports, regional and national newspapers, and a Pulitzer Prize winning book.⁶⁸ More recently, oil and gas sites in Amwell Township were the subject of a state Grand Jury investigation and the issuance of significant violations to key operators.⁶⁹ Unfortunately, Amwell Township officials have not made efforts in in exercising their authority to updated the zoning code to better protect community members.

2. Derry Township, Westmoreland County

Derry Township is located about an hour east of Pittsburgh in Westmoreland County. Derry is among the municipalities in Westmoreland County where oil and gas operations have surged in recent years and residents must contend with impacts from numerous wells and compressor stations. Landslides and the flow of sediment into waterways also occurred during construction of the Mariner East 2 pipeline.

The Township is guided on some development decisions by Westmoreland County's 2013 Subdivision and Land Development Ordinance, which doesn't specify oil and gas as a land use. However, Derry has not adopted any zoning requirements of its own—leaving residents with virtually no recourse to prevent polluting facilities from being built next to their homes, schools, and places of work.

3. Forward Township, Butler County

Residents of Forward Township have watched oil and gas development spread rapidly across the rural and agricultural landscape. Next door to one another are two of the largest cryogenic plants in western Pennsylvania: MarkWest Liberty Bluestone in Jackson Township and XTO Energy Penn in Penn Township. Within Forward Township, there are dozens of wells, a large processing plant, compressor stations, and pipelines and gathering lines.

This rapid industrial transformation has occurred in the complete absence of zoning. Similar to Derry Township, Forward Township appears to rely only on the county Subdivision and Land

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⁶⁷ Calculation based on historic volumes of gas production (million cubic feet) from the Energy Information Administration, natural gas production, table of Pennsylvania Natural Gas Marketed Production, https://www.eia.gov/dnav/ng/hist/n9050pa2a.htm.

⁶⁸ Eliza Griswold, "The Fracturing of Pennsylvania," *The New York Times Magazine*, 11/17/11; and *Amity and Prosperity: One Family and the Fracturing of America*, 2018.

⁶⁹ Office of Attorney General Josh Shapiro, "PA Fracking Company pleads to Criminal Conviction in 43rd Statewide Grand Jury Investigation," press release, 6/12/20; and Farm & Dairy News, "Pa. reaches settlement with EQM for pipeline violations," 10/30/20.

Development Ordinance, which neglects to make any specific reference to oil and gas activities as a land use. ⁷⁰ Because Forward Township has failed to adopt and enforce zoning requirements, residents have virtually no recourse to prevent polluting facilities from being built where they live, work, and go to school.

V. Municipal Ordinances and Government

A. Definitions and Abbreviations

The following terms are commonly used in zoning ordinances and are abbreviated as indicated in the tables used in the overviews of municipalities that follow.

<u>Permitted Use (P)</u>: A use that is authorized in the zoning district without any additional processes (such as public hearings) that are required for conditional uses and special exceptions.

Accessory Use (AU): A use that is allowed as a subordinate and incidental use to the primary use on the parcel (such as a swimming pool or a shed next to a residential dwelling).

<u>Conditional Use (CU)</u>: A use that is authorized in the zoning district, but which may only be granted following an administrative process subject to the standards and criteria established by the ordinance. Typically, the implication is that if the requirements are met, then permission will be granted.

Special Exception (SE): A use that is authorized, but which may only be granted following a public hearing and an administrative process subject to the standards and criteria established by the ordinance. SE is usually a more onerous type of permit to acquire than CU, as it often implies some discretion on the part of the administrative process.

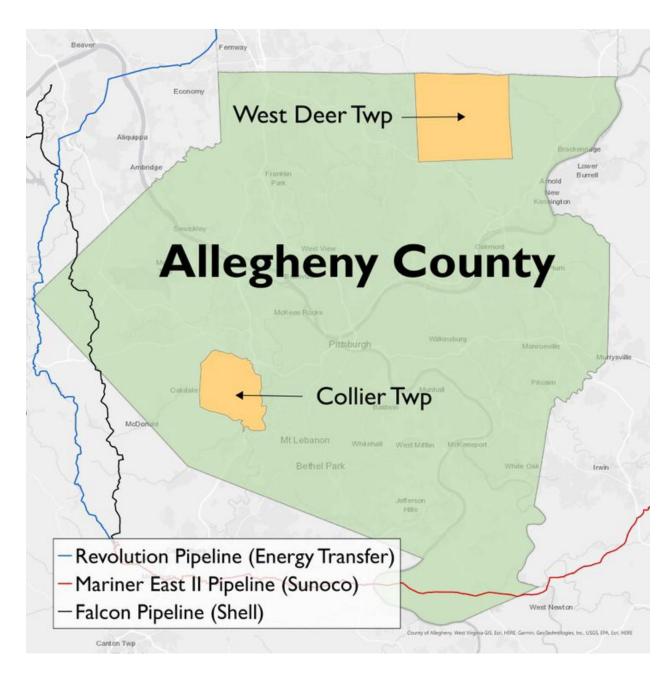
Prohibited/Forbidden (N): A use that is expressly not allowed within the zoning district.

<u>Blank Cells in EIP's Zoning Use Tables</u>: Typically, blank cells mean that the use is prohibited, as it is not one of the specifically enumerated permitted uses. The one potential exception to this is in industrial districts, which sometimes allow, by special exception, uses that are comparable to the specific industrial uses permitted in the district.

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⁷⁰ Butler County, Subdivision, Development & Zoning, https://www2.co.butler.pa.us/planning/bcsaldo.pdf.

B. Allegheny County



1. West Deer Township

West Deer Township is located at the northern border of Allegheny County, to the east of Pittsburgh and the Pennsylvania Turnpike (I-76). It encompasses rural and suburban residences and outdoor recreational areas and has a history of coal mining and limited oil and gas drilling.

Olympus Energy submitted applications seeking Conditional Use approval to construct two large unconventional gas drilling pads (Dionysus and Leto) in the semi-suburban residential zoning district, near homes and a local park. Opposition to the development grew quickly within the community, in large part because of a successful effort to educate West Deer residents about their rights under the PA Constitution and local laws. In turn, the Township saw unprecedented participation in the public hearing process that is required for all Conditional Use Permit applications. The West Deer Township Board of Supervisors granted party status to all residents within 1½ miles of the proposed Dionysus site, enabling those individuals to ask direct questions and present evidence during the related hearings. The supervisors are individuals to ask direct questions and present evidence during the related hearings.

In December 2021, the West Deer Township Board of Supervisors unanimously voted to deny local permits for Olympus Energy's proposed Dionysus deep well site. Olympus Energy appealed to the Allegheny County Court of Common Pleas, which affirmed the Township's decision; Olympus then appealed to the PA Commonwealth Court, which is currently reviewing the case. ⁷³ At the same time, hearings on the Leto project have continued.

Government

Tbl. WDT-1, West Deer Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
Township Manager	Daniel Mator	N/A	N/A	N/A
	Beverly S. Jordan, Chairwoman	2025		
Township	Shirley Hollibaugh, Vice Chairwoman	2023	Elected	Four years
Board of Supervisors	Vernon Frey	2023		
Supervisors	James Smullin	2025		
	Jennifer Mann	2025		
	Mark Schmidt, Chairman	2025		
	Richard Hollibaugh	2025		
Planning	Katharine Rojik, Secretary	2024	Appointed by Board of	
Commission	Robert Bechtold	2024	Supervisors	
	Alan M. Banks	2023	1 /	Four years

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⁷¹ Concerned Residents of West Deer (CROWD). Overview of issues and updates on hearings and permitting available at https://concernedresidents.weebly.com/.

⁷² Information on the hearings and links to exhibits available at http://www.westdeertownship.com/gas-well-hearing-information/.

⁷³ Concerned Residents of West Deer (CROWD). Overview of issues and updates on hearings and permitting available at https://concernedresidents.weebly.com/.

	Suzanne L. Garlena	2022		
	Patrick D. Stark	2022		
	Scott Woloszyk, Chairman	2025		
	Neil Tristani, Vice Chairman	2026	Appointed by Board of	Five years
- ·	Joseph D. Gizienski	2024		
Zoning Hearing	George Hollibaugh	2022		
Board	Sean Parkinson	2023	Supervisors	J
	Daniel Smullin, Alternate	2026		
	H. Nelson Crooks Jr., Alternate	2025		
	Chad Dolby, Alternate	2025		

Zoning Code

West Deer Township enacted its Zoning Ordinance in 2012.⁷⁴ The Township amended its assignment of authorized land uses in each zoning district in 2015.⁷⁵ As outlined below, West Deer Township has nine zoning districts and two overlay districts, one of which (Village Corridor) is relevant to oil and gas development.

West Deer Township's code does not define specific purposes allowed in each zoning district. Instead, the Township has established a Table of Authorized Land Uses, which guides what is allowed or prohibited in each district and, in turn, the level of review and types of permits needed. Most of the residential zoning districts allow cluster development, which concentrates residential development in specific areas so that remaining land can be used for recreation, open space, natural resource preservation, and agriculture.

Tbl. WDT-2, West Deer Township: Zoning Districts

District	Name
R	Rural Estate
R-1	Rural Residential
R-2	Semi- Suburban Residential
R-3	Suburban Residential

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⁷⁴ West Deer Township., Allegheny County, PA, Ordinances, Ch. 210 (Zoning), *available at* https://ecode360.com/12743975.

West Deer Twp., Allegheny County, PA, Zoning, Table of Authorized Land Uses, *available at* https://ecode360.com/attachment/WE1400/WE1400-210a%20Table%20of%20Authorized%20Land%20Uses.pdf.

R-4	Urban Residential
C-1	Neighborhood Commercial
C-2	Highway Commercial
I	Industrial
SU	Special Use
V	Village Corridor Overlay

Tbl. WDT-3, West Deer Township: Zoning for Specific Oil and Gas Uses

Oil and gas use	District									
On and gas use	R	R-1	R-2	R-3	R-4	C-1	C-2	I	SU	V
Gas and oil production	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU
Deep oil and gas wells (including for	CU	CU	CU	CU				CU		
exploration, extraction, production)										
Shallow oil and gas wells (including	CU	CU	CU	CU	CU		CU	CU	CU	
for exploration, extraction,										
production)										
Compressor stations	CU	CU						CU	CU	
Processing plants								CU		

Tbl. WDT-4, West Deer Township: Setback Distance/Size Requirements for Oil and Gas Uses

Use	Setback from				
Use	Buildings	Sites or buildings on historic registries			
Drill rigs	1.5 x height	N/A			
Deep oil and gas wells	650 ft.	200 ft.			
Shallow oil or gas wells	100 ft.	200 ft.			
Compressor stations	1200 ft.	200 ft.			
Natural gas processing plants	1000 ft.	200 ft.			

Tbl. WDT-5, West Deer Township: Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Two-step application process	Requires completeness check of application materials
	Narrative and maps of project	Including acreage, number of wells, all equipment and structures, parking areas, transportation routes, relation to compressor stations and processing plants
A11 - 11 4	First responders have adequate information	Applicant must provide site orientation upon request and facilitate training of first responders
All oil and gas operations	Receipt of all required state and federal permits	Applicant must provide copies of all relevant permits and plans
operation.	Emergency management plan	Preparedness, prevention and contingency plan must be provided to and approved by the Township
	Stormwater management plan	Plan must be approved by Township Engineer
	Township Roadway Maintenance and Repair Agreement	Agreement must include bonding requirements and be approved by Township
	Water quality tests	Applicant must provide copies of tests on all water wells, springs, and surface waters within 1000 ft. of oil and gas well sites

Tbl. WDT-6, West Deer Township: Other Requirements for Oil and Gas Uses

Use	Requirement				
	Lighting must minimize glare on road and buildings				
All oil and gas uses	Noise must not exceed ambient noise for more than 10 minutes per hours by: 5 dB during drilling; 10 dB during hydraulic fracturing; and 5 dB at compressor stations and processing plants. Installation of sound mitigation devices				
Oil and gas wells	Fencing and landscaping around all sites and impoundments; warning signs on fences No drilling in designated Township floodway; no storage of chemicals in floodplain Conduct and pay for water quality tests on all water wells, springs, and				
	surface waters within 1000 ft. of oil and gas well sites Site access to emergency responders				

2. Collier Township

Collier Township is located in the western part of Allegheny County, southwest of Pittsburgh and the bordering major highways (I-79 and I-376). It encompasses rural and suburban residences and outdoor recreational areas and has had some limited oil and gas drilling in the past.

Government

Tbl. CT-1, Collier Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length	
Interim Township Manager	George Macino		Appointed by Commissioners		
	Wayne Chiurazzi, President	2025			
Township Board of	Mary Ann Cupples-Wisniowski, Vice President	2025	Elected	4 years	
Commissioners	Timothy Young	2025		, J	
	Dawnlee Vaughn	2023			
	Debra Zymroz	2023			
	Kevin Vaughn	2023			
Planning Commission	Tom Chidlow	2022	Appointed by Commissioners	Four years	
	Tyler Lonchar	2025			
	Mike Ahwesh	2023			
	Gary Adams	2024			
.	Anthony Bagnato	2024			
Zoning Hearing Board	Art Kifer	2024	Appointed by	Five years	
	Gary Ludin	2026	Commissioners	·	
	David Auel	2024			
	Jennifer Fox-Rabold	2025			

Zoning Code

Collier Township enacted its most recent Zoning Ordinance in 2015.⁷⁶ In 2011, the Township adopted an ordinance specifically to "allow extraction of gas and oil with the least detrimental impact on residentially zoned property, historic or recreational resources and schools." As outlined below, Collier Township has 15 zoning districts (7 of which primarily support residential uses) with clear purposes and limits on permitted activity.

Notably, Collier Township's zoning code has two definitions applicable to oil and gas activities. "Mineral removal" means production and extraction overall but specifically names conventional oil and gas operations with single wells and limited output; while "oil and gas wells" comprises all types of well sites, facilities, structures, and equipment.⁷⁸

Tbl. CT-2, Collier Township: Zoning Districts

District	Name	Purpose
S-C	Special Conservation	Preserve natural features and resources and to protect key Township and regional recreational facilities, provide for accessory uses and compatible supporting uses
R-1	Rural Residential	Protect agricultural uses and preserve natural features and resources while encouraging low-density single-family residential development, provide for accessory uses and compatible public and semi-public uses
R-2 and R-2-A	Suburban Residential	Encourage single-family developments at suburban densities where utilities and transportation facilities exist or are anticipated in the future, provide for accessory uses and compatible public and semi- public uses
R-3	Medium Density Residential	Plan for locations that are appropriate for higher density residential development because they are served by transportation, public utilities and services and where future development growth is expected
R-3-A	Village Center	Assimilate a former United States military facility into adjacent residential communities while permitting reuse of historic and institutional assets; authorize a mix of uses that will provide supporting services in a village center
R-4	Residential/Gateway	Enhance the Route 50 corridor as a gateway, provide opportunities for limited commercial and office use and compatible public, semi- public, and accessory uses, and protect single-family neighborhoods
R-5	Planned Residential Community	Continue the character of an established planned residential community, encourage a mix of housing types, provide for compatible public, semi-public and accessory uses

⁷⁶ Collier Twp., Allegheny County, PA, Ordinances, Ch. 27 (Zoning), *available at* https://ecode360.com/31130372.

⁷⁷ Collier Twp., Allegheny County, PA, Ordinance 592, 2011: https://www.colliertownship.net/DocumentCenter/View/197/Gas-Well-Ordinance-PDF?bidId=.

⁷⁸ Collier Twp., Allegheny County PA, Municipal Code Section 27-202, Particular Meanings, *available at* https://ecode360.com/31130393.

B-1	Planned Shopping Center	Provide for controlled development of commercial areas surrounding established community shopping centers to meet the general needs of the population
B-1-A	Highway Interchange	Provide for certain commercial development to take place within the district, provided that an I-79 interchange exists to service traffic generated by such uses and to avoid burdening the local road network
B-2	Highway Commercial	Provide for commercial uses that depend on access to an arterial highway, that may generate truck traffic and that may not be compatible with commercial areas devoted primarily to retail shopping
В-3	Special Commercial	Provide for commercial use, including a specialty retail shopping complex related to historic facilities nearby
B-4	Commercial and Light Industrial	Provide for a mixture of commercial and light industrial uses to encourage revitalization near the Carnegie I-79 interchange
PEDD	Planned Economic Development	Promote economic development on large undeveloped tracts in a campus-style atmosphere, allowing for a compatible mix of uses
I-1	Industrial	Encourage the continuation and revitalization of general industrial uses in areas that have already been established for these uses

Tbl. CT-3, Collier Township: Zoning for Specific Oil and Gas Uses

		Districts												
Oil and gas use	S-C	R-1	R-2 & R-2-A	R-3	R-3A	R-4	R-5	B-1	B-1-A	B-2	B-3	B-4	PEDD	I-1
Oil and gas wells	CU							CU	CU	CU	CU	CU		CU
Mineral removal		CU											CU	
Compressor stations														P
Processing plants														P
Refinery (oil, gas, or similar product)														Р

Tbl. CT-4, Collier Township: setbacks and distance/size requirements for oil and gas uses

Use		ks from specific locations	
	Buildings	Property line	Other
Conventional oil and gas wells	300 ft. *	300 ft.	100 ft. from stream banks and cemeteries
Unconventional oil or gas wells	1,000 ft.	1,000 ft.	100 ft. from stream banks and cemeteries

Roadways for compressor stations and	1,000 ft.	100 ft.	2,500 ft. from
processing plants			schools

^{*} This 300 ft. setback also applies to the Panhandle Trail: https://panhandletrail.org/.

Tbl. CT-5, Collier Township: Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Conditional use application fee	Non-refundable \$1,000 fee and initial review escrow deposit of \$5,000
	Receipt of all required state and federal permits	Applicant must provide copies of all relevant permits and plans submitted or issued to PA DEP and proof of insurability
	Bonding for street restoration and road repair	Applicant must post a bond or other financial security "in favor of the Township"
	Site plan	Developed by a licensed engineer and including title information, property lines, streets and rights-of-way, adjacent property owners and structures, natural features, equipment and structures, vehicle cleaning areas, transportation routes, stormwater and sediment controls
Oil and gas wells	Environmental Impact Statement	Including existing and historical land uses and conditions, overview of operations, plans to manage noise and radioactive materials, site restoration plan and schedule
	Lighting and water usage/disposal plans	Including reduced glare and water sources and transportation methods
	Information on proposed pipelines for water, gas, oil, and other	Including location, depth, type
	Transportation plan	Including proposed truck routes and evidence of sufficient turning radius
	Information to first responders	Applicant must provide site orientation, maps, and emergency plans upon request
	Reimbursement to Township	Covers fees for site inspections and Township engineer
Compressor	Receipt of all required state, federal, and Township permits	Applicant must obtain Township zoning, grading, and occupancy permits
stations and processing	Narrative of project	Including information on the site, property lines and building, water wells and sources, rights-of-way
plants	Township road use plan and maintenance agreement	Plan must include information on truck weights and routes and minimize impact on local roads

Emergency management plans	Site orientation and training for first responders at applicant's expense
Reimbursement to Township	Covers fees for site inspections and consultants

Tbl. CT-6, Collier Township: Other Requirements for Oil and Gas Uses

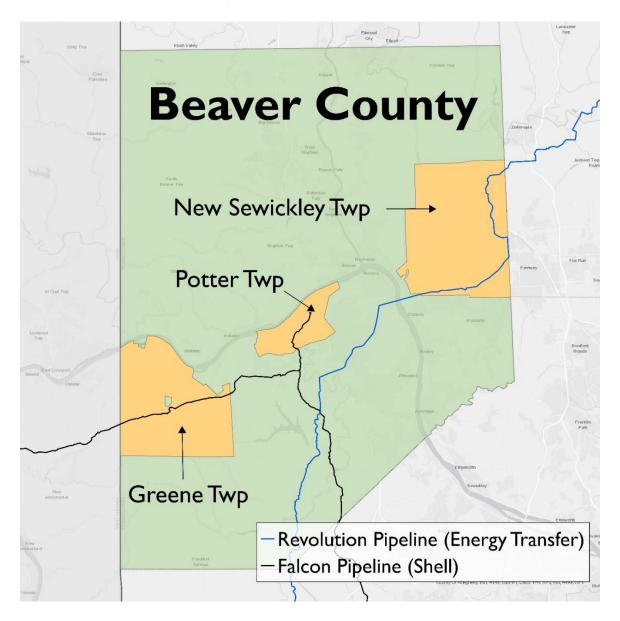
Use	Requirement					
	No drilling, construction, or workover activities between 7 pm-7 am					
	No mineral removal in certain designated waterways					
	Fencing and screening as necessary for security and protection of properties					
	Lighting must minimize glare on road and buildings					
	Engines must have equipment to contain exhaust					
Oil and gas wells	Vapor recovery units and similar equipment must be installed, and odor control measures taken					
	Operators must establish ambient noise levels and not exceed it or 55dBA by more than 7 dBA during drilling 7 am-9 pm and 5 dB during drilling 9 pm-7 am; and 10 dBA during hydraulic fracturing; or any higher for more than 1 minute per hour. 79 Sound mitigation measures must be taken if exceedances occur.					
	Operators must be reachable by the public by phone and by Township officials 24/7					
	Impoundments must be secured with 6-ft. fencing and gates and netting if they contain non-potable water and liquids					
Oil and gas wells	Public roads must be kept free of dirt, mud, debris					
On and gas wens	Operators must park in their own areas off public streets					
	No site construction on Class 1 or 2 soils (US Dept. of Agriculture standards)					
Compressor	Lighting must be directed to not shine on public roads, nearby vicinity, or adjacent properties					
stations and	Construction and paving of access roads must prevent dust, water, mud, and					
processing plants	sediment from reaching public roads and surrounding areas					
	All noise-generating equipment that exceeds Township standards must be enclosed					

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Compressors and power-driven equipment must use electric motors

Sites must be secured with 8-ft. high-security fencing and gates and visible signage

C. Beaver County



1. Greene Township

Greene Township is located in the southwest part of Beaver County, bordering the Ohio River and the West Virginia line. As is the case across the County, the Township has seen an uptick in oil and gas activities. In addition, the Township is on the path of the Shell Falcon Pipeline, which connects the company's ethane cracker plant to the north in Potter Township (also in Beaver

County) and the MarkWest Houston processing plant in Chartiers Township (Washington County).

Government

Tbl. GT-1, Greene Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
	Mike Messner, Chairman	2027		
	Nate Jarrup, Vice Chair	2026		
Township Board of Supervisors	Merry Smith, Supervisor/Road Master	2023	Elected	Four to six years
Planning	Rose Marie Kendall, Chairperson	2025		
Commission	Kari Wilson, Vice Chair	2024		
	Kathy Nelson, Secretary	2025	Appointed	
	Lisa Moore	2022	by Board of	Three years
	Mike Messner	2023	Supervisors	
Zoning	Francis Himic, Chair	2025		
Hearing	Judy Novak	2023		
Board	Bivian Moore	2025		
	Kevin Taylor, Alternate	2023		
	Jack E. Sharp III, Alternate	2023		

Zoning Code

Greene Township adopted its current zoning code in 2012, which includes a chapter pertaining specifically to oil and gas activities. ⁸⁰ As outlined below, Greene Township has six zoning districts. The zoning code specifies the purposes of each district, as well as allowed oil and gas activities.

Notably, Greene Township's zoning code chapter on oil and gas defines numerous ways in which those uses must be conducted, such as being "harmonious and appropriate" in relation to the general vicinity; not being hazardous in relation to existing neighborhood uses; and not

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⁸⁰ Greene Twp., Beaver County, Town Code, Ch. 153, adopted 11-5-2012; §153.280-287 on oil and gas passed 2-6-2012, *available at* https://codelibrary.amlegal.com/codes/greene/latest/greenetwp-pa/0-0-0-2650

resulting in impacts (e.g., traffic, noise, fumes, odors) that have a detrimental impact on "any persons, property, or the general welfare."81

Tbl. GT-2, Greene Township: Zoning Districts

District	Name	Purpose
A-1	Agricultural	Provide for agrarian, low-density residential and related land uses
R-1	Suburban Residential	Provide for the development and maintenance of single-family residential neighborhoods together with activities that are compatible and normally associated with residential neighborhoods
R-2	General Residential	Provide for a mix of single- and multi-family residential dwelling units in areas of the municipality that are appropriate for blending of land uses
C-1	Light Commercial	Provide locations for general business and related activities for the use and convenience of area and district consumers
C-2	Highway Commercial	Provide sites for both light commercial and heavy commercial activities along major highway corridors
I	Industrial	Provide for both heavy commercial and industrial oriented land use activities

Tbl. GT-3, Greene Township: Zoning for Specific Oil and Gas Uses

Oil and gas usa	District							
Oil and gas use	A-1	R-1	R-2	C-1	C-2	I		
Subsurface activities (e.g., underground transmission	P	P	Р	Р	P	P		
and gathering lines) Oil or gas wells	CU			CU	CU	CU		
Compressor stations	CU			CU	CU	CU		
Natural gas processing plants	CU			CU	CU	CU		

Tbl. GT-4, Greene Township: Setback Distance/Size Requirements for Oil and Gas Uses

Use	Setback from					
	Buildings off the site property	Property lines	Sites or buildings on historic registries			
Oil or gas wells	200 ft.	200 ft.	500 ft.			
Compressor stations	Zoning district	200 ft.	500 ft.			

⁸¹ Greene Twp., Beaver County, Town Code, Ch. 153.282(C).

	requirements		
Natural gas processing plants	Zoning district	200 ft.	500 ft.
	requirements		

Tbl. GT-5, Greene Township: Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Two-step application process	Requires completeness check of
		application materials
	Receipt of all	Applicant must provide copies of all relevant permits
	required state and federal permits	and plans
	First responders have adequate information	Applicant must provide site orientation upon request and facilitate training of first responders
	Emergency management plan	Preparedness, prevention and contingency plan must be provided to and approved by the Township
All oil and	Certificate of liability insurance naming Township as insured	Coverage not less than \$10 million per occurrence, \$50 million aggregate, \$10 million property damage
gas uses	Map of site and project narrative	Including all wells, equipment, permanent improvements, land disturbance, parking of vehicles, etc.
	Soil erosion and sedimentation	Plan must conform with County Conservation
	control plan	District requirements
	Traffic plan	Including manner and routes for delivery of equipment, chemicals, water
	Easements for transmission and gathering lines	Applicant must provide information recorded with the Township
	Rehabilitation/reclamation plan	Including information on protection of land, streams, etc., projected reforestation, land reuse, etc.
	Township Roadway Maintenance and Repair Agreement	Agreement must include bonding requirements and be approved by Township

Tbl. GT-6, Greene Township: Other Requirements for Oil and Gas Uses

Use	Requirements	
	Construction/truck traffic limited to 7 am to 7 pm	
	No restricted hours for well drilling, operation of compressor	
	stations/natural gas processing plants	
All oil and gas uses	No access to sites only on private roads	
	Operators must determine the ambient noise level to 100 ft. or nearby	
	structures and maintain it.	
	Permanent fencing around wellhead, equipment, tanks, impoundments	

	Lighting must minimize glare on roads and buildings within 300 ft.
	Dust, gases, fumes, refuse, smoke that endanger health and safety or cause
	soiling or staining are prohibited; specific dust control measures must be
	taken
	Operator employees may not live onsite except for two weeks during drilling.
	No drilling in designated Township floodway; drilling in 100-year
	floodplain prohibited but with exceptions; no storage of chemicals in
	floodplain
	Impoundments allowed only on the same deep well sites that they service;
	fencing and netting are required on wastewater impoundments
All oil and gas wells	24-hour site security or securing fencing
	Seismic testing requires Township approval
	Operators of coal bed methane and conventional wells may request waivers
	from all conditions

2. New Sewickley Township

New Sewickley Township is located in the northeast section of Beaver County, east of the Ohio River and bordering active oil and gas areas in Butler County. As is the case across the County, the Township has seen an uptick in oil and gas operations, including a compressor station (Pike) that is classified as a major source of air pollution.

In addition, the Township is on the path of the ETC Revolution Pipeline, which connects drilling sites in several nearby counties with the ETC Revolution Processing Plant in Smith Township (Washington County). New Sewickley has experienced community and environmental impacts from ETC's pipeline work, including landslides.

Government

Tbl. NST-1, New Sewickley Township Officials

Office	Official	End of Ter m	Elected/ Appointed	Term Length
Township Manager- Zoning/Code officer	Ronald Leindecker	N/A	N/A	N/A
Township Board of	Greg Happ, Chairman	2023	Elected	Six
Supervisors	Doug Martin, Vice Chairman	2025	Elected	years

	Charles Mike Phipps	2027		
	Fritz Retsch	2027		
	Martin Bonzo			
	Albert Horn, Chairman	2023		
	Ed Eisenbrown, Vice- Chairman	2024		
Planning	Jenny Fessler	ssler 2023 Appointed by		Four
Commission	Gary Braun	2026	Board of Supervisors	Years
	Ed Majors	2025	1	
	Art Craig	2025		
	Mike Phipps	2025		
	Jack Harding, Chairman	2024		
Zoning Hearing	Frank Miklos, Vice- Chairman	2025	Three Appointed	Three
Board	Lynn Reinhardt, Jr.	2023	by Supervisors	Years
	Neil Bonzo, Alternate	2023		

Zoning Code

New Sewickley adopted its current zoning code in 2017 and recently amended it in 2019.82 It includes a chapter specifically on oil and gas activities that spells out which aspects are allowed in different zoning districts. 83 As outlined below, New Sewickley Township has five zoning districts.

Tbl. NST-2, New Sewickley Township: Zoning Districts

District	Name	Purpose
RA	Residential Agricultural	Serve as a rural resource area and residential district in order to accommodate residential development while still maintaining a rural setting and traditional rural uses
MDR	Mixed Density Residential	Provide a wide range of housing types at various densities in a rural resource area setting

 $^{^{82}}$ New Sewickley Twp., Beaver County, Town Code, Ordinance 214 amending ordinance 208, adopted 5-7-2019, available at http://www.newsewicklev.com/wp-content/uploads/2019/06/Final-Zoning-Ordinance-No.-208 As-Amended.pdf.

83 New Sewickley Township, Zoning ordinance number 214, Article 9, Oil and Natural Gas Development.

GC	General Commerce	Provide for a wide variety of retail and related business activities to service both Township residents and the regional community.
LI	Light Industrial	Provide for a mix of light industry and heavy commerce in areas of the community where it will not conflict with less intense land uses and where adequate area wide highway access is available along the municipal perimeter.
TND	Traditional Neighborhood Development	Recognize the historic pattern of growth and embody a healthy mix of small-scale business development, institutions that support the community, and single-family dwellings at a density that promotes walkability and maintains historic character.

Tbl. NST-3, New Sewickley Township: Zoning for Specific Oil and Gas Uses

Oil and gas use	District				
On and gas use	RA	MDR	GC	LI	TND
Oil or gas wells	CU	CU	CU	P or	CU
				CU*	
Compressor stations	CU	CU	CU	CU	CU
Natural gas processing plants				CU	
Freshwater impoundments		CU		CU	
Centralized wastewater				CU	
impoundments					

^{*} Oil and gas wells are permitted use in the Light Industrial district if they are located more than 1000 ft. from buildings; at less than 1000 ft. they are conditional use.

Tbl. NST-4, New Sewickley Township: Setbacks and Distance/Size Requirements for Oil and Gas Uses

Use	Setback from				
USE	Lot size	Buildings	Property lines	Public rights of way	
Oil or gas wells	10 acres**	500 ft./300 ft.*	200 ft.	500 ft.	
Compressor stations	15 acres	750 ft.	200 ft.	500 ft.	
Natural gas processing plants	15 acres	750 ft.	200 ft.	500 ft.	
Freshwater impoundments	10 acres	N/A	200 ft.	200 ft.	
Centralized wastewater impoundments	10 acres	N/A	200 ft.	200 ft.	

Tbl. NST-5, New Sewickley Township: Application Requirements for Oil and Gas Uses

ol. NST-5, New Sewickley Township: Application Requirements for Oil and Gas Uses			
Use	Application Requirement	Notes	
	Two-step application process	Requires completeness check of application materials	
	Receipt of all required state and federal permits	Applicant must provide copies of all relevant permits and plans	
	First responders have adequate information	Applicant must provide site orientation upon request and facilitate training of first responders	
All oil and gas uses	Emergency management plan	Preparedness, prevention and contingency plan must be provided to and approved by the Township	
	Map of site and narrative of project	Including type and location of all wells, equipment, permanent improvements, land disturbance, parking of vehicles, etc.	
	Soil erosion and sedimentation control plan		
	Plan for transmission of gas	Applicant must identify mid- and downstream facilities in and 800 ft. beyond Township	
	Reportable spills and accidents plan	Including how these will be reported to Township	
	Traffic plan	Including manner and routes for delivery of equipment, chemicals, water	
	Township Roadway Maintenance and Repair Agreement	Agreement must include bonding requirements and be approved by Township	

Tbl. NST-6, New Sewickley Township: Other Requirements for Oil and Gas Uses

Use	Requirements
	Construction operations restricted to 6:00 am – 9 pm; doesn't apply during
	drilling and maintenance
All oil and gas	24-hour site security during drilling; warning signs at site
wells	Security fencing for accessory impoundments and sites within 1000 ft. of
	buildings
	Permanent fencing around wellhead, equipment, tanks, impoundments

^{*} The ordinance distinguishes between "existing protected" buildings (500 ft. setback) and "all other buildings and structures" (300 ft. setback).

^{**} Lot size is 40 acres in the Traditional Neighborhood Development District.

	Downward and inward lighting to reduce glare on roads and buildings; lighting only on well pad
	Primary access road to sites must be improved to a dustless all-weather surface that prevents stormwater erosion and sedimentation onto roadways
	Construction operations restricted to 6:00 am – 9 pm; doesn't apply during drilling and maintenance
	Heavy truck traffic limited to 7:00 am – 7:00 pm
Communication	Operator must determine ambient noise level and demonstrate to Township
Compressor stations and	that it is being maintained
processing plants	Lighting should be limited to security lighting "when practicable"
prants	Row of coniferous trees required for screening unless site has a 75 ft. deep woodland buffer
	Plan required to reduce visibility, such as fencing and landscaping

3. Potter Township

Potter Township is located in the center of Beaver County, along the Ohio River. As is the case across the County, the Township has seen an uptick in oil and gas operations. In particular, Potter Township is on the route of the Shell Falcon pipeline and home to Shell's ethane and polyethylene production plant (in Monaca), set to be one of the largest single sources of greenhouse gases and other pollutants in Pennsylvania.

Government

Tbl. PT-1, Potter Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
Township	Rebecca Matsco, Chairwoman	2027		
Board of Supervisors	Earl Shamp, Vice Chair	2023	Elected	Six years
	Al Cwynar, Supervisor	2025		
	Lauren Patton	2022		
Dlamina	Lennie Miller	2023	Appointed by	E
Planning Commission	Philip Floyd	2025	Board of	Four years
Commission	Mark Summerville	2026	Supervisors	
	Tom Ruff	2023		

	George Barnes,			
	Alternate	2025		
	Dan Kunzmann	2025		
Zoning Hearing	Mark Czarnecki	2023	Appointed by	Three years
Board	Tom Podnar	2024	Supervisors	J
Zoning Officer	Justin Cwynar	N/A	N/A	N/A

Zoning Code

Potter adopted its current zoning code in 2014 and recently amended it in 2019.⁸⁴ It includes a section specifically on oil and gas wells and facilities that spells out which aspects are allowed in different zoning districts, covering wells, compressor stations, and processing plants.⁸⁵ When Shell announced plans to build its plant, the Township added a separate chapter of the zoning law to cover petrochemical facilities and incidental uses.⁸⁶ As outlined below, Potter Township has five zoning districts.

Tbl. PT-2, Potter Township: Zoning Districts

District	Name	Purpose
MU	Mixed Use	Preserve and foster multiple development uses; primary uses are commercial and service oriented.
R	Residential	Provide for and maintain low-density residential requirements; allow agricultural uses, single-family dwellings, two-family dwellings, and multiple-family dwellings; include associated public, institutional, and recreational uses and other compatible uses.
NHD	Natural Heritage	Conserve open space and natural resources; to protect steep slopes; minimize the impact of development on the environment in areas with sensitive natural features; provide for outdoor recreation and related activities; and preserve the Township's natural heritage.
OIP	Office Industrial Park	Provide for and maintain suitable areas which will satisfy the commercial and industrial requirements and potential of the Township, including commercial offices.

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⁸⁴ Potter Twp., Beaver County, Town Code, Chapter 210, Zoning, adopted 12-17-2014, *available at* https://ecode360.com/13086872

⁸⁵ Potter Township, Zoning ordinance section 210-40, oil and gas wells and facilities.

⁸⁶ Potter Township, Zoning ordinance section 210-63, petrochemical facilities and uses incidental thereto.

I	Industrial	Provide suitable space for existing industries and their expansion, including those with large space requirements; provide for future industrial development; and take advantage of nearby rail and water transportation.
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Tbl. PT-3, Potter Township: Zoning for Specific Oil and Gas Uses *

Oil and gas usa	District				
Oil and gas use	MU	R	NHD	OIP	Ι
Oil or gas wells	CU		CU	CU	CU
Compressor stations	CU			CU	CU
Natural gas processing plants	CU			CU	CU
Petrochemical facilities					CU

^{*} The Township code states that oil and gas sites "shall be considered a principal use by right within all zoning districts" (§210-40(C)(1). However, the limitations for each zoning district (§210-16 through §216-20) specify "oil and gas wells and facilities" as conditional uses only for some districts; the table reflects those more specific limitations.

Tbl. PT-4, Potter Township: Setbacks and Distance/Size Requirements for Oil and Gas Uses

	Setback from:				
Use	Buildings	Property lines	Streets	Sites or buildings on historic registries	
Drilling rigs	1.5x height	1.5x height	1.5x height		
Oil or gas wells	Compliance with require dis	ments in applica	ble zoning	500 ft.	
Compressor stations	1000 ft.	N/A	NA	500 ft.	
Natural gas processing plants	1000 ft.	N/A	N/A	500 ft.	

Table PT-5, Potter Township: Application Requirements for Oil and Gas Uses

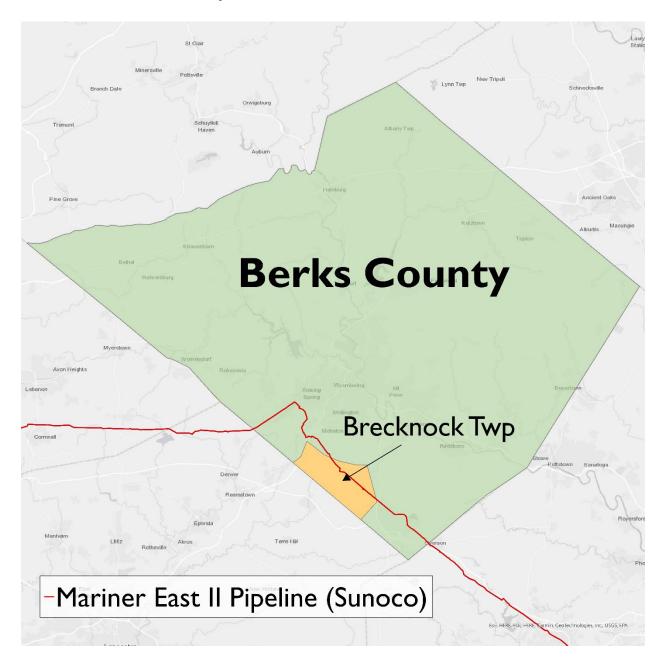
Use	Application Requirement	Notes
	Two-step application process	Requires completeness check of
		application materials
	Receipt of all	Applicant must provide copies of all
All oil	required state and federal permits	relevant permits and plans
and gas uses	First responders have adequate information	Applicant must provide site orientation upon request and facilitate training of first responders
	Emergency management plan	Preparedness, prevention and contingency plan must be provided to the Township

Map of site and narrative of project	Including type and location of all wells,
	equipment, permanent improvements,
	land disturbance, storage of chemicals,
	parking of vehicles, etc.
Environmental Impacts plan	If not covered in documentation to DEP,
	then narrative including mitigation
	measures
Traffic plan	Including ingress and egress
Township Roadway Maintenance and	Agreement must include bonding
Repair Agreement	requirements and be approved by
	Township

Table PT-6, Potter Township: Other Requirements for Oil and Gas Uses

Use	Requirements
Oil & gas wells and facilities	Security fencing except during drill, when 24/7 security is required No access to well sites through local streets Permanent fencing around wellheads, equipment, tanks, impoundments Operator must determine ambient noise level at 100 feet and not exceed it by more than 5 dB during drilling or compressor station/processing plant operation, 10 dB during hydraulic fracturing; installation of sound mitigation devices Downward and inward lighting to reduce glare on roads & buildings within 100 feet No drilling in designated Township floodway; drilling in 100-year floodplain prohibited with exceptions
Compressor stations and processing plants only	Construction operations restricted to 6:00 am – 9:00 pm; doesn't apply during drilling and maintenance Heavy truck traffic limited to 7:00 am – 7:00 pm Operator must determine noise level at 100 Lighting should be limited to security lighting "when practicable"

D. Berks County



1. Brecknock Township

Brecknock Township is located in the southern part of Berks County, between I-176 and state route 222 south of Reading. It is one of the 86 municipalities in Pennsylvania crossed by Energy Transfer's Mariner East II (ME2) pipeline and the location of one of ME2's pump stations, named Beckersville.

The Berks County Planning Commission reviewed land development plans for the Beckersville pump station, and in 2015 publicly expressed concerns regarding the potential impact of the station on nearby residents. The Commission recommended that noise levels generated by the facility be limited to typical levels for a rural-residential district, i.e., 50-60 dBA; the operator provide safety awareness and emergency training to local and County EMS/first responders; and residents be given advance notification of maintenance activities and pigging operations.⁸⁷

For its part, Brecknock Township does not appear to have questioned the ME2 project, and in 2015 granted an easement for the pipeline to go through public parkland. 88 In 2017, the PA DEP issued a permit for the Beckersville pump station. 89

Government

Tbl. BRKN-1, Brecknock Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
D 1.6	Jeffrey M. Fiant, Chairman	2023		
Board of Supervisors	Parker U. Reinoehl	2027	Elected	Six years
	Ronald J. McClure	2025		
	John R. Burger, Chairman	2022		Four years
Planning	Richard K. Burkhart, Vice Chairman	2024	Appointed by Board	
Commission	Michael E. Deibert	2023	of Supervisors	
	Elizabeth H. Davis	2025		
	Dennis McIntyre	2024		
	Michael S. Bieber, Chairman	2022		
Zoning Hearing	Glenn R. Kraft, Vice Chairman	2023	Appointed by Board of	Three years
Board	Michael L. Ruth	2024	Supervisors	
	Kerry T. Stoner, Alternate	2024		

⁸⁷ Meeting minutes, Berks County Planning Commission, 2/11/15, http://www.co.berks.pa.us/Dept/Planning/Documents/BCPC/Meetings/Feb15Minutes.pdf

⁸⁸ Andrew Wagaman, "Brecknock Township OK2 easement for pipeline through recreational area," *Reading Eagle*, 3/11/15.

⁸⁹ Permit number 06-03164, DEP Southcentral Regional Office, 11/7/17.

Zoning Code

The Brecknock Township Zoning Ordinance was adopted in 2006, with some amendments made as recently as 2019. It establishes eight zoning districts (as well as special districts for sexually oriented businesses and an airport), which are outlined below.

Brecknock Township's Zoning Ordinance does not specifically reference oil and gas uses. It could therefore be assumed that such uses would be a permitted use in the Light Industrial district, which specifies certain types of businesses (e.g., office buildings, printing, and medical marijuana) but has only minimal requirements related to lot size and dimensions. However, it appears that the Beckersville Pump Station was constructed in the Rural Residential District, in which low-density single-family homes is the only development use specified.

Notably, Brecknock's Zoning Ordinance prohibits certain uses overall, stating that, "No building or structure may be erected, altered or used and no lot or premises may be used for any activity which is noxious, injurious or offensive by reason of dust, smoke, odor, fumes, noise, vibration, gas, effluent discharge, illumination or similar substances or conditions." ⁹¹

Tbl. BRKN-2, Brecknock Township: Zoning Districts

District	Name	Purpose
R-R	Rural Residential	Foster the continued existence of watersheds, woodlands, and agriculture and to protect critical natural areas such as steep slopes, watercourses, water supplies, and ecosystems. Low-density single-family development is permitted; allow concentrations of development when significant portions of the tract are permanently reserved for open space.
LDR	Provide a transition from rural and agricultural areas to moderat density residential areas that are compatible with the existing neighborhoods and uses in the district; foster protection of sensi environmental features; ensure that adequate water and sewage facilities are provided for proposed development.	
CA	Conservation/ Agricultural	Foster the protection and conservation of sensitive environmental resources; encourage and promote continued agricultural, open space, recreation, and conservation uses; protect groundwater resources in the Township; allow for low-density residential development; limit the residential demand for public services and facilities.

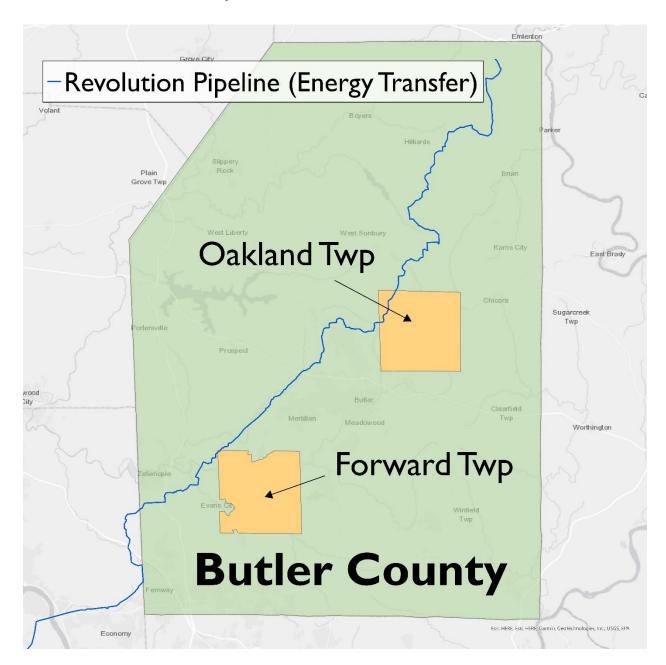
⁹¹ Township of Brecknock Zoning Ordinance, §27-309, Prohibited Uses. This section specifically exempts agricultural uses, so that they may be allowed.

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⁹⁰ Township of Brecknock, Code of Ordinances, Chapter 27, adopted by Ordinance 150, 3/7/2006, available at https://www.brecknockberks.com/code-of-ordinances

RC	Rural Conservation	Foster the protection and conservation of sensitive environmental resources; encourage and promote continued agricultural, open space, recreation, and conservation uses; protect groundwater resources in the Township; allow for ultra-low-density residential development; limit the residential demand for public services and facilities.
NCV	Neighborhood Commercial/ Village	Provide an identifiable core area within the Township which contains community facilities and services; promote a sense of community by establishing a location where Township functions are centralized; allow for a mix of residential, commercial, and industrial uses and encourage infill of vacant parcels at a scale compatible with existing uses in the district.
GC	General Commercial	Provide centralized areas for retail and service uses which are accessible to the regional transportation system; establish standards which promote a unified and organized arrangement of buildings, services, and parking areas.
OBC	Office/Business Campus	Provide a consolidated area for larger-scale business, medical and governmental offices and research uses; promote the establishment of a professional business campus; locate larger-scale commercial uses in close proximity to arterial roads.
LI	Light Industrial	Provide an area for light industrial uses which have a minimal negative impact on land, air and water resources.

E. Butler County



1. Forward Township

Forward Township is located in the southwest part of Butler County, to the east of Evans City and I-79. Forward and adjacent municipalities (in particular Jackson Township and Connoquenessing Borough) have been a key part of the expansion of an interconnected system of midstream facilities and wells.

Across Forward Township, there are dozens of wells, a large processing plant (Sarsen), and compressor stations (Forward and Royal Oak)—as well as infrastructure to support them and pipelines to connect them. In addition, Forward Township is on the path of the ETC Revolution Pipeline.

Government

Tbl. FWD TWP-1, Forward Township: Government Officials

Office	Office Official		Elected/ Appointed	Term Length
Township	Mel Musulin, Chairman	2023		Eassa to Circ
Board of	Mark Wilson, Vice Chair	2025	Elected	Four to Six
Supervisors	Steve Buehler	2027		years
	Steve Longwell, Chairman	2023		
	Stuart Thompson, Vice Chairman	2024		
	Carl Powell	2024		
D1	Shane Rhoades	2024	Appointed by Supervisors	Four years
Planning Commission	Chad Biirr	2024		
Commission	John McElhinny	2024		
	Charlie Flach	2022		
	Tom Zoelle 2022			
	Nick Madaffari	2022		

No Zoning in Forward Township

The relatively rapid industrial expansion in Forward Township has occurred in the absence of zoning. The Township has a land development ordinance, issues permit and conducts inspections for such basic development as houses, driveways, fencing, and septic systems, and requires the submission of formal plans for any development that would cause stormwater runoff or occur in floodplains. The Township is guided on some development decisions by Butler County's 2012 Subdivision and Land Development Ordinance, which doesn't specify oil and gas as a land use. San a land use.

However, the Township has chosen to not adopt zoning requirements—leaving residents with virtually no recourse to prevent polluting facilities from being built next door. As the map below indicates, these facilities are close enough together to potentially have a cumulative impact on air quality and health in Forward Township. This is a particularly troubling pattern given that

⁹² Forward Township, Applications and Forms overview, https://forwardtwpbutlerco.us/application-for-variance/

⁹³ Butler County, Subdivision, Development & Zoning, https://www2.co.butler.pa.us/planning/bcsaldo.pdf.

Forward Township is sandwiched between two of the largest cryogenic plants in western Pennsylvania, the MarkWest Liberty Bluestone (Jackson Township) and XTO Energy Penn Cryogenic (Penn Township).

2. Oakland Township

Oakland Township is located in the center of Butler County, to the east of Butler City. It has dozens of wells and associated infrastructure, such as gathering lines and water impoundments. In addition, Oakland Township is on the path of the ETC Revolution Pipeline.

Local Government

Tbl. OT-1, Oakland Township: Government Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
Township	Shaun M. Krill, Chairman	2028		
Board of	James C. Shipley, Vice-Chairman	2024	Elected	Six years
Supervisors	Brian G. Hans, Supervisor	2026		
	Larry Thompson, Chairman	2022		
D1	Patricia Sanderson, Vice Chairman	2024	Appointed	
Planning Commission	John Cook, Secretary	2023	by	Four years
	Gary Wuff	2025	Supervisors	
	Open seat			

Code Provisions in Oakland Township

Oakland Township has not adopted formal zoning, although its municipal code includes a section currently "reserved for future use," indicating the potential for zoning provisions. 94 At the same time, the Township adopted an oil and gas ordinance in 2011 as part of its subdivision and land use code that includes requirements related to specific aspects of wells, compressor stations, and processing plants (e.g., project applications, site maintenance, and noise). 95

Oakland Township requires setbacks from buildings, lot lines, and streets only for onsite drill rigs—at a distance equivalent to 1.5x the drill rig height—not for any other oil and gas operations or facilities that can impact nearby residents and businesses.

⁹⁴ Oakland Twp, Butler County, Chapter 23, Township Ordinances, available at https://www.oaklandtownship.us/township-ordinances.

⁹⁵ Oakland Twp, Butler County, Ordinance 2011-02 in Chapter 19 of municipal code, subdivision & land use, adopted 8-3-2011, available at https://bb771da4-eee3-4156-a3decc8ebf08853a.filesusr.com/ugd/00e052 ab851e81b2ab494fb7af7e9efdec58bb.pdf.

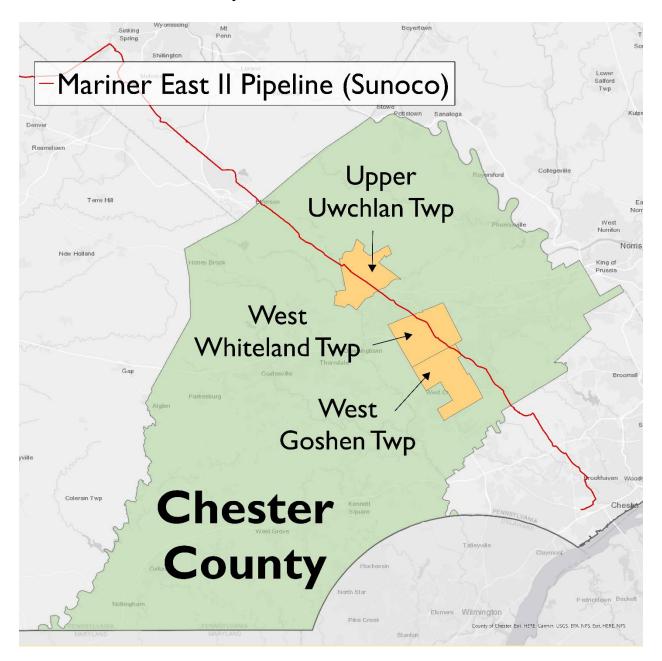
Tbl. OT-2, Oakland Township: Application Requirements for Oil and Gas Uses

Use	Application Requirements	Notes
	Two-step application process	Requires completeness check of
		application materials
	Emergency management plan and	Applicant must provide a Preparedness,
All oil	emergency contact	Prevention, and Contingency (PPC) plan and 24/7 contact
and	Adequate information to first	Applicant must provide site orientation
gas	responders	and training course to first responders
uses	Copies of all	
	required state and federal permits	
		Including location, number of wells, acres
	Project narrative and maps	of land disturbance, equipment, relation to
		compressor stations and processing plants,
		and transportation routes.

Tbl. OT-3, Oakland Township: Other Requirements for Oil and Gas Uses

Use	Requirements
	24/7 on-site supervision and security; 6-ft. fencing, lockable gates, and
	warning signs
Oil and gas wells	No site access only through local streets
gus wons	
	Downward and inward lighting
	Attempts to preserve natural vegetation
	Applicant must establish baseline ambient noise level (default of 70dBA)
Compressor stations	and not exceed it by more than 5 dBA
and processing	Sound mitigation devices must be installed for permanent structures near
plants	homes, buildings, public facilities, etc.
	Security lighting only when practicable

F. Chester County



1. Upper Uwchlan Township

Upper Uwchlan Township is located in the north central part of Chester County, straddling I-76 and encompassing Marsh Creek Lake, a regional drinking water supply.

Six of the 48 criminal complaints lodged by the PA Attorney General against Energy Transfer Partners (the parent company of Sunoco Pipeline) over the construction of ME2 occurred in

Upper Uwchlan Township, involving the discharge of thousands of gallons of drilling fluid into Marsh Creek Lake, wetlands, and streams. 96

Subsequently, Sunoco submitted amended permit applications and plans for the pipeline segments in the Township. 97 PA DEP initially issued a permit for the ME2 Eagle Pump Station located in Upper Uwchlan in 2017; the agency is currently reviewing Sunoco's renewal application. 98

Government

Tbl. UU-1, Upper Uwchlan Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
Board of	Sandy M. D'Amico, Chairperson	2023		
	Jenn Baxter, Vice Chair	2025	Elected	Six years
Supervisors	Andy Durkin	2027		
	Sally Winterton, Chair	2025		
	Joe Stoyack, Vice-Chair	2026		Five years
	Chad Adams	2025	Appointed by Board of Supervisors	
Dlamina	David Colajezzi	2026		
Planning Commission	Jim Dewees	2027		
Commission	Stephen Fean	2022		
	Ravi Mayreddy	2026		
	Jim Shrimp	2024		
	Jeff Smith	2025		
	James Greaney	2023	Appointed	
Zoning	Lauren Cortesi	2023	by Board	Three years
Hearing Board	Peter Egan	2025	of	
Joe Ceribelli (Alternate) 2024		2024	Supervisors	

Zoning Code

Upper Uwchlan adopted its zoning code in 1989, establishing nine districts (as well as a special flood hazard mitigation area), as outlined below. 99 The Township's zoning ordinance does not

⁹⁶ Report of the 45th Grand Jury on Investigation No. 56 on Sunoco Pipeline LP construction of the Mariner East II, section VI(c); specific locations also in chart on Mariner East II Inadvertent Returns available at https://www.dep.pa.gov/Business/ProgramIntegration/Pennsylvania-Pipeline-Portal/pages/mariner-east-ii.aspx.

⁹⁷ PA DEP, Community Information, Marsh Creek Lake (HDD 290), https://www.dep.pa.gov/About/Regional/SoutheastRegion/Community%20Information/Pages/Marsh-Creek-Lake-HDD-290.aspx.

⁹⁸ PA DEP, eFACTS listing for Sunoco Pipeline Eagle Station, Site ID #791273, https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleSite.aspx?SiteID=791273.

99 Township of Upper Uwchlan Code, Chapter 200, adopted 6-7-89, available at https://ecode360.com/8342086.

specifically reference oil and gas uses but provides latitude to officials regarding their potential location. Current oil and gas activities in the Township comprise only transmission and delivery.

It is possible that oil and gas uses would be considered an industrial use restricted to the Limited Industrial (LI) district. This assumption is supported by a clause in the requirements for the LI district allowing for "Any use similar to the above permitted uses not specifically provided for herein," subject to authorization as a special exception. The potential location of oil and gas uses in the LI district would be subject to lot size requirements and "physical performance standards" covering such aspects as glare and heat, air pollution, waste discharge, and flammable and explosive materials. 101

Oil and gas uses could also potentially be located in the Planned Industrial/Office district (PI) because of a clause in that section of the zoning code allowing for "Any other use as determined by the Board of Supervisors to be the same general character as the above permitted uses" (which include manufacturing), subject to authorization as a conditional use and lot size requirements. ¹⁰²

Nevertheless, the ME2 Eagle pump station appears to be located in the R-2 Residential district. ¹⁰³ This district is zoned for low to moderate density residential development, with specified exceptions only for religious and educational uses. This may have happened because the Township didn't know it could zone for buildings associated with a pipeline, or because officials at the time decided not to contest the station's location.

Tbl. UU-2, Upper Uwchlan Township: Zoning Districts

District	Name	Purpose
R-1	Residential (low density)	Support the preservation of critical natural resources, such as streams, floodplains, wet soils, variable groundwater yield areas, and conditionally suitable for on-lot sewage disposal systems; encourage continued agricultural, open space and conservation uses; provide for low density residential development; encourage and promote phased development.
R-2	Residential (low to moderate density)	Provide for low to moderate density residential development in areas not generally characterized by steep slopes or floodplains, but which contain soils conditional for on-lot sewage disposal systems and variable groundwater yields; encourage continued agricultural, open space and conservation uses; encourage and promote phased development.

^{100 §200-44(}J)(1), Limited Industrial District Use Regulations, Upper Uwchlan Township Code.

¹⁰² §200-49(M)(2), Planned Industrial/Office District Use Regulations, Upper Uwchlan Township Code.

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¹⁰¹ §200-82, Physical Performance Standards, Upper Uwchlan Township Code.

¹⁰³ Township notifications about maintenance at the Eagle pump station state it is located at Little Conestoga and Milford Roads, which the Upper Uwchlan Township Zoning Map indicates in in the R2 District. See https://www.upperuwchlan-pa.gov/250/Sunoco-Mariner-East and <a href="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upperuwchlan-pa.gov/DocumentCenter/View/47/Zoning-Map?bidId="https://www.upp

R-3	Residential (medium to high density)	Encourage medium to high density residential development located in areas of the Township which contain environmental features generally suitable for such development and accessible to transportation systems and community facilities.
R-4	Residential (high density)	Provide the opportunity for high density residential development to occur in areas of the Township which contain environmental features generally suitable for such development and accessible to transportation systems and community facilities.
C-1	Village	Preserve the historical development patterns of the villages of Eagle and Byers; establish standards for new development and coordinated street and landscape improvements and pedestrian amenities; provide for a variety of uses in a manner which facilitates and promotes pedestrian travel within the village setting.
C-2	Limited Commercial	No purpose specified; standards for the Planned Industrial/Office District apply.
C-3	Highway Commercial	Provide for retail and service uses in an area accessible to a regional highway system. The C-3 District establishes standards for a unified and organized arrangement of buildings, service and parking areas, to facilitate access management and provide for safe, convenient and attractive commercial activity.
LI	Limited Industrial	Provide for limited industrial and other related intensive activities; encourage the establishment of industrial uses; establish reasonable standards governing industrial development to ensure its compatibility with the character of the area and adjacent land uses; locate industrial uses within close proximity to major roads.
PI	Planned Industrial/ Office	Provide and require unified and organized arrangement of buildings, service and parking areas, together with adequate circulation and designated open space, all planned and designed as integrated units; promote large, unified developments which have direct access on a major highway.

2. West Whiteland Township

West Whiteland Township is located in the northcentral part of Chester County, south of I-76 and crossed by State Route 30.

West Whiteland has been at the center of problems associated with the construction of the Mariner East 2 pipeline, including numerous sinkholes and drilling fluid leaks in a residential neighborhood. ¹⁰⁴ In 2019, Sunoco Pipeline bought out homeowners in one of the areas where

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 $^{^{104}}$ Report of the 45^{th} Grand Jury on Investigation No. 56 on Sunoco Pipeline LP construction of the Mariner East II, section VI(d).

sinkholes occurred. 105 Residents concerned with impacts to property and the environment continued to document problems as ME2 even during the final stages of pipeline construction. 106

Government

Tbl. WW-1, West Whiteland Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length	
Board of	Rajesh Kumbhardare, Chair	2026			
Supervisors	Theresa Santalucia, Vice Chair	2024	Elected	Six years	
Supervisors	Brian Dunn	2027			
	Mark Gordon, Chair	2022			
	Raymond McKeeman, Vice Chair	2023			
Planning	Dan Cote	2023	-	Five years	
Commission	Andy Wright	2025	Appointed by Board of		
	Jeff Glisson	2024	Supervisors		
	Mary Frances McGarrity	2023			
	Vacant seat	2024			
Zoning	Paul Clery, Chair	2024		TI	
Hearing	Jo Ann Kelton	2022		Three years	
Board					

Zoning Code

West Whiteland adopted its zoning code in 1998, establishing 11 districts, as outlined below. 107 Current oil and gas uses in the Township comprise transmission and delivery activities.

In addition, West Whiteland has "supplementary land use regulations" in its zoning code to cover such activities as agriculture, forestry, and recreation. In 2015, the Township added a section specifically on pipelines in order to "accommodate the need for surface land uses affiliated with transmission pipelines consistent with the desire to protect the health, safety and welfare of the citizens of the Township." Among other requirements (summarized below), this section restricts land disturbance for pipelines to the Limited Industrial District, where "public

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¹⁰⁵ Jon Hurdle, "Sunoco buys two homes at Chester County site of Mariner East 2-related sinkhole," *StateImpact*, 4/29/2019

¹⁰⁶ West Whiteland Residents for Pipeline Safety, https://www.facebook.com/WWRPS.

¹⁰⁷ Township of West Whiteland Code, Chapter 325, adopted 12-8-98, available at https://ecode360.com/11701933.

¹⁰⁸ West Whiteland Township Code §325-28.3, adopted 3-11-2015 by ordinance number 421.

utility installations" are also allowed as a permitted use. ¹⁰⁹ However, as described above, the impacts of pipeline development can clearly spill over into other zoning districts, including residential areas—as they have in West Whiteland.

Tbl. WW-2, West Whiteland Township: Zoning Districts

District	Name	Purpose
R-1	Residential (low density)	Provide for continued low density, single-family residential development appropriate because of the relative remoteness from major commercial areas and transportation routes; provide flexible development options where special consideration is given to preservation of slopes, woodland and open space and where public water and centralized sewer facilities are provided.
R-2	Residential (moderate density)	Provide for moderate density residential use where mostly large, undeveloped tracts with good highway access are situated to serve as transition areas between lower density residential uses and higher density uses.
R-3	Residential (moderate to high density)	provide for moderate to higher density residential use which is compatible with existing residential development and directly accessible to major highways and commercial uses.
R-4	Residential (mobile home parks)	Provide adequate facilities for manufactured home parks; promote a safe and attractive neighborhood environment; encourage the preservation of open space by centralizing manufactured homes.
ТС	Town Center Mixed Use	Promote the development of a pedestrian-oriented central area which contains an integrated mix of residential, retail, office, entertainment, civic, institutional, and recreational uses which can serve as a community focal point.
NC	Neighborhood Commercial	Provide a district that permits the development of neighborhood convenience centers which can provide shopping and personal services for neighborhood residents.
O/L, O/R, O/C	Office (Laboratory, Residential, Commercial)	Encourage campus-type office buildings, institutional and/or laboratory and research development; accommodate the development of projects that create live-work communities; integrate retail commercial and office-type uses at high-visibility locations.
L-1	Limited Industrial	Provide an industrial district compatible with surrounding residential and commercial districts suitable for light manufacturing and assembly, research and development, wholesale, distribution and service use.

-

¹⁰⁹ West Whiteland Township Code §325-28.3(B)(1).

L-2	1 6 1	Provide an industrial district isolated from residential and commercial uses suitable for less labor-intensive uses that require relatively larger sites and for heavy manufacturing and bulk raw material processing.
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Tbl. WW-3, West Whiteland Township: Requirements for Transmission Pipelines and Utility Installations (as industrial uses)

Use	Requirement
	Minimum lot size of 2 acres, 25% building coverage
Transmission	No emission of gases, smoke, odors, dust, or particulate matter
pipelines and	No production or storage of explosive materials
public utility	No heat, light, glare, or vibrations beyond the lot boundary
installations	No discharge of effluent
	No chemical or waste lagoons or large-scale liquids storage
	Noise limitations per Township ordinance (§213-3)

3. West Goshen Township

West Goshen Township is located in the center of Chester County, intersected by several state roads and comprising a lake and several parks.

One of the pump stations for the Mariner East 2 pipeline is located in West Goshen, named Boot Road. The station has been in use since the construction of MEI, but Sunoco Pipeline expanded and reconfigured it during construction of the new pipeline. Some of the changes made were the result of a 2015 settlement by the Township and concerned residents with Sunoco that required the installation of additional safety equipment at the station; for its part, the Township promised not to invoke any zoning or land use ordinances in relation to the station or dispute Sunoco's public utility status.¹¹⁰

An additional aspect of this settlement was that Sunoco would not construct any additional above-ground equipment in West Goshen Township, with the caveat that if the company needed to do so, it would be restricted to land adjacent to the Boot Road station. In 2017, the Township filed a lawsuit with the PA PUC against Sunoco for violating the terms of the settlement in this regard. ¹¹¹

¹¹⁰ Settlement Agreement between Sunoco Pipeline LP, West Goshen Township, and Concerned Citizens of West Goshen Township, 2015, https://www.westgoshen.org/DocumentCenter/View/312/2015-Settlement-Agreement-PDF.

West Goshen Township v. SPLP Pipeline LP, brief filed before the Public Utility Commission, 8/2/17, https://www.westgoshen.org/DocumentCenter/View/304/08-02-2017-West-Goshen-Township-Public-Utility-Commission-Brief-PDF

In 2018, the PUC ruled in favor of the Township, prohibiting Sunoco from constructing a valve station anywhere but on the designated lot and requiring the company to provide additional documents and safety reviews to the Township and its pipeline consultant. 112

Government

Tbl. WG-1, West Goshen Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
	Shaun Welsh, Chair	2023		
Board of	Ashley Gagne, Vice Chair	2025		
	John Hellman	2027	Elected	Six years
Supervisors	Tinamarie Smith	2027		
	Robin Stuntebeck	2023		
	R Douglas Stewart, Chair	2024		
	John Terry Wildrick, Vice Chair	2026		
	Jeffrey S. Lieberman	2023		
Diamina	John Mattia	2026	Appointed by	
Planning Commission	Alessandra O'Reilly Bellwoar	2026	Board of	Four years
Commission	Carrie Martin	2025	Supervisors	
	Corey Wegerbauer	2025		
	Dr. Douglas White	2026		
	Vito Genua	2024		
	Joseph DeFelippes, Chair	2024		
Zoning	Scott T. Cullinan, Vice Chair	2024	Appointed by	TT1
Hearing	Shannon Royer	2023	Board of	Three years
Board	Salvatore Triolo, Alternate	2023	Supervisors	
	Nick DiPrinzio, Alternate	2024		

Zoning Code

West Goshen Township adopted its zoning ordinance in 1972. 113 Some districts have been added in more recent years and a few divided into sub-types; the core 18 districts are outlined below. The ordinance does not specify purposes for each district or sub-type, except for the few districts limited to clear single purposes (e.g., planned office park or municipal complex).

West Goshen's zoning ordinance contains supplemental regulations for a wide range of commercial and industrial activities; according to the definitions associated with these regulations, "mineral extraction" is a process for a range of substances, including crude oil and

¹¹² Summary of PUC Decision & Order Regarding West Goshen Township vs. Sunoco Logistics, 9/20/18, https://www.westgoshen.org/259/Sunoco-Mariner-I-II---Documents-Litigati
113 Township of West Goshen Code, Chapter 84, adopted 12-13-72, available at https://ecode360.com/10796167

natural gas. 114 This implies the possibility of allowing oil and gas extraction in the Township in the future.

In addition, West Goshen has regulations in its zoning code specifically for public utility and gas and liquid pipeline facilities, which would apply to such infrastructure as pump and valve stations. Notably, West Goshen requires that any pipeline facilities handling gas or hazardous liquids have a minimum setback from all occupied structures equal to the "pipeline impact radius." 116

Tbl. WG-2, West Goshen Township: Zoning Districts

District	Name		
R-2	Residential (low density)		
R-3	Residential (moderate density)		
R-4	Residential (moderate to high density)		
C-1	Neighborhood Commercial		
C-2	Commercial Shopping Center		
C-3	Limited Highway Commercial		
C-4	Special Limited Business and Apartment		
C-5	General Highway		
I-1	Campus Light Industrial		
I-2	Light Industrial		
I-2R	Light Industrial Restricted		
I-3	General Industrial		
I-C	Industrial Commercial		
OP	Planned Office Park		
MP	Multipurpose		
M-S	Medical Service		
RGC	Residential Golf Course		

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¹¹⁴ Township of West Goshen Code §84-57.9, Mineral Extraction Regulations, adopted 5/9/01 by ordinance no. 6-2001; and §84-8, Definitions.

¹¹⁵ Township of West Goshen Code \$84-39(18)(b) on public utility and pipeline facilities, adopted 9/2/14 by ordinance no. 4-2014; requirements are in \$84-56(B).

¹¹⁶ Township of West Goshen Code, §84-56(B)(18); according to the definition of "pipeline impact radius" in the zoning ordinance, this distance is to be calculated according to state and federal regulations.

MCX	Municipal Complex

Tbl. WG-3, West Goshen Township: Zoning for Specific Oil and Gas Uses

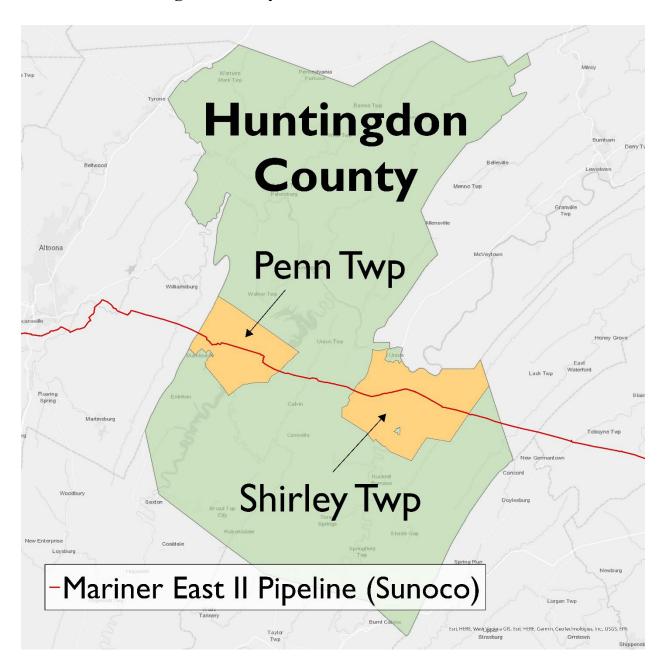
This table does not include those districts created for a single type of development only

011							District	t						
Oil and gas use	R-2	R-3	R-4	C-1	C-2	C-3	C-4	C-5	I-1	I-2	I-2R	I-3	I-C	MP
Mineral extraction									P	P	P			P
Gas and liquid pipeline facilities									CU	CU	CU	CU	CU	

Tbl. WG-4, West Goshen Township: Requirements for Mineral Extraction and Pipeline Facilities

Use	Requirement
	Plan that follows Township's Subdivision and Land Development ordinance
	Landscaping, screening, and fencing of site
Oil and gas extraction	Extraction limited to depths that will not disturb the aquifer and water table
on and gue onvicement	Setbacks: site 50 ft. from a public right-of-way; extraction 200 ft. from property lines, 300 ft. from streets, 400 feet from intersection with street lines
	Adequate control of drainage, dust, debris, and vibrations
	Lights, stop signs, and caution signs on public streets near site
	No emission of gases, smoke, odors, or radiation
	No emission of dust or particulate matter in excess of state and federal regulations
	No production or storage of explosive materials
	No heat or vibrations beyond the lot boundary
Pipeline facilities	No discharge of effluent
	Waste material storage limited to 5 days, must be screened
	No chemical or waste lagoons or large-scale liquids storage
	Exterior lighting use per Township ordinance (§84-55(F))
	Emergency contact reachable 24/7
	Emergency response plan filed with Township

G. Huntingdon County



1. Shirley Township

Shirley Township is located in the southeastern part of Huntingdon County, bisected by State Route 522. It is one of the 86 municipalities in Pennsylvania crossed by the Mariner East 2 pipeline and the location of one of ME2's pump stations, named Mt. Union.

In addition, three of the 48 criminal complaints lodged by the PA Attorney General against Energy Transfer related to the construction of ME2 occurred in Shirley Township, involving the discharge of thousands of gallons of drilling fluid into a stream and wetland.

In 2017, the PA DEP issued a permit for the Mt. Union pump station. Shirley Township issues permits for certain types of development and has a Subdivision and Land Development Ordinance (SALDO) in its Township Code. However, it does not have any zoning to guide permitted uses in different parts of the Township and does not mention any oil and gas uses.

The SALDO includes a section on Mineral Extraction with some requirements for plans to ensure dust and noise abatement, adequate state permitting, and safe traffic access; it also includes setbacks from buildings, water wells, and streams. It is possible that these requirements could apply to any future oil and gas wells, but currently, there are none in the Township. In 2014, Huntingdon County conducted a review of the development proposal for the Mt. Union pump station under its own subdivision and land use rules.

Tbl. SH-1, Shirley Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length	
D 1.6	Gary Frehn	2027			
Board of Supervisors	Daniel R McKeehan	2025	Elected	Six years	
	Robert Allenbaugh	2023			
Dlamina	John McGarvey, Chair	2023	Appointed by		
Planning Commission	Elizabeth Lear	2025	Board of	Four years	
Commission	Kathy Varner	2025	Supervisors		

2. Penn Township

Penn Township is located in the center of Huntingdon County, surrounding a large part of Raystown Lake. It is one of the 86 municipalities in Pennsylvania crossed by Energy Transfer's Mariner East 2 pipeline and the location of one of ME2's pump stations, named Markelsburg.

In addition, one of the 48 criminal complaints lodged by the PA Attorney General against Energy Transfer related to the construction of ME2 occurred in Penn Township, involving the discharge of drilling fluid and additives into Raystown Lake and leading to bentonite clay covering nearly four acres of the lake bottom at a depth of two feet.

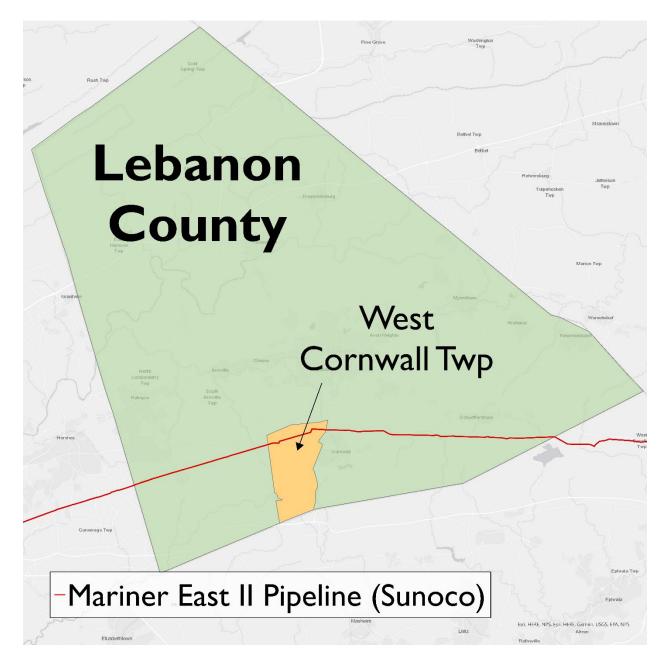
Penn Township does not have any zoning, nor any other ordinances to govern land use locations in the Township. It appears that most decisions about buildings and other development proposals are made by a Board of Supervisors and a Code Enforcement Officer. In 2014, Huntingdon County conducted a review of the development proposal for the Markelsburg pump station under

its own subdivision and land use rules. In 2017, the PA DEP issued a permit for the Markelsburg pump station.

Tbl. PennH-1, Penn Township (Huntingdon County) Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
	Kevin Fluke, Chairman	2025		
	Besty Yingling, Co-Chair	2024		
Board of Supervisors	Justin Kann	2026	Elected	Six years
	James Weikert	2027		
	Peggy Stuller	2025		

H. Lebanon County



1. West Cornwall Township

West Cornwall Township is located at the southern part of Lebanon County, straddling State Route 322. It is one of the 86 municipalities in Pennsylvania crossed by the Mariner East 2 pipeline and the location of one of ME2's pump stations (Cornwall).

In 2017, the PA DEP issued a permit for expanded operations at the Cornwall pump station, which was originally built in 2014 for use on the Mariner East I pipeline. West Cornwall has been at the center of a multi-year legal battle over the Township's interpretation of its zoning

code and the requirement for a full public comment and hearing process before a Conditional Use permit can be issued.

On this basis, residents appealed the Township's Conditional Use permit for expanded structures at the Cornwall pump station and in 2019, the Commonwealth Court agreed with them. ¹¹⁷ After Energy Transfer reapplied for the permit, several public hearings were held, during which residents asked the Township to impose certain conditions for safety and resident notification. The Township issued a new Conditional Use permit in 2021 but did not add any new conditions. ¹¹⁸

Tbl. WC-1, West Cornwall Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length	
	Russell Gibble, Chairman	2025			
Board of Supervisors	David Lloyd	2027	Elected	Six years	
Supervisors	Dennis Tulli	2023			
	Barry Ansel	2025		Four years	
	Mark Stone	2026			
Planning Commission	Kim Juliani	2027	Appointed by Board of Supervisors		
Commission	Rick Helsey	2023	Supervisors		
	Jon Green	2024			
	Gary Brummel	2025			
Zoning Hearing Board	Stewart Halsell	2026	Appointed by Board of Supervisors	Three years	
Dould	Jennifer Besse	2023	Super visors		

Zoning Code

The West Cornwall Township Zoning Ordinance was adopted in 1998, with some amendments made through 2008. It establishes 11 zoning districts, which are outlined below.

¹¹⁷ Doug Lorenzen, Pamela Bishop, Phillip J. Stober, and Concerned Citizens of Lebanon County v. West Cornwall Township Zoning Hearing Board and Sunoco Pipeline, L.P., Commonwealth Court of Pennsylvania, decided 10/23/19; and "Chris Coyle, W. Cornwall supervisors hear public comment on pipeline pump station application," *LebTown*, 6/3/21.

¹¹⁸ West Cornwall Township, Sunoco Conditional Use Hearing Findings, 8/9/2021, *available at* https://westcornwalltwp.com/township-meeting-notes/

West Cornwall Township's Zoning Ordinance does not specifically reference oil and gas uses. It could therefore be assumed that such uses would be permitted use in the Manufacturing district, which specifies certain types of businesses (e.g., automobile repair, railroad, trucking, and warehousing) as conditional uses. The Mineral Extraction district is limited to an existing stone quarry.

The Cornwall Pump Station is located in the Manufacturing District, which specifies that any permitted uses must adhere to performance standards in the zoning code. These standards require that uses be "non-objectionable in terms of smoke or dust emission, odors, noise, heat, vibration, visual impact or glare, and shall not be injurious or have an adverse effect on adjacent areas or the Township as a whole."

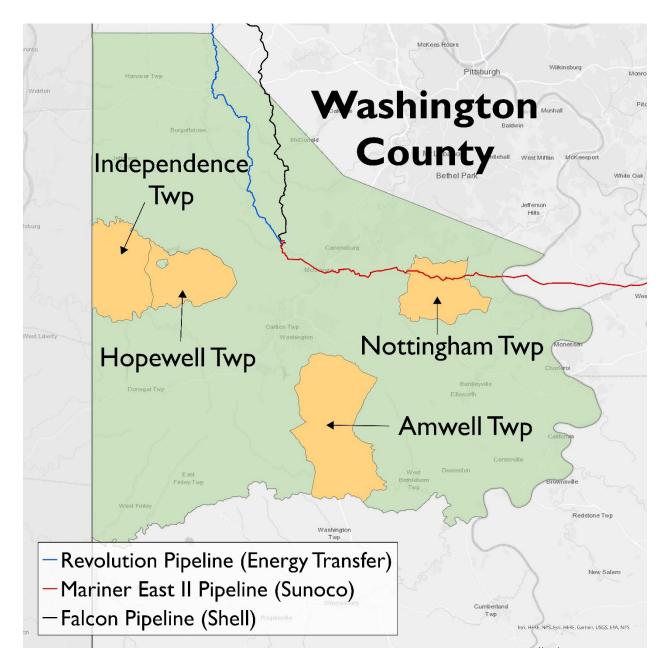
Following the conflict over the ME2 pump station permitting, West Cornwall Township has initiated a process to update several aspects of its zoning ordinance—including to determine whether there are uses in certain zones that would no longer have to be classified as "conditional use."

Tbl. WC-2, West Cornwall Township: Zoning Districts

District	Name	Purpose
A	Agricultural	Protect and preserve existing agricultural lands and those areas where environmental conditions are most conducive to agricultural operations; principal protection and preservation emphasis is concentrated on existing farmland and conversion to nonfarm usage is discouraged. Limited residential, nonresidential and farm related commercial uses are permitted.
RF	Residential Forest	Allow limited residential and recreational development on predominantly wooded or forested areas. It is recognized that this district contains ecologically sensitive land which needs regulation to protect and preserve its environmental integrity for future generations.
F	Forest	Protect the forested area from ecologically detrimental development and thereby protect municipal water supplies originating in this area.
R-1	Low Density residential	Accommodate and encourage low density development, primarily residential in nature. Development is restricted to low density, single-family residential development and related compatible uses designed to serve the residential community.
R-2	Medium Density Residential	Provide for and promote a variety of medium density housing types and land uses in a manner which is consistent with the existing development pattern and building characteristicswhere public sewer and water facilities, if not currently provided, are most likely to be extended, and where higher density development could then be supported.
R-3	Special Purpose Residential	Provide reasonable standards for the development of mobile home parks.

MED	Mineral	Comprised of an existing quarry area of the Township adjoining property under the same ownership in an adjoining Township where said use is permitted by special exception. This district also is used for agricultural purposes.
C-1	Neighborhood Commercial	Fulfill the daily commercial needs of persons living therein. These demands can be met by providing conveniently located commercial districts designed to accommodate a limited range of commercial uses which would be compatible with the residential community they serve.
C-2	General Commercial	Accommodate commercial activity. Since these enterprises are for the most part dependent on traffic generated by a major thoroughfare, these uses are grouped together to facilitate shopping via automobile.
M	Manufacturing	Includes current industrial sites plus additional acreage to encourage the establishment of new uses which would constitute a harmonious and appropriate blend of development with the surrounding agricultural and residential areas.
GEP	General Floodplain	Prohibit or restrict construction of any permanent building or structure or uses and activities to prevent unnecessary loss of life or property from possible natural catastrophe, as well as to protect stream valleys from ecologically detrimental development.

I. Washington County



1. Amwell Township

Amwell Township is located in the south-central part of Washington County, bisected by I-79 south of the city of Washington. With less than 4,000 residents, Amwell has had outsized prominence in the public's growing awareness of the toll that the oil and gas industry takes on people and the environment.

Amwell Township has hundreds of wells, several large compressor stations (such as Baker, Kryptonite, Mako, Redd, Redd Farm, Steelhead, and Tupta Day), waste impoundments, and a spiderweb of pipelines and gathering lines. This intense development dates back to the start of the Marcellus Shale boom and has never stopped. As the map below indicates, some larger facilities are close enough together to potentially have a cumulative impact on air quality and health in Amwell Township.

About a decade ago, Amwell residents living nearby industrial gas sites began to suffer from fouled water and air and debilitating health symptoms. They saw pets and livestock suddenly grow ill and die. They spent years complaining to the PA DEP and Range Resources and reporting their experiences to researchers and the media—as detailed in reports, regional and national newspapers, and a Pulitzer Prize winning book.¹¹⁹

Three of the families filed a lawsuit and won a monetary settlement. ¹²⁰ The PA DEP eventually fined Range Resources over \$4 million and shut down several large waste impoundments in Washington County, including the Yeager in Amwell. ¹²¹ DEP also ordered Range to repair and upgrade the Jon Day impoundment in Amwell, which had been under investigation for leaks. ¹²²

In 2020, a Grand Jury appointed by the state Attorney General concluded that the Yeager impoundment had been releasing toxic chemicals for years. ¹²³ In a more recent example of operator malfeasance, EQM Gathering was fined in 2020 for soil erosion and landslides around its pipeline construction that contaminated protected waterways, including in Amwell. ¹²⁴

Government

Tbl. AMT-1, Amwell Township: Government Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
Board of Supervisors	H. Wayne Montgomery, Chairman	2027		Six years
	Scott W. Hartley, Vice Chair	2023	Elected	
	Dee Frazee, Sr.	2025		

¹¹⁹ Eliza Griswold, "The Fracturing of Pennsylvania," *The New York Times Magazine*, 11/17/11; and *Amity and Prosperity: One Family and the Fracturing of America*, 2018.

¹²⁰ Reed Frazier, "Court document reveals Range Resources, other defendants agreed to \$3 million settlement in Washington County contamination lawsuit," *Allegheny Front*, 6/4/19.

¹²¹ StateImpact, "Range Resources to pay \$4M for violations as western Pa. impoundments," 9/18/14.

David Conti, "Range Resources to pay \$4.15 million fine, close oil and gas drilling impoundments," TribLive, 9/18/14.

¹²³ Office of Attorney General Josh Shapiro, "PA Fracking Company pleads to Criminal Conviction in 43rd Statewide Grand Jury Investigation," press release, 6/12/20.

¹²⁴ Farm & Dairy News, "Pa. reaches settlement with EQM for pipeline violations," 10/30/20.

	Kathleen M. Wall,		
	Secretary/Treasurer		
	Scott Hartley, Chairman		
	Gregory Alexander, Vice	Amainted by	
Planning Commission	Chairman	Appointed by Board of	
	William Day	Supervisors	
	Jason Clark	Supervisors	
	Andrew Vore		
	Joseph Maley, Chairman	Amainted by	
Zoning Hearing Board	Jason Hartley, Vice	Appointed by Board of	Throa waara
	Chairman		Three years
	Clark Sims	Supervisors	

Amwell Township has not updated its zoning to match changing times and the encroachment of gas operations on the places where people live, work, and play. Whether deliberately or out of sheer neglect, the Township has made the decision to drill, process, and transport gas throughout the Township with virtually no assessment of land use and community impacts.

Amwell Township's zoning code was adopted in 1975—the year the Vietnam War ended and a time when gas production in Pennsylvania was over 8,000 percent less than it is today. 125 Amwell's zoning code also pre-dates by nearly 40 years the Pennsylvania Supreme Court decision that allows municipalities to limit the location of oil and gas activities.

Amwell Township's zoning ordinance establishes five districts, outlined below. Possibly due to the ordinance being decades old, it doesn't specify "oil and gas" or any other clearly related use (such as compressor stations or waste impoundments). As a result, only basic restrictions on such aspects as yard size, height, parking, and signage would apply.

The closest Amwell Township's zoning ordinance comes to referring to oil and gas uses is "mineral extraction," or activities that excavate and separate "the desired material from the undesirable one," including from shale. ¹²⁶ This might potentially apply to the initial stages of gas development; if so, it would be allowed as a special exception in the Conservation district.

Processing and treatment are defined as activities that "produce or emit dust, smoke, refuse matter, toxic or noxious odors, gases and fumes, excessive noise, vibrations, or similar

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¹²⁵ Calculation based on historic volumes of gas production (million cubic feet) from the Energy Information Administration, natural gas production, table of Pennsylvania Natural Gas Marketed Production, https://www.eia.gov/dnav/ng/hist/n9050pa2a.htm.

¹²⁶ Definitions, Township of Amwell Zoning Ordinance.

substances and conditions."¹²⁷ It is unclear whether Amwell would consider oil and gas operations to be part of this category; if so, it would be allowed as a principal use in the Light Industrial district and a special exception use in the Rural Agricultural district.

However, given the proliferation of gas operations throughout Amwell, it doesn't appear that the Township has leveraged its zoning authority or its outdated, rudimentary ordinance in the context of oil and gas development. The ordinance does note risks to health, safety, and damage to property—but this is only in relation to "natural conditions" in the Conservation district that could cause them.

Tbl. AMT-2, Amwell Township: Zoning Districts

District	Name	Purpose
R-S	Suburban Residential	Provide for development of the broadest range of suburban residential uses; preserve the existing character of the land uses within the District; prevent the encroachment of land uses that are not compatible with the existing land uses.
R-A	Rural Agricultural	Identify those areas where agricultural activities should be encouraged or preserved, and general suburban development curtailed until such time as community services and facilities can be expanded.
С-Н	Highway Commercial	Encourage a compatible land use relationship between contiguous residential districts and those commercial uses oriented toward the automobile.
L-I	Light Industrial	Provide for the employment opportunities by industrial activities which shall be compatible with the surrounding land uses.
С	Conservation	Protect persons and property from undue and unnecessary exposure to natural conditions and locations which will result in threats to their health and safety and damage and/or destruction to their property.

2. Hopewell Township

Hopewell Township is located in the west-central part of Washington County, near Washington City and adjacent to Cross Creek County Park. Gas development has surged in the area in the last decade, with dozens of wells, a large compressor station (Lowry), and a spider web of gathering lines and pipelines. In addition, Hopewell is on the planned route of the Sunoco Mariner East 2 pipeline.

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¹²⁷ §801, Township of Amwell Zoning Ordinance.

Some of the earliest and most prominent incidents of the shale boom's impact on water, air, and health took place in Hopewell Township, which often resulted from well sites and centralized waste impoundments being built close to homes. 128

Government

Tbl. HT-1, Hopewell Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
Township	Mary Rush, Chairperson	2023		
Board of	Donald Kearns, Vice Chairman	2025	Elected	Six years
Supervisors	John Miller, Supervisor	2027		
Planning	Cody Atkinson	2023	Appointed	
Commission	Commission Tammy Moore		by Board of	Four years
	David Rice	2025	Supervisors	
Zoning Hearing	Bonnie Woods	2023	Appointed	
Board	Larry Keenan	2024	by Board of	Three years
	William Black	2025	Supervisors	

Zoning Code

Hopewell Township adopted its zoning code in 2018, establishing six districts that comprise both the Township and neighboring West Middletown Borough, as outlined below. ¹²⁹ The code includes two sections on specific aspects of oil and gas permitting and activities. ¹³⁰

Notably, the statement of purpose of the Agricultural District emphasizes oil and gas operations, with the Township asserting that by permitting these operations in that district, it "intends to enhance its ability to maintain its rural character by providing sufficient buffers and setbacks." ¹³¹ In addition, landowners are allowed to give written consent to have setback requirements waived. ¹³²

¹²⁸ "Pennsylvania DEP fines Range Resources \$4.15 million for Violating Environmental Regulations," *PR Newswire*, 9/18/14. https://www.prnewswire.com/news-releases/pennsylvania-dep-fines-range-resources-415-million-for-violating-environmental-regulations-275638111.html See also June Chappel's testimony in *Shalefield Stories*, 2014,

https://environmentamerica.org/sites/environment/files/reports/ShalefieldStoriesnp.pdf ¹²⁹ Hopewell Twp., Washington County, Chapter 320 of Town Code, *available at* https://ecode360.com/33570991.

¹³⁰ Hopewell Twp. Zoning code §320-602 and §320-1012.

Hopewell Twp. Zoning code section 320-401(B)(5), Agricultural district classification.

Hopewell Twp. Zoning code section 320-603, Specific criteria for conditional uses.

Tbl. HT-2, Hopewell Township: Zoning Districts

District	Name	Purpose
RO/R	Residential Overlay and Residential	Provide for residential development on primary municipal or state roads and preserve existing housing developments in such areas
V	Village	Preservation and enhancement of existing higher density housing and mixed-use opportunities and support of locally oriented commercial development.
ВО	Business Overlay	Provide a range of services to the general public necessary to meet the community and regional needs for general goods and services; serve personal needs and daily convenience with direct access to streets.
Ind-1	Limited Industrial	Light industrial uses which shall not disturb surrounding residential areas with noise or other undesirable aspects; warehousing, manufacturing, agriculture, and uses including those which require substantial amounts of open-air storage or generally considered incompatible with other land uses.
A	Agricultural	Preservation and conservation of agricultural related practices and production and associated natural resources by providing reasonable requirements for the development and use of land in order to help maintain the Township's rural character.
HDO	Heritage District Overlay	Preservation of the long-established physical character within West Middletown Borough by containing a mix of compatible uses with residential and nonresidential land uses encouraging walkability and traditional design patterns characteristics of the corridor.

Tbl. HT-3, Hopewell Township: Zoning for Specific Oil and Gas Uses

0.1	Districts					
Oil and gas use	RO/R	V	BO	Ind-1	A	HDO
Oil and gas pipelines	P	P	P	P	P	
Oil and gas development				CU	CU	
Compressor stations					CU	
Natural gas processing plants						
Deep injection wells (Class II				CU		
for waste disposal)						
Impoundments (for waste)					CU	

Tbl. HT-4, Hopewell Township: Setback and Distance/Size Requirements for Oil and Gas Uses

	Setback from				
Use	Building	Property line	Watercourses/ wetlands	Lot size	County Park
Oil and gas wells	500 ft./1000 ft.		200-300 ft.***	20 acres	500 ft.
Compressor stations	500/1000 ft.*	200 ft.		5 acres	
Natural gas processing plants	500/1000 ft.*	200 ft.		100 acres	
Deep injection wells				20 acres	
Impoundments	500 ft./1500			5 acres/2	
(for waste)	ft.*			acres **	
Impoundments (for freshwater)	500 ft./1000 ft.*				

^{*} The longer setbacks are for structures classified as "protected" (vs. "occupied").

Tbl. HT-5, Hopewell Township: Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Copy of leases and landowner information	Applicant must provide lists of royalty and surface owners, residents within 300 ft. of proposed site
	Project narrative	Including location, work hours, company representative, onsite trailers.
	Schedule for all phases of activity	Applicant must provide projected dates for site preparation, drilling, fracturing, production, plugging, restoration
All oil and gas uses	Adequate information to first responders	Applicant must provide site orientation upon request and training course for first responders
	Receipt of all required state and federal permits	Applicant must provide copies of all relevant permits and plans
	Emergency management plan and emergency contact	Applicant must provide a Preparedness, Prevention, and Contingency (PPC) plan
	Blast study	Study must conform to recommended practices of the American Petroleum Institute
	Certificate of liability insurance naming Township as insured	Coverage not less than \$25 million per person, \$25 million per occurrence, \$25 million

^{**} The smaller lot size is for impoundments considered "accessory" to a well site.

*** The shorter distance is for conventional wells.

		property damage; "hold harmless" clause for Township required
	Township Roadway Maintenance and Repair Agreement	Agreement must include bonding requirements and subcontracts
	Annual review hearing	Well operators must meet with the Township about any concerns; public meetings may result
Compressor stations and	Environmental study	Applicant must provide DEP-approved permit with noise and emissions information
processing plants	Spill containment study	Plan must be designed by a professional
	Documentation of all required permits and bonding	
Pipelines	Description of substances being transported	
	Location of pressure relief valves	

Tbl. HT-6, Hopewell Township: Other Requirements for Oil and Gas Uses

Use	Requirement
	Site preparation and pre-production prohibited Sundays and holidays
	Lighting must be placed to avoid glare on roads, buildings, and residences.
	Noise levels must adhere to zoning district requirements and operator must install mitigation technologies to ensure compliance
0.1 1 11	Security measures must be in place at all times, subject to Township review; compliant signage must be in place
Oil and gas wells	Access roads must be paved and constructed to prevent dust and mud
	Truck routes must minimize impact on local roads
	Engines must be enclosed and have remote/local shutdowns
	Any reentry drilling plans must be submitted to Township 30 days prior to
	operations and may be subject to a public hearing
	Any traffic control site plans must be submitted to Township 14 days prior
	and are subject to Township approval
	Site plan by licensed professional engineer or surveyor
	Chain-link fencing at least 8-ft. high
Impoundments	Surrounding surfaces designed to minimize runoff
	Signage identifying content of the impoundment; testing of contents every 4 months, results provided to the Township
Compressor Building plans must be approved by the Township	

stations and	Landscaped screening/buffer of 50-foot trees; structures designed to blend
processing plants	into surrounding area
	Electric motors required for compressor engines and other power-driven
	equipment
	Expansions must be requested, and plan submitted to Township

3. Independence Township

Independence Township is located in the west-central part of Washington County, along the state border with West Virginia. Gas development has surged in the area in the last decade, with dozens of wells, a large compressor station (Dryer), a pigging station (Smith), and a spider web of gathering lines and pipelines. In addition, Independence is on the planned route of the Sunoco Mariner East 2 pipeline.

Government

Tbl. IT-1, Independence Township Officials

Office	Official	End of	Elected/	Term
		Term	Appointed	Length
Township	Thomas Jennings, Chairman	2027		
Board of	Joyce McKenzie, Vice Chairman	2025	F1 4 1	Six
Supervisors	Thomas Cowden, Supervisor	2023	Elected	years
	Thomas Jennings	2025		
Planning	Mark Cecchini	2024	Appointed	Five
Commission	Nicholas Cecchini	2025	by	
	John Hudock	2023	Supervisors	years
	Dale Tudor	2027		
Zoning Hearing	Building/Zoning managed by the	N/A	Contracted	
Board	Harshman Group		by	N/A
			Township	

Zoning Code

Independence Township adopted its zoning code in 2007 and amended a section in 2012 to add more requirements for oil and gas operations (i.e., impoundments, wells, compressor stations, and natural gas processing plants) and again in 2015 to require greater security at oil and gas

well sites. 133 As outlined below, there are six zoning districts in Independence Township. In addition, the Township Code includes a chapter specifying permitting and enforcement for oil and gas extraction that was adopted in 2008. 134

Tbl. IT-2, Independence Township: Zoning Districts

District	Name	Purpose
A	Agricultural	Provide for agriculture and low-density single-family residential development in the more remote rural areas of the Township where public sewers are not available, and accessory uses and compatible public and semipublic uses
R-1	Rural Residential	Preserve natural resources and limited agricultural operations while encouraging low-density single-family residential development suited to the natural conditions and accessory uses and compatible public and semipublic uses
R-2	Medium Density Residential	Provide for medium density residential uses in locations that are served by public sewers and for accessory uses and compatible public and semipublic uses
V	Village	Provide for the maintenance, improvement and continued use of land and structures in older, concentrated settlement areas, diversity of uses appropriate to such population centers and compatible public, semipublic and accessory uses
В	Business	Provide opportunities for commercial development which meet the general needs of the population within the market area for shopping and services.
I	Industrial	Provide opportunities for commercial development that meet the general needs of the population within the market area for shopping and services

¹³³ Independence Twp., Washington County, Chapter 410 of Town Code, available at https://ecode360.com/10529281; amended 2012 by Ord. No. 12-01 (adding Section 410-83(DD) to the zoning code) and 2014 by Ordinance number 14-02.

134 Independence Twp. Code Chapter 279, available at https://ecode360.com/14208749#14208749.

Tbl. IT-3, Independence Township: Zoning for Specific Oil and Gas Uses

Oil and gas use	Districts					
	A	R-1	R-2	V	В	I
Oil and gas wells	CU	CU				
Compressor stations *	SE				SE	SE
Natural gas processing plants *	SE				SE	SE

^{* §410-12(}A) of the Township code states that any uses not designated as an "authorized use" in specific districts would only be approved in A, B, and I districts, subject to approval by the Zoning Hearing Board as a Special Exception. Oil and gas wells are in the Township's table of authorized uses, but compressor stations and processing plants are not.

Tbl. IT-4, Independence Township: Setbacks and Distance/Size Requirements for Oil and Gas Uses

Use	Setback from			
USE	Building	Property line	Lot size	
Oil and gas wells	300/500 ft.*		15 acres **	
Compressor stations	750 ft.	200 ft.		
Natural gas processing plants	750 ft.	200 ft.		
Impoundments	300 ft.			

^{*} The shorter distance is from the edge of the well pad, the longer from the wellhead.

Tbl. IT-5, Independence Township: Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Receipt of all required state and federal permits	Applicant must file copies of all relevant permits and plans with the Township
	Transportation plan	Applicant must provide information on the materials and equipment used to construct the facility and measures that will be taken to maintain and repair roads that are used
All Oil and Gas Uses	Emergency management plan	The plan must include methods to address well leakage, spills, defective casing, potential impact on public water supplies, and vandalism
	Schedule for all phases of activity	Applicant must provide projected dates for site preparation, drilling, fracturing, production, plugging, restoration
	Bonding	Certification of bond held by PA DEP for well plugging

^{**} Lot size requirement applies only in the medium density (R-2) zoning district.

Tbl. IT-6, Independence Township: Other Requirements for Oil and Gas Uses

Use	Requirement
	Material and equipment storage areas must be screened with walls, fencing, or evergreen vegetation
All Oil and Gas	Security measures, including onsite personnel, fencing, locked gates
Uses	Access roads must be improved with all-weather, dust-free surfaces
	Maintenance vehicle areas should not disrupt the normal flow of traffic
Compressor Stations and Processing Plants	Noise level limit of 60 dBA at the nearest property line

4. Nottingham Township

Nottingham Township is located in the northeastern part of Washington County, just south of Pittsburgh and east of Washington City. There are many wells in the area, a large compressor station (Crescent Moon), and a spider web of gathering lines and pipelines. In addition, Independence is on the planned route of the Mariner East 2 pipeline.

Tbl. NT-1, Nottingham Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
Township Board	Todd E. Flynn, Chair	2024		
of Supervisors	Douglas S. King, Vice Chair	2027	Elected	Six years
	Dave Resanovich	2026		
	James Sanford, Chair	2027		
D1 .	Jim Patterson, Vice-Chair	2025	Appointed by	Four years
Planning	Mike Christoff, Secretary	2024	Township	
Commission	Ed Malachosky	2025	Supervisors	
	Vacancy	2027		
Zoning Hearing	Joe Judeikis, Chairman	2024		
Board	Sandra L. Mansmann	2025	Appointed	Three years
	Ron Ramsey	2026		

Nottingham Township adopted its zoning code in 2017 and made some amendments specific to compressor stations and processing plants in 2019. ¹³⁵ As outlined below, there are seven zoning districts in Nottingham Township (as well as one overlay district for mixed use that does not allow for oil and gas activities).

Tbl. NT-2, Nottingham Township: Zoning Districts

District	Name	Purpose
A-1	Agricultural	Preserve agricultural land and designate those areas where agricultural activities should be encouraged and only a minimum of other compatible low intensity land uses should be permitted
R-1	Rural Residential	Provide for low-density residential development in suburban and rural areas where public sewer and/or water facilities may not be available and compatible public, semipublic and accessory uses
R-2	Suburban Residential	Provide for higher density single-family dwellings in areas which have public water and sewer facilities available; allow compatible planned residential developments on selected sites; and authorize compatible public, semipublic and accessory uses
R-3	Multifamily Residential	Plan for locations that are appropriate for higher density residential development because they are served by transportation, public utilities and services and that are in areas where future development growth is expected to occur
B-1	Limited Commercial	Provide retail shopping and service facilities of a limited type and size appropriate to smaller properties which do not generate large amounts of traffic, and which do not adversely impact neighboring residential uses
B-2	General Commercial	Provide retail and service facilities which serve the needs of the general community, and which are located in high-volume traffic corridors to allow convenient access and to minimize traffic impact
M-I	Light Industrial	Provide for light industrial uses in appropriate locations

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¹³⁵ Nottingham Twp., Washington County, Chapter 425 of Town Code, *available at* https://ecode360.com/32601532; section 425-65 adopted 2019 by Ordinance 110-C.

Tbl. NT-3, Nottingham Township: Zoning for Specific Oil and Gas Uses

Oil and gas use	Districts						
	A-1	R-1	R-2	R-3	B-1	B-2	M-I
Oil and gas drilling subsurface facilities	P	P	P	P	P	P	Р
Oil and gas development & production	P	P			P	P	P
Compressor stations	CU						
Processing plants	CU						

Tbl. NT-4, Nottingham Township: Setbacks and Distance/Size Requirements for Oil and Gas Uses

Use	Setba	Setback from		
	Buildings	Lot size		
Oil and gas development &	600 ft.			
production				
Compressor stations	600 ft.	50 acres		
Processing facilities *		50 acres		
* §425-65 of the zoning code covers both compressor stations and processing				
facilities, but specifies a setback only for o	compressor stations.			

Tbl. NT-5, Nottingham Township: Application requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Receipt of required state permits	Applicant must provide a copy of the drilling permit issued by PA DEP
	Well location plat	Applicant must provide the plat submitted to PA DEP
	Project narrative	Including planned operations and equipment
All oil and gas uses	Erosion and sedimentation and spill and leak control plans	Including measures to remove waste materials from impacted public and private properties
	Road bonding	Applicant must provide overall information on the status of such bonding

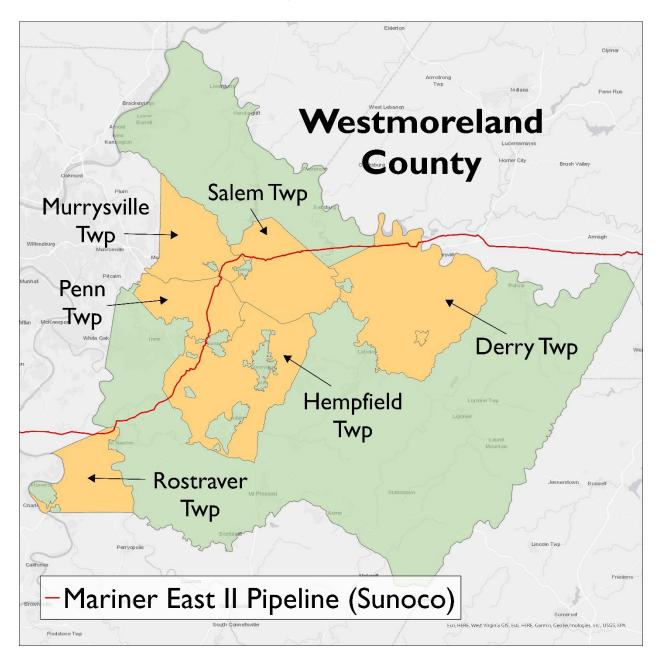
ir su	Name and contact information for on-site upervisor and all ubcontractors	Supervisor must be reachable 24/7
	chedule for all phases of ctivity	Applicant must provide projected dates for site preparation, drilling, fracturing, production, plugging, restoration
H	Iours of operation	Including construction, excavation, and road work
N	Noise control measures	Includes those taken to ensure compliance with zoning requirements

Tbl. NT-6, Nottingham Township: Other Requirements for Oil and Gas Uses

Use	Requirement
	Project applicants must attend a public meeting and answer questions at
	least 30 days prior to starting project
Oil and gas wells	Township roads must be kept free of dirt, mud, debris, and dust control
	measures must be taken
	Public safety at road crossing and roadways must be maintained
	100 ft. of site access road must be paved and gated
	A Preparedness, Prevention, and Contingency (PPC) plan must be
	provided to the Township and site orientation given to first responders
	Lighting must be placed to avoid glare on roads, buildings, and residences
	to 300 ft.
	Fencing, warning signs, and security guards for sites near protected
	structures
	Residents whose properties will be drilled under must be notified
	Ambient noise levels must be established and not exceeded by more than 7
	dBA from 6 am-10 pm and 5 dBA from 10 pm-6 am. Higher decibel levels
	may occur for limited periods up to 5 minutes per hour.
	Workover activities allowed only from 6 am-8 pm (with exceptions)
	Equipment must be placed on engines to minimize exhaust
	Township can review & approve temporary housing
	Maintenance vehicle areas should not disrupt the normal flow of traffic
	Noise level limit of 60 dBA at the nearest property line
Compressor	
stations and	Compressors must be in enclosed buildings and all power-driven
processing plants	equipment must utilize electric engines; no electric power can be
	generated onsite

A screened buffer area must be placed at adjoining properties
Information on all gases, chemicals, hazardous materials must be provided to first responders and Material Safety Data Sheets kept onsite
Liquids, fuels, waste, and other substances must be properly stored and disposed
Noise standards for oil and gas development (wells) apply to these facilities

J. Westmoreland County



1. Derry Township

Derry Township is located in the north central part of Westmoreland County, about an hour east of Pittsburgh. Derry is among the municipalities in Westmoreland County where oil and gas operations have surged in recent years and residents have come to experience high levels of air pollution from both local and regional sources.

There are many oil and gas wells in the Township, large compressor stations (Derry, Ecker Bergman, Orgovan, and Salem), and a spider web of gathering lines and pipelines. In addition, Derry is on the planned route of the Mariner East 2 pipeline. Derry Township was one of the locations where EQM Gathering LLC committed numerous violations during pipeline construction, including landslides and the flow of sediment into waterways.

Yet this relatively rapid industrial expansion has occurred in the absence of zoning. Derry Township issues permits and for basic development (such as houses, driveways, and fencing) and regulates stormwater runoff, but lacks a planning commission. The Township is guided on some development decisions by Westmoreland County's 2013 Subdivision and Land Development Ordinance, which doesn't specify oil and gas as a land use.

However, Derry has not adopted zoning requirements of its own—leaving residents with virtually no recourse to prevent polluting facilities from being built next door. As the map below indicates, some of the largest oil and gas facilities in Derry Township are close enough together to potentially have a cumulative impact on air quality and health.

Government

Tbl. DT-1, Derry Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
T 1' D 1 C	David A. Slifka, Chairman	2024		
Township Board of Supervisors	Jim Prohaska, Vice Chairman	2026	Elected	Six years
Supervisors	Don Kepple	2027		

2. Hempfield Township

Hempfield Township is located in the central part of Westmoreland County, less than an hour east of Pittsburgh. Hempfield is among the many municipalities in Westmoreland County where oil and gas operations have surged in recent years and residents have come to experience high levels of air pollution from both local and regional sources. There are many oil and gas wells in the Township, large compressor stations (Jackson, Silvis, and South Oakford, and a spiderweb of

gathering lines and pipelines. In addition, Hempfield is on the planned route of the Sunoco Mariner East 2 pipeline.

Government

Tbl. HT-1, Hempfield Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
	George C. Reese, Chairman	2023		
Township Board	Douglas Weimer, Vice Chairman	2025		
of Supervisors	Thomas B. Logan, Treasurer	2025	Elected	Six years
	William G Bretz	2027		
	John M. Silvis, Supervisor	2023		
	Dana Smith, Chairman	2023		
	William Utzman, Vice Chairman	2022		
Dlamina	Becky Durbin	2025	Appointed	
Planning Commission	Brian Jamnik	2025	by Board of	Four years
Commission	Ed Bejster	2024	Supervisors	
	Richard Tatano	2024		
	Suzanne Ward	2022		
	Woody Weissinger, Chairman	2022		
7 ' 11 '	Robert Whisner, Vice Chairman	2025	Appointed	
Zoning Hearing Board	Jay Anderson	2026	by Board of	Five years
Doard	Raymond Doran	2024	Supervisors	
	Robert Jackson	2023		

Zoning Code

Hempfield adopted a zoning ordinance in 2014 that establishes 11 districts and amended it as recently as 2020. However, the Township continues to neglect to include oil and gas wells and facilities as designated land uses anywhere in its local ordinances. As a result, there are neither associated setbacks nor application and operational requirements to help protect residents.

Tbl. HT-2, Hempfield Township: Zoning Districts

District	Name	Purpose
A	Agricultural	Preserve and support the Township's remaining farming areas; residential uses that are compatible with or preserve farmland and natural resources

RR	Rural Residential	Allow for residential development that is compatible with rural character; preservation of natural features is strongly encouraged; single-family dwellings, family farms and other low-density uses are permitted
SR	Suburban Residential	Provide for housing choices on smaller lots and at higher densities than in the Rural Residential District; primarily intended for single-family residences but allows for some multifamily options
CR	Corridor Residential	Encourage multifamily residential development in areas with access to major streets, water and sewer service, shopping and essential services
VR	Village Residential	Provide compatible standards governing existing villages, also known as "coal patch towns," as well as other older, densely developed neighborhood
NC	Neighborhood Commercial	Promote the creation of neighborhood shopping and services in designated areas of the Township that are accessible to residential neighborhoods; encourage development of distinct commercial centers by allowing a mix of uses
LC	Local Commercial	Sustain and promote commercial businesses along major transportation corridors that are typically local in character that serve the surrounding community and tend to be smaller and generate less traffic than regional businesses
RC	Regional Commercial	Provide for larger-scale commercial businesses areas along major transportation corridors with the infrastructure to support them
LI	Light Industry	Provide for light manufacturing, research and testing laboratories, technological industries and like businesses that require utilities and good street access but are lower in intensity than heavy industrial uses
НІ	Heavy Industry	Provide designated locations where high-intensity industrial and other uses can be located, and their impacts managed (such as noise and traffic that make them incompatible with residential and other uses)
Ι	Institutional	Identify and provide standards for development of land used or to be used for colleges and universities

3. Murrysville Township

Murrysville Borough is located in the northeastern part of Westmoreland County, just outside Pittsburgh. There are oil and gas wells in the Township, large compressor stations (Boarst and Mainline), a storage facility (Tonkin), and a spider web of gathering lines and pipelines. In addition, Murrysville is on the planned route of the Sunoco Mariner East 2 pipeline.

For the last few years, Murrysville has been challenged by a proposal by Olympus Energy for the first unconventional drilling pad (Titan) in the Borough, along with gathering and transmission lines. The Murrysville Watch Committee has contested the permits on the basis that the Borough's zoning ordinance allows industrial development in the rural-residential district and parks.

Government

Tbl. MB-1, Murrysville Borough: Government Officials

Office	Official	End of Term	Elected/ Appointed	Term Length	
Mayor	Regis J. Synan	2023	Elected	Two years	
	Dayne F. Dice, President	2025			
	Jason Lemak	2025			
N4 ' ' 1	Tony Spadaro	2023			
Municipal Council	Carl Stepanovich	2025	Elected	Four years	
Council	Jamie Lingg	2025			
	Dr. Jamie Lee Korns	2023			
	Mac McKenna	2023			
	Robert F. Mitall, Chair	2024		Four years	
	Jayne Hoy	2026			
DI .	Edward Patrick	2025	A ' 4 11		
Planning Commission	James Olszewski	2026	Appointed by Municipal Council		
Commission	Ryan Lemke	2023	Withhelpar Council		
	Chris Kerns	2023			
	Anthony Livecchi	2025			
7	Michael J. Kearney, Jr.	2027	A 1.1		
Zoning Hearing Board	Matthew Prather	2024	Appointed by Municipal Council	Five years	
Board	Vacant	2023	Widincipal Couliell		

Zoning Code

Murrysville Borough adopted its zoning code in 2005, creating seven zoning districts and including a section specific to gas and oil extraction. In 2017, the Borough adopted an amendment to its zoning code to govern the "exploration or production of oil or natural gas from a shale reservoir or source rock," i.e., unconventional drilling operations.

This new section also created an "Oil and Gas Recovery Overlay District" in some residential areas that have historically had low population densities and included "agricultural and resource recovery areas and areas that permit short-term industrial uses such as quarrying and mining." This action has been at the heart of the controversy over permitting of new unconventional oil and gas operations in the Borough, which according to the amended zoning code are only allowed (as a conditional use) in the oil and gas overlay district.

Tbl. MB-2, Murrysville Borough: Zoning Districts

District	Name	Purpose
P-L	Public Land	Protect publicly owned land where preservation of land and where land uses are designed to benefit the public interest
R-R	Rural Residential	Protect environmentally sensitive areas and portions of the Municipality that are not otherwise suitable for development at higher densities. Single-family residential uses on large lots where needs for traffic facilities and utilities are low are primary considerations.
R-1	Low Density Residential	Provide for development of residential uses at a relatively low density, restricted to single-family homes, except in planned residential developments, and accessory uses
R-2	Medium Density Residential	Provide an alternative in the choice of housing areas for those persons who desire a relatively low density of single- family development but do not wish to obtain a minimum of one-acre lot and a variety of housing types
R-3	High Density Residential	Recognize the need for an alternative to single-family detached houses as the preferred housing type, consistent with the fact that such development requires far more extensive servicing for a given unit of land
MU	Mixed Use	Provide for the location of small retail, office and residential uses as well as to direct the development of properties located between commercially developed and residentially developed properties; encourage the convenient placement of such uses for the benefit of the residents
В	Business	Provide areas for the location of commercial and industrial uses in areas of the Municipality where infrastructure can support such uses; minimize the impact of these uses on that infrastructure and surrounding properties

Tbl. MB-3, Murrysville Borough: Zoning for Specific Oil and Gas Uses

	Districts							
Oil and gas use	P-L	R-R	R-1	R-2	R-3	MU	В	Overlay District
Conventional well sites		CU	CU	CU	CU	CU	CU	CU
Unconventional well sites								CU
Compressor stations							CU	
Processing plants							CU	

Tbl. MB-4, Murrysville Borough: Setbacks and Distance/Size Requirements for Oil and Gas Uses

Haa		Setbacks from			
Use	Building	Recreation Area	Lot size		
Conventional oil and gas wells					
Unconventional oil and gas wells	750 ft./350 ft.*	300 ft.			
Compressor stations **			10 acres		
Natural gas processing plants **			10 acres		

^{*} The longer setback is for the well pad; the shorter for structures, materials, equipment, etc. used during development.

Tbl. MB-5, Murrysville Borough: Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Written permission from property owners	Applicant must obtain permission from those who have title to or the right to occupy the surface of the drill site
	Proof of all required state and federal permits	Applicant must provide copies of all relevant permits and plans
Oil and Gas Wells	Survey of the site	Must be from a professional engineer or surveyor and include access roads, location of the pad, required setbacks, existing buildings, equipment, new structures, housing, staging areas, parking, retention ponds
	Plan to comply with municipal noise ordinance	Generally, and specifically for use of compression

^{**} Not specified; underlying zoning area, yard, height, and setbacks apply.

	Road and transportation plan	Including access roads and intersections with public streets, site distance, heavy equipment routes
	Bonding	Applies to streets and much be approved by Municipal Engineer
	Demonstration of no impact	Applicant must provide expert witness testimony that the location of the facility will not adversely impact the use of adjacent properties
Compressor stations and processing plants	Written permission from property owners	Applicant must obtain permission from those who have title to or the right to occupy the surface of the drill site
	Noise management plan	Including an acoustics study per municipal requirements
	24/7 contact	Applicant must provide supervisor information to Municipality and emergency management services

Tbl. MB-6, Murrysville Borough: Other Requirements for Oil and Gas Uses

Use	Requirement
	Hours of operation limited to Monday-Saturday, 7 am-9 pm, except for drilling, fracking, emergency, and compliance activities
	Thick chain-link fencing 6 ft. in height with lockable gates or 24/7 on-site security at well sites; warning signs on fencing
	Impoundments must have thick chain-link fencing 6 ft. in height and comply with federal leak detection & monitoring rules
	Routes must minimize impact on public streets; safety of persons in roadways & crossings
	Municipal roadway maintenance and repair agreement
	Training for first responders and code officers
Oil and gas wells	No staging of trucks & equipment on public roads; no idling outside the well pad
	Operators must notify municipality 90 days prior to startup, abandonment, and shutdown of sites
	For property owners within 2,500 ft., the operator must provide a project description and contact information and hold a meeting
	Municipal staff and first responders must have access to sites
	Municipal landscaping and buffering requirements apply
	Bunk houses limited to one per site, maximum occupancy of 6 for 60 days: policies for drug, alcohol, firearms
	All contractors subject to a developer's agreement prepared by Municipal Solicitor

	All facilities & compression equipment must be enclosed in a building constructed of metal or masonry with soundproof walls and natural colors
	Electric motors must be used unless operator demonstrates other engines are necessary; exhaust mufflers & boxes must be used
Compressor stations and processing plants	Security fencing, screening, buffering at least 10 ft. from properties and 20 ft. from public right-of-way
processing plants	Drip pans to prevent leaks; vapor recovery/destruction units on condensate tanks
	Fire department must inspect facility prior to operation; spills must be reported within 12 hours

4. Penn Township

Penn Township is located in the eastern central part of Westmoreland County, just outside Pittsburgh. There are many oil and gas wells in the Township, along with a spider web of gathering lines and pipelines. In addition, Penn Township is on the planned route of the Sunoco Mariner East 2 pipeline.

For several years, some residents of Penn Township have been fighting the expansion of unconventional drilling and associated environmental and community impacts, in particular at the Drakulic and Poseidon well pads. Additional permits proposed by Olympus Energy and Apex Energy are being contested on the basis that the Township's zoning ordinance allows over 50% of land—including in residential areas—to be available for large-scale oil and gas development.

Tbl. PennT-1, Penn Township (Westmoreland County) Officials

Office	Official	End of Term	Elected/ Appointed	Term Length	
	Jeff Shula, Ward 1	2023			
T	Lisa Rose Zaucha, Ward 2	2025			
Township Commissioners	Chuck Konkus, Ward 3	2023	Elected	Four years	
Commissioners	Chuck Miller Ward 4	2025			
	Larry Harrison, Ward 5	2023			
	Phil Miller, Chairman	2023		Thusan	
	Donna Muller	2024			
Dlamina Cammissian	Jason McCabe	2023	Appointed by Township		
Planning Commission	Hank Tkacik	2024	Commissioners	Three years	
	Mark Cypher	2025	Commissioners		
	Dominick Frollini, Alternate	2025			
Zoning Hearing Board	Mark Hensler, Chairman	2023		Five years;	

Eric Rinker	2027		alternates
Michael DeMark	2023	A	serve three
William Mihalco	2024	Appointed by Township	years
Jeffrey Laspina	2026	Commissioners	
Pati Lindauer Wolinsky,	2023		
Alternate			

Penn Township adopted its zoning code in 2016, creating five zoning districts and a Mineral Extraction Overlay (MEO) specific to mining and oil and gas activities "where the population density is low and significant development is not projected for the near future." The MEO extends over parts of the residential and industrial districts.

Unconventional drilling and facilities in the MEO have to be approved as a Special Exception. Among other things, this requires the Township to hold a public hearing and allows the Zoning Hearing Board to add more "conditions and safeguards" during the application and approval process in keeping with court decisions on local authority under Act 13.

Notably, the section of Penn Township's zoning ordinance on unconventional oil and gas operations opens the door for residents to contest whether operations are in compliance with municipal law. It states that operations may not "violate the citizens of Penn Township's right to clean air and pure water as set forth in Art. 1, Sec. 27, of the Pennsylvania Constitution (The Environmental Rights Amendment). The applicant shall have the burden to demonstrate that its operations will not affect the health, safety or welfare of the citizens of Penn Township or any other potentially affected landowner."

Tbl. PennT-2, Penn Township, Westmoreland County: Zoning Districts

District	Name	Purpose
RR	Rural Resource	Provide land for agricultural operations, resource management, timber harvesting, outdoor recreation, public and private conservation areas, low-density single-family residential, and compatible support uses
MDR	Mixed Density Residential	Provide land for a variety of housing options at moderate to high densities and for personal and professional services, small-scale mixed-use sites and compatible support uses

NC	Neighborhood Commercial	Provide land for small-scale commercial uses, personal and professional services, planned mixed-use developments, multifamily residential, mixed-use structures with commercial uses, restaurants, arts and entertainment, and compatible support uses for the permitted principal uses
CC	Commercial Corridor	Provide land for transit-oriented uses at a variety of scales, whether planned as a unified development or as a stand-alone facility, and including compatible support uses for the permitted principal uses
IC	Industrial Commerce	Provide land for heavy and light industrial, processing, planned light industrial and planned commerce uses, in addition to warehousing and distribution, supply yards, and compatible support uses
MEO	Mineral Extraction Overlay	Provide areas for the extraction of minerals as defined by the commonwealth, where the population density is low and significant development is not projected for the near future

Tbl. PennT-3, Penn Township, Westmoreland County: Zoning for Specific Oil and Gas Uses

0.1 1	Districts					
Oil and gas use	R-R	MDR	NC	CC	IC	MEO
Conventional well sites	P	P	P	P	P	P
Unconventional well sites						SE
Compressor stations					CU	
Processing plants					CU	

Tbl. PennT-4, Penn Township, Westmoreland County: Setbacks and Distance/Size Requirements for Oil and Gas Uses

	Setbacks				
Use	Protected (occupied) Structure	Property line	Lot size		
Conventional oil and gas wells			1 acre in RR and MDR districts		
Unconventional oil and gas wells	600 ft.	200 ft.	10 acres		
Compressor stations	1,200 ft.	200 ft.	2 acres		
Natural gas processing plants	1,200 ft.	200 ft.	2 acres		

Tbl. PennT-5, Penn Township (Westmoreland County): Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Demonstration that the operations will not impact residents' health, safety, or welfare	Applicants bear the burden of proof, which can include environmental reports, air pollution modeling, hydrogeological studies, etc.
All oil and gos	Copies of all information submitted to DEP to obtain permits	
All oil and gas operations	Copy of DEP-issued erosion & sedimentation control permit	
	Copy of DEP-approved site access security measures	
	Health and safety reports	Applicant must provide "industry standard" reports on the development and operation of facilities
	Affidavit from engineer	Pertaining to compliance with all industry and state standards under PA Oil & Gas Act
	Design & construction measures to reduce impacts	Including sound barriers, chemical and waste storage, lighting, stormwater management, etc.
	Landscaping plan	Must comply with zoning code section 190-630
	Copies of enforcement notices, fines, or penalties	Applies to applicant and their contractors and consultants
	Transportation and routing plan	Including site access, use of Township roads, road performance bonds, local and state permits
Operations subject to Special Exception approval	Project narrative	Including location, use, land changes and improvements, demonstration of compliance with applicable standards.

Tbl. PennT-6, Penn Township, Westmoreland County: Other Requirements for Oil and Gas Uses

Use	Requirement
	No land use or structure shall result in conditions that are dangerous, cause offensive odors, smoke, dust, dirt, noise, vibration, glare, excessive traffic, or be a nuisance or detriment to the "health, safety, moral, or general welfare" of the community or property in the Township.
All oil &	No more than 50% of any forest may be cleared; no development of ponds, watercourses, or wetlands.
gas uses in	Odor controls must meet DEP standards
Mineral Extraction	Bulk storage of flammable, explosive, or toxic liquids must be in an enclosed building or new tanks and be secured by a fence
Overlay District	Materials, waste, and discharges must be prevented from reaching and contaminating water supplies and watercourses.
	Harmful dust, dirt, fumes, vapors, or gases may not extend, and vibrations may not be detectable beyond the site property or lot line.
	Noise levels determined by the Township (above 90 dBA) must be controlled.
	Industrial uses may not exceed 90dBA for more than 2 hours in a 24-hour period.

5. Rostraver Township

Rostraver Township is located in the southeastern corner of Westmoreland County, bordered by the Monongahela and Youghiogheny Rivers. There are numerous oil and gas wells in the Township, and a spider web of gathering lines and pipelines. In addition, Rostraver is on the planned route of the Sunoco Mariner East 2 pipeline.

In 2016, Rostraver Township fined Sunoco Pipeline for violating its road use permit and was prohibited from continuing to use a main public road. In addition, the Westmoreland Sanitary Landfill located in Rostraver Township has come under scrutiny by state and local officials due to its longstanding acceptance of oil and gas waste. In 2020, DEP fined the Landfill for illegally trucking leachate contaminated by drill cuttings and muds to treatment facilities and as a result has been required to improve its handling of the substances.

Tbl. ROST-1, Rostraver Township Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
	Jeffrey R Johnson, Chairman	2025		
Board of	Devin M DeRienzo, Vice Chairman	2024	Elected	Four
Commissioners	Justin Kosanko	2025		years

	John Lorenzo	2024		
	Gary N. Beck Sr.	2024		
	Carl DeiCas, Township Engineer	N/A		
Planning	Frank Monack, Zoning Officer	N/A	N/A	N/A
Agency *	Tamira Spedaliere, Township Planner	N/A		
Zoning Hearing Board	John Bedell, Chairman	2024	Appointed by	Five years
	Stuart D. Boyd, Vice Chairman	2027		
	G. Adam Martin	2025	Board of	
	Larry A Callaway Sr.	2025	Commissioners	
	William D Hoffman Jr	2025		
	Justin M Shawley, Alternate	2026		

^{*} In 2002, the Board of Commissioners created a Planning Agency in place of a Planning Commission. Agency members are professional staff with the Township and review applications for land development, subdivisions, and zoning changes.

Rostraver Township adopted its zoning code in 1995, creating eleven zoning districts; it has been amended several times, including to add definitions and provisions specific to gas and oil activities. The Township code also includes a chapter on permitting and requirements for oil and gas exploration (including seismic activity). Notably, Rostraver Township requires a Special Exception permit in those districts where activities are allowed, which doesn't include those zoned only for residential purposes.

Tbl. ROST-2, Rostraver Township: Zoning Districts

District	Name	Purpose
A-1	Agricultural	Preserve productive agricultural land resources and provide sites for low-density residential development compatible with natural features, agricultural pursuits and the perpetuating of low-density use characteristics
V-R	Village Residential	Encourage urban infill and outgrowth or extension of the existing development together with activities that are compatible and normally associated in the Township's historic villages
R-1	Recidential	Provide for the development and maintenance of single-family residential neighborhoods, together with activities that are compatible and normally associated with residential neighborhoods
R-2	Suburban	Provide for residential neighborhoods to accommodate single-family, duplex housing and multifamily condominium units, together with activities that are compatible and normally associated with residential neighborhoods

R-3	Multiple- Family Residential	Provide for a mix of single-family and multifamily residential dwelling units in areas of the Township with acceptable levels of infrastructure and access facilities
B-1	Special Business	Provide locations for retail-oriented businesses in conjunction with private and public services in growth areas
B-2	Retail Business	Provide locations for general business and related activities for the use and convenience of area and district consumers
MU	Mixed Use District	Provide for a wide range of business, professional and light manufacturing uses in a campus environment, by fostering innovative building and open space masses resulting in an aesthetically attractive working environment
I-1	Light Industrial	Provide sites for both commercial and light industrial activities
I-2	Heavy Industrial	Accommodate industrial activities of an intrusive nature which are normally not compatible with or detract from the viability of other uses due to high levels of traffic generation, noise, aesthetic and related considerations
I-3	Mixed Industrial- Services	Accommodate services or industrial activities of the types permitted in the I-2 District; permit adult-oriented entertainment and businesses, commercial recreation, hotels and motels and eating and drinking establishments

Tbl. ROST-3, Rostraver Township: Zoning for Specific Oil and Gas Uses

0.1	Districts										
Oil and gas use	A-1	V-R	R-1	R-2	R-3	B-1	B-2	MU	I-1	I-2	I-3
Oil and gas drill site	SE								SE	SE	SE
Compressor stations										SE	SE
Processing plants										SE	SE
Water storage facility										SE	SE

Tbl. ROST-4, Rostraver Township: Setbacks and Distance/Size Requirements for Oil and Gas Uses

	Setbacks from					
Use	Building	Property Line	Wetlands & Water Bodies*	Lot size		
Oil and gas drill site	250 ft.		150 ft.	10 acres**		
Compressor stations	600 ft.	200 ft.				
Processing plants	600 ft.	200 ft.		5 acres		

Tbl. ROST-5, Rostraver Township: Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Notification to surface owners (wells) and permission from property owners (facilities)	
	Description of the operation	Including timing, duration, maps and plans submitted to state and federal agencies to obtain permits
	Narrative and survey of the project	Including acreage, location and number of wells, equipment, structures, permanent facilities, floodway location; relation of site to compressor stations and processing plants
	Schedule of all phases of development (for wells)	Including site preparation, drilling, fracturing, production, and closure
	Gas transmission plan	Including gather, compressors, and other midstream & downstream facilities within and 800 ft. beyond Township boundary
	Drainage and stormwater plan	Including all storm sewers, best management practices, and verification of compliance with Township Code Chapter 164
Oil and gas wells and supporting facilities	List and description of heavy trucks and routing	Including all equipment over 10 tons
lacinues	Name of security personnel reachable 24/7	
	Emergency Plan and training plan for first responders	Including copies of the Preparedness Prevention and Contingency (PPC) plan filed with DEP and chemical inventory filed with PENNSAFE; applicant bears cost of training
	Information on lighting and anticipated noise levels	
	Land reclamation plan	
	Road use and maintenance agreement	Including bonding level
	Reimbursement to Township for consultant costs	Including for application review and ordinance enforcement
	List of chemicals and waste products to be stored onsite	

^{*} Applies to those areas more than 1 acre in size.

** Drill site includes water storage and staging areas as accessory uses.

Use	Application Requirement	Notes
	Description of explosives and other exploration methods	
	Map of testing area	Includes points of use and energy sources
Exploration	Traffic control plan	
	Insurance information	Must cover proposed operations; \$1 million per person, \$3 million per occurrence, \$1 million property damage
	Performance bond	\$250,000
	Report on all infrastructure to be affected	Prepared by Township and submitted to Board of Commissioners as part of permit application process

Tbl. ROST- 6, Rostraver Township: Other Requirements for Oil and Gas Uses

Use	Requirement			
	Thick chain-link fencing 6 ft. in height with lockable gates or 24/7 on-site security at well sites; warning signs on fencing			
	Lighting must be directed downward to prevent glare onto public roads, adjacent properties, and surrounding vicinity and comply with Township Code 195-81.2			
	Dust, vibration, and odors must be minimized, and noise reduction measures taken in accordance with Township Code Section 195-74			
	Exhaust must be contained; public streets must be kept free of mud, debris, and trash; refuse and trash must be contained and not disposed of onsite			
	Permanent facilities must blend into the surrounding area (color & landscaping)			
	Topsoil must remain onsite for restoration			
All Oil and Gas	No vehicular access only from residential streets			
Operations	Grading & filling must comply with Township Code section 195-70			
	In 100-year floodplain, chemical storage is prohibited; closed loop drilling systems are encouraged; structures must be designed to not cause flooding and withstand 100-year storm events; operations must comply with Township Code Chapter 97			
	Material Safety Data Sheets for hazardous chemicals must be onsite			
	Township officials have the right of inspection at all phases of			
	development			
	Grading & filling must comply with Township Code 195-70			

Use	Requirement
	Height requirements must comply with Township Code 195-73
C. IW.	No hazardous or environmentally unsafe activities may occur, or substances be stored onsite
Staging and Water Storage Facilities	No storage or parking in required side yard areas
(Additional Requirements)	Permitted only on property with a minimum of space of 32,000 sq. ft. (staging) and 20,000 ft. (water storage)
Requirements)	Water storage site restoration must occur within one year of end of use
	Testing may occur only between 8 am (weekdays) and 9 am (weekends) – earlier of sunset or 7 pm
	Engineer specializing in seismology must be on site during testing
Exploration	The township must have access to operator contact 24/7
	Operator must obtain permission from property owners within 400 ft. of charge and 125 ft. of vibroseis/weight drop tests
	Notification of plans and provision of daily logs to Township water and sewage providers and public via newspapers
Exploration	All springs, wells, septic systems, underground waste storage systems, utilities, and pipelines must be surveyed and may not be damaged
	All public roads must be restored if damaged, traffic may not interfere with the flow of traffic or pose a hazard
	Explosives must be transported in accordance with federal hazardous materials laws
	Energy levels restricted to 5/10 inch per second

6. Salem Township

Salem Township is located in the northeastern part of Westmoreland County, just outside Pittsburgh. Salem is among the municipalities in Westmoreland County where oil and gas operations have surged in recent years and residents have come to experience high levels of air pollution from both local and regional sources. There are oil and gas wells in the Township, large compressor stations (Delmont, Oakford, South Oakford, and Rock Springs), a pumping and storage facility (Delmont), and a spiderweb of gathering lines and pipelines. In addition, Salem is on the planned route of the Mariner East 2 pipeline.

Tbl. ST-1, Salem Township: Government Officials

Office	Official	End of Term	Elected/ Appointed	Term Length
D 1 C	Bob Zundel, Chairman	2027		
Board of Supervisors	Ken Trumbetter, Vice Chairman	2025	Elected	Six years
	Kerry Jobe	2023		
D1	Jack Dunaway, Chair	N/A	Appointed by	No term limits
Planning Commission	Connie Mattei	N/A	Board of	
	John Durco		Supervisors	iiiiits

No zoning in Salem Township

The relatively rapid industrial expansion in Salem Township has occurred in the absence of zoning. However, in 2006, Salem Township adopted an ordinance to address the impacts of oil and gas operations, which it later included in its Subdivision and Land Development Ordinance (SALDO). ¹³⁶ Range Resources and other energy companies sued the Township, claiming that the ordinance amounted to regulation—the "how" of industry activities, which is preempted by state authority—and after various rounds of appeals, in 2009 the Supreme Court sided with the industry. ¹³⁷

Perhaps as a result of 2013 reassertion of municipal rights under Act 13, the Township's SALDO currently in use includes a section on the Surface Development Associated with Oil and Gas Well Drilling operations. As outlined below, the Township has some requirements for the application process and to address the impacts of well site construction and drilling.

Tbl. ST-2, Salem Township: Application Requirements for Oil and Gas Uses

Use	Application Requirement	Notes
	Copy of the application submitted to DEP	
Oil and gas Wells	Plat of the property where drilling will occur	Including location of structures, water supplies and bodies of water, planned improvements, and transmission lines both on and within 1,000 ft. of the site
	Copy of flow tests for private water supplies on the property	

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¹³⁶ Ordinance No. 01-2006, "Regulating Subdivisions and Land Development with the Township of Salem and Providing Remedies and Penalties for the Violation of Same." (Digital copy provided by the Township to EIP.) ¹³⁷ Range Resources-Appalachia, LLC v. Salem Township. Case summary and court decision *available at* https://casetext.com/case/range-resources-appalachia-v-salem-tp-1.

Copy of water quality tests on
all water wells, springs, and
surface waters on and within
1,000 ft. of the site

Tbl. ST-3, Salem Township: Application Requirements for Oil and Gas Uses

Use	Requirement
	Operators may enter into agreements with surface owners about the location of activities and infrastructure that constitute an exception to the provisions
	After an application is approved, the operator must post bonds determined by the Township to cover the removal and restoration of access roads and water treatment facilities
	Road maintenance agreement with the Township
	Access roads to well sites must be as "direct and feasible" as possible; additional wells must use the same roads unless an exception is granted by the Board of Supervisors
	Access roads must be no more than 15 ft. in width; be made of materials to facilitate removal and land restoration; and removed within 60 days after drilling ends
	Access roads must be kept mud free; include areas of stone that wipes off tires; and have low slopes under 12%.
	Operators must submit a stormwater management plan for review and approval by the Township engineer
Oil and	Pipes must be at least 12 inches in diameter; at least one must be installed within 50 ft. of public and private roads
gas wells	Anticipated direction of surface water onto adjoining properties requires property owner permission
	Surface owners must have the right of access across roads
	Lockable gates must be installed at access road crossings
	Transmission lines must be located close to existing access ways, property lines, and fence lines and tie into existing ones when possible
	Transmission lines must be buried at least 36 inches; encased in steel or concrete if they cross streams or run under private or public roads; and be removed (including valves and boxes) within 60 days after drilling ends
	Water treatment facilities must be located close to roads to minimize impact on surface owner; comply with DEP regulations
	Water treatment facilities may be left on property after operations end with written permission from the landowner
	Operators must quickly address impacts on the water supply of surface owners and other water bodies on the property through flow and water quality tests. If DEP determines operators caused impacts, Township can declare the operations to be a public nuisance and restrict them.