

Setbacks

What is meant by a 'Setback'?

A setback refers to the distance which must be maintained between a facet of natural gas development, such as a well bore or a well pad, and a public or private resource, such as a stream, building or water well.

What is the purpose of a setback?

While a comprehensive and robust permitting and inspection regiment, along with industry best practices and standards, are the primary means of protecting public health, safety and the environment, setbacks can serve as a reasonable buffer between well development activity and a public or private resource. These distances ensure that equipment and vehicles necessary during the well drilling and completion process – a relatively short duration during the overall life of a well – are able to operate safely and there is not any impact on public health or the environment as a result of being in proximity to the development, while at the same time not being so excessive that they effectively prohibit individuals from being able to develop their natural gas rights.

When were Pennsylvania's setbacks modernized?

In 2012, Pennsylvania enacted a comprehensive law known as [Act 13](#), which modernized its regulation of unconventional natural gas development. Among many other new criteria, Act 13 significantly expanded setback distances applicable specifically to unconventional natural gas wells. These setbacks are part of an overall environmental regiment designed to facilitate the optimal development of natural gas resources consistent with the protection of public health, safety, the environment, and property.

What are the applicable setbacks in Pennsylvania?

Act 13 established new setback distances between unconventional natural gas wells and the following resources:

- *Water wells*: Increased from 200 feet to **500 feet**.
- *Existing buildings*: Increased from 200 feet to **500 feet**.
- *Streams, springs, wetlands, bodies of water*: Increased from 100 feet to **300 feet**.
- *Public water supplies*: **1,000 feet** (new).

Additionally, unconventional well pads must maintain a setback distance of **100 feet** between the edge of disturbance and any stream, spring, wetland or body of water. Certain setback distances may be modified if consented to in writing by the owner of the resource (building, water well) and the operator abides by additional terms and conditions of the permit to ensure the safety and protection of people and property.



While a PA Supreme Court ruling affected some setbacks, the MSC's members have continued to adhere to the established Act 13 distances. These distances are the furthest among the nation's top five natural gas producing states and the furthest among neighboring Ohio and West Virginia.

How are public health, safety and the environment protected during unconventional natural gas development?

Although decades of scientific research confirms that natural gas development poses minimal threat to public health or the environment, a rigorous environmental permitting and compliance process serves as the primary means of protecting public health, safety and the environment.

For example, to drill and operate an unconventional natural gas well in Pennsylvania, an operator must adhere to or obtain the following:

- An [erosion and sediment control permit](#) to construct the well pad, pipeline and related infrastructure.
- A [well drilling permit](#) to drill and operate the well.
 - This permit and related regulations include comprehensive [well construction and operating standards](#), such as casing and cementing the well to protect water supplies and aggressive monitoring inspections of the wellbore's mechanical integrity.
- An [air quality permit](#), or adherence to robust operating and emission control criteria if the well will operate below applicable permit emission thresholds.
- [Waste permits](#) to process or handle liquid waste onsite.
- Strict regulations governing [production fluids](#) and [secondary containment](#) for activities on the well site. Operators also routinely test well water before drilling operations, and by [law](#) face a rebuttable presumption standard should a water supply appear to be impacted during or after well development.
- County and/or municipal requirements, as applicable.

