

# Marcellus Shale Tool Kit



## The Permitting Process, Filing a Complaint, and Tracking Permits

### Permitting

Pennsylvania passed the Oil and Gas Act in 1984. The Oil and Gas Act, Chapter 78, requires that all new wells be permitted by the state prior to being drilled, and also requires that all existing wells be registered. The DEP's Oil and Gas Program develops and enforces regulations for the bonding, permitting, and registration of wells, environmental requirements for drilling operations, waste disposal, cementing and casing of wells, and proper plugging of wells upon abandonment.

In order to drill a Marcellus shale gas well in Pennsylvania, the operator must obtain a **well permit** from the Bureau of Oil and Gas management, and must file a **water management plan** with the DEP detailing where water withdrawals will occur. The operator also must apply for coverage under the **Erosion and Sediment Control General Permit-1 (ESCGP-1)**, and must prepare an **Erosion and Sedimentation Control Plan** which must be posted at the well site for the duration of operations.

### Bonding

Bond must be posted for each well. Bond for one well is \$2,500, and a blanket bond to cover any number of wells is \$25,000.

### Monitoring

DEP has a protocol for inspection and monitoring of gas wells from drilling through extraction and reclamation, however, the number of DEP field staff providing inspection is minimal considering the number of wells being drilled. Because of this, it is increasingly important that citizens keep a watchful eye as well.

### Filing A Complaint

Private citizens play a vital role in helping to keep the gas industry from polluting our water supplies and our surface waters. If you see suspicious activity or notice a difference in your drinking water supply consider filing a complaint with the one of the following regulatory agencies:

Pennsylvania Department of Environmental Protection: 412-442-4000. You can send written complaints to Alan Eichler, Department of Environmental Protection, 400 Waterfront Dr., Pittsburgh, Pa 15222

Environmental Protection Agency: 877-919-4372 or [eyesondrilling@epa.gov](mailto:eyesondrilling@epa.gov)

Pennsylvania Fish & Boat Commission: 1-855-347-4545

When filing a complaint provide the time, location, and specific details of what you are observing (hear, smell, see, and feel). Taking pictures and/or video with a time and date stamp will help the investigation.

Permitting continued...

## Stay Informed!

There are a few ways to monitor gas development in your area.

### 1) **E-Notice & E-Facts**

E-Facts is DEP's searchable database of permitting information. E-Notice is a notification system used by DEP to notify the public of permitting information. You can sign up for E-Notice and you'll receive email notification of any permits that are applied for or issued within the municipalities that you choose to track. To search the E-Facts database visit <http://www.dep.state.pa.us/efacts/default.asp>. To sign up for E-Notice, visit <http://www.dep.state.pa.us/enotice/>

### 2) **www.fracktracker.org**

This data tool, developed by the University of Pittsburgh's Center for Healthy Environments and Communities, provides a visual display of many different sets of data relevant to Marcellus shale extraction, including information about recently permitted wells. This tool in many ways is easier to use than DEP's eMap system. The data platform can be found by visiting [www.fracktracker.org](http://www.fracktracker.org).



## Water Impacts: Public and Private Water Supplies

### Hydrofracking

The process of Marcellus shale extraction requires a significant amount of water. Each Marcellus shale well requires at least 3 million gallons of water for hydrofracking, and each well can be fracked up to 10 times. After hydrofracking, up to 70% of this water returns to the surface, often containing more salt than seawater along with a host of other contaminants. Few treatment facilities exist to treat this water.

### Public Water Supplies

Marcellus shale extraction has the potential to impact our public water supplies in several ways. Most public water suppliers in this area rely on our major rivers for source water, especially the Youghiogheny and Monongahela Rivers. As a result of the discharge of high salty wastewater from hydrofracking operations, levels of total dissolved solids (TDS), essentially measurements of salinity, have doubled in major rivers including the Yough and the Mon. In 2008 TDS levels in the Mon became high enough to prompt drinking water advisories. Those with public water should report any unusual color, odor, or taste to their public water supplier immediately.

## Private Water Supplies

Private water wells can also be impacted by drilling activities. Well drilling, fracking, and seismic testing have all been implicated in the contamination of private water supplies around Pennsylvania. In Northeast Pennsylvania there have been cases of methane migrating into drinking water aquifers.

If a gas well is drilled within 1000 feet from a private water supply the drilling company must test that water supply both prior to and after drilling, however, in this area reports of contamination outside the 1000' boundary have surfaced. It is advisable for those living in the vicinity of drilling but not necessarily within the 1000' presumption zone to consider having private water supplies tested prior to drilling.

Testing should be completed by a DEP certified laboratory. Ask the lab to send a technician to take the samples (do not take the samples yourself!) and have this testing performed just prior to the start of drilling. For more information, please contact our office.

If you notice a change in your private water supply file a complaint with the DEP immediately.



## Leasing your Marcellus Shale Rights... Food for Thought

### General Information

There are many companies trying to gather leases for gas. Make sure to research the company that approaches you to ensure that they are a drilling company and their violation history is minimal.

If the words GRANT or CONVEY are used in your lease, you may be selling the rights to your land permanently.

There may be MORE THAN ONE type of gas or field of gas under your property. Make sure you lease only the types/fields you want to lease. If you decide to lease multiple fields be sure that you are compensated appropriately. Include in the lease that you are not allowing the right to produce coal bed methane.

If you are asked to lease for a pipeline only, make sure you are only leasing for the pipeline and not for compressor stations, meter pits, dehydrating facilities, or other uses.

Do you want disposal of wastes under your property? You may be asked to allow disposal of carbon or brine under your land. Be aware of this.

If you lease 40 acres but only 10 are used for extraction, you may want to be able to lease the other 30 to a different company. Make sure your lease allows you to do that. (This is called a Pugh clause.)

Leases DO NOT have to be five years. You can negotiate shorter terms, like three years.



*Leasing continued...*

If activities on your property depend on “paying quantities,” make sure this is defined in the lease so you know what the company means.

When do the well activities start? This may seem self-evident, but do they start when the actual well drilling begins or when the company starts cutting roads across your property?

Royalty amounts are negotiable. You can also determine in what part of the month your payments are made.

Be sure to understand what costs will be deducted from your payments by the gas producer. Some leases state that they will deduct any tax imposed by government bodies. There may also be a tax associated with assessment of your property. Some townships may want to impose a tax to help pay for road maintenance or damaged water supplies; your lease should require the company to pay 100% of such taxes.

You should be paid based on the highest field market price, not the lowest field market price since the company can sell gas to another company in which it has an interest causing the price to be artificially less.

Generally, shallow gas wells can be tapped for house use. Often people think they can negotiate the same deal with regard to Marcellus shale gas, however, Marcellus shale is much more pressurized and may create a safety issue. Consider taking the “house” portion as a cash payment instead.

## **Land Use & Water Considerations**

Many gas companies want to utilize your land along with other nearby land. This could mean the lease will cover not only your land but adjacent properties (sometimes several). Make sure all of your land is included in the unit or include a Pugh clause so that you can lease the parts not in the first lease to another company. Your royalty payment should be based on your land and not dependent on the size of the unit so that adding more acreage to the unit will not dilute your royalty payment.

Consider prohibiting the company from using any water from your springs, wells, or ponds. Remember that each well can use between 1 and 5 million gallons of water each time it is fractured.

Marcellus shale wells generate a large quantity of polluted water. Be wary of agreeing to allow construction of a pond on your property for treatment and disposal of this water, and also be wary of land disposal. You may want them to haul this water away. You may want to control the location of any ponds. **KNOW HOW BIG THEY WILL BE.** Include a section in the lease stating that the ponds will be removed after well development.

Include in your lease how wide you want the roads to be across your property pre-drilling, during drilling, and post-drilling. Consider asking that gates be installed to prevent access to the roads on your property.

Any pipelines on your property should be buried to at least 36 inches after the ground settles.

If you have timber on your property, you should decide whether to have the timber removed yourself before earth moving starts.



*Leasing continued...*

Require that your private water supplies (wells and springs) and surface water supplies (streams and ponds) be tested as to quality and quantity where applicable by the company **PRIOR TO ANY ACTIVITY**. If your private water supplies are within 1000' of the well the company may be required to test your water. If you are outside 1000' you should put in your lease that the company must conduct these tests. Baseline data on water supplies is crucial in proving any future contamination.

Your lease should state that any damage to your water supplies or springs caused by the company's operations must be fixed or corrected. If drilling causes the quality or quantity of your private water supply to deteriorate, the company must replace the water supply. If surface waters on your property are affected, the company must also correct this. Your lease can specify the time frame in which you want this done.

Establish distances from your home and outbuildings where drilling and other activities may take place. Typically 300 feet from any structure is what is specified. You can restrict proximity to your home and barn. Distances and locations can be negotiated.

Include in your lease a time period for removal of all pipes, well casing machinery, equipment and fixtures after completion of extraction, and a time period for restoration of the surface of your land. Do you want a field or trees as part of the restoration? Request to use native plants and grasses. You have the right to participate in these decisions.

## **Just In Case**

Include a process for you to file a complaint if you feel the company is not complying with the terms of your lease. A thirty day period after receipt of a written notice from you setting forth what you think they have failed to do is reasonable. If the company does not get a written excuse from you or fix the problem within 30 days, this can be cause for termination of the lease.

Sometimes the lease will have a sentence stating "Lessor (you) further agrees to sign additional documents as may be requested by the company to show you have title to the gas they want to lease." This means you are warranting the title to your land and/or gas. You should not do this. The company should do property and mineral searches to establish ownership. You should never sign additional documents that could potentially change the terms of the lease.

You should not be responsible for damages or problems caused by the company, including resulting nuisance or air, water, solid waste pollution unless you have contributed to the problem.

You have the right to see and copy the company's records including costs as to wells on either your property or in any unit that includes your property. You should have a written process in your lease as to how to exercise this right. For example, you could make this request in writing and then give the company fifteen days to produce the records at their office.



*Leasing continued...*

Ensure the company cannot lease your property to another entity and divest themselves of liability for the terms and conditions of the lease. You will want them to remain jointly liable with the new lessee.

Know what a shut-in well is. If a well is drilled but not used, it may be capped. Since the well is considered active, the lease continues indefinitely under what is called a shut-in. No royalties are paid, although a minimal fee per acre may be paid. If you are concerned about this, consider putting an expiration limit in your lease for shut-in wells.

Finally, remember that the property is still yours and you should have the right to use it and enjoy it in a way that does not interfere with the gas extraction. You should have in your lease where you do not want wells and roads, pipes and electric lines, ponds and meter sites. Otherwise, the company gets to decide.



## **Marcellus Citizen Stewardship Project**

This project is being piloted in the Youghiogheny River watershed but is expected to spread throughout the southwestern Pennsylvania region. The MCSP provides citizens with tools and knowledge to responsibly monitor Marcellus shale development to aid in community and environmental protection

The Marcellus Citizen Stewardship Project offers basic trainings-- called Visual Assessment Trainings—that provide information on monitoring Marcellus shale development. Participants will learn to use their senses of sight, hearing and smell to identify potential issues resulting from drilling operations; this approach is unique because no technical equipment is necessary. Data gathered through this process is uploaded using simple online forms and eventually is integrated into FracTracker, an interactive data platform providing citizens with a common place to learn about and share information on Marcellus shale gas operations. Visual Assessment Trainings also provide information on permitting and regulations, air and water pollution, the use of FracTracker, filing a complaint, and safety. After completing this basic training, participants will have the opportunity to sign up for further instruction in air or water monitoring.

You can access our Visual Assessment Manual on our website at [www.mtwatershed.com](http://www.mtwatershed.com)

### **marcellus citizen stewardship project an outreach, assessment and monitoring initiative**