ONGP — Frequently Asked Questions

ONGP in Pennsylvania

ONGP is a significant industry in Pennsylvania. The latest wave of ONGP activity in the state began in 2005 with the start of unconventional oil and natural gas development (UONGD). Unconventional wells differ from conventional wells by the geologic formation being tapped. They use horizontal and vertical drilling and hydraulic fracturing ("fracking") to access traditionally unavailable reservoirs of oil and natural gas.

As of December 31, 2021, there are 11,779 active unconventional wells in the state, with an average of 40 wells added each month. Thirty-five of Pennsylvania’s 67 counties have active unconventional wells, primarily in the northeast and southwest parts of the state. Sixteen percent of the state’s active unconventional wells are in Washington County, followed by 13 percent, 13 percent in Susquehanna, Greene and Bradford counties.

Pennsylvania also has more than 115,300 active conventional wells located in 40 counties. Sixteen percent of the state’s conventional wells are in Warren County, followed by 12 percent, 10 percent, and 9 percent in McKean, Indiana and Venango counties.*

ONGP Health Registry

The Pennsylvania Department of Health’s (DOH) Division of Environmental Health Epidemiology (DEHE) has developed a confidential, voluntary ONGP health registry to track and respond to public health concerns related to ONGP. Those who wish to report a health concern will be able to describe the problem to a DOH employee. DEHE’s Health Assessment Program, including the state toxicologist, can review environmental testing results and/or health records to determine if there is an ONGP health risk. Information on joining the registry is provided at the end of this FAQ.

* Pennsylvania Department of Environmental Protection (DEP) Spud Report, Wells by County, 1/3/2022

Q: Where can I find the location of ONGP activities?

A: ONGP activities occur throughout Pennsylvania. Unconventional and conventional oil and natural gas wells are in the northeast, northcentral, and southwest parts of the state. Pipelines run across the entire length of the state, and oil refineries can be found in the southeast corner. The following resources provide maps of ONGP infrastructure in Pennsylvania:

- DEP Oil and Gas Mapping: Locations of unconventional, conventional, injection, and storage wells
- USDOT National Pipeline Mapping System: Locations of pipelines regulated by the Federal Energy Regulatory Commission (FERC)
- DEHE is developing an Environmental Health Indicators Map: Locations of conventional and unconventional wells, compressor stations, underground natural gas storage areas, and pipelines

Q: What chemicals are used in fracking?

A: Pennsylvania participates with FracFocus as the official chemical disclosure registry which lists most chemicals used in hydraulically fractured wells in the state. Hundreds of chemicals are searchable on fracfocus.org. The registry is mandatory for operators, but some chemicals used in fracking are considered proprietary, meaning the operators do not have to disclose them. Check out the Agency for Toxic Substances and Disease Registry's (ATSDR) ToxFAQs for the principal chemicals used in fracking: benzene, toluene, ethylbenzene, and xylene to learn more about these chemicals and how they can impact health.

Q: Will DOH sample my water, air or soil?

A: No, DOH is not currently able to perform sampling. DEP is the state agency that conducts environmental sampling related to ONGP (per guidelines available here). Also, Penn State Extension provides limited free water testing and other resources for private well owners.

Q: Who regulates my drinking water?

A: DEP’s Bureau of Safe Drinking Water regulates public water in accordance with the federal and state Safe Drinking Water Act. The federal drinking water regulations and standards developed by EPA are available at epa.gov/dwstandardsregulations. Please note that in Pennsylvania, private water supplies (e.g., private well, spring water, etc.) are not regulated. EPA regulations are not legally enforceable in this situation. If you use a private well for drinking water, please follow the recommended guidelines for testing your well water. More information about maintaining your private well can be found at privatewellclass.org.
Q: Who regulates air quality?
A: DEP’s Bureau of Air Quality regulates ambient (outdoor) air in accordance with the federal Clean Air Act and the Pennsylvania Air Pollution Control Act. EPA has developed National Ambient Air Quality Standards (NAAQS) for six common air pollutants (epa.gov/criteria-air-pollutants/naaqs-table). Current ambient air monitoring may not detect short-term air pollution, even at high levels. To find out the real-time air quality data where you live, visit EPA’s AirNow program at airnow.gov.

Q: Where can I learn about the health effects of different contaminants I may be exposed to in my drinking water or air?
A: Select fact sheets on common environmental contaminants are available on the DOH website at health.pa.gov/topics/envirohealth/Pages/Fact-Sheets.aspx. ATSDR publishes fact sheets for a wider range of chemicals. EPA has a website for Chemicals and Toxics Topics. Also, EPA recently released a report on hydraulic fracturing chemicals and impacts on drinking water.

Q: What can I do if my drinking water or air is contaminated?
A: If your drinking water is found to be contaminated, you should not consume the water. Find an alternative and safe drinking water supply. The quickest thing to do is begin using bottled water. Consider installing a proper water treatment system as guided by your water test results. If possible, connect to a public water system. In cases where private well treatment systems are installed, it is recommended to retest after installation to ensure the system is working as intended.
If the air outside of your home is found to be contaminated, keep windows closed and use air conditioning or central heat with a high-efficiency air filter, if possible.
If you have not already done so, contact DEP, county or local officials, the oil and gas drilling companies, emergency services, and DOH. In addition, an environmental health physician and/or toxicologist may be able to provide information about the health risks of your current water or ambient air given up-to-date environmental sampling results.

Q: What resources are available to me if I want to connect to a public water system?
A: Contact your local municipality to learn about the availability of municipal water systems in your area. The Department of Community and Economic Development (DCED) provides grants to low-income municipalities for small water and sewer infrastructure projects. Although not available for individual homeowners, this grant could be used by a municipality to connect multiple homeowners to a public water system. Consider approaching your municipal officials about applying for the Small Water and Sewer Program. You can also find a list of all Pennsylvania state grant opportunities here.

Q: What research has been done on the health effects of ONGP?
A: Research on the health effects of ONGP, specifically unconventional shale development, has been growing over the last five years. You can find the research online using the following resources:

- DOH and Colorado Department of Public Health and Environment’s “Systematic Review of the Epidemiologic Literature Assessing Health Outcomes in Populations Living near Oil and Natural Gas Operations: Study Quality and Future Recommendations,” published in 2019 (mdpi.com/1660-4601/16/12/2123)
- Concerned Health Professionals of NY’s Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (concernedhealthy.org/compendium/) (Disclaimer: this source is not limited to research findings)
Q: Can you refer me to an environmental health physician?

A: Yes, here are some environmental health physicians in Pennsylvania:

1) DR. EDWARD MCVAY
   St. Vincent’s Health System, Erie
   814-452-7879
   emcvay@svhs.org

2) DR. THEODORE “TED” THEM
   Guthrie Clinic, Sayre
   570-887-2495
   them_theodore@guthrie.org

3) DR. ANTHONY PIZON
   University of Pittsburgh, Pittsburgh
   412-864-2067 (assistant)
   412-864-5382 (clinic coordinator)
   pizonaf@upmc.edu

4) DR. MARILYN HOWARTH
   University of Pennsylvania, Philadelphia
   215-808-2165
   howarthmv@gmail.com
   marilyn.howarthmd@uphs.penn.edu

This is a compilation of physicians within Pennsylvania known to DOH to have environmental training. A physician’s inclusion is not a recommendation and/or endorsement by DOH to use their services. An appointment with an environmental health physician does not replace a visit with your primary care provider. Please check with your health insurance before making an appointment to determine your financial liability.

Q: What can I do about an abandoned well on my property?

A: Act 13 (2012) of Pennsylvania’s oil and gas law established the Marcellus Legacy Fund to plug orphan or abandoned wells that have the potential to impact human health. The Pennsylvania Department of Community and Economic Development (DCED) administers the program that allows municipalities, higher education institutions, for-profit businesses, watershed organizations and other authorized organizations to apply on behalf of themselves or private citizens. For more information, see community.newpa.com/programs/orphan-abandoned-well-plugging-program-oawp/.

Q: What do I do if I have another question that hasn’t been answered?

A: Please contact the Division of Environmental Health Epidemiology (DEHE) at DOH. We will update this document periodically. The next page provides contact information for DEHE and DEP.
Contact Us

Division of Environmental Health Epidemiology
DEPARTMENT OF HEALTH

Room 933, Health and Welfare Building 717-787-3350
d 625 Forster St. env.health.concern@pa.gov
Harrisburg, PA 17120-0701 health.pa.gov/topics/envirohealth
724-662-6068

To be part of our ONGP health registry, contact the Environmental Health team above

Our district and county health offices may be able to connect you to additional resources in your area:

Northwest District
19 McQuiston Drive
Jackson Center, PA 16133-1635
724-662-6068

Northcentral District
Water Tower Square
1000 Commerce Park Drive, Ste 109
Williamsport, PA 17701-5475
570-327-3400

Northeast District
655 Carey Ave.
Wilkes-Barre, PA 18706-5485
570-826-2062

Southwest District
233 West Otterman St.
Greensburg, PA 15601-2305
724-830-2701

Southcentral District
30 Kline Plaza
Harrisburg, PA 17104-1530
717-787-8092

Southeast District
Room 442, Reading State Building
625 Cherry St.
Reading, PA 19602-1152
610-378-4352

Allegheny County
542 Fourth Ave.
Pittsburgh, PA 15219-2111
412-687-ACHD (2243)

Erie County
606 West Second St.
Erie, PA 16507-1111
814-451-6700

Office of Oil and Gas Management
DEPARTMENT OF ENVIRONMENTAL PROTECTION

16th floor, Rachel Carson State Office Building 717-772-2199
P.O. Box 2063 ra-epoilandgas@pa.gov
Harrisburg, PA 17105-2063 dep.pa.gov/oilandgas

For oil and gas complaints, call 1-866-255-5158
For general environmental complaints, call 1-888-723-3721 (OR 1-800-541-2050 for emergencies)

The oil and gas district offices may be able to connect you to additional resources in your area:

Northwest District
230 Chestnut St.
Meadiville, PA 16335-3481
814-332-6860

Southwest District
400 Waterfront Drive
Pittsburgh, PA 15222-4745
412-442-4024

Eastern District
208 West Third St.
Williamsport, PA 17701-6448
570-327-3636