pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# Marcellus Shale: Tough Regulations, Greater Enforcement

For more than two years Pennsylvania has been proactively increasing its oversight of gas drilling.

No other state has added more staff, done a more comprehensive strengthening of its rules or more aggressively enforced its rules than Pennsylvania has.

**Consider the following:**

- In 2008, the Department of Environmental Protection (DEP) required every application for a Marcellus Shale drilling permit to include a mandatory water plan that governed water withdrawal and disposal issues. That requirement has been in effect and working for two years.
- In 2008, DEP placed on its Web site the list of chemicals mixed with water that are used to frac or break the shale usually 5,000 to 8,000 feet underground to free the gas, and the department recently updated that list. DEP also required that the list of chemicals be available at each well site right from the first Marcellus Shale well drilled in 2005.
- In 2008, DEP raised substantially fees to apply for a drilling permit. The application fee was raised from $100 to now $5,000, $10,000 or more for deep Marcellus wells. All revenue was invested to increase oversight.
- In 2009, Governor Edward G. Rendell directed the hiring of 37 additional employees for oil and gas staff.
- In 2010, the Governor directed the hiring of an additional 68 oil and gas employees. The 2009 and 2010 hiring will more than double the number of state employees regulating Pennsylvania's gas industry.
- In 2009, DEP opened a new office for gas staff in Williamsport, Lycoming County and another new office in Scranton, Lackawanna County in 2010, two areas of the commonwealth that were experiencing drilling for the first time.
- Starting Nov. 1, 2010, DEP will post well-specific gas production data and updates every 6 months.
- A new regulation was passed on July 2, 2010 that requires drilling companies to treat drilling water to the safe drinking water standard for Total Dissolved Solids (TDS). This new rule ensures that streams in Pennsylvania do not exceed the safe drinking water standard of 500 milligrams per liter.
- Also passed on July 2, 2010, a new rule that mandates a 150 foot buffer for the 20,000 miles of Pennsylvania's streams that are the state's most pristine and highest quality. The combination of the TDS and buffers rule provide unprecedented protection for Pennsylvania's waters.
- Enacting strengthened regulations that require best well design and construction practices, including comprehensive measures to prevent gas migration as happened in Dimock Township, Susquehanna County. Those rules will be final by November 2010.
- Mandating and enforcing strong blowout prevention policies such as:
    - A snubbing unit, which prevents pipes from ejecting uncontrollably from a well, must be used to clean out the composite frac plugs and sand during post-fracturing (post-frac) if coil tubing is not an option;

FACT SHEET


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- A minimum of two pressure barriers must be in place during all post-frac cleanout operations;
- Any blowout preventer equipment must be tested immediately after its installation and before its use. Records of these tests must be kept on file at the well site or with the well site supervisor;
- At least one well site supervisor who has a current well control certification from a recognized institution must be on location during post-frac cleanout operations; and
- A remote-controlled, independently powered blowout preventer unit, which allows workers to control what's happening on the rig at a safe distance, must be located a minimum of 100 feet from the well and operational during all post-frac cleanout operations.

- Working closely with the State Police to conduct unannounced FracNet operations to strenuously enforce waste and highway safety laws for trucks hauling wastewater from drilling sites.

When tough enforcement of our rules is required, the Department of Environmental Protection takes action. In cases, DEP has stopped issuing new drilling permits; ordered wells to be plugged; ordered that drilling stop, fracking halt, and well completion cease. All these steps put safety first.

The Marcellus Shale gas industry operating in Pennsylvania can and must be the very best in the world and strong rules and enforcement will help it to be world class.

For more information, visit www.depweb.state.pa.us, keyword: oil and gas.