

City of Philadelphia Water Department
December 2011 - Position Statement on
Marcellus Shale Drilling in the Delaware River Basin

The Delaware River Basin provides Pennsylvania with abundant and valuable natural resources. For centuries, the pristine forests of the northern portion of the basin have provided clean water to support Philadelphia and Southeast Pennsylvania's vibrant economy. Today, the Philadelphia Water Department provides that clean water to 1.8 million people in Philadelphia, Bucks County, Montgomery County and Delaware County. The assurance of a sustainable, clean source of drinking water for our citizens is our pledge for today and for generations to come.

Natural gas extraction from the Marcellus Shale presents a significant economic opportunity for communities and landowners above the deposits; however, this drilling will impose currently unknown costs on Pennsylvania's water supplies. Drilling activities are projected to impact thousands of acres of land upstream from Philadelphia in the next five to ten years. The scope, scale, and speed of the proposed drilling and related activities within the Marcellus may be as significant as the coal mining boom of the late 19th and early 20th centuries. The coal mining boom of the past has lessons for today. It fostered incredible economic development, but 21st century taxpayers continue to pay to remediate the environmental harms. Any natural gas development in the basin should not impose costs on future generations.

Proposed Regulations

Philadelphia has an immense civic and moral responsibility to provide our citizens with the safest, highest quality drinking water. The quality of our tap water is intimately linked to the health, vitality, and quality of our watershed, rivers, and communities. The Marcellus Shale formation underlies roughly half of the watershed area influencing Philadelphia's water supply, and thus, all activities related to natural gas extraction present new challenges to the quality and safety of our water resources. For this reason it is the responsibility of the City of Philadelphia and PWD to work with regional industry and regulatory partners to ensure that all natural gas drilling is performed with full respect for Philadelphia's drinking water.

PWD has been actively following and tracking the development of this industry since its introduction in Pennsylvania. We believe that with the proper regulations and legislation, continuous monitoring and careful controls on the discharge of fracking waters, the waters of the Delaware and our drinking water intakes may be protected. The soon to be introduced Delaware River Basin Commission (DRBC) Regulations provide an adequate framework for protecting

Philadelphia's drinking water sources, if faithfully adhered to by industry and diligently enforced by the DRBC.

PWD supports—and suggests enhancements to—the proposed DRBC Regulations for water quality monitoring to meet Safe Drinking Water Act standards, and for drilling companies to provide substantial financial assurances for remediation. The proposed regulations permit a total of 300 wells to be drilled in the basin over an 18-month period, after which DRBC will conduct a regulatory reassessment. It is PWD's expectation that if new scientific findings occur during the 18-month evaluation period, that these findings will be incorporated into future regulatory policies relating to natural gas extraction. PWD will continue to review the information provided by the regulatory and scientific community regarding drilling activities upstream that may affect our drinking water and will immediately raise any concerns if it believes that drinking water safety is compromised.

Additional Actions

PWD seeks to partner with the Commonwealth, DRBC and industry on the following additional actions to protect the water supply for all communities that rely on the Delaware River Basin.

- A moratorium on the permitting of additional wells pending the findings of DRBC's regulatory assessment in 18 months. Assessments must be performed in a thorough and robust manner, with sufficient sampling data, a quality assurance/quality control plan and a model that can provide a high degree of certainty regarding its conclusions.
- A commitment to cease drilling during the 18-month assessment period should water quality or other monitoring data show an increase in sentinel water quality parameters—beyond natural or seasonal fluctuations—until the cause of the increase is ascertained.
- A cumulative impact analysis of the long-term implications of natural gas extraction on our drinking water supply and a commitment to update regulations to address results of the study.
- Legislation for impact fees that allocates funding to DRBC to develop and maintain an aggressive sampling program to help protect the river and support DRBC's 18th month assessment. It is in every party's interest to have a robust sampling program in place. In addition, impact fees should be available to reimburse water utilities that are committing to their own sampling program in response to drilling. Currently, the proper water system monitoring for the exotic and radioactive constituents from hydrofracking is estimated in the hundreds of thousands of dollars per year for Philadelphia. Philadelphia ratepayers should

not be burdened by the additional costs to ensure its water is safe.

- The phase-in of drilling activities in the basin that are deemed safe to occur coupled with a process that allows for examination and evaluation of impacts and how the regulations are implemented in order to identify improvements for future protections.
- Full reforestation and restoration of lands cleared to accommodate drilling and related activities (including access roads) when drilling is complete, as required on state game lands and forests.
- Participation in the Delaware Valley Early Warning System (EWS) from all dischargers, facilities, and transporters of drilling wastewater to notify Philadelphia of accidents and water quality events upstream.
- Installation of continuous monitoring probes, funded by the natural gas industry, at priority surface water locations to provide advanced notification of accidents and spills via the EWS.
- Expansion of land application prohibitions to include treated wastewater and solids produced from the treatment of brines from natural gas well pads (i.e. road salt applications).
- A tri-state commission (Pennsylvania, New Jersey and New York) to guide land management issues as they relate to the special protected waters and the wild and scenic waterways of the Delaware River and the establishment of a public forum for information exchange to keep all interested citizens up to date on gas drilling impacts and strategies.