

**Testimony to the  
Senate of Pennsylvania  
Senate Majority Policy Committee**

**Marcellus Shale Public Hearing**

**Pennsylvania College of Technology  
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Chairman Pippy, Senator Yaw, and other members of the Committee, we commend your leadership in addressing this important issue here in the beautiful northcentral Pennsylvania and appreciate this opportunity to provide these written comments.

We are a 13,000 member organization consisting of 53 Trout Unlimited Chapters across Pennsylvania with one common goal: the conservation and enhancement of Pennsylvania's cold water streams and fisheries, specifically this great Commonwealth's wild trout resources. We restore streams through habitat improvement projects, conduct seminars on water quality and fisheries management and work to educate the next generation about the importance of clean water and wild trout. Pennsylvania Trout serves as a coordination and communications link among its 53 component chapters.

We have read the previous testimony presented to the Committee last November, studied the various state environmental law, rules and regulations that apply to the development and production of natural gas and oil, and have the following concerns and recommendations:

1. There is the potential for the daily removal of millions of gallons of water from streams, rivers, lakes and underground aquifers to provide the fresh water needed to drill and hydrofracture the Marcellus shale gas producing zones. The withdrawal of water from headwater streams, small tributaries, or during low stream flow periods can cause serious damage to the aquatic resources we value so highly. We are concerned that the Susquehanna River Basin (SRBC) and Delaware River Basin (DRBC) Commissions do not have adequate staff to monitor and enforce the laws governing water withdrawal and consumption, and ask the Committee to encourage these agencies to ensure they can fulfill their mission to protect water resources.
2. Likewise, Pennsylvania's natural resource agency, the Department of Environmental Protection (DEP), presently does not have adequate experienced staff to monitor and ensure compliance with current environmental requirements. The Pennsylvania Council of Trout Unlimited is concerned also that DEP may develop expedited permit reviews that may lead to inadequate oversight of the industry, one example being the recent decision to exclude the County Conservation Districts from oil and gas regulatory activities. The Districts should be reviewing erosion and sedimentation control plans for the earth disturbance necessary for well development as well as reviewing the permits required for stream and wetland crossings. Because a few Districts have been too slow is no reason to totally remove Districts from the review. We believe there may be inadequate training by DEP of the Districts relative to review of gas well erosion control plans, and suggest some uninvolved third party be charged with investigating the causes for the perceived problem. We urge the Committee to review any changes DEP makes in its relationship with the Districts and provide appropriate oversight.
3. There is significant potential for environmental damage through the possible improper storage, transportation and disposal of water used to drill and hydrofracture gas wells. Presently, we believe DEP does an inadequate job of regulating these activities. Wastewater from gas wells contains numerous pollutants, which vary greatly depending on the formations penetrated, the compounds used during drilling of the well, and other factors. We are concerned about on-site storage in the huge earthen impoundments sometimes used by the industry, transportation via the many trips by large trucks to deliver the wastewater to an appropriate disposal site, the hazards posed by the crashes that may occur during that transportation, and the lack of adequate treatment in municipal sewage treatment facilities.

No one presently has a workable, environmentally sound plan to dispose of millions of gallons per day of the wastewaters that can be produced by the Marcellus gas play. No one, including the industry and DEP.

Sewage facilities that accept such wastewater will not remove the salt, which simply passes through into the stream. They cannot adequately treat for metals, which end up in the sewage sludge and may be land-applied on agricultural fields. They are not required to conduct adequate monitoring of the wastewater they receive, nor does DEP require adequate monitoring of the effluent from the sewage facility. We believe "whole effluent toxicity testing" or WETT, be required from facilities that accept large volumes of such wastewaters, a test DEP normally requires when municipalities accept other industrial wastes containing multiple pollutants. We do not believe municipal sewage facilities have been required to monitor their effluent for well wastewater chemicals that they receive, nor are their discharge permits amended to accept such wastewaters or authorize the discharge of the chemicals they contain.

A number of private applicants other than gas companies have proposed projects to treat and discharge the wastewaters produced during drilling and hydrofracturing gas wells. We are concerned that DEP will not conduct a thorough review of such an application, but rather issue a simple permit such as the one recently issued to PA Brine Treatment, Inc. operating in Franklin, Pennsylvania. That permit authorizes the discharge of nearly 400 tons of salt per day to the Allegheny River at Franklin, a river only about six percent larger than the West Branch Susquehanna River near Williamsport during critical low flow periods. DEP proposes to "grandfather" this and similar existing permits, permits that we believe should never have been issued in the first place. We ask that DEP be required to use effluent guidelines that protect a receiving stream's aquatic life and drinking water uses at all times as the basis for any such discharge permits.

We believe well wastewaters are not adequately sampled for their chemical characteristics. We request that DEP be required to establish scientifically-based sampling and testing protocols for well wastewaters, and apply those protocols to all well wastewater disposed or stored. This data should be made public, and ask that DEP be required to establish a special link on its web site that provides this and other relevant data regarding the Marcellus gas industry.

4. Drilling and pipeline construction activities in Special Protection Watersheds - High Quality (HQ) and Exceptional Value (EV) streams - and Wilderness Trout Designated areas may permanently affect these areas. DEP does not allow **any** new industrial waste or treated sewage discharges within those special areas, yet routinely authorizes (or simply ignores) discharges from drill site construction and pipeline installation activities. This special treatment simply needs to be stopped.

5. We question whether the current bonding requirements are adequate to deal with plugging and closing of wells or to deal with any long-term environmental implications of orphan or abandoned well sites.

6. DEP does not presently evaluate the impact of cumulative activities within a watershed until it is too late. Only once a stream is deemed impaired does DEP initiate, albeit interminably slowly, a Total Maximum Daily Load, or TMDL, study to determine how to handle all discharges to a stream or river. While a TMDL may not be the best tool to use, DEP should be required to establish an activity trigger level and then immediately evaluate, using a protocol similar to conducting a TMDL, all existing and proposed discharges for their cumulative impact on the receiving stream, including stormwater quality and quantity and stream temperature.

7. At a minimum, and subject to more stringent requirements that may be developed through the suggestion regarding cumulative impact evaluations, above, roads built to and around well pad sites should be required to incorporate Environmentally Sensitive Maintenance principles as outlined by the Center for Dirt and Gravel Roads Program.

8. We support a version of the severance fee as a way to earmark some funding for all DEP and county conservation district staff that has already been noted as inadequate. We believe the extraction of this Commonwealth's resources, done properly with adequate environmental safeguards and oversight, requires some compensation so that the citizens of Pennsylvania do not have to bear this tax burden now or fund environmental cleanups or other restorations in the future if those safeguards are not in place.

9. We support the call for a moratorium on any new leases on State Forest lands until adequate assessments are completed and the Department of Conservation and Natural Resources (DCNR) gains a better understanding of the impacts on the 660,000 acres of already leased State Forest land within the Marcellus play. We ask the Committee to rebuff the requests by the gas industry to develop these lands more quickly, and allow the time necessary to determine all the impacts on lands owned by the citizens of this Commonwealth.

10. In previous testimonies to the Committee, DEP's Acting Secretary John Hanger stated, "Governor Rendell recognizes this potential and has made facilitating this development in a manner that is environmentally sound one of his top priorities. Given that direction, the Department of Environmental Protection is working diligently to review permits expeditiously and render a decision in a timely fashion once it has been thoroughly evaluated." We dispute that DEP, within its current regulatory structure and policy, can adequately review permits to drill and operate a well within the Marcellus shale formations and at the same time be sure their review is environmentally sound. The current poor economic conditions will not persist in this great nation, and the state's budget shortfalls now is no cause to sell the Marcellus gas hastily.

Chairman Pippy, Senator Yaw and members of the committee, we thank you for your time and attention. We would be happy to answer any questions you may have regarding our testimony.

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