

April 22, 2010

Mr. James Martin  
Chief, Office of Oil and Gas  
WV Department of Environmental Protection  
601 57th Street, SE  
Charleston, WV 25304-2345

Dear Mr Martin:

I am writing on behalf of Trout Unlimited, the major coldwater conservation group in the US, with 140,000 members nationwide, with Councils and Chapters in West Virginia. We welcome the opportunity to comment on the process being carried out by DEP to address regulation of the oil and natural gas industries. It was the lack of regulations and protection of streams that led the WV State Council of Trout Unlimited to call for a moratorium on Marcellus Shale Drilling on the Monongahela National Forest. Since 90% of remaining WV brook trout waters are in the Mon Forest, it is critical to assure that these watersheds are not further degraded. We also need protection for the many wild trout waters in WV that are outside of the Mon Forest boundary.

As we learned at the first organizational meeting of the stakeholders, the main reason for the DEP endeavor is the onset of the Marcellus Shale play, which is not currently covered by rules appropriate to this activity. Trout Unlimited is not opposed to energy development of this type, but it has to be done with concern for the environment and without harm to coldwater fisheries. Right now there are no rules in place that specifically address the horizontal drilling method used to fracture the shale and release and recover the natural gas. Problems have already occurred where drilling brine has been released into streams and infiltrated groundwater. Hence, we feel that several important issues need to be addressed in this rulemaking process:

## General recommendations

- Place the highest quality native and wild coldwater habitat permanently off limits to gas drilling activities.
- Use current scientific information as the basis for all decisions related to gas development that affect our fish, wildlife, and water resources.
- Update state permitting processes to incorporate comprehensive environmental analysis, including cumulative impact analysis, in order to protect critical habitat and sustain fish, wildlife and water resources.
- Implement new measures for monitoring the effects of gas development and improve measures for state oversight of the environmental impacts of drilling.
- Make comprehensive and thorough mitigation and reclamation of fish, wildlife and water resources a fixture in all gas permitting decisions, including an appropriate level of bonding required for each drilling permit.
- Make industry accountable for the costs of gas development on both private and public lands, including state costs for adequate monitoring and enforcement.

## Specific Recommendations

### 1. Water withdrawal rules

Currently there is no permit process for water removal from streams and lakes in WV. Water trucks are removing water to supply the millions of gallons of water needed for each fracking cycle of the drilling process. Since each well site may have up to 8 drill holes this represents a huge water usage which is currently unregulated. There should be a permitting process that controls and monitors how water is removed from our lakes and streams.

### 2. Minimum instream flows

We need to assure a minimum flow provision to protect aquatic life in streams. Other states have such a provision to protect native and wild trout and other life, and West Virginia should have such a rule also. Hence, a sufficient flow by is specified which protects the downstream fish and other aquatic species. The rules should include a moratorium on removal when the flow of the stream is low due to weather conditions.

### 3. Ponds vs. closed systems

Currently, water from the fracking process comes back to the surface and is stored in lined ponds. After the operation is complete, the solids remaining in the pond are wrapped up with the plastic liner and buried on site. We suggest that burying the toxic waste is a risk to the groundwater and suggest that this material be taken off site and the waste handled appropriately. We further recommend requiring industry to recycle and reuse fracking water in order to protect fresh water resources and reduce the amount of waste generated from drilling activities.

### 4. Frack water disposal and composition identification

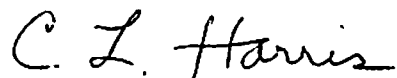
First, we feel that the composition of the drilling water should be identified, since many additives are toxic, and dangerous to all life. The brine that emerges from the drilling operation will contain the toxins that were added to facilitate drilling and contaminants picked up from the shale. Disclosure of the types of toxic materials added to drilling water should be required, and the disposal of this fracking water should be monitored by regulation.

### 5. Road considerations

Strengthen, or create if absent, rules that ensure best management practices for storm water and erosion controls for all drilling activities, in order to protect native and wild trout habitat from sedimentation and erosion impacts.

Thank you for the opportunity to provide input to the DEP and we look forward to working with you to protect West Virginia's streams.

Sincerely,



Larry Harris  
Secretary of the National Leadership Council  
Trout Unlimited