



West Virginia Surface Owners' Rights Organization

1500 Dixie Street, Charleston, WV 25311

(304) 346-5891 - FAX: (304) 346-8981

Website: www.wvsoro.org E-mail: info@wvsoro.org

October 1, 2009

Bernardo Garcia
WVDEP Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304-2345

Re: Comments on the General Water Pollution Control Permit number GP-WV-1-07

Dear Mr. Garcia,

In 2007, when the Office of Oil & Gas (OO&G) initially issued the permit, part of the rationale given for issuing a general permit was "to allow for the collection of environmental data regarding volumes of produced water generated from different coal-bearing strata, the quality of the water generated, the types of treatment systems used, the dispersion techniques of land application of the produced water and the impacts, if any, on vegetation, soil, groundwater and surface water." The permit was issued without the benefit of data on how much water would be produced, what is in the water produced or what treatment systems were known to work and set a precedent for permitting activity to see if it would occur. Now the OO&G is now preparing to renew the permit, with few changes, without providing any justification or rationale as to whether the renewal is appropriate or warranted.

The application of coal bed methane produced water is not a sound practice for surface owners and the environment generally, and after two years of supposedly gathering data, the OO&G has provided no evidence to suggest otherwise. The issuance of a general permit was and continues to be a bad idea for the following reasons:

1. Although the surface owner on whose land the water is applied has to give a voluntary consent to the land application, the surface owner who consents to the application is not the only one affected. The applied water can percolate through the soil or through groundwater come to neighboring lands, and into streams and affect downstream riparian owners.
2. Although discharges are not to be conducted within a 1,000 feet of a domestic water supply, this protection for surface owners is somewhat crude and may not be strong enough to protect water quality in aquifers used for drinking water. WVDEP must consider geology, infiltration rates, and the movement of pollutants into the groundwater system. In addition, the permit places no limitations on discharges near streams. The permit should not allow land application within 1,000 feet, at a minimum, of any stream, especially higher quality streams, such as trout waters, and permitting of CBM operations and/or land application of CBM-produced waters should be prohibited in areas of karst topography, if any such scenario should exist.

3. As noted previously, no data on the constituents on the produced water is provided as a basis or rational for renewing the permit.
4. The permit provides no data regarding the amount of produced water from coal bed methane wells, and ignores the fact that the volume of water produced varies widely depending on the drilling techniques used. Three types of coal bed methane wells are drilled in West Virginia: vertical, horizontal and horizontal pinnate
5. The permit assumes that the produced water will be treated, if it exceeds the accepted discharge parameters, before being land applied. However, the permit does not state permissible or impermissible treatment systems. It just names the standards that must be met after treatment system and before the water can be applied to the land. The treatment system is left entirely up to the operator.
6. West Virginia's soils are too diverse to determine suitability for land application especially in a general permit. Even within an area as small as an acre there are several soil types with several percolation qualities. Relying on gross soil type determinations of a NRCS soil map seems a wholly inadequate way to regulate the application that produced water under a general permit.
7. No ground water monitoring is required unless a facility operates at "the upper discharge limits" allowed under section B.
8. The permit seems to be based on the premise that land application is the only alternative for disposal of produced water. No serious consideration is given as to whether land application is an appropriate method for disposal of CBM-produced waters, versus other alternatives that may be more protective.
9. The permit continues to allow the intentional diversion of waste streams from a portion of the treatment facility ("bypass") despite the fact that coal bed methane produced water has to actually be pumped out of the ground at some great effort. If there is a problem with the treatment system, the operator should stop the pumps and not do a "bypass." This should be taken out of this or any coal bed methane produced water permit.
10. There is no requirement that the operator report the volume of wastes, the method of disposal and actual destination for the wastes, only that such information shall be provided to the OO&G upon request. The OO&G should make reporting mandatory so it can monitor volume and verify proper disposal by contacting the ultimate recipient of the wastes.
11. The fee paid by the operator to use the land application program remains absurdly low and should be raised to a realistic level. Rather than revising the fee schedule to allow operators to pay one fee for multiple wells, drillers should continue to pay the fee for each well. The OO&G has limited resources its entire regulatory program is critically underfunded. The OO&G needs staff to review, evaluate and issue permits; observe field activities and perform compliance monitoring, and this should be reflected in the permit fee. This program should not be subsidized

by the taxpayers, suffer from neglect from lack of staffing, or rob resources from other programs at the Office of Oil and Gas that are already in crisis.

One positive revision is that the permit now requires some surface water monitoring, as well as a soil monitoring plan and a vegetation study to establish a baseline for the facility. It is disappointing that these were not required previously and that there continues to be no requirement for groundwater monitoring except at sites where discharges exceed water quality standards.

Finally, with regard to the discharge limitations and monitoring requirements, no unit of measure or concentration is given for barium, so there is no way to evaluate whether the proposed limitation is reasonable. In addition, we note that the permit no longer requires monitoring for total petroleum hydrocarbons. Why was this requirement removed?

Thank you for the opportunity to comment.

Sincerely,

Julie Archer
Project Manager