WV DEP, OOG Attn: Kristin Boggs 601 57th Street SE Charleston, WV 25304

Comments re: WV's Oil & Gas Regulatory Review for Marcellus Shale

West Virginia Rural Water Association (WVRWA) is a non-profit association whose members include most of the public water and wastewater utilities in the state. These comments are being submitted on behalf of WVRWA, in response to WVDEP's request for public input for its Oil & Gas regulatory program and policies, in light of the state's Marcellus Shale gas boom. Our concerns primarily include potential impacts to quantity and quality of public drinking water sources, as well as possible impacts on wastewater treatment plant operations.

Marcellus gas wells may require millions of gallons of water each for fracking of the shale prior to gas production. The WVDEP has attempted to address this water quantity issue with an online map of the state's watersheds, which uses real time stream gauging stations. This website is a step in the right direction, but unfortunately it still monitors the flow in too few streams to be completely effective, and depends on the gas industry's water haulers to voluntarily access it and adhere to its prohibitions when streams are in seasonal low flow conditions.

Of greater concern are water quality issues. Much of the fracking fluid flows back out of the Marcellus wells, along with produced brines. Spills of these brines, which may be saltier than seawater, represent acute threats to public water supplies, while improper disposal of the brines may increase the background salinity of streams, representing chronic water quality problems in sources of public water supplies.

To help protect public drinking water from brine spills, the existing requirement that gas well operators contact nearby water well owners regarding water sampling should be expanded. Marcellus well permittees should contact via letter the nearest public supply downstream of each wellsite, regardless of distance, and offer to pay for background water quality samples. In addition, prior to fracking the well, the gas well operator should contact that public supply water plant's operator via telephone, reassuring the water plant that any spills will be reported immediately to the water plant itself as well as to the WVDEP and/or USEPA spill hotlines.

The production and disposal of all Marcellus brines in WV should be reported to WVDEP. Currently there is not sufficient capacity at brine re-injection well sites or brine treatment plants in WV. Brine disposal by applying it on the land, on roads, or at conventional wastewater plants will not prevent the salinity from entering our surface waters. An increase in salinity in the Monongahela and Ohio Rivers during the past decade has already led to creation of increased disinfection byproducts at our drinking water supplies.

In the event a public water supply becomes temporarily or permanently impaired due to Marcellus brines, and an alternate source of water is required, the party or parties responsible for the impairment should also be held responsible for paying for the alternate water supply. A similar requirement regarding public water supplies currently exists in WV's mining regulations, but not in its oil & gas regulations.

Sincerely,

Lewis Baker, WVRWA Source Water Protection Specialist

Cc Debbie Britt, WVRWA Executive Director