

EPA Looks to the Sky for New Limits on Natural Gas

September 10, 2010

[Christopher B. Power](#)

As seen in the September 10th issue of *The State Journal*.

The rapid growth of natural gas exploration and production in the Marcellus Shale areas of New York, Pennsylvania, and West Virginia has led to considerable focus on the implications of such activities on water resources. Concerns about the withdrawal of large quantities of water used for drilling, chemicals used in that process, and the disposal of produced water from Marcellus Shale wells have prompted a number of state regulatory proposals, as well as an ongoing study by the U.S. Environmental Protection Agency ("EPA") on hydraulic fracturing. West Virginia Department of Environmental Protection Secretary Randy Huffman has recently suggested that his agency may develop a separate regulatory office solely to focus on permitting and oversight of Marcellus Shale wells, which involve the use of unconventional horizontal drilling to access gas thousands of feet below the surface. However, questions about the environmental effects of gas production from deep shale formations is not limited to water pollution control issues.

EPA is also taking a new look at the air quality impacts of natural gas exploration and production, as well as natural gas processing, transmission, storage and distribution. According to the agency, the purpose of this review is to consider whether new or revised emission standards should be promulgated for hazardous air pollutants and other pollutants associated with the natural gas industry. In particular, EPA is evaluating whether to issue standards applicable to: (1) equipment leaks of volatile organic compounds ("VOCs") from onshore natural gas processing plants; (2) emissions of sulfur dioxide from onshore natural gas processing; (3) emissions of hazardous air pollutants from oil or natural gas production facilities; and (4) emissions of hazardous air pollutants from natural gas transmission and storage facilities. As a part of this effort, EPA held public hearings in August, 2010, in Dallas, Texas and Denver, Colorado.

Although EPA's current review of its air regulations is mandated by a 2009 Consent Order following a citizens suit filed against it under the Clean Air Act, the clamor for tighter controls on emissions from natural gas production activities began several years earlier. The genesis of these concerns was the substantial growth of drilling in another deep formation, the Barnett Shale, in several counties located in south Texas. Local residents' fears of toxic air emissions in that area were reinforced by the publication in January, 2009, of a report by Al Armendariz, then a Southern Methodist University professor and now an EPA regional staff member. The SMU study found that emissions of VOCs and nitrogen oxide (ozone precursors) from gas production in the Barnett Shale would soon exceed the total volume of such emissions from cars and trucks in the Dallas-Fort Worth area.

On the basis of this study and growing citizen complaints, some towns in Texas have enacted moratoria on issuance of new drilling permits until the question of the effects of such emissions on local residents can be resolved. Some, such as the Mayor of Dish, Texas, have issued warnings to other towns located in areas of such shale "plays," suggesting that they be prepared to address the serious air quality concerns of local residents before allowing large drilling programs to proceed. For its part, the Texas Commission on Environmental Quality has proposed significant changes to its state rules that would impose specific permitting requirements, emission limits based on best available control technology, and monitoring and

reporting obligations on oil and gas facility operators.

At the same time, EPA has proposed doing away with a rule that would have clarified how state agencies must address the aggregation of potential emissions associated with new sources of air pollution, possibly opening the door to an interpretation that would require the application of "major source" review programs prior to the installation of some natural gas facilities, such as multiple compressor engines located along a single pipeline. Pursuant to a final rule issued on January 15, 2009, sources would have been entitled to a rebuttable presumption that different activities or projects (i.e. separate physical changes or changes in methods of operation) are not "substantially related" (and thus their potential emissions are not required to be aggregated for purposes of the Clean Air Act's New Source Review program), if those changes occur three or more years apart. Responding to a petition filed by the Natural Resources Defense Council, EPA has stayed the effective date of that change until November 18, 2010, and in April, 2010, it formally proposed revoking that proposed aggregation rule. What will take the place of the "substantially related" policy, and how EPA's new approach to aggregation may affect natural gas production, processing, and transportation, is an open question.

Finally, EPA has also proposed to expand the source categories that must report annual emissions of greenhouse gases to include natural gas producers, processors (including operators of gas compressor engines), pipelines and storage facility operators. If finalized, the proposed rule will require detailed annual reporting (starting with calendar year 2011) of carbon dioxide and methane emissions, as well as NOx emissions from gas flaring, for natural gas facilities that emit at least 25,000 tons per year of CO2 equivalent pollutants.

To be sure, gas producers and others involved in some aspect of the natural gas industry must continue to be involved as new water pollution control permitting requirements for gas-related facilities and potentially restrictive water quality standards are proposed by state and federal agencies. However, their planning and regulatory involvement clearly should also include consideration of air pollution control requirements that may be coming in the not-too-distant future. A realistic appraisal of the regulatory landscape shows that new proposals will be evaluated with a view towards all possible environmental concerns, including preservation of air quality.