

MEMORANDUM

To: Acting President Jeff Kessler, Chair
Speaker Richard Thompson, Chair
Joint Committee on Government and Finance

cc: Jason Pizatella, Legislative Director
Keith Burdette, Cabinet Secretary, West Virginia Department of Commerce
Angel Moore, Deputy Secretary/General Counsel, West Virginia Department of
Commerce

From: Jeff Herholdt, Director
West Virginia Division of Energy

Date: November 8, 2011

Re: Quarterly Report Ending September 30, 2011
Legal Challenges Potentially Impacting the Energy Industry

As mandated by SB 518, the following information presents legal challenges with the potential to impact the state's energy industry. This submission has been summarized by the West Virginia Chamber of Commerce's Energy Committee. Future reports will be submitted on a quarterly basis.

REPORT ON LITIGATION RELATED TO
ENERGY AND NATURAL RESOURCES IN WEST VIRGINIA
THIRD QUARTER 2011
(Ending September 30, 2011)

1. West Virginia Judge Overturns Morgantown Horizontal Drilling Ban

Earlier this year, the City of Morgantown, West Virginia adopted an ordinance which prohibited the drilling of deep, horizontal gas wells and hydraulic fracking within one mile outside of the city limits. Similar bans were under consideration by several other cities within the State.

Prior to the adoption of the ordinance, Enrout Properties (“Enrout”) leased to Northeast National Energy (“Northeast”) the right to extract Marcellus Shale gas from the property. Northeast then sought and obtained two drilling permits from the State to extract gas from the Marcellus formation using fracking techniques.

After Morgantown adopted the ordinance, Northeast and Enrout sued the city seeking to set aside the ordinance. By order issued August 12, 2011, the Circuit Court of Monongalia County, West Virginia ruled that the ordinance was pre-empted by the comprehensive State regulatory program for gas wells.

2. Stream Buffer Zone Rule Hearing

On September 26, 2011, a Congressional hearing of the U.S. House Energy & Mineral Resources Subcommittee of the Natural Resources Committee was held in Charleston, West Virginia to examine the Office of Surface Mining and Reclamation’s (OSM) Stream Protection rulemaking and its impact on jobs. This hearing was held as part of the Committee’s investigation into OSM’s decision to re-write the revised Stream Buffer Zone Rule issued in December of 2008.

Prior to the 1977 passage of the Surface Mine Control and Reclamation Act (“SMCRA”), rock removed to access coal seams by surface mining methods was often not returned to mined areas and simply dumped downhill of mined areas where it choked nearby streams and contributed sediment to downstream areas. Although SMCRA required the return of most spoil to mined areas and placement of “excess” spoil into stable spoil disposal areas, it expressly recognized need to place excess spoil in “fills” located in small headwater streams in steep-sloped Appalachia. 30 U.S.C. §1265(b)(22)(D) (authorizing fills in watercourses so long as drains are constructed).

These fills are also regulated by the Corps of Engineers under §404 of the Clean Water Act. 33 U.S.C. §1344. OSM had long limited disturbances within 100 feet of most streams (known as the “Stream Buffer Zone Rule”) unless closer disturbances would not violate water quality standards or adversely affect the water quantity, quality or other environmental resources of the stream. 30 C.F.R. §816.57. Until a 1999 federal court ruling (*Bragg v. Robertson*), the Stream Buffer Zone Rule (“SBZ”) was never interpreted to restrict valley fills or the ponds constructed to control sediment from these fills—because those activities were expressly authorized by SMCRA as primary measures to control sedimentation. 73 Fed. Reg. 75814, 75814-75818 (Dec. 12, 2008). In *Bragg v. Robertson*, however, a federal district court judge in the Southern District of West Virginia ruled that the 1983 SBZ prohibited valley fills.

The Fourth Circuit ultimately vacated the district court opinion in 2001. However, because it ruled that district court never had jurisdiction, it did not address merits of the SBZ rule dispute—leaving application of SBZ rule to fills in a state of confusion. In order to clarify the confusion, OSM proposed an initial rule in 2004 clarifying that SBZ rule is a sediment control measure that does not prohibit valley fills. 69 Fed. Reg. 1036 (Jan. 7, 2004). OSM later conducted EIS and re-proposed an expanded rule in 2007. 72 Fed. Reg. 48890 (Aug. 24, 2007). In December of 2008, OSM issued a clarification of the stream buffer zone rules after a five-year process that included 40,000 public comments, two proposed rules, and 5,000 pages of environmental analysis from 5 different agencies. The final rule codified coal surface mining practices that had been in effect for over 30 years by clarifying that the SBZ does not prohibit excess spoil fills but requires the applicant to demonstrate that it has minimized the length and number of valley fills and because fills are expressly authorized by §404 of the Clean Water Act. 73 Fed. Reg. 75814 (Dec. 12, 2008).

After anti-mining groups challenged OSM’s 2008 SBZ rule in federal court, OSM attempted to simply cast the rule aside by admitting “serious legal deficiencies” and requesting the Court to remand and vacate the rule. *National Parks Conservation Association v. Kempthorne*, 1:09-cv-00115 (D.D.C.). By Memorandum Opinion and Order dated August 12, 2009, Judge Kennedy refused to allow the Agency to simply withdraw the rule without following established statutory procedures for repealing an agency rule. OSM entered into a settlement agreement with the plaintiffs whereby it agreed to issue new regulations replacing the 2008 SBZ rule.

On June 11, 2009, the Secretary of the Department of the Interior, the Administrator of the U.S. Environmental Protection Agency (EPA), and the Acting Assistant Secretary of the Army (Civil Works) entered into a memorandum of understanding (MOU designed to reduce the environmental consequences of surface coal mining operations in six Appalachian states. 75 Fed. Reg. 34667 (June 18, 2010); 75 Fed. Reg. 22723 (April 30, 2010). The June 11, 2009 MOU committed OSM to making revisions to key provisions of current SMCRA regulations, including the Stream Buffer Zone Rule and Approximate Original Contour requirements.

The following members of the House Energy and Mineral Resources Subcommittee attended the hearing and gave opening statements: Chairman Lamborn (R-Colo.), Mr. Johnson (R-Ohio), and Mrs. Capito (R-W.Va.). Congressmen Lamborn and Johnson stated that the Obama Administration's own estimates projected the direct loss of 7,000 jobs nationwide as a result of the new rule. Congressman Johnson also suggested that the Administration had colluded with environmental groups by practically inviting them to sue OSM over the 2008 version of the SBZ. Congresswoman Capito touted the economic benefits of coal mining to the State of West Virginia and discussed the potential adverse impacts of the proposed change.

Governor Tomblin criticized EPA and other regulatory agencies for relentlessly pursuing an anti-coal agenda. He also questioned whether the changes to the SMZ rule were consistent with Congress's mandate in SMCRA to "assure that the coal supply essential to the Nation's energy requirements and to its economic and social well-being is provided and strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy."

Thomas Clarke, Director of the West Virginia Department of Environmental Protection criticized OSM and EPA for seizing regulatory authority that legitimately resided with the States. Mr. Clarke pointed out that, in making quantum shifts in regulatory policy that are Congress' business to make, OSM was creating unnecessary regulatory uncertainty. Mr. Clarke defended West Virginia's own regulatory scheme and criticized EPA's failure to adequately involve the states in preparing its Environmental Impact Statement related to the rule. The following individuals also testified in opposition to OSM's actions:

- Jason Bostic of the West Virginia Coal Association
- Roger Horton, West Virginia Co-Chair Mountaintop Mining Coalition
- Michael Carey, President Ohio Coal Association
- Katharine Fredriksen, Senior Vice President Environmental & Regulatory Affairs CONSOL Energy, Inc.
- Bo Webb and Maria Gunnoe.

3. EPA Announces Cross-State Air Pollution Rule

On July 7, 2011, the U.S. Environmental Protection Agency (EPA) announced its final transport rule to reduce interstate transport of emissions that contribute to fine particulate matter (PM_{2.5}) and ozone. The rule sets emissions budgets that cap emissions in 27 states in the eastern half of the United States and affects coal-fired power plants located in those states. Beginning as early as next year, the rule will require coal-fired

power plants to reduce emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x), both of which contribute to PM_{2.5} and ozone air pollution. The rule addresses emissions that EPA has identified under the “good neighbor” provision of the Clean Air Act as significantly contributing to nonattainment or interfering with maintenance of the 1997 PM_{2.5} and ozone National Ambient Air Quality Standards (NAAQS) and 2006 24-hour PM_{2.5} NAAQS in downwind states.

The final transport rule, called the Cross-State Air Pollution Rule (CSAPR), replaces a transport rule called the Clean Air Interstate Rule (CAIR) that EPA promulgated in 2005. CAIR was originally vacated as “fatally flawed,” but later remanded without setting aside the rule, by the United States Court of Appeals for the District of Columbia in 2008. Among the flaws identified by the D.C. Circuit were EPA’s compliance deadlines as too late to help downwind areas achieve attainment by their statutory deadlines and EPA’s emissions trading system, which the court said did not ensure that the required emissions reductions would occur within each covered state. While the Agency returned to drawing board, CAIR remained in place and power plants initiated costly construction programs to install controls necessary to come into compliance with CAIR and have been complying with CAIR ever since.

The Midwest Ozone Group (MOG) and others questioned whether a new transport rule with a new set of emission reductions was needed to address the nation’s air quality standards. In its comments on the proposed transport rule, MOG submitted air quality data more recent than the air quality and source emission data relied upon by EPA for its CSAPR. MOG’s modeling shows that no additional controls are needed beyond CAIR to bring most or all sites into attainment. EPA rejected MOG’s modeling results, however, and stated that “any analysis of whether beyond CAIR controls are necessary is irrelevant to [CSAPR]”. See the pre-publication version of CSAPR beginning at 114, available at: <http://www.epa.gov/airtransport/actions.html>.

Additionally, the final transport rule does not address emission reductions that are likely to be required for communities in downwind states to achieve the final reconsidered ozone NAAQS that EPA is expected to announce the end of July 2011 or the new particulate matter (PM) NAAQS that EPA is expected to propose by the end of this summer. The 2006 annual PM_{2.5} NAAQS was remanded in 2009 by the D.C. Circuit to the Agency to explain why the annual standard that the Agency promulgated deviated from the recommendations of EPA’s Clean Air Science Advisory Committee. *American Farm Bureau Federation v. EPA*, 559 F.3d 512 (D.C. Cir. 2009). During the Bush Administration in 2008, EPA promulgated an ozone NAAQS that is more stringent than the 1997 NAAQS, but in 2009 following the D.C. Circuit’s decision, the Obama Administration decided to reconsider the 2008 ozone NAAQS, explaining that EPA’s Clean Air Science Advisory Committee had recommended lower levels than those promulgated by EPA under President Bush. Indeed, EPA has announced that it plans to issue two more transport rules and that CSAPR will serve as a model for these additional transport rules.

EPA says its modeling shows that coal use will not decrease under the Cross-State Air Pollution Rule. In the final rule, EPA identifies a number of measures that coal-fired power plants may take to achieve the required emission reductions, including: “effective and frequent operation” of existing control equipment; low sulfur coal; increased generation from “relatively cleaner units”; and/or installation of add-on control equipment such as low NOx burners, scrubbers, or dry sorbent injection. This last option is obviously not feasible for power plants trying to figure out how to bring emissions units into compliance by January 2012.

According to EPA, the benefits of the rule and supplemental proposal outweigh their costs. EPA estimates that the rule and supplemental proposal will result in \$120 to \$280 billion in annual benefits in 2014. Of the estimated annual benefits, most are public health-related. EPA summarizes the state-level public health benefits in 2014, stating that: “The public health benefits in most states exceed the combined annual costs of implementing the Cross-State Air Pollution rule for the entire region.” EPA attributes \$4 billion to visibility improvements in national parks and wilderness areas. EPA estimates costs in 2014 to include annual costs of \$800 million and approximately \$1.6 billion per year in capital investments as a result of CAIR for a total of \$2.4 billion.

EPA acknowledges that the effects of the rule on jobs are “modest,” but “positive”. In the Fact Sheet that accompanied the final rule, EPA says it examined “some employment impacts” and its analysis “show[s] that some jobs are lost, but more are gained as some companies construct and operate pollution control equipment to comply with the rule.”

Additionally, EPA asserts, in its PowerPoint presentation on CSAPR, that the rule will have “small effects on electricity generation”. According to EPA estimates, in 2014 “[a]verage monthly household electricity bill increases by 1 percent” and “natural gas prices increase less than 1 percent”. EPA characterizes changes in power generation as “small”.

Compliance deadlines: The rule phases in reductions but requires compliance beginning January 1, 2012. For SO₂ and annual NO_x reductions compliance is required by January 1, 2012, and for ozone-season NO_x reductions, compliance is required at the beginning of the 2012 ozone-season or by May 1, 2012. Phase 2 SO₂ and annual NO_x reductions are required by January 1, 2014, and Phase 2 ozone-season NO_x reductions are required by May 1, 2014.

Emissions reductions: EPA projects that the rule will reduce power plant SO₂ emissions by 6.4 million tons per year (tpy) or 73 percent from 2005 levels and power plant NO_x emissions by 1.4 million tpy, including 340,000 tpy of NO_x during the ozone season (May 1 – September 30), or 54 percent from 2005 levels.

Pollutants: The rule targets SO₂ and NO_x emissions from power plants and includes separate requirements for annual SO₂ reductions, annual NO_x reductions, and ozone-season NO_x reductions.

States: The rule requires 27 states in the eastern half of the United States to reduce SO₂ and NO_x emissions. Twenty-one states, including West Virginia, are required to reduce annual SO₂ and NO_x emissions, and 20 states, including West Virginia, are required to reduce NO_x emissions during the ozone-season. The 27 affected states are: Alabama; Arkansas; Florida; Georgia; Illinois; Indiana; Iowa; Kansas; Kentucky; Louisiana; Maryland; Michigan; Minnesota; Mississippi; Missouri; Nebraska; New Jersey; New York; North Carolina; Ohio; Pennsylvania; South Carolina; Tennessee; Texas; Virginia; West Virginia; and Wisconsin.

In a supplemental proposal signed on the same day as the final CSAPR and published in the *Federal Register* five days later (76 Fed. Reg. 40662, July 11, 2011), EPA is proposing to include 6 states – Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin – in the CSAPR ozone-season control program. Of those 6 states, only Oklahoma is not covered by the final CSAPR for PM_{2.5}. The supplemental proposal, if finalized, would bring the total number of states covered by the CSAPR to 28. Comments on the supplemental proposal are due August 22, 2011. EPA plans to finalize the supplemental proposal by late fall 2011.

Budgets: The rule caps SO₂ emissions at 2.4 million tons per year annually and NO_x emissions at 1.2 million tons per year, including ozone-season NO_x emissions at 600,000 tons per year. The CSAPR budgets are more stringent than the CAIR budgets. Power plants will achieve annual SO₂ emissions around 1.8 million tons lower and annual NO_x emissions around 76,000 tons lower than what would have been achieved by 2014 under CAIR.

Trading: The rule allows trading and allows both intrastate and interstate trading. Power plants may trade emissions with other power plants within the same program, *i.e.*, annual SO₂ and NO_x programs and ozone-season program in the same or different states. The trading programs are described by EPA as “air quality-assured trading programs”. The rule manages any emissions shifting that may occur as a result of interstate trading by including provisions to ensure that necessary reductions will occur within every covered state.

Residual nonattainment: By 2014, when the CSAPR is fully implemented, EPA projects that only the Houston-Galveston metropolitan area will continue to violate the 1997 ozone standard and only the Liberty-Clairton, PA area will continue to violate the 24-hour PM_{2.5} standards.

Implementation: Initially, the CSAPR will be implemented through federal implementation plans (FIPs) that EPA is imposing upon each of the 27 affected states.

Each state may replace EPA's FIP with a state implementation plan (SIP) to achieve the required amount of emission reductions from sources selected by the state.

Resources: For additional information on EPA's Cross-State Air Pollution Control Rule, visit <http://www.epa.gov/airtransport/>.

Multiple parties have challenged CSAPR by both filing petitions for administrative review with USEPA and by filing petitions for judicial review in the US Court of Appeal for the DC Circuit.

4. West Virginia Governor Issues Executive Order To Regulate Marcellus Shale Development

On July 12, 2011, West Virginia's Governor Tomblin announced the issuance of an Executive Order ("Order") requiring the WVDEP to immediately promulgate emergency rules to regulate the development of unconventional oil and gas in West Virginia to protect the public health, safety and welfare of the citizens of West Virginia, while underscoring the importance of oil and gas production to the economy of the State. The Executive Order focuses primarily on protection of water during withdrawal and disposal, well pad construction and reclamation, well safety plans, disclosure of chemical additives in frack fluids, disposal of drill cuttings and drilling mud, and public notice when drilling near a municipality. The substantive provisions of the Order are as follows:

- (1) The WVDEP Return Fluids Memorandum dated July 30, 2010, prohibiting operators from utilizing land application of any return fluids from completion activities in the Marcellus Shale formation, is to continue in full force and effect.
- (2) Disposal of return fluids into any publicly-owned wastewater treatment plant is prohibited without the prior written approval of the WVDEP.
- (3) WVDEP must increase regulatory oversight of practices and equipment to ensure that no pollutants are disposed of or discharged into the water in violation of any applicable water quality standards and effluent limitations.
- (4) WVDEP must promulgate emergency rules governing the following:
 - a. Erosion and sediment control plans for well sites disturbing an area of three acres or more of surface, excluding pipelines, gathering lines, and roads (the "Surface Disturbance Threshold") must be certified by, and constructed under the supervision of, a registered professional engineer;
 - b. Applications for permits involving well sites that exceed the Surface Disturbance Threshold must be accompanied by a site

construction plan certified by, and sites must be constructed under the supervision of, a registered professional engineer;

c. Applications for well work permits must provide an estimate of the volume of water that will be used for drilling, fracturing or stimulating (“fracking”) and, if the well requires water withdrawals of water in excess of 210,000 gallons during a single month (the “Water Withdrawal Threshold”), the applicant must also file a water management plan. The water management plan can be submitted on either an individual well basis or a watershed basis, and must include the following information:

- (i) The type and exact location of the water source;
- (ii) The anticipated volume of each withdrawal;
- (iii) The anticipated months when withdrawals will be made;
- (iv) The planned management and disposition of wastewater from fracking and production activities;
- (v) A listing of the anticipated additives that may be combined with water for fracking the well, and upon well completion, a list of the additives actually used in fracking must be submitted as part of the completion report;
- (vi) For all surface water withdrawals, the water management plan must include documentation of measures that will be taken to allow the State to manage the quantity of its waters for present and future use and enjoyment and for the protection of the environment, including: (1) the identification of the current designed and existing water uses, including any public water intakes within one mile downstream of the withdrawal location; (2) a demonstration that sufficient in-stream flow will be available immediately downstream of the point of withdrawal; and (3) the methods to be used to minimize significant adverse impact to aquatic life;

d. Applications involving well sites in excess of the Surface Disturbance Threshold must include a well-site safety plan addressing the measures to be employed for the protection of persons on the site, the general public and the environment. The plan must encompass all aspects of the operation, including the actual well work, completion, and production activities. Operators will be required to provide the safety plan to the local emergency planning committee;

- e. Operators must protect the quantity and quality of water in surface and groundwater systems by:
- (i) Withdrawing water by approved methods to maintain sufficient in-stream flow immediately downstream;
 - (ii) Casing, sealing or otherwise managing wells to keep fluids or natural gas from entering ground and surface waters;
 - (iii) Conducting operations using best management practices to prevent additional contributions of suspended or dissolved solids to streamflow or runoff outside the permit area; and
 - (iv) Registering all water supply wells with the Office of Oil and Gas and plugging all such wells;
- f. Operators withdrawing more than the Water Withdrawal Threshold must:
- (i) Within a limited timeframe, identify the location of water withdrawal and verify that sufficient flow exists to protect designated uses of the stream; and
 - (ii) Post signs at water withdrawal points.
- g. Operators must implement record keeping and reporting requirements for all water used in connection with fracking activities and for all produced water from production activities:
- (i) For production activities, the well operator must record the quantity of flowback water from fracking the well; the quantity of produced water; and the method of management or disposal of both the flowback and produced water;
 - (ii) For transportation activities, the operator must record the quantity of water transported; the collection and delivery or disposal locations; and the name of the water hauling company.
- h. Applicants seeking to drill the first horizontal well on a well pad located in an area (1) within the boundaries of any municipality or (2) within a one-mile radius of any municipality, must publish public notice sufficient to apprise the public of the applicants' intent to drill.

(5) All drill cuttings and drilling mud from regulated sites must be disposed of in an approved West Virginia solid waste facility or managed in an otherwise approved manner.

(6) The WVDEP must evaluate its overall regulatory authority over drilling activities related to horizontal wells and identify additional areas of critical regulatory concern, such as well construction and design standards, air emissions, drill cuttings management, recycling of produced fluids, and water management. Upon completing its review, the WVDEP shall exercise its emergency rulemaking authority to promulgate any additional emergency legislative rules necessary to address areas of environmental concern requiring immediate attention.

In a somewhat related matter, in August 2011, the Delaware Riverkeeper and others sued the Delaware River Basin Commission (“DRBC”) and the Army Corps of Engineers to prohibit the DRBC from finalizing fracking rules without first complying with NEPA. *See Delaware Riverkeeper Network v. Army Corps of Engineers*, No. CV11-3780 (E.D. N.Y.). NEPA prohibits “major federal actions” which could significantly affect the quality of the human environment absent either a finding of no significant effect (a so-called “FONSI”) or an environmental impact statement (“EIS”). The plaintiffs allege that the DRBC is a “federal agency” for NEPA purposes. They sued the Corps of Engineers because statutorily it is required to supply federal funds to the DRBC and because it had “approved” the release of the draft rules.

5. Sierra Club v. WVDEP and Patriot Mining

In 2010, the Sierra Club challenged an NPDES permit issued by WVDEP to Patriot Mining for a small surface mine proposed outside Morgantown. Mining has occurred for over a century along the creek into which the mine will discharge. The Sierra Club argued that WVDEP should have imposed limits on the discharges of conductivity (the ability of water to carry an electric charge), total dissolved solids (TDS) and sulfate. It claimed in an appeal to the Environmental Quality Board (EQB) that without limits of 300 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) on conductivity and 50 mg/l on sulfate, the discharges would violate WVDEP’s “narrative water quality standard.” The relevant portions of the narrative standard provide that:

[T]he following general conditions are not to be allowed in any of the waters of the state.

3.2.e. Materials in concentrations which are harmful, hazardous, or toxic to man, animal or aquatic life;

3.2.i. Any other condition, including radiological exposure, which adversely alters the integrity of the waters of the State including wetlands; no significant adverse impact to

the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed.

The Sierra Club argued that it has performed a statistical analysis on data maintained by WVDEP, which showed that a significant number of sensitive mayfly species disappear from waters below mines when the conductivity exceeds 277 $\mu\text{S}/\text{cm}$ and the conductivity is over 50 mg/l, and that these changes should be regarded as “significant adverse impact to the biological component of the ecosystem.” It argued that permit limits should be imposed to ensure in-stream concentrations did not exceed these values. Generally, it is accepted that most earth disturbing activities will cause in-stream concentrations to exceed these levels absent prohibitively expensive treatment such as reverse osmosis.

The EQB rejected the use of the conductivity and sulfate urged by the Sierra Club, but nonetheless determined that discharges of these substances posed a “reasonable potential” to violate the narrative standards. Accordingly, the EQB ordered WVDEP to impose limits on conductivity, TDS and sulfate without determining at what threshold the in-stream levels violate the narrative standards or describing what test WVDEP should use for measuring whether the narrative standards have been violated.

On appeal to the Circuit Court of Kanawha County, the Circuit Court ruled in September, 2011 that the EQB’s order lacked sufficient specificity to be reviewed. The Court found that the EQB had not explained what legal mechanism it was relying on to regulate conductivity, TDS or sulfate (in light of admissions by the Sierra Club witnesses that these substances may not themselves be “causing” impacts to mayflies), how WVDEP should go about setting in-stream thresholds which should not be exceeded, or what the role was of the “West Virginia Stream Condition Index” used by WVDEP as a tool for evaluating compliance with the narrative water quality standards. Accordingly, it remanded all of these questions back to the EQB, which is now re-considering the case.