

# Testimony of Environmental Defense Fund and Colorado Conservation Regarding Proposed Revisions to Regulation No. 6, Pt. A., Standards of Performance for New Stationary Sources before the Air Quality Control Commission

## 1. Introduction

Chairwoman Roberts, members of the Commission, thank you for the opportunity to testify about the Air Pollution Control Division's proposal to adopt partially EPA's New Source Performance Standards for oil and gas facilities.

Natural gas and oil operations contribute to air pollution associated with serious human health effects and adverse environmental consequences, including ground-level ozone or "smog," toxic air pollution, climate-disrupting pollution, particulate pollution, and the haze that obscures scenic vistas in national parks and wilderness areas. According to the most recent inventory, oil and gas facilities were the largest sources of oxides of nitrogen and volatile organic compounds in Colorado in 2008.<sup>1</sup> A recent study released by the National Oceanic and Atmospheric Administration based on atmospheric measurements in Colorado's D.J. Basin found benzene levels significantly higher than previously thought, concluding that "oil and gas operations in the DJB (Denver-Julesburg Basin) could be the largest source of C<sub>6</sub>H<sub>6</sub> (benzene) in Weld County."<sup>2</sup> Also in 2008, air samples obtained from oil and gas sites in Colorado's Piceance Basin led researchers to determine that emissions from well completions, dehydration units, and condensate tanks may pose an elevated cancer risk to nearby residents.<sup>3</sup> While more recent data on emissions is needed to characterize current day emissions, the Denver Front range remains out of attainment with the 1997 and 2008 8-hr ozone NAAQS and exceedances of ozone standards have been monitored in parts of the state that currently meet standards<sup>4</sup> indicating that more must be done to protect human health and the environment from the deleterious pollution associated with the the briskly expanding oil and gas industry in the state. Moreover, the lack of available data on current emissions underscores the need for increased monitoring, in particular real-time monitoring that can be accessed by the public.

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<sup>1</sup> Colorado Department of Public Health and Environment, Air Quality Control Commission; Regulation number 7, Section XIX.K. <http://www.cdphe.state.co.us/regulations/airregs/5CCR1001-9.pdf> (accessed April 24, 2012).

<sup>2</sup> Petron, G., et al., *Hydrocarbon emissions characterization in the Colorado Front Range: A pilot study*, 117 JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES D04304 (Feb., 21 2012)

<sup>3</sup> See, e.g., Raj Goyal, Air Toxic Inhalation: Overview of Screening-Level Health Risk Assessment for Garfield County, (June 2008), <http://www.garfield-county.com/publichealth/documents/Air%20Toxics%20Screening%20Level%20Risk%20Assesment%20Presentation%206%2017%2008%20-%20Dr%20Raj%20Goyal.pdf> (last visited June 14,2012); Teresa Coons & Russell Walker, Community Health Risk Analysis of Oil and Gas Industry Impacts in Garfield County (June 2008), [http://www.garfieldcounty.com/public-health/documents/1\\_COMMUNITY\\_HEALTH\\_RISK\\_ANALYSIS-\(Complete\\_Report\\_16MB\).pdf](http://www.garfieldcounty.com/public-health/documents/1_COMMUNITY_HEALTH_RISK_ANALYSIS-(Complete_Report_16MB).pdf) (last visited June 14, 2012); Teri Whiteley, T & Tim Doty, Barnett Shale Formation Area Monitoring Projects (2009), <http://www.bseec.org/sites/all/pdf/airquality/01.pdf> (last visited June 14, 2012).

<sup>4</sup> Rodriguez, M.A.; Barna, M.G.; & Moore, T., Regional Impacts of Oil and Gas Development on Ozone Formation in the Western United States, 59 *J. Air & Waste Mgmt. Ass.*, 1111, 1111 (2009).

2. Adoption of EPA’s New Source Performance Standards will significantly reduce pollution associated with oil and gas sources and the attendant human health and environmental risks such pollution poses.

EPA’s New Source Performance Standards contain significant protections for human health and the environment that will greatly improve air quality in Colorado and the nation. Overall, the NSPS will remove 190,000 tons of volatile organic compounds, 1.0 million tons of methane and 11,000 tons of hazardous air pollutants from the atmosphere in 2015 when all standards will be fully implemented.<sup>5</sup> As we noted in our comments, the cornerstone of the standards is the reduced emission completion requirement for hydraulically fractured gas wells that will remove approximately 22 tons of volatile organic compounds from the atmosphere during each well completion<sup>6</sup> while also achieving significant methane and hazardous air pollutants co-benefits.<sup>7</sup> In addition, the well provisions require operators combust rather than vent emissions from low-pressure, delineation and wildcat wells starting today that will reduce volatile organic compounds by an additional 30,000 tons.<sup>8</sup>

3. EPA’s NSPS builds-on important protections in place in Colorado.

While modeled on existing Colorado standards, the NSPS adds important additional protections to protect human health and the environment. Unlike the Oil and Gas Conservation Commission rule, EPA’s reduced emission completion requirement requires that operators capture rather than vent or flare emissions during well completions and re-completions in all instances except where a pipeline is not available or pressure is insufficient. The Oil and Gas Conservation Commission on the other hand, allows operators to apply for a variance from its “green completion” requirement on the basis that a pipeline is not available and whenever capture is not “technically or economically feasible.”<sup>9</sup> In addition, whereas EPA requires combustion where capture is not required (e.g. for delineation, wildcat and low-pressure wells), the OGCC allows either venting or flaring.<sup>10</sup> In sum, EPA’s rule dramatically limits the circumstances under which an operator may vent natural gas and associated air contaminants from wells during completions. EPA’s rule adds important requirements for reciprocating and centrifugal compressors that will reduce deleterious pollution from leaking components at these sources by 95% and 50%, respectively.<sup>11</sup> Colorado does not require any controls to limit pollution from wet seals or rod-packing on compressors. Lastly, EPA requires operators submit annual reports demonstrating compliance

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<sup>5</sup> EPA Final Rule, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. 49492 (Aug, 16, 2012).

<sup>6</sup> EPA, Oil and Natural Gas Sector: Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution. Background Final Technical Support Document for the Final Rules, Table 4-2 (April 2012).

<sup>7</sup> *Id.* at Table 4-3. EPA’s Final TSD does not quantify methane and HAPs reductions from the REC requirement.

<sup>8</sup> *Id.*

<sup>9</sup> COGCC R. 805(b)(3)(A),(D).

<sup>10</sup> *Id.* at 805(b)(3)(A),(D).

<sup>11</sup> 40 C.F.R. §§ 5380 and 5385.

and documenting periods of non-compliance with the standards that must be signed by a senior company official and accompanied by a statement as to the truth, accuracy and completeness of the report.<sup>12</sup> The OGCC requires no such certification.

4. Adequate compliance monitoring and enforcement is necessary for Coloradans to reap the full benefits of the NSPS.

The unique nature of the oil and natural gas industry, consisting of numerous, dispersed and often remotely located facilities, many of which are unmanned, poses significant compliance monitoring and enforcement challenges. The Division's partial adoption proposal augments these challenges by adding a layer of complexity and uncertainty that is likely to lead to gaps and redundancies in enforcement and decreased transparency with concomitant adverse effects on human health and the environment.

The split jurisdiction approach proposed by the Division will result in the following inefficiencies and uncertainties. First, two agencies, rather than one, will be responsible for inspecting facilities in Colorado with the likelihood that inspectors from both agencies will visit the same site at different times. Second, facilities will submit annual compliance reports to two separate agencies with the result that neither agency will have a complete record of a particular facility's compliance record. This will hamper enforcement efforts and decrease the effectiveness of penalties since both EPA and the Division may take a company's compliance with clean air requirements into account when assessing penalties for air quality violations.

Split jurisdiction also poses an information barrier to local inspectors and members of the public. The Division's approach will make it difficult for citizens and local inspectors to know whether to report a suspected violation to the state or to EPA. This is likely to slow reporting and lead to delay in the resolution of any unlawful activities or emissions.

The Division has noted that resource constraints are a primary driver in the split jurisdiction approach. We recognize these constraints and would support any efforts to make sure the Division has the resources it needs to fulfill its duty to protect public health and the environment. Even with new staffing increases, we note that the Division will only have eight full-time air inspectors for the entire state of Colorado – far fewer than are needed to provide oversight on the thousands of oil and gas wells in the state. Likewise, we are concerned that splitting jurisdiction with EPA will only exacerbate this problem. EPA Region 8 has less than five full-time air inspectors for the 27 tribal nations and six states within their jurisdiction. Given the inadequacy of existing inspection capacity it is clear that the legislature must provide additional resources to ensure the Division can do its job to protect human health and the environment. We welcome the opportunity to work with the state and the Division to secure such resources. Equally important, and particularly critical until additional resources are in place, are increased monitoring requirements and self-certification requirements for Colorado-only rules.

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<sup>12</sup> Id. at § 60.5420(b)(iv).

Technologies are available today that deliver continuous air quality monitoring. Such information, if made available to the public on an online database, would provide much-needed current information on emissions and compliance and significantly compliment agency inspection and enforcement resources, helping to ensure critical air quality requirements are being met.

#### 5. Conclusion

Colorado is home to over 46,000 oil and gas wells and that number is briskly expanding, especially into heavily populated areas like the Front Range. EPA's New Source Performance Standards offer critical safeguards that will greatly improve air quality in Colorado. However, adequate compliance monitoring and enforcement is necessary for these benefits to be realized. For the reasons discussed above and in our written comments we believe that full adoption of the New Source Performance Standards, as well as increased air quality monitoring, is necessary to meet these goals. We look forward to working with the Commission and the Division to make these goals a reality.