LATHAM & WATKINS LLP

Webcast

ANSWERS TO OUR VIEWERS' QUESTIONS

Hydraulic Fracturing Update: Legal Developments and Trends

On a March 18, 2014 webcast, a panel of senior US Latham & Watkins lawyers from our Environmental Department provided an overview of recent key developments related to hydraulic fracturing. Presented below are answers to some of the questions received from viewers. If you have additional questions or comments, please feel free to contact any of our presenters.*

*Please click **here** to access the on-demand replay of the webcast.*

Answers to our Viewers' Questions

1. **What is a "green completion" and will it be required in the United States? What about the European Union?**

In a "green completion," gas and liquid hydrocarbons are separated from the flow back fluids (and associated debris) that comes from the well as it is being prepared for production. In particular, after fracturing, but before commencement of production, the well bore must be cleaned of debris and fracture fluid. During this period, natural gas escapes from the well along with the flow back water and debris. Instead of venting or flaring the escaping gas, a "green completion" truck or trailer mounted technology system is used to capture the gas, fluids and debris flowing out of the well and to separate the hydrocarbons. The technology works by reducing the pressure, which allows the hydrocarbons to separate from the denser fluids and sand. The remaining hydrocarbons are then delivered directly into equipment that transports them for productive use. The exact technology needed to accomplish a "green completion" will vary by region, with a three-phase separation technique needed in wet gas regions, such as the Marcellus shale, and a sand separation required in other regions.

In August of 2012, US EPA promulgated a New Source Performance Standard (NSPS) that will require – starting on January 1, 2015 – a 95% reduction of VOC emissions from all newly fractured and re-fractured wells.[1] To accomplish this reduction, operators will need to use a "green completion" technology (referred to in the rule as "reduced emissions completion"). As a result, this NSPS will mandate "green completion" technology starting in 2015 for all hydraulically fractured and refractured wells in the United States.

No hydraulic fracturing-specific regulations currently exist at the European Community level. Instead, hydraulic fracturing is governed by a series of general purpose environmental, health and safety (EHS) regulations and directives as well as directives for mining waste management and mining site closure. Many of these general EHS regulations and directives are implemented at the individual member state level, leaving each EU member state the discretion to prohibit hydraulic fracturing, which many EU member states have chosen to do. For those EU member states that do allow hydraulic fracturing, however, these directives would afford sufficient discretion to require a "green completion" technology. Although we have not yet seen any trend or pattern of EU member states imposing such a "green completion" technology requirement, the situation could change under the new European Commission guidelines titled – "Recommendations on minimum principles for the exploration and production of hydrocarbons (such as shale gas) using high volume hydraulic fracturing" – issued on January 22, 2014. These guidelines mandate EU member states to impose well design and construction restrictions so as to prevent environmental and health risks as well as best available operational practices and monitoring requirements for VOCs and other air pollutants likely to have harmful effects. The more disciplined and hydraulic fracturing-specific analysis envisioned by the guidelines may lead EU member states that allow it to impose a "green completion" technology requirement in the future, particularly if such a requirement exists in the United States.

2. **Looking ahead, do you expect more regulation from states or from the EPA around fracking fluids, and fugitive emissions?**

Potentially. As discussed in the first segment of the webcast, the US EPA issued a notice in July 2013 that it was partially granting a petition by a variety of organizations to use its authority under the Toxic Substances Control Act (TSCA), stating the Agency's intent to initiate rulemakings that would require submission of information on chemicals used in hydraulic fracturing. EPA did not indicate the scope of the rule and has not yet issued an Advanced Notice of Proposed Rulemaking that will initiate the stakeholder input process and consultation with other agencies. However EPA also has stated its intent to issue a proposed rule to set discharge standards for wastewater from hydraulic fracturing operations. This rule would likely set standards for the re-use, re-injection and disposal of flow back water. EPA is expected to issue the Proposed Rule sometime in 2014. Finally, on March 28, 2014, the Obama Administration issued a Methane Reduction Strategy as part of the President's Climate Action Plan. The Methane Reduction Strategy contains the broad outlines for a multi-agency strategy to reduce methane emissions from four major sources (the oil and gas industry, cattle and dairy farming, coal mining, and landfills) using voluntary, incentive-based programs as well as new regulatory initiatives.

3. **Do you know of other states that are currently considering regs similar to what CO Air Quality Commission adopted around emissions, monitoring, and repair in order to control methane emissions?**

Colorado is currently the only state that has adopted rules limiting methane emissions from oil and gas operations. It is possible that other states will follow suit, but we are not aware of any other proposed methane emission regulations at the state level at this time. However, seven Northeastern states (New York, Connecticut, Delaware, Maryland, Rhode Island, Vermont, and Massachusetts) wrote a letter to EPA in December 2012 stating their intent to sue EPA for failure to regulate methane emissions from oil and gas operations under Section 111 of the Clean Air Act. The Northeastern states' letter was in response to EPA's

decision to take no further action regarding methane emissions from the oil and gas industry after publishing the NSPS Subpart OOOO rule in August 2012. EPA did state that it would continue to evaluate the matter and no lawsuit has been filed to date.

4. **Can you please comment on the state of regulation of fracking in NY State? It seems to be somewhat in contrast to that of neighboring Pennsylvania.**

A moratorium on all hydraulic fracturing activities in place in New York state since 2008 when Governor Patterson ordered the New York State Department of Conservation (DEC) to conduct an environmental evaluation of hydraulic fracturing and ordered the well approval process halted until the study was completed. At the time the 2008 moratorium went into place, a number of leases had been signed in anticipation of hydraulic fracturing permits to be issued by 2009. However, no commercial hydraulic fracturing has occurred since the moratorium went into effect. A draft of the DEC study was published in September 2009, but the DEC spent more than one year reviewing public comments. In December 2010, Patterson issued an executive order requiring further environmental review. Gov. Andrew Cuomo kept the order in place when he took office. In September 2012, the DEC and the New York Department of Health began a study of the health impacts associated with hydraulic fracturing but there is currently no time-line for completion of the study or the issuance of the supplemental generic environmental impact study (SGEIS). Without the complete SGEIS, DEC will not issue permits for hydraulic fracturing in the state of New York or regulations governing fracturing operations. In January 2014, DEC Commissioner Joseph Martens' stated in his testimony at a state legislative hearing that he does not anticipate that any permits will be issued before 2015. The 2014-2015 state budget, which became effective April 1, 2014, contains no funding for the regulation of hydraulic fracturing.

5. **Who has the liability in the US for civil/criminal costs for environmental harm resulting from fracking – the field operator or is the risk equally shared by the oilfield services firm that conducts the fracking process?**

Civil liabilities arising from non-compliance or remediation obligations under applicable environmental laws and resulting from hydraulic fracturing operations can arise either under statutory and associated regulatory programs, or under state common law. Whether the "owner" of the relevant property or the "operator" is liable for a particular liability will depend on the specific federal, state or local legal regime giving rise to the liability and is not subject to a general response. However, most commercial agreements for drilling services, hydraulic fracturing or related services contain provisions that allocate environmental liability risks between the parties. As a result, the best answer in a particular situation is to look first to the underlying commercial agreements. In the absence of such commercial agreements, the analysis would vary by the applicable law (including varying by state) and would depend on the underlying facts.

6. **Are the penalties for violation of state or federal laws in the United States civil in nature, criminal or both?**

While it is statute-specific, typically statutes do authorize both civil and criminal penalties, although criminal enforcement under environmental statutes is relatively rare. For example, the federal Clean Air Act, Clean Water Act, Toxic Substance Control Act, and the Underground Injection Control portion of the

Safe Drinking Water Act all provide for both civil and criminal penalties. In contrast, the Emergency Planning and Community Right-to-Act allows the imposition of criminal penalties for some types of violations, but not for violations of the ECPRA 313 Toxics Release Inventory (TRI) reporting requirements. State oil and gas drilling and production laws vary with respect to whether penalties are both civil and criminal.

7. **There have been recent announcements of pending biodegradable fluids that can be used in fracturing processes. How do you anticipate these products will comply with regulations?**

Biodegradable polymers are being considered as a replacement for the traditional biodegradable guar gum polymers (made from guar beans). Steeply rising costs of guar gum and agricultural uncertainties are reasons for the potential shift. Because both types of polymers are biodegradable, there may be little difference with respect to health and environmental concerns and thus little, if any, difference with respect to any regulations. If cross-linking agents often used with guar gum polymers are not necessary for a given biodegradable polymer, the latter might be considered "greener." Note that, to date, regulations have focused on disclosure of what chemicals are used in the hydraulic fracturing fluids, rather than regulating use of the chemicals (diesel additives being a notable exception).

Please access **the March 18 webcast** for additional information.

Endnote

[1] Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. 49490 (Aug. 16, 2012) (codified at 40 CFR Parts 60 and 63).

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