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## Current Developments Affecting Hydraulic Fracturing Operations (April 2015)

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We are providing our quarterly update on laws, regulation, and policy affecting hydraulic fracturing (“fracking”) operations. Our last installment was issued January 13, 2015, and may be found [here](#).

Foremost among current developments is the issuance of a final rule for fracking on federal and Indian lands (and associated litigation), new requirements for oil transport by rail (as discussed extensively in previous alerts), and emerging state efforts to evaluate and regulate seismic risk and water use. In many instances, information provided in our previous updates has been referenced below in order to provide context, and we encourage readers to refer to previous installments (as linked in the text) for a more in-depth analysis.

### **FEDERAL REGULATORY DEVELOPMENTS**

#### A. BLM Final Rule For Fracking on Federal and Tribal Lands

On March 26, 2015<sup>1</sup>, the U.S. Department of Interior (“Interior Department”) Federal Bureau of Land Management (“BLM”) published its anticipated final rule (“Final Rule”) for fracking on federal and tribal lands, which becomes effective on June 24, 2015 and will be the first collection of federal fracking rules to be implemented. The Final Rule requires (i) public disclosure of chemicals used in fracking operations through FracFocus within 30 days of operations completion (excepting certain trade-secret protected information as outlined in the Final Rule); (ii) confirmation that

wells used in fracking operations meet appropriate construction standards (*i.e.*, testing for well integrity and strength of barriers); (iii) plans for managing flowback waters from fracking operations; and (iv) storage of recovered fluids in covered tanks instead of lined pits. The Final Rule also provides that a variance may be granted by BLM to specific regulations within the Final Rule if “state or tribal regulations are demonstrated to be equal to or more protective than the BLM’s rule.” BLM announced that it will identify the specific regulatory variances that will be allowed, prior to the Final Rule becoming effective on June 24, 2015<sup>2</sup>.

On March 20, 2015, the same day as the Final Rule was announced by the Interior Department Secretary, the Independent Petroleum Association of America and Western Energy Alliance filed a lawsuit against the Interior Department, claiming the Final Rule is burdensome to the extent it will “either duplicate state law requirements or improperly curtail the primary jurisdiction of state governments.” On March 26, 2015, the State of Wyoming (North Dakota and Colorado were allowed to join as petitioner-intervenors in April 2015) filed a separate lawsuit against the Interior Department claiming the Final Rule “exceeds the agency’s statutory jurisdiction, conflicts with the Safe Drinking Water Act, and unlawfully interferes with the State of Wyoming’s hydraulic fracturing regulations.”

#### B. Proposed Pretreatment Standards on Fracking Wastewater

On April 7, 2015, the Environmental Protection Agency (“EPA”) published a proposed rule that would require oil and gas companies engaged in the “extraction of oil and natural gas from low permeability, low porosity geologic formations” (referred to in the regulation as unconventional oil and gas resources and including fracking operators) to pretreat wastewater from operations before such wastewater can be sent to publicly owned treatment works (“POTW”). EPA indicates that there will be no added cost to industry in the short term, as no POTW is currently accepting such wastewater (though several instances of direct discharge to POTWs has occurred in the past). EPA states that the rule is meant to “ensure that such current industry best practice is maintained over time,” noting that large volume direct discharges of fracking fluids to POTWs is neither technologically nor economically feasible.

#### **SEISMIC RISK**

In both the United States and Canada, regulatory authorities are taking action to reduce the frequency of earthquake events based on mounting evidence that fracking operations are associated with increased risk of seismic events (see OMM January 13, 2015, Client Alert, Current Developments Affecting Hydraulic Fracturing Operations).

#### C. United States

Citing increased seismic activity “correlating with increasing volumes of saltwater injected” in the applicable counties, the Kansas Corporation Commission (“KCC”), on March 19, 2015, issued an order that requires

fracking operators in Harper and Sumner Counties to reduce the amount of saltwater being injected into wastewater disposal wells in the area. The order states that the “increased number of recorded earthquakes in Kansas coincides with an increase in the number of injection wells and the amounts of injected saltwater in Harper and Sumner Counties.” Although the report states that “it has not been possible to trace a specific earthquake to a specific injection well based on available data,” the KCC finds the increase in seismic activity justifies the issuance of the order.

On April 21, 2015, researchers from Southern Methodist University released a study finding that that high volumes of wastewater injection combined with saltwater extraction from natural gas wells most likely caused earthquakes occurring from 2013 through 2014 near Azle, Texas. As a result of the study, Texas Regulators warned two fracking operators that it may cancel permits for two injection wells located near Azle, unless the operators appear at hearings scheduled for June 2015 to explain why such action is unnecessary<sup>3</sup>.

In March 2015, the Oklahoma Corporation Commission (“OCC”) issued a directive to 357 companies operating fracking disposal wells in the Arbuckle formation, requiring them to demonstrate by April 18, 2015 that they have an approved plugging plan in place and are not injecting wastewater below the Arbuckle formation or else such companies will be required to reduce disposed volume by 50 percent. As of the date of publication, it has been reported that up to 25 wells have shut down (at least temporarily) in response to OCC’s directive, although no official information has been released by OCC. The issuance of the directive followed the formation of the Coordinating Council on Seismic Activity in September 2014 and the adoption of the “traffic light” system, which can subject certain wells to heightened scrutiny and, in some cases, shut down pending further investigation after an earthquake with at least a 4.0 magnitude (see OMM January 13, 2015, Client Alert, Current Developments Affecting Hydraulic Fracturing Operations). Under the directive, the OCC also expanded its definition of an “area of interest” from 10km around the epicenter of a 4.0 magnitude earthquake to include multiple seismic events that occur in close proximity to earthquakes with a magnitude of 3.0 or greater, which, according to the directive, “is expected to more than double the number of disposal wells with an area of interest.” The Oklahoma Secretary of Energy and Environment recently stated that a number of states, including Oklahoma, are working together to develop best practices in connection with saltwater disposal wells in addition to developing the “traffic light” system throughout several states<sup>4</sup>.

On April 21, 2015, the Oklahoma Geological Survey released a Statement on Oklahoma Seismicity, finding that “it is very likely that the majority of recent earthquakes, particularly those in central and north-central Oklahoma, are triggered by the injection of produced water in disposal wells,” as the seismicity rate in 2013 was only 70 times greater than such rate in years prior to 2008, but is now 600 times greater than pre-2008

seismicity rates. On April 23, 2015, the U.S. Geological Survey (“USGS”) released a report that discussed modelling for predicting the frequency and locations of seismic activity in connection with fluid injection from oil and gas operations. The report outlines 17 “induced seismicity zones,” including in Colorado, New Mexico, Alabama (on Florida border), Arkansas, Oklahoma, Kansas (on the Oklahoma border), Texas, and Ohio, where increased rates in seismic activity are linked to wastewater injection wells. Some commentators have noted that such research may increase liability risks for fracking operators and provide additional support for landowners filing lawsuits against such companies claiming damages to their property.

#### D. Canada

In February 2015, the Alberta Energy Regulator (“AER”) announced new seismic event requirements for fracking operations in Fox Creek, Alberta. Operators will be required to cease operations if they detect a tremor exceeding a magnitude of 4.0 or greater on the Richter scale and report such event to AER. Operators cannot resume operations until provided clearance by AER. Fracking operators must also take certain measures for any recorded seismic activity above a magnitude of 2.0 on the Richter scale. AER released the new requirements after 20 earthquakes were recorded in the Fox Creek area between December 2014 and January 2015, with magnitudes as high as 4.4 on the Richter scale.

On January 21, 2015, an announcement was made on behalf of the Induced Seismicity Monitoring Network Consortium, made up of several governmental, industry, and environmental groups, that the consortium had hired a seismologist for a two-year contract to study the impacts of fracking on seismic events in northeast British Columbia, where a recent report found that 231 seismic events had occurred between August 2013 and October 2014, many of which were linked to fracking operations.

### **RAIL TRANSPORTATION**

#### E. Proposed Rules

On February 27, 2015, the Department of Transportation (“DOT”) Federal Railroad Administration (“FRA”) published a notice of proposed rulemaking titled “Risk Reduction Program,” that would require railroad operators to prepare and submit a risk management plan that identifies “applicable hazards and...plans to mitigate, if not eliminate...risk.” The rule would be applicable to all Class I railroads and any railroad with an “inadequate safety performance” record, as determined by the Secretary of Transportation. On April 17, 2015, DOT issued an Emergency Order to require that trains transporting large amounts of Class 3 flammable liquid through certain highly populated areas adhere to a maximum authorized operating speed limit of 40 miles per hour by April 24, 2015<sup>5</sup> which was followed by the issuance of an Emergency Directive by the Transportation Safety Board of Canada on April 23, 2015 similarly lowering the speed limit for trains moving through certain highly populated areas and carrying crude oil or other hazardous materials.

On April 17, 2015, FRA also issued a safety advisory making recommendations to enhance the mechanical safety of such trains, including that railroads reduce “the impact threshold levels the industry currently uses for wayside detectors that measure wheel impacts to ensure the wheel integrity of tanks cars.” On the same day, a letter was sent by the FRA to the Association of American Railroads asking that the organization and its members voluntarily make an additional commitment to provide certain relevant information to FRA and emergency responders immediately following a derailment of high-hazard trains, including “information related to the lading, tank cars, and trains involved in the derailment or accident,” and that the group “develop a process for the railroads to gather, organize and store” such information.

On April 23, 2015, two notices were published in the Federal Register in connection with rail transportation of hazardous materials. The Pipeline and Hazardous Materials Safety Administration (“PHMSA”) issued a Notice of Safety Advisory to remind carriers and shippers of hazardous materials of their “responsibility to ensure that current, accurate and timely emergency response information” is both maintained and provided to responders following an incident. FRA and PHMSA jointly published a Notice of Safety Advisory reminding operators of high hazard flammable trains to provide FRA and PHMSA with information “agency personnel need to conduct investigations immediately following an accident or incident,” including origin and destination information, results from any product testing undertaken prior to transportation, the type of liquid being transported, and general information on the train (such as the train number, position of tank cars, and specifications). On April 24, 2015, FRA published a Notification of Modification of Information Collection Requirements, to require the reporting of the number of rail cars carrying crude oil, the number of cars damaged or derailed carrying crude oil, and the number of cars releasing crude oil, after an incident involving a crude-oil train.

The recent actions by DOT and its related agencies follows the publication of two proposed rules by the PHMSA titled “Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains” and “Hazardous Materials: Oil Spill Response Plans for High-Hazard Flammable Trains,” which set forth stringent requirements for rail shipments of hazardous materials, including crude oil, ethanol, and other flammable materials, and a phase-out of DOT-111 tank cars by 2020. Such tank cars, have been involved in recent major spill events in conjunction with derailments (see OMM September 2, 2014, Client Alert, Current Developments Affecting Hydraulic Fracturing Operations). Various groups have been lobbying the White House prior to issuance of a final rule by PHMSA, (expected in May 2015), including a request by several railroads to exclude electronically controlled pneumatic brake requirements in the final rule<sup>6</sup> There has been disagreement over feasibility of the proposed phase-out, the number of tank cars that need to be retrofitted, and as to the cost of meeting deadlines set forth by PHMSA. One group has estimated that it is possible to achieve the phase-out of older tank cars

within five to seven years<sup>7</sup>. Another group projects the modifications would cost \$3.9 billion rather than the \$2.2 billion estimated by PHMSA<sup>8</sup>. The number of entities lobbying in connection with crude oil transportation has increased from only one company disclosing such lobbying in 2012, to at least 41 entities in the first quarter of 2015, with a jump of over 100 percent from the first three months of 2014<sup>9</sup>.

On March 30, 2015, in a letter posted on its website, BNSF Railway announced it would be phasing out all DOT-111 tank cars and replacing them with CPC-1232 tank cars modified to meet PHMSA-proposed standards (see discussion above) and reducing speeds to “35 mph for all shale crude trains operated on our tracks through large municipal areas with populations over 100,000 people.”

On April 3, 2015, the National Transportation Safety Board (“NTSB”) sent a letter to PHMSA recommending it implement an “aggressive, intermediate progress milestone schedule...for the replacement and retrofitting of legacy DOT-111 and CPC 1232 tank cars to appropriate tank car performance standards, that includes equipping these tank cars with jackets, thermal protection and appropriately sized pressure relief devices,” and “establish a publicly available reporting mechanism that reports at least annually, progress on retrofitting and replacing tanks cars.” However, NTSB has also stated that volatility is not a key factor in determining the magnitude of a crude-oil train accident, despite that PHMSA is looking at such issues as a factor in such train derailments<sup>10</sup>.

### **BANS AND RESTRICTIONS ON FRACKING OPERATIONS**