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MOLLY CAGLE

Regulatory Innovation

Analyzing the legal trends associated with fracking

Water management has always been, and will continue to be, a key business and environmental concern for shale gas producers and operators, highlighting that drought and increasing competition for water have only heightened the need for effective water management strategies. Here, Molly Cagle, a partner in the Environmental Group at Baker Botts, discusses the regulation of water associated with hydraulic fracturing with *iWWD* Managing Editor Elisabeth Lisican.

Elisabeth Lisican: Describe some recent legal trends you have noticed around the regulation of water associated with hydraulic fracturing.

Molly Cagle: There have been several recent legal trends regarding the regulation of water associated with hydraulic fracturing. On the supply side, some regulatory initiatives seek to better track the water footprint from oil and gas extraction. The upstream oil and gas sector is still a very minor user of freshwater resources compared with other industries and agricultural and municipal use. Still, hydraulic fracturing operations can be water-intensive and can particularly affect areas suffering from drought or water stress. In some cases, tracking water usage has allowed the sector to show that the overall quantity of water used is minor compared with other traditional uses.

On the wastewater side, states like Texas are doing a great job of encouraging reuse and recycling of produced water and hydraulic fracturing flowback. Texas already was at the forefront of encouraging recycling and was proactive about issuing pilot permits to promote new technologies. Yet, it continues to improve. Texas recently updated its rules to continue to track developments in the industry, including regulatory incentives like streamlined permitting for mobile recycling units. Other states are developing their own approaches based on unique local needs.

Lisican: Why are good water management practices essential in oil- and gas-producing areas facing drought and/or increased competition for water?

Cagle: Good water management practices make good business sense. A significant amount of the costs associated with hydraulic fracturing a well are associated with water management. And mismanagement can result in agency investigations and substantial fines and litigation.

There have been stepped-up enforcement efforts by all levels of government when it comes to hydraulic fracturing and water management. Whether it is enforcement related to a spill or penalties for migratory birds dying in wastewater pits, water management practices can be a target for agency and environmental group enforcement. Compliance with state policies may not even be enough. Just recently, an environmental group in Ohio has asked the U.S. Environmental Protection Agency to withdraw the state's authority to manage water use with oil and gas based on claims the state is not doing enough. Another recent trend is nuisance and surface owner litigation with claims suggesting that water management practices like frac tanks are the new industry standards.

Of course, the water management calculus becomes even more important in oil- and gas-producing areas facing drought and water scarcity. It is extremely important for oil and gas producers to carefully plan both water supply and wastewater management issues up front and to be flexible as conditions change. Regulation of water is constantly in flux, and as regulators become more aware of the best practices in regulating hydraulic fracturing, industry can expect water scarce jurisdictions to constantly evaluate how to manage water use associated with oil and gas production. Some jurisdictions may face public pressure to ban hydraulic fracturing if the public perceives industry as not doing its part to conserve water resources.

Lisican: How are state policy and recent technological innovations around fracking water management intertwined?

Cagle: State policy and technological innovation in hydraulic fracturing water management practices are undoubtedly intertwined. We have seen vast improvements in the use of produced water recycling and reuse and flexible state policies encouraging reuse are a significant factor driving that innovation. For example, the ability to test pilot-scale recycling projects in Texas before investing millions of dollars in infrastructure has been key to the development of new treatment technologies.

With continuing drought and water scarcity, industry is also looking to new ways to use undeveloped water sources like brackish groundwater. Brackish groundwater is less salty than seawater and thus more economical to potentially treat. But state laws and regulations focused on freshwater may actually impede development of this resource. For example, it is not clear how brackish water should be defined. So states need to carefully consider the options and develop policies to promote new and innovative water management practices. iWWD

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