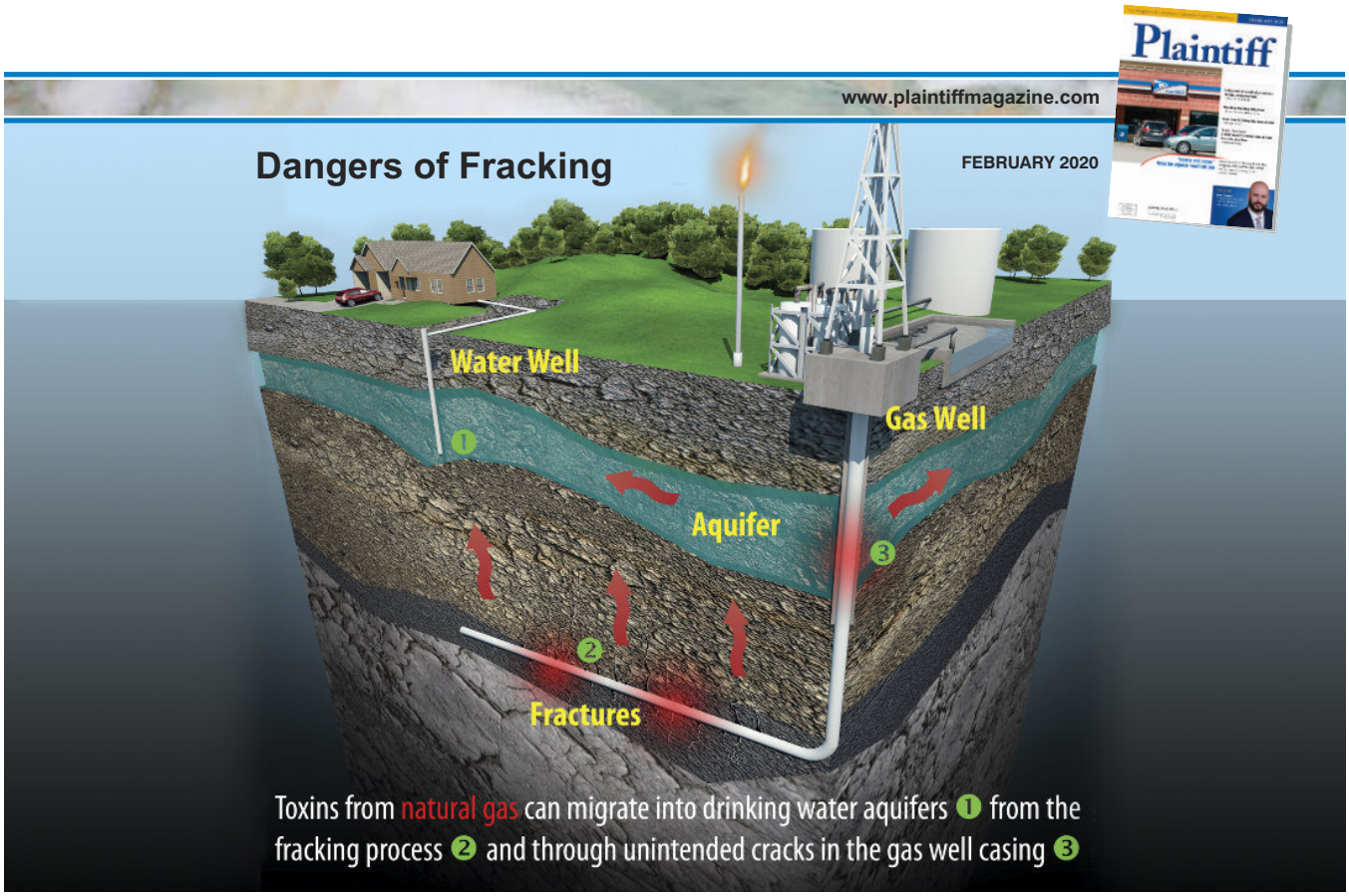

Tracking fracking

The Federal BLM doubled the number of California fracking permits issued in the first six months of 2019 – can more lawsuits be far behind?

By Nancy Yeend and Ann Clarke

Getting involved with a fracking case, for example in California, will require developing a team of experts, translating technical jargon into information that lay people can understand, and appreciating the diverse ways it impacts people, their communities, and the environment. For a case to produce a successful outcome will in great measure depend on the means to resolution: trial or use of a dispute resolution process.

Simply put, fracking, shorthand for hydraulic fracturing, is a process for extracting oil or gas from the ground. The process typically begins by drilling a hole in rock and injecting acid, such as hydrochloric acid, mixed with thousands of gallons of water to remove cement debris and drilling mud. The oil and gas are then flushed out by injecting a "slickening fluid" composed of water under high pressure and mixed with an untold number of potentially toxic and hazardous chemicals and abrasive materials, such as sand.[1] The fracking process has been around since the Civil War, but its use expanded following World War II, and it came into wide use in the 1990s.[2] Approximately half of the oil and about two thirds of all the natural gas produced in the United States come from fracking. Fracking is more common in the United States than in any other country. Today, the two states where fracking is most widespread are Texas and North Dakota.

Backdrop

When fracking began ramping up in the late 1990s, the oil and gas companies proffered that it provided an alternative source of fuel, was cheaper to produce, and created more jobs. Resistance has grown over the past twenty years to fracking as the public has learned about the negative consequences of the fracking life-cycle from sourcing and storing the water, sand, acid, and other abrasives and chemicals, clearing vegetation and leveling the well site, constructing access roads, fencing, lighting, utilities, and pipelines, placing support equipment and buildings on the site, drilling the well and injecting the water and abrasives, removing the oil and gas, transporting the

oil or gas to a refinery, disposing of or recycling wastewater, sand, and other materials, closing, mothballing or abandoning the site, remediating, and, depending upon funding, restoring the site.

Impacts include among other things: air and water pollution, greenhouse gas emissions, accidents, explosions, leaks and spills, land disturbance, earthquakes, subsidence, sinkholes, health issues, crime, noise, damage to cultural sites and wildlife habitat, and sudden demand for expanded local support services such as schools, emergency response, fire and police, hospitals, roads, housing, drinking water, sewage, and waste management. Fracking, like most extractive industries, remains a boom-bust endeavor, sometimes leaving ghost towns, displaced workers and their families, and orphaned assets in its wake.

Geologic risks from oil and gas extraction have received considerable attention over the years. For example, Long Beach, California, was known as the Sinking City in the early half of the 20th century due to extraction of seven billion barrels of oil from the Wilmington Oil Field with catastrophic damage to the wharf, buildings, roads and other infrastructure and leading to the 1958 California Anti-Subsidence Act. The subsidence area covered 20 square miles and had sunk approximately 30 feet.[3]

Sinkholes are a known geologic phenomenon in states like Florida and parts of Texas, but are relatively unknown in other regions of the country. Whether fracking causes sinkholes is controversial, but the risk is heightened when the acid or low pH wastewater from fracking is injected into limestone formations, such as in Florida, or water is removed for use in fracking.

Of more widespread concern is the role wastewater disposal in injection wells plays in causing the increased earthquake activity reported in many states, including Oklahoma, Kansas, Texas, Arkansas, Colorado, New Mexico, Ohio and Alabama. The USGS reported over 800 earthquakes in Arkansas during a six-month period. It does not mean that other states will not experience similar earthquakes. Geologist, Mark Petersen, who was in charge of the research looking into fracking-related earthquakes, indicates that these "human-induced" earthquakes could also impact California, known for the many faults riddling the state. This 2016 report estimates that seven million Americans could be at risk due to these human-induced earthquakes.[4]

Wastewater disposal presents additional challenges. Approximately 80 percent of the water used in fracking remains in the rock and can ultimately seep into the underground water systems. Twenty percent is wastewater that flows back to the surface. Wastewater is often contaminated and some contaminants may be toxic, carcinogenic, and radioactive material.[5] Wastewater, sand, and other materials that cannot be cleaned and recycled for reuse in the fracking process pose a liability for owners and operators of the fracking operations and potentially to society if the owners are bankrupt and the sites are abandoned.

Much attention has also been given to human health risks due to exposure to the chemicals used in fracking. For example, companies conceal their list of chemicals used in fracking as "trade secrets" due to "loopholes." These "ambiguities" have existed for many years. In 1997, the federal Environmental Protection Agency ruled that oil and gas operations are not subject to the Emergency Preparedness and Community Right-to-Know Act's requirement for a Toxic Release Inventory, known as TRI. Litigation against EPA to require TRI reporting has failed.[6] California, however, in 2013 passed Assembly Bill 4, which requires disclosure of chemicals used to boost production from oil and gas wells.[7]

To date, the federal EPA has not listed waste materials from oil and gas activities as hazardous wastes under the federal Resource Conservation and Recovery Act, which would otherwise regulate their storage, handling, transport, disposal, and cleanup. Meanwhile, petroleum activities have been effectively excluded from the Superfund Amendments to the 1980 Comprehensive Environmental Response, Compensation and Liability Act (commonly called Superfund). And, under the Energy Policy Act of 2005, oil and gas operations were exempted from the Underground Injection Control permitting provisions of the federal Safe Drinking Water Act. Oil and gas operations have also been exempted from certain provisions of the federal Clean Water Act; such as the storm water runoff permit requirements for uncontaminated storm water.

According to one study, chemicals used in fracking have increased asthma rates in children by 25 percent in six Texas counties.[8] According to the Texas Oil and Gas Accounting Project, a significant percentage of chemicals used in fracking, if absorbed through the skin, swallowed, or inhaled, are harmful to the brain, heart, lungs, kidneys and immune system. TRI requirements would provide the public, local hospitals, and emergency responders with a better understanding of risks to the community and their personal risk from exposure. Many believe that health care providers and emergency responders need to know what chemicals are being used so that they can respond effectively and protect not only the patients, but themselves, other staff, other patients, and the community.

Methane is both an asset and a potent greenhouse gas. If pipelines or other means of containing methane are not readily available, operators may flare the excess. Owners and operators also face liability due to explosions. If pipelines and equipment are not properly constructed and maintained, methane may leak. According to Robert Myers, professor at Lock University, houses in Colorado and Ohio have exploded because gas drillers had failed to properly seal the production lines. In Pennsylvania and other states, methane

gas produced by fracking has contaminated nearby water wells and aquifers. When methane is leaked or flared, it not only is a source of air and water pollution, greenhouse gas, and a hazard to human safety, it is also a source of liability and lost income to royalty holders, whether private or governmental.

A perspective

Lawsuits were filed beginning in 2013 in Colorado, Texas, and other states by oil and gas industries to prevent or overturn anti-fracking bans. Some states upheld the fracking bans, like the New York State Court of Appeals, while others, like Oregon established a fracking moratorium and Washington, New Jersey, Vermont and New York have banned fracking. Colorado overturned its fracking bans.[9]

Towards the end of 2014 some cities and counties in California initiated fracking bans as more and more health, safety, and environmental issues began to arise. San Benito and Mendocino counties put anti-fracking means on the November ballots. A proposed ban in Santa Barbara County failed. Monterey County voters passed measure Z in 2016, which banned *"fracking, new oil and gas wells and new waste-injection wells."*[10] Monterey County in 2018 accepted the industry's settlement offer which would allow the County to avoid litigation costs while preserving its right to uphold the fracking ban prohibiting land uses in support of well stimulating and to limit further expansion of oil and gas extraction.

Fracking litigation

Litigation has focused on a wide range of issues. For example, one of the earliest jury verdicts involving a fracking case occurred in 2014 in Texas, where a family claimed that chemicals used in a fracking operation sickened and killed livestock.[11] In one Colorado case an oil worker was splashed with chemicals used in a fracking operation. The nurse who handled the clothes nearly died because the medical team was unable to learn what chemicals were used. The oil company claimed the list of chemicals were proprietary.[12]

Professor Blake Watson of the University of Dayton School of Law looked at 147 cases involving hydraulic fracturing filed between 2011 and 2018. The vast majority of the cases involved four states: Texas and Pennsylvania with thirty-one cases each, closely followed by Arkansas with twenty-six and Oklahoma with twenty-four. A 2015 case in California, *Gardiner Family, LLC v. Crimson Resource Management Corporation*, involved alleged contamination of the family's almond orchard by flow-back from the hydraulic wastewater being re-injected underground in one of Crimson's waste disposal wells. The case settled in 2017 for $3 million.[13]

Meanwhile, an obscure tool called a Lone Pine order has had some play in litigation over fracking. Courts have used Lone Pine orders to manage mass tort litigation, especially when associated with complex, catastrophic events. Basically, under a Lone Pine order, plaintiffs must provide some evidence of the alleged damages or injuries prior to discovery. These so-called pre-discovery or pseudo-summary judgment orders have unraveled some fracking-related cases, resulting in dismissals. In contrast, some courts have disallowed Lone Pine orders in fracking cases.

Fracking disputes will likely increase, thus generating litigation for some time to come in California. Fracking is occurring extensively along the California coast from Seal Beach to the Santa Barbara Channel.[14] Although the Bureau of Land Management (BLM) has not issued any new oil or gas leases since 2013,[15] it doubled the number of fracking permits in the first six months of 2019 in California.[16]

In May of 2019, BLM circulated a proposal to open one million acres of Federal land to fracking in eight California counties, and in October their analysis states, *"No conflicts were found between the estimated impacts of hydraulic fracturing and the resource or program management goals."*[17] Counties affected by the decision include eastern Fresno, western Kern, Kings, Madera, San Luis Obispo, Santa Barbara, Tulare and Ventura counties.[18] In October 2019 conservation groups filed suit to block fracking on 725,500 acres in Alameda, Contra Costa, Fresno, Merced, Monterey, San Benito, San Joaquin, San Mateo, San Mateo, Santa Clara, Santa Cruz and Stanislaus counties.[19]

Navigating fracking disputes

As Abraham Lincoln said, *"Discourage litigation. Persuade your neighbors to compromise wherever you can. Point out to them the nominal winner is often a real loser – in fees, expenses, and waste of time."* Several forms of dispute resolution, including mediation, arbitration, and facilitated negotiation, have been used to either prevent conflicts about site location, construction, operation, cleanup and long-term remediation of industrial facilities, large or small, or to resolve them without having to go to trial.

When alternatives to trial are considered, two things must be evaluated: the specific process and the neutral used. If arbitration is being considered, participants should also consider whether they want a binding or non-binding decision and a single arbitrator or panel of three. If mediation were being considered, participants would select a single neutral and consider whether to include a co-mediator. A co-mediator can be extremely helpful, especially if the mediators have different subject matter expertise, many parties are involved, and emotions are intense.

No matter the ADR process used, at a minimum, the neutral – the person managing the process, must have subject matter understanding and experience handling similar types of cases. To assist in advising a client before taking a fracking-related case, or to resolve issues that arise after a case has been initiated,

a checklist may help with planning a strategy.[20] A plaintiff's attorney or dispute management specialist could take, for example, the California Environmental Quality Act (CEQA) guidelines or a federal agency's checklist, such as the ones available on the Department of Energy's National Environmental Policy Act (NEPA) website, as a guide in narrowing the issues for further discussion.

Using such a checklist early will also help avoid cost and delay by identifying up front which, if any, permits, approvals, concurrences, or negative findings will be needed. Depending on the scope of issues, the neutral may need access to subject matter experts, such as archeologists, Native American cultural leaders, wildlife biologists, or experts in groundwater remediation and emergency response planning. These experts may not only assist in the regulatory process, but they, along with the affected parties, may be able to broaden the scope of potential solutions.

Mediation is the most used ADR process for fracking cases because it offers three distinct benefits. Mediation allows the participants to make critical decisions based on what makes good business sense. Mediation also can help participants meet basic human needs, such as for respect.[21] Mediation can also be confidential. If, however, public officials who are subject to open government rules are involved, facilitated negotiation could be used as the primary tool, with mediation being used for specific confidential settlement discussions between litigants. Settlement agreements in such a situation may be subject to public disclosure.

Conclusion

Controversy over fracking and its various impacts, including whether and how to address end-of-life issues such as orphaned assets and contamination, will continue, whether between a landowner and an operator, a community and the industry, or royalty holders and a company. Plaintiff attorneys and dispute resolution specialists must develop more in-depth knowledge of the field. Where resources permit, attorneys and dispute resolution specialists should also gather or otherwise have access to a team of subject matter specialists to facilitate effective solutions.

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[4] Achenbach, Joel, *7 Million Americans at Risk of Man-Made Earthquakes*, Washington Post, March 28, 2016.
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[12] Lustgarten, A., ProPublica, November 13, 2008.
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[14] Koch, W., *As U.S. Fracking Bans Increase, So Do Lawsuits*, National Geographic, November 6, 2014.
[15] According to the California Department of Conservation, there were 652 oil and gas wells stimulated using hydraulic fracturing in 2014.
[16] As of 2015, there were 56,653 active oil and gas wells in California, and 1,666,715 in the US.
[17] Renda, M., *Feds Push to Open 1 Million Acres to Fracking in California*, Courthouse News, October 31, 2019, and Federal Register notice by the Land Management Bureau, November 1, 2019.
[18] Fracking has been documented in 10 California counties – Colusa, Glenn, Kern, Los Angeles, Monterey, Sacramento, Santa Barbara, Sutter, Kings and Ventura. Center for Biological Diversity, 2018.
[19] Center for Biological Diversity, October 30, 2019.
[20] *Beyond the Fracking Wars: A Guide for Lawyers*, Public Officials, Planners, and Citizens, ABA, 2013.
[21] According to Maslow's *Hierarchy of Needs*, there are basic human needs of food and shelter, but what settles cases are the other needs of acknowledgment, validation, economic, sense of justice, confidentiality, etc.