

C O M M E N T

# The Critical Role of Voluntary Standards and Certification in the Hydraulic Fracturing Framework

by Susan Packard LeGros

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The article by Professor Merrill and Dean Schizer<sup>1</sup> sets out a reasoned structure for addressing the risks to surface and groundwater resources associated with shale gas development. It suggests that, at a minimum, where leading or best practices have been identified to address known risks, these practices should be incorporated into regulation. As a practical matter, this means state regulation because it is at the state level where these issues are primarily regulated. The article acknowledges that there are potential risks for which best practice is not known, and for that set of challenges the legal system must formulate an evolving approach to addressing responsibility. It suggests application of well-established principles of liability to address areas of risk not yet capable of being distilled into regulation.

There is a long time line involved in incorporating best practices into multiple state regulations. It is not an exaggeration to say that it could take decades accompanied by inconsistency across jurisdictions for that to be accomplished. Yet, even as that effort progresses, the engineering and operational practices associated with fracturing and the scientific studies of impact are altering the information on which best practices are based. Without disputing the need for a strong and scientifically based regulatory program, there is a faster and more adaptive approach to advance and incorporate best practices.

While the article acknowledges the existence of programs involving voluntary standards, these programs have particular application to the fast-changing subject of shale gas. Voluntary standards can advance timely identification of best practices and likely represent the best way to accomplish widespread adoption in a short period of time. In addition, independent certification programs can support the integrity of best practices and voluntary standards

by providing the public with information and transparency that are necessary to engender a level of confidence that the standards are meaningful.

Various articles have examined the contribution that voluntary standards organizations can make at a time when there has been no new environmental legislation since 1994 and any environmental regulation is almost inevitably going to face a gauntlet of challenge.<sup>2</sup> Given the current landscape, the role of a voluntary standards organization becomes more critical and, arguably, more necessary.

Multiple organizations have adopted various versions of best or recommended practices in shale gas extraction and production.<sup>3</sup> Some of these are aspirational, identifying “relevant considerations” and guidelines; others are prescriptive and include specific metrics.<sup>4</sup> The experience of the Center for Sustainable Shale Development (CSSD) is instructive of the challenges such initiatives face as well as the potential for impact. CSSD is a non-profit organization formed in 2011 to respond to the growing need for responsible approaches to the prospect of shale gas development in the Appalachian Basin, which includes the Marcellus and Utica Plays.

CSSD followed an initial effort led by a group of shale operators, foundations, and regulators assembled by the University of Pittsburgh’s Institute on Politics that began meeting in 2010 to explore issues related to Marcellus Shale exploration. Seeking to elevate and inform the regional energy dialogue, the Shale Gas Roundtable, as they named

1. Thomas M. Merrill & David M. Schizer, *The Shale Oil and Gas Revolution, Hydraulic Fracturing, and Water Contamination: A Regulatory Strategy*, 98 MINN. L. REV. 145 (2013).

2. See, e.g., Michael P. Vandenbergh, *The Emergence of Private Environmental Governance*, 44 ELR 10125, 10131-32 (Feb. 2014); Michael P. Vandenbergh, *Private Environmental Governance*, 99 CORNELL L. REV. 129, 131 (2013).

3. See, e.g., AMERICAN PETROLEUM INSTITUTE STANDARDS, <http://www.api.org/publications-standards-and-statistics/standards> (last visited June 4, 2015).

4. Compare MARCELLUS SHALE COALITION, RECOMMENDED PRACTICES: DRILLING AND COMPLETIONS 2 (Sept. 24, 2013), available at <http://marcelluscoalition.org/category/library/recommendedpractices>, with EQUITABLE ORIGIN, <http://www.equitableorigin.com> (last visited June 4, 2015).

themselves, identified a three-part mission related to unconventional oil and gas production, transport, and use:

- Building and sustaining relationships among relevant cross-sector stakeholders to better support diverse regional environmental protection, community quality of life, and economic development goals
- Identifying high-priority focus areas through consensus-building, dialogue, extensive research, and shared goals for the region
- Assessing the focus areas and developing ideas and recommendations that promote the improved management of and outcomes from regional unconventional oil and gas development and activities.

Seeking the best possible balance between environmental organizations and the Pennsylvania Department of Environmental Protection (DEP), they encouraged the agency to strengthen engagement with and support of cross-sector and industry efforts to develop best management practices:

DEP should continue its engagement with and support of various multi-stakeholder and industry efforts to develop best management practices (BMPs) and high-level performance standards. As appropriate, these practices/standards should be considered for incorporation into future revisions of relevant regulations and guidance documents to ensure continual improvement of industry operations.<sup>5</sup>

At about the same time, The Shale Gas Production Subcommittee of the Secretary of Energy Advisory Board issued its report identifying measures to reduce the environmental impact and enhance the safety of shale gas production.<sup>6</sup> Among its conclusions was the finding that:

[C]reation of a shale gas industry production organization dedicated to continuous improvement of best practice through development of standards, diffusion of these standards, and assessing compliance among its members can be an important mechanism for improving shale gas companies' commitment to safety and environmental protection as it carries out its business.<sup>7</sup>

The Report suggests that such an organization be governed by a board of directors composed of member companies on a rotating basis, along with external members, for example, from NGOs and academic institutions.

One of the Subcommittee's recommendations was the need to organize for continuous improvement of "best practice," defined as "industry techniques or methods that have proven over time to accomplish given tasks and objectives in a manner that most acceptably balances desired

outcomes and avoids undesirable consequences."<sup>8</sup> Continuous best practice refers to:

the evolution of best practice by adopting process improvements as they are identified, thus progressively improving the level and narrowing the distribution of performance of firms in the industry. Best practice is a particularly helpful management approach in a field that is growing rapidly, where technology is changing rapidly, and involves many firms of different size and technical capacity.<sup>9</sup>

Importantly, best practice does not mean a single process or procedure but allows for a range of practices that may be equally effective at achieving desired outcomes.

Similarly, the International Energy Agency's (IEA's) Golden Rules for a Golden Age of Gas includes as their first rule "Measure, Disclose, and Engage":

The public does not have reliable and up-to-date information about unconventional and shale gas operation. Data on water and air quality should be measured before the start of operations and monitored throughout operations. The type, volume, and effects of the chemicals being used in unconventional gas production ought to be made available. Engagement with communities is important and local communities should feel benefits from the operations.<sup>10</sup>

CSSD was formed to build upon the needs identified in these efforts for industry leadership and dialogue with community and environmental stakeholders. Its structure and by-laws present a template for other similar organizations. The mission of the organization is to bring together environmental, industry, and community organizations committed to ensuring the highest level of environmental and community responsibility when a decision is made to develop and extract shale gas. CSSD does not involve itself in decisions about where and when to extract gas—that is up to the individual companies and governmental authorities responsible for permitting and other authorizations. When the decision is made to extract gas, our focus is on how to do it right.

The original founding partners included four producers: CONSOL, Chevron, EQT Corporation, and Shell; and five environmental NGOs: Clean Air Task Force, Environmental Defense Fund (EDF), Group Against Smog and Pollution (GASP), Pennsylvania Environmental Council, and Pennfuture. Startup funding was provided by The Heinz Endowments and the William Penn Foundation.

The 12-member Board has equal numbers of representatives of industry, environmental, and civil society to ensure balanced input and concurrence of approach. Best practices

5. SHALE GAS ROUNDTABLE: DELIBERATIONS, FINDINGS, AND RECOMMENDATIONS 10 (Aug. 2013), available at <http://www.iop.pitt.edu/shalegas/PDF/90696%20SHALE%20GAS%20FULL%20REPORT-final.pdf>.

6. SEC'Y OF ENERGY ADVISORY BD., SHALE GAS PROD. SUBCOMM. NINETY-DAY REPORT, (Aug. 11, 2011), available at [http://www.shalegas.energy.gov/resources/081111\\_90\\_day\\_report.pdf](http://www.shalegas.energy.gov/resources/081111_90_day_report.pdf).

7. *Id.* at 27.

8. *Id.* at 26.

9. *Id.*

10. Carlos Pascual et al., *Golden Rules for a Golden Age of Gas*, CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE (June 1, 2012), <http://carnegieendowment.org/2012/06/01/golden-rules-for-golden-age-of-gas>; see also INT'L ENERGY AGENCY, GOLDEN RULES FOR A GOLDEN AGE OF GAS 43 (2012), available at [http://www.worldenergyoutlook.org/media/weoweb-site/2012/goldenrules/WEO2012\\_GoldenRulesReport.pdf](http://www.worldenergyoutlook.org/media/weoweb-site/2012/goldenrules/WEO2012_GoldenRulesReport.pdf).

are considered and recommended by a Standards Committee of representatives from the environmental and industry organizations and become effective only upon unanimous adoption by the Board. This ensures that any performance standard reflects the concurrence of all groups represented. To date, CSSD has adopted 15 performance standards addressing such subjects as impoundments, wastewater treatment and recycling, flaring, compressors, and pre- and post-drilling monitoring, all drafted to exceed the baseline of existing regulations.

From the outset, NGO and philanthropic representatives held that merely promulgating best practices was not sufficient—there had to be a process for independent auditing and inspection of gas producers to certify the standards were met, and the auditing process needed to be as transparent as possible. To implement this goal, CSSD adopted written standard-by-standard guidance to be used by auditors, standards for training and accreditation of auditors, and a verification protocol specifying the duration and scope of audits. All of these documents are provided for public review on the CSSD website. Certification is open to any producer willing to undergo the rigorous third party desk and field audits required. To date, CSSD has certified three producers as meeting these highest of standards. Certification is effective for two years, with at least one interim audit taking place during that two-year period.

Why would producers choose to participate in this type of program? The justification offered by the article for best practices regulation applies equally to voluntary

standards—“[T]he entire industry has a strong stake in promoting public confidence in shale oil and gas drilling, and in assuring that actions of a few irresponsible companies do not jeopardize the entire industry.”<sup>11</sup> Another reason is that, given the hodgepodge of state regulations across multiple jurisdictions, meeting voluntary standards is a way of obtaining greater substantive and cost certainty. Regulations, administrations, and agency priorities and interpretations may change, but a company’s commitment to best practices as a guidepost assures it will achieve no less, and often significantly more than what is required by regulation. From the standpoint of the regulated community, commitment to best practices backstops the possibility that administrative agency cuts in funding or personnel will undermine government’s ability to incorporate best practices into regulatory updates or to maintain rigorous enforcement. Finally, voluntary regulation provides the flexibility to innovate—something that is more difficult to do in a prescribed regulatory regime. A voluntary program offers participants the ability to experiment with different approaches to best practices without necessarily requiring regulatory approval.

The shifting economic, regulatory, political, and operational landscape of shale gas development requires regulatory approaches that are timely, flexible, and adaptive. Voluntary standards, particularly those that incorporate diverse perspectives, are a path toward responsible and constructive leadership that can inform and support development of a reasoned regulatory and legal structure.

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11. Merrill & Schizer, *supra* note 1, at 223.