



# WASHINGTON WATCH

## **EPA Assessing Utility of Toxic Substances Control Act to Obtain Information on Hydraulic Fracturing Chemical Substances and Mixtures**

**By Lynn L. Bergeson**

The United States Environmental Protection Agency (EPA) published in the May 19, 2014, *Federal Register* an advance notice of proposed rulemaking (ANPR) to seek comment on the information that should be reported or disclosed for hydraulic fracturing chemical substances and mixtures and the mechanism for obtaining this information. According to EPA, this mechanism could be regulatory (under Sections 8(a) and/or 8(d) of the Toxic Substances Control Act (TSCA)), voluntary, or a combination of both. It could include best management practices, third-party certification and collection, and incentives for disclosure of information. In addition, EPA seeks comment on ways to minimize reporting burdens and costs and avoid duplicating state and other federal agency information collections, while at the same time maximizing data available for EPA risk characterization, external transparency, and public understanding. EPA is also soliciting comments on incentives and recognition programs that could be used to support the development and use of safer chemicals in hydraulic fracturing. Comments were due on August 18, 2014. More information is available at <http://www2.epa.gov/hydraulicfracturing#outreach>.

## Background

According to the *Federal Register* notice, EPA received a petition from Earthjustice and 114 other groups on August 4, 2011, requesting that EPA issue TSCA Sections 4 and 8 rules requiring toxicity testing of chemicals and mixtures used in oil and gas exploration and production; reporting to EPA, among other things, the identity of those chemicals and mixtures; and submitting to EPA health and safety studies on the chemicals and mixtures. In EPA's November 2, 2011, initial response, EPA denied the TSCA Section 4 request for issuance of a test rule because, according to EPA:

...the petition did not set forth sufficient facts to conclude that it was 'necessary to issue' the requested TSCA section 4 rule, as required by TSCA section 21(b)(1). (Owens, 2011).

On November 23, 2011, EPA granted in part and denied in part the TSCA Section 8(a) and Section 8(d) requests by limiting the scope from chemicals and mixtures used in all processes of oil and gas exploration and production to chemical substances and mixtures used in hydraulic fracturing. EPA published a document with its rationale for its response to the petition in the July 11, 2013, *Federal Register*, and stated its intent to publish an ANPR to identify key issues for further discussion and analysis.

## Request for Comment

EPA requested comment on the design and scope of potential regulatory or voluntary approaches or combination of both approaches to obtain information on chemical substances and mixtures used in hydraulic fracturing. EPA invited comments on all aspects of the ANPR, including its description of hydraulic fracturing activities. The agency requested that

comments should provide enough detail and contain sufficient supporting information for EPA to understand the issues raised and give them the fullest consideration. Comments should have included alternatives, rationales, benefits, technological and economic feasibility (including costs), and supporting data. Supporting information should include any information that substantiates conclusions and recommendations, including, but not limited to, experiences, data, analyses, studies and articles, and standard professional practices. Below is a summary of the topics for which EPA sought comment. The ANPR includes more specific questions for each topic.

### ***Conceptual Approach to Reporting and Disclosure of Chemical Substances and Mixtures Used in Hydraulic Fracturing***

EPA sought comment on what information should be reported to EPA (or through a confidential business information (CBI) cleared third-party certifier) or disclosed publicly (by EPA) regarding the identity, quantities, types and circumstances of uses of chemical substances and mixtures used in hydraulic fracturing, as well as what types of health and safety studies should be reported or disclosed. EPA requested comments on whether and how data that are claimed to be CBI could be reported to EPA (or to a third-party certifier) and then aggregated and disclosed while protecting the identities of individual products and firms. EPA also requested comment on the appropriate mix of voluntary disclosure and/or regulatory reporting mechanisms. EPA noted that TSCA Section 8(e) requires manufacturers, importers, processors, and distributors to provide the agency with information on any of their chemical substances or mixtures that reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment.

## ***Who Should Report or Disclose Information on Chemical Substances and Mixtures Used in Hydraulic Fracturing***

Under TSCA Section 8(a), EPA has the authority to require, by rulemaking, chemical manufacturers and processors to maintain records and submit to EPA reports about chemical substances and mixtures, as well as environmental and health data on those substances and mixtures.

According to EPA, the hydraulic fracturing industry includes a variety of companies that could be subject to TSCA Section 8(a) reporting, including chemical manufacturers, chemical suppliers who engage in processing, service providers mixing chemicals on site to create the hydraulic fracturing fluids, and service providers responsible for injecting the hydraulic fracturing fluid into the well to fracture the formation. EPA requested comment on whether, in the context of a potential reporting and/or disclosure program, all or any companies should be required to report or whether a specific type or types of company (*e.g.*, chemical supplier) should be required to report and other types of company (*e.g.*, service provider) should be encouraged to report voluntarily.

## ***Scope of Reporting or Disclosure of Information on Chemical Substances and Mixtures Used in Hydraulic Fracturing***

EPA sought comment on the information that should be reported or disclosed regarding chemical substances and mixtures used in hydraulic fracturing. According to the notice, EPA appears to be exploring various regulatory approaches, voluntary approaches, or a combination of both for obtaining this information. Under TSCA Section 8(a), EPA has the authority to require, by rulemaking, chemical manufacturers and processors to maintain records and submit to EPA such reports as EPA may reasonably

require. EPA stated that it expects that data obtained could be aggregated to provide a national list of the chemical substances and mixtures used in hydraulic fracturing, providing it with the ability to determine which chemicals are used most frequently. For chemicals that have not been previously well-characterized in terms of their chemical, physical, and toxicological properties, EPA may conduct research to understand better these properties to perform a basic risk characterization.

### ***Use of Third-Parties***

EPA requested comments on the use of third-parties for the collection of information on chemical substances used in hydraulic fracturing and/or to certify the use of best practices.

### ***Reporting Threshold and Frequency of Reporting or Disclosure***

EPA stated that it is interested in comments regarding the threshold for the size of entities that should be required or encouraged to report or disclose information on chemical substances and mixtures used in hydraulic fracturing and environmental and health data on those substances and mixtures. EPA also stated that it is interested in comments regarding how often reporting or disclosure should take place.

### ***Data Collection Efficiency***

According to the notice, EPA believes that any mechanism for reporting and/or disclosure of information on chemical substances and

mixtures should be structured in a manner that minimizes the potential for duplication and overlap.

### ***Health and Safety Studies of Chemicals and Mixtures Used in Hydraulic Fracturing***

EPA sought comment on potential options for reporting or disclosure of health and safety studies for chemical substances and mixtures used in hydraulic fracturing. Under TSCA Section 8(d), EPA has the authority to require manufacturers, processors, and distributors of any chemical substance or mixture and persons who propose to manufacture, process, or distribute in commerce any chemical substance or mixture to submit health and safety studies to EPA. EPA noted that one mechanism for the collection of these studies is TSCA Section 8(d), while other mechanisms could include voluntary approaches. EPA requested comment on the types of companies that would report or disclose health and safety studies. EPA also requested comment on whether companies should be required to report studies or be encouraged to disclose studies, or whether a combination of regulatory and voluntary approaches should be used to obtain health and safety studies.

### ***Safer Chemicals and Transparency***

According to EPA, incentives and recognition programs could be used to support the development and use of safer chemicals (both those created deliberately and inadvertently) in hydraulic fracturing. EPA believes that safer chemicals are generally less toxic to human health and the environment, and are less persistent and bioaccumulative than their alternatives. Under an EPA-sponsored voluntary initiative, EPA stated that it

could provide resources and recognition for companies committed to promoting and using safe and sustainable practices. EPA noted that such a voluntary program could help companies meet corporate sustainability goals by providing the means to, and an objective measure of, environmental stewardship. Information that could be collected or disclosed under such a voluntary program could be used to verify a company's eligibility for awards or recognition in relation to identified measures and goals.

EPA suggests that existing programs that encourage the development of safer chemicals (*e.g.*, the Green Chemistry Program and the Sustainable Futures Program) or the use of safer substitutes (*e.g.*, Design for the Environment) could serve as models for application to hydraulic fracturing. According to EPA, a similar program focusing on chemicals used in hydraulic fracturing could speed adoption by well owners, operators, and suppliers of safer chemicals. The program could also increase public understanding about chemical choice and use in hydraulic fracturing. EPA stated that, to determine whether replacement chemicals are safer, it would be important to take into account the effectiveness and potential associated risks with the alternative chemicals. EPA requested comment on strategies for creating incentives and voluntary approaches for the development and use of safer chemicals.

## **Discussion**

The ANPR delivers on EPA's commitment to engage in a stakeholder process to develop an approach to obtaining information on chemicals used in hydraulic fracturing. At the same time, given the scope and complexities of the areas discussed in the notice, and the probably strong resistance by some manufacturers to disclose information, it is less

than clear that EPA will obtain useful information in response to the ANPR that will assist its consideration of the issues and contribute to a workable approach for obtaining the information requested by the petitioners.

The petitioners' request for Section 8 reporting was relatively straight-forward, asking for reporting of information on chemical identities, quantities, byproducts, the number of potentially exposed individuals, and related information. While there are several possible complexities at play, particularly concerning EPA's role versus that of other ongoing or planned information reporting (e.g., by FracFocus, various states, other federal agencies [Bureau of Land Management (BLM)]), for which the ANPR might have produced some useful comments, the notice raises a host of additional questions that, in turn, raise significant and difficult legal, procedural, and policy issues. While a full review of the many such issues raised is beyond the scope of this analysis, the following are noteworthy:

- TSCA Section 8 enables EPA to require reporting from manufacturers (including importers) and processors, but not users. In discussing the companies that could be subject to reporting, EPA discussed "service providers responsible for injecting the hydraulic fracturing fluid into the well." While such service providers might process (blend) the chemicals during earlier stages, they could become users (and "end users" for that matter) when doing the injection and would not be subject to reporting. Or by raising the point was EPA *sotto voce* asking for comment on whether such an activity fits within "processing"? In context, either interpretation is possible.



- Early in the notice, without explanation, the concept of reporting to EPA “through a CBI cleared third-party certifier” was raised. Bergeson & Campbell, P.C. has been involved in TSCA matters for over three decades and, while we recognize that appropriately cleared government officials and EPA contractors can access CBI, we have never encountered this formulation and wonder why EPA did not provide an explanation.
  
- In discussing the “scope of reporting,” after reviewing a series of standard elements for Section 8(a) reporting, how the chemicals and mixtures used “may react to create other chemical substances and mixtures as products within an on-site mixing apparatus or in the well” was discussed and EPA asked for comment on the reporting that should be included.
  
- Regarding “safer chemicals,” EPA raised questions and pointed to its ongoing efforts such as Green Chemistry and Design for the Environment. While we see merit in pursuing efforts to encourage the use of safer chemicals in hydraulic fracturing operations, we were puzzled when the notice characterized these as involving “safer chemicals (both those created deliberately and inadvertently) in hydraulic fracturing.” The parenthetical phrase adds little beyond confusion to the discussion of developing and using safer chemicals in hydraulic fracturing.

In general, the ANPR may reflect an attempt by EPA to send up a large trial balloon of various ideas that may or may not altogether reflect the realities of what could be achieved under current TSCA authority or that are consistent with present TSCA program implementation. It may be that some ideas commented upon in the ANPR notice may be beyond anything likely to be implemented by EPA's Office of Pollution Prevention and Toxics, but nonetheless may receive favorable consideration by other agencies or under different authorities under EPA's jurisdiction. Given the importance of the issue, stakeholders undoubtedly gave careful consideration to EPA's request for comment to ensure the many important questions that were asked were thoughtfully answered.

At the same time, such a broad, generalized call for consideration of various suggestions and ideas runs some risks for EPA's toxic chemical programs (even if one includes the Toxics Release Inventory (TRI) program along with the TSCA implementation activities). While having numerous ideas "in play" and able to claim that they are "under consideration," the Administration may be raising expectations among environmental constituencies, some of which will likely ask about how or when any of these initiatives will happen. As an ANPR, and one with somewhat novel or untested approaches as discussed earlier, the actual timeframe during which one should expect any final rule to make any of this a reality is four to six years at a minimum. A cynic might note that this puts any decisions about final rules beyond the reach of current Administration officials. Although there are no indications that this is a conscious element of the current announcement, no one should expect action taken under this initiative to happen anytime soon.

## References

Owens, S.A. (2011). Letter to Deborah Goldberg, Earthjustice. Re: TSCA Section 21 Petition Concerning Chemical Substances and Mixtures Used in Oil and Gas Exploration or Production. Available at: <http://www.epa.gov/oppt/chemtest/pubs/SO.Earthjustice.Response.11.2.pdf>

---

**Lynn L. Bergeson** is the Managing Partner of Bergeson & Campbell, P.C., a Washington, D.C. law firm focusing on conventional, nano, and biobased chemical, pesticide, and other specialty chemical product approval and regulation, environmental, health, and safety law, chemical product litigation, and associated business issues. Ms. Bergeson is also President of The Acta Group, with offices in the U.S., U.K, and China. The views expressed in this article are entirely those of the author. [www.lawbc.com](http://www.lawbc.com)