SIERRA CLUB
FOUNDED 1892

March 25, 2014

By Electronic Mail

To: DOE FracFocus 2.0 Task Force

Dear Chairman Deutch and Task Force Members:

Sierra Club offers the following comments on the Secretary of Energy Advisory Board's (SEAB) February 24th Task Force Draft entitled "*Task Force Report on FracFocus 2.0.*"[1]

As the report indicates, discussion of FracFocus inevitably requires discussion of the appropriate scope and structure of well stimulation chemical disclosure in general. Numerous states have adopted FracFocus as the official mechanism for state-mandated disclosures, and BLM has proposed using FracFocus for disclosure for wells on federal lands. Sierra Club contends that, in its current form, FracFocus is an inappropriate tool for mandated disclosures. Nonetheless, insofar as these states do use FracFocus for these purposes, DOE, through its funding and thus oversight of FracFocus, must take all available steps to ensure that FracFocus is adequate to the task. Sierra Club's comments here therefore address both FracFocus specifically and the appropriate contours of disclosure programs generally.

We agree that each of the measures recommended in the report would be a step in the right direction and lead to improvement of FracFocus. However, even if these measures are uniformly implemented, FracFocus will continue to provide an incomplete tool for handling hydraulic fracturing fluid disclosures. We therefore offer these comments regarding additional issues.

Robust Disclosure Requirements Are Vital

Sierra Club joins the current Report and the 2011 Subcommittee reports in "strongly endors[ing] full disclosure of the chemical composition of fracturing fluids." Report at 10.

Full disclosure of all chemicals used is necessary because these chemicals have been and will be discharged into the environment as a result of unconventional oil and gas production. On this point, we are concerned with the Report's endorsement of the 2011 Subcommittee statement that "The Subcommittee shares the prevailing view that the risk of fracturing fluid leakage into drinking water sources through fractures made in deep shale reservoirs is remote." *Id.* The best available science indicates that in at least two instances, fractures in the target formation itself (fractures growing "out of zone" and/or communicating with an abandoned well) have caused methane contamination in groundwater, indicating a potential pathway for stimulation fluid

[1] Secretary of Energy Advisory Board, Draft Task Force Report on FracFocus 2.0, U.S. DOE, February 24, 2014.

migration as well.[2] More importantly, leakage "through fractures made in deep shale" is only a small part of the problem. In numerous other instances, unconventional production has contaminated ground water as a result of leakage through improper well casing or contamination from activities on the surface, such as chemical spills or seepage from ponds.[3] Policymakers must consider the entire sphere of activity associated with well stimulation and unconventional production, and it is clear that this activity has caused groundwater contamination in the past and presents a real danger of doing so in the future.

In light of this danger, well stimulation disclosure rules serve a number of vital purposes. Disclosure of chemicals used facilitates a more thorough environmental review of the risks and consequences of well stimulation, enables government to better craft appropriate regulation to protect public health and environmental resources, and will likely incentivize drillers to use safer chemicals. For example, BLM and other relevant federal agencies, such as the U.S. Forest Service, cannot evaluate the risks that a particular stimulation treatment poses to the lands and resources these agencies manage without knowing the anticipated chemicals and their concentrations. Many hydraulic fracturing chemicals are toxic.[4] Some, like formaldehyde, are known carcinogens.[5] On a more immediate scale, knowledge of the chemicals used in well stimulation helps those who might be exposed to the chemicals to determine what chemicals they may have been exposed to, who is at fault for any exposure, and the appropriate response. Medical professionals need to know the chemicals used when diagnosing and treating exposure to the chemicals, and to study the public health effects of well stimulation. We discuss other purposes of disclosure in connection with advance disclosure, below.

Accordingly, the Task Force should affirm the urgent and strident need for robust disclosure requirements.

Disclosure Must Encompass All Chemicals, Without Exceptions for Trade Secrets

As noted above, we agree with the Task Force that "*full disclosure* of the chemical composition of fracturing fluids" is vital. Report at 10 (emphasis added). Subsequent language in the Report, however, inappropriately retreats from this position by positing a role for trade secret exemptions from disclosure. Such exemptions are both inappropriate and unnecessary, a fact that the Task

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[2] Natural Resources Defense Council and Sierra Club's Response to Question from Senator Landrieu Regarding Water Contamination (June 5, 2013), *attached.*

[3] *Id.*

[4] See Theo Colborn et al., Natural Gas Operations from a Public Health Perspective, 17 Hum. & Ecological Risk Assessment: An Int'l J. 1039,1040, 1045-46.

[5] See Id. at 1050, tbl.2; International Agency for Research on Cancer, List of Classifications by CAS Number Registry, available at http://monographs.iarc.fr/ENG/Classification/index.php.

Force appears to recognize despite its limited endorsement of narrow trade secret provisions. Because trade secret exemptions are unnecessary, contrary to the public interest, and have proven unworkable in practice, the Task Force should clearly state its opposition to any trade secret exemptions to disclosure requirements.

Complete disclosure of all chemicals and techniques used in well stimulation is required to adequately protect the environment and public health. For instance, if the identities of certain chemicals are withheld, physicians may be unaware of certain chemicals to which a patient may have been exposed. This may make it difficult or impossible to accurately diagnose and treat the patient, or to understand the interactive effects that chemicals can have on a patient's health. Because complete information is necessary to "ensure that acute exposures are handled appropriately and to ensure that surveillance programs are optimized," the Pediatric Environmental Health Specialty Units, a network of experts in children's environmental health, have recommended full disclosure of all chemical information.[6]

Beyond care of individual patients, epidemiologists and other public health researchers require knowledge of the full suite of chemicals used in order to evaluate the risks posed by well stimulation, and these researchers must be able to freely share information about stimulation chemicals. State officials also need chemical information to evaluate the hazards posed by these chemicals in advance of hydraulic fracturing. Information on chemicals used also encourages industry to create safer products and allows parents and community leaders to protect families from unnecessary toxic exposures. Trade secret exemptions undermine these purposes and put public health at risk.

As the Task Force recognizes, requiring full disclosure of all chemicals used imposes a minimal burden on industry, because chemicals can be reported through a "systems approach" that identifies all chemicals used in aggregate, disassociating chemicals from individual products and additives. Report at 13. Industry has not shown that this approach, without any further exemptions from disclosure, is inadequate to protect industry's interests.

Even if full disclosure does interfere with industry interests in maintaining confidentiality, that industry interest is outweighed by the public interest in full disclosure. The Task Force appropriately recognizes that the Emergency Planning and Community Right-to-Know Act represents a conclusion of exactly this type, requiring disclosure of information even if it is a trade secret when the public interest requires. Report at 12. As Sierra Club and others explained in comments to BLM, BLM has the authority to require full disclosure *even if* the disclosed information contains trade secrets.[7] States generally have similar authority.

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[6] Pediatric Environmental Health Specialty Units, *PEHSU Information on Natural Gas Extraction and Hydraulic Fracturing for Health Professionals* 3 (Aug. 2011) *available at* aoec.org/pehsu/documents/hydraulic_fracturing_and_children_2011_health_prof.pdf.

[7] *See, e.g., Chrysler Corp. v. Brown*, 441 U.S. 281, 301-302 (1979).

Finally, we note that existing frameworks that provide for trade secret exemptions to disclosure have proven unworkable in practice. The Task Force identifies Wyoming as an example of a "good" trade secret framework, insofar as it requires that "trade secret disclaimers [be] documented and attested." Report at 13. Yet as the Wyoming Supreme Court recently determined, the Wyoming trade secret exemption has been invoked inappropriately, with inadequate proof, in numerous cases.[8]

Any trade secret exemption to full disclosure of the chemicals used is unnecessary, contrary to the public interest, and likely to be abused. Accordingly, the Task Force should advocate full disclosure without any such exemption. If a trade secret exemption is allowed, it must be extraordinarily narrow, with standards at least as stringent as those identified by the Task Force.

Chemicals Must Be Disclosed Prior To Well Stimulation

Some states, such as Wyoming and California, require disclosure of well stimulation chemicals prior to actual stimulation. Advance disclosure serves a number of important purposes. The Task Force should call for such advance disclosure generally, and ensure that FracFocus is modified to facilitate advance disclosure.

Nearby residents benefit from pre-treatment disclosure because it enables them to conduct appropriate baseline testing and is a basis for future monitoring of water quality. Local governments need advance knowledge of the chemicals that may be used to ensure that emergency responders have the training, personal protective equipment, and plans needed to respond to accidents, and that they are adequately protected from chemicals and not unwittingly exposed. Prior disclosure not only allows for preparation in advance of accidents, it also ensures that appropriate information is immediately available when an accident occurs. For example, advance disclosure that makes this information public prior to stimulation facilitates immediate access to this information for emergency responders, who might otherwise have to request this information from the supplier or operator in an emergency.

As the Task Force recognizes, FracFocus currently does not provide functionality consistent with advance disclosure. Report at 19. The Task Force should go beyond this observation and identify this functionality as a vital part of a disclosure framework, calling for both its provision by FracFocus and requirement by regulators.

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[8] http://earthjustice.org/news/press/2014/wyoming-supreme-court-rejects-fracking-industry-argument-to-withhold-chemicals-as-trade-secrets, http://www.courts.state.wy.us/Opinions/2014WY37.pdf.

FracFocus Fails To Provide Information In An Appropriate Form

The public must be provided with comprehensive access to chemical information in a format that facilitates aggregation, analysis, and further study. FracFocus, in its current form, not only fails to facility such access: FracFocus actively inhibits it, by including "'terms of use' [that impose] restrictions on sharing and aggregation of data on the site." Report at 16. These restrictions are arbitrary, unnecessary, and completely inappropriate for any official repository of mandatory reporting data.

While the Task Force identifies various measures that would improve public access to information disclosed via FracFocus, this is another area in which the Task Force's recommendations fail to go far enough. The Task Force implies that FracFocus would provide adequate public access if it modified the way in which PDFs are generated and allowed batch downloading of PDFs. Report at 18. Although PDFs provide a valuable method of access for some members of the public, they are an inadequate substitute for aggregate data in "raw, machine-readable form." *Id.* The Task Force should clarify that provision of such data is not merely "one way" to improve FracFocus's provision of data, but a vital tool that must be added.

Data Integrity and Retention

As explained by the Task Force, FracFocus fails to meet many standards for government retention and integrity of information. Sierra Club agrees with the measures identified by the Task Force to address these problems, and with the conclusion that unless and until these deficiencies are somehow cured, BLM and other federal agencies are precluded from using FracFocus.

Although Sierra Club agrees that states that use FracFocus for officially mandated disclosures should download data from FracFocus regularly, it is unclear whether this practice would suffice to bring the reported information properly within the ambit of state public records and data storage laws. Further investigation on this issue is appropriate. Until these questions are resolved, FracFocus is an inappropriate repository for official data.

The Task Force identifies a number of common sense, easy to implement measures to improve data integrity on FracFocus. Sierra Club submits that FracFocus should also provide a mechanism whereby members of the public can flag and report errors.

Finally, the Task Force should direct additional attention to accountability and enforcement of reporting requirements when reporting is done through FracFocus. This is another issue that has received inadequate attention from states that have elected to use FracFocus for mandatory reporting.

Conclusion

Sierra Club appreciates the attention the Task Force has directed toward FracFocus, and the Task Force has performed an important service by identifying many of the flaws in FracFocus and difficulties with its use as an official reporting mechanism. However, there are several areas in which the Task Force must strengthen its discussion and recommendations. Notably, the Task Force should call for full disclosure of all chemicals used, without exceptions for trade secrets; for disclosure in advance of production; and for States and Federal Agencies to abstain from using FracFocus as an official reporting mechanism until limits in FracFocus are remedied and questions regarding the use of FracFocus as a public repository are answered.

Sincerely,

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