November 15, 2017

The Honorable Scott Pruitt, Administrator
U.S. Environmental Protection Agency Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Ave., NW; Mail Code 1101A
Washington, DC 20460

Dear Administrator Pruitt:

Citizens have a right to know what health hazards we are being exposed to, especially when these hazards have been identified by government health assessments. As health professionals, scientists and first responders, we therefore ask you to disclose the confidential identities of 41 chemicals designed for use in oil and gas drilling and hydraulic fracturing that EPA identified as potentially harmful under the New Chemicals program between 2003 and 2014. These identities are likely the only way for the public to determine where these chemicals are being used so that citizens, scientists and regulators can monitor for the chemicals in the environment and take other steps to protect public health. The federal Toxic Substances Control Act (TSCA) provides that such confidential information "shall be disclosed if the Administrator determines that disclosure is necessary to protect health or the environment against an unreasonable risk of injury to health or the environment."[1] We urge you to act under this authority to reveal the information marked "confidential" or "missing" in the attached spreadsheet including Chemical Abstracts Service (CAS) numbers, chemical names, trade names, and manufacturer names.

EPA identified health concerns about the chemicals

Between 2003 and 2014, EPA regulators identified health concerns about each of the 41 substances, according to documents released in response to a Freedom of Information Act request filed by nonprofit groups Partnership for Policy Integrity (PFPI) and Earthworks. Manufacturers proposed some of the 41 chemicals for use in hydraulic fracturing, a process that typically involves underground injection at high pressure of a mix of water, sand, and chemicals to fracture rock formations and release trapped oil or natural gas. The other chemicals were proposed for use in drilling oil and gas wells, a process that precedes fracking. Regulators' concerns ranged from "irritation to the eye, skin, and mucous membranes"[2] to kidney toxicity[3], liver toxicity,[4] neurotoxicity, and developmental toxicity.[5]

EPA allowed chemicals to be used

Despite identification of health concerns, EPA approved the chemicals for manufacture and use, in most cases without health testing that EPA can require under the law. Partly because of this failure to require such health testing, since 2009, the Government Accountability Office has placed EPA's chemicals review program on its list of government programs at highest risk of waste, fraud, abuse and mismanagement.[6] Additional evidence, including notices sent to EPA that commercial manufacturing for 23 of the chemicals had begun, shows that the chemicals were used or in some cases probably used in oil and gas wells.

Chemical identities are virtually the only way to find chemicals

When EPA has raised health concerns about chemicals, and these chemicals are injected in oil and gas wells, the public should know where and when the chemicals are being used. Yet without identities, it is virtually impossible to locate the chemicals. EPA does not track where new chemicals are used once they are approved. Nor does EPA monitor for these chemicals in the environment.[7] The only likely way to find the chemicals is by searching for them in FracFocus and California's well stimulation disclosure database, repositories of fracking chemical disclosure for more than 125,000 wells in at least 23 states. Searches for chemicals must be conducted by CAS number (a unique numeric identifier for each chemical), chemical name, or trade name. Yet, in EPA's records, chemical manufacturers withheld CAS numbers, or the numbers were missing, for all 41 chemicals. Many of the other identifiers were confidential or missing, too.[8] Utilizing the available information, PFPI searched the databases and was able to document only two of the 41 chemicals as being used in specific oil and gas wells.[9] Even here, the search results may have been incomplete because the chemicals' CAS numbers were confidential, and FracFocus has stated that CAS numbers are the best way to search for chemicals.[10] PFPI's research shows that it is unrealistic to expect to locate the chemicals through other federal chemical disclosure regimes such as the Emergency Planning and Community Right to Know Act (EPCRA)[11] due to logistical hurdles, reporting exemptions, and provisions that allow confidentiality claims.[12] TSCA provides health providers with some access to confidential information, yet such access likely requires proof of exposure – proof that would be difficult to establish without prior disclosure and testing for chemicals in the environment.[13] In any event, the public has a right to know where and when these chemicals are being used.

Public exposure to these chemicals is possible

Evidence suggests that human exposure to the 41 chemicals is not just hypothetical. In recent investigations, people living near well sites have reported health problems consistent with some of the health concerns identified by EPA including skin conditions, upper respiratory symptoms, and memory loss.[14] In addition, leaks and spills of drilling and fracking chemicals are common at well sites. In a recent report on fracking and drinking water, EPA acknowledged "the many potential sources for leaks and spills" of fracking chemicals.[15] In disclosures to investors required by the U.S. Securities and Exchange Commission, drilling companies have stated that accidental releases of drilling and fracking chemicals are among the most significant risks facing their businesses.[16] EPA estimated that between 2000 and 2013, drilling companies hydraulically fractured 21,900 oil and natural gas wells located within one mile of a water well or surface water where water was withdrawn for public water systems - public water systems that serve an estimated 8.6 million people.[17] Therefore, it is possible that some of the 41 chemicals were released and that people were exposed, whether through water or other routes. If drilling occurred in areas currently off-limits including Maryland, New York and the Delaware River basin, millions more could be exposed.

TSCA requires disclosure of confidential information if there is an unreasonable risk

It is an unreasonable risk for people to be unknowingly exposed to chemicals that EPA, itself, has identified as potentially harmful. We ask you to release the 41 chemicals' identifying information so that health professionals, scientists, first responders, citizens and regulators can locate these chemicals and act to protect public health.

cc: Charlotte Bertrand, Acting Principal Deputy Assistant Administrator

Sincerely,

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[1] Pub. L. No. 114-182 § 11(d)(3) (modifying Pub. L. No. 94-469 § 14(a)(3) and codified as amended at 15 U.S.C. § 2613 (d)(3)).

[2] See, e.g., EPA record number L-14-0273, FOCUS Report (April 30, 2014).

[3] See, e.g., EPA record number P-13-0369, SAT Report (Aug. 19, 2014) at 2.

[4] See, e.g., EPA record number P-12-0072, FOCUS Report (Dec. 15, 2011) at 2.

[5] See, e.g., EPA Record number P-10-0050, SAT Report (Nov. 26, 2014) at 2.

[6] U.S. Government Accountability Office. (2009). High-Risk Series: An Update (Publication No. GAO-09-271). 22-24. Retrieved from http://www.gao.gov/assets/290/284961.pdf. U.S. Government Accountability Office. (2017). High-Risk Series: An Update (Publication No. GAO-15-290). 425-429. Accessed online at http://www.gao.gov/assets/690/682765.pdf.

[7] Meeting with Greg Schweer et al., Chief New Chemicals Management Branch, Office of Pollution Prevention and Toxics, Dusty Horwitt, Senior Counsel, Partnership for Policy Integrity, Aaron Mintzes, Policy Advocate, Earthworks (February 10, 2016).

[8] Chemical makers withheld chemical names for 40 of 41 chemicals. Trade names for 24 of 41 chemicals were confidential or missing. Manufacturer names for 24 of the 41 chemicals were confidential or missing.

[9] The chemicals were EPA record numbers P-09-0085 and P-12-0072.

[10] FracFocus. What Chemicals Are Used? Accessed online at http://fracfocus.org/chemical-use/what-chemicals-are-used.

[11] EPCRA is intended to help first responders and emergency planners. It requires that operators of facilities that use hazardous chemicals such as oil and gas wells provide lists of the chemicals or safety data sheets about specific chemicals to the state commissions, local committees, and the local fire department with jurisdiction over the facility. Another federal law, the Comprehensive Environmental Response, Compensation and Liability Act or CERCLA requires operators of oil and natural gas wells to report releases of certain hazardous substances to the National Response Center, an entity created by the Clean Water Act.

[12] FracFocus has suggested that these laws could help locate fracking chemicals. See FracFocus. Chemicals and Public Disclosure. Accessed online at http://fracfocus.org/chemical-use/chemicals-public-disclosure. But among the problems with this argument are these: EPCRA generally requires reporting of chemicals to local and state emergency planning entities if they are stored at well sites in quantities of 10,000 pounds or more. See 42 U.S.C. § 11022; 40 CFR § 370.10. EPA reports that most fracking chemicals are used at well sites in smaller quantities. See U.S. Environmental Protection Agency. Hydraulic Fracturing for Oil and Gas: Impacts from the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States (2016), at 5-27. Accessed online at https://www.epa.gov/hfstudy. EPCRA also allows withholding of chemical information as a trade secret. See 42 USC §11042. CERCLA requires operators of oil and natural gas wells to report releases of certain listed hazardous substances to the National Response Center, an entity created by the Clean Water Act. But based on the available chemical identities, none of the 41 chemicals in this petition appear on the list and would, therefore, not be subject to such reporting. See Pub. L. 96-510 §§ 102 and 103 (codified at 42 U.S.C. §§ 9602 and 9603). 40 CFR § 302.4 (providing the list of hazardous substances and their reportable quantities).

[13] 15 USC § 2613(d)(5)-(6).

[14] See, e.g., Peter Rabinowitz et al. Proximity to natural gas wells and reported health status: results of a household survey in Washington County, Pennsylvania. Environmental Health Perspectives, (2015) 123, 21-26. doi: 10.1289/ehp.1307732.
[15] U.S. Environmental Protection Agency. Hydraulic Fracturing for Oil and Gas: Impacts from the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States (December 2016) at 5-31. Accessed online at https://www.epa.gov/hfstudy.
[16] See, e.g., Noble Energy, Inc. Form 10-K filed with the U.S. Securities and Exchange Commission, at 38-39 (Feb. 14, 2017).
[17] EPA Fracking and Drinking Water Study, supra note 14, at 2-14.