

Frackers can use dangerous chemicals without disclosure due to “Halliburton loophole”

A fracking rig targets the Marcellus Shale.

reader comments

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For almost 20 years, US public-health advocates have worried that toxic chemicals are getting into ground water and harming human health because of an exemption to the federal Safe Drinking Water Act that allows operators of oil and gas fracking operations to use chemicals that would be regulated if used for any other purpose.

The so-called Halliburton Loophole, named after the oil and gas services company once headed by former Vice President Dick Cheney, means that the industry can use fracking fluid containing chemicals linked to negative health effects including kidney and liver disease, fertility impairment, and reduced sperm counts without being subject to regulation under the act.

While environmentalists and public-health campaigners have long called for closing the loophole, they haven't known how many of the regulated chemicals are used by the industry, how often the industry reports their use in its fracking disclosures, what quantities of the chemicals are used, and how often the industry chooses not to identify its chemicals on the grounds that they are proprietary.

Now, some of that data is publicly available in a study by researchers at Northeastern University and three other colleges. The paper, published in its final form in February, reports that the industry uses 28 chemicals regulated under the Safe Drinking Water Act and discloses them in up to 73 percent of its reports of fracking activities to FracFocus, an industry-sponsored database.

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Between 2014 and 2021, the industry used 282 million pounds of the regulated chemicals, a number dwarfed by the 7.2 billion pounds of chemicals that were reported but not identified on the grounds that they are proprietary or trade secrets, the paper said.

The chemical most frequently reported to the database during that period was ethylene glycol, used by the industry as a friction-reducer and gelling agent, that can harm the eyes, skin, kidneys, and respiratory system and even kill humans if swallowed, according to the federal Centers for Disease Control and Prevention.

Ethylene glycol was disclosed to FracFocus more than 52,000 times, or 45 percent of all disclosures, more than twice as often as any of the other regulated chemicals, during the study period. Operators used about 250 million pounds of the chemical, the study said.

The second-most commonly reported fracking chemical subject to the loophole was acrylamide, another friction-reducer, which appeared in 19 percent of the cases notified to the database. Its health effects include nervous-system impairments including muscle weakness, numbness in hands and feet, and sweating, according to the CDC.

Benzene, which can cause cancer at high or prolonged exposures, was reported only 111 times but had one of the largest weights of the regulated chemicals, at 7.5 million

pounds, according to the paper, titled *Outcomes of the Halliburton Loophole: Chemicals regulated by the Safe Drinking Water Act in U.S. Fracking Disclosures, 2014-2021*.

Other regulated chemicals identified by the study include naphthalene, formaldehyde, and 1,4 dioxane, which are variously linked to negative effects on the nervous, respiratory, urinary, and gastrointestinal systems.

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