



National Tribal Toxics Council

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September 17, 2014

Wendy Cleland-Hamnett, Director
Office of Pollution Prevention and Toxics
Document Control Office (7407M)
1200 Pennsylvania Ave NW
Washington, DC 20160-0001

**RE: EPA-HQ-OPPT-2011-1019
Consultation and Coordination on Hydraulic Fracturing Chemicals and Mixtures
Advance Notice of Proposed Rulemaking Comment Submittal**

Dear Director Cleland-Hamnett,

Thank you for your continued support of the National Toxics Council's (NTTC) role in the Office of Pollution Prevention and Toxics (OPPT) programs on issues related to chemical safety, toxic chemicals, and pollution prevention. Among the key issues that the NTTC is focusing on are ways to reduce tribal exposure to toxic chemicals in Indian Country.

The NTTC appreciates the opportunity to participate in the recent Consultation and Coordination on Hydraulic Fracturing Chemicals and Mixtures Advance Notice of Proposed Rulemaking process. Among the numerous areas of concern with the hydraulic fracturing process and the many chemicals used in the process, the Council's priorities are the protection of tribal water resources, subsistence foods, and traditions. Also addressed in the attached comments document, the NTTC encourages transparency regarding the chemicals used in the hydraulic fracturing process and to address their "Trade Secret" and "Proprietary" classifications. It is most difficult, if not impossible, for tribal environmental staff to monitor and test for the presence of a substance if there is little or no information available. Complete chemical information is also critical for first responders to safely respond to spills and releases occurring on tribal lands.

Sincerely,

Dianne C. Barton, Chair National Tribal Toxics Council

Hydraulic fracturing first experimented in Grant County, Kansas in 1947, at that time the engineering was simple and unsophisticated- source KU-Kansas Geological Survey- December 2011. During the 1980's into the 1990's, George P. Mitchell's company, Mitchell Energy & Development Corp, developed new drilling and production techniques to yield oil/gas at unprecedented levels via horizontal hydraulic fracturing that use chemicals, sand and vast quantities of water in this process of energy extraction. The Energy Policy Act of 2005 exempted fluids that are used in the natural gas extraction process of hydraulic fracturing from the regulatory process that is set by EPA SWDA. Specifically, the 'Halliburton Loophole' exempts companies that drill for natural gas from disclosing proprietary chemicals that would otherwise be regulated under the Federal Safe Drinking Water Act.

Contamination of water supply has been reported by many people across the nation. Oil and gas industry continue to uphold that this process is safe and there is no contamination. Kansas Geological Survey- public information circular 32 states, "The Kansas Corporation Commission, as the regulatory agency, approves, oversees, and inspects such operations, and no ground-water contamination has been reported to them as a consequence of fracking operations in Kansas". The question that we pose is "How can the State or a tribe monitor for a chemical that is safeguarded by law under non-disclosure?" The 2013 winter edition of AISES states "examination of fracking fluid have detected volatile organic compounds like benzene, toluene, ethylbenzene, and xylene. This past September the U.S. Geological Survey confirmed that groundwater on the Wind River Indian Reservation in Wyoming contains contaminants associated with fracking".

According to an Environmental Integrity Project (EIP) report, "Fracking Beyond the Law," uses self-reported data from drilling companies and federal records to document at least 33 companies fracking at least 351 wells across 12 states with fluids containing diesel from 2010 through early August 2014. Diesel fuels were used to frack wells in Texas, Colorado, North Dakota, Arkansas, Oklahoma, Wyoming, New Mexico, Utah, Kansas, Pennsylvania, West Virginia, and Montana without required Safe Drinking Water Act permits."- Source: environmentalintegrity.org.

Drilling operators are prohibited from injecting diesel fuels to hydraulically fracture oil and gas wells unless they are authorized by a Safe Drinking Water Act permit. "Diesel fuel is also often used as the main ingredient in oil-base mud drilling fluid.^[47] The advantage of using diesel is its low cost and that it delivers excellent results when drilling a wide variety of difficult strata including shale, salt and gypsum formations.^[47] Diesel-oil mud is typically mixed with up to 40% brine water.^[48] Due to health, safety and environmental concerns, Diesel-oil mud is often replaced with vegetable, mineral, or synthetic food-grade oil-base drilling fluids, although diesel-oil mud is still in widespread use in certain regions.^[49]"

"Our findings based on these new documents continue to raise serious concerns. Between 2005 and 2009, 12 of the 14 companies used 32.7 million gallons of diesel fuel or fluids containing diesel fuel. BJ Services used the most diesel fuel and fluids containing diesel, more than 11.5 million gallons, followed by Halliburton, which used 7.2 million gallons"-Waxman.

"We urge the EPA and the states to exercise their legal authority by immediately investigating the compliance status of these 351 wells and taking all necessary steps to make sure they are properly permitted." – Mary Greene, Environmental Integrity Project. Part of this permitting process is disclosure of chemicals; this should be addressed as well.

CHEMICAL REPORTING PROBLEM(s):

- Self-reporting and self-policing can be problematic and a conflict of interest, case in point with oil and gas industry supported “Frac Focus Chemical Disclosure Registry” website. According to EIP, diesel use was a listed chemical base and within the past several months, Frac Focus pulled references to the use of diesel from the website.

Chemical Reporting Tools

- TRI reporting tool - EPA
- Water Contaminant Information Tool (WCIT) - first responders can obtain information on first aid, medical treatments and toxicity values, field detection and analysis, and environmental impacts. In addition, the responders can acquire the methods for collecting field samples and data on contaminants that are not normally encountered.
- OSHA/EPA Occupational Chemical Database
- BLM - AFMSS is used to track oil and gas information on public and Indian land. It contains data concerning lease and agreement ownership, well identification, location and history, including casing information, geologic formations, resource protection, production, and operator compliance. The system has an electronic commerce module to interface with the oil and gas industry.
- EPA - Chemical Data Reporting. The CDR data factsheet is a sub-set of the complete CDR data because **confidential business information is not included**. Under the Chemical Data Reporting (CDR) rule, EPA collects manufacturing, processing, and use information about chemicals in commerce in the United States.
- 40 CFR 144 (5) Section 1445 of SDWA authorizes the promulgation of regulations for such recordkeeping, reporting, and monitoring requirements “as the Administrator may reasonably require * * * to assist him in establishing regulations under this title,” and a “right of entry and inspection to determine compliance with this title, including for this purpose, inspection, at reasonable time, or records, files, papers, processes, controls, and facilities * * *.”

Priority pollutants are a set of chemical pollutants EPA regulates, and for which EPA has developed analytical test methods. This list includes the **Chemical Abstract Services Registry Number (CASRN)** and was listed on the December 2012 EPA “Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources: Progress Report” (Chemicals Identified in Hydraulic Fracturing Fluids). The following chemicals are priority pollutants and have been identified by EPA in the hydraulic fracturing process.

1. Acrolein CASRN- 107-02-8
2. Benzene CASRN- 71-43-2- carcinogenic and chemical found in diesel
3. Bis(2-chloroethyl) ether- CASRN- 111-44-4
4. Naphthalene- CASRN- 91-20-3
5. Phenol- CASRN- 108-95-2
6. Phenanthrene CASRN- 85-01-8
7. Toluene CASRN- 108-88-3
8. Copper CASRN- 7440-50-8
9. Lead CASRN- 7439-92-1
10. Zinc CASRN- 7440-66-6

Potential Solutions to streamline the reporting mechanism(s)

- Disclose chemical composition, concentrations and amounts used by operator
- Companies that supply the chemicals to operators must notify them when products containing diesel require a permit
- Public participation and opportunity to comment is needed during permitting process
- States and EPA need to list diesel based fracking products that require a permit
- Companies that supply fracking fluids containing diesel should be required to label their products and notify operators that a permit is required by Federal regulation.
- Well operator should fully disclose content of all fracking fluids including the ingredients in trade secret products, chemical and composition in base fluids
- Close the Halliburton loophole of the Energy Policy Act of 2005 (pg. 105. Sect. 322) Paragraph (1) of Sect. 1421 (d) of Safe Water Drinking Act (42 U.S.C. 300 h (d)) that stripped EPA of all authority to regulate and uphold the SWDA.
- Drilling activities on Federal Lands- what mechanism does BLM and BIA have in place for permitting when diesel products are used and who is the responsible agency that oversees inspection of well casing?
- Utilizing this source to obtain chemical information: Reporting mechanism in place for first responders to an emergency such as MSDS sheets, DOT HazMat PLACARDS, & CHEMTREC.
- Companies provide a Material Safety Data Sheet (MSDS) to the Energy and Commerce Committee for review.
- E-Enterprise presents a broad plan to improve the way EPA and the States manage environmental programs, provide service to the regulated community and the public, and achieve environmental results. Fully achieving the E-Enterprise vision requires States and EPA to collectively recast the business model of environmental protection for the United States and in doing so redefine how regulators interact among themselves, and with regulated entities and the public. - See more at: <http://www.exchangenetwork.net/e-enterprise/#sthash.3LT1Kytu.dpuf> . The Exchange Network streamlines the data-sharing process, saving time and money. - See more at: <http://www.exchangenetwork.net/about/what-we-do/#sthash.3aOCcETx.dpuf>
- Transparency, accuracy and accountability of data and search functions potentially by way of using E-Enterprise
- The Toxic Release Inventory- section 313 of the Emergency Planning and Community Right-to-Know Act should require oil and gas industries to report their chemicals to ensure the safety of first responders in the event of natural disasters or human induced problems.

Streamline the chemical disclosure process is necessary to protect and safeguard the health of the public. Emergency management should have full access to 'proprietary trade' chemicals to ensure proper handling and protection when responding to a hazardous situation. An act of congress is needed to ensure the safety of all emergency responders in every state, county and tribal lands across the nation. At the very least, congress should require all oil, gas and chemical industries to disclose chemicals to TRI ensure the safety of fire, police, emergency medical technicians across the nation. Natural or man-made induced disasters occur everywhere across the nation. At the very least, oil, gas and chemical facilities should be held accountable to those same people that serve and protect their communities by way of responding, assisting and cleaning up releases.

Exemptions by law have allowed oil, gas, & chemical industries full reign of pollution protection. Exemptions have left communities in the dark about what chemicals are being released and therefore making it difficult to attribute responsibility and seek remedies for health and environmental associated problems.

It has been said that the chemicals that are used in the hydraulic fracturing process are safe. If this is the case, then disclosure should not be problematic for oil, gas, chemical manufacturers and operators. "The companies' reporting errors also reinforce the need for mandatory and uniform national disclosure of the contents and use of hydraulic fracturing fluids"- Waxman.

REFERENCES:

EPA 601/R-12/011, December 2012, www.epa.gov/hfstudy, "Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources"- Progress Report.

40 CFR- 144

Waxman, Markey & Degette- October 25, 2011- letter to EPA Administrator Lisa Jackson.

Wikipedia:

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