

To: Senate Judiciary Committee  
 Re: The Necessity of The Fracking Safety Act, SB 107

May 2, 2012

The "Halliburton Loophole" in 2005 created an unprecedented oil and gas industry exemption from 8 federal health and safety laws, including the Clean Air and Clean Water Acts. It is necessary for public and environmental health to create standards for best safety practices for hydraulic fracturing.

### **The Need to Preserve Air Quality**

A paper entitled "Natural Gas Operations from a Public Health Perspective" identified health effects for 353 chemicals used to drill and fracture natural gas wells in the U.S. Of these, 71 are particularly noxious, each associated with 10 or more different health effects.<sup>1</sup>

Storage of flowback fluid in open pits increases the chance of exposure to volatile chemicals by inhalation, ingestion, and absorption. Researchers from Pittsburgh University Center for Healthy Environments and Communities (CHEC) report that organic compounds in shale are released to the surface with the flowback fluid or "produced water" that, when stored in open pits, results in offgassing of the organic compounds in the waste water and release of Hazardous Air Pollutants (HAPs).<sup>2</sup>

A New York environmental impact statement calculated annual methanol emission of 32.5 tons from fracturing fluid waste stored in a centralized open impoundment. The EPA reports that "chronic inhalation or oral exposure to methanol may result in headache, dizziness, giddiness, insomnia, nausea, gastric disturbances, conjunctivitis, visual disturbances (blurred vision), and blindness in humans."<sup>3</sup>

The Colorado Oil & Gas Commission's website has reported 1,000 spills alone in Weld County from 2003 to 2012.<sup>4</sup>

### **Need to Protect the Quality of the Water Natural Resource**

Water is a precious commodity in the semi-arid Western part of the United States. The practice of hydraulic fracturing requires huge quantities of water, which is permanently removed from the system. Each well uses about 5 million gallons of water that is subsequently polluted and cannot be returned to system.

Studies conducted by the oil and gas industry and interviews with industry regulators reveal that 20 to 85% of fracturing fluids may remain in the earth, a continued source of groundwater contamination for years into the future.<sup>5</sup>

Fracking was cited as the source of groundwater pollution in a central Wyoming town by the U.S. Environmental Protection Agency in 2011.<sup>6</sup>

### **References**

- 1 <http://www.endocrinedisruption.com/files/Oct2011HERA10-48forweb3-3-11.pdf>
- 2 <http://www.fracktracker.org/2010/08/potential-shale-gas-extraction-air-pollution-impacts/>
- 3 <http://www.epa.gov/ttn/atw/hlthef/methanol.html>
- 4 <http://wtfrack.org.blogspot.com/2012/02/media-advisory-northern-colorado.html>
- 5 <https://www.propublica.org/article/new-gas-wells-leave-more-chemicals-in-ground-hydraulic-fracturing>
- 6 [http://usnews.msnbc.msn.com/\\_news/2011/12/08/9302971-epa-fracking-likely-polluted-towns-water](http://usnews.msnbc.msn.com/_news/2011/12/08/9302971-epa-fracking-likely-polluted-towns-water)

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