



PRESS RELEASE

EU environmental assessment law must include fracking, says HEAL

Brussels, 17 December 2013 – New evidence published yesterday has prompted renewed calls from the Health and Environment Alliance (HEAL) for the environmental impact assessment to address shale gas fracking in Europe. (1)

Research published in *Endocrinology* confirms fears that shale gas fracking can release harmful chemicals into the environment, and thereby menace public health, according to HEAL. Ensuring that the EU environmental impact assessment law includes shale gas activities is a crucial step towards addressing human health threats associated with the release of fracking chemicals.

The study is the first to show that ground and surface water samples taken from hydraulic fracturing (fracking) sites in the USA where spills had occurred contain higher levels of endocrine-disrupting activity than areas with little drilling. (2) Endocrine disrupting activity is of concern because ground and surface water is often used for drinking and bathing.

Although fracking in the USA takes place under different conditions and laws, this study is equally relevant for Europe because spills can never be completely avoided. The study makes the link between fracking spills and water contaminated with higher levels of harmful chemicals, which may cause or facilitate chronic diseases. Endocrine disrupting chemicals (EDCs) are linked with various chronic diseases, such as infertility and sexual organ malformation, hormonal cancers (breast, prostate, testis), neurological impairments (e.g., learning difficulties), and metabolic conditions (e.g., diabetes and obesity). (3)

"More than 700 chemicals are used in the fracking process, and many of them disturb hormone function," said one of the study's authors, Susan Nagel, PhD, associate professor of obstetrics, gynaecology and women's health at the University of Missouri, School of Medicine. *"With fracking on the rise, populations may face greater health risks from increased endocrine-disrupting chemical exposure."* (4)

The types and amounts of toxic chemicals used in fluids injected into fracking wells are not always disclosed fully to the public. However, in 2011 The Endocrine Disruption Exchange (TEDX) successfully identified 353 chemicals being used in shale fracturing for natural gas. The analysis showed that 37% of these chemicals were endocrine disruptors. The study also showed that exposure to more than 75% of the chemicals used could have immediate effects on the skin, eyes, and other sensory organs, and the respiratory and gastrointestinal systems. (5)

Lisette van Vliet, Senior Policy Advisor, HEAL says: *"This new paper shows we're right to be concerned about these chemicals contaminating our water – water for drinking and growing food – in ways that could contribute to chronic diseases like some cancers, obesity and infertility. Environmental impact assessment is a key process to address chemical uses so EU law must include all fracking activities. We look to the European Parliament to stand firm against the blocking minority in the European Council and continue to insist that all fracking activities be included in the law."*

Sandra Steingraber, PhD, Concerned Health Professionals of New York (6) says: *"This new study shows us three things. One, chemicals commonly used in US drilling and fracking operations include*

agents that mimic sex hormones. Two, in areas of intense drilling, these chemicals turn up in water supplies at levels that alter hormonal signalling in living cells. Three, pregnant women, mothers, fathers, children, breast cancer patients—and all those who love them—are right to stand up and say, very loudly, ENOUGH. With this study, the fracking industry, like the tobacco and lead paint industries before it, has very little ground left from which to wave the 'no proof of harm' flag.”

Notes

1. The European Parliament, Member States in the European Council, and the European Commission are currently negotiating the final text of the EIA law in so-called 'Triologue' talks.
2. "Estrogen and Androgen Receptor Activities of Hydraulic Fracturing Chemicals and Surface and Ground Water in a Drilling-Dense Region," 16 December 2013, Endocrinology
<http://endo.endojournals.org/content/early/2013/12/16/en.2013-1697.abstract?rss=1>
3. WHO [State of the science of endocrine disrupting chemicals 2012](#); EU [State of the Art Assessment of Endocrine Disrupters, Final Report](#)
4. Dr Nagel is quoted in an article at <http://medicine.missouri.edu/news/0214.php>
5. The Endocrine Disruption Exchange (TEDX), Natural gas operations from a public health perspective, September 2011 <http://endocrinedisruption.org/chemicals-in-natural-gas-operations/journal-article>
More on **Chemicals in Natural Gas Operations** by TEDX at <http://endocrinedisruption.org/chemicals-in-natural-gas-operations/introduction>
Video here <http://www.youtube.com/watch?v=rXHI2jSg5pM>
6. Biologist Sandra Steingraber is a co-founder of Concerned Professionals of New York, as well as New Yorkers Against Fracking. In 2010, during a visit to the European Parliament she spoke out on the public health implications of fracking, and was cited in UK press. She is Distinguished Scholar in Residence at Ithaca College in New York.

More information from HEAL on fracking at <http://www.env-health.org/policies/other-issues/fracking/>

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HEAL is a leading European not-for-profit organization addressing how the environment affects health in the European Union. With the support of its more than 65 member organizations, which represent health professionals, not-for-profit health insurers, patients, citizens, women, youth, and environmental experts, HEAL brings independent expertise and evidence from the health community to different decision-making processes. Members include international and Europe-wide organisations as well as national and local groups. Website: www.env-health.org

Concerned Health Professionals of New York is an initiative to amplify the voices of hundreds of health professionals in New York who have been calling on Governor Andrew Cuomo to conduct a comprehensive Health Impact Assessment (HIA) on high-volume horizontal hydraulic fracturing. As health professionals who everyday serve and care for New Yorkers, it is critical that the public health

and safety of our communities is taken into consideration before any decision is made on whether or not to lift the current moratorium on fracking in New York. Website: <http://concernedhealthny.org>