

Fracking fluid complaints and identification

According to a report from the Oil & Gas Accountability Project, citizens from many states have reported negative impacts to water quality in the wake of hydraulic fracturing.

The report says, “Common complaints include: murky or cloudy water, black or gray sediments, iron precipitates, soaps, black jelly-like grease, floating particles, diesel fuel or petroleum odors, increased methane in water, rashes from showering, gassy taste and decrease or complete loss of water flow.”

The report continues, “In most cases, the agencies conducting follow-up water quality sampling do not know what chemicals have been used in fracturing operations because companies are not required to disclose this information. Consequently, state agencies do not test for all fracturing fluid chemicals. Citizens have also experienced soil and surface water contamination from spills of hydraulic fracturing fluids.”

Chemicals that can move through air

Of the 54 chemicals identified by DEP as being used in fracking fluid, 21 are readily airborne. As noted in the table below, all of these chemicals can harm the eyes, skin, respiratory tract, gastrointestinal tract or liver.

Health Effect Category	Number of Chemicals	Percent of Chemicals
Gastrointestinal and liver	21	100%
Respiratory	21	100%
Skin, eye and sensory organ	21	100%
Other	20	95%
Cardiovascular and blood	19	90%
Brain and nervous system	19	90%
Kidney	17	81%
Ecological	15	71%
Immune	11	52%
Developmental	10	48%
Reproductive	9	43%
Mutagen	7	33%
Endocrine disruptors	7	33%
Cancer	6	29%

Chemicals that can move through water

Of the 54 chemicals identified by DEP as being used in fracking fluids, 34 are soluble, allowing them to move into surface and underground water.

Health Effect Category	Number of Chemicals	Percent of Chemicals
Skin, eye and sensory organ	34	100%
Respiratory	32	94%
Gastrointestinal and liver	31	91%
Cardiovascular and blood	26	76%
Other	26	76%
Brain and nervous system	25	74%
Kidney	21	62%
Ecological	21	62%
Immune	19	56%
Developmental	14	41%
Cancer	11	32%
Endocrine disruptors	11	32%
Reproductive	11	32%
Mutagen	10	29%