

As air pollution from fracking rises, EPA to set rules

April 17 2012, By Renee Schoof

The rush to capture natural gas from hydraulic fracturing has led to giant compressor stations alongside backyard swing sets, drilling rigs in sight of front porches, and huge flares at gas wells alongside country roads.

Air pollution from fracking includes the fumes breathed in by people nearby, as well as smog spread over a wide region and emissions of the greenhouse gas methane.

On Tuesday, the [Environmental Protection Agency](#) is expected to announce the first national rules to reduce [air pollution](#) at hydraulically fractured - fracked - wells and some other [oil and gas industry](#) operations. The agency estimated that the plan it proposed in July would reduce smog-forming, cancer-causing and climate-altering pollutants from the [natural gas](#) industry by about one-fourth.

The White House in recent weeks has been reviewing the EPA plan to consider possible changes, the normal procedure for regulations. Industry groups have lobbied for exemptions that would reduce the impact of the rule, saying the original requirements are too costly. Environmental and health advocates have been talking to White House officials as well, opposing the industry's proposed changes.

The final version on Tuesday will show how President Barack Obama's administration navigates between the nation's needs for energy and health. Obama supports fracking because it yields vast amounts of natural gas, a fuel that burns cleaner than coal. He also has said that it

should be done "without putting the health and safety of our citizens at risk."

Pam Judy of Carmichaels, Pa., says she fears that her family already is at risk from fumes from a large natural gas compressor station 780 feet from their home in the hills. When they built it, they were far from everything. Three years later, a natural gas compressor station was built on neighboring property.

"We have fumes that are in our yard almost constantly," she said. "There are times when it smells like diesel or a [kerosene](#) smell. It's very difficult to pinpoint the exact smell. Then there are times we get a smell like chlorine. When we get that chlorine smell it literally will scorch your eyes and your throat."

Air tests found 16 chemicals in her yard, including benzene, a chemical the EPA classifies as a carcinogen. She said test of her blood also showed exposure to benzene and other chemicals. Benzene can cause dizziness and headaches, symptoms she's had. Her adult children have had runny noses, headaches and sore throats that go away when they aren't at their parents' home.

The family worries about long-term exposure and is wrestling with whether to stay. Their land was handed down in her family since her great-grandparents' day, Judy said. "It's really heart-wrenching for us to make the decision to move."

Paul Parker, a retired vice president of an engineering company who worked with energy companies, has lived for 36 years in an area south of Pittsburgh where natural gas development has sprung up in the last few years. Parker said no to leases on his own property, but sees the development around him and says the area has been ruined.

"When you go outside, it's like living in a chemical complex," he said. Pollution comes from vents on storage tanks near his property, he said, as well as nearby flaring to burn gas in early stages of well development and the diesel emissions of hundreds of trucks needed to haul water and equipment to well sites.

Fracking involves pumping water, sand and chemicals deep underground to release gas. After the injection, the fracking fluids and gas flow back for a period of several days or more.

The EPA's rule would require companies to use portable equipment to capture this gas that otherwise escapes to the atmosphere or gets burned off in flares, a process known as green completion. The equipment would reduce volatile organic compounds, which are part of what forms smog. The same equipment would capture methane, the primary constituent of natural gas, and make it available for sale.

The industry estimates that more than 25,000 wells are fractured or refractured each year.

The American Petroleum Institute, the lobby for the oil and [gas industry](#), has asked the Obama administration to make the requirement apply only to wells where the gas stream is 10 percent or more of volatile organic compounds.

That approach would exclude many wells.

The EPA's existing rule for volatile organic compounds in the gas industry was issued in 1985 and applied only to leak detection at new and upgraded gas processing plants. That arrangement leaves much of the volatile organic-compound emissions from the oil and gas industry unregulated.

API told the EPA earlier that the average well is 2.95 percent volatile organic compounds. API spokesman Carlton Carroll said on Friday that API had to correct that number because it was wrong. "We believe the average is closer to 10 percent," he said.

API president and CEO Jack Gerard said in a letter three weeks ago to senior White House adviser Valerie Jarrett that emissions controls on low volatile organic-compound gas would not be cost-effective. He also asked for other changes, including at least two years for building the equipment needed for green completions.

Environmental groups oppose those requests. They say that even small percentages of volatile organic compounds add up, because the volumes in fracking are so large. They also say that the industry over-estimated the costs of green completions, and they point out that in states such as Colorado and Wyoming, where the equipment is already required, the gas industry has continued to grow.

Other parts of the EPA's plan would require equipment on compressors, storage tanks and new pneumatic controllers, the instruments that control pressure and other conditions.

"This industry produces an astonishing amount of air pollutions," and the emissions have been largely ignored, said Joe Osborne, legal director of the Group Against Smog and Pollution.

Some pollutants on a local level can mean greater risks for cancer and neurological and reproductive problems, Osborne said. Other pollutants combine to form smog, which spreads over a much wider area. Smog can make it hard to breathe, aggravate asthma and other lung diseases and permanently damage lungs

In Pennsylvania, where GASP is based, parts of the state, along with

much of the rest of the Eastern U.S., already don't meet health standards for smog. The good news is that smog levels have gone down in the past 20 years, Osborne said. But the development of shale [gas](#) "has the potential to halt that progress or potentially even reverse it."

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