



EPA weighs tougher air pollution rules on drillers (08/05/2010)

Eryn Gable, special to E&E

DENVER -- Western residents joined environmental activists this week in calling on the Obama administration to strengthen nationwide limits on air pollution from oil and gas drillers to better protect public health.

In one of two public meetings held this week, U.S. EPA officials fielded comments and questions on proposed reforms to air pollution standards from one of the West's most robust industry sectors, including some rules that not been updated since 1985.

The exchanges between regulators and stakeholders in Colorado were similar to what the agency heard a day earlier in Arlington, Texas, with calls for stronger regulations from advocacy groups while industry representatives defended drillers' environmental performance and cautioned the agency against burdening a vital economic sector with cumbersome new rules ([Greenwire](#), Aug. 3).

EPA is expected to update its air pollution standards for oil and gas drillers by November 2011 as part of a settlement agreement with environmental groups that challenged the agency's regulations in court.



U.S. EPA is expected to revise air pollution standards for thousands of oil and gas drilling platforms by next year. The new regulations could have major implications in the Interior West, where oil and gas development is a major economic activity. Photo courtesy of the National Energy Technology Laboratory.

Kim Weber, a De Beque, Colo., resident, said her family had experienced harmful health effects from oil and gas wastewater ponds, including months-long asthma attacks suffered by her son until he took a vacation in Texas.

"After being in Texas for just a few weeks, or days, actually, he started feeling better," Weber said at Tuesday's public meeting here.

Weber, a member of the advocacy group Western Colorado Congress, said other residents have also complained of health problems -- including headaches, rashes, lightheadedness, brain lesions, leukemia and heart disorders -- which she contends are linked to emissions from compressors, pipelines and other equipment

associated with oil and gas development.

"Although there is no documented evidence that the emitted toxins are causing these health problems, it is suspicious that so many symptoms and issues have developed in the same span of time and space," she said.

Gopa Ross moved to La Veta, Colo., after her water well was contaminated by coalbed methane gas in Las Animas County. Since moving, she said, the nosebleeds, dizziness and headaches she experienced before have gone away.

"There was a haze over the valley where I lived when fracking was going on, hydraulic fracturing," Ross said. "There were emissions in the air. I can't tell you what they were because no one is out there monitoring."

Mike Eisenfeld, New Mexico organizer for the San Juan Citizens Alliance, said the 35,000 natural gas wells in the Four Corners region are pushing the area toward "non-attainment" status for ground-level ozone while documented asthma cases in the area are going up.

"Those of us who live in the Four Corners region are getting slaughtered by the air-quality impacts. It's not acceptable," he said.

Elizabeth Paranhos of Environmental Defense Fund noted that the oil and gas industry is the third-largest source of U.S. emissions of methane, a potent greenhouse gas that is more than 20 times more effective in trapping heat in the atmosphere than carbon dioxide. EPA has estimated as much as 300 billion cubic feet of methane gas is released each year, resulting in \$1 billion in lost profits.

Health impacts

Environmentalists said the impact of outdated air quality regulations has been especially evident in the West, where residents have long voiced concerns about the impacts of drilling on public health.

In western Colorado's Garfield County, for example, oil and gas drilling has increased by more than 132 percent since 2004, and there are now more than 7,000 wells. According to state data, oil and gas operations in the county are responsible for 77 percent of emissions of benzene, a known carcinogen. [Research](#) by the county has shown that some residents could face "unacceptable" cancer risks unless steps are taken to reduce emissions.

In northwestern New Mexico's San Juan County, home to more than 18,000 oil and gas wells, drillers are clamoring to tap the second-largest producing natural gas field in the United States. The Bureau of Land Management reports there are more than 375 wells in San Juan County that release hydrogen sulfide (H₂S) -- a chemical compound that can cause labored breathing, headaches and even death -- but current federal regulations do not limit H₂S from individual wells.

Oil and gas drilling has also been linked to rising smog levels and climate change. In western Wyoming's Sublette County, increased drilling is linked to skyrocketing levels of ground-level ozone. Ozone levels have violated federal health limits and the state has recommended that the region be declared a "nonattainment area" due to pollution ([Land Letter](#), March 19, 2009).

A recent [study](#) published in the *Journal of Air and Waste Management* found "a clear potential for oil and gas development to negatively affect regional [ozone] concentrations in the western United States, including several treasured national parks and wilderness areas in the Four Corners region."

New regulations

EPA is reviewing its regulations in response to a lawsuit filed by WildEarth Guardians and the San Juan Citizens Alliance challenging the agency's failure to update regulations that have been in place since 1985 and 1999, despite legal requirements that they be reviewed and updated every eight years.

"That's kind of a slam dunk. It's hard to win a case like that," said Bruce Moore, senior technical adviser with the EPA's Office of Air Quality, Planning and Standards.

As part of a legal settlement, EPA committed to reviewing and updating three sets of Clean Air Act regulations by Jan. 31, 2011, and to finalize updates by Nov. 30, 2011.

The first regulations, called "New Source Performance Standards," ensure that the latest technology is used to reduce any pollutants that endanger public health and welfare, such as hydrogen sulfide, smog-forming nitrogen oxides and greenhouse gases like methane. Under the Clean Air Act, New Source Performance Standards must be reviewed and updated every eight years, but standards for oil and gas drilling have not been updated since 1985.

The second set of regulations, called "Maximum Achievable Control Technology" (MACT) standards, ensure that the most effective technology available is used to limit toxic air emissions such as benzene. The Clean Air Act requires that MACT standards be reviewed and updated every eight years, but standards related to energy development have not been updated since they were first issued in 1999.

The third set of regulations, known as "Residual Risk" standards, aim to reduce toxic air emissions to fully safeguard public health. The standards address any "residual risk" to public health that exists after MACT standards are adopted. Although the Clean Air Act requires that Residual Risk standards be issued within eight years of the establishment of Maximum Achievable Control Technology standards, there are currently no Residual Risk standards for the oil and gas industry.

Moore noted that the current regulations do not cover many pollution sources from the oil and gas industry, including venting of casinghead gas, vapor from truck loading, produced water ponds, well completions, and leaks from pipelines and compressor stations.

Industry response

The threat of new regulations has raised the ire of oil and gas industry officials, who questioned why their sector has been singled out for more regulation, especially since the pollution produced by energy development is small compared to other sources such as cars and trucks.

Energy industry officials noted that oil and natural gas companies have been working hard to reduce their emissions in recent decades. For example, EPA's Natural Gas STAR Program has chronicled dramatic reductions in methane emissions since its inception in 1993, including the elimination of more than 822 billion cubic feet of methane emissions from 1993-2008. And in Colorado, eight-hour ozone levels remained virtually flat from 1990-2007, despite increases in drilling activity.

"No industry in Colorado has truly done more to reduce emissions and the formation of ozone than the oil and gas industry," said Doug Flanders, policy director for the Colorado Oil & Gas Association, noting that operators in the Wattenberg Field along the northern Front Range have spent more than \$40 million to reduce emissions by 85 percent.

Kathleen Sgamma, director of government affairs for the Western Energy Alliance, warned that additional regulation could compel energy companies to move their operations overseas to countries with less-stringent standards, costing American jobs and ultimately leading to more environmental damage.

"Certainly it makes sense to comply with the law, and to review those regulations. But the outcome should not necessarily be lots of additional, onerous regulation," she said.

Dollis Wright, CEO of the consulting firm Quality Environmental Professional Associates Inc., urged EPA to let data be the driving force behind any new regulations. Wright noted that her group's review of data from the Agency for Toxic Substances and Disease Registry failed to show increased cancer risk or other health effects from oil and gas operations at 68 sites included in the registry.

"I encourage EPA to remember that chemicals in and of themselves do not create risks," said Wright, who studied gas field air pollution for the Colorado Oil and Gas Association in 2008.

Industry officials also stressed that states are better equipped to address issues related to energy development. "Not every single issue needs to be an EPA issue," said Stan Dempsey, president of the Colorado Petroleum Association.

[Click here](#) for the Garfield County research.

[Click here](#) for the *Journal of Air and Waste Management* study.

Gable is a freelance journalist based in Colorado Springs, Colo.