

## **Pa. well blowout tests industry on voluntary fracking disclosure**

**Mike Soraghan, Environment & Energy Publishing, 5-4-11**

Chesapeake Energy Corp., whose gas well blew out during hydraulic fracturing last month in northeastern Pennsylvania, hasn't publicly disclosed chemicals that spilled, setting up the first test of an industry-backed voluntary disclosure program.

An official in charge of the disclosure registry said the chemicals should be disclosed in such a situation.

"You'd have to treat it like one that was completed," Mike Paque, executive director of the Ground Water Protection Council (GWPC), said in an interview. "The chemicals were down the hole."

Chesapeake has led the drive within the industry for disclosure and was among the first to join the FracFocus registry initiative. But company spokesman Jim Gipson said the company doesn't plan to file a report until it is done with "completion," the preparation of production after drilling.

"Information is uploaded on the site when well completion reports are filed with the state," explained Gipson, citing the process in which a well is prepared for production after drilling. But it's not clear when, or if, that process will ever take place.

"We won't know for a while but it is entirely possible this well could be completed at some point in the future," Gipson said.

Chesapeake's Atgas 2H well in Bradford County's LeRoy Township blew out April 19, spewing water for more than 12 hours.

U.S. EPA and the Pennsylvania Department of Environmental Protection (DEP) have requested a list of the chemicals involved as part of their investigation of the spill. State and federal investigations and the threat of lawsuits may be making the company reluctant to publicly disclose the chemicals.

"We have fully and voluntarily complied with the DEP's April 22 request for information, which includes chemical additives used in the hydraulic fracture stimulation of the Atgas 2H" well, Gipson said.

But if the accident had taken place in Wyoming, which has the strictest public disclosure rules in the country on fracturing, the public would already know at least what drillers planned to blast down the hole. Wyoming requires the list from well operators in advance to get a permit.

"We would have had prior approval and disclosure," said Wyoming State Oil and Gas Supervisor Tom Doll.

But the FracFocus site doesn't request information before a well is drilled or "fracked." Paque said the chemical mix always changes from the original plans, and having two lists of ingredients would sow confusion. Paque said last week he had been told by Chesapeake officials that they would post the information, but as of this morning it was not posted.

GWPC administers the FracFocus registry along with another organization of state legislators, the Interstate Oil and Gas Compact Commission.

They began working on the registry last fall to provide a central place for drilling companies to post fracturing fluids. The site launched last month.

The initiative, backed by industry and paid for with help from the U.S. Department of Energy, is part of a larger effort by industry and state regulators to head off federal regulation of fracturing.

Chesapeake's Gipson didn't respond directly to a request for a list of the chemicals that were being injected. He said they should be similar to those used in nearby wells.

"This well shouldn't be much different," Gipson said.

### **Industry assurances, Md. lawsuit**

The lists of additives injected in other wells in Bradford County include formaldehyde, ethanol, hydrotreated light petroleum distillate (a class of solvents that includes kerosene) and 2-Butoxyethanol, or 2-Be, a hazardous chemical linked to long-term health problems experienced following the 1989 *Exxon Valdez* oil spill.

The chemicals make up a very small fraction of the millions of gallons of fluid injected into a Marcellus Shale gas well. But human exposure to some of them is measured in parts per million.

The name of other chemicals was withheld as "proprietary."

Gipson sought to assure that whatever the chemicals were, most didn't get sprayed out of the well and into creeks.

"When comparing completion records, you need to keep in mind that this well was undergoing only stage three of a dozen or more stages when the equipment started leaking," he said. "Also, much of the chemical additives are engineered to bond with the steel casing and the shale, so it's a faulty assumption that large volumes of these already highly diluted (0.5 percent of total volume) additives returned to the surface."

He added, "The overwhelming majority of what flowed to the surface [last month] was naturally occurring brine that had been trapped in the shale for 300 million years or more."

That ultra-salty brine is generally more dangerous than the fracturing fluid itself, and can include metals like barium and strontium and traces of radioactivity.

Chesapeake has said testing during the spill showed "limited and very localized environmental impact," and that tests a short distance downstream in the Susquehanna River found "no effect whatsoever."

Maryland Attorney General Douglas Gansle (D), announcing earlier this week that he intended to sue Chesapeake, countered that "tens of thousands of gallons" of fracturing fluid came out of the well, and the fluid leaked into a tributary of the Susquehanna, which flows into the Chesapeake Bay.

The debate about what chemicals are in fracturing fluid has gotten louder since drilling started to ramp up in the more heavily populated Northeast. And an exemption from public disclosure and EPA regulation, granted by former President George W. Bush and a Republican Congress in 2005, has raised suspicions among drill-site neighbors. Voluntary disclosure is viewed as a way to alleviate some of that suspicion.

Chesapeake Chairman and CEO Aubrey McClendon was among the first gas executives to call for increased disclosure of fracturing chemicals. And the company joined in the launch of the FracFocus site with a press release announcing its participation.

## **Patchwork of state rules**

State rules on disclosure of fracturing chemicals vary widely. Some have no requirements; some require disclosure only to regulators or medical personnel in an emergency.

Last year, Wyoming adopted the strictest public disclosure rules in the country.

The Wyoming Oil and Gas Conservation Commission requires drillers to post what they plan to inject in order to get a permit to drill. There are some exemptions for ingredients that are "trade secrets," but they must be approved in advance. After the well is completed, they must come back and report what they actually injected. All of the information, including approval of trade secrets, is posted to the agency's website.

The strict disclosure rules, requested by then-Gov. Dave Freudenthal (D), were also designed to head off federal regulation of fracturing.

"The governor felt if we did that, EPA would not need to step in and regulate fracking," Doll said.

In the case of an accident like the blown-out well, all information about the chemicals in the fracturing fluid would be disclosed.

The accident in LeRoy Township will also test drillers' claim that the fracturing process itself has not been proven to have contaminated water supplies. But industry representatives have generally made that assertion with regard to the underground escape of the fracturing chemicals, rather than surface spills.