

TRIB LIVE | Business

Western Pennsylvania's top news and sports source



Larger text Smaller text



Radioactive fracking debris triggers worries at dump sites



Evan R. Sanders | Tribune-Review

A standard radiation monitor, photographed at the Yukon facility of Max Energy Services on Friday, April 26, 2013. The standard radiation monitor counts per second as trucks hauling waste into the facility drives through.



Recommend 1.2k Send

Tweet 91

About Timothy Puko

By Timothy Puko

Timothy Puko 412-320-7991
Business Writer
Pittsburgh Tribune-Review

Published: Saturday, May 11, 2013, 9:00 p.m.
Updated: Sunday, May 12, 2013

When a garbage truck from a shale gas well set off radiation detectors at a South Huntingdon landfill on April 19, it drew attention from township officials.

But they aren't the only ones watching what's become a growing issue all over Pennsylvania. The number of garbage trucks setting off radiation monitors had a fivefold increase between 2009 and 2012, drawing renewed attention from state officials who hadn't believed radiation would be a big problem from the state's drilling industry.

South Huntingdon is trying to block MAX Environmental Technologies Inc. from receiving DEP permission to accept a higher level radioactive waste, supervisor Melvin Cornell said.

"This stuff they compile as they dump it. It will grow and grow and grow," Cornell said. "Hey, if there's nothing wrong, take it down, and make a playground with it where they live. That might sound harsh, but we don't want it here."

VIDEO

[More Videos](#)

Contact Us | Video | RSS | Mobile

Between 2009 and 2012, radiation alarms went off 1,325 times in 2012, with more than 1,000 of those alerts just from oil and gas waste, according to data from the Department of Environmental Protection.

The state's landfills have to one day be fit for people to live on after they close, so the state has to make sure they aren't allowing a dangerous build-up of radioactivity, officials said.

The spike in radiation alarms gave them pause for concern and is a big reason they started a year-long study of radioactivity in the shale gas industry, which the DEP announced in January.

"All the data we have indicates public health is protected. We want to make sure going forward, long term, things stay that way," DEP spokesman Kevin Sunday said.

State regulators, industry supporters and some scientists say that treating shale waste properly eliminates big health risk. But there are critics who argue that bringing large quantities of even low-level radioactive particles to the surface can lead to a slow, incremental build up of particles that people breathe or eat throughout their lifetimes.

The state began requiring radiation monitors at landfills in 2002 because of medical waste. But oil and gas waste — which brings up naturally occurring radiation formerly locked a mile or so underground — has become an increasing concern.

The spike in radiation alarms roughly corresponds shale drilling activity. Radiation detectors went off 423 times in 2008 and 1,325 times in 2012, according to DEP data. Gas drillers punched 335 new shale wells in 2008 and 1,354 new shale wells in 2012.

The average radium content in Marcellus shale wastewater samples was more than double the content found in wastewater from other gas-producing formations, the Geological Survey found in 2011.

It's more than 40 times the federal limit for industrial discharges, but it can be diluted in treatment or separated with chemicals into a sludge, said Mark A. Engle, a groundwater expert and study co-author. Engle said that the radioactive sludge should be safely contained by a dump's liners.

"I'm not ready on first principle to dismiss the concerns ... (but) I kind of think this won't be a frightening thing," said Elizabeth Casman, a professor at Carnegie Mellon University whose research team is studying whether shale gas can lead to increased radon exposure in homes.

But that's no comfort to Cornell. He said he personally inspected the truck that came in April 19 to ensure it was quarantined until it could be sent elsewhere.

MAX asked the DEP last year for permission to accept radioactive waste in South Huntingdon. The company wants to capitalize on waste from the shale boom.

"We find ourselves in a bit of a business disadvantage," said Carl Spadaro, environmental general manager for MAX, adding some landfills are taking up to 90 percent of their waste from Marcellus drilling sites.

The state isn't changing any rules while it does its study because past research has shown problems are unlikely, state officials said. They will be examining radioactivity in all facets of drilling, including sludge, wastewater, drill cuttings, gas and the imprint radioactivity may leave on all the equipment, pipes and trucks that haul it around.

Industry officials believe the waste companies have good enough systems to ensure they handle it safely. At landfills, once a monitor goes off, workers take samples to classify the waste, and then use that information to figure out how they can mix it with other garbage to prevent radiation build up, landfill officials said.

"It's not going to be a long-term problem," said Andrew Paterson, a Marcellus Shale Coalition technical expert. "As long as you're managing it properly, it's not going to be a risk."

That isn't necessarily happening all the time, scientists and environmental advocates said. Several groups have criticized a state policy that allows drillers to bury some waste at their well sites, as long as it's covered in its plastic liner and buried.

The DEP has proposed banning that practice but it would have made more sense to have the radiation study finished before pushing new rules, said John Walliser, vice president at the Pennsylvania Environmental Council. There are still a lot of unknowns about radioactivity in gas development, too, especially whether it can get into homes through the gas or if the state's landfills have the capacity to handle the solid waste, he added.

"We want them to get the regulations in places as fast as they humanly can," Walliser said. "And I just wish they would have started this study much much sooner when they knew this was going forward."

Timothy Puko is a Trib Total Media staff writer. Reach him at 412-320-7991 or tpuko@tribweb.com.

Most Popular Business Headlines

Daily Photo Galleries



Tuesday - June 11, 2013

Business Photo Galleries



3D printing on display in Pittsburgh



- **Sen. Sessions: Immigration Vote No Sign of Confidence**
- **Ron Paul: US May Assassinate Snowden**
- **Issa: 'Reckless' to Release IRS Transcripts**
- **Government Loophole: Profit From Property Flips**
- **Healing Powers of Vinegar Help Many Diseases**

What's This?