



Pennsylvania Gas Drillers Dumping Radioactive Waste in New York



Tuesday, 23 November 2010

Written by [Peter Mantius](#)

0



Dr. Earl Robinson, a pulmonologist who lives less than a mile away, noted that people who live near landfills often have higher rates of lung and bladder cancer than those who don't.

ELMIRA, N.Y. -- Trucks hauling rock cuttings from drilling for natural gas in the Marcellus Shale formation in Pennsylvania regularly cross the New York State border these days to dump in the Chemung County Landfill seven miles east of Elmira.

The Marcellus formation is characterized by unusually high readings of naturally occurring radioactive material, or NORM, so most of the cuttings are probably radioactive. The Chemung Landfill, a former gravel pit, has never been licensed to handle low-level radioactive waste.

So how can the landfill's private operators get clearance from the county and state environmental regulators to bethcome a regional dump for radioactive drilling wastes?

The short answer: Provide the revenue-hungry county a rich payout, exploit a legal loophole, and presto, it's a done deal.

The longer answer: Regulations haven't kept pace with the recent widespread use of an invasive new drilling technology used to tap the Marcellus.

"There are many aspects of this new industrial activity that outpace existing regs. Radiological regulation is just one of them," said Anthony Ingraffea, a Cornell University geology professor who has tracked the



This article is part of an ongoing investigation into gas drilling in New York's Marcellus Shale.

DC Bureau is staffed by award-winning journalists dedicated to bringing you in-depth stories covering the Environment and National Security. Help us by [donating](#) or by signing up for our newsletter.

* indicates required

Email Address *

[f](#) [Become a fan on Facebook](#) or

[FOLLOW US ON twitter](#)

SUBSCRIBE TO DC BUREAU

[Google](#)
[Yahoo](#)
[AOL](#)

[RSS](#)
[Environment](#)
[National Security](#)

[Videos](#)
[Podcast](#)
[Contact Us](#)

FOR NEWS ON IRAQ, AFGHANISTAN, AND PAKISTAN VISIT:



evolution of natural gas drilling for decades.

The latest variation of hydraulic fracturing now commonly used in Marcellus shale mining in Pennsylvania has never been allowed in New York State, but it is expected to be approved soon. Ingraffea said the New York Department of Environmental Conservation will need broader legal authority and a much deeper staff to cope with its considerable side effects.

But the DEC isn't there yet, so there are legal gray areas that provide opportunities, and Casella Waste Systems is mining them.

In 2005, Casella entered into a 25-year, \$90-million contract with Chemung County to operate its landfill, which had been taking in about 80,000 tons a year of garbage and municipal waste.

In April, the company and the county agreed to certain amendments to the deal and reaffirmed their goal of eventually increasing the landfill's capacity to 417,000 tons per year.

"It's been a great partnership," said Larry Shilling, regional vice president for Casella, which has a pending application with the DEC for authority to boost capacity to 180,000 tons.

The DEC hasn't raised major objections to the latest application. Nor did it object when it learned in January 2010 that for months the company had been accepting up to 2,000 tons of Pennsylvania drilling waste a week without first asking the agency for permission.

Casella also began diverting a major portion of its Chemung County municipal waste to other landfills to leave room for the Marcellus cuttings.

The DEC still isn't sure when the new waste stream started because a lawyer for Casella said it was hard to pin down an exact date. While the DEC has taken it all in stride, several local residents who live near the landfill are quite agitated.

Dr. Earl Robinson, a pulmonologist who lives less than a mile away, noted that people who live near landfills often have higher rates of lung and bladder cancer than those who don't.

Before Casella arrived, the Chemung Landfill had a history of violations involving industrial hazardous waste, so it may be partly to blame for the county's problems with lung and bladder cancer.

From 2003-2007, the county's bladder cancer incidence rate for males was 49.5 percent higher than the state average, while the lung cancer rate was 27.0 percent higher, according to the New York State Cancer Registry. In the 1999-2002 period, Chemung County had the highest bladder cancer rate in the state for males.

Obviously, Casella's recent acceptance of Marcellus cuttings had nothing to do with those elevated levels in the past. But the new practice adds a new level of concern, Robinson said.

"Drill cuttings contain radioactive waste that will release radon gas, a carcinogen, and this will be dispersed into the atmosphere," he said.

It may also find its way into drinking water supplies, Robinson added, because one engineering report commissioned by the county found that part of the landfill was "approximately 500 feet horizontally from the Chemung Valley Aquifer."

Robinson is a member of a citizens group, Residents for the Preservation of Lowman and Chemung (RFPLC), that is challenging Casella's bid to boost capacity to 180,000 tons per year.

RFPLC's central claim is that Marcellus drilling wastes can't be disposed of in a landfill that isn't licensed to handle low-level radioactive waste. Such landfills are rare, and Chemung isn't one of them.

The group's argument echoes a formal statement sent to the DEC last December by the New York State Conference of Environmental Health Directors, which said in part: "Under no circumstances should drill cuttings be disposed outside licensed landfills without testing to show they are not a threat to human health or the environment."

The DEC hasn't conducted its own radiological testing of any wastes at the Chemung Landfill. Instead, it relied on submittals from Casella that appeared to show that neither drill cuttings nor soil contaminated with brine from Marcellus wells were dangerously radioactive.

Moreover, Lisa Schwartz, a lawyer for the DEC, argued that the level of radioactivity in the wastes sent to the Chemung Landfill wasn't even a relevant legal question in the proceeding on Casella's application to expand



ADVERTISEMENT:

**DRILL CUTTINGS CONTAIN
RADIOACTIVE WASTE
THAT WILL RELEASE
RADON GAS. A CARCINOGEN.
AND THIS WILL BE
DISPERSED INTO THE
ATMOSPHERE**

capacity. Her position reflected Casella's stance on the issue.

In September, Edward Buhmaster, an administrative law judge for the DEC, ruled that RFPLC's challenge to the legality of dumping potentially radioactive wastes was irrelevant. He limited the Casella proceeding to the question of whether to allow the capacity to grow to 180,000 tons per year.

The citizens' group has appealed to the acting commissioner of the DEC. Under the law, Schwartz had argued, the Chemung Landfill could accept radioactive shale drill cuttings so long as they were not "processed or concentrated." And she argued that the Chemung wastes were not. Ingraffea, among others, disagreed. In a pro bono memo filed in support of the RFPLC, the Cornell geologist stated that rock cuttings from drilling are typically carried to the surface by "drilling mud" that has been saturated with NORM. The rock cuttings are later separated from the mud in an industrial process known as "dewatering."

Buhmaster, the administrative law judge, struck Ingraffea's testimony from the record along with comments made by two other scientific experts on behalf of RFPLC.

Buhmaster concluded that the Marcellus shale cuttings were not processed and the landfill was legally entitled to make drill cuttings its entire waste stream -- up to its capacity.

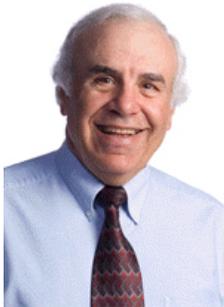
Thomas S. West, an attorney for Casella, argued that if RFPLC's central contention had any validity, which he denied, "it is a matter of statewide applicability that should not be determined in the context of a specific application for a particular facility."

He said RFPLC could follow other procedural avenues to pursue its claim that radioactive cuttings had to go to a landfill licensed to handle them.

In addition to serving as Casella's attorney, West has also served as a lobbyist to Chesapeake Energy, one of the companies that has dumped Marcellus brine-contaminated soil into the Chemung Landfill.

West also argued that the citizens' group's concerns about potentially radioactive wastes were addressed by the fact that Casella had installed radiological monitors at the landfill to warn of loads that exceeded set limits for radioactivity.

In April, Buhmaster had expressed enthusiasm for on-site monitoring. But Schwartz acknowledged weeks later that the DEC staff hadn't seen details of how the monitors would be operated and said their effectiveness "cannot be confirmed."



In any case, Ingraffea said the DEC's decision not to oppose the importation of Marcellus drill cuttings from Pennsylvania to Chemung "creates a precedent for a de facto open-door policy for potentially unacceptable materials to be transported into New York State without adequate regulations in place."

The DEC is rushing to complete its final rules for the latest brand of hydraulic fracturing in the New York Marcellus shale, and agency officials have said they expect to finish in early 2011. But Gov. David Paterson issued an executive order Dec. 11 banning high-volume, horizontal hydrofracking through July 1, 2011.

The rules are spelled out in the agency's draft Supplemental Generic Environmental Impact Statement, which drillers plan to use to speed through the permitting process in New York. The draft has drawn thousands of critical comments.

Many of those criticisms have targeted the DEC's approach to NORM and radioactive wastes.

When the agency tested brine from all 12 of New York State's conventional Marcellus wells in 2008 and 2009 it found alarmingly high levels of radioactivity in more than half of them. Readings for the extremely dangerous Radium 226 were up to 260 times the limit allowed to be released into the environment.

Those readings alarmed the New York State Department of Health, which has discouraged the use of Marcellus brine as a roadway de-icer unless the radioactive materials can be removed first.

The DEC's test findings also drew the attention of the New York City Department of Environmental Protection. "These data raise serious issues for public health, particularly with disposal of both solid waste (i.e. drill cuttings and equipment) and wastewater," the NYCDEP wrote in a hard-hitting Dec. 9, 2009 letter to the DEC.

The city's top environmental officer, Steven W. Lawitts, wrote that the DEC was obliged to do further analysis of the issue, adding: "Such an analysis must be completed before any activity that is likely to generate radioactive waste can move forward." The DEC, however, said it intended to wait for the results of actual drilling in New York's Marcellus. Meeting Lawitts' more rigorous standard became less of a legal imperative

after the DEC announced in April that natural gas wells drilled in the New York City watershed could not use the SGEIS process. Instead, drillers would be required to go through the lengthy environmental impact process well-by-well, a prohibitive expense that effectively curbs the latest brand of hydraulic fracturing within the New York watershed. If the watershed was spared hydraulic fracturing of the Marcellus, the DEC was spared a legal confrontation over radiological regulation.

The DEC has also drawn criticism for its failure to draw a sharp distinction between the latest version of hydraulic fracturing and the more benign techniques used in the past.

The draft DGEIS, many critics argue, needs to be rewritten to reflect special new impacts of the latest technique, which now dominates Marcellus mining. Ingraffea calls it "high-volume, slickwater fracking from long laterals on multi-well pads."

Translated, that means drilling horizontally for several thousand feet along a deep shale formation from a well pad that may contain eight or more wells -- using up to 5 million of gallons of water per well with sand and chemicals that reduce friction and kill bacteria.

Before it's allowed in New York, Ingraffea said, the state should require radiation monitoring of all wastes, solid and liquid, at the drilling pad so they can be sent to proper disposal destinations.

"Let the regs catch up with technology," he said.

Like

Shirley Rice and 2 others like this.



Like this? Let your friends know now!

Latest articles from Peter Mantius

[Marcellus Shale: The Real Price of Compulsory Integration In New York](#) posted on Tuesday, 07 December 2010

The natural gas industry made Joe Todd an offer he couldn't refuse. He told them...

[Pennsylvania Gas Drillers Dumping Radioactive Waste in New York](#) posted on Tuesday, 23 November 2010

ELMIRA, N.Y. -- Trucks hauling rock cuttings from drilling for natural gas in the Marcellus...

[Gov. Paterson Vetoes NY Drilling Moratorium, but bans High-Volume Hydrofracking Until July 2011](#) posted on Wednesday, 01 December 2010

Gov. David Paterson on Dec. 11 vetoed a bill that would have banned a wide...

[back to top](#)

[Gov. Paterson Vetoes NY Drilling Moratorium, but bans High-Volume Hydrofracking Until July 2011](#) < Prev

Next > [America's Energy Future](#)

Showing 7 comments

Sort by



FRepublican Farmer 2 months ago

The Chemung County Executive and the County Legislature are negligent for allowing radioactive wastes to occur at the Landfill in Chemung, NY. The chummy relationship between Casella and the County is an environmental nightmare which will spread its wings in 15-20 years. It is amazing that the Susquehanna River Basin Commission would not be concerned about the activities at the Chemung Site. Recently, the SRBC increased the amount of water permitted for hydrofracking in Pennsylvania. Do they have any concern about the final resting place of that water after it has been used in the hydrofracking process. Has anyone thought about why PA landfills aren't "cashing in" on the radioactive wastes being dumped in

NYS.

DEC is a toothless shadow of any agency. It has become an arm of the NYS Business Council. Look at the DEC regulated gravel pits around NYS and you can see the "questionable beautification" enhancements that occurred after the pits became inactive. Check out the gravel pits along RTE 86 between East Corning and Owego.

Eyesores.

The Chesapeake Bay Commission also needs to be heard on the radioactive cuttings issue. If farm fertilizer and farm runoff are important issues/concerns, is it logical to be heard on radioactive cuttings and the eventual leachate which will reach the Chesapeake

Bay. High Water quality must be maintained and it needs to be a priority. NYS DEC and the PA EPD have not embraced this idea yet. Is it logical to think that both agencies should KNOW that a mistake in the water quality monitoring/management could be a catastrophe or is the priority to bring more dollars into the coffers of NYS, PA and Chemung County government. The radioactive cuttings at the Chemung landfill are an obvious statement by Chemung County that quality in any form is a stranger to them.

5 people liked this. [Like](#) [Reply](#)



harvey 2 months ago

...and we can all rest easily knowing that our new conservative-controlled Congress will surely encourage our EPA to protect us non-corporate citizens from these toxic chemicals & gases -- heckuva job, voters!

5 people liked this. [Like](#) [Reply](#)



Farmer Fran 2 months ago

James Asbury and "Kilgour," like the Chemung County legislature and the DEC's judge Edward Buhrmaser and lawyer Lisa Schwartz, are obviously eager to cash in on the short-term profits from gas drilling, at the expense of our health and our environment. They are a disgrace. This is a serious public health issue. The only ones in this who stand to gain nothing financially are Dr. Tony Ingraffea, Dr. Earl Robinson, and the citizen group opposing this insane dumping of hazardous waste in a facility that cannot handle it. We need to listen to THEM and stop this before it gets worse. Why should Chemung County and the entire watershed area be a dumping ground for toxic waste? We are already paying the price with high rates of cancer in this area; we will be paying an even higher price from the new drilling-related carcinogens, endocrine disruptors, and neurotoxins. What kind of insane legislators and citizens allow corporations to dump radioactive materials on them? We need to fight back against the greedy corporations that would treat us worse than lab rats. Shame on the county.

1 person liked this. [Like](#) [Reply](#)



J2g 1 month ago

If NY residents really think the Marcellus Shale debris is dangerous, then all persons with houses built on shale and granite, and soil derived from these rock types, should consider tearing down their houses and moving.

[Like](#) [Reply](#)



Kilgour 2 months ago

This was dated April 11, 2010. The link at the bottom is no longer found on their site.

I think that's odd that the original article from the Star-Gazette in Elmira just can not be found but here are the results of testing done 8 months ago and was published by the Star-Gazette as well as the Ithaca Journal

Radiation Testing Shows Marcellus Shale Drill Cuttings are Safe for Chemung County, NY Landfill
Chemung County, NY officials have released a report they commissioned from an independent certified health physicist that show levels of radiation in the Marcellus Shale drill cuttings coming from Pennsylvania Marcellus drilling operations to the Chemung County landfill are well below U.S. Environmental Protection Agency standards for radiation.

The gist of the report is that the soil that the county landfill would accept from Marcellus Shale drilling poses no health threat from radiation, said County Executive Tom Santulli.

These people are experts. They made it very clear that this material is less radioactive than the

countertops in our houses and soil in our gardens, Santulli said. My message is simplethis stuff is not toxic. Its no more radioactive than the soil in your garden and bricks on your house. All this testing verifies that. This is way below any EPA levels.

This would be equivalent to taking dirt from your backyard and using it in landfill, he said. It can be used for cover. Its that safe.*

However, the debate still rages. Those opposed to drilling claim there is a significant threat to human health from the drill cuttings. County Executive Santulli says those opposed have zero credibility on the matter with no facts to back up their claims.

For more information on both positions, see the full article in the Star-Gazette.

*Elmira Star-Gazette (Apr 11) County study says soil from gas drilling is safe

Like Reply



James Asbury 2 months ago

you are all so right, you should break this on national news. (snicker) Please NY, don't let them drill in your state. When you go into enough debt, PA will just by you and give you a better name.

Like Reply



Larry BEnnett 1 month ago in reply to James Asbury

Spelt in prooper englush, I'm shure.

Like Reply

Add New Comment

Optional: Login below.

Post as ...

Reactions



MauraStephens 2 months ago

From [Twitter](#) via [BackType](#)

Pennsylvania Gas Drillers Dumping Radioactive Waste in New York <http://t.co/DGzxp7E>



JosephTrento 2 months ago

From [Twitter](#) via [BackType](#)

Pennsylvania Gas Drillers Dumping Radioactive Waste in New York <http://t.co/Q19Nb1E>



danastasi 2 months ago

 From [Reddit](#) via [BackType](#)

Jersey's already full.



TheIceLander 2 months ago

 From [Reddit](#) via [BackType](#)

That's terrible. They should at least dump it in New Jersey where no one would notice.



InactiveUser 2 months ago

 From [Reddit](#) via [BackType](#)

If every farmer in Pen had a 10,000 liter water tank, a masher and a pump the state could run on gas from grass clippings.



Over9Grand 2 months ago

 From [Reddit](#) via [BackType](#)

Theres already a huge uproar around here about the shale drilling. Had friends tell about family's farms that ended up loosing 80% of their live stock due to problems with the water. Yet they keep allowing them to drill



thefoxtrot 2 months ago

 From [Reddit](#) via [BackType](#)

glad I don't live there, bunch of caner zombies will start walking around...

Trackback URL

blog comments powered by [DISQUS](#)

[RESET USER SETTING](#) [TOP](#)

Powered By [T3 Framework](#)

Copyright © 2011 DC Bureau – Exposing Environmental Polluters, Breaking Environmental and Natural Resources News, and National Security Stories That Matter. All Rights Reserved. Designed by [JoomlaArt.com](#)

[DC Bureau](#) Address 1830 Connecticut Ave, NW Washington, D.C. 20009 - 202-466-4310. A Product of the [Public Education Center](#).

[Support Us](#) - [Staff](#) - [Privacy](#) - [About Us](#) - [Contact Us](#) - [Site map](#) - [Submit a tip!](#) - [Donate](#) - [Press](#) - [Log-in](#)

[Natural Resources](#) - [National Security](#) - [Environment](#) - [National Security](#) - [Ocean Pollution](#) - [Iraq war contracting abuse](#) - [Exploiting our Water](#) - [The Iraq and Afghanistan Wars](#)

[Poisoned Soldiers](#) - [Natural Gas Drilling](#) - [Sulfide Mining's threat to water](#) - [Toxins in Louisiana after Katrina](#) - [Sonar's threat to Marine life](#) - [Secret History: Nukes, Terrorism, and America](#)

Share Our Stories

Feel free to republish our articles, graphics and blog for free. Just credit us and link to us, but please don't edit our material or sell it separately. (We're licensed under [Creative Commons](#), which provides the legal details.)

 [Become a fan on Facebook](#) or  [Follow us on Twitter](#)