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# Headlines Highlights for RA's Tablet - THURSDAY, January 30, 2014

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# Charleston Gazette

War of words arises on MCHM flushing

**Experts warn 'flushing' might not have gotten all chemicals out**

**By** Ken Ward Jr.

**By** David Gutman

CHARLESTON, W.Va. -- The "flushing" recommended by the Tomblin administration and West Virginia American Water might not have effectively eliminated Crude MCHM and other toxic chemicals from plumbing systems in homes and businesses, experts are warning.

MCHM from the Jan. 9 Freedom Industries leak into the Elk River might be stuck inside pipes and hot-water tanks, and experts are concerned that the chemical also could be breaking down into other toxic materials that have yet to be fully identified.

Scott Simonton, a Marshall University environmental engineer, told a legislative committee Wednesday that he found cancer-causing formaldehyde -- which he said is one possible breakdown product from the chemical -- in one local water sample and that the continued lack of data on the chemicals that leaked into the Elk is very concerning.

"It's frightening, it really is frightening," said Simonton, who is a member of the state Environmental Quality Board and also consults for at least one local law firm that's filed suit over the leak. "What we know scares us -- and we know there's a lot more we don't know."

Early Wednesday evening, the state Department of Health and Human Resources issued a statement that called Simonton's comments regarding formaldehyde "totally unfounded" and said his testimony "does not speak to the health and safety of West Virginians."

Dr. Letitia Tierney, commissioner of the Bureau for Public Health, said Wednesday evening that the chemists the state state had consulted with all said the formaldehyde could not have come from the MCHM.

"Our experts are all in agreement that it's unlikely that his findings are in any way related to the chemical spill," she said. "It's already in our environment."

Tierney and Elizabeth Scharman, director of the West Virginia Poison Center, questioned Simonton's methodology, saying that he hasn't released multiple samples, the lab he used, how his sample was collected or other details. They also said Simonton had not made attempts to contact them.

"People shouldn't just take the statement of, 'Oh we found formaldehyde in the water,' and have that be a scary statement in itself," Scharman said. "What we're trying to let people know is that formaldehyde can be found in the water and it can be found in the air, and just put that in perspective."

Tierney said formaldehyde is not something they test for because it is created and breaks down naturally and dissolves quickly.

"Formaldehyde is naturally produced in very small amounts in our bodies as part of our normal, everyday metabolism and causes no harm," Tierney's statement said. "It can also be found in the air that we breathe at home and at work, in the food we eat, and in some products that we put on our skin."

Wednesday morning, Simonton told a joint legislative committee on water resources that his family is still not drinking or cooking with tap water, two weeks after the water company and government officials said it is safe for all uses.

"Your level of what risk you will accept is up to you," Simonton said. "I can only tell you what mine is, and I'm not drinking the water. The formaldehyde had me personally a little freaked out."

Sen. John Unger, chairman of the legislative water committee, summed up Simonton's findings. "I think we're in a little bit of shock because of this," said Unger, D-Berkeley.

Andrew Whelton, an environmental engineer from the University of South Alabama, drove to West Virginia after the leak. He and his team of researchers have been taking water samples and helping residents complete the flushing process, but with a different set of guidelines than the state and West Virginia American recommended.

For example, Whelton emphasizes that residents should open their windows during the flushing process and use ceiling or floor fans to push chemical fumes outside.

Whelton also suggests shutting off hot-water tanks before flushing because chemicals in the water will evaporate faster into your home or workplace from hot water than from cold.

In an interview, Whelton said it's crucial that officials begin testing and sampling inside people's homes to determine the level of contamination of plumbing systems and what to do about it.

"I can't believe they aren't doing this," Whelton said. "These issues aren't being addressed. The long-term consequences of this spill are not being addressed."

The latest estimates made public by the state Department of Environmental Protection are that 10,000 gallons of Crude MCHM leaked from a storage tank at Freedom's Etowah Terminal, just 1.5 miles upstream from West Virginia American's regional intake, which provides drinking water to 300,000 people.

The main ingredient in Crude MCHM is another chemical, called 4-methylcyclohexanemethanol. Simonton noted, though, that methanol also is one of its main components. Methanol can break down into formaldehyde, he said.

Tierney, however, said the state's experts have concluded that MCHM cannot be broken down into formaldehyde unless it is heated to 500 degrees Fahrenheit.

Scharman added that, although information on the health and long-term effects of the chemical is still limited, the state has much better information on its chemical makeup and how it breaks down.

Simonton said he found traces of formaldehyde in water samples taken from the Vandalia Grille, in downtown Charleston.

Kevin Thompson, an attorney who retained Simonton as an expert witness for a leak lawsuit, said the sample taken at the Vandalia Grille five days after the leak found 32 parts per billion of formaldehyde. He said that one sample is the only one of dozens his team took that they has been received, so far.

Formaldehyde is found in food and in common consumer products, such as cigarettes, cosmetics

and wrinkle-free clothing. It can enter your body by inhalation, ingestion or if your skin comes into contact with liquids containing formaldehyde, according to the U.S. Agency for Toxic Substances and Disease Registry.

The ATSDR said the risks of formaldehyde are "low" at 10 parts per billion. The agency said the risks of irritation from formaldehyde are "medium" at 100 parts per billion.

After Simonton's testimony about formaldehyde, West Virginia American Water issued a statement that said, "It is misleading and irresponsible to voice opinions on potential health impacts to residents of this community without all of the facts.

"Procedures for water analysis are carefully prescribed, outlined and certified," the water company statement said. "West Virginia American Water will continue working with governmental health and environmental professionals and, in conjunction with these professionals, we and public health agencies will make public any reliable, scientifically sound information relating to risks to public health, if any."

In his testimony, Simonton also said he is still concerned with the 1 part per million standard for Crude MCHM that the federal Centers for Disease Control and Prevention has said is safe in water for everyone except pregnant women.

The vast majority of the most recent test results posted by the state Division of Homeland Security show a "not detected" level of Crude MCHM in water samples. The state has said it can detect the chemical down to 10 parts per billion, although officials in Louisville, Ky., have said their tests can detect the chemical at concentrations down to 1 part per billion.

Scharman said that is just the nature of testing.

"For any test that we do," she said, "different labs have different lower thresholds, so you can always find a level that can test just slightly under."

In a letter sent Tuesday to Sen. Jay Rockefeller, D-W.Va., West Virginia American Water President Jeff McIntyre emphasized that the most recent testing using the state's method has shown "non-detectable levels of MCHM in multiple pressure zones, accounting for approximately 85 percent of our local service area.

"In remaining areas where testing results are above the non-detectable limit, they are still extremely low and only a fraction of the CDC-established 1 ppm health-protective limit," McIntyre wrote.

Last week, Adjutant Gen. James Hoyer of the West Virginia National Guard said the Guard had done some testing in hospitals but had no plans to test in individual homes or businesses.

"I'd have Guardsmen on duty for the rest of my career," Hoyer said.

The water company also has said it has no plans to provide customers with home testing of their

tap water.

In his legislative testimony Wednesday, Simonton stressed what other outside public-health officials have already made clear: Little is known about the chemicals involved in the leak.

"We don't know what happens to this stuff once it gets into the environment," he said. "What happens when it reacts with makeup or soap or shampoo or anything else that we come into contact with everyday?"

He also said the flushing period recommended by West Virginia American and state officials wasn't enough and that the chemical is sticking to pipes in the system.

Starting Jan. 13, water company officials and the state began a weeklong process of lifting broad "do not use" orders for sections of the nine-county area impacted by the MCHM leak. After the order was lifted, residents were advised to run their hot water for 15 minutes, their cold water for 5 minutes, and their outside faucets for 5 minutes to flush the chemical from their homes.

But since then, residents have continued to complain that the black-licorice smell of the chemical is lingering, especially in their hot water.

State officials, in announcing their guidance for flushing, rejected an earlier recommendation from the ATSDR that residents be advised to flush their plumbing systems until the chemical odor is gone.

Simonton said people have flushed for hours and hours, and the odor still remains.

"We know the stuff is sticking," he said. "Exactly where it is or how it's happening is unclear right now."

The U.S. Environmental Protection Agency had said in internal documents that flushing the chemicals out of the system "may require a fairly prolonged time to complete," perhaps two to three weeks.

In a letter sent Monday to the Federal Emergency Management Agency, Tomblin acknowledged that the public lacks faith in the safety of the region's water supply.

"Despite the best efforts of the company and government many people no longer view their tap water as safe and are continuing to demand bottled water to meet their potable water needs," the governor wrote to FEMA Regional Director MaryAnn Tierney. "It is impossible to predict when this will change, if ever."

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National Public Radio

**How Industrial Chemical Regulation Failed West Virginia (Audio Link)**

On Jan. 9, people in and around Charleston, W.Va., began showing up at hospitals: They had nausea, eye infections and some were vomiting. It was later discovered that around 10,000 gallons of toxic chemicals had leaked into the Elk River, just upstream from a water treatment plant that serves 300,000 people. Citizens were told not to drink or bathe in the water, and while some people are now using water from their taps, many still don't trust it or the information coming from public officials.

*Charleston Gazette* reporter Ken Ward tells *Fresh Air*'s Dave Davies that the spill included "a chemical called crude , which was sold by a company called Freedom Industries — sold to coal companies for use in the process of cleaning and washing the impurities out of coal before they ship that coal to market."

For Ward, the episode is far more than the story of an accident and a cleanup: Ward says the spill and the sometimes confusing information authorities have provided about the risks to citizens reflect long-standing regulatory failures in West Virginia and across the nation.

Ward is an award-winning investigative reporter who has been covering West Virginia energy and environmental issues for *The Charleston Gazette* for years.

## Interview Highlights

**On how the chemical leak was discovered**

Some people who live in that part of town called in both to the metro 911 — the county emergency operation center — and to the state Department of Environmental Protection complaints of an odor. [They said] they smelled some sort of a strong licorice odor in the air.

The Department of Environmental Protection sent a couple of air quality inspectors out and ... when they first went there they were told by company officials, "No, we're not having any problems. What are you talking about?" [The inspectors] asked to tour the site. [They] went out and they noticed there was a problem at one of the tanks. They described to me a 400-square-foot, 3- to 4-inch-deep pool of this chemical that had leaked out of a hole in the tank, and a 4-foot-wide stream of this stuff that was pouring across the containment area ... and it was kind of disappearing ... into the river. ... Much of the Elk River was frozen over so you couldn't immediately see that it was in the river.

The problem that arises from that is that Freedom Industries [the company that owns the chemical storage tanks] had a permit from the state Department of Environmental Protection — a storm water permit, a permit to govern runoff from its facility. One of the requirements of that permit is that they immediately report any spills. The Department of Environmental Protection says they didn't report this spill to the state. And the fact that they didn't report it immediately delayed some efforts at containing the spill and certainly affected the size of it and made the

situation worse than it necessarily had to be.

**On the ambiguity around the health risks of the chemical spill**

Eastman Chemical, which makes it, puts out what's called a Material Safety Data Sheet. An MSDS is something that's required under the Occupational Safety and Health Act. It's supposed to be kept on site for workers to look at and it's supposed to be filed with emergency responders and local environmental authorities. It's supposed to list the properties of the chemical, its flashpoint and what's the toxicity of it.

And the problem with this particular substance is that if you read the MSDS for it, where it lists toxicological effects: Is it a carcinogen? No data. Does it cause developmental problems? No data. Most of the basic health effects that you'd want to know about, there's no data available listed on the MSDS for this material.

**On what citizens are doing in response**

My family and I, we're not drinking this water. I know a lot of people that aren't. When you go to the grocery stores here you still see people buying pretty significant quantities of bottled water, filling up their carts. When you go to restaurants you hear people asking, "Are you using bottled water? Are you using tap water?" And restaurants are putting out press releases and they have signs that say, "We're using only bottled water."

**On the U.S. Chemical Safety Board's recommendations for stricter oversight of industrial chemicals in West Virginia**

The Chemical Safety Board has been to West Virginia quite a few times and they came here in 2008 after an explosion at a Bayer CropScience chemical plant. ... The Chemical Safety Board came in and investigated that and found a lot of problems at the plant and found a dearth of regulation of that sort of a plant. And one of the things the Chemical Safety Board said was that our state ... should work with the Kanawha-Charleston Health Department to create a new chemical accident prevention program through which government inspectors would more frequently go into these plants, would ensure they're being operated safely.

The Chemical Safety Board came back again after a series of accidents at a DuPont chemical plant ... in West Virginia — [a series of] accidents there in January of 2010 ended up with one worker being killed. And the Chemical Safety Board repeated its recommendation after that incident. ...

The state has really done absolutely nothing to implement that recommendation. The Kanawha County officials have encouraged the state to work with them ... and the state has just basically ignored the recommendation.

**On misconceptions about federal regulation of dangerous industrial chemicals**

The industry officials didn't like the Chemical Safety Board recommendations. They insisted

there's enough regulation already and that agencies like the Environmental Protection Agency and the Occupational Safety and Health Administration do enough already.

And I think there seems to be this idea that ... agencies like EPA and OSHA are these jackbooted thugs that are kicking down the gates of manufacturing facilities and stomping out jobs. When in fact, a lot of these facilities will go for years and years without ever seeing an OSHA inspector coming in and checking on the workplace conditions; without ever seeing an EPA inspector who is looking at their environmental conditions. The notion that these places are just terribly overregulated is wildly exaggerated.

**On what authority the Obama administration has to regulate industrial chemicals**

[The Obama administration certainly has] broad rule-making authority at EPA, and the Environmental Protection Agency can make rules about all sorts of things about this; the Occupational Safety and Health Administration can make rules about these things.

One example is [that] the coal industry here likes to complain about how tough the Obama administration is on them, but a few years ago we had a major spill of toxic coal ash from an impoundment in east Tennessee, and the Obama administration promised after that, "We're going to write new rules to govern toxic coal ash and ensure that it's handled and disposed of safely."

Well, they still haven't done that. OSHA knows that combustible dust is a big problem. They haven't written rules about that.

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# Pittsburgh Post-Gazette

Alcosan expects approval of sewer plan

## $2 billion project still looking to add green components

**January 29, 2014 11:48 PM**

**By Don Hopey / Pittsburgh Post-Gazette**

This week or next, the Allegheny County Sanitary Authority expects federal approval of its $2 billion plan to significantly control, but not eliminate, wet weather sewage overflows into the region's rivers.

However, unless city and county officials convince the U.S. Environmental Protection Agency to make a last-minute change, the OK won't give Alcosan the additional months it requested to

study and add "green" infrastructure components such as rain gardens, trees, planted roof tops, permeable pavement and rain barrels to the plan.

"EPA has let us know in meetings we've had that they don't want us to delay," said Nancy Barylak, a spokeswoman for the joint city-county authority. "The agency has told us that green infrastructure will not be allowed to hold up the wet weather plan implementation schedule."

The Pittsburgh region is one of hundreds of metropolitan areas that have older sewer systems that were designed to overflow regularly during rainstorms as a way to prevent damage to treatment facilities.

Federal water regulations no longer allow such sewage overflows, and a federal court order in 2008 mandated that Alcosan stop all 52 illegal sanitary sewer overflows into the region's rivers by 2026 and significantly reduce discharges from 153 combined sewer overflows.

The Alcosan control plan, submitted to EPA a year ago, proposes only so-called "gray infrastructure" fixes, including construction of bigger collector pipes and two or three massive underground storage tunnels to hold wet-weather flows until they can be pumped through a much-expanded Alcosan treatment facility.

The $2 billion plan will capture and treat 79 percent of the region's combined sewer overflows. A more extensive $3.6 billion plan proposal would have captured more than 90 percent of that overflow, but was judged too costly for Alcosan's ratepayers, which include the city of Pittsburgh and 83 other municipalities.

Neither plan contained any green components, but when Alcosan submitted the cheaper plan in January 2013, it asked the EPA for an 18-month extension to study the feasibility of using the alternative overflow controls.

Green sewer system infrastructure is designed to hold and use stormwater where it falls instead of channeling it into collection pipes. It is a relatively new but proven water management strategy, endorsed by the EPA, to reduce the amount of stormwater that must be treated while at the same time beautifying neighborhoods and enhancing public parks and green space.

A number of cities -- Chicago, Philadelphia, Cleveland, Milwaukee, Minneapolis and Washington, D.C. -- have included green components in their overflow plans. But Alcosan has embraced such strategies slowly and reluctantly, said Barney Oursler, executive director of Pittsburgh United, a coalition of 13 environmental, union, community and faith organizations that has campaigned for green infrastructure components.

"We think Alcosan has learned how to do green washing, but isn't really interested in or capable of changing its old gray way of doing things," Mr. Oursler said.

The coalition said Alcosan lacks the vision needed to implement large-scale green infrastructure components in the sewer improvement plan, and has called on city and county officials to replace the authority's board of directors.

But Allegheny County Executive Rich Fitzgerald, who, along with Pittsburgh Mayor Bill Peduto, supports green infrastructure strategies, said he expects the authority will more aggressively pursue those options.

"Even some of the Alcosan staff that have been reluctant to utilize green infrastructure have changed their attitudes and are now pursuing green," Mr. Fitzgerald said. "Gray will be a component of the plan -- it would be unrealistic to say it won't -- but we want to do as much with green as we can."

Mr. Fitzgerald and Mr. Peduto were in Washington, D.C., Tuesday, along with Alcosan executive director Arletta Scott Williams, for meetings on the issue with U.S. Rep. Mike Doyle, D-Forest Hills. A meeting with EPA officials scheduled for Wednesday was postponed to allow the city and county leaders to accompany President Obama on his visit to U.S. Steel's Irvin plant in West Mifflin.

David Sternberg, an EPA spokesman, declined to discuss the specifics of the Alcosan plan decision, but said the agency "supports flow reduction efforts by the municipalities of the Three Rivers Region through the use of green infrastructure as part of a comprehensive approach to achieving healthier waters."

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# Los Angeles Times

**Tainted West Virginia water: Formaldehyde in the shower**

**By David Zucchino**

First, federal regulators couldn't explain the possible health dangers posed by the mysterious coal-cleansing chemical that spilled into West Virginia's drinking water -- except that pregnant woman shouldn't drink it even after the water had been declared safe for everyone else.

Then the chemical company responsible for the spill belatedly admitted a second, equally unpronounceable chemical containing ether also had been dumped into the water.

Now comes this warning for hundreds of thousands of West Virginians: They may be inhaling formaldehyde while showering in the tainted water, which was declared safe for human consumption a week after the Jan. 9 spill into the Elk River just north of downtown Charleston.

"I can guarantee you that citizens in this valley are, at least in some instances, breathing formaldehyde,'' Scott Simonton, a Marshall University environmental scientist and member of a state water quality board, told a legislative committee in Charleston on Wednesday.

"It's frightening, it's really frightening," Simonton told the panel. He said he and his family are not drinking or cooking with the water, even though state and federal authorities have declared it safe for all uses.

Formaldehyde is listed by the Environmental Protection Agency as a likely human carcinogen that has caused cancer in animals. The EPA says the colorless, pungent gas can cause burning sensations in the eyes and throat, nausea and breathing difficulties in exposure to elevated levels, defined as above 0.1 parts per million. It can also trigger several allergic reactions.

Formaldehyde is used in plywood, paneling, particleboard and furniture, and as an adhesive and a preservative in paints.

**[Updated, 3:25 p.m. Jan. 29:** "Formaldehyde is a ubiquitous, naturally occurring substance produced by every living organism," the American Chemistry Council's Formaldehyde Panel said in a statement. "Studies show that formaldehyde is readily biodegradable and does not accumulate in either the environment or in people. In the environment, formaldehyde is quickly broken down in the air by sunlight or by bacteria in soil or water."**]**

Simonton, a member of West Virginia's Environmental Quality Board, said he found traces of formaldehyde in water samples taken at a popular restaurant in downtown Charleston, but he did not specify the concentration. Other testing showed no traces of the chemical, but other samples are still being tested.

"The problem is, we're seeing it in water,'' Simonton said in remarks first reported by the Charleston Gazette. "We don't know what the concentration is in the air.''

According to Simonton, methanol in the chemical that spilled into the water supply, 4-methylcyclohexanemethanol, or MCHM, can break down into formaldehyde.

"This stuff is breaking down into formaldehyde in the shower or in the water system, and they're inhaling it,'' Simonton said of some of the 300,000 residents of nine West Virginia counties told not to use their tap water in the days after the spill.

Other environmental scientists said in published interviews that more testing is required to confirm the formaldehyde came from the chemical spill and was not present before the incident.

Richard Denison, a senior scientist at the Environmental Defense Fund, told The Times on Wednesday that because no reliable scientific data exists on the toxicity of inhaling MCHM, officials were wrong to declare the tainted water safe for showering. A presumed safe level for ingestion of a chemical does not guarantee a safe level for inhalation, he said.

"Generally speaking, chemicals can be more toxic by inhalation than by ingestion because the lung is more permeable than the lining of the gut with respect to chemicals getting in the bloodstream,'' Denison said.

He added: "Clearly the chemical [MCHM] is volatile -- that's why people can smell it. Taking a hot shower in such water means that people clearly would be exposed via inhalation of the vapor.''

Simonton said people should be cautious, even though their tap water has been declared safe.

"Your level of what risk you'll accept is up to you,'' Simonton said. "I can only tell you what mine is, and I'm not drinking the water. The formaldehyde had me personally a little freaked out.''

After Simonton's presentation, the chairman of the legislative panel, state Sen. John Unger, remarked: "I think we're in a little bit of shock because of this.''

**[For the record, 4:05 p.m. Jan. 29: A previous version of this post incorrectly stated that Richard Denison of the Environmental Defense Fund said that because no reliable scientific data exist on the toxicity of inhaling formaldehyde, officials were wrong to declare the tainted water safe for showering. Denison was referring to inhaling the chemical MCHM. He said there are reliable data on the toxicity of inhaling formaldehyde.]**

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# Washington Post

**Blog: Obama says fracking can be a 'bridge' to a clean-energy future. It's not that simple**

## By Brad Plumer, Updated: January 29 at 2:47 pm

In his State of the Union address, President Obama heaped praise on the boom in natural-gas production across the United States. And he made a comment about fracking that triggered some grumbling from green groups.

"If extracted safely," Obama said, natural gas is "the 'bridge fuel' that can power our economy with less of the carbon pollution that causes climate change."

Other administration officials have made this "bridge fuel" comment before. If fracking is done right, the idea goes, then all that natural gas can provide somewhat lower-carbon electricity as an interim step as we develop more carbon-free sources of energy. *That's* how we'll tackle global warming.

But does this idea really make sense? It's complicated, and there are reasons to be skeptical about the whole "bridge" concept. So here's a breakdown:

**How the natural gas "bridge" is supposed to work**: In the near future, the glut of cheap natural gas from shale fracking will push aside coal in the U.S. electricity sector. Because burning natural gas for electricity emits about half the carbon-dioxide that burning coal does, this will reduce U.S. carbon emissions. That, in turn, buys the country time to make the more arduous shift to even cleaner forms of energy, like solar or wind or nuclear.

To some extent, this is already happening. In recent years, increased use of natural gas has helped push down U.S. carbon emissions:

But there's a catch: The United States can't keep burning natural gas indefinitely if we want to make truly deep cuts in emissions. At some point, the nation will have to transition to cleaner energy if we want to avoid significant climate change. (In some cases, natural gas can help with that — by offering a backstop for renewable power.)

The exact timeline here is often left vague, though. Last year, Energy Secretary Ernest Moniz told the Senate that natural gas use would need to get phased out by mid-century or so, and that "we must continue to invest in research in carbon-free sources— renewables, nuclear and CCS [carbon capture and storage] for both coal and natural gas."

So, let's get more specific.

**If the world wants to meet its climate goals, the "bridge" would have to be short.** In a paper last year in *Climatic Change*, energy expert Michael Levi laid out some hard numbers and scenarios:

*A short bridge.* Say the world wants to stabilize the amount of carbon-dioxide in the atmosphere at about 450 parts per million — giving us a shot at limiting global warming below 2°C. If that's the goal, then the world can use natural gas for only a brief period before transitioning to carbon-free power. Global gas consumption would have to peak by 2020 or 2030. That's a short bridge.

*A medium bridge. S*ay the world instead decides to risk more global warming and aims for a carbon target of 550 parts per million. This would pose a very strong chance of breaching the 2°C threshold. Still, natural gas would be useful as an intermediate bridge in this scenario, with global gas use peaking somewhere between 2020 and 2060.

*A permanent bridge.* And what if natural gas use continued indefinitely? The International Energy Agency has calculated what would happen if the world simply replaced a great deal of coal with natural gas and left it at that. The world would still be on track to increase atmospheric carbon emissions to about 650 parts per million, "a trajectory consistent with a probable temperature rise of more than 3.5°C in the long term, well above the widely accepted 2°C target."

**Why environmentalists are skeptical of the bridge:** Some climate hawks have looked askance at this whole "bridge fuel" notion. They'll point out that natural gas is still a fossil fuel, capable of heating the planet. And, they say, there are a few problems:

1) Energy companies involved in the shale boom certainly aren't planning to phase out natural gas anytime soon. Indeed, they're now building power plants and pipelines that are expected to last decades. That could make it harder to meet the 2°C goal.

2) Likewise, all this cheap shale gas could actually hinder the development of carbon-free sources like solar and wind and nuclear. One study from MIT suggested that the natural-gas boom could lead to *higher* U.S. greenhouse-gas emissions by mid-century if it stunts the growth of renewable energy.

3) The country's natural-gas infrastructure still leaks an unknown amount of heat-trapping methane, a potent greenhouse gas in its own right. That means that the climate benefits of natural gas may well be oversold. In his paper, Levi notes that methane isn't a huge problem if natural gas acts as a very short bridge toward the 2°C target. But methane leaks could be a bigger issue the longer we use natural gas. (The Obama administration is working on a plan to address that.)

4) Some climate groups have argued that even 2°C worth of global warming is too dangerous and that we should try to stabilize at 350 parts per million, which would mean taking carbon out of the atmosphere (the world is currently hovering around 397 parts per million ). In this scenario, we'd basically need to stop using all fossil fuels immediately.

So, there are a lot of different scenarios. Natural gas makes most sense as a bridge if we're willing to chance a hefty dose of global warming — with all the risks that come with it, from rising sea levels, to droughts to withering food production. But if we want to avoid a 2°C rise in temperatures, much of that natural gas may need to stay in the ground.

That's why, in his paper, Levi concluded that natural gas is better thought of as a "hedging tool" than as a "bridge." In the event that the world's policymakers won't do anything about climate change, then natural gas is at least less damaging to the climate than coal. But that's a very different idea.

**Further reading:**

— Can natural gas help tackle climate change? A very basic primer.

— Here's a post by Michael Levi explaining his "bridge" paper.

— Methane leaks are undermining the shale-gas boom. Here's how to fix that.

— There are plenty of other environmental risks from fracking, including air pollution and the possibility of groundwater contamination. Those are also worth discussing, but note that on the flip side, natural gas is cleaner than coal when it comes to a variety of air pollutants, such as soot and mercury.

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# Philadelphia Inquirer

## Blog: Climate change and the State of the Union

**By Sandy Bauers, *Inquirer GreenSpace Columnist***

Posted: Wednesday, January 29, 2014, 12:04 PM

"But we have to act with more urgency because a changing climate is already harming western communities struggling with drought and coastal cities dealing with floods," President Obama said in his State of the Union address last night. ""That's why I directed my administration to work with states, utilities and others to set new standards on the amount of carbon pollution our power plants are allowed to dump into the air.

Environmental groups praised the speech, but pushed for more. Many singled out his "all-of-the-above" energy strategy as problematic, saying a more definitive shift to clean energy needs to happen.

"The shift to a cleaner energy economy won't happen overnight, and it will require some tough choices along the way," Obama said. "But the debate is settled. Climate change is a fact. And when our children's children look us in the eye and ask if we did all we could to leave them a safer, more stable world, with new sources of energy, I want us to be able to say yes, we did."

Here are responses from various environmental groups:

**Environmental Defense Fund:** “In addition to the groundbreaking Climate Action Plan, the Obama Administration has set cleaner standards for our cars and trucks, doubled down on its renewable energy goal and -- most important -- proposed the first-ever national limits on carbon pollution from power plants," said president Fred Krupp. "We look forward now to action on methane, another powerful climate pollutant. As the President told the New Yorker magazine recently, methane pollution will be a 'profound' problem if not handled correctly. The President also proposed tonight to shift more vehicles to natural gas -- but that would indeed cause profound problems for the climate unless his Administration takes action to curb methane releases from the natural gas industry."

**Sierra Club:** “The President has taken significant steps forward by committing to hold dirty power plants accountable for their toxic carbon pollution and to protect our public lands. We’re also encouraged to hear his plans to help repair and modernize America's infrastructure," said executive director Michael Brune. “Unfortunately, the sum total of the President’s commitments fall short of what American families need to ensure a safe, healthy planet for our children. We can’t drill or frack our way out of this problem. There is far more potential for good job creation in clean energy like solar and wind, and common sense solutions like energy efficiency."

**Earthjustice:** “The success of the President’s climate plan and our children's future depends on viewing all fossil fuels decisions through the lens of climate impacts, as the president has said he would do for the Keystone XL pipeline," said president Tripp Van Noppen. "Those agencies responsible for drilling off our coasts, fracking, mountaintop removal, and fossil fuel exports have to prioritize climate change just as the EPA is doing, and the President needs to ensure that they do. An ‘all-of-the-above energy strategy’ cannot work for the President’s own climate action plan and the climate vision he espoused tonight. All energy sources were not created equal. Clean energy is better for our families, communities, future generations, and American competitiveness. The United States should be placing our bets on 'best of the above,' not 'all of the above.' "

**Center for Climate and Energy Solutions:** "There’s no prospect of Congress taking serious action anytime soon, and the president is right to move forward with the regulatory tools at his disposal," said president Eileen Claussen. "The carbon limits for power plants the administration is developing must deliver meaningful reductions while ensuring the reliability and affordability of America’s power supplies. In crafting them, the Administration must work closely with states and business to forge practical, flexible approaches that protect both the climate and our economy."

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# Cecil Whig

## Commentary: Saving the Bay

**By Laura Wormuth lwormuth@stardem.com | Posted: Thursday, January 30, 2014 4:30 am**

**Since 1984, hailed as “The Year of the Bay,” the Chesapeake region has undergone a transformation — not simply of the water, the ecosystem, the islands or the shoreline, but also of the people, the mindset and the attitude surrounding the policies and work that needs to be done for restoration of the area.**

**Debate surrounds the progress — or lack thereof — made toward “saving” the Chesapeake Bay. Deadlines for improvement are rescheduled, plans and projects redefined, budgets reassessed, priorities revised, goals reviewed. But despite the uncertainty, what is sure is that the issues, the severity of them, have been recognized over the last 30 years. Those years have reformed the perspectives of the people living in the watershed of the Bay and are changing the way the population lives.**

A tremendous amount of support for the Bay exists through policy changes, advocacy groups and personal responsibility. Everyone from watermen to farmers to recreational users care about the state of this important and unique area. Individuals volunteer their time, professionals provide their expertise, organizations, programs and commissions dedicate funds and effort to

this noble purpose.

These 30 years have seen the formation of regulations and, more importantly, the formation of groups of people who are dedicated to determining the best policies, the best actions, to conserve the ecosystem and maintain its economic viability while preserving its beauty.

In the old philosophical debate of optimism versus pessimism, one could rightfully ask, are the efforts to rehabilitate the Chesapeake Bay half full or half empty?

When the federal government failed to reduce nutrient pollution by the suggested deadline of the year 2000, goals were reset to demand a 40 percent reduction by 2010. When numbers again failed to reflect the drop in nitrogen and phosphorous pollution, that deadline was extended to 2025.

Facts like this make people fearful that the intentions and endeavors made by public and private entities are desperate and perhaps even hopeless. What good are one person's efforts when corporations and government cannot make progress or meet goals?

However, in the face of these missed deadlines and unachieved goals, the commitment remains strong, dedication remains consistent, new plans are developed, new tactics tested and the vision of a healthy Chesapeake is re-imagined with every new idea and each new generation.

At a recent talk on landscaping, sponsored by the Chesapeake Bay Foundation, horticulturist Thomas Christopher spoke to residents of Easton about creating sustainable lawns using native plants to reduce the use of fertilizers by homeowners and gardeners. While this event seems small in comparison to regional and national initiatives like the Chesapeake Clean Water Blueprint developed by the Environmental Protection Agency which lays out goals to reduce the three major components of Bay pollution — nitrogen, phosphorous and sediment — this simple gathering of Eastern Shore residents is a testament to the commitment of everyone who lives and works on or around the Bay watershed.

The legacy, the history, of the Chesapeake Bay is filled with hope and optimism. The land that John Smith described in his 1608 adventure as "at the mouth of a very goodly bay ... Within is a country that may have the perogative over the most pleasant places known, for large and pleasant navigable rivers, heaven and earth never agreed better to frame a place for man's habitation" is still a vision every person who lives or visits the place holds with hope.

With every big plan and every small effort, we all come closer to a healthier Chesapeake Bay.

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# Chesapeake Bay Journal

**Blog: Details filed in industry groups' TMDL appeal**

Industry groups that are appealing a federal district court's decision to uphold the EPA's "pollution diet" for the Chesapeake Bay filed a more detailed brief about their appeal this week.

The American Farm Bureau Federation and other farm- and development-minded groups sued the EPA within weeks of its issuing the Chesapeake Bay Total Maximum Daily Load (TMDL) in December 2010. They said the EPA had overstepped its boundaries as laid out in the Clean Water Act and was treading on states' authority to determine how and where to meet water quality goals.

Their appeal restates this argument in more detail, reiterating that the groups believe the Clean Water Act leaves it up to states to establish water quality standards for waters within their borders.

U.S. District Court Judge Sylvia Rambo ruled in September that the EPA acted within its Clean Water Act authority and that its role was critical in developing a multi-state pollution reduction strategy.

The appeal states that Congress authorized the EPA to establish only a "total load" and not allocations that provide "reasonable assurance" requirements or deadlines. It interprets the Clean Water Act as allowing the implementation of specific TMDLs for specific impaired waterways at the state level.

The appeal argues that Congress established the Clean Water Act on a basis of "cooperative federalism" that works with states as they chart their courses toward clean water. It also states that, even if the EPA has the authority to approve or establish certain allocations, it lacks the authority to mandate to states their implementation in any specific manner or time.

Judge Rambo stated in her decision that the parties involved in the suit had the opportunity to participate in drafting the TMDL "in a meaningful way," and she called the process an example of cooperative federalism.

The appeal also lays out the argument that the states and stakeholders already were making progress toward Bay water quality improvements prior to the TMDL being issued. It states that the TMDL restricts the control of states and localities over land use and economic development decisions as they relate to water quality.

"These are uniquely local decisions that should be made by local governments," AFBF President Bob Stallman said in a press release about the appeal. "That is why this power is specifically withheld from EPA in the Clean Water Act."

View our previous stories about the groups' plans to appeal here, and about the judge's original decision here.

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# Roanoke Times

## Ahead of Obama's speech, Southwest Va. legislators blast proposed EPA rules

**By Michael Sluss | Posted: Tuesday, January 28, 2014 11:53 am**

On the day of President Barack Obama's State of the Union address, Southwest Virginia legislators and coal industry advocates gathered in Richmond to blast the administration's proposed regulations on greenhouse gas emissions from power plants.

"These regulations are so unrealistic, they literally make it impossible to build a new coal-fired power plant in the United States," said Del. Terry Kilgore, R-Scott County. "The technology simply does not exist out there to meet what these regulations would demand."

Kilgore, the chairman of the House Commerce and Labor Committee, is one of 85 General Assembly members – all but one of them Republican -- who signed a letter to Obama asking him to ditch the proposed EPA regulations. Sen. Phillip Puckett, D-Russell County, is the only Democrat to sign the letter.

Coal industry representatives and the president of the Virginia Chamber of Commerce joined Southwest Virginia legislators to demonstrate their opposition to the proposed regulations.

"It's going to devastate our local governments that depend on coal taxes for a large portions of their budgets and it's going to put a huge burden on families and businesses as they see their cost of electricity rising," Kilgore said. "None of these outcomes are acceptable to Virginians, so we're asking the president and the EPA to put these regulations aside and go back to the drawing board and look for more responsible ways to reduce carbon emissions that would not hurt our economy."

But, for now, Virginia is sending a mixed message to Washington about the new emissions standards. Democratic Gov. Terry McAuliffe has been supportive of them.

"He supports them with respect to the new plants and thinks this is a way to inspire investments in clean coal technology and renewable energy," McAuliffe spokesman Brian Coy said.

Coy said McAuliffe would not support imposing the new EPA rules on existing plants.

But when asked about McAuliffe's position on the regulations, Puckett said:"Yes, it hurts."

"I've talked very plainly to him about what this might do to the Southwest region," Puckett said. "The other piece that Virginians don't talk much about is what it means to businesses like Norfolk Southern and the Hampton Roads ports. This is not just about Southwest Virginia. So when you take the perspective of who it really affects, it affects the entire state. And it's a huge

piece of the economy."

Puckett said he has told McAuliffe that the governor can help the cause by investing state research dollars into clean coal technology projects.

"We need a commitment and an understanding that we can't do without this industry," Puckett said.

Barry DuVal, the president of the Virginia Chamber of Commerce, called the proposed EPA regulations "an attack on coal" and an "attack on jobs in Virginia."

"We endorse this letter going to the president," DuVal said. "We ask that he get his priorities in order and the EPA back at the table with leaders from the power companies and develop some regulations that are realistic and does, at the same time, protect our environment and the economy."

The Sierra Club of Virginia issued a statement criticizing the opponents of the new EPA rules, saying they "fail to offer any alternative means of addressing carbon pollution that is driving climate change."

"The coal industry in Virginia was losing jobs due to mechanization even while coal production levels held steady," the Sierra Club statement said. "Recent reductions in demand are due largely to expanded natural gas production, not to new EPA requirements."

A group called Small Business Majority also circulated a list of businesses that support the EPA's efforts to limit carbon pollution.

Copies of the letter to Obama also were sent to Virginia's U.S. senators, Democrats Mark Warner and Tim Kaine.

Warner spokesman Kevin Hall said the senator "thinks the EPA should set standards that are attainable but not so difficult that they threaten to put entire industries out of business."

"Senator Warner has voted against EPA regulations before when he thought they overreached, and we're keeping a close eye on this proposal," Hall said.

Kaine's office issues a statement saying he "has consistently said that we need to balance our need for reliable energy – including coal and other fossil fuels – with a growing consensus that we must reduce carbon pollution."

Kaine last year asked the EPA to release separate standards for new coal and gas plants to reflect key differences in the two technologies, which the agency did.

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# Philadelphia Inquirer

## Delco oil spill nearly cleaned up, DEP says

**By Sandy Bauers, Inquirer Staff Writer**

**Posted: January 29, 2014**

A spill of about 1,000 gallons of crude oil into the Delaware River near Trainer, Delaware County, was largely cleaned up Tuesday, according to the state Department of Environmental Protection.

The spill happened about 1 p.m. Monday when a pipe burst in the marine off-loading area at the Monroe Energy L.L.C. refinery, just south of the Commodore Barry Bridge.

The majority of the oil is gone, said DEP spokeswoman Deborah Fries. "What is remaining is sheen."

She said the cold weather helped response workers do their job. Cold oil has a higher viscosity, which made it easier to collect and contain, she said.

Plus, the winds were pushing the product toward the shore instead of into the river. And at the time, there was no precipitation, which could have spread the oil.

Fries said there was no harm to aquatic life.

Monroe spokesman Adam Gattuso said that oil-containment booms affixed to the facility's pier, leading to the docks and a bulkhead, were deployed immediately. Then more booms were added outside the first ring.

"The efforts for cleanup continue, and we're going to work until everything is out of the water," he said.

A statement from the company said that employees were working closely with various agencies, including the DEP, the Coast Guard, and the Pennsylvania Fish and Boat Commission.

Also on the site were members of the Delaware Bay and River Cooperative, a nonprofit

corporation organized by oil and transportation companies to respond to spills.

The company statement said, "We will be looking closely at the role the extreme weather might have played."

Officials are still investigating.

Maya van Rossum, the Delaware Riverkeeper, said that while the spill may seem small, "it is a spill nonetheless, of dangerous contamination that does not belong in our river, and I will expect the company to go above and beyond to try to make it right."

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# Philadelphia Inquirer

## Nutter launches energy efficiency mission for Philly buildings

**By Sandy Bauers, *Inquirer GreenSpace Columnist***

Posted: Wednesday, January 29, 2014, 5:13 PM

Philadelphia will join nine other major American cities in a coordinated effort to boost energy efficiency in large commercial buildings, Mayor Nutter announced today.

Details on how the efficiency gains would be achieved were slim -- first, a plan has to be developed -- but officials said that the potential exists for savings of $77 million in energy costs a year. If that were to happen, it would be the equivalent of reducing the amount of climate change pollution generated by 23,000 households, they said.

"Improving energy performance in Philadelphia's buildings is not just good for the environment, it puts money back in the pockets of building owners, operators, and tenants – and ultimately back into the local economy," Nutter said in a press release about the announcement.

The national effort, dubbed the City Energy Project, is an initiative shepherded by the Natural Resources Defense Council and the Institute for Market Transformation.

The largest source of energy use and climate pollution in cities comes not from transportation, officials said, but from their stationary assets: Their buildings.

According to a Philadelphia analysis, buildings are responsible for 62 percent of the city's carbon emissions, more than either the transportation or industrial sectors. As much as 30 percent of the energy these buildings use, however, is wasted, the analysis found.

Atlanta, Boston, Chicago, Denver, Houston, Kansas City, Los Angeles, Orlando, and Salt Lake

City also will be part of the project.

Funds are coming from Bloomberg Philanthropies, the Doris Duke Charitable Foundation, and The Kresge Foundation. The money will go toward helping each of the cities develop plans and policies to boost energy efficiency.

Philadelphia already has a building "benchmarking" program, where building owners measure and compare the energy performance of their buildings. Think of it as miles per gallon in a car.

"By having more access to data, building owners and managers will be able to compare their building's performance with other like-sized and –aged buildings, and see how much they could be saving on energy costs," the city notes on the program website.

I was talking to a realty trust official about it not long ago, and he felt that energy efficient buildings will be more appealing to tenants, although they might cost more per square foot, too, at the outset. Consider a city block where all the big office buildings basically have the same amenities. "Yet, if I said to you, one building is a D, one is a C, one is a B, one is an A. Where would you rent?" he asked.

Laurie Kerr, Director of the City Energy Project at the Natural Resources Defense Council, said in the press release that the ten mayors "are showing there is the political will to put people to work to build a healthier, more prosperous future for America's cities. In the face of a changing climate and increasingly extreme weather, these city leaders know they cannot wait for the state or federal government to make them more resilient and sustainable – they are taking action now."

The skills and technology are there, said Cliff Majersik, Executive Director of the Institute for Market Transformation, also in the press release. "But we need a coordinated effort by major cities and the private sector to make it happen."

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# Middletown Transcript

## Governor Markell proposes 10-cent gasoline tax to fund Delaware transportation projects

### Tax would generate an estimated $50 million per year

# to fund roads and bridges.

DOVER, Del. Gov. Jack Markell is asking legislators and Delawareans to support a 10-cent increase in the state motor fuels tax as part of a plan to create a reliable revenue stream for the state's Transportation Trust Fund.

At a press conference today in Dover, Markell said the funds generated from the tax hike would significantly boost spending on transportation projects statewide and put thousands of Delawareans to work over the next five years.

Delaware's motor fuels tax has not been increased in the last 19 years, since 1995). The rates are 23 cents per gallon for gasoline and 22 cents per gallon for special fuels, including diesel.

A 10-cent-per-gallon increase in motor fuel and special fuel taxes would generate an additional $50 million for the trust fund that pays for roads, bridges and other essential transportation elements. The estimated additional cost to motorists would by $57 per year or $4.78 per month, according to a press release from the governor's office.

Under Markell's plan, increased motor fuels tax revenues would be coupled with a fiscally-responsible borrowing strategy that keeps DelDOT on track to paying down debt.

Markell proposes borrowing $50 million each year for five years by DelDOT to fund already-identified, but delayed construction projects that address safety, congestion and maintenance needs under the State's Capital Transportation Plan, Paving program and State of Good Repair initiative.

The combination of $50 million in new revenue each year and $50 million in borrowing each year would pay for an additional $500 million dollar investment in transportation projects statewide over five years.

Since 1999, the Transportation Trust Fund has been dependent on fluctuating monies from state escheat funds. It has also been financially challenged for many years by a combination of stagnant or flat revenue streams, residual debt, rising operating and construction costs, increased transit expenses, ongoing maintenance requirements, and steadily rising demand for new projects to keep pace with economic expansion and traffic growth, Markell said.

These challenges have caused the postponement or delay of more than 55 road projects in the current fiscal year. Deferral of projects leads to higher future costs in system maintenance, construction costs and right-of-way acquisition.