Coal waste at most power plants linked to groundwater pollution

https://www.tribdem.com/news/coal-waste-at-most-power-plants-linked-to-groundwater-pollution/article_54606484-3fbf-11e9-a6f5-175a431a32f8.html

- Mar 6, 2019

Montour Steam in Washingtonville, Montour County, is among nine Pennsylvania coal power plants found to have unsafe levels of pollution in groundwater samples.

Unsafe levels were found in 91 percent of coal power plants nationally, according to a report released Monday by a pair of environmental groups.

The report included two plants in Indiana County.

According to the report, the groundwater near 242 of the 265 power plants with monitoring data contained unsafe levels of one or more of the pollutants in coal ash, including arsenic, a known carcinogen, and lithium, which is associated with neurological damage, among other pollutants.

“This is a wake-up call for the nation. Using industry’s own data, our report proves that coal plants are poisoning groundwater nearly everywhere they operate,” said Lisa Evans, senior counsel with Earthjustice, a San Francisco-based legal group focusing on environmental issues.

The new report was completed by the Environmental Integrity Project, with assistance from Earthjustice.

The Environmental Integrity Project is a Washington, D.C.-based group, founded by former Environmental Protection Agency attorneys, that advocates for more effective enforcement of environmental laws.

For the report released Monday, the environmental groups obtained and analyzed all of the groundwater monitoring data that power companies posted on their websites in 2018.

“Many of the coal ash waste ponds are poorly and unsafely designed, with less than 5 percent having waterproof liners to prevent contaminants from leaking into the groundwater, and 59 percent built beneath the water table or within five feet of it,” according to the report.

The report lists and ranks the sites across the U.S. with the worst groundwater contamination from coal ash. In Pennsylvania, that includes the New Castle Generating Station in Lawrence County, which the environment groups deemed the fifth-most contaminated coal ash site in the country.

The Lawrence County location had levels of arsenic in the groundwater near the plant’s coal ash dump that are at 372 times safe levels for drinking, the report found. It was ranked behind only the contaminated sites in Texas, North Carolina and two in Wyoming.

The Montour County plant has three-times the allowed level of cobalt and sulfate and four times the level permitted of lithium.

In addition to the New Castle site and Montour Steam, the report included seven other Pennsylvania coal power plants, all of which had elevated levels of pollution in groundwater testing samples. They included:

- Bruce Mansfield Plant, Shippingport, Beaver County
- Brunner Island, York Haven Lancaster County
- Cheswick Generating, Cheswick, Allegheny County
- Conemaugh Generating Station, New Florence, Indiana County
- Hatfield’s Ferry, Masontown, Greene County
- Homer City, Homer City, Indiana County
- Keystone Generating, Shelocta, Armstrong County

According to Earthjustice's report, coal ash from the Conemaugh Generating Station is stored in a recycling pond on the property.

The study included roughly 75 percent of the coal power plants in the U.S. Last year was the first time the power plants were required to post the information about the groundwater samples.

The rest of the coal plants have not posted groundwater data either because they closed their ash dumps before a federal Coal Ash Rule took effect in 2015, or because they were eligible for an extension or exemption.

State and federal laws don't require that the groundwater meet safe drinking water standards "unless the aquifer is or may be used for drinking water purposes," said Neil Shader, a spokesman for the state Department of Environmental Protection.

Shader said Pennsylvania's waste regulations for coal ash are "in most cases, more stringent than EPA's coal ash rules."

Power plants must submit quarterly and annual reports of sampling from ground and surface water around coal ash storage facilities, he said.

"If there is a statistically significant increase in any parameter at any monitoring point above the background level, evaluation and assessment requirements are triggered," he said.

While the report documented groundwater sample data, the report's authors note that there's no clear way of measuring how often the pollution made it into drinking water.

The federal Coal Ash Rule and state laws don't require the companies to test private drinking wells of neighbors. The report notes that while the data isn't available, there is ample anecdotal evidence that pollution gets into drinking water.

The report documented more than a dozen incidents in which tainted drinking water was linked to pollution from nearby coal ash storage.

That includes incidents involving Little Blue Run in Beaver County, where the coal company First Energy has had to purchase affected neighboring properties and provide alternative sources of clean water, according to the report.

Feds sue coal plant over pollution

https://www.heraldstandard.com/news/op_wire/feds-sue-coal-plant-over-pollution/article_734180fc-043b-5b23-a28b-972b26965d02.html

- Jan 7, 2011

HOMER CITY, Pa. (AP) - The federal government sued Thursday over a coal-burning electricity generating plant in Homer City, calling it "one of the largest air pollution sources in the nation" and asking the court to keep it from operating unless it meets Clean Air Act standards.

The lawsuit by the Justice Department, filed in Pittsburgh at the request of the Environmental Protection Agency, said the plant, with coal-fired, steam-generating boilers, had been modified unlawfully, resulting in significant discharge of harmful chemicals into the air.

"These pollutants harm public health and the environment, contributing to premature mortality, asthma attacks, acid rain and other adverse effects in downwind communities and natural areas," the lawsuit alleged.

The defendants include EME Homer City Generation LP; as well as previous owners and operators New York State Electric & Gas Corp. of Rochester, N.Y., or NYSEG; and Erie-based Pennsylvania Electric Co., also known as Penelec.

Charley Parnell, a spokesman for the plant's current operators, Edison Mission Energy of Santa Ana, Calif., said the company has not been able to review the lawsuit and could not comment on it.

, but noted it has spent about $300 million since its 1999 purchase to reduce emissions.

"It appears, based on an earlier notice of intent that we received from the government, that all of the alleged violations occurred before we acquired the facility," Parnell said. Edison Mission Energy is a subsidiary of Edison International of Rosemead, Calif.

Penelec spokesman Scott Surgeoner also declined comment because the lawsuit had not been reviewed, but noted the company sold its share of the Homer City plant more than a decade ago. Penelec is a subsidiary of First Energy Corp. of Akron, Ohio.

NYSEG spokesman Clay Ellis said the company does not comment on pending litigation.

The lawsuit asks the court for an injunction to prevent operation of the plant in violation of the Clean Air Act, to require defendants to obtain permits and remedy past violations, to force them to audit modifications and report the results, and to have them surrender emissions allowances or credits to offset illegal emissions.

It also wants an order that the defendants "take other appropriate actions to remedy, mitigate and offset the harm to public health and the environment" caused by alleged violations of the Clean Air Act; civil penalties and legal costs.

Assistant U.S. Attorney Paul E. Skirtich declined comment.

The Associated Press

Clean coal is essential to America | U.S. Energy Secretary Dan Brouillette+

https://www.pennlive.com/opinion/2020/06/clean-coal-is-essential-to-america-us-energy-secretary-dan-brouillette.html

- Published: Jun. 25, 2020, 8:58 a.m.

By

- **Dan Brouillette**

In March of this year, as COVID-19 began its upward climb, the State of Pennsylvania chose to include coal mining among its “essential” activities.

This decision presumably didn’t sit well with those wanting to ban coal altogether due to environmental concerns.

The problem with their position is two-fold.

First, we can’t get rid of coal. It is essential to this nation.

As Gov. Jim Justice of neighboring West Virginia said at the time, “Coal is so essential it is unbelievable. We have to have good electricity flowing into our homes.”

Second, we don’t have to get rid of coal. We just need to make it cleaner, which is what President Trump and his Administration are doing.

To understand why coal is so vital, imagine if during the height of COVID-19′s spread, when Pennsylvania’s hospitalizations had reached their peak, the flow of electricity had been drastically interrupted. The cost to human life would have been both tangible and tragic.

Yet that is what could have happened had coal become unavailable. Indeed, coal provides around 24 percent of America’s electricity needs and about 20 percent of Pennsylvania’s.

Critics contend that coal can be replaced by emissions-free renewables like wind and solar power. Granted, there is a growing place in our electric grid for these and other sources like natural gas and nuclear energy. Under the president’s plan for innovation-driven energy dominance, we are committed to developing, producing, using, and exporting every fuel source and technology we have. Through the power of innovation, we are truly pursuing an “all-of-the-above” American energy strategy.

But what happens to renewables when the wind does not blow or the sun does not shine? Contrast that with the rock-solid reliability of coal, which is available 24 hours a day, seven days a week, and 365 days a year. In fact, during the 2019 polar vortex, coal was critical for heating homes in many of the affected areas of the nation.

And the good news is that America's coal is as abundant as it is reliable. The United States has more coal than any other country, 474 billion short tons of it, enough to last for hundreds of years.

In short, coal contributes significantly to the energy security of Pennsylvania and the nation.

Coal is also crucial to our economic security. A strong coal future will power our manufacturing base, preserving American jobs and creating new employment and economic opportunity across the country. By some estimates, new coal production could result in up to 47,500 new coal mining jobs, while the resulting carbon products could support the creation of hundreds of thousands of new manufacturing jobs.

As the third largest coal producing state, Pennsylvania is at the heart of this economic activity. According to the U.S. Energy Information Administration, American coal exports were 54 percent higher in 2019 than in 2016, and you should be proud that Pennsylvania is playing such an important role in the expansion of American coal.

Finally, coal is vital to our national security, not just by keeping our grid up and running, but also by producing our steel and its potential to create a domestic supply chain for rare earth elements.

The United States has some of the highest quality metallurgical coal in the world to make steel, and our coal reserves contain vast quantities of rare earths which we use in items ranging from defense technology to health care and iPhones to jet engines.

As for coal's environmental footprint, coal-fired electricity generation is now cleaner than ever and one reason is the work done by the U.S. Department of Energy. According to our National Energy Technology Laboratory, which has a site in Pittsburgh, a new coal plant with pollution controls reduces nitrogen oxides by 83 percent, sulfur dioxide by 98 percent, and particulate matter by 99.8 percent compared to plants without controls.

That is one reason the United States continues to lead the world in reducing energy-related carbon emissions.

And by continuing to drive down emissions, we do not need to eliminate coal from our menu of energy options. Rather, as we look to the future, we can make coal even cleaner.

Through a new initiative called Coal FIRST, we are laying the groundwork for tomorrow's coal plants. "FIRST" stands for flexible, innovative, resilient, small, and transformative. We want these plants to be emissions-free.

We also seek to advance the commercial deployment of carbon capture utilization and storage, or CCUS, technologies. Perhaps the greatest hurdle to commercializing CCUS are the costs associated with carbon capture, which represent 75 percent of total CCUS costs.

We need to reduce carbon capture costs by about 50 percent and we're engaged in world-leading research and development to produce the technologies to get us there.

American clean coal technology is essential to the future of our energy industry, our economy, and our national security.

As we emerge from the coronavirus pandemic and reopen our economy, we must apply our ingenuity to expand the use of American coal, while making it cleaner, to ensure its viability for generations to come.

PA Coal Alliance: Proposed emission standards would harm economy without improving environment

https://www.prnewswire.com/news-releases/pa-coal-alliance-proposed-emission-standards-would-harm-economy-without-improving-environment-264913461.html

NEWS PROVIDED BY
Pennsylvania Coal Alliance

Jun 27, 2014, 11:34 ET

HARRISBURG, Pa., June 27, 2014 /PRNewswire/ -- Although touted by proponents as a flexible and achievable way to curb carbon emissions, recently proposed federal power plant emission standards are merely a de facto attempt transform America's energy usage away from coal, the Pennsylvania Coal Alliance said today.

Alliance CEO John Pippy, testifying before the state Senate Environmental Resources and Energy Committee, said the standards would have a disproportionate, negative impact on jobs and the economy in energy-producing states such as Pennsylvania.

A recent economic study by the Pennsylvania Economy League of Greater Pittsburgh showed that the state's coal industry supports 36,000 jobs in the commonwealth and adds more than $4 billion annually to the state's economy.

The proposed standards would force the state to reduce carbon emissions by 42 percent, using 2005 as a baseline. Pippy noted that carbon emissions already are declining, by nearly 12 percent from 2005 to 2012, and projected to decline by 22 percent through 2020.

"Given the affordability and reliability of coal as a source of electricity, this regulatory attempt to displace coal will have profound and sweeping consequences, not just on the coal industry and its workers, but also on those communities that host coal-fired power plants, those employed at these facilities and every ratepayer who depends upon the reliable provisioning of electricity at competitive rates," Pippy said.

Pippy recommended that the General Assembly enact a measure that would require legislative approval before submitting a state compliance plan to the U.S. Environmental Protection Agency. He also urged the committee to submit comments at an EPA hearing in Pittsburgh July 31.

The irony is that the proposed standards would have virtually no impact on global greenhouse gas emissions and could even cause an increase because they would essentially kill any continued advancement in clean coal technology, Pippy noted.

He said U.S. power plants account for only 4 percent of global carbon emissions, while China and India alone account for 20 percent. They and other developing countries are increasing their reliance on coal, he said.

"Pennsylvania and its residents would pay a steep price for an ill-conceived public policy that would do nothing to address the issue it purports to address," Pippy said. "We urge state lawmakers to do all they can to mitigate the harm this will cause to the state's economy."

Largest coal-fired power plants in Pa. to close after new wastewater rule

https://whyy.org/articles/largest-coal-fired-power-plants-in-pa-to-close-after-new-wastewater-rule/

By

- Associated Press

November 22, 2021

Hold for Business Photo-- Swayne Hall--A Norfolk Southern freight train hauling coal makes it way through downtown Pittsburgh Thursday, Jan. 26, 2017. (AP Photo/Gene J. Puskar)

Climate change isn't what's driving some U.S. coal-fired power plants to shut down. It's the expense of stricter pollution controls on their wastewater.

Dozens of plants nationwide plan to stop burning coal this decade to comply with more stringent federal wastewater guidelines, according to state regulatory filings, as the industry continues moving away from the planet-warming fossil fuel to make electricity.

The new wastewater rule requires power plants to clean coal ash and toxic heavy metals such as mercury, arsenic and selenium from plant wastewater before it is dumped into streams and rivers. The rule is expected to affect 75 coal-fired power plants nationwide, according to the Environmental Protection Agency.

Those plants had an October deadline to tell their state regulators how they planned to comply, with options that included upgrading their pollution-control equipment or retiring their coal-fired generating units by 2028.

The national impact of the wastewater rule is still coming into focus, but at least 26 plants in 14 states said they will stop burning coal, according to the Sierra Club, which has been tracking state regulatory filings. Twenty-one of the plants intend to shut down, and five indicated they may switch to natural gas, the environmental group said.

“The free ride these plants have been getting is ending in a lot of ways,” said Zack Fabish, a Sierra Club lawyer. “And them choosing to retire by 2028 probably reflects the reality that a lot of the subsidies they have been getting in terms of being able to dump their wastewater into the commons, they are not going to be able to do that in the future.”

The rule will reduce the discharge of pollutants into the nation’s waterways by about 386 million pounds annually, according to EPA estimates. It’s expected to cost plant operators, collectively, nearly $200 million per year to implement.

Those that intend to close include two of Pennsylvania’s largest coal-fired power plants, Keystone and Conemaugh outside Pittsburgh, which said they will stop using coal and retire all of their generating units by Dec. 31, 2028, according to regulatory notices obtained separately by The Associated Press.

The plants opened more than 50 years ago and together employ about 320 full-time workers and 170 contractors. They generate enough power for perhaps 1.5 million homes, according to industry averages for coal plants of their size.

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1 year ago

In addition to Pennsylvania, states with power plants that plan to stop using coal by 2028 are Arkansas, Georgia, Indiana, Louisiana, Maryland, Michigan, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Texas and West Virginia, the Sierra Club data shows.

Power producers that say they will shutter coal-fired units as a result of the new rule include Atlanta-based Southern Co. and Houston-based NRG. Southern, which operates electric utilities in Georgia, Alabama and Mississippi, said it will shutter two-thirds of its coal fleet, including units at the nation’s two largest coal-fired power plants, Scherer and Bowen, both in Georgia.

NRG said it plans to stop burning coal at its domestic plants outside Texas, and install new pollution controls at its two Texas plants.

The electric power sector has spent years transitioning from coal to cheaper, cleaner-burning natural gas and renewables like wind and solar. Nationwide, about 30% of generating capacity at coal plants has been retired since 2010, according to the Energy Information Administration. (Coal use at power plants is expected to surge more than 20% this year because of sharply higher natural gas prices — the first such increase since 2014 — but the energy agency said it expects that trend to be temporary.)

The long-term move away from coal has been pronounced in Pennsylvania, the nation's No. 3 coal-producing state after Wyoming and West Virginia. Coal's share of electrical power generation in the state declined from nearly half in 2010 to 10% last year, with operators taking advantage of a statewide boom in natural gas drilling in the Marcellus Shale, the nation's largest gas field. Seventeen Pennsylvania coal plants have been retired since 2009.
"The smallest, oldest (coal) plants were generally the ones the economics killed first. They were too expensive and too small to be retrofitted to meet new EPA standards," said Jean Reaves Rollins, president of The C Three Group, a market research firm focused on energy infrastructure and utilities.

She said coal plants in competitive electricity markets like Pennsylvania's have also come under pressure. "It is clear in the case of the two Pennsylvania plants, the cost of compliance will put them out of the economic running," she said.

Pennsylvania and neighboring Ohio have accounted for 20% of all coal-fueled power plant shutdowns in the U.S. in recent years, according to federal data.

The Keystone and Conemaugh plants are owned by a consortium of private investors, with Texas-based power producer Talen Energy also holding a stake. Talen referred questions to the plants' chief operating officer, who did not return phone calls and emails.

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Industry officials contend the mothballing of so many coal plants carries consequences for the nation's electric grid. Michelle Bloodworth, president and CEO of America's Power, a trade organization that advocates on behalf of coal-fueled electricity, cited recent blackouts in Texas and elsewhere as examples of "what happens when you go too far too fast."

"We are monitoring the situation currently but we do remain concerned that overly aggressive policies that lead to the premature retirement of dispatchable generation like the coal fleet will jeopardize the reliability and resilience of the electricity grid," Bloodworth said.

Experts have pointed out that in the case of last winter's massive Texas blackout, most of the megawatts that went offline were generated by gas, coal and nuclear plants.

In Pennsylvania, the planned retirements of Keystone and Conemaugh come as building trade unions, industry groups and coal communities fight the state's planned entry into the Regional Greenhouse Gas Initiative, a multi-state consortium that imposes a price on carbon dioxide emissions from power plants that use coal, gas and oil. Pennsylvania would be the first major fossil fuel state to adopt such a carbon pricing policy.

David Masur, executive director of PennEnvironment, an environmental group, said the closures show that "with or without policies to reduce carbon pollution, the companies who own these antiquated power plants intend to shut them down or convert many of them anyway."

The planned shutdowns could leave Homer City Generating Station as the last large, traditional coal-fired power plant in the state still operating by decade's end. Homer City, which is east of Pittsburgh and is the largest coal plant in Pennsylvania, has told state regulators it plans to keep operating and abide by the new wastewater limits.

Owners of shuttering plants are responsible for environmental cleanup, according to the EPA.