Coal-Fired Power Plants

Hopes Rest on Private Firms for Legacy Coal Cleanup

By Stephen Lee

The defining landmark in Hazleton, Pa., when John Quigley was growing up in the 1960s was a giant pile of black, crumbly coal waste that had been there for as long as anyone could remember. Taller than a 20-story building, the heap covered an area the size of four football fields and even had its own name: the Jeansville Coal Bank.

"It was the Mount Everest of Hazleton," Quigley, who later became the city’s mayor and then head of the state Department of Environmental Protection (DEP), told Bloomberg BNA. "It loomed over the city, which was a pretty interesting metaphor because Hazleton’s whole history is interwoven with mining, and its decline was because of mining."

Now, specialty power companies such as Olympus Power LLC, Northern Star Generation LLC, Robindale Energy Services Inc., and the Rich Family of Companies are cleaning up those piles, pitching their efforts as a win-win: They get free scrap coal to burn for power, and the community gets free cleanup of their polluted land and water. The enthusiasm for such efforts is an acknowledgment that government efforts to clean up befouled lands can only go so far. (Click here for a slideshow on Pennsylvania’s coal refuse situation)

More than just eyesores, coal refuse piles leach acid mine drainage into streams, occasionally catch on fire—sometimes smoldering underground for decades and emitting volatile organic compounds—and pose a safety hazard for children who play on the unstable banks, said Vincent Brisini, former deputy secretary at Pennsylvania DEP’s Office of Waste, Air, Radiation, and Remediation.

But now the companies say they might only be able to survive a few more years, thanks to growing pressure from cheap natural gas and environmental regulations. One coal refuse plant already has gone down: Piney Creek Power Plant, of Clarion, Pa., stopped operations in 2013, a victim of bruising energy markets.

If the nation’s 18 remaining refuse plants also shut down, the 800 coal refuse piles scattered throughout Pennsylvania—to say nothing of the hundreds more in West Virginia, Kentucky, and other Appalachian states—will remain in place indefinitely, because neither the federal government nor the states have the money to clean them up, said John Stefanko, deputy secretary for the Office of Active and Abandoned Mine Operations at the Pennsylvania DEP.

A Win-Win?

That’s why so many environmental groups, in an unlikely pairing, have given the coal refuse industry their stamp of approval. Their reasoning is that, even though the companies do burn coal, the environmental benefits of cleaning up the refuse piles outweigh the costs.

"We’re very interested in partnering with the waste coal industry," Anne Daymut, watershed coordinator at the Western Pennsylvania Coalition for Abandoned Mine Reclamation, told Bloomberg BNA. "We do view it as a win-win."

The cost/benefit claims can’t be precisely measured because much of the data has never been collected, largely due to a lack of funding, said George Ellis, executive director of the Anthracite Region Independent Power Producers Association, an industry trade group.

For example, no one knows which or how many toxins are released from the 48 pile fires currently smoldering throughout the state, some of which have been burning for decades, said Ellis, former president of the Pennsylvania Coal Association.
Fourteen facilities capable of burning coal refuse for power now operate in Pennsylvania, with two more in West Virginia, another in Wyoming, and one more in Utah. The industry is strongest in Pennsylvania because the state offers a more hospitable climate for independent power companies than most other states, said Sean Lane, Olympus Power's executive vice president of governmental affairs.

The industry hasn't taken off more broadly, Lane said, because environmental permitting regulations make it "extremely difficult and costly" to site new power plants. Economic forces are at play, too: energy and capacity pricing in the current marketplace run by PJM Interconnection LLC, operator of the nation's largest power grid, wouldn't sustain a new coal refuse plant, Lane said.

Corporate investors in the sector include General Electric Capital Corp., Energy Capital Partners, Dynegy Inc., and CalPERS, the largest public pension fund in the U.S. based in California.

Benefits to Local Economies

Even given the incomplete data about the technology's costs and benefits, the industry's supporters seem to far outnumber its detractors. In addition to Daymut, representatives from the Eastern Pennsylvania Coalition for Abandoned Mine Reclamation, Schuylkill Conservation District, and Earth Conservancy, a group dedicated to reclamation of former coal mining lands, also told Bloomberg BNA that they support the industry.

Some environmentalists, such as Carol Parenzan, executive director of the Middle Susquehanna Riverkeeper Association Inc., point to the economic and environmental justice benefits brought on by the coal refuse industry.

"Take a drive to Shamokin," Parenzan told Bloomberg BNA, referring to a struggling coal town an hour and a half north of Harrisburg, Pa. "This was once a thriving city of 20,000 people plus. Now you drive through the city and there's boarded-up houses, closed businesses, and an orange stream running through the center of town. It's a fine line between what's best for the environment and what's best for business.

"But you can't say no to this, no to that. You have to find benefits for everyone so it can be a win-win."
Bipartisan Support

Other supporters of the industry include Joseph Pizarchik, who headed the Office of Surface Mining Reclamation and Enforcement under President Barack Obama, and both Republican and Democratic lawmakers in the Pennsylvania statehouse.

“These slag piles will be there in perpetuity,” state Rep. Peter Schweyer (D) told Bloomberg BNA. "As a liberal Democrat, I am not of the opinion that [EPA chief Scott] Pruitt will do anything to help our slag piles. So we can either clean them ourselves or not. Yes, this is still a carbon-based fuel; it’s going to have costs on the clean air side. But it helps so much in other ways that those benefits outweigh the costs.”

Similarly, Pennsylvania House Majority Leader Dave Reed (R) told Bloomberg BNA that the coal refuse industry is "really a public-private partnership that cleans up those piles. Government doesn't have the funds to do it themselves. Those piles are going to sit there for generations. Jobs are going to leave and you’re going to continue to have the environment being polluted."

A Low-Ranking Priority

In 1988, Quigley was elected mayor of Hazleton. Immediately he busied himself with the state's abandoned mine land problem. Including the coal refuse piles, Pennsylvania's overall reclamation bill has been pegged at $15 billion.

But the Office of Surface Mining Reclamation and Enforcement deems refuse piles such as the Jeansville Coal Bank as the lowest-priority sites. That meant Quigley couldn't spend federal dollars to clean them up until the higher-priority sites were addressed.

“I tried to develop plans to turn [the abandoned mine land sites] into productive use,” Quigley said. “But that’s a very long-term proposition, and I was only there for eight years. The whole problem of AML was well beyond the capacity of a city with a $6 million budget. So we didn’t get much further than conceptual plans and aspirations.”

The Jeansville Coal Bank remained in place. It caught fire underground in 2012; the fire is still burning today.

Fighting for Survival

In addition to the fires at coal refuse piles, dust laced with heavy metals can blow off the piles and into the water and soil, according to Brisini, who now serves as director of environmental affairs at Olympus Power.

The piles, often dangerously unstable and surrounded by physical hazards, also attract dirt bikers and all-terrain vehicle drivers. Most recently, Isael Ramirez died July 7 when he struck a gate outside a coal refuse pile while operating an ATV in Hughestown, Pa., the chief of police told Bloomberg BNA.

To keep the coal refuse industry afloat, its lobbyists want both a regulatory fix and an economic fix.

On the regulatory side, the industry is backing a bill in Congress known as the Satisfying Energy Needs and Saving the Environment (SENSE) Act (H.R. 1119), which would allocate additional sulfur dioxide emissions credits to coal refuse power plants under the Cross-State Air Pollution Rule. That would effectively ease pollution control requirements by allowing the plants to increase their emissions.

The SENSE Act would also change the compliance obligations for coal refuse plants under the EPA's Mercury and Air Toxics Standards rule.

The bill passed the House last year, but was never introduced in the Senate. Rep. Keith Rothfus (R-Pa.), the SENSE Act’s sponsor, told Bloomberg BNA that he plans on pushing for the bill “very aggressively” again in this session of Congress.

A Republican spokesman for the House Energy and Commerce Committee said the panel is considering moving the bill this year, although it’s not yet on the schedule. The bill was re-introduced in the House in February.

Rothfus also said he met recently with EPA officials to seek “administrative relief” for coal refuse plants. So far, agency officials haven’t signaled their willingness to comply, he said. Liz Bowman, an EPA spokeswoman, told Bloomberg BNA that the EPA was talking to elected officials, but declined to say specifically what it planned to do about administrative relief for coal-refuse-fired power plants.

A Tax Lifeline?

Meanwhile, to help coal refuse plants stay competitive with other, cheaper forms of energy, Pennsylvania lawmakers inserted a tax credit for the industry into last year’s state budget.

The tax credit, which was worth $7.5 million last year and $10 million per year for 10 years, won't come close to saving the industry on its own, according to Olympus Power's Lane. The industry had initially asked for $45 million.

Nevertheless, the credit "serves as an important statement in the public record of Pennsylvania's support, and as a potential model solution, as we engage Congress in a dialogue regarding the preservation of this industry," Lane said.

The legislature passed a $32 billion budget June 30, but the revenue package isn't expected to be finished until later this month at the earliest.

Lane said all sources of revenue and spending, including tax credits, are “under great scrutiny” in the state legislature.

However, state House Majority Leader Reed told Bloomberg BNA he was confident the tax credit would be renewed this year.
Some Stakeholders Push Back

But not everyone supports the idea of burning coal refuse. Rep. Frank Pallone (D-N.J.), ranking member on the Energy and Commerce Committee, opposed the SENSE Act last year, saying it would be “absurd” to give coal refuse plants a “free pass” under EPA air standards.

After the bill passed the House last year, the Obama White House said it would veto it.

Further, coal refuse carries higher levels of toxic heavy metals per pound than regular coal, according to Tom Schuster, senior campaign representative with the Sierra Club’s Pennsylvania chapter.

Seven of the nation’s 18 coal refuse-fired power plants are also unable to satisfy the acid gas portion of the MATS rule for hydrogen chloride or sulfur dioxide, acknowledged Brisini, the former Pennsylvania DEP official. The state has granted the industry an extension until 2019 to comply with the rule.

“If you’re going to claim that what you’re doing has environmental benefits, at a bare minimum, you have to comply with the existing [MATS] limits,” Schuster said. “And they’re not.”

In Schuster’s view, a better solution to cleaning up the piles is the Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More (RECLAIM) Act (H.R. 1731, S. 728, S. 738), a bill in Congress that would speed the delivery of $1 billion to coal states for land remediation. The bill passed a House committee June 27 and is expected to start moving in the Senate shortly.

The House version could move forward as part of a larger bill, such as the pending infrastructure bill, Democratic aides say. In the Senate, the chief difference between the two bills, one sponsored by Senate Majority Leader Mitch McConnell (R-Ky.) and the other by Sen. Joe Manchin (D-W.Va.), is that Manchin’s places greater emphasis on economic development. Proponents on both sides of the aisle say they’re confident the bill will pass.

Industry Rejects Charges

The coal refuse industry flatly rebuffs Schuster’s claims about environmental harms. Brisini said that, during the combustion process, chemical reactions occur that capture the pollutants in the ash. He also said fabric filters at the plants are “extremely effective” at capturing non-mercury metals.

The ash that remains after combustion is tested and certified for leachates, then brought to a reclamation site, Brisini said. There, the material is set in place, where it hardens like concrete and releases no metals into the soil, he said.

Further, in developing the MATS rule, the EPA should have considered the special characteristics of coal refuse plants, which may exceed the acid gas rules but still deliver net benefits, Gary Merritt, former director of Pennsylvania’s now-defunct Office of Environmental Energy Management, told Bloomberg BNA.

The high cost of additional control equipment to comply with MATS would “inevitably result in the closure of these facilities,” Brisini said.

As for the RECLAIM Act, even if it were to pass, Pennsylvania alone has an inventory of $13 billion to $14 billion in higher-priority mine sites that must be cleaned up before the state can use federal funds on waste piles, Merritt said. Because the bill only releases $1 billion nationwide, it wouldn’t come close to delivering enough money to clean up the piles.

‘A Good-News Story’

The Pennsylvania DEP also recently found impressive reductions in water discharges after coal refuse piles were cleaned up. DEP found that, post cleanup of coal refuse piles, iron flowing into the Blacklick Creek watershed had been reduced by 99 percent, acidity by 96 percent, aluminum by 94 percent, manganese by 87 percent, and sulfate by 82 percent.

“We've got fish in the water now,” Cambria County Commissioner Tom Chernisky told Bloomberg BNA. "People weren't fishing here before. This is a good-news story.”

The 14 coal refuse plants in Pennsylvania have removed more than 200 million tons of coal waste, restored or improved more than 1,200 miles of streams and reclaimed more than 7,000 acres of abandoned mine lands, according to the Anthracite Region Independent Power Producers Association. Currently, the industry removes about 10 million tons of waste per year, the group said.

Still Burning

John Quigley became secretary of the Pennsylvania DEP in 2015. Last year, working with the Obama administration, he helped steer $30 million in federal funding toward the cleanup of a large coal refuse pile in Ehrenfeld, Pa.

“That was one of the things I was most proud of,” Quigley said. "And in the back of my mind, I was thinking, 'Can we do that in Hazleton?'”

The money ran dry before that could happen: The $30 million influx of federal funding was only a one-time infusion. President Donald Trump proposed canceling the funding altogether in his maiden budget request.
“There are hundreds of communities that are dealing with these issues, and there's nowhere near enough public funding available to solve the problem,” Quigley said. “Ultimately there's no substitute for public sector involvement in remediating these problems, but you have to take the long view. Private companies might be our only hope to reclaim these lands.”

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