

Uncovered: The coal dust in our wind

By Aaron Applegate
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NORFOLK

In the early 1990s, exports were booming at Lamberts Point, the largest coal shipping terminal in the northern hemisphere.

To keep pace with demand, the company that would soon become part of Norfolk Southern – the Norfolk and Western Railway Co. – built two silos and more conveyor belts.

That construction, the first at Lamberts Point in decades, triggered a new era for the terminal: air quality regulation.

Lamberts Point, a coal terminal on the banks of the Elizabeth River since 1885, never had an air permit because it predated the 1970 federal Clean Air Act and the resulting oversight.

On April 6, 1992, the state Department of Air Pollution Control issued the railway company its first air pollution permit for coal dust.

The permit, however, put a limit only on dust related to the new construction – the silos and conveyor belts. It put no restrictions on so-called “fugitive dust” elsewhere on the 400-acre terminal.

The permit didn’t regulate coal dust from the thousands of uncovered rail cars waiting daily at Lamberts Point to be emptied, from the open-air rotary dumper that flipped the cars, or from the telescoping chutes on coal loaders that filled ships.

Twenty-two years later, the coal terminal owned by Norfolk Southern is still covered by that same 1992 permit. And those silos and conveyor belts? Demand for coal slipped over the years; they’re mostly unused.

In effect, there are no coal dust emission limits for Lamberts Point, provided the terminal doesn’t handle more coal than allowed each year by the state; the company hasn’t come close in years.

Lamberts Point is a regulatory relic, grandfathered in before the days of modern air pollution control.

“In a nutshell, that’s what we’re looking at,” said Troy Breathwaite, regional air permits manager for the state Department of Environmental Quality, formerly the Department of Air Pollution Control. “We’re kind of limited in what we can do with grandfathered sources. Fortunately, there are not as many around as there used to be.”

How would the Department of Environmental Quality know if too much coal dust was blowing off Lamberts Point?

“If they don’t have a limit on fugitive dust, then we wouldn’t know that,” said John Brandt, the DEQ’s regional air compliance and monitoring manager.

Some people living near Lamberts Point and environmentalists have complained Norfolk Southern is not doing enough to limit coal dust. They say breathing it could cause health problems.

“There doesn’t appear to be any incentive for them to take action if there are no limits on how much can be released,” said Joe Cook, an environmental activist for the Sierra Club and Norfolk resident who lives near the coal terminal. “It’s a serious problem.”

The environmental group and some residents have scheduled a second forum on coal dust for later this month. They’ve asked Norfolk Southern executives to meet with them. A Norfolk Southern spokesman said the company will be responding to their concerns but declined to say how.

“We are aware of and sensitive to the issue of coal dust, and we put a lot of resources into controlling it,” spokesman Robin Chapman said. “We are constantly looking for new ways to improve dust suppression.”

Norfolk City Councilwoman Theresa Whibley said she plans to ask city officials at Tuesday’s council meeting to research air pollution in neighborhoods around Lamberts Point.

“I want to find out what the air quality is in that part of Norfolk and see if the air is being compromised by coal dust,” she said, “and if it is, see if we can solve it.”

Lamberts Point’s Pier 6, named for the most recent ship-loading area, has been run about the same way for more than 50 years; it was built in 1962.

Rail cars from the mountain mines of Appalachia – nearly 200,000 cars last year alone – stream into the site. They are shuttled to the facility’s “dumper,” a huge piece of equipment that flips coal-filled cars as they are sprayed with water to suppress dust. The coal falls onto a conveyor belt that whisks it to loaders that use telescoping chutes to fill ships docked at the 1,800-foot pier.

Because changes in operation trigger air quality permit reviews, there have been few opportunities to revisit Norfolk Southern’s permit, the DEQ’s Breathwaite said.

The DEQ inspects Lamberts Point at least once every five years to assess compliance with general state regulations for controlling fugitive dust. A common problem cited by state inspectors was coal dust wafting off the rail car dumper.

DEQ inspectors made an unannounced visit to Lamberts Point on Wednesday. The last inspection was in 2011. The report isn’t complete yet, said Brandt, who was there. He said he didn’t notice any problems with coal dust during the 2½-hour trip.

Across the James River, a Newport News coal terminal operated by Dominion Terminal Associates is regulated by a modern state air pollution permit. The facility was built in the 1980s, after the Clean Air Act.

The latest permit for the facility has a limit for maximum emission from the entire site. It requires specific amounts of water to be sprayed to limit coal dust and determines how long rail cars can sit before being sprayed. The DEQ required the facility's rail car dumper to be enclosed.

The rules reflect the evolution of air pollution regulation, Brandt said.

"Part of the learning process for permitting is, we need to be precise in terms of wet suppression, and we need to do more than put limits on specific points," he said. "We need to do limits for the whole facility."

Breathwaite said if Lamberts Point was built today, it would have a facility-wide coal dust limit.

It's impossible to know how much dust is wafting into surrounding neighborhoods.

The Department of Environmental Quality doesn't have air quality monitors at the facility, but a Norfolk Southern consultant operates one monitor at a wastewater treatment plant north of Lamberts Point.

Three years of data from that monitor provided by Norfolk Southern show federal air standards for particulate matter were not exceeded.

The DEQ does estimate how much airborne pollutants come off the coal terminal. The agency uses a formula tied to the amount of coal Norfolk Southern processes in a year.

For example, the department estimated that based on the amount of coal passing through Lamberts Point last year, 43.8 tons, or 87,600 pounds, of particulate matter escaped from the site. Almost all of that is known as "PM10," which means particles smaller than 10 micrometers or 0.0004 inches. Small particles can cause health problems because of their ability to lodge deep in the respiratory system.

While it's likely that much of the particles are related to coal dust, the DEQ doesn't identify its makeup, Brandt said.

A DEQ analysis of particles found at a home near Lamberts Point in 1996 found "large amounts of coal dust and combustion products of coal, wood and oil." Other minerals, fibers and paint were also found.

DEQ officials said as long as Norfolk Southern doesn't exceed its annual limit of 55 million tons passing through Lamberts Point, the agency assumes there are no pollution problems. The terminal handled just under 22 million tons last year and less the year before.

Norfolk Southern's Chapman said operating under an old permit doesn't affect how the company handles coal dust.

“We don’t need a permit to tell us what we need to do,” he said. “We’re doing it.”

Brandt said Norfolk Southern has a legal right to the 1992 permit despite the evolution of air pollution control:

“When the regs change, we don’t open all the permits. When they change something, that would trigger a new permit.”

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