

## **Bruce Mansfield Coal Plant NPDES Permit Hearing**



### **Background and Talking Points**

November 28, 2018, 6:00 PM  
South Side Area School District  
Middle/High School Auditorium  
4949 Rt. 51  
Hookstown, PA 15050

### **Hearing Details**

**WHAT:** Public hearing on DEP's intent to issue a Clean Water Act NPDES permit for Bruce Mansfield Power Plant and Little Blue Run Impoundment

**WHEN:** Wednesday, November 28, 2018, 6:00 PM (Doors at 5:30 PM)

**WHERE:** South Side Area School District's Middle/High School Auditorium located at 4949 PA State Route 151, Hookstown, PA 15050

### **Background on Plant**

The Bruce Mansfield coal-fired power plant, owned by FirstEnergy, is a 2,700 megawatt plant in Shippingport, Pennsylvania, just north of Pittsburgh on the Ohio River in Beaver County. It is currently the largest coal plant in the state, and one of the largest remaining plants in the country. Bruce Mansfield began operating in 1976, and is equipped with air pollution scrubbers on all three of the plant's generating units. The scrubber that serves units 1 and 2 was damaged in a January 2018 fire and is currently inoperable, meaning the plant is rarely running. In fact, this year, the plant is only running at about 16% of its capacity.

In 2017, Bruce Mansfield was responsible for releasing over 6 million pounds of nitrogen oxides (NOx), forming smog that causes asthma attacks, and over 19 million pounds of sulfur dioxide (SO2), which causes acid rain, breathing problems, and particulates in the air. The communities around the plant do not meet the federal health-based safeguards for smog and SO2, and Bruce Mansfield is the largest single source of both SO2 and NOx in the region, despite having significantly scaled back its operation in recent years.

For nearly 40 years, the plant piped much of its toxic coal waste into the Little Blue Run dump, seven miles from the plant. Little Blue was shut down in 2016 after pollution problems forced numerous residents to abandon their homes in the surrounding community and remediation efforts are expected to take decades.

Right now, the plant withdraws about 195 million gallons of water per day from the Ohio River and its Clean Water Act enforced National Pollutant Discharge Elimination System permit, deciding what pollutants it can dump in the river, has been expired since December 2011. Currently, Bruce Mansfield discharges pollutants into the Ohio River.

### What's The Issue?

Currently, there are at least 10 coal plants in Pennsylvania that have water pollution protections that have not been updated since the issuance of federal guidelines in 1982. This means that coal plants have been dumping toxins into our waterways based on limits established 35 years ago and what's worse, these supposed safeguards don't include any limits at all on mercury, arsenic, selenium, and other harmful toxins. Would you want a phone from 1982? Probably not. So why would we want water "protections" from that time?

### Pollution Facts

- The pollutants discharged into the Ohio River by coal plants like Bruce Mansfield can cause severe health and environmental problems in the form of cancer and other health risks in humans, lowered IQ among children, and deformities and reproductive harm in fish and wildlife.
- These pollutants include mercury, arsenic, and selenium.
- Due to their close proximity to these discharges and relatively high consumption of fish, some minority and low-income communities have greater exposure to, and are therefore at greater risk from, pollutants from coal-fired power plants.
- Many of these pollutants, once in the environment, remain there for years.

### *Mercury*

Mercury is a powerful neurotoxin that can damage the brain and nervous system. Mercury is of special concern to women who are pregnant or thinking of becoming pregnant, since exposure to mercury can cause developmental problems, learning disabilities, and delayed onset of walking and talking in babies and infants.

### *Arsenic*

Ingesting arsenic is associated with cancer, including lung cancer, skin tumors, internal organ tumors, and is connected to heart problems, nervous system disorders, and stomach pain. The

U.S. Environmental Protection Agency (“EPA”) estimates that nearly 140,000 people each year experience increased cancer risk due to arsenic in fish from coal-fired power plants.

### *Selenium*

Selenium is acutely poisonous to fish and aquatic life in even small doses; concentrations below 3-8 micrograms per liter can kill fish, and lower concentrations can leave fish deformed or sterile.

### Retirement and Reliability

Earlier in October, PJM Interconnection, the regional electric grid operator for 13 states including Pennsylvania, announced the Bruce Mansfield coal-fired power plant is not necessary to maintain reliability. When a series of already planned grid upgrades are completed, the plant can retire in June 2021 with no impact to electric reliability.

### Other Factors to Consider When Testifying

- Why is the Ohio River important to you? How do you use it? How does your family use it?
- Do you want clean water? Does your family deserve clean water?
- Should companies be allowed to operate facilities with permits that have been expired for nearly five years?
- Do you want toxic chemicals in your drinking water supply?
- How do you think Article 1, Sec. 27 of the PA Constitution (guaranteeing PA residents the right to clean water, air, and the right to enjoy the environment) should impact the DEP’s decision to issue a strong permit to eliminate toxic coal pollution from the plant?
- Does the local economy benefit from clean water? Do property values increase when the Ohio River is clean?

### Water Permit Hearing Talking Points

- Require compliance with the Effluent Limitation Guidelines (ELGs) at the earliest possible time.
  - The ELGs limit the amount of toxic pollution such as arsenic, mercury, and selenium that coal plants can dump into rivers.
  - Operators have had years to plan for the required updates to pollution safeguard systems.
  - These regulations are no surprise to Bruce Mansfield executives, as they were published in September of 2015, therefore the company has had plenty of time to update pollution controls and *should have begun doing so even sooner*.
  - There is no reason for DEP to delay implementation until December 31, 2023, particularly when the plant has announced its intention to retire in June 2021.
- The Final Permit Must Be Amended to Remove the Automatic ELG Repeal Language
  - Although the draft permit includes requirements for compliance with the Effluent Limitation Guidelines, it includes a provision that would appear to automatically delete these requirements should EPA “notice” changes to the ELGs.

- While DEP calls this a “reopener” provision in the Draft Fact Sheet, this deletion provision is both problematic and contrary to the Clean Water Act. It needs to be removed, and compliance with the ELG standards must be mandated by the earliest possible date of November 2020.
- Technology-based Clean Water Act limits are needed for key discharge points at the facility.
  - It is well-settled that the pollutants selenium, cadmium, lead, copper, mercury, ammonia, nitrite, chloride, arsenic, barium, nickel, antimony, and hexavalent chromium, are present in discharges from coal-fired plants, from things like coal pile runoff, ash leachate, and coal ash dewatering wastewater.
  - Well-known and widely-implemented technologies are available to address these waste streams.
  - Here, the draft permit fails to set appropriate standards for waste streams containing just such toxics-laden wastewater.
  - For example, discharge points, namely, Outfalls 21, 23, 24, 26, 28, 30, 31, 32, 33, 34,35, 36, 37, 38, 39, 40, and 41 are springs and seepwater impacted by Little Blue Run.
  - This means that these outfalls are discharging wastewater containing pollutants characteristic of ash transport water, FGD wastewater, and coal pile runoff.
  - The draft permit should be revised to incorporate limits for additional pollutants, and to require additional controls, such as a bioreactor for selenium, to ensure that limits are consistent with Best Available Technology for outfalls such as these at Bruce Mansfield.
- Include Technology-Based Effluent Limitations for Bromide and Total Dissolved Solids.
  - The draft permit fails to include effluent limitations for bromide discharges.
  - Bromide is particularly dangerous close to drinking water intakes.
  - Bromide in sources of drinking water can result in the formation of dangerous carcinogenic compounds as a result of disinfection processes.
  - DEP must assess appropriate Technology Based Effluent Limitations reflecting Best Available Technology for bromides, along with any more stringent requirements to protect water quality.