

# U.S. Environmental Protection Agency (EPA)'s Toxic Water Rule for Power Plants

*Later this summer, EPA is expected to release a proposal to weaken water pollution standards for coal-burning power plants, which are by far the largest source of toxic water pollution.*

## Strong Pollution Standards for Power Plants Were Long Overdue

In 2015 EPA revised water pollution standards for the power plant industry (known as the Steam Electric Effluent Limitations and Guidelines (ELG) rule), which had not been updated since 1982. Outdated standards for coal plants had led to the contamination of 23,000 miles of rivers and streams across the country. These technology-based standards set the first-ever national pollution limits on the amount of heavy metals, nutrients, and other chemicals that power plants can discharge into U.S. waters. Specifically, the 2015 rule required power plants to achieve zero discharge of fly ash and bottom ash wastewater and set strict limits on arsenic, mercury, selenium, and nitrogen from wet scrubber systems (FGD wastewater).

The 2015 ELGs for power plants became effective January 4, 2016 and implementation began at plants across the country. But on September 18, 2017, in response to petitions submitted by the Utility Water Act Group and the Small Business Administration on behalf of power plant utilities, EPA postponed for two years certain compliance deadlines in the 2015 rule. EPA took this action in order to have time to revise the pollution limits for two of the five power plant waste streams – FGD and bottom ash wastewater. FGD and bottom ash wastewater are the two largest and most toxic wastewater streams generated by steam electric power plants. In May 2019, EPA included the power plant ELGs on its list of active rulemakings and the agency is expected to release a draft revised rule for public comment later this summer and to publish a final revised rule by summer 2020.

## Power Plant Pollution Threatens Public Health and the Environment

Power plant discharges are full of harmful pollutants such as mercury, arsenic, lead, and selenium. Exposure to these contaminants cause cancer, harm children as they develop in the womb, and cause neurological and organ damage. The 2015 ELGs rulemaking record clearly documents that power plant wastewater – which also contains other pollutants of concern to drinking water systems such as vanadium, nitrogen, and bromide – contaminates drinking source waters. Power plants frequently discharge wastewater into rivers and lakes that are used as drinking water sources, including near almost 100 public drinking water intakes and approximately 1500 wells. Because of this pollution, over 4,000 miles of rivers are unsafe for use as a source of drinking water or for fishing. There are documented cases of power plants contaminating drinking water supplies with arsenic, bromide, and nutrients. Bromide especially poses public health risks and present challenges for drinking water systems, because bromide in treated water can result in the formation of disinfection byproducts (DBPs), such trihalomethanes that are known to be carcinogenic.



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## **These Pollution Standards Are Affordable and Achievable**

Some in industry allege it is too expensive to comply with the pollution limits for bottom ash and FGD wastewater required by the 2015 ELG rule. In reality the technologies available to meet these pollution limits are affordable and many power plants are already using them. In 2015 EPA found that 45 percent of all plants with wet scrubbers are already in compliance with these limits. More than 80 percent of all coal-fired plants built in the last 20 years do not discharge bottom ash wastewater and in 2015 EPA found that more than half of all older plants had already installed zero discharge technologies for this wastestream.

The vast majority of power plants will incur zero costs to comply with the 2015 ELG rule. In 2015 EPA estimated that overall only about 12 percent of all steam electric power plants and 28 percent of coal-fired or petroleum coke-fired plants will incur any cost. 96 percent of power plants would have annual compliance costs that amount to less than 1 percent of their annual revenue; just 1 percent would have costs greater than 3 percent of revenue. On aggregate, EPA found that the 2015 rule would have resulted in the U.S. steam electric power industry losing only 0.2 percent of its capacity to early retirement, providing only 0.2 percent less generation, and seeing an increase of only 0.6 percent in total annual costs.

## **EPA Should Strengthen, Not Weaken, Water Pollution Standards for Power Plants**

It is unreasonable for EPA to weaken these standards for the last few remaining power plants that are grossly behind on upgrading to the best available technology and continue to put public health and the environment at risk because of their uncontrolled pollution. Instead of weakening these pollution standards, EPA should uphold the zero discharge standards for bottom ash wastewater and act to strengthen the standards for FGD wastewater to include critical pollutants like bromide and boron that were entirely uncontrolled under the 2015 rule.

# **PROTECT WATER QUALITY AND PUBLIC HEALTH:**

## **Reject any attempts to weaken toxic water pollution standards for power plants!**

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