

Oregon's Utility Mercury Rule

Mercury emissions and federal rules

Mercury is a persistent, toxic pollutant that accumulates in the food chain. Mercury emissions, including those from burning coal, can eventually reach water bodies and accumulate in fish tissue, which is the main way humans are exposed to mercury. Several of Oregon's rivers, lakes and reservoirs currently have fish advisories because of high mercury content.

To reduce mercury emissions from coal-fired power plants in Oregon, DEQ has adopted the Oregon Utility Mercury Rule. The rule will reduce mercury emissions from existing coal-fired power plants by up to 90 percent and cap future mercury emissions from new coal-fired power plants.

Other sources of mercury exist in Oregon, including the Ash Grove Cement Plant in Durkee. However, according to EPA, on average, mercury coming from global sources accounts for more than 80 percent of the mercury deposited in Oregon.

Oregon's Utility Mercury Rule

The Utility Mercury Rule caps mercury emissions from new plants and mandates the installation of mercury controls on Oregon's only existing coal-fired power plant. The plant, operated by PGE, is expected to reduce mercury emissions by 90 percent by July 1, 2012.

Though there is some debate as to the effectiveness of current mercury control technologies, studies by the U.S. Department of Energy's National Energy Technology Laboratory suggest this level of reduction is feasible. Mercury emissions from the Boardman plant currently range from 137 to 292 pounds per year. DEQ estimates mercury emissions from the Boardman plant will range from 18 to 35 pounds per year after the installation of controls.

The rule will require all existing and future coal-fired power plants to submit mercury emission reduction plans and to install continuous monitoring equipment. The Boardman plant installed continuous monitoring equipment in 2008 to collect information that will help determine the effectiveness of the installed mercury controls.

DEQ estimates that the average PGE residential customer, using 1068 kilowatt of electricity per

month, would pay no more than an additional 40 cents per month or \$4.80 per year as a result of the rule.

PGE reducing other air pollutants

Concurrent with the requirements for new emission controls to reduce mercury, the Boardman plant is subject to Best Available Retrofit Technology under the federal Regional Haze rules. These rules require the Boardman plant to install multi-pollutant controls to reduce other air pollutants such as sulfur dioxide and nitrogen oxide that contribute to regional haze. These rules also require the plant to stop burning coal by Dec. 31, 2020.

Public input during plant upgrade

There are uncertainties concerning the effectiveness of mercury control technology. It is possible the plant will be unable to achieve the required reductions by the deadline set by DEQ. If this occurs, DEQ can grant a temporary alternative mercury emission limit while the plant works on system improvements. DEQ will hold a public hearing prior to establishing any alternative level of mercury emissions.

After system improvements, if 90 percent reduction of mercury emissions is not achievable using the best available technology and process improvements, DEQ can initiate a public process to make the temporary limit permanent.

The future of coal power in Oregon

After 2018, the total mercury emissions statewide from the existing Boardman plant and any newly constructed coal-fired power plants must not exceed 60 pounds per year.

The Boardman plant will be capped at 35 pounds per year, which is equal to the high end of emission estimates for the Boardman plant after achieving a 90 percent mercury emission reduction. Any new plants in the state must utilize advanced coal-fired power plant technologies and will not be allowed to emit more than a total of 25 lbs per year.

Alternative formats

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