

POWER POISONS



***How the Electric Power Industry
Has Evaded Toxic Air Pollution Controls
For Two Decades***

Clean Air Watch

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Power Poisons: How the Electric Power Industry Has Evaded Toxic Air Pollution Controls For Two Decades

When Senators John Kerry (D-Mass.) and Joe Lieberman (I-Conn.) recently unveiled their draft American Power Act, public health advocates such as The American Lung Association raised alarms over unpublicized provisions that could interfere with ongoing U.S. Environmental Protection Agency efforts to clean up mercury and other toxic air contaminants from electric power plants. As the Lung Association noted in a May 12, 2010 statement, the draft legislation

would unleash a dangerous process to attack life-saving rules on coal-fired power plants and threaten to permit much more air pollution around the nation. The outrageous proposal creates an open door through which millions of tons of life-threatening pollution could be allowed to flow...

Particle pollution and ozone aren't the only pollutants targeted under the bill as proposed—just the most widespread. The draft bill invites attack on safeguards applying to a horde of other noxious emissions, known under the Clean Air Act as hazardous air pollutants, which include mercury, arsenic, lead and other toxics.

<http://www.lungusa.org/press-room/press-releases/statement-of-charles-d.html>

By contrast, spokesmen for the electric power industry welcomed the bill language, which appears to have been drafted by industry lobbyists. (Senator Kerry described it as “a little something that got worked out between a couple of the environmental groups and the utilities,” though no environmental group has come forward to admit a share of responsibility.)

This episode is just the latest in an ugly saga that began two decades ago as electric power industry lobbyists have received special exemptions that permit coal burning electric power plants to evade Clean Air Act toxic pollution requirements that apply to other industries. The saga is all the more ugly because the electric power industry is the biggest source of toxic mercury pollution in the nation.

Here are two anniversaries that provide some perspective on this situation: In November, we will mark the 20-year anniversary of the electric power industry's receiving a special exemption from air toxics control in the Clean Air Act (CAA) Amendments of 1990. And in December, we will mark the ten-year anniversary of the U.S. EPA's determining that regulation of emissions of the air toxic mercury from coal-fired power plants is both appropriate and necessary.

It is easy to imagine how the various parties will be observing these anniversaries:

- EPA will be in the midst of sorting through data from the second survey of power plant air toxic emissions it has collected over the past 20 years as it works to meet a March 2011 court deadline to propose limits on air toxics emissions for the electric sector.

- Environmentalists will be pushing EPA to make sure the March 2011 deadline is not extended.
- And coal interests, led by the Utility Air Regulatory Group (UARG), will be trying to come up with a new way to say that EPA is moving too fast and that they need more time.

UARG's latest attempt to slow the process was thrown out by the courts in April when Judge Rosemary Collyer of the U.S. District Court of the District of Columbia approved the consent agreement between EPA and environmental groups to propose toxic pollution standards – so-called maximum achievable control technology (MACT) limits by March 2011 -- and finalize them by November 2011. UARG argued that the timeline was too hasty – despite the fact that if EPA had stuck to the timeline set out in the CAA Amendments of 1990, it likely would have proposed a standard in the mid 1990s.

To try to make sense of this swirl of dates, deadlines, and extension, we put together the *Timeline of Delay*. While we started the timeline with the signing of the CAA Amendments of 1990, we could have started it before 1990, when electric utility interests started to lobby Congress for a special exemption from the toxics title of the CAA Amendments of 1990. Their success is embodied in the law's special deal that separates the electric utility sector from other sectors of the economy.

Before it could regulate air toxics from electric power plants, Congress directed EPA to complete studies of power company air toxics emissions within three years. If EPA determined action was warranted based on those studies, Congress directed EPA to regulate electric power plants under this part of the law. As the *Timeline of Delay* shows, EPA did not deliver the report until 1998 and did not make a determination until 2000...and, almost ten years later, coal-fired power plants still are not controlling emissions of air toxics.

In 2005, the Bush administration attempted to rescind tough toxic air pollution control requirements for the power industry and substitute a weak cap-and-trade system that would not have required any mercury-specific pollution controls before 2018. An EPA analysis showed that the plan would require approximately a 70% reduction in mercury emissions – but not until the year 2026! A federal court threw out the Bush plan as illegal, and ordered EPA to go back and follow the law.

While the process for regulating air toxics from the utility industry slowed to a crawl, EPA moved with relative speed in other sectors of the economy. Since 1990, EPA has finalized over 100 MACT rules, covering many sector of the economy, including:

- 1993: Final Coke Ovens MACT Rule, Final Dry Cleaning MACT Rule
- 1995: Final Aerospace MACT Rule, Final Petroleum Refineries MACT Rule
- 1998: Final Pharmaceuticals Production MACT Rule, Final Pulp & Paper (non-combustion) MACT Rule

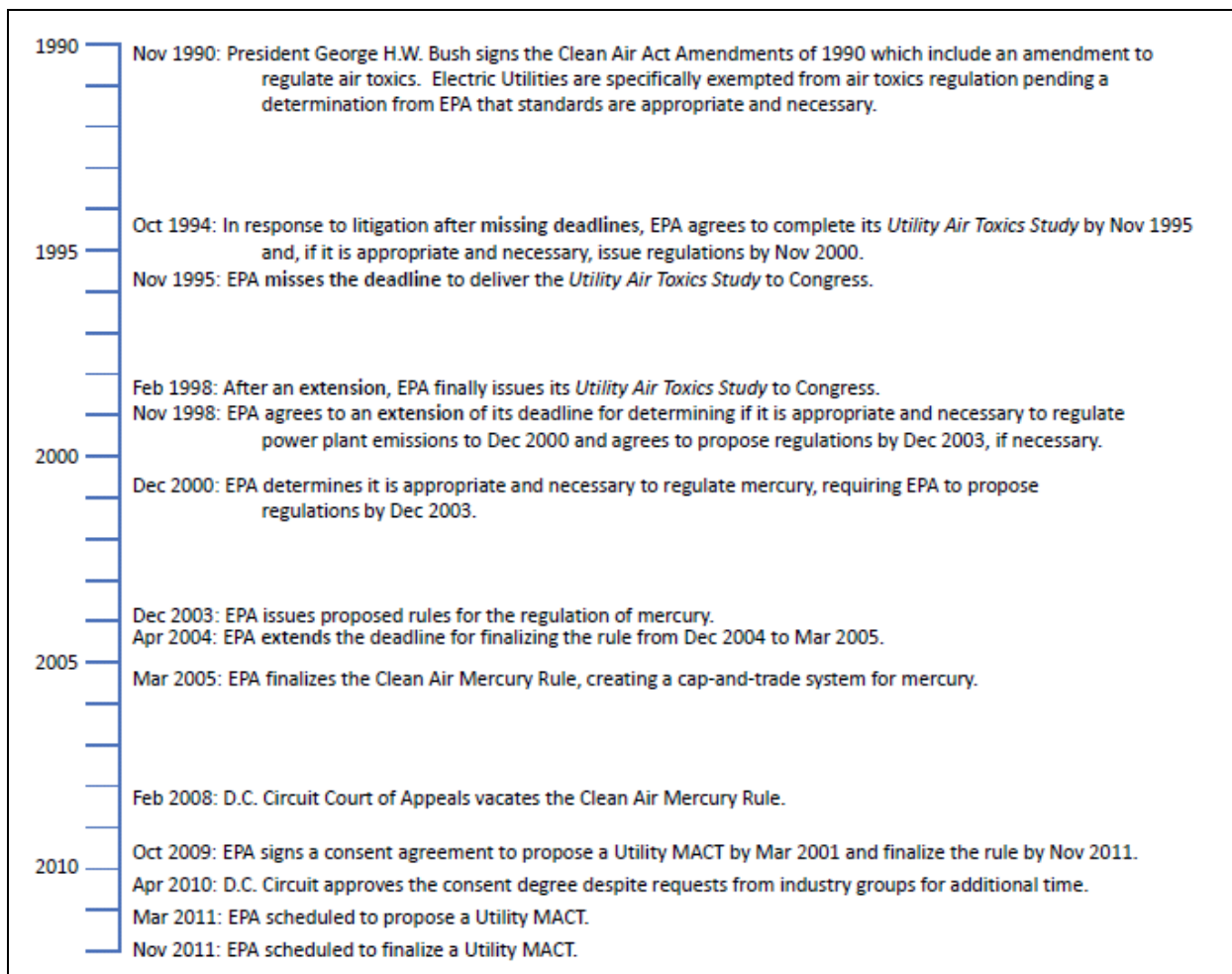
- 1999: Final Oil & Natural Gas Production MACT Rule, Final Portland Cement Manufacturing MACT Rule
- 2003: Final Asphalt Processing MACT Rule
- 2004: Final Iron and Steel Foundries (Major Sources) MACT Rule

In addition, EPA recently proposed toxic air pollution standards for industrial boilers – a significant source of mercury but one that is dwarfed by the emissions from electric power. EPA also recently proposed toxic air pollution standards for gold mining.

Fed up with the delays gained by the electric power industry, more than a dozen states have passed rules that require significant reductions from coal-fired power plants even if EPA never acts.

Here is the timeline:

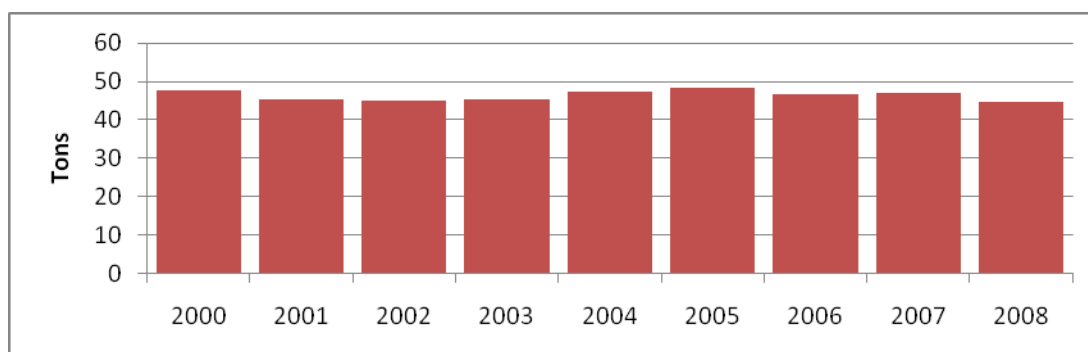
Figure 1. Timeline of Delay: Slow Path of Utility Air Toxics Regulation



Impact of the Delay

As documented in a recent report by the Environmental Integrity Project (EIP) report *Dirty Kilowatts: America's Top Fifty Power Plant Mercury Polluters*, these delays have had exactly the impact you might expect on mercury emissions: none. From 2000 to 2008, a time period during which control technologies to reduce mercury emissions by 90 percent became commercially available, mercury emissions from the electric power sector have remained essentially unchanged. The variability in mercury emissions in the figure below have as much to do with changes in the economy as they have to do with the deployment of control technologies. EIP found that of the 50 top mercury emitters, more than half increased their mercury emissions from 2007 to 2008.

Figure 2. Mercury Emissions from U.S. Power Plants (2000-2008)



Source: Environmental Integrity Project, *Dirty Kilowatts: America's Top Fifth Power Plant Mercury Polluters*, March 2010. http://www.environmentalintegrity.org/news_reports/documents/DirtyKilowatts-Top50MercuryPowerPlantReport.pdf

Why Should We Care?

As the EPA itself has noted, “Mercury exposure at high levels can harm the brain, heart, kidneys, lungs, and immune system of people of all ages. Research shows that most people's fish consumption does not cause a health concern. However, it has been demonstrated that high levels of methylmercury in the bloodstream of unborn babies and young children may harm the developing nervous system, making the child less able to think and learn.” In addition, according to the EPA, “Birds and mammals that eat fish are more exposed to mercury than other animals in water ecosystems. Similarly, predators that eat fish-eating animals may be highly exposed. At high levels of exposure, methylmercury's harmful effects on these animals include death, reduced reproduction, slower growth and development, and abnormal behavior.” <http://www.epa.gov/mercury/about.htm>

The EPA also reminds us that “Coal-burning power plants are the largest human-caused source of mercury emissions to the air in the United States, accounting for over 50 percent of all domestic human-caused mercury emissions.”

Coal-burning power plants also spew out dozens of other toxic contaminants, including arsenic, dioxins, manganese and acid gases including hydrogen chloride and hydrogen fluoride – which the Department of Health and Human Services has described as a “serious systemic poison.”

<http://www.atsdr.cdc.gov/mhmi/mmg11.html>

The Road Ahead

Currently, the EPA is operating under a consent agreement to issue a draft rule that sets plant-specific air toxics emissions limits by March 16, 2011 and to issue a final rule by November 16, 2011. The courts reinforced those dates with its recent decision over the objections of UARG. However, the judge gave us some pause when she wrote, “If EPA needs more time to get it right, it can seek more time.”

By the time the proposed rule comes out, EPA will have had 21 years and one day to get it right and industry will have had 21 years and one day to get ready.

It is ridiculous to argue that more time is needed. And it would be a tragedy if coal-burning electric power industry lobbyists once again convince Congress to let the industry off the hook.