

# The Bush Administration's Proposed Air Pollution Legislation: More Mercury Pollution, Higher Health Risks

Across the United States, mercury air pollution from coal-fired power plants contaminates our lakes, rivers, and oceans. Toxic mercury emissions deposit from the air into water bodies and then concentrate in fish. Eating mercury-contaminated fish damages the brains and nervous systems of children and can harm cardiovascular and immune systems in adults.<sup>2</sup>

The Bush administration's proposed rewrite to our nation's air pollution laws would significantly weaken health protections for millions of Americans. The current Clean Air Act, signed by the first President Bush in 1990, requires power plants to dramatically reduce their emissions of toxic mercury before the end of this decade. The current administration's legislative proposal would weaken these health protections, allowing power plants to continue emitting far more mercury pollution, for decades longer.

# Power plants - #1 mercury polluter

Coal-fired power plants are the nation's largest uncontrolled industrial mercury source - responsible for more than 40 percent of mercury air pollution from U.S. industry.<sup>3</sup> Power plants are the only major mercury polluters still unregulated under federal clean air standards.

#### Widespread mercury contamination

Two major Environmental Protection Agency reports to Congress document how mercury air pollution contaminates our lakes, streams, and other water bodies, concentrates in fish, and causes serious health risks for pregnant women and children who eat those fish.<sup>4,5</sup>

- In 2003, 44 states issued fish consumption advisories for mercury, warning citizens to limit how often they eat certain types of fish because the fish are contaminated with mercury.<sup>6</sup>
- 21 states have issued mercury advisories for fish in every inland lake or river.
- The U.S. Food and Drug Administration and EPA specifically warns pregnant women, women of childbearing age, nursing mothers, and young children not to eat shark, swordfish, king mackerel, or tilefish. The advisory warns the same populations to limit their consumption of albacore "white tuna" or tuna steaks to six ounces or less per week and fish that have lower levels of mercury, such as shrimp, canned light tuna, salmon, pollock, and catfish, to 12 ounces or less per week. Six ounces of fish is an average cooked meal, about the size of a can of tuna.<sup>8</sup>
- Across the U.S., mercury pollution has contaminated 131 million acres of lakes (32 percent of the national total) and 767,000 miles of streams and rivers (21 percent of the national total).

### Mercury is highly toxic

Methylmercury (the form of mercury that contaminates fish) is highly toxic, interfering with the development and function of the central nervous system. Infants can ingest methylmercury from breast milk when mothers have eaten contaminated fish. Children are exposed when they eat such fish. Children and infants are at higher risk of mercury poisoning because their nervous systems continue to develop until about age 14. Health effects linked to prenatal methylmercury exposure include: <sup>10, 11</sup>

- poor performance on tests of attention and language
- impaired memory
- inability to process and recall information
- impaired visual and motor function

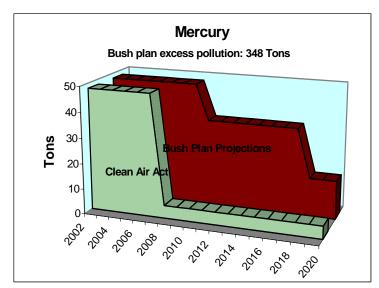
In adults, methylmercury poisoning can adversely affect fertility and blood pressure regulation and contribute to heart-rate variability and heart disease. 12, 13

In 2004, EPA indicated that 1 in 6 women of childbearing age has mercury levels in her blood above EPA's safe health threshold. <sup>14</sup> Nationally, this means that as many as 630,000 of the four million babies born each year are at risk of health problems due to mercury exposure *in utero*. <sup>15</sup>

# The Bush so-called "Clear Skies" bill means more mercury

The Bush administration's air pollution legislation would amend the Clean Air Act to weaken requirements for power plants and other facilities to reduce mercury pollution. While it claims to reduce mercury emissions, it would actually allow far more mercury pollution than faithful enforcement of the current Clean Air Act – for decades longer.

- Current law requires EPA to issue "maximum achievable control technology" (MACT) standards for coal-fired power plants three years after it finalizes regulations. In December 2001, the EPA told the Edison Electric Institute that the Clean Air Act's MACT standard could reduce power plants' mercury emissions by 90 percent, from 48 tons to 5 tons nationwide by 2008.
- But the Bush administration's proposed changes to the statute would weaken the Clean Air Act, by repealing the MACT standard for power plants, delaying mercury reductions to 2010, and allowing emissions of 34 tons in 2010 and 15 tons in 2018.
- That's more than 6 times as much power plant mercury pollution as full enforcement of the current Clean Air Act through 2017 and 3 times as much mercury each year after that, indefinitely.



• From 2008 through 2020, that's 348 tons more mercury under the Bush legislative proposal.

## Mercury "trading" could increase local risks

The current Clean Air Act requires mercury reductions at each power plant. The Bush legislation would allow unrestricted emissions trading. This means that some power plants may not have to reduce their emissions at all. Instead, they could buy mercury emission "credits" from other power plants and do nothing to stop contamination of local lakes and streams. Some plants could even *increase* their mercury emissions. Because mercury trading could lead to toxic hotspots where mercury contamination increases, other legislative proposals—notably the Clean Power Act—bar trading in mercury emissions.

## Deep mercury reductions are feasible

Independent tests to date indicate that 90 percent removal of mercury will be technologically and economically feasible. <sup>17</sup> Some air pollution controls are achieving reductions of more than 90 percent right now. <sup>18</sup> History also reminds us that substantial technological improvements and a steady reduction in control costs occur only when strong standards are set. <sup>19</sup>

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<sup>&</sup>lt;sup>1</sup> U.S. EPA, 1997a. Mercury Study Report to Congress, Volume I, Executive Summary. EPA-452/R-97-003.

<sup>&</sup>lt;sup>2</sup> National Research Council, 2000. Toxicological Effects of Methylmercury. National Academy Press, Washington, DC.

<sup>&</sup>lt;sup>3</sup>U.S. EPA, National Emissions Inventory, 1999.

<sup>&</sup>lt;sup>4</sup>U.S. EPA, 1997a. Mercury Study Report to Congress, Volume I, Executive Summary. EPA-452/R-97-003.

<sup>&</sup>lt;sup>5</sup>U.S. EPA, 1998a. Study of hazardous air pollutant emissions from electric utility steam generating units – final report to Congress. February. 453/R-98-004a.

<sup>&</sup>lt;sup>6</sup>U.S. PIRG, Fishing For Trouble, October 2004.

<sup>&</sup>lt;sup>7</sup> *Id*.

<sup>8</sup> http://www.fda.gov

<sup>&</sup>lt;sup>9</sup>U.S. PIRG, Fishing For Trouble, October 2004.

<sup>&</sup>lt;sup>10</sup>U.S. EPA, 1997f. Mercury Study Report to Congress, Volume V: Health Effects of Mercury and Mercury Compounds. EPA-452/R-97-007.

<sup>&</sup>lt;sup>11</sup>Toxicological Effects of Methylmercury, National Academy Press, Washington, DC, 2000.

<sup>&</sup>lt;sup>12</sup> High levels of mercury in seafood linked to infertility. BJOG: an International Journal of Obstetrics and Gynecology. 109:1121-5, 2002.

<sup>&</sup>lt;sup>13</sup> Toxicological Effects of Methylmercury, National Academy Press, Washington, DC, 2000.

<sup>&</sup>lt;sup>14</sup> Centers for Disease Control, January 2003. Second National Report on Human Exposure to Environmental Chemicals.

<sup>&</sup>lt;sup>15</sup> Derived by the Clean Air Task Force from 2000 census data and fertility data from the National Center for Health Statistics.

<sup>&</sup>lt;sup>16</sup> U.S. EPA presentation to Edison Electric Institute. December 4, 2001.

<sup>&</sup>lt;sup>17</sup> Massachusetts Department of Environmental Protection, 2002. Evaluation of the technological and economic feasibility of controlling and eliminating mercury emissions from the combustion of solid fossil fuel. Bureau of Waste Prevention, Division of Planning and Evaluation. December.

<sup>&</sup>lt;sup>18</sup> U.S. EPA, 2002. Control of mercury emissions from coal-fired electric utility boilers. Interim report including errata dated 3-21-02. EPA-600/R-01-109. April.

<sup>&</sup>lt;sup>19</sup>Northeast States for Coordinated Air Use Management, 2000. Environmental regulation and technology innovation: controlling mercury emissions from coal-fired boilers.

This fact sheet can be found on the web at: <a href="http://cta.policy.net/">http://cta.policy.net/</a>