

LEARNING AND DEVELOPMENTAL DISABILITIES INITIATIVE

MERCURY FACT SHEET

May 20, 2004

Recommendation:

Congress should implement a rule on mercury emissions that protects public health, including children's health. The rule should not include cap-and-trade, which allows for certain communities to be exposed far more than others. In addition, it should prompt the implementation of a true "Maximum Achievable" standard—EPA's legal obligation under the Clean Air Act—at least a 90% reduction in mercury air emissions from utilities by 2008.

Justification:

1) Mercury Pollution from power plants is a major public health problem.

- Coal fired power plants emit thousands of pounds of toxic mercury into our nation's air every year—the EPA has identified coal-fired power plants as the largest industrial emitters of mercury, producing more than 1/3 of all mercury pollution in the U.S. Airborne mercury eventually deposits in water bodies. Mercury has contaminated 10.2 million acres of lakes, estuaries, and wetlands and 415,000 miles of stream, rivers, and coastline. Aquatic microorganisms convert the heavy metal into the organic form methylmercury, which accumulates in many edible fish species. Fish are the primary source of mercury exposure in the United States.
- 45 states have issued 2,140 specific fish consumption advisories due to mercury contamination (this represents an incredible 138% increase from 1993 to 2002). 19 states have issued *statewide* advisories for mercury in lakes and/or rivers. They are: CT, FL, IL, IN, KY, ME, MD, MA, MI, MN, MO, NH, NJ, ND, OH, PA, RI, VT, WI. In addition, 11 states have issue statewide advisories for mercury in coastal waters. They are: AL, FL, GA, LA, ME, MA, MS, NC, RI, SC, TX.
- Recent findings from the Centers for Disease Control and Prevention (CDC) conclude that nearly 8% of women of childbearing age, literally millions of American women, have blood mercury concentrations higher than the level considered safe by the EPA—mercury that they will unknowingly transmit to children *in utero*. EPA scientists recently estimated that 630,000 children annually were at risk due to exposure to unsafe maternal mercury blood levels.

2) Serious health effects:

- The health effects of mercury on child development are serious. Affected children experience measurable declines in motor skills, learning capacity, and memory, along with other symptoms of irreversible brain damage that persist into their teenage years. Adverse effects on cardiac function have also been detected. Mercury further undermines the administration's commitment to Leave No Child Behind: exposure to unsafe mercury

levels can affect future life success and leave too many children behind where their innate potential should have taken them. Note that these measurable effects occur at low exposure levels achieved by ordinary people eating normal amounts of fish in their diets—because the fish are contaminated.

- The National Academies of Science (NAS) has concluded that where women consume large amounts of mercury-contaminated fish and seafood during pregnancy, there is likely to be an increase in the number of children who have to struggle to keep up in school and who might require remedial classes or special education.

3) EPA's Current Proposal - Some Major Concerns:

- **Takes years longer than the law permits:** The EPA is legally required to reduce mercury emissions to the maximum extent possible by 2008. EPA admitted in 2001 that using a so-called Maximum Achievable Control Technology (MACT) standard to enforce the Clean Air Act could cut power plant mercury pollution by nearly 90% (from 48 tons per year today to about 5 tons by 2008). EPA instead proposed to use a weak 'cap-and-trade' rule to reduce mercury emissions in two phases – capping emissions at 34 tons by 2010 (two years after 2008) and 15 tons by 2018 (ten years after 2008).
- **Leaves hundreds of extra tons of mercury in the air, food chain and ultimately in our children:** Instead of 5 tons by 2008, EPA wants to reduce power plant mercury emission to 34 tons by 2010 and 15 tons by 2018. Over the ten-year period from 2008-2018, the EPA's rule would allow polluters to emit an extra 328 tons of mercury compared with strong air quality standards.
- **Lets polluters off the hook:** The Bush cap-and-trade rule would allow almost seven times more mercury through 2017 or beyond compared to a strong MACT standard, and at least 3 times the mercury indefinitely. "Banking" mercury credits (a feature of the proposed cap-and-trade proposal) means that actual reductions scheduled for 2018 probably wouldn't be achieved before 2025 (and that "achievement" is still three times the level of a strong mercury standard). Despite public claims of 70% reductions in utility mercury emissions by 2018 (later with banking factored in), EPA's own emissions analysis only estimates a 38-46% reduction by 2020, to somewhere between 26 and 30 tons. No further reductions are scheduled after 2018 (later with banking factored in). Americans are stuck with 15-30 tons of mercury emitted from power plants indefinitely. Women and children shouldn't have to wait forever. Children who are being affected *right now* will be in high school before EPA's efforts even *begin* to have any effect.
- **Threatens communities across America with toxic "hot spots":** Because mercury is a toxic and accumulative pollutant, the cap-and-trade regulatory model used by EPA to reduce sulfur dioxide emissions cannot easily be applied without the risk that certain communities will get more than their fair share of toxic mercury pollution. Every child, in every city, town, and rural community throughout America, deserves our best efforts to reduce mercury emissions as much as possible. Trading schemes that arbitrarily threaten some communities

more than others are not consistent with the Clean Air Act's commitment to protect public health and the environment.

4) Strong Mercury Standards Work – An Example:

- A decade-long study sponsored by the EPA, the U.S. Geological Survey, and the State of Florida recently revealed that tough regulations of airborne mercury emissions produce swift, dramatic improvements in mercury contamination in local fish tissues. There, south Florida waste incinerators were required to reduce their mercury emissions by 90%. They did so, and mercury levels in Everglades fish and wildlife declined by 60% in just ten years. The Florida study shows that local mercury emissions matter and that strong pollution controls make a big difference in cleaning up the local environment and protecting public health.

Researched by the Physicians for Social Responsibility – www.psr.org; Compiled by the Institute for Children's Environmental Health – www.iceh.org