



FACT SHEET

DRAFT EPA ACTION PLAN FOR MERCURY

WHAT IS MERCURY?

Mercury, a naturally occurring metal, moves between the water, the air, and soil as a result of natural and human activities. It enters the environment from sources like coal-fired power plants, mining and smelting of various ores, and the disposal of consumer products manufactured with it. Because it is a persistent, bioaccumulative and toxic (PBT) pollutant, the amount of mercury in the biosphere has been increasing since the beginning of the industrial age. In fact, 870 pounds of mercury is added to the atmosphere in this country each day from human sources.

In its organic form, methylmercury bioaccumulates in fish and becomes more concentrated as it moves up the food chain to humans and other animals who eat the fish. Mercury is the most frequent reason for fish consumption advisories in the U.S., accounting for 60 percent of all advisories in fresh water bodies. To date, 40 states have issued advisories for mercury in one or more water bodies, and 11 states have issued them on a state-wide basis.

WHY IS MERCURY A PROBLEM?

Mercury is well known and long established as a neurotoxin that slows fetal and child development and causes irreversible deficits in brain function. Scientific debate is ongoing to more precisely determine the level of mercury exposure at which effects begin to occur. Several, but not all, existing studies show adverse human health effects at the level at which many Americans are exposed today from fish consumption. Tens of thousands of babies are born each year after being exposed in the womb to levels of mercury at which some studies have shown adverse health effects. This is the same uncertainty the Agency faced with respect to lead, decades ago. Like lead, mercury poses threats to our children that we must address now.

EPA will act to assure that our standards are fully protective of public health. This draft mercury action plan contains a list of actions that brings all of the Agency's tools to bear on this potent neurotoxin.

KEY MERCURY ACTION ITEMS

The draft EPA Action Plan for Mercury is the first of a series of such national action plans. It is a part of EPA's draft Multimedia Strategy for Priority Persistent, Bioaccumulative, and Toxic (PBT) Pollutants. The Agency has reviewed current regulations, initiatives, and programs which manage and control mercury, and has identified a set of cost-effective options to move toward achieving further reductions.

Specifically, the Agency proposes the following actions, in consultation with other federal agencies, and with the involvement of states, tribes and other stakeholders:

➔ CONTROL EMISSIONS FROM AIR POINT SOURCES.

EPA has taken several important steps to reduce the emissions from municipal waste combustors and medical waste incinerators. These actions will reduce mercury emissions caused by human activities by 50 percent from 1990 levels.

Actions to reduce emissions of carbon dioxide to control climate change will have a significant co-benefit in reduced mercury emissions, as well. Additional work is being done to evaluate the linkage of air emissions to water quality impacts and to help determine appropriate geographically targeted reduction actions. The Agency will gather high quality emissions data on coal-fired electric generating plants to address the uncertainties about mercury emissions and to support regulatory actions.

➔ REVISE THE WATER QUALITY CRITERION, AND IMPROVE MEASUREMENT OF MERCURY IN WATER.

EPA plans to revise its water quality human health criterion for mercury and publish new analytical methods for measuring mercury levels in water.

→ SEEK REDUCTIONS IN USES OF MERCURY AND IMPROVE INFORMATION AND CITIZENS' "RIGHT TO KNOW."

These use-reduction measures will lower the levels of mercury in waste streams as well as the danger of accidental releases. Generally, EPA will look to voluntary rather than regulatory approaches to reduce mercury use. Additionally, EPA is considering lowering the level at which mercury releases must be reported under the Toxic Release Inventory (TRI), which could result in additional reporting of mercury releases.

→ DEVELOP AN ENVIRONMENTALLY ACCEPTABLE DISPOSAL METHOD FOR MERCURY WASTES DESIGNATED AS HAZARDOUS WASTES.

Currently, EPA requires that hazardous wastes containing high levels of mercury be treated for elemental mercury recovery. This requirement may no longer be the preferred approach since the demand for mercury has been reduced to the point where the supply of recovered mercury exceeds it. Also, there are some air emissions of mercury associated with various waste treatment processes. Therefore, EPA will seek information on alternative treatment technologies which would permanently stabilize mercury wastes to allow their disposal in hazardous waste landfills.

→ SEEK REDUCTION IN EXPOSURE TO HIGHLY EXPOSED POPULATIONS.

Unfortunately, even with immediate reductions in mercury releases into the environment, it will be quite some time before there is a measurable reduction in mercury levels in fish. Therefore, EPA will continue public information and outreach programs, including continued support and strengthening of the states' and tribes' fish advisory programs which warn people about mercury levels.

→ DECREASE FURTHER ENVIRONMENTAL CONTAMINATION FROM ILLEGAL USE/DISPOSAL OF MERCURY THROUGH FOCUSED COMPLIANCE MONITORING AND ENFORCEMENT OF MERCURY RESTRICTIONS AND REQUIREMENTS.

EPA will focus compliance assistance and outreach, monitoring and/or enforcement on

significant sources of mercury in the environment. Where enforcement actions are warranted, EPA will use Supplemental Environmental Projects (SEPs) to encourage pollution prevention activities or mitigate damage. Also, EPA will expand compliance and enforcement activities for direct and indirect dischargers of mercury to surface waters.

→ CONTINUE INTERNATIONAL EFFORTS TO REDUCE MERCURY RELEASES.

Internationally, the U.S. has made commitments with Canada through the Binational Toxics Strategy to significantly reduce releases of mercury and other priority PBTs. EPA is also supporting early implementation of the Persistent Organic Pollutants and Heavy Metals Protocols to the Long Range Transboundary Air Pollution Convention of the United Nations.

→ PERFORM AND SUPPORT FURTHER RESEARCH ON ALL ASPECTS OF THE MERCURY PROBLEM.

EPA is developing a research strategy that will focus federal and other research on the most important data gaps.

→ SUPPORT REGIONAL, STATE, TRIBAL, AND LOCAL ACTIONS TO REDUCE MERCURY.

State, tribal, and local governments play a key role in achieving mercury reductions. EPA will support state and local efforts through funding, information sharing, and coordination. For example, EPA will expand outreach to publicly-owned treatment works about preventing mercury pollution in sewage discharges.

HOW DO I FIND OUT MORE?

For further information, contact *Karen Maher* at (202) 260-3894. For copies of the Draft EPA Action Plan for Mercury and other related documents, call the *Pollution Prevention Information Clearinghouse* at (202) 260-1023.

Documents are also available on the World Wide Web at:

<http://www.epa.gov/pbt>