



# Environmental Fact Sheet

## MERCURY IN THE MUNICIPAL SOLID WASTE (MSW) STREAM

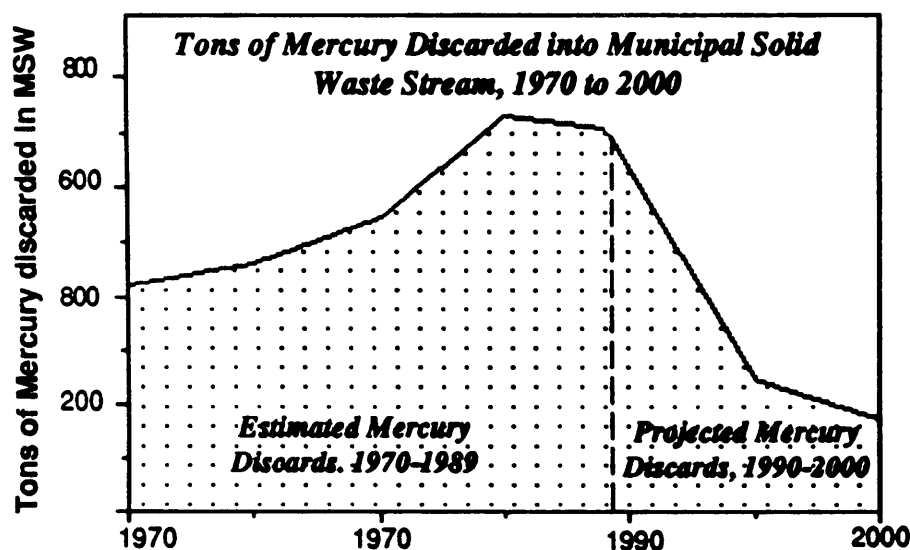
### Background

Mercury is used in many applications due to its excellent ability to conduct electrical current, its ability to form alloys with most metals, and its low cost. Mercury is also a toxic heavy metal with a strong tendency to bioaccumulate in the food chain, and as a result can create serious human health and environmental problems. Global releases of mercury in the environment stem from both natural sources and releases related to human activities (e.g., mining and manufacturing activities, urban refuse, combustion ash). Human activities account for releases of approximately 12,000 tons of mercury annually into the air, soil, and water. As part of the EPA's effort to identify sources of hazardous compounds in municipal solid waste and promote voluntary initiatives to reduce the use of these compounds, EPA has examined the sources of mercury in MSW.

### Mercury in MSW Expected to Decline Dramatically

Discards of mercury in municipal solid waste in the United States were estimated to be 709 tons in 1989. EPA expects dramatic decreases in mercury discards in the next

several years due largely to a long-term commitment by the battery industry to remove or greatly reduce mercury from alkaline batteries through technological innovations. Currently, household batteries are by far the major source of mercury in MSW, followed, to lesser degrees, by electric lighting, paint residues, fever thermometers, and thermostats. The expected decrease emphasizes the effectiveness of source reduction\* initiatives in reducing the potential toxicity of municipal solid waste.



Mercury levels in MSW should also decrease as the concentration of mercury in paint residues decreases sharply, resulting from EPA bans and voluntary cancellations by the paint industry of registrations of mercury-based biocides in 1990 and 1991.

\* Source reduction is the design, manufacture, purchase, or use of materials to reduce their amount or toxicity before they enter the MSW stream.



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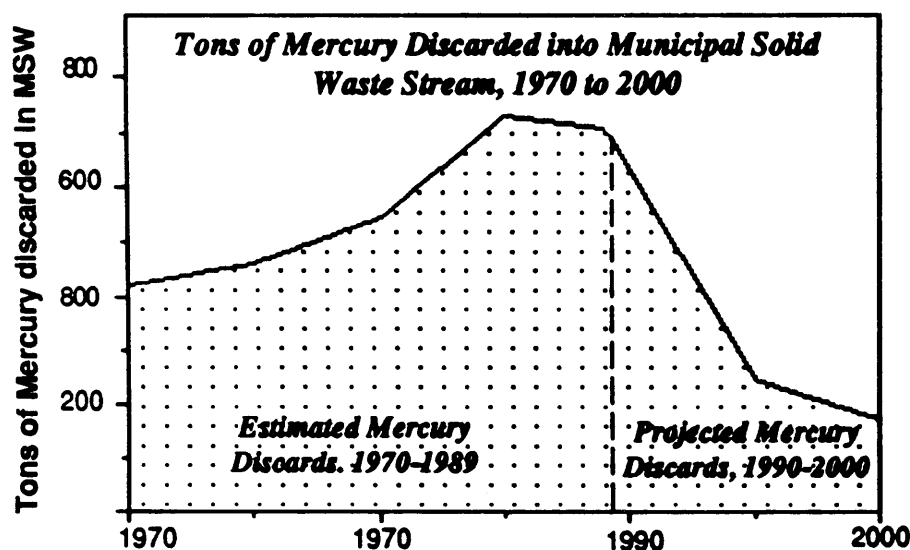
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