

# **Toward a Great Lakes Phase-Down Strategy for Mercury in Products and Waste**



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# Origins: Great Lakes Regional Collaboration



## GLRC's 2005 Great Lakes Restoration Strategy

- Reaffirmed commitment to virtual elimination of mercury and other persistent toxic pollutants
- Called for “significant reductions in mercury emissions from coal fired power plants” by 2010
- Called for “By 2015, full phase-outs of intentionally added mercury bearing products, as possible.”

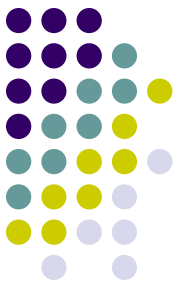
“A basin-wide mercury product stewardship strategy should be developed to complete phase-outs of mercury uses, including a mercury waste management component, as practicable.”



# **Origins: Council of Great Lakes Governors and Great Lakes & St. Lawrence Cities Initiative**

CGLG and GLSLCI letter to President Bush  
(December 12, 2005):

“The Great Lakes States, Cities and Tribes will develop a basin-wide mercury product stewardship strategy aimed at managing mercury wastes and reducing the use of mercury-containing products. The Great Lakes Pollution Prevention Roundtable will lead this effort.”



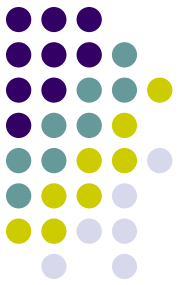
# Mercury Strategy Team Membership

## Representatives from:

- State environmental agencies
- Tribal organizations: Great Lakes Indian Fish and Wildlife Commission, Chippewa Ottawa Resource Authority, Lac du Flambeau Band, Nottawaseppi Huron Band of Potawatomi, Sault Sainte Marie Tribe of Chippewa Indians, Seneca Nation
- GLSLCI (Superior, WI)
- GLRPPR/ IL Waste Mgmt. & Research Center
- U.S. EPA Region 5 and GLNPO
- Battelle (consulting support)



# Scope & Structure of the Strategy



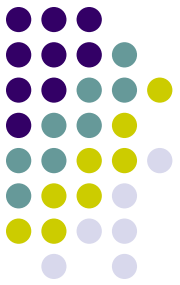
- 5 products and 5 sectors
- Criteria:
  - Quantity used
  - Quantity released (prioritize releases to water)
  - Available alternatives to products
  - Unmet potential for reduction
  - Exposure to sensitive populations

Strategy does not address mercury from power plants

# Strategy Structure



- For each priority product/sector
  - Background on uses/releases
  - Existing programs
  - Recommended state actions (mandatory and voluntary)
- Crosscutting strategies
- Next Steps (implementation and tracking progress)



# Priority products and sectors

## Products

- Dental Amalgam
- Thermostats
- Switches, Relays, and Measurement and Control Devices
- Lamps
- Fever Thermometers

## Sectors

- Schools
- Steel Manufacturing (scrap metal- auto switches)
- Heavy Industry
- Health Care
- Households

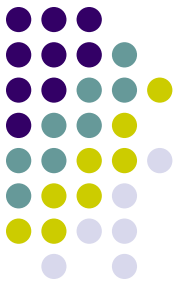
# Products:

## Dental Amalgam



- Require dental offices to follow American Dental Association BMPs
- Require amalgam separators in dentists' offices
- Support collection & safe management of bulk elemental mercury from dentists' offices

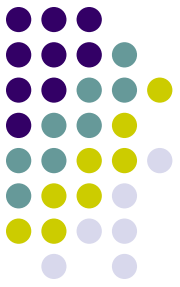




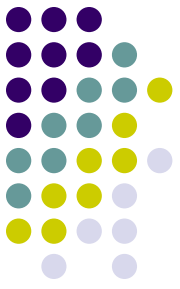
# Thermostats

- Ban sale and/or installation of mercury thermostats
- Require manufacturers or wholesalers to offer a bounty for the return of mercury thermostats (provide incentives for collection)
- Accept thermostats at HHW collections
- Promote ENERGY STAR programmable thermostats (mercury-free)

# Switches, Relays, and Measurement and Control Devices



- Phase out sale and distribution
- Establish labeling requirements for products exempted from phase-out



# Lamps

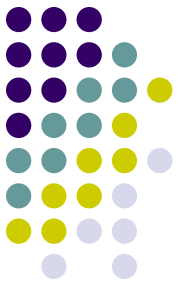
- Require recycling of mercury-containing lamps regardless of TCLP
- Revoke CESQG exemption from lamp recycling
- Provide collection for households through partnerships with HHW, retailers, and utilities
- Regulate drum top crushers
- Ban sale when adequate mercury-free alternatives exist

# Fever Thermometers



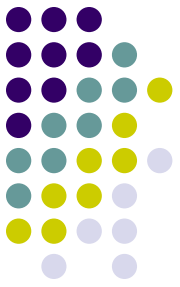
- Ban sale and distribution
- Support thermometer exchange programs
- Conduct public outreach

# Sectors: Schools



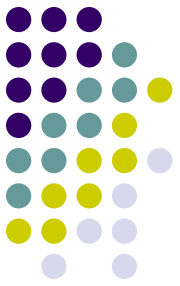
- Prohibit purchase, use, and storage of elemental mercury, mercury compounds, and mercury-containing laboratory and medical equipment in schools (K-12)
- Conduct outreach to school faculty and staff
- Help schools to eliminate mercury (e.g. via free access to HHW collections)

# Steel Manufacturing/ Scrap Metal Furnaces



- Encourage participation in NVMSRP ([National Vehicle Mercury Switch Recovery Program](#))
- Plan for continued achievement of auto switch recycling goals after expiration of funding for NVMSRP

# Heavy Industry



- Promote industry development of phase-out plans for mercury-containing equipment
- Require use of lower-mercury feedstock from large volume users when mercury discharge is a problem



# Health Care

- Implement state H2E programs to encourage hospitals to
  - Adopt mercury-free purchasing policies
  - Handle and dispose of mercury-containing materials properly
- Engage other health care facilities, such as veterinary care and medical research laboratories, in similar mercury reduction activities

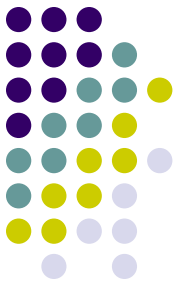




# Households

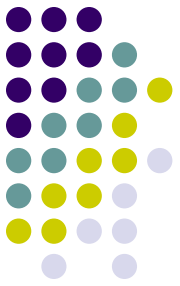
- Provide education and outreach
- Ensure access to free collection for safe management of mercury and mercury products

# Crosscutting Strategies

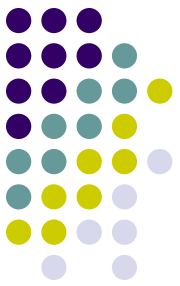


- Fund collections and outreach
- Support development of alternative products
- Require product labeling
- Require manufacturer reporting
- Conduct educational outreach
- Support extended producer responsibility requirements
- Develop mercury-free purchasing policies
- Coordinate efforts with other states and with Canada

# Current Status of Strategy



- Technical reviewers are currently examining the completed draft. Comments expected March 19.



# Next Steps

- State and tribal representatives submit draft to agency directors for approval  
30-day review period
- Present draft to Great Lakes governors, representatives from local/municipal government and tribal councils
- Release for public comment/ stakeholder input  
60-day public comment period
- Obtain tribal council/ governor signatures  
Anticipated release date September 2007

# Questions?



- Contact me at [winter.jessica@epa.gov](mailto:winter.jessica@epa.gov) or (312) 353-3212