### New York State Mercury Reduction Initiatives

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# Why Are We Concerned About Reducing Mercury Emissions?

- Atmospheric Deposition is a major source of mercury environmental loading in New York and the Northeast, leading to wide spread public health advisories on fish consumption.
- Long established neurotoxin, slows fetal and child neurological development; causes irreversible deficits in brain function;
- Sensitive human subpopulation children in utero and young children;
- Sensitive animal population eagles, loons, osprey, mink, otters and songbirds.



## National, Regional, State Mercury Research & Reduction Efforts

- US EPA Mercury Study Report to Congress (December 1997);
- Northeast States and Eastern Canadian Provinces Mercury Study: A Framework for Action (February, 1998);
- The Great Lakes Binational Toxics Strategy Mercury Workgroup (April 1997);
- NYSERDA Environmental Monitoring, Evaluation & Protection Program.



# Major Mercury Sources in New York

Coal-fired Utility Units

Fuel type and control configurations

Portland Cement Plants

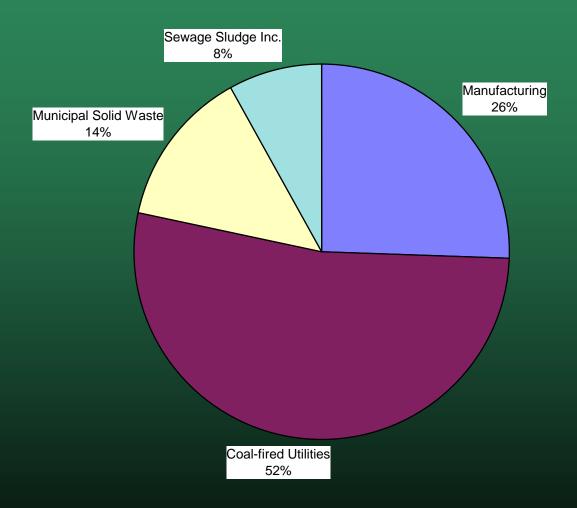
Long kilns – petcoke, coal, raw materials, added utility fly ash

Incineration Sources

Municipal Solid Waste Incineration Sewage Sludge Incineration



#### Mercury Point Source Emissions - 2005





### **Mercury Reduction Initiatives**

- 6 NYCRR Part 219-7
  - Mercury Emission Limitations For Large Municipal Waste Combustors
- 6 NYCRR Part 246
  - Mercury Reduction Program for Coal-Fired Electric Utility Steam Generating Units
- 6 NYCRR Part 374-4
  - Standards For The Management Of Elemental Mercury and Dental Amalgam Wastes At Dental Facilities

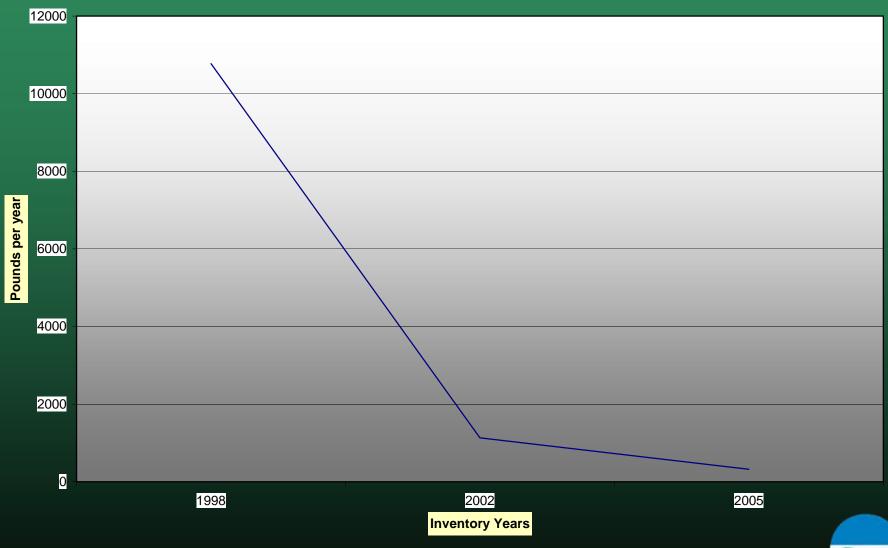


# 6 NYCRR Part 219-7 (Incinerators)

- Federal National Emission Standard for Hazardous Air Pollutants (NESHAP) for Municipal Waste Combustors
  - Mercury limitation 80 ug/dscm or 85% removal whichever is less stringent (compliance date: 12/2000)
  - New York State limitation 28 ug/dscm or 85% removal whichever is less stringent (compliance date: 12/2003)



#### Mercury Emissions from Municipal Waste Combustors



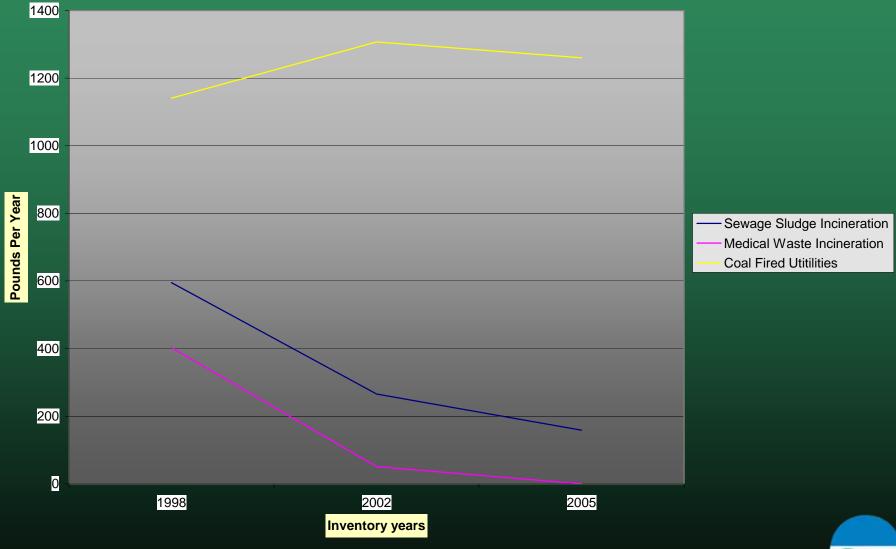
### 6 NYCRR Part 246

## Mercury Reduction Program for Coal-fired Electric Utility Steam Generating Units

- Federal Clean Air Mercury Rule reduces Hg 30% by 2010, and 70% by 2018
  - New York State will achieve a minimum of 50% Hg reduction in 2010 and 90% in 2015
  - CAMR's Phase II mercury cap for New York is 310 lbs per year and Part 246 will result in less than 150 lbs per year in 2015



#### Mercury Emission Reductions from Point Source Categories





### Next Source Categories for Mercury Reductions

- Portland Cement Manufacturing
  - federal NESHAP failed to regulate
- National Emission Standards for Hazardous Air Pollutants for:
  - Iron and Steel Foundries
  - Electric Arc Furnace Steelmaking Facilities
  - Proposed on September 17 & 20, 2007
  - Pollution prevention approach to remove mercury switches from automobiles
- Continued Investigation into Area Sources





preventing hazardous spills, assisting businesses in finding mercury-free alternatives to needed equipment, to monitoring water and habitat to keep toxic levels safe for fish, wildlife and humans. The DEC has established a Mercury Work Group to

Tools

Favorites

Mercury in Fish and Wildlife

Mercury in New York State's

Janaging Dental Mercury

hapter 611, Laws of 2006

Janaging Mercury Containing

Vaters

quipment

help coordinate its response to issues on mercury and the environment. The Work Group's Recommendations to Meet the Mercury Challenge (PDF, 99 KB) provides more information on

Protection Agency's web page on mercury NYS Dept of Health Information on Mercury Spills in New York State Great Lakes Regional Collaboration Draft

Mercury Phase-Down

Internet

Janaging Mercury-Added the Group's vision. Consumer Products in New