#### AIR TOXICS PROGRAM

SALLY SHAVER, DIRECTOR APRIL 14, 2004

#### The Air Toxics Program

(stationary, mobile, and indoor air sources)

Regulatory Approaches Risk Assessment
Methods for
Facility Specific &
Community-Scale

Risk Decision Criteria for Facilities and Communities

Voluntary Reduction Options Education and Outreach

S/L/T Program Structure Design

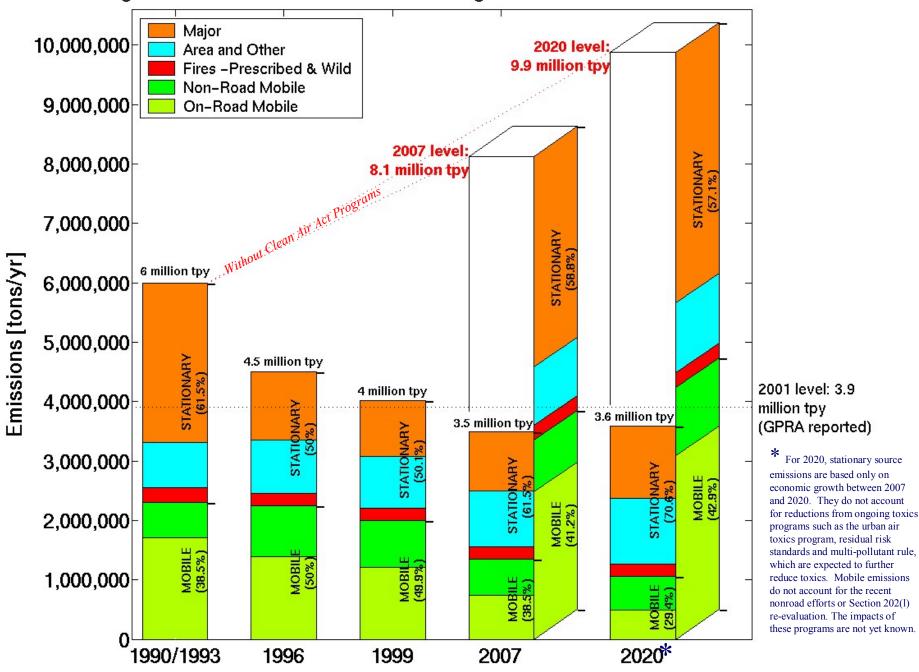
**Achieve Meaningful Reductions** at the Local Level

#### CAA SECTION 112 PROGRAMS

- Toxics
  - 10-yr MACT standards
  - Utility MACT
  - Section 129 rules
  - Residual risk rules
  - Urban Air Toxics
    - Area Source Rules
    - Community Assessment Projects



Contiguous U.S. Contribution of Source Categories to Total Emissions for all HAPs



## MACT FOR DEFENSE LAND SYSTEMS AND MISCELLANEOUS EQUIPMENT

- Separate surface coating standard to reduce toxic air emissions at DoD and NASA facilities
  - Cover all surface coating operations at military installations that are major sources of air toxics emissions
  - Working with DoD stakeholders to determine whether or not to cover some coating operations at military installations that emit below major source thresholds
- Proposal planned for late 2005

#### **UTILITY MACT**

- Utility MACT proposed December 15, 2003; promulgation December 2004
- Interstate Air Quality Rule proposed December 17, 2003
- 3 Public Hearings held February 25-26, 2004 for both rules
- Supplemental Proposal for Utility signed February 24, 2004
- Public Hearing held March 31, 2004

### UTILITY MACT (CONTINUED)

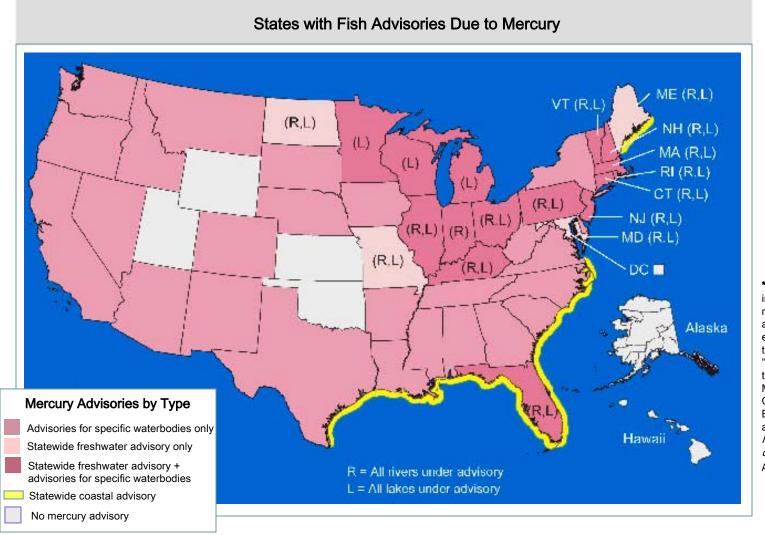
- Three alternatives proposed
  - Proposed Section 112 MACT requirements for utility units
    - Reduces mercury emissions from 48 to 34 tons by 2007
  - Proposed rule to address mercury from power sector under Section 111 (revising December 2000 determination to use Section 112 MACT requirements)
  - Proposed cap-and-trade approach [under Section 112(n)(1)(A)]

# UTILITY MACT - PROPOSED SECTION 111 ALTERNATIVE

- Federal rule for new sources 111(b)
  - Includes new utility emission limits for mercury and nickel
- Guidelines for State Implementation Plans 111(d)
  - Sets emission rates for existing coal-fired utility units under a cap-and-trade program administered by States
    - Phase 1: 2010 (solicit comment on cap level)
    - Phase 2: 2018 Capped at 15 tons
  - Sets a limit for nickel emissions from oil-fired units to ensure adequate control in State plans

#### **Mercury Contamination in Fish**

 Currently 44 states have issued fish consumption advisories for some or all of their waters due to contamination from mercury.\*



\*Note: For more information about the relationship between fish advisories and human exposure to mercury, see the EPA Report "America's Children and the Environment: Measures of Contaminants, Body Burdens, and Illnesses" available at http://yosemite.epa.gov/o chp/ochpweb.nsf/content/publications.htm

# SECTION 129 COMBUSTION RULES

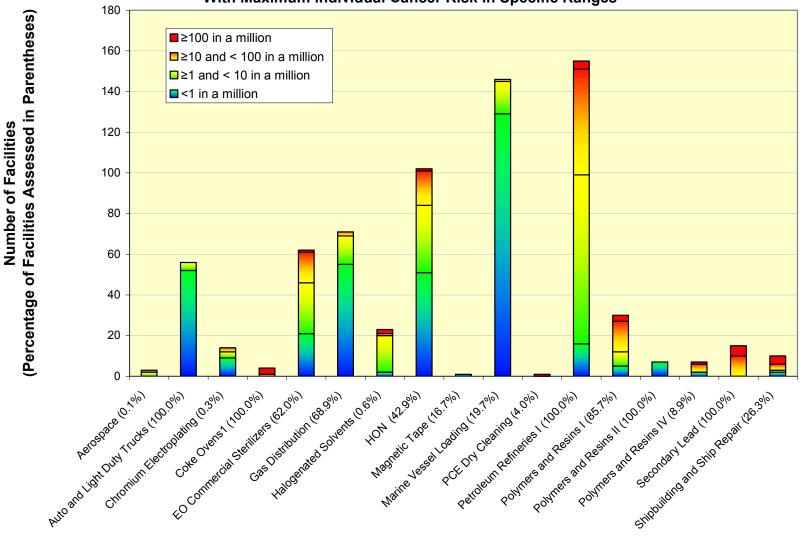
- Large MWC revision proposal September 2005; promulgation April 2006
- Small MWC litigation remanded February 2004
- Other Solid Waste Incinerators promulgation by November 2005
- Commercial and Industrial Solid Waste Incinerators – remanded in September 2001
- Medical Waste Incinerators remanded in March 1999

#### RESIDUAL RISK

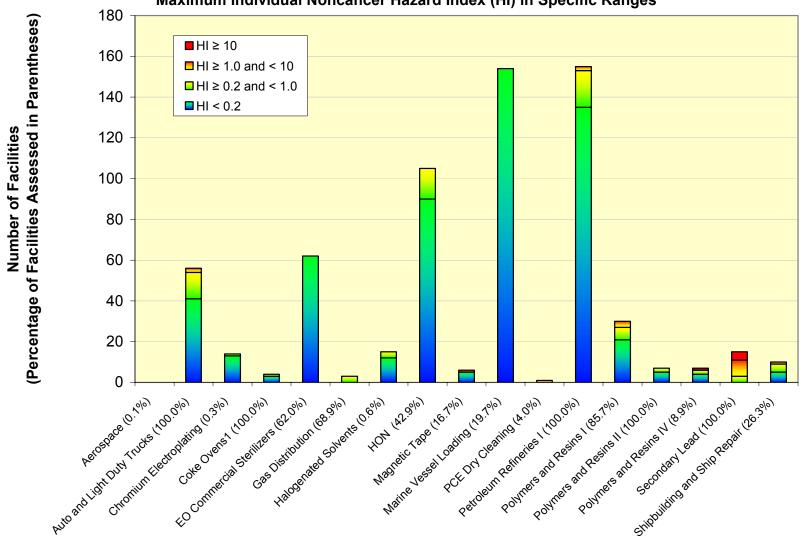
- Risk in MACT
  - General Approach
    - Risk assessment information has been used to reduce regulatory requirements for low-risk sources
    - Two CAA provisions have been used:
      - Delisting authority (112(c)(9))
      - Health threshold provision (112(d)(4))

- Where we are now
  - Risk Assessment Library almost complete
  - All 20 of the two- and four-year MACT residual risk standards have been started
- Five of the 24 seven-year MACT projects have been initiated

Residual Risk Test: Facilities Subject to MACT With Maximum Individual Cancer Risk in Specific Ranges



Residual Risk Test: Facilities Subject to MACT With Maximum Individual Noncancer Hazard Index (HI) in Specific Ranges



- Complete current standards with court-ordered deadlines
  - Coke ovens final 2005
  - Dry cleaning final 2006
  - HON final 2006\*
  - Halogenated Solvents final 2006\*
- Complete 4 proposals of no further controls by end of 2005\*
  - Industrial cooling towers
  - Magnetic tape
  - Ethylene oxide sterilizers
  - Gasoline distribution

<sup>\*</sup>dates under negotiation

- Challenges facing residual risk program
  - Develop rules which target high-risk facilities in categories without impacting low-risk ones
    - Process should be simple, efficient
    - Process should be implementable by States
  - Develop innovative ways to reduce risks where controls are not available
    - MACT may have been effective, yet risks may still be high

- Develop "total facility low-risk demonstration (TFLRD)" rule
- Develop comprehensive residual risk rule
- Considering linking MACT review to this generic approach

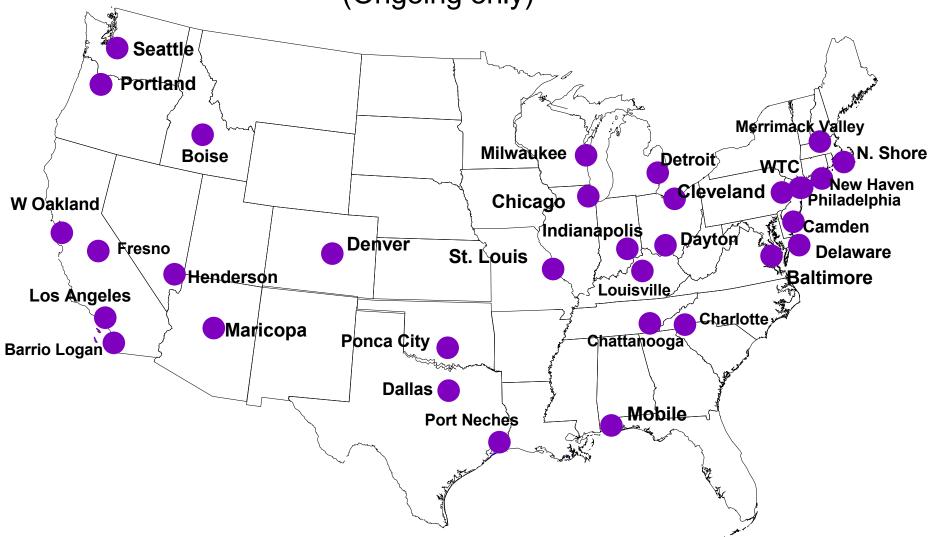
# URBAN AIR TOXICS – Area Source Rules

- Develop strategy for addressing area source categories, including size cut-offs, geographical coverage, and combining multiple source categories into single rulemakings
- Looking to see where we would get criteria pollutant co-benefits with our area source rules
- Ongoing litigation/mediation
  - 22 area source rules started (10 are top 20 toxicity weighted)
  - Plan to start additional 8 (top 20 toxicity weighted)

# AREA SOURCE EMISSION REDUCTION INITIATIVE

- Objective of initiative is to work through trade associations or similar organizations to identify and develop voluntary emission reduction programs for source categories on the area source list
  - Enforceable, self certifying program
  - Coordinating with other EPA offices to identify similar programs
  - Tentatively identified the following source categories to be considered as candidates:
    - Autobody Refinishing approximately 50,000-60,000 sources
    - Welding (part of several metal finishing/fabricating source categories)
    - Nickel plating (part of plating and polishing)
    - Paint and Coating Manufacturing
    - Industrial Boilers

## Community-based Projects (Ongoing only)



Assessment/Reduction Projects

#### OTHER ACTIVITIES

- Disposal of mercury switches from automobiles
- Chlor-alkali facilities
- Poly Brominated Diphenyl Ethers (PBDE)
- Heavy Metals Strategy
- Stationary Source Engines
- Comprehensive Environmental Reporting System (CERTS)
- Construction Sector
- Special Projects, e.g., Alyeska, Fort Worth, Region IV Pulp & Paper Projects

### OTHER ACTIVITIES (CONTINUED)

- Risk Assessment Forum Agency wide group
  - Cumulative Risk Assessment
  - Steering Committee Aimed at Methods/Processes for Cancer & Non-Cancer Risk Assessment
- Peer review
- IRIS Development
- International
  - Long-Range Transboundary Air Pollution (LRTAP)
    - Stockholm Convention, Expert Group on Persistent Organic Pollutants (POPs), Expert Group on Heavy Metals