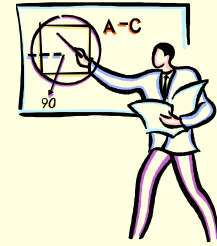


# EPA's Current Air Toxics Activities

Dave Guinnup

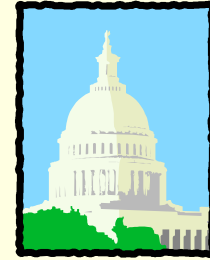
NACAA Fall Membership Meeting  
Boston, MA -- 21 September 2009

# Summary of Talk



- Risk and Technology Review (RTR) program
  - Status
  - Science Advisory Board peer review of EPA's risk assessment methodologies
- NATA
  - 2002 data release
  - 2005 update – plans and expectations
- School Air Toxics Monitoring project

# Congressional Mandate



- Residual Risk CAA 112(f)
  - Assess risks that remain after implementation of MACT standards within 8 years of promulgation
  - Set additional standards if MACT does not protect public health with an “ample margin of safety”
  - Set additional standards if necessary to prevent adverse environmental effects
- Technology Review CAA 112(d)(6)
  - Review standards every 8 years
  - Revise as necessary
- Since the first technology review coincides with residual risk review, we combine them into one “RTR” rulemaking

# Status of RTR Program

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- EPA has issued MACT standards for 174 categories
- We have finalized RTR standards for 16 source categories, proposed 10 more, and have received comments from an advance notice of proposed rulemaking (ANPRM) on an additional 12 categories
- 17 additional categories are to be included in an ANPRM slated for this fall
- Schedule for next several bins of rulemakings being currently negotiated with EarthJustice

# SAB Review of RTR Risk Assessment Methods



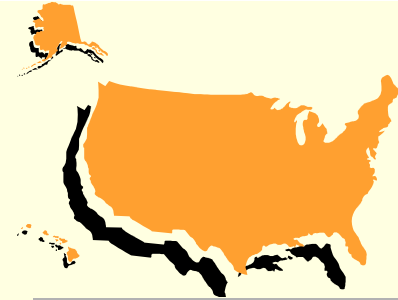
- Held July 28-29, 2009
- Review focused on technical aspects of risk assessments as highlighted in 2 case studies: petroleum refineries & Portland cement
- Key topics covered:
  - Emissions data
  - Dispersion modeling
  - Dose-response assessment
  - Chronic health assessment, including inhalation and multipathway exposures
  - Acute health assessments
  - Ecological assessment
  - Risk characterization
- Final SAB report expected in early 2010

# Summary of SAB Comments



- Preferred health-protective approaches, assumptions
- Emissions data limit assessments
  - Start with theoretical facility emissions, then use actual emissions from inventory
  - May recommend mandatory reporting to inventory
- Supported dispersion modeling approach and dose-response hierarchy for chronic health assessments, will recommend refinements, additional documentation
- Supported extending acute assessments to include additional benchmarks, adding pollutant impacts
- Multipathway analysis could use additional ground-truthing
- Ecological analysis good start, may need to extend to other HAPs
- Will suggest refined approaches for radionuclides

# NATA



- 2002 NATA released in June
  - Significant press and public interest
  - Significant controversies over highest risk estimates and timeliness of data resulting in many hours of additional staff work, highlighting need to improve process
- 2005 NATA ready to begin preview process
  - Improving process to ensure better coordination across Regions, State, and local agencies in order to avoid local areas being blind-sided by press
  - EPA providing materials to facilitate focusing reviews on high-risk estimates, key sources
  - Preview targeted to start October 15; webinars planned to facilitate coordination, data review
  - Agencies should verify that key technical staff are in contact with Region NATA contacts early to ensure proper coordination and data review

# School Air Toxics Monitoring Initiative – early analysis



- 2 schools completed monitoring early -- TN
- Ashland City Elementary (#1 school in USA Today) and Lakeview Elementary (#95)
  - Both schools identified based on concern regarding nearby manganese (Mn) sources
  - 12 samples collected April-June
  - Measured concentrations below levels of health-based concern
    - All individual measurements below individual sample (short-term exposure) screening levels
    - Projected long-term averages for Mn and other pollutants below long-term comparison levels
  - Mn source emissions
    - Ashland: Most recent estimates (2007 TRI) less than half estimates used by USA Today or NATA
    - Lakeview: Most recent estimates generally similar to previous estimates
  - Meteorological data (wind patterns) at school differ from those from nearest NWS station (used in USA Today and NATA modeling) but support the notion that regional wind patterns during the sampling are not inconsistent with long-term wind patterns in the area
  - Next steps:
    - No additional air monitoring planned
    - Recognize TN continued oversight through operating permit programs
    - Also, recognize that collection of on-site wind data (to improve our long-term modeling capabilities) has continued to date and may continue for limited time into future, as resources allow
- Most schools started later, still conducting monitoring