



# Air Quality Modeling to Support Regulatory Programs



# Recent Regulatory Applications Support

- Regulatory Impact Analysis (RIA) for:
  - Clean Air Interstate Rule (CAIR)
    - Address emissions of  $\text{NO}_x$  and  $\text{SO}_2$  from coal-fired electric generation units (EGU)
  - Clean Air Mercury Rule (CAMR)
    - Address emissions of Hg from EGUs
  - Renewable Fuel Standard Program (RFS2)
    - Examine the displacement of gasoline and diesel with renewable fuels



# Upcoming Regulatory Applications

- Transport Rule (1)
  - Addresses interstate transport under CAA section 110a(2)d for 84 ppb Ozone NAAQS, 15  $\mu\text{g}/\text{m}^3$  annual PM NAAQS, and 35  $\mu\text{g}/\text{m}^3$  daily PM NAAQS
  - Covers East only
  - Modeling needed to support basis for rule and Regulatory Impact Analysis (RIA)
  - Proposed Rule published Aug 3, 2010; Final Rule target completion June 2011
- Transport Rule (2)
  - Addresses interstate transport in East and West for new 2010 ozone NAAQS
  - Modeling needed to support basis for rule and RIA
  - Proposed Rule: summer 2011; Final Rule: summer 2012
- New PM NAAQS
  - Expected NAAQS Review
  - Modeling needed to support RIA
  - Proposed Rule: February 2011; Final Rule October 2011



# Upcoming Regulatory Applications (cont.)

- Industrial Boiler Maximum Achievable Control Technology (MACT) Standard
  - Intended to reduce all HAPs including HCL and Hg
  - Co-benefits of controls....will also reduce SO<sub>2</sub>, as well as CO, VOC, and directly emitted PM
  - Modeling needed to support RIA
  - Final Rule: December 2010
- Utility Boiler MACT Standard
  - Intended to reduce all HAPs including HCL and Hg
  - Co-benefits of controls....will also reduce SO<sub>2</sub>, as well as CO, VOC, and directly emitted PM
  - Modeling needed to support RIA
  - Proposed Rule: March 2011; Final Rule: November 2011



# Upcoming Regulatory Applications (cont.)

- Heavy-Duty Vehicle Green House Gas Rule
  - Technology and fuels standards to reduce GHG emissions
  - Co-benefits of controls.....TBD
  - Modeling needed to support RIA
  - Final Rule: June 2011
- Other: Center for Disease Control (CDC)/Phase Modeling for 2007 and 2008
  - 2007 by end of 2010
  - 2008 by spring of 2011