



Air Quality Modeling to Support Regulatory Programs



Recent Regulatory Applications Support

- Regulatory Impact Analysis (RIA) for:
 - Clean Air Interstate Rule (CAIR)
 - Address emissions of NO_x and 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 SO₂, 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 SO₂, 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