Status of Emission Inventories

And

Modeling Update

Introduction

This section will address items 4 and 5 in the EPA Checklist for June 2003 Progress Report. See attached checklist for reference.

Since October 2000, Tennessee has been part of the Arkansas-Tennessee-Mississippi Ozone Study (ATMOS). This study and the organization that supports it were designed to address attainment of the 8-hour National Ambient Air Quality Standard (NAAQS) for ozone in portions of this geographical region. The issues in item 5 of the checklist were addressed in great detail in the draft technical protocol for the study provided by the modeling consultant Systems Applications International (SAI) / ICF. The relevant sections of that protocol document are attached and referenced below.

Obviously, ozone Early Action Compacts (EAC) were not a consideration in the original design of the study. The extremely tight timeline of the EAC process has forced some issues to be quickly addressed including:

- Additional geographical areas within the grids had to be defined to match the EAC structure.
- An additional ambient monitor added since the beginning of the study had to be accounted for.
- Updates to the monitor design values based on more recent ambient measurements were determined.
- Relevant updates to the modeling emission inventory were provided to the consultant.
- Selection and evaluation of at least one additional meteorological scenario was begun.
- Additional Urban Airshed Model (UAM) runs to account for these changes were begun.

While there is much to be accomplished in a very short timeframe, the existing ATMOS study provides Tennessee the basis for meeting the deadlines.

Checklist Items

4. The UAM modeling consultant, Systems Applications International (SAI) / ICF requested relevant emission inventory updates – mobile and stationary – from state and local agencies be provided by mid June. Updates were provided. See attached email from Wayne Davis, University of Tennessee Knoxville to Jay Haney, ICF for details and some issues concerning the 91 counties under state jurisdiction.

5.a. See attached Section 1 of the draft technical protocol.

5.b. See attached Section 3 of the draft technical protocol.

5.c. See attached Section 3 of the draft technical protocol.

5.d. See Introduction above. Preliminary results from model revisions are expected shortly.

5.e. Funding has been allocated to carry out the actions listed in the Introduction above. Also see attached Section 6 of the draft technical protocol.

If more detailed information on any of these issues is needed, the entire draft technical protocol document can be provided. An evaluation of results from updated model runs and scenarios can be provided in the next progress report. It is also suggested that the ATMOS website be visited at the following URL for additional background details:

http://atmos.saintl.com/

Review Checklist for June 2003 Progress Report

1. Was the list of control measures submitted in the June 16, 2003 milestone report (and the EAC plan) developed with local stakeholder input?

   Yes ☐ No ☐

2. Is the local stakeholder process for the Early Action Compact (EAC) area documented?

   Yes ☐ No ☐

3. Description of the local stakeholder process:

   Documentation should include the following information, but is not limited to items on this list:

   a. The primary local organization responsible for EAC activities.
   b. The lead contact.
   c. Organizational chart for subgroups or list of stakeholders working on various activities.
   d. What meetings were held, and what level of public participation was there?
   e. Which stakeholders were invited and level of participation?
   f. When/where were meetings held?
   g. How were the meetings advertised? How were invitations issued?
   h. What is the website for the local EAC program (if there is one)?
   i. Description of Outreach efforts.

4. What is the status of development of emissions inventories? What issues have been identified in the development of the inventories?

5. Photochemical Modeling for Attainment Demonstration.

   a. General information: Has a model been selected?
   b. What is the base year for the ozone episode selected?
   c. What is the status of the meteorological model development?
   d. What is the status of the modeling activities?
   e. What issues are being encountered, i.e., funding, model meeting performance criteria, etc.?

6. Discuss, to the extent possible, the geographic area for which control measures are expected to be implemented.

7. Discuss, to the extent possible, any early anticipated resource constraints.