

TERC Science Advisory Committee
March 30 – 31, 2009 Meeting
HARC/Lone Star College District Services Campus
4800 Research Forest Drive, The Woodlands, TX

AGENDA

Monday, March 30: Public Meeting (Board Room)

8:00 – 8:30 **COFFEE**

8:30 – 8:35 **Welcome and Introduction** (George Beatty)

8:35 – 10:15 **The 2009 TERC Science Synthesis**

Overview (Jay Olaguer)

SIP Modeling Sensitivity Update (Will Vizuete)

General Discussion

10:15 – 10:30 **BREAK**

10:30 – 12:15 **The Study of Houston Atmospheric Radical Precursors (SHARP)**

Overview of the SHARP Science Plan (Barry Lefer and Bernhard Rappenglueck)

Air Research Information Infrastructure (Shelly Thomas and Jay Olaguer)

General Discussion

12:15 – 13:30 **LUNCH - Offsite**

13:30 – 14:30 **Research Prioritization Discussion 1** (Moderator: David Mobley)

Emissions: What do we know, what do we need to know, how do we get there?

- a. How do we reconcile the gap between reported emissions and ambient observations? --
Prioritize emissions inventory/factor needs:
 - i. By pollutant
 - ii. By source type
 - iii. How do top-down monitoring and emissions results inform i. and ii?
- b. What tools are available to fill data gaps?
- c. How can industry be engaged in providing or participating in the collection of emissions data and control efficiencies, and in defining and implementing best practice?
- d. How can emissions inventories be used to prioritize sources needing further control?
- e. How can emissions inventories and emissions factors be used to identify and quantify control techniques that work and are cost effective?
- f. What is the role of public information dissemination (e.g., HARC's Air Research Information Infrastructure) in encouraging the availability of emissions data?

14:30 – 15:30 **Research Prioritization Discussion 2** (Moderator: Russ Dickerson)

Science: Meteorology, transport, and chemistry

- a. What are the key scientific areas needing research investment under the 75 ppb standard?
- b. How do we prioritize areas of research for benefit to the SIP?
- c. Do we need a field study of long-range transport chemistry and dynamics to better understand regional background ozone in Texas and how to mitigate it?
- d. What coordination is needed among the various national and local research funders and non-attainment areas to investigate science issues of importance to the SIP?
- e. What opportunities in air toxics research should TERC invest in, and how should these be linked to the interests of the health effects community?

15:30 – 15:45 **BREAK**

15:45 – 16:45 **Research Prioritization Discussion 3** (Moderator: Joe Pinto)

Modeling: Defining best practice

- a. How do we define best practice for attainment demonstration under the 75 ppb O₃ NAAQS?
- b. What aspects of EPA's guidance need to be changed or implemented differently?
- c. What does an adequate SIP model (framework and components) look like under the 75 ppb standard? How far are we from having such a model?
- d. Should the State of Texas cultivate more than one SIP modeling platform?
- e. What should the role of TERC, universities, and other non-regulatory institutions in Texas be in assisting the TCEQ in the SIP modeling process? What role should regional and national collaboration play in the SIP modeling process?

16:45 – 17:30 **Research Prioritization Discussion 4** (Moderator: David Brymer)

Control Strategies: From 85 ppb to 75 ppb

- a. What new control strategies in the short-term have the most promise in bringing Houston into attainment of the 85 ppb ozone NAAQS?
- b. What new control strategies in the longer-term have the most promise in bringing Houston and Dallas-Ft. Worth into attainment of the 75 ppb ozone NAAQS?
- c. What role should the social sciences play in assessing the effectiveness of potential control strategies?
- d. What examples of success outside of Texas should TERC study?
- e. How can enforcement of existing regulations be improved so as to better demonstrate future attainment?

17:30 **DISMISSAL**

18:30 – 20:00 **Private Dinner for SAC**

Tuesday, March 31: Private SAC Deliberation (F1 Conference Room)

8:00 – 8:30 **COFFEE**

8:30 – 9:30 Discussion and Approval of the 2009 TERC Science Synthesis

9:30 – 10:30 Discussion and Approval of the SHARP Science Plan

10:30 – 10:45 **BREAK**

10:45 – 11:30 The Process for Drafting the New Strategic Research Plan

11:30 – 12:30 Research Prioritization: Breakout Groups

Group 1: Emissions and Control Strategies

Group 2: Science and Modeling

12:30 – 13:00 **LUNCH**

13:00 – 15:00 Research Prioritization: Plenary Discussion

15:00 – 15:30 Action Items