

**EAST TEXAS COUNCIL OF GOVERNMENTS
NETAC TECHNICAL ADVISORY COMMITTEE**

**Friday, October 16, 2009, 10:00 a.m.
Longview Public Library, Moeschle Room
222 W. Cotton Street
Longview, Texas**

MINUTES OF MEETING

1) Call to Order: Jim Mathews, NETAC General Counsel

Jim Mathews called the meeting to order at approximately 10:00 a.m.

2) Roll Call: Rick McKnight, ETCOG Environmental Manager

Technical Advisory Committee Present

- Jim Mathews, NETAC General Counsel
- Mark McMahon, Flint Hills Resources
- Kathy Singleton, TCEQ Region 4
- Carrie Paige, EPA-Dallas
- David Duncan, Luminant
- N.N. Dharmarajan, AEP
- Kelly Spencer, AEP
- Sharon Wellman, Eastman Chemical
- Scott Snedden, Westlake Chemical
- Doug Boyer, TCEQ Austin
- Karen Owen, Longview MPO
- Greg Morgan, City of Tyler

Others Present

- Greg Yarwood, ENVIRON
- Sue Kemball-Cook, ENVIRON
- Rick McKnight, ETCOG
- Luke Kimbrough, ETCOG

3) Discussion and approval of the NETAC Technical Advisory Committee meeting minutes of September 30, 2009: Jim Mathews

A motion was made to approve the minutes of the September 30, 2009 meeting of the Technical Committee. A second was made and the minutes passed without any opposition.

4) Discussion and approval of report on emissions from natural gas development in the Haynesville Shale: Sue Kemball-Cook, ENVIRON

The Haynesville Shale is an unconventional natural gas reservoir which is 10,000-13,000 feet below the surface of Northeast Texas/Northwest Louisiana and may be one of largest natural gas reserves in the U.S. Drilling began in 2008 and despite economic downturn and a fall in the price of natural gas since 2008, development of the Haynesville Shale has continued. This development is likely to generate significant emissions of the ozone precursors NO_x and VOCs. NETAC has developed an emission inventory for this development and will determine the potential impact on Northeast Texas Ozone using the NETAC 2012 ozone model.

The report was presented during a previous meeting of the Technical Advisory Committee and a brief time was given to review and respond with any comments or questions. A motion was made to approve the report and a second was made. The report passed without opposition.

5) Review of 2009 high ozone days: Sue Kemball-Cook

Three continuous air monitoring stations (CAMS) are located in the East Texas counties. These three monitors are commonly referred to as the Karnack, Longview, and Tyler monitors. The fourth highest 8-hour ozone value was measured at 67 ppb, 73 ppb, and 75 ppb respectively for 2009. This was a slight increase for the Longview and Tyler monitors and a slight decrease at Karnack when compared to the 2008 fourth highest 8-hour ozone value. However these values continue the historical downward trend of monitored ozone for these monitors. This downward trend continues when you analyze the 8-hour ozone design values for each monitor. The 2005-2008 design value for the Longview monitor was 78 and the 2006-2009 design value is 75. The 2005-2008 design value for Tyler was 77 and the 2006-2009 design value is 74. The 2005-2008 design value for Karnack was 71 and the 2006-2009 design value is 68.

All three Northeast Texas monitors saw a decline in their design value and attained the 75 ppb standard as of 2009. This can be seen as a combination of declining regional transport into the area and regional NO_x reductions being effective. However the 4th highest ozone value saw an increase at both the Longview and Tyler monitor. The 4th highest ozone values required to attain the 75 ppb target in 2010 are 83 ppb at Longview, 80 at Tyler, and 92 at Karnack.

A total of nine individual days with high ozone have been analyzed in more detail to further understand the causes of high ozone on each individual day. The causes of these high ozone days have been preliminarily identified as a combination of either regional 8-hour background ozone, urban plume impacts, power plant plume impacts, or HRVOC impacts on any analyzed day.

6) Update on analysis and modeling of HRVOC data collected at CAMS19 in 2008: Greg Yarwood (Enclosure TC3)

In August-October 2008 HRVOC measurements were taken at CAMS19 near Longview. Ten of the sixty-four studied days showed strong HRVOC measures. Three of these days corresponded with high ozone levels and northerly winds. These type of conditions would suggest that the Eastman Complex can play a role in high ozone events at CAMS19. Estimates for the Eastman Complex ethene inventory are derived from a 2006 NETAC aircraft flight and are consistent with the emission inventory. NETAC requested information in March 2009 from complex companies. Eastman and Flint Hills Resources investigated 2008 days with HRVOC events and found no unusual activity. AEROMOD and CAMx modeling both suggest that the HRVOC emissions needed to produce observed spikes are greater than the typical day emission inventory. It is estimated ethene emissions of approximately 2500 lbs/hr can cause observed morning ozone spikes at CAMS 19 through interaction with readily available NO_x.

7) Update on development of 2012 Ozone Model: Sue Kemball-Cook

The purpose of the 2012 ozone model is to show future year emission reductions that lead to attainment for the Northeast Texas region of the 2008 ozone standard. The model is based on the year 2005 meteorology, biogenics, and fires with emission inventories updated to expected 2012 levels. The 2012 emission inventory is based on a 2018 TCEQ inventory for the Houston SIP with modifications by TCEQ for some source categories and the remaining components adapted to 2012 levels. Next inventory improvements specific for Northeast Texas were added. A draft of the 2012 inventory has been completed and shows an overall decrease in NO_x sources. The emission inventory work for growth of the Haynesville Shale will be included in the 2012 inventory when completed. Control strategy development will be based on this 2012 model. Future year ozone design values will be calculated using EPA MATS tool. These design values will indicate whether additional control strategies will need to be developed. If needed, these strategies will be developed in concert with TCEQ and NETAC and then modeled to show impact of proposed controls.

8) Discussion of remaining technical activities for current biennium: Greg Yarwood

The current biennium's contract ends on March 31, 2010. Projects to be completed include a mobile monitoring project, updating the conceptual model with monitoring data, and analyzing additional data from CAMS 19 found by TCEQ.

9) Discussion of proposed technical activities for next biennium: Greg Yarwood

The next biennium's draft workplan includes projects covering monitoring, modeling, emission inventory development. Modeling work will continue looking at possible control strategies and the possibility of a new ozone standard. Monitoring work will continue with a priority of better understanding the HRVOC spikes at CAMS 19. Another monitoring project would be to add an SO₂ monitor at the Tyler monitor. Emission inventory work will include the continued development of an inventory specifically for the Haynesville Shale.

10) Other Business

Jim Mathews briefed the Technical Advisory Committee on the addition of three new areas associated with TCEQ's Near Nonattainment Areas funding program and other issues concerning the new biennium's contract. NETAC has also been contacted by several groups concerning research projects NETAC could possibly be interested in funding.

11) Adjournment

The meeting adjourned at approximately 12:00 p.m.