

Fourth Biannual Report on the
Early Action Compact for
Northeast Texas

December 2004

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Background

On December 20, 2002 local governments in a five county area of Northeast Texas (Gregg, Harrison, Rusk, Smith, and Upshur counties) entered into an Early Action Compact (EAC) with the U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ). The purpose of the EAC is to develop and implement a Clean Air Action Plan (CAAP) that will reduce ground level ozone concentrations throughout the five county area to comply with the 8-hour ozone standard by December 31, 2007 and maintain the standard beyond that date. The EAC includes a series of milestones to guide progress toward the development of the CAAP and as shown in Table 1. The area also must submit progress reports to EPA documenting progress in implementing the EAC and achieving the milestones. The requirements for the progress reports are given in EPA's April 4, 2003 guidance. This is the fourth (December 2004) progress report covering activities for the second half of 2004.

Table 1. Key milestone dates for the Northeast Texas Early Action Compact (EAC).

Date	Item
December 31, 2002	Signed EAC agreement
June 16, 2003	Identify/describe potential local emission reduction strategies
November 30, 2003	Initial modeling emission inventory completed Conceptual model completed Base case (1999) modeling completed
December 31, 2003	Future year (2007) emission inventory completed Emission inventory comparison for 1999 and 2007 Future case modeling completed
January 31, 2004	Schedule for developing further episodes completed Local emission reduction strategies selected One or more control cases modeled for 2007 Attainment maintenance analysis (to 2012) completed Submit preliminary Clean Air Action Plan (CAAP) to TCEQ and EPA
March 31, 2004	Final revisions to 2007 control case modeling completed Final revisions to local emission reduction strategies completed Final attainment maintenance analysis completed Submit final CAAP to TCEQ and EPA
December 31, 2004	State submits SIP incorporating the CAAP to EPA
December 31, 2005	Local emission reduction strategies implemented no later than this date
December 31, 2007	Attainment of the 8-hour ozone standard

Ozone Attainment Status

The Northeast Texas ozone monitoring data determine whether the area is in compliance with the National Ambient Air Quality Standards (NAAQS) for ozone. The TCEQ operates three ozone monitors in Northeast Texas at Longview, Tyler and Karnack. NETAC operates a research ozone monitor that was located at Waskom in 2002-2003 and in Panola County in 2004. There have been no exceedences of the 1-hour ozone standard in Northeast Texas in the past 3 years and so the area is monitoring attainment of the 1-hour ozone NAAQS in 2004.¹ The annual 4th highest 8-hour ozone values at monitors in Northeast Texas are shown in Table 2 along with the resulting preliminary 2002-2004 8-hour design values.¹ No design values are shown for Waskom and Panola because the monitors do not have 3 years of complete data. The monitors at Longview, Tyler and Karnack have complete 2002-2004 data and are monitoring attainment of the 8-hour ozone NAAQS in 2004.¹ The EPA designated all five NETAC counties as 8-hour ozone attainment areas.

Table 2 Annual 4th highest 8-hour ozone values (ppb) and preliminary 2004 8-hour ozone design values for Northeast Texas

Year	Longview	Tyler	Karnack	Waskom	Panola
2002	84	84	88	86	
2003	82	79	80	82	
2004 ¹	83	81	77		75
Preliminary 2004 ¹ Design Value	83	80	81	N/A	N/A

Stakeholder Process

In 1995 local elected officials and other leaders in local government, business and industry created Northeast Texas Air Care (NETAC) in order to provide leadership and guidance in addressing ozone air quality issues in a five county area consisting of Gregg, Harrison, Rusk, Smith, and Upshur counties. A 23-member policy committee consisting of representatives of local government, business and industry, the general public and environmental interest groups governs NETAC. (Attachment 1)

From its inception NETAC has placed significant emphasis on the need to ensure that air quality planning activities are developed using scientifically sound techniques. In order to achieve this objective NETAC created a Technical Advisory Committee to undertake, supervise, and guide technical studies such as emission inventory development, air quality modeling and control strategy development, and specialized monitoring studies. The Technical Advisory Committee reports to the policy committee. The Technical Advisory Committee consists of representatives from local government, local business and industry, EPA technical staff, TCEQ technical staff, Texas Department of Transportation planning staff, and the general public and environmental interest groups. (Attachment 2)

¹ Ozone data for 2004 are from the TCEQ but are preliminary until the TCEQ completes final quality assurance and submits the data to EPA

NETAC is actively involved in public education and outreach programs concerning ozone air quality issues. This work is guided by NETAC's Public Education/Outreach Committee, which consists of representatives from local government, local business and industry, TCEQ staff, and environmental interest groups. (Attachment 3) The Public Education/Outreach Committee reports to the NETAC Policy Committee.

NETAC receives staff support for its activities from the East Texas Council of Governments (ETCOG), which receives and administers grant funds provided by the Texas Legislature for air quality planning activities.

NETAC and its subcommittees meet on an as-needed basis. All meetings are open to the public and are posted at the East Texas Council of Governments and advertised through the distribution of information packets to local media outlets.

During the second half of 2004 NETAC the Technical Advisory Committee held meetings on October 8, and December 13, 2004. The NETAC Policy Committee met on December 13, 2004. The October 8, 2004 Technical Committee meeting discussed the TCEQ's progress on developing a State Implementation Plan (SIP) revision to implement NETAC's CAAP. The December 13, 2004 Technical and Policy Committee meetings included briefings on TCEQ's submission to EPA of a SIP revision implementing the NETAC CAAP. Also discussed at the October 8 and December 13, 2004 meetings were: (a) Ozone levels observed during the 2004 ozone season and lessons learned on the causes of high ozone in Northeast Texas; (b) Progress of NETAC's pilot program to demonstrate NOx emission reduction technologies for gas compressor engines; (c) Plans for NETAC technical studies in 2005 to monitor and understand ozone levels in the region.

Public Outreach

NETAC is actively engaged in public education and outreach activities concerning ozone air quality issues. NETAC held an ozone season awareness kickoff event on April 30, 2004 to raise public awareness of ozone air quality issues and encourage public support for programs designed to minimize ozone formation.

Public education and outreach programs that have been established and that continue on an ongoing basis include:

1. Production and distribution of public service announcements broadcast on local radio stations providing information on ozone air quality issues and recommending actions to reduce ozone levels on ozone action days.
2. Printing and distribution to local public schools book covers designed to increase public awareness of ozone air quality issues.
3. Establishment and maintenance of a website (<http://www.netac.org>) to provide information concerning ozone air quality issues and NETAC's ongoing activities.

4. Annual sponsorship of an ozone awareness event prior to the commencement of ozone season in order to highlight ozone air quality issues and encourage public support for programs designed to minimize ozone formation.

In cooperation with the Texas Commission on Environmental Quality, NETAC and local governments in the area provide “ozone action alerts” for the public on days when TCEQ predicts meteorological conditions are favorable for high ozone formation. Notification is provided through the NETAC website, local government public access channels, and the display of ozone alert flags.

Technical Activities

NETAC technical activities in the second half of 2004 were focused on supporting the TCEQ in developing a SIP revision to implement the NETAC CAAP, and submitting the SIP revision to EPA by the end of 2004 in accordance with the schedule of EAC deliverables shown in Table 1. NETAC assisted the TCEQ by responding to EPA comments on the draft CAAP and conducting additional ozone model runs requested by the TCEQ and EPA. On November 17, 2004, the TCEQ adopted revisions to the SIP implementing the Northeast Texas EAC.

At the request of TCEQ and EPA, NETAC has modeled two control strategies that go beyond the 2007 attainment demonstration. The control strategy runs show additional reductions in ozone below the levels in the 2007 attainment demonstration. These control strategies provide an additional measure of safety in 8-hour ozone levels for Northeast Texas beyond the CAAP attainment demonstration.

The additional control strategies modeled by NETAC were:

- Strategy 1: Include reductions in highly reactive VOC (HRVOC) at two Longview chemical plants due to enhanced leak detection and repair programs (permits making these programs enforceable are specified in the NETAC CAAP). The HRVOC reductions amount to 0.86 tons/day at Eastman and 0.08 tons/day at Huntsman by the start of the 2007 ozone season. Add the TCEQ’s low emission “gas can” rule to reduce VOC emissions from small containers used to store gasoline. Remove the TCEQ’s industrial water heaters, small boilers and process heaters rule (TAC 117.460-469), which had a negligible effect on NOx emissions in the NETAC area.
- Strategy 2: Include 1.5 tons/day of Texas Emissions Reduction Program (TERP) NOx reductions in the NETAC 5 County area in addition to Strategy 1.

The ozone benefits of these strategies are summarized as follows:

- HRVOC reductions at the Eastman and Huntsman chemical facilities near Longview result in 8-hour ozone decreases of up to ~0.4 ppb in the vicinity of these sources.

- The TERP NO_x reduction for off-road mobile sources results in 8-hour ozone decreases throughout the NETAC area with the greatest decrease of up to ~0.6 ppb near Tyler.
- The ozone benefits of the HRVOC and TERP NO_x strategies are too small to change projected 2007 8-hour ozone design values because the design values are truncated to the next lowest ppb.

Emission Reduction Measures

NETAC is implementing a pilot program to demonstrate NO_x emission reduction technologies for gas compressor engines. Previous studies by NETAC indicate that an estimated 32 tons/day of NO_x emissions are generated by a large number of relatively small gas compressor engines that are widely distributed throughout the five county area. NETAC plans to obtain, install, and test retrofit equipment on up to four gas compressor engines. This pilot program is intended to encourage and facilitate owners and operators of gas compressor engines in the NETAC area applying for TERP grants for installation of these technologies on a larger number of engines.

NETAC does not anticipate obstacles in implementing its pilot program. However, unless sufficient funds are available under the TERP program NETAC's goal of encouraging and facilitating owners and operators of gas compressor engines to achieve broader reductions through individual TERP grants could be impaired.

Implementing the Clean Air Action Plan

As discussed above, the TCEQ incorporated the NETAC CAAP into a SIP revision on November 17, 2004. The TCEQ has submitted the SIP revision to EPA before the required date of December 31, 2004, shown in Appendix 4. NETAC is on schedule in implementing the CAAP.

Attachment 1

NETAC Policy Committee

- Mayor Joey Seeber, Co-Chair, City of Tyler
- Judge Bill Stoudt, Co-Chair, Gregg County
- Judge Becky Dempsey, Smith County
- Judge Fowler, Upshur County
- Judge Wayne McWhorter, Harrison County
- Judge Sandra Hodges, Rusk County
- Mayor Murray Moore, City of Longview
- Mayor Edward Smith, City of Marshall
- Mayor John Fullen, City of Henderson
- Tony Williams, City Manager, City of Kilgore
- Greg Morgan, Project Coordinator, City of Tyler
- Ron Stephens, City Manager, City of Gilmer
- Ricky Childers, City Manager, City of Longview
- Janet Cook, Asst. City Manager, City of Marshall
- Tammy Campbell, WE CAN
- David Duncan, Environmental Regional Manager, TXU
- Darrell J. Rachels, Eastman Chemical Company
- Keith Honey, General Manager, AEP/SWEPCO
- Eric Albritton, Attorney
- L. Dale Rhoades, Environmental Supervisor, LaGloria Oil & Gas Co.
- Lou Ann Nisbett, Director, MEDCO
- John M. Stroud, Executive Director, LEDCO
- Tom Mullins, Executive Director, Tyler Economic Development Corporation

Attachment 2

NETAC Technical Advisory Committee

- Mayor Murray Moore, City of Longview
- Robert Ray, Assistant City Attorney, City of Longview
- Councilwoman Karen Hailey, City of Longview
- Karen Owen, Longview MPO
- Greg Morgan, Projects Coordinator, City of Tyler
- Tanya McCuller, Tyler MPO
- Janet Cook, Asst. City Manager, City of Marshall
- Jim Mathews, NETAC General Counsel
- Erik Snyder, EPA Region 6
- Michael Morton, EPA-Region 6
- Gerry Wolfe, SIP Coordinator, TCEQ-Austin
- James Red, TCEQ-Austin
- Charles Murray, TCEQ-Region 5 Air Program
- Dale Spitz, TXDOT-Tyler District
- Sharon Wellman, Eastman Chemical Company
- L. Dale Rhoades, LaGloria Oil & Gas Company
- Kelly Spencer, AEP/SWEPCO
- Bruce Moore, Manager Air Quality West, AEP/SWEPCO Environmental Services
- Dick Robertson, TXU Air Quality Manager
- David Duncan, TXU
- Dennis Leahey, Huntsman Chemical
- Dwight K. Shellman, Jr., Caddo Lake Institute, Inc.
- Ramon Alvarez, Ph.D., Environmental Defense Fund
- Eric Albritton, Attorney
- Henry C. Bradbury, Environmental Solution
- Micaela Crooks, CenterPoint Energy

Attachment 3

NETAC Public Education/Outreach Committee

- Robert Ray, Assistant City Attorney, City of Longview
- Greg Morgan, Project Coordinator, City of Tyler
- Janet Cook, City of Marshall
- Sharon Wellman, Eastman Chemical Company
- Don Montgomery, TXU
- Kathy Bell, TCEQ-Region 5 Air Program
- Darrell Powell, TCEQ-Austin
- Kelly Spencer, AEP/SWEPCO
- Scott McCloud, AEP/SWEPCO
- Henry C. Bradbury, Environmental Solution