The CLEAN AIR PLAN

for the

SAN ANTONIO

METROPOLITAN STATISTICAL AREA

Submitted by the

Air Improvement Resources Committee

of the

Alamo Area Council of Governments

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Chapter I. Purpose of the Clean Air Plan

The Clean Air Act is the comprehensive Federal law that regulates airborne emissions from area, mobile, and stationary sources across the United States. This law authorizes the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment.

Of the many air pollutants commonly found throughout the country, the EPA has recognized six "criteria" pollutants that can injure health, harm the environment, and cause property damage. EPA calls these pollutants "criteria" air pollutants because the agency has regulated them by first developing health-based criteria (science-based guidelines) as the basis for setting permissible levels. The NAAQS are a listing of the threshold levels, the concentration values above which human health is put at risk, for these criteria pollutants.

During the past several years, air quality planning in the San Antonio region has intensified since ozone concentrations have exceeded the values permitted in the 8-hour ozone NAAQS. Due to legal challenges to the NAAQS and ensuing litigation, the EPA has not formally designated any areas of the United States in violation of the 8-hour ozone NAAQS. However, that designation process is expected to begin as early as 2004. Areas formally designated in violation of the NAAQS and contributing to a violation are called "non-attainment areas," a term frequently used in this and many other air quality documents.

Local elected officials, concerned leaders in business and industry, and other citizens committed to air quality planning have worked together for years to create an air quality plan for the citizens of the San Antonio region. This group, meeting as the Air Improvement Resources (AIR) Committee of the Alamo Area Council of Governments (AACOG), has proactively created an air quality plan that is comprehensive, flexible, and relies on EPA-approved technical analysis for its control strategy recommendations. They have created this document, the Clean Air Plan for the San Antonio Metropolitan Statistical Area. The Clean Air Plan was designed to enable a local approach to ozone attainment and to encourage early emission reductions that will help keep our area in attainment of the 1-hour ozone NAAQS and ensure attainment of the 8-hour ozone NAAQS, and so protect human health.

This Clean Air Plan also incorporates the Early Action Compact for the San Antonio area. The Early Action Compact protocol was endorsed by EPA Region 6 on June 19, 2002, and is designed to develop and implement control strategies, account for growth, and achieve and maintain the 8-hour ozone standard. As such, it represents a key component to finalizing this area's Clean Air Plan.

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Chapter II. Background

San Antonio, Texas is currently the largest corporate city in the nation that has not been designated in non-attainment, that is, it has not officially failed to meet air quality standards given in the NAAQS. However, during the ozone seasons of 1997 through 2000, local air quality monitors recorded ozone levels above the concentrations allowed under the 8-hour ozone NAAQS. Moreover, in June of 2002, area monitors recorded some of the highest 8-hour and 1-hour ozone values on record since 1998[1]. Since EPA guidance suggests that Metropolitan Statistical Areas be considered for the boundaries for new 8-hour ozone non-attainment areas, air quality planning has focused on Bexar, Comal, Guadalupe and Wilson Counties, which constitute the San Antonio Metropolitan Statistical Area (SA/MSA).

a) A brief history of air quality planning efforts in the San Antonio region

As early as 1995, the Air Quality Committee of the Alamo Area Council of Governments, chaired by Senator Jeff Wentworth, first met to address air quality issues. This committee requested the first emissions inventory, for inventory year 1994.

In January 1996, the San Antonio Mayor's Blue Ribbon Committee on Air Quality merged with the Air Quality Committee of the Alamo Area Council of Governments (AACOG) to form the Air Quality Task Force (AQTF). The charge of the AQTF was to develop public education and provide advice to elected officials on air quality issues. The major accomplishment of the early AQTF was the establishment of the Ozone Action Day program. During FY 1996 - 1997, the AQTF provided input on the first Near Non-Attainment grant, authorized by the 1997 Texas Legislature.

However, when, in the summer of 1996, the EPA proposed the new eight-hour ozone NAAQS, the focus of the AQTF began to shift, first by providing comments and guidance on the impact of the new eight-hour ozone NAAQS. In the summer of 1998 a local contingency met with EPA's Region 6 to begin discussion on the development of a Flexible Attainment Region (FAR) agreement.

The AACOG developed its first photochemical model in 1997 along with sponsoring air quality

[1] On June 24, 2002, the CAMS 23 monitor, located near Marshall High School in San Antonio, recorded a 1-hour average ozone value of 126 parts per billion (ppb), an exceedance of the 1-hour ozone NAAQS. The most recent exceedance of the 1-hour standard prior to this date was 141 ppb recorded September 4, 1998 at CAMS 58 in Camp Bullis. Also on June 24, 2002, the CAMS 23 monitor recorded an 8-hour average ozone reading of 110 ppb, an exceedance of the 8-hour average ozone NAAQS. The most recent 8-hour reading prior to this date above 100 ppb was a reading of 110 ppb recorded September 4, 1998 at CAMS 58 in Camp Bullis.

monitoring efforts at St. Hedwig (southeast Bexar County) during the 1997 ozone season. Monitor results indicated that on high ozone level days, background levels coming into Bexar County were at or near ozone NAAQS threshold levels. Later that year when EPA finalized the eight-hour NAAQS it became apparent that, based on historical data, the SA/MSA could well be designated non-attainment when the EPA made the first eight-hour non-attainment designations initially scheduled for July 2000.

During July 1998, the City of San Antonio (COSA), San Antonio-Bexar County Metropolitan Planning Organization (MPO), Bexar County, and AACOG staff recommended to elected officials that the AQTF be revised to fit the structure advised by the Texas Commission on Environmental Quality (TCEQ), then known as the Texas Natural Resource Conservation Commission (TNRCC). During January - February 1999, the Boards of Directors and other responsible parties representing COSA, Bexar County, MPO, and AACOG approved the formation of the Air Improvement Resources (AIR) Committee consortium including the Executive/Advisory, Technical, and Public Education Committees and member appointments. The AIR Committee conducted its first official meeting during April 1999 with the goal to establish an organized, comprehensive, and aggressive plan of action to keep the SA/MSA from slipping into non-attainment of the ozone standard.

Working with partners in the near non-attainment areas across Texas, the AACOG has developed a second photochemical model for September 1999. This episode models ozone formation for four of the five near non-attainment areas of the state, Corpus Christi, Austin, Victoria and San Antonio. AACOG is now expanding the network of ozone and meteorological monitoring stations in the San Antonio region. The TCEQ is responsible for maintaining monitors upon which official air quality data depends. Better monitoring allows for refined technical analysis of human exposure to ozone, a greater understanding of the formation and movement of ozone in the region, and provides a database for verification of the performance of future photochemical models.

Since its first meeting, the AIR Committee has worked to cast the results of its planning effort into a protocol able to address air quality planning requirements originating with the Clean Air Act. The AIR Committee recognizes that the Clean Air Plan provides the means to sustain the healthfulness of the region's air by proactively seeking local solutions to air quality issues within a suitable state and federally approved protocol.

For these reasons, the AIR Committee is pleased to engage with local citizens, the EPA and the Texas Commission on Environmental Quality in the planning effort required to successfully develop a Clean Air Plan for the SA/MSA. From the point of view of the AIR Committee, this Clean Air Plan is the culmination of years of effort and planning, which has been made possible through enabling funding provided by the Legislature of the State of Texas.

b) The Ozone NAAQS and The Clean Air Plan

At this writing, there are actually two NAAQS for ozone, given in the table below.

The National Ambient Air Quality Standards (NAAQS) for Ozone	
1-Hour Ozone NAAQS 0.12 parts per million	**8-Hour Ozone NAAQS** 0.08 parts per million
To attain this standard, the daily maximum 1-hour average concentration measured by a continuous ambient air monitor must not exceed 125 parts per billion (ppb) more than once per year, averaged over 3 consecutive years.	To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average of continuous ambient air monitoring data over each year must not exceed 85 ppb.

The EPA intends to phase out the 1-hour ozone NAAQS, leaving the 8-hour ozone NAAQS[2]; the 8-hour standard is generally considered to be more stringent and more protective of human health. However, at this time, the implementation policy for the 8-hour ozone NAAQS has not been completed. Until the EPA formally revokes the 1-hour standard, both standards remain active federal law.

The Clean Air Plan is designed to be a working document providing comprehensive planning for the ozone challenge faced by the citizens of the entire SA/MSA. Adoption of this draft Clean Air Plan requires development of control strategies, or methodologies for lowering ozone concentrations to acceptable levels, which are designed to meet the region's clean air challenge. The technical analysis of the photochemical modeling, used to demonstrate the effectiveness of the control strategies, is performed by the staff of AACOG and is reviewed and approved by the AIR Committee, the staff of AACOG, the TCEQ, and the EPA.

Given the above program requirements and those of the Early Action Compact discussed in Chapter IV, this Clean Air Plan may require amendments as air quality assurance planning continues. If required, such amendments will be written for signature by affected parties that list in detail the air quality planning needs of the San Antonio region as determined by local, state and federal air quality planners. These subsequent agreements will be incorporated into this Clean Air Plan for the SA/MSA as required. However, once portions of the Clean Air Plan are incorporated into the SIP, then SIP revision processes must be followed to change those incorporated portions. SIP revisions are binding and federally enforceable.

[2] "Once the 8-hour standard has become fully enforceable and subject to no further legal challenge, EPA again will take action to revoke the 1-hour ozone standard in areas where air quality meets the standard." Fact Sheet, EPA Reinstates the 1-Hour Ground-Level Ozone (Smog) Standard, page 3; published July 7, 2000. Available online June 23, 2002: http://www.epa.gov/ttn/oarpg/t1/fact_sheets/reinstate_fs.pdf

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Chapter III. Air Quality in the San Antonio Metropolitan Statistical Area

The three-year average of the fourth-highest eight-hour averaged ozone values recorded at CAMS 23 for 1997, 1998 and 1999 is 88 parts per billion (ppb). The three-year average of the fourth-highest eight-hour averaged ozone values recorded at CAMS 23 for 1998, 1999, and 2000 is 85 parts per billion (ppb). The three-year average of the fourth-highest eight-hour averaged ozone values recorded at CAMS 23 for 2000, 2001, and 2002 is 88 parts per billion (ppb). These three-year averages are violations of the eight-hour ozone NAAQS. The following table lists the 8-hour ozone exceedances recorded at the San Antonio monitors from 1995 to October 31, 2002. The accompanying 1-hour ozone values show the maximum reading in the area for the same day. (All ozone data provided by TCEQ.)

8-hour Ozone Exceedances in the San Antonio Region, 1995 - 1997

1995 8-hour Ozone Exceedances; 1-hour maximums, same day			
	1 Hour	8 Hour	Consecutive Exceedances / Periods
06/13/1995	105	96	
06/21/1995	100	93	June 21-23
06/22/1995	97	85	
06/23/1995	111	89	
06/27/1995	105	89	
07/08/1995	109	87	July 8-11
07/09/1995	99	87	
07/10/1995	100	79	
07/11/1995	109	86	
09/03/1995	120	104	
09/09/1995	105	94	September 9 - 10
09/10/1995	108	91	
09/25/1995	119	108	September 25 - 26
09/26/1995	122	101	
10/10/1995	108	90	

1996 8-hour Ozone Exceedances; 1-hour maximums, same day			
	1 Hour	8 Hour	Consecutive Exceedances / Periods
06/03/1996	130	97	
07/03/1996	106	89	

1997 8-hour Ozone Exceedances; 1-hour maximums, same day			
	1 Hour	8 Hour	Consecutive Exceedances / Periods
07/16/1997	123	95	
08/26/1997	103	95	
09/06/1997	100	88	

8-hour Ozone Exceedances in the San Antonio Region, 1998 - 2002

1998 8-hour Ozone Exceedances; 1-hour maximums, same day			
	1 Hour	8 Hour	Consecutive Exceedances / Periods
05/07/1998	140	101	Excused 1-hour values – Mexican Fire / Smoke
05/10/1998	107	89	
08/28/1998	99	89	August 28 - September 4
08/30/1998	99	92	
09/03/1998	105	87	
09/04/1998	141	110	
09/16/1998	107	91	
10/09/1998	121	95	

1999 8-hour Ozone Exceedances; 1-hour maximums, same day			
	1 Hour	8 Hour	Consecutive Exceedances / Periods
08/05/1999	120	100	
08/16/1999	109	87	
08/21/1999	109	87	
08/30/1999	101	85	August 30 - September 1
08/31/1999	108	95	
09/01/1999	109	91	
09/16/1999	93	85	September 16 – 20
09/18/1999	108	96	
09/19/1999	96	91	
09/20/1999	107	86	
10/01/1999	99	88	

2000 8-hour Ozone Exceedances; 1-hour maximums, same day			
	1 Hour	8 Hour	Consecutive Exceedances / Periods
09/05/2000	92	87	
09/16/2000	90	86	September 16 – 18
09/18/2000	108	93	

2001 8-hour Ozone Exceedances; 1-hour maximums, same day			
	1 Hour	8 Hour	Consecutive Exceedances / Periods
06/18/2001	101	90	

2002 8-hour Ozone Exceedances; 1-hour maximums, same day			
	1 Hour	8 Hour	Consecutive Exceedances / Periods
06/15/2002	103	86	June 15 – 25
06/17/2002	119	107	
06/18/2002	108	104	
06/23/2002	103	97	
06/24/2002	126	110	
06/25/2002	119	99	
07/08/2002	94	85	
08/05/2002	101	90	August 5 – 7
08/06/2002	117	100	

08/07/2002	98	86	
08/30/2002	109	98	August 30-31
08/31/2002	103	97	
09/12/2002	130	111	September 12-14
09/13/2002	104	97	
09/14/2002	108	91	
09/21/2002	97	87	
09/28/2002	95	85	

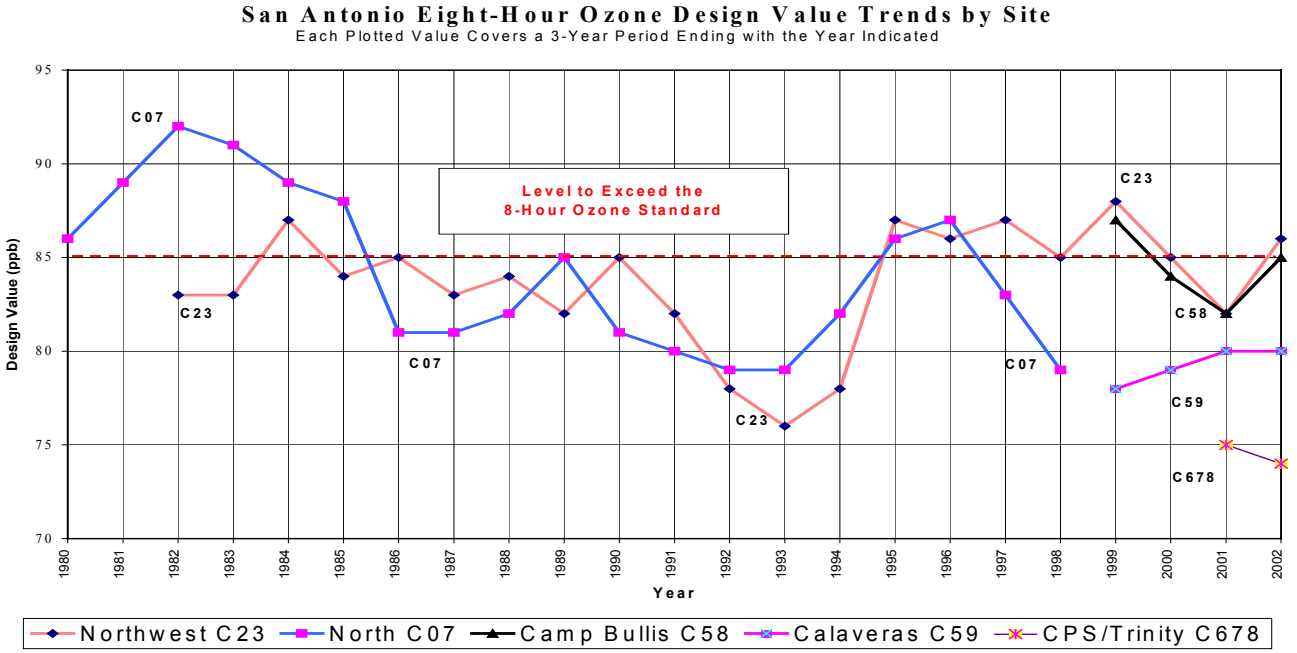
Data provided by TCEQ.

The above table lists 1-hour ozone exceedances recorded in May 1998, excused due to the presence of smoke that originated with fires in Mexico[3]. 1-hour ozone exceedances are as follows:

1-hour ozone exceedances, per site, in the San Antonio Region, 1990 - 2002

CAMS Site	Date of 1-hour Ozone Exceedance	1-hour Average Exceedance Value
Northwest C23	September 12, 2002	130
Northwest C23	June 24, 2002	126
Camp Bullis C58	September 4, 1998	141
Northwest C23	June 3, 1996	130
North C07	June 3, 1996	127
North C07	Sept. 12, 1996	126

Data provided by TCEQ.



[3] According to voice mail from Guy Donaldson, USEPA Region 6, recorded July 21, 1999, the EPA informed the TNRCC that, in 1998, San Antonio had been impacted by smoke on April 14-17, 26, 27, May 4-31, and June 4-6.

The graph above shows the “design values” in the San Antonio region for the 8-hour ozone NAAQS. The design value is the 3-year average of the fourth-highest 8-hour average ozone level recorded each year at each monitor – the method for determining non-attainment for the 8-hour ozone NAAQS. The graph shows this 3-year average since 1980, clearly illustrating that San Antonio’s ozone levels, as recorded over the last twenty or so years, have frequently violated the 8-hour standard promulgated in 1997.

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Chapter IV. The Early Action Compact

In response to a request by the TCEQ, on June 19th, 2002, EPA Region 6 Administrator Gregg A. Cooke addressed a letter to the Chairman of the TCEQ, Robert J. Huston. In that letter, Regional Administrator Cooke encouraged the TCEQ, as well as other Region 6 State Agencies, to engage eligible local communities in the development of a local air quality compact based on the Protocol for Early Action Compacts Designed to Achieve and Maintain the 8-Hour Ozone Standard. Regional Administrator Cooke wrote that, in creating the Early Action Compact (EAC) protocol, the "TNRCC has created an original means to achieve air quality benefits, and we commend your leadership and support your efforts as you move to improve air quality in Texas." Regional Administrator Cooke noted that, upon "the completion of a Compact agreement that meets the requirements of the Protocol, the EPA will honor the commitments as outlined in the Protocol."

The principles of the tri-party EAC to be executed by Local, State and the EPA officials are:

- Early planning, implementation, and emission reductions leading to expeditious attainment and maintenance of the 8-hour ozone standard;
- Local control of the measures to be employed, with broad based public input;
- State support to ensure technical integrity of the early action plan;
- Formal incorporation of the early action plan into the SIP;
- Deferral of the effective date of nonattainment designation and related requirements so long as all Early Action Compact terms and milestones are met; and
- Safeguards to return areas to traditional SIP requirements should EAC terms and/or milestones be unfulfilled, with appropriate credit given for emission reduction measures implemented.

The Clean Air Plan provides for the adoption of the EAC, which facilitates early voluntary 8-hour ozone NAAQS air quality plans in a manner consistent with applicable local, state, and federal air quality policy and which follows the guidance provided by the EAC protocol. The EAC protocol as endorsed by the EPA is attached, and the Clean Air Plan is designed to embody and fulfill all requirements of the protocol.

The local entities whose representatives support and sign the Clean Air Plan are committed to holding primary responsibility for the development and implementation of the plan, as well as for maintaining communication with all parties. These commitments by local agencies are enumerated in Chapter V, Memorandum of Agreement, along with the commitments of the State and the EPA.

According to the protocol, the plans can be developed through execution of a Compact between Local, State and the EPA officials for areas that are in attainment (including no monitored violations)

of the 1-hour ozone standard. If a monitor records a 1-hour average ozone concentration of 125 parts per billion (ppb) or greater, the monitor has recorded an exceedance of the 1-hour ozone NAAQS. If a monitor averages more than three exceedances of the 1-hour ozone NAAQS over three years, then the area in which the monitor resides has violated the 1-hour ozone NAAQS and the area may not petition to enter into a Clean Air Plan based on the Early Action Compact.

In addition, according to the protocol, the plans can be developed through execution of a Compact between Local, State and the EPA officials for areas that approach or monitor exceedances of the 8-hour standard. If a monitor records an 8-hour average ozone concentration of 85 ppb or greater, the monitor has recorded an exceedance of the 8-hour ozone NAAQS. The Early Action Compact is available to areas in which exceedances of the 8-hour ozone NAAQS have been recorded.

The Early Action Compact is designed to develop and implement control strategies, account for growth, and achieve and maintain the 8-hour ozone standard. This approach will offer a more expeditious time line for achieving emission reductions than the EPA's expected 8-hour implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. In general, these early action plans will include all necessary elements of a comprehensive air quality plan, but will be tailored to local needs and driven by local decisions.

The area encompassed by the Clean Air Plan:
The SA/MSA, which comprises Bexar, Wilson, Comal and Guadalupe Counties, is the planning area for which the Clean Air Plan is designed. The EPA recommends that the MSA serve as the presumptive boundary for the 8-hour ozone NAAQS non-attainment areas.

Participating and signatory groups and agencies:
The individuals representing the entities which are expected to endorse this Clean Air Plan are: the County Judges for Bexar, Wilson, Comal and Guadalupe Counties; the mayors for the cities of San Antonio, Floresville, Seguin and New Braunfels; appropriate signatures from EPA and TCEQ; and the Chairman of the Alamo Area Council of Governments.

Conditions for Modification or Early Termination
This agreement may be modified at any time or terminated at any time by mutual consent of all signatory parties. Any signatory party may withdraw from the agreement if the other signatory parties do not carry out provisions of the agreement. However, once portions of the Clean Air Plan are incorporated into the SIP, then SIP revision processes must be followed to change those incorporated portions. SIP revisions are binding and federally enforceable.

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Chapter IV. The Early Action Compact

a) Milestones and Reporting

The AIR Committee of the AACOG is the local entity charged with oversight and coordination of the development of the Clean Air Plan for the SA/MSA. The AIR Committee shall be responsible for the assessment and reporting of the region's progress against milestones with deliverables sent to TCEQ and the EPA and reported in a regular, public process, at least every six months. Public reporting of assessment and progress against milestone will occur at least once every six months during the regularly scheduled, public meetings (scheduled on a monthly basis), of the joined AIR Executive/Advisory Committees of the AACOG. Every meeting of the AIR Executive and Advisory Committees is a public meeting, with notification of the meeting time and location published by AACOG according to the Texas Open Meetings Act. AACOG shall provide notice of each meeting to the secretary of state, the county clerk of Bexar County, and at AACOG's main administrative offices in a place readily accessible to the general public at all times for at least 72 hours before the scheduled time of the meeting. (Although the AIR Executive and the AIR Advisory Committees are separate committees, they typically hold joint committee meetings at least once a month. In each case, the notification process is as described above.) The reports made during these meetings satisfy the public reporting requirements of the Early Action Compact protocol.

The milestones in the Early Action Compact within the Clean Air Plan for the San Antonio Metropolitan Statistical Area (area) are:

1. Completion of emissions inventories as outlined in section b), Emissions Inventory;
2. Completion of modeling as outlined in section c), Modeling;
3. Adoption of control strategies that demonstrate attainment as outlined in section d) Control Strategies;
4. Post-attainment demonstration and plan updates as outlined in section e), Maintenance for Growth;
5. Continuing public involvement in the planning process will be conducted as outlined in section f), Public Involvement. This is in addition to the public reporting conducted at least once every six months, as outlined above;
6. Identification and description, by no later than June 16, 2003, of local control strategies under then-current **consideration** for inclusion into the area's local clean air plan, including those analyzed in modeling. This will be combined with the first biannual report of assessment and progress against milestones, as outlined above;
7. Completion and adoption of the early action SIP revision by December 31, 2004; and

8. Attainment not later than December 31, 2007.

The timelines required for completion of the above tasks are found within each corresponding section as indicated in the numbered list immediately above. That is, for example, the timeline for the development of required emissions inventories is found in section b), Emissions Inventory.

In the following sections of Chapter IV, the Early Action Compact, the symbol ✔denotes a milestone required by the Early Action Compact. The requirement listing is followed by the timeline associated with meeting this milestone.

The deadline for delivery of the local early action plan from the AIR Committee to the TCEQ will be March 31, 2004. December 31, 2004 is the date by which the State must have completed, adopted and submitted the SIP revisions to the EPA.

If the area does not achieve its milestones, including attaining the 8-hour ozone standard on or before December 31, 2007, the area will be deemed in violation of the EAC and will be subject to the full planning requirements under applicable Clean Air Act (CAA) standard SIP processes including requirements defined as part of the EPA's 8-hour implementation rulemaking. The area will be subject to the same requirements and deadlines which would have been effective under the CAA and the EPA's 8-hour designation rulemaking had it not participated in this program, with no preferential delays or exemptions from the EPA. However, the area will receive appropriate credit in the standard SIP process for all emission reductions from measures implemented in this program.

If the area has had the effective date of its nonattainment designation deferred and the area does not reach attainment of the 8-hour ozone standard by December 31, 2007, then the nonattainment designation will be effective immediately. If the EPA's implementation schedule also requires SIP's from areas on or before December 31, 2007, then a SIP revision demonstrating attainment by the new attainment date will be due for the nonattainment area no later than December 31, 2008. The EPA will offer participating areas no extensions or delays of the applicable attainment date.

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b) Emissions Inventory

✔ The Early Action Compact requires that the modeling of emissions inventories using the most current tools available will be completed for at least one recent episode in order to support the control strategies incorporated into the early action plan SIP. Emission inventories will include:

- 1999 or later episode reflective of a typical ozone season exceedance that meets the EPA episode selection guidance to ensure that representative meteorological regimes are considered;
- MOBILE6 data with link based Travel Demand Model (TDM) mobile data in urban areas;
- NONROAD model data adjusted for local equipment populations and usage rates;
- Area source data based when possible on local survey data.

The above requirements for emissions inventory development will be met as follows:

- The AACOG is currently refining a September 1999 photochemical modeling emissions inventory. The September 1999 episode meets the EPA episode selection guidance criteria. This emissions inventory does incorporate NONROAD model data adjusted for local equipment populations and usage rates and area source data based on some local survey data.
- The AACOG will incorporate MOBIILE6 data with link based TDM mobile data in urban areas into the 1999 emissions inventory by April 30, 2003.
- The AACOG will project this emissions inventory to 2007 by September 30, 2003.

✔ The Early Action Compact requires that further episode inventories will also be developed over time to fully represent the variety of situations that typically contribute to ozone production in the area and to include the most recent developments.

The above requirement for development of further episode inventories will be based on consecutive updates to the Conceptual Model performed by AACOG, which will be concluded by April 30, 2003 and April 30, 2005. The decision to develop other episode inventories will be made by the local entities, TCEQ and the EPA, within six months of completion of the updates.

✔ The Early Action Compact requires that emission inventories will be compared and analyzed for trends in emission sources over time.

The above required trends analysis will be concluded by September 30, 2003 and September 30, 2005, based on AACOG's analysis of the local 1996, 1999 and 2002 National Emissions Trends Emissions Inventories.

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c) Modeling

✔ Emission inventories will be used to develop SIP quality modeling episodes that perform within the EPA's accepted margin of accuracy, including a base case and future case on or before December 31, 2007. Inventories must sufficiently account for projected future growth in ozone precursor emissions, particularly from stationary, non-road, and on-road mobile sources. The local area must carefully document their modeling approach, and work will be supported and reviewed by the State and concurrently reviewed by the EPA.

✔ Quantifiable emission reduction measures will be integrated into the future case to produce one or more control cases. These control cases will be used to indicate the relative effectiveness of different measures and aid in selecting appropriate measures.

✔ Prior to plan implementation, the control strategies should be determined based on model results from a control case episode that shows achievement of the 8-hour ozone standard on or before December 31, 2007 through implementation of the control strategies.

The above required base case and future case on or before December 31, 2007, will be developed based on the September 1999 photochemical model currently under refinement by the AACOG, or other photochemical model as agreed upon by the partners under this compact and which meets the requirements of this compact. AACOG will follow the most recent EPA draft 8-hour ozone modeling guidance for model and episode selection-base case and future case, input data preparation and quality assurance, and the "modeled" attainment test. This future base case will be available as a carefully-documented report by September 2003 from the AACOG for review by TCEQ and EPA. All model inputs will be included with the written report.

✔ Communities will continue to develop other episodes as necessary to fully represent the variety of situations that typically contribute to ozone production in the area and to support the plan with the most current information and tools. Other episodes may also indicate necessary revisions to ensure that sufficient emission reduction measures are selected and implemented to continue to achieve target ozone concentration levels.

The above requirement for development of further episode will be based on the analysis of two consecutive updates to the Conceptual Model performed by AACOG, which will be concluded by April 30, 2003 and April 30, 2005. The decision to develop other episode inventories will be made by the local entities in concert with TCEQ and the EPA.

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d) Control Strategies

✔ After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area will identify additional local controls, as necessary, to demonstrate attainment of the 8-hour standard on or before December 31, 2007. These local controls will be specific, quantified, permanent and enforceable control strategies. All controls will include specific implementation dates, as well as detailed documentation and reporting processes.

✔ Controls will be implemented as soon as practicable, but not later than December 31, 2005.

✔ Controls will be designed and implemented by the community with full stakeholder participation.

✔ All control measures will be incorporated by the state into the State Implementation Plan, which will be submitted to the EPA for review and approval. In the event that areas wish to add or substitute measures after SIP submittal, plan modifications will be treated as SIP revisions and facilitated by the state.

The above control strategy development requirements will be satisfied by development of a base case and future case on or before March 31, 2004. This base and future case set will account for all Federal, State and local controls that have been or will be adopted by 2007. The base and future case set will be developed based on the September 1999 photochemical model currently under refinement by the AACOG, or other photochemical model as agreed upon by the partners under this compact and which meets the requirements of this compact. This future case analysis, control cases and control case showing achievement of the 8-hour ozone standard on or before December 31, 2007 will be available as a report by March 31, 2004 from the AACOG.

In general, the Early Action Compact requires the creation of a photochemical model that will demonstrate attainment by Dec. 31, 2007. A successful attainment demonstration will depend upon the proper analysis of control strategies as outlined above. These quantified, mandatory, enforceable control strategies are the core measures which will provide the essential reductions required to assure attainment under the Early Action Compact.

The Early Action Compact also requires an ongoing review and update procedure for the emissions

inventories and photochemical model, including trend analyses and an analysis of the impacts of regional growth through 2012, as outlined in the Maintenance for Growth subchapter. Such analysis may reveal the requirement for additional control strategies as well.

In addition to these control strategies evaluated through modeling and growth analysis, voluntary control strategies will be developed. Such voluntary measures support the enforceable control strategies through the additional emissions reductions, public involvement and public education benefits they provide. Credit allowed by the EPA for the following voluntary measures will be taken whenever possible. Otherwise, these strategy implementations will be added to a "margin of safety" argument in the SIP, whenever applicable.

Voluntary Air Quality Control Strategies

Various entities have responded to a request for Letters of Commitment for Voluntary Implementation Measures to be implemented under this compact. The signatory parties agree to implement the following voluntary measures immediately, or as otherwise specified, and they fully recognize that the commitments set forth below are strictly voluntary. Nothing in this Agreement authorizes the EPA or TCEQ to convert the voluntary measures undertaken by a signatory party into state or federally enforceable measures under either state or federal law without the express written consent of the affected party.

A. Continuation of existing AACOG programs providing notification of forecasted high ozone levels under the Air Quality Health Alert program, media programs and events, technical assistance to local industry and public education. These programs are described in greater detail in Appendix A.

   Implementation: AIR Committee and AACOG

B. Investigation of additional measures to reduce emissions of ozone precursors on a cost-effective basis.

   Implementation: Investigation by AIR Committee and AACOG; implementation of measures by local business, industry and other appropriate entities.

C. Implementation of Air Quality Health Alert programs by the local governments and independent school districts. Details of individual programs are described in the Summary Report for Local Governments and Independent School Districts, attached as Appendix B.

   Implementation: Local Governments and Independent School Districts

D. Implementation of Air Quality Health Alert facility management and employee awareness programs by the area entities to promote actions and behaviors which will reduce emissions of ozone precursors in the SA/MSA region. These will produce positive emission reductions, particularly on Air Quality Health Alert Days. The list does not include the many entities that support regional clean air measures on an informal basis. Details of the specific programs are set out in commitment letters contained in Appendix A, B, and C.

Implementation: Local Employers throughout the region.

E. Implementation of quantifiable, voluntary emission reduction programs that will be incorporated into the implementation plan by industries and local governments in the SA/MSA region. The reductions are described in more detail in the commitment letters in Appendices B and C.

Implementation: Local entities throughout the region.

In addition to the voluntary measures described above, further voluntary control strategies may be developed and adopted in this Clean Air Plan as a response to future local exceedances or violations of federal air quality standards.

- If exceedances of the 1-hour average ozone NAAQS or exceedances and violations of the 8-hour ozone NAAQS are recorded on local air quality monitors, further voluntary control strategies will be considered by the AIR Committee, the TCEQ and the EPA as they may result from the ongoing public involvement process.
- Before the finalization of the local SIP revisions, newly monitored exceedances and violations will result in a public review of the control strategies being planned for that revision. This review is an important part of the public involvement process. If public awareness of exceedances brings a further public willingness to enact further voluntary or mandatory control strategies beyond those modeled in the SIP attainment and maintenance analyses, they should be duly considered for inclusion in the SIP revision control strategy set.
- After the date of finalization of the local SIP revisions, newly monitored exceedances and violations will result in a public review of the control strategies in the SIP and a fresh call for implementation of further and more effective voluntary control strategies from business, industries, local agencies and citizens. This review is an important part of the public involvement process.
- Should the exceedances occur before the full impacts of control strategies within the locally adopted SIP revisions are realized (i.e., before the entire vehicle fleet has been through the first year test cycle, should a state vehicle Inspection and Maintenance emission test be implemented locally), then the resulting public review and assessment process will include

careful consideration of that fact.

Such an *event-responsive* review process clearly complements and gives fresh impetus to the public involvement goals in the EAC. Such a review process allows local air quality planners the opportunity not just to offer the public a strategy review and progress report, but to ask the public for a renewal of their involvement in and commitment to the ongoing planning process in the context of new exceedances of the air quality standards. Such a review process allows local businesses, industry and other agencies further opportunity to implement fresh voluntary emission reduction methods. Enactment of control strategies resulting from the public involvement process should not conflict with the role of the SIP planning process mandated in the Early Action Compact, but will be a harmonious element of the SIP planning process.

By responding to future exceedances and violations with a public review of control strategies and their purpose, local elected officials, air quality planners, and the citizens themselves remain committed to ongoing local air quality planning needs. Since new exceedances and violations are grounds for a review of the plan, we give assurances to the reader of our common vigilance, in which public participation is required.

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SAN ANTONIO METROPOLITAN STATISTICAL AREA

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e) Maintenance for Growth

✔ The plan must include a component to address emissions growth at least 5 years beyond December 31, 2007, ensuring that the area will remain in attainment of the 8-hour standard during that period. This future attainment maintenance analysis may employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:

- Modeling analysis showing ozone levels below the 8-hour standard in 2012;
- An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
- Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates.

The satisfactory choice of methodologies to demonstrate a maintenance analysis through 2012 will be agreed upon by the AIR Committee, TCEQ and the EPA. The resultant analysis to show attainment through 2012 will be agreed upon by the AIR Committee, TCEQ and the EPA. The analysis will be completed by the AACOG as part of the SIP revisions package when the SIP revisions are due with TCEQ by March 31, 2004. December 31, 2004 is the date by which the State must have completed, adopted and submitted the SIP revisions to the EPA. A 6 month reporting period will follow the past 6 months updates; anticipated updates will be reported in the next 6 months.

✔ The plan must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate:

- all relevant actual new point sources;
- impacts from potential new source growth; and
- future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Term Transportation Plan and most current trend and projections of local motor vehicle emissions.

This update and verification will be an ongoing process between the TCEQ and the AACOG.

✔ If at any time the review of growth demonstrates that adopted control measures are inadequate to address growth in emissions, additional measures will be added to the plan. Local planning processes should anticipate this possibility.

If warranted, additional control measures revealed by analysis for growth will be included by the AACOG as part of an additional SIP revision to be submitted after December 31, 2004, the date

for submitting the original SIP revision to the EPA.

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f) Public Involvement

✔ Public involvement will be included in all stages of the planning and implementation process.

✔ Public education programs will be used to raise awareness regarding issues, opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.

✔ Interested stakeholders will be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Plan drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.

✔ Public comment on the proposed final plan will follow the normal SIP revision process as implemented by the State.

✔ Semi-annual reports detailing, at a minimum, progress toward milestones will be publicly presented and publicly available.

Public reporting of assessment and progress against milestones will occur at least once every six months during the regularly scheduled, public meetings of the joined AIR Executive/Advisory Committees of the AACOG. In addition, the AIR Public Education Committee (see Appendix A) is charged with fulfilling these requirements.

The development of a regional Clean Air Plan requires continuing collaboration with the EPA and TCEQ, as well as many other state and local agencies. The local planning process can be outlined in two essential steps. These measures will be ongoing through the term of this plan, as follows:

Step 1 - Secure Stakeholder Participation

Vital Participation of Interested and Necessary Stakeholders Throughout the SA/MSA

The history of efforts to identify, contact, and secure the participation of interested and necessary stakeholders has its origins in 1995. This effort has led to the present-day AIR Committee. The AIR Committee is a group of elected officials, business and industry leaders, local citizenry and technical research staff drawn from the twelve-county AACOG region. The AIR Committee is

dedicated to public involvement through their public monthly meetings held through the AACOG and public education outreach efforts across the region. The public education efforts include television and radio programs, as well as advertisement of ozone-reducing practices.

The AIR Committee also draws support from and coordinates efforts with other projects within the Natural Resources / Transportation Department of AACOG. These AACOG projects include: the San Antonio Clean Cities Program, for the promotion of cleaner burning fuels and fleets across the region; the Commute Solutions program, responsible for public awareness campaigns including an ongoing Rideshare program; and the Air Quality Health Alert campaign, responsible for the release of health alerts throughout the region for days of expected high ozone readings.

Step 2 – Coordinate Plan Development

Vital Participation of the Public, State and Federal Air Quality Planning Agencies

The AIR Committees have been meeting publicly at least once a month since the spring of 1999. The many stakeholders involved in the plan development process have shown differing knowledge, strengths and ability to volunteer time to participate. During this time, the committees have reviewed many control strategies and considered several forms of what has become the Clean Air Plan. Each of the plans has been subject to review by 1) the public, through their participation in the AIR Committee meetings and public stakeholder meetings, 2) business and industry, through their participation in the AIR Advisory Committee, and 3) through technical analysis provided by the AIR Technical Committee, the TCEQ and the EPA. During this entire process, TCEQ and the EPA have been working in close partnership with the AIR Committee both to review and assess the technical basis for the control strategy choices and to offer guidance regarding applicable state rules and procedures.

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Chapter V. Early Action Compact Memorandum of Agreement (MOA)

Participating and signatory groups and agencies

The individuals representing the entities which are expected to endorse this Early Action Compact are: the County Judges for Bexar, Wilson, Comal and Guadalupe Counties; the mayors for the cities of San Antonio, Floresville, Seguin and New Braunfels; the Chairman of the Texas Commission on Environmental Quality; the Administrator of EPA Region 6; and the Chairman of the Alamo Area Council of Governments.

Local, State and the EPA Commitments

The entities whose representatives support and sign the Early Action Compact (the "signatory parties") are committed to specific tasks and timelines. By affixing their signature to this MOA, the representative commits their signatory party to the terms of this MOA and to the actions and milestones outlined therein. The commitments include the following:

Local Officials' Commitments:

1. Early Action Compact Milestones and Timeline

Milestone	Completion Date	Reference in the Early Action Compact
Emissions Inventory Milestones		
Development of a 1999 or later episode emissions inventory according to requirements in Chapter IV, b)	Completed; now being refined by AACOG	Chapter IV, b)
Incorporate MOBILE6 data with Link-Based Travel Demand Model data in urban areas	April 30, 2003 by AACOG	Chapter IV, b)
Further emission inventory episode development based on local Conceptual Model update. Other episode inventories, if required, made in concert with EPA, TCEQ, and local entities.	Conceptual Model updates completed by AACOG by April 30, 2003 and April 30, 2005	Chapter IV, b)
NONROAD model data adjusted for local equipment populations and usage rates; Area source data is based when possible on local survey data.	Current 1999 episode does incorporate these requirements	Chapter IV, b), c)
Emissions Trend Analysis utilizing National Emissions Trends (NET) Emissions Inventories (EI's)	By September 30, 2003 and September 30, 2005, based on local 1996, 1999, 2002 NET EI's, conducted by AACOG	Chapter IV, b)

Milestone	Completion Date	Reference in the Early Action Compact
Modeling Milestones		
Develop SIP quality modeling episodes that perform within the EPA's accepted margin of accuracy, including a base case and future case on or before December 31, 2007. Documented & reviewed by TCEQ & EPA. Quantifiable emission reduction measures in the future case to produce one or more control cases. Control strategies determined against control case model.	Deliver future base case model by September 30, 2003 from AACOG, based on the Sept. 1999 photochemical model currently under refinement by AACOG, or other photochemical model as agreed upon by the partners under this compact and which meets the requirements of this compact.	Chapter IV, c)
Develop other episodes as necessary to fully represent the variety of situations that typically contribute to local ozone production	Requirement for further episode development based on Conceptual Model updates. Updates completed by AACOG by April 30, 2003 and April 30, 2005.	Chapter IV, c)
Control Strategy Development Milestones		
Identify additional local controls, as necessary, to demonstrate 2007 attainment of the 8-hour standard. Controls implemented by Dec. 31, 2005, with full local stakeholder participation.	Future case analysis, control cases and control case showing achievement of the 8-hour ozone standard on or before Dec. 31, 2007 will be available as a report by March 31, 2004 from AACOG	Chapter IV, d)
All control measures will be incorporated by the state into the State Implementation Plan.	Required deliverables from AACOG to TCEQ & EPA by March 31, 2004	Chapter IV, d)
Maintenance for Growth Milestones		
Component to address emissions growth at least 5 years beyond December 31, 2007, ensuring that the area will remain in attainment of the 8-hour standard during that period.	The satisfactory choice of methodologies to demonstrate a maintenance analysis through 2012 will be agreed upon by the AIR Committee, TCEQ and the EPA. In any case, required deliverables from AACOG to TCEQ, EPA by March 31, 2004.	Chapter IV, e)
A continuing planning process will include modeling updates and modeling assumption verification (particularly growth assumptions)	Ongoing process between the TCEQ, EPA and AACOG	Chapter IV, e)
If the review of growth demonstrates that adopted control measures are inadequate to address growth in emissions, additional measures will be added to the plan	Required deliverables from AACOG to TCEQ, EPA as needed for additional SIP revision after December 31, 2004	Chapter IV, e)

Milestone	Completion Date	Reference in the Early Action Compact
Public Involvement Milestones		
Conducted in all stages of the planning and implementation process. Public education programs used to raise awareness regarding issues, opportunities for involvement in the planning process, implementation of control strategies. Interested stakeholders involved in the planning process as early as possible. Planning meetings open to the public, with posted meeting times and locations. Plan drafts made publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders. Semi-annual reports detailing, at a minimum, progress toward milestones, publicly presented and publicly available.	Public reporting of assessment and progress against milestone will occur at least once every six months during the regularly scheduled, public meetings of the joined AIR Executive / Advisory Committees of the AACOG. AIR Public Education Committee is charged with fulfilling these requirements.	Chapter IV, f)

In addition, local signatories will be responsible for:

2. Notifying parties as soon as possible of issues and developments, which may impact performance and progress toward milestones.

3. Notifying parties as soon as possible if Early Action Compact milestones will be missed or have been missed.

4. Notifying parties as soon as possible if Early Action Compact modification/termination is to be requested.

The State's Commitments

The State will provide support to areas throughout the planning and implementation process, including:

5. Technical assistance in the development of emission inventories, modeling process, trend analysis and quantification and comparison of control measures;

6. Necessary information on all Federal and State adopted emission reduction measures which affect the area;

7. Critical third party review of emissions inventory, modeling, and self-evaluation work;

8. Technical and strategic assistance, as appropriate, in the selection and implementation of

control strategies;

9. Technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date;

10. Maintenance of monitors and reporting and analysis of monitoring data;

11. Support for public education efforts;

12. Coordinate communication between local areas and the EPA to facilitate continuing the EPA review of local work;

13. Expeditious review of the locally developed plan, and if deemed adequate, propose modification of the SIP to adopt the early action plan;

14. Adoption of control measures into the SIP as expeditiously as possible. The final complete SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.

15. The EPA will provide technical assistance to the state and local area in the development of the early action plan.

16. The EPA will move quickly to review and approve completed plans by no later than nine months after submission of the SIP revision by the state.

17. When the EPA's 8-hour implementation guidelines call for designations, the EPA will defer the effective date of nonattainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and milestones of the Early Action Compact, included in the Clean Air Plan, are being met, including submission of the early action SIP revision by December 31, 2004.

18. Provided that the monitors in the area reflect attainment by December 31, 2007, the EPA will move expeditiously to designate the area as attainment and impose no additional requirements.

19. If at any time the area does not meet all the terms of this Compact, including meeting agreed-upon milestones, then it will forfeit its participation and its designation (or redesignation if necessary) will become effective according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer the area no delays, exemptions or other

favorable treatment because of its previous participation in this program.

20. If the area violates the standard as of December 31, 2007, and the area has had the effective date of its nonattainment designation deferred, the area's nonattainment designation will become effective. The state will then submit a revised attainment demonstration SIP revision according to the CAA and the EPA's 8-hour implementation rule, unless the 8-hour implementation schedule requires SIP's from 8-hour nonattainment areas before December 31, 2008. In that event, a revised attainment demonstration SIP revision for the participating area will be due as soon as possible but no later than December 31, 2008. In no event will the EPA extend the attainment date for the area beyond that required by the CAA and/or the EPA's 8-hour implementation rule.

21. No area will be allowed to renew its Early Action Compact after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

Conditions for Modification or Early Termination

This agreement may be modified at any time or terminated at any time by mutual consent of all signatory parties. Any signatory party may withdraw from the agreement if the other signatory parties do not carry out provisions of the agreement. However, once portions of the Clean Air Plan are incorporated into the SIP, then SIP revision processes must be followed to change those incorporated portions. SIP revisions are binding and federally enforceable.

Additional Terms of This Agreement

1. This MOA creates no cause of action against any party beyond those, if any, that may already exist under state or federal law. In addition, all parties agree that this MOA cannot be used against one another or by a third party as an enforceable order in any court proceedings. This MOA will be reviewed and modified as needed.
2. It is understood that emission reductions achieved through the measures described in this document will be donated to the regional Clean Air Plan effort and will not be available for use in an emissions banking/trading program, unless agreed upon by the signatory parties.
3. Additional signatories can be added at any time.

Executed in multiple copies by the signatory parties to this Memorandum of Agreement. The representatives of the signatory parties executing this MOA represent that they have the authority to sign the MOA and to bind the signatory party that they represent to the terms of the MOA.

The Honorable Nelson Wolff
Bexar County Judge

Date:

Bonnie Conner on behalf of
The Honorable Ed Garza
Mayor, City of San Antonio

Date: 12-09-02

Jay Millikin on behalf of
The Honorable Danny Scheel
Comal County Judge

Date: 12/9/2

The Honorable Adam Cork
Mayor, City of New Braunfels

Date: 12/9/02

The Honorable James E. Sagebiel
Guadalupe County Judge

Date: 12-9-02

The Honorable Mark Stautzenberger
Mayor, City of Seguin

Date: 12.9.02

The Honorable Marvin Quinney
Wilson County Judge

Date: 12-09-2002

The Honorable Raymond Ramirez
Mayor, City of Floresville

Date:
Date: 12/9/02

The Honorable Gregg Cooke,
Administrator, Region 6,
US Environmental Protection Agency

Date: 12/9/02

The Honorable Robert J. Huston,
Chairman,
Texas Commission on Environmental
Quality

Date: 12/9/02

The Honorable Marcy Meffert,
Chair,
Alamo Area Council of Governments

Date: 12/9/02

OFFICERS OF THE AIR IMPROVEMENT RESOURCES COMMITTEE
(Alamo Area Council of Governments)

The Honorable Patrick Heath,
Chairman, Air Improvement
Resources Committee

Date: 12/9/02

The Honorable Jay Millikin,
Vice Chairman, Air Improvement
Resources Committee

Date: 12/9/02

Protocol for Early Action Compacts
Designed to Achieve and Maintain the 8-Hour Ozone Standard

Purpose of the Compact

Early voluntary 8-hour air quality plans can be developed through a Compact between Local, State and the Environmental Protection Agency (EPA) officials for areas that are in attainment (including no monitored violations) of the 1-hour ozone standard but approach or monitor exceedances of the 8-hour standard. These early action plans will include all necessary elements of a comprehensive air quality plan, but will be tailored to local needs and driven by local decisions. The Early Action Compact is designed to develop and implement control strategies, account for growth, and achieve and maintain the 8-hour ozone standard. This approach will offer a more expeditious time line for achieving emission reductions than the EPA's expected 8- hour implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Early Action Compacts should complement any existing Ozone Flex Agreements.

The principles of the tri-party Early Action Compact to be executed by Local, State and the EPA officials are:

- Early planning, implementation, and emission reductions leading to expeditious attainment and maintenance of the 8-hour ozone standard;
- Local control of the measures to be employed, with broad based public input;
- State support to ensure technical integrity of the early action plan;
- Formal incorporation of the early action plan into the SIP;
- Deferral of the effective date of nonattainment designation and related requirements so long as all Compact terms and milestones are met; and
- Safeguards to return areas to traditional SIP requirements should Compact terms and/or milestones be unfulfilled, with appropriate credit given for emission reduction measures implemented.

Compact Requirements

The Compact will address the following components:

A. Milestones and Reporting

- In order to facilitate self-evaluation and communication with the EPA, TNRCC and stakeholders, the Early Action Compact must include clearly measurable milestones for the development and implementation of the plan. Local areas will assess and report their progress against milestones in a regular, public process, at least every six months. Milestones will include, at a minimum:
  - Completion of emissions inventories and modeling;
  - Adoption of control strategies that demonstrate attainment;
  - Completion and adoption of the early action SIP revision;
  - Attainment not later than December 31, 2007;
  - Post-attainment demonstration and plan updates as outlined in Section E;

- In the absence of achieving milestones, including attaining the 8-hour ozone standard on or before December 31, 2007, the area will be deemed in violation of the Compact and will be subject to the full planning requirements under applicable Clean Air Act (CAA) standard SIP processes including requirements defined as part of the EPA's 8-hour implementation rulemaking. Such an area will be subject to the same requirements and deadlines which would have been effective under the CAA and the EPA's 8-hour designation rulemaking had it not participated in this program, with no preferential delays or exemptions from the EPA. However, the area will receive appropriate credit in the standard SIP process for all emission reductions from measures implemented in this program.
- If the area has had a nonattainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the nonattainment designation will be effective immediately. If the EPA's implementation schedule also requires SIP's from areas on or before December 31, 2007, then a SIP revision demonstrating attainment by the new attainment date will be due for the nonattainment area no later than December 31, 2008. The EPA will offer areas no extensions or delays of the applicable attainment date.

B. Emissions Inventory

- Modeling emissions inventories using the most current tools available will be completed for at least one recent episode in order to support the early action plan. Emission inventories must include:
  - 1999 or later episode reflective of a typical ozone season exceedance that meets the EPA episode selection guidance to ensure that representative meteorological regimes are considered;
  - MOBIILE6 data with link based Travel Demand Model (TDM) mobile data in urban areas;
  - NONROAD model data adjusted for local equipment populations and usage rates;
  - Area source databased when possible on local survey data.
- Further episode inventories will also be developed over time to fully represent the variety of situations that typically contribute to ozone production in the area and to include the most recent developments.
- Emission inventories will be compared and analyzed for trends in emission sources over time. This will improve an area's understanding of the trends in emissions in their community and will aid in verification of the accuracy of the inventories.

C. Modeling

- Emission inventories will be used to develop SIP quality modeling episodes that perform within the EPA's accepted margin of accuracy, including a base case and future case on or before December 31, 2007. Therefore, inventories must sufficiently account for projected future growth in ozone precursor emissions, particularly from stationary, non-road, and on-road mobile sources.
- Local area must carefully document modeling approach, and work will be supported and reviewed by the State and concurrently reviewed by the EPA.
- Quantifiable emission reduction measures will be integrated into the future case to produce one or more control cases. These control cases will be used to indicate the relative effectiveness of different measures and aid in selecting appropriate measures.
- Prior to plan implementation the control strategies should be determined based on model results from a control case episode that shows achievement of the 8-hour ozone standard on or before December 31, 2007 through implementation of the control strategies.

- Communities will continue to develop other episodes as necessary to fully represent the variety of situations that typically contribute to ozone production in the area and to support the plan with the most current information and tools. Other episodes may also indicate necessary revisions to ensure that sufficient emission reduction measures are selected and implemented to continue to achieve target ozone concentration levels.

D. Control Strategies

- After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area will identify additional local controls, as necessary, to demonstrate attainment of the 8-hour standard on or before December 31, 2007. These local controls will be specific, quantified, permanent and enforceable control strategies. All controls will include specific implementation dates, as well as detailed documentation and reporting processes.
- Controls will be implemented as soon as practicable, but not later than December 31, 2005.
- Controls will be designed and implemented by the community with full stakeholder participation.
- All control measures will be incorporated by the state into the State Implementation Plan and submitted to the EPA for review and approval. In the event that areas wish to add or substitute measures after SIP submittal, plan modifications will be treated as SIP revisions and facilitated by the state.

E. Maintenance for Growth

- The plan must include a component to address emissions growth at least 5 years beyond December 31, 2007, ensuring that the area will remain in attainment of the 8-hour standard during that period. This future attainment maintenance analysis may employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - Modeling analysis showing ozone levels below the 8-hour standard in 2012;
  - An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates.
- The plan must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate:
  - all relevant actual new point sources;
  - impacts from potential new source growth; and
  - future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Term Transportation Plan and most current trend and projections of local motor vehicle emissions.
- If the review of growth demonstrates that adopted control measures are inadequate to address growth in emissions, additional measures will be added to the plan. Local planning processes should prepare for this possibility.

F. Public Involvement

- Public involvement will be conducted in all stages of the planning and implementation process.

- Public education programs will be used to raise awareness regarding issues, opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
- Interested stakeholders will be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Plan drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
- Public comment on the proposed final plan will follow the normal SIP revision process as implemented by the State.
- Semi-annual reports detailing, at a minimum, progress toward milestones, will be publicly presented and publicly available.

Local, State and the EPA Commitments

Local Areas

Local areas hold primary responsibility for the development and implementation of the plan, as well as for maintaining communication with all parties, including:

- Drawing up the Compact, which embodies the requirements described in Sections A-F, including a time line for milestones.
- Completing and signing by all parties of the Early Action Compact no later than December 31, 2002.
- Completing and adopting the early action plan as part of the SIP no later than December 31, 2004.
- Notifying parties as soon as possible of issues and developments, which may impact performance and progress toward milestones.
- Notifying parties as soon as possible if Compact milestones will be missed or have been missed.
- Notifying parties as soon as possible if Compact modification/termination is to be requested.

State

The state will assist in the drafting of the Early Action Compact and will provide support to areas throughout the planning and implementation process, including:

- Technical assistance in the development of emission inventories, modeling process, trend analysis and quantification and comparison of control measures;
- Necessary information on all Federal and State adopted emission reduction measures which affect the area;
- Critical third party review of emissions inventory, modeling, and self-evaluation work;
- Technical and strategic assistance, as appropriate, in the selection and implementation of control strategies;
- Technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date;
- Maintenance of monitors and reporting and analysis of monitoring data;
- Support for public education efforts;
- Coordinate communication between local areas and the EPA to facilitate continuing the EPA review of local work;
- Expeditious review of the locally developed plan, and if deemed adequate, propose modification of the SIP to adopt the early action plan;

- Adoption of control measures into the SIP as expeditiously as possible. The final complete SIP revision must be completed, adopted, and submitted by the state to the EPA by 2004.

EPA

The EPA will recognize the local area's and State's commitment to voluntarily adopt an early, substantive, enforceable and scientifically-based attainment plan with early implementation of control measures by becoming a party to the Early Action Compact developed in conformance with this protocol.

- The EPA will provide technical assistance to the state and local area in the development of the early action plan.
- The EPA will move quickly to review and approve completed plans by no later than nine months after submission of the SIP revision by the state.
- When the EPA's 8-hour implementation guidelines call for designations, the EPA will defer the effective date of nonattainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and milestones of the compact are being met, including submission of the early action SIP revision by 2004.
- Provided that the monitors in the area reflect attainment by December 31, 2007, the EPA will move expeditiously to designate the area as attainment and impose no additional requirements.
- If at any time the area does not meet all the terms of this Compact, including meeting agreed-upon milestones, then it will forfeit its participation and be designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions or other favorable treatment because of its previous participation in this program.
- If the area violates the standard as of December 31, 2007, and the area has had a nonattainment designation deferred, the area will be designated nonattainment. The state will then submit a revised attainment demonstration SIP revision according to the CAA and the EPA's 8-hour implementation rule, unless the 8-hour implementation schedule requires SIP's from 8-hour nonattainment areas before December 31, 2008. In that event, a revised attainment demonstration SIP revision for the participating area will be due as soon as possible but no later than December 31, 2008. In no event will the EPA extend the attainment date for the area beyond that required by the CAA and/or the EPA's 8-hour implementation rule.
- No area will be allowed to renew their Early Action Compact after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.