INCOG
INDIAN NATIONS COUNCIL OF GOVERNMENTS

Tulsa Metropolitan Area 8-Hour Ozone Early Action Compact

A TULSA AREA PARTNERSHIP

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OZONE EARLY ACTION COMPACT
Tulsa Transportation Management Area

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THE EARLY ACTION COMPACT
Tulsa Transportation Management Area

Background Information

The National Ambient Air Quality Standards for Ozone

The Federal Clean Air Act is the comprehensive law that regulates airborne emissions from area, mobile, and stationary sources nationwide. 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. The EPA currently has two NAAQS for ozone, the 1-hour peak standard and the 8-hour average standard.

Areas formally declared in violation of the NAAQS and those contributing to a violation are designated "nonattainment areas." Nonattainment areas must meet certain Clean Air Act requirements, such as:

- **Transportation Conformity** - Requires a demonstration that regional long-range transportation plans will not negatively impact air quality, or federal transportation funds can be withheld.
- **New Source Review** - Requires a review of new or modified industrial operations that constitute major sources of emissions in order to minimize air pollution.
- **Rate of Progress Requirements** - A certain percentage of pollutants must be reduced each year.
- **Specific attainment date -** Consequences of failure to reach attainment by the specified date include stricter control measures and the potential for significant penalties.
- **10-year maintenance plan -** Includes additional or continuing mandatory programs for 10 years following attainment.

Another requirement obligates the state to develop and implement a prescriptive comprehensive clean air plan that mandates how the area will come into compliance with the standard. This plan and any revisions to it are known as the State Implementation Plan (SIP).

The 1-Hour Standard in the Tulsa Metropolitan Statistical Area

To meet the 1-hour ozone standard, an area must have a monitored hourly peak ozone concentration below 125 parts per billion (ppb). If an area exceeds the standard more than three times in three years, it is subject to a nonattainment designation. The Tulsa Metropolitan Statistical Area (TMSA) is in attainment of the 1-hour ozone standard.

The O_3 Flex Agreement

In order to ensure continued attainment of the 1-hour ozone standard, the region's leaders signed an air quality improvement plan called the Ozone Flex Agreement (O_3 Flex) in August of 2002. Elected officials and community leaders in the Tulsa TMA entered into this agreement with EPA and the Oklahoma Department of Environmental Quality (ODEQ), to proactively

reduce ozone precursor emissions in their own operations. While O_3 Flex requires community education and outreach, it imposes no mandatory requirements on the general public.

The 8-Hour Standard in the Tulsa Transportation Management Area

During the past several years, air quality planning in the TTMA has intensified as ozone concentrations have exceeded the value permitted by the 8-hour ozone NAAQS. Due to legal challenges to the new NAAQS and ensuing litigation, EPA has not formally designated any areas of the United States in violation of the 8-hour ozone NAAQS. The 8-hour NAAQS has been upheld by the Supreme Court, and in accordance with a consent decree filed November 13, 2002, with the U.S. District Court for the District of Columbia, EPA and nine environmental groups agreed on a schedule to promulgate designations by April 15, 2004. Based on recent monitoring data, it is probable that the Tulsa Transportation Management Area (TTMA) will be declared a nonattainment area when formal designations occur.

The 8-hour ozone standard is found by averaging three years of the fourth highest 8-hour ozone levels in an area. This number, called the design value, must be lower than 85 parts per billion (ppb) to meet the standard. Currently, the TTMA design value (averaging 2000, 2001, and 2002) is 87 ppb. Each year this design value will change slightly, and there is indication of steady improvement toward attainment. Despite annual fluctuations and observed improvements in the design value, it is understood that long-term air quality may not improve without a concerted emission-reduction effort. The Early Action Compact (EAC) is the region's response to this challenge.

Protocol for Early Action Compacts

EPA Region 6 endorsed the Texas Commission on Environmental Quality's (TCEQ) Protocol for Early Action Compacts (EAC Protocol) on June 19, 2002 (as revised per letter from Gregg A. Cooke, EPA Region 6 Administrator to Robert Huston, TCEQ, dated October 18, 2002). It establishes a two-step process that offers a more expeditious time line for achieving clean air than EPA's expected 8-hour implementation rulemaking. The EAC Protocol allows a region to enter into a memorandum of agreement (MOA) by December 31, 2002, committing to develop and implement a detailed technical plan to reach attainment by 2007.

The principles of the EAC Protocol to be executed by Local, State and 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 terms and milestones are met; and
- Safeguards to return areas to traditional SIP requirements should terms and/or milestones be unfulfilled, with appropriate credit given for emission reduction measures implemented.

The Tulsa Transportation Management Area Response

The region is volunteering to participate in the EAC Protocol process to expedite air cleanup for future public health and welfare. The TTMA Response has two components:

1. The Early Action Compact (EAC) – The **EAC** is a Memorandum of Agreement to prepare and implement the Clean Air Action Plan. More specifically, the EAC sets measurable, enforceable milestones for developing and implementing the Clean Air Action Plan.
2. The Clean Air Action Plan (CAAP) – The **CAAP** serves as the region's official air quality improvement plan, with quantified emission-reduction measures. The CAAP will include all necessary elements of a comprehensive air quality plan, but will be tailored to local needs and driven by local decisions. Moreover, the CAAP will be incorporated into the formal SIP and the region will be legally required to carry out this plan just as in nonattainment areas. For example, development of the CAAP will require the same scientific diligence and undergo the same scrutiny as the nonattainment areas' SIPs, so that the emission reduction strategies selected will be adequate to ensure the region stays in attainment of the 8-hour standard.

EAC Protocol Versus Traditional Nonattainment

A major advantage of the region's participation in the EAC Protocol is the flexibility afforded to the signatories in selecting emission reduction measures and programs that are best suited to local needs and circumstances. Recognizing the varied socioeconomic and emissions characteristics within the region, not all measures can or should be implemented by every entity.

The primary differences between the process outlined in the EAC Protocol and the traditional nonattainment area process are:

- EAC Protocol is designed to achieve clean air sooner than expected under the traditional nonattainment process[1].
- EAC Protocol allows for more local control in selecting emission-reduction measures.
- EAC Protocol provides deferral of nonattainment designation and related requirements as long as Plan requirements and milestones are met. This would alleviate any stigma associated with a nonattainment designation.

Should any milestones be missed in designing or implementing the CAAP, the region would automatically forfeit the deferred effective date of its nonattainment designation and revert to the traditional nonattainment requirements, with appropriate credit given for emission reduction strategies already implemented.

EAC Protocol Versus O_3 Flex

[1] Under the traditional nonattainment process, emissions reduction strategies are unlikely to be implemented before 2007. Under the EAC Protocol, emissions reduction strategies will be fully implemented by 2005.

The EAC Protocol specifically addresses the 8-hour standard and will build on the emission reduction strategies outlined in the O_3 Flex Agreement. However, the strategies needed to attain the 8-hour standard likely will affect more people than those outlined in the O_3 Flex Agreement, since the 8-hour standard is generally more difficult to achieve.

EAC Protocol Timeline

The TTMA EAC is designed to enable a local, proactive approach to ensuring attainment of the 8-hour ozone NAAQS, and so protect human health. Using the EAC Protocol, the region would implement emission reduction measures by 2005 that are directed at attaining the 8-hour standard by 2007. This allows for a significantly earlier start than waiting for formal EPA nonattainment designation and it gives the local area more flexibility in choosing which emission reduction strategies to implement in order to bring about 8-hour ozone NAAQS attainment.

The Area Encompassed by the EAC

The TTMA, which comprises Tulsa County and portions of Creek, Osage, Rogers and Wagoner Counties, is the planning area for which this EAC is designed. This is the same area encompassed by the O_3 Flex Agreement. Upon its completion, a careful evaluation and analysis of the photochemical air shed modeling results may modify the implementation boundary of this EAC as deemed reasonable and appropriate by all signatories. If further analyses indicate, this area may be expanded or contracted to coincide with an EPA promulgated nonattainment area for the Tulsa area. This does not prejudge the final nonattainment boundary to be made by the EPA as required by the Clean Air Act.

Signatories and Their Responsibilities

The individuals representing the entities that will sign this EAC are: the Chairman of the INCOG Air Quality Committee, the Chairman of the INCOG Board of Directors, the Director of Air for the Oklahoma Department of Environmental Quality, the Mayor of the City of Tulsa, the Tulsa County Board of Commissioners, the President of the Metro Tulsa Chamber of Commerce and the Administrator for EPA Region 6. Represented by the Chairman of the INCOG Air Quality Committee, the stakeholders and membership of the INCOG Air Quality Committee, it's alternates, the AdHoc Technical Committee and the Ozone Alert! Public Relations Committee also participated in the development of this EAC.

The local entities whose representatives support and sign the EAC are committed to holding primary responsibility for the development and implementation of the CAAP, and for maintaining communication with all parties. These commitments by local agencies are enumerated in the following Memorandum of Agreement, along with the commitments of ODEQ and EPA.

Conditions for Modification or Early Termination

This agreement may be modified or terminated at any time by mutual consent of all signatory parties before formal incorporation into the SIP in 2004. Before the CAAP is adopted into the SIP, any signatory party may withdraw from the agreement. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of

the original agreement, the agreement will be void, any deferred effective date of the nonattainment designation would be withdrawn and the area's nonattainment designation would become effective soon after. Once the CAAP is incorporated into the SIP, modification is considerably more difficult, as the SIP is a legally binding state and federal agreement to carry out specific emission-reduction activities.

Tulsa Transportation Management Area Early Action Compact

Memorandum of Agreement

This Early Action Compact (EAC) is a Memorandum of Agreement between the Indian Nations Council of Governments (INCOG), representing the local governments within the Tulsa Transportation Management Area (TTMA), the Oklahoma Department of Environmental Quality (ODEQ) and the United States Environmental Protection Agency (EPA). It is for the express purpose of developing and implementing a Clean Air Action Plan (CAAP) that will reduce ground-level ozone concentrations in the TTMA to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet these obligations results in immediate reversion to the traditional nonattainment process.

I. General Provisions

A. The signatory parties commit to develop, implement and maintain the CAAP according to EPA Protocol for Early Action Compacts issued June 19, 2002 (as revised per letter from Gregg A. Cooke, EPA Region 6 Administrator to Robert Huston, TCEQ, dated October 18, 2002), and adhere to all terms and conditions stated in the guidelines. The milestones required by the Early Action Compact are denoted by the symbol ⓘ within this CAAP. See **Appendix A** for EPA Protocol for Early Action Compacts Designed to Achieve and maintain the 8-Hour Ozone Standard.

B. If the region does not meet all the terms of the EAC, including meeting agreed-upon milestones and attainment of the 8-hour ozone NAAQS on or before December 31, 2007, then it will forfeit its participation and the deferred effective date of its nonattainment designation will be withdrawn thus having an effective nonattainment designation and becoming subject to EPA's 8-hour ozone implementation rules.

C. Before formal adoption into the SIP, this agreement may be modified or terminated by mutual consent of all signatory parties, or any party may withdraw from the agreement. The local government signatories will approve the CAAP before it is submitted to ODEQ for inclusion in the SIP. Once the CAAP is incorporated into the SIP, any modifications will be treated as SIP revisions.

D. This EAC may be executed in multiple counterparts. The last signature date of the EAC is the start date of the agreement's term, and the agreement remains in effect until December 31, 2007.

II. Local Government and ODEQ Responsibilities

The local governments, represented by INCOG, agree to develop and implement a CAAP that will demonstrate attainment of the 8-hour ozone standard by year's end 2007 and maintenance until at least 2012. Development of this plan will be in coordination with ODEQ, EPA, stakeholders and the public. Critical to the development of this CAAP, is the air quality photochemical modeling results and emission reduction measure evaluations to be provided by ODEQ within the performance milestones. The CAAP will include a process to monitor and maintain long-term compliance with the standard. It will be submitted to ODEQ and EPA for review by March 31, 2004. ⓘ.

In the event a development or issue arises that may impact performance or progress toward milestones (including if a milestone will be or has been missed and/or if a termination or modification has been requested), INCOG or the signatory party responsible will notify all other signatories as soon as possible.

A. Milestones and Reporting

1. Milestones

EAC CAAP Milestones	
December 31, 2002	EAC signed by all parties ⓘ
June 16, 2003	Potential local emission reduction control strategies identified and described ⓘ
December 31, 2003	Initial modeling emissions inventory completed
	Conceptual modeling completed
	Base case modeling completed
[redacted]	
March 31, 2004	Attainment maintenance analysis completed
	Schedule for development of further episodes completed
	One or more modeled control cases completed
	Local emission reduction strategies selected
	Submission of CAAP to ODEQ and EPA
[redacted]	
December 31, 2004	CAAP adopted and incorporated into the SIP ⓘ
[redacted]	
December 31, 2007	Attainment of the 8-hour standard

2. Reporting ⓘ

In order to facilitate self-evaluation and communication with EPA, ODEQ, stakeholders, and the public, the ODEQ will assess and report progress towards

milestones in a regular, public process, at least every six months, beginning with a biannual report in June 2003. The June 2006 report specifically will document that the area continues to implement its control measures and emission reductions attributed to local measures are being achieved.

B. Emissions Inventories

1. An **initial modeling emissions inventory,** ⓘ will be developed by ODEQ by December 31, 2003. This inventory will include:
   a. Emissions modeling data for a 1999 or later episode that is representative of a typical ozone season exceedance and meets EPA episode selection guidance ⓘ;
   b. MOBILE6 data with link based Travel Demand Model (TDM) mobile data in urban areas ⓘ;
   c. NONROAD model data adjusted for local equipment populations and usage rates ⓘ;
   d. Area source data, based on local survey data, when possible. ⓘ

2. A 2007 **future year modeling emissions inventory** ⓘ will be developed by ODEQ by February 1, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.

3. **One further episode inventory,** ⓘ also developed by ODEQ will represent the variety of situations that typically contribute to ozone production in the area and to include the most recent emissions modeling methods and data. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
   a. The conceptual model will be updated by December 31, 2003.
   b. A schedule for the development of further episode inventories will be completed by March 31, 2004.

4. Emissions inventories will be compared and analyzed for trends in emission sources over time. ⓘ The **emissions inventory comparison and analysis** will be completed by February 1, 2004.

C. Modeling ⓘ

1. Modeling will be developed and provided by ODEQ. **Base case modeling** will be completed by December 31, 2003 and **future case modeling** will be completed by February 1, 2004. One or more **modeled control cases** will be

completed by March 31, 2004, with final revisions completed by May 31, 2004. All modeling:

a. Will be SIP quality consistent with EPA modeling guidance and perform within EPA's accepted margin of accuracy;
b. Will be carefully documented;
c. Will sufficiently account for projected future growth in ozone precursor emissions;
d. Will be accomplished by ODEQ with technical support and concurrent review by the local area stakeholder group, and concurrently reviewed by EPA;
e. Will be used to determine the effectiveness of NOx and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Emission Reduction Strategies ⓘ

1. All adopted Federal and State emission reduction strategies that have been or will be implemented by the December 31, 2007 attainment date will be included in base, future and control case modeling.
2. Additional local emission reduction strategies under consideration for inclusion in the CAAP will be identified and described by June 16, 2003.
3. Additional local emission reduction strategies needed to demonstrate attainment for the TTMA December 31, 2007 will be selected by March 31, 2004, with final revisions completed by May 31, 2004. The selected local strategies will be implemented as soon as practical, but no later than December 31, 2005.
4. Local emission reduction strategies will be specific, quantified and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
5. Voluntary strategies can play a supporting role in the CAAP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the CAAP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
6. Local emission reduction strategies will be designed and implemented by the community with stakeholder participation.
7. Local emission reduction strategies will be incorporated by the state into the SIP no later than December 31, 2004. In the event that the region desires to add, delete or substitute strategies after SIP submittal, the region will request a modification. CAAP modifications will be treated as SIP revisions and facilitated by the state.

E. Maintenance Plan for Growth ⓘ

1. The CAAP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the area will remain in attainment of the 8-hour standard during that period. Attainment maintenance analysis will be completed by March 31, 2004, with final revisions completed by May 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
   a. Modeling analysis showing ozone levels below the 8-hour standard in 2012;
   b. An annual review of growth (especially mobile and stationary source) to ensure emission reduction strategies and growth assumptions are adequate;
   c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates.

2. A continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions) will be conducted concurrent with the tracking and reporting process for the CAAP. This update and verification will be an ongoing process between the signatories, stakeholders and the public. Modeling updates and planning processes must consider and evaluate:
   a. All relevant actual new point sources;
   b. Impacts from potential new source growth; and
   c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.

3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the CAAP.

4. In the event that the continuing planning process identifies the need to add, delete, or substitute emission reduction strategies after the CAAP has been incorporated into the SIP, the local area will initiate, and ODEQ will facilitate a SIP revision to accommodate changes.

F. Public Involvement ⓘ

1. Public involvement will be conducted in all stages of planning by the signatory parties, with assistance from the INCOG Air Quality Committee Stakeholders. Outreach may include one or more of the following techniques: stakeholder

meetings, public meetings and presentations, websites, print advertising and radio.

2. Public education programs will be used to raise awareness regarding issues, opportunities for involvement in the planning process, implementation of emission reduction strategies, and any other issues important to the area.
3. 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. CAAP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Public comment on the proposed final CAAP will follow the normal SIP revision process as implemented by the State.
5. Semi-annual reports detailing, at a minimum, progress toward milestones, will be publicly available and be a prominent source of information determining the completion of milestones. The June 2006 semiannual report will provide the implementation status of all local control measures included in the CAAP and adopted into the ODEQ SIP revision for the Tulsa MSA.

III. The Oklahoma Department of Environmental Quality

The state, represented by ODEQ, will partner in the development of the CAAP planning and implementation process through:

1. The development of emission inventories, modeling process, trend analysis and quantification and comparison of emission reduction strategies;
2. Providing regular reviews of emissions inventory and modeling development, and emission reduction strategy modeling;
3. Providing support and the necessary information on all Federal and State adopted emission reduction strategies which affect the area;
4. Providing technical and strategic assistance in the local area selection and implementation of emission reduction strategies;
5. Modeling development, and technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date;
6. Maintenance of monitors and reporting and analysis of monitoring data;
7. Support for public education efforts;
8. Coordinate communication between local areas and EPA to facilitate continuing EPA review of local work;
9. Expeditious review of the locally developed CAAP, and if deemed adequate, propose modification of the SIP to adopt the CAAP;
10. Adoption of emission reduction strategies into the SIP as expeditiously as possible. The final complete SIP revision must be completed, adopted, and submitted by the state to EPA by December 31, 2004. The SIP revisions will include a demonstration that the area will attain the 8-hour ozone standard by December 31, 2007.

IV. The Environmental Protection Agency

1. The EPA will provide technical assistance to the state and local area in the development of the early action plan.
2. 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.
3. When EPA makes its initial 8-hour ozone NAAQS designations, 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.
4. Provided that the monitors in the area reflect attainment by December 31, 2007, EPA will move expeditiously to designate the area as attainment and impose no additional requirements.

5. 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 re-designation if necessary) will become effective soon after. The state will then submit a revised SIP for areas designated nonattainment according to the Clean Air Act (CAA) and available guidance on implementation of the 8-hour ozone standard. The EPA will offer such an area no delays, exemptions or other favorable treatment because of its previous participation in this program.
6. If the area violates the standard as of December 31, 2007, and the area has had the effective date of its nonattainment designation deferred, EPA will take action to withdraw the deferred effective date, and the area's nonattainment designation will become effective soon after. The state will then submit a revised attainment demonstration SIP revision according to the Clean Air Act (CAA) and EPA's 8-hour implementation rule, unless the 8-hour implementation schedule requires SIPs 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 EPA extend the attainment date for the area beyond that required by the CAA and/or EPA's 8-hour implementation rule.
7. The region will not be allowed to renew this EAC after December 31, 2007, or to initiate a new compact if it has previously forfeited its participation.

Signatures:

Chair
INCOG Board
Date

Mayor, City of Tulsa
Date

Chair
INCOG Air Quality Committee
Date

President
Tulsa Metro Chamber
Date

Scott Thomas for Caddie Terrill

Director of Air Quality
Oklahoma Department of
Environmental Quality
Date

12-23-0

Gregg A. Cooke
Administrator, Region 6,
US Environmental Protection Agency
Date

APPENDIX A

PROTOCOL FOR EARLY ACTION COMPACTS
DESIGNED TO ACHIEVE AND MAINTAIN THE 8-HOUR OZONE STANDARD

Purpose of Compact

Early voluntary 8-hour air quality plans can be developed through a Compact between Local, State and EPA officials for areas that are in attainment 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 are 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 earlier than 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 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/or designation requirements so long as all Compact terms and milestones are met; and
- Safeguards to return areas to traditional SIP attainment 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 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;
- 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 mandatory standard SIP processes (which will be developed under EPA's 8-hour implementation rulemaking). Such an area will be subject to the same requirements and deadlines, which would have been effective had it not participated in this program, with no preferential delays or exemptions from 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 non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective immediately. If EPA's implementation schedule also requires Sips from areas on or before December 31, 2007, then a SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008. 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 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.

- 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 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 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 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, including modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must include all relevant actual new point sources in the modeling, and evaluate and account for potential new source growth, as well as updating the modeling of future transportation patterns and their impact on air quality.
- 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 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:

- Draw up the Compact, which embodies the requirements described in Sections A-F, including a time line for milestones.
- The Early Action Compact must be completed and a final version signed by all parties no later than December 31, 2002.
- The early action plan must be complete and adopted as part of the SIP no later than December 31, 2004.
- Notify parties as soon as possible of issues and developments, which may impact performance and progress toward milestones.
- Notify parties as soon as possible if Compact milestones will be missed or have been missed.
- Notify 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 EPA to facilitate continuing 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 no later than December 31, 2004.

EPA

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.

- EPA will provide technical assistance to the state and local area in the development of the early action plan.
- 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 EPA's 8-hour implementation guidelines call for designations, EPA will defer the effective date of nonattainment designation and/or designation requirements for participating areas that are monitoring violation of 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 no later than December 31, 2004.
- Provided that the monitors in the area reflect attainment by December 31, 2007, 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 EPA's 8-hour ozone implementation guidelines. 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 non-attainment designation deferred, and then the area will revert to its designation of non-attainment effective immediately. The state will then submit a revised attainment demonstration SIP revision according to EPA's 8-hour implementation guidelines, unless the 8-hour implementation schedule requires SIP's from 8-hour non-attainment 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 EPA extend the attainment date for the area beyond that required by the 8-hour implementation guidance.
- 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 it participation.