THE EARLY ACTION COMPACT

Background Information

The National Ozone Standards

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 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 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 stiff 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 clean air plan and revisions to it are known as the State Implementation Plan (SIP).

The 1-Hour Standard in Northwestern New Mexico

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. San Juan County has never exceeded the 1-hour standard.

The 8-Hour Standard in Northwestern New Mexico

During the past several years, ozone concentrations have been increasing within San Juan County. Although ozone concentrations have not exceeded the 1-hour NAAQS for ozone, levels have come close to the limit for exceeding the 8-hour NAAQS for ozone. 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, the U.S. District Court for the District of Columbia, PA, and nine environmental groups

agreed on a schedule to promulgate designations by April 15, 2004. Based on recent monitoring data, it is unlikely that San Juan County will be declared a nonattainment area when the formal designations occur in 2004. The area currently is under the 8-hour NAAQS, but may not be able to stay within the limits for the 8-hour standard with impending increases in population and development.

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, San Juan County's design value (averaging 2000, 2001, and 2002) is 76 ppb. Each year this design value will change slightly. Despite annual fluctuations in the design value, elected officials and the citizens of the region understand that long-term air quality will not improve without a concerted emission-reduction effort. The Early Action Compact (EAC) is the region's response.

Protocol for Early Action Compacts

EPA Region 6 endorsed the Protocol for Early Action Compacts (EAC Protocol), which was developed by the Texas Commission on Environmental Quality (TCEQ), 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 or continue to show 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 San Juan County Response

The region is volunteering to participate in the EAC Protocol process to expedite air cleanup for future public health and welfare. The San Juan County 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 county'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 the effective date of a nonattainment designation and related requirements, as long as CAAP 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 a nonattainment designation and revert to the traditional nonattainment requirements, with appropriate credit given for emission reduction strategies already implemented.

EAC Protocol Timeline

The San Juan County 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.

[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 Area Encompassed by the EAC

San Juan County, which is comprised of Farmington, Aztec, Bloomfield, and San Juan County is the planning area for which this EAC is designed.

Signatories and Their Responsibilities

The individuals representing the entities that will sign this EAC are: the mayors for the City of Farmington, the City of Aztec, and the City of Bloomfield; the Chairman of the San Juan County Board of County Commissioners; and appropriate signatories from EPA and NMED. 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 NMED 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, and any deferred effective date of a nonattainment designation would be withdrawn. 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.

San Juan County Early Action Compact

Memorandum of Agreement

This Early Action Compact (EAC) is a Memorandum of Agreement between the local governments representing San Juan County and the cities of Farmington, Bloomfield, and Aztec (collectively, the local governments), the New Mexico Environment Department (NMED) 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 San Juan County 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. 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 may be designated nonattainment according 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 by notifying all parties to this agreement in writing. The local government signatories will approve the CAAP before it is submitted to NMED for inclusion in the SIP. Once the CAAP is incorporated into the SIP, any modifications will be treated as SIP revisions.

D. The 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 Responsibilities

The local governments agree to develop and implement a CAAP that will demonstrate attainment at year's end 2007 of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with NMED, EPA, stakeholders and the public. The CAAP will include a process to monitor and maintain long term

compliance with the standard. It will be submitted to NMED 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), the New Mexico Environment Department or the signatory party responsible will notify all other signatories as soon as possible.

A. Milestones and Reporting

1. Milestones

EAC/CAAP Milestones	
June 16, 2003	Potential local control measures identified and described
December 31, 2003	Initial modeling emissions inventory completed
	Conceptual modeling completed
	Base case modeling completed
February 1, 2004	Future year emissions inventory modeling completed
	Emissions inventory comparison and analysis completed
	Future case modeling completed
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 NMED and EPA
May 31, 2004	Final revisions to modeled control cases completed
	Final revisions to local emission reduction strategies completed
	Final revisions to attainment maintenance analysis completed
	Submission of revised CAAP to NMED and EPA
December 31, 2004	CAAP adopted and incorporated into the SIP
December 31, 2005	Local emission reduction strategies implemented no later than this date
June 30, 2006	Six-month emission reductions progress report submitted by NMED to EPA
December 31, 2007	Attainment of the 8-hour standard

2. Reporting

In order to facilitate self-evaluation and communication with EPA, NMED, stakeholders, and the public, the region 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 that emission reductions attributed to local measures are being achieved to ensure EPA can make a comprehensive assessment of air quality progress in the local area.

B. Emissions Inventories

1. An **initial modeling emissions inventory** will be developed 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 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** will also be developed to 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. **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 with technical support and review by NMED 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 that may be needed to demonstrate attainment for San Juan County by 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, permanent 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. 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 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 NMED 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 Four Corners Ozone Task Force or other appropriate party. Outreach may include one or more of the following techniques: public meetings and presentations, stakeholder meetings, 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 presented and publicly available.

III. The New Mexico Environment Department

The state, represented by NMED, will provide support to areas throughout the planning and implementation process, including:

1. Technical assistance in the development of emission inventories, modeling process, trend analysis and quantification and comparison of emission reduction strategies;
2. Necessary information on all Federal and State adopted emission reduction strategies which affect the area;
3. Critical third party review of emissions inventory, modeling, and self-evaluation work;
4. Technical and strategic assistance, as appropriate, in the selection and implementation of emission reduction strategies;
5. 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 2004. A SIP revision will include a demonstration that the area will attain or continue to show attainment of 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 continue to reflect attainment on December 31, 2007, EPA will move expeditiously to reaffirm the area designation 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 EPA will take action to withdraw any deferred effective date of a nonattainment designation and the area will become subject to applicable statutory requirements. 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 a 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:

Gail Aspromonte
Mayor, City of Aztec

12-20-02
Date

Keith Johnson
Mayor, City of Bloomfield

12-20-2002
Date

William E. Standley
Mayor, City of Farmington

12-20-02
Date

Mark Duncan
Chairman, San Juan County
Board of County Commissioners

12-20-02
Date

John R. D'Antonio, Jr.
Secretary, New Mexico
Environment Department

12/20/02
Date

Gregg A. Cooke
Administrator, Region 6
U.S. Environmental Protection Agency

12/20/02
Date