

**SOUTH CAROLINA'S 8-HOUR OZONE
EARLY ACTION COMPACT**
Williamsburg County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone 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. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Williamsburg County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

I. General Provisions

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of 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. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. 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 non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

Local Plan /Early Action SIP Milestones		
DATE	MILESTONE	RESPONSIBILITY
December 31, 2002	EAC signed by all parties and submitted to EPA	Local/State/EPA
June 16, 2003	Discussion of control measures being considered to EPA	Local/State
March 31, 2004	Final local early action plan submitted to DHEC; copy to EPA	Local
December 31, 2004	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
April 1, 2005	Local/State control strategies implemented no later than this date	Local/State
September 30, 2005	EPA takes final action on SIP submitted December 31, 2004	EPA
June 30, 2006	State submits progress report to EPA	State
December 31, 2007	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
 - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
 - b. MOBILE6 for determining on-road mobile emissions;
 - c. NONROAD model data; and,
 - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 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.
4. 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.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
 - be SIP quality and perform within EPA's accepted margin of accuracy;
 - be carefully documented;
 - sufficiently account for projected future growth in ozone precursor emissions;
 - be accomplished by DHEC and reviewed by EPA; and,
 - be used to determine the effectiveness of NO_x 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. Control Strategies

1. All adopted Federal and State control 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 and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, 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.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 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 ozone standard in 2012;
 - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
 - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
 - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP 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 the following:
 - 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 early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

F. Public Involvement

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at www.scdhec.net/baq/eap.html.

III. Local Government Responsibilities

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

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 must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

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

IV. The South Carolina Department of Health and Environmental Control

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

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

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

V. The Environmental Protection Agency

The EPA will participate by:


1. Recognizing 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 EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is 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 participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures


United States Environmental Protection Agency

Regional Administrator 12-30-02
Title Date


South Carolina
Department of Health and Environmental Control

Deputy Commissioner 12/20/02
Title Date


Williamsburg County Representative

SUPERVISOR DEC 20, 02
Title Date