

**Tennessee and Georgia: Attainment Demonstrations for the Chattanooga,  
Nashville, and Tri-Cities Early Action Compact Areas**  
Effective Update Date: 10/26/05 (08/26/05 70 FR 50199)

**Background of the Plan:** Ozone is formed by a series of chemical reactions involving nitrogen oxides (NO<sub>x</sub>), and volatile organic compounds (VOCs). Ozone and its precursors have many adverse effects on human health, and in order to mitigate these adverse health effects, EPA issued an 8-hour ozone standard on July 18, 1997, and revoked the previous 1-hour ozone standard. On April 30, 2004, EPA designated every county in the United States as unclassifiable/attainment or nonattainment based on the level of ozone present in those areas. Several areas of the United States were found to be very near the cutoff level between attainment and nonattainment, and were also within compliance with the previous 1-hour ozone standard. As a result, several of these communities entered into an agreement between State, local governments, and EPA to implement measures not necessarily required by the Clean Air Act (CAA) to achieve cleaner air as soon as possible, and sooner than required. These areas were designated nonattainment-deferred. This agreement is called an Early Action Compact (EAC), and requires communities who elect to participate, to develop and implement air pollution control strategies, account for emissions growth, and demonstrate attainment by 2007 and maintenance for at least five years of the 1997 8-hour ozone standard. Greater details of the EAC program are provided in EPA's December 16, 2003 proposed Federal Register document entitled "Deferral of Effective Date of Nonattainment Designations for 8-hour Ozone National Ambient Air Quality Standards for Early Action Compact Areas. On December 29, 2004, and December 31, 2004, respectively, the State of Tennessee and Georgia submitted to EPA revisions pursuant to the EAC protocol in order to attain and maintain the 1997 8-hour ozone NAAQS in the Chattanooga, Nashville, and Tri-Cities EAC areas. These areas consist of a total of 19 counties.

**Summary of the Plan:** The Tennessee and Georgia state implementation plan (SIP) revisions rely on an attainment level of emissions of VOCs and NO<sub>x</sub> to maintain the 1997 8-hour ozone standard through a combination of control measures, within the Chattanooga, Nashville, and Tri-Cities EAC areas by 2007, and incorporated the measures developed by these EACs into the Tennessee and Georgia SIP. Specifically, these revisions provide the following items:

1. An attainment demonstration for the 2007-2017 period.
2. A commitment for an interim evaluation in 2008.
3. A commitment to annually track station and highway mobile source emissions starting in 2005.
4. Based on the tracking the growth of stationary and onroad mobile sources, Tennessee commits to adopt and implement additional control measures, as needed from their analyses as expeditiously as practicable, but no later than two years from meeting a triggering condition.
5. A timeline of Actions and submittals for the maintenance plan from December 2004 to December 2017.

The control measures include both stationary and mobile source controls, and the attainment demonstrations were conducted and supported through photo-chemical modeling. A failure to meet any of the commitments or milestones agreed upon through the EAC process will result in EPA taking action to propose and promulgate a finding of failure to meet the milestone, and to withdraw the deferred effective date of the nonattainment designation.

**Projected Design EAC Design Values:**

Tennessee and Georgia EAC Future Design Values (Parts Per Billion)

Area/Monitor	2007	2012	2017
<b>Chattanooga EAC Area</b>			
Sequoyah	84	80	77
Chattanooga	84	79	75
Meigs County	84	80	77
<b>Nashville EAC Area</b>			
Rockland Road	81	79	75
East Nashville Health Center	66	64	61
Percy Priest Dam	75	73	70
Rutherford County	82	79	75
Wright's Farm	82	79	75
Fairview	80	77	74
Lebanon	76	72	69
<b>Tri-Cities EAC Area</b>			
Kingsport	84	81	80
Blountville	83	80	78

**Control Measures:** The Tennessee and Georgia submittals outline State and local measures that have been adopted and implemented, or will be implemented by December 31, 2005, to attain and maintain the 8-hour ozone standard. These measures include controls on both stationary and mobile emission sources. These control measures include but are not limited to the following:

- Expansion of the Motor Vehicle Inspection and Maintenance Program
- Expansion of the Stage 1 Gasoline Vapor Recovery program
- Addition of a Motor Vehicle Tampering Provision
- An Open Burning Ban during the ozone season for the Chattanooga area

**Federal Register:** (70 FR Page 30382, 05/26/06), Attainment Demonstrations for the Chattanooga, Nashville, and Tri-Cities Early Compact Areas – Proposed Rule; (70 FR 50199, 08/26/05), Attainment Demonstrations for the Chattanooga, Nashville, and Tri-Cities Early Compact Areas – Final Rule.

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