

# PRESS BRIEFING: Nonattainment designation and its affect on business growth and development

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## Introduction

- **The Clean Air Act (CAA) requires EPA to set a national standard for ozone.**
  - The Clean Air Act identifies 6 common air pollutants that can injure health, harm the environment, and cause property damage—ozone is one of the 6 pollutants.
  - The pollutants are called criteria pollutants because EPA has developed health-based criteria as the basis for setting the pollutant’s allowable levels.
  - For each of the criteria pollutants, EPA sets a national ambient air quality standard (NAAQS) that applies to the concentration of the pollutant in the outdoor air.
  - EPA’s national standard for ozone is designed to protect the public from exposure to ground-level ozone.
  - Ozone is not emitted directly from sources. Ground-level ozone forms when emissions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) “cook” in the sun. Sources of these pollutants include cars and trucks, power plants, refineries, other large industrial sources, and some natural sources.
  
- **EPA revised the national standard for ozone.**
  - On July 18, 1997, EPA set a revised standard for ozone that is more stringent and measured over a longer period of time (8 hours) than the previous (1 hour) standard that has been in place since 1979.
  - The standard for ozone was revised after research showed that longer-term exposure to lower levels of ozone can also affect human health.
  - Implementation of the revised standard, however, was delayed until 2004 due to a lengthy legal battle.
  - The revised national standard for ozone is .08 parts per million (ppm), averaged over 8 hours.
  
- **EPA designated those areas that do not meet the revised standard as nonattainment for ozone .**
  - By July 15, 2003, state governors and tribal leaders examined the latest ozone air quality data and submitted a recommendation to EPA on what areas are not meeting the revised 8-hour standard for ozone.
  - On April 15, 2004, EPA designated areas in the United States as “unclassifiable/attainment” or “nonattainment” for the revised 8-hour standard for ozone. If air quality in a geographic area met or did better than the standard for ozone, it was designated attainment; areas that did not meet the standard were designated nonattainment.
  - Part or all of 474 counties nationwide were designated nonattainment for either failing to meet the ozone standard or causing or contributing to nonattainment in a downwind county. Although the vast majority of counties in the U.S., 2, 668 in all, meet the revised standard, EPA estimates that some 159 million people live in areas that do not meet the revised standard.
  - EPA then categorized the nonattainment areas according to the severity of their ozone problems. Those nonattainment areas that were attaining the old, 1-hour ozone standard were classified as “basic, subpart 1” under the revised 8-hour standard. All other nonattainment other were categorized under five classifications, ranging from “marginal” to “extreme.”
  - In Tennessee, the nonattainment counties were categorized as follows:

<b>Nonattainment Area Name</b>	<b>Counties</b>	<b>Classification</b>	<b>Maximum Attainment Date <i>(from June 15, 2004)</i></b>
<b>Knoxville</b>	Knox, Anderson, Blount, Jefferson, Loudon, Sevier, Cocke (part)	Basic	June 2009
<b>Memphis</b>	Shelby	Moderate	June 2010
<b>Nashville (EAC)</b>	Davidson, Rutherford, Sumner, Williamson, Wilson	Basic	December 2007
<b>Chattanooga</b>	Hamilton, Meigs	Basic	June 2009
<b>Clarksville-Hopkinsville, KY-TN</b>	Montgomery	Basic	June 2009

Johnson City-Kingsport-Bristol (EAC)	Hawkins, Sullivan	Basic	December 2007
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### Consequences of nonattainment

- **The nonattainment designation, what does it mean?**
  - For areas that do not attain the national standard for ozone, the CAA requires improvements in air quality in the form of a reduction in ozone levels.
  - In order to improve air quality, states must draft or revise a plan known as a state implementation plan (SIP) to improve the air quality in the nonattainment areas. The plan outlines the measures that the state will take in order to improve air quality and specifically sets forth an approach to reducing ozone levels by reductions in emissions of ozone precursors (NO<sub>x</sub> and VOCs).
  - Although EPA has not issued its final rule, it has indicated that most 8-hour ozone nonattainment areas will be required to submit a SIP or SIP revision by April 2007. See table “Ozone Classification, Sample of Requirements.”
- **The CAA requires certain measures for nonattainment areas under traditional nonattainment.**
  - Depending on the area’s classification (basic, marginal, moderate, etc...), the CAA mandates certain air pollution control programs be utilized by a nonattainment areas to help reduce ozone levels.
  - For Example, the CAA requires the use of a New Source Review permit program, including the requirement for offsets, and federal general and transportation conformity.
- **Attainment with the 8-hour standard is required by a specified date.**
  - After designated nonattainment, an area must meet the federally mandated deadline for compliance with the 8-hour standard for ozone. The required attainment dates vary, from 2007 to 2021, and based on the area’s classification. See table “Ozone Classification, Sample of Requirements” for the required attainment dates for each nonattainment area. For Tennessee nonattainment areas, see the classification table above for the required attainment date.
  - In the interim, the nonattainment area must demonstrate to EPA that it is making reasonable further progress toward improving air quality.

### An alternative to traditional nonattainment: Early Action Compacts

- **Introduction:** EPA first embraced an alternative route to attainment with the national ozone standard in June 2002 when it endorsed an Early Action protocol for parts of Texas. Today, this alternative route is called an Early Action Compact (EAC). EACs are signed by representatives of the local community, State and Tribal air quality officials, and EPA Regional administrators. On December 31, 2002, EPA entered into EACs with 33 communities.
- **What is an Early Action Compact?**
  - An EAC is a memorandum of agreement between the local government, that state environmental agency, and EPA. As long as an area meets all the milestones stipulated in the memorandum of agreement, EPA will defer its effective date of nonattainment.
  - It also permits local areas to make their own decisions on what measures will be implemented to achieve reductions in NO<sub>x</sub> and VOCs, precursor pollutants that form ozone.
  - An area that successfully participates in an EAC will not carry the perceived stigma of being labeled a nonattainment area and will not be required to implement federal measures such as new or modified source offsets or transportation conformity. Instead, the area will implement its own locally chosen measures that are federally enforceable after implemented into the state’s SIP.
- **EACs have stipulated milestones, requiring earlier implementation of control measures and attainment with the 8-hour ozone standard.**

- The trade off for the nonattainment deferral and the ability to implement locally chosen measures instead of those federally mandated is that EAC areas must implement control measures and achieve reductions sooner than is required by the CAA.
- Each EAC is required to meet a number of milestones stipulated in the compact. The milestones that remain include:

<b>Submittal Date</b>	<b>Compact Milestone</b>
December 31, 2004	State submits adopted local measures to EPA as a SIP revision that, when approved, will be federally enforceable
2005 Ozone Season (or no later than December 31, 2005)	Implement control measures that have been put into the SIP
June 30, 2006	State reports on implementation of measures and assessment of air quality improvement and reductions in NO <sub>x</sub> and VOC emissions to date
December 31, 2007	Area attains 8-hour ozone NAAQS. Failure to attain by this date will result in the nonattainment designation becoming effective.

- **EPA entered into Early Action Compacts (EAC) with 33 communities.**

- EPA originally entered into EACs with 33 communities. For a full listing of all areas in the United States participating EACs and information relevant to EAC milestones, please visit <http://www.epa.gov/tn/naaqs/ozone/eac/index.htm#List>.
- EPA rejected further participation for three areas (Knoxville, Memphis, and Chattanooga) on April 15, 2004.
- Because EPA felt that these areas did not present as strong of a case as other areas in demonstrating attainment by December 2007, it determined that these areas would follow traditional nonattainment requirements while other EAC areas would continue under this alternative route to attainment.

### **Control measures for traditional nonattainment areas: Limits on expansion and new development**

- **Table “Ozone Classification, Sample of Requirements.”**

- The table provides an indication of what EPA will require for nonattainment areas.
- EPA reports they will promulgate another final rule (phase 2 of the 8-hour ozone implementation) at the end of the summer that will stipulate what specific requirements will be federally mandated in each nonattainment area.

- **New Source Review (NSR) permit program.**

- Nonattainment areas are required to control expansion of existing facilities and the development of new ones if they trigger a certain threshold of emissions in tons per year (tpy). If the modification or new development meets or exceeds the threshold level of pollutant, it is considered a major source and must receive a permit prior to construction. See table “Ozone Classification, Sample of Requirements” for the threshold emissions levels for each nonattainment area.
- As a part of this control, major new development and modifications to existing facilities cannot receive a permit to construct until they comply with certain requirements set out in § 173 of the CAA:
  - Apply the lowest achievable emission rate (LAER) control technology
  - ***Offset new emissions with creditable emission reductions***
  - Provide a net air quality benefit analysis where appropriate
  - Certify that all sources in the State owned and operated by the same owners are in compliance with all applicable emissions limitations and CAA standards
  - Demonstrate, through an alternative siting analysis, that the benefits of the proposed source significantly outweigh the environmental and social costs resulting from the source’s location, construction, or modification
  - Provide an opportunity for public comment on the permit

- **NSR Offsets.**

- NSR offsets are emissions reductions obtained by the owner or operator proposing to construct a new major source, or proposing to construct a major modification of an existing source, in a nonattainment area.
- The amount of offsets (in tpy) must equal or exceed the amount of the emissions increases at the proposed new or modified source.
- EPA uses an offset ratio to let businesses know how large the offset must be in comparison to the emissions increases at the new or modified source. The offset ratios for Tennessee areas undergoing traditional nonattainment are:
  - Knoxville: at least 1 to 1
  - Memphis: 1.15 to 1
  - Chattanooga: at least 1 to 1
- § 173(c) of the CAA stipulates that sources must generally comply with the offset requirement by obtaining emissions reductions of the air pollutant from the same source or other sources in the same nonattainment area. A state may allow a source to obtain emissions reductions in another nonattainment area if:
  - The other area has an equal to or higher classification; AND
  - Emissions from the other source contribute to a violation of NAAQS in the nonattainment area in which the source seeking the permit is located
- To use an emission reduction as an NSR offset, it must be:
  - Quantifiable
    - Reliably and replicably measured
    - Emissions reductions must be calculated from the time period for which the reductions will be used
    - In some cases, estimated emissions reductions may need to be discounted by 10 percent to address uncertainties associated with predicting the emissions reductions
  - Surplus
    - Emissions reductions are surplus as long as they are not otherwise relied on to meet other applicable CAA requirements such as:
      - A technology-based requirement, including RACT, BACT, LAER, BART, NSPS limits, or NESHAP limits
      - Demonstration of transportation conformity
      - Compliance with reasonable further progress requirement
      - Any other applicable CAA requirement
  - Federally enforceable
    - Control measures must be made federally enforceable through one of the following:
      - A SIP or SIP revision
      - A transportation conformity determination (for trucks only), or
      - A permit issued under a SIP-approved permitting program
    - Emission reductions approved under EPA's voluntary measures policy reductions may not be used for NSR offsets
  - AND Permanent
    - The emissions reductions must be permanent throughout the term that the emissions reduction is used.
    - The NSR offset requirement must be met for the life of the new source, but the offsets are not required to come from the same source or sources the entire time.
    - Short term credits: Any emissions reductions that do not last as long as the emissions reduction requirement must usually meet additional requirements (some will necessitate additional provisions in the NSR permitting program). For example, a new source may be required to obtain emissions reductions sufficient for a minimum number of years (e.g., 5 years), both initially and at each renewal.

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