

US EPA ARCHIVE DOCUMENT



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

March 11, 2009

Ira W. Leighton
Acting Regional Administrator
U.S. Environmental Protection Agency, Region 1
One Congress Street, Suite 1100
Boston, MA 02114-2023

Dear Acting Regional Administrator Leighton:

On March 12, 2008, the U.S. Environmental Protection Agency (EPA) revised the National Ambient Air Quality Standard (NAAQS) for ozone, lowering it from 0.08 parts per million (ppm) to 0.075 ppm. I am responding to EPA's December 4, 2008 letter to Governor Deval Patrick requesting Massachusetts' recommendations concerning its attainment status under the revised ozone NAAQS.

Massachusetts air quality data for the 2005-2007 three-year period indicate that ozone concentrations exceed the 2008 ozone NAAQS at monitors across the state. Therefore, I recommend that EPA designate Massachusetts as non-attainment statewide.

I also recommend that the Commonwealth continue to have two non-attainment areas, western and eastern Massachusetts, as follows:

- A western Massachusetts non-attainment area comprising Berkshire, Franklin, Hampden, and Hampshire counties.
- An eastern Massachusetts non-attainment area comprising Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester counties. The eastern Massachusetts non-attainment area should not include the state of Rhode Island and southern New Hampshire. Although all of Rhode Island and parts of southern New Hampshire are within the Boston-Worcester-Manchester-MA-RI-NH Combined Statistical Area (CSA), a multi-state non-attainment area is more complex for states to administer and will not result in any air quality benefit.

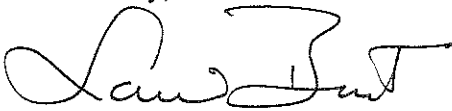
I am attaching documentation to support these recommendations, including certified air monitoring data for 2005, 2006 and 2007 (Attachment 1) and Massachusetts' rationale for the recommended area boundaries (Attachment 2).

Massachusetts has made significant progress in reducing ozone levels and will continue to aggressively control its sources of ozone precursors. We will continue our active participation in the Ozone Transport Commission, the New England Governors' Conference, and the Northeast States for Coordinated Air Use Management, in which regional approaches to complex regional air quality problems, such as ozone, can best be formulated. However, the states cannot meet EPA's health-based air quality standards on their own. Strong national leadership is needed given the pervasive and widespread nature of air pollution. I urge EPA to recognize the importance of transport of ozone and other pollutants from upwind states and to adopt national control measures and strategies to minimize the impact of transport on Massachusetts and other downwind states. Such action by EPA is necessary to insure that states are able to meet the NAAQS in the time periods prescribed under the Clean Air Act.

If you require further information in support of these recommendations, please contact Barbara Kwetz (617-292-5882). An electronic copy of this material is being provided to your staff.

I look forward to continuing to work with you to improve environmental quality in Massachusetts.

Sincerely,



Laurie Burt
Commissioner

Enclosures

Cc: Governor Deval L. Patrick
Governor John Lynch
Governor Donald L. Carcieri
Secretary Ian A. Bowles

ATTACHMENT 1

MASSACHUSETTS 2005-2007 MONITORED OZONE DATA

In order to develop the Governor's recommendation on Massachusetts' attainment status for the 2008 National Ambient Air Quality Standard (NAAQS) for ozone, the Massachusetts Department of Environmental Protection analyzed certified data from its ozone air-monitoring network for the three-year period 2005-2007, the years for which EPA has requested the states base their recommendations.

Data Requirements for the 2008 Ozone Standards

The 2008 ozone NAAQS is based on a three-year averaging period. The level of the 2008 ozone standard is 0.075 parts per million (ppm). A monitor is in violation of the standard if the three-year average of the annual fourth-highest daily maximum eight-hour value (the design value) is 0.075 ppm or greater.

Summary of Monitored Data

The table below summarizes the certified ozone data collected by the Massachusetts monitoring network for the three-year period 2005-2007. Thirteen monitors recorded ambient ozone data for the required three-year period used to determine compliance with the standard. As reflected below, the design value at 12 of the 13 monitoring sites violated the 2008 ozone standard (0.075) during 2005 through 2007.

Monitoring Site	EPA AQS code	Data Capture 2005	Data Capture 2006	Data Capture 2007	Data Capture 2005-2007	Design Value (ppm)	Site Violates Ozone Standard
Western MA							
Adams	25-003-4002	86	93	79	86 ¹	.081	Y
Amherst	25-015-0103	96	99	98	97	.077	Y
Chicopee	25-013-0008	96	99	99	98	.092	Y
Ware	25-015-4002	93	94	97	94	.087	Y
Eastern MA							
Milton	25-021-3003	97	95	99	97	.086	Y
Fairhaven	25-005-1002	95	95	98	96	.080	Y
Lynn	25-009-2006	98	97	98	97	.084	Y
Newbury	25-009-4004	100	97	97	98	.079	Y
Haverhill	25-009-5005	99	98	99	98	.080	Y
Roxbury	25-025-0042	98	98	99	98	.068	N
Stow	25-017-1102	98	100	100	99	.081	Y
Truro	25-001-0002	98	98	94	96	.084	Y
Worcester	25-027-0015	98	94	99	97	.083	Y

¹ Although the data capture for the 3-year period is less than 90% at this monitor, the data is included because the 3-year fourth highest 8-hour concentration exceeds the standard.

ATTACHMENT 2

RATIONALE FOR MASSACHUSETTS' BOUNDARY RECOMMENDATIONS

EPA Guidance

EPA guidance¹ concerning the boundaries for non-attainment areas states that the Core Based Statistical Area (CBSA)² or Combined Statistical Area (CSA - 2 or more adjacent CBSAs) associated with the violating monitor(s) serve as the starting point or "presumptive" boundary for considering the geographic boundaries of an ozone non-attainment area. The presumptive boundary is not binding, however. The guidance states that non-attainment areas should be evaluated on a case-by-case basis and that area-specific analyses may support boundaries that are larger or smaller than the presumptive area starting point.

EPA guidance identifies a number of factors³ that should be considered in a determination of area boundaries but notes that areas may identify and evaluate other relevant factors or circumstances specific to a particular area. States may submit additional information they believe EPA should consider as relevant to their boundaries.

Massachusetts' Recommendations

Recommendation 1 – Western Massachusetts

The western Massachusetts non-attainment area should consist of Berkshire, Franklin, Hampden, and Hampshire counties.

This boundary recommendation encompasses the Springfield and Pittsfield Metropolitan Statistical Areas, smaller Micropolitan Statistical Areas (North Adams, Greenfield, and Amherst) and all portions of western Massachusetts counties that are not within a metro or micro area. This is the same boundary as the current western Massachusetts non-attainment area for the 1997 ozone standard. Massachusetts believes that this boundary, which is consistent with the presumptive boundaries, is appropriate for the western Massachusetts non-attainment area. It will allow Massachusetts to continue to address emission sources within state borders on a uniform basis and to address ozone in the western part of the Commonwealth on a region-wide basis.

¹ U.S. EPA, Memorandum from Robert J. Meyers to Regional Administrators, Regions I-X, December 4, 2008 - *Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards*.

² Metropolitan and micropolitan statistical areas are defined by the U.S. Office of Management and Budget. "Core Based Statistical Area" (CBSA) is a collective term for both metro and micro areas. A metro area contains a core urban area of 50,000 or more population, and a micro area contains an urban core of at least 10,000 (but less than 50,000) population. Each metro or micro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration with the urban core.

³ Factors EPA identifies include: air quality data; location and contribution of sources; population density; traffic and commuting patterns; growth rate and patterns; meteorology; geography/topography; and jurisdictional boundaries.

Recommendation 2 – Eastern Massachusetts

The eastern Massachusetts non-attainment area should consist of the Massachusetts counties of Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester. Although all of Rhode Island and parts of southern New Hampshire are within the Boston-Worcester-Manchester- MA-RE-NH Combined Statistical Area (CSA), Massachusetts recommends against the creation of a multi-state non-attainment area based on the CSA boundaries.

Discussion: This recommendation differs from the presumptive boundary discussed in EPA's guidance by excluding from the non-attainment area those portions of New Hampshire and Rhode Island that are part of the Boston-Worcester-Manchester-MA-RI-NH CSA. Massachusetts believes that an area-specific evaluation based on the following points supports this recommendation.

1. EPA's guidance indicates that the rationale for the presumptive CSA or CBSA boundary is the need to consider emission controls over a larger area due to the pervasive nature of ozone and the transport of ozone and its precursors. However, this important goal is met if all contributing areas within a CSA are designated as a non-attainment area, with the same ozone classification,⁴ even if they are not within the same non-attainment area. Rhode Island and eastern Massachusetts are likely to be classified by EPA at the same level based on the severity of their ozone violations. If New Hampshire's ozone concentrations place it in a less severe classification than eastern Massachusetts, New Hampshire intends to request that EPA classify its non-attainment area at the same level as eastern Massachusetts. Thus, eastern Massachusetts, Rhode Island and southern portions of New Hampshire will be subject to Clean Air Act control requirements commensurate with their uniform classification.
2. Massachusetts is strongly committed to working with other states within the Ozone Transport Region to address air quality on a regional basis. The Ozone Transport Commission member states are engaged in an ongoing regional attainment planning process for the 2008 ozone standard. That process includes coordinated development of emissions inventories, joint ozone attainment modeling, and the development of recommended control strategies for all states within the OTC. Massachusetts, Rhode Island and New Hampshire are actively engaged in this OTC planning process. Thus, the coordinated planning efforts that would be one of the advantages of a three-state non-attainment area are already in place. In addition, Massachusetts, New Hampshire and Rhode Island will consult with each other, and with Region 1 EPA staff, to identify any additional SIP and attainment issues on which the three states may be able to coordinate.

⁴ Ozone non-attainment areas are classified based on the level of severity of their ozone problem. The Clean Air Act requires certain emission control measures based on classifications. Eastern MA and Rhode Island are "moderate" non-attainment areas under the 1997 standard. EPA will issue classifications for non-attainment areas under the 2008 ozone standard in 2010.

3. The Clean Air Act and State Implementation Plans (SIPs) are designed to be implemented on a state-by-state basis. Each state must prepare its own SIP and conduct public hearings on proposed SIP revisions and adopt controls through its own regulatory process. Thus, state jurisdictional issues support single-state SIPs, unless there is a good rationale for a multi-state area. A rationale clearly exists in areas where a smaller non-attainment boundary might result in less stringent controls in the excluded areas. This is not the case for the MA-RI-NH CSA.
4. A multi-state SIP would be administratively more complex for each of the three states and require the commitment of additional staff resources. This is particularly true in Massachusetts because it has two non-attainment areas. Preparing one State Implementation Plan that covers the eastern and western Massachusetts non-attainment areas will require less staff time than preparing one SIP for western Massachusetts and a separate multi-state SIP for eastern Massachusetts. Under present budgetary constraints, the use of limited staff resources is an important consideration.

Conclusion: EPA's guidance for setting area boundaries supports the creation of areas that are large enough to include within the non-attainment area all sources (mobile, point and area) that contribute to non-attainment. When emissions sources are already subject to Clean Air Act controls commensurate with the same ozone classification, and the states are already engaged in multi-state ozone attainment planning, this goal has been met. EPA's guidance acknowledges that area-specific analyses may support boundaries that are larger or smaller than the CSA presumptive boundary and that area-specific factors and circumstances will be taken into account. The factors and circumstances specific to the MA-NH-RI CSA discussed above support Massachusetts view that an eastern Massachusetts non-attainment area that includes only the portions of the CSA within Massachusetts' boundaries is warranted and preferable.