US EPA ARCHIVE DOCUMENT

STATE OF CONNECTICUT
EXECUTIVE CHAMBERS
HARTFORD, CONNECTICUT
06106

JOHN G. ROWLAND
GOVERNOR

June 24, 2003

Linda Fisher, Deputy Administrator
U. S. Environmental Protection Agency
Ariel Rios Building, 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Eight Hour Ozone National Ambient Air Quality Standard Recommended Designations for Connecticut

Dear Deputy Administrator Fisher:

Pursuant to section 107(d)(1) of the Clean Air Act (CAA) and section 6103(a) of the Transportation Equity Act for the 21st Century (TEA-21), the Environmental Protection Agency (EPA) requested that by July 15, 2003 Governors submit recommendations regarding attainment designations and geographic boundaries for the eight-hour ozone national ambient air quality standards (NAAQS). This standard was promulgated in 1997 and after years of litigation was recently upheld by the United States Supreme Court. Following states recommendations, EPA plans to promulgate designations by April 15, 2004.

Section 107(d)(1) of the CAA requires areas to be designated nonattainment if they do not meet the NAAQS or contribute to ambient air quality in a nearby area that does not meet the standard. EPA guidance[1] recommends that metropolitan areas (identified by the federal Office of Management and Budget based on U.S. Census Bureau data) serve as the presumptive boundaries for 8-hour nonattainment areas. As described in the enclosed package, available air quality data indicate that all of Connecticut currently exceeds the 8-hour ozone NAAQS. Based on these data, and consistent with county boundaries, I recommend that two separate 8-hour ozone nonattainment areas be established in Connecticut (see the attached figure):

1) "Southwest Connecticut", including all of Fairfield, New Haven and Middlesex Counties, as part of a larger multi-state nonattainment area with metropolitan New York and northern New Jersey; and
2) "Greater Connecticut", including the remaining counties in Connecticut (i.e., Litchfield, Hartford, Tolland, Windham and New London Counties).

Consistent with Connecticut's use of county boundaries, I also recommend that:

1) The Rhode Island portion of the New London Metropolitan Statistical Area (MSA) be excluded from the Greater Connecticut 8-hour ozone nonattainment area; and
2) The Connecticut portion of the Boston-Worcester-Lawrence Consolidated Metropolitan Statistical Area (CMSA) (i.e., the Town of Thompson) be included with the Greater Connecticut 8-hour ozone nonattainment area.

[1] "Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standards (NAAQS or Standard)"; Memorandum from John Seitz, Director, Office of Air Quality Planning and Standards to EPA Regional Air Directors; March 28, 2000.

It is my understanding that these variances from the respective MSA and CMSA boundaries are consistent with the recommended boundaries being submitted by the States of Rhode Island and Massachusetts.

In addition to the above recommendations for the State of Connecticut, I have instructed the Department of Environmental Protection (DEP) to review and comment, as appropriate, on the 8-hour ozone nonattainment designations and boundaries proposed by other states. For example, it is our understanding that New Jersey will be recommending that the Ocean County portion of the New York City CMSA be included with the Philadelphia nonattainment area. This is appropriate, given that Ocean County is immediately downwind from Philadelphia on most high ozone days. I have also instructed the DEP to provide further recommendations, as warranted, regarding final boundaries and nonattainment area severity classifications later this year after ozone data from this summer are available.

I would like to emphasize that, although EPA intends to establish 8-hour nonattainment boundaries generally consistent with the boundaries of metropolitan areas, attainment of the ozone NAAQS in Connecticut (and elsewhere in the Northeast) cannot be achieved unless emission reductions are secured over a geographic region much larger than any single nonattainment area. EPA's recent actions requiring regional NOx reductions in the eastern U.S. and tighter national emission limits on motor vehicles and fuels are examples of the types of control programs that will be needed. However, CT remains concerned about our ability to attain and maintain compliance with the more stringent 8-hour ozone standard in the face of overwhelming transported pollution from upwind states and sources. EPA must require, through section 110(a)(2)(D) of the Clean Air Act, that these states address and mitigate their contributions to our poor air quality. Without significant additional reductions upwind, we will continue to experience unhealthy air quality. We will also be forced to continue to have economic inequities in our business sector, as we have to impose expensive control measures on our businesses that are not required in many of the states that are contributing to our unhealthy air quality.

In closing, Connecticut reaffirms its commitment to work with Northeast and other states and EPA to identify and pursue adoption of additional regional emission reductions both within the Ozone Transport Region and in areas further upwind that contribute to unhealthy ozone levels in Connecticut and elsewhere. Although we intend to do our fair share to reduce Connecticut's contribution to unhealthy ozone levels both within our borders and further downwind, we expect EPA to hold all states to a standard that would mitigate their contribution to any other state's ozone problems.

Please contact Anne Gobin, Acting Chief of the Department of Environmental Protection's Bureau of Air Management at (860) 424-3026 with any questions regarding these recommendations. Thank you.

Sincerely,

John G. Rowland

JOHN G. ROWLAND
Governor

JGR/PMB/djw
Attachment (Figure)
Enclosure (Support Document)

c: R. Varney (EPA Region I)
D. Conroy (EPA Region I)
A. Rocque (CTDEP)
A. Gobin (CTDEP)

Technical Support Document

State of Connecticut Recommendations to the U.S. Environmental Protection Agency Regarding 8-Hour Ozone Attainment Designations

Connecticut Department of Environmental Protection
Bureau of Air Management

June 24, 2003

US EPA ARCHIVE DOCUMENT

Technical Support Document

State of Connecticut Recommendations to the U.S. Environmental Protection Agency Regarding 8-Hour Ozone Attainment Designations

(June 24, 2003)

Summary

Pursuant to the Clean Air Act (CAA), the Governor of each State is provided the opportunity to submit recommendations to the Environmental Protection Agency (EPA) regarding attainment/nonattainment designations for new or revised national ambient air quality standards (NAAQS). In July 1997, EPA promulgated a new 8-hour ozone NAAQS. In accordance with section 6103 of the Transportation Equity Act for the 21st Century (TEA-21), EPA was required to designate all areas relative to the new standard by July 2000. Litigation on the validity of the standard proceeded until the Supreme Court issued its decision supporting the 8-hour ozone NAAQS on February 27, 2001. EPA subsequently entered into a consent decree with environmental groups, agreeing to promulgate designations by April 15, 2004. On February 27, 2003 EPA asked Governors and tribal leaders to provide recommendations for 8-hr ozone designations by July 15, 2003.

Based on measured ambient data for the period 2000-2002, all of Connecticut currently exceeds the 8-hour ozone NAAQS. As a result, the entire state must be designated as nonattainment for the new standard. The Governor's recommendation regarding geographic boundaries is to establish two separate 8-hour nonattainment areas in Connecticut:

1 "Southwest Connecticut", including all of Fairfield, New Haven and Middlesex Counties, as part of a larger multi-state nonattainment area with metropolitan New York and northern New Jersey; and

2) "Greater Connecticut", including the remaining counties in Connecticut (i.e., Litchfield, Hartford, Tolland, Windham, and New London Counties).

The recommended boundaries are consistent with New England County Metropolitan Area (NECMA) boundaries identified by the federal Office of Management and Budget with the exception that Middlesex County is included with Southwest Connecticut rather than with Greater Connecticut.

Background Information

On July 18, 1997, the EPA revised the ozone NAAQS by adding a standard for 8-hour averaging periods. The EPA established the 8-hour ozone NAAQS at a level of 0.08 parts per million (ppm). An area is in compliance with the NAAQS when the 3-year average of the annual 4th-highest daily maximum 8-hour ozone concentrations (i.e., the design value) does not exceed the standard at any monitoring site in the area.

Technical Support Document

State of Connecticut Recommendations to the U.S. Environmental Protection Agency Regarding 8-Hour Ozone Attainment Designations

(June 17, 2003)

Summary

Pursuant to the Clean Air Act (CAA), the Governor of each State is provided the opportunity to submit recommendations to the Environmental Protection Agency (EPA) regarding attainment/nonattainment designations for new or revised national ambient air quality standards (NAAQS). In July 1997, EPA promulgated a new 8-hour ozone NAAQS. In accordance with section 6103 of the Transportation Equity Act for the 21st Century (TEA-21), EPA was required to designate all areas relative to the new standard by July 2000. Litigation on the validity of the standard proceeded until the Supreme Court issued its decision supporting the 8-hour ozone NAAQS on February 27, 2001. EPA subsequently entered into a consent decree with environmental groups, agreeing to promulgate designations by April 15, 2004. On February 27, 2003 EPA asked Governors and tribal leaders to provide recommendations for 8-hr ozone designations by July 15, 2003.

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When a new or revised NAAQS is promulgated, Section 107(d)(1) of the CAA enables Governors to submit a list of all areas in their state, designating each as nonattainment, attainment, or unclassifiable based on available information. The CAA provision allows up to one year after promulgation of a new or revised NAAQS for Governors to make designation recommendations (i.e., by July 18, 1998 for the new 8-hour ozone NAAQS). However, this provision was superceded by section 6103(a) of the Transportation Equity Act for the 21st Century (TEA-21), which provided Governors with an additional year (i.e., by July 18, 1999) to make recommendations for the new 8-hour standard. Based on available data, Governor Rowland made initial recommendations to EPA on July 14, 1999 that the entire State be designated as nonattainment for the 8-hour standard. In addition, in light of the May 14, 1999 remand of the standard by the U.S. Court of Appeals for the District of Columbia Circuit, Governor Rowland indicated that his specific recommendations regarding nonattainment area boundaries would be withheld until EPA issued further guidance on the issue.

EPA issued additional guidance regarding 8-hour ozone designations on March 28, 2000 ("Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standards (NAAQS or Standard)"; Memorandum from John Seitz, Director, Office of Air Quality Planning and Standards to EPA Regional Air Directors; March 28, 2000). EPA's presumption is that 8-hour ozone nonattainment area boundaries should reflect the boundaries of the applicable Metropolitan Statistical Area or the Consolidated Metropolitan Statistical Area (C/MSA). States may request that a nonattainment area be expanded or contracted relative to these presumptive boundaries, provided adequate justification is presented as part of the Governor's designation recommendation. The guidance requested that Governors submit their recommendations for 8-hour nonattainment boundaries by June 30, 2000. Governor Rowland re-submitted Connecticut's recommendations in a letter dated July 21, 2000. However, due to litigation, the due date was postponed further until a recent consent decree with environmental groups, which has resulted in EPA's request for recommendations by July 15, 2003.

Current Connecticut C/MSA boundaries (identified by the federal Office of Management and Budget (OMB) using U.S. Census Bureau data from the 1990 census) are depicted in Figure 1. Connecticut contains all, or portions, of four metropolitan areas:

1) The Connecticut portion of the New York-Northern New Jersey-Long Island CMSA;

2) The Hartford CMSA;

3) The Connecticut portion of the New London CMSA (which also includes the two bordering towns of Westerly and Hopkinton in Rhode Island); and

4) The Connecticut portion of the Boston-Worcester-Lawrence CMSA (Connecticut's portion consists only of the Town of Thompson).

Note, several towns in northwest and eastern Connecticut are not included in any metropolitan area. Furthermore, C/MSA boundaries follow county boundaries (or their equivalent) in all regions of the country except for New England, where cities and towns are used to define

C/MSA boundaries. As described below, such county level boundaries are being proposed for Connecticut.

Recommended Designations and Nonattainment Boundaries for Connecticut

The Connecticut Department of Environmental Protection currently operates 11 ozone-monitoring stations in Connecticut. Figure 2 depicts the ten monitoring network locations operating during the period from 2000 through 2002. Current 1-hour nonattainment boundaries are also displayed. Table 1 summarizes the annual frequency of 8-hour exceedances at these sites, as well as the most recent 8-hour design values.

Design value data for the 2000 through 2002 period exceed the 8-hour ozone NAAQS of 0.08 ppm at all monitoring locations in Connecticut. Current design values range from 0.100 ppm at Middletown and 0.099 ppm at Madison to 0.089 ppm at Groton and 0.090 ppm at East Hartford. The average number of exceedance days over the 2000 through 2002 period ranged from around a dozen days per year in Southwest Connecticut to 6 days per year at Groton and 7 days per year at East Hartford.

In general, both the magnitude of 8-hour design values and the frequency of 8-hour exceedances were more frequent in the proposed Southwest Connecticut nonattainment area than in the proposed Greater Connecticut nonattainment area over the same period. Based on these data, it is recommended that all of Connecticut be designated as nonattainment for the 8-hour ozone NAAQS and that the EPA establish two separate 8-hour nonattainment areas in the state, as depicted in Figure 3:

1 ***"Southwest Connecticut"***, including all of Fairfield, New Haven and Middlesex Counties, as part of a larger multi-state nonattainment area with metropolitan New York and northern New Jersey;

2) ***"Greater Connecticut"***, including the remaining counties in Connecticut (i.e., Litchfield, Hartford, Tolland, Windham, and New London Counties).

The recommended boundaries are generally consistent with EPA's preference that 8-hour nonattainment boundaries reflect those of the corresponding metropolitan areas. Although C/MSA boundaries are not used, the recommended county boundaries are more consistent with the approach used to define C/MSA's in all areas of the country (including the remainder of the New York CMSA) except New England. Furthermore, the use of county-level boundaries will streamline the development of emission inventories, which, under EPA's National Emissions Inventory (NEI) reporting procedures, must be determined on a county-level basis.

Consistent with the use of county boundaries, Connecticut also recommends that:

1) The Rhode Island portion of the New London MSA be excluded from the Greater Connecticut 8-hour ozone nonattainment area; and

2) The Connecticut portion of the Boston-Worcester-Lawrence CMSA (i.e., the Town of Thompson) be included with the Greater Connecticut 8-hour ozone nonattainment area.

Based on discussions with air quality officials from Rhode Island and Massachusetts, these variances from the respective C/MSA boundaries are consistent with the boundaries recommended by each of those States.

Additional Recommendation on Implementation

Although EPA intends to establish 8-hour nonattainment boundaries generally consistent with the boundaries of metropolitan areas, it is important to recognize that attainment of the 8-hour ozone NAAQS in Connecticut (and elsewhere in the Northeast) cannot be achieved unless emission reductions are secured over a geographic region much larger than any single nonattainment area. EPA's recent actions requiring regional NOx reduction in the eastern U.S. and tighter national emission limits on motor vehicles and fuels are examples of the types of control programs that will be needed.

Connecticut reaffirms its commitment to work with the other Northeast states and EPA to identify and pursue adoption of additional regional emission reductions both within the Ozone Transport Region and in areas further upwind that contribute to unhealthy ozone levels in Connecticut and elsewhere in the Northeast. Although we intend to do our fair share to reduce Connecticut's contribution to unhealthy ozone levels both within our borders and further downwind, EPA needs to improve on the procedures it uses to address the ozone transport issue. For example, rather than continuing to separate the State Implementation Plan (SIP) approval process from the transport provisions of the Clean Air Act, EPA should integrate these processes. By directly linking SIP approvals for upwind areas to the transport provisions of section 110(a)(2)(D) of the Act, attainment SIP's for each area would be required to include sufficient controls to mitigate that area's contribution to downwind nonattainment.

Table 1
Eight-Hour Ozone Exceedance Days and Design Values

Monitoring Site (Site ID)	County	Average Number of Exceedance Days (2000-2002)	2000-2002 Design Value[1] (ppm)
Westport (09-001-9003-1)	Fairfield	12.7	.096
Danbury (09-001-1123-1)	Fairfield	11.3	.097
Greenwich (09-001-0017-1)	Fairfield	11.7	.096
Stratford (09-001-3007-1)	Fairfield	11.3	.098
Madison (09-009-3002-1)	New Haven	12.3	.099
Hamden (09-009-9005-1)	New Haven	8.7	.095
Middletown (09-007-0007-1)	Middlesex	11.3	.100
Stafford (09-013-1001-1)	Tolland	8.3	.094
Groton (09-011-0008-1)	New London	5.7	.089
East Hartford (09-003-1003-1)	Hartford	7.0	.090

Note: Shaded areas in the table indicate monitors located in DEP's proposed Southwest Connecticut portion of the NY/NJ/CT multi-state 8-hour nonattainment area. All other monitors are located in DEP's proposed Greater Connecticut 8-hour nonattainment area. The DEP began operating an additional monitor in the town of Cornwall in 2001. This site is located in the proposed Greater Connecticut 8-hour nonattainment area.

[1] The design value is the 3-year average of the annual 4th-highest daily maximum 8-hour ozone concentrations. Monitors with design values equal to or exceeding 0.085 ppm are violating the 8-hour ozone standard.

Figure 1

Metropolitan Statistical Areas in Connecticut

(Identified by Federal Office of Management and Budget)

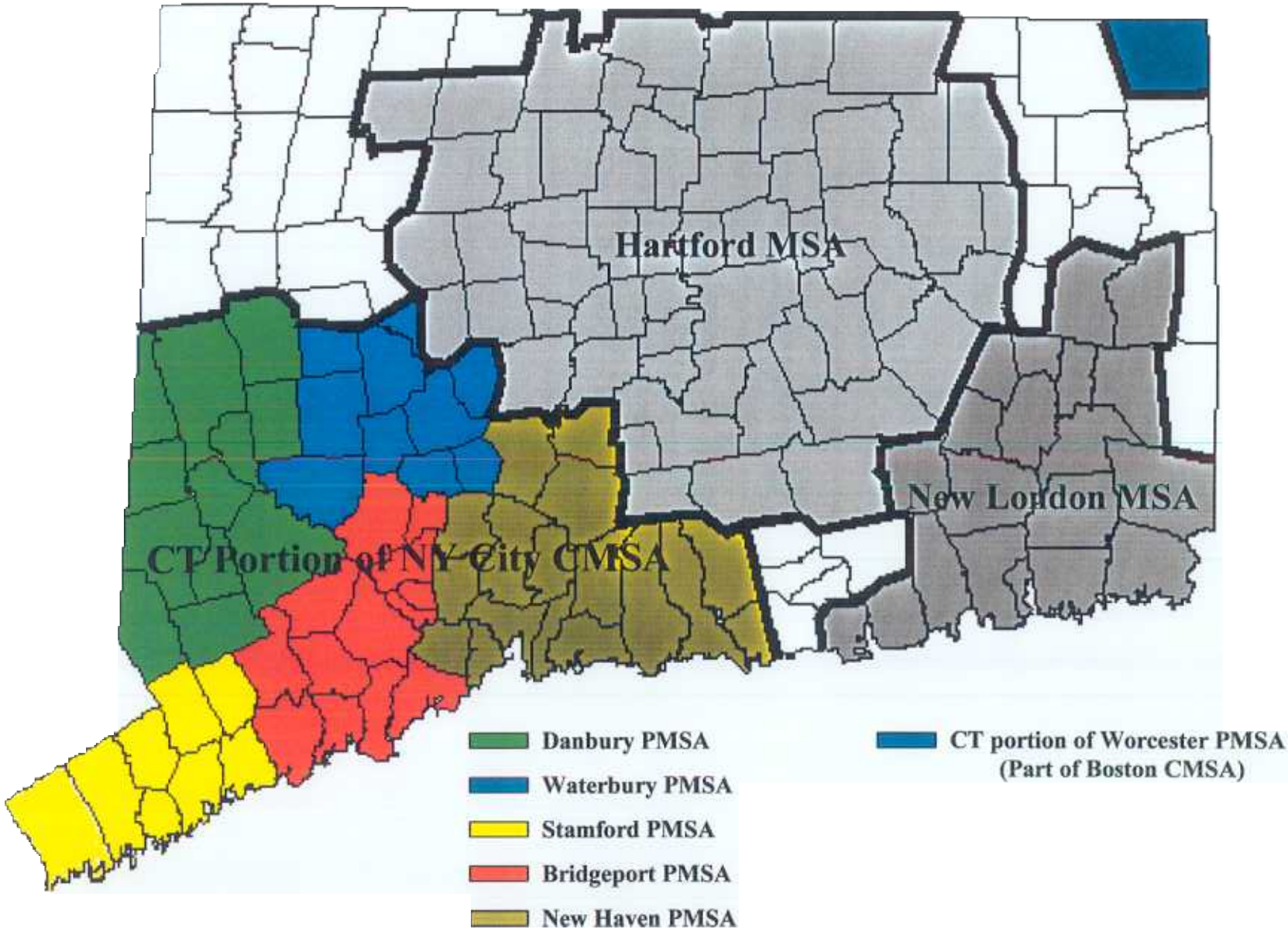


Figure 2
Ozone Monitoring Network (2000 - 2002)

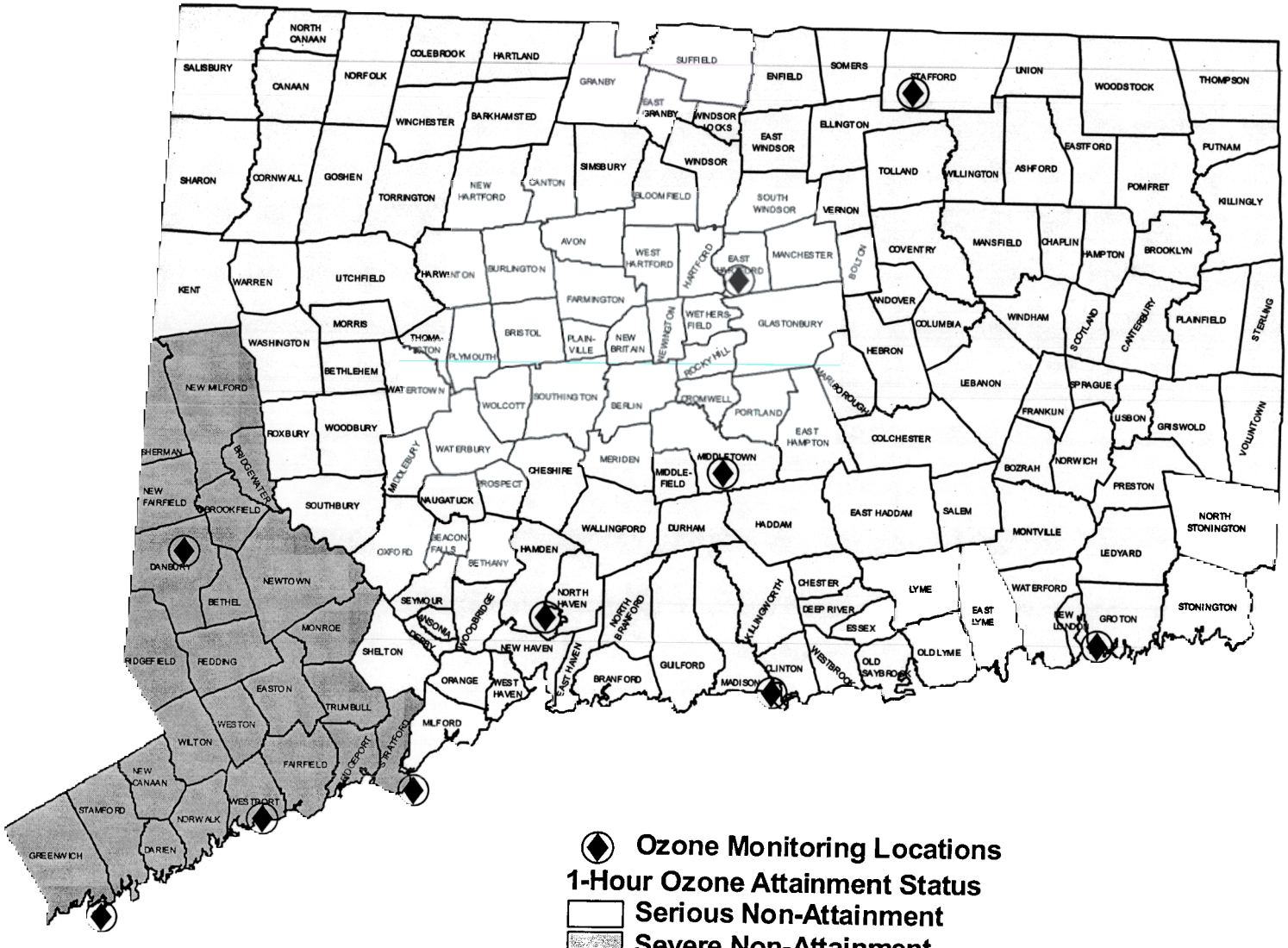
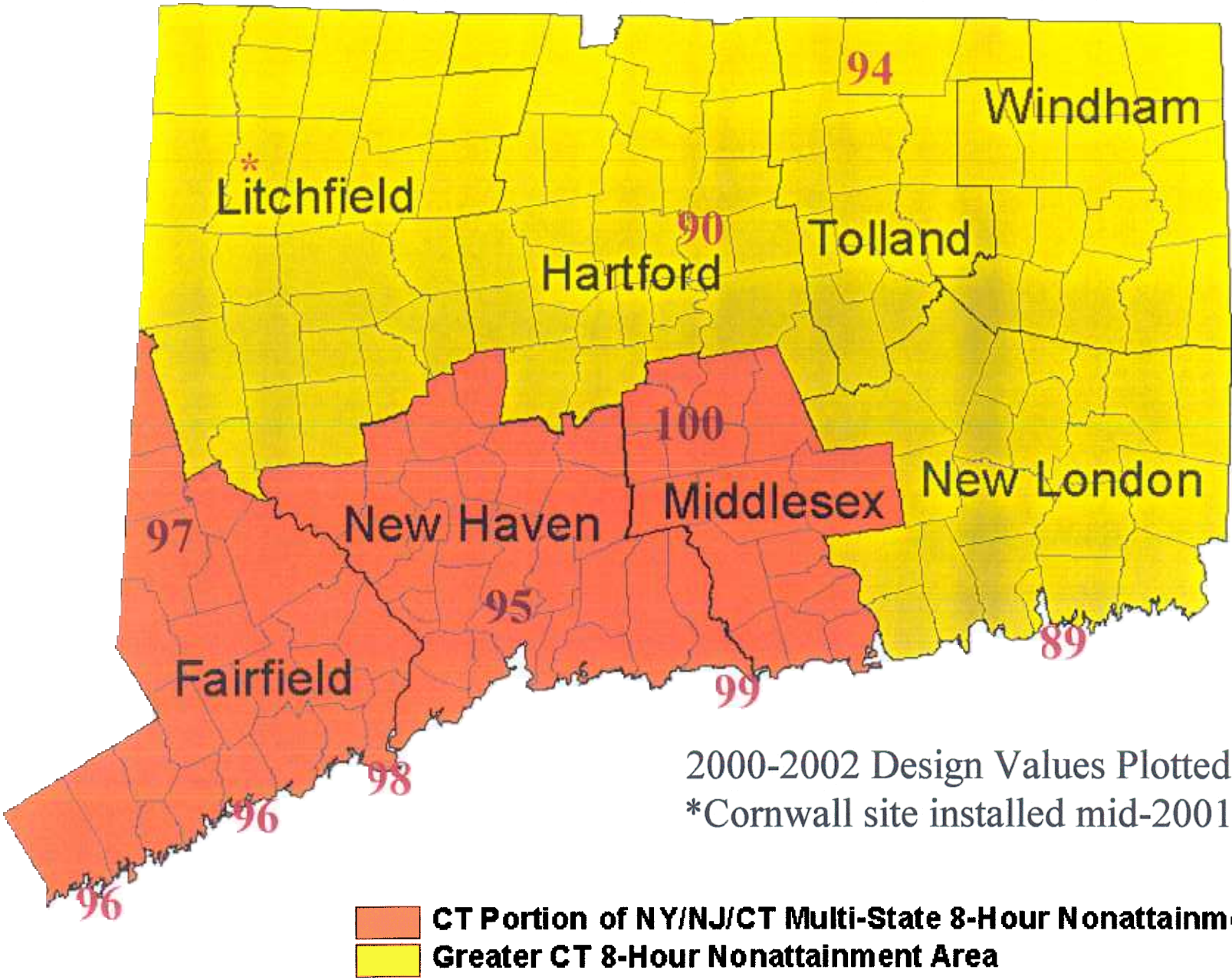


Figure 3

Recommended 8-Hour Ozone Nonattainment Area Boundaries



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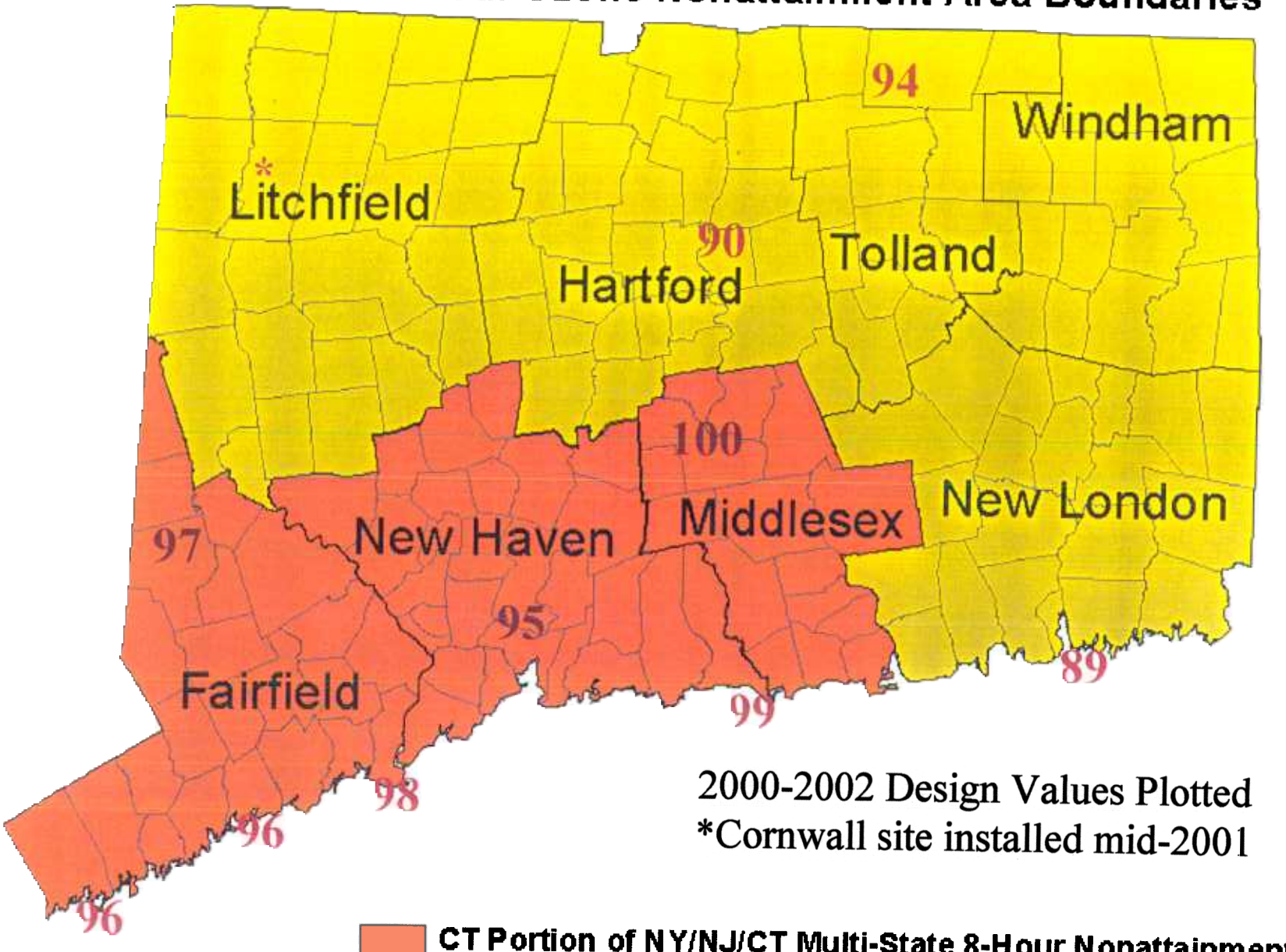
Attachment

Recommended 8-Hour Ozone Nonattainment Area Boundaries



2000-2002 Design Values Plotted
*Cornwall site installed mid-2001

CT Portion of NY/NJ/CT Multi-State 8-Hour Nonattainment Area
Greater CT 8-Hour Nonattainment Area