

## **Connecticut; New York - Northern New Jersey - Long Island Area, Post-1996 Rate-of-Progress**

### **Federal Register Dates:**

June 30, 2000	Notice of Proposed Rulemaking, 65 FR 40560
October 19, 2000	Final Rulemaking, 65 FR 62624

**EPA Approval Date:** The final rule approving the Connecticut portion of the New York - Northern New Jersey - Long Island area post-1996 rate of progress and contingency plans was effective on November 20, 2000.

**State Submittal:** On December 30, 1997, and January 7, 1998, the State of Connecticut formally submitted the post-1996 rate-of-progress (ROP) plan as state implementation plan (SIP) revisions.

### **Background/Prior Action:**

The Connecticut portion of the New York - Northern New Jersey - Long Island area severe ozone area consists of all cities and townships in Fairfield County except Shelton City; and the Towns of Bridgewater and New Milford in Litchfield County.

The post-1996 ROP plan documents how Connecticut complied with the provisions of section 182 (c)(2)(B) of the Federal Clean Air Act (the Act). This section of the Act requires that serious and above ozone nonattainment areas develop rate-of-progress (ROP) plans to reduce ozone forming pollutant emissions by 3 percent a year, averaged over each consecutive 3 year period beginning in 1996, until the area reaches its attainment date. The first set of emission reductions are required to occur between November 1996 and November 1999, and are referred to as post-1996 ROP plan reductions, which will yield an overall reduction of nine percent of the combined 1990 VOC and NOX emission levels.

### **Summary:**

EPA is approving the Connecticut portion of the New York - Northern New Jersey - Long Island area post-1996 rate-of-progress plan as revisions to Connecticut's state implementation plan.

The manner in which states are to determine the required level of emission reductions is described in an EPA guidance document entitled, "Guidance on the Post-1996 Rate-of-Progress Plan and the Attainment Demonstration" (EPA 452-93-015.) The calculation procedure is similar to the one used to determine the 15 percent emission reduction obligation. Table 1 below illustrates the steps Connecticut used to derive its 1999 emission target levels for VOC and NOX. The ROP plan indicates that 1999 projected, controlled emissions are below the target levels for the state's New York - Northern New Jersey - Long Island severe nonattainment areas. The VOC emission values shown in parenthesis reflect subtraction of acetone from the area source categories.

Table 1  
[Units are tons per summer day]

Description	VOC	NOx
Step 1: 1990 Inventory	183.8	116.9
Step 2: Develop Rate-of Progress Inventory (biogenics and non-reactives subtracted).	128.2 (126.1)	116.9
Step 3: non-creditable reductions <sup>1</sup>	8.2 (1.4 of which occurs between 1996-1999).	10.0
Step 4: Calculate required reduction (State will use both VOC and NOx rdxns. to meet post-1996 ROP, as shown).	6.26%, 7.5 (7.4)	2.74%, 2.9
Step 5: Calculate total expected reduction (sum of non-creditable and required 9% reduction.) <sup>2</sup>	1.4 + 7.5 = 8.9 (8.8)	10.0 + 2.9 = 12.9
Step 6: Set Target Level for 1999 <sup>3</sup>	92.9 (93.0)	104.0
Step 7: Project, Controlled Emissions to 1999.	92.9 (93.3)	86.5

<sup>1</sup> States cannot take credit for reductions achieved by Federal Motor Vehicle Control Program (FMVCP) measures (new car emission standards) promulgated prior to 1990 or for reductions resulting from requirements to lower the Reid Vapor Pressure (RVP) of gasoline promulgated prior to 1990.

<sup>2</sup> For VOC, only the FMVCP reductions that accrue between 1996 and 1999 are included in Step 5 because the increment that accrues between 1990 and 1996 is accounted for in development of the 1996 VOC emission target levels.

<sup>3</sup> For NOx, target level = Step 2 - Step 5. For VOC, target level=1996 targets (325.7 for Greater Hartford area) - Step 5.

### Contingency Measures:

Ozone nonattainment areas classified as serious or above must submit to the EPA, pursuant to section 182(c)(9) of the Act, contingency measures to be implemented if an area misses an ozone SIP milestone. Table 1 indicates that Connecticut's post-1996 ROP plans achieve surplus NOx emission reductions. Surplus amounts are calculated by subtracting the NOx target levels in step 6 from the NOx projected, controlled emission levels in step 7. The 17.5 tpsd surplus reductions achieved in the State's portion of the NY-NJ-CT area covers the 3.2 tpsd reduction needed to meet contingency requirements for this area.

Connecticut's contingency plan proposes that 2 tons of excess NOx emission reductions achieved in the Connecticut portion of the New York - Northern New Jersey - Long Island area be applied in the Greater Connecticut serious area to complete that area's contingency obligation.

**Transportation Conformity Budgets:**

A control strategy SIP is required to establish a motor vehicle emission budget which places a cap on emissions that cannot be exceeded by predicted highway and transit vehicle emissions. Post-1996 motor vehicle emission budgets for the year 1999 of 20.5 tons/day volatile organic compounds (VOC), and 39.4 tons/day of nitrogen oxides (NOx) were approved into the SIP.

Connecticut submitted 2002 and 2005 budgets for NOx and VOCs to EPA as a required component of the post-1999 plan. Connecticut also submitted 2007 budgets for NOx and VOCs to EPA as a required component of the attainment demonstration. Since the 2002, 2005 and 2007 budgets are more restrictive, cover a time frame later than the post-1996 ROP plans, and are based on post-1999 and the attainment plan, these budgets take precedence over the 1999 motor vehicle emission budgets. As a result, all new and revised Transportation Plans and Transportation Improvement Programs that require a conformity determination must conform to the 1999 budgets of 20.5 tons/day volatile organic compounds (VOC), and 39.4 tons/day of nitrogen oxides (NOx) for conformity analysis years prior to 2002; conform to 2002 budgets of 15.2 tons/day volatile organic compounds (VOC), and 38.4 tons/day of nitrogen oxides (NOx) for conformity analysis years 2002 up to 2005; conform to MOBILE6.2 2005 budgets of 19.5 tons/day volatile organic compounds (VOC), and 36.8 tons/day of nitrogen oxides (NOx) for conformity analysis years 2005 up to 2007; and, conform to MOBILE6.2 2007 budgets of 16.4 tons/day volatile organic compounds (VOC), and 29.7 tons/day of nitrogen oxides (NOx) for conformity analysis years 2007 and later.

**Identification by rule name and/or number/citation of the regulations that have been approved by EPA as part of the SIP Plan:**

No new state regulations were approved into the Connecticut Implementation Plan as part of the Connecticut portion of the New York - Northern New Jersey - Long Island area Post-1996 Rate-of-Progress Plan.

The Post-1996 Rate-of-Progress Plan and Contingency Plan relied on a number of existing Connecticut State regulations and emission reduction programs including the following:

- National Low Emission Vehicle (NLEV) Program
- Non-CTG RACT
- Stationary Source VOC RACT
- NOx RACT
- Gasoline Loading Racks
- Stage II + Tank Breathing
- Automobile Refinishing,
- Architectural and Industrial Maintenance Coatings
- Cutback asphalt (RE imp.)
- Reform, other gas market
- On-road mobile strategies (I/M, Reform, Tier 1)
- Reform, Off Road

**Other Commitments:**

**EPA Region 1 Contact:** Donald O. Cooke, (617) 918-1668.  
Robert McConnell, (617) 918-1046