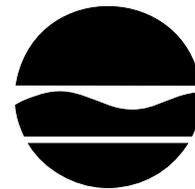


Department of Environmental Conservation  
Division of Air Resources



Joe Martens  
Commissioner

**NEW YORK  
STATE IMPLEMENTATION PLAN**

**NEW YORK METROPOLITAN AREA  
CARBON MONOXIDE  
LIMITED MAINTENANCE PLAN  
FOR 2012 - 2022**

**PROPOSED REVISION**

**DECEMBER 2012**

New York State Department of Environmental Conservation  
*Andrew M. Cuomo, GOVERNOR*

*Joe Martens, COMMISSIONER*

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## Table of Contents

### Acronyms and Abbreviations

#### 1.0 INTRODUCTION

- 1.1. National Ambient Air Quality Standards for Carbon Monoxide
- 1.2. New York Metropolitan Area Carbon Monoxide Air Quality History

#### 2.0 MAINTENANCE PLAN

- 2.1 Requirements
- 2.2 Carbon Monoxide Monitor Locations and Design Values
- 2.3 Maintenance Demonstration

#### 3.0 EMISSION INVENTORY

##### 3.1 Methodology

- 3.1.1 On-Road Methodology
- 3.1.2 Nonroad Methodology
- 3.1.3 NonPoint Source Methodology
- 3.1.4 Point Source Methodology

##### 3.2 Emission Inventory Requirements

- 3.2.1 Winter-Day Inventory

#### 4.0 VERIFICATION OF CONTINUED ATTAINMENT

#### 5.0 CONTINGENCY MEASURES

#### 6.0 TRANSPORTATION AND GENERAL CONFORMITY

#### 7.0 PUBLIC PARTICIPATION

#### 8.0 CONCLUSIONS

### Appendices

## LIST OF TABLES

Table 1 NYMA Area 1-hour and 8-hour CO Design Values (in ppm)

Table 2 NYSDEC Rule Effectiveness Matrix

Table 3 2007 CO Emissions by County (Tons per Winter Day)

## LIST OF FIGURES

Figure 1 Location of CO Ambient Air Quality Monitors

## LIST OF APPENDICES

- A CO Design Values 2007-2011
- B EPA Guidance Document  
“Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas”.
- C New York State On-Road Motor Vehicle Emission Budget MOVES Technical Support Documentation
- D Technical Support Document for the Development of the 2007 Emission Inventory for Regional Air Quality Modeling in the Northeast/Mid-Atlantic Region; ver. 3.3; January 23, 2012
- E Technical Support Document for the Development of the 2017/2020 Emission Inventories for Regional Air Quality Modeling in the Northeast/Mid-Atlantic Region; ver. 3.3; January 23, 2012
- F Technical Support Document for the Development of the 2025 Emission Inventory for PM Nonattainment Counties in the MANE-VU Region; ver. 3.3, rev. 2; January 23, 2012
- G Public Notices
- H Responses to Comments
- I Sample Calculations for Nonpoint Sources

## Acronyms and Abbreviations

AADT	Annual Average Daily Traffic
Act	Clean Air Act Amendments of 1990
AF	Allocation Factor
AIRS	Aerometric Information Retrieval System
CFR	Code of Federal Regulations
CMV	Commercial Marine Vessel
CNG	Compressed Natural Gas
CO	Carbon Monoxide
DEC	Department of Environmental Conservation
DV	Design Value
DVMT	Daily Vehicle Miles Traveled
EDMS	Emission Dispersion Modeling System
EF	Emission Factor
EPA	United States Environmental Protection Agency
FG	Factor Groups
FHWA	Federal Highway Administration
FR	Federal Register
GVWR	Gross Vehicle Weight Rating
HPMS	Highway Performance Monitoring System
IM	Inspection/Maintenance
LDV	Light Duty Vehicle
LEV	Low Emission Vehicle
LMP	Limited Maintenance Plan
LPG	Liquefied Petroleum Gas
MOS	Margin Of Safety
MOVES	Motor Vehicle Emissions Simulator
NAAQS	National Ambient Air Quality Standards
NEI	National Emissions Inventory
NLEV	National Low Emission Vehicle
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxide
NPTS	National Personal Transportation Survey
NWS	National Weather Service
NYCRR	New York Codes, Rules and Regulations
NYMA	New York Metropolitan Area
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department Of Transportation
NYSERDA	New York State Energy Research and Development Authority
NYTEST	New York Transient Emissions Short Test
NYVIP	New York Vehicle Inspection Program
OAQPS	Office of Air Quality Planning and Standards
OBD	On-Board Diagnostics

PM	Particulate Matter
PM <sub>2.5</sub>	Fine PM; Particulate Matter with an aerodynamic diameter ≤ 2.5 micrometers
PM <sub>10</sub>	Coarse PM; Particulate Matter with an aerodynamic diameter ≤ 10 micrometers
ppm	parts per million
PSD	Prevention of Significant Deterioration
QA	Quality Assurance
QC	Quality Control
RE	Rule Effectiveness
RVP	Reid Vapor Pressure
SAF	Seasonal Adjustment Factor
SEQR	State Environmental Quality Review
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TIP	Transportation Improvement Program
TSD	Technical Support Document
VOC	Volatile Organic Compound
VMT	Vehicle Miles Traveled

## 1.0 INTRODUCTION

### 1.1 National Ambient Air Quality Standards for Carbon Monoxide

In accordance with section 109 of the Clean Air Act (Act), the United States Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for several criteria pollutants, including carbon monoxide (CO). CO is a colorless, odorless gas, a poison by inhalation, and can cause asphyxiation. The dominant source of CO is incomplete combustion from motor vehicles. CO concentrations are most pronounced in the ambient air during winter months, when motor vehicles experience cold starts.

The NAAQS for CO are established in section 50.8 of Title 40 of the Code of Federal Regulations (40 CFR 50.8). There are two primary CO NAAQS; a one-hour standard of 35 parts per million (ppm) and a non-overlapping eight-hour average standard of 9 ppm. The one-hour NAAQS is exceeded when measured data equals 35.5 ppm or greater, and the eight-hour NAAQS is exceeded when measured data equals 9.5 ppm or greater. An area is in violation of the NAAQS if it experiences more than one exceedance of any standard within a calendar year (one exceedance of both standards per year is allowed by the NAAQS). Data must be measured in accordance with the methodology established in Appendix C of 40 CFR 53.

### 1.2 New York Metropolitan Area Carbon Monoxide Air Quality History

On November 23, 1999, the New York State Department of Environmental Conservation (DEC) submitted a proposed revision to the State Implementation Plan (SIP) to the EPA. The submission was a CO redesignation request and maintenance plan for the New York Metropolitan Area (NYMA). This request was to redesignate the New York portion of the New York – Northern New Jersey - Long Island CO nonattainment area from nonattainment to attainment of the CO NAAQS. EPA approved the redesignation request because the CO NAAQS was being met in New York and it met the redesignation requirements set forth in the Act. New York's CO maintenance plan was approved by EPA because it provided for continued attainment of the CO NAAQS.

EPA also approved the New York CO attainment demonstration that was submitted by DEC on November 15, 1992. This action provided for full approval of the New York State SIP for CO. Currently, there are no areas of New York State designated as nonattainment for the CO standards.

EPA first set NAAQS for CO in 1971. For protection of both public health and welfare, EPA set an 8-hour primary standard at 9 ppm and a 1-hour primary standard at 35 ppm. In a review of the standards completed in 1985, EPA revoked the secondary standards (for public welfare) due to a lack of evidence of adverse effects on public welfare at or near ambient concentrations. The last

review of the CO NAAQS was completed in 1994 and EPA chose not to revise the standards at that time. On January 28, 2011, EPA proposed to retain the existing NAAQS for CO and on August 12, 2011 the decision became final. The existing primary standards are 9 ppm over an 8-hour period, and 35 ppm measured over 1 hour. EPA modified the ambient air monitoring requirements for CO by requiring CO monitors to be sited near roads in certain urban areas. EPA is requiring one CO monitor to be collocated with a “near-road” nitrogen dioxide (NO<sub>2</sub>) monitor in urban areas having populations of 1 million or more.

## 2.0 MAINTENANCE PLAN

### 2.1 Requirements

Section 175A of the Clean Air Act Amendments requires that a SIP for a former nonattainment area provide for continuing maintenance of the NAAQS. That maintenance SIP must provide contingency measures to assure that the State will promptly correct any violation of the standard that occurs after the redesignation of the area to attainment. The maintenance plan for nonclassifiable areas must include all four elements listed below:

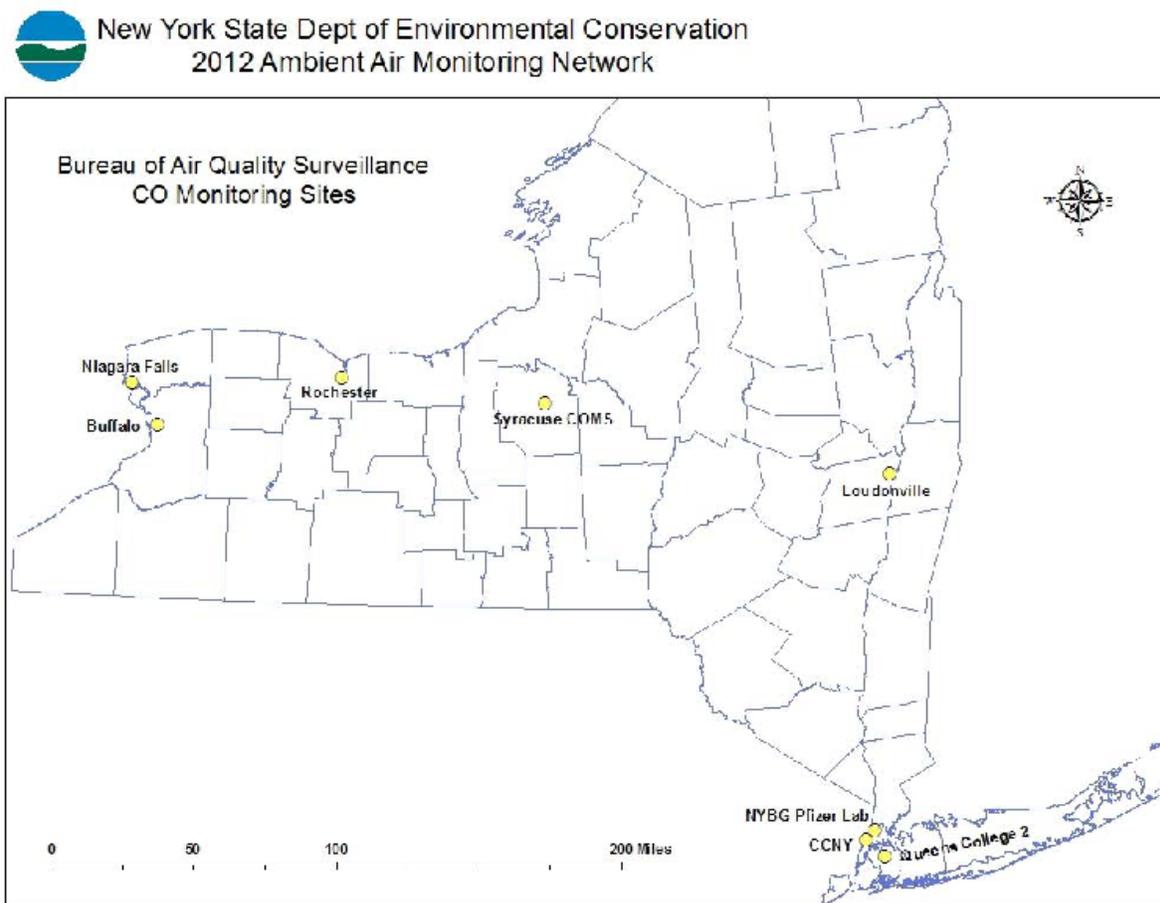
1. A demonstration that the national standard has been attained and will be maintained for at least ten years after redesignation;
2. Provisions for continued air monitoring to verify the attainment status of the redesignated area;
3. A demonstration to show that the proposed reductions in emissions will be enough to maintain the standard; and
4. A contingency provision to correct any violations of the standard that might occur after the area is redesignated to attainment.

In order to use the limited maintenance plan (LMP), design values (two years of monitoring data) must be at or below 85% of exceedance levels of the CO NAAQS. Additionally, the design value for the area must continue to be at or below 85% of exceedance levels of the CO NAAQS until the time of final EPA action or the redesignation.

EPA’s guidance for limited maintenance plans is included in an October 6, 1995 memorandum from Joseph W. Paisie, Group Leader, Intergrated Policy and Strategies Group MD-15) entitled, “Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas.” This document is included in Appendix B of this proposed SIP revision.

## 2.2 Carbon Monoxide Monitor Locations and Design Values

Figure 1 - Location of CO Ambient Air Quality Monitors in New York State



CO design values are discussed in terms of the 8-hour CO NAAQS, rather than the 1-hour NAAQS, because the 8-hour NAAQS is typically the standard of concern. However, a 1-hour design value would be computed in the same manner. For 8-hour CO, the maximum and second maximum (non-overlapping) 8-hour values at a site for the most recent 2 years of data are used to determine compliance with the NAAQS. DEC used the values from the Aerometric Information Retrieval System (AIRS) AMP450, "Quick Look", printout and chose the higher of the second highs as our design value for that site. All design values within the area are identified and the highest of those is used as the design value for the area. Note that, for each site, individual years of CO data are considered separately to determine the second maximum for each year - CO data are not combined from different years. The CO NAAQS requires that not more than one 8-hour average per year can exceed 9 ppm (greater than or

equal to 9.5 ppm to adjust for rounding). DEC evaluates attainment over a two-year period. If an area has a design value greater than 9 ppm, it means there was a monitoring site where the second highest (non-overlapping) 8-hour average was greater than 9 ppm in at least one year.

Table 1 contains CO design values for monitors in the NYMA for 2010-2011. As can be seen in the table, the design values are well below the NAAQS for CO.

Table 1 - NYMA Area 1-hour and 8-hour CO Design Values (in ppm)										
Site ID	Name	Year	1st max 1 hr	2nd max 1 hr	1st max 8 hr	2nd max 8 hr		1 hr design value		8 hr design value
36-005-0133	Pfizer Lab	2010	2.1	2.0	1.6	1.5		2.8		1.9
		2011	3.2	3.0	2.8	2.3		3.0		2.3
36-061-0135	CCNY	2010	3.5	2.3	1.8	1.8		2.3		1.8
		2011	3.1	2.7	2.0	1.6		2.7		1.8
36-081-0124	Queens College	2010	3.4	3.4	2.7	1.9		3.4		1.9
		2011	2.1	1.9	1.8	1.4		3.4		1.9

### 2.3 Maintenance Demonstration

The maintenance demonstration must demonstrate effective safeguards of the NAAQS are in place for at least 10 years following the redesignation showing that future year CO emissions will not exceed the level of the attainment year. To make this demonstration, DEC completed a Motor Vehicle Regional Analysis, to support the use of the LMP option for the maintenance demonstration. That analysis is described below.

The following methodology was used to determine whether increased emissions from on-road mobile sources could, in the next 10 years, increase concentrations in the area and threaten the assumption of maintenance that underlies the LMP policy. This analysis is submitted in order to demonstrate that this area is eligible for the LMP option.

DEC used the following equation:

$$DV + (VMT_{pi} \times DV_{mv}) < MOS$$

$$2.3 + (1.1645 \times 1.45) < 7.65$$

$$2.3 + (1.69) < 7.65$$

$$3.99 < 7.65$$

Where:

DV = the area's design value based on the most recent 2 years of quality assured data in ppm. The design value for the area is 2.3 ppm based on 2011 monitoring data at the Pfizer Lab location (36-005-0133).

VMT<sub>pi</sub> = the projected % increase in vehicle miles traveled (VMT) over the next

10 years. The VMT growth rate (VMT<sub>pi</sub>) was developed based on a linear regression of Highway Performance Monitoring System (HPMS) historical data for forecasting VMT prepared by the New York State Department of Transportation (NYSDOT). These projections employed HPMS data from 1981 to 2007. The projected growth rate for the area is 16.45%

DV<sub>mv</sub> = motor vehicle design value based on on-road mobile portion of the attainment year inventory in ppm. The on-road portion is 63.12% of the attainment year inventory. The DV<sub>mv</sub> of 1.45 ppm was derived by multiplying DV by the percentage of the attainment year inventory represented by on-road mobile sources (2.3 multiplied by 0.6312).

MOS = margin of safety for the relevant CO standard for a given area. With an 8 hour standard of 9 ppm, 85 percent of the exceedance level is 7.65 ppm.

Since 3.99 ppm is less than the margin of safety value of 7.65 ppm, the area passes the regional analysis criterion.

### 3.0 EMISSION INVENTORY

#### 3.1 Methodology

##### 3.1.1 On-road Methodology

The on-road component of the 2007 CO inventory includes an estimate of emissions from all motorized vehicles operated on public

roadways. All on-road mobile source emissions were estimated using EPA's Motor Vehicle Emissions Simulator (MOVES) model using locally-developed inputs for each of the 7 counties in the nonattainment area. These inputs include varying meteorological data, vehicle activity, fuel characteristics, and emissions control programs.

“Base-year” inventory inputs were derived from 2007 data, where applicable, and reflect the programs and controls that were in effect in 2007. Once all inputs were developed, DEC modeled the inventory, whether annual and/or daily, in accordance with EPA’s guidance *"Using MOVES to Prepare Emission Inventories in State Implementation Plans and Transportation Conformity: Technical Guidance for MOVES2010, 2010a and 2010b"* (EPA-420-B-12-028, April 2012). More detailed descriptions of DEC’s methodologies for developing MOVES-specific inputs can be found in New York State On-Road Motor Vehicle Emission Budget MOVES Technical Support Document located in Appendix C.

### 3.1.2 Nonroad Methodology

#### New York State Nonroad Methodology for 2007 Emissions Estimates for Carbon Monoxide for the New York City Metropolitan Area for a Typical Winter Day

Nonroad mobile source emissions are separated by four main categories. These include aircraft, commercial marine vessels, locomotives and “other”. “Other” nonroad equipment is further broken down into several sub-categories of equipment and vehicles. These include: agricultural, commercial, construction and mining, industrial, lawn and garden, logging, pleasure craft, and recreational. Emissions for all sectors were estimated using four separate methodologies. Nonroad emissions for 2007 for the NYMA are estimated for seven New York counties.

The sub-categories of “other” nonroad equipment are separated by 2-stroke gasoline, 4-stroke gasoline, liquefied petroleum gas (LPG), compressed natural gas (CNG) and diesel fueled engine types. All emissions from these sources for 2007 were estimated using Version 2008a of the U.S. EPA Nonroad Model. The software was finalized for use in SIP development on June 12, 2006. Using the EPA Nonroad Model, nonroad emissions from New York were estimated for each individual county for each month of the year. Temperature and fuels blend data varied by month for each county across the state. To estimate emissions for a typical winter day, an average is calculated by summing the January, February and December Nonroad Model runs and then dividing by 90.

Temperature data for 2007 were acquired from the National Oceanic and Atmospheric Administration which included historical weather data from thirty-three airport locations across the state of New York as well as surrounding locations. This information was used to develop average high and low temperatures for each month on a county by county basis. The results were input into the Nonroad Model.

Gasoline and diesel fuels blend data for 2007 were acquired from the New York State Department of Agriculture and Markets. These data are based on thousands of samples collected across the state from fueling stations and retention areas. These samples are then analyzed for many profiles including oxygen content, Reid Vapor Pressure (RVP) and sulfur content. The data provided average monthly fuels profiles on a county by county basis. The results were input into the Nonroad Model.

2007 aircraft emissions for New York State were estimated using FAA's Emission Dispersion Modeling System (EDMS) Version 5.1. Airport specific landing and take-off data by aircraft type acquired from FAA are used as inputs to the model. EDMS uses this information to estimate from both aircraft and ground service equipment.

2007 Commercial Marine Vessel (CMV) emissions are based upon Version 2 of the 2008 NEI. The NEI emissions from Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk and Westchester counties are built off of the CMV emissions report prepared by the Starcrest Consulting Group in conjunction with their work on the New York Harbor Deepening Project. This project was undertaken as part of the Harbor Deepening Project to update the baseline inventory and to optimize the offsets that would be utilized by the Army Corps of Engineers. This data is based on actual 2002 operational data from an intensive survey of all CMV types, activity and fuel consumption and took several months to complete. While DEC would like to use the Starcrest methodology to update the CMV inventory for the rest of the state it would require an intensive effort to survey all of the counties bordering Lake Erie, Niagara River, Lake Ontario, the St. Lawrence Seaway, Lake Champlain, Hudson River, Mohawk River, Erie Canal and both the Long Island Sound and Atlantic Ocean since Suffolk County was not included in the Starcrest inventory.

The detailed CMV emissions inventory methodology can be found in the EPA document entitled "Documentation for Aircraft, Commercial Marine Vessel, Locomotive, and Other Components of the National Emissions Inventory – Volume I – Methodology". This document can be found at:  
[ftp://ftp.epa.gov/EmisInventory/2002finalnei/documentation/mobile/2002nei\\_mobile\\_nonroad\\_methods.pdf](ftp://ftp.epa.gov/EmisInventory/2002finalnei/documentation/mobile/2002nei_mobile_nonroad_methods.pdf)

2007 locomotive emissions are based on Version 2 of the 2008 NEI. These emissions were derived from a locomotive emissions report developed by the New York State Energy Research and Development Authority (NYSERDA) in conjunction with DEC. The report is entitled: “NYSERDA CLEAN DIESEL TECHNOLOGY: NON-ROAD FIELD DEMONSTRATION PROGRAM; Development of the 2002 Locomotive Survey & Inventory for New York State”. The report included an intensive survey of all locomotive activity throughout New York State.

Aircraft, CMV and locomotive activity is consistent throughout the year. Therefore, to estimate emissions for a typical winter day for these sectors, we divide the annual emissions total by 365.

### 3.1.3 NonPoint Source Methodology

For nonpoint source emissions, DEC referenced a series of technical support documents (TSD) that were prepared for MARAMA, which are included with this document as the following appendices:

*Appendix D – Technical Support Document for the Development of the 2007 Emission Inventory for Regional Air Quality Modeling in the Northeast/Mid-Atlantic Region; ver. 3.3; January 23, 2012*

*Appendix E – Technical Support Document for the Development of the 2017/2020 Emission Inventories for Regional Air Quality Modeling in the Northeast/Mid-Atlantic Region; ver. 3.3; January 23, 2012*

*Appendix F – Technical Support Document for the Development of the 2025 Emission Inventory for PM Nonattainment Counties in the MANE-VU Region; ver. 3.3, rev. 2; January 23, 2012*

These documents explain the data sources, methods, and results for preparing emission projections for 2017 and 2025 for PM nonattainment areas in the Mid-Atlantic/Northeast Visibility Union (MANE-VU) region. The MANE-VU region includes Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Virginia is not included in the MANE-VU region, though several cities and counties in northern Virginia were included in this inventory as they are part of a nonattainment area that includes MANE-VU jurisdictions. Sample calculations for nonpoint sources are in Appendix I of this document.

### 3.1.4 Point Source Methodology

The point source inventory, including EGUs, was also developed with the MANE-VU states. The methodology is described in the MARAMA TSDs listed previously (i.e., Appendices D through F). DEC used the compiled data and applied rule effectiveness per the method outlined in EPA guidance.<sup>1</sup>

It is acknowledged that point sources do not always run all controls at all times. To account for this, DEC has adopted the EPA recommendation in the use of rule effectiveness (RE). EPA guidance from 2005 was used to generate RE values for point sources within New York State. Once an RE value was calculated, it was applied to all relevant sources at the process level. When RE is applied, the result is increased emission estimates reflecting less than 100 percent compliance. The formulas below were adopted from the 2005 guidance, and illustrate how the application of RE will increase emissions values significantly for those processes that do not have an RE value of 100 percent:

Calculate uncontrolled emissions:

$$\text{Uncontrolled emissions} = \frac{\text{controlled emissions}}{(1 - \text{control efficiency})}$$

Controlled emissions incorporating rule effectiveness:

$$\text{uncontrolled emissions} \times [1 - (\text{control efficiency} \times \text{RE})] \\ = \text{controlled emissions}$$

As demonstrated by the equations above, applying RE will increase emissions values significantly for those processes that do not have a RE value of 100%, particularly for processes which are highly controlled.

RE was generally applied to all processes where a control device or technique was used. However, NYSDEC did consider the limitations which are presented when a blanket RE is applied absolutely. This was also discussed in US EPA's most recent guidance:

*...not all emission estimated involving use of a control device or technique need to be adjusted to account for RE. In some instances, a state or local agency may conclude that a control device that operated in conjunction with a continuous emissions*

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<sup>1</sup> ["Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter for National Ambient Air Quality Standards \(NAAQS\) and Regional Haze Regulations"; EPA, August 2005.](#)

*monitor, or is equipped with an automatic shutdown device, may provide a sufficient level of assurance that intended emission reductions will be achieved, and therefore an adjustment for rule effectiveness is not necessary. Another example would be in instances where a direct determination of emissions, such as via a mass balance calculation, can be made. (US EPA, 2005, B-3)*

To determine RE for point sources DEC utilized criteria given in US EPA guidance tailored to New York’s facilities and rules. A rule effectiveness matrix (Table 2) was developed and several criteria were evaluated to give a RE percentage to each appropriate process.

<b>Table 2 – NYSDEC Rule Effectiveness Matrix</b>	
<b>NYSDEC Compliance Factors Considered</b>	<b>Rule Effectiveness</b>
Source specific monitoring used for compliance Records filed at least every 4 months Compliant for at least 8 quarters High accuracy compliance test methods are utilized NYSDEC has the authority to impose punitive measures Operators follow daily O&M instructions Subject to Title V (or other) compliance certification Subject to inspection once every 2 years or more frequently	100%
Source specific monitoring used as indicator of compliance Records filed every 6-9 months Facility is believed to have been compliant for at least 8 quarters Process parameters & inspection of control equipment are inspected NYSDEC has the authority to impose punitive measures Operators follow daily O&M instructions Subject to Title V (or other) compliance certification Subject to inspection once every 3 years or more frequently	90%
Source specific monitoring used as indicator of compliance Records filed every year Facility is believed to be meeting its compliance schedule Process review and inspection of control equipment NYSDEC has the authority to impose punitive measures Operators follow daily or weekly O&M instructions Not subject to compliance certification Subject to inspection once every 5 years or more frequently	80%

## 3.2 Emission Inventory Requirements

### 3.2.1 Winter-Day Inventory

DEC developed a 2007 typical winter day inventory for the 7-county downstate area in New York State. This inventory was developed consistently with EPA's most recent guidance for emission inventories in nonattainment areas and is representative of the time period associated with the monitoring data showing attainment. A county level sectoral inventory with and without rule effectiveness (RE) is presented in Table 3 below.

Table 3 - 2007 CO Emissions by County (Tons per Winter Day)								
County FIPS	County	Point	Point w/RE	Nonpoint	Nonroad	Onroad	Total	Total w/RE
36005	Bronx	1.44	1.77	77.18	29.38	156.54	264.54	264.87
36047	Kings	1.85	2.81	149.41	94.60	263.40	509.27	510.22
36059	Nassau	3.34	3.52	81.07	118.93	580.89	784.22	784.40
36061	New York	3.79	4.21	141.96	230.59	202.87	579.22	579.64
36081	Queens	6.88	7.71	125.77	102.03	441.15	675.83	676.66
36085	Richmond	0.99	1.48	25.57	21.12	130.41	178.09	178.58
36119	Westchester	1.07	1.11	60.18	81.66	382.66	525.58	525.62
	<b>Total</b>	19.37	22.61	661.14	678.31	2,157.93	3,516.75	3,519.99

## 4.0 VERIFICATION OF CONTINUED ATTAINMENT

Continued attainment must be verified from ambient air quality data collected in the redesignation areas. DEC will continue to comply with the monitoring criteria set forth in 40 CFR 58, "Ambient Air Quality Surveillance." In addition, DEC will continue its annual review of data from the two most recent, consecutive years in order to verify continued attainment of the CO NAAQS. Any future modifications to the monitoring network will be coordinated with EPA to ensure that the attainment status of the area can be adequately verified.

## 5.0 CONTINGENCY MEASURES

Maintenance plans for attainment areas must include contingency provisions, or extra measures beyond those needed for attainment, to offset any unexpected increase in emissions and ensure that the standard is maintained. DEC will continue with its winter-time Reid Vapor Pressure (RVP) measure as identified in section 7.3 of the 1992 CO SIP. Additionally, several state and federal mobile measures for reducing ozone precursors and particulate matter emissions in the NYMA may provide ancillary CO reductions. Some of these

include: EPA's non-road engine emissions control programs, heavy-duty vehicle emission standards, and heavy-duty inspection program.

## 6.0 TRANSPORTATION AND GENERAL CONFORMITY

Under the CAA, federally funded transportation projects must not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of NAAQS. In other words, these projects, and any emissions changes resulting from them, must "conform" to implementation plans developed by states for the criteria pollutants. Conformity generally applies to projects funded or approved by the Federal Highway Administration (FHWA) or the Federal Transit Administration in areas that do not meet or previously have not met NAAQS for a criteria pollutant (i.e., nonattainment or maintenance areas).

Section 176(c) of the CAA prohibits federal agencies from conducting activities in nonattainment or maintenance areas that do not conform to a state's SIP. General conformity requirements are in place to ensure federal activities not related to transportation or highway projects do not interfere with the SIP budgets, do not cause or contribute to new violations, and ensure the timely attainment and maintenance of the NAAQS as the schedule exists in the SIP.

General conformity differs from transportation conformity in that it applies to projects that were not considered in the transportation improvement program (TIP), as the TIP applies to highways and mass transit. All federal actions not covered under transportation conformity are covered under general conformity requirements unless the actions do not exceed de minimis levels. General conformity requirements can be met by: (1) showing emission increases are already covered in the SIP; (2) the state agreeing to modify the SIP to include the emissions; (3) finding offsets for the increased emissions; or, (4) mitigating the increased emissions.

According to the 1995 EPA guidance document for LMPs, the Transportation Conformity Rule and the General Conformity Rule apply to nonattainment and maintenance areas operating under maintenance plans. Under either transportation or general conformity, one means of demonstrating conformity of federal actions is to indicate that expected emissions from those actions are consistent with the emissions budget for the area. The guidance document states that emission budgets in the LMP area are not constraining for the length of the maintenance period because it is unreasonable to expect that this area will experience so much growth during this period that a violation of the CO NAAQS would occur (see the Motor Vehicle Regional Analysis in Section 2.3). In other words emissions in the LMP area are not capped for the maintenance period. Therefore, federal actions, in the LMP area, requiring conformity determinations under the transportation conformity rule satisfy the "budget test" required in the conformity rule in 40 CFR sections 93.118, 93.119

and 93.120. Similarly, in this area, federal actions subject to the general conformity rule satisfy the “budget test” specified in the conformity rule in 40 CFR section 93.158(a)(5)(i)(A).

DEC will use the interagency consultation process to inform all involved agencies that, upon approval of the LMP, CO budgets will no longer be constraining for transportation conformity because of the low levels of emissions and expected growth rates during the period. Once the LMP is approved, regional transportation conformity is presumed to be satisfied, with no need for a quantitative comparison of budgets for the second ten-year maintenance period. DEC will also ensure that project-level CO evaluations of transportation projects (i.e., project level conformity, as described in 40 CFR 93.116) are carried out as part of environmental reviews.

## 7.0 PUBLIC PARTICIPATION

Section 121 of the Act requires states to provide a satisfactory process of consultation with general purpose local governments, and designated organizations of elected officials of local governments.

Participation by affected local entities, as well as the public, is provided for through 6 NYCRR Part 617, “State Environmental Quality Review” (SEQR). For each major SIP revision, SEQR requires DEC to provide appropriate notice, provide the opportunity to submit written comments, and allow the public and local entities the opportunity to request a public hearing.

DEC is generally self-reliant when it comes to developing, implementing, and enforcing the SIP. When necessary, additional consultation and participation by local political subdivisions are provided through the SIP Task Force that was established in 2005, which consists of officials from 37 local governments and designated organizations of elected officials. Otherwise, New York’s county agencies are no longer relied upon for their assistance with these SIP-related tasks, nor are any other organizations.

## 8.0 CONCLUSIONS

DEC believes it has addressed and satisfied all the criteria of Section 175A of the Act. This SIP submittal shows that design values (two years of ambient monitoring data) for CO are at or below 85% of exceedance levels of the CO NAAQS; therefore, DEC has met the requirements for a LMP. The maintenance demonstration shows that future year CO emissions will not exceed the level of the attainment year and effective safeguards are in place for the NAAQS for at least 10 years following EPA’s redesignation.