8.0 NEW MOBILE SOURCE MEASURES

8.1 Introduction

New mobile source measures will have a large effect on NO_x and VOC emissions. Improvement in combustion efficiency and fuel quality, as well as the use of control devices, will reduce these emissions significantly. These measures are described in this section.

8.2 Low Emission Vehicles (LEV)

Section 177 of the CAA permits states to adopt new motor vehicle emissions standards that are identical to California's. New York has exercised this option in 6 NYCRR Part 218, “Emission Standards for Motor Vehicles and Motor Vehicle Engines,” which incorporates California's emissions standards for light-duty vehicles.

The LEV regulations provide flexibility to auto manufacturers by allowing them to certify their vehicle models to one of several different emissions standards. These consist of several different tiers of increasingly stringent LEV emission standards to which a manufacturer may certify a vehicle, including LEV, ultra-low-emission vehicle (ULEV), super-ultra low-emission vehicle (SULEV), and zero-emission vehicle (ZEV). The different standards are intended to provide flexibility to manufacturers in meeting program requirements. However, manufacturers must demonstrate that the overall fleet for each model year meets the specified NMOG standard for that year. These requirements are progressively lower with each model year.

8.3 Personal Watercraft

New York adopted California’s emissions standards for personal watercraft in 2003. These standards reduce emissions of hydrocarbons, NO_x and PM beyond the levels achieved by federal standards. This is accomplished by imposing lower emission certification levels beginning with model year 2006 and which become increasingly stringent. In addition, the personal watercraft engine program includes test procedures for new and in-use engines, which guarantees compliance with the standards, establishes an environmental label program and extends emission warranty requirements.

Manufacturers of personal watercraft engines can choose the standard among which they wish to certify their engines as long as the emissions of their entire product line meet the corporate average requirement. CARB’s average requirement declines through the 2008 model year. On a sales

and kW-weighted basis, manufacturers' engine production must, on average, comply with requirements set in the rule. There is, however, an upper bound limit on higher emission engines. This federal emission limit (FEL) cap is necessary to encourage manufacturers to abandon conventional high emitting carbureted two stroke technology, thereby reducing individual exposure to extremely high polluting engines.

A spark ignition marine engine manufacturer may exchange emission credits with another manufacturer. Traded credits expire if they are not used in averaging within three model years following the model year in which they were generated.

At the end of the model year, the manufacturer must have a net positive or zero emission credit balance to be in compliance. In addition, each engine family must comply with its certification FEL. Emission credits may not be used to offset an engine family's emissions that exceed its applicable FEL, or to remedy nonconformity determined by Production Line Testing (PLT), Selective Enforcement Audit (SEA), or a recall.

At the start of each model year, the engine manufacturer will begin to randomly select engines from the end of the assembly line from each engine family for PLT at a rate of one percent in accordance with CARB's June 14, 2000 "Final Regulation Order."

The Personal Watercraft program also provides for in use compliance testing, recalls, and warranty statements, as well as the use of permanent and temporary (i.e., hang tags) emission control labels for spark ignition marine engines which have been certified to the emission standards.

8.4 NYMA I/M Programs (NYVIP and NYTEST)

In the downstate NYMA, which consists of New York City, Nassau, Suffolk, Rockland and Westchester counties, a high enhanced I/M emissions test is required annually and with any change of vehicle ownership. The emissions inspection is completed in conjunction with a safety inspection. Depending on vehicle model year, a NYTEST tailpipe emission test or a NYVIP on-board diagnostics (OBD II) check is required.

Vehicles that are 25 model years old and newer up to model year 1995, with a gross vehicle weight (GVW) of 8,500 pounds or less, go through a series of procedures which check for tailpipe emissions (NYTEST), anti-tampering visual checks, and gas cap leaks. The visual inspections require an expanded anti-tampering check of a vehicle's air pollution control components including the catalytic converter, positive crankcase ventilation (PCV) system, exhaust gas recirculation (EGR) valve, thermostatic air cleaner (TAC), air injection system, evaporative emission

control system, and fuel inlet restrictor. NYTEST test standards (cutpoints) are based on a sliding scale such that older vehicles will have more lenient standards than newer vehicles. OBD checks (NYVIP) are completed on model year 1996 and newer vehicles along with the anti-tampering visual inspection of the air pollution control devices. The OBD check detects a malfunction through the vehicle's computer system of the air pollution control devices through NYVIP.

On March 27, 1996, the Department submitted “New York State Implementation Plan - Enhanced Motor Vehicle Inspection/Maintenance Program” to outline the NYTEST tailpipe testing I/M program in NYMA. On May 7, 2001, EPA approved a SIP revision that demonstrated the effectiveness of the NYMA decentralized testing I/M network and approved New York's alternate tailpipe test, NYTEST. Final cutpoints for the NYTEST program were implemented on April 1, 2003. In March 2006, the Department submitted "New York State Implementation Plan - New York Vehicle Inspection Program (NYVIP)" to outline the statewide OBD-based NYVIP I/M program. On February 21, 2007, EPA approved this SIP revision.

New York implements it's I/M programs through 6 NYCRR Part 217, “Motor Vehicle Enhanced Inspection and Maintenance Program Requirements,” and Title 15 NYCRR Part 79, “Motor Vehicle Inspection Regulations,” to comply with EPA regulations and to improve performance of its I/M program. The intended effect of this action is to maintain consistency between the state-adopted rules and the federally-approved SIP, and to apply a control strategy that will result in emission reductions that will help achieve attainment of the NAAQS for ozone.

8.5 Federal Diesel Fuel (with State Backstop)

New York State’s motor vehicle diesel fuel program is identical to the EPA motor vehicle diesel fuel regulations, which treat diesel engine systems and fuels as a system. The EPA motor vehicle diesel fuel regulation is an integral part of EPA regulations establishing new emission standards that will begin to take effect in model year 2007 and will apply to heavy-duty highway engines and vehicles greater than 8,500 pounds GVWR. New York adopted California regulations that are numerically identical. These standards are based on the use of high efficiency catalytic exhaust emission control devices or comparably effective advanced technologies.

In addition to setting emission limits for PM, the requirements establish standards for NO_x and non-methane hydrocarbons (NMHC) of 0.20 grams per brake horsepower-hr (g/bhp-hr) and 0.14 g/bhp-hr, respectively. The NO_x and NMHC standards will be phased in between 2007 and 2010 for diesel engines. The phase-in will be on a percent-of-sales basis from 2007

into 2010. Gasoline engines will also be subject to these standards, with a phase-in provision that requires 50 percent compliance in the 2008 model year and 100 percent compliance in the 2009 model year. Flexibility provisions to assist the transition to the new standards are included that will provide an incentive for the early introduction of clean technologies. They will also provide for flexibility in adapting new technologies and existing engine-based technologies.

Because many control devices are damaged by sulfur, it is necessary to reduce the level of sulfur in motor vehicle diesel fuel by 97 percent, to 15 ppm. This rule provides for production of 15 ppm motor vehicle diesel fuel beginning on June 1, 2006. The rule is effective at downstream locations (such as terminals) on July 15, 2006, and at retail locations and wholesale purchaser-consumer facilities on October 15, 2006.

8.6 Federal Non-Highway Diesel Fuel and Heavy Duty Diesel On-Road Requirements

The Department's non-road program, based on the application of the federal rules, will reduce emissions NO_x and PM from non-road diesel engines by combining engine and fuel controls as a system to obtain emission reductions. Overall, a 90 percent reduction in emissions from these engines is expected.

The non-road standards apply to diesel engines that are used in construction, agricultural, industrial, and airport equipment, and set emission standards for different sizes of non-road engines. Standards vary by engine size with implementation dates ranging from 2008 - 2014. Mobile engines greater than 750 horsepower will have one additional year of flexibility to meet their emission standards. These emission standards will not apply to diesel engines used in locomotives and marine vessels, which are being addressed by an EPA rulemaking proposed April 3, 2007. Fuel requirements for these engines have been promulgated with the non-road standards.

Integral to the new provisions are the new fuel requirements that will reduce the allowable levels of sulfur in fuel used in non-road diesel engines, locomotives, and marine vessels. The current sulfur levels will be reduced from about 3,000 ppm to 15 ppm, which is a reduction of greater than 99 percent. This reduction will take place in two phases. In the first, beginning in 2007, fuel sulfur levels in non-road diesel fuel will be limited to a maximum of 500 ppm. This includes the use of the fuel in locomotive and marine applications. Beginning in 2010, sulfur levels in most non-road diesel fuel will be reduced to 15 ppm. Locomotive and marine diesel fuel will be restricted to this level in 2012.

9.0 NEW STATIONARY SOURCE MEASURES

9.1 Introduction

In accordance with Part D of Title I of the CAA, states containing non-attainment areas are required to implement Reasonably Available Control Measures (RACM) to provide a means to attain the NAAQS for the pollutant in question.

The Department worked closely with the OTC to develop a series of model stationary source control measures to help alleviate the ozone problem within the non-attainment areas across the state. An initial list of approximately 1,000 control measures was compiled by the OTC and participating states. After a number of meetings, a short list of effective control measures was decided upon, which served as a basis for many of the rule changes featured in this chapter.

In addition to the reductions to be made by implementing these OTC-assisted measures, the Department also initiated rulemakings such as CAIR, a multi-state program that will target ozone problems around and downwind of areas with excessive precursor emissions.

Table 10.1 lists tentative milestone dates for the adoption of these new and/or revised stationary source control measures.

Table 10.1: Key Adoption Dates for New Stationary Source Measures

6 NYCRR Part	Rule Name	Proposal Published in State Register	Regulatory Package to Environmental Board	File Regulation with Secretary of State	Regulation Effective
228, 235	Adhesives and Sealants	**06-02-08**	09-16-08	11-03-08	12-19-08
235	Consumer Products	**06-02-08**	09-16-08	11-03-08	12-19-08
234	Graphic Arts	**06-02-08**	09-16-08	11-03-08	12-19-08
241	Asphalt Formulation	**06-02-08**	09-16-08	11-03-08	12-19-08
243, 244, 245	Clean Air Interstate Rule (CAIR)	**04-11-07**	07-11-07	09-19-07	10-19-07
220-1	Portland Cement Plants	**06-02-08**	09-16-08	11-03-08	12-19-08
220-2	Glass Manufacturing	**06-02-08**	09-16-08	11-03-08	12-19-08
227-4	Asphalt Paving Production	**06-02-08**	09-16-08	11-03-08	12-19-08
227-2, 227-3	ICI Boilers RACT	**06-02-08**	09-16-08	11-03-08	12-19-08
200	MACT	**06-02-08**	09-16-08	11-03-08	12-19-08
222	Distributed Generation	**06-02-08**	09-16-08	11-03-08	12-19-08
227-2	HEDD	**06-15-08**	12-15-08	06-01-09	06-01-09

9.2 Part 228: Surface Coating Processes; Part 235: Consumer Products

In 2006 the OTC released its model rule for adhesives, sealants, adhesive primers and sealant primers. The Department intends to use this model rule as a guide in revising 6 NYCRR Part 228, "Surface Coating Processes," and Part 235, "Consumer Products."

EPA's consumer and commercial products rule was published September 11, 1998 (40 CFR Part 59 Subpart D). This Part 59 rule applied only to household adhesive use, and did not regulate adhesives used in commercial and industrial applications. The OTC's 2001 model rule proposed additional product categories and stricter standards, but its definitions of products generally exempted those products being sold in large containers.

The OTC 2006 model rule, based upon 1998 RACT and Best Available Retrofit Control Technology (BARCT) developments by CARB, places stricter VOC limits on a greater range of products. The proposed rule prohibits the sale or use of adhesives, sealants, adhesive primers or sealant primers in excess of its proposed VOC content limits after January 1, 2009. It also requires that labels have the product's VOC content clearly expressed, and presents an option for add-on control systems to meet the required content limit.

Emissions reductions should be observed for area sources as well as point sources, due to the variety of industrial and commercial applications for the subject products. Of the VOC reductions projected within the Ozone Transport Region (OTR), approximately 96 percent will come from area source reductions, while point sources are responsible for the remaining 4 percent reduction.

OTC's model rule will provide very effective reductions in VOC levels throughout New York State and the OTR. For area source VOC emissions, the OTC assumed a 64.4 percent reduction from uncontrolled levels, based upon the reduction estimations initially performed by CARB in 1998. Many point sources have been successful in installing control equipment yielding very high destruction efficiencies; for any of these sources with control systems exceeding 85 percent overall capture/destruction efficiency, no additional reductions were calculated, as they already meet the VOC control criteria. For point sources lacking control equipment, 64.4 percent was again assumed. As a result of these reductions, in 2009, OTC calculations predict that New York State will see a savings of 21.5 tons of VOC each summer day, or 3290 tons over the 153-day ozone season lasting from May 1-September 30.

Projected 2009 baseline inventory: 33.4 tons VOC per summer day

Assumed savings:	64.4% [conservative CARB estimate[1]]
2009 Control Inventory	= 33.4 tons – (33.4 tons * .644)
	= 11.9 tons
2009 Benefit	= 33.4 tons – 11.9 tons
	= 21.5 tons VOC per summer day

9.3 Part 235: Consumer Products

The Department will modify 6 NYCRR Part 235, "Consumer Products," under which a VOC content limit is placed on a range of consumer and commercial products. The products regulated include personal care, household, and automotive aftermarket products, as well as products purchased for use in commercial or institutional settings such as schools and hospitals.

A federal consumer and commercial products rule was published on September 11, 1998 as 40 CFR Part 59 Subpart D. In 2001 the OTC, feeling this rule regulated an inadequate portion of the consumer and commercial products inventory, developed model regulations for additional product categories and more stringent VOC limits. These suggestions were used as a basis for the VOC limits contained in Part 235, which took effect on January 1, 2005.

The OTC developed its 2006 model rule, finalized September 13, 2006, to again expand the VOC content limitations that participating states may adopt for their own programs. Included are limits to 13 new product categories, a more restrictive limit on one previously regulated category, and additional requirements for two other previously regulated categories. The OTC rule is influenced by amendments put forth by CARB in July 2005. The Department will again use the OTC's proposed model rule as a guideline for its amendment of Part 235.

CARB calculated per capita VOC reductions in conjunction with its 2005 rule. Because the proposed rule mirrors that of CARB so closely, it is assumed that a similar per capita savings will result, which equates to a yearly reduction of 0.122 lb/capita. These reductions come in addition to the 6.06 lb/capita witnessed from the 2001 model rule. Adoption and implementation of the OTC 2006 model rule will result in VOC emissions reductions of 3.7 tons per summer day and 566 tons over the ozone season in New York State in 2009. CARB estimated the average cost effectiveness of these amendments to be $4,000 per ton VOC reduced.

[1] CARB 1998: California Air Resources Board, "Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology for Adhesives and Sealants," December 1998, p.18.

Projected 2009 baseline inventory: 183.3 tons VOC per summer day
Current Emission Factor: 6.06 lb per capita
Benefit from CARB 2005 amendments: 0.122 lb per capita

Assumed savings:	= 1 – (6.06 - .122)/6.06
	= 2.0%
2009 Control Inventory	= 183.3 tons – (183.3 tons * .02)
	= 179.6
2009 Benefit	= 183.3 tons – 179.6 tons
	= 3.7 tons VOC per summer day

9.4 Part 239: Portable Fuel Containers

EPA recently finalized the rule, "Control of Hazardous Air Pollutants From Mobile Sources" (72 FR 8427-8570). This federal rule, required by Section 183(e) of the Clean Air Act, directs EPA to regulate consumer and commercial products that are significant sources of VOC emissions. The Department is planning to use this federal rule as a basis for amending the existing 6 NYCRR Part 239, "Portable Fuel Container Spillage Control."

With this federal rule, EPA sets regulations for portable fuel containers (PFCs), as well as for gasoline and passenger vehicles. The purpose is to significantly reduce emissions of hazardous air pollutants from mobile sources, referred to as "mobile source air toxics" (MSATs), to which exposure is known or suspected to cause serious health effects, including cancer. The PFC controls will considerably reduce such MSATs as benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, and naphthalene.

Since the Department issued Part 239 in October 2002, a number of problems have been identified, as follows:

1. An automatic shutoff feature, intended to cut off fuel flow when the tank reaches a prescribed level, has proven to be incompatible with many types of fuel tanks. This leads to additional spillage and has frustrated many consumers;

2. Poor production quality of the PFCs, as demonstrated by a CARB compliance test resulting in nearly 50 percent failure of PFCs that have already been introduced to the market; and

3. Storage of gasoline in non-regulated containers designed for other fluids, such as kerosene.

As a result of these issues, emissions will still be lost due to evaporation through the diurnal cycle, as well as through spillage. The federal rule contains methods considered "best available controls" to correct these problems. The anticipated modifications to Part 239 will:

1. Eliminate the existing automatic shutoff feature, fill height and flow rate standards to simplify fueling and lessen spillage;

2. Require certification and compliance of PFCs prior to their introduction to the market; and

3. Expand the definition of a non-compliant container, effectively regulating diesel and kerosene containers in the same manner as PFCs

Along with these modifications, EPA has issued a standard of 0.3 grams per gallon per day (g/gal/day) of hydrocarbons. This standard was established based upon the emissions from a can over a diurnal test cycle, and requires stringent compliance testing to ensure emissions control over the life of the product. This standard must be met for containers manufactured on or after January 1, 2009. These new requirements will reduce hydrocarbon emissions from uncontrolled fuel containers by approximately 75 percent.

Both area and non-road source inventories are expected to be affected by these amendments. Of the projected VOC emission reductions, approximately 70 percent will be attributed to the area source inventory. These changes come from reductions in diurnal and permeation emissions from storage, and transport/spillage emissions from re-fueling at gas pumps. The remaining 30 percent will be accounted for in the non-road source inventory, where emissions will be reduced during re-fueling of non-road sources (e.g. lawnmowers, personal watercraft, etc.).

9.5 Part 234: Graphic Arts

Amendments are being made to the graphic arts industry regulations under 6 NYCRR Part 234, "Graphic Arts." These amendments are in response to two Control Techniques Guidelines (CTG) documents published by the EPA in September 2006: "Control Techniques Guidelines for Flexible Package Printing" and "Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing." CAA Section 182(b)(2)(A) provides that for non-attainment areas designated moderate or worse, RACT provisions must be included in the applicable SIP for "each category of VOC sources in the area covered by a CTG document issued by the Administrator between the date of the enactment of the Clean Air Act Amendments of 1990 and the date of attainment." These

CTGs present guidance in determining RACT for VOC emissions from inks, coatings, adhesives and cleaning materials within facilities that conduct the aforementioned printing processes.

Flexible package printing facilities incorporate rotogravure printing and flexographic printing. These processes result in two major sources of VOC emissions: evaporation of VOCs from inks, coatings, and adhesives; and evaporation of VOCs from cleaning materials. There are two approaches to target VOC emissions from inks, coatings and adhesives. One approach involves the addition or optimization of add-on controls such as capture systems (in a dryer, or through floor sweeps and hoods) and control devices (carbon adsorbers, thermal oxidizers, and catalytic oxidizers). The flexible package printing CTG presents the EPA's recommended control levels, which are based on the first installation date of the equipment. The second approach calls for the substitution of low-VOC inks such as waterborne inks assuming they do not compromise the quality of the process. The CTG suggests applying the control recommendations for inks, coatings, and adhesives to those presses with the potential to emit from the dryer, prior to controls, 25 tpy of VOCs or more (inks, coatings, and adhesives combined), a level chosen for its cost effectiveness.

The flexible package printing CTG suggests applying good work practices for cleaning materials, which entail keeping solvent containers closed whenever they are not in use, enclosing shop towels in containers, and transporting cleaning materials in closed containers or pipes. These recommendations apply to those flexible package printing operations that emit 15 lb/day or more of VOCs with no control, or an equivalent level on an alternate time basis (such as 450 lb/month or 3 tons per 12-month rolling period).

EPA's lithographic and letterpress CTG provides control recommendations for the use of fountain solutions, cleaning materials, and inks in offset lithographic printing; and cleaning materials and inks in letterpress printing, all of which contribute to VOC emissions through evaporation. Add-on controls, process modifications/work practices, and material reformulation/substitution are all ways to reduce emissions from these sources. Add-on controls in the form of capture systems and control devices are recommended for emissions from heatset web offset lithographic inks and heatset web letterpress inks, with specified control efficiencies dependent upon the first installation date. Because of low VOC emissions, the EPA proposes no controls for sheet-fed or coldset web inks or varnishes, waterborne coatings or radiation-cured materials. Keeping fountain solutions cool, or replacing their traditional alcohol component (isopropyl alcohol, n-propyl alcohol and ethanol) with a substitute such as glycol ethers, can reduce VOC evaporation. The CTG

recommends cleaning materials with a specific vapor pressure, along with work practices as previously described.

For cost-effectiveness, the EPA recommends applying add-on controls to those facilities with heatset web offset lithographic and heatset web letterpress printing presses with a PTE of 25 tpy VOCs. The fountain solution and cleaning material controls are recommended for any offset lithographic or letterpress printing facilities that emit 15 lb of VOC per day or more, not considering controls.

Cost analyses were performed by the EPA, for which details can be found in the CTG documents. These calculations included equipment, instrument and installation costs, as well as estimations of labor, maintenance, utility, and overhead costs. For flexible package printing, a catalytic oxidizer was analyzed under different operating scenarios, leading to estimated costs of $1,300-$5,700 per ton VOC removed. Lithographic and letterpress printing presses will see estimated costs of $2,010 per ton of VOC removed by controls on heatset inks; costs of $855/ton for cleaning materials; and an actual savings due to alcohol substitutes in fountain solutions. Consumers are not expected to incur any significant price increases.

9.6 Part 241: Asphalt Formulation

The Department is considering changes to the use of cutback and emulsified asphalts in paving operations. The proposed ban on cutback asphalts and increased restrictions on emulsified asphalts will be made in 6 NYCRR Part 241, “Asphalt Formulation.”

While cutback and emulsified asphalts are used in similar applications, they differ in how they are prepared. In preparing cutback asphalt, asphalt cement is blended with a diluent that is typically 25 to 45 percent by volume petroleum distillate. Emulsified asphalt preparation involves mixing asphalt cement with water and an emulsifying agent, such as soap. It is possible for emulsified asphalts to contain no VOCs, though some may contain up to 12 percent VOC by volume.

Currently, New York permits the use of cutback asphalt only during the cooler portion of the year from October 16 to May 1, and allows for emulsified asphalt to contain 2 to 12 percent VOCs, depending on the grade established by the American Society for Testing and Materials (ASTM). This proposed rule will have a similar, ozone-season ban on cutback asphalt; and will also limit the use of emulsified asphalt to that which contains not more than 0.5mL oil distillate from a 200mL sample—effectively 0.25 percent VOC content. Certain exemptions when necessary may be granted by the State Commissioner.

In calculating reductions resulting from these anticipated rule changes, an average baseline VOC content of 2.5 percent for emulsified asphalt was assumed. Thus, reducing the average VOC content from 2.5 percent to 0.25 percent represents a 90 percent reduction in emissions. This would lead to a projected savings of 16.5 tons VOC per summer day, or 2525 tons per ozone season for New York State in 2009. It is believed that no additional costs would be incurred from the use of low-VOC emulsified asphalts due to their current availability.

Projected 2009 baseline inventory: 18.3 tons VOC per summer day	
Assumed baseline VOC content: 2.5%	
Proposed VOC content limit: 0.25%	
Assumed savings:	= (2.5% - 0.25%)/2.5%
	= 90%
2009 Control Inventory	= 18.3 tons – (18.3 tons * .90)
	= 1.83 tons
2009 Benefit	= 18.3 tons – 1.83 tons
	= 16.5 tons VOC per summer day

9.7 Part 243: NO_x Emissions Budget Ozone Season Trading Program; Part 244: NO_x Emissions Budget Annual Trading Program; Part 245: SO_2 Emissions Budget Annual Trading Program

On May 15, 2005, EPA published a final administrative action finding that 28 states and the District of Columbia contribute significantly to non-attainment of the NAAQS for fine particles ($PM_{2.5}$) and/or 8-hour ozone in downwind states. CAA Section 110(a)(2)(D) specifies the states' requirements to address this interstate transport. Under this obligation, EPA is requiring the upwind states to introduce control measures to reduce their emissions of SO_2 and/or NO_x, which are precursors of PM and ozone, within certain time constraints. Citing the possibility of highly cost-effective controls on EGUs, EPA introduced a cap-and-trade program within the CAIR states to ensure substantial reductions of SO_2 and NO_x. The entire EPA final action is generally known as the Clean Air Interstate Rule (CAIR).

New York is one of the states that contributes to both PM and ozone non-attainment in downwind states, and is therefore required to reduce SO_2 and NO_x levels. New York State's NO_x-emitting sources significantly contribute to ground-level ozone pollution in Connecticut, New Jersey and Rhode Island. In turn, 10 states, along with the District of Columbia, directly contribute to New York State's own ozone pollution. The CAIR program was designed to ensure a collective effort in controlling this far-reaching problem.

To mirror the three model rules adopted by the EPA with CAIR, the Department adopted three new regulations: 6 NYCRR Part 243, "CAIR NO_X Ozone Season Trading Program;" 6 NYCRR Part 244, "CAIR NO_x Annual Trading Program;" and 6 NYCRR Part 245, "CAIR SO_2 Trading Program." Additionally, Part 200, "General Provisions," was also revised in order to facilitate the administration of these programs. Assuming all the affected states choose to achieve these reductions through EGU controls, then EGU SO_2 emissions in the affected states would be capped at 3.6 million tons in 2010 and 2.5 million tons in 2015; and EGU annual NO_x emissions would be capped at 1.5 million tons in 2009 and 1.3 million tons in 2015.

The EPA predicts widespread success in the reduction of NO_x and SO_2 through the implementation of CAIR. In the 23 states and District of Columbia affected by the annual NO_x requirements, EPA estimates that CAIR will reduce annual NO_x emissions by 1.2 million tons in 2009 and by 1.5 million tons in 2015. These region-wide emission reductions are indicative of the success estimated for New York State's reductions: state-wide, the EPA projects a 48 percent reduction from 2003 NO_x levels by 2015. In conjunction with existing air quality regulations, CAIR will help 19 counties within the state reach attainment for 8-hr ozone by 2010. CAIR will also aid in bringing Erie and Niagara counties into attainment for 8-hr ozone by 2015. The nine remaining non-attainment counties will also see reductions of ground level ozone, albeit to levels still above the NAAQS. Assuming that upwind states are also able to achieve reductions through CAIR, these non-attainment areas will likely be more successful in reaching the NAAQS through further implementation of local emission controls.

The "Regulatory Impact Analysis for the Final Clean Air Interstate Rule" (RIA) released by EPA in March 2005 reported the costs associated with implementing CAIR if all affected states in the region make the required emissions reductions through the electric generating industry, and included a benefit-cost analysis demonstrating the substantial net economic benefits to society yielded by the rulemaking. The RIA estimates annual private compliance costs (1999 dollars) of $2.4 billion ($83.2 million NY) for 2010 and $3.6 billion ($123.8 million NY) for 2015. EPA analysis shows that this action will generate annual net benefits of $60.4-$71.4 billion (approximately $2.1 billion NY) in 2010 and $83.2-$98.5 billion (approximately $2.9 billion NY) in 2015.

Although the power industry will be impacted by the regulations on EGUs, the EPA claims that regional electricity prices will not be significantly impacted, and are actually predicted to be below 2000 levels in 2010 and 2015.

9.8 Subpart 220-1: Portland Cement Plants

The Department will target the reduction of NO_x emissions with updates made to 6 NYCRR Part 220, "Portland Cement Plants." NO_x is created during fuel combustion for the energy-intensive formation of cement. The state will investigate RACT controls to identify a feasible way to meet these reductions. In updating the rule, the regulations concerning portland cement plants will be identified as Subpart 220-1, as new regulations for glass manufacturing plants will be introduced as Subpart 220-2.

There are currently three portland cement plants in New York State (two long wet kilns, and one long dry kiln). Upon the introduction of NO_x RACT in 1995, the Department promulgated revisions to Part 220 that required owners of these facilities to submit a plan that identified RACT and included a schedule for installation of RACT. An all-inclusive regulation could not be established, as the variation in technology demanded a distinct analysis and application of NO_x controls that were reasonably available at the time. Despite advancements in NO_x control technology and knowledge of portland cement plants, the uniqueness in plant designs still requires independent analyses. Therefore, DAR is proposing taking the same approach where each plant owner will be required to perform a RACT analysis that will identify the technology and level of control with a schedule for installation.

The OTC presented a 2006 model rule which encouraged states to study the variety of control technologies and implement those that were efficient and reasonable. The OTC guidelines proposed emissions limits of 3.88 lbs NO_x per ton of clinker produced in long wet kilns, and 3.44 lbs NO_x per ton of clinker for long dry kilns, both representing 60 percent reductions from uncontrolled levels. The exact reduction levels may vary as the Department works with the portland cement plants to achieve an economically and technologically reasonable level of control. To get an approximation of the reductions, MACTEC Inc. calculated the 2002 emission rate from each kiln and compared it to the guidelines proposed in the OTC 2006 model rule. Through this kiln-specific percent reduction analysis, reductions of 15.3 tons NO_x per summer day, or 2,340 tons for the ozone season in 2009 were estimated. Manufacturer costs will vary widely depending on kiln type, fuel type, and other unique factors that affect the type of control technology that can be applied.

9.9 Subpart 220-2: Glass Manufacturing

The Department is proposing to implement a new regulation to limit the emissions of NO_x formed by the high temperatures required in glass melting furnaces. The current 6 NYCRR Part 220, "Portland Cement

Plants," will be altered to include a Subpart 220-2, under which the glass manufacturing plants within the state will be subject to certain restrictions. New York State currently does not contain specific emission limitation requirements, but will implement those NO_x limits proposed by the OTC in their 2006 model rule.

There are several alternate control technology options to reduce NO_x from glass furnaces. These include combustion modifications (low NO_x burners, oxy-fuel firing, oxygen-enriched air staging), process modifications (fuel switching, batch preheat, electric boost), and post-combustion modifications (fuel reburn, selective catalytic reduction, selective non-catalytic reduction). Oxy-firing has proved to be the most effective control measure by reducing NO_x emissions up to 85 percent, as well as reducing energy consumption, increasing production rates and improving glass quality.

The Department will implement the following NO_x emission rate limits, as proposed by the OTC: For the production of container glass, pressed/blown glass, and fiberglass, 4.0 lbs NO_x per ton of glass pulled, on a block 24-hr average; for the production of flat glass, 9.2 lbs NO_x per ton of glass pulled on a block 24-hr average, or 7.0 lbs NO_x per ton of glass pulled on a rolling 30-day average. The Department will work with glass plants to come up with an efficient use of technology to meet these standards.

An 85 percent reduction can be expected for glass furnaces within New York State. When applied to the projected 2009 base inventory, this percentage translates to a NO_x reduction of 5.8 tons per summer day or 887 tons per ozone season.

Projected 2009 baseline inventory:	6.8 tons NO_x per summer day
Assumed savings:	85%
2009 Control Inventory	= 6.8 tons – (6.8 tons * .85)
	= 1.0 ton
2009 Benefit	= 6.8 tons – 1.0 ton
	= 5.8 tons NO_x per summer day

9.10 Subpart 227-4: Asphalt Paving Production

The Department is planning to revise 6 NYCRR Part 227, "Stationary Combustion Installations," to include new provisions to control emissions from hot mix asphalt production, identified as Subpart 227-4. The dryer operation is the main source of emissions in asphalt production plants, as high temperatures amid the presence of nitrogen and oxygen result in formation of NO_x.

These NO_x emissions reductions can efficiently be realized through the implementation of low-NO_x burners and flue gas recirculation. The OTC, with its 2006 model rule, has proposed emission rate limits based on process type (batch or drum mix) and type of fuel, with each limit equating to a 35 percent reduction from uncontrolled levels. Also proposed is a requirement for minor sources to implement low-NO_x burners. Best Management Practices are also encouraged. They could yield a substantial reduction in fuel use, benefiting the business and ultimately reducing NO_x emissions.

These Best Management Practices include the following:

1. Burner tune-ups: would possibly reduce NO_x emissions by 10 percent;

2. Stockpile management: covering, sloping, or paving beneath stockpiles could reduce moisture content by 25 percent, leading to a fuel consumption savings of 10-15 percent;

3. Lowering mix temperature: ongoing research suggests that decreasing mix temperature by up to 20 percent may be possible, resulting in reduced fuel consumption; and

4. Other general best practices, such as routine equipment inspections.

NO_x emissions can be reduced by 25-40 percent with low-NO_x burners, and by an additional 10 percent through addition of flue gas recirculation. For modeling purposes, a 35 percent NO_x reduction was assumed, and applied to a database that represented only point sources, leading to some uncertainty over actual reduction numbers.
Non-major area source asphalt plant emissions are not explicitly included in the area source inventory, and are therefore included under the ICI boiler category. In terms of reductions from point sources, New York State should see approximate NO_x reductions of 70 lbs per summer day, or 5.4 tons for the ozone season in 2009.

The proposed control methods come at reasonable costs. Low-NO_x burner costs are in the range of $500-$1,250 per ton of NO_x reduced, and combining these with flue gas recirculation leads to costs of $1,000-$2,000 per ton of NO_x removed, as calculated by the Department.

Projected 2009 baseline inventory: 0.1 tons NO_x per summer day	
Assumed savings:	35%
2009 Control Inventory	= 0.1 tons – (0.1 tons * .35)
	= .065 tons
2009 Benefit	= 0.1 tons – .065 tons
	= .035 tons NO_x per summer day

9.11 Subpart 227-2: Reasonably Available Control Technology (RACT) for Major Sources of Oxides of Nitrogen (NO_x); Subpart 227-3: Reasonably Available Control Technology (RACT) for Minor Sources of Oxides of Nitrogen (NO_x)

With the modification of 6 NYCRR Subpart 227-2, "Reasonably Available Control Technology (RACT) for Major Sources of Oxides of Nitrogen (NO_x)," stricter control requirements are being implemented for major stationary sources that contain natural gas and/or oil-fired Industrial/Commercial/Institutional (ICI) boilers, or combined cycle/cogeneration combustion turbines. Additionally, the existing 6 NYCRR Subpart 227-3, "Pre-2003 Nitrogen Oxides Emissions Budget and Allowance Program," will be repealed because the program's limited duration ended five years ago; in its place will be established a new Subpart 227-3, "Reasonably Available Control Technology (RACT) for Minor Sources of Oxides of Nitrogen (NO_x)," that will set NO_x emission controls for natural gas and/or oil-fired ICI boilers and simple cycle combustion turbines that are deemed minor sources. Those minor sources that are expected to be covered under Part 222, "Distributed Generation," will be exempt from Subpart 227-3.

Boilers combust fuel to produce heat and process steam. Industrial uses, such as those in chemical, paper, or petroleum plants, typically call for a heat input of 10-250 mmBtu/hr. Commercial and institutional facilities such as office buildings and hospitals are smaller on average, generally requiring boilers with a heat input less than 100 mmBtu/hr. Eighty percent of commercial and institutional boilers are smaller than 15 mmBtu/hr. The wide range of boiler uses lead to a variety of boiler designs, fuel types, and control systems, and as a result, there is high variability in emission rates and control options. The size classifications according to heat input are as follow:

Small boilers:	10 to 25 mmBtu/hr
Mid-size boilers:	>25 to 100 mmBtu/hr
Large boilers:	>100 to 250 mmBtu/hr
Very large boilers:	>250 mmBtu/hr

The emission limits to be implemented with this rule revision will be based upon a combination of boiler size and fuel type. Unique boiler configurations may lead to problems meeting the proposed presumptive emission limits; in such events, case-by-case RACT determinations will be made.

Typically, all ICI boilers located at major facilities will be included in the point source emissions inventory. This inventory lists boilers individually, with their size and actual emissions expressed directly. ICI boilers at minor facilities are included in the area source emissions inventory. Emissions from these units are not listed individually, but are calculated from a record of total fuel consumption within the state.

Cost figures were collected by the Department and OTC from companies involved with the manufacture, installation and/or maintenance of combustion equipment. These figures are inclusive of installation and maintenance costs, and are presented below for the various size classifications, in terms of dollars per ton of NO_x removed:

Small boilers - up to $1,000
Mid-size boilers (at major sources) - $2,500 to $4,500
Mid-size boilers (at minor sources) - $4,500 to $9,000
Large boilers - $1,500 to $3,000
Simple cycle combustion turbines - $2,500 to $4,500

9.12 Subpart 227-2: High Electric Demand Day Units

The Department currently plans to introduce provisions for High Electric Demand Day (HEDD) units into 6 NYCRR Subpart 227-2. HEDD units include EGUs that typically operate on peak ozone days when demand for electricity is very high. These peak-demand units can be among the dirtiest in the region. The Department is planning to propose regulations establishing appropriate operating parameters and emission controls for these units. Part 227-2 will reduce HEDD emissions from sources that are not located at major sources.

9.13 Part 222: Distributed Generation

The Department currently plans to introduce provisions for Distributed Generation into 6 NYCRR Part 222. Distributed generation sources are stationary internal combustion engines (ICEs) used to produce energy, and in some cases hot water or heat, for use within the facility at which it is located. These units serve to increase the reliability of electricity supply and help reduce overall energy costs for consumers. Distributed generation sources can add to ozone pollution issues as they are typically located in urban areas and generally have shorter stacks than central station power plants, causing emissions to impact those people living in the vicinity of the source. Due to the expanding distributed generation market, the Department is proposing a new rule, 6 NYCRR Part 222, "Distributed Generation." Modifications will also be made to 6 NYCRR Parts 200 and 201, and Subpart 227-2.

Included in the distributed generation category are "emergency power generating stationary internal combustion engines" and "demand response sources." Emergency generators operate for no more than 500 hours per year, and only when the usual supply of power is unavailable. Demand response sources operate under similar time constraints and act as a power source when the usual source is unavailable, or when called upon to reduce demand on the electric grid.

9.14 Part 200: General Provisions

The EPA has delegated authority to the Department to implement the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for major stationary sources which are subject to these requirements. Currently, Table 4 of 6 NYCRR Part 200, "General Provisions," contains NESHAP standards as of July 1, 2003. The EPA has promulgated several new NESHAP standards since this time. The Department has proposed, and expects to finalize adoption this fall (2007), amendments to section 200.10 to incorporate NESHAPs adopted since 2003.

Part 200 is also being updated to reflect new MACT guidelines for existing Other Solid Waste Incinerator (OSWI) units and large (unit capacity >250 tons per day (tpd)) Municipal Waste Combustors (MWCs). As mandated by CAA Sections 111 and 129, the EPA promulgated on December 16, 2005 Emission Guidelines for existing OSWI units under 40 CFR 60 Subpart FFFF; and promulgated on May 10, 2006 amendments to its previous guidelines for existing large MWCs under 40 CFR 60 Subpart Cb. The Department has proposed amendments to 6 NYCRR Part 200, Section 200.10 Table 2 to incorporate by reference the requirements of these updated guidelines which should be finally adopted by the Fall of

2007. Incorporating the referenced requirements will give the Department the needed authority to implement and enforce the requirements.

10.0 REASONABLE FURTHER PROGRESS (RFP)

10.1 Introduction

The CAA, in Section 182, requires ozone non-attainment areas with air quality classified as moderate or higher to submit plans showing RFP towards attainment of the NAAQS. RFP is defined, under Section 171(1) of the Act, to mean ‘‘such annual incremental reductions in emissions of the relevant air pollutant as are required by [part D of title I] or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable [NAAQS] by the applicable date.’’ The demonstration of RFP is based on guidelines contained in the Phase II Eight-Hour Ozone Implementation Rule (40 CFR 51.910) which specifies the base year emissions inventory upon which RFP is to be planned for and implemented, the increments of emissions reductions required over specified time periods, and the process for establishing whether RFP milestones were achieved. Emissions from stationary, area and mobile sources must all be included.

For the New York – N. New Jersey – Long Island, NY-NJ-CT ozone non-attainment area, the Department’s RFP demonstration exceeds the requirements in the Phase II Eight-Hour Ozone Implementation Rule (40 CFR 51.910). This is more fully described below.

For clarification purposes, RFP means for the purposes of the 8-hour NAAQS, the progress reductions required under Section 172(c)(2) and Section 182(b)(1) and (c)(2)(B) and (c)(2)(C) of the CAA. Rate of Progress (ROP) means for the purposes of the 1-hour NAAQS, the progress reductions required under Section 172(c)(2) and Section 182(b)(1) and (c)(2)(B) and (c)(2)(C) of the CAA.

10.2 2008 15% RFP Plan

The 2008 RFP demonstration must provide at least a 15 percent reduction in the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area 2002 base year anthropogenic VOC emissions by 2008. This percentage reduction is calculated from the adjusted baseline inventory that excludes: the emissions reduction benefits of the January 1, 1990 Federal Motor Vehicle Control Program (FMVCP), the June 11, 1990 federal RVP requirements of 9.0 psi, and the post-1990 “fix-up” of pre-1990 RACT rules and/or motor vehicle inspection programs. Further additional reductions must also be identified to compensate for any growth in emissions after 2002. EPA’s document entitled “Guidance on the Adjusted Base Year Emissions Inventory and the Target for the 15 Percent Rate-of-Progress Plans,” dated October 1992, provided the

guidance for calculating the adjusted base year inventory and the 2008 target level of emissions. The target level of emissions for 2008 is the maximum amount of anthropogenic VOC emissions within the non-attainment area permitted to occur.

10.2.1 2008 Target Level VOC Emissions

The calculation of the 15 percent VOC reductions and the 2008 target level of emissions are summarized in the following steps:

Step 1: The compilation of the base year inventory for VOC emissions in the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area, including biogenic emissions. See Chapter 4 for the 2002 base year inventory.

Step 2: The biogenic emissions were removed to develop the 2002 ROP base year anthropogenic emission inventory.

Step 3: The adjusted base year inventory was developed by removing the non-creditable FMVCP. Following EPA supplemental guidance, the Department also assumed the gasoline to have an RVP of 9.0 psi. Details of the mobile model inputs and procedures for estimating the benefits of the FMVCP are in the Appendix. The post-1990 RACT “fix-up” requirements were met previously and surpassed with the implementation of RACT statewide as required by CAA Section 184(b)(1)(B); therefore, the adjustment for this in 2002 is zero.

Step 4: The adjusted baseline inventory (Step 3) was multiplied by 0.85 to identify the required 2008 VOC emissions to demonstrate RFP.

Step 5: The 2008 VOC projection inventory, which includes emission growth and controls, was compared to the required 2008 VOC emissions target level to demonstrate RFP (Step 4).

The total VOC reduction needed to demonstrate the 15% RFP requirement is the difference between the 2008 projected base case emission (without controls) and the 2008 target emission level. If the 2008 VOC projection inventory is less than the 2008 VOC RFP target level, then RFP is met. For the New York State portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area, the calculations are as follows:

Step 1: 2002 Base Year VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	461.3
Non-Road	283.5
On-Road	236.8
Biogenic	204.4
Total	1199.9

Step 2: 2002 Base Year Anthropogenic VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	461.3
Non-Road	283.5
On-Road	236.8
Total	995.5

Step 3: Remove 2008 VOC Federal Motor Vehicle Control Program (FMVCP)

Suffolk County	7.3	tpd
Nassau County	5.2	tpd
Queens County	4.1	tpd
Kings County	2.6	tpd
Richmond County	0.9	tpd
New York County	4.7	tpd
Bronx County	2.0	tpd
Westchester County	4.4	tpd
Rockland County	1.3	tpd
Total	32.5	tpd

2002 Adjusted Base Year Anthropogenic VOC Inventory

995.5 – 32.5 = 963.0 tpd

Step 4: Calculate 2008 Projected VOC Emissions to Demonstrate RFP

963.0 x 0.85 = 818.6 tpd

Step 5: Compare 2008 Projected VOC Anthropogenic Emissions Inventory to 2008 Projected VOC Emissions to Demonstrate RFP

2008 Projected VOC Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	13.2
EGU	2.5
Area	406.3
Non-Road	214.9
On-Road	148.9
Total	785.8

The comparison of the 2008 Projected VOC Anthropogenic Emissions Inventory to 2008 Projected VOC Emissions to Demonstrate RFP shows that reasonable further progress is met with VOC emission reductions alone. The Department has exceeded the 2008 RFP requirement by 32.8 tpd (4.6%).

10.2.2 2008 NO_x Reductions

The following calculations and charts demonstrate the NO_x reductions that are projected though 2008.

2002 Base Year Anthropogenic NO_x Inventory (tpd)

Point (Non-EGU)	50.9
EGU	117.6
Area	78.3
Non-Road	178.5
On-Road	327.3
Total	752.6

Remove 2008 NOx FMVCP

Suffolk County	7.5	tpd
Nassau County	4.9	tpd
Queens County	4.0	tpd
Kings County	2.5	tpd
Richmond County	1.1	tpd
New York County	2.6	tpd
Bronx County	2.0	tpd
Westchester County	4.7	tpd
Rockland County	1.4	tpd
Total	30.7	tpd

2002 Adjusted Base Year Anthropogenic NO_x Inventory (tpd)

752.6 – 30.7 = 721.9 tpd

2008 Projected NO_x Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	65.0
EGU	108.9
Area	76.7
Non-Road	161.5
On-Road	211.8
Total	623.9

Therefore, in addition to meeting the 15 percent RFP requirement for total VOC reduction, the New York State portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area is projected to realize a 13.6 percent reduction in NO_x emissions between 2002 and 2008.

10.2.3 Contingency Measures

CAA Section 172(c)(9) requires the state to adopt specific contingency measures that will take effect without further action by the state or EPA if the state fails to achieve its RFP requirements.

In order to demonstrate compliance with the contingency measures provision applicable to the attainment demonstration, the Department has opted to include measures that have been or will be adopted for its contingency measures for the New York State

portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area.

The EPA requires that the contingency measures identified by the State must be sufficient to secure an additional 3 percent reduction in ozone precursor emissions in the year following the year in which the failure has been identified.

For a non-attainment area that fails to meet RFP percent reduction requirements, and where it has been demonstrated that NO_x controls are needed to attain the primary NAAQS for ozone, measures that produce a combination of NO_x and VOC reductions may serve as contingency measures. EPA requires at least 0.3 percent out of every reduction of 3 percent be attributable to a reduction in VOC measures.

For the New York State portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area, the Department needs to show that it has secured an additional 24.6 tpd (0.03 x 818.6) reduction of VOC, or an equivalent combination of VOC and NO_x.

The 2008 RFP contingency requirement is met through the 32.8 tpd VOC reduced beyond the 15 percent RFP requirement.

10.3 2011 RFP Plan

The 2011 RFP demonstration shows an additional 9 percent anthropogenic VOC emission reduction in the New York State portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area between 2008 and 2011. This accounts for a total anthropogenic VOC emission reduction of 24 percent from 2002 base year anthropogenic VOC emissions.

10.3.1 2011 Target Level VOC Emissions

The calculation of the 24 percent VOC reductions and the 2011 level of emissions are summarized in the following steps below:

Step 1: The compilation of the base year inventory for VOC emissions in the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area, including biogenic emissions. See Chapter 4 for the 2002 base year inventory.

Step 2: The biogenic emissions were removed to develop the 2002 ROP base year anthropogenic emission inventory.

Step 3: The adjusted base year inventory was developed by removing the non-creditable FMVCP. Following EPA supplemental guidance, the Department also assumed the gasoline to have an RVP of 9.0 psi. Details of the mobile model inputs and procedures for estimating the benefits of the FMVCP are in the Appendix. The post-1990 RACT "fix-up" requirements were met previously and surpassed with the implementation of RACT statewide as required by CAA Section 184(b)(1)(B), therefore, the adjustment for this in 2002 is zero.

Step 4: The adjusted baseline inventory (Step 3) was multiplied by 0.76 to identify the required 2011 VOC emissions to demonstrate RFP.

Step 5: The 2011 VOC projection inventory, which includes emission growth and controls, was compared to the required 2011 VOC emissions target level to demonstrate RFP (Step 4).

The total VOC reduction needed to demonstrate the 24 percent RFP requirement is the difference between the 2011 projected base case emission (without controls) and the 2011 target emission level. If the 2011 VOC projection inventory is less than the 2011 VOC RFP target level, then RFP is met. For New York – N. New Jersey – Long Island, NY-NJ-CT, the calculations are as follows:

Step 1: 2002 Base Year VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	461.3
Non-Road	283.5
On-Road	236.8
Biogenic	204.4
Total	1199.9

Step 2: 2002 Base Year Anthropogenic VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	461.3
Non-Road	283.5
On-Road	236.8
Total	995.5

Step 3: Remove 2011 VOC FMVCP

Suffolk County	9.1	tpd
Nassau County	6.6	tpd
Queens County	5.1	tpd
Kings County	3.2	tpd
Richmond County	1.2	tpd
New York County	5.5	tpd
Bronx County	2.4	tpd
Westchester County	5.3	tpd
Rockland County	1.6	tpd
Total	40.0	tpd

2002 Adjusted Base Year Anthropogenic VOC Inventory (tpd)

995.5 – 40.0 = 955.5 tpd

Step 4: Calculate 2011 Projected VOC Emissions to Demonstrate RFP

955.5 x 0.76 = 726.2 tpd

Step 5: Compare 2011 Projected VOC Anthropogenic Emissions Inventory to 2011 Projected VOC Emissions to Demonstrate RFP

2011 Projected VOC Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	13.7
EGU	2.5
Area	398.9
Non-Road	191.7
On-Road	120.9
Total	727.7

The comparison of the 2011 Projected VOC Anthropogenic Emissions Inventory to 2011 Projected VOC Emissions to demonstrate RFP shows that there is a 1.5 tpd shortfall to demonstrate RFP through 2011 and the Department must rely on substitution of NO_x reductions to meet the requirement.

10.3.2 2011 NO_x Reductions

The following calculations and charts demonstrate the NO_x reductions that are projected though 2011.

2002 Base Year Anthropogenic NO_x Inventory (tpd)

Point (Non-EGU)	50.9
EGU	117.6
Area	78.3
Non-Road	178.5
On-Road	327.3
Total	752.6

Remove 2011 NOx FMVCP

Suffolk County	8.2	tpd
Nassau County	5.5	tpd
Queens County	4.3	tpd
Kings County	2.6	tpd
Richmond County	1.1	tpd
New York County	2.7	tpd
Bronx County	2.1	tpd
Westchester County	5.3	tpd
Rockland County	1.5	tpd
Total	33.3	tpd

2002 Adjusted Base Year Anthropogenic NO_x Inventory (tpd)

752.6 – 33.3 = 719.3 tpd

2011 Projected NO_x Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	64.1
EGU	108.9
Area	77.1
Non-Road	149.9
On-Road	163.8
Total	563.8

The New York portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area is projected to realize a 21.6 percent reduction in NO_x emissions between 2002 and 2011.

In order to make the 2011 RFP demonstration, 1.2 tpd NOx of the available 155.5 tpd total NOx reduction must be used, leaving a net reduction of 154.3 tpd NOx beyond the 24 percent RFP requirement. The 1.2 tpd NOx reduction was calculated using EPA's "NOx Substitution Guidance" dated December, 1993 on a percentage to percentage basis (563.8 x 1.5 / (727.7 +1.5)).

10.3.3 Contingency Measures

CAA Section 172(c)(9) requires the state to adopt specific contingency measures that will take effect without further action by the state or EPA if the State fails to achieve its RFP requirements.

In order to demonstrate compliance with the contingency measures provision applicable to the attainment demonstration, the Department has opted to include measures that have been or will be adopted for its contingency measures for the New York State portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area.

EPA requires that the contingency measures identified by the state must be sufficient to secure an additional 3 percent reduction in ozone precursor emissions in the year following the year in which the failure has been identified.

For the New York State portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area, the Department needs to show that it has secured an additional 21.8 tpd (0.03 x 726.2) reduction of VOC, or an equivalent combination of VOC and NO_x.

The 2011 RFP contingency requirement is met through the 154.3 tpd NO_x reduced beyond the 24 percent RFP requirement.

10.4 2012 RFP Plan

The 2012 RFP demonstration requires an additional 3 percent anthropogenic VOC and NO_x emission reductions in the New York State portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area between 2011 and 2012. This accounts for a total anthropogenic VOC and NO_x emission reduction of 27 percent from 2002 base year anthropogenic VOC and NO_x emissions.

10.4.1 2012 Target Level VOC Emissions

The calculation of the VOC reductions and the 2012 level of emissions are summarized in the following steps below:

Step 1: The compilation of the base year inventory for VOC emissions in the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area, including biogenic emissions. See Chapter 4 for the 2002 base year inventory.

Step 2: The biogenic emissions were removed to develop the 2002 base year anthropogenic emission inventory.

Step 3: The adjusted base year inventory was developed by removing the non-creditable FMVCP. Following EPA supplemental guidance, the Department also assumed the gasoline to have an RVP of 9.0 psi. Details of the mobile model inputs and procedures for estimating the benefits of the FMVCP are in the Appendix. The post-1990 RACT "fix-up" requirements were met previously and surpassed with the implementation of RACT statewide as required by CAA Section 184(b)(1)(B), therefore, the adjustment for this in 2002 is zero.

Step 4: The adjusted baseline inventory (Step 3) was multiplied by 0.73 to identify the required 2012 VOC emissions to demonstrate RFP.

Step 5: The 2012 VOC projection inventory, which includes emission growth and controls, was compared to the required 2012 VOC emissions target level to demonstrate RFP (Step 4).

The total VOC reduction needed to show the 27 percent RFP requirement is the difference between the 2012 projected base case emission (without controls) and the 2012 target emission level. If the 2012 VOC projection inventory is less than the 2012 VOC RFP target level, then RFP is met. For New York – N. New Jersey – Long Island, NY-NJ-CT, the calculations are as follows:

Step 1: 2002 Base Year VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	461.3
Non-Road	283.5
On-Road	236.8
Biogenic	204.4
Total	1199.9

Step 2: 2002 Base Year Anthropogenic VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	461.3
Non-Road	283.5
On-Road	236.8
Total	995.5

Step 3: Remove 2012 VOC FMVCP

Suffolk County	9.5	tpd
Nassau County	6.9	tpd
Queens County	5.3	tpd
Kings County	3.3	tpd
Richmond County	1.3	tpd
New York County	5.6	tpd
Bronx County	2.5	tpd
Westchester County	5.5	tpd
Rockland County	1.7	tpd
Total	41.6	tpd

2002 Adjusted Base Year Anthropogenic VOC Inventory (tpd)

995.5 – 41.6 = 950.9 tpd

Step 4: Calculate 2012 Projected VOC Emissions to Demonstrate RFP

950.9 x 0.73 = 694.2 tpd

Step 5: Compare 2012 Projected VOC Anthropogenic Emissions Inventory to 2012 Projected VOC Emissions to Demonstrate RFP.

2012 Projected VOC Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	13.8
EGU	2.5
Area	399.8
Non-Road	187.2
On-Road	120.9
Total	724.2

The comparison of the 2012 Projected VOC Anthropogenic Emissions Inventory to 2012 Projected VOC Emissions to demonstrate RFP shows that there is a 30.0 tpd shortfall to demonstrate RFP through 2012 and the Department must rely on substitution of NO_x reductions to meet the requirement.

10.4.2 2012 NO_x Reductions

The following calculations and charts demonstrate the NO_x reductions that are projected though 2012.

2002 Base Year Anthropogenic NO_x Inventory (tpd)

Point (Non-EGU)	50.9
EGU	117.6
Area	78.3
Non-Road	178.5
On-Road	327.3
Total	752.6

Remove 2012 NOx FMVCP

Suffolk County	8.5	tpd
Nassau County	5.7	tpd
Queens County	4.3	tpd
Kings County	2.6	tpd
Richmond County	1.1	tpd
New York County	2.8	tpd
Bronx County	2.1	tpd
Westchester County	5.5	tpd
Rockland County	1.6	tpd
Total	34.2	tpd

2002 Adjusted Base Year Anthropogenic NOx Inventory (tpd)

752.6 – 34.2 = 718.4 tpd

2012 Projected NO_x Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	62.8
EGU	108.9
Area	77.3
Non-Road	145.7
On-Road	163.8
Total	558.5

The New York portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area is projected to realize a 22.3 percent (159.9 tpd) reduction in NO_x emissions between 2002 and 2012. In order to make the 2012 RFP demonstration, 22.2 tpd NO_x of the available 159.9 tpd total NO_x reduction must be used, leaving a net reduction of 137.7 tpd NO_x beyond the 27 percent RFP requirement. The 22.2 tpd NO_X reduction was calculated using EPA's "NO_x Substitution Guidance" dated December, 1993 on a percentage to percentage basis.

10.4.3 Contingency Measures

CAA Section 172(c)(9) requires the state to adopt specific contingency measures that will take effect without further action by the state or EPA if the State fails to achieve its RFP requirements.

In order to demonstrate compliance with the contingency measures provision applicable to the attainment demonstration, the

Department has opted to include measures that have been or will be adopted for its contingency measures for the New York State portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area.

EPA requires that the contingency measures identified by the state must be sufficient to secure an additional 3 percent reduction in ozone precursor emissions in the year following the year in which the failure has been identified.

For the New York State portion of the New York – N. New Jersey – Long Island, NY-NJ-CT non-attainment area, the Department needs to show that it has secured an additional 20.8 tpd (0.03 x 694.2) reduction of VOC, or an equivalent combination of VOC and NO_x.

The 2012 RFP contingency requirement is met through the 137.7 tpd NO_x reduced beyond the 27 percent RFP requirement.

10.5 Motor Vehicle Emissions Budgets

Year	VOC (tpd)	NOx (tpd)
2008	148.85	211.77
2011	120.93	163.84
2012	111.08	147.43

10.6 Emissions Reductions by Control Strategy

Proposed Revisions

6 NYCRR Part	Rule Name	Implementation Year	Contaminant	% Reduction (2012 CF)	Reduction Ton / OSD NYMA 2008	Reduction Ton / OSD NYMA 2011	Reduction Ton / OSD NYMA 2012
228, 235	Adhesives and Sealants	2009	VOC	64.4	5.58	6.08	5.86
235	Consumer Products (2)	2009	VOC	2.0	15.04[1]	16.73	16.31
241	Asphalt Paving	2009	VOC	20	2.31	2.45	2.32
220-1	Portland Cement Plants	2009	NOx	70	0	0	0
220-2	Glass Manufacturing	2009	NOx	70	0	0	0
227-4	Asphalt Production	2009	NOx	35	-0.01	-0.01	-0.03
239	Portable Fuel Containers (1)	2009	VOC	23.2	16.02[2]	25.29	28.59

[1] For Consumer Products, tons/OSD reduction includes both rule revisions
[2] For Portable Fuel Containers, tons/OSD reduction includes both rule revisions

Adopted Rules

6 NYCRR Part	Rule Name	Implementation Year	Contaminant	% Reduction	Reduction Ton / OSD NYMA 2008	Reduction Ton / OSD NYMA 2011	Reduction Ton / OSD NYMA 2012
205	AIM Coatings	2005	VOC	31	9.97	9.45	8.36
235	Consumer Products (1)	2005	VOC	14.2	15.04	16.73	16.31
228	Mobile Equipment Repair	2004	VOC	38	8.50	8.89	8.38
226	Solvent Metal Cleaning	2005	VOC	66	3.78	4.27	4.20
239	Portable Fuel Containers (1)	2003	VOC	71.3	16.02	25.29	28.59

11.0 NEW SOURCE REVIEW (NSR)

Major stationary sources of air pollution, as defined by the CAA, and major stationary sources which undertake major modifications are required to obtain a permit before commencing construction. The review process through which permits are issued is known as New Source Review (NSR). NSR is required for major sources whether the source or modification is located in an area that is not in attainment, or is classified as attainment or unclassifiable.

For non-attainment areas, the permits are called non-attainment NSR (NNSR) permits. Permits for sources in attainment areas are referred to as Prevention of Significant Deterioration (PSD) permits. The entire program, including both NNSR and PSD permit reviews, is usually referred to as the NSR program.

The NSR program is in place to protect the air quality of the areas in which the sources or modifications are located as well as areas that might be affected by transport. These programs are integral to the success of the various SIP efforts, ensuring that new major sources and modifications to these sources do not interfere with attainment and maintenance of the NAAQS, or exacerbate air quality problems in existing non-attainment areas.

As a result of changes to the federal PSD program, permitting responsibilities that had been delegated to New York related to PSD were returned to EPA in May 2004. Thus, EPA presently has the responsibility for administering the PSD program in New York.

The NSR permitting program in New York is implemented through the provisions of 6 NYCRR Part 231, “New Source Review In Nonattainment Areas and Ozone Transport Region.” The Department is revising Part 231 in part to comply with the 2002 federal NSR rule that EPA promulgated and correct deficiencies that EPA identified in regards to New York’s existing NNSR regulation as well as implement additional measures protective of the New York State environment. The 2002 federal NSR rule modified both the NNSR and PSD regulations at 40 CFR 51.165 and 52.21, respectively, and requires states with SIP approved NSR programs to revise their regulations in accordance with the 2002 federal NSR rule and submit the revisions to EPA for approval into the SIP. The Department’s existing NNSR program at Part 231 is subject to this requirement. Another purpose of the rulemaking is to adopt a State PSD program for proposed new major facilities and major modifications to existing facilities located in attainment areas. The proposed Part 231 rule incorporates provisions from the federal PSD regulations in significant part with additional provisions to ensure enforceability of the rule and effective monitoring, recordkeeping and reporting.

From the State's perspective, major NSR is a critical tool in meeting the Legislature's air quality objectives. The program ensures that air quality is preserved in areas of the state that meet the NAAQS and does not further degrade, but actually improves, in areas of the State which currently are not in attainment of the NAAQS. The State of New York currently has areas that are designated non-attainment for ozone, particulate matter less than 10 micrometers (PM_{10}), and $PM_{2.5}$. As a result, the Department must have a NNSR program that meets the requirements of Part D of Title I of the CAA to adopt permit programs for the construction, modification, and operation of major stationary sources in non-attainment areas.

The proposed regulation is one in a series of programs intended to track pollution, ensure that sources are meeting their regulatory obligations, and maintain permits. These permits contain provisions to limit emissions of ozone precursors (VOCs and NO_x), $PM_{2.5}$, SO_2, CO, and lead.

12.0 REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT)

The CAA requires SIPs to "provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." In EPA's Phase 2 ozone rule, 40 CFR 51.912 was revised to require non-attainment areas to demonstrate, through a SIP submission, that the state's RACT requirements for NO_x and VOC were current and appropriate to meet 8-hour ozone requirements. This SIP submission was to be provided to EPA no later than 27 months after designation for the 8-hour ozone NAAQS, or September 15, 2006.

The Department prepared the RACT SIP, provided for a public process, and submitted it to EPA by the deadline. The RACT analysis' conclusion was that the RACT rules presently in place continue to meet the criteria for RACT for 8-hour ozone due to the updating of a number of rules in recent years . Additionally, the Department determined that source-specific RACT provisions presently in place also meet 8-hour RACT requirements for all applicable EPA source categories in operation in New York. Many permits in which these requirements appear contain conditions requiring the reassessment of RACT for the affected sources, resulting in the frequent updating of these requirements.

Although the Phase 2 rules required only that sources whose emissions exceed 50 and 100 tpy of VOCs and NO_x, respectively, be included in this assessment, the Department included sources whose emissions exceeded the lower, 1-hour ozone-based major source thresholds to prevent "backsliding."

It was noted that several source categories were in the process of being evaluated by the OTC and New York and, as a result of this assessment, will result in new controls. New controls in New York will be implemented under the schedule of rule revisions described in Chapter 9.

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13.0 REASONABLY AVAILABLE CONTROL MEASURES (RACM)

Sections 172(a)(2)(A) and 181(a) of the CAA require ozone non-attainment areas to attain the NAAQS as expeditiously as practicable, including such reductions as may be obtained through RACT, and to provide outer-limit dates for attainment based on an area's classification. Furthermore, CAA Section 172(c)(1) states, "IN GENERAL - Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." The Department submitted a RACT SIP revision to EPA on September 15, 2006.

The RACM requirement applies to all non-attainment areas that are required to submit an attainment demonstration, whether covered under only CAA Subpart 1 or also Subpart 2.

EPA issued several guidance documents for implementing the RACM provisions of the CAA that interpret that provision to require a demonstration that the state has adopted all reasonable measures to meet RFP requirements and to demonstrate attainment as expeditiously as practicable and thus, that no additional measures that are reasonably available will advance the attainment date or contribute to RFP for the area:

- "State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas" (44 FR 20372 – 20375).
- "State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990; Proposed Rule" (57 FR 13498 – 13560 (April 16, 1992)).
- "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas." John S. Sietz, Director, Office of Air Quality Standards and Planning, November 30, 1999
- "Additional Submission on RACM for States with Severe One-Hour Ozone Nonattainment Areas SIPs." John S. Sietz, Director, Office of Air Quality Standards and Planning, December 14, 2000.
- "Guidance on Incorporating Bundled Measures in a State Implementation Plan." Stephen D. Page, Director, Office of Air Quality Standards and Planning, August 15, 2005.

OTC staff and member states, including New York, formed and participated in several workgroups to identify and evaluate candidate control measures that could be used to demonstrate attainment of the 8-hour ozone NAAQS. Initially,

the workgroups compiled and reviewed a list of approximately 1,000 candidate control measures. These control measures were identified through published sources such as EPA's CTGs, National Association of Clean Air Agencies (NACAA) "Menu of Options" documents, the AirControlNET database, emission control initiatives in member states as well as other states including California, state/regional consultations, and stakeholder input. The workgroups evaluated data regarding emissions benefits, cost-effectiveness (economic feasibility) and implementation issues (technological feasibility) to develop a preliminary list of 30 candidate control measures to be considered for more detailed analysis. These measures were selected to focus on the pollutants and source categories that are thought to be the most effective in reducing ozone levels in the Northeastern and Mid-Atlantic regions. "Identification and Evaluation of Candidate Control Measures – Final Technical Support Document," dated February 28, 2007 is included in this SIP revision as an Appendix as supporting documentation of the process and product of the workgroups.

Based on the analysis conducted by the workgroups, the OTC Commissioners recommended that states consider reductions from the following source categories:

Consumer Products
Portable Fuel Containers
Adhesives and Sealants Applications
Diesel Engine Chip Reflash
Cutback and Emulsified Asphalt Paving
Asphalt Production Plants
Cement Kilns
Glass Furnaces
Industrial, Commercial and Institutional (ICI) Boilers
Regional Fuels

With the exception of Diesel Engine Chip Reflash and Regional Fuels, the State of New York is developing new or revised regulations for all of the source categories recommended by the OTC Commissioners that will provide for the implementation of all reasonably available control measures and attainment of the NAAQS as expeditiously as practicable. Hence, New York State believes that these measures represent RACM as they are reasonably available and can be expected to advance the attainment date and contribute to RFP. These measures, referred to as "Beyond On The Way" measures in the modeling scenarios, are anticipated to provide an additional 1 to 2 ppb reduction benefit in the projected 2009 and/or 2012 design values beyond what was projected for "On The Books / On the Way" measures as detailed in the modeling section of this SIP.

Additionally, the Commissioners directed the OTC to evaluate control measures for EGUs and HEDD units.

Despite significant reductions of ozone precursor emissions achieved to date, a significant portion of the ozone problem continues to be caused by NO_x transported into and generated within the OTR by EGUs. HEDD operation of EGUs generally has not been addressed under existing air quality control requirements, and these units are operated on very hot summer days when air pollution levels are highest. Department staff has participated in discussions with OTC staff, other state environmental and utility regulators, EPA staff, EGU owners and operators and independent regional systems operators to assess emissions associated with HEDD during the ozone season and to address excess NO_x emissions on HEDDs.

The OTC has developed the "Memorandum of Understanding Among the States of the Ozone Transport Commission Concerning the Incorporation of High Electrical Demand Day Emission Reduction Strategies into Ozone Attainment State Implementation Planning" (HEDD MOU) to address NO_x emissions on days when electricity demand is highest. These HEDDs have a strong correlation to days with the highest potential for ozone formation. Given the high emissions and the favorable meteorology for ozone formation, the OTC states have resolved to pursue reductions from units operating on HEDDs during the ozone season. The reductions are to be achieved beginning with the 2009 ozone season or as soon as feasible thereafter, but not later than 2012.

The State of New York is currently evaluating the potential mechanisms and strategies for achieving these emission reductions. The OTC HEDD MOU lists potential mechanisms and strategies. They are:

- Regulatory emission caps on HEDD units on HEDDs
- Performance standards
- State/Generator Partnership Agreements
- Energy efficiency programs
- Demand response programs, provided that these programs do not shift emissions to units with unacceptably high pollutant emissions
- Regulatory standards or controls for distributed generation
- NO_x allowance retirements at adjusted ratios that provide for effective reductions on HEDDs

The Department will implement measures to meet its obligations under the OTC HEDD MOU. These measures are expected to impact ozone levels on the days when the potential for ozone formation are the greatest. It is, however, not possible through the planning and attainment demonstrations performed within this document to predict the impact of these measures. In addition, it is not possible to develop estimates of creditable emissions reductions that will result from the mechanisms and strategies needed to achieve reductions on HEDDs.

Ozone SIP inventories are based on typical daily emissions during the peak ozone season ("Emission Inventory Requirements for Ozone State Implementation Plans," EPA-450/4-91-010, USEPA OAQPS, March 1991). HEDD units do not operate on typical ozone season days. Emissions from HEDD units are not fully accounted for using this methodology to quantify ozone season day emissions. HEDD measures will, therefore, likely reduce ozone levels on ozone exceedance days, but emission reductions from these measures will not be accounted for as creditable emission reductions in the rate-of-progress or attainment year inventories.

The HEDD emission reductions will provide additional weight-of-evidence towards attaining the ozone NAAQS in 2012.

Department of Environmental Conservation
Division of Air Resources

NEW YORK
STATE IMPLEMENTATION PLAN
FOR
OZONE
(8-HOUR NAAQS)

ATTAINMENT DEMONSTRATION
FOR
NEW YORK METRO AREA

APPENDIX A

FINAL PROPOSED REVISION FEBRUARY 2008

New York State Department of Environmental Conservation
ELIOT SPITZER, GOVERNOR ***ALEXANDER GRANNIS, COMMISSIONER***

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Table 1 Ambient ozone and other precursor pollutant monitor stations in New York CMSA

AQS ID	County	Monitor	Pollutant		AQS ID	County	Monitor	Pollutant
090010017	Fairfield	Greenwich	ozone		090010004	Fairfield	Bridgeport	CO
090011123	Fairfield	Danbury	ozone		090010020	Fairfield	Stamford	CO
090013007	Fairfield	Stratford	ozone		090090025	New Haven	New Haven	CO
090019003	Fairfield	Sherwood Island	ozone		340030004	Bergen	Fort Lee	CO
090070007	Middlesex	Middletown	ozone		340035001	Bergen	Hackensack	CO
090090027	New Haven	New Haven	ozone		340171002	Hudson	Jersey City	CO
090093002	New Haven	Madison	ozone		340232003	Middlesex	Perth Amboy	CO
090099005	New Haven	Hamden	ozone		340252001	Monmouth	Freehold	CO
340030005	Bergen	Teaneck	ozone		340270023	Morris	Morristown	CO
340170006	Hudson	Bayonne	ozone		340390003	Union	Elizabeth	CO
340190001	Hunterdon	Flemington	ozone		360050083	Bronx	Botanical Gardens	CO
340230011	Middlesex	New Brunswick	ozone		360470071	Kings	Flatbush Ave	CO
340250005	Monmouth	Monmouth Univ.	ozone		360590005	Nassau	Eisenhower Park	CO
340273001	Morris	Chester	ozone		360610056	New York	PS59	CO
340315001	Passaic	Ramapo	ozone		360610062	New York	Canal Street	CO
360050083	Bronx	Botanical Garden	ozone		360610081	New York	Bloomingdales	CO
360050110	Bronx	IS 52	ozone		360610092	New York	E34th street	CO
360810098	Queens	College Point	ozone		360810097	Queens	Springfield Blvd	CO
360810124	Queens	Queens College	ozone		360810124	Queens	Queens College	CO
360850067	Richmond	Susan Wagner	ozone		361030009	Suffolk	Holtsville	CO
361030002	Suffolk	Babylon	ozone		090019003	Fairfield	Sherwood Island	NO, NO2
361030004	Suffolk	Riverhead	ozone		340170006	Hudson	Bayonne	NO2
361030009	Suffolk	Holtsville	ozone		340230011	Middlesex	New Brunswick	NO, NO2
361192004	Westchester	White Plains	ozone		340273001	Morris	Chester	NO, NO2
090019003	Fairfield	Sherwood Island	PAMS		340390004	Union	Elizabeth	NO2
340230011	Middlesex	New Brunswick	PAMS		360050083	Bronx	Botanical Gardens	NO, NO2

360050083	Bronx	Botanical Gardens	PAMS		360590005	Nassau	Eisenhower Park	NO, NO2
					360610056	New York	PS59	NO, NO2

Table 2 Listing of 4-highest measured 1-h and 8-h ozone concentrations (ppb) and the number of exceedance days in New York CMSA

AQS ID	Monitor	County	year	1H1	1H2	1H3	1H4	1H-Days	8H1	8H2	8H3	8H4	8H-days
90010017	Greenwich	Fairfield	2000	124	123	114	111	0	113	95	85	84	3
90010017	Greenwich	Fairfield	2001	154	130	126	125	4	131	117	107	98	13
90010017	Greenwich	Fairfield	2002	168	150	131	125	4	120	110	106	103	18
90010017	Greenwich	Fairfield	2003	144	137	126	125	4	124	106	105	99	7
90010017	Greenwich	Fairfield	2004	108	102	101	98	0	85	84	79	75	1
90010017	Greenwich	Fairfield	2005	153	124	118	115	1	110	99	93	89	8
90010017	Greenwich	Fairfield	2006	134	134	128	124	3	100	99	99	97	5
90011123	Danbury	Fairfield	2000	131	124	106	105	1	97	96	92	90	7
90011123	Danbury	Fairfield	2001	140	133	125	122	3	112	107	98	96	9
90011123	Danbury	Fairfield	2002	152	141	141	129	5	121	120	110	109	17
90011123	Danbury	Fairfield	2003	113	110	109	104	0	103	88	86	85	4
90011123	Danbury	Fairfield	2004	108	104	103	102	0	98	92	86	86	4
90011123	Danbury	Fairfield	2005	158	146	145	135	5	110	109	106	104	11
90011123	Danbury	Fairfield	2006	144	123	112	106	1	103	98	88	87	4
90013007	Stratford	Fairfield	2000	140	122	111	110	1	124	94	91	90	4
90013007	Stratford	Fairfield	2001	148	144	143	129	4	131	120	110	102	10
90013007	Stratford	Fairfield	2002	145	135	133	125	4	129	115	104	103	19
90013007	Stratford	Fairfield	2003	155	144	135	127	4	125	114	106	101	8
90013007	Stratford	Fairfield	2004	135	105	103	99	1	110	88	81	81	2
90013007	Stratford	Fairfield	2005	136	111	111	109	1	96	96	92	90	8
90013007	Stratford	Fairfield	2006	138	136	125	120	3	110	99	97	95	7
90019003	Westport	Fairfield	2000	136	116	114	110	1	120	89	85	84	3
90019003	Westport	Fairfield	2001	150	144	139	123	3	133	122	114	97	15
90019003	Westport	Fairfield	2002	143	138	133	128	5	117	114	111	98	19
90019003	Westport	Fairfield	2003	141	133	132	118	3	113	112	108	97	6
90019003	Westport	Fairfield	2004	129	106	98	97	1	99	87	82	81	2
90019003	Westport	Fairfield	2005	146	119	119	115	1	100	92	91	91	10
90019003	Westport	Fairfield	2006	148	137	130	104	3	119	109	102	89	6
90070007	Middletown	Middlesex	2000	121	116	111	107	0	103	92	90	89	6
90070007	Middletown	Middlesex	2001	150	138	137	134	8	111	111	108	102	11
90070007	Middletown	Middlesex	2002	141	138	135	128	4	110	110	110	102	16

90070007	Middletown	Middlesex	2003	138	113	113	108	1	111	96	93	92	7
90070007	Middletown	Middlesex	2004	124	102	101	99	0	102	84	83	82	1
90070007	Middletown	Middlesex	2005	136	134	130	122	3	110	106	99	96	7
90070007	Middletown	Middlesex	2006	144	108	107	107	1	110	98	94	89	5
90090027	New Haven	New Haven	2000										
90090027	New Haven	New Haven	2001										
90090027	New Haven	New Haven	2002										
90090027	New Haven	New Haven	2003										
90090027	New Haven	New Haven	2004	104	96	93	92	0	85	78	77	73	1
90090027	New Haven	New Haven	2005	149	119	112	105	1	108	85	84	80	2
90090027	New Haven	New Haven	2006	121	111	101	96	0	100	83	80	79	1
90093002	Madison	New Haven	2000	146	136	118	111	2	121	104	93	87	6
90093002	Madison	New Haven	2001	162	146	145	129	4	133	126	105	100	11
90093002	Madison	New Haven	2002	155	146	132	130	4	134	126	114	107	19
90093002	Madison	New Haven	2003	139	134	129	123	3	124	117	115	101	9
90093002	Madison	New Haven	2004	137	104	100	95	1	111	86	84	77	2
90093002	Madison	New Haven	2005	145	141	128	116	3	99	96	93	92	8
90093002	Madison	New Haven	2006	131	117	115	115	1	114	100	95	95	6
90099005	Hamden	New Haven	2000	124	118	116	104	0	104	88	83	81	2
90099005	Hamden	New Haven	2001	136	134	131	128	4	110	104	102	101	9
90099005	Hamden	New Haven	2002	162	133	130	128	6	124	106	103	102	14
90099005	Hamden	New Haven	2003	136	119	101	101	1	105	96	92	91	7
90099005	Hamden	New Haven	2004										
90099005	Hamden	New Haven	2005										
90099005	Hamden	New Haven	2006										
AQS ID	**Monitor**	**County**	**year**	**1H1**	**1H2**	**1H3**	**1H4**	**1H-Days**	**8H1**	**8H2**	**8H3**	**8H4**	**8H-days**
340030005	Teaneck	Bergen	2000	105	101	98	98	0	89	81	77	76	1
340030005	Teaneck	Bergen	2001	127	125	120	110	2	115	110	108	96	9
340030005	Teaneck	Bergen	2002	143	135	128	123	3	105	104	103	101	16
340030005	Teaneck	Bergen	2003	107	105	104	96	0	98	97	90	85	4
340030005	Teaneck	Bergen	2004	115	97	92	89	0	88	88	83	82	2
340030005	Teaneck	Bergen	2005	122	120	110	107	0	100	93	92	91	8
340030005	Teaneck	Bergen	2006									86	
340170006	Bayonne	Hudson	2000	108	103	103	100	0	103	89	89	82	3
340170006	Bayonne	Hudson	2001	137	132	130	116	3	116	109	103	91	6

340170006	Bayonne	Hudson	2002	109	108	108	105	0	98	90	90	86	4
340170006	Bayonne	Hudson	2003	131	107	107	104	1	102	97	82	80	2
340170006	Bayonne	Hudson	2004	114	113	92	92	0	88	82	81	79	1
340170006	Bayonne	Hudson	2005	141	120	115	113	1	96	93	92	91	6
340170006	Bayonne	Hudson	2006									87	
340190001	Flemington	Hunterdon	2000	116	110	107	105	0	106	102	95	91	8
340190001	Flemington	Hunterdon	2001	130	128	128	123	3	112	103	102	100	12
340190001	Flemington	Hunterdon	2002	131	117	113	108	1	115	109	99	97	17
340190001	Flemington	Hunterdon	2003	123	118	114	98	0	115	110	92	92	6
340190001	Flemington	Hunterdon	2004	109	109	100	99	0	98	90	89	87	6
340190001	Flemington	Hunterdon	2005	115	110	108	107	0	100	93	92	92	12
340190001	Flemington	Hunterdon	2006									87	
340230011	Rutgers univ	Middlesex	2000	118	112	111	108	0	112	101	100	94	10
340230011	Rutgers univ	Middlesex	2001	142	136	133	114	3	120	110	106	106	16
340230011	Rutgers univ	Middlesex	2002	132	124	124	123	1	115	104	103	103	24
340230011	Rutgers univ	Middlesex	2003	122	120	103	100	0	117	113	91	86	4
340230011	Rutgers univ	Middlesex	2004	119	112	102	91	0	99	88	81	80	2
340230011	Rutgers univ	Middlesex	2005	132	125	115	111	2	97	94	94	92	10
340230011	Rutgers univ	Middlesex	2006									92	
340250005	W. Long Branch	Monmouth	2000	130	129	119	102	2	118	104	101	98	5
340250005	W. Long Branch	Monmouth	2001	127	124	117	105	1	114	112	97	91	8
340250005	W. Long Branch	Monmouth	2002	126	123	122	121	1	104	102	102	101	14
340250005	W. Long Branch	Monmouth	2003	151	143	139	128	4	130	127	111	99	10
340250005	W. Long Branch	Monmouth	2004	108	104	94	94	0	99	94	80	80	2
340250005	W. Long Branch	Monmouth	2005	139	115	112	104	1	99	95	88	88	8
340250005	W. Long Branch	Monmouth	2006									88	
340273001	Chester	Morris	2000	118	110	109	107	0	114	99	98	90	6
340273001	Chester	Morris	2001	123	121	114	110	0	108	108	107	101	13
340273001	Chester	Morris	2002	144	142	118	113	2	129	123	107	105	25
340273001	Chester	Morris	2003	122	118	116	96	0	109	108	91	90	4
340273001	Chester	Morris	2004	93	89	89	84	0	81	78	75	75	0
340273001	Chester	Morris	2005	100	95	95	92	0	91	87	85	81	3
340273001	Chester	Morris	2006									91	
340315001	Ramapo	Passaic	2000	102	101	93	91	0	97	82	81	81	1
340315001	Ramapo	Passaic	2001	105	104	103	99	0	92	91	91	88	8

340315001	Ramapo	Passaic	2002	133	116	116	114	1	109	101	97	97	11
340315001	Ramapo	Passaic	2003	117	107	101	97	0	88	85	83	81	2
340315001	Ramapo	Passaic	2004	110	103	99	91	0	95	91	79	74	2
340315001	Ramapo	Passaic	2005	108	102	102	98	0	94	90	90	88	7
AQS ID	**Monitor**	**County**	**year**	**1H1**	**1H2**	**1H3**	**1H4**	**1H-Days**	**8H1**	**8H2**	**8H3**	**8H4**	**8H-days**
360050083	Bot.Gardens	Bronx	2000	112	95	88	87	0	103	79	76	71	1
360050083	Bot.Gardens	Bronx	2001	98	95	92	89	0	86	84	79	77	1
360050083	Bot.Gardens	Bronx	2002	132	126	126	122	3	105	100	96	96	6
360050083	Bot.Gardens	Bronx	2003	105	104	102	100	0	89	85	79	79	2
360050083	Bot.Gardens	Bronx	2004	102	96	93	92	0	87	81	79	74	1
360050083	Bot.Gardens	Bronx	2005	109	105	100	95	0	82	80	75	74	0
360050083	Bot.Gardens	Bronx	2006	109	107	106	101	0	95	90	89	76	3
360050110	IS52	Bronx	2000	110	94	86	81	0	102	81	74	68	1
360050110	IS52	Bronx	2001	91	83	76	76	0	69	68	66	63	0
360050110	IS52	Bronx	2002	133	116	115	112	1	102	93	93	89	6
360050110	IS52	Bronx	2003	109	107	98	94	0	100	90	84	82	2
360050110	IS52	Bronx	2004	94	91	89	89	0	80	80	77	70	0
360050110	IS52	Bronx	2005	108	101	101	99	0	97	79	78	77	1
360050110	IS52	Bronx	2006	114	94	90	89	0	99	81	80	72	1
360810098	College Point	Queens	2000	106	87	87	83	0	100	80	72	69	1
360810098	College Point	Queens	2001	105	105	97	96	0	93	81	76	72	1
360810098	College Point	Queens	2002	122	110	106	104	0	85	84	83	82	1
360810098	College Point	Queens	2003	103	96	91	89	0	93	83	82	72	1
360810098	College Point	Queens	2004	82	81	76	76	0	69	68	66	64	0
360810098	College Point	Queens	2005	109	103	97	93	0	84	78	75	73	0
360810098	College Point	Queens	2006									NA	
360810124	Queens College	Queens	2000									NA	
360810124	Queens College	Queens	2001	129	123	120	102	1	101	93	76	74	2
360810124	Queens College	Queens	2002	141	127	116	112	2	98	97	90	89	7
360810124	Queens College	Queens	2003	116	106	105	103	0	104	93	90	86	4
360810124	Queens College	Queens	2004	104	95	95	94	0	83	82	80	75	0
360810124	Queens College	Queens	2005	123	118	114	111	0	92	91	88	86	4
360810124	Queens College	Queens	2006	110	104	100	100	0	89	86	81	78	2
360850067	Susan Wagner	Richmond	2000	123	116	113	111	0	118	103	101	94	11
360850067	Susan Wagner	Richmond	2001	133	127	121	117	2	110	108	97	97	10

360850067	Susan Wagner	Richmond	2002	132	123	115	114	1	111	106	104	99	19
360850067	Susan Wagner	Richmond	2003	127	120	108	103	1	114	111	90	86	5
360850067	Susan Wagner	Richmond	2004	127	108	97	94	1	106	86	84	83	2
360850067	Susan Wagner	Richmond	2005	136	117	111	111	1	101	98	97	94	8
360850067	Susan Wagner	Richmond	2006	125	114	112	106	1	113	98	96	92	8
361030002	Babylon	Suffolk	2000	134	112	108	106	1	115	100	86	86	4
361030002	Babylon	Suffolk	2001	128	126	100	98	2	103	101	84	84	2
361030002	Babylon	Suffolk	2002	143	141	132	126	4	111	110	109	108	9
361030002	Babylon	Suffolk	2003	151	130	125	109	3	114	110	105	94	6
361030002	Babylon	Suffolk	2004	103	101	97	94	0	90	89	82	81	2
361030002	Babylon	Suffolk	2005	130	124	118	115	1	101	100	99	98	6
361030002	Babylon	Suffolk	2006	139	129	128	115	3	107	96	93	90	5
361030004	Riverhead	Suffolk	2000	145	116	114	98	1	120	95	93	85	4
361030004	Riverhead	Suffolk	2001	122	111	99	98	0	98	95	95	82	3
361030004	Riverhead	Suffolk	2002	129	127	126	119	3	111	106	95	90	6
361030004	Riverhead	Suffolk	2003	118	114	100	93	0	92	91	91	82	3
361030004	Riverhead	Suffolk	2004	104	85	83	80	0	85	71	70	69	1
361030004	Riverhead	Suffolk	2005	126	113	112	105	1	95	93	90	86	6
361030004	Riverhead	Suffolk	2006	168	146	126	120	3	130	103	103	101	5
361030009	Holtsville	Suffolk	2000	139	127	112	105	2	120	109	95	92	4
361030009	Holtsville	Suffolk	2001	147	138	120	117	2	117	114	98	97	8
361030009	Holtsville	Suffolk	2002	148	139	137	123	3	128	110	109	103	18
361030009	Holtsville	Suffolk	2003	155	132	128	110	3	117	114	112	102	6
361030009	Holtsville	Suffolk	2004	111	102	100	93	0	90	87	80	79	2
361030009	Holtsville	Suffolk	2005	127	120	113	105	1	99	96	95	93	8
361030009	Holtsville	Suffolk	2006	144	135	128	124	3	117	101	97	96	5
361192004	White Plains	Westchester	2000	116	108	95	91	0	110	86	78	78	2
361192004	White Plains	Westchester	2001	127	127	120	109	2	107	95	92	91	8
361192004	White Plains	Westchester	2002	156	133	133	129	5	120	108	103	102	15
361192004	White Plains	Westchester	2003	128	111	110	102	1	97	93	92	91	4
361192004	White Plains	Westchester	2004	105	99	96	91	0	79	79	78	78	0
361192004	White Plains	Westchester	2005	133	123	119	118	1	106	98	97	95	9
361192004	White Plains	Westchester	2006	145	110	106	103	1	112	87	83	83	2

Table 3 Measured 8-h ozone design values (ppb) for 2000 to 2004 for monitors in New York CMSA

County	Location	AQS ID	DV02	DV03	DV04	DVC
Fairfield	Greenwich	90010017	95	100	92	95.6
Fairfield	Danbury	90011123	98	96	93	95.6
Fairfield	Stratford	90013007	98	102	95	98.3
Fairfield	Westport	90019003	93	97	92	94.0
Middlesex	Middletown	90070007	97	98	92	95.6
New Haven	Madison	90093002	98	102	95	98.3
New Haven	Hamden	90099005	94	98		96.0
Bergen	Teaneck	340030005	92	94	89	91.6
Hudson	Bayonne	340170006	86	86	82	84.6
Hunterdon	Flemington	340190001	97	97	92	95.3
Middlesex	New Brunswick	340230011	101	98	89	96.0
Monmouth	W. Long Branch	340250005	97	97	93	95.6
Morris	Chester	340273001	98	98	90	95.3
Passaic	Ramapo	340315001	88	88	84	86.6
Bronx	Botanical Gardens	360050083	81	84	83	82.6
Bronx	IS52	360050110	73	78	80	77.0
Queens	College Point	360810098	74	75	72	73.0
Queens	Queens College	360810124		83	83	83.0
Richmond	Susan Wagner	360850067	96	94	89	93.0
Suffolk	Babylon	361030002	92	95	94	93.6
Suffolk	Riverhead	361030004	85	84	80	83.0
Suffolk	Holtsville	361030009	97	100	94	97.0
Westchester	White Plains	361192004	90	94	90	91.3

Table 4 Average 6 to 9 AM measured concentrations and standard deviation of ozone precursors for the period 1995 to 2006 for monitors in New York CMSA

Nitric oxide NO (ppb)

AQS ID	1995		1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006	
	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd
90019003	N.A.	0.0	11.2	18.3	12.0	17.7	11.2	17.7	8.5	14.4	9.0	12.7	11.1	18.2	9.6	18.4	9.8	17.6	8.4	15.1	7.5	13.4	5.8	9.9
340230011	15.1	21.9	15.6	24.9	14.0	21.2	11.1	20.2	11.1	19.6	13.8	19.1	10.5	16.7	8.5	12.4	7.8	13.4	7.7	12.3	7.0	7.4	N.A.	0.0
340273001	2.5	2.9	2.4	1.8	3.0	3.9	2.8	2.4	2.2	2.7	2.5	2.4	2.0	1.6	2.8	2.3	4.2	1.2	3.7	1.2	3.3	1.5	N.A.	0.0
360050083	25.3	27.9	27.7	29.1	22.1	25.2	16.8	15.2	16.8	19.6	21.4	27.4	15.9	24.4	14.7	13.4	24.7	75.9	16.9	16.5	15.5	16.3	14.2	13.3
360590005	35.0	43.4	27.5	31.7	28.8	35.0	27.2	26.5	24.3	32.4	22.0	24.0	21.9	25.0	15.8	16.4	15.7	21.0	16.9	17.8	15.7	18.2	15.5	16.9
360610056	61.7	47.9	57.8	43.4	58.4	43.4	51.6	33.4	55.2	41.0	55.8	40.7	48.8	30.6	40.8	29.5	45.5	33.8	43.4	31.3	41.7	30.2	32.0	22.7

Nitrogen dioxide NO2 (ppb)

AQS ID	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd
90019003	N.A.	0.0	13.7	8.6	15.4	8.8	15.0	9.2	14.9	8.7	13.6	7.3	16.7	9.2	17.3	9.0	14.2	9.0	10.7	7.4	11.7	8.2	11.6	6.4
340170006	28.5	15.0	29.8	16.9	30.3	15.1	28.2	14.2	29.0	14.8	27.2	11.9	29.0	14.0	24.7	12.9	28.8	18.1	20.1	11.4	20.7	11.9	N.A.	0.0
340230011	19.2	10.7	20.8	11.2	19.8	9.1	17.6	10.5	16.4	10.4	18.3	8.7	14.8	7.9	16.2	7.8	16.4	8.3	14.9	7.4	15.7	7.4	N.A.	0.0
340273001	8.4	5.4	7.5	4.9	8.5	6.4	9.1	5.0	8.8	5.1	8.4	4.8	8.0	4.3	7.9	4.2	6.1	3.8	5.5	3.2	8.6	4.2	N.A.	0.0
340390004	41.1	15.7	40.4	14.1	46.8	16.3	43.7	14.2	42.2	13.7	39.1	13.7	42.8	13.0	39.5	15.6	33.8	13.9	29.9	13.0	31.8	13.0	N.A.	0.0
360050083	32.6	14.2	31.9	12.6	31.3	12.8	29.9	13.0	29.0	12.5	27.9	11.7	27.5	12.5	28.1	13.0	28.7	11.6	23.3	11.5	25.0	10.8	25.4	11.5
360610056	41.6	16.9	43.3	13.8	43.8	15.9	42.1	14.2	47.0	17.0	39.5	13.3	41.1	13.9	43.8	16.3	39.0	16.0	38.0	14.3	39.1	14.8	37.9	14.5

Carbon monoxide CO (ppm)

AQS ID	1995		1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006	
	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd	Avg	sd
90010004	1.2	0.5	1.2	0.4	1.0	0.4	1.1	0.3	1.0	0.3	0.9	0.2	0.8	0.2	0.8	0.2	0.7	0.2	N.A.	0.0	N.A.	0.0	N.A.	0.0
90010020	1.4	0.6	1.4	0.5	1.3	0.5	1.3	0.4	1.1	0.4	0.9	0.4	1.0	0.3	0.9	0.4	1.0	0.3	0.7	0.3	0.6	0.3	0.5	0.2
90090025	1.0	0.3	1.0	0.4	0.9	0.3	1.0	0.3	0.7	0.3	0.6	0.2	0.6	0.2	0.6	0.2	0.7	0.2	0.5	0.2	N.A.	0.0	N.A.	0.0
340030004	1.7	0.6	1.8	0.7	N.A.	0.0	2.0	0.8	1.7	0.6	1.4	0.6	1.5	0.5	1.3	0.5	1.1	0.4	0.9	0.3	0.9	0.3	N.A.	0.0
340035001	1.0	0.4	1.0	0.4	0.7	0.4	0.8	0.4	0.7	0.3	0.6	0.3	0.6	0.3	0.6	0.2	0.7	0.2	0.5	0.3	0.6	0.2	N.A.	0.0
340171002	1.8	1.0	1.9	0.9	1.5	0.8	1.7	0.8	1.3	0.7	1.2	0.7	1.1	0.5	1.2	0.5	1.1	0.5	1.1	0.5	1.1	0.4	N.A.	0.0
340232003	1.2	0.5	1.2	0.5	1.1	0.4	1.0	0.3	0.9	0.5	0.9	0.4	0.7	0.3	0.6	0.2	0.7	0.3	0.5	0.2	0.6	0.2	N.A.	0.0
340252001	1.3	0.6	1.1	0.6	1.5	0.7	1.1	0.5	1.2	0.5	1.0	0.4	0.9	0.4	0.9	0.3	0.9	0.4	0.7	0.3	0.6	0.2	N.A.	0.0
340270003	1.7	0.9	1.8	0.9	1.6	0.8	1.4	0.7	1.3	0.7	1.4	0.6	1.1	0.5	1.0	0.4	0.9	0.3	0.7	0.3	0.6	0.2	N.A.	0.0
340390003	1.9	0.9	1.7	0.9	1.5	0.8	1.4	0.8	1.3	0.6	1.4	0.8	1.1	0.5	1.0	0.5	1.1	0.6	0.8	0.4	0.9	0.3	N.A.	0.0
360050083	0.7	0.4	0.7	0.4	0.7	0.4	0.7	0.3	0.7	0.3	0.7	0.3	0.7	0.3	0.8	0.2	0.8	0.2	0.7	0.2	0.6	0.2	0.4	0.2

360470071	2.7	1.4	2.7	1.3	2.6	1.1	2.0	0.8	1.8	0.7	1.8	0.7	1.3	0.5	1.3	0.4	1.4	0.4	1.1	0.4	1.0	0.3	1.0	0.3
360590005	0.8	0.5	0.8	0.4	0.6	0.4	0.5	0.3	0.6	0.4	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0
360610056	1.2	0.6	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.4	0.9	0.4	0.9	0.3	0.8	0.3	0.9	0.3	0.7	0.2	0.7	0.2	0.7	0.2
360610062	2.0	0.8	1.9	0.7	1.7	0.7	1.8	0.6	1.5	0.6	1.5	0.6	1.3	0.4	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0
360610081	2.6	1.3	2.6	1.1	2.3	0.9	2.2	1.3	1.7	0.7	1.6	0.6	1.2	0.4	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0
360610092	1.6	0.7	1.6	0.8	1.6	0.8	1.4	0.6	1.3	0.5	1.3	0.5	1.0	0.4	1.0	0.4	1.2	0.4	1.0	0.3	N.A.	0.0	N.A.	0.0
360810097	N.A.	0.0	N.A.	0.0	N.A.	0.0	0.8	0.3	0.8	0.3	0.7	0.3	0.5	0.3	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0
360810124	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	0.6	0.2	0.5	0.2	0.7	0.3	0.6	0.3	0.5	0.2	0.5	0.2
361030009	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	N.A.	0.0	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

missing data N.A.

Table 5a 2002 Base Year anthropogenic emissions by major category by county for New York CMSA

FIPS	Sector	County	CO [tons/yr]	NOX [tons/yr]	VOC [tons/yr]	NH3 [tons/yr]	SO2 [tons/yr]	PM10 [tons/yr]	PM2_5 [tons/yr]	PMC [tons/yr]
09001	Area	Fairfield	9691	3134	16853	537	2951	4596	1942	2655
09007	Area	Middlesex	5867	610	5718	325	734	1640	928	711
09009	Area	New Haven	12220	2937	17691	493	2849	3919	2152	1767
34003	Area	Bergen	4746	2859	14450	1429	823	1471	985	485
34013	Area	Essex	3978	2475	12055	1380	1081	1136	779	357
34017	Area	Hudson	2808	1766	8299	1047	627	987	551	436
34019	Area	Hunterdon	6005	450	5134	773	395	2077	937	1141
34023	Area	Middlesex	4548	2385	13625	1261	692	1942	915	1027
34025	Area	Monmouth	5535	1799	11075	1081	501	2328	1070	1258
34027	Area	Morris	7713	1749	11041	865	735	1820	1231	589
34031	Area	Passaic	4618	1377	8937	797	453	986	755	231
34035	Area	Somerset	7297	1111	8339	780	281	2119	1177	942
34037	Area	Sussex	7435	480	6063	581	563	1641	1052	589
34039	Area	Union	2337	1642	9241	968	603	796	484	312
34041	Area	Warren	4422	369	4048	553	344	1361	684	677
36005	Area	Bronx	1486	3710	13479	644	2196	2275	815	1460
36047	Area	Kings	3078	7560	26169	1223	3688	4047	1629	2418
36059	Area	Nassau	2354	6458	19705	766	4086	5316	1522	3794
36061	Area	New York	5351	15971	23441	982	7579	5258	2786	2473
36081	Area	Queens	2467	6888	25061	1077	3498	4000	1553	2447

36085	Area	Richmond	528	1282	7551	209	439	2530	449	2080
36087	Area	Rockland	815	1299	3835	175	639	1068	375	693
36103	Area	Suffolk	5310	7013	24839	1251	15634	15608	2885	12723
36119	Area	Westchester	2445	4786	13960	581	3844	3283	1119	2164
	Total		113055	80110	310610	19778	55236	72204	28774	43431
09001	Nonroad	Fairfield	90294	7099	9305	5	608	558	512	45
09007	Nonroad	Middlesex	14877	1138	2571	1	76	104	95	8
09009	Nonroad	New Haven	56678	7887	6476	4	756	476	438	38
34003	Nonroad	Bergen	89576	5835	6863	4	468	455	414	41
34013	Nonroad	Essex	59601	8357	4347	4	880	427	377	50
34017	Nonroad	Hudson	24683	5151	2910	2	1420	314	289	26
34019	Nonroad	Hunterdon	15378	1238	1742	1	106	121	110	11
34023	Nonroad	Middlesex	59779	5049	4761	3	576	393	362	32
34025	Nonroad	Monmouth	53453	4122	5968	3	848	388	356	32
34027	Nonroad	Morris	52311	2950	4551	3	212	278	252	27
34031	Nonroad	Passaic	29426	2051	2971	2	147	168	155	14
34035	Nonroad	Somerset	36601	2276	2786	2	169	197	180	17
34037	Nonroad	Sussex	12356	749	2167	1	71	106	96	10
34039	Nonroad	Union	36126	4538	2727	2	1460	253	232	21
34041	Nonroad	Warren	7834	571	1061	0	45	61	56	5
36005	Nonroad	Bronx	30868	2546	2707	2	289	240	221	19
36047	Nonroad	Kings	74936	7602	6042	5	1641	622	572	49
36059	Nonroad	Nassau	89770	4186	7386	4	371	385	354	30
36061	Nonroad	New York	146840	10951	8917	8	1313	865	796	69
36081	Nonroad	Queens	74087	10808	6198	4	1746	779	722	57

36085	Nonroad	Richmond	17680	3768	1729	1	1546	254	234	20
36087	Nonroad	Rockland	19675	1300	2104	1	98	113	104	9
36103	Nonroad	Suffolk	146580	7681	18434	8	620	780	715	65
36119	Nonroad	Westchester	72461	3619	6601	4	342	399	365	34
	Total		1311870	111469	121323	75	15805	8738	8008	730
09001	Point	Fairfield	508	3892	1161	0	5070	267	190	77
09007	Point	Middlesex	353	1536	220	0	965	69	61	8
09009	Point	New Haven	677	2305	2479	0	5512	231	202	29
34003	Point	Bergen	605	956	700	0	82	169	151	18
34013	Point	Essex	624	2102	579	0	2110	208	182	27
34017	Point	Hudson	2051	9767	1481	0	19250	1713	1077	635
34019	Point	Hunterdon	259	491	135	0	18	51	49	2
34023	Point	Middlesex	2907	3608	3524	0	504	527	466	61
34025	Point	Monmouth	381	240	150	0	55	50	43	7
34027	Point	Morris	259	283	236	0	52	52	35	17
34031	Point	Passaic	68	122	232	0	26	22	18	4
34035	Point	Somerset	216	307	180	0	40	111	97	13
34037	Point	Sussex	83	38	36	0	0	18	11	7
34039	Point	Union	965	4013	4472	0	1253	590	538	53
34041	Point	Warren	444	580	471	0	101	256	233	23
36005	Point	Bronx	273	1006	78	5	484	57	35	22
36047	Point	Kings	959	3848	402	45	1194	170	151	19
36059	Point	Nassau	1134	4487	700	48	739	220	188	31
36061	Point	New York	1470	5042	221	94	2574	373	291	82

36081	Point	Queens	3134	10180	604	222	4018	752	619	133
36085	Point	Richmond	541	1278	251	23	29	175	132	43
36087	Point	Rockland	720	5996	101	53	9371	252	170	82
36103	Point	Suffolk	2249	12617	693	221	33079	687	552	135
36119	Point	Westchester	253	1343	29	2	209	90	57	32
	Total		21134	76037	19133	713	86734	7110	5551	1560
09001	Mobile	Fairfield	150917	17587	8866	785	383	384	255	129
09007	Mobile	Middlesex	36657	4474	1991	183	91	92	61	30
09009	Mobile	New Haven	138844	16514	7826	708	350	352	234	117
34003	Mobile	Bergen	166267	17190	12689	816	367	386	250	136
34013	Mobile	Essex	100856	11660	7601	489	245	270	183	88
34017	Mobile	Hudson	45399	5363	3516	221	112	125	85	40
34019	Mobile	Hunterdon	39178	4434	2689	187	95	106	72	34
34023	Mobile	Middlesex	152630	15794	11279	760	343	361	234	127
34025	Mobile	Monmouth	120749	11765	9258	624	265	270	170	100
34027	Mobile	Morris	119430	10727	8219	568	236	236	146	90
34031	Mobile	Passaic	59066	6286	4509	290	134	142	93	49
34035	Mobile	Somerset	64761	6671	4682	315	145	154	101	53
34037	Mobile	Sussex	28100	2532	2003	134	58	59	38	22
34039	Mobile	Union	83187	8656	6282	421	187	196	126	70
34041	Mobile	Warren	32726	3730	2246	152	76	86	58	27
36005	Mobile	Bronx	96211	8795	6910	479	213	208	132	76
36047	Mobile	Kings	96616	9287	7018	497	224	220	141	79
36059	Mobile	Nassau	232141	23495	17620	1184	577	564	367	196
36061	Mobile	New York	86086	8320	6342	441	199	195	124	70
36081	Mobile	Queens	158702	14783	10962	792	352	344	218	126
36085	Mobile	Richmond	40517	3770	2857	202	90	88	56	32
36087	Mobile	Rockland	57207	5571	3780	269	133	130	85	45
36103	Mobile	Suffolk	386450	37087	29485	1991	935	900	577	324
36119	Mobile	Westchester	189118	18736	12480	897	451	441	290	151
	Total		2681814	273224	191110	13405	6262	6309	4097	2212

Table 5b Summary of emissions for Base Year 2002 for New York CMSA

Sector	CO	NOX	VOC	NH3	SO2	PM10	PM2_5	PMC
Area	113055	80110	310610	19778	55236	72204	28774	43431
Nonroad	1311870	111469	121323	75	15805	8738	8008	730
Point	21134	76037	19133	713	86734	7110	5551	1560
Mobile	2681814	273224	191110	13405	6262	6309	4097	2212

Table 6a 2009 Future Year anthropogenic emissions by major category by county for New York CMSA

FIPS	Sector	County	CO [tons/yr]	NOX [tons/yr]	VOC [tons/yr]	NH3 [tons/yr]	SO2 [tons/yr]	PM10 [tons/yr]	PM2_5 [tons/yr]	PMC [tons/yr]
9001	Area	Fairfield	9176	3272	14328	531	2991	4623	1873	2750
9007	Area	Middlesex	5471	623	4968	317	743	1611	876	735
9009	Area	New Haven	11514	3061	15883	487	2887	3883	2056	1827
34003	Area	Bergen	4564	2551	12715	1547	820	1461	964	497
34013	Area	Essex	3832	2224	10563	1520	1073	1127	761	366
34017	Area	Hudson	2706	1599	7245	1158	623	985	539	447
34019	Area	Hunterdon	5607	411	4639	908	390	2046	887	1160
34023	Area	Middlesex	4360	2110	12131	1373	690	1946	893	1053
34025	Area	Monmouth	5124	1633	9692	1188	499	2311	1026	1285
34027	Area	Morris	7259	1552	9819	930	730	1773	1173	601
34031	Area	Passaic	4355	1252	7937	858	450	956	721	234
34035	Area	Somerset	6826	987	7473	880	280	2066	1115	951
34037	Area	Sussex	6933	445	5490	650	556	1588	990	599
34039	Area	Union	2256	1478	8303	1071	599	794	475	319
34041	Area	Warren	4136	338	3671	637	340	1340	648	691
36005	Area	Bronx	1589	4053	11690	783	2402	2473	893	1581
36047	Area	Kings	3276	8258	22814	1488	4063	4392	1776	2616
36059	Area	Nassau	2448	6977	17685	922	4386	5551	1624	3927
36061	Area	New York	5667	17198	22183	1172	8128	5639	2983	2656
36081	Area	Queens	2642	7514	22491	1309	3837	4363	1689	2674
36085	Area	Richmond	566	1414	7374	256	500	2828	499	2329
36087	Area	Rockland	824	1417	3367	209	713	1143	399	744
36103	Area	Suffolk	5255	7543	22779	1504	16628	16241	3014	13227

36119	Area	Westchester	2489	5174	12567	693	4104	3511	1193	2318
	Area	TOTAL	108872	83083	277807	22391	58432	74653	29067	45586
9001	Area BOTW	Fairfield	9176	3025	13832	531	2991	4623	1873	2750
9007	Area BOTW	Middlesex	5471	584	4842	317	743	1611	876	735
9009	Area BOTW	New Haven	11514	2850	15517	487	2887	3883	2056	1827
34003	Area BOTW	Bergen	4564	2551	12260	1547	820	1461	964	497
34013	Area BOTW	Essex	3832	2224	10170	1520	1073	1127	761	366
34017	Area BOTW	Hudson	2706	1599	6952	1158	623	985	539	447
34019	Area BOTW	Hunterdon	5607	411	4559	908	390	2046	887	1160
34023	Area BOTW	Middlesex	4360	2110	11744	1373	690	1946	893	1053
34025	Area BOTW	Monmouth	5124	1633	9351	1188	499	2311	1026	1285
34027	Area BOTW	Morris	7259	1552	9555	930	730	1773	1173	601
34031	Area BOTW	Passaic	4355	1252	7690	858	450	956	721	234
34035	Area BOTW	Somerset	6826	987	7309	880	280	2066	1115	951
34037	Area BOTW	Sussex	6933	445	5400	650	556	1588	990	599
34039	Area BOTW	Union	2256	1478	8040	1071	599	794	475	319
34041	Area BOTW	Warren	4136	338	3603	637	340	1340	648	691
36005	Area BOTW	Bronx	1589	3798	11416	783	2402	2473	893	1581
36047	Area BOTW	Kings	3276	7700	22129	1488	4063	4392	1776	2616
36059	Area BOTW	Nassau	2448	6234	16824	922	4386	5551	1624	3927
36061	Area BOTW	New York	5667	14638	20653	1172	8128	5639	2983	2656
36081	Area BOTW	Queens	2642	6996	21808	1309	3837	4363	1689	2674
36085	Area BOTW	Richmond	566	1326	7292	256	500	2828	499	2329
36087	Area BOTW	Rockland	824	1252	3234	209	713	1143	399	744
36103	Area BOTW	Suffolk	5255	6743	21980	1504	16628	16241	3014	13227
36119	Area BOTW	Westchester	2489	4636	11984	693	4104	3511	1193	2318
	Area BOTW	TOTAL	108872	76361	268144	22391	58432	74653	29067	45586

9001	Non-Road	Fairfield	93619	5720	6365	5	269	472	434	38
9007	Non-Road	Middlesex	14806	862	1954	1	14	85	78	7
9009	Non-Road	New Haven	57314	6404	4529	4	454	402	370	32
34003	Non-Road	Bergen	102190	4702	5043	5	104	389	353	35
34013	Non-Road	Essex	45422	5247	2688	3	332	280	241	39
34017	Non-Road	Hudson	27326	4539	2209	2	296	254	233	21
34019	Non-Road	Hunterdon	16930	1012	1228	1	20	100	90	9
34023	Non-Road	Middlesex	66727	4053	3319	4	112	323	297	26
34025	Non-Road	Monmouth	59104	3636	4257	4	172	321	294	27
34027	Non-Road	Morris	58259	2341	3357	3	46	243	218	24
34031	Non-Road	Passaic	32713	1613	2166	2	27	139	128	11
34035	Non-Road	Somerset	40986	1782	1890	2	32	171	157	15
34037	Non-Road	Sussex	13693	662	1806	1	13	91	82	9
34039	Non-Road	Union	40405	3877	2026	2	309	221	203	18
34041	Non-Road	Warren	8682	462	903	1	8	52	48	5
36005	Non-Road	Bronx	33433	2182	2056	2	52	188	173	15
36047	Non-Road	Kings	82574	6615	4500	6	328	495	455	39
36059	Non-Road	Nassau	98263	3605	5202	5	68	327	302	26
36061	Non-Road	New York	166400	9360	6841	10	248	701	646	55
36081	Non-Road	Queens	80916	9973	4783	5	615	682	632	50
36085	Non-Road	Richmond	18932	3494	1281	2	324	212	195	17
36087	Non-Road	Rockland	21222	1068	1586	1	18	96	88	8
36103	Non-Road	Suffolk	152620	6944	13217	9	126	639	586	53
36119	Non-Road	Westchester	78709	3115	4737	4	67	344	314	30
	Nonroad	TOTAL	1411245	93268	87943	82	4053	7227	6617	609
9001	EGU-Point	Fairfield	1265	2379	49	93	4783	491	489	2
9007	EGU-Point	Middlesex	0	0	0	0	0	0	0	0

9009	EGU-Point	New Haven	1452	243	37	114	0	117	117	0
34003	EGU-Point	Bergen	1800	1026	46	141	0	145	145	0
34013	EGU-Point	Essex	37	33	1	3	0	3	3	0
34017	EGU-Point	Hudson	579	1618	63	36	10958	902	730	172
34019	EGU-Point	Hunterdon	5	9	0	0	0	0	0	0
34023	EGU-Point	Middlesex	733	334	19	57	0	59	59	0
34025	EGU-Point	Monmouth	0	0	0	0	0	0	0	0
34027	EGU-Point	Morris	0	0	0	0	0	0	0	0
34031	EGU-Point	Passaic	0	0	0	0	0	0	0	0
34035	EGU-Point	Somerset	0	0	0	0	0	0	0	0
34037	EGU-Point	Sussex	0	0	0	0	0	0	0	0
34039	EGU-Point	Union	139	93	4	11	0	11	11	0
34041	EGU-Point	Warren	0	0	0	0	0	0	0	0
36005	EGU-Point	Bronx	160	101	4	13	0	13	13	0
36047	EGU-Point	Kings	261	214	7	20	0	21	21	0
36059	EGU-Point	Nassau	476	949	12	37	0	38	38	0
36061	EGU-Point	New York	5	26	0	0	0	0	0	0
36081	EGU-Point	Queens	222	262	6	17	0	18	18	0
36085	EGU-Point	Richmond	94	116	5	5	0	8	8	0
36087	EGU-Point	Rockland	314	2842	38	19	1293	529	432	97
36103	EGU-Point	Suffolk	2105	4958	100	118	0	162	162	0
36119	EGU-Point	Westchester	1	1	0	0	0	0	0	0
	EGU-Point	TOTAL	9649	15203	391	685	17035	2519	2248	271
9001	Point	Fairfield	169	1846	1115	0	261	143	131	11
9007	Point	Middlesex	155	664	177	0	252	43	41	2
9009	Point	New Haven	371	826	2066	0	1192	203	183	21

34003	Point	Bergen	389	486	643	0	66	104	84	20
34013	Point	Essex	499	1126	704	0	1879	167	137	29
34017	Point	Hudson	427	554	936	0	165	108	94	13
34019	Point	Hunterdon	92	221	139	0	5	27	25	2
34023	Point	Middlesex	2830	2302	3880	0	363	478	411	67
34025	Point	Monmouth	623	322	202	0	83	62	52	11
34027	Point	Morris	412	356	243	0	66	70	46	24
34031	Point	Passaic	104	155	260	0	28	30	24	5
34035	Point	Somerset	324	399	254	0	73	143	121	21
34037	Point	Sussex	133	35	37	0	0	22	13	8
34039	Point	Union	881	2224	2675	0	1242	585	525	60
34041	Point	Warren	470	333	643	0	100	254	225	28
36005	Point	Bronx	285	940	67	4	462	60	37	23
36047	Point	Kings	528	1052	358	2	122	32	30	2
36059	Point	Nassau	395	533	641	5	117	81	71	10
36061	Point	New York	624	1575	116	16	550	92	66	26
36081	Point	Queens	639	1626	287	13	675	130	84	46
36085	Point	Richmond	139	140	230	1	26	132	85	47
36087	Point	Rockland	249	497	27	4	30	69	40	29
36103	Point	Suffolk	564	1030	398	2	1743	53	44	8
36119	Point	Westchester	268	1429	31	2	225	95	61	34
	Point	TOTAL	11572	20670	16129	49	9723	3181	2632	548
9001	Point BOTW	Fairfield	169	1807	1115	0	261	143	131	11
9007	Point BOTW	Middlesex	155	621	177	0	252	43	41	2
9009	Point BOTW	New Haven	371	733	2066	0	1192	203	183	21
34003	Point BOTW	Bergen	389	486	693	0	66	104	84	20
34013	Point BOTW	Essex	499	1125	704	0	1879	167	137	29

34017	Point BOTW	Hudson	427	554	1050	0	165	108	94	13
34019	Point BOTW	Hunterdon	92	221	139	0	5	27	25	2
34023	Point BOTW	Middlesex	2830	2302	4004	0	363	478	411	67
34025	Point BOTW	Monmouth	623	322	202	0	83	62	52	11
34027	Point BOTW	Morris	412	356	243	0	66	70	46	24
34031	Point BOTW	Passaic	104	155	260	0	28	30	24	5
34035	Point BOTW	Somerset	324	399	254	0	73	143	121	21
34037	Point BOTW	Sussex	133	35	37	0	0	22	13	8
34039	Point BOTW	Union	881	2135	3513	0	1242	585	525	60
34041	Point BOTW	Warren	470	333	643	0	100	254	225	28
36005	Point BOTW	Bronx	285	881	67	4	462	60	37	23
36047	Point BOTW	Kings	528	987	358	2	122	32	30	2
36059	Point BOTW	Nassau	395	531	641	5	117	81	71	10
36061	Point BOTW	New York	624	1347	116	16	550	92	66	26
36081	Point BOTW	Queens	639	1510	287	13	675	130	84	46
36085	Point BOTW	Richmond	139	131	230	1	26	132	85	47
36087	Point BOTW	Rockland	249	399	27	4	30	69	40	29
36103	Point BOTW	Suffolk	564	998	395	2	1743	53	44	8
36119	Point BOTW	Westchester	268	1405	31	2	225	95	61	34
	Point BOTW	TOTAL	11571	19774	17252	49	9723	3181	2632	548
9001	N.F. EGU	Fairfield	0	41	0	0	16	0	0	0
9007	N.F. EGU	Middlesex	0	41	0	0	16	0	0	0
9009	N.F. EGU	New Haven	3	41	0	0	16	0	3	3
36005	N.F. EGU	Bronx	0	0	0	0	0	0	0	0
36047	N.F. EGU	Kings	62	20	2	0	0	0	3	3
36059	N.F. EGU	Nassau	0	0	0	0	0	0	0	0
36061	N.F. EGU	New York	0	0	0	0	0	0	0	0
36081	N.F. EGU	Queens	0	0	0	0	0	0	0	0
36085	N.F. EGU	Richmond	0	0	0	0	0	0	0	0

36087	N.F. EGU	Rockland	0	0	0	0	0	0	0	0
36103	N.F. EGU	Suffolk	0	0	0	0	0	0	0	0
36119	N.F. EGU	Westchester	0	0	0	0	0	0	0	0
	N.F. EGU	TOTAL	65	143	2	0	49	0	7	7
9001	Mobile	Fairfield	90766	9179	4710	844	85	303	174	129
9007	Mobile	Middlesex	22178	2370	1071	198	20	72	42	31
9009	Mobile	New Haven	83934	8798	4165	763	78	278	160	118
34003	Mobile	Bergen	98717	8096	6565	862	75	281	152	129
34013	Mobile	Essex	61522	5494	4096	520	48	186	104	81
34017	Mobile	Hudson	27786	2556	1913	239	22	87	49	38
34019	Mobile	Hunterdon	25518	2289	1582	215	20	78	45	34
34023	Mobile	Middlesex	96100	7905	6272	845	74	277	151	127
34025	Mobile	Monmouth	74180	5701	4946	665	57	206	109	97
34027	Mobile	Morris	73711	5337	4347	620	52	188	98	90
34031	Mobile	Passaic	35847	2999	2388	312	27	104	57	47
34035	Mobile	Somerset	41120	3367	2624	353	31	117	64	53
34037	Mobile	Sussex	18543	1352	1112	153	13	48	26	23
34039	Mobile	Union	50997	4165	3358	451	39	146	79	67
34041	Mobile	Warren	21310	1933	1300	174	16	64	37	28
36005	Mobile	Bronx	47697	4139	3227	452	37	152	84	68
36047	Mobile	Kings	60774	5548	4353	592	49	202	113	89
36059	Mobile	Nassau	140772	13496	10236	1367	119	488	277	211
36061	Mobile	New York	52696	4959	4576	469	39	160	89	71
36081	Mobile	Queens	98712	8839	7112	959	79	324	180	144
36085	Mobile	Richmond	28410	2539	2035	278	23	94	52	42
36087	Mobile	Rockland	39533	3509	2408	361	32	127	71	56
36103	Mobile	Suffolk	216547	20029	14170	2117	185	744	420	325
36119	Mobile	Westchester	122177	11200	7408	1123	100	402	228	174
	Mobile	TOTAL	1629547	145799	105975	14931	1317	5128	2860	2269

Table 6b Summary of emissions for Future Year 2009 for New York CMSA

Sector	CO	NOX	VOC	NH3	SO2	PM10	PM2_5	PMC
Area	108872	83083	277807	22391	58432	74653	29067	45586
Nonroad	1411245	93268	87943	82	4053	7227	6617	609
EGU-Point	9713	15346	393	685	17084	2519	2255	277
Point	11572	20670	16129	49	9723	3181	2632	548
N.F.EGU	65	143	2	0	49	0	7	7
Mobile	1629547	145799	105975	14931	1317	5128	2860	2269
Total	3171014	358309	488248	38138	90660	92707	43438	49296
Area BOTW	108872	76361	268144	22391	58432	74653	29067	45586
Nonroad	1411245	93268	87943	82	4053	7227	6617	609
EGU-Point	9713	15346	393	685	17084	2519	2255	277
Point BOTW	11571	19774	17252	49	9723	3181	2632	548
N.F.EGU	65	143	2	0	49	0	7	7
Mobile	1629547	145799	105975	14931	1317	5128	2860	2269
Total	3171014	350691	479709	38138	90660	92707	43437	49296

Table 7a 2012 Future Year anthropogenic emissions by major category by county for New York CMSA

FIPS	Sector	County	CO [tons/yr]	NOX [tons/yr]	VOC [tons/yr]	NH3 [tons/yr]	SO2 [tons/yr]	PM10 [tons/yr]	PM2_5 [tons/yr]	PMC [tons/yr]
9001	Area	Fairfield Co	8927	3067	13363	527	2997	4611	1837	2774
9007	Area	Middlesex Co	5295	588	4673	313	745	1593	852	740
9009	Area	New Haven Co	11183	2887	14996	484	2893	3850	2010	1840
34003	Area	Bergen Co	4457	2328	11687	1590	370	1415	921	494
34013	Area	Essex Co	3746	2019	9804	1572	407	1072	710	363
34017	Area	Hudson Co	2644	1468	6703	1198	245	952	507	444
34019	Area	Hunterdon Co	5430	375	4363	959	141	2011	854	1157
34023	Area	Middlesex Co	4255	1915	11205	1414	320	1904	855	1049
34025	Area	Monmouth Co	4987	1509	8912	1227	217	2271	990	1281
34027	Area	Morris Co	7046	1400	9101	953	293	1716	1118	598
34031	Area	Passaic Co	4228	1156	7391	880	188	922	689	233
34035	Area	Somerset Co	6612	901	6986	917	139	2026	1077	949
34037	Area	Sussex Co	6709	406	5190	676	182	1544	947	597
34039	Area	Union Co	2207	1351	7755	1109	249	765	447	318
34041	Area	Warren Co	4008	308	3455	669	122	1313	623	690
36005	Area	Bronx Co	1606	3690	11385	838	1269	2408	814	1594
36047	Area	Kings Co	3313	7580	22075	1593	2424	4291	1659	2631
36059	Area	Nassau Co	2459	6017	16813	983	2409	5373	1456	3917
36061	Area	New York Co	5735	14245	20781	1246	4595	5219	2590	2630
36081	Area	Queens Co	2678	6872	21934	1401	2267	4284	1580	2704
36085	Area	Richmond Co	574	1319	7461	274	315	2911	495	2416

36087	Area	Rockland Co	821	1246	3218	223	506	1140	385	755
36103	Area	Suffolk Co	5207	6497	22001	1603	11225	16166	2839	13327
36119	Area	Westchester Co	2482	4475	11917	737	1991	3398	1065	2333
	Area	TOTAL	106609	73618	263167	23384	36508	73155	27321	45834
9001	Nonroad	Fairfield Co	96139	5463	5881	6	221	447	411	36
9007	Nonroad	Middlesex Co	14930	833	1753	1	3	77	71	6
9009	Nonroad	New Haven Co	58334	6395	4148	4	427	380	349	30
34003	Nonroad	Bergen Co	106610	4159	4767	5	36	368	334	34
34013	Nonroad	Essex Co	46941	5011	2584	3	265	267	228	39
34017	Nonroad	Hudson Co	28248	4205	2009	2	84	233	214	19
34019	Nonroad	Hunterdon Co	17533	910	1135	1	4	93	84	9
34023	Nonroad	Middlesex Co	68952	3519	3104	4	25	301	277	24
34025	Nonroad	Monmouth Co	61286	3356	3942	4	44	298	273	25
34027	Nonroad	Morris Co	60283	2025	3137	3	16	231	208	23
34031	Nonroad	Passaic Co	33662	1377	1984	2	5	129	118	11
34035	Nonroad	Somerset Co	42563	1553	1809	2	6	164	150	14
34037	Nonroad	Sussex Co	14146	607	1644	1	2	83	75	8
34039	Nonroad	Union Co	41724	3528	1910	2	91	210	193	17
34041	Nonroad	Warren Co	8917	402	830	1	1	48	44	4
36005	Nonroad	Bronx Co	34894	1931	1930	3	8	170	157	14
36047	Nonroad	Kings Co	86515	5936	4245	6	81	450	415	36
36059	Nonroad	Nassau Co	102880	3237	4900	5	14	308	283	24
36061	Nonroad	New York Co	175790	8334	6546	10	50	641	590	50
36081	Nonroad	Queens Co	84514	9556	4582	5	419	660	612	47

36085	Nonroad	Richmond Co	19740	3283	1211	2	94	198	182	16
36087	Nonroad	Rockland Co	22023	948	1466	1	3	89	82	7
36103	Nonroad	Suffolk Co	156760	6406	12033	9	40	594	544	50
36119	Nonroad	Westchester Co	82262	2801	4470	4	17	324	296	28
	Nonroad	TOTAL	1465646	85773	82022	86	1957	6761	6188	573
9001	EGU-Point	Fairfield Co	1147	2350	46	84	4783	0	479	0
9007	EGU-Point	Middlesex Co	0	0	0	0	0	0	0	0
9009	EGU-Point	New Haven Co	1232	221	32	96	0	0	99	0
34003	EGU-Point	Bergen Co	2719	1721	70	213	0	0	219	0
34013	EGU-Point	Essex Co	76	71	2	6	0	0	6	0
34017	EGU-Point	Hudson Co	608	1653	64	38	10958	0	733	0
34019	EGU-Point	Hunterdon Co	28	58	1	2	0	0	2	0
34023	EGU-Point	Middlesex Co	1276	549	33	100	0	0	103	0
34025	EGU-Point	Monmouth Co	0	0	0	0	0	0	0	0
34027	EGU-Point	Morris Co	0	0	0	0	0	0	0	0
34031	EGU-Point	Passaic Co	0	0	0	0	0	0	0	0
34035	EGU-Point	Somerset Co	0	0	0	0	0	0	0	0
34037	EGU-Point	Sussex Co	0	0	0	0	0	0	0	0
34039	EGU-Point	Union Co	245	164	6	19	0	0	20	0
34041	EGU-Point	Warren Co	0	0	0	0	0	0	0	0
36005	EGU-Point	Bronx Co	91	55	2	7	0	0	7	0
36047	EGU-Point	Kings Co	244	219	6	19	0	0	20	0
36059	EGU-Point	Nassau Co	258	505	7	20	0	0	21	0
36061	EGU-Point	New York Co	4	20	0	0	0	0	0	0

36081	EGU-Point	Queens Co	165	206	4	13	0	0	13	0
36085	EGU-Point	Richmond Co	17	37	0	1	0	0	1	0
36087	EGU-Point	Rockland Co	317	887	38	19	1293	0	433	0
36103	EGU-Point	Suffolk Co	413	966	11	32	0	0	33	0
36119	EGU-Point	Westchester Co	5	7	0	0	0	0	0	0
	EGU-Point	TOTAL	8846	9690	321	671	17035	0	2190	0
9001	Point	Fairfield Co	173	1896	1133	0	270	149	138	12
9007	Point	Middlesex Co	154	612	171	0	248	43	41	2
9009	Point	New Haven Co	383	751	2090	0	1198	208	187	21
34003	Point	Bergen Co	402	495	736	0	67	109	89	21
34013	Point	Essex Co	560	1182	755	0	1903	177	146	31
34017	Point	Hudson Co	512	568	1114	0	170	114	100	14
34019	Point	Hunterdon Co	91	209	147	0	4	27	26	2
34023	Point	Middlesex Co	2957	2266	4252	0	368	504	433	71
34025	Point	Monmouth Co	694	308	224	0	90	67	54	13
34027	Point	Morris Co	471	346	262	0	59	74	49	25
34031	Point	Passaic Co	117	144	281	0	25	30	24	5
34035	Point	Somerset Co	379	384	292	0	88	155	129	25
34037	Point	Sussex Co	177	34	40	0	0	23	14	9
34039	Point	Union Co	887	2149	3686	0	1201	607	546	61
34041	Point	Warren Co	484	281	683	0	100	268	239	29
36005	Point	Bronx Co	287	876	67	4	458	58	36	22
36047	Point	Kings Co	538	995	371	2	123	33	31	3
36059	Point	Nassau Co	401	507	673	5	106	83	73	10

36061	Point	New York Co	639	1376	120	16	556	93	67	26
36081	Point	Queens Co	651	1520	300	13	655	132	84	48
36085	Point	Richmond Co	141	130	240	1	20	90	46	44
36087	Point	Rockland Co	271	436	28	4	30	72	42	30
36103	Point	Suffolk Co	582	1012	414	2	1738	53	45	8
36119	Point	Westchester Co	282	1471	33	3	232	100	64	36
	Point	TOTAL	12233	19949	18113	50	9709	3269	2702	567

9001	Mobile	Fairfield Co	81339	6462	3549	865	77	277	147	130
9007	Mobile	Middlesex Co	20028	1679	821	205	18	67	36	31
9009	Mobile	New Haven Co	75507	6219	3162	785	70	254	136	118
34003	Mobile	Bergen Co	89657	5709	4885	868	75	261	133	128
34013	Mobile	Essex Co	54997	3873	3060	525	48	169	89	80
34017	Mobile	Hudson Co	25202	1809	1441	242	22	79	42	37
34019	Mobile	Hunterdon Co	24302	1670	1237	223	20	73	39	34
34023	Mobile	Middlesex Co	88359	5694	4756	868	76	262	134	128
34025	Mobile	Monmouth Co	66611	4097	3723	680	58	197	99	98
34027	Mobile	Morris Co	69205	3882	3338	639	54	182	91	91
34031	Mobile	Passaic Co	32677	2129	1789	316	28	96	50	47
34035	Mobile	Somerset Co	38627	2451	2022	367	32	112	57	54
34037	Mobile	Sussex Co	18097	1017	878	162	14	48	24	24
34039	Mobile	Union Co	45452	2943	2483	454	39	136	69	67
34041	Mobile	Warren Co	20343	1411	1024	180	17	59	32	28
36005	Mobile	Bronx Co	52009	3678	2961	560	46	168	86	82
36047	Mobile	Kings Co	50400	3697	2926	557	46	168	86	82
36059	Mobile	Nassau Co	123933	9563	7674	1372	120	429	223	206
36061	Mobile	New York Co	46772	3593	3211	488	40	147	76	72
36081	Mobile	Queens Co	81404	5852	4639	895	73	268	137	131
36085	Mobile	Richmond Co	21838	1557	1209	240	20	72	37	35
36087	Mobile	Rockland Co	34259	2519	1699	354	32	112	58	54
36103	Mobile	Suffolk Co	218566	15842	12366	2430	210	740	380	360

36119	Mobile	Westchester Co	113662	8490	5721	1187	106	376	196	180
	Mobile	TOTAL	1493245	105836	80573	15462	1338	4751	2455	2296

Table 7b Summary of 2012 Future Year anthropogenic emissions by major category by county for New York CMSA

Sector	**CO [tons/yr]**	**NOX [tons/yr]**	**VOC [tons/yr]**	**NH3 [tons/yr]**	**SO2 [tons/yr]**	**PM10 [tons/yr]**	**PM2_5 [tons/yr]**	**PMC [tons/yr]**
Area	106609	73618	263167	23384	36508	73155	27321	45834
Nonroad	1465646	85773	82022	86	1957	6761	6188	573
EGU-Point	8846	9690	321	671	17035	0	2190	0
Point	12233	19949	18113	50	9709	3269	2702	567
Mobile	1493245	105836	80573	15462	1338	4751	2455	2296
Total	3086579	294866	444196	39654	66547	87935	40855	49270

Table 8 Biogenic emissions by pollutant by county for New York CMSA

State	FIPS	County	NO [TPY]	CO [TPY]	VOC [TPY]
Connecticut	009001	Fairfield	52	894	7150
	009007	Middlesex	54	615	5587
	009009	New Haven	80	876	7544
New Jersey	034003	Bergen	37	239	2455
	034013	Essex	57	199	1831
	034017	Hudson	26	125	701
	034019	Hunterdon	81	706	5743
	034023	Middlesex	98	456	5267
	034025	Monmouth	125	1152	15423
	034027	Morris	63	604	7288
	034031	Passaic	41	339	3841
	034035	Somerset	49	518	5548
	034037	Sussex	67	718	7768
	034039	Union	21	168	2191
	034041	Warren	125	517	4505
New York	036005	Bronx	25	100	657
	036047	Kings	15	60	309
	036059	Nassau	81	408	2859
	036061	New York	16	76	473
	036081	Queens	20	105	543
	036085	Richmond	47	173	1292
	036087	Rockland	26	300	4006
	036103	Suffolk	368	1328	12886
	036119	Westchester	35	549	5347

Table 9 Statistical estimates based on measured and predicted 8-h ozone concentrations over New York CMSA

(a) Threshold of 40 ppb

AQS ID	Obs avg	Pred avg	R^2	NME	RMSE	FE	MAGE	MNGE	MB	MNB	MFB	NMB	N
	ppb	ppb		%	ppb	%	ppb	%	ppb	%	%	%	
090010017	63.36	64.77	0.66	13.5	11.54	13.3	8.53	13.9	1.41	3.7	2.1	2.2	102
090011123	65.16	61.98	0.66	14.9	12.39	15.4	9.68	15.3	-3.18	-2.8	-4.7	-4.9	90
090013007	63.59	63.13	0.59	15.9	14.04	15.5	10.08	15.8	-0.46	-0.1	-2.2	-0.7	102
090019003	65.56	65.84	0.63	13.4	12.59	13.8	8.79	14.7	0.28	2.2	0.1	0.4	86
090070007	62.35	63.01	0.70	12.4	10.80	12.6	7.72	13.3	0.67	2.2	0.6	1.1	97
090093002	65.77	68.14	0.62	15.0	13.35	14.3	9.86	15.3	2.37	5.2	3.3	3.6	95
090099005	62.77	61.82	0.60	15.2	13.28	15.4	9.56	16.0	-0.95	-0.7	-3.0	-1.5	92
340030005	65.18	58.73	0.55	16.7	14.46	18.1	10.86	16.7	-6.45	-8.6	-11.1	-9.9	96
340130016	61.41	62.42	0.44	15.7	13.24	15.6	9.62	15.9	1.01	3.2	0.9	1.7	66
340170006	60.92	59.73	0.60	14.7	11.36	15.6	8.97	15.2	-1.18	-2.0	-3.8	-1.9	85
340190001	65.96	61.28	0.73	11.8	10.25	12.2	7.76	11.6	-4.68	-5.6	-6.6	-7.1	110
340230011	68.80	65.82	0.76	10.6	9.66	10.8	7.31	10.5	-2.98	-2.8	-3.7	-4.3	107
340250005	64.77	74.40	0.69	17.4	14.82	16.0	11.24	18.5	9.63	16.3	13.7	14.9	98
340273001	68.02	60.08	0.68	15.7	13.93	16.1	10.64	14.9	-7.94	-9.3	-11.0	-11.7	112
340315001	62.54	59.74	0.55	15.2	11.84	15.7	9.51	15.3	-2.80	-2.8	-4.6	-4.5	95
360050083	60.99	51.16	0.36	22.1	17.21	24.6	13.49	21.6	-9.83	-14.4	-18.5	-16.1	72
360050110	60.98	47.02	0.42	27.1	19.28	32.5	16.51	27.6	-13.95	-22.3	-28.2	-22.9	65
360810098	57.30	46.69	0.46	23.3	15.75	27.8	13.35	23.9	-10.61	-18.6	-23.2	-18.5	69
360810124	61.67	57.57	0.44	17.2	12.96	18.4	10.61	17.6	-4.10	-5.7	-8.1	-6.7	77
360850067	66.41	66.24	0.73	11.3	9.80	11.5	7.52	11.6	-0.17	0.2	-0.9	-0.3	95
361030002	61.19	62.93	0.39	18.5	14.81	17.4	11.31	18.2	1.74	5.4	2.9	2.9	86
361030004	61.31	71.77	0.58	20.4	15.45	18.7	12.48	21.5	10.46	18.6	15.5	17.1	70
361030009	63.61	59.04	0.72	13.6	10.84	14.4	8.64	13.5	-4.58	-6.7	-8.1	-7.2	103
361192004	63.58	55.80	0.57	18.7	15.41	20.3	11.91	18.4	-7.78	-10.6	-13.4	-12.2	84

(b) Threshold of 60 ppb

AQS ID	Obs avg	Pred avg	R^2	NME	RMSE	FE	MAGE	MNGE	MB	MNB	MFB	NMB	N
	ppb	ppb		%	ppb	%	ppb	%	ppb	%	%	%	
090010017	78.19	77.74	0.38	13.2	13.72	13.6	10.32	13.8	-0.45	0.3	-1.4	-0.6	51
090011123	80.93	73.40	0.59	13.5	13.22	14.5	10.89	13.4	-7.54	-8.8	-10.2	-9.3	46
090013007	80.82	79.92	0.23	16.8	17.39	17.1	13.56	17.1	-0.90	-0.1	-2.4	-1.1	46
090019003	80.69	78.81	0.46	11.6	13.11	12.1	9.36	12.2	-1.88	-1.8	-3.2	-2.3	45
090070007	80.50	77.84	0.72	10.0	10.04	11.1	8.06	10.6	-2.67	-3.8	-4.7	-3.3	40
090093002	83.13	83.73	0.33	14.4	15.04	14.2	11.99	14.5	0.60	1.6	0.1	0.7	45
090099005	79.43	77.92	0.40	12.8	13.36	12.9	10.20	12.9	-1.52	-1.0	-2.4	-1.9	41
340030005	81.23	70.83	0.24	16.4	17.26	18.2	13.32	16.2	-10.40	-12.1	-14.6	-12.8	47
340130016	73.17	72.73	0.05	15.5	15.19	15.9	11.35	15.6	-0.44	0.8	-1.5	-0.6	35
340170006	72.83	72.03	0.19	13.8	12.79	14.2	10.04	13.9	-0.81	-0.4	-2.1	-1.1	43
340190001	78.95	70.89	0.44	11.4	12.16	11.9	8.98	10.8	-8.06	-9.6	-10.7	-10.2	61
340230011	80.95	75.15	0.54	10.6	11.23	10.9	8.58	10.3	-5.81	-6.7	-7.6	-7.2	66
340250005	78.30	86.89	0.54	13.9	14.26	12.6	10.90	13.9	8.59	11.2	9.8	11.0	53
340273001	81.13	68.37	0.45	16.6	16.89	17.7	13.48	15.8	-12.76	-14.8	-16.8	-15.7	66
340315001	76.24	69.56	0.33	15.4	14.20	16.5	11.74	15.4	-6.68	-8.4	-10.2	-8.8	47
360050083	74.53	60.25	0.07	21.5	19.87	24.4	16.04	20.9	-14.28	-18.1	-21.9	-19.2	36
360050110	74.81	56.43	0.18	24.6	21.70	28.9	18.37	24.1	-18.37	-24.1	-28.9	-24.6	32
360810098	70.15	56.05	0.28	20.4	17.26	24.0	14.29	20.4	-14.10	-20.1	-23.8	-20.1	30
360810124	73.40	66.36	0.21	16.1	14.48	17.8	11.84	16.3	-7.04	-9.4	-11.6	-9.6	39
360850067	77.98	76.98	0.51	10.2	10.12	10.3	7.94	10.1	-1.00	-1.0	-1.8	-1.3	57
361030002	75.86	72.82	0.10	18.9	18.15	19.1	14.31	19.0	-3.04	-2.2	-5.0	-4.0	40
361030004	75.18	84.09	0.36	16.2	14.79	15.2	12.18	16.8	8.91	12.6	10.7	11.9	31
361030009	78.98	71.65	0.53	13.6	13.07	14.8	10.70	13.6	-7.33	-9.0	-10.6	-9.3	50
361192004	80.67	68.21	0.29	19.8	19.56	22.5	16.00	19.9	-12.46	-14.6	-17.8	-15.4	40

Table 10 Statistical estimates based on measured and predicted concentrations (ppb) of ozone precursors and other species over New York CMSA

	CO												
AQS ID	**Obs avg**	**Pred avg**	**R^2**	**NME**	**RMSE**	**FE**	**MAGE**	**MNGE**	**MB**	**MNB**	**MFB**	**NMB**	**N**
	ppb	**ppb**		**%**	**ppb**	**%**	**ppb**	**%**	**ppb**	**%**	**%**	**%**	
090010004	663.65	333.55	0.31	49.8	352.94	65.2	330.14	48.1	-330.10	-48.1	-65.2	-49.7	121
090010020	852.54	333.69	0.29	60.9	550.34	86.4	518.85	59.6	-518.85	-59.6	-86.4	-60.9	135
090090025	571.88	288.80	0.33	49.5	305.56	65.0	283.09	48.1	-283.09	-48.1	-65.0	-49.5	131
340030004	994.27	536.35	0.09	46.9	519.16	60.3	466.00	44.8	-457.93	-43.4	-59.0	-46.1	47
340035001	540.06	536.73	0.45	19.9	133.76	21.8	107.21	22.9	-3.34	4.8	0.7	-0.6	135
340130016	551.54	576.89	0.24	20.0	141.63	19.9	110.34	21.6	25.35	7.9	4.2	4.6	130
340171002	1117.67	567.30	0.01	51.6	665.07	65.8	576.40	51.8	-550.37	-37.7	-59.0	-49.2	135
340175002	659.71	600.07	0.37	19.3	147.53	20.1	127.19	19.2	-59.64	-6.7	-9.3	-9.0	49
340232003	539.05	455.69	0.17	24.9	163.62	27.6	134.15	25.8	-83.35	-10.3	-15.6	-15.5	131
340252001	639.40	257.72	0.35	59.7	403.56	84.2	381.68	58.7	-381.68	-58.7	-84.2	-59.7	135
340270003	721.44	310.09	0.05	57.1	469.77	76.9	411.55	53.5	-411.35	-53.4	-76.8	-57.0	135
340390003	929.41	457.29	0.23	51.3	559.46	64.2	476.86	47.2	-472.12	-45.3	-62.7	-50.8	126
360050083	690.71	761.80	0.28	22.4	200.32	21.7	154.93	24.9	71.09	13.8	9.1	10.3	135
360470071	1058.78	657.44	0.27	37.9	450.15	46.5	401.67	36.5	-401.33	-36.5	-46.4	-37.9	134
360610056	719.46	870.25	0.14	29.7	267.14	28.5	213.57	38.3	150.79	31.0	20.5	21.0	135
360610092	925.50	873.24	0.29	21.2	261.90	21.9	196.26	22.7	-52.26	1.7	-2.7	-5.7	135
360810124	469.17	622.72	0.14	45.0	255.15	41.3	211.29	66.0	153.55	58.2	32.3	32.7	130
361030009	112.17	340.94	0.16	206.3	247.39	112.5	231.36	481.2	228.77	480.5	111.7	203.9	111

	NO												
AQS ID	**Obs avg**	**Pred avg**	**R^2**	**NME**	**RMSE**	**FE**	**MAGE**	**MNGE**	**MB**	**MNB**	**MFB**	**NMB**	**N**
	ppb	**ppb**		**%**	**ppb**	**%**	**ppb**	**%**	**ppb**	**%**	**%**	**%**	
090019003	9.42	1.09	0.36	89.7	13.17	129.4	8.45	93.0	-8.33	-46.5	-114.0	-88.4	110
090091123	12.35	1.34	0.30	89.2	13.13	154.6	11.01	86.7	-11.01	-86.7	-154.6	-89.2	129
090099005	2.27	1.30	0.13	62.7	2.20	73.0	1.43	104.9	-0.97	38.6	-23.7	-42.7	133
340030005	10.68	7.10	0.36	51.4	7.72	59.7	5.49	51.1	-3.58	-17.3	-38.1	-33.5	132
340130016	13.44	10.08	0.30	47.5	10.47	47.5	6.39	49.3	-3.35	5.2	-12.8	-25.0	130
340230011	4.45	2.28	0.17	58.6	5.32	57.6	2.61	44.2	-2.18	-31.3	-50.1	-48.9	135
340273001	2.37	0.69	0.08	76.0	2.26	114.9	1.80	72.1	-1.69	-64.2	-109.3	-71.1	129

360050083	8.07	18.22	0.33	132.0	13.49	86.4	10.65	256.5	10.15	253.4	82.4	125.8	124
360050110	11.85	37.24	0.32	214.4	28.01	113.3	25.40	390.0	25.40	390.0	113.3	214.4	98
360590005	10.40	4.94	0.33	59.6	11.14	68.0	6.20	59.0	-5.46	-20.3	-46.6	-52.5	134
360610056	19.30	38.10	0.30	100.0	22.29	73.2	19.30	170.4	18.80	168.9	71.6	97.4	126
360810098	14.78	36.29	0.45	148.0	23.99	96.2	21.86	247.2	21.52	246.8	95.6	145.6	130
360810124	9.17	10.24	0.16	70.7	9.99	66.5	6.49	120.0	1.07	96.9	34.1	11.6	135
361030009	6.76	1.96	0.23	71.7	7.71	94.8	4.85	63.3	-4.80	-57.2	-91.8	-71.0	130

	NO2												
AQS ID	**Obs avg**	**Pred avg**	**R^2**	**NME**	**RMSE**	**FE**	**MAGE**	**MNGE**	**MB**	**MNB**	**MFB**	**NMB**	**N**
	ppb	**ppb**		**%**	**ppb**	**%**	**ppb**	**%**	**ppb**	**%**	**%**	**%**	
090019003	16.80	11.94	0.38	35.3	7.24	41.0	5.94	35.2	-4.86	-20.5	-30.0	-28.9	130
090091123	23.93	13.63	0.37	43.6	12.21	54.3	10.44	41.1	-10.30	-40.1	-53.3	-43.1	135
090099005	13.90	13.64	0.55	20.9	3.80	20.4	2.90	21.6	-0.26	4.3	0.7	-1.9	135
340030005	17.65	28.76	0.57	64.2	13.15	52.0	11.33	86.4	11.11	85.4	50.9	63.0	132
340130016	25.26	31.19	0.39	30.3	9.67	28.9	7.66	38.4	5.93	33.9	23.9	23.5	130
340131003	25.64	31.20	0.34	28.9	9.46	27.8	7.42	35.4	5.56	29.8	21.6	21.7	135
340170006	19.09	38.06	0.39	99.4	20.14	70.3	18.97	128.3	18.97	128.3	70.3	99.4	131
340230011	12.55	14.62	0.46	25.3	4.49	23.1	3.18	28.7	2.07	22.0	15.7	16.5	135
340273001	8.12	7.43	0.32	35.9	3.88	33.8	2.91	33.6	-0.69	-4.5	-12.6	-8.5	130
340390004	40.51	25.79	0.09	39.6	19.60	45.8	16.04	36.2	-14.72	-30.9	-41.3	-36.3	131
360050083	25.02	41.72	0.54	66.8	19.02	49.3	16.70	73.7	16.70	73.7	49.3	66.8	124
360050110	30.04	49.85	0.68	65.9	20.80	51.9	19.81	73.9	19.81	73.9	51.9	65.9	98
360590005	20.83	24.07	0.60	24.8	6.43	25.2	5.17	30.9	3.24	22.7	16.2	15.6	135
360610056	40.28	50.65	0.60	27.4	12.94	25.7	11.04	31.6	10.37	30.4	24.4	25.7	135
360810098	25.84	50.07	0.62	93.8	25.12	66.5	24.23	107.0	24.23	107.0	66.5	93.8	130
360810124	26.30	34.11	0.67	31.5	9.89	27.4	8.28	33.5	7.81	31.9	25.8	29.7	135
361030009	15.28	14.70	0.44	21.5	4.24	23.3	3.29	23.8	-0.58	1.6	-2.9	-3.8	135

	SO2												
AQS ID	**Obs avg**	**Pred avg**	**R^2**	**NME**	**RMSE**	**FE**	**MAGE**	**MNGE**	**MB**	**MNB**	**MFB**	**NMB**	**N**
	ppb	**ppb**		**%**	**ppb**	**%**	**ppb**	**%**	**ppb**	**%**	**%**	**%**	
0900100121	1.98	3.18	0.48	73.4	1.82	69.2	1.46	181.2	1.19	175.9	62.8	60.2	132
0900111231	1.17	1.91	0.60	71.3	1.11	69.7	0.83	197.8	0.74	192.4	63.1	63.7	127
0900121241	2.06	2.51	0.71	33.3	0.98	36.5	0.69	65.1	0.45	54.0	23.5	21.9	134

0900190031	1.03	2.28	0.58	125.5	1.58	93.7	1.29	347.7	1.25	345.3	90.7	121.5	96
0900911232	3.24	2.11	0.54	39.3	1.61	54.0	1.28	40.1	-1.13	-36.0	-50.5	-35.0	135
0900921231	3.55	1.91	0.18	59.3	2.44	86.5	2.11	101.9	-1.64	9.4	-53.3	-46.2	129
3400350012	2.93	4.42	0.55	55.6	2.32	39.9	1.63	62.7	1.49	57.5	33.9	50.8	135
3401300161	3.04	4	0.23	56.1	2.46	48.2	1.70	76.8	0.96	67.2	36.2	31.6	127
3401700061	5.45	9.46	0.26	74.4	4.65	56.7	4.05	95.4	4.01	94.9	56.2	73.5	135
3401710022	4.67	9.47	0.13	104.1	5.70	76.9	4.86	197.6	4.80	197.0	76.3	102.7	135
3402320032	3.72	3.19	0.43	28.6	1.32	32.9	1.06	29.5	-0.53	-11.7	-18.7	-14.2	131
3402730011	3.12	2.12	0.53	42.4	1.92	59.6	1.32	45.3	-1.00	-30.1	-48.0	-32.0	135
3403900032	4.12	4.6	0.18	37.5	2.06	36.2	1.54	45.2	0.47	28.9	15.8	11.5	127
3403900042	8.22	4.63	0.20	45.1	4.83	53.3	3.70	39.7	-3.59	-37.7	-51.5	-43.7	132
3600500831	4.71	7.38	0.52	62.5	3.72	50.3	2.94	82.6	2.68	77.5	44.3	56.9	134
3600501101	6.54	12.98	0.31	100.5	7.34	69.6	6.57	127.1	6.43	126.1	68.5	98.3	131
3605900053	2.09	4.05	0.53	99.7	2.51	75.2	2.08	181.2	1.97	177.6	70.9	94.3	132
3606100561	7.75	12.92	0.31	69.0	6.25	52.1	5.35	81.2	5.18	79.1	49.6	66.9	135
3608101241	3.49	5.7	0.59	68.7	3.00	54.6	2.40	88.8	2.21	86.6	51.9	63.4	135
3610300092	3.3	3.63	0.35	39.2	1.67	41.6	1.29	63.8	0.33	38.3	9.7	9.9	135

Selective Precursors

	ETHANE												
AQS ID	**Obs avg**	**Pred avg**	**R^2**	**NME**	**RMSE**	**FE**	**MAGE**	**MNGE**	**MB**	**MNB**	**MFB**	**NMB**	**N**
	Ppb	**ppb**		**%**	**ppb**	**%**	**ppb**	**%**	**ppb**	**%**	**%**	**%**	
090019003	1.03	1.31	0.36	39.1	0.49	37.2	0.40	53.7	0.28	45.9	28.5	27.5	88
090099005	0.60	1.40	0.28	132.9	0.88	87.4	0.80	237.2	0.80	236.9	87.2	132.5	85
340230011	1.06	1.56	0.16	56.0	0.71	47.1	0.59	70.9	0.50	66.8	42.5	47.4	85
360050083	2.20	3.27	0.17	64.1	1.97	54.8	1.41	89.9	1.06	86.6	50.2	48.2	86

	ISOPRENE												
AQS ID	**Obs avg**	**Pred avg**	**R^2**	**NME**	**RMSE**	**FE**	**MAGE**	**MNGE**	**MB**	**MNB**	**MFB**	**NMB**	**N**
	Ppb	**ppb**		**%**	**ppb**	**%**	**ppb**	**%**	**ppb**	**%**	**%**	**%**	
090019003	0.57	0.46	0.54	38.6	0.30	45.4	0.22	43.0	-0.11	-8.4	-22.4	-18.9	88
090099005	0.56	0.98	0.45	83.6	0.69	60.7	0.47	120.7	0.41	113.7	52.7	73.1	85
340230011	0.59	2.19	0.81	267.9	1.79	117.2	1.59	317.3	1.59	317.3	117.2	267.9	85

360050083	0.64	0.67	0.54	32.7	0.27	34.1	0.21	40.7	0.02	18.9	7.1	3.6	86

	FORMALDEHYDE												
AQS ID	**Obs avg**	**Pred avg**	**R^2**	**NME**	**RMSE**	**FE**	**MAGE**	**MNGE**	**MB**	**MNB**	**MFB**	**NMB**	**N**
	Ppb	**ppb**		**%**	**ppb**	**%**	**ppb**	**%**	**ppb**	**%**	**%**	**%**	
340230006	4.08	2.80	0.47	35.7	2.39	38.3	1.45	30.8	-1.28	-23.5	-31.6	-31.3	9
340273001	5.27	2.84	0.86	46.2	2.83	65.9	2.43	48.0	-2.43	-48.0	-65.9	-46.2	8
340390004	3.32	3.79	0.80	18.7	1.03	17.9	0.62	20.4	0.47	10.6	6.8	14.2	14
360050083	4.58	3.80	0.70	23.4	1.35	32.6	1.07	25.8	-0.78	-20.3	-27.8	-17.0	15
360810124	3.93	3.48	0.93	15.1	0.66	24.9	0.59	20.5	-0.45	-15.7	-20.5	-11.4	13

Table 11 Projected future design values (DVF) for ozone monitors in New York CMSA

(a) For Scenario 2009

AQS ID	County	Monitor	Latitude	Longitude	CMAQ Column	CMAQ Row	DVC ppb	DVF ppb	RRF	#Days in RRF	Threshold ppb
90010017	Fairfield	Greenwich	41.0036	-73.5853	140	105	95.7	87	0.913	30	85
90011123	Fairfield	Danbury	41.4014	-73.4447	140	108	95.7	85	0.897	18	85
90013007	Fairfield	Stratford	41.1519	-73.1036	142	107	98.3	90	0.919	38	85
90019003	Fairfield	Sherwood Island	41.1189	-73.3369	141	106	94	85	0.909	37	85
90070007	Middlesex	Middletown	41.5519	-72.6308	145	111	95.7	84	0.888	21	85
90093002	New Haven	Madison	41.2583	-72.5506	146	109	98.3	88	0.905	39	85
90099005	New Haven	Hamden	41.3411	-72.9214	143	109	96	87	0.912	25	85
340030005	Bergen	Teaneck	40.9	-74.03	137	103	91.7	85	0.928	18	85
340170006	Hudson	Bayonne	40.6708	-74.1258	137	101	84.7	77	0.911	22	85
340190001	Hunterdon	Flemington	40.5167	-74.81	132	98	95.3	83	0.877	15	85
340230011	Middlesex	New Brunswick	40.4733	-74.4256	135	98	96	83	0.874	22	85
340250005	Monmouth	W. Long Branch	40.1881	-74.0061	139	97	95.7	84	0.88	45	85
340273001	Morris	Chester	40.7872	-74.6775	133	101	95.3	84	0.882	13	85
340315001	Passaic	Ramapo	41.0522	-74.2581	135	104	86.7	77	0.898	19	85
360050083	Bronx	Botanical Gardens	40.8659	-73.8808	138	103	82.7	77	0.939	20	85
360050110	Bronx	IS52	40.8162	-73.9021	138	102	77	69	0.908	20	85
360810098	Queens	College Point	40.7842	-73.8476	138	102	73.7	66	0.908	20	85
360810124	Queens	Queens College	40.7362	-73.8232	139	102	83	74	0.894	26	85
360850067	Richmond	Susan Wagner	40.5973	-74.1262	137	100	93	84	0.904	42	85
361030002	Suffolk	Babylon	40.7465	-73.4189	141	103	93.7	85	0.917	22	85
361030004	Suffolk	Riverhead	40.9612	-72.7127	146	106	83	74	0.901	36	85

361030009	Suffolk	Holtsville	40.8275	-73.0569	144	104	97	89	0.926	34	85
361192004	Westchester	White Plains	41.052	-73.764	138	105	91.3	85	0.935	22	85

(b) For Scenario 2012

AQS ID	County	Monitor	Latitude	Longitude	CMAQ Column	CMAQ Row	DVC ppb	DVF ppb	RRF	#Days in RRF	Threshold ppb
90010017	Fairfield	Greenwich	41.0036	-73.5853	140	105	95.7	83	0.874	30	85
90011123	Fairfield	Danbury	41.4014	-73.4447	140	108	95.7	81	0.853	18	85
90013007	Fairfield	Stratford	41.1519	-73.1036	142	107	98.3	86	0.878	38	85
90019003	Fairfield	Sherwood Island	41.1189	-73.3369	141	106	94	81	0.868	37	85
90070007	Middlesex	Middletown	41.5519	-72.6308	145	111	95.7	80	0.839	21	85
90093002	New Haven	Madison	41.2583	-72.5506	146	109	98.3	83	0.853	39	85
90099005	New Haven	Hamden	41.3411	-72.9214	143	109	96	83	0.874	25	85
340030005	Bergen	Teaneck	40.9	-74.03	137	103	91.7	81	0.892	18	85
340170006	Hudson	Bayonne	40.6708	-74.1258	137	101	84.7	75	0.891	22	85
340190001	Hunterdon	Flemington	40.5167	-74.81	132	98	95.3	78	0.825	15	85
340230011	Middlesex	New Brunswick	40.4733	-74.4256	135	98	96	79	0.826	22	85
340250005	Monmouth	W. Long Branch	40.1881	-74.0061	139	97	95.7	80	0.836	45	85
340273001	Morris	Chester	40.7872	-74.6775	133	101	95.3	79	0.83	13	85
340315001	Passaic	Ramapo	41.0522	-74.2581	135	104	86.7	73	0.853	19	85
360050083	Bronx	Botanical Gardens	40.8659	-73.8808	138	103	82.7	75	0.908	20	85
360050110	Bronx	IS52	40.8162	-73.9021	138	102	77	67	0.881	20	85
360810098	Queens	College Point	40.7842	-73.8476	138	102	73.7	64	0.881	20	85
360810124	Queens	Queens College	40.7362	-73.8232	139	102	83	71	0.861	26	85
360850067	Richmond	Susan Wagner	40.5973	-74.1262	137	100	93	80	0.868	42	85

361030002	Suffolk	Babylon	40.7465	-73.4189	141	103	93.7	82	0.884	22	85
361030004	Suffolk	Riverhead	40.9612	-72.7127	146	106	83	70	0.845	36	85
361030009	Suffolk	Holtsville	40.8275	-73.0569	144	104	97	86	0.889	34	85
361192004	Westchester	White Plains	41.052	-73.764	138	105	91.3	82	0.904	22	85

Table 12 Estimated future design values (ppb) for grid cells that are within the nonattainment area or adjacent counties of New York CMSA

(a) For scenario 2009

State	County	County Name	CMAQ Column	CMAQ Row	DVF Hybrid (ppb)	DVF MATS (ppb)	Monitor in grid	Percent in water
9	1	Fairfield	142	107	89	90	Y	18.6
9	1	Fairfield	139	105	85	83	N	2.6
9	1	Fairfield	141	106	85	86	Y	32.9
9	1	Fairfield	141	107	85	84	N	0
9	1	Fairfield	141	108	85	83	N	0
9	1	Fairfield	142	108	85	85	N	0
9	1	Fairfield	140	106	84	84	N	0
9	1	Fairfield	140	107	84	83	N	0
9	1	Fairfield	141	109	84	82	N	0
9	1	Fairfield	140	108	83	83	Y	0
9	1	Fairfield	139	109	82	82	N	1
9	1	Fairfield	140	109	82	82	N	0
9	1	Fairfield	139	108	81	81	N	0
9	7	Middlesex	146	109	88	87	Y	20.2
9	7	Middlesex	145	110	85	84	N	0
9	7	Middlesex	146	110	83	82	N	0
9	7	Middlesex	145	111	82	83	Y	0
9	7	Middlesex	146	111	82	82	N	0
9	7	Middlesex	144	111	81	81	N	0
9	7	Middlesex	145	112	80	79	N	0
9	9	New Haven	145	109	89	89	N	8.6
9	9	New Haven	143	108	86	86	N	25.5
9	9	New Haven	142	109	85	83	N	0
9	9	New Haven	143	109	85	84	Y	0.2
9	9	New Haven	143	110	85	83	N	0
9	9	New Haven	144	109	85	85	N	4.1
9	9	New Haven	144	110	85	84	N	0
9	9	New Haven	142	110	82	81	N	0

9	9	New Haven	142	111	78	78	N	0
34	3	Bergen	137	104	92	91	N	0
34	3	Bergen	136	104	88	88	N	0
34	3	Bergen	137	103	85	85	Y	1.2
34	3	Bergen	137	102	81	81	N	4.9
34	13	Essex	135	101	86	86	N	0
34	13	Essex	136	102	83	83	N	2
34	13	Essex	135	102	79	81	N	1
34	13	Essex	136	101	75	79	N	0
34	17	Hudson	137	101	79	78	Y	16.1
34	19	Hunterdon	132	98	81	79	Y	0
34	19	Hunterdon	132	99	81	80	N	6.8
34	19	Hunterdon	132	97	80	79	N	0
34	19	Hunterdon	132	100	80	79	N	0
34	19	Hunterdon	131	99	79	78	N	3.6
34	19	Hunterdon	131	98	77	76	N	0.1
34	23	Middlesex	135	98	84	83	Y	0.3
34	23	Middlesex	135	99	83	84	N	0
34	23	Middlesex	135	97	82	81	N	0
34	23	Middlesex	136	98	81	77	N	2.6
34	23	Middlesex	136	99	81	80	N	4.2
34	25	Monmouth	135	95	87	87	N	0
34	25	Monmouth	138	98	86	84	N	8.9
34	25	Monmouth	138	97	82	80	N	4.9
34	25	Monmouth	136	96	81	82	N	0
34	25	Monmouth	137	98	81	79	N	6.4
34	25	Monmouth	136	97	80	79	N	0
34	25	Monmouth	137	96	78	79	N	1.9
34	25	Monmouth	137	97	78	78	N	0.3
34	25	Monmouth	138	96	78	77	N	7.7
34	27	Morris	135	103	85	83	N	0
34	27	Morris	133	101	82	81	Y	0
34	27	Morris	134	101	81	82	N	0
34	27	Morris	134	103	80	78	N	0
34	27	Morris	134	102	79	81	N	2

34	27	Morris	132	101	78	78	N	0
34	27	Morris	133	102	77	79	N	1.6
34	27	Morris	133	103	76	75	N	0.3
34	31	Passaic	136	103	85	86	N	0
34	31	Passaic	135	104	77	76	Y	0
34	31	Passaic	134	104	75	74	N	0
34	35	Somerset	134	98	83	82	N	0
34	35	Somerset	133	98	82	82	N	0
34	35	Somerset	133	99	82	83	N	0
34	35	Somerset	133	100	81	81	N	0
34	35	Somerset	134	99	80	81	N	0
34	35	Somerset	134	100	80	81	N	0
34	37	Sussex	132	102	76	76	N	0
34	37	Sussex	132	103	75	74	N	0
34	37	Sussex	131	103	74	74	N	0.3
34	37	Sussex	131	104	73	72	N	0.7
34	37	Sussex	132	104	73	73	N	0
34	37	Sussex	133	104	73	73	N	0
34	37	Sussex	131	105	72	71	N	0
34	37	Sussex	132	105	71	72	N	0
34	37	Sussex	133	105	71	71	N	0
34	39	Union	135	100	86	86	N	0
34	39	Union	136	100	82	81	N	0.1
34	41	Warren	130	99	79	79	N	1
34	41	Warren	130	100	79	79	N	0.1
34	41	Warren	131	100	79	78	N	0
34	41	Warren	131	101	77	77	N	0
34	41	Warren	130	101	76	77	N	0
34	41	Warren	131	102	76	76	N	0
34	41	Warren	130	102	75	76	N	0
36	5	Bronx	138	103	75	80	Y	9.5
36	47	Kings	138	101	75	76	N	1.8
36	59	Nassau	140	101	93	92	N	35.4
36	59	Nassau	140	103	88	90	N	17.8
36	59	Nassau	141	103	84	87	Y	2.4

36	59	Nassau	141	102	83	85	N	10.5
36	59	Nassau	140	102	80	86	N	0.8
36	81	Queens	139	101	83	84	N	15.6
36	81	Queens	139	102	74	79	Y	14.3
36	81	Queens	138	102	64	67	N	12.9
36	85	Richmond	137	100	83	82	Y	28.8
36	87	Rockland	137	105	89	89	N	16.4
36	87	Rockland	136	105	87	85	N	0
36	87	Rockland	136	106	80	79	N	2.2
36	103	Suffolk	143	105	102	104	N	62.3
36	103	Suffolk	143	104	92	91	N	2.4
36	103	Suffolk	141	104	89	89	N	42.7
36	103	Suffolk	142	104	88	89	N	9.6
36	103	Suffolk	143	103	87	88	N	28.8
36	103	Suffolk	144	105	86	85	N	28.3
36	103	Suffolk	144	104	85	86	Y	0.4
36	103	Suffolk	142	103	82	86	N	4.3
36	103	Suffolk	145	104	81	81	N	14.1
36	103	Suffolk	145	105	79	79	N	14.1
36	103	Suffolk	148	106	78	76	N	43.4
36	103	Suffolk	146	105	77	77	N	8.2
36	103	Suffolk	146	106	77	76	Y	49
36	103	Suffolk	149	107	77	74	N	49.2
36	119	Westchester	139	104	91	90	N	39.8
36	119	Westchester	138	104	87	86	N	7.2
36	119	Westchester	139	107	86	84	N	0
36	119	Westchester	138	106	85	83	N	0
36	119	Westchester	139	106	85	84	N	0
36	119	Westchester	137	106	84	84	N	13.3
36	119	Westchester	138	105	83	82	Y	0.4
36	119	Westchester	138	107	83	85	N	0
36	119	Westchester	137	107	82	81	N	0

(b) For scenario 2012

State	County	County Name	CMAQ Column	CMAQ Row	DVF Hybrid (ppb)	DVF MATS (ppb)	Monitor in grid	Percent in water
9	1	Fairfield	142	107	85	86	Y	18.6
9	1	Fairfield	139	105	82	80	N	2.6
9	1	Fairfield	141	108	82	78	N	0
9	1	Fairfield	140	107	81	78	N	0
9	1	Fairfield	141	106	81	82	Y	32.9
9	1	Fairfield	142	108	81	81	N	0
9	1	Fairfield	140	106	80	80	N	0
9	1	Fairfield	141	107	80	80	N	0
9	1	Fairfield	140	108	79	78	Y	0
9	1	Fairfield	141	109	79	77	N	0
9	1	Fairfield	139	109	78	77	N	1
9	1	Fairfield	140	109	78	77	N	0
9	1	Fairfield	139	108	77	77	N	0
9	7	Middlesex	146	109	83	82	Y	20.2
9	7	Middlesex	145	110	80	79	N	0
9	7	Middlesex	145	111	78	78	Y	0
9	7	Middlesex	146	110	78	77	N	0
9	7	Middlesex	144	111	77	77	N	0
9	7	Middlesex	146	111	77	77	N	0
9	7	Middlesex	145	112	75	74	N	0
9	9	New Haven	145	109	83	84	N	8.6
9	9	New Haven	143	108	82	82	N	25.5
9	9	New Haven	143	109	81	80	Y	0.2
9	9	New Haven	144	109	81	81	N	4.1
9	9	New Haven	142	109	80	79	N	0
9	9	New Haven	143	110	80	78	N	0
9	9	New Haven	144	110	80	80	N	0
9	9	New Haven	142	110	78	76	N	0
9	9	New Haven	142	111	74	73	N	0
34	3	Bergen	137	104	88	87	N	0
34	3	Bergen	136	104	84	83	N	0

34	3	Bergen	137	103	82	81	Y	1.2
34	3	Bergen	137	102	78	78	N	4.9
34	13	Essex	135	101	82	81	N	0
34	13	Essex	136	102	80	79	N	2
34	13	Essex	135	102	75	76	N	1
34	13	Essex	136	101	72	76	N	0
34	17	Hudson	137	101	77	75	Y	16.1
34	19	Hunterdon	132	98	76	74	Y	0
34	19	Hunterdon	132	97	75	74	N	0
34	19	Hunterdon	132	99	75	74	N	6.8
34	19	Hunterdon	132	100	75	74	N	0
34	19	Hunterdon	131	99	73	73	N	3.6
34	19	Hunterdon	131	98	72	72	N	0.1
34	23	Middlesex	135	98	79	78	Y	0.3
34	23	Middlesex	135	99	78	79	N	0
34	23	Middlesex	135	97	77	76	N	0
34	23	Middlesex	136	98	77	73	N	2.6
34	23	Middlesex	136	99	77	76	N	4.2
34	25	Monmouth	138	98	83	80	N	8.9
34	25	Monmouth	135	95	82	83	N	0
34	25	Monmouth	137	98	78	74	N	6.4
34	25	Monmouth	136	96	77	77	N	0
34	25	Monmouth	138	97	77	75	N	4.9
34	25	Monmouth	136	97	75	74	N	0
34	25	Monmouth	137	96	75	74	N	1.9
34	25	Monmouth	138	96	75	72	N	7.7
34	25	Monmouth	137	97	74	73	N	0.3
34	27	Morris	135	103	80	78	N	0
34	27	Morris	133	101	77	76	Y	0
34	27	Morris	134	101	76	77	N	0
34	27	Morris	134	102	75	76	N	2
34	27	Morris	134	103	75	73	N	0
34	27	Morris	132	101	74	72	N	0
34	27	Morris	133	102	73	74	N	1.6
34	27	Morris	133	103	71	70	N	0.3

34	31	Passaic	136	103	81	82	N	0
34	31	Passaic	135	104	74	71	Y	0
34	31	Passaic	134	104	70	69	N	0
34	35	Somerset	134	98	78	77	N	0
34	35	Somerset	133	98	77	76	N	0
34	35	Somerset	133	99	77	78	N	0
34	35	Somerset	133	100	76	76	N	0
34	35	Somerset	134	99	75	77	N	0
34	35	Somerset	134	100	75	76	N	0
34	37	Sussex	132	102	72	71	N	0
34	37	Sussex	132	103	70	69	N	0
34	37	Sussex	133	104	69	68	N	0
34	37	Sussex	131	103	68	68	N	0.3
34	37	Sussex	131	104	68	67	N	0.7
34	37	Sussex	132	104	68	68	N	0
34	37	Sussex	131	105	67	66	N	0
34	37	Sussex	133	105	67	67	N	0
34	37	Sussex	132	105	66	67	N	0
34	39	Union	135	100	81	82	N	0
34	39	Union	136	100	78	77	N	0.1
34	41	Warren	130	99	74	74	N	1
34	41	Warren	130	100	74	74	N	0.1
34	41	Warren	131	100	73	73	N	0
34	41	Warren	131	101	72	72	N	0
34	41	Warren	130	101	71	72	N	0
34	41	Warren	131	102	71	70	N	0
34	41	Warren	130	102	70	70	N	0
36	5	Bronx	138	103	72	79	Y	9.5
36	47	Kings	138	101	73	74	N	1.8
36	59	Nassau	140	101	89	88	N	35.4
36	59	Nassau	140	103	86	87	N	17.8
36	59	Nassau	141	103	81	85	Y	2.4
36	59	Nassau	141	102	79	82	N	10.5
36	59	Nassau	140	102	77	84	N	0.8
36	81	Queens	139	101	81	81	N	15.6

36	81	Queens	139	102	72	78	Y	14.3
36	81	Queens	138	102	63	65	N	12.9
36	85	Richmond	137	100	80	78	Y	28.8
36	87	Rockland	137	105	86	84	N	16.4
36	87	Rockland	136	105	82	80	N	0
36	87	Rockland	136	106	76	74	N	2.2
36	103	Suffolk	143	105	99	99	N	62.3
36	103	Suffolk	143	104	88	87	N	2.4
36	103	Suffolk	141	104	85	85	N	42.7
36	103	Suffolk	142	104	85	85	N	9.6
36	103	Suffolk	143	103	83	85	N	28.8
36	103	Suffolk	144	104	82	82	Y	0.4
36	103	Suffolk	144	105	82	81	N	28.3
36	103	Suffolk	142	103	79	84	N	4.3
36	103	Suffolk	145	104	77	77	N	14.1
36	103	Suffolk	145	105	75	75	N	14.1
36	103	Suffolk	146	105	73	73	N	8.2
36	103	Suffolk	148	106	73	72	N	43.4
36	103	Suffolk	146	106	72	72	Y	49
36	103	Suffolk	149	107	72	70	N	49.2
36	119	Westchester	139	104	88	87	N	39.8
36	119	Westchester	138	104	84	83	N	7.2
36	119	Westchester	138	106	83	78	N	0
36	119	Westchester	139	106	82	79	N	0
36	119	Westchester	139	107	82	79	N	0
36	119	Westchester	137	106	81	80	N	13.3
36	119	Westchester	138	105	80	79	Y	0.4
36	119	Westchester	138	107	80	80	N	0
36	119	Westchester	137	107	78	76	N	0

Table 13 Measured 8-h ozone design values (ppb) from 2002 to 2006 in New York CMSA

Monitor	County	AQS ID	DV02	DV03	DV04	DV05	DV06
Greenwich	Fairfield	90010017	95.0	100.0	92.3	87.7	87.0
Danbury	Fairfield	90011123	98.3	96.7	93.3	91.7	92.3
Stratford	Fairfield	90013007	98.3	102.0	95.0	90.7	88.7
Sherwood Island	Fairfield	90019003	93.0	97.3	92.0	89.7	87.0
Middletown	Middlesex	90070007	97.7	98.7	92.0	90.0	89.0
New Haven	New Haven	90090027					77.3
Madison	New Haven	90093002	98.0	102.7	95.0	90.0	88.0
Hamden	New Haven	90099005	94.7	98.0			
Teaneck	Bergen	340030005	92.0	94.0	89.0	86.0	86.0
Bayonne	Hudson	340170006	86.0	86.0	82.0	84.0	86.0
Flemington	Hunterdon	340190001	97.0	97.0	92.0	90.0	89.0
New Brunswick	Middlesex	340230011	101.0	98.0	89.0	86.0	88.0
W. Long Branch	Monmouth	340250005	97.0	97.0	93.0	89.0	85.0
Chester	Morris	340273001	98.0	98.0	90.0	82.0	82.0
Ramapo	Passaic	340315001	88.0	88.0	84.0	81.0	78.0
Botanical Gardens	Bronx	360050083	81.3	84.0	83.0	75.7	74.7
IS52	Bronx	360050110	73.3	78.0	80.3	76.3	73.0
College Point	Queens	360810098	74.3	75.3	72.7	69.7	
Queens College	Queens	360810124		83.0	83.3	82.3	79.7
Susan Wagner	Richmond	360850067	96.7	94.0	89.3	87.7	89.7
Babylon	Suffolk	361030002	92.7	95.3	94.3	91.0	89.7
Riverhead	Suffolk	361030004	85.7	84.7	80.3	79.0	85.3
Holtsville	Suffolk	361030009	97.3	100.7	94.7	91.3	89.3
White Plains	Westchester	361192004	90.3	94.7	90.3	88.0	85.3

Table 14 Base year design value (ppb) based upon an average of the 4th highest 8-h ozone concentrations for the 2000 to 2004 period and the projected design value (ppb) for monitors in New York CMSA

Location	County	AQS ID	DV02 Avg	RRF	DVF
Greenwich	Fairfield	90010017	75.0	0.913	68
Danbury	Fairfield	90011123	80.5	0.897	72
Stratford	Fairfield	90013007	80.7	0.919	74
Sherwood Island	Fairfield	90019003	80.8	0.909	73
Middletown	Middlesex	90070007	81.0	0.888	71
Madison	New Haven	90093002	81.4	0.905	73
Teaneck	Bergen	340030005	80.6	0.928	74
Bayonne	Hudson	340170006	80.2	0.911	73
Flemington	Hunterdon	340190001	81.4	0.877	71
New Brunswick	Middlesex	340230011	81.0	0.874	70
W. Long Branch	Monmouth	340250005	81.6	0.88	71
Chester	Morris	340273001	80.2	0.882	70
Ramapo	Passaic	340315001	79.2	0.898	71
Botanical Gardens	Bronx	360050083	76.6	0.939	71
IS52	Bronx	360050110	74.6	0.908	67
College Point	Queens	360810098	71.4	0.908	64
Queens College	Queens	360810124	71.4	0.894	63
Susan Wagner	Richmond	360850067	73.2	0.904	66
Babylon	Suffolk	361030002	74.6	0.917	68
Riverhead	Suffolk	361030004	74.4	0.901	67
Holtsville	Suffolk	361030009	77.4	0.926	71
White Plains	Westchester	361192004	78.0	0.935	72

Table 15 Estimated trends based on measured hourly ozone concentrations (ppb) with and without meteorological adjustments using the K-Z filter approach for four time periods between 1990 and 2005

AQS ID	County	Location	1985-2005 RAW TRENDS		1990-2005 RAW TRENDS		1995-2005 RAW TRENDS		2000-2005 RAW TRENDS	
			Slope (%/yr)	95% CI	Slope (%/yr)	95% CI	Slope (%/yr)	95% CI	Slope (%/yr)	95% CI
090010017	Fairfield	Greenwich	-0.118	0.015	0.165	0.022			-1.670	0.051
090011123	Fairfield	Danbury	0.041	0.019	0.591	0.024	0.807	0.037	-0.111	0.052
090013007	Fairfield	Stratford	-0.558	0.017	0.078	0.018	-0.037	0.034	-1.191	0.060
090070007	Middlesex	Middletown	-0.097	0.014	0.225	0.017	0.111	0.033	-0.486	0.056
090093002	New Haven	Madison	0.056	0.015	-0.203	0.022	-0.610	0.035	-1.786	0.078
340170006	Hudson	Bayonne	-0.988	0.014	-1.137	0.019	-0.987	0.035	-2.175	0.038
340190001	Hunterdon	Flemington	-0.326	0.013	-0.208	0.019	-0.250	0.026	-0.700	0.050
340273001	Morris	Chester	-0.823	0.015	-0.863	0.024	-1.293	0.043	-2.929	0.104
360850067	Richmond	Susan Wagner	-0.643	0.018	-0.400	0.027	-1.031	0.030	-2.593	0.076
361030002	Suffolk	Babylon	-0.315	0.018	-0.927	0.016	-0.706	0.024	-0.482	0.080
361030004	Suffolk	Riverhead	-0.163	0.051	-0.170	0.051	-1.590	0.057	-0.543	0.070
361192004	Westchester	White Plains	-0.424	0.018	-0.250	0.026	-0.352	0.048	-1.199	0.115

AQS ID	County	Location	1985-2005 MET-ADJ		1990-2005 MET-ADJ		1995-2005 MET-ADJ		2000-2005 MET-ADJ	
			Slope (%/yr)	95% CI	Slope (%/yr)	95% CI	Slope (%/yr)	95% CI	Slope (%/yr)	95% CI
090010017	Fairfield	Greenwich	-0.234	0.017	0.202	0.024	-0.288	0.033	-0.749	0.096
090011123	Fairfield	Danbury	-0.083	0.021	0.646	0.023	0.506	0.038	0.750	0.090
090013007	Fairfield	Stratford	-0.823	0.019	-0.123	0.019	-0.398	0.035	-0.313	0.088
090070007	Middlesex	Middletown	-0.197	0.011	0.171	0.012	0.067	0.023	-0.333	0.093
090093002	New Haven	Madison			-0.167	0.025	-0.913	0.040	-0.994	0.092
340170006	Hudson	Bayonne	-0.784	0.015	-0.782	0.022	-1.198	0.036	-1.603	0.077
340190001	Hunterdon	Flemington	-0.118	0.016	0.121	0.023	-0.358	0.026	-0.384	0.073
340273001	Morris	Chester	-0.645	0.017	-0.575	0.029	-1.491	0.040	-2.419	0.112

360850067	Richmond	Susan Wagner	-0.399	0.022			-1.261	0.048	-1.704	0.064
361030002	Suffolk	Babylon	-0.678	0.014	-1.101	0.016	-0.958	0.031	-0.367	0.061
361030004	Suffolk	Riverhead	-0.089	0.038	-0.089	0.038	-1.312	0.035	-0.714	0.128
361192004	Westchester	White Plains	-0.330	0.018	0.084	0.024	-0.371	0.042	-0.631	0.158

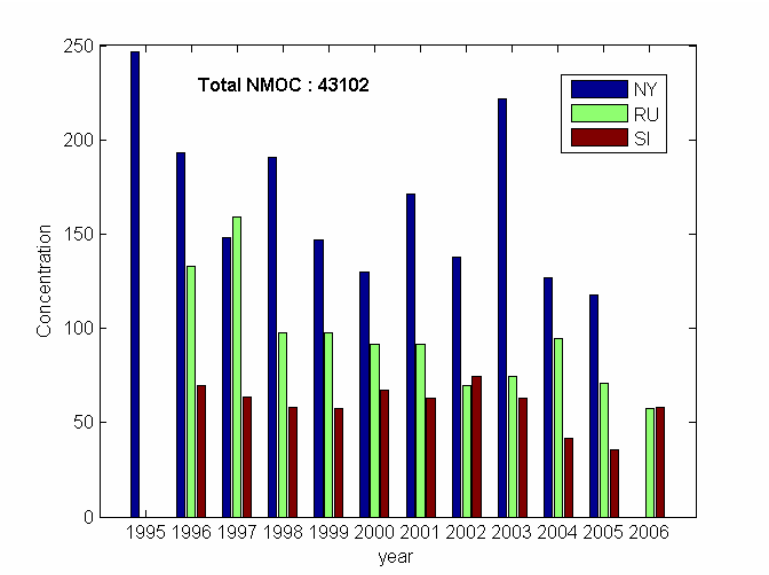


Figure 3-1: Seasonal average Total NMOC at NY, RU, and SI from 1995 to 2006.

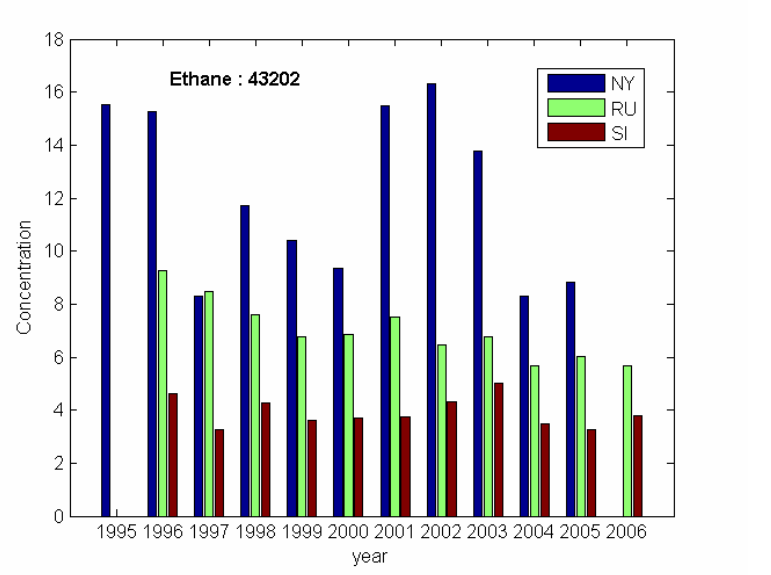


Figure 3-2: Seasonal average Ethane at NY, RU, and SI from 1995 to 2006.

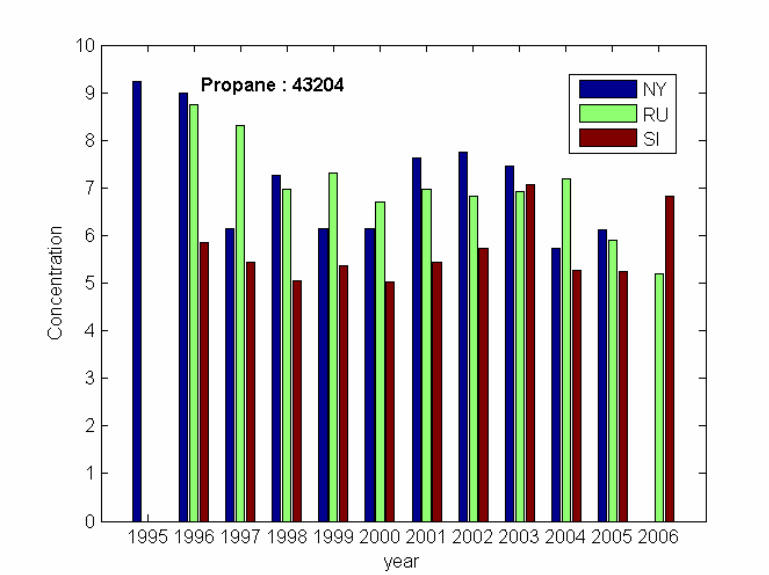


Figure 3-3: Seasonal average Propane at NY, RU, and SI. from 1995 to 2006

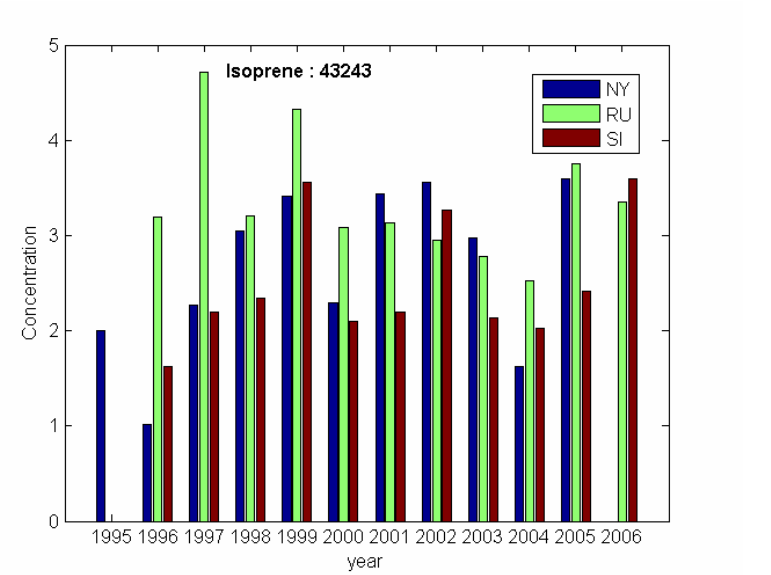


Figure 3-4: Seasonal average Isoprene at NY, RU, and SI from 1995 to 2006.

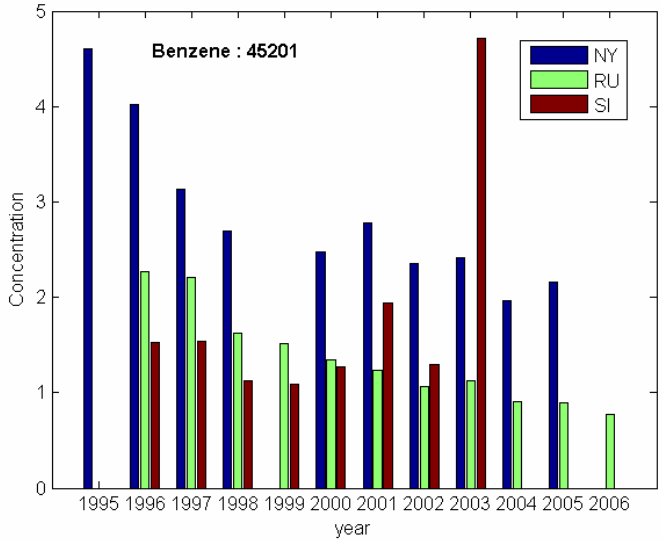


Figure 3-5: Seasonal average Benzene at NY, RU, and SI from 1995 to 2006.

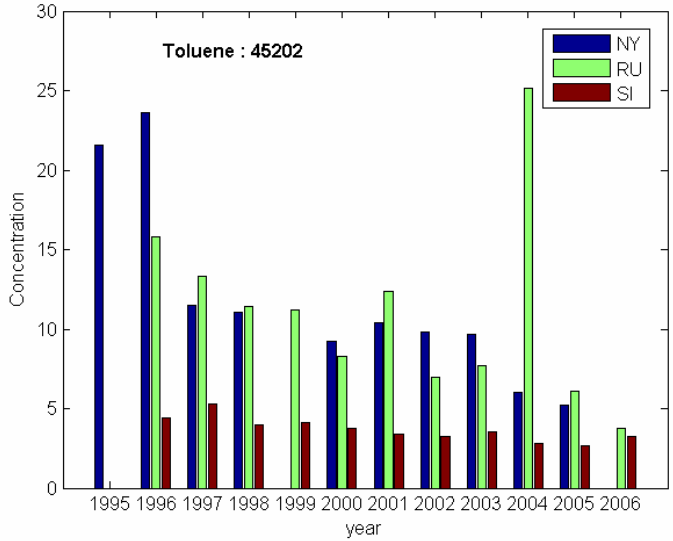


Figure 3-6: Seasonal average Toluene at NY, RU, and SI from 1995 to 2006.

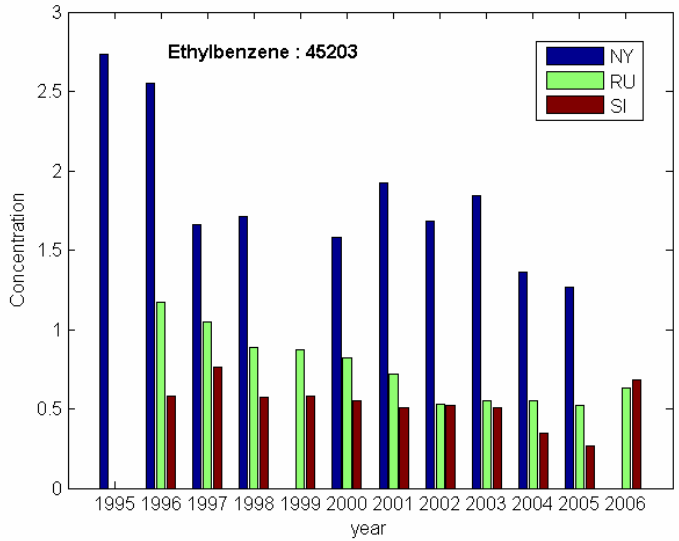


Figure 3-7: Seasonal average Ethylbenzene at NY, RU, and SI from 1995 to 2006.

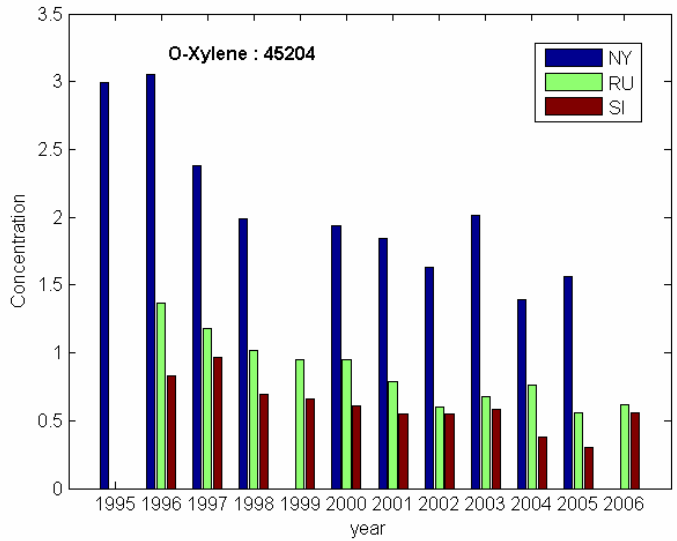
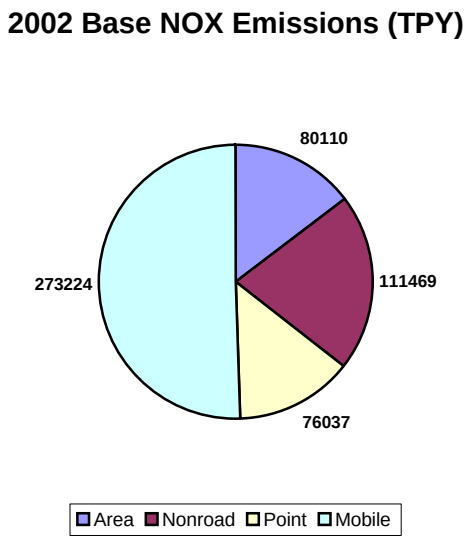
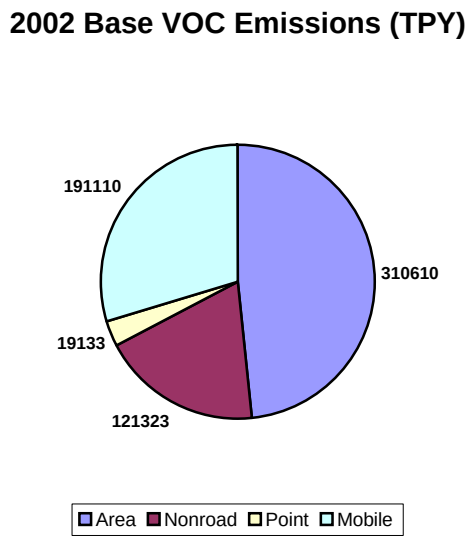
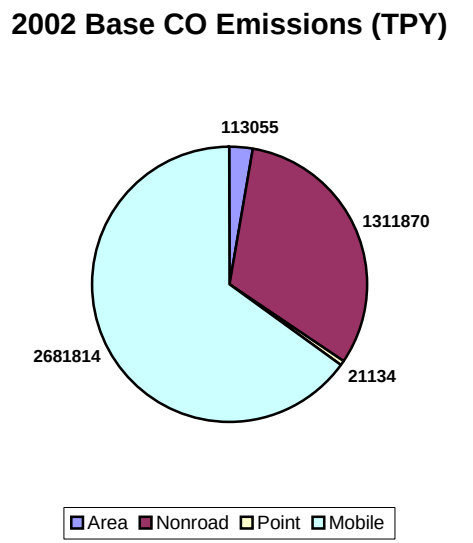


Figure 3-8: Seasonal average O-Xylene at NY, RU, and SI from 1995 to 2006.







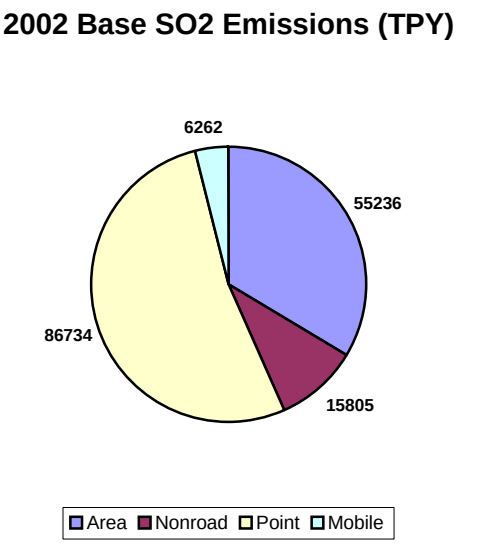
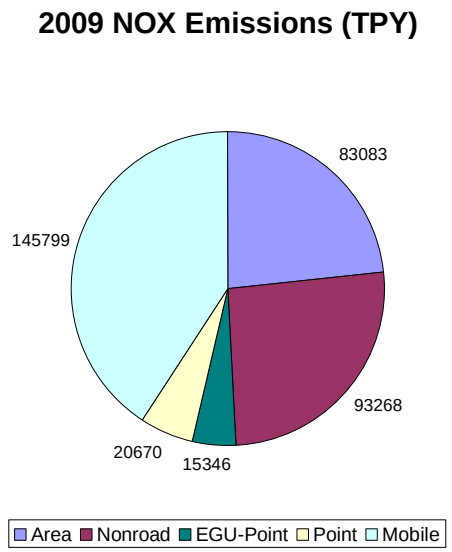
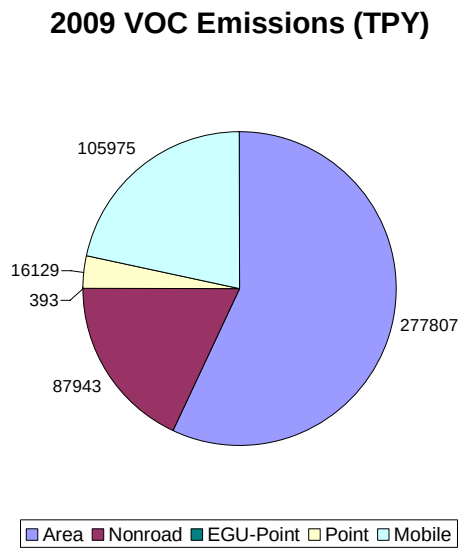
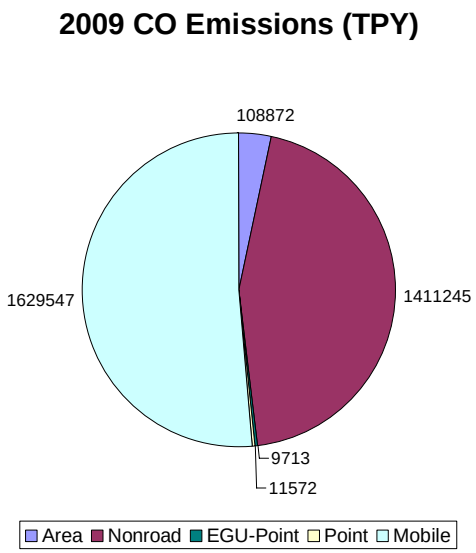


Figure 3-9 2002 Base year emissions for New York CMSA







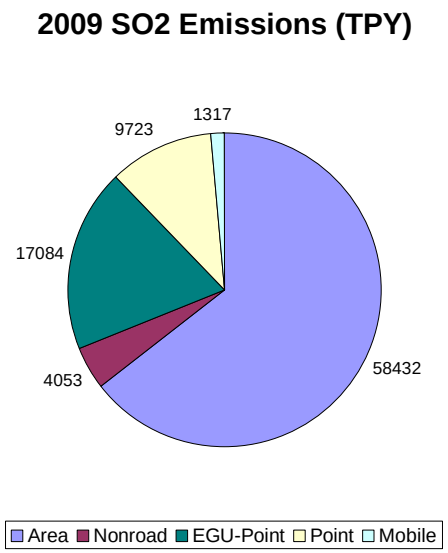
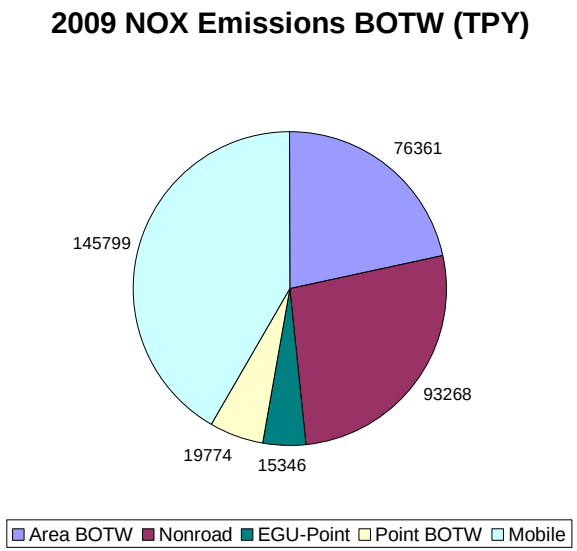
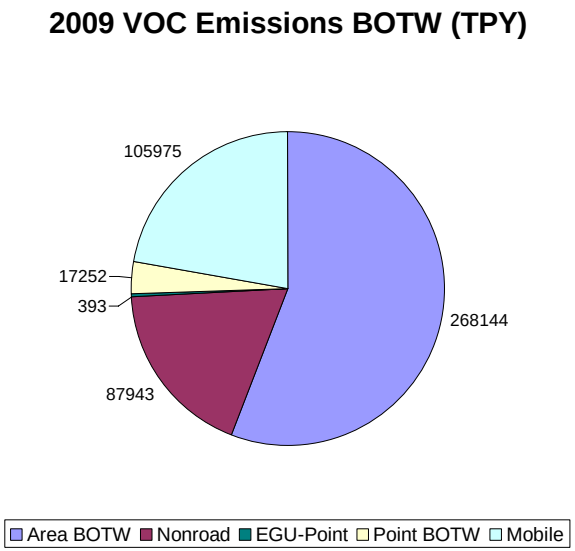
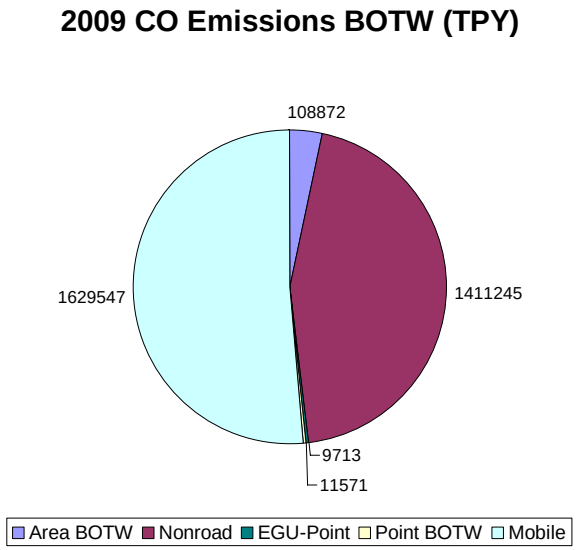


Figure 3-10 2009 OTW projected emissions for New York CMSA







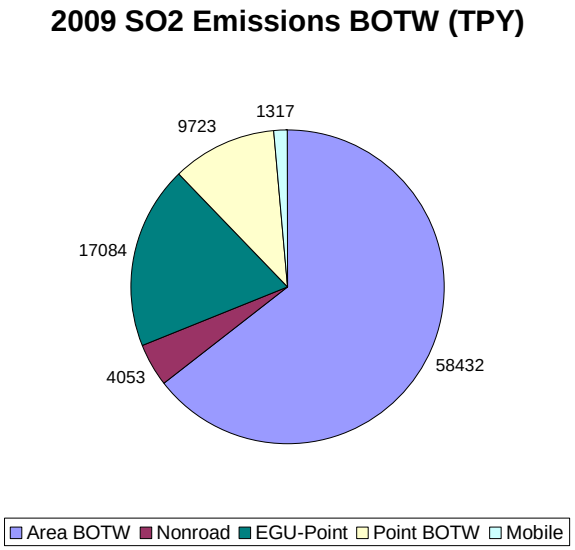
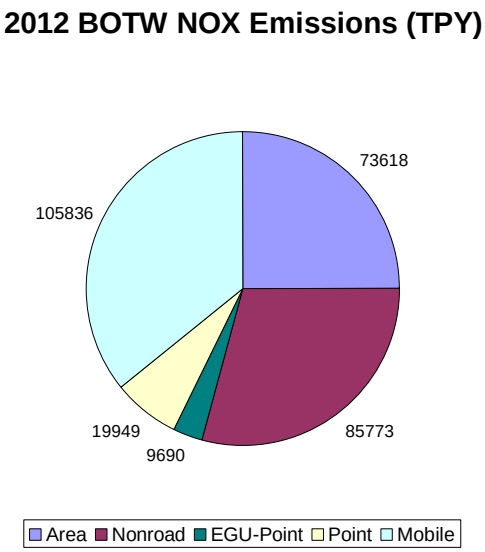
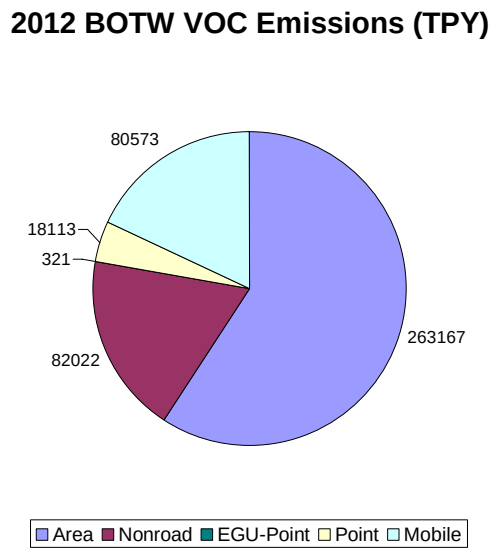
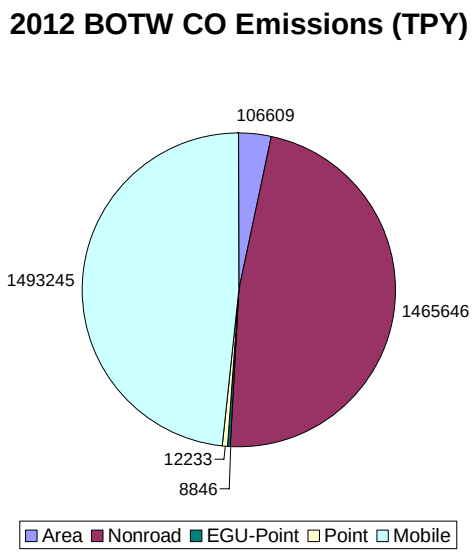


Figure 3-11 2009 BOTW projected emissions for New York CMSA







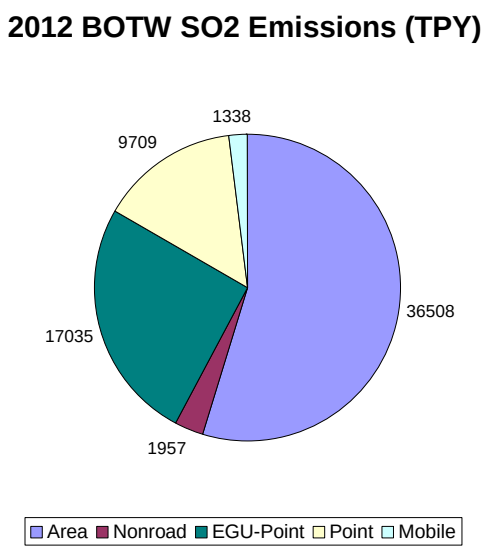


Figure 3-12 2012 BOTW projected emissions for New York CMSA

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Department of Environmental Conservation
Division of Air Resources

NEW YORK STATE IMPLEMENTATION PLAN FOR OZONE (8-HOUR NAAQS)

ATTAINMENT DEMONSTRATION FOR NEW YORK METRO AREA

APPENDIX B

FINAL PROPOSED REVISION FEBRUARY 2008

New York State Department of Environmental Conservation
ELIOT SPITZER, GOVERNOR ***ALEXANDER GRANNIS, COMMISSIONER***

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New York State
2002 Annual Emissions Inventory
NYMA Nonattainment Area

Statewide by County by Sector for all three contaminants (TPY)
- point (except for EGU) (1p.)
- EGU (electric generating units) (1p.)
- area (1p.)
- nonroad mobile (1p.)
- onroad mobile (1p.)
- biogenic (1p.)

Statewide County Level Annual CO Emissions From All Sectors (TPY) (1p.)
Statewide County Level Annual NOx Emissions From All Sectors (TPY) (1p.)
Statewide County Level Annual VOC Emissions From All Sectors (TPY) (1p.)

Statewide Point Source SCC Level Annual CO Emissions (lbs) (3pp.)
Statewide Point Source SCC Level Annual NOx Emissions (lbs) (3pp.)
Statewide Point Source SCC Level Annual non-HAP VOC Emissions (lbs) (9pp.)
Statewide Point Source SCC Level Annual HAP VOC Emissions (lbs) (6pp.)

Statewide Area Source SCC Level Annual CO Emissions (lbs) (1p.)
Statewide Area Source SCC Level Annual NOx Emissions (lbs) (1p.)
Statewide Area Source SCC Level Annual VOC Emissions (lbs) (2pp.)

Statewide NRMS CO Emissions for Aircraft, Marine, & Locomotive (TPY) (1p.)
Statewide NRMS NOx Emissions for Aircraft, Marine, & Locomotive (TPY) (1p.)
Statewide NRMS VOC Emissions for Aircraft, Marine, & Locomotive (TPY) (1p.)

Statewide NRMS CO, NOx & VOC for Off Road Equipment by SCC (TPY) (3pp.)

NYMA by County CO, NOx & VOC from all sectors (TPY) (1p.)

Appendix B
2002 Annual Statewide & NYMA

February 5, 2008

2002 Annual **Point**

Point		Tons per year		
COUNTY	FIPS	CO	NOx	VOC
ALBANY	36001	631	5,913	418
ALLEGANY	36003	86	49	12
BRONX	36005	269	994	77
BROOME	36007	108	125	111
CATTARAUGUS	36009	0	0	0.0
CAYUGA	36011	252	655	92
CHAUTAUQUA	36013	143	222	194
CHEMUNG	36015	34	557	73
CHENANGO	36017	7	12	65
CLINTON	36019	25	58	45
COLUMBIA	36021	135	147	40
CORTLAND	36023	1	2	57
DELAWARE	36025	71	275	264
DUTCHESS	36027	201	60	54
ERIE	36029	1,979	1,041	1,494
ESSEX	36031	365	757	469
FRANKLIN	36033	0	0	0
FULTON	36035	2	14	72
GENESEE	36037	46	101	4
GREENE	36039	347	3,180	48
HAMILTON	36041	0	0	0
HERKIMER	36043	222	318	133
JEFFERSON	36045	82	36	103
KINGS	36047	426	868	387
LEWIS	36049	2	3	13
LIVINGSTON	36051	22	66	72
MADISON	36053	0	0	0
MONROE	36055	1,800	5,465	1,537
MONTGOMERY	36057	20	23	22
NASSAU	36059	344	424	716
NEW YORK	36061	808	2,180	159
NIAGARA	36063	3,915	1,660	331
ONEIDA	36065	103	55	272
ONONDAGA	36067	232	1,856	617
ONTARIO	36069	130	924	328
ORANGE	36071	216	643	1,003
ORLEANS	36073	4	5	101
OSWEGO	36075	134	343	204
OTSEGO	36077	0	0	0
PUTNAM	36079	15	58	5
QUEENS	36081	579	1,428	290
RENSSELAER	36083	18	75	194
RICHMOND	36085	137	136	209
ROCKLAND	36087	230	465	44
ST LAWRENCE	36089	36,115	355	181
SARATOGA	36091	171	357	574
SCHENECTADY	36093	67	105	411
SCHOHARIE	36095	76	82	14
SCHUYLER	36097	71	243	5
SENECA	36099	279	62	78
STEUBEN	36101	70	252	174
SUFFOLK	36103	494	1,368	459
SULLIVAN	36105	4	0.3	5
TIOGA	36107	0	0	0
TOMPKINS	36109	287	442	33
ULSTER	36111	18	357	301
WARREN	36113	1,329	1,198	129
WASHINGTON	36115	111	392	152
WAYNE	36117	61	60	463
WESTCHESTER	36119	255	1,348	38
WYOMING	36121	10	172	17
YATES	36123	0	0	0
STATEWIDE		**53,563**	**37,985**	**13,363**

EGU		2002 Annual		EGU
		Tons per year		
COUNTY	FIPS	CO	NOx	VOC
ALBANY	36001	296	538	29
ALLEGANY	36003	17	32	1
BRONX	36005	0	0	0
BROOME	36007	96	2,758	12
CATTARAUGUS	36009	2	14	0
CAYUGA	36011	0	0	0
CHAUTAUQUA	36013	375	6,757	44
CHEMUNG	36015	0	0	0
CHENANGO	36017	0	0	0
CLINTON	36019	4	250	32
COLUMBIA	36021	0	0	0
CORTLAND	36023	0	0	0
DELAWARE	36025	0	0	0
DUTCHESS	36027	0	0	0
ERIE	36029	321	7,368	37
ESSEX	36031	0	0	0
FRANKLIN	36033	0	0	0
FULTON	36035	0	0	0
GENESEE	36037	5	28	5
GREENE	36039	0	0	0
HAMILTON	36041	0	0	0
HERKIMER	36043	0	33	0
JEFFERSON	36045	383	447	7
KINGS	36047	366	2,527	33
LEWIS	36049	10	12	7
LIVINGSTON	36051	0	0	0
MADISON	36053	0	0	0
MONROE	36055	152	3,065	18
MONTGOMERY	36057	0	0	0
NASSAU	36059	446	2,410	62
NEW YORK	36061	858	3,549	91
NIAGARA	36063	469	9,047	85
ONEIDA	36065	18	31	1
ONONDAGA	36067	724	1,374	47
ONTARIO	36069	0	0	0
ORANGE	36071	510	6,546	61
ORLEANS	36073	0	0	0
OSWEGO	36075	1,485	881	24
OTSEGO	36077	0	0	0
PUTNAM	36079	0	0	0
QUEENS	36081	2,538	9,178	264
RENSSELAER	36083	82	135	4
RICHMOND	36085	404	591	32
ROCKLAND	36087	490	5,526	65
ST LAWRENCE	36089	26	29	2
SARATOGA	36091	124	277	19
SCHENECTADY	36093	0	0	0
SCHOHARIE	36095	0	0	0
SCHUYLER	36097	0	0	0
SENECA	36099	0	0	0
STEUBEN	36101	0	0	0
SUFFOLK	36103	1,638	9,672	272
SULLIVAN	36105	0	0	0
TIOGA	36107	0	0	0
TOMPKINS	36109	214	4,015	26
ULSTER	36111	0	0	0
WARREN	36113	0	0	0
WASHINGTON	36115	0	0	0
WAYNE	36117	0	0	0
WESTCHESTER	36119	0	0	0
WYOMING	36121	26	107	3
YATES	36123	110	3,186	32
Statewide		**12,189**	**80,386**	**1,316**

Area		2002 Annual		Area
		Tons per year		
COUNTY	FIPS	CO	NOx	VOC
ALBANY	36001	3,893	2,234	7,269
ALLEGANY	36003	7,866	319	6,263
BRONX	36005	1,486	3,710	13,479
BROOME	36007	6,591	1,350	9,469
CATTARAUGUS	36009	11,342	592	9,366
CAYUGA	36011	5,481	461	5,062
CHAUTAUQUA	36013	9,990	906	10,032
CHEMUNG	36015	3,794	574	4,381
CHENANGO	36017	7,706	382	6,157
CLINTON	36019	6,826	629	6,041
COLUMBIA	36021	4,100	380	3,747
CORTLAND	36023	4,188	311	3,713
DELAWARE	36025	8,231	397	6,527
DUTCHESS	36027	4,868	1,622	9,089
ERIE	36029	10,855	5,825	22,696
ESSEX	36031	5,820	333	4,349
FRANKLIN	36033	7,657	402	6,058
FULTON	36035	5,621	404	4,788
GENESEE	36037	2,553	347	3,023
GREENE	36039	3,911	274	3,347
HAMILTON	36041	1,731	58	1,314
HERKIMER	36043	5,721	409	5,023
JEFFERSON	36045	9,490	649	8,201
KINGS	36047	3,078	7,560	26,169
LEWIS	36049	9,882	248	7,484
LIVINGSTON	36051	4,394	326	4,075
MADISON	36053	5,040	394	4,518
MONROE	36055	7,048	4,930	19,792
MONTGOMERY	36057	2,630	331	2,713
NASSAU	36059	2,354	6,458	19,705
NEW YORK	36061	5,351	15,971	23,441
NIAGARA	36063	3,564	1,187	7,263
ONEIDA	36065	10,708	1,557	11,817
ONONDAGA	36067	7,164	2,927	13,272
ONTARIO	36069	5,342	647	5,434
ORANGE	36071	3,955	1,595	7,838
ORLEANS	36073	2,609	226	2,465
OSWEGO	36075	9,692	656	8,799
OTSEGO	36077	7,641	413	6,289
PUTNAM	36079	1,932	383	2,402
QUEENS	36081	2,467	6,888	25,061
RENSSELAER	36083	7,402	792	7,300
RICHMOND	36085	528	1,282	7,551
ROCKLAND	36087	815	1,299	3,835
ST LAWRENCE	36089	14,701	763	11,740
SARATOGA	36091	12,180	1,229	11,253
SCHENECTADY	36093	1,803	843	3,508
SCHOHARIE	36095	4,421	187	3,543
SCHUYLER	36097	2,579	112	2,080
SENECA	36099	1,356	189	1,506
STEUBEN	36101	10,672	694	9,047
SUFFOLK	36103	5,310	7,013	24,839
SULLIVAN	36105	5,467	417	4,272
TIOGA	36107	5,457	347	4,556
TOMPKINS	36109	6,517	631	5,895
ULSTER	36111	8,626	993	8,543
WARREN	36113	7,125	559	5,533
WASHINGTON	36115	10,083	464	8,023
WAYNE	36117	6,697	545	6,097
WESTCHESTER	36119	2,445	4,786	13,960
WYOMING	36121	4,759	258	3,983
YATES	36123	2,770	137	2,300
STATEWIDE		356,287	98,804	507,292

Nonroad		2002 Annual		Nonroad
		Tons per year		
COUNTY	FIPS	CO	NOx	VOC
ALBANY	36001	17,534	4,250	1,559
ALLEGANY	36003	3,295	332	678
BRONX	36005	30,836	2,643	2,833
BROOME	36007	10,350	1,188	1,018
CATTARAUGUS	36009	6,545	660	1,114
CAYUGA	36011	7,769	868	1,912
CHAUTAUQUA	36013	12,091	2,475	2,006
CHEMUNG	36015	5,376	547	643
CHENANGO	36017	3,602	395	702
CLINTON	36019	78	310	2,561
COLUMBIA	36021	6,122	1,412	1,210
CORTLAND	36023	3,548	320	678
DELAWARE	36025	5,849	457	1,389
DUTCHESS	36027	17,488	2,735	2,165
ERIE	36029	54,493	7,267	4,434
ESSEX	36031	12,317	650	4,304
FRANKLIN	36033	7,723	771	2,592
FULTON	36035	426	87	1,413
GENESEE	36037	5,313	1,211	775
GREENE	36039	5,708	606	1,137
HAMILTON	36041	15,141	209	6,283
HERKIMER	36043	6,879	957	1,972
JEFFERSON	36045	15,057	1,943	4,152
KINGS	36047	74,634	7,617	6,038
LEWIS	36049	4,604	303	1,380
LIVINGSTON	36051	4,736	548	939
MADISON	36053	4,994	689	759
MONROE	36055	57,587	5,126	4,587
MONTGOMERY	36057	4,941	1,341	888
NASSAU	36059	89,391	4,479	7,354
NEW YORK	36061	146,416	11,044	9,194
NIAGARA	36063	14,019	1,761	1,677
ONEIDA	36065	14,129	1,862	2,216
ONONDAGA	36067	30,545	3,369	2,826
ONTARIO	36069	9,480	851	1,354
ORANGE	36071	17,898	2,092	2,005
ORLEANS	36073	3,840	336	877
OSWEGO	36075	12,164	1,306	3,064
OTSEGO	36077	4,285	541	921
PUTNAM	36079	7,304	486	991
QUEENS	36081	72,839	11,357	6,350
RENSSELAER	36083	7,279	1,287	978
RICHMOND	36085	17,588	3,771	1,748
ROCKLAND	36087	19,523	1,352	2,088
ST LAWRENCE	36089	13,497	1,959	4,356
SARATOGA	36091	12,650	1,500	1,958
SCHENECTADY	36093	6,137	1,069	579
SCHOHARIE	36095	3,119	277	895
SCHUYLER	36097	4,314	143	1,565
SENECA	36099	7,036	395	2,535
STEUBEN	36101	6,095	1,004	1,024
SUFFOLK	36103	145,045	9,522	18,492
SULLIVAN	36105	9,213	389	2,248
TIOGA	36107	4,412	393	757
TOMPKINS	36109	6,085	521	1,050
ULSTER	36111	11,980	1,116	2,035
WARREN	36113	11,548	653	3,132
WASHINGTON	36115	3,964	642	818
WAYNE	36117	7,960	1,397	1,322
WESTCHESTER	36119	71,468	4,198	6,539
WYOMING	36121	4,857	573	948
YATES	36123	5,252	243	1,875
STATEWIDE		1,206,370	119,808	157,892

2002 Annual **Onroad**

Onroad		Tons per day		
COUNTY	**FIPS**	**CO**	**NOx**	**VOC**
ALBANY	36001	94,709	8,885	5,125
ALLEGANY	36003	11,521	1,824	599
BRONX	36005	62,986	7,134	4,702
BROOME	36007	56,355	6,244	2,951
CATTARAUGUS	36009	22,280	2,963	1,103
CAYUGA	36011	21,465	2,135	1,113
CHAUTAUQUA	36013	37,884	5,037	1,951
CHEMUNG	36015	20,044	2,307	1,121
CHENANGO	36017	12,291	1,364	635
CLINTON	36019	22,221	2,708	1,124
COLUMBIA	36021	22,101	2,045	1,136
CORTLAND	36023	17,141	1,855	872
DELAWARE	36025	14,662	1,625	756
DUTCHESS	36027	58,243	5,590	3,475
ERIE	36029	208,934	20,217	10,793
ESSEX	36031	16,041	1,846	782
FRANKLIN	36033	12,050	1,199	619
FULTON	36035	10,566	981	576
GENESEE	36037	32,667	3,645	1,612
GREENE	36039	21,825	2,384	1,082
HAMILTON	36041	3,163	317	162
HERKIMER	36043	20,369	2,031	1,064
JEFFERSON	36045	30,457	3,850	1,574
KINGS	36047	84,765	9,875	6,652
LEWIS	36049	7,000	709	344
LIVINGSTON	36051	22,780	2,540	1,152
MADISON	36053	19,961	2,111	1,034
MONROE	36055	166,060	14,942	9,355
MONTGOMERY	36057	23,535	2,654	1,181
NASSAU	36059	194,701	21,968	14,952
NEW YORK	36061	77,353	8,733	7,690
NIAGARA	36063	38,346	3,497	2,015
ONEIDA	36065	56,332	5,369	3,048
ONONDAGA	36067	109,327	10,684	6,164
ONTARIO	36069	37,673	3,973	1,917
ORANGE	36071	89,891	9,661	5,237
ORLEANS	36073	8,837	868	460
OSWEGO	36075	32,031	3,346	1,597
OTSEGO	36077	17,595	2,127	897
PUTNAM	36079	41,376	4,183	2,538
QUEENS	36081	133,330	15,476	10,396
RENSSELAER	36083	37,463	3,584	2,077
RICHMOND	36085	39,155	4,492	2,977
ROCKLAND	36087	52,063	5,686	3,309
ST LAWRENCE	36089	23,827	2,445	1,279
SARATOGA	36091	59,757	5,709	3,307
SCHENECTADY	36093	33,913	3,298	1,784
SCHOHARIE	36095	10,111	1,122	534
SCHUYLER	36097	4,484	528	238
SENECA	36099	14,782	1,508	719
STEUBEN	36101	34,195	5,342	1,703
SUFFOLK	36103	300,650	33,046	20,738
SULLIVAN	36105	19,003	1,901	1,008
TIOGA	36107	15,482	1,845	808
TOMPKINS	36109	18,174	1,646	990
ULSTER	36111	55,284	5,388	2,866
WARREN	36113	22,756	2,403	1,198
WASHINGTON	36115	15,002	1,420	805
WAYNE	36117	19,646	1,928	1,016
WESTCHESTER	36119	161,917	18,229	10,082
WYOMING	36121	9,444	906	479
YATES	36123	4,754	562	255
STATEWIDE		**2,942,730**	**313,890**	**179,731**

2002 Annual **Biogenic**

Biogenic		Tons per year		
County	FIPS	CO	NO	VOC
ALBANY	36001	730	59	6,253
ALLEGANY	36003	1,218	129	9,526
BRONX	36005	100	25	657
BROOME	36007	879	107	7,861
CATTARAUGUS	36009	1,654	148	13,540
CAYUGA	36011	986	227	7,928
CHAUTAUQUA	36013	1,260	202	8,144
CHEMUNG	36015	521	88	3,911
CHENANGO	36017	1,120	149	7,833
CLINTON	36019	1,631	138	13,341
COLUMBIA	36021	896	96	8,484
CORTLAND	36023	616	101	4,280
DELAWARE	36025	1,672	133	13,435
DUTCHESS	36027	1,096	90	10,288
ERIE	36029	1,127	165	6,898
ESSEX	36031	2,547	94	20,888
FRANKLIN	36033	2,337	228	17,197
FULTON	36035	764	90	5,275
GENESEE	36037	645	201	3,993
GREENE	36039	886	47	8,182
HAMILTON	36041	2,092	78	16,056
HERKIMER	36043	1,783	175	12,846
JEFFERSON	36045	1,754	251	12,503
KINGS	36047	60	15	309
LEWIS	36049	1,693	154	12,116
LIVINGSTON	36051	888	222	6,048
MADISON	36053	1,049	149	7,528
MONROE	36055	990	223	6,237
MONTGOMERY	36057	579	106	4,715
NASSAU	36059	408	81	2,859
NEW YORK	36061	76	16	473
NIAGARA	36063	940	335	5,182
ONEIDA	36065	1,515	214	10,021
ONONDAGA	36067	929	171	6,259
ONTARIO	36069	767	178	6,024
ORANGE	36071	1,065	110	13,024
ORLEANS	36073	635	195	3,314
OSWEGO	36075	1,277	119	7,911
OTSEGO	36077	1,190	157	7,958
PUTNAM	36079	473	32	5,243
QUEENS	36081	105	20	543
RENSSELAER	36083	894	96	7,316
RICHMOND	36085	173	47	1,292
ROCKLAND	36087	300	26	4,006
ST LAWRENCE	36089	3,876	376	28,960
SARATOGA	36091	1,125	76	9,010
SCHENECTADY	36093	377	39	3,032
SCHOHARIE	36095	737	95	5,496
SCHUYLER	36097	438	87	3,193
SENECA	36099	438	127	3,305
STEUBEN	36101	1,475	267	12,085
SUFFOLK	36103	1,328	368	12,886
SULLIVAN	36105	1,325	76	12,538
TIOGA	36107	730	102	5,400
TOMPKINS	36109	576	96	4,128
ULSTER	36111	1,493	82	15,714
WARREN	36113	1,396	46	11,568
WASHINGTON	36115	1,109	183	8,355
WAYNE	36117	920	270	5,940
WESTCHESTER	36119	549	35	5,347
WYOMING	36121	720	194	3,813
YATES	36123	507	107	4,017
STATEWIDE		**63,436**	**8,313**	**492,483**

2002 STATEWIDE COUNTY LEVEL ANNUAL CO EMISSIONS FROM ALL SECTORS (TPY)

COUNTY	FIPS	Point	EGU	Area	Nonroad	On-road	Biogenic	Total
ALBANY	36001	631	296	3,893	17,534	94,709	730	117,793
ALLEGANY	36003	86	17	7,866	3,295	11,521	1,218	24,004
BRONX	36005	269	0	1,486	30,836	62,986	100	95,677
BROOME	36007	108	96	6,591	10,350	56,355	879	74,379
CATTARAUGUS	36009	0	2	11,342	6,545	22,280	1,654	41,824
CAYUGA	36011	252	0	5,481	7,769	21,465	986	35,952
CHAUTAUQUA	36013	143	375	9,990	12,091	37,884	1,260	61,743
CHEMUNG	36015	34	0	3,794	5,376	20,044	521	29,769
CHENANGO	36017	7	0	7,706	3,602	12,291	1,120	24,726
CLINTON	36019	25	4	6,826	78	22,221	1,631	30,786
COLUMBIA	36021	135	0	4,100	6,122	22,101	896	33,354
CORTLAND	36023	1	0	4,188	3,548	17,141	616	25,494
DELAWARE	36025	71	0	8,231	5,849	14,662	1,672	30,486
DUTCHESS	36027	201	0	4,868	17,488	58,243	1,096	81,896
ERIE	36029	1,979	321	10,855	54,493	208,934	1,127	277,708
ESSEX	36031	365	0	5,820	12,317	16,041	2,547	37,090
FRANKLIN	36033	0	0	7,657	7,723	12,050	2,337	29,767
FULTON	36035	2	0	5,621	426	10,566	764	17,379
GENESEE	36037	46	5	2,553	5,313	32,667	645	41,229
GREENE	36039	347	0	3,911	5,708	21,825	886	32,678
HAMILTON	36041	0	0	1,731	15,141	3,163	2,092	22,126
HERKIMER	36043	222	0	5,721	6,879	20,369	1,783	34,974
JEFFERSON	36045	82	383	9,490	15,057	30,457	1,754	57,223
KINGS	36047	426	366	3,078	74,634	84,765	60	163,329
LEWIS	36049	2	10	9,882	4,604	7,000	1,693	23,190
LIVINGSTON	36051	22	0	4,394	4,736	22,780	888	32,820
MADISON	36053	0	0	5,040	4,994	19,961	1,049	31,044
MONROE	36055	1,800	152	7,048	57,587	166,060	990	233,637
MONTGOMERY	36057	20	0	2,630	4,941	23,535	579	31,705
NASSAU	36059	344	446	2,354	89,391	194,701	408	287,643
NEW YORK	36061	808	858	5,351	146,416	77,353	76	230,862
NIAGARA	36063	3,915	469	3,564	14,019	38,346	940	61,253
ONEIDA	36065	103	18	10,708	14,129	56,332	1,515	82,805
ONONDAGA	36067	232	724	7,164	30,545	109,327	929	148,922
ONTARIO	36069	130	0	5,342	9,480	37,673	767	53,393
ORANGE	36071	216	510	3,955	17,898	89,891	1,065	113,535
ORLEANS	36073	4	0	2,609	3,840	8,837	635	15,926
OSWEGO	36075	134	1,485	9,692	12,164	32,031	1,277	56,784
OTSEGO	36077	0	0	7,641	4,285	17,595	1,190	30,710
PUTNAM	36079	15	0	1,932	7,304	41,376	473	51,100
QUEENS	36081	579	2,538	2,467	72,839	133,330	105	211,859
RENSSELAER	36083	18	82	7,402	7,279	37,463	894	53,137
RICHMOND	36085	137	404	528	17,588	39,155	173	57,984
ROCKLAND	36087	230	490	815	19,523	52,063	300	73,421
ST LAWRENCE	36089	36,115	26	14,701	13,497	23,827	3,876	92,042
SARATOGA	36091	171	124	12,180	12,650	59,757	1,125	86,007
SCHENECTADY	36093	67	0	1,803	6,137	33,913	377	42,297
SCHOHARIE	36095	76	0	4,421	3,119	10,111	737	18,464
SCHUYLER	36097	71	0	2,579	4,314	4,484	438	11,886
SENECA	36099	279	0	1,356	7,036	14,782	438	23,891
STEUBEN	36101	70	0	10,672	6,095	34,195	1,475	52,507
SUFFOLK	36103	494	1,638	5,310	145,045	300,650	1,328	454,466
SULLIVAN	36105	4	0	5,467	9,213	19,003	1,325	35,012
TIOGA	36107	0	0	5,457	4,412	15,482	730	26,082
TOMPKINS	36109	287	214	6,517	6,085	18,174	576	31,853
ULSTER	36111	18	0	8,626	11,980	55,284	1,493	77,401
WARREN	36113	1,329	0	7,125	11,548	22,756	1,396	44,154
WASHINGTON	36115	111	0	10,083	3,964	15,002	1,109	30,269
WAYNE	36117	61	0	6,697	7,960	19,646	920	35,284
WESTCHESTER	36119	255	0	2,445	71,468	161,917	549	236,633
WYOMING	36121	10	26	4,759	4,857	9,444	720	19,817
YATES	36123	0	110	2,770	5,252	4,754	507	13,392
STATEWIDE		**53,563**	**12,189**	**356,287**	**1,206,370**	**2,942,730**	**63,436**	**4,634,575**

2002 STATEWIDE COUNTY LEVEL ANNUAL NOx EMISSIONS FROM ALL SECTORS (TPY)

COUNTY	FIPS	Point	EGU	Area	Nonroad	On-road	Biogenic	Total
ALBANY	36001	5,913	538	2,234	4,250	8,885	59	21,878
ALLEGANY	36003	49	32	319	332	1,824	129	2,686
BRONX	36005	994	0	3,710	2,643	7,134	25	14,506
BROOME	36007	125	2,758	1,350	1,188	6,244	107	11,771
CATTARAUGUS	36009	0	14	592	660	2,963	148	4,377
CAYUGA	36011	655	0	461	868	2,135	227	4,346
CHAUTAUQUA	36013	222	6,757	906	2,475	5,037	202	15,599
CHEMUNG	36015	557	0	574	547	2,307	88	4,073
CHENANGO	36017	12	0	382	395	1,364	149	2,301
CLINTON	36019	58	250	629	310	2,708	138	4,092
COLUMBIA	36021	147	0	380	1,412	2,045	96	4,080
CORTLAND	36023	2	0	311	320	1,855	101	2,589
DELAWARE	36025	275	0	397	457	1,625	133	2,888
DUTCHESS	36027	60	0	1,622	2,735	5,590	90	10,096
ERIE	36029	1,041	7,368	5,825	7,267	20,217	165	41,882
ESSEX	36031	757	0	333	650	1,846	94	3,680
FRANKLIN	36033	0	0	402	771	1,199	228	2,600
FULTON	36035	14	0	404	87	981	90	1,576
GENESEE	36037	101	28	347	1,211	3,645	201	5,534
GREENE	36039	3,180	0	274	606	2,384	47	6,491
HAMILTON	36041	0	0	58	209	317	78	662
HERKIMER	36043	318	33	409	957	2,031	175	3,924
JEFFERSON	36045	36	447	649	1,943	3,850	251	7,177
KINGS	36047	868	2,527	7,560	7,617	9,875	15	28,462
LEWIS	36049	3	12	248	303	709	154	1,428
LIVINGSTON	36051	66	0	326	548	2,540	222	3,703
MADISON	36053	0	0	394	689	2,111	149	3,343
MONROE	36055	5,465	3,065	4,930	5,126	14,942	223	33,751
MONTGOMERY	36057	23	0	331	1,341	2,654	106	4,455
NASSAU	36059	424	2,410	6,458	4,479	21,968	81	35,821
NEW YORK	36061	2,180	3,549	15,971	11,044	8,733	16	41,492
NIAGARA	36063	1,660	9,047	1,187	1,761	3,497	335	17,486
ONEIDA	36065	55	31	1,557	1,862	5,369	214	9,087
ONONDAGA	36067	1,856	1,374	2,927	3,369	10,684	171	20,381
ONTARIO	36069	924	0	647	851	3,973	178	6,573
ORANGE	36071	643	6,546	1,595	2,092	9,661	110	20,648
ORLEANS	36073	5	0	226	336	868	195	1,629
OSWEGO	36075	343	881	656	1,306	3,346	119	6,651
OTSEGO	36077	0	0	413	541	2,127	157	3,238
PUTNAM	36079	58	0	383	486	4,183	32	5,142
QUEENS	36081	1,428	9,178	6,888	11,357	15,476	20	44,348
RENSSELAER	36083	75	135	792	1,287	3,584	96	5,969
RICHMOND	36085	136	591	1,282	3,771	4,492	47	10,320
ROCKLAND	36087	465	5,526	1,299	1,352	5,686	26	14,355
ST LAWRENCE	36089	355	29	763	1,959	2,445	376	5,928
SARATOGA	36091	357	277	1,229	1,500	5,709	76	9,148
SCHENECTADY	36093	105	0	843	1,069	3,298	39	5,353
SCHOHARIE	36095	82	0	187	277	1,122	95	1,762
SCHUYLER	36097	243	0	112	143	528	87	1,113
SENECA	36099	62	0	189	395	1,508	127	2,280
STEUBEN	36101	252	0	694	1,004	5,342	267	7,560
SUFFOLK	36103	1,368	9,672	7,013	9,522	33,046	368	60,990
SULLIVAN	36105	0.3	0	417	389	1,901	76	2,784
TIOGA	36107	0	0	347	393	1,845	102	2,688
TOMPKINS	36109	442	4,015	631	521	1,646	96	7,351
ULSTER	36111	357	0	993	1,116	5,388	82	7,936
WARREN	36113	1,198	0	559	653	2,403	46	4,859
WASHINGTON	36115	392	0	464	642	1,420	183	3,101
WAYNE	36117	60	0	545	1,397	1,928	270	4,200
WESTCHESTER	36119	1,348	0	4,786	4,198	18,229	35	28,596
WYOMING	36121	172	107	258	573	906	194	2,211
YATES	36123	0	3,186	137	243	562	107	4,235
STATEWIDE		**37,985**	**80,386**	**98,804**	**119,808**	**313,890**	**8,313**	**659,186**

2002 STATEWIDE COUNTY LEVEL ANNUAL VOC EMISSIONS FROM ALL SECTORS (TPY)

COUNTY	FIPS	Point	EGU	AREA	Non-road	On-road	Biogenic	Total
ALBANY	36001	418	29	7,269	1,559	5,125	6,253	20,653
ALLEGANY	36003	12	1	6,263	678	599	9,526	17,079
BRONX	36005	77	0	13,479	2,833	4,702	657	21,747
BROOME	36007	111	12	9,469	1,018	2,951	7,861	21,423
CATTARAUGUS	36009	0.0	0	9,366	1,114	1,103	13,540	25,122
CAYUGA	36011	92	0	5,062	1,912	1,113	7,928	16,108
CHAUTAUQUA	36013	194	44	10,032	2,006	1,951	8,144	22,371
CHEMUNG	36015	73	0	4,381	643	1,121	3,911	10,128
CHENANGO	36017	65	0	6,157	702	635	7,833	15,392
CLINTON	36019	45	32	6,041	2,561	1,124	13,341	23,145
COLUMBIA	36021	40	0	3,747	1,210	1,136	8,484	14,617
CORTLAND	36023	57	0	3,713	678	872	4,280	9,600
DELAWARE	36025	264	0	6,527	1,389	756	13,435	22,371
DUTCHESS	36027	54	0	9,089	2,165	3,475	10,288	25,071
ERIE	36029	1,494	37	22,696	4,434	10,793	6,898	46,353
ESSEX	36031	469	0	4,349	4,304	782	20,888	30,793
FRANKLIN	36033	0	0	6,058	2,592	619	17,197	26,467
FULTON	36035	72	0	4,788	1,413	576	5,275	12,125
GENESEE	36037	4	5	3,023	775	1,612	3,993	9,413
GREENE	36039	48	0	3,347	1,137	1,082	8,182	13,796
HAMILTON	36041	0	0	1,314	6,283	162	16,056	23,814
HERKIMER	36043	133	0	5,023	1,972	1,064	12,846	21,038
JEFFERSON	36045	103	7	8,201	4,152	1,574	12,503	26,540
KINGS	36047	387	33	26,169	6,038	6,652	309	39,588
LEWIS	36049	13	7	7,484	1,380	344	12,116	21,345
LIVINGSTON	36051	72	0	4,075	939	1,152	6,048	12,287
MADISON	36053	0	0	4,518	759	1,034	7,528	13,839
MONROE	36055	1,537	18	19,792	4,587	9,355	6,237	41,526
MONTGOMERY	36057	22	0	2,713	888	1,181	4,715	9,519
NASSAU	36059	716	62	19,705	7,354	14,952	2,859	45,648
NEW YORK	36061	159	91	23,441	9,194	7,690	473	41,048
NIAGARA	36063	331	85	7,263	1,677	2,015	5,182	16,552
ONEIDA	36065	272	1	11,817	2,216	3,048	10,021	27,376
ONONDAGA	36067	617	47	13,272	2,826	6,164	6,259	29,185
ONTARIO	36069	328	0	5,434	1,354	1,917	6,024	15,055
ORANGE	36071	1,003	61	7,838	2,005	5,237	13,024	29,168
ORLEANS	36073	101	0	2,465	877	460	3,314	7,218
OSWEGO	36075	204	24	8,799	3,064	1,597	7,911	21,600
OTSEGO	36077	0	0	6,289	921	897	7,958	16,065
PUTNAM	36079	5	0	2,402	991	2,538	5,243	11,179
QUEENS	36081	290	264	25,061	6,350	10,396	543	42,904
RENSSELAER	36083	194	4	7,300	978	2,077	7,316	17,869
RICHMOND	36085	209	32	7,551	1,748	2,977	1,292	13,809
ROCKLAND	36087	44	65	3,835	2,088	3,309	4,006	13,347
ST LAWRENCE	36089	181	2	11,740	4,356	1,279	28,960	46,519
SARATOGA	36091	574	19	11,253	1,958	3,307	9,010	26,121
SCHENECTADY	36093	411	0	3,508	579	1,784	3,032	9,314
SCHOHARIE	36095	14	0	3,543	895	534	5,496	10,482
SCHUYLER	36097	5	0	2,080	1,565	238	3,193	7,080
SENECA	36099	78	0	1,506	2,535	719	3,305	8,143
STEUBEN	36101	174	0	9,047	1,024	1,703	12,085	24,032
SUFFOLK	36103	459	272	24,839	18,492	20,738	12,886	77,686
SULLIVAN	36105	5	0	4,272	2,248	1,008	12,538	20,071
TIOGA	36107	0	0	4,556	757	808	5,400	11,521
TOMPKINS	36109	33	26	5,895	1,050	990	4,128	12,122
ULSTER	36111	301	0	8,543	2,035	2,866	15,714	29,458
WARREN	36113	129	0	5,533	3,132	1,198	11,568	21,560
WASHINGTON	36115	152	0	8,023	818	805	8,355	18,153
WAYNE	36117	463	0	6,097	1,322	1,016	5,940	14,838
WESTCHESTER	36119	38	0	13,960	6,539	10,082	5,347	35,965
WYOMING	36121	17	3	3,983	948	479	3,813	9,242
YATES	36123	0	32	2,300	1,875	255	4,017	8,479
STATEWIDE		**13,363**	**1,316**	**507,292**	**157,892**	**179,731**	**492,483**	**1,352,076**

Annual Point Source Carbon Monoxide by SCC in lbs.

SCC	2002Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
10100205	25,426	27,008	28,589	29,116	29,710	30,007
10100401	66,421	82,714	99,006	104,437	103,115	102,454
10100405	11,450	14,259	17,067	18,004	17,776	17,662
10100501	951	1,421	1,892	2,048	1,535	1,278
10100505	970	1,450	1,930	2,090	1,566	1,304
10100601	242,894	254,387	265,881	269,712	297,978	312,111
10100602	55,617	58,249	60,881	61,758	68,231	71,467
10100604	374,777	392,511	410,245	416,156	459,770	481,576
10200202	108,988	111,405	113,822	114,627	114,905	115,044
10200203	190,942	195,176	199,410	200,822	201,309	201,552
10200204	111,065	113,528	115,991	116,812	117,095	117,236
10200205	275,964	282,084	288,203	290,243	290,947	291,298
10200206	1,120,691	1,145,543	1,170,395	1,178,679	1,181,535	1,182,963
10200401	843,588	920,175	996,763	1,022,292	1,023,446	1,024,024
10200402	66,857	72,926	78,996	81,019	81,111	81,157
10200501	17,402	17,481	17,559	17,585	17,375	17,269
10200502	9,192	9,233	9,274	9,288	9,177	9,121
10200503	1,522	1,529	1,536	1,538	1,520	1,510
10200504	17,616	17,695	17,775	17,801	17,588	17,481
10200601	846,297	866,097	885,896	892,496	907,879	915,571
10200602	1,506,103	1,541,339	1,576,575	1,588,320	1,615,697	1,629,385
10200603	104,317	106,758	109,199	110,012	111,908	112,856
10200704	149	137	126	122	115	112
10200707	181	167	153	148	140	136
10200799	23,904	24,398	24,892	25,057	25,141	25,182
10200802	15	15	15	15	15	15
10200901	369,446	393,077	416,708	424,585	431,306	434,667
10200902	51,000	54,262	57,524	58,612	59,540	60,003
10200903	83,928	89,297	94,665	96,455	97,982	98,745
10200905	33,398	35,534	37,671	38,383	38,990	39,294
10200906	20,000	21,279	22,559	22,985	23,349	23,531
10201002	718	697	676	669	673	675
10201301	5,265	5,602	5,939	6,051	6,147	6,194
10201302	2,970	3,021	3,072	3,089	3,110	3,120
10201401	3,987	4,080	4,173	4,204	4,277	4,313
10201403	4	4	4	4	4	4
10300203	70	71	72	73	73	72
10300206	55	56	57	57	57	57
10300209	34,557	35,270	35,982	36,220	36,063	35,985
10300401	193,001	186,236	179,471	177,216	179,938	181,299
10300402	80,424	77,605	74,786	73,846	74,981	75,548
10300501	9,451	9,747	10,043	10,141	10,232	10,278
10300502	7,177	7,401	7,626	7,701	7,770	7,805
10300503	1,342	1,384	1,426	1,440	1,453	1,460
10300504	1,637	1,688	1,739	1,756	1,772	1,780
10300601	798,203	801,812	805,421	806,624	819,883	826,513
10300602	775,135	778,640	782,144	783,313	796,189	802,627
10300603	96,247	96,682	97,117	97,262	98,861	99,660
10300701	64,686	66,373	68,061	68,623	69,934	70,589
10300901	20,200	20,154	20,107	20,092	20,092	20,092
10300902	130,915	130,615	130,314	130,214	130,214	130,214
10300903	29,717	29,649	29,581	29,558	29,558	29,558
10301002	159	162	165	167	168	169
10301302	3,034	3,093	3,153	3,172	3,203	3,218
10500105	3,192	3,226	3,259	3,270	3,262	3,258
10500106	154,904	158,528	162,152	163,360	166,175	167,583
10500110	2,105	2,044	1,983	1,962	1,974	1,981
10500113	3	4	4	4	4	4
10500205	623	642	662	668	674	677
10500206	6,341	6,370	6,399	6,408	6,513	6,566
10500209	600	599	597	597	597	597
10500210	44	45	46	46	46	47
10500214	11	11	12	12	12	12
20100101	55	82	109	118	88	73
20100102	34,495	51,572	68,648	74,340	55,710	46,394
20100201	247,590	259,306	271,021	274,926	303,739	318,145
20100202	201,776	211,324	220,872	224,055	247,536	259,276

Annual Point Source Carbon Monoxide by SCC in lbs.

SCC	2002Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
20200101	16	16	16	16	16	16
20200102	85,371	85,755	86,140	86,268	85,235	84,718
20200103	325	327	328	329	325	323
20200104	2,506	2,518	2,529	2,533	2,502	2,487
20200201	364,919	373,457	381,994	384,840	391,473	394,790
20200202	2,010,266	2,057,297	2,104,328	2,120,005	2,156,546	2,174,817
20200203	127,868	130,859	133,851	134,848	137,172	138,335
20200204	46,224	47,305	48,386	48,747	49,587	50,007
20200252	3,149	3,223	3,296	3,321	3,378	3,407
20200253	39,674	40,602	41,530	41,840	42,561	42,921
20200254	48,209	49,337	50,464	50,840	51,717	52,155
20200301	282,331	282,303	282,275	282,266	283,692	284,406
20200401	594,235	597,039	599,842	600,777	593,791	590,298
20200402	874,540	874,540	874,540	874,540	874,540	874,540
20201001	337	328	318	314	316	317
20201707	7,099	7,098	7,098	7,097	7,133	7,151
20300101	170,211	175,514	180,817	182,584	184,220	185,038
20300102	31	32	33	33	33	33
20300201	86,409	86,800	87,190	87,321	88,756	89,474
20300202	47,013	47,226	47,438	47,509	48,290	48,681
20300204	6,079	6,106	6,134	6,143	6,244	6,294
20300301	16,257	16,237	16,218	16,211	16,206	16,203
20300702	293,350	292,676	292,002	291,778	291,778	291,778
20300801	247,380	246,812	246,244	246,055	246,055	246,055
20300807	530,391	529,173	527,955	527,549	527,549	527,549
20301001	72	74	75	76	76	77
20400401	256,498	278,567	300,636	307,992	323,337	331,009
30100899	94	106	117	121	128	132
30101814	177	199	221	229	242	249
30101860	306	344	382	395	418	430
30101891	6,990	7,863	8,736	9,028	9,555	9,819
30101899	237	267	296	306	324	333
30103499	1,253	1,238	1,224	1,219	1,239	1,249
30103553	25	28	31	32	34	35
30106099	5,042	5,996	6,950	7,268	7,784	8,041
30182003	29,000	32,595	36,189	37,388	39,628	40,748
30190004	4,464	5,022	5,579	5,765	6,102	6,271
30190013	932	930	927	927	944	952
30199999	148,729	167,165	185,601	191,746	203,235	208,980
30290003	445	455	464	467	479	485
30300101	25,692,588	27,371,472	29,050,360	29,609,988	31,068,726	31,798,098
30300102	45,825,377	48,819,840	51,814,310	52,812,464	55,414,273	56,715,182
30300105	273,836	291,730	309,624	315,588	331,136	338,910
30300331	49,255	48,387	47,519	47,230	48,454	49,067
30300503	6,527	6,954	7,380	7,522	7,893	8,078
30300702	171,805	168,778	165,751	164,742	169,012	171,148
30300933	55,763	54,781	53,798	53,471	54,857	55,550
30300934	894	878	862	857	879	891
30300936	7,910	7,771	7,631	7,585	7,781	7,880
30390003	178,704	175,742	172,781	171,794	168,172	166,361
30400101	856	1,000	1,144	1,192	1,273	1,313
30400103	13,486	15,757	18,028	18,785	20,055	20,690
30400108	28,672	33,500	38,329	39,938	42,639	43,989
30400109	129,523	151,335	173,147	180,417	192,617	198,716
30400112	14,540	16,989	19,437	20,253	21,623	22,308
30400115	38,502	44,986	51,470	53,631	57,257	59,070
30400301	7,582	8,474	9,366	9,663	10,258	10,555
30400732	482,149	538,872	595,596	614,504	652,319	671,227
30400740	447	500	552	570	605	622
30402005	6,819,383	8,120,552	9,421,724	9,855,447	10,656,701	11,057,329
30490003	24,228	25,243	26,257	26,595	27,412	27,820
30500205	5,278	5,810	6,342	6,520	6,910	7,105
30500251	120,992	133,193	145,394	149,461	158,406	162,878
30500606	2,029,025	2,231,280	2,433,536	2,500,954	2,622,419	2,683,152
30500613	790	869	947	974	1,021	1,045
30500706	879,897	939,581	999,266	1,019,161	1,052,922	1,069,803
30500899	16,636	16,519	16,403	16,364	16,611	16,735

Annual Point Source Carbon Monoxide by SCC in lbs.

SCC	2002Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
30501202	4,380	4,349	4,319	4,308	4,373	4,406
30501204	340,089	337,707	335,324	334,530	339,584	342,111
30501205	2,733	2,713	2,694	2,688	2,729	2,749
30501206	21,441	21,291	21,141	21,091	21,410	21,569
30501402	55,589	58,537	61,485	62,468	64,742	65,879
30501403	55,957	58,925	61,892	62,881	65,171	66,315
30501406	578	609	640	650	673	685
30502021	242	261	281	287	300	307
30590001	350	359	367	370	367	365
30590003	756	786	817	827	826	826
30599999	9,577	10,260	10,942	11,170	11,676	11,930
30700115	316,148	324,365	332,583	335,322	345,958	351,276
30700718	37,000	38,846	40,692	41,307	42,481	43,069
30801005	25	28	31	32	34	35
31000412	1,253	1,098	944	892	890	890
31000414	1,985	2,064	2,144	2,171	2,169	2,169
31306599	801	997	1,193	1,258	1,393	1,460
31604003	66	64	63	62	62	62
31605001	56,218	54,930	53,641	53,212	53,024	52,930
31612002	99	97	94	94	93	93
31615001	306,259	299,240	292,221	289,882	288,858	288,347
31616003	138	135	132	131	130	130
39000289	460	455	449	447	432	425
39000489	8,330	9,087	9,843	10,095	10,106	10,112
39000589	2,923	2,936	2,949	2,954	2,918	2,900
39000689	3,342,986	3,421,196	3,499,406	3,525,476	3,586,243	3,616,626
39000699	4,511	4,616	4,722	4,757	4,839	4,880
39000889	94,737	90,956	87,175	85,915	80,982	78,516
39000989	129	137	145	148	150	152
39001089	1,864	1,809	1,755	1,737	1,748	1,753
39001099	16,592	16,110	15,628	15,467	15,563	15,611
39001399	41,432	44,082	46,732	47,616	48,369	48,746
39900601	5,792	6,035	6,277	6,358	6,553	6,651
39990003	16,849	17,555	18,261	18,496	19,063	19,347
39990004	18	19	19	20	20	20
39990014	323	339	354	360	370	375
39999994	7,689	9,352	11,015	11,569	12,234	12,566
39999995	289	351	414	434	459	472
40201001	6,042	6,183	6,325	6,372	6,482	6,537
40500301	64,890	64,978	65,067	65,096	66,604	67,358
40600131	7,060	7,047	7,033	7,029	6,976	6,950
50100102	377,585	388,244	398,903	402,456	415,419	421,900
50100103	1,494	1,491	1,487	1,486	1,486	1,486
50100104	87,518	89,989	92,459	93,283	96,287	97,790
50100105	117,406	120,720	124,035	125,139	129,170	131,185
50100106	400,506	411,812	423,118	426,887	440,636	447,511
50100410	701,211	699,601	697,991	697,454	697,454	697,454
50100421	464,595	463,528	462,461	462,106	462,106	462,106
50100505	10,552	10,721	10,889	10,945	10,933	10,927
50100515	941,852	968,440	995,027	1,003,890	1,036,225	1,052,392
50100789	96,789	99,521	102,254	103,164	106,487	108,149
50200101	174	188	202	206	215	219
50200504	3,479	3,535	3,590	3,609	3,604	3,602
50200515	98,094	106,023	113,952	116,595	121,253	123,582
50200601	184,223	183,799	183,376	183,235	183,235	183,235
50300112	41,595	47,944	54,294	56,411	60,398	62,391
50300501	25,323	29,189	33,055	34,343	36,771	37,984
50300503	605	697	790	821	878	907
50300506	28,089	32,377	36,665	38,095	40,787	42,133
50300701	4,318	4,977	5,636	5,856	6,270	6,477
50410560	671	690	709	715	738	750
STATEWIDE	**107,125,537**	**114,073,532**	**121,021,543**	**123,337,542**	**128,891,015**	**131,667,761**
State (tons)	53,563	57,037	60,511	61,669	64,446	65,834

Annual Point Source Nitrogen Oxides by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
10100205	31,783	33,760	35,737	36,396	37,138	37,509
10100401	644,505	802,600	960,695	1,013,393	1,000,566	994,152
10100405	133,305	166,004	198,704	209,603	206,950	205,624
10100501	4,562	6,821	9,079	9,832	7,368	6,136
10100505	4,454	6,659	8,864	9,599	7,193	5,990
10100601	601,590	630,057	658,523	668,012	738,020	773,024
10100602	57,916	60,657	63,397	64,311	71,051	74,421
10100604	1,199,800	1,256,573	1,313,347	1,332,271	1,471,893	1,541,705
10200202	2,370,969	2,423,547	2,476,124	2,493,650	2,499,693	2,502,714
10200203	6,244,607	6,383,085	6,521,563	6,567,722	6,583,637	6,591,595
10200204	270,437	276,434	282,431	284,430	285,119	285,464
10200205	411,807	420,939	430,071	433,115	434,165	434,689
10200206	1,355,017	1,385,065	1,415,114	1,425,130	1,428,583	1,430,310
10200401	1,655,404	1,805,694	1,955,985	2,006,081	2,008,347	2,009,480
10200402	715,232	780,166	845,101	866,745	867,724	868,214
10200501	74,378	74,713	75,048	75,160	74,260	73,810
10200502	37,949	38,120	38,291	38,348	37,889	37,659
10200503	6,088	6,116	6,143	6,152	6,078	6,042
10200504	165,591	166,337	167,082	167,331	165,327	164,325
10200601	2,363,292	2,418,581	2,473,871	2,492,301	2,535,260	2,556,739
10200602	2,045,277	2,093,127	2,140,976	2,156,926	2,194,104	2,212,693
10200603	142,374	145,705	149,035	150,146	152,734	154,028
10200704	909	838	767	743	703	682
10200707	109,477	100,932	92,387	89,539	84,630	82,176
10200799	194,145	198,159	202,173	203,512	204,189	204,528
10200802	108	110	112	112	113	113
10200901	168,375	179,145	189,915	193,505	196,568	198,100
10200902	5,625	5,985	6,345	6,465	6,567	6,618
10200903	9,257	9,849	10,441	10,638	10,807	10,891
10200905	115,374	122,754	130,133	132,593	134,692	135,742
10200906	3,400	3,617	3,835	3,907	3,969	4,000
10201002	4,261	4,138	4,014	3,972	3,997	4,009
10201301	86,385	91,910	97,436	99,278	100,849	101,635
10201302	11,286	11,480	11,674	11,739	11,817	11,856
10201401	15,946	16,319	16,692	16,816	17,106	17,251
10300203	4,698	4,795	4,892	4,924	4,903	4,892
10300206	404	412	421	423	422	421
10300209	255,528	260,797	266,067	267,823	266,666	266,087
10300401	1,690,125	1,630,884	1,571,642	1,551,895	1,575,734	1,587,653
10300402	852,146	822,277	792,408	782,451	794,470	800,480
10300501	42,865	44,207	45,550	45,997	46,411	46,618
10300502	30,464	31,418	32,372	32,690	32,984	33,131
10300503	5,369	5,537	5,706	5,762	5,813	5,839
10300504	6,546	6,751	6,956	7,025	7,088	7,119
10300601	1,477,498	1,484,178	1,490,859	1,493,085	1,517,629	1,529,900
10300602	861,022	864,915	868,808	870,105	884,408	891,559
10300603	144,078	144,729	145,381	145,598	147,991	149,188
10300701	83,357	85,532	87,706	88,431	90,120	90,965
10300901	34,800	34,720	34,640	34,614	34,614	34,614
10300902	48,002	47,892	47,782	47,745	47,745	47,745
10300903	24,269	24,213	24,158	24,139	24,139	24,139
10301002	1,172	1,195	1,219	1,227	1,240	1,246
10301302	11,529	11,754	11,980	12,055	12,171	12,229
10500105	12,769	12,903	13,036	13,081	13,048	13,032
10500106	185,901	190,251	194,600	196,050	199,429	201,118
10500110	12,326	11,967	11,609	11,490	11,561	11,596
10500113	26	27	27	27	28	28
10500205	2,241	2,311	2,382	2,405	2,427	2,437
10500206	31,574	31,717	31,860	31,907	32,432	32,694
10500209	4	4	4	4	4	4
10500210	323	329	336	338	341	343
10500214	72	73	75	75	76	76
20100101	14,564	21,774	28,984	31,388	23,521	19,588
20100102	200,485	299,732	398,979	432,061	323,780	269,639
20100201	515,644	540,044	564,444	572,577	632,583	662,586
20100202	553,404	579,591	605,777	614,506	678,906	711,107
20200101	4,205	4,224	4,243	4,249	4,199	4,173
20200102	1,162,539	1,167,774	1,173,009	1,174,754	1,160,686	1,153,653
20200103	86,664	87,054	87,444	87,574	86,526	86,001
20200104	12,033	12,087	12,141	12,159	12,014	11,941
20200201	347,812	355,949	364,086	366,799	373,121	376,282
20200202	2,496,879	2,555,294	2,613,709	2,633,181	2,678,568	2,701,261
20200203	501,233	512,960	524,686	528,595	537,706	542,262

Annual Point Source Nitrogen Oxides by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
20200204	99,940	102,278	104,616	105,395	107,212	108,120
20200252	3,776	3,864	3,952	3,982	4,050	4,085
20200253	29,752	30,448	31,144	31,376	31,917	32,187
20200254	73,291	75,006	76,720	77,292	78,624	79,290
20200301	12,079	12,078	12,077	12,076	12,137	12,168
20200401	1,645,161	1,652,920	1,660,678	1,663,264	1,643,917	1,634,244
20200402	1,312,980	1,312,980	1,312,980	1,312,980	1,312,980	1,312,980
20201001	363	353	342	339	341	342
20201707	185	185	185	185	186	186
20300101	545,831	562,801	579,771	585,428	590,663	593,281
20300102	8,183	8,439	8,695	8,781	8,860	8,899
20300201	296,375	297,715	299,055	299,502	304,425	306,886
20300202	124,186	124,748	125,309	125,496	127,559	128,591
20300204	2,410	2,421	2,432	2,435	2,475	2,495
20300301	422	422	421	421	421	421
20300702	61,247	61,107	60,966	60,919	60,919	60,919
20300801	266,040	265,429	264,818	264,615	264,615	264,615
20300807	89,246	89,041	88,836	88,768	88,768	88,768
20301001	78	79	81	82	82	83
20400401	6,640	7,212	7,783	7,973	8,371	8,569
30100899	112	126	140	145	153	157
30101809	0	0	0	0	0	0
30101814	36	40	45	46	49	51
30102499	4,289	4,825	5,361	5,539	5,863	6,025
30103499	3,059	3,023	2,987	2,975	3,025	3,049
30106008	531	631	732	765	820	847
30106011	171	203	235	246	264	272
30190004	7,276	8,185	9,094	9,397	9,946	10,221
30190013	1,110	1,107	1,104	1,103	1,124	1,134
30199999	1,064,644	1,196,613	1,328,583	1,372,573	1,454,816	1,495,938
30290003	742	758	773	778	798	808
30300101	18,598	19,813	21,029	21,434	22,490	23,018
30300102	17,815	18,979	20,143	20,531	21,543	22,049
30300105	37,580	40,036	42,491	43,310	45,444	46,510
30300331	197,022	193,551	190,080	188,923	193,820	196,269
30300503	36,865	39,274	41,683	42,486	44,579	45,625
30300702	428,976	421,419	413,861	411,342	422,004	427,336
30300910	23,214	22,805	22,396	22,260	22,837	23,125
30300933	147,332	144,736	142,141	141,275	144,938	146,769
30300934	532	523	513	510	523	530
30300936	2,109	2,072	2,035	2,022	2,075	2,101
30300998	53	52	51	51	52	53
30390003	5,650	5,557	5,463	5,432	5,317	5,260
30400101	1,807	2,111	2,416	2,517	2,687	2,772
30400102	134	156	179	186	199	205
30400103	11,473	13,405	15,337	15,981	17,062	17,602
30400108	1,066	1,246	1,425	1,485	1,585	1,635
30400109	39,874	46,589	53,304	55,542	59,298	61,175
30400112	24,234	28,315	32,396	33,756	36,039	37,180
30400114	372	404	435	445	470	483
30400115	45,835	53,554	61,272	63,845	68,162	70,321
30400301	3,917	4,378	4,838	4,992	5,299	5,453
30400320	75	83	92	95	101	104
30400402	497,518	581,301	665,083	693,011	739,870	763,300
30400414	94,472	110,381	126,290	131,593	140,491	144,940
30400499	14,990	17,514	20,039	20,880	22,292	22,998
30400732	95,233	106,437	117,641	121,375	128,845	132,579
30400740	21,878	24,452	27,026	27,884	29,600	30,458
30490003	50,038	52,134	54,229	54,928	56,614	57,457
30500205	6,786	7,470	8,155	8,383	8,884	9,135
30500251	22,201	24,440	26,678	27,425	29,066	29,887
30500503	12,000	11,916	11,832	11,804	11,982	12,071
30500606	1,489,172	1,637,614	1,786,056	1,835,537	1,924,685	1,969,259
30500613	3,159	3,474	3,789	3,894	4,083	4,177
30500706	16,995,572	18,148,402	19,301,235	19,685,512	20,337,620	20,663,675
30500899	19,805	19,666	19,528	19,481	19,776	19,923
30500915	503,534	500,007	496,479	495,304	502,786	506,527
30501202	120,010	119,169	118,328	118,048	119,831	120,723
30501204	135,972	135,019	134,067	133,749	135,770	136,780
30501205	927	920	914	912	926	932
30501206	6,304	6,259	6,215	6,201	6,294	6,341
30501401	214,981	226,382	237,783	241,583	250,379	254,776
30501402	2,269,711	2,390,079	2,510,447	2,550,570	2,643,429	2,689,859

Annual Point Source Nitrogen Oxides by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
30501403	1,547,532	1,629,601	1,711,670	1,739,027	1,802,340	1,833,997
30501416	114,681	120,763	126,845	128,872	133,564	135,910
30502021	1,119	1,209	1,299	1,329	1,390	1,421
30515002	18,232	18,104	17,977	17,934	18,205	18,340
30590001	1,400	1,434	1,469	1,480	1,466	1,460
30590003	1,260	1,311	1,361	1,378	1,377	1,377
30599999	200,844	215,158	229,472	234,243	244,869	250,182
30700106	29,410	30,174	30,939	31,194	32,183	32,678
30700110	563,073	577,708	592,344	597,222	616,165	625,637
30700718	1,960	2,058	2,156	2,188	2,250	2,281
30790003	10,920	10,728	10,535	10,471	10,545	10,582
30990003	896	970	1,044	1,069	1,109	1,130
31000412	13,778	12,079	10,380	9,814	9,795	9,786
31000414	7,939	8,257	8,576	8,682	8,678	8,675
31306599	1	1	1	1	1	1
31603002	182	178	174	172	172	171
31604002	2	2	2	2	2	2
31604003	53	52	51	50	50	50
31605001	91,762	89,659	87,556	86,855	86,548	86,395
31605003	9,001	8,795	8,588	8,520	8,490	8,475
31612001	7,126	6,963	6,799	6,745	6,721	6,709
31612002	80	78	76	76	75	75
31615001	55,132	53,868	52,605	52,184	52,000	51,907
31616002	11,890	11,618	11,345	11,254	11,214	11,195
31616003	100	98	95	95	94	94
31616004	1	1	1	1	1	1
39000289	9,198	9,089	8,980	8,944	8,644	8,495
39000489	62,291	67,946	73,602	75,487	75,572	75,615
39000589	11,539	11,591	11,643	11,660	11,521	11,451
39000689	1,453,498	1,487,503	1,521,508	1,532,843	1,559,263	1,572,474
39000699	5,370	5,496	5,621	5,663	5,761	5,810
39000798	273	279	284	286	287	288
39000889	355,263	341,084	326,905	322,179	303,683	294,435
39000989	22	23	25	25	26	26
39001089	13,732	13,333	12,934	12,801	12,880	12,920
39001099	6,637	6,444	6,251	6,187	6,225	6,244
39001399	139,838	148,783	157,727	160,709	163,253	164,525
39900601	18,910	19,702	20,494	20,758	21,395	21,714
39990003	15,178	15,814	16,450	16,662	17,173	17,429
39990004	40	42	43	44	45	46
39990014	13,300	13,946	14,592	14,807	15,225	15,434
39999989	10	12	14	15	16	16
39999994	15,010	18,256	21,503	22,585	23,882	24,531
39999995	115	140	165	174	184	189
40200701	9,020	10,559	12,098	12,611	13,580	14,065
40201001	7,193	7,361	7,530	7,586	7,716	7,782
40500301	2,350	2,353	2,356	2,357	2,412	2,439
40500401	2	2	2	2	2	2
40600131	8,200	8,184	8,169	8,164	8,102	8,072
50100102	4,237,350	4,356,967	4,476,584	4,516,456	4,661,929	4,734,667
50100103	343,620	342,831	342,042	341,779	341,779	341,779
50100104	1,634,714	1,680,861	1,727,007	1,742,389	1,798,511	1,826,572
50100105	898,012	923,362	948,712	957,162	987,992	1,003,407
50100106	254,222	261,398	268,575	270,967	279,695	284,059
50100410	150,579	150,234	149,888	149,773	149,773	149,773
50100421	374,949	374,088	373,227	372,940	372,940	372,940
50100505	11,985	12,176	12,367	12,431	12,417	12,410
50100515	83,588	85,948	88,307	89,094	91,963	93,398
50100789	52,536	54,019	55,502	55,996	57,800	58,702
50200101	52	56	60	62	64	66
50200504	31,184	31,682	32,179	32,345	32,308	32,290
50200505	2	2	2	2	2	2
50200515	15,822	17,101	18,379	18,806	19,557	19,933
50200601	38,992	38,903	38,813	38,783	38,783	38,783
50300112	457,540	527,389	597,239	620,522	664,375	686,302
50300501	133,113	153,434	173,756	180,529	193,288	199,667
50300503	4,518	5,208	5,897	6,127	6,560	6,777
50300506	86,960	100,236	113,511	117,936	126,271	130,439
50300701	69,954	80,633	91,313	94,873	101,577	104,930
50410560	799	822	844	852	879	893
STATEWIDE	**75,970,260**	**79,211,554**	**82,452,854**	**83,533,285**	**85,454,355**	**86,414,893**
state (tons)	37,985	39,606	41,226	41,767	42,727	43,207

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
10100205	296	314	333	339	346	349
10100401	9,555	11,899	14,242	15,024	14,833	14,738
10100405	664	827	990	1,044	1,031	1,024
10100501	29	43	57	62	47	39
10100505	147	220	293	318	238	198
10100601	12,247	12,827	13,407	13,600	15,025	15,738
10100602	2,804	2,937	3,070	3,114	3,440	3,604
10100604	66,141	69,271	72,400	73,444	81,141	84,989
10200202	13,079	13,369	13,659	13,755	13,789	13,805
10200203	42,007	42,939	43,870	44,181	44,288	44,341
10200205	2,300	2,351	2,402	2,419	2,425	2,428
10200206	132,445	135,382	138,319	139,298	139,636	139,805
10200401	12,904	14,076	15,247	15,638	15,656	15,664
10200402	3,744	4,084	4,424	4,537	4,542	4,545
10200501	959	963	968	969	957	952
10200502	379	381	383	383	379	377
10200503	61	61	61	62	61	60
10200504	705	708	711	712	704	699
10200601	50,423	51,603	52,783	53,176	54,093	54,551
10200602	77,309	79,118	80,926	81,529	82,935	83,637
10200603	7,822	8,005	8,188	8,249	8,392	8,463
10200704	65	60	55	53	50	49
10200707	724	667	611	592	560	543
10200799	1,756	1,792	1,829	1,841	1,847	1,850
10200802	4	4	4	4	4	4
10200901	3,801	4,044	4,287	4,368	4,437	4,472
10200902	390	415	440	448	455	459
10200903	642	683	724	738	749	755
10200905	1,053	1,120	1,187	1,210	1,229	1,238
10200906	6,920	7,363	7,805	7,953	8,079	8,142
10201002	67	65	63	63	63	63
10201301	1,113	1,184	1,256	1,279	1,300	1,310
10201302	589	599	610	613	617	619
10201401	319	326	334	336	342	345
10201403	0	0	0	0	0	0
10300203	15	16	16	16	16	16
10300206	51	52	53	53	53	53
10300401	41,978	40,506	39,035	38,544	39,137	39,433
10300402	18,176	17,539	16,902	16,689	16,946	17,074
10300501	547	564	581	587	592	595
10300502	486	501	516	522	526	529
10300503	91	94	97	98	99	99
10300504	111	115	118	119	120	121
10300601	44,952	45,156	45,359	45,427	46,173	46,547
10300602	40,000	40,181	40,362	40,422	41,087	41,419
10300603	5,095	5,118	5,141	5,148	5,233	5,275
10300701	5,325	5,464	5,603	5,649	5,757	5,811
10300901	25	25	25	25	25	25
10300902	2,501	2,495	2,489	2,488	2,488	2,488
10300903	0	0	0	0	0	0
10301002	25	26	26	26	27	27
10301302	607	619	631	634	641	644
10500105	77	78	79	79	79	80
10500106	10,150	10,388	10,625	10,704	10,889	10,981
10500110	193	188	182	180	181	182
10500113	2	2	2	2	2	2
10500205	87	90	93	94	94	95
10500206	1,662	1,670	1,677	1,680	1,707	1,721
10500209	7	7	7	7	7	7
10500210	7	7	7	7	7	7
10500214	6	6	7	7	7	7
20100101	5	7	10	11	8	7
20100102	13,332	19,931	26,531	28,731	21,530	17,930
20100106	68	102	135	147	110	91
20100201	6,326	6,625	6,925	7,025	7,761	8,129
20100202	88,698	92,895	97,092	98,491	108,813	113,974
20200101	0	0	0	0	0	0
20200102	23,237	23,342	23,446	23,481	23,200	23,060

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
20200103	40	40	40	41	40	40
20200104	624	627	630	631	623	620
20200106	31	31	31	31	31	31
20200201	1,913	1,958	2,003	2,018	2,053	2,070
20200202	297,805	304,772	311,739	314,062	319,475	322,182
20200203	2,783	2,848	2,913	2,935	2,985	3,011
20200204	13,438	13,753	14,067	14,172	14,416	14,538
20200252	377	386	395	398	405	408
20200253	1,211	1,239	1,268	1,277	1,299	1,310
20200254	4,041	4,135	4,230	4,261	4,335	4,372
20200301	8,751	8,751	8,750	8,749	8,794	8,816
20200401	57,552	57,823	58,095	58,185	57,508	57,169
20200402	198,442	198,442	198,442	198,442	198,442	198,442
20201001	217	211	204	202	204	204
20201707	1	1	1	1	1	1
20300101	64,449	66,457	68,465	69,134	69,753	70,063
20300102	0	0	0	0	0	0
20300201	37,940	38,112	38,283	38,340	38,971	39,286
20300202	2,750	2,762	2,775	2,779	2,825	2,847
20300204	602	605	608	609	619	624
20300301	786	785	784	784	783	783
20300702	10,940	10,914	10,889	10,881	10,881	10,881
20300801	6,677	6,662	6,647	6,642	6,642	6,642
20300807	32,228	32,154	32,080	32,055	32,055	32,055
20301001	46	47	48	49	49	49
20400401	9,635	10,464	11,293	11,569	12,146	12,434
30100899	6	7	7	8	8	8
30100908	1,559	1,754	1,949	2,013	2,131	2,190
30101401	48,480	53,868	59,256	61,052	64,365	66,021
30101402	100	112	125	129	136	140
30101404	10	11	12	12	13	13
30101805	87,504	98,435	109,367	113,011	119,615	122,918
30101808	233	262	291	300	318	327
30101809	80,995	91,113	101,232	104,604	110,718	113,774
30101810	1,241	1,396	1,551	1,603	1,696	1,743
30101811	1,657	1,864	2,071	2,140	2,265	2,328
30101814	6,979	7,851	8,723	9,014	9,540	9,804
30101817	596	670	745	770	815	837
30101818	33,554	37,746	41,938	43,335	45,867	47,134
30101819	49	55	61	63	67	69
30101822	14,374	16,169	17,965	18,563	19,648	20,191
30101847	25,711	28,923	32,135	33,206	35,146	36,117
30101852	21,392	24,064	26,737	27,628	29,242	30,050
30101860	2,080	2,340	2,600	2,686	2,843	2,922
30101891	1,736	1,953	2,170	2,242	2,373	2,439
30101892	286	322	357	369	391	402
30101893	59	66	74	76	81	83
30101894	52	58	65	67	71	73
30101899	4,389	4,937	5,486	5,668	6,000	6,165
30102499	10,280	11,564	12,848	13,277	14,052	14,440
30102630	79,638	89,587	99,536	102,852	108,863	111,869
30102699	11,835	13,314	14,792	15,285	16,178	16,625
30103499	2,617	2,586	2,555	2,545	2,588	2,609
30103553	6	7	7	8	8	8
30103554	915	904	893	890	905	912
30104005	370	416	462	478	506	520
30106002	1,299	1,544	1,790	1,872	2,005	2,071
30106004	18,558	22,070	25,582	26,753	28,649	29,598
30106008	14,854	17,665	20,476	21,413	22,931	23,690
30106009	46,817	55,676	64,536	67,489	72,274	74,667
30106010	819	974	1,129	1,181	1,264	1,306
30106011	26,175	31,128	36,081	37,733	40,408	41,746
30106012	1,188	1,413	1,638	1,713	1,835	1,895
30106099	301,389	358,422	415,456	434,467	465,273	480,676
30107002	27,261	30,667	34,072	35,207	37,265	38,294
30112199	705	697	688	686	697	703
30113299	1,046	1,034	1,021	1,017	1,034	1,043
30130101	948	1,066	1,185	1,224	1,296	1,332

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
30180001	989	1,112	1,234	1,275	1,351	1,390
30182001	1	1	1	1	1	1
30182002	22,024	24,754	27,485	28,395	30,096	30,947
30182003	18	21	23	24	25	26
30183001	22,108	24,850	27,592	28,505	30,211	31,063
30184001	494	556	618	639	676	695
30187097	1,182	1,329	1,475	1,524	1,615	1,661
30187098	48	47	47	46	47	48
30188801	7,670	8,628	9,586	9,906	10,485	10,774
30188805	1,841	2,069	2,297	2,373	2,516	2,587
30190004	226	255	283	292	309	318
30190013	62	62	62	62	63	63
30199999	50,820	57,120	63,419	65,519	69,445	71,408
30200903	118,152	118,661	119,171	119,340	119,755	119,963
30200911	72,893	73,207	73,521	73,626	73,882	74,010
30200912	16	16	16	16	16	16
30200999	32,114	32,252	32,391	32,437	32,550	32,606
30201501	73	74	75	76	77	78
30203201	84,345	85,580	86,816	87,228	88,174	88,648
30203202	59,015	59,981	60,947	61,270	62,574	63,227
30203299	2,619	2,657	2,696	2,709	2,738	2,753
30282001	9	9	9	9	9	9
30290003	15	15	15	16	16	16
30299998	36,939	37,544	38,149	38,350	39,167	39,575
30300102	167,131	178,052	188,973	192,614	202,103	206,848
30300105	6,443	6,864	7,285	7,425	7,791	7,974
30300199	434	462	491	500	525	537
30300312	3,415	3,355	3,295	3,275	3,359	3,402
30300331	29,634	29,112	28,590	28,416	29,152	29,521
30300399	1,972	1,937	1,903	1,891	1,940	1,964
30300503	1,526	1,626	1,725	1,759	1,845	1,889
30300702	74,980	73,659	72,338	71,898	73,761	74,693
30300910	204	200	197	196	201	203
30300912	21	21	20	20	21	21
30300933	615	604	593	590	605	613
30300934	757	744	730	726	745	754
30300935	5,414	5,319	5,223	5,191	5,326	5,393
30300936	24,258	23,831	23,403	23,261	23,864	24,165
30300998	232	228	224	222	228	231
30390003	48	47	46	46	45	45
30400101	275	321	368	383	409	422
30400102	197	230	263	274	293	302
30400103	5,125	5,989	6,852	7,139	7,622	7,864
30400108	22,001	25,706	29,411	30,646	32,718	33,754
30400109	12,878	15,047	17,215	17,938	19,151	19,758
30400112	19,947	23,306	26,665	27,785	29,664	30,603
30400114	5,214	5,651	6,088	6,234	6,584	6,758
30400115	6,426	7,508	8,590	8,951	9,556	9,859
30400131	10,838	12,663	14,488	15,097	16,117	16,628
30400132	42,407	49,548	56,690	59,070	63,064	65,061
30400150	103,657	113,370	123,082	126,320	133,521	137,122
30400199	2,480	2,898	3,315	3,454	3,688	3,805
30400299	1,379	1,611	1,843	1,921	2,051	2,116
30400301	97	109	120	124	132	136
30400320	1,046	1,169	1,292	1,333	1,415	1,456
30400331	8,964	10,019	11,073	11,425	12,128	12,479
30400732	85,710	95,794	105,877	109,238	115,961	119,322
30401002	9,658	10,289	10,920	11,130	11,679	11,953
30402003	3,336	3,973	4,609	4,821	5,213	5,409
30402004	75	89	104	108	117	122
30402005	140,963	167,859	194,756	203,721	220,284	228,565
30402201	180	210	241	251	268	276
30404901	174	189	203	208	220	226
30405099	3	3	4	4	4	4
30490003	1,573	1,639	1,705	1,727	1,780	1,806
30500205	829	913	997	1,025	1,086	1,117
30500212	1,690	1,860	2,031	2,088	2,213	2,275
30500251	3,297	3,629	3,961	4,072	4,316	4,438

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
30500606	15,781	17,354	18,927	19,451	20,396	20,869
30500613	32	35	38	39	41	42
30500706	132,462	141,447	150,432	153,427	158,510	161,051
30500899	20,372	20,229	20,087	20,039	20,342	20,493
30500915	206,714	205,266	203,818	203,335	206,407	207,943
30501202	2,797	2,778	2,758	2,752	2,793	2,814
30501204	7,420	7,368	7,316	7,299	7,409	7,464
30501205	64	63	63	62	63	64
30501206	462	459	456	455	462	465
30501299	2,981	3,139	3,297	3,350	3,472	3,533
30501402	51,595	54,331	57,068	57,980	60,091	61,146
30501403	8,539	8,992	9,445	9,596	9,945	10,120
30501406	11,658	12,276	12,895	13,101	13,578	13,816
30501520	11,245	11,414	11,583	11,640	11,932	12,078
30502021	90	98	105	107	112	115
30590001	14	14	15	15	15	15
30590003	25	26	27	28	28	28
30599999	2,679	2,870	3,061	3,125	3,266	3,337
30600503	173	183	194	197	204	208
30600508	1,495	1,586	1,676	1,706	1,767	1,797
30600701	793	841	889	905	937	953
30600801	1,361	1,444	1,526	1,554	1,609	1,636
30600811	1,041	1,104	1,167	1,188	1,230	1,251
30688801	1,378	1,461	1,545	1,573	1,628	1,656
30700105	86,947	89,207	91,467	92,220	95,145	96,608
30700106	5,692	5,840	5,988	6,037	6,229	6,324
30700110	86,936	89,196	91,455	92,208	95,133	96,596
30700115	143,665	147,399	151,133	152,378	157,211	159,628
30700122	43,950	45,092	46,235	46,615	48,094	48,833
30700199	123,140	126,341	129,541	130,608	134,751	136,822
30700401	12,202	12,519	12,836	12,942	13,353	13,558
30700405	149,776	153,669	157,562	158,860	163,898	166,418
30700718	12,720	13,355	13,989	14,201	14,604	14,806
30700727	4,300	4,515	4,729	4,801	4,937	5,005
30700896	9,561	10,294	11,026	11,270	11,687	11,896
30700925	106,809	111,513	116,217	117,785	121,826	123,846
30700960	24,650	25,736	26,821	27,183	28,116	28,582
30701399	198,908	210,191	221,474	225,235	234,475	239,095
30702099	235,135	248,139	261,143	265,477	280,015	287,284
30788801	11,062	11,565	12,068	12,236	12,724	12,968
30790003	218	215	211	209	211	212
30799998	33,676	35,208	36,740	37,250	38,736	39,479
30799999	25,326	26,478	27,630	28,014	29,131	29,690
30800106	1,319	1,486	1,654	1,710	1,799	1,844
30800113	85,398	96,238	107,078	110,692	116,494	119,395
30800114	4,128	4,652	5,176	5,350	5,631	5,771
30800115	8,283	9,334	10,385	10,736	11,298	11,580
30800123	58,651	66,096	73,541	76,022	80,007	81,999
30800127	8,624	9,718	10,813	11,178	11,764	12,057
30800131	7,419	8,360	9,302	9,616	10,120	10,372
30800501	41,567	46,843	52,119	53,878	56,702	58,114
30800699	331,450	373,337	415,225	429,187	453,966	466,356
30800703	11,280	12,706	14,131	14,606	15,450	15,871
30800704	5,993	6,751	7,508	7,760	8,208	8,432
30800705	945	1,064	1,183	1,223	1,294	1,329
30800722	193	217	242	250	264	272
30801002	162,993	183,591	204,190	211,056	223,241	229,334
30801005	125,028	140,829	156,630	161,896	171,244	175,917
30801007	10,771	12,132	13,493	13,946	14,752	15,154
30899999	312,600	352,105	391,610	404,778	428,148	439,833
30901099	4,175	4,602	5,029	5,171	5,452	5,593
30901102	22	27	32	34	37	38
30903007	56,374	62,136	67,898	69,819	73,617	75,516
30904200	71,795	79,133	86,471	88,917	93,755	96,174
30904300	13,790	15,199	16,609	17,079	18,008	18,473
30982599	25	28	30	31	33	33
30988801	9,128	10,061	10,994	11,305	11,920	12,227
30990003	18	19	21	21	22	23

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
30999999	1,358	1,497	1,636	1,682	1,773	1,819
31000207	57,104	60,171	63,238	64,260	66,916	68,244
31000227	729	768	807	820	854	871
31000412	70	61	53	50	50	50
31000414	159	165	172	174	174	174
31088801	85,848	90,459	95,070	96,607	100,600	102,596
31299999	3,524	4,301	5,078	5,337	5,697	5,876
31303001	12,308	15,322	18,336	19,341	21,411	22,446
31303501	1,279	1,547	1,814	1,904	2,087	2,178
31303502	7,595	9,185	10,775	11,305	12,390	12,933
31306500	0	0	0	0	0	0
31306501	1,460	1,739	2,017	2,110	2,282	2,367
31306505	668	796	923	966	1,044	1,083
31306599	80,318	99,989	119,659	126,215	139,722	146,475
31307001	2,890	3,441	3,993	4,177	4,516	4,686
31399999	61	73	84	88	95	99
31401101	17,453	18,496	19,538	19,886	20,742	21,170
31401503	52	55	58	59	62	63
31499999	379	418	456	469	496	509
31501001	2	2	2	2	2	2
31502001	9	9	9	9	9	9
31503001	80	91	103	107	113	116
31603001	155,683	152,115	148,547	147,358	146,838	146,577
31603002	35,454	34,641	33,829	33,558	33,440	33,380
31604001	219,566	214,534	209,502	207,825	207,091	206,724
31604002	921	900	879	872	869	867
31604003	3,064	2,994	2,924	2,900	2,890	2,885
31605001	161,134	157,441	153,748	152,517	151,979	151,710
31605002	109	107	104	103	103	103
31605003	12	12	11	11	11	11
31612001	321	314	306	304	303	302
31612002	109	107	104	103	103	103
31612003	39	38	37	37	37	37
31613001	2,634	2,574	2,513	2,493	2,484	2,480
31613002	583	570	556	552	550	549
31613004	24	23	23	23	23	23
31614001	96	94	92	91	91	90
31614002	28	27	27	27	26	26
31615001	50,362	49,208	48,054	47,669	47,501	47,416
31615003	21,404	20,913	20,423	20,259	20,188	20,152
31616002	2,004	1,958	1,912	1,897	1,890	1,887
31616003	38,605	37,720	36,836	36,541	36,412	36,347
31616004	1	1	1	1	1	1
33000212	1,014	1,109	1,204	1,236	1,289	1,315
33000214	2,246	2,457	2,667	2,738	2,855	2,913
33000297	38,851	42,495	46,139	47,354	49,381	50,395
38500101	1	1	1	1	1	1
39000289	717	709	700	697	674	662
39000489	208	227	246	252	252	253
39000589	116	116	117	117	116	115
39000689	129,636	132,668	135,701	136,712	139,069	140,247
39000699	295	302	309	311	317	320
39000798	10	10	10	10	11	11
39000989	45	48	51	52	53	53
39001089	286	277	269	266	268	269
39001399	10,348	11,010	11,672	11,892	12,081	12,175
39090001	87	95	103	105	106	106
39090002	51	56	60	62	62	62
39090003	288	289	290	291	287	285
39090004	10	10	10	11	10	10
39090005	261	285	308	316	317	317
39090011	4	4	4	4	4	4
39090012	462	462	462	462	462	462
39900601	915	953	991	1,004	1,035	1,050
39990003	1,810	1,886	1,962	1,987	2,048	2,078
39990004	37	39	40	41	42	43
39990013	59	61	64	65	67	68
39990014	533	559	585	593	610	619

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
39999989	97,320	118,368	139,415	146,431	154,844	159,050
39999992	46,535	56,599	66,663	70,018	74,041	76,052
39999993	12,000	14,595	17,191	18,056	19,093	19,612
39999994	692,347	842,084	991,820	1,041,732	1,101,581	1,131,505
39999995	3,719	4,523	5,327	5,595	5,917	6,078
39999996	2,200	2,676	3,152	3,310	3,500	3,595
39999999	29,429	35,793	42,158	44,279	46,823	48,095
40100251	316,016	359,691	403,366	417,925	440,897	452,384
40100295	7,810	8,889	9,969	10,328	10,896	11,180
40100296	176	200	225	233	246	252
40100298	2,218	2,525	2,831	2,933	3,094	3,175
40100299	1,155	1,315	1,474	1,527	1,611	1,653
40100335	5,571	6,341	7,111	7,368	7,773	7,975
40100336	3,069	3,493	3,917	4,059	4,282	4,393
40100398	11,038	12,563	14,089	14,597	15,400	15,801
40100399	14,726	16,761	18,796	19,475	20,545	21,081
40100501	860	850	840	836	850	857
40188898	31	35	40	41	43	44
40200101	23,592	27,617	31,643	32,985	35,519	36,786
40200110	73,874	86,479	99,084	103,286	111,221	115,188
40200201	27,602	32,312	37,022	38,592	41,556	43,039
40200210	56,076	65,645	75,213	78,403	84,426	87,437
40200301	18,271	21,389	24,506	25,546	27,508	28,489
40200401	302,372	353,967	405,563	422,761	455,239	471,478
40200501	24,850	29,090	33,331	34,744	37,413	38,748
40200510	17,347	20,307	23,267	24,254	26,117	27,049
40200601	15,478	17,228	18,978	19,561	20,732	21,317
40200701	35,807	41,916	48,026	50,063	53,909	55,832
40200706	3,624	4,243	4,861	5,067	5,457	5,651
40200710	1,030	1,206	1,382	1,440	1,551	1,606
40200711	248	291	333	347	374	387
40200712	442	492	542	559	592	609
40200801	202,218	236,723	271,229	282,731	304,451	315,311
40200803	38,257	44,210	50,163	52,148	55,940	57,835
40200810	4,756	5,568	6,379	6,650	7,161	7,416
40200842	77,153	85,445	93,738	96,502	101,238	103,605
40200843	243,381	269,540	295,700	304,419	319,357	326,826
40200898	4,195	4,669	5,144	5,302	5,619	5,777
40200998	901	1,055	1,208	1,260	1,357	1,405
40201001	396	405	414	417	424	428
40201101	1,674	1,863	2,052	2,115	2,242	2,305
40201103	3,566	3,715	3,865	3,915	4,038	4,099
40201122	67,940	67,271	66,601	66,378	68,461	69,502
40201201	1,199	1,187	1,175	1,171	1,208	1,227
40201301	1,006,487	1,064,209	1,121,931	1,141,172	1,188,225	1,211,751
40201303	14,072	14,885	15,698	15,969	16,630	16,961
40201310	45	50	55	57	60	62
40201330	807	942	1,077	1,122	1,207	1,250
40201399	23,443	24,788	26,133	26,581	27,678	28,227
40201401	1,655	1,842	2,029	2,092	2,217	2,279
40201432	13,550	15,082	16,614	17,125	18,149	18,661
40201435	36,479	36,479	36,479	36,479	37,626	38,200
40201601	1,093	1,217	1,340	1,381	1,464	1,505
40201607	3,517	3,915	4,313	4,445	4,711	4,844
40201620	84	93	103	106	113	116
40201699	943	1,050	1,157	1,192	1,264	1,299
40201721	30,110	33,346	36,583	37,661	39,509	40,433
40201722	109,773	121,572	133,370	137,303	144,041	147,409
40201725	29,020	32,139	35,259	36,298	38,080	38,970
40201727	83,830	92,840	101,851	104,854	109,999	112,572
40201799	53,825	59,911	65,996	68,025	72,095	74,130
40201899	7,611	8,471	9,332	9,619	10,194	10,482
40201901	992,694	1,068,048	1,143,402	1,168,520	1,237,329	1,271,734
40202201	7,132	8,042	8,951	9,254	9,794	10,063
40202203	1,006	1,133	1,260	1,303	1,378	1,415
40202220	37,298	42,012	46,725	48,296	51,085	52,479
40202230	11,225	12,644	14,062	14,535	15,374	15,794
40202299	2,323	2,617	2,910	3,008	3,182	3,269

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
40202501	84,228	103,459	122,690	129,100	140,399	146,048
40202502	217	267	316	333	362	376
40202503	8,122	9,972	11,823	12,439	13,527	14,071
40202521	36,207	44,483	52,759	55,517	60,379	62,809
40202537	5,895	7,182	8,468	8,897	9,658	10,038
40202544	10,850	13,330	15,810	16,637	18,093	18,822
40202599	15,545	19,033	22,522	23,684	25,740	26,769
40203001	20,144	23,582	27,019	28,165	30,329	31,410
40204004	25,005	27,832	30,659	31,601	33,492	34,437
40204161	163	170	177	179	184	187
40204321	12,006	12,505	13,005	13,171	13,583	13,789
40204330	44,015	45,845	47,676	48,286	49,797	50,552
40204340	279,630	291,258	302,886	306,762	316,360	321,159
40204435	16,686	17,380	18,074	18,305	18,878	19,164
40206031	13,774	13,638	13,503	13,457	13,880	14,091
40206034	506	501	496	494	510	518
40288805	14,005	16,395	18,784	19,581	21,085	21,837
40288821	36,982	43,292	49,603	51,706	55,679	57,665
40288822	20	23	27	28	30	31
40288824	1,461	1,710	1,960	2,043	2,200	2,278
40299995	604,656	710,515	816,375	851,662	917,838	950,926
40299996	15	17	18	19	20	21
40299998	8,089	9,469	10,850	11,310	12,178	12,613
40299999	106	124	142	148	160	165
40300302	14,135	14,991	15,846	16,132	16,703	16,989
40301002	526	558	590	600	622	632
40301007	168	178	188	192	198	202
40301008	0	0	0	0	0	0
40301016	112	119	125	128	132	134
40301017	620	658	695	708	733	745
40301018	67	71	76	77	80	81
40301019	51,955	55,100	58,245	59,294	61,396	62,446
40301020	4,799	5,090	5,380	5,477	5,671	5,768
40301021	4,365	4,630	4,894	4,982	5,159	5,247
40301025	1	1	1	1	1	1
40301028	670	711	751	765	792	805
40301075	142	151	159	162	168	171
40301097	15,701	16,652	17,602	17,919	18,554	18,872
40301098	6,850	7,264	7,679	7,817	8,094	8,233
40301099	12,072	12,803	13,534	13,777	14,266	14,510
40301120	101	107	113	115	119	121
40301151	50,934	54,017	57,101	58,129	60,189	61,219
40301197	360	382	404	411	425	433
40400102	2,756	2,923	3,090	3,145	3,257	3,313
40400107	101	107	113	115	119	121
40400109	878	931	984	1,002	1,038	1,055
40400110	12	13	13	14	14	14
40400111	109,741	116,384	123,028	125,242	129,682	131,902
40400114	85,328	90,494	95,659	97,381	100,833	102,559
40400116	2,320	2,460	2,601	2,648	2,741	2,788
40400117	63,771	67,631	71,492	72,778	75,358	76,648
40400121	265	281	297	302	313	319
40400122	3,520	3,733	3,946	4,017	4,160	4,231
40400150	26,405	28,004	29,602	30,135	31,203	31,737
40400151	130,107	137,984	145,860	148,485	153,749	156,381
40400152	14,813	15,710	16,606	16,905	17,505	17,804
40400153	47,200	50,057	52,914	53,867	55,776	56,731
40400154	152,807	162,058	171,308	174,392	180,574	183,665
40400160	611,535	648,556	685,577	697,917	722,658	735,028
40400179	75,969	80,568	85,167	86,700	89,773	91,310
40400199	1,238	1,313	1,388	1,413	1,463	1,488
40400204	191	190	190	190	188	188
40400250	359,849	381,634	403,418	410,679	425,237	432,516
40400251	23,493	24,915	26,337	26,811	27,762	28,237
40400253	1,607	1,704	1,801	1,834	1,899	1,931
40400254	0	0	0	0	0	0
40400301	4,557	4,890	5,222	5,332	5,574	5,695
40400302	3,701	3,969	4,237	4,327	4,522	4,620

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
40400401	73	73	73	73	72	72
40400404	233	233	232	232	230	229
40400408	318	337	356	363	376	382
40400413	2	2	2	2	2	2
40400414	4,246	4,336	4,426	4,457	4,368	4,324
40400497	4	4	4	4	4	4
40400498	76	80	85	86	90	91
40500101	4,319	4,186	4,053	4,008	4,065	4,093
40500212	43,355	42,018	40,680	40,234	40,802	41,085
40500301	511,361	512,017	512,673	512,892	524,761	530,695
40500311	1,131,039	1,096,148	1,061,256	1,049,626	1,064,428	1,071,829
40500312	21,548	20,883	20,219	19,997	20,279	20,420
40500316	1,477	1,431	1,386	1,371	1,390	1,400
40500401	145,397	141,019	136,641	135,181	137,118	138,086
40500411	93,282	90,415	87,547	86,591	87,815	88,427
40500415	21	20	20	19	20	20
40500431	14,121	13,685	13,249	13,104	13,289	13,382
40500511	769,093	745,367	721,641	713,733	723,798	728,831
40500597	13,401	13,417	13,434	13,439	13,750	13,906
40500599	8,915	8,927	8,939	8,943	9,150	9,254
40500701	1,257	1,259	1,260	1,261	1,290	1,305
40500801	258	250	242	240	243	245
40588801	206,600	206,881	207,163	207,257	212,057	214,457
40600101	85	85	85	85	84	84
40600131	40,355	40,279	40,203	40,177	39,875	39,724
40600135	456	466	475	478	469	464
40600140	2,533	2,538	2,544	2,545	2,521	2,508
40600141	21,594	21,553	21,512	21,499	21,337	21,256
40600163	1,112	1,110	1,108	1,107	1,099	1,094
40600232	48,481	51,416	54,351	55,329	57,290	58,271
40600234	111,112	117,838	124,565	126,807	131,302	133,550
40600251	5,271	5,590	5,909	6,016	6,229	6,336
40600301	2,488	2,485	2,482	2,481	2,461	2,452
40600302	105	105	105	105	104	103
40600306	5,707	5,828	5,950	5,990	5,872	5,813
40600307	14	14	14	14	14	14
40600401	1,399	1,397	1,394	1,393	1,383	1,377
40600402	35	35	35	35	35	35
40600602	18	18	18	18	18	18
40600603	1,190	1,187	1,185	1,184	1,175	1,171
40600706	2,189	2,185	2,181	2,179	2,163	2,155
40600707	1	1	1	1	1	1
40688801	134	142	150	153	158	161
40700809	127	126	124	124	126	127
40700810	25	25	24	24	25	25
40701607	11,000	10,871	10,741	10,698	10,877	10,966
40701613	1,781	1,760	1,739	1,732	1,761	1,776
40701614	113	112	110	110	112	113
40701698	1,000	988	976	973	989	997
40704405	85	84	83	83	84	85
40704406	144	142	141	140	142	144
40704497	3	3	3	3	3	3
40704498	6	6	6	6	6	6
40708098	40	39	39	38	39	39
40714697	124	123	121	121	123	124
40714698	2,640	2,609	2,578	2,568	2,611	2,632
40715812	4,522	4,469	4,416	4,398	4,471	4,508
40717613	1,008	996	984	980	997	1,005
40722097	21	21	21	20	21	21
40786099	2	2	2	2	2	2
40799997	86,248	85,234	84,220	83,882	85,280	85,979
40799998	1,580	1,561	1,543	1,537	1,562	1,575
40799999	4,151	4,102	4,053	4,037	4,104	4,138
49000101	7,106	7,023	6,939	6,911	7,027	7,084
49000201	759	750	741	738	750	757
49000405	5,641	6,302	6,963	7,183	7,581	7,780
49000599	328	324	320	319	324	327
49099998	35,398	34,982	34,565	34,426	35,000	35,287

Annual Point Source non-hazardous VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
49099999	391,898	387,289	382,680	381,144	387,499	390,676
50100102	40,915	42,070	43,225	43,610	45,014	45,717
50100103	8	8	8	8	8	8
50100104	3,713	3,818	3,923	3,958	4,085	4,149
50100105	0	0	0	0	0	0
50100106	17,755	18,256	18,757	18,924	19,534	19,839
50100402	257,165	264,063	270,960	273,259	281,681	285,892
50100403	32,351	33,111	33,871	34,125	35,063	35,532
50100404	3,430	3,422	3,414	3,411	3,411	3,411
50100405	6,823	7,016	7,209	7,273	7,507	7,624
50100406	9,583	9,854	10,124	10,214	10,543	10,708
50100410	14,971	14,936	14,902	14,890	14,890	14,890
50100421	68,965	68,807	68,648	68,595	68,595	68,595
50100422	1,088	1,119	1,149	1,160	1,197	1,216
50100505	243	247	250	252	251	251
50100701	499	513	527	532	549	558
50100707	30	31	32	32	33	34
50100720	33	34	35	35	36	37
50100731	229	235	242	244	252	256
50100740	704	724	744	750	775	787
50100760	10	10	11	11	11	11
50100771	40	41	42	43	44	45
50100781	20	21	21	21	22	22
50100789	4,890	5,028	5,166	5,212	5,380	5,464
50100799	8,460	8,699	8,938	9,017	9,308	9,453
50200101	52	56	60	62	64	66
50200504	1,614	1,640	1,665	1,674	1,672	1,671
50200515	5,063	5,472	5,881	6,018	6,258	6,378
50200601	10,070	10,047	10,024	10,016	10,016	10,016
50200602	103,575	107,747	111,918	113,309	115,828	117,087
50200603	64,642	64,494	64,345	64,296	64,296	64,296
50200610	844	842	840	840	840	840
50300112	338	390	442	459	491	508
50300501	392	452	512	532	569	588
50300503	11	13	14	15	16	16
50300506	6,708	7,732	8,756	9,097	9,740	10,062
50300701	1,865	2,150	2,434	2,529	2,708	2,797
50300702	8,969	10,338	11,707	12,164	13,024	13,453
50300801	1,174	1,353	1,532	1,592	1,705	1,761
50300820	850	979	1,109	1,152	1,234	1,275
50300830	31	36	40	42	45	46
50300899	4	5	5	5	6	6
50382501	56	65	73	76	82	84
50410405	1,567	1,611	1,655	1,670	1,724	1,751
50410420	0	0	0	1	1	1
50410560	116	119	123	124	128	130
50410621	5	5	5	5	6	6
68240030	23,547	23,495	23,442	23,425	23,388	23,370
STATEWIDE	**20,551,532**	**21,918,311**	**23,285,093**	**23,740,686**	**24,732,834**	**25,228,909**
state(tons)	10,276	10,959	11,643	11,870	12,366	12,614

Annual Point Source HAPs VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
10100205	0.6	0.6	0.7	0.7	0.7	0.7
10100401	541.1	673.8	806.6	850.8	840.1	834.7
10100405	1,076.3	1,340.3	1,604.3	1,692.3	1,670.9	1,660.2
10100501	9.2	13.7	18.3	19.8	14.8	12.4
10100601	3,656.3	3,829.3	4,002.3	4,060.0	4,485.5	4,698.2
10100602	837.2	876.8	916.5	929.7	1,027.1	1,075.8
10100604	19,745.4	20,679.7	21,614.1	21,925.5	24,223.3	25,372.2
10200204	4.9	5.0	5.1	5.2	5.2	5.2
10200401	2,354.3	2,568.0	2,781.8	2,853.0	2,856.3	2,857.9
10200501	167.1	167.8	168.6	168.8	166.8	165.8
10200601	14,286.5	14,620.8	14,955.0	15,066.4	15,326.1	15,456.0
10200602	21,971.6	22,485.6	22,999.7	23,171.0	23,570.4	23,770.1
10200799	1.1	1.1	1.1	1.1	1.1	1.1
10200901	356.8	379.6	402.5	410.1	416.6	419.8
10200902	60.0	63.8	67.7	68.9	70.0	70.6
10200903	98.7	105.0	111.3	113.4	115.2	116.1
10200905	161.9	172.3	182.6	186.1	189.0	190.5
10200906	80.0	85.1	90.2	91.9	93.4	94.1
10201302	4.8	4.8	4.9	4.9	5.0	5.0
10300209	1,130.0	1,153.3	1,176.6	1,184.4	1,179.3	1,176.7
10300401	1,640.5	1,583.0	1,525.5	1,506.3	1,529.5	1,541.0
10300501	95.9	98.9	101.9	102.9	103.9	104.3
10300502	4.4	4.5	4.6	4.7	4.7	4.7
10300601	13,420.0	13,480.7	13,541.4	13,561.6	13,784.6	13,896.0
10300602	11,941.9	11,995.9	12,049.9	12,067.9	12,266.2	12,365.4
10300603	1,427.6	1,434.1	1,440.5	1,442.7	1,466.4	1,478.2
10300701	5.0	5.2	5.3	5.3	5.4	5.5
10300901	47.6	47.5	47.4	47.4	47.4	47.4
10300902	335.6	334.8	334.1	333.8	333.8	333.8
10300903	643.8	642.3	640.9	640.4	640.4	640.4
10500105	51.2	51.4	51.6	51.7	51.1	50.8
10500113	0.0	0.0	0.0	0.0	0.0	0.0
10500214	0.2	0.2	0.2	0.2	0.2	0.2
20100101	1.8	2.7	3.6	3.9	2.9	2.4
20100102	152.1	227.3	302.6	327.7	245.6	204.5
20100201	8.8	9.2	9.6	9.7	10.7	11.2
20200101	1.8	1.9	1.9	1.9	1.8	1.8
20200102	576.0	578.6	581.2	582.1	575.1	571.6
20200103	0.3	0.3	0.3	0.3	0.3	0.3
20200104	55.3	55.5	55.8	55.9	55.2	54.9
20200201	1,402.4	1,435.2	1,468.0	1,479.0	1,504.4	1,517.2
20200203	489.7	501.2	512.7	516.5	525.4	529.8
20200252	639.4	654.4	669.3	674.3	685.9	691.8
20200253	601.6	615.7	629.8	634.5	645.4	650.9
20200254	6,165.1	6,309.3	6,453.5	6,501.6	6,613.7	6,669.7
20200401	1,236.0	1,241.8	1,247.6	1,249.5	1,234.9	1,227.6
20200402	12,636.7	12,636.7	12,636.7	12,636.7	12,636.7	12,636.7
20300101	5.0	5.1	5.3	5.3	5.4	5.4
20300102	3.6	3.7	3.8	3.9	3.9	3.9
20300702	1.4	1.4	1.4	1.4	1.4	1.4
20300801	85.6	85.4	85.2	85.2	85.2	85.2
30101401	33,040.1	36,565.4	40,090.7	41,265.8	43,447.8	44,538.9
30101805	267,865.8	301,329.4	334,793.1	345,947.6	366,165.6	376,274.6
30101808	3,811.0	4,287.1	4,763.2	4,921.9	5,209.5	5,353.4
30101809	1.0	1.1	1.2	1.3	1.4	1.4
30101810	622.0	699.7	777.4	803.3	850.3	873.7
30101811	3,656.0	4,112.7	4,569.5	4,721.7	4,997.7	5,135.6
30101817	9,433.0	10,611.4	11,789.9	12,182.7	12,894.7	13,250.7
30101818	1,486.0	1,671.6	1,857.3	1,919.2	2,031.3	2,087.4
30101819	66.0	74.2	82.5	85.2	90.2	92.7
30101821	235.0	264.4	293.7	303.5	321.2	330.1
30101822	131,955.0	148,439.7	164,924.5	170,419.4	180,379.0	185,358.9
30101847	28,318.0	31,855.7	35,393.4	36,572.6	38,710.0	39,778.7
30101860	693.0	779.6	866.1	895.0	947.3	973.5
30101891	34,774.0	39,118.2	43,462.4	44,910.5	47,535.2	48,847.5
30101892	1.0	1.1	1.2	1.3	1.4	1.4
30101893	288.0	324.0	360.0	372.0	393.7	404.6
30101894	5,354.0	6,022.9	6,691.7	6,914.7	7,318.8	7,520.8

Annual Point Source HAPs VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
30101899	40,235.0	45,261.4	50,287.9	51,963.3	55,000.2	56,518.6
30102499	9,025.0	10,152.5	11,279.9	11,655.8	12,336.9	12,677.5
30102630	169,132.0	190,261.1	211,390.3	218,433.3	231,199.0	237,581.9
30102699	2,670.0	3,003.6	3,337.1	3,448.3	3,649.8	3,750.6
30103499	53.0	52.4	51.8	51.5	52.4	52.8
30106002	327.8	389.8	451.8	472.5	506.0	522.8
30106004	531.0	631.5	732.0	765.5	819.7	846.9
30106008	2,863.4	3,405.3	3,947.2	4,127.8	4,420.5	4,566.8
30106009	200.0	237.8	275.7	288.3	308.8	319.0
30106010	959.0	1,140.5	1,322.0	1,382.4	1,480.5	1,529.5
30106011	2,912.4	3,463.5	4,014.7	4,198.4	4,496.1	4,644.9
30106099	140,052.9	166,555.8	193,058.7	201,893.1	216,208.3	223,366.0
30107002	504.0	567.0	629.9	650.9	689.0	708.0
30112199	14,016.0	13,851.2	13,686.3	13,631.4	13,858.7	13,972.3
30113299	205.0	202.6	200.2	199.4	202.7	204.4
30117401	28.3	31.8	35.3	36.5	38.6	39.7
30130101	2,265.0	2,548.0	2,830.9	2,925.2	3,096.2	3,181.7
30180001	22.0	24.7	27.5	28.4	30.1	30.9
30182001	0.9	1.0	1.2	1.2	1.3	1.3
30182002	88,910.0	99,931.0	110,952.0	114,625.6	121,493.8	124,928.0
30182003	35.0	39.3	43.7	45.1	47.8	49.2
30183001	5,848.3	6,574.3	7,300.4	7,542.4	7,992.2	8,217.1
30184001	201.1	226.2	251.3	259.7	274.9	282.5
30187001	1,590.0	1,571.3	1,552.6	1,546.4	1,572.2	1,585.0
30188801	1,353.0	1,522.0	1,691.1	1,747.4	1,849.5	1,900.6
30188805	81,460.0	91,557.5	101,655.0	105,020.8	111,313.6	114,459.9
30199999	45,550.7	51,197.0	56,843.3	58,725.4	62,244.1	64,003.5
30200734	14,806.0	15,048.4	15,290.8	15,371.6	15,699.0	15,862.7
30203201	660,689.3	670,368.6	680,047.9	683,274.3	690,689.9	694,397.7
30299998	75,882.0	77,124.4	78,366.8	78,780.9	80,458.7	81,297.6
30300102	68,660.0	73,146.6	77,633.2	79,128.7	83,027.0	84,976.2
30300199	56.0	59.7	63.3	64.5	67.7	69.3
30300331	2,616.0	2,569.9	2,523.8	2,508.5	2,573.5	2,606.0
30300341	1,216.0	1,194.6	1,173.2	1,166.0	1,196.2	1,211.4
30300361	6.0	5.9	5.8	5.8	5.9	6.0
30300934	1.0	1.0	1.0	1.0	1.0	1.0
30400103	367.4	429.3	491.1	511.8	546.4	563.7
30400108	377.9	441.5	505.2	526.4	562.0	579.8
30400109	65.0	75.9	86.9	90.5	96.7	99.7
30400112	1,200.0	1,402.1	1,604.2	1,671.5	1,784.5	1,841.1
30400115	8,955.0	10,463.0	11,971.1	12,473.7	13,317.2	13,738.9
30400132	504.0	588.9	673.7	702.0	749.5	773.2
30400299	164.0	191.6	219.2	228.4	243.9	251.6
30400320	41.3	46.2	51.0	52.7	55.9	57.5
30400331	354.1	395.8	437.4	451.3	479.1	493.0
30401002	10,687.2	11,385.5	12,083.9	12,316.7	12,923.5	13,226.9
30402004	5,434.0	6,470.8	7,507.7	7,853.3	8,491.8	8,811.0
30402005	619.0	737.1	855.2	894.6	967.3	1,003.7
30500212	92.5	101.8	111.1	114.2	121.1	124.5
30500251	3,827.6	4,213.6	4,599.5	4,728.2	5,011.2	5,152.6
30501204	93,226.9	92,573.8	91,920.8	91,703.1	93,088.4	93,781.0
30501205	658.2	653.6	649.0	647.4	657.2	662.1
30501206	7,400.3	7,348.5	7,296.6	7,279.3	7,389.3	7,444.3
30501299	301.1	317.1	333.0	338.4	350.7	356.8
30501406	879.0	925.6	972.2	987.8	1,023.7	1,041.7
30501420	106.0	107.6	109.2	109.7	112.5	113.9
30600508	239.0	253.5	267.9	272.8	282.4	287.3
30600811	116.8	123.9	130.9	133.3	138.0	140.4
30622401	407.0	431.6	456.3	464.5	481.0	489.2
30622404	315.0	334.1	353.1	359.5	372.2	378.6
30700105	608.0	623.8	639.6	644.9	665.3	675.6
30700106	4,742.0	4,865.3	4,988.5	5,029.6	5,189.1	5,268.9
30700110	6,458.0	6,625.9	6,793.7	6,849.7	7,066.9	7,175.6
30700115	34,722.0	35,624.5	36,527.0	36,827.8	37,995.9	38,580.0
30700122	80,875.0	82,977.1	85,079.2	85,779.9	88,500.7	89,861.1
30700199	47,646.0	48,884.4	50,122.8	50,535.6	52,138.5	52,940.0
30700401	407.0	417.6	428.2	431.7	445.4	452.2
30700406	9.0	9.4	9.9	10.0	10.3	10.5

Annual Point Source HAPs VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
30700718	520.0	545.9	571.9	580.5	597.0	605.3
30700727	20.0	21.0	22.0	22.3	23.0	23.3
30700896	543.0	584.6	626.2	640.1	663.8	675.6
30700925	168,552.0	175,975.1	183,398.2	185,872.6	192,249.2	195,437.6
30700960	48,352.0	50,481.4	52,610.9	53,320.7	55,150.0	56,064.6
30701199	138.0	144.9	151.8	154.1	158.4	160.6
30701399	84,606.1	89,405.3	94,204.6	95,804.4	99,734.5	101,699.5
30702099	5,314.8	5,608.7	5,902.6	6,000.6	6,329.2	6,493.5
30799998	146,790.0	153,467.3	160,144.7	162,370.4	168,845.5	172,083.1
30799999	0.0	0.0	0.0	0.0	0.0	0.0
30800113	4,242.8	4,781.4	5,319.9	5,499.4	5,787.7	5,931.8
30800114	486.6	548.4	610.1	630.7	663.8	680.3
30800115	1,776.0	2,001.4	2,226.9	2,302.0	2,422.7	2,483.0
30800127	2,827.0	3,185.8	3,544.7	3,664.3	3,856.4	3,952.4
30800131	1,343.3	1,513.8	1,684.3	1,741.2	1,832.4	1,878.1
30800501	12,712.2	14,325.8	15,939.4	16,477.3	17,340.9	17,772.8
30800699	337,763.2	380,448.3	423,133.4	437,361.8	462,613.0	475,238.6
30800702	518.1	583.6	649.1	670.9	709.6	729.0
30800703	13,930.0	15,690.4	17,450.8	18,037.6	19,079.0	19,599.7
30800704	354.8	399.6	444.4	459.4	485.9	499.2
30800721	1,595.9	1,797.6	1,999.3	2,066.5	2,185.9	2,245.5
30800722	9,236.8	10,404.1	11,571.4	11,960.5	12,651.0	12,996.3
30800723	1,988.0	2,239.2	2,490.4	2,574.2	2,722.8	2,797.1
30800724	22,040.4	24,825.8	27,611.1	28,539.6	30,187.3	31,011.2
30800736	518.0	583.5	648.9	670.7	709.5	728.8
30800799	38.2	43.0	47.8	49.4	52.3	53.7
30801002	208.5	234.8	261.2	270.0	285.6	293.4
30801005	977.1	1,100.6	1,224.1	1,265.2	1,338.3	1,374.8
30801007	30,326.0	34,158.5	37,990.9	39,268.4	41,535.6	42,669.2
30899999	657.7	740.8	823.9	851.6	900.8	925.4
30901001	29.4	32.4	35.4	36.4	38.3	39.3
30901042	9.4	10.4	11.3	11.6	12.3	12.6
30901052	937.0	1,032.8	1,128.5	1,160.5	1,223.6	1,255.2
30901099	13,904.0	15,325.2	16,746.3	17,220.0	18,156.9	18,625.3
30901101	376.0	461.9	547.9	576.5	627.0	652.3
30901102	304.0	373.5	443.0	466.1	506.9	527.4
30982599	3.0	3.3	3.6	3.7	3.9	4.0
30988801	511.0	563.2	615.5	632.9	667.3	684.5
31000227	348.0	366.7	385.4	391.6	407.8	415.9
31000302	48.8	51.4	54.0	54.9	57.2	58.3
31303001	754.0	938.7	1,123.3	1,184.9	1,311.7	1,375.1
31303501	66.0	79.8	93.6	98.2	107.7	112.4
31306500	0.0	0.0	0.0	0.0	0.0	0.0
31306501	40.0	47.6	55.3	57.8	62.5	64.9
31306505	12.6	15.0	17.4	18.2	19.6	20.4
31306599	14,426.5	17,959.5	21,492.6	22,670.3	25,096.3	26,309.3
31307001	70.0	83.4	96.7	101.2	109.4	113.5
31401503	52.0	55.1	58.2	59.2	61.8	63.1
31499999	113.0	124.5	136.0	139.8	147.7	151.7
31502001	3,750.3	3,756.7	3,761.6	3,761.6	3,758.2	3,758.2
31503001	188.5	215.6	242.6	251.6	265.9	273.1
31603001	3,175.0	3,102.2	3,029.5	3,005.2	2,994.6	2,989.3
31603002	103,063.0	100,701.0	98,339.0	97,551.7	97,207.3	97,035.1
31604001	120,538.0	117,775.5	115,013.1	114,092.2	113,689.4	113,488.0
31604002	1,216.0	1,188.1	1,160.3	1,151.0	1,146.9	1,144.9
31604003	2,732.0	2,669.4	2,606.8	2,585.9	2,576.8	2,572.2
31605001	82,253.0	80,367.9	78,482.9	77,854.5	77,579.6	77,442.2
31605002	101.0	98.7	96.4	95.6	95.3	95.1
31605003	158.0	154.4	150.8	149.6	149.0	148.8
31605004	3,484.0	3,404.2	3,324.3	3,297.7	3,286.0	3,280.2
31612001	165.0	161.2	157.4	156.2	155.6	155.3
31612002	297.0	290.2	283.4	281.1	280.1	279.6
31612003	3,373.0	3,295.7	3,218.4	3,192.6	3,181.4	3,175.7
31613001	377.0	368.4	359.7	356.8	355.6	355.0
31613002	393.0	384.0	375.0	372.0	370.7	370.0
31613004	130.0	127.0	124.0	123.0	122.6	122.4
31614001	16.0	15.6	15.3	15.1	15.1	15.1
31614002	33.0	32.2	31.5	31.2	31.1	31.1

Annual Point Source HAPs VOC by SCC in lbs.

SCC	2002 Annual	2005 Annual	2008 Annual	2009 Annual	2011 Annual	2012 Annual
31615001	3,981.0	3,889.8	3,798.5	3,768.1	3,754.8	3,748.2
31615003	21,879.0	21,377.6	20,876.2	20,709.0	20,635.9	20,599.3
31616002	1,040.0	1,016.2	992.3	984.4	980.9	979.2
31616003	61,547.0	60,136.5	58,725.9	58,255.8	58,050.1	57,947.2
31616004	81.0	79.1	77.3	76.7	76.4	76.3
33000104	13.0	12.9	12.7	12.7	13.1	13.3
33000212	9,974.0	10,909.5	11,845.0	12,156.8	12,677.3	12,937.5
33000214	6,319.0	6,911.7	7,504.4	7,701.9	8,031.7	8,196.5
33000297	306.0	334.7	363.4	373.0	388.9	396.9
39000689	1,808.8	1,851.1	1,893.4	1,907.5	1,940.4	1,956.9
39990003	2,302.0	2,398.4	2,494.8	2,527.0	2,604.5	2,643.3
39990014	748.0	784.3	820.7	832.8	856.3	868.0
39999989	7,985.0	9,711.9	11,438.9	12,014.5	12,704.8	13,049.9
39999992	40.4	49.1	57.8	60.8	64.2	66.0
39999993	55,516.0	67,522.6	79,529.3	83,531.5	88,330.4	90,729.9
39999994	575,359.8	699,794.8	824,230.0	865,708.3	915,443.9	940,311.7
39999998	9,843.9	11,972.9	14,101.9	14,811.6	15,662.5	16,088.0
39999999	15,349.7	18,669.4	21,989.2	23,095.8	24,422.6	25,086.1
40100204	1,252.0	1,425.0	1,598.1	1,655.7	1,746.8	1,792.3
40100205	74,071.0	84,308.0	94,545.1	97,957.4	103,341.9	106,034.2
40100222	39,240.0	44,663.2	50,086.4	51,894.1	54,746.6	56,172.9
40100501	320.0	316.2	312.5	311.2	316.4	319.0
40200101	9,141.6	10,701.4	12,261.3	12,781.2	13,763.1	14,254.1
40200110	20,821.8	24,374.7	27,927.6	29,111.9	31,348.4	32,466.6
40200201	2,198.1	2,573.2	2,948.3	3,073.3	3,309.4	3,427.4
40200210	180.0	210.7	241.4	251.7	271.0	280.7
40200301	1,959.0	2,293.3	2,627.5	2,739.0	2,949.4	3,054.6
40200401	18,034.2	21,111.5	24,188.8	25,214.5	27,151.6	28,120.1
40200501	11,280.0	13,204.8	15,129.5	15,771.1	16,982.7	17,588.5
40200510	4,666.0	5,462.2	6,258.4	6,523.8	7,024.9	7,275.5
40200701	51,467.9	60,250.1	69,032.4	71,959.8	77,488.0	80,252.1
40200706	2,435.0	2,850.5	3,266.0	3,404.5	3,666.0	3,796.8
40200707	1.0	1.2	1.3	1.4	1.5	1.6
40200710	11,530.0	13,497.4	15,464.9	16,120.7	17,359.1	17,978.3
40200711	76.0	89.0	101.9	106.2	114.4	118.5
40200801	43,014.0	50,353.7	57,693.4	60,139.9	64,760.1	67,070.1
40200803	3,305.0	3,678.7	4,052.3	4,176.9	4,426.8	4,551.7
40200810	226.0	264.5	303.1	315.9	340.2	352.3
40200842	25,781.5	28,552.5	31,323.6	32,247.3	33,829.6	34,620.8
40200843	3,800.4	4,208.9	4,617.4	4,753.5	4,986.8	5,103.4
40200898	8,020.0	8,926.7	9,833.5	10,135.7	10,742.1	11,045.3
40200998	627.0	734.0	841.0	876.6	944.0	977.7
40201101	22,003.1	24,490.7	26,978.4	27,807.6	29,471.3	30,303.2
40201103	379.0	420.8	462.5	476.5	502.4	515.3
40201122	11,782.0	11,665.9	11,549.8	11,511.2	11,872.3	12,052.9
40201201	148.0	146.5	145.1	144.6	149.1	151.4
40201301	73,029.1	77,726.1	82,423.2	83,988.9	87,666.9	89,505.9
40201303	923.6	1,018.7	1,113.9	1,145.6	1,210.6	1,243.1
40201310	14.0	15.6	17.2	17.7	18.8	19.3
40201330	101.1	108.5	116.0	118.5	124.1	126.9
40201399	737.0	803.0	869.1	891.1	937.8	961.2
40201401	219.0	243.8	268.5	276.8	293.3	301.6
40201432	1,899.0	2,113.7	2,328.4	2,400.0	2,543.6	2,615.3
40201435	4,400.0	4,400.0	4,400.0	4,400.0	4,538.4	4,607.5
40201601	21.9	24.4	26.9	27.7	29.3	30.2
40201607	753.7	838.9	924.2	952.6	1,009.6	1,038.1
40201620	0.4	0.5	0.5	0.5	0.6	0.6
40201699	30.4	33.8	37.3	38.4	40.7	41.9
40201721	5,176.7	5,733.1	6,289.6	6,475.0	6,792.7	6,951.6
40201722	8,424.0	9,329.4	10,234.9	10,536.7	11,053.7	11,312.2
40201725	4,323.8	4,788.5	5,253.3	5,408.2	5,673.5	5,806.2
40201727	15,222.0	16,858.1	18,494.2	19,039.6	19,973.8	20,441.0
40201799	10,159.6	11,308.3	12,456.9	12,839.8	13,608.0	13,992.1
40201901	80,179.1	87,839.5	95,499.8	98,053.3	104,101.7	107,125.9
40202201	6,390.0	7,197.5	8,005.1	8,274.3	8,752.0	8,990.8
40202203	904.0	1,018.2	1,132.5	1,170.6	1,238.2	1,271.9
40202220	19,583.0	22,057.8	24,532.6	25,357.6	26,821.6	27,553.6
40202299	227.2	255.9	284.7	294.2	311.2	319.7

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40202501	7,359.7	9,041.4	10,723.1	11,283.7	12,271.6	12,765.5
40202502	43.0	52.8	62.7	65.9	71.7	74.6
40202503	122.9	143.9	164.8	171.8	185.0	191.6
40202521	2,010.0	2,469.4	2,928.9	3,082.0	3,351.9	3,486.8
40202537	200.1	228.6	257.1	266.6	284.7	293.7
40202544	894.9	1,099.4	1,304.0	1,372.1	1,492.3	1,552.4
40202599	14,569.5	17,377.7	20,186.0	21,122.0	22,813.3	23,658.9
40203001	826.6	967.6	1,108.6	1,155.7	1,244.4	1,288.8
40204004	5,903.0	6,570.4	7,237.8	7,460.2	7,906.6	8,129.8
40204161	32.0	33.3	34.7	35.1	36.2	36.8
40204330	127.0	132.3	137.6	139.3	143.7	145.9
40204340	4,605.0	4,796.5	4,988.0	5,051.8	5,209.9	5,288.9
40206031	58.0	57.4	56.9	56.7	58.4	59.3
40206034	18.0	17.8	17.6	17.6	18.1	18.4
40288824	0.1	0.2	0.2	0.2	0.2	0.2
40299995	170,977.0	205,969.5	240,962.1	252,626.2	273,679.1	284,205.6
40299998	179.0	209.5	240.1	250.3	269.5	279.1
40300302	3,162.0	3,353.4	3,544.8	3,608.6	3,736.6	3,800.5
40301016	1.7	1.8	1.9	1.9	2.0	2.0
40301017	85.8	91.0	96.2	97.9	101.4	103.1
40301018	68.9	73.1	77.3	78.6	81.4	82.8
40301019	4,466.0	4,736.4	5,006.7	5,096.8	5,277.5	5,367.9
40301020	471.6	500.1	528.7	538.2	557.3	566.8
40301021	354.2	375.6	397.1	404.2	418.6	425.7
40301097	409.3	434.1	458.9	467.1	483.7	492.0
40301098	128.6	136.4	144.2	146.8	152.0	154.6
40301099	533.4	565.7	598.0	608.8	630.4	641.2
40301120	1.0	1.0	1.1	1.1	1.2	1.2
40301151	3,087.0	3,273.9	3,460.8	3,523.1	3,647.9	3,710.4
40301197	19.4	20.6	21.7	22.1	22.9	23.3
40400110	13,188.9	13,987.3	14,785.7	15,051.9	15,585.4	15,852.2
40400111	9,901.8	10,501.2	11,100.6	11,300.4	11,701.0	11,901.3
40400114	39,273.7	41,651.2	44,028.8	44,821.3	46,410.1	47,204.6
40400116	420.1	445.5	470.9	479.4	496.4	504.9
40400117	10,590.2	11,231.3	11,872.4	12,086.1	12,514.5	12,728.8
40400121	3.7	3.9	4.1	4.2	4.3	4.4
40400122	84.8	90.0	95.1	96.8	100.3	102.0
40400150	6,872.1	7,288.1	7,704.2	7,842.8	8,120.9	8,259.9
40400151	5,927.4	6,286.3	6,645.1	6,764.7	7,004.5	7,124.4
40400152	11,640.0	12,344.7	13,049.3	13,284.2	13,755.1	13,990.6
40400153	1,956.0	2,074.4	2,192.8	2,232.3	2,311.4	2,351.0
40400154	12,454.7	13,208.7	13,962.6	14,214.0	14,717.8	14,969.8
40400160	56,794.5	60,232.6	63,670.8	64,816.9	67,114.6	68,263.4
40400179	6,732.2	7,139.7	7,547.3	7,683.1	7,955.5	8,091.7
40400199	11,428.3	12,120.2	12,812.0	13,042.6	13,505.0	13,736.1
40400250	69,739.0	73,960.8	78,182.6	79,589.9	82,411.2	83,821.9
40400251	2,867.4	3,040.9	3,214.5	3,272.4	3,388.4	3,446.4
40400253	246.5	261.4	276.3	281.3	291.3	296.2
40400254	11,785.5	12,498.9	13,212.4	13,450.2	13,927.0	14,165.4
40400301	20.2	21.7	23.1	23.6	24.7	25.2
40400302	16.0	17.2	18.3	18.7	19.6	20.0
40400401	80.0	79.8	79.7	79.6	79.0	78.7
40400498	3.1	3.3	3.5	3.6	3.7	3.8
40500101	38.0	36.8	35.7	35.3	35.8	36.0
40500212	1,339.0	1,297.7	1,256.4	1,242.6	1,260.1	1,268.9
40500301	3,697.8	3,702.7	3,707.6	3,709.2	3,795.1	3,838.0
40500311	32,934.0	31,918.0	30,902.0	30,563.4	30,994.4	31,209.9
40500312	79.0	76.6	74.1	73.3	74.3	74.9
40500401	7,456.8	7,226.7	6,996.7	6,920.0	7,017.6	7,066.4
40500431	12,941.9	12,542.6	12,143.4	12,010.3	12,179.7	12,264.3
40500511	292,704.0	283,674.4	274,644.7	271,634.9	275,465.6	277,380.9
40500701	204.0	204.3	204.6	204.6	209.4	211.8
40500801	0.7	0.7	0.6	0.6	0.6	0.7
40588801	1,776.0	1,778.4	1,780.8	1,781.6	1,822.9	1,843.5
40600131	1,428.5	1,425.7	1,423.0	1,422.1	1,411.5	1,406.1
40600135	407.8	416.5	425.1	428.0	419.6	415.3
40600140	302.0	301.5	301.1	300.9	298.6	297.4
40600141	2,992.0	2,986.3	2,980.7	2,978.8	2,956.4	2,945.2

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40600163	41,270.2	41,192.1	41,114.0	41,088.0	40,779.1	40,624.6
40600232	8,258.0	8,757.9	9,257.8	9,424.5	9,758.6	9,925.6
40600234	87,962.4	93,287.4	98,612.4	100,387.4	103,946.0	105,725.4
40600251	228.5	242.3	256.2	260.8	270.0	274.6
40600301	2.0	2.0	2.1	2.1	2.1	2.0
40600302	17.9	17.9	17.8	17.8	17.7	17.6
40600306	412.1	420.9	429.6	432.6	424.0	419.7
40600307	2.4	2.4	2.4	2.4	2.4	2.3
40600401	7.6	7.6	7.6	7.6	7.5	7.5
40600402	1.7	1.7	1.7	1.7	1.7	1.7
40600602	2.9	2.9	2.9	2.9	2.8	2.8
40600603	70.7	70.5	70.4	70.4	69.8	69.6
40600706	502.0	501.1	500.1	499.8	496.0	494.1
40700815	573.0	566.3	559.5	557.3	566.6	571.2
40701613	123.0	121.6	120.1	119.6	121.6	122.6
40703202	1.7	1.6	1.6	1.6	1.6	1.6
40703601	302.3	298.7	295.2	294.0	298.9	301.3
40703620	2.0	2.0	2.0	1.9	2.0	2.0
40704420	1,119.0	1,105.8	1,092.7	1,088.3	1,106.4	1,115.5
40708098	37.6	37.1	36.7	36.5	37.2	37.5
40714697	7.0	6.9	6.8	6.8	6.9	7.0
40714698	2,315.0	2,287.8	2,260.6	2,251.5	2,289.0	2,307.8
40715812	5,307.0	5,244.6	5,182.2	5,161.4	5,247.4	5,290.5
40717613	34,353.0	33,949.0	33,545.0	33,410.4	33,967.4	34,245.9
40722097	217.0	214.4	211.9	211.0	214.6	216.3
40786099	21.5	21.2	21.0	20.9	21.3	21.4
40799997	9,881.2	9,765.0	9,648.8	9,610.1	9,770.3	9,850.4
40799998	100.1	99.0	97.8	97.4	99.0	99.8
49000201	375.0	370.6	366.2	364.7	370.8	373.8
49000202	4.0	4.0	3.9	3.9	4.0	4.0
49000599	138.0	136.3	134.7	134.2	136.4	137.5
49099999	139.0	137.4	135.7	135.2	137.4	138.6
50100102	449.7	462.4	475.1	479.3	494.7	502.4
50100104	3,406.0	3,502.2	3,598.3	3,630.4	3,747.3	3,805.8
50100105	169.6	174.4	179.2	180.8	186.6	189.5
50100106	10.9	11.2	11.5	11.6	12.0	12.2
50100402	50,741.7	51,996.9	53,252.1	53,670.5	55,213.2	55,984.6
50100403	2,435.6	2,430.0	2,424.4	2,422.5	2,422.5	2,422.5
50100404	337.8	337.1	336.3	336.0	336.0	336.0
50100410	500.5	499.3	498.2	497.8	497.8	497.8
50100421	625.4	624.0	622.5	622.0	622.0	622.0
50100505	0.8	0.8	0.8	0.8	0.8	0.8
50100707	209.0	214.9	220.8	222.8	229.9	233.5
50100720	474.0	487.4	500.8	505.2	521.5	529.6
50100731	5,237.0	5,384.8	5,532.7	5,582.0	5,761.7	5,851.6
50100740	3,965.0	4,076.9	4,188.9	4,226.2	4,362.3	4,430.4
50100760	77.0	79.2	81.3	82.1	84.7	86.0
50100771	164.0	168.6	173.3	174.8	180.4	183.2
50100781	80.0	82.3	84.5	85.3	88.0	89.4
50100799	81.0	83.3	85.6	86.3	89.1	90.5
50200504	67.6	68.6	69.7	70.1	70.0	70.0
50200505	1.8	1.8	1.9	1.9	1.9	1.9
50200507	1,252.0	1,249.1	1,246.3	1,245.3	1,245.3	1,245.3
50200602	14,078.6	15,216.5	16,354.5	16,733.9	17,402.4	17,736.6
50300112	316.3	364.6	412.9	429.0	459.3	474.5
50300503	5.0	5.8	6.5	6.8	7.3	7.5
50300701	128.0	147.5	167.1	173.6	185.9	192.0
50300702	891.0	1,027.0	1,163.0	1,208.4	1,293.8	1,336.5
50382501	66.7	76.9	87.1	90.5	96.9	100.1
50410405	2,167.0	2,228.2	2,289.3	2,309.7	2,384.1	2,421.3
50410420	28.4	29.2	30.0	30.3	31.2	31.7
50410560	240.0	246.8	253.5	255.8	264.0	268.2
64615012	21,435.0	21,471.2	21,499.3	21,499.3	21,480.0	21,480.0
68240030	89.9	89.7	89.5	89.4	89.3	89.2
68480001	48.8	51.8	54.7	55.7	57.7	58.7
STATEWIDE	**6,173,481**	**6,697,348**	**7,221,207**	**7,395,816**	**7,720,382**	**7,882,678**
state (tons)	3,087	3,349	3,611	3,698	3,860	3,941

Annual Area Source Carbon Monoxide by SCC in lbs.

strSCC	02 Annual	05 Annual	08 Annual	09 Annual	11 Annual	12 Annual
2101001000	0	0	0	0	0	0
2101002000	140,671	149,421	158,171	161,087	164,374	166,017
2101004000	67,131	100,363	133,595	144,673	108,415	90,286
2101005000	514,396	640,575	766,755	808,814	798,578	793,459
2101006000	35	37	39	40	43	45
2102001000	0	0	0	0	0	0
2102002000	681,514	696,627	711,740	716,778	718,515	719,384
2102004000	656,222	659,177	662,132	663,117	655,175	651,205
2102005000	57,225	62,420	67,616	69,347	69,425	69,464
2102006000	4,701,646	4,811,642	4,921,639	4,958,305	5,043,767	5,086,498
2102007000	280,852	272,689	264,527	261,807	263,428	264,239
2102008000	0	0	0	0	0	0
2102011000	59,933	57,705	55,478	54,735	56,139	56,840
2103001000	0	0	0	0	0	0
2103002000	14,085	14,375	14,666	14,762	14,699	14,667
2103004001	2,800,263	3,040,868	3,281,474	3,361,676	3,401,602	3,421,566
2103004002	4,812,392	5,225,885	5,639,378	5,777,209	5,845,824	5,880,132
2103005000	1,597,675	1,541,674	1,485,673	1,467,006	1,489,540	1,500,808
2103006000	5,593,660	5,618,951	5,644,243	5,652,673	5,745,591	5,792,051
2103007000	66,770	68,116	69,463	69,912	70,646	71,014
2103008000	8,234,052	8,215,144	8,196,236	8,189,934	8,189,934	8,189,934
2103011000	103,530	117,835	132,141	136,909	138,293	138,986
2104001000	0	0	0	0	0	0
2104002000	6,000	6,161	6,323	6,376	6,269	6,216
2104004000	6,667,290	6,674,357	6,681,423	6,683,779	6,675,773	6,671,770
2104006010	15,040,000	15,582,155	16,124,312	16,305,030	16,587,170	16,728,240
2104007000	382,402	388,775	395,148	397,273	415,573	424,723
2104008001	442,744,650	428,703,334	414,661,985	409,981,546	400,536,337	395,813,718
2104008052	144,777,150	140,185,651	135,594,141	134,063,641	130,975,065	129,430,773
2104008070	38,837,250	38,729,510	38,621,769	38,585,856	37,830,654	37,453,052
2104011000	344,820	452,298	559,776	595,602	595,442	595,362
2302002100	832,787	846,117	859,446	863,889	869,073	871,666
2302002200	2,935,866	2,982,859	3,029,852	3,045,516	3,063,790	3,072,927
2302003100	242,812	246,699	250,585	251,881	253,392	254,148
2610000100	2,581,877	2,592,450	2,603,023	2,606,547	2,611,679	2,614,245
2610000400	3,254,646	3,267,895	3,281,144	3,285,560	3,291,973	3,295,179
2610030000	10,170,758	10,210,144	10,249,531	10,262,660	10,281,286	10,290,599
2610040400	0	0	0	0	0	0
2810001000	10,306,205	10,306,205	10,306,205	10,306,205	10,306,205	10,306,205
2810015000	311,629	270,355	229,081	215,323	215,323	215,323
2810030000	2,755,446	2,968,740	3,182,034	3,253,132	3,318,568	3,351,286
STATEWIDE	**712,573,637**	**695,707,209**	**678,840,742**	**673,218,599**	**660,607,562**	**654,302,025**
State (tons)	356,287	347,854	339,420	336,609	330,304	327,151

Annual Area Source NOx by SCC in lbs.

strSCC	02 Annual	05 Annual	08 Annual	09 Annual	11 Annual	12 Annual
2101001000	-	-	-	-	-	-
2101002000	3,376,101	3,586,097	3,796,093	3,866,092	3,944,966	3,984,403
2101004000	322,228	481,742	641,257	694,428	520,394	433,376
2101005000	4,835,323	6,021,410	7,207,500	7,602,863	7,506,630	7,458,514
2101006000	79	83	86	87	97	102
2102001000	-	-	-	-	-	-
2102002000	16,356,341	15,325,637	14,294,931	13,951,363	13,985,171	14,002,075
2102004000	3,149,864	2,906,229	2,662,592	2,581,380	2,550,468	2,535,012
2102005000	537,912	533,947	529,982	528,660	529,257	529,555
2102006000	5,597,197	5,250,023	4,902,849	4,787,124	4,869,637	4,910,893
2102007000	1,638,301	1,466,985	1,295,669	1,238,564	1,246,234	1,250,069
2102008000	-	-	-	-	-	-
2102011000	287,677	265,726	243,774	236,457	242,520	245,552
2103001000	-	-	-	-	-	-
2103002000	873,248	814,766	756,284	736,789	733,605	732,013
2103004001	13,441,262	13,247,658	13,054,053	12,989,518	13,143,792	13,220,930
2103004002	22,359,114	22,037,059	21,715,003	21,607,651	21,864,282	21,992,598
2103005000	15,018,144	13,339,299	11,660,449	11,100,834	11,271,353	11,356,613
2103006000	27,968,301	25,732,750	23,497,194	22,752,010	23,126,005	23,313,003
2103007000	527,128	491,634	456,140	444,309	448,978	451,312
2103008000	296,668	283,340	270,013	265,570	265,570	265,570
2103011000	496,944	537,446	577,948	591,449	597,429	600,419
2104001000	-	-	-	-	-	-
2104002000	144,000	147,872	151,743	153,034	150,468	149,186
2104004000	32,002,992	32,036,911	32,070,829	32,082,136	32,043,711	32,024,499
2104006010	35,344,000	36,618,064	37,892,130	38,316,818	38,979,849	39,311,365
2104007000	2,817,696	2,864,655	2,911,614	2,927,267	3,062,113	3,129,536
2104008001	4,557,150	4,412,623	4,268,096	4,219,921	4,122,702	4,074,092
2104008052	2,337,000	2,262,884	2,188,767	2,164,062	2,114,206	2,089,278
2104008070	399,750	398,641	397,532	397,162	389,389	385,503
2104011000	1,655,136	2,171,029	2,686,923	2,858,887	2,858,119	2,857,735
2610000100	142,925	143,511	144,096	144,291	144,575	144,718
2610000400	116,237	116,710	117,183	117,341	117,570	117,684
2610030000	717,244	720,022	722,799	723,725	725,038	725,695
2610040400	-	-	-	-	-	-
2810001000	219,687	219,687	219,687	219,687	219,687	219,687
2810015000	6,685	5,800	4,915	4,620	4,620	4,620
2810030000	65,783	70,875	75,967	77,664	79,226	80,007
STATEWIDE	**197,608,119**	**194,511,112**	**191,414,098**	**190,381,762**	**191,857,661**	**192,595,613**
State (tons)	98,804	97,256	95,707	95,191	95,929	96,298

Annual Area Source VOC by SCC in lbs.

strSCC	02 Annual	05 Annual	08 Annual	09 Annual	11 Annual	12 Annual
2101001000	-	-	-	-	-	-
2101002000	16,881	17,930	18,980	19,330	19,725	19,922
2101004000	2,685	4,014	5,344	5,787	4,336	3,611
2101005000	78,188	97,367	116,547	122,940	121,384	120,607
2101006000	2	2	2	2	2	2
2102001000	-	-	-	-	-	-
2102002000	81,782	83,595	85,409	86,014	86,223	86,327
2102004000	26,249	26,367	26,485	26,525	26,207	26,049
2102005000	3,205	3,496	3,787	3,884	3,888	3,890
2102006000	307,846	315,048	322,250	324,651	330,247	333,044
2102007000	20,284	19,694	19,105	18,909	19,025	19,084
2102008000	-	-	-	-	-	-
2102011000	2,397	2,308	2,219	2,190	2,246	2,274
2103001000	-	-	-	-	-	-
2103002000	1,127	1,150	1,173	1,181	1,176	1,174
2103004001	190,418	206,779	223,140	228,594	231,309	232,667
2103004002	1,825,007	1,981,816	2,138,626	2,190,895	2,216,916	2,229,927
2103005000	361,075	348,418	335,762	331,543	336,636	339,183
2103006000	1,538,257	1,545,212	1,552,167	1,554,485	1,580,038	1,592,814
2103007000	17,571	17,925	18,280	18,398	18,591	18,688
2103008000	7,871	7,853	7,835	7,829	7,829	7,829
2103011000	7,040	8,013	8,985	9,310	9,404	9,451
2104002000	840	863	885	893	878	870
2104004000	453,376	453,856	454,336	454,496	453,953	453,681
2104006010	2,068,000	2,142,547	2,217,093	2,241,942	2,280,736	2,300,133
2104007000	60,379	61,386	62,392	62,727	65,617	67,062
2104008001	401,379,750	388,650,291	375,920,803	371,677,650	363,114,890	358,833,498
2104008052	15,774,750	15,274,466	14,774,180	14,607,419	14,270,891	14,102,626
2104008070	35,208,750	35,111,076	35,013,402	34,980,845	34,296,199	33,953,876
2104011000	23,448	30,756	38,065	40,501	40,490	40,485
2302002100	249,377	253,369	257,361	258,692	260,244	261,020
2302002200	897,493	911,858	926,223	931,011	936,599	939,392
2302003000	132,378	134,497	136,616	137,322	138,146	138,557
2302003100	117,585	119,467	121,349	121,976	122,708	123,074
2302003200	4,345	4,415	4,484	4,508	4,535	4,549
2302050000	6,559,158	6,655,252	6,751,345	6,783,376	6,856,996	6,893,806
2401001000	62,206,421	57,794,116	53,381,800	51,911,032	53,846,488	54,814,219
2401005000	27,778,422	24,283,440	20,788,450	19,623,456	20,468,189	20,890,557
2401008000	347,880	301,208	254,535	238,978	237,181	236,283
2401020000	8,425,557	8,891,528	9,357,501	9,512,825	10,033,743	10,294,203
2401050000	11,292,990	12,447,246	13,601,504	13,986,256	14,747,169	15,127,626
2401055000	5,091,861	7,359,414	9,626,973	10,382,824	11,603,678	12,214,106
2401060000	19,413,996	19,413,996	19,413,996	19,413,996	20,024,501	20,329,754
2401065000	31,722,448	32,582,189	33,441,932	33,728,513	34,053,011	34,215,261
2401070000	4,439	4,941	5,443	5,610	5,946	6,114
2401075000	1,720,552	1,794,627	1,868,702	1,893,393	1,973,921	2,014,185
2401080000	613,767	618,730	623,693	625,347	635,641	640,788
2415020000	344,817	259,266	173,715	145,198	153,097	157,047
2415025000	823,854	715,562	607,270	571,173	638,334	671,915
2415035000	128,021	96,232	64,444	53,848	56,911	58,443
2415045000	1,338,916	1,058,649	778,381	684,959	724,310	743,985
2415055000	7,479,434	5,486,922	3,494,407	2,830,236	2,930,291	2,980,318
2415060000	2,786,320	2,066,816	1,347,310	1,107,476	1,152,832	1,175,510
2420010055	6,845,520	6,799,803	6,754,085	6,738,846	6,850,159	6,905,816
2420020055	164,420	163,321	162,222	161,856	164,531	165,869
2425000000	23,796,856	23,829,278	23,861,700	23,872,507	24,425,418	24,701,874
2430000000	3,102,680	3,483,621	3,864,562	3,991,542	4,214,866	4,326,529

Annual Area Source VOC by SCC in lbs.

strSCC	02 Annual	05 Annual	08 Annual	09 Annual	11 Annual	12 Annual
2440020000	17,915,000	13,944,112	9,973,216	8,649,586	9,260,862	9,566,501
2460000000	150,195,049	140,977,323	131,759,575	128,687,000	129,277,799	129,573,200
2461022000	11,134,197	9,670,751	8,207,302	7,719,487	8,027,875	8,182,070
2461800000	4,263,900	4,270,326	4,276,753	4,278,895	4,279,036	4,279,106
2501011011	3,470,305	2,713,105	1,955,902	1,703,502	1,090,127	783,439
2501011012	29,967,706	23,428,926	16,890,130	14,710,537	9,413,762	6,765,366
2501011016	1,644,658	1,285,803	926,948	807,329	516,637	371,291
2501012011	330,934	258,486	186,039	161,890	103,526	74,344
2501012012	2,708,900	2,115,871	1,522,842	1,325,166	847,424	608,552
2501012016	7,012,429	5,477,279	3,942,125	3,430,409	2,193,695	1,575,336
2501060051	14,133,252	14,106,510	14,079,768	14,070,854	13,965,062	13,912,166
2501060052	22,264,713	22,222,584	22,180,456	22,166,413	21,999,755	21,916,425
2501060053	580,819	579,719	578,620	578,254	573,906	571,733
2501060100	31,671,337	24,957,127	18,242,901	16,004,831	13,308,615	11,960,502
2501060201	5,808,186	5,797,196	5,786,207	5,782,543	5,739,067	5,717,329
2501080050	666,766	744,059	821,352	847,117	895,055	919,025
2501080100	40,527	45,225	49,923	51,489	54,403	55,859
2505020120	14,683,726	15,572,640	16,461,556	16,757,861	17,351,905	17,648,928
2505030120	435,614	434,789	433,965	433,690	430,429	428,799
2610000100	645,469	648,113	650,756	651,637	652,920	653,561
2610000400	441,702	443,500	445,298	445,898	446,768	447,203
2610030000	503,012	504,959	506,907	507,556	508,478	508,938
2610040400	-	-	-	-	-	-
2630000000	393,480	404,588	415,696	419,399	432,906	439,660
2630020000	8,021,650	8,248,095	8,474,539	8,550,020	8,825,414	8,963,111
2640000000	1,504,940	1,547,423	1,589,906	1,604,067	1,655,734	1,681,567
2810001000	481,894	481,894	481,894	481,894	481,894	481,894
2810015000	14,665	12,723	10,780	10,133	10,133	10,133
2810030000	505,165	544,269	583,373	596,408	608,405	614,403
2830000000	169,750	169,750	169,750	169,750	169,750	169,750
2850000010	126,900	128,925	130,949	131,624	131,475	131,401
STATEWIDE	**1,014,583,329**	**965,678,066**	**916,772,688**	**900,470,934**	**890,051,098**	**884,841,164**
State (tons)	507,292	482,839	458,386	450,235	445,026	442,421

2002 NEW YORK ANNUAL CO EMISSIONS FROM AIRCRAFT, COMMERCIAL MARINE AND LOCOMOTIVE (TPY)

COUNTY	AIRCRAFT	COMMERCIAL MARINE	LOCOMOTIVE	TOTAL
ALBANY	206.75	265.77	83.44	555.96
ALLEGANY	0.00	0.00	9.17	9.17
BRONX	0.00	24.72	10.92	35.64
BROOME	7.42	0.00	32.93	40.35
CATTARAUGUS	0.00	0.00	17.93	17.93
CAYUGA	0.00	1.86	26.48	28.34
CHAUTAUQUA	2.03	6.15	160.14	168.32
CHEMUNG	5.75	0.00	15.40	21.15
CHENANGO	0.00	0.00	12.08	12.08
CLINTON	1.67	0.00	19.40	21.07
COLUMBIA	0.00	8.56	110.23	118.79
CORTLAND	0.00	0.00	4.98	4.98
DELAWARE	0.00	0.00	3.30	3.30
DUTCHESS	0.00	20.17	134.77	154.94
ERIE	248.41	93.49	245.61	587.51
ESSEX	0.00	0.00	23.78	23.78
FRANKLIN	1.90	46.86	9.37	58.13
FULTON	0.00	0.00	0.00	0.00
GENESEE	0.00	0.00	82.05	82.05
GREENE	0.00	8.56	23.45	32.01
HAMILTON	0.00	0.00	0.00	0.00
HERKIMER	0.00	0.00	54.57	54.57
JEFFERSON	3.01	48.38	64.10	115.49
KINGS	0.00	259.08	0.47	259.55
LEWIS	0.00	0.00	1.26	1.26
LIVINGSTON	0.00	0.00	12.80	12.80
MADISON	0.00	0.00	34.97	34.97
MONROE	164.60	7.30	112.16	284.06
MONTGOMERY	0.00	0.00	92.16	92.16
NASSAU	0.66	28.22	27.40	56.29
NEW YORK	3.08	186.44	7.75	197.27
NIAGARA	0.01	1.89	64.76	66.66
ONEIDA	0.02	5.43	69.12	74.57
ONONDAGA	145.30	0.00	117.64	262.94
ONTARIO	0.00	0.00	3.48	3.48
ORANGE	34.16	10.71	78.17	123.04
ORLEANS	0.00	1.86	0.30	2.16
OSWEGO	0.00	1.92	78.73	80.65
OTSEGO	0.00	0.00	25.13	25.13
PUTNAM	0.00	10.71	58.94	69.65
QUEENS	4089.80	278.59	11.67	4380.05
RENSSELAER	0.00	3.62	71.24	74.86
RICHMOND	0.00	380.89	0.00	380.89
ROCKLAND	0.00	0.09	30.73	30.82
ST LAWRENCE	2.89	46.86	87.37	137.12
SARATOGA	0.00	0.58	38.17	38.75
SCHENECTADY	0.01	0.00	66.06	66.07
SCHOHARIE	0.00	0.00	9.99	9.99
SCHUYLER	0.00	0.00	1.71	1.71
SENECA	0.00	0.00	0.21	0.21
STEUBEN	0.00	0.00	33.78	33.78
SUFFOLK	119.76	10.16	185.56	315.48
SULLIVAN	0.00	0.00	1.91	1.91
TIOGA	0.00	0.00	15.39	15.39
TOMPKINS	6.65	0.00	1.67	8.32
ULSTER	0.00	15.23	39.26	54.49
WARREN	0.00	0.00	1.02	1.02
WASHINGTON	0.00	0.00	25.85	25.85
WAYNE	0.00	4.27	80.78	85.05
WESTCHESTER	87.20	11.40	56.25	154.84
WYOMING	0.00	0.00	20.97	20.97
YATES	0.00	0.00	1.34	1.34
TOTAL	5131.07	1789.76	2710.27	9631.09

2002 NEW YORK ANNUAL NOx EMISSIONS FROM AIRCRAFT, COMMERCIAL MARINE AND LOCOMOTIVE (TPY)

COUNTY	AIRCRAFT	COMMERCIAL MARINE	LOCOMOTIVE	TOTAL
ALBANY	136.90	2016.54	747.93	2901.37
ALLEGANY	0.00	0.00	84.86	84.86
BRONX	0.00	184.70	100.53	285.23
BROOME	5.09	0.00	300.56	305.65
CATTARAUGUS	0.00	0.00	168.40	168.40
CAYUGA	0.00	14.15	241.91	256.06
CHAUTAUQUA	0.21	46.74	1434.78	1481.73
CHEMUNG	4.02	0.00	137.58	141.60
CHENANGO	0.00	0.00	113.97	113.97
CLINTON	0.18	0.00	175.70	175.88
COLUMBIA	0.00	65.15	1007.90	1073.05
CORTLAND	0.00	0.00	50.48	50.48
DELAWARE	0.00	0.00	30.01	30.01
DUTCHESS	0.00	153.54	1304.67	1458.21
ERIE	210.99	709.47	2207.18	3127.64
ESSEX	0.00	0.00	216.63	216.63
FRANKLIN	0.19	356.56	83.72	440.47
FULTON	0.00	0.00	0.00	0.00
GENESEE	0.00	0.00	744.99	744.99
GREENE	0.00	65.15	209.50	274.65
HAMILTON	0.00	0.00	0.00	0.00
HERKIMER	0.00	0.00	494.28	494.28
JEFFERSON	0.29	368.13	574.10	942.52
KINGS	0.00	1638.61	4.78	1643.39
LEWIS	0.00	0.00	12.78	12.78
LIVINGSTON	0.00	0.00	123.03	123.03
MADISON	0.00	0.00	322.15	322.15
MONROE	144.65	55.58	1015.17	1215.40
MONTGOMERY	0.00	0.00	833.72	833.72
NASSAU	0.46	220.96	278.06	499.48
NEW YORK	0.29	1163.29	78.64	1242.22
NIAGARA	0.01	14.40	592.37	606.78
ONEIDA	0.01	41.20	633.35	674.56
ONONDAGA	114.67	0.00	1068.97	1183.64
ONTARIO	0.00	0.00	35.04	35.04
ORANGE	15.54	81.51	757.82	854.87
ORLEANS	0.00	14.15	3.08	17.23
OSWEGO	0.00	14.57	703.29	717.86
OTSEGO	0.00	0.00	224.44	224.44
PUTNAM	0.00	81.51	35.04	116.55
QUEENS	4053.35	1960.24	106.40	6119.99
RENSSELAER	0.00	27.53	658.76	686.29
RICHMOND	0.00	2292.44	0.00	2292.44
ROCKLAND	0.00	0.70	283.33	284.03
ST LAWRENCE	0.27	356.56	782.12	1138.95
SARATOGA	0.00	4.43	345.38	349.81
SCHENECTADY	0.00	0.00	594.81	594.81
SCHOHARIE	0.00	0.00	89.20	89.20
SCHUYLER	0.00	0.00	16.31	16.31
SENECA	0.00	0.00	2.14	2.14
STEUBEN	0.00	0.00	304.90	304.90
SUFFOLK	102.76	81.04	1883.49	2067.29
SULLIVAN	0.00	0.00	17.63	17.63
TIOGA	0.00	0.00	137.60	137.60
TOMPKINS	3.86	0.00	14.94	18.80
ULSTER	0.00	115.92	350.72	466.64
WARREN	0.00	0.00	9.09	9.09
WASHINGTON	0.00	0.00	236.68	236.68
WAYNE	0.00	32.45	731.65	764.10
WESTCHESTER	53.27	89.24	570.91	713.42
WYOMING	0.00	0.00	192.10	192.10
YATES	0.00	0.00	12.12	12.12
TOTAL	4847.00	12266.46	24491.69	41605.16

2002 NEW YORK ANNUAL VOC EMISSIONS FROM AIRCRAFT, COMMERCIAL MARINE AND LOCOMOTIVE (TPY)

COUNTY	AIRCRAFT	COMMERCIAL MARINE	LOCOMOTIVE	TOTAL
ALBANY	28.31	63.05	32.58	123.94
ALLEGANY	0.00	0.00	3.44	3.44
BRONX	0.00	6.66	4.11	10.77
BROOME	0.82	0.00	12.38	13.20
CATTARAUGUS	0.00	0.00	6.74	6.74
CAYUGA	0.00	0.44	9.96	10.40
CHAUTAUQUA	0.64	1.46	60.21	62.31
CHEMUNG	0.62	0.00	5.79	6.41
CHENANGO	0.00	0.00	4.55	4.55
CLINTON	0.52	0.00	7.30	7.82
COLUMBIA	0.00	2.04	41.45	43.49
CORTLAND	0.00	0.00	1.88	1.88
DELAWARE	0.00	0.00	1.24	1.24
DUTCHESS	0.00	4.80	50.66	55.46
ERIE	29.08	22.19	92.46	143.73
ESSEX	0.00	0.00	8.94	8.94
FRANKLIN	0.61	11.14	3.52	15.27
FULTON	0.00	0.00	0.00	0.00
GENESEE	0.00	0.00	30.85	30.85
GREENE	0.00	2.04	8.82	10.86
HAMILTON	0.00	0.00	0.00	0.00
HERKIMER	0.00	0.00	20.51	20.51
JEFFERSON	0.98	11.49	24.09	36.56
KINGS	0.00	58.14	0.18	58.32
LEWIS	0.00	0.00	0.47	0.47
LIVINGSTON	0.00	0.00	4.82	4.82
MADISON	0.00	0.00	13.15	13.15
MONROE	21.53	1.73	42.16	65.42
MONTGOMERY	0.00	0.00	34.65	34.65
NASSAU	0.11	10.01	10.29	20.41
NEW YORK	0.99	31.84	2.91	35.74
NIAGARA	0.00	0.45	24.35	24.80
ONEIDA	0.00	1.29	25.98	27.27
ONONDAGA	17.78	0.00	44.23	62.01
ONTARIO	0.00	0.00	1.31	1.31
ORANGE	4.11	2.55	29.38	36.04
ORLEANS	0.00	0.44	0.11	0.55
OSWEGO	0.00	0.46	29.60	30.06
OTSEGO	0.00	0.00	9.45	9.45
PUTNAM	0.00	2.55	22.16	24.71
QUEENS	805.42	82.99	4.91	893.32
RENSSELAER	0.00	0.86	26.78	27.64
RICHMOND	0.00	82.10	0.00	82.10
ROCKLAND	0.00	0.03	11.56	11.59
ST LAWRENCE	0.94	11.14	32.84	44.92
SARATOGA	0.00	0.14	14.34	14.48
SCHENECTADY	0.00	0.00	24.84	24.84
SCHOHARIE	0.00	0.00	3.75	3.75
SCHUYLER	0.00	0.00	0.64	0.64
SENECA	0.00	0.00	0.08	0.08
STEUBEN	0.00	0.00	12.71	12.71
SUFFOLK	13.28	3.49	69.76	86.54
SULLIVAN	0.00	0.00	0.72	0.72
TIOGA	0.00	0.00	5.84	5.84
TOMPKINS	1.23	0.00	0.63	1.86
ULSTER	0.00	3.62	14.76	18.38
WARREN	0.00	0.00	0.38	0.38
WASHINGTON	0.00	0.00	9.72	9.72
WAYNE	0.00	1.02	30.36	31.38
WESTCHESTER	10.41	4.04	21.14	35.59
WYOMING	0.00	0.00	7.89	7.89
YATES	0.00	0.00	0.50	0.50
TOTAL	937.38	424.21	1020.83	2382.42

SCC	EQUIP	CLASSIFICATION	Engine Type	VOC	NOX	CO
2260001010	Motorcycles: Off-Road	Recreational Equipment	2 Stroke	4,180.42	12.22	3,621.46
2260001020	Snowmobiles	Recreational Equipment	2 Stroke	17,896.97	140.89	40,643.29
2260001030	ATVs	Recreational Equipment	2 Stroke	4,164.75	12.19	3,570.59
2260001060	Specialty Vehicles/Carts	Recreational Equipment	2 Stroke	170.99	34.76	4,536.61
2260002006	Tampers/Rammers	Construction and Mining Equipment	2 Stroke	335.96	5.13	821.28
2260002009	Plate Compactors	Construction and Mining Equipment	2 Stroke	20.35	0.08	39.58
2260002021	Paving Equipment	Construction and Mining Equipment	2 Stroke	24.24	0.09	47.52
2260002027	Signal Boards/Light Plants	Construction and Mining Equipment	2 Stroke	0.17	0.00	0.35
2260002039	Concrete/Industrial Saws	Construction and Mining Equipment	2 Stroke	894.67	12.29	2,170.24
2260002054	Crushing/Proc. Equipment	Construction and Mining Equipment	2 Stroke	4.50	0.02	9.25
2260003030	Sweepers/Scrubbers	Industrial Equipment	2 Stroke	12.63	0.06	25.99
2260003040	Other General Industrial Eqp	Industrial Equipment	2 Stroke	0.99	0.00	2.07
2260004015	Rotary Tillers < 6 HP	Lawn and Garden Equipment (Res)	2 Stroke	146.05	0.48	262.01
2260004016	Rotary Tillers < 6 HP	Lawn and Garden Equipment (Com)	2 Stroke	294.76	0.98	555.11
2260004020	Chain Saws < 6 HP	Lawn and Garden Equipment (Res)	2 Stroke	2,104.00	6.20	3,419.65
2260004021	Chain Saws < 6 HP	Lawn and Garden Equipment (Com)	2 Stroke	3,757.99	44.51	8,167.00
2260004025	Trimmers/Edgers/Brush Cutter	Lawn and Garden Equipment (Res)	2 Stroke	2,843.33	9.76	4,930.30
2260004026	Trimmers/Edgers/Brush Cutter	Lawn and Garden Equipment (Com)	2 Stroke	2,867.90	13.32	5,517.20
2260004030	Leafblowers/Vacuums	Lawn and Garden Equipment (Res)	2 Stroke	1,791.08	5.77	3,077.24
2260004031	Leafblowers/Vacuums	Lawn and Garden Equipment (Com)	2 Stroke	2,612.57	21.19	5,563.81
2260004035	Snowblowers	Lawn and Garden Equipment (Res)	2 Stroke	1,126.93	2.19	1,892.98
2260004036	Snowblowers	Lawn and Garden Equipment (Com)	2 Stroke	1,033.02	1.54	2,015.94
2260004071	Commercial Turf Equipment	Lawn and Garden Equipment (Com)	2 Stroke	1.16	0.00	2.27
2260005035	Sprayers	Agricultural Equipment	2 Stroke	13.06	0.04	25.50
2260006005	Generator Sets	Commercial Equipment	2 Stroke	295.23	1.10	562.65
2260006010	Pumps	Commercial Equipment	2 Stroke	2,020.00	8.75	3,962.07
2260006015	Air Compressors	Commercial Equipment	2 Stroke	1.04	0.00	2.16
2260006035	Hydro Power Units	Commercial Equipment	2 Stroke	11.13	0.05	22.79
2260007005	Chain Saws > 6 HP	Logging Equipment	2 Stroke	153.14	1.89	366.36
2265001010	Motorcycles: Off-Road	Recreational Equipment	4 Stroke	159.97	18.00	1,577.46
2265001030	ATVs	Recreational Equipment	4 Stroke	1,652.18	161.73	14,220.06
2265001050	Golf Carts	Recreational Equipment	4 Stroke	737.46	234.22	35,288.88
2265001060	Specialty Vehicles/Carts	Recreational Equipment	4 Stroke	183.19	33.07	3,911.47
2265002003	Pavers	Construction and Mining Equipment	4 Stroke	18.38	9.84	721.07
2265002006	Tampers/Rammers	Construction and Mining Equipment	4 Stroke	0.16	0.05	5.65
2265002009	Plate Compactors	Construction and Mining Equipment	4 Stroke	70.96	11.69	1,331.53
2265002015	Rollers	Construction and Mining Equipment	4 Stroke	29.48	16.89	1,351.69
2265002021	Paving Equipment	Construction and Mining Equipment	4 Stroke	99.68	24.56	2,607.04
2265002024	Surfacing Equipment	Construction and Mining Equipment	4 Stroke	36.43	10.22	1,182.12
2265002027	Signal Boards/Light Plants	Construction and Mining Equipment	4 Stroke	2.54	0.48	60.38
2265002030	Trenchers	Construction and Mining Equipment	4 Stroke	72.03	29.69	2,210.34
2265002033	Bore/Drill Rigs	Construction and Mining Equipment	4 Stroke	42.15	9.33	651.06
2265002039	Concrete/Industrial Saws	Construction and Mining Equipment	4 Stroke	106.01	50.48	5,457.16
2265002042	Cement & Mortar Mixers	Construction and Mining Equipment	4 Stroke	106.87	19.09	2,282.65
2265002045	Cranes	Construction and Mining Equipment	4 Stroke	3.68	4.88	91.40
2265002054	Crushing/Proc. Equipment	Construction and Mining Equipment	4 Stroke	9.51	3.30	320.54
2265002057	Rough Terrain Forklifts	Construction and Mining Equipment	4 Stroke	5.49	8.42	119.52
2265002060	Rubber Tire Loaders	Construction and Mining Equipment	4 Stroke	13.25	20.83	285.86
2265002066	Tractors/Loaders/Backhoes	Construction and Mining Equipment	4 Stroke	35.70	15.81	1,718.47
2265002072	Skid Steer Loaders	Construction and Mining Equipment	4 Stroke	24.93	22.23	760.30
2265002078	Dumpers/Tenders	Construction and Mining Equipment	4 Stroke	15.21	3.13	355.50
2265002081	Other Construction Equipment	Construction and Mining Equipment	4 Stroke	4.73	7.27	100.24
2265003010	Aerial Lifts	Industrial Equipment	4 Stroke	90.35	93.13	2,459.45
2265003020	Forklifts	Industrial Equipment	4 Stroke	256.26	393.02	5,560.27
2265003030	Sweepers/Scrubbers	Industrial Equipment	4 Stroke	79.24	70.03	2,390.20
2265003040	Other General Industrial Eqp	Industrial Equipment	4 Stroke	279.94	61.89	6,096.44
2265003050	Other Material Handling Eqp	Industrial Equipment	4 Stroke	6.44	6.18	188.27
2265003060	AC\Refrigeration	Industrial Equipment	4 Stroke	5.16	1.84	203.28
2265003070	Terminal Tractors	Industrial Equipment	4 Stroke	26.36	40.61	577.71
2265004010	Lawn mowers	Lawn and Garden Equipment (Res)	4 Stroke	5,671.01	401.66	51,099.15
2265004011	Lawn mowers	Lawn and Garden Equipment (Com)	4 Stroke	1,546.76	150.97	19,524.47
2265004015	Rotary Tillers < 6 HP	Lawn and Garden Equipment (Res)	4 Stroke	490.25	34.10	4,304.25
2265004016	Rotary Tillers < 6 HP	Lawn and Garden Equipment (Com)	4 Stroke	781.51	76.09	9,511.98
2265004025	Trimmers/Edgers/Brush Cutter	Lawn and Garden Equipment (Res)	4 Stroke	33.04	2.31	286.96
2265004026	Trimmers/Edgers/Brush Cutter	Lawn and Garden Equipment (Com)	4 Stroke	29.16	3.91	484.89
2265004030	Leafblowers/Vacuums	Lawn and Garden Equipment (Res)	4 Stroke	57.74	4.43	548.54
2265004031	Leafblowers/Vacuums	Lawn and Garden Equipment (Com)	4 Stroke	575.88	258.36	19,406.55
2265004035	Snowblowers	Lawn and Garden Equipment (Res)	4 Stroke	484.03	50.28	5,444.25
2265004036	Snowblowers	Lawn and Garden Equipment (Com)	4 Stroke	192.76	52.60	5,796.37
2265004040	Rear Engine Riding Mowers	Lawn and Garden Equipment (Res)	4 Stroke	533.29	104.21	12,017.21
2265004041	Rear Engine Riding Mowers	Lawn and Garden Equipment (Com)	4 Stroke	57.43	20.94	2,512.95
2265004046	Front Mowers	Lawn and Garden Equipment (Com)	4 Stroke	93.48	22.12	2,713.43

SCC	EQUIP	CLASSIFICATION	Engine Type	VOC	NOX	CO
2265004051	Shredders < 6 HP	Lawn and Garden Equipment (Com)	4 Stroke	94.57	8.66	1,089.96
2265004055	Lawn & Garden Tractors	Lawn and Garden Equipment (Res)	4 Stroke	6,349.90	1,429.95	159,779.97
2265004056	Lawn & Garden Tractors	Lawn and Garden Equipment (Com)	4 Stroke	773.15	292.50	33,794.81
2265004066	Chippers/Stump Grinders	Lawn and Garden Equipment (Com)	4 Stroke	111.95	93.45	4,488.03
2265004071	Commercial Turf Equipment	Lawn and Garden Equipment (Com)	4 Stroke	2,727.90	1,024.29	104,534.12
2265004075	Other Lawn & Garden Eqp.	Lawn and Garden Equipment (Res)	4 Stroke	321.70	39.02	5,215.51
2265004076	Other Lawn & Garden Eqp.	Lawn and Garden Equipment (Com)	4 Stroke	181.22	22.75	2,955.47
2265005010	2-Wheel Tractors	Agricultural Equipment	4 Stroke	1.98	0.68	89.63
2265005015	Agricultural Tractors	Agricultural Equipment	4 Stroke	6.44	7.49	180.53
2265005020	Combines	Agricultural Equipment	4 Stroke	0.05	0.06	0.92
2265005025	Balers	Agricultural Equipment	4 Stroke	4.76	5.36	82.38
2265005030	Agricultural Mowers	Agricultural Equipment	4 Stroke	2.04	0.56	69.64
2265005035	Sprayers	Agricultural Equipment	4 Stroke	29.17	8.76	596.22
2265005040	Tillers > 6 HP	Agricultural Equipment	4 Stroke	59.30	8.50	1,482.74
2265005045	Swathers	Agricultural Equipment	4 Stroke	6.97	8.49	130.51
2265005055	Other Agricultural Equipment	Agricultural Equipment	4 Stroke	11.18	10.15	270.55
2265005060	Irrigation Sets	Agricultural Equipment	4 Stroke	11.78	14.71	253.22
2265006005	Generator Sets	Commercial Equipment	4 Stroke	6,029.24	1,494.68	160,160.45
2265006010	Pumps	Commercial Equipment	4 Stroke	1,797.43	452.14	37,036.20
2265006015	Air Compressors	Commercial Equipment	4 Stroke	717.79	311.36	18,390.92
2265006025	Welders	Commercial Equipment	4 Stroke	1,176.21	562.25	46,190.03
2265006030	Pressure Washers	Commercial Equipment	4 Stroke	3,179.69	659.07	70,152.96
2265006035	Hydro Power Units	Commercial Equipment	4 Stroke	108.66	33.03	3,562.03
2265007010	Shredders > 6 HP	Logging Equipment	4 Stroke	30.06	6.37	787.26
2265007015	Forest Eqp - Feller/Bunch/Skidder	Logging Equipment	4 Stroke	0.49	0.07	9.33
2265008005	Airport Ground Support Equipment	Airport Equipment	4 Stroke	15.65	14.83	365.12
2265010010	Other Oil Field Equipment	Industrial Equipment	4 Stroke	7.03	2.83	411.99
2267001060	Specialty Vehicle Carts	Recreational Equipment	LPG	2.77	10.05	40.20
2267002003	Pavers	Construction and Mining Equipment	LPG	1.29	4.70	18.97
2267002015	Rollers	Construction and Mining Equipment	LPG	2.20	7.96	32.41
2267002021	Paving Equipment	Construction and Mining Equipment	LPG	0.34	1.23	4.93
2267002024	Surfacing Equipment	Construction and Mining Equipment	LPG	0.23	0.83	3.36
2267002030	Trenchers	Construction and Mining Equipment	LPG	3.94	14.39	58.02
2267002033	Bore/Drill Rigs	Construction and Mining Equipment	LPG	1.28	4.73	18.71
2267002039	Concrete/Industrial Saws	Construction and Mining Equipment	LPG	3.81	13.70	56.49
2267002045	Cranes	Construction and Mining Equipment	LPG	1.38	5.06	20.22
2267002054	Crushing/Proc. Equipment	Construction and Mining Equipment	LPG	0.23	0.84	3.35
2267002057	Rough Terrain Forklifts	Construction and Mining Equipment	LPG	2.50	9.15	36.77
2267002060	Rubber Tire Loaders	Construction and Mining Equipment	LPG	6.25	22.76	92.13
2267002066	Tractors/Loaders/Backhoes	Construction and Mining Equipment	LPG	0.66	2.39	9.70
2267002072	Skid Steer Loaders	Construction and Mining Equipment	LPG	5.12	18.81	75.31
2267002081	Other Construction Equipment	Construction and Mining Equipment	LPG	2.05	7.57	30.15
2267003010	Aerial Lifts	Industrial Equipment	LPG	30.83	113.22	449.50
2267003020	Forklifts	Industrial Equipment	LPG	2,941.12	10,672.38	43,061.82
2267003030	Sweepers/Scrubbers	Industrial Equipment	LPG	22.66	81.48	332.85
2267003040	Other General Industrial Equipm	Industrial Equipment	LPG	6.90	24.96	101.11
2267003050	Other Material Handling Equipment	Industrial Equipment	LPG	1.67	6.13	24.36
2267003070	Terminal Tractors	Industrial Equipment	LPG	13.85	49.66	203.50
2267004066	Chippers/Stump Grinders	Lawn and Garden Equipment (Com)	LPG	19.43	70.94	287.43
2267005055	Other Agricultural Equipment	Agricultural Equipment	LPG	0.04	0.14	0.55
2267005060	Irrigation Sets	Agricultural Equipment	LPG	0.04	0.13	0.52
2267006005	Generator Sets	Commercial Equipment	LPG	130.01	637.24	1,698.23
2267006010	Pumps	Commercial Equipment	LPG	30.68	148.50	402.53
2267006015	Air Compressors	Commercial Equipment	LPG	37.28	178.91	490.49
2267006025	Welders	Commercial Equipment	LPG	60.36	223.12	885.32
2267006030	Pressure Washers	Commercial Equipment	LPG	0.80	2.98	11.65
2267006035	Hydro Power Units	Commercial Equipment	LPG	0.60	2.87	7.91
2267008005	Airport Ground Support Equipment	Airport Equipment	LPG	4.44	16.16	65.03
2268002081	Other Construction Equipment	Construction and Mining Equipment	CNG	0.00	0.30	1.19
2268003020	Forklifts	Industrial Equipment	CNG	12.64	777.01	3,140.26
2268003030	Sweepers/Scrubbers	Industrial Equipment	CNG	0.01	0.92	3.71
2268003040	Other General Industrial Equipment	Industrial Equipment	CNG	0.01	0.61	2.47
2268003060	AC\Refrigeration	Industrial Equipment	CNG	0.04	2.39	9.71
2268003070	Terminal Tractors	Industrial Equipment	CNG	0.06	3.61	14.80
2268005055	Other Agricultural Equipment	Agricultural Equipment	CNG	0.00	0.17	0.75
2268005060	Irrigation Sets	Agricultural Equipment	CNG	0.23	13.44	57.69
2268006005	Generator Sets	Commercial Equipment	CNG	2.54	208.92	564.06
2268006010	Pumps	Commercial Equipment	CNG	0.13	10.63	29.00
2268006015	Air Compressors	Commercial Equipment	CNG	0.18	14.98	41.35
2268006020	Gas Compressors	Commercial Equipment	CNG	9.63	551.60	2,467.98
2268006035	Hydro Power Units	Commercial Equipment	CNG	0.00	0.15	0.56
2268010010	Other Oil Field Equipment	Industrial Equipment	CNG	0.18	10.61	45.09

SCC	EQUIP	CLASSIFICATION	Engine Type	VOC	NOX	CO
2270001060	Speciality Vehicle Carts	Recreational Equipment	Diesel	33.81	103.92	123.63
2270002003	Pavers	Construction and Mining Equipment	Diesel	36.77	379.48	192.61
2270002006	Tampers/Rammers	Construction and Mining Equipment	Diesel	0.14	0.83	0.49
2270002009	Plate Compactors	Construction and Mining Equipment	Diesel	2.28	13.01	7.78
2270002015	Rollers	Construction and Mining Equipment	Diesel	104.23	941.64	554.27
2270002018	Scrapers	Construction and Mining Equipment	Diesel	76.50	1,090.40	500.96
2270002021	Paving Equipment	Construction and Mining Equipment	Diesel	6.71	59.87	35.87
2270002024	Surfacing Equipment	Construction and Mining Equipment	Diesel	4.64	40.44	27.13
2270002027	Signal Boards/Light Plants	Construction and Mining Equipment	Diesel	22.53	113.69	70.80
2270002030	Trenchers	Construction and Mining Equipment	Diesel	62.05	437.92	332.68
2270002033	Bore/Drill Rigs	Construction and Mining Equipment	Diesel	48.64	519.79	199.79
2270002036	Excavators	Construction and Mining Equipment	Diesel	301.65	3,762.47	1,537.00
2270002039	Concrete/Industrial Saws	Construction and Mining Equipment	Diesel	5.00	29.47	25.74
2270002042	Cement & Mortar Mixers	Construction and Mining Equipment	Diesel	2.34	19.57	8.84
2270002045	Cranes	Construction and Mining Equipment	Diesel	78.61	1,024.93	280.70
2270002048	Graders	Construction and Mining Equipment	Diesel	75.12	956.12	362.10
2270002051	Off-highway Trucks	Construction and Mining Equipment	Diesel	260.12	3,550.46	1,571.32
2270002054	Crushing/Proc. Equipment	Construction and Mining Equipment	Diesel	16.03	180.02	65.76
2270002057	Rough Terrain Forklifts	Construction and Mining Equipment	Diesel	149.86	1,203.05	827.58
2270002060	Rubber Tire Loaders	Construction and Mining Equipment	Diesel	375.05	4,608.14	2,128.57
2270002066	Tractors/Loaders/Backhoes	Construction and Mining Equipment	Diesel	647.46	2,799.72	2,600.12
2270002069	Crawler Tractor/Dozers	Construction and Mining Equipment	Diesel	325.87	4,048.96	1,821.46
2270002072	Skid Steer Loaders	Construction and Mining Equipment	Diesel	625.10	1,795.10	2,273.82
2270002075	Off-Highway Tractors	Construction and Mining Equipment	Diesel	44.02	487.95	275.56
2270002078	Dumpers/Tenders	Construction and Mining Equipment	Diesel	1.90	5.77	6.49
2270002081	Other Construction Equipment	Construction and Mining Equipment	Diesel	41.15	474.67	264.48
2270003010	Aerial Lifts	Industrial Equipment	Diesel	35.09	117.74	119.37
2270003020	Forklifts	Industrial Equipment	Diesel	123.86	1,242.40	724.91
2270003030	Sweepers/Scrubbers	Industrial Equipment	Diesel	64.06	658.70	223.07
2270003040	Other General Industrial Eqp	Industrial Equipment	Diesel	69.34	750.17	241.93
2270003050	Other Material Handling Eqp	Industrial Equipment	Diesel	6.53	34.71	22.18
2270003060	AC\Refrigeration	Industrial Equipment	Diesel	370.18	2,712.73	1,402.74
2270003070	Terminal Tractors	Industrial Equipment	Diesel	67.86	850.03	306.57
2270004031	Leafblowers/Vacuums	Lawn and Garden Equipment (Com)	Diesel	0.01	0.05	0.03
2270004036	Snowblowers	Lawn and Garden Equipment (Com)	Diesel	1.36	14.12	5.51
2270004046	Front Mowers	Lawn and Garden Equipment (Com)	Diesel	63.80	323.21	203.08
2270004056	Lawn & Garden Tractors	Lawn and Garden Equipment (Com)	Diesel	14.13	71.33	44.38
2270004066	Chippers/Stump Grinders	Lawn and Garden Equipment (Com)	Diesel	54.70	483.02	216.50
2270004071	Commercial Turf Equipment	Lawn and Garden Equipment (Com)	Diesel	6.59	48.67	22.81
2270004076	Other Lawn & Garden Eqp.	Lawn and Garden Equipment (Com)	Diesel	0.20	1.25	0.72
2270005010	2-Wheel Tractors	Agricultural Equipment	Diesel	0.02	0.13	0.13
2270005015	Agricultural Tractors	Agricultural Equipment	Diesel	709.90	5,588.37	3,386.78
2270005020	Combines	Agricultural Equipment	Diesel	51.70	566.60	210.94
2270005025	Balers	Agricultural Equipment	Diesel	0.52	2.42	1.76
2270005030	Agricultural Mowers	Agricultural Equipment	Diesel	0.08	0.52	0.41
2270005035	Sprayers	Agricultural Equipment	Diesel	7.54	40.14	23.75
2270005040	Tillers > 6 HP	Agricultural Equipment	Diesel	0.01	0.07	0.05
2270005045	Swathers	Agricultural Equipment	Diesel	4.65	39.67	20.29
2270005055	Other Agricultural Equipment	Agricultural Equipment	Diesel	15.83	116.80	67.31
2270005060	Irrigation Sets	Agricultural Equipment	Diesel	9.74	73.19	30.13
2270006005	Generator Sets	Commercial Equipment	Diesel	423.09	2,774.72	1,486.38
2270006010	Pumps	Commercial Equipment	Diesel	93.12	661.06	345.95
2270006015	Air Compressors	Commercial Equipment	Diesel	209.73	1,667.44	788.59
2270006020	Gas Compressors	Commercial Equipment	Diesel	0.06	0.51	0.23
2270006025	Welders	Commercial Equipment	Diesel	319.27	807.33	1,170.16
2270006030	Pressure Washers	Commercial Equipment	Diesel	13.36	92.82	44.97
2270006035	Hydro Power Units	Commercial Equipment	Diesel	9.76	72.00	35.59
2270007010	Shredders > 6 HP	Logging Equipment	Diesel	0.00	0.00	0.00
2270007015	Forest Eqp - Feller/Bunch/Skidder	Logging Equipment	Diesel	24.29	323.82	111.48
2270008005	Airport Ground Support Equipment	Airport Equipment	Diesel	53.04	622.95	288.72
2270009010	Other Underground Mining Equipment	Construction and Mining Equipment	Diesel	0.00	0.00	0.00
2270010010	Other Oil Field Equipment	Industrial Equipment	Diesel	2.35	28.74	9.72
2282005010	Outboard	Pleasure Craft	2 Stroke	41,019.29	873.91	69,948.20
2282005015	Personal Water Craft	Pleasure Craft	2 Stroke	14,301.71	220.35	25,299.84
2282010005	Inboard/Sterndrive	Pleasure Craft	4 Stroke	3,300.45	2,066.29	42,792.72
2282020005	Inboard/Sterndrive	Pleasure Craft	Diesel	84.75	2,192.70	346.83
2282020010	Outboards	Pleasure Craft	Diesel	1.79	6.79	4.90
2285002015	Railway Maintenance	Railroad Equipment	Diesel	9.10	46.76	38.62
2285004015	Railway Maintenance	Railroad Equipment	4 Stroke	3.07	0.99	101.61
2285006015	Railway Maintenance	Railroad Equipment	LPG	0.03	0.11	0.45
		Statewide Total		155,509.35	78,202.50	1,196,738.82

2002 NYMA COUNTY LEVEL ANNUAL NOx, VOC AND CO EMISSIONS FROM ALL SECTORS (TPY)

2002 NYMA ANNUAL NOx EMISSIONS FROM ALL SECTORS (TPY)								
COUNTY	FIPS	Point	EGU	Area	Nonroad	On-road	Biogenic	Total
BRONX	36005	994	0	3,710	2,643	7,134	25	14,506
KINGS	36047	868	2,527	7,560	7,617	9,875	15	28,462
NASSAU	36059	424	2,410	6,458	4,479	21,968	81	35,821
NEW YORK	36061	2,180	3,549	15,971	11,044	8,733	16	41,492
QUEENS	36081	1,428	9,178	6,888	11,357	15,476	20	44,348
RICHMOND	36085	136	591	1,282	3,771	4,492	47	10,320
ROCKLAND	36087	465	5,526	1,299	1,352	5,686	26	14,355
SUFFOLK	36103	1,368	9,672	7,013	9,522	33,046	368	60,990
WESTCHESTER	36119	1,348	0	4,786	4,198	18,229	35	28,596
NYMA		**9,211**	**33,454**	**54,968**	**55,984**	**124,640**	**633**	**278,890**

2002 NYMA ANNUAL VOC EMISSIONS FROM ALL SECTORS (TPY)								
COUNTY	FIPS	Point	EGU	AREA	Non-road	On-road	Biogenic	Total
BRONX	36005	77	0	13,479	2,833	4,702	657	21,747
KINGS	36047	387	33	26,169	6,038	6,652	309	39,588
NASSAU	36059	716	62	19,705	7,354	14,952	2,859	45,648
NEW YORK	36061	159	91	23,441	9,194	7,690	473	41,048
QUEENS	36081	290	264	25,061	6,350	10,396	543	42,904
RICHMOND	36085	209	32	7,551	1,748	2,977	1,292	13,809
ROCKLAND	36087	44	65	3,835	2,088	3,309	4,006	13,347
SUFFOLK	36103	459	272	24,839	18,492	20,738	12,886	77,686
WESTCHESTER	36119	38	0	13,960	6,539	10,082	5,347	35,965
NYMA		**2,379**	**819**	**158,039**	**60,635**	**81,499**	**28,372**	**331,743**

2002 NYMA ANNUAL CO EMISSIONS FROM ALL SECTORS (TPY)								
COUNTY	FIPS	Point	EGU	Area	Nonroad	On-road	Biogenic	Total
BRONX	36005	269	0	1,486	30,836	62,986	100	95,677
KINGS	36047	426	366	3,078	74,634	84,765	60	163,329
NASSAU	36059	344	446	2,354	89,391	194,701	408	287,643
NEW YORK	36061	808	858	5,351	146,416	77,353	76	230,862
QUEENS	36081	579	2,538	2,467	72,839	133,330	105	211,859
RICHMOND	36085	137	404	528	17,588	39,155	173	57,984
ROCKLAND	36087	230	490	815	19,523	52,063	300	73,421
SUFFOLK	36103	494	1,638	5,310	145,045	300,650	1,328	454,466
WESTCHESTER	36119	255	0	2,445	71,468	161,917	549	236,633
NYMA		**3,542**	**6,741**	**23,834**	**667,739**	**1,106,919**	**3,098**	**1,811,874**

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