

# **Evaluating Ozone Control Programs in the Eastern United States: Focus on the NO<sub>x</sub> Budget Trading Program, 2004**

State and Local Information for EPA Region 2

New Jersey

New York

U.S. Environmental Protection Agency

Office of Air and Radiation

Office of Air Quality Planning and Standards

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## New Jersey

### Emissions

State total emissions of NO<sub>x</sub> and VOCs have decreased from 1997 to 2004.

#### **Ozone Season (May-September) Emission Totals by Major Source Categories (tons)**

Source Category	1997	2002	2004
<b>NO<sub>x</sub> Emissions</b>			
Power Industry	14,384	17,118	10,904
Mobile On-Road	86,092	72,447	66,090
Other	61,213	47,357	42,728
<b>VOC Emissions</b>			
Mobile On-Road	58,520	44,680	39,399
Solvent Usage	66,274	40,201	39,991
Other	84,269	55,418	52,553

The emissions data used in the report are measured or estimated values from EPA's National Emissions Inventory (NEI). Starting in 1997, the NEI incorporated power industry data measured by the Continuous Emissions Monitoring System (CEMS). For 2002, the preliminary version of the NEI was used, which includes the 2002 CEMS data, but does not include 2002 data for other sources submitted by state, local, and tribal air agencies.

EPA used CEMS data for the power industry for 2003 and 2004. Emissions for other sources for that period were estimated by interpolating between the 2002 preliminary NEI data and a projected 2010 emission inventory developed to support the Clean Air Interstate Rule.

For additional information use the following online resources:

National Emissions Inventory (NEI): [www.epa.gov/ttn/chief/net](http://www.epa.gov/ttn/chief/net) .

Emissions data for the power industry: <http://cfpub.epa.gov/gdm> .

Information on mobile sources: [www.epa.gov/otaq](http://www.epa.gov/otaq) .

## Ozone

On average, ozone has declined between 1997 and 2004. These improvements in ozone are in response to both state and regional reductions in NO<sub>x</sub> and VOC emissions. The level of ozone improvement varies from site to site.

### **Highest Fourth Daily Maximum 8-hour Ozone Concentration by Metropolitan Statistical Area, 1997, 2002 and 2004**

Metropolitan Statistical Area	1997 O <sub>3</sub> 8-hr (ppm)	2002 O <sub>3</sub> 8-hr (ppm)	2004 O <sub>3</sub> 8-hr (ppm)
Atlantic--Cape May, NJ PMSA	0.11	0.09	0.08
Bergen--Passaic, NJ PMSA	0.1	0.1	0.08
Jersey City, NJ PMSA	0.11	0.09	0.08
Middlesex--Somerset--Hunterdon, NJ PMSA	0.11	0.1	0.09
Monmouth--Ocean, NJ PMSA	0.11	0.13	0.09
Newark, NJ PMSA	0.1	0.11	0.08
Philadelphia, PA--NJ PMSA	0.12	0.11	0.09
Trenton, NJ PMSA	0.11	0.11	0.08
Vineland--Millville--Bridgeton, NJ PMSA	0.1	0.1	0.08
Level of the NAAQS is .08 ppm. Units are parts per million (ppm).			
Notes:			
<ul style="list-style-type: none"><li>• Data from exceptional events are not included.</li><li>• The reader is cautioned that this summary is not adequate in itself to numerically rank MSAs according to their air quality.</li><li>• The monitoring data represent the quality of air in the vicinity of the monitoring site and, for some pollutants, may not necessarily represent urban-wide air quality.</li></ul>			

## New York

### Emissions

State total emissions of NO<sub>x</sub> and VOCs have decreased from 1997 to 2004.

**Ozone Season (May-September) Emission Totals by Major Source Categories (tons)**

Source Category	1997	2002	2004
<b>NO<sub>x</sub> Emissions</b>			
Power Industry	43,333	38,198	34,147
Mobile On-Road	172,429	142,484	130,778
Other	125,976	112,492	99,260
<b>VOC Emissions</b>			
Mobile On-Road	121,539	85,849	76,829
Solvent Usage	127,823	90,609	90,257
Other	122,422	110,260	105,870

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### **Highest Fourth Daily Maximum 8-hour Ozone Concentration by Metropolitan Statistical Area, 1997, 2002 and 2004**

Metropolitan Statistical Area	1997 O <sub>3</sub> 8-hr (ppm)	2002 O <sub>3</sub> 8-hr (ppm)	2004 O <sub>3</sub> 8-hr (ppm)
Dutchess County, NY PMSA	0.09	0.11	0.08
Nassau--Suffolk, NY PMSA	0.11	0.11	0.08
New York, NY PMSA	0.12	0.1	0.08
Newburgh, NY--PA PMSA	0.09	0.09	0.08
Albany--Schenectady--Troy, NY MSA	0.08	0.1	0.08
Buffalo--Niagara Falls, NY MSA	0.08	0.11	0.08
Elmira, NY MSA	0.07	0.09	0.07
Jamestown, NY MSA	0.09	0.1	0.09
Rochester, NY MSA	0.09	0.1	0.07
Syracuse, NY MSA	0.08	0.09	0.08
Utica--Rome, NY MSA	0.07	0.09	0.07
Level of the NAAQS is .08 ppm. Units are parts per million (ppm).			
Notes:			
<ul style="list-style-type: none"><li>• Data from exceptional events are not included.</li><li>• The reader is cautioned that this summary is not adequate in itself to numerically rank MSAs according to their air quality.</li><li>• The monitoring data represent the quality of air in the vicinity of the monitoring site and, for some pollutants, may not necessarily represent urban-wide air quality.</li></ul>			

Trends for 1997-2004 with 95 percent confidence limits are presented below. Ozone season averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in meteorology.

### Seasonal Average 8-hour Ozone Trends

