



**Department of
Environmental
Conservation**

NEW YORK STATE AMBIENT AIR QUALITY REPORT FOR 2018

New York State Ambient Air Monitoring Program

**BUREAU OF AIR QUALITY SURVEILLANCE
DIVISION OF AIR RESOURCES
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

625 Broadway Albany, NY 12233-3256
P: (518) 402-8508 | DAR.web@dec.ny.gov

Summary and background information

This technical document is designed to provide summary information about the ambient air quality in New York State as it relates to the EPA's National Ambient Air Quality Standards (NAAQS). The data here are provided in the same format as the EPA NAAQS, and as such may include information at air quality monitoring stations that have since been closed. In the footer of each page there is a key to assist in the interpretation of the data. Site numbers are the NYS internal site identifiers and are different from the AQS site numbers.

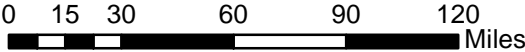
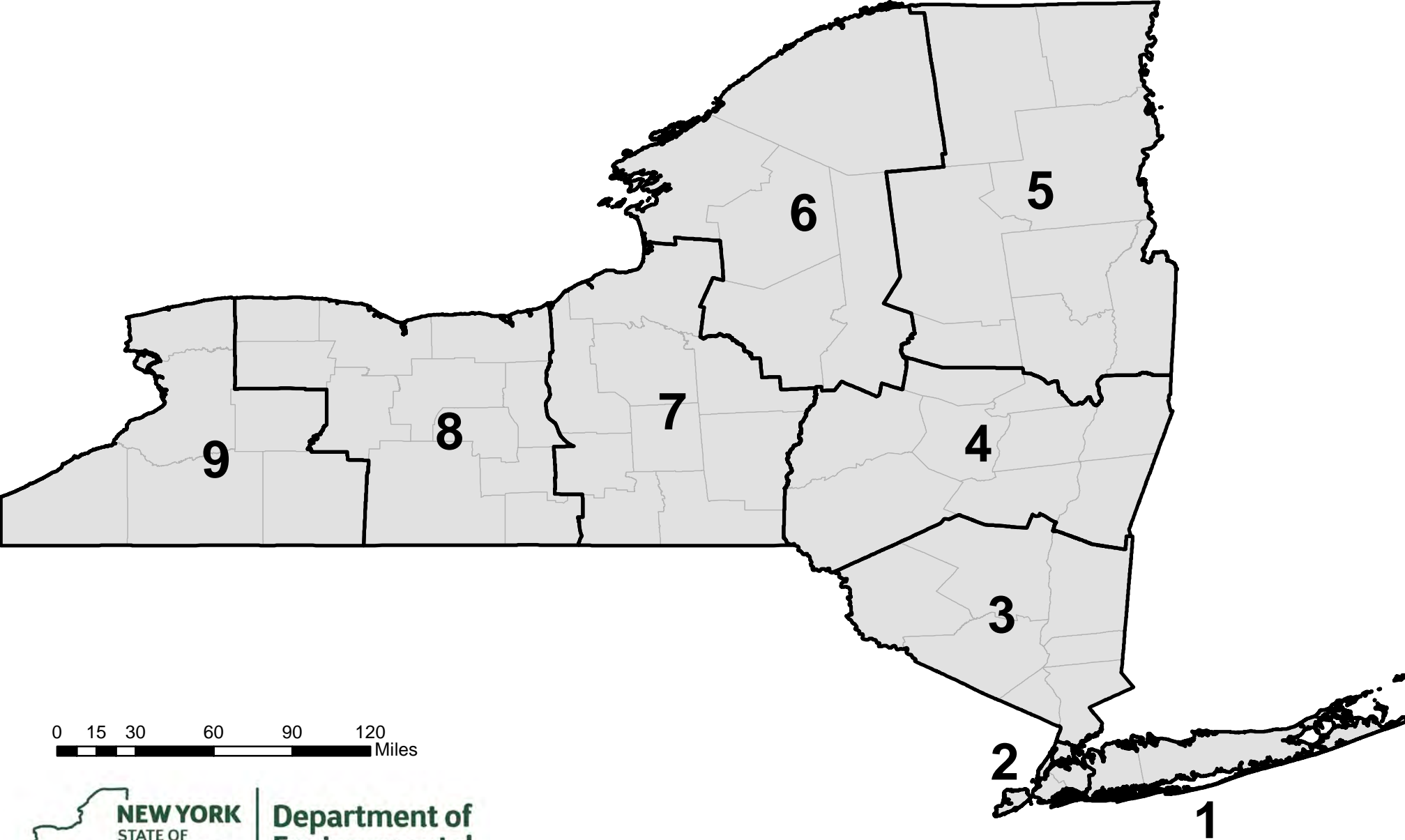
This document does not cover all pollutants measured, only those that have a NAAQS criteria. More information about the other programs for which the NYSDEC collects data, and more detailed information about the instrumentation currently available at individual site can be found in the [Monitoring Network Plan](#).

For more information about the current and historic NAAQS, standards for regulatory action, health effects of individual pollutants, and more please go to the [EPA's Criteria Air Pollutants webpage](#).

Full datasets are available for download and review from the [EPA Air Data webpage](#).

For current Air Quality Index (AQI) Forecast and Current Observations for New York State, please go to the [NYSDEC's AQI webpage](#).

New York State Department of Environmental Conservation Administrative Regions



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National Ambient Air Quality Standards

Pollutant		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide		primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead		primary and secondary	Rolling 3-month average	0.15 µg/m ³ (1)	Not to be exceeded
Nitrogen Dioxide		primary	1-hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	Annual	53 ppb (2)	Annual Mean
Ozone		primary and secondary	8-hour	0.070 ppm (3)	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particle Pollution	PM _{2.5}	primary	Annual	12 µg/m ³	annual mean, averaged over 3 years
		secondary	Annual	15 µg/m ³	annual mean, averaged over 3 years
		primary and secondary	24-hour	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	primary and secondary	24-hour	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide		primary	1-hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

(Annual Means in parentheses are based on less than 75% available data)
 *Federal Ambient Air Quality Standard

[Date of Occurrence, Hour]
 + Denotes a contravention of Federal AAQS

Footnotes

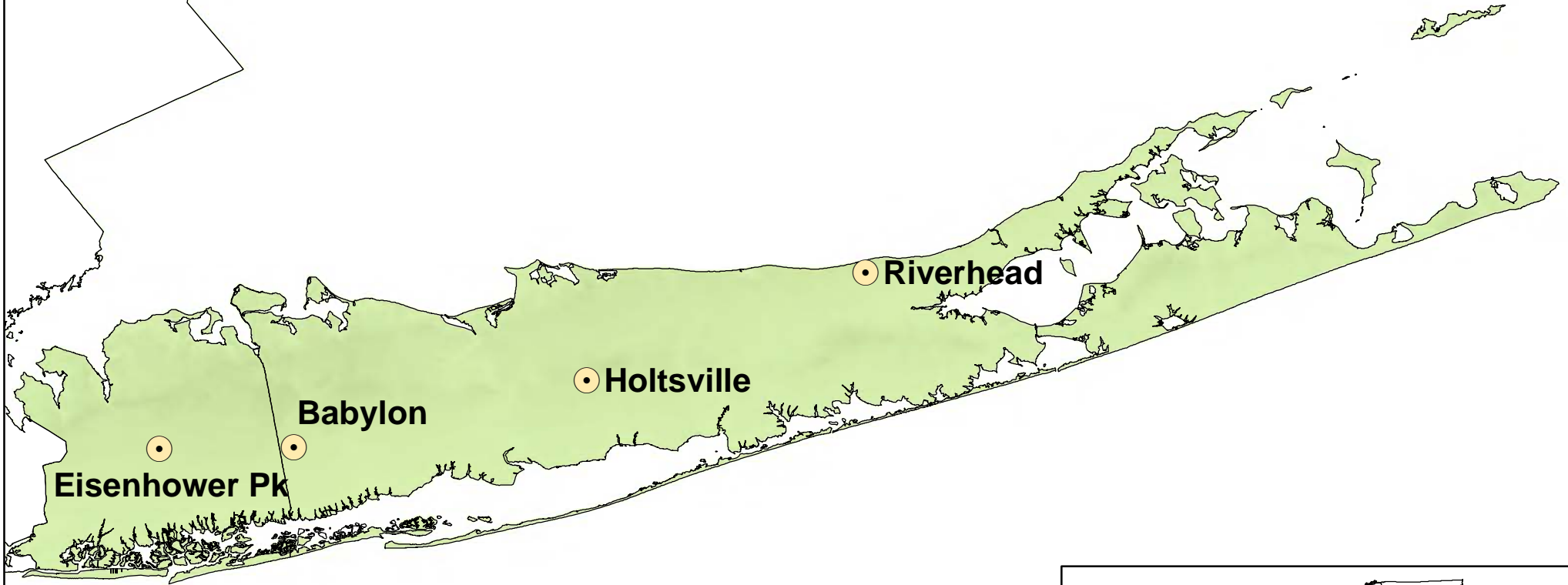
⁽¹⁾ Final rule signed October 15, 2008. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 year, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

⁽²⁾ The official level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.

⁽³⁾ Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O_3 standards additionally remain in effect in some areas. Revocation of the previous (2008) O_3 standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.

⁽⁴⁾ The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual/ 30 ppb) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which implementation plans providing for attainment of the current (2010) standard have not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of a SIP call under the previous SO_2 standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the require NAAQS.

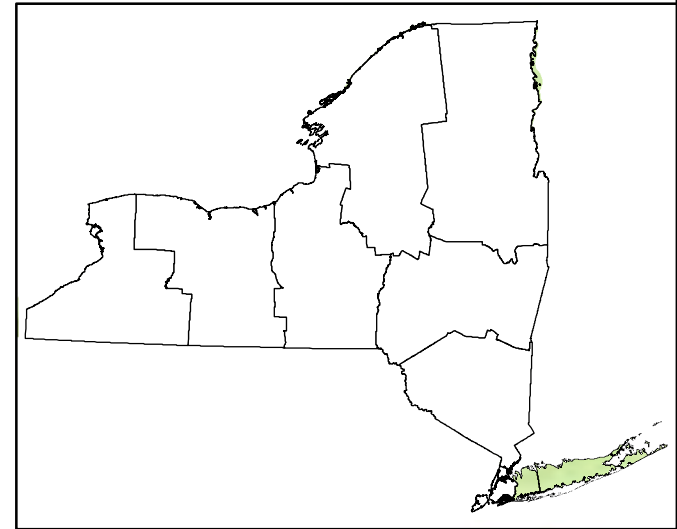
Region 1



0 4.75 9.5 19 28.5 38 Miles



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SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 2008 through 2018

Annual Arithmetic Mean (ppb) - Primary Standard
(12-month average not to exceed 30 PPB* ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Eisenhower Park	2950-10	4.72	3.45	2.09	1.97	(1.15)	(1.12)	1.35	1.03	0.40	0.23	0.23
Holtsville	5151-10	4.82	3.81	3.95	2.22	(1.03)	(1.20)	0.84	0.77	0.39	0.16	0.12

Holtsville site (5151-10) was operated by Suffolk County Health Dept. until 9/30/10, when NYSDEC commenced monitoring.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
Station	Site No.	Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Eisenhower Park	2950-10	8,639	99	6.5	6.5	6	6.33
Holtsville	5151-10	8,410	96	2.5	3.7	7.1	4.43

(Annual Means in parentheses are based on less than 75% available data)

*Federal Ambient Air Quality Standard

[Date of Occurrence, Hour]

+ Denotes a contravention of Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years' annual means not to exceed 12 µg/m³ *;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1 st	2 nd	3 rd	4 th	2018	2017	2016	3-yr Avg.
Eisenhower Park (C)	2950-10	345	31.6 28-Aug	23.3 16-Aug	23.2 17-Aug	17.3	14.6	15.6	15.8	7.5	4.9	6.5	6.0	6.3	6.5	6.4	6.4
Babylon (F)	5150-02	116	20.5 1-Jun	18.4 1-Jul	16.7 6-Aug	16.7	14.3	14.9	15.3	6.5	6.9	8.2	5.7	6.8	6.6	6.5	6.6
Holtsville (C)	5151-10	339	27.5 28-Aug	24.4 1-Jul	20.79 16-Aug	17.8	14.4	14.3	15.5	7.3	4.7	7.0	7.3	6.7	6.4	6.1	6.4

(F) = Federal Reference Method

(C) = Continuous, used for AQI calculations. Values based on 24-hour averages of 1-hour values

(Annual Means in parentheses are based on less than 75% available data)

*Federal Ambient Air Quality Standard

[Date of Occurrence, Hour]

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OZONE - Continuous UV Light Absorption

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
Babylon	5150-02	5,466	93	4	0.089 2-Jul	0.086 10-Jul	0.077 1-Jul	0.077 6-Aug	0.073 21-Jun	0.077 1-Jul	0.074 6-Aug	0.074+
Holtsville	5151-10	5,712	97	4	0.083 2-Jul	0.080 2-Jul	0.072 2-Jul	0.076 2-Jul	0.073 21-Jun	0.071 2-Jul	0.076 2-Jul	0.073+
Riverhead	5155-01	5,748	98	5	0.089 2-Jul	0.088 2-Jul	0.082 2-Jul	0.072 2-Jul	0.078 15-Jul	0.076 2-Jul	0.072 2-Jul	0.075+

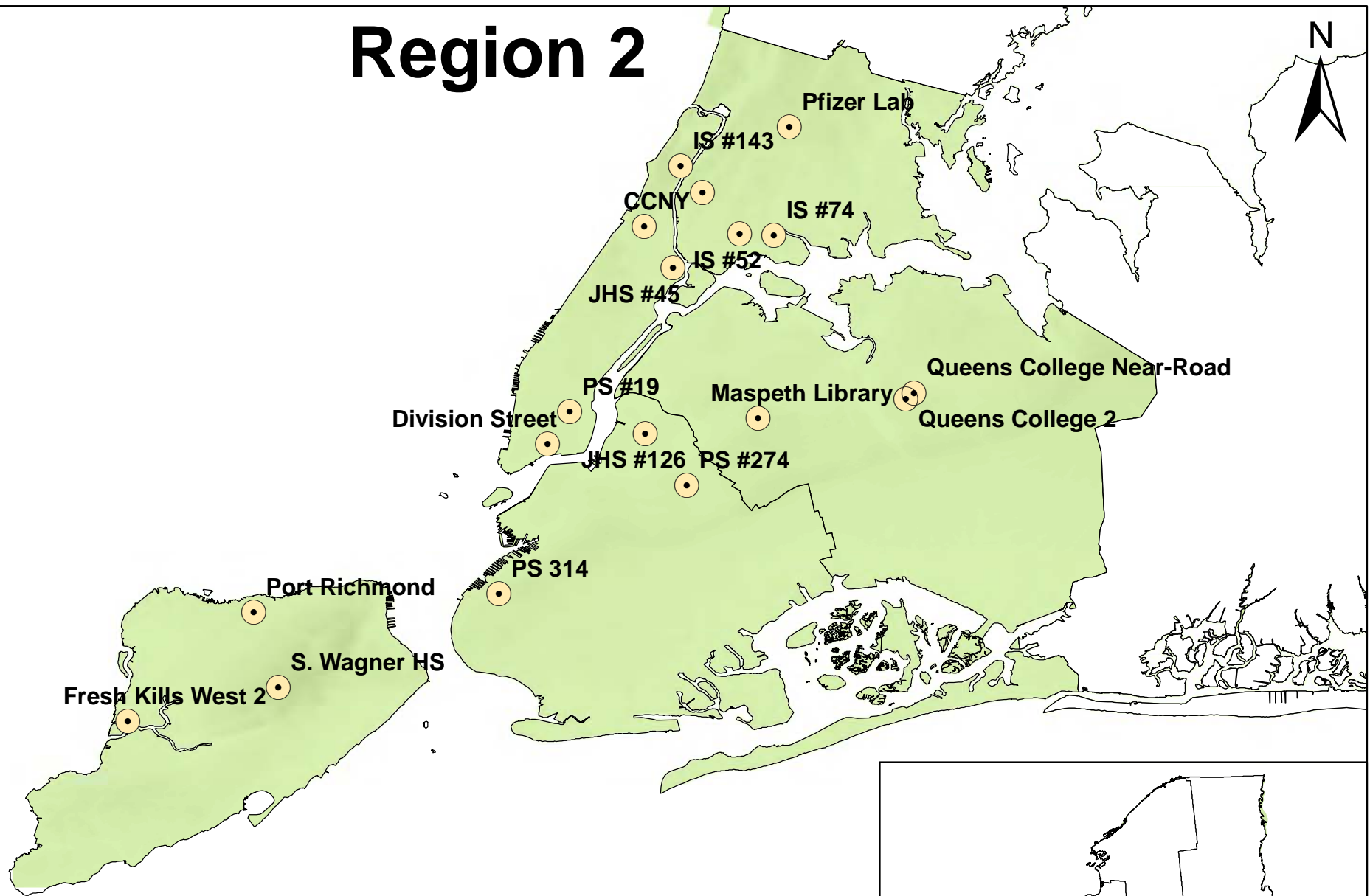
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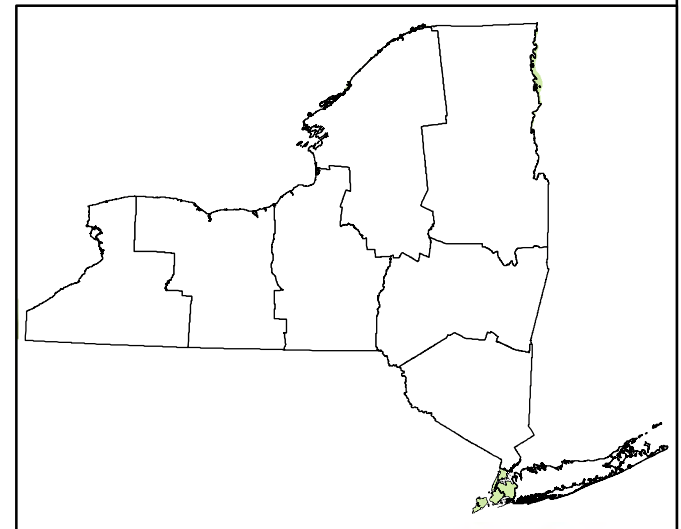
Region 2



0 1.75 3.5 7 10.5 14 Miles



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SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 2008 through 2018
 Annual Arithmetic Mean (ppb) - Primary Standard
 (12-month average not to exceed 30 PPB ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
PS 59	7093-10	(10.81)	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Botanical Garden (Harding Lab/Pfizer Lab)	7094-06 / 7094-10	5.96	5.32	4.83	4.65	3.28	2.44	1.9	1.29	0.84	0.59	0.63
IS 52	7094-07	6.58	6.33	(6.22)	xxx	(2.1)	1.22	1.36	1.83	0.67	0.54	0.57
Queens College 2	7096-15	4.02	3.41	2.83	2.65	1.79	1.22	1.11	0.75	0.57	0.52	0.41

Sampling was suspended at 7094-07 on 06/24/10 due to building construction and resumed on 08/10/13.

Sampling was suspended at 7093-10 in 2009

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
		Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Botanical Garden (Harding Lab/Pfizer Lab)	7094-10	8,592	98	6.2	5.2	7.3	6.23
IS 52	7094-07	8,520	97	7.5	4.7	6.5	6.23
Queens College 2	7096-15	8,589	98	5.5	4.6	6.9	5.67

(Annual Means in parentheses are based on less than 75% available data)

*Federal Ambient Air Quality Standard

[Date of Occurrence, Hour]

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INHALABLE PARTICULATES (PM₁₀)

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		24-Hour Concentrations - µg/m ³							# of Days > 150 µg/m ³ - Not to exceed an expected avg of one per year during the last 3 years *						
			Maximum		2nd Max.		3rd Max.		2016		2017		2018		
Station	Site No.	Total Obs.	Value	Date	Value	Date	Value	Date	Mea	Est	Mea	Est	Mea	Est	Exp. Avg.
Division Street	7093-24	61	40	14-Apr	38	6-Aug	33	1-Jul	0	0	0	0	0	0	0
IS 52	7094-07	57	41	14-Apr	28	1-Jul	28	6-Aug	0	0	0	0	0	0	0
Queens College 2	7096-15	55	38	14-Apr	31	6-Aug	28	1-Jul	0	0	0	0	0	0	0

(Annual Means in parentheses are based on less than 75% available data)

*Federal Ambient Air Quality Standard

[Date of Occurrence, Hour]

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(Manhattan Sites)

INHALABLE PARTICULATES (PM_{2.5})**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

(Average of last 3 years' annual means not to exceed 12 µg/m³ *;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1 st	2 nd	3 rd	4 th	2018	2017	2016	3-yr Avg.
JHS 45 (F)	7093-08	121	25.0 4-Jul	23.0 1-Jan	19.7 31-Jan	19.7	16.5	16.2	17.5	8.6	7.7	9.6	6.3	8.1	7.4	7.2	7.6
IS 143 (C)	7093-15	352	24.2 2-Jul	22.8 11-Jan	21.5 28-Aug	19.3	17.1	22.0	19.5	10.3	6.6	7.3	7.13	7.8	8.5	8.4	8.2
PS 19 (F)	7093-21	122	40.4 6-Mar	29.5 5-May	27 2-Mar	27.0	16.5	19.4	21.0	12.7	10.1	10.5	8.3	10.4	9.1	8.9	9.5
PS 19 (C)	7093-21	357	32.2 2-Jul	27.7 16-Aug	23.7 22-Jan	21.1	20.0	18.4	19.8	10.7	7.7	9.2	9.1	8.8	8.8	8.0	8.5
Division St (F)	7093-24	119	22.1 9-Nov	22 6-Aug	21.6 1-Jul	21.6	17.9	18.0	19.2	9.6	9.3	11.0	8.3	9.6	8.8	8.8	9.0
Division St (C)	7093-24	322	27.9 28-Aug	22.6 2-Jul	21.4 16-Aug	18.3	15.8	18.9	17.7	8.2	6.0	7.4	5.6	6.8	7.1	7.8	7.2
CCNY (C)	7093-25	343	28.70 28-Aug	25.43 2-Jul	23.25 3-Jul	18.9	15.3	16.9	17.0	8.7	6.8	8.2	8.1	8.0	7.7	8.1	7.9

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[Date of Occurrence, Hour]

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INHALABLE PARTICULATES (PM_{2.5})

(Bronx & Brooklyn Sites)

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years' annual means not to exceed 12 µg/m³ *;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1st	2nd	3rd	4th	2018	2017	2016	3-yr Avg.
Morrisania (C)	7094-05	358	29.5 28-Aug	26.2 11-Jan	25.0 2-Jul	18.7	14.0	17.3	16.7	8.9	5.9	7.7	6.2	7.2	6.7	6.9	6.9
IS 52 (F)	7094-07	121	24.4 1-Jan	20.1 31-Jan	18.7 1-Jul	18.7	16.3	16.9	17.3	8.6	7.4	9.2	6.7	8.0	7.2	7.6	7.6
IS 52 (C)	7094-07	298	25.6 28-Aug	24.6 17-Aug	23.3 11-Jan	18.5	18.1	16.1	17.6	7.6	(0.0)	(0.0)	8.6	8.6	6.2	6.0	xx
IS 74 (C)	7094-08	305	25.6 28-Aug	24.6 17-Aug	23.3 11-Jan	17.4	14.4	17.5	16.5	8.1	5.5	7.6	6.3	6.9	6.6	7.3	6.9
Botanical Gdn - Pfizer (F)	7094-10	122	24.0 1-Jan	21.8 4-Apr	21.5 31-Jan	21.5	18.7	19.4	19.9	9.1	8.2	9.5	6.3	8.3	8.0	8.1	8.1
PS 314 (C)	7095-07	290	26.0 28-Aug	22.1 16-Aug	19.7 22-Jan	16.1	14.9	14.9	15.3	7.5	5.1	6.6	5.8	6.2	6.3	6.5	6.3
JHS 126 (F)	7095-43	121	21.5 9-Nov	17.9 4-Apr	17.9 4-Apr	17.9	17.2	16.4	17.2	8.5	7.3	9.2	6.5	7.9	7.5	7.8	7.7
PS 274 (C)	7095-98	293	21.3 4-Jul	21.1 16-Aug	20.0 28-Aug	17.2	14.5	16.5	16.1	7.5	5.1	7.2	5.8	6.4	6.5	6.6	6.5

(F) = Federal Reference Method

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(Annual Means in parentheses are based on less than 75% available data)

*Federal Ambient Air Quality Standard

[Date of Occurrence, Hour]

+ Denotes a contravention of Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

(Queens, and Staten Island Sites)

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years' annual means not to exceed 12 µg/m³ *;and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *, *changed from 65 µg/m³ on 12/17/06*)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1st	2nd	3rd	4th	2018	2017	2016	3-yr Avg.
Maspeth Library (C)	7096-13	353	23.6 16-Aug	22.9 28-Aug	20.6 17-Aug	16.7	14.4	17.0	16.1	7.9	5.4	6.7	6.4	6.6	6.7	6.7	6.7
Queens College 2 (F)	7096-15	349	23 2-Jan	22.5 8-Aug	21.8 6-Aug	19.2	17.3	16.7	17.7	7.6	7.3	8.5	5.9	7.3	7.1	6.7	7.0
Queens College 2 (C)	7096-15	339	22.8 28-Aug	22.7 22-Jan	20.4 16-Aug	18.1	16.2	16.7	17.0	6.4	6.2	7.3	4.9	6.2	6.3	6.5	6.3
Queens College Near Road (C)	7096-16	347	24.3 16-Aug	23.1 28-Aug	20.4 2-Jul	18.7	15.8	16.7	17.1	8.9	6.2	7.9	6.8	7.4	6.7	6.5	6.9
Queens College Near Road (F)	7096-16	115	20.3 9-Nov	20.2 1-Jul	19.5 6-Aug	19.5	16.3	--	--	8.3	8.1	9.7	6.8	8.3	7.8	--	--
Port Richmond (F)	7097-03	104	22.4 31-Jan	20.6 1-Jul	20.1 9-Nov	20.1	17.1	15.7	17.6	8.1	6.5	9.2	6.9	7.7	7.2	7.2	7.3
Port Richmond (C)	7097-03	265	26.5 2-Jul	25.6 28-Aug	24.6 17-Aug	17.6	14.5	14.3	15.5	8.0	5.7	7.8	8.1	7.4	7.0	6.6	7.0
Freshkills West (C)	7097-17	324	32.9 16-Aug	31.0 28-Aug	25.2 29-Aug	21.0	15.8	16.7	17.8	8.1	6.4	10.1	7.5	8.0	7.0	8.2	7.8

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CARBON MONOXIDE - Continuous Gas Filter Correlation

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One-Hour Average						Running 8-Hour Average (Non-Overlapping)				
		Maximum not to exceed 35 PPM more than once per calendar year *						Maximum not to exceed 9 PPM more than once per calendar year *				
		Observations			Highest Values, PPM			Observations		Highest Values, PPM		
Station	Site No.	Total Obs.	% Avail	>35 PPM	1st	2nd	3rd	Total	>9 PPM	1st	2nd	Days> 9 PPM
CCNY	7093-25	8,560	99	0	2.91 [11/04:21]	2.52 [12/02:18]	2.51 [12/02:19]	8,681	0	1.70 [12/02:20]	1.20 [12/20:14]	0
Botanical Gardens (Pfizer Lab)	7094-10	8,646	99	0	2.30 [12/20:09]	2.01 [12/20:08]	1.96 [12/20:10]	8,700	0	1.50 [12/20:11]	1.20 [01/11:09]	0
Queens College 2	7096-15	8,497	97	0	1.95 [12/20:09]	1.72 [10/31:06]	1.69 [10/31:07]	8,409	0	1.30 [12/31:08]	1.20 [10/31:09]	0
Queens College Near Road	7096-16	7,684	88	0	3.50 [12/28:15]	2.41 [12/20:09]	2.20 [10/31:07]	7,453	0	1.70 [12/31:09]	1.50 [10/31:11]	0

(Annual Means in parentheses are based on less than 75% available data)

*Federal Ambient Air Quality Standard

[Date of Occurrence, Hour]

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OZONE - Continuous UV Light Absorption

(Bronx, Brooklyn, and Staten Island Sites)

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	
Botanical Garden (Pfizer Lab)	7094-10	5,754	98	7	0.085 2-Jul	0.081 10-Jul	0.079 30-Jun	0.071 6-Aug	0.070 6-Jul	0.069 13-Jun	0.077 6-Aug	
IS 52	7094-07	5,762	98	6	0.081 10-Jul	0.078 30-Jun	0.074 2-Jul	0.071 18-Jun	0.069 26-May	0.069 18-May	0.071 18-Jun	
Freshkills West	7097-17	4,150	97	6	0.081 2-Jul	0.078 18-Jun	0.078 10-Jul	0.072 1-Jul			0.072 1-Jul	xx
Susan Wagner	7097-01	0	0						0.077 21-Jul	0.072 13-Jun		xx

Sampling was suspended at 7094-01 from in 2018 due to building construction

(Annual Means in parentheses are based on less than 75% available data)

*Federal Ambient Air Quality Standard

[Date of Occurrence, Hour]

+ Denotes a contravention of Federal AAQS

OZONE - Continuous UV Light Absorption

(Manhattan and Queens Sites)

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
CCNY	7093-25	5,516	94	2	0.086 2-Jul	0.082 18-Jun	0.080 10-Jul	0.077 1-Jul	0.071 6-Jul	0.070 10-Jul	0.077 1-Jul	0.072+
Queens College 2	7096-15	8,598	98	6	0.082 10-Jul	0.080 1-Jul	0.076 2-Jul	0.073 25-May	0.071 26-May	0.079 10-Jul	0.073 25-May	0.074+

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

NITROGEN DIOXIDE - Continuous Chemiluminescence

Annual Averages 2008 through 2018
 Annual Arithmetic Mean (PPB) - Primary Standard
 (12-month average not to exceed 53 PPB *)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Botanical Garden (Harding Lab/Pfizer Lab)	7094-10 /7094-06	22.91	21.85	20.1	20.86	18.6	18.37	17.2	17.16	15.59	14.91	14.44
IS 52	7094-07	25.18	24.57	-24.94	xxx	-20.8	20.67	19.88	20.13	18.27	17.3	17.46
Queens College 2	7096-15	22.51	20.91	19.28	(21.62)	17.5	17.5	16.75	17.16	15.81	15.25	14.44
Queens College Near-Road	7096-15	--	--	--	--	--	--	--	--	--	(16.29)	16.44

Sampling was terminated at 7093-10 on 06/30/08. Sampling was suspended at 7094-07 on 06/24/10 due to building construction, and resumed on 08/10/13.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One-Hour Averages - average of 98th percentile for last 3 years not to exceed 75 PPB *								
		Observations		98th Percentile, PPB				Highest Values, PPB		
Station	Site No.	Total	% Avail	2016	2017	2018	3-yr avg.	1st	2nd	3rd
Botanical Gardens - Pfizer Lab	7094-10	7,897	90	55.8	56.0	53.9	55.2	71.5 1-May	68.1 20-Dec	67.9 20-Dec
IS 52	7094-07	8,015	91	60.1	59.4	59.3	59.6	79.1 1-May	77.8 20-Dec	72.2 20-Dec
Queens College 2	7096-15	8,429	96	57.1	58.5	53.1	56.2	79.1 7-Apr	72.7 7-Apr	71.6 7-Apr
Queens College Near-Road	7096-16	8,366	96	--	(54.5)	53.5	--	74.7 20-Dec	68.6 31-Oct	67.8 20-Dec

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

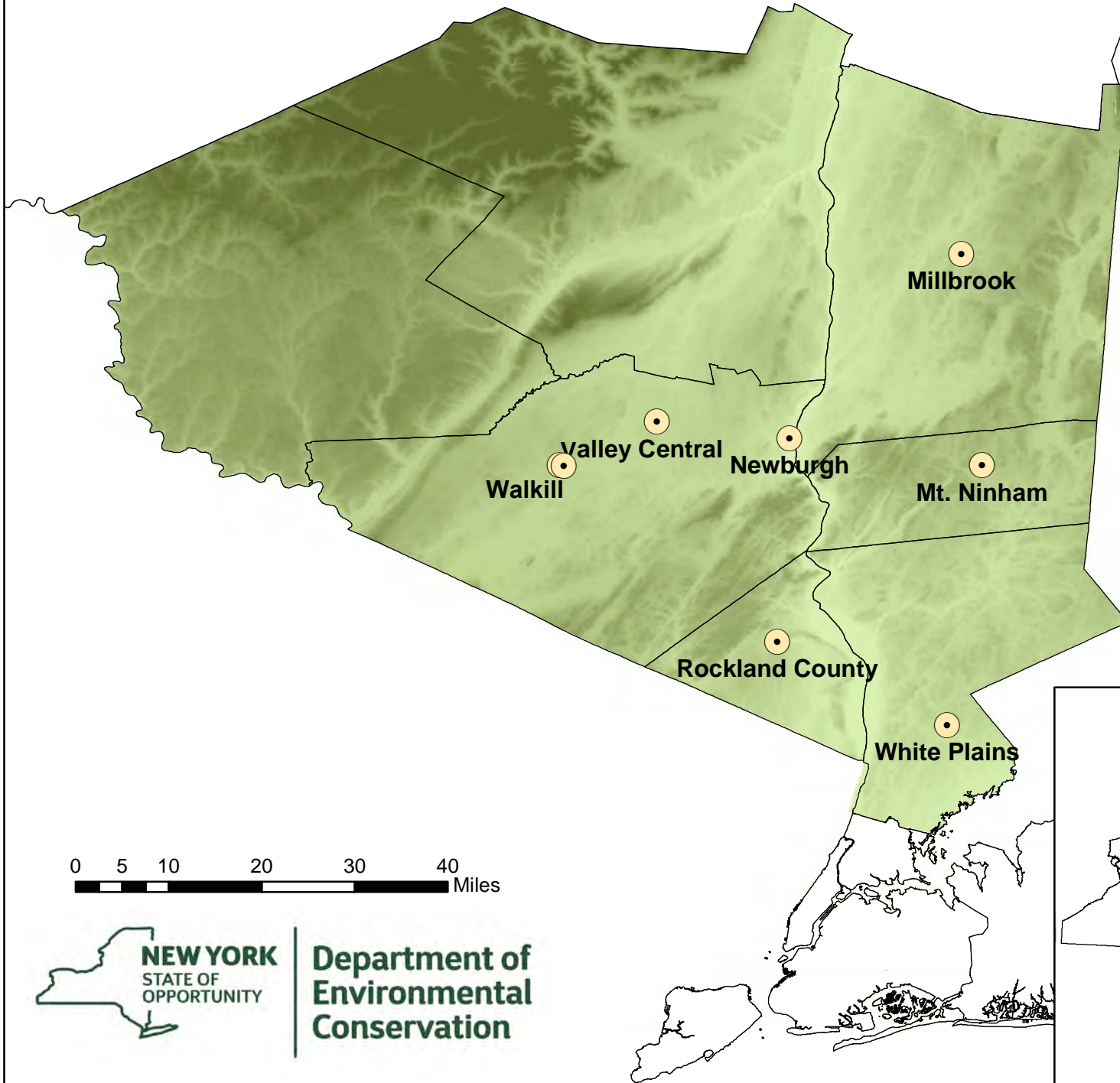
LEAD -PM₁₀ Samplers**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

		24-Hour Concentrations - µg/m ³								THREE MONTH ROLLING AVERAGES		
				Maximum		2nd Max.		3rd Max.		Maximum not to exceed 0.15 µg/m ³ , effective beginning 1/1/13		
										Highest Values, µg/m ³		
Station	Site No.	Total Obs.	% Avail	Value	Date	Value	Date	Value	Date	2016	2017	2018
IS 52	7094-07	56	92	0.0082	1-Feb	0.006	14-Apr	0.0049	27-Mar	0.0047	0.0041	0.0033

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

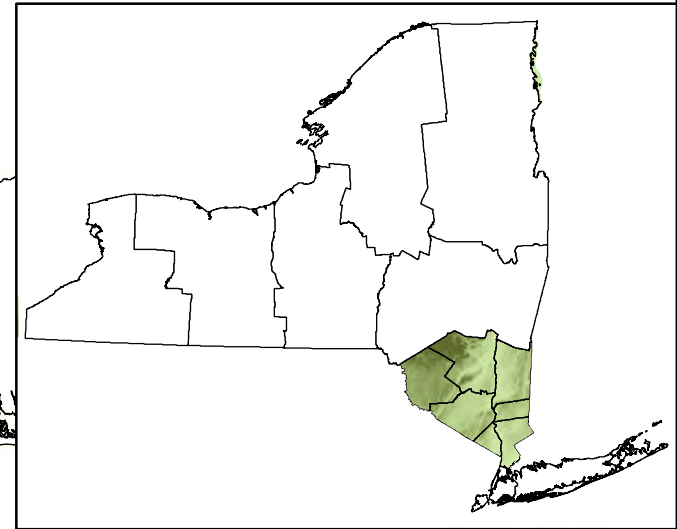
Region 3



0 5 10 20 30 40 Miles



**Department of
Environmental
Conservation**



SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 2008 through 2018
 Annual Arithmetic Mean (ppb) - Primary Standard
 (12-month average not to exceed 30 PPB* ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mt. Ninham	3951-01	1.33	1.14	0.8	0.86	0.73	0.72	0.63	0.59	0.23	0.22	0.11
Millbrook	1328-01	xx	xx	xx	-0.97	1.42	2.45	0.65	0.81	0.18	0.16	0.18
Belleayre Mtn.	5565-03	0.9	0.71	0.5	0.52	0.31	xxx	xxx	xxx	xxx	xxx	xxx

Sampling was suspended at 5565-03 in 2013

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages					
		average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
Station	Site No.	Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Mt. Ninham	3951-01	8,411	96	3.4	5.9	2.4	3.90
Millbrook	1328-01	8,572	98	3.4	1.2	2.5	2.37

(Annual Means in parentheses are based on less than 75% available data)
 *New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years= annual means not to exceed 12 µg/m³ *;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *, *changed* from 65 µg/m³ on 12/17/06)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1st	2nd	3rd	4th	2018	2017	2016	3-yr Avg.
Newburgh (F)	3502-04	118	17 1-Jul	16.2 1-Jan	16.2 1-Jan	16.2	13.9	20.0	16.7	7.1	5.5	7.6	5.4	6.4	6.0	6.1	6.2
Newburgh (C)	3502-04	339	31.4 3-Jul	30.9 28-Aug	26.3 7-Aug	19.3	16.4	17.0	17.5	7.6	5.1	7.0	5.5	6.3	6.2	5.5	6.0
Rockland Co. (C)	4353-02	337	26.4 28-Aug	19.3 2-Jul	18.7 16-Aug	16.9	12.3	19.5	16.3	6.8	4.7	6.4	5.0	5.7	5.6	6.0	5.8
White Plains (C)	5902-04	323	25.2 4-Jul	20.3 2-Jul	19.9 3-Jul	15.8	13.0	18.3	15.7	6.9	4.9	6.2	5.2	5.8	5.8	6.3	6.0

(F) = Federal Reference Method

(C) = Continuous, used for AQI calculations. Values based on 24 hour averages of 1-hour values

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

OZONE - Continuous UV Light Absorption**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
Valley Central	3527-01	5,798	99	1	0.084 2-Jul	0.069 20-Jul	0.067 2-May	0.064 1-May	0.064 2-Jun	0.059 17-Jul	0.064 1-May	0.062
Rockland County	4353-02	5,807	99	6	0.115 2-Jul	0.073 16-Jul	0.072 2-May	0.072 13-Jul	0.073 9-Aug	0.066 18-May	0.072 13-Jul	0.070
White Plains	5902-04	5,737	98	13	0.093 2-Jul	0.08 18-Jun	0.08 16-Jul	0.075 28-Jul	0.078 26-Jun	0.072 3-Aug	0.075 28-Jul	0.075+
Millbrook	1328-01	5,635	96	2	0.088 2-Jul	0.073 2-May	0.066 25-May	0.065 10-Jul	0.071 25-May	0.063 10-Apr	0.065 10-Jul	0.066
Mt. Ninham	3951-01	5,283	90	2	0.086 2-Jul	0.074 2-May	0.070 18-Jun	0.066 10-Jul	0.071 20-Jun	0.070 18-May	0.066 10-Jul	0.069

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

LEAD - Low Volume Air Samplers

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		24-Hour Concentrations - $\mu\text{g}/\text{m}^3$								THREE MONTH ROLLING AVERAGES		
				Maximum		2nd Max.		3rd Max.		Maximum not to exceed 0.15 $\mu\text{g}/\text{m}^3$, effective beginning 1/1/13		
Station	Site No.	Total Obs.	% Avail	Value	Date	Value	Date	Value	Date	Highest Values, $\mu\text{g}/\text{m}^3$		
										2016	2017	2018
Wallkill	3566-02	--	--	--	--	--	--	--	--	0.02	0.01	--
Wallkill	3566-09	122	97	0.01	10-Jun	0.01	16-Jun	0.01	6-Aug	0.03	0.01	0.01
Scotchtown	3566-10	--	--	--	--	--	--	--	--	0.003	--	--

Sampling at Scotchtown was terminated 12/31/2016

Sampling at 3566-09 was terminated 12/31/2017

(Annual Means in parentheses are based on less than 75% available data)
 *New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

SULFUR DIOXIDE - Continuous Pulsed Fluorescence**Annual Averages 2008 through 2018**

Annual Arithmetic Mean (ppb) - Primary Standard
(12-month average not to exceed 30 PPB * ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Loudonville	0101-33	3.61	3.85	2.33	1.92	0.97	2.03	1.6	1.3	0.36	0.37	0.36
Schenectady	4601-05	3.42	2.63	1.92	(2.18)	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Grafton State Park	4153-04	1.77	1.52	1.12	1.13	(0.76)	xxx	xxx	xxx	xxx	xxx	xxx

Sampling at 4601-05 and 4153-04 was terminated on 06/30/11 and 12/31/12, respectively.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages					
		average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
Station	Site No.	Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Loudonville	0101-33	8,630	99	2.1	3.7	4.2	3.33

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years annual means not to exceed 12 µg/m³ *
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *, *changed* from 65 µg/m³ on 12/17/06)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1st	2nd	3rd	4th	2018	2017	2016	3-yr Avg.
Albany Co. HD (F)	0101-13	122	19.9 7-Jan	17.3 5-Nov	16.5 7-Aug	16.5	15.4	17.9	16.6	7.1	5.7	7.7	5.7	6.0	6.5	6.2	6.4
Albany Co. HD (C)	0101-13	365	25.0 19-Jan	24.8 22-Jan	22.2 25-Nov	19.7	17.0	17.0	17.9	8.6	7.0	7.9	8.1	7.9	7.5	6.2	7.2
Loudonville (F)	0101-33	122	18.1 7-Jan	16.4 5-Nov	16.2 1-Jul	16.2	13.6	16.2	15.3	6.2	4.7	7.3	5.1	5.8	5.8	5.6	5.7

(F) = Federal Reference Method

(C) = Continuous, used for AQI calculations. Values based on 24 hour averages of 1-hour values

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

CARBON MONOXIDE - Continuous Gas Filter Correlation

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One-Hour Average						Running 8-Hour Average (Non-Overlapping)				
		Maximum not to exceed 35 PPM more than once per calendar year *						Maximum not to exceed 9 PPM more than once per calendar year *				
		Observations			Highest Values, PPM			Observations		Highest Values, PPM		
Station	Site No.	Total Obs.	% Avail	>35 PPM	1st	2nd	3rd	Total	>9 PPM	1st	2nd	Days> 9PPM
Loudonville	0101-33	8,560	99	0	1.20 [11/25:21]	1.20 [11/26:07]	1.10 [11/26:08]	8,597	0	0.20 [11/26:10]	0.80 [11/25:16]	0

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

OZONE - Continuous UV Light Absorption

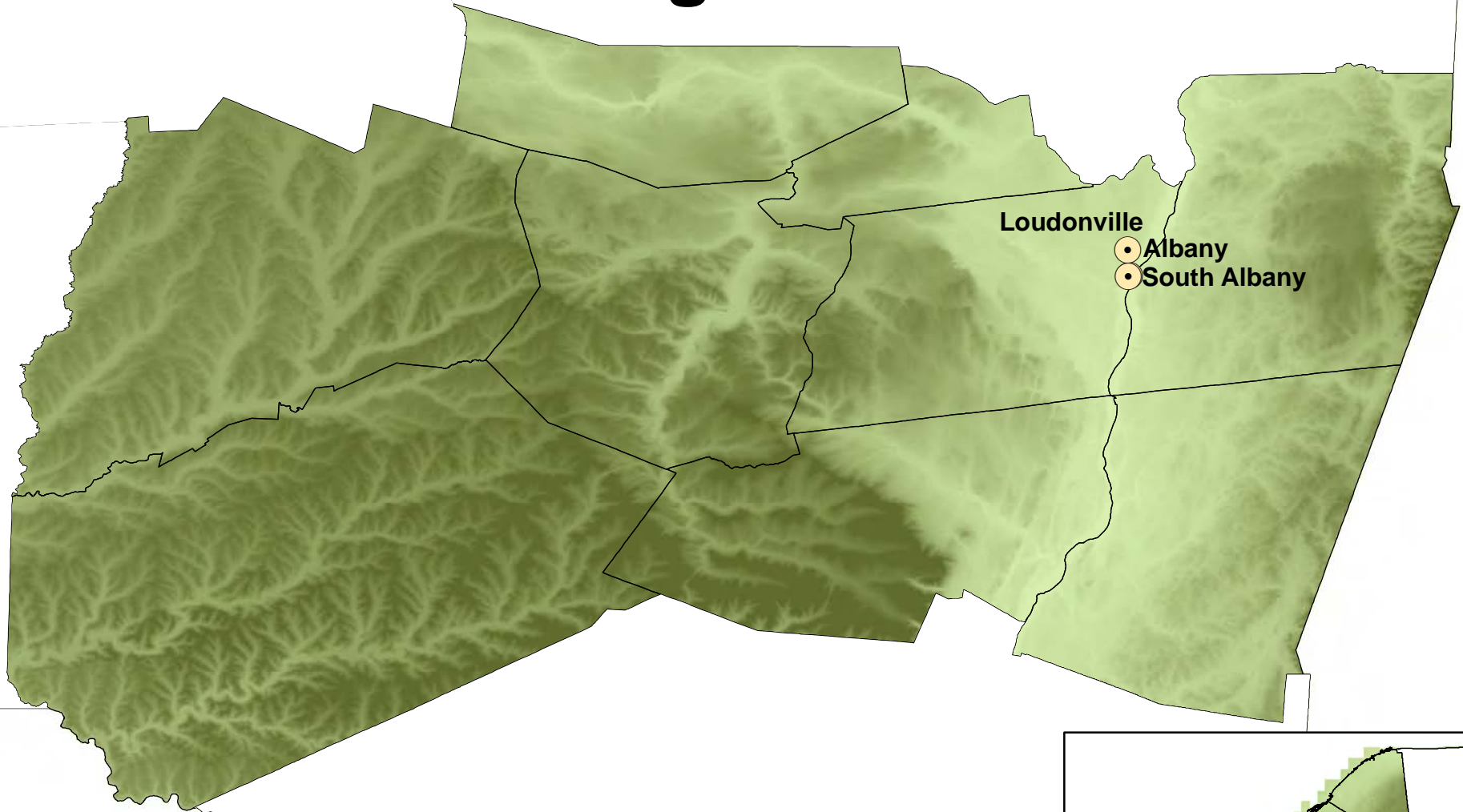
Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
Loudonville	0101-33	5,691	97	2	0.074 2-Jul	0.071 26-May	0.067 25-May	0.064 2-May	0.068 27-May	0.061 17-May	0.064 2-May	0.064

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

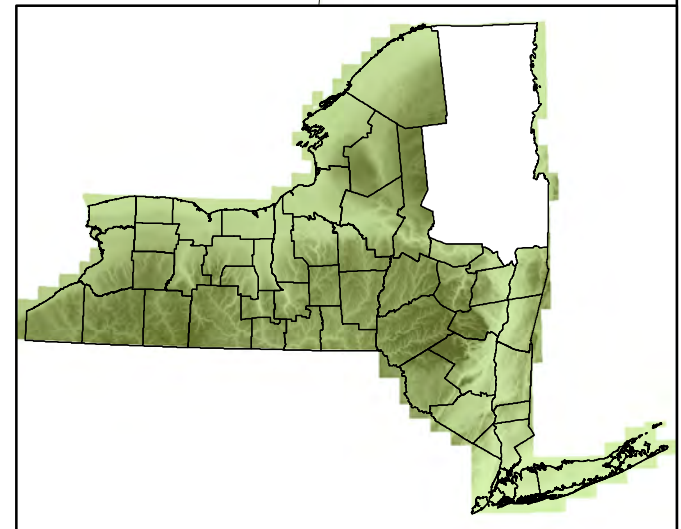
Region 4



0 5 10 20 30 40 Miles



**Department of
Environmental
Conservation**



SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 2008 through 2018
Annual Arithmetic Mean (ppb) - Primary Standard
(12-month average not to exceed 30 PPB * ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Whiteface Mtn. - Lodge	1567-04	0.82	0.64	0.72	0.73	0.61	0.36	0.38	0.47	0.26	0.18	0.18
Paul Smiths College	1655-01	0.75	0.6	0.57	0.67	0.5	-0.52	0.6	0.32	0.2	0.28	0.11
Piseco Lake	2050-01	0.56	0.44	0.34	0.32	0.14	0.17	0.21	0.16	0.05	0.03	0.03

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages					
		average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
Station	Site No.	Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Whiteface Mtn. - Lodge	1567-04	8,090	98	1.0	1.5	3.1	1.87
Paul Smiths College	1655-01	8,090	92	1.1	1.2	1.9	1.40
Piseco Lake	2050-01	8,408	96	1.0	1.0	1.5	1.17

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years= annual means not to exceed 12 µg/m³ *;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *, *changed* from 65 µg/m³ on 12/17/06)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1st	2nd	3rd	4th	2018	2017	2016	3-yr Avg.
Whiteface Base (F)	1567-04	59	12.6 6-Aug	12.5 4-Aug	10.5 31-Dec	12.5	11.7	10.0	11.4	3.4	3.6	5.1	1.6	3.4	3.7	3.5	3.6
Whiteface Base (C)	1567-04	321	15.8 24-Aug	12.0 28-Aug	11.1 17-Aug	10.3	9.9	9.85	10.0	3.7	3.8	4.5	2.4	3.6	3.6	3.9	3.7

(F) = Federal Reference Method

(C) = Continuous, used for AQI calculations. Values based on 24 hour averages of 1-hour values

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

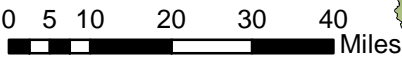
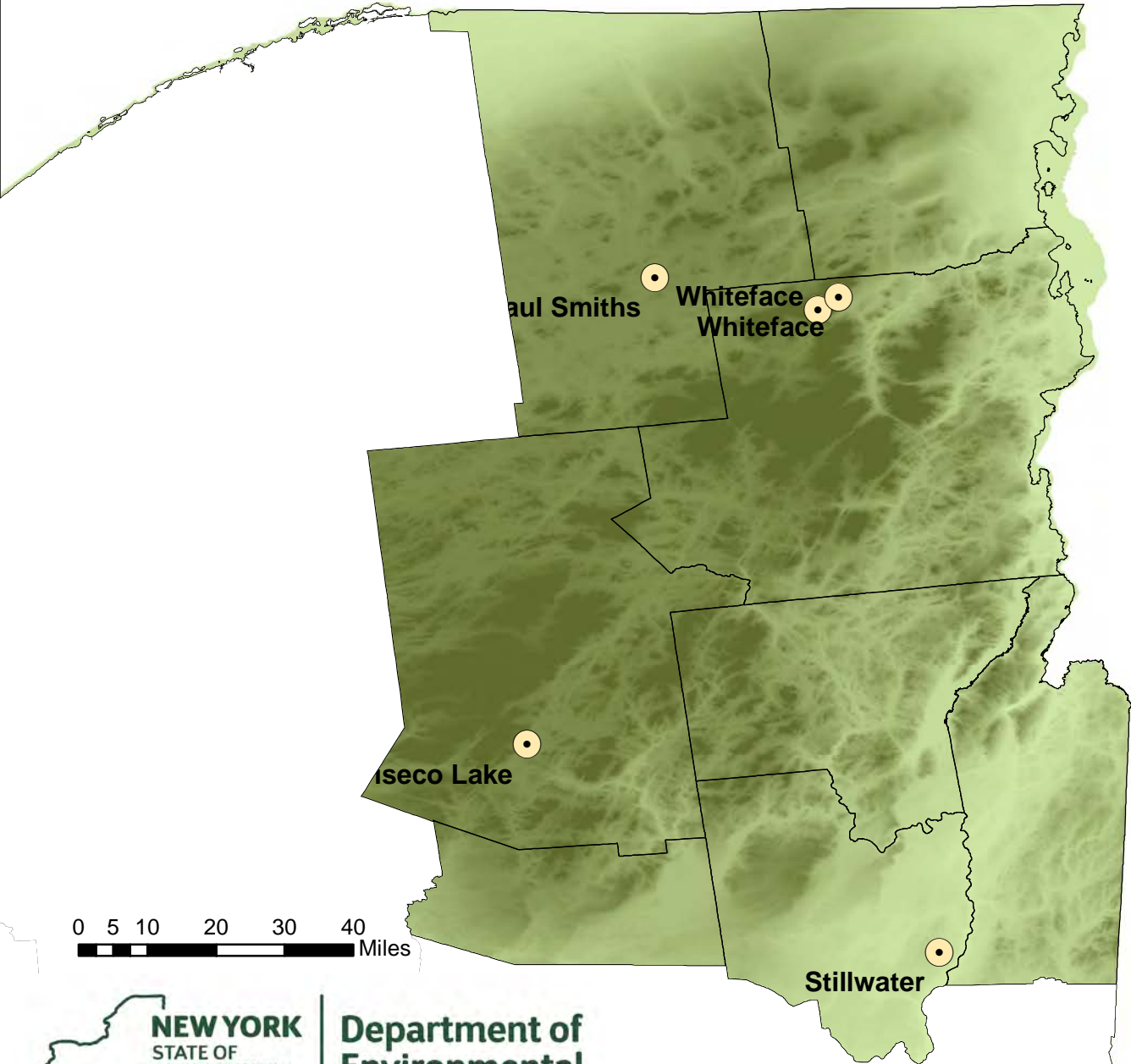
OZONE - Continuous UV Light Absorption**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
Stillwater	4567-01	5,680	97	1	0.076 2-Jul	0.066 2-May	0.062 9-May	0.067 26-May	0.067 20-Jun	0.060 17-May	0.067 26-May	0.064
Whiteface Mtn. Summit	1567-03	5,022	97	2	0.073 25-May	0.072 9-Jul	0.070 26-May	0.069 1-May	0.067 23-May	0.066 12-Jun	0.066 1-May	0.066
Whiteface Mtn. Base	1567-04	5,702	85	1	0.072 9-Jul	0.070 25-May	0.069 1-May	0.066 2-May	0.068 19-Jun	0.060 15-Apr	0.066 2-May	0.064
Piseco Lake	2050-01	5,671	96	0	0.069 25-May	0.067 26-May	0.066 2-May	0.063 24-Apr	0.061 18-Apr	0.064 17-May	0.063 24-Apr	0.062
Mt. Ninham	3951-01	5,463	93	2	0.086 2-Jul	0.074 2-May	0.070 18-Jun	0.066 10-Jul	0.071 20-Jun	0.070 18-May	0.066 10-Jul	0.069

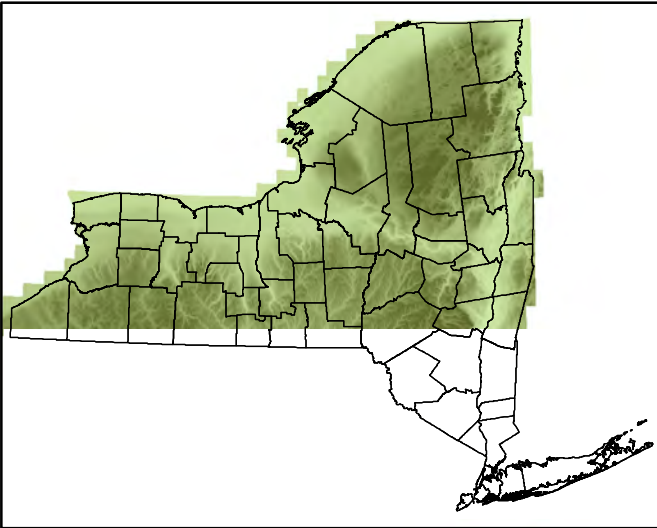
(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

Region 5



Department of
Environmental
Conservation



SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 2008 through 2018
Annual Arithmetic Mean (ppb) - Primary Standard
(12-month average not to exceed 30 PPB * ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alcoa West	4402-08	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	5.16	4.00
Alcoa East	4402-07	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	1.62	1.30
Nick's Lake	2167-03	0.63	0.52	0.54	0.48	0.65	0.6	0.67	0.52	0.2	(0.16)	0.12

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages					
		average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
Station	Site No.	Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Alcoa West	4402-08	8,474	97	86.5	90.5	xxx	xxx
Alcoa East	4402-07	8,520	97	40.6	45.2	xxx	xxx
Nick's Lake	2167-03	7,557	86	7.5	1.1	2.5	3.70

*Alcoa East and Alcoa West are source oriented monitors established in 2017 to comply with the Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide Primary National Ambient Air Quality Standard (80 FR 51052) that requires that NYSDEC provide data to characterize the 1-hour ambient air concentration of SO₂ in areas near the Alcoa Massena West Aluminum Plant.

(Annual Means in parentheses are based on less than 75% available data)
*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years= annual means not to exceed 12 µg/m³ *;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *, *changed* from 65 µg/m³ on 12/17/06)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1st	2nd	3rd	4th	2018	2017	2016	3-yr Avg.
Utica (C)	3202-01	300	21.3 16-Aug	19.9 27-Aug	15.8 15-Aug	14.2	14.1	17.1	15.1	6.7	4.2	5.7	5.1	5.4	5.4	5.9	5.6

(F) = Federal Reference Method

(C) = Continuous, used for AQI calculations. Values based on 24 hour averages of 1-hour values

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

OZONE - Continuous UV Light Absorption**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
Nick’s Lake	2167-03	4,526	96	0	0.068 25-May	0.066 26-May	0.065 2-May	0.064 1-May	0.071 26-May	0.057 10-Jun	0.064 1-May	0.064
Perch River	2223-01	5,522	94	2	0.072 25-May	0.072 9-Jul	0.069 1-May	0.068 2-May	0.067 20-Jun	0.066 12-Jun	0.068 2-May	0.067

Sampling stopped at 2167-03 in 2018 no power being available at the site

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

Region 7



Fulton

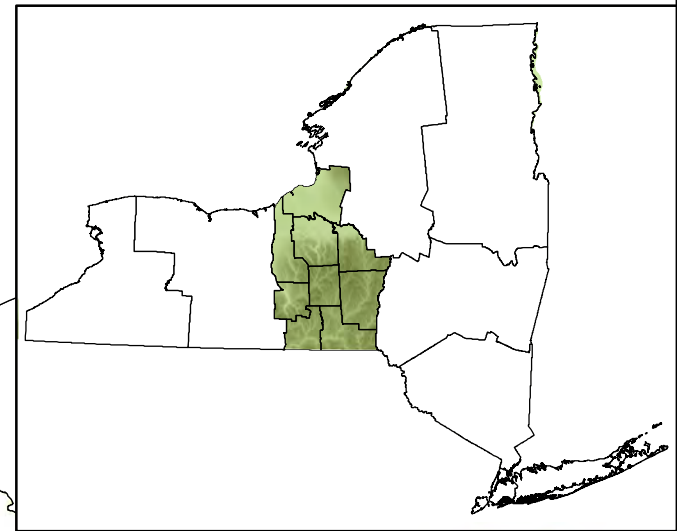
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Cayuga East

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Department of
Environmental
Conservation



SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 2008 through 2018
 Annual Arithmetic Mean (ppb) - Primary Standard
 (12-month average not to exceed 30 PPB * ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Camp Georgetown	2655-01	1.79	1.17	1.09	0.52	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Cayuga East*	5456-01	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	0.34	0.09
East Syracuse	3353-09	2.06	1.23	0.92	0.88	0.88	0.61	0.7	0.6	0.4	0.35	0.26

Sampling at 2655-01 was suspended on 04/02/2012

*Cayuga East is a source-oriented monitor established in 2017 to comply with the Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide Primary National Ambient Air Quality Standard (80 FR 51052) that requires that NYSDEC provide data to characterize the 1-hour ambient air concentration of SO₂ in areas near the Cayuga Operating Company Power Plant.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages					
		average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
Station	Site No.	Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Trumansburg	4950-01	8,223	96	2.4	2.5	xxx	xxx
Cayuga East	5456-01	8,595	98	51.8	24.9	xxx	xxx
East Syracuse	3353-09	8,520	98	2.2	1.9	2.9	2.33

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years= annual means not to exceed 15 µg/m³*;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³*, *changed* from 65 µg/m³ on 12/17/06)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1st	2nd	3rd	4th	2018	2017	2016	3-yr Avg.
East Syracuse (C)	3353-09	322	20.1 12-Dec	19.4 10-Feb	18.4 22-Jan	16.2	12.2	13.2	13.9	5.3	3.5	5.9	4.6	4.8	5.2	5.0	5.1
East Syracuse (F)	3353-09	119	22.9 31-Jan	17 7-Aug	16.8 5-Aug	16.8	13.0	10.8	13.5	6.5	5.4	6.6	5.2	5.9	5.5	5.3	5.6

(F) = Federal Reference Method

(C) = Continuous, used for AQI calculations. Values based on 24-hour averages of 1-hour values

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

OZONE - Continuous UV Light Absorption**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
East Syracuse	3353-09	5,746	98	2	0.075 26-May	0.073 25-May	0.068 1-May	0.066 2-May	0.067 11-Aug	0.064 19-Jul	0.066 2-May	0.065
Fulton/Granby	3754-01	5,798	99	1	0.074 26-May	0.069 25-May	0.068 1-May	0.067 14-Jul	0.061 20-Jun	0.063 12-Jun	0.067 14-Jul	0.063

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

Region 8



Rochester Near-Road
Rochester Pri 2

Williamson

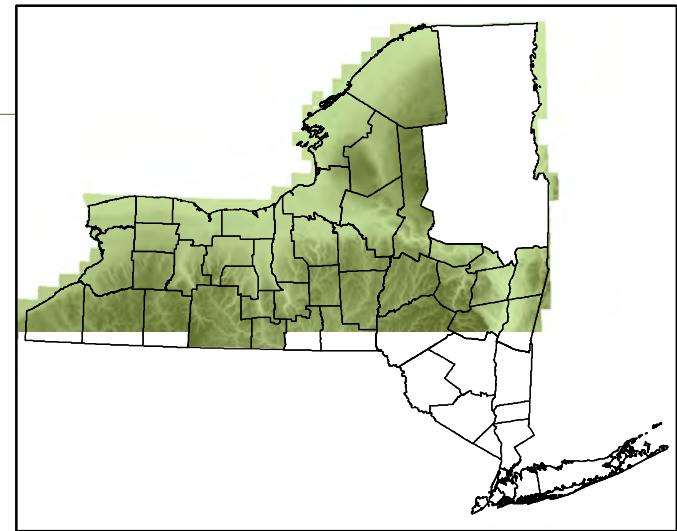
Cayuga West

Pinnacle State Park

0 5 10 20 30 40
Miles



Department of
Environmental
Conservation



SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 2008 through 2018
Annual Arithmetic Mean (ppb) - Primary Standard
(12-month average not to exceed 30 PPB * ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Elmira	0701-05	2.8	2.01	2.08	1.65	1.48	xx	xx	xx	xx	xx	xx
Rochester	2701-22	2.91	2.54	2.19	(1.15)	0.99	0.91	0.96	0.79	0.68	0.49	0.23
Cayuga West*	4950-01	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	0.11	0.09
Pinnacle	5001-04	1.67	1.04	0.63	0.71	0.39	0.39	0.45	0.33	0.21	0.13	0.13

Sampling was suspended at 0701-05 in 2013

*Cayuga West is a source-oriented monitor established in 2017 to comply with the Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide Primary National Ambient Air Quality Standard (80 FR 51052) that requires that NYSDEC provide data to characterize the 1-hour ambient air concentration of SO₂ in areas near the Cayuga Operating Company Power Plant.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages					
		average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
Station	Site No.	Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Rochester	2701-22	8,425	96	7.5	19.7	27	18.07
Cayuga West*	4950-01	8,223	96	2.4	2.5	xxx	xxx
Pinnacle	5001-04	8,243	94	2.0	1.9	4.7	2.87

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM₁₀)

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		24-Hour Concentrations - µg/m ³							# of Days > 150 µg/m ³ - Not to exceed an expected avg of one per year during the last 3 years *						
			Maximum		2nd Max.		3rd Max.		2016		2017		2018		
Station	Site No.	Total Obs.	Value	Date	Value	Date	Value	Date	Mea	Est	Mea	Est	Mea	Est	Exp. Avg.
Rochester	2701-22	56	33	2-May	31	26-Jan	25	26-May	0	0	0	0	0	0	0

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years= annual means not to exceed 12 µg/m³ *;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *, *changed* from 65 µg/m³ on 12/17/06)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1st	2nd	3rd	4th	2018	2017	2016	3-yr Avg.
Rochester 2 (F)	2701-22	113	26.9 6-Jul	24.7 3-Dec	19.3 31-Jan	19.3	13.8	13.1	15.4	7.3	6.7	8.5	6.9	7.3	6.5	6.0	6.6
Rochester 2 (T)	2701-22	344	21.9 27-Aug	20.1 15-Aug	18.5 15-Jul	16.9	13.8	15.1	15.3	7.9	5.7	7.7	7.8	7.3	6.2	6.1	6.5
Rochester Near Road (T)	2701-23	341	21.4 27-Aug	20.5 13-Dec	20.0 12-Dec	17.4	13.9	16.0	xx	6.1	5.7	7.7	5.5	6.2	7.2	7.5	7.0
Rochester Near Road (F)	2701-23	108	23.5 3-Dec	20.2 31-Jan	18.8 7-Aug	18.8	14.7	14.5	16.0	6.9	6.6	7.7	6.6	6.9	6.7	6.3	6.6
Pinnacle (C)	5001-04	306	18.8 13-Dec	14.6 15-Aug	14.6 11-Dec	13.1	11.1	11.3	11.8	4.6	4.6	5.6	4.4	4.8	4.6	4.9	4.8
Pinnacle (T)	5001-04	115	20.5 3-Dec	18.6 9-Aug	15 5-Aug	15.0	11.1	11.3	12.5	5.5	4.8	6.6	4.6	5.4	4.6	4.9	5.0

(F) = Federal Reference Method

(C) = Continuous, used for AQI calculations. Values based on 24 hour averages of 1-hour values

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

CARBON MONOXIDE - Continuous Gas Filter Correlation**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

		One-Hour Average						Running 8-Hour Average (Non-Overlapping)				
		Maximum not to exceed 35 PPM more than once per calendar year *						Maximum not to exceed 9 PPM more than once per calendar year *				
		Observations			Highest Values, PPM			Observations		Highest Values, PPM		
Station	Site No.	Total Obs.	% Avail	>35 PPM	1st	2nd	3rd	Total	>9 PPM	1st	2nd	Days> 9PPM
Rochester 2	2701-22	8,301	95	0	1.45 [12/19:19]	1.31 [12/19:20]	1.25 [12/19:18]	7,929	0	1.10 [12/03:00]	0.80 [02/15:01]	0
Rochester Near-Road	2701-23	8,593	98	0	1.627 [09/27:09]	0.996 [12/19:17]	0.901 [12/20:08]	8557	0	0.70 [02/14:23]	0.70 [12/19:20]	0
Pinnacle	5001-04	8,304	95	0	0.49 [09/14:13]	0.35 [01/19:13]	0.35 [01/16:10]	8,208	0	0.30 [01/16:09]	0.30 [01/16:17]	0

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

OZONE - Continuous UV Light Absorption

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
Rochester 2	2701-22	8,327	95	4	0.073 26-May	0.072 14-Jul	0.071 25-May	0.071 9-Jul	0.067 11-Jun	0.067 12-Jun	0.071 9-Jul	0.068
Pinnacle	5001-04	8,181	93	0	0.066 25-May	0.065 20-Jul	0.064 23-Apr	0.064 1-May	0.062 21-Jun	0.058 10-Jun	0.064 1-May	0.061
Williamson	5863-01	5,565	95	4	0.075 9-Jul	0.073 26-May	0.071 25-May	0.071 14-Jul	0.067 6-Jul	0.065 10-Jun	0.071 14-Jul	0.067

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

NITROGEN DIOXIDE - Continuous Chemiluminescence

Annual Averages 2008 through 2018

Annual Arithmetic Mean (PPB) - Primary Standard (12-month average not to exceed 53 PPB *)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Rochester Near-Road	2701-23	xx	xx	xx	xx	xx	xx	(9.95)	10.09	9.72	9.08	8.73

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One-Hour Averages - average of 98th percentile for last 3 years not to exceed 75 PPB *								
		Observations		98th Percentile, PPB				Highest Values, PPB		
Station	Site No.	Total	% Avail	2016	2017	2018	3-yr avg.	1st	2nd	3rd
Rochester Near-Road	2701-23	8,269	94	40.6	35.8	36.8	37.73	39.6 12-Mar	43.5 12-Mar	39.2 19-Dec

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

LEAD-PM₁₀ Samplers

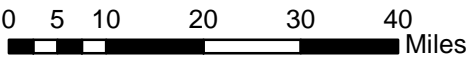
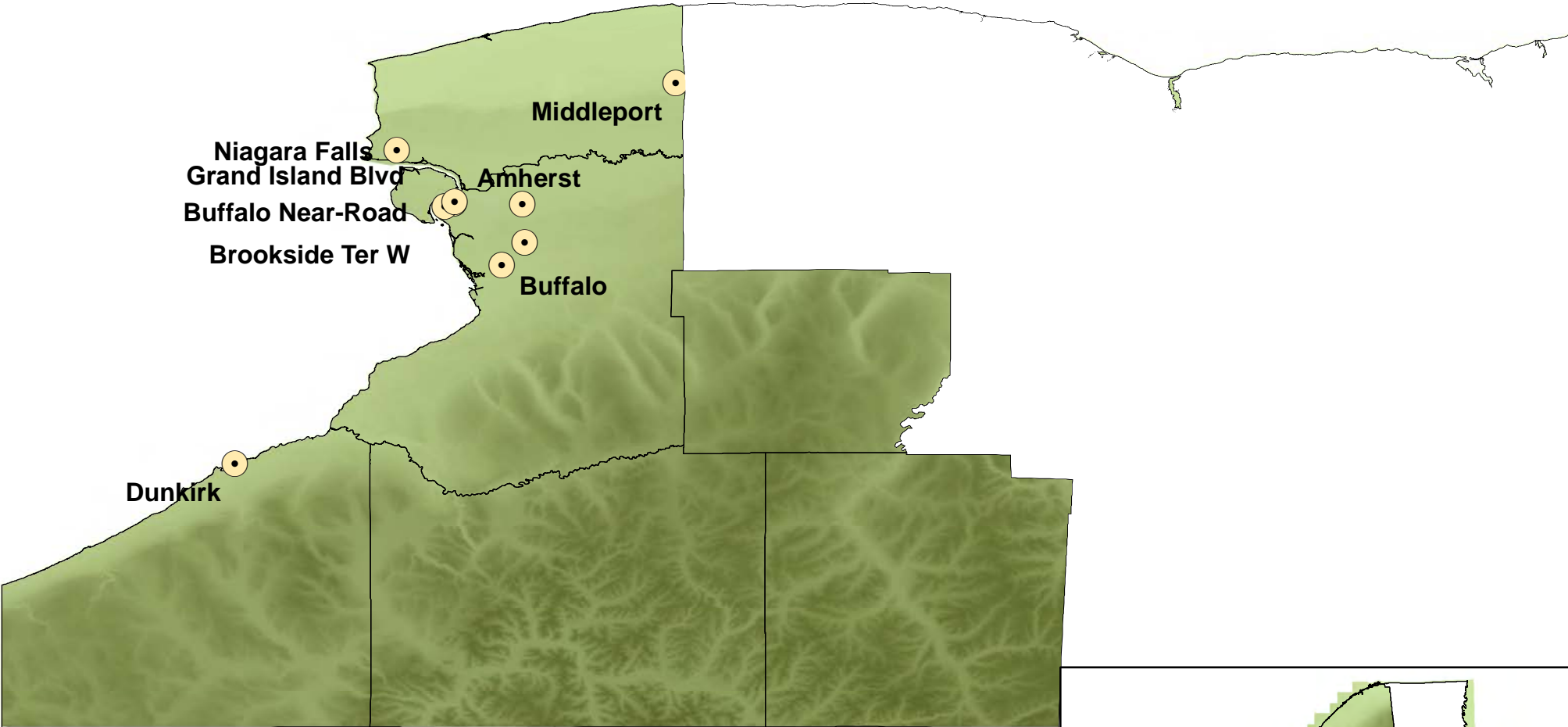
Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		24-Hour Concentrations - µg/m ³								THREE MONTH ROLLING AVERAGES		
				Maximum		2nd Max.		3rd Max.		Highest Values, µg/m ³		
Station	Site No.	Total Obs.	% Avail	Value	Date	Value	Date	Value	Date	2016	2017	2018
Rochester	2701-22	57	96	0.0082	1-Feb	0.0048	27-Mar	0.0039	1-Jul	0.0052	0.0042	0.0025

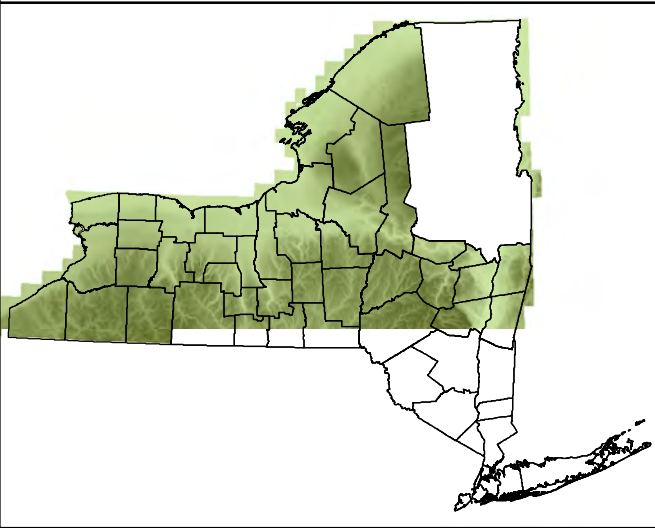
(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

Region 9



Department of
Environmental
Conservation



SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 2008 through 2018
 Annual Arithmetic Mean (ppb) - Primary Standard
 (12-month average not to exceed 30 PPB * ⁽⁴⁾)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Buffalo	1401-18	2.34	1.74	1.5	2.01	2.72	(2.4)	1.49	1.02	0.49	0.35	0.40
Brookside Terrace	1472-14	2.83	2.1	1.83	3.43	2.11	2.82	(1.52)	1.04	0.77	0.35	0.38
Dunkirk	0601-04	2.68	2.55	1.54	1.72	1.3	1.03	1.5	1.28	0.41	0.16	0.14
Niagara Falls	3102-25	2.13	1.58	1.53	2.74	3.47	xxx	xxx	xxx	xxx	xxx	xxx

Sampling was suspended at 1472-04 in 2007, and at 0675-01 and 3102-25 in 2013

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One Hour Averages					
		average of 99 th percentile for last 3 years not to exceed 75 PPB *					
		Observations		99 th Percentile, PPB			
Station	Site No.	Total Obs.	% Avail	2018	2017	2016	3-yr Avg.
Buffalo	1401-18	8,608	98	7.1	8.3	6.7	7.37
Brookside Terrace	1472-14	8,581	98	5.0	3.2	18.2	8.80
Dunkirk	0601-04	8,307	95	3.0	2.6	5.1	3.57

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM₁₀)

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		24-Hour Concentrations - µg/m ³							# of Days > 150 µg/m ³ - Not to exceed an expected avg of one per year during the last 3 years *						
		Maximum		2nd Max.		3rd Max.			2016		2017		2018		
Station	Site No.	Total Obs.	Value	Date	Value	Date	Value	Date	Mea	Est	Mea	Est	Mea	Est	Exp. Avg.
Buffalo (R&P)	1401-18	59	38	2-May	35	8-May	31	26-May	0	0	0	0	0	0	0

(Annual Means in parentheses are based on less than 75% available data)
 *New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (PM_{2.5})

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

(Average of last 3 years= annual means not to exceed 12 µg/m³ *;
and average of 98th percentile for last 3 years not to exceed 35 µg/m³ *, *changed* from 65 µg/m³ on 12/17/06)

Station	Site No.	Total Obs.	Maximum Values, µg/m ³			98th Percentile, µg/m ³				Quarterly Averages, 2018				Annual Mean, µg/m ³			
			1 st	2 nd	3 rd	2018	2017	2016	3-yr Avg.	1 st	2 nd	3 rd	4 th	2018	2017	2016	3-yr Avg.
Buffalo (F)	1401-18	118	25.1 4-Jul	21.1 3-Dec	19.4 5-Aug	19.4	16.7	15	17.0	7.1	7.7	9.2	6.2	7.5	7.2	6.8	7.2
Buffalo (C)	1401-18	364	28.7 4-Jul	23.5 15-Aug	22.1 16-Aug	16.2	16.1	15.5	15.9	7.6	6.6	8.3	7.5	7.5	7.5	7.7	7.6
Grand Island Blvd (C)	1472-13	206	22.4 30-Jun	21.6 18-Jan	20.9 18-Jun	19.7	16.3	15.6	17.2	9.6	8.0	10.5	9.4	9.4	7.8	7.7	8.3
Brookside Terrace (C)	1472-14	364	23.4 18-Jun	21.6 15-Aug	21.5 27-Aug	17.5	13.6	14.7	15.3	7.2	6.4	8.5	7.0	7.3	7.0	6.6	7.0
Buffalo Near Road (C)	1455-02	337	18.6 1-Jul	18.2 27-Aug	17.6 26-May	16.1	16.1	15.2	15.8	7.5	7.1	7.5	7.6	7.4	7.8	7.8	7.7
Buffalo Near Road (F)	1455-02	116	26.5 4-Jul	19.8 5-Aug	17.8 1-Jul	17.8	15.0	13.7	15.5	7.7	7.3	9.3	6.1	7.6	7.4	6.7	7.2
Dunkirk (F)	0601-04	117	32 3-Dec	18.5 5-Aug	17.2 1-Jul	17.2	13.7	12.8	14.6	6.2	6.4	7.9	5.8	6.6	6.2	5.8	6.2
Amherst (F)	1451-03	118	20.6 3-Dec	18.4 5-Aug	17.8 7-Aug	17.8	14.7	12.5	15.0	6.9	6.4	8.2	6.0	6.9	6.6	6.10	6.5

(F) = Federal Reference Method

(C) = Continuous, used for AQI calculations. Values based on 24 hour averages of 1-hour values

TEOM sampling at 3102-25 was terminated on 12/31/12, and FRM on 4/01/13.

Sampling resumed on 4/4/13 at 0601-04.

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

CARBON MONOXIDE - Continuous Gas Filter Correlation**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

		One-Hour Average Maximum not to exceed 35 PPM more than once per calendar year *						Running 8-Hour Average (Non-Overlapping) Maximum not to exceed 9 PPM more than once per calendar year *				
		Observations			Highest Values, PPM			Observations		Highest Values, PPM		
Station	Site No.	Total Obs.	% Avail	>35 PPM	1st	2nd	3rd	Total	>9 PPM	1st	2nd	Days> 9PPM
Buffalo	1401-18	8,569	98	0	1.20 [03/07:07]	1.10 [03/07:06]	0.90 [02/13:23]	8,596	0	0.90 [03/07:09]	0.70 [03/07:04]	0
Buffalo Near-Road	1455-02	8,627	97	0	1.19 [03/07:07]	1.03 [03/07:04]	0.92 [02/28:06]	8,555	0	0.70 [11/20:02]	0.60 [03/07:07]	0

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

OZONE - Continuous UV Light Absorption**Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018**

		8-hr Running Average Begin Hour							4th Highest Daily Maximum 8-Hour Average-			
		Observations			Daily Highest Values, PPM				Not to exceed an avg of 0.075 ppm during the last 3 years, <i>changed</i> to 0.070 ppm beginning 1/1/2016*			
Station	Site No.	Total Obs.	% Avail	Days >.070 PPM	1st	2nd	3rd	4th	2016	2017	2018	Avg.
Dunkirk	0604-01	5,720	92	4	0.078 25-May	0.073 18-Jun	0.072 24-May	0.072 26-May	0.069 24-May	0.066 27-Sep	0.072 25-May	0.068
Amherst	1451-03	5,703	97	1	0.074 25-May	0.073 26-May	0.070 28-May	0.069 24-May	0.074 11-Jun	0.066 12-Jun	0.069 25-May	0.069
Middleport	3120-02	5,545	94	1	0.071 9-Jul	0.07 28-May	0.069 25-May	0.069 26-May	0.07 18-Apr	0.062 19-Jul	0.069 9-Jul	0.067

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS

NITROGEN DIOXIDE - Continuous Chemiluminescence**Annual Averages 2008 through 2018**

Annual Arithmetic Mean (PPB) - Primary Standard (12-month average not to exceed 53 PPB *)

Station	Site No.	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Buffalo Near-Road	1455-02	--	--	--	--	--	--	9.9	12.4	10.78	9.6	9.54
Buffalo	1401-18	16.41	15.05	13.88	13	(12.52)	10.46	(10.38)	(8.7)	9.9	9.49	9.81
Amherst	1451-03	10.23	(9.71)	(7.42)	8.19	8.32	6.44	--	--	--	--	--

Sampling at 1451-03 was suspended 12/31/12.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 2018

		One-Hour Averages - average of 98th percentile for last 3 years not to exceed 75 PPB *								
		Observations		98th Percentile, PPB				Highest Values, PPB		
Station	Site No.	Total	% Avail	2015	2016	2017	3-yr avg.	1st	2nd	3rd
Buffalo Near-Road	1455-02	8,057	92	44.7	40.4	41	42.03	54.0 1-May	53.9 1-May	52.7 1-May
Buffalo	1401-18	8,231	94	54.6	45.8	47.2	49.20	54.0 1-May	53.9 1-May	52.7 1-May

(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard + Denotes a contravention of NYS/Federal AAQS