

New York State Department of Environmental Conservation
Division of Air Resources
Bureau of Technical Support, Room 400
80 Wolf Road, Albany, New York 12233-3253
Phone: (518) 457-7450 • **FAX:** (518) 485-8443
Website: www.dec.state.ny.us



Erin M. Crotty
Acting
Commissioner

Division of Air Resources

1999 Annual New York State Air Quality Report Ambient Air Monitoring System

Draft Data Tables Only
March 2001

New York State Department of Environmental Conservation

George E. Pataki, Governor

Erin M. Crotty, Acting Commissioner

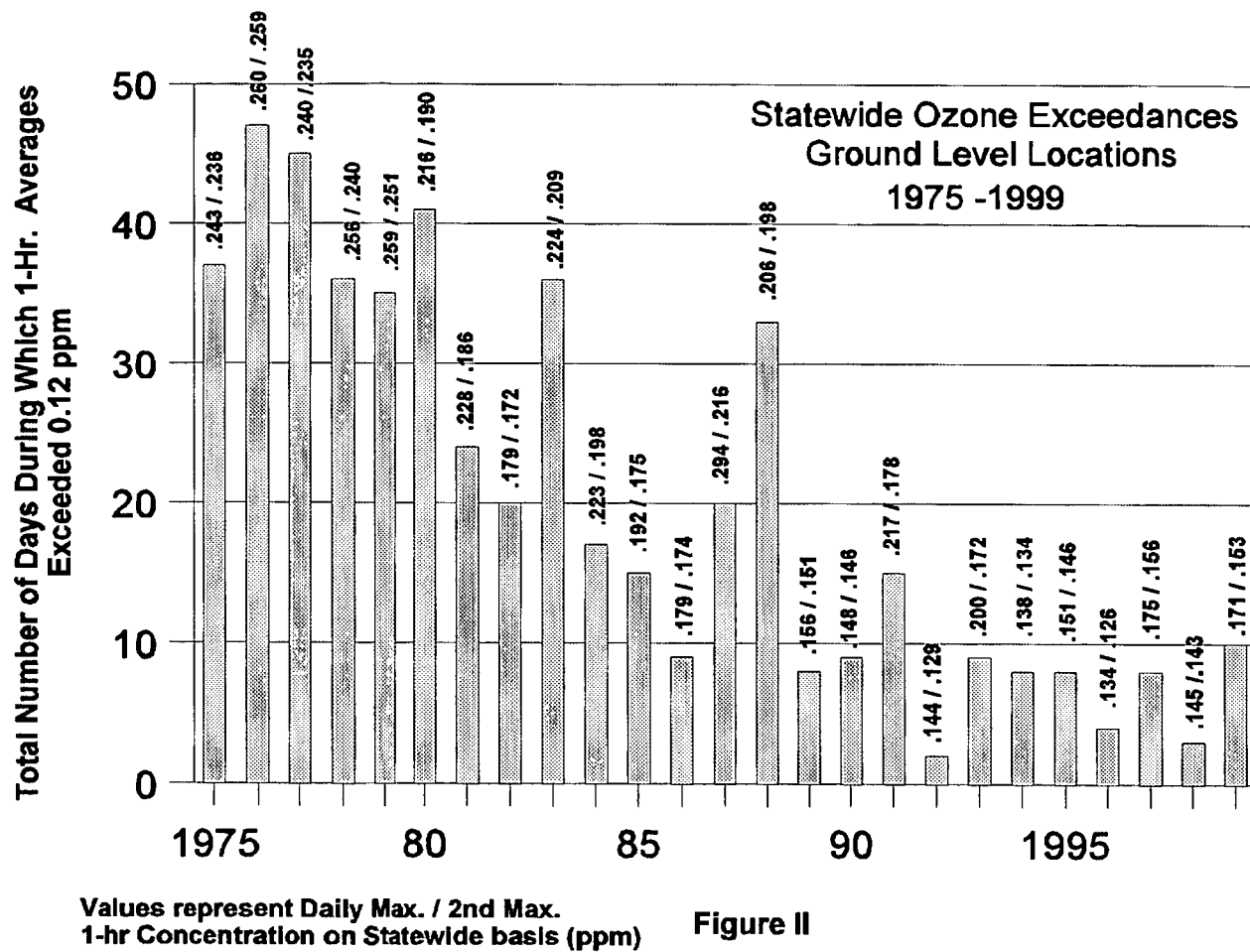
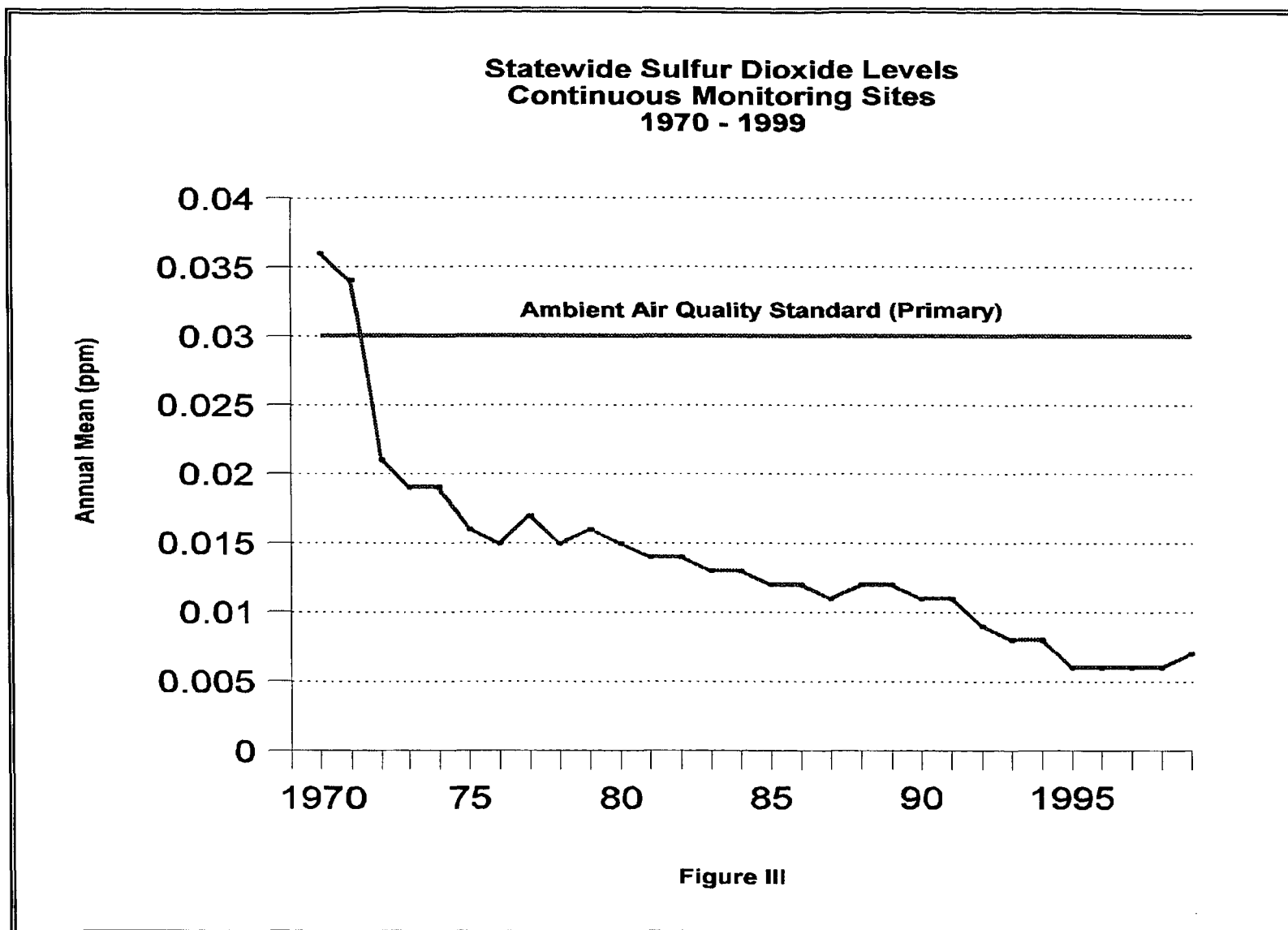
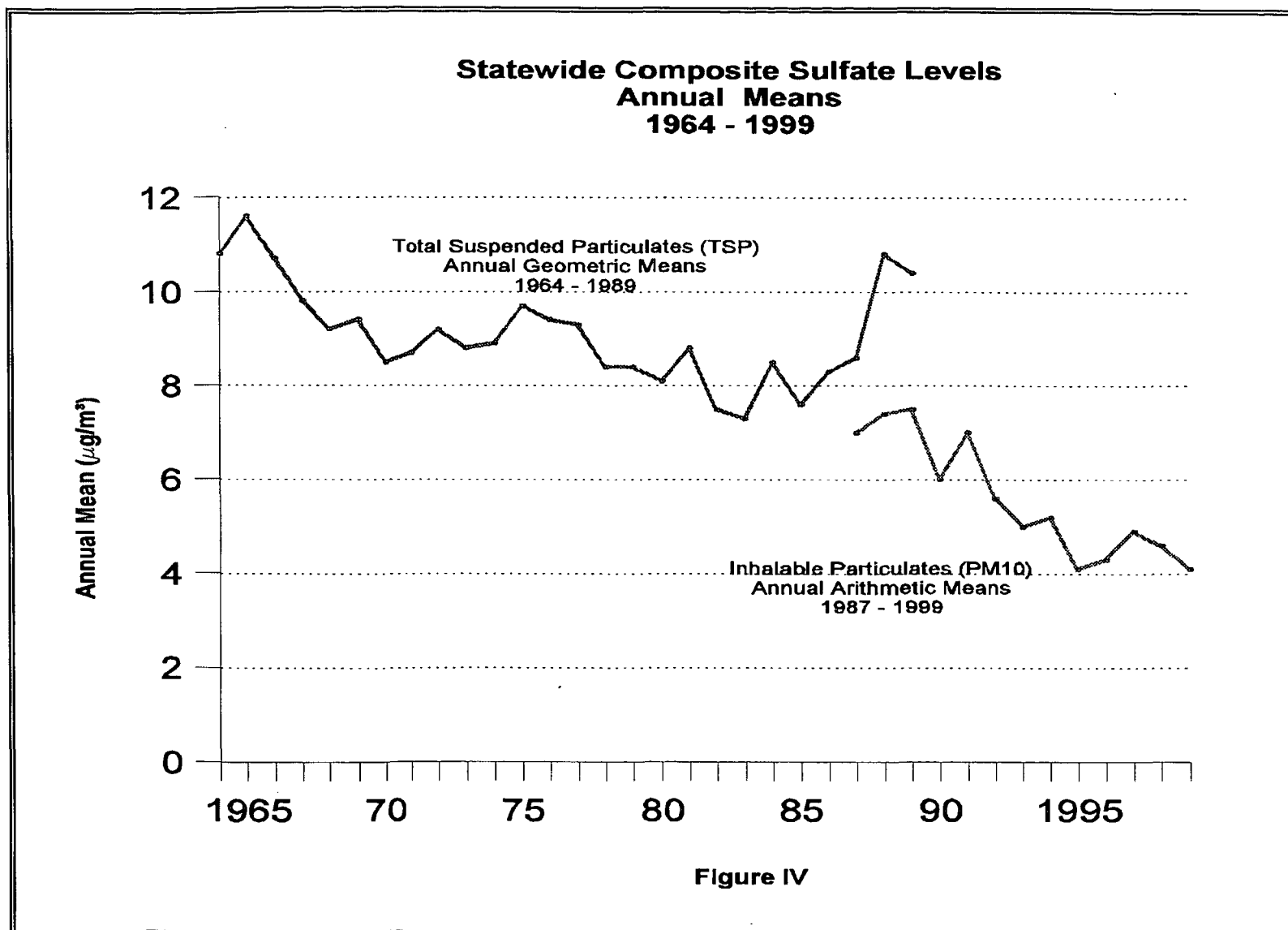
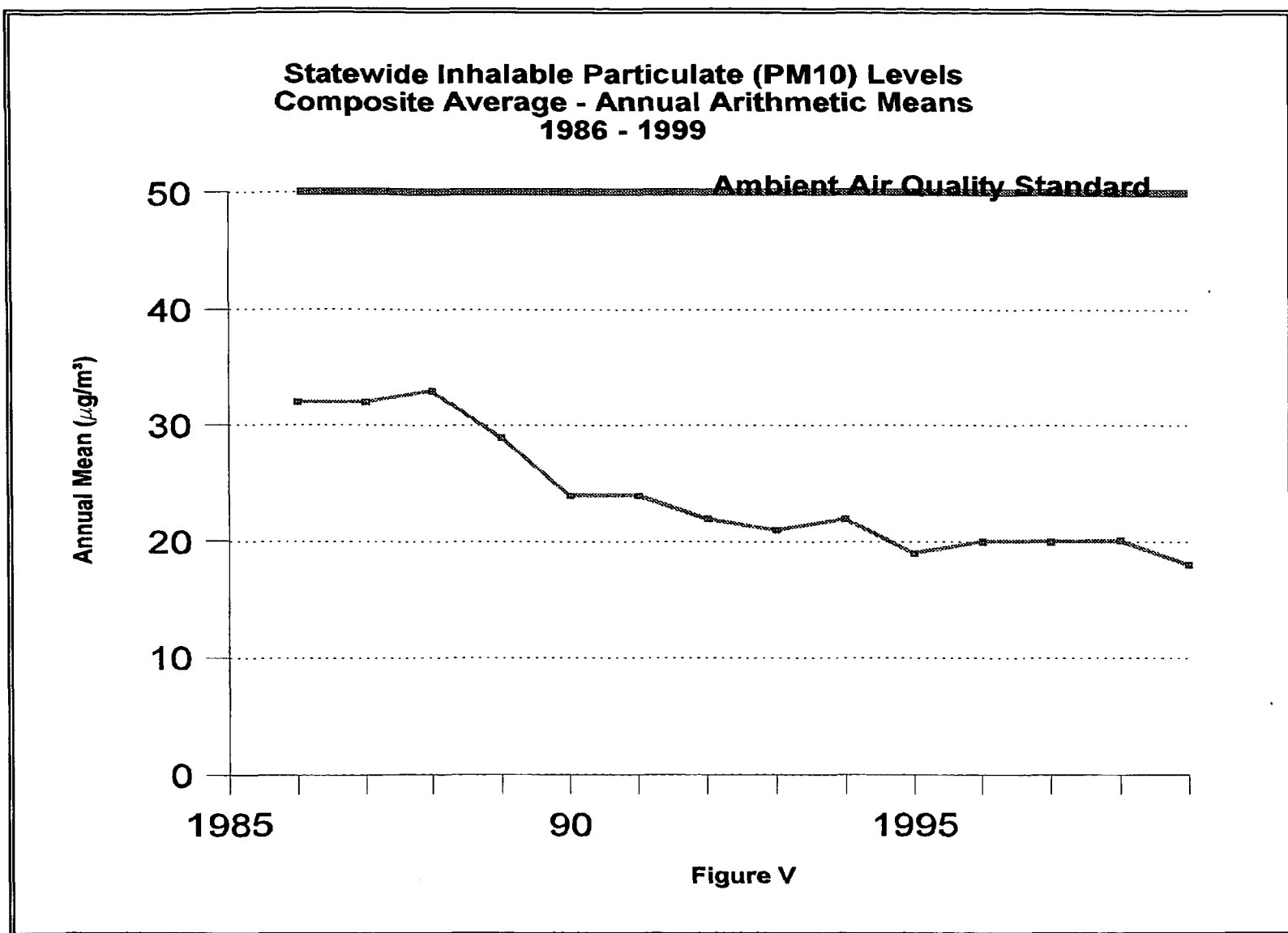
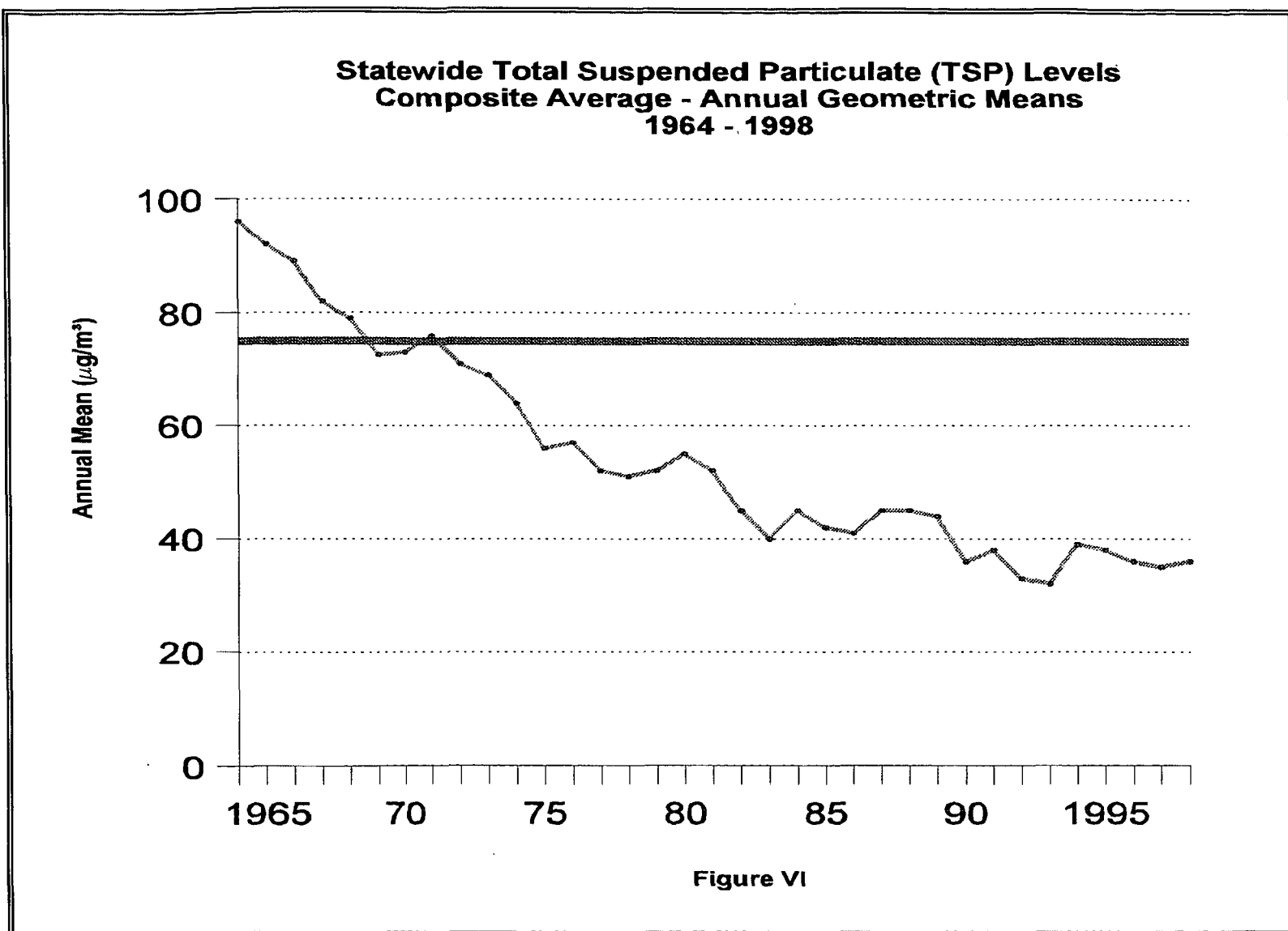


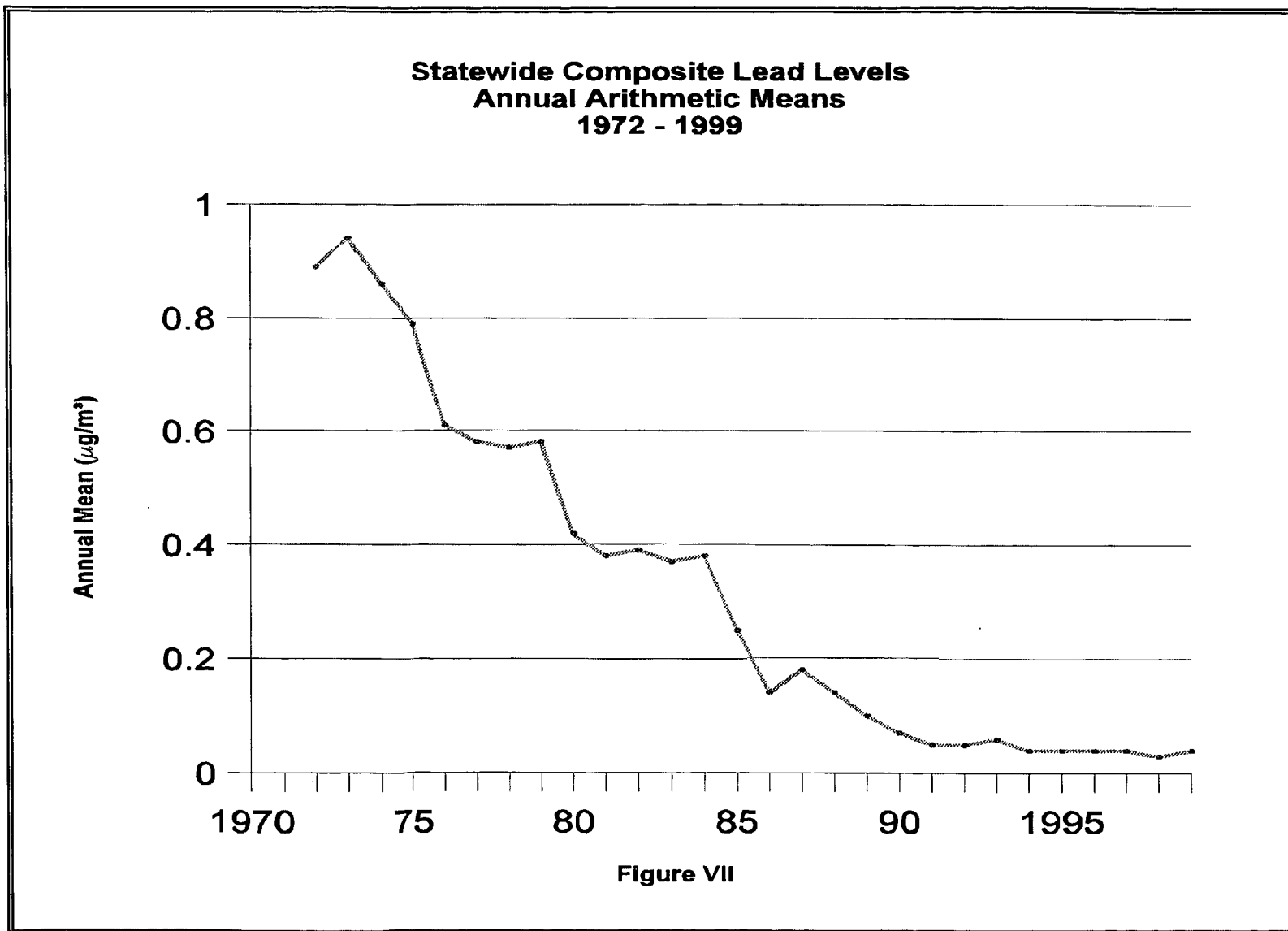
Figure II





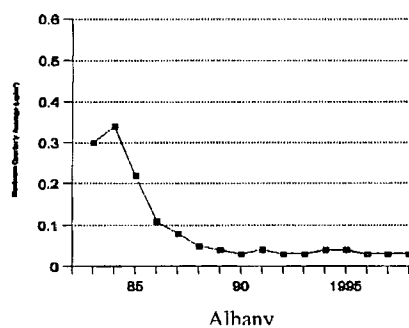
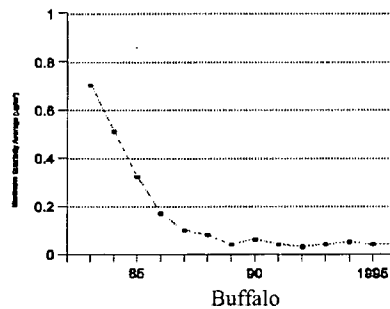


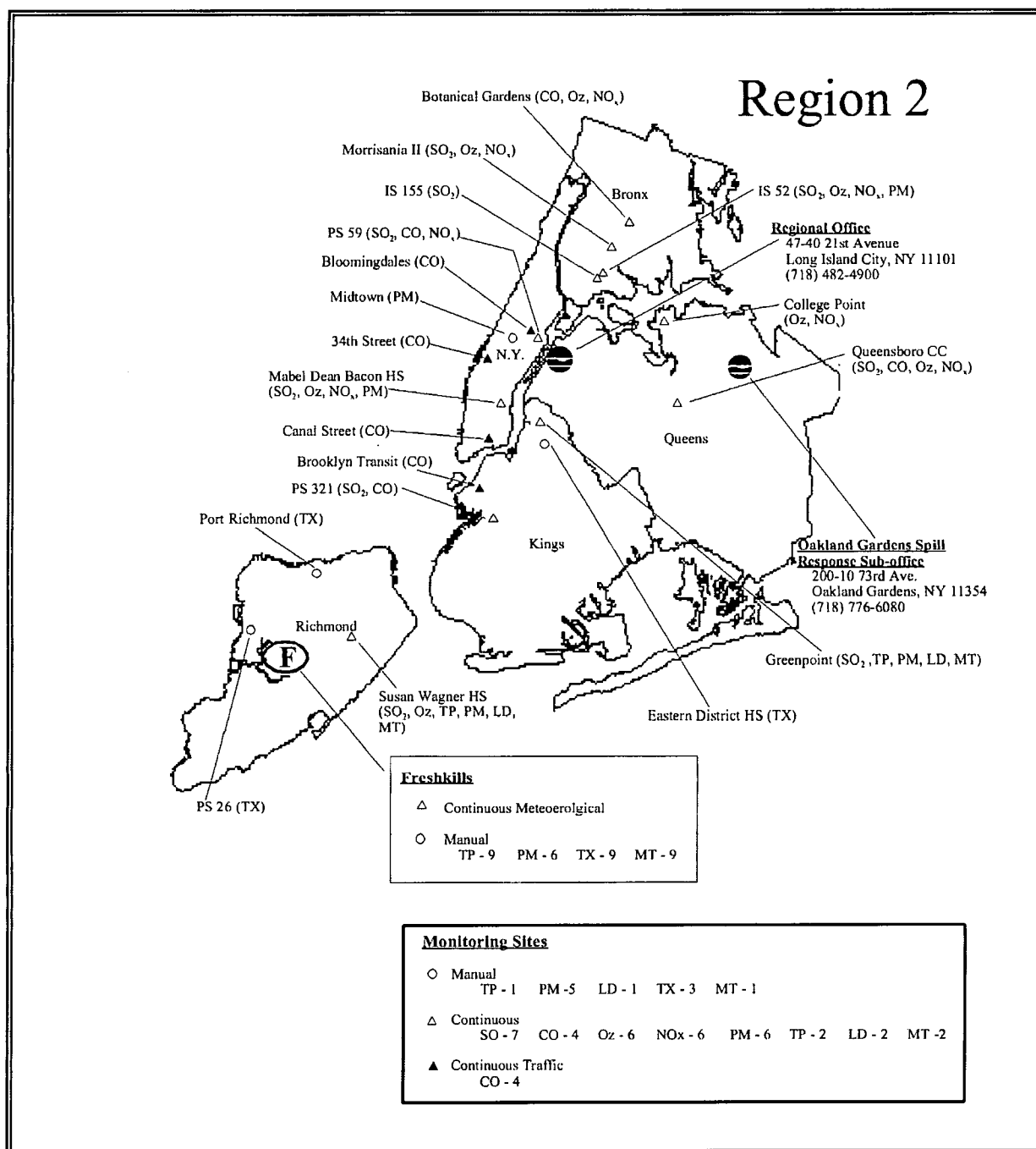




Maximum Quarterly Lead Concentrations Individual Sites 1980 - 1999

AAQS - Maximum Quarterly Average not to exceed 1.5 $\mu\text{g}/\text{m}^3$





NYSDEC Region 2

Metropolitan Air Quality Control Region

Manhattan and Queens Sites

SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 1989 through 1999
Annual Arithmetic Mean (ppm) - Primary Standard
(12 month average not to exceed 0.03 PPM *)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Mabel Dean	7093-05N	.019	.014	.017	.017	(.019)	xxx	xxx	(.012)	.013	.011	.013
PS 59	7093-10	.021	.018	.016	.018	.018	.017	.015	.015	.012	.012	.013
Queens College	7096-02	.011	.010	.012	.010	.009	(.011)	.006	.007	.005	xxx	xxx
Queensboro Comm. College	7096-08	---	---	---	---	---	---	---	---	---	.006	.007

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

				Running 3-Hour Averages Maximum not to exceed 0.5 PPM more than once per calendar year *					24 Hour Average (Calendar Day) Maximum not to exceed 0.14 PPM more than once per calendar year *				
		One-Hour Averages		Observations		Highest Values, PPM Non-Overlapping			Observations		Highest Values, PPM Midnight - Midnight		
Station	Site No.	Total Obs.	% Avail	Total	>0.5 PPM	1 st	2 nd	3 rd	Total	>.14 PPM	1 st	2 nd	3 rd
Mabel Dean	7093-05N	8,532	97	8,404	0	.094 [02/16, 11]	.078 [12/09, 10]	.072 [02/16, 08]	358	0	.043 [12/03]	.039 [12/09]	.036 [01/27]
PS 59	7093-10	8,567	98	8,435	0	.101 [02/16, 11]	.087 [02/01, 10]	.077 [12/03, 07]	362	0	.050 [02/16]	.045 [12/03]	.044 [02/01]
Queensboro Community College	7096-08	8,211	94	8,035	0	.071 [12/03, 07]	.063 [02/09, 06]	.056 [01/27, 08]	343	0	.041 [12/03]	.029 [01/27]	.028 [02/16]

SULFUR DIOXIDE - Continuous Pulsed Fluorescence

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

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

*New York and Federal Ambient Air Quality Standard

+ Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES - Wedding or Dichotomous Sampler

NYSDEC Region **2**

Metropolitan Air Quality Control Region

Manhattan Sites

Annual Averages 1989 through 1999

Annual Arithmetic Mean ($\mu\text{g}/\text{m}^3$)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	3 Yr Exp Val
Mabel Dean	7093-05N	29	28	35	(35)	(27)	28	24	25	26	24	21	24
PS 59	7093-10	40	(39)	(36)	(38)	(30)	31	33	41	31	30	xx	xx
Midtown	7093-12	66	(58)	(51)	44	47	51	51	45	46	56	(47)	50
37 th Street	7093-13	--	--	--	--	--	--	--	--	(42)	(41)	xx	xx
Canal Street	7093-14	--	--	--	--	—	—	—	(44)	(51)	47	xx	xx

Sampling at 7093-12 was suspended on 9/27/99 and terminated at 7093-10, 7093-13, and 7093-14 on 12/31/1998.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		24-Hour Concentrations - $\mu\text{g}/\text{m}^3$							# of Days > 150 $\mu\text{g}/\text{m}^3$ - Not to exceed an expected avg of one per year during the last 3 years *						
			Maximum	2 nd Max.	3 rd Max.				1997	1998	1999				
Station	Site No.	Total Obs.	Value	Date	Value	Date	Value	Date	Mea	Est	Mea	Est	Mea	Est	Exp Avg
Mabel Dean (W)	7093-05N	48	46	09/09	45	07/05	44	08/28	0	0.0	0	0.0	0	0.0	0.0
Midtown (D)	7093-12	43	102	08/04	79	08/28	77	09/09	0	0.0	0	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

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

+ Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (<2.5 Microns) - Rupprecht & Patashnick Sampler

NYSDEC Region **2**

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

Metropolitan Air Quality Control Region

(Average of last 3 years' annual means not to exceed $15 \mu\text{g}/\text{m}^3$ *; and average of 98th percentile for last 3 years not to exceed $65 \mu\text{g}/\text{m}^3$ *)

Station	Site No.	Total Obs.	Maximum Values			98 th Percentile				Quarterly Averages, 1999				Annual Mean			
			1 st	2 nd	3 rd	1999	1998	1997	3-yr avg	1 st	2 nd	3 rd	4 th	1999	1998	1997	3-yr avg
Mabel Dean (F)	7093-05	99	38.4 [12/09]	36.5 [11/23]	36.2 [07/31]	36.2	--	--	--	--	--	(15.6)	(16.8)	(16.3)	--	--	--
PS 59 (F)	7093-10	33	36.4 [11/23]	33.5 [08/28]	31.0 [12/06]	36.4	--	--	--	--	--	(15.8)	(16.4)	(16.1)	--	--	--
Canal Street (F)	8100-02	35	45.0 [10/30]	39.6 [11/23]	32.4 [08/28]	45.0	--	--	--	--	--	(14.3)	(17.2)	(16.3)	--	--	--
Morrisania (F)	7094-05	31	44.8 [10/30]	37.0 [09/09]	34.0 [12/05]	44.8	--	--	--	--	--	(17.5)	(18.1)	(17.8)	--	--	--
Botanical Garden (F)	7094-06	30	35.2 [10/30]	27.6 [11/14]	26.9 [07/05]	35.2	--	--	--	--	--	(14.0)	(13.3)	(13.5)	--	--	--
IS 52 (F)	7094-07	67	35.4 [10/29]	33.8 [12/05]	28.3 [12/03]	33.8	--	--	--	--	--	(4.8)	(13.1)	(13.0)	--	--	--
Greenpoint (F)	7095-01	30	42.8 [11/02]	32.9 [11/23]	30.7 [08/28]	42.8	--	--	--	--	--	(15.2)	(16.6)	(16.2)	--	--	--
PS 321 (F)	7095-06	28	38.0 [11/02]	33.2 [08/28]	26.8 [07/29]	38.0	--	--	--	--	--	(15.5)	(13.1)	(14.0)	--	--	--
Queensboro CC (F)	7096-08	47	29.6 [10/30]	29.5 [08/28]	28.0 [12/05]	29.6	--	--	--	--	--	(13.5)	13.3	(13.4)	--	--	--
PS 29 (F)	7096-10	30	34.1 [11/02]	30.7 [08/28]	30.5 [12/05]	34.1	--	--	--	--	--	(12.3)	13.5	(13.2)	--	--	--
Susan Wagner (F)	7097-01	36	32.1 [08/28]	32.0 [10/30]	28.8 [09/09]	32.1	--	--	--	--	--	(12.2)	(12.2)	(12.2)	--	--	--
Port Richmond (F)	7097-03	5	16.5 [12/23]	15.3 [12/29]	13.2 [12/26]	16.5	--	--	--	--	--	--	(12.0)	(12.0)	--	--	--

(Annual Means in parentheses are based on less than 75% available data)
F = Federal Reference Method

T = TEOM (Tapered Element Oscillating Microbalance)

* Federal Ambient Air Quality Standard
+ Denotes a contravention of Federal AAQS

CARBON MONOXIDE - Continuous Non-Dispersive Infrared

NYSDEC Region 2
Metropolitan Air Quality Control Region
Traffic Sites

Annual Averages 1989 through 1999
Annual Arithmetic Mean (ppm)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
350 Canal Street	8100-02N	2.9	2.8	2.8	3.1	2.6	2.3	2.1	1.9	1.7	1.6	1.5
Brooklyn Transit	8100-03	3.0	2.6	2.4	2.1	2.2	2.2	1.9	1.9	1.7	1.6	1.5
225 E. 34 th Street	8100-06	—	(2.3)	2.3	2.1	1.9	1.9	1.7	1.6	1.3	1.3	1.3
Bloomington	8100-07	—	—	—	—	(2.9)	2.4	2.7	2.5	(2.4)	(2.2)	1.7

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		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	1 st	2 nd	3 rd	Total	>9 PPM	1 st	2 nd	3 rd	Days > 9PP M
350 Canal Street	8100-02N	8,530	97	0	9.3 [08/12, 21]	7.1 [08/12, 20]	6.2 [10/29, 24]	8,582	0	5.0 [10/30, 03]	4.1 [08/12, 23]	3.9 [11/23, 19]	0
Brooklyn Transit	8100-03	8,434	96	0	7.8 [10/29, 23]	7.3 [09/27, 14]	6.6 [01/21, 08]	8,518	0	5.4 [10/30, 05]	5.0 [05/22, 05]	4.7 [01/21, 14]	0
225 E. 34 th Street	8100-06	8,455	97	0	5.8 [10/29, 23]	5.4 [01/25, 15]	5.4 [05/22, 01]	8,527	0	4.9 [10/30, 03]	4.8 [05/22, 06]	3.7 [11/23, 18]	0
Bloomington	8100-07	8,376	96	0	6.8 [10/29, 23]	6.2 [10/29, 22]	5.9 [10/30, 02]	8,434	0	5.5 [10/30, 04]	4.7 [02/16, 14]	4.4 [01/21, 12]	0

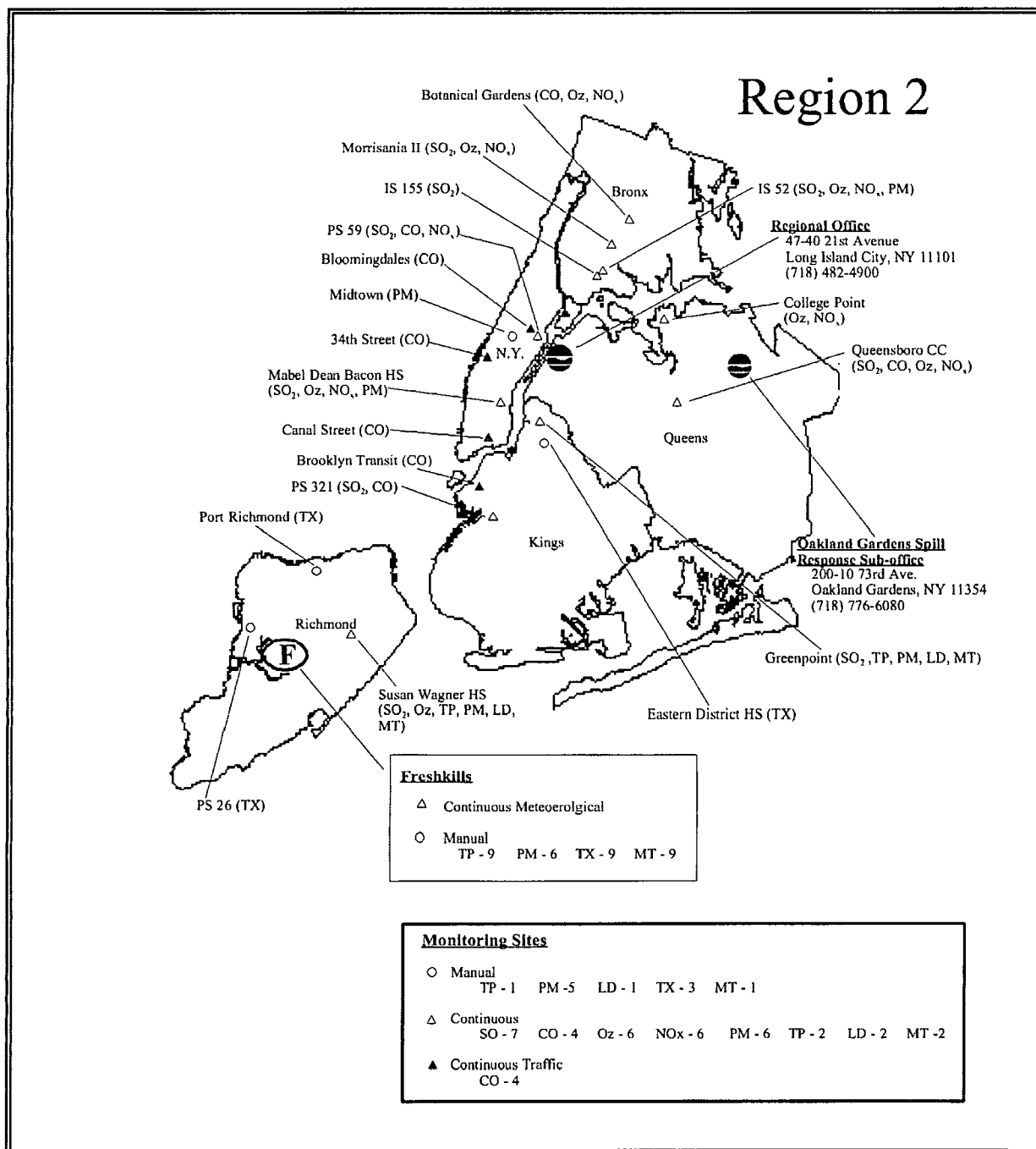
(Annual Means in parentheses are based on less than 75% available data)

*New York and Federal Ambient Air Quality Standard

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

+ Denotes a contravention of NYS/Federal AAQS (Note: 9PPM standard is not exceeded unless 8-hour avg > 9.4 PPM)



NYSDEC Region 2

Metropolitan Air Quality Control Region

Manhattan and Queens Sites

SULFUR DIOXIDE - Continuous Pulsed Fluorescence

Annual Averages 1989 through 1999
 Annual Arithmetic Mean (ppm) - Primary Standard
 (12 month average not to exceed 0.03 PPM *)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Mabel Dean	7093-05N	.019	.014	.017	.017	(.019)	xxx	xxx	(.012)	.013	.011	.013
PS 59	7093-10	.021	.018	.016	.018	.018	.017	.015	.015	.012	.012	.013
Queens College	7096-02	.011	.010	.012	.010	.009	(.011)	.006	.007	.005	xxx	xxx
Queensboro Comm. College	7096-08	---	---	---	---	---	---	---	---	---	.006	.007

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		One-Hour Averages		Running 3-Hour Averages Maximum not to exceed 0.5 PPM more than once per calendar year *					24 Hour Average (Calendar Day) Maximum not to exceed 0.14 PPM more than once per calendar year *				
				Observations		Highest Values, PPM Non-Overlapping			Observations		Highest Values, PPM Midnight - Midnight		
Station	Site No.	Total Obs.	% Avail	Total	>0.5 PPM	1 st	2 nd	3 rd	Total	>.14 PPM	1 st	2 nd	3 rd
Mabel Dean	7093-05N	8,532	97	8,404	0	.094 [02/16, 11]	.078 [12/09, 10]	.072 [02/16, 08]	358	0	.043 [12/03]	.039 [12/09]	.036 [01/27]
PS 59	7093-10	8,567	98	8,435	0	.101 [02/16, 11]	.087 [02/01, 10]	.077 [12/03, 07]	362	0	.050 [02/16]	.045 [12/03]	.044 [02/01]
Queensboro Community College	7096-08	8,211	94	8,035	0	.071 [12/03, 07]	.063 [02/09, 06]	.056 [01/27, 08]	343	0	.041 [12/03]	.029 [01/27]	.028 [02/16]

SULFUR DIOXIDE - Continuous Pulsed Fluorescence

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

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

*New York and Federal Ambient Air Quality Standard

+ Denotes a contravention of NYS/Federal AAQS

NYSDEC Region **2**
Metropolitan Air Quality Control Region

Annual Averages 1989 through 1999
Annual Arithmetic Mean (ppm) - Primary Standard
(12 month average not to exceed 0.03 PPM *)

Bronx Sites

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1988	1999
IS 155	7094-03	.017	.016	.016	.014	.013	.014	.010	.009	.008	.009	.010
Morrisania	7094-05	---	.014	.018	.019	.018	.018	.014	.014	.012	.011	.011
IS 52	7094-07	---	---	---	---	---	---	---	---	---	---	.014

Sampling at 7094-03 was terminated on 7/19/99 and commenced at 7094-07 on 10/05/99

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

				Running 3-Hour Averages Maximum not to exceed 0.5 PPM more than once per calendar year *					24 Hour Average (Calendar Day) Maximum not to exceed 0.14 PPM more than once per calendar year *				
		One-Hour Averages		Observations		Highest Values, PPM Non-Overlapping			Observations		Highest Values, PPM Midnight - Midnight		
Station	Site No.	Total Obs.	% Avail	Total	>0.5 PPM	1 st	2 nd	3 rd	Total	>.14 PPM	1 st	2 nd	3 rd
IS 155	7094-03	4,565	95	4,465	0	.071 [02/16, 09]	.060 [01/06, 13]	.057 [03/04, 10]	193	0	.038 [02/16]	.035 [02/09]	.033 [01/06]
Morrisania	7094-05	8,133	93	8,008	0	.124 [02/16, 11]	.079 [12/03, 07]	.072 [02/16, 08]	342	0	.052 [02/16]	.041 [12/03]	.037 [01/12]
IS 52	7094-07	2,062	99	2,037	0	.082 [12/03, 07]	.081 [12/09, 09]	.062 [10/08, 09]	87	0	.044 [12/03]	.036 [12/09]	.031 [12/13]

SULFUR DIOXIDE - Continuous Pulsed Fluorescence

NYSDEC Region **2**

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

N=NAMS (National Air Monitoring Station)

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

Metropolitan Air Quality Control Region

Annual Averages 1989 through 1999

Annual Arithmetic Mean (ppm) - Primary Standard

Brooklyn and Staten Island Sites

(12 month average not to exceed 0.03 PPM *)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Greenpoint	7095-01N	.018	.016	.013	.012	.010	.011	.010	(.009)	.008	.007	.007
PS 321	7095-06	.013	.013	.013	.009	.008	.011	.008	.009	.008	.008	.009
Susan Wagner	7097-01	.012	.009	.010	(.009)	(.009)	.008	.005	.006	.006	.006	.006

Sampling at 7095-01 was terminated on 10/22/99

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		One-Hour Averages		Running 3-Hour Averages Maximum not to exceed 0.5 PPM more than once per calendar year *					24 Hour Average (Calendar Day) Maximum not to exceed 0.14 PPM more than once per calendar year *				
				Observations		Highest Values, PPM Non-Overlapping			Observations		Highest Values, PPM Midnight - Midnight		
Station	Site No.	Total Obs.	% Avail	Total	>0.5 PPM	1 st	2 nd	3 rd	Total	>.14 PPM	1 st	2 nd	3 rd
Greenpoint	7095-01N	6,778	96	6,659	0	.072 [02/16, 12]	.054 [02/16, 09]	.052 [02/09, 03]	286	0	.033 [02/16]	.028 [02/01]	.026 [02/09]
PS 321	7095-06	8,461	97	8,333	0	.055 [01/21, 09]	.055 [12/03, 03]	.050 [02/16, 12]	358	0	.036 [12/03]	.030 [01/27]	.029 [02/16]
Susan Wagner	7097-01	8,504	97	8,370	0	.041 [01/21, 09]	.041 [12/09, 09]	.040 [04/29, 09]	360	0	.024 [12/03]	.022 [12/09]	.021 [12/13]

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

*New York and Federal Ambient Air Quality Standard

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

+ Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES - Wedding or Dichotomous Sampler

NYSDEC Region **2**

Metropolitan Air Quality Control Region

Manhattan Sites

Annual Averages 1989 through 1999
Annual Arithmetic Mean (ug/m³)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	3 Yr Exp Val
Mabel Dean	7093-05N	29	28	35	(35)	(27)	28	24	25	26	24	21	24
PS 59	7093-10	40	(39)	(36)	(38)	(30)	31	33	41	31	30	xx	xx
Midtown	7093-12	66	(58)	(51)	44	47	51	51	45	46	56	(47)	50
37 th Street	7093-13	--	--	--	--	--	--	--	--	(42)	(41)	xx	xx
Canal Street	7093-14	--	--	--	--	--	--	--	(44)	(51)	47	xx	xx

Sampling at 7093-12 was suspended on 9/27/99 and terminated at 7093-10, 7093-13, and 7093-14 on 12/31/1998.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		24-Hour Concentrations - ug/m ³							# of Days > 150 ug/m ³ - Not to exceed an expected avg of one per year during the last 3 years *						
			Maximum	2 nd Max.	3 rd Max.				1997	1998	1999				
Station	Site No.	Total Obs.	Value	Date	Value	Date	Value	Date	Mea	Est	Mea	Est	Mea	Est	Exp Avg
Mabel Dean (W)	7093-05N	48	46	09/09	45	07/05	44	08/28	0	0.0	0	0.0	0	0.0	0.0
Midtown (D)	7093-12	43	102	08/04	79	08/28	77	09/09	0	0.0	0	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

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

+ Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES - Wedding or Dichotomous Sampler

NYSDEC Region **2**

Metropolitan Air Quality Control Region

Bronx and Brooklyn Sites

Annual Averages 1989 through 1999

Annual Arithmetic Mean ($\mu\text{g}/\text{m}^3$)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	3 Yr Exp Val
IS 155	7094-03	(30)	27	26	24	21	27	23	23	25	23	xx	xx
Morrisania II	7094-05	--	29	31	28	25	29	24	26	24	24	xx	xx
IS 52	7094-07	--	--	--	--	--	--	--	--	--	--	(16)	xx
Greenpoint	7095-01N	30	30	30	26	25	29	25	26	(26)	23	23	24
PS 321	7095-06	28	27	25	23	21	25	20	22	24	20	xx	xx
PS 314	7095-07N	44	39	29	23	27	31	26	27	28	26	xx	xx

Sampling at 7094-03, 7094-05, 7095-06, and 7095-07 was terminated on 12/31/98; and commenced at 7094-07 on 10/03/99.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		24-Hour Concentrations - ug/m ³							# of Days > 150 ug/m ³ - Not to exceed an expected avg of one per year during the last 3 years *						
			Maximum		2 nd Max.		3 rd Max.		1997		1998		1999		
Station	Site No.	Total Obs.	Value	Date	Value	Date	Value	Date	Mea	Est	Mea	Est	Mea	Est	Exp Avg
IS 52 (W)	7094-07	12	27	11/14	22	11/02	22	12/08	--	--	--	--	0	0.0	0.0
Greenpoint (W)	7095-01N	50	51	09/09	46	07/17	42	07/29	0	0.0	0	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

W=Wedding Sampler

N=NAMS (National Air Monitoring Station)

D=Dichotomous Sampler

Mea=Measured

Est=Estimated

+ Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES - Wedding or Dichotomous Sampler

NYSDEC Region **2**
Metropolitan Air Quality Control Region
Staten Island Sites

Annual Averages 1989 through 1999 Annual Arithmetic Mean (ug/m³)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	3 Yr Exp Val
Susan Wagner	7097-01	(25)	22	(22)	19	(19)	21	19	20	19	17	16	17
PS 26	7097-02	(31)	25	28	23	(26)	26	24	25	25	20	xx	xx
Port Richmond	7097-03	(32)	26	27	22	22	24	21	22	(23)	(23)	xx	xx

Sampling at 7097-02 and 7097-03 was terminated on 12/31/98.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		24-Hour Concentrations - ug/m ³							# of Days > 150 ug/m ³ - Not to exceed an expected avg of one per year during the last 3 years *						
			Maximum		2 nd Max.		3 rd Max.		1997		1998		1999		
Station	Site No.	Total Obs.	Value	Date	Value	Date	Value	Date	Mea	Est	Mea	Est	Mea	Est	Exp Avg
Susan Wagner (W)	7097-01	51	45	07/05	43	07/17	39	08/22	0	0.0	0	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

W=Wedding Sampler

N=NAMS (National Air Monitoring Station)

D=Dichotomous Sampler

Mea=Measured

Est=Estimated

+ Denotes a contravention of NYS/Federal AAQS

INHALABLE PARTICULATES (<2.5 Microns) - Rupprecht & Patashnick Sampler

NYSDEC Region **2**

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

Metropolitan Air Quality Control Region

(Average of last 3 years' annual means not to exceed $15 \mu\text{g}/\text{m}^3$ *; and average of
98th percentile for last 3 years not to exceed $65 \mu\text{g}/\text{m}^3$ *)

Station	Site No.	Total Obs.	Maximum Values			98 th Percentile				Quarterly Averages, 1999				Annual Mean			
			1 st	2 nd	3 rd	1999	1998	1997	3-yr avg	1 st	2 nd	3 rd	4 th	1999	1998	1997	3-yr avg
Mabel Dean (F)	7093-05	99	38.4 [12/09]	36.5 [11/23]	36.2 [07/31]	36.2	--	--	--	--	--	(15.6)	(16.8)	(16.3)	--	--	--
PS 59 (F)	7093-10	33	36.4 [11/23]	33.5 [08/28]	31.0 [12/06]	36.4	--	--	--	--	--	(15.8)	(16.4)	(16.1)	--	--	--
Canal Street (F)	8100-02	35	45.0 [10/30]	39.6 [11/23]	32.4 [08/28]	45.0	--	--	--	--	--	(14.3)	(17.2)	(16.3)	--	--	--
Morrisania (F)	7094-05	31	44.8 [10/30]	37.0 [09/09]	34.0 [12/05]	44.8	--	--	--	--	--	(17.5)	(18.1)	(17.8)	--	--	--
Botanical Garden (F)	7094-06	30	35.2 [10/30]	27.6 [11/14]	26.9 [07/05]	35.2	--	--	--	--	--	(14.0)	(13.3)	(13.5)	--	--	--
IS 52 (F)	7094-07	67	35.4 [10/29]	33.8 [12/05]	28.3 [12/03]	33.8	--	--	--	--	--	(4.8)	(13.1)	(13.0)	--	--	--
Greenpoint (F)	7095-01	30	42.8 [11/02]	32.9 [11/23]	30.7 [08/28]	42.8	--	--	--	--	--	(15.2)	(16.6)	(16.2)	--	--	--
PS 321 (F)	7095-06	28	38.0 [11/02]	33.2 [08/28]	26.8 [07/29]	38.0	--	--	--	--	--	(15.5)	(13.1)	(14.0)	--	--	--
Queensboro CC (F)	7096-08	47	29.6 [10/30]	29.5 [08/28]	28.0 [12/05]	29.6	--	--	--	--	--	(13.5)	13.3	(13.4)	--	--	--
PS 29 (F)	7096-10	30	34.1 [11/02]	30.7 [08/28]	30.5 [12/05]	34.1	--	--	--	--	--	(12.3)	13.5	(13.2)	--	--	--
Susan Wagner (F)	7097-01	36	32.1 [08/28]	32.0 [10/30]	28.8 [09/09]	32.1	--	--	--	--	--	(12.2)	(12.2)	(12.2)	--	--	--
Port Richmond (F)	7097-03	5	16.5 [12/23]	15.3 [12/29]	13.2 [12/26]	16.5	--	--	--	--	--	--	(12.0)	(12.0)	--	--	--

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

F = Federal Reference Method

T = TEOM (Tapered Element Oscillating Microbalance)

* Federal Ambient Air Quality Standard

+ Denotes a contravention of Federal AAQS

(Annual Means in parentheses are based on less than 75% available data)
F = Federal Reference Method

T = TEOM (Tapered Element Oscillating Microbalance)

* Federal Ambient Air Quality Standard
+ Denotes a contravention of Federal AAQS

TOTAL SUSPENDED PARTICULATES - High Volume Air Samplers

NYSDEC Region **2**

Metropolitan Air Quality Control Region

Annual Geometric Means (G.M., ug/m³) 1989 through 1999

Station	Site No.	AAQS G.M. *	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Mabel Dean	7093-05	75	61	52	56	(47)	xx	xx	xx	xx	xx	xx	xx
Midtown	7093-12	75	132+	107+	95+	(96)+	99+	110+	92+	118+	117+	129+	xx
Greenpoint	7095-01N	75	65	--	59	49	56	67	59	57	(58)	50	56
Susan Wagner	7097-01	75	--	--	37	(38)	(40)	44	37	33	35	32	29
PS 26	7097-02	75	--	--	48	(21)	43	54	47	44	(43)	xx	xx

Sampling at 7097-02 was terminated on 03/31/97 and at 7093-12 on 12/31/98.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		24-Hour Concentrations - ug/m ³							Maximum - Not to exceed 250 ug/m ³ more than once per calendar year *		
			Maximum		2 nd Max.		3 rd Max.		Number of Observations		
Station	Site No.	Total Obs.	Value	Date	Value	Date	Value	Date	>150 ug/m ³ **	>250 ug/m ³ *	>260 ug/m ³ **
Greenpoint	7095-01N	51	117	05/12	100	04/30	93	07/17	0	0	0
Susan Wagner	7097-01	48	66	07/17	64	07/29	58	07/05	0	0	0

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

*New York Ambient Air Quality Standard (AAQS)

+ Denotes a contravention of New York State AAQS

N=NAMS (National Air Monitoring Station)

** Federal Ambient Air Quality Standards - Primary (260 ug/m³) and Secondary (150 ug/m³)

++ Denotes a contravention of Federal AAQS

CARBON MONOXIDE - Continuous Non-Dispersive Infrared

NYSDEC Region **2**
Metropolitan Air Quality Control Region
Traffic Sites

Annual Averages 1989 through 1999
Annual Arithmetic Mean (ppm)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
350 Canal Street	8100-02N	2.9	2.8	2.8	3.1	2.6	2.3	2.1	1.9	1.7	1.6	1.5
Brooklyn Transit	8100-03	3.0	2.6	2.4	2.1	2.2	2.2	1.9	1.9	1.7	1.6	1.5
225 E. 34 th Street	8100-06	—	(2.3)	2.3	2.1	1.9	1.9	1.7	1.6	1.3	1.3	1.3
Bloomington	8100-07	—	—	—	—	(2.9)	2.4	2.7	2.5	(2.4)	(2.2)	1.7

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		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	1 st	2 nd	3 rd	Total	>9 PPM	1 st	2 nd	3 rd	Days > 9PP M
350 Canal Street	8100-02N	8,530	97	0	9.3 [08/12, 21]	7.1 [08/12, 20]	6.2 [10/29, 24]	8,582	0	5.0 [10/30, 03]	4.1 [08/12, 23]	3.9 [11/23, 19]	0
Brooklyn Transit	8100-03	8,434	96	0	7.8 [10/29, 23]	7.3 [09/27, 14]	6.6 [01/21, 08]	8,518	0	5.4 [10/30, 05]	5.0 [05/22, 05]	4.7 [01/21, 14]	0
225 E. 34 th Street	8100-06	8,455	97	0	5.8 [10/29, 23]	5.4 [01/25, 15]	5.4 [05/22, 01]	8,527	0	4.9 [10/30, 03]	4.8 [05/22, 06]	3.7 [11/23, 18]	0
Bloomington	8100-07	8,376	96	0	6.8 [10/29, 23]	6.2 [10/29, 22]	5.9 [10/30, 02]	8,434	0	5.5 [10/30, 04]	4.7 [02/16, 14]	4.4 [01/21, 12]	0

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

*New York and Federal Ambient Air Quality Standard

N=NAMS (National Air Monitoring Station)

+ Denotes a contravention of NYS/Federal AAQS (Note: 9PPM standard is not exceeded unless 8-hour avg > 9.4 PPM)

[Date of Occurrence, Hour]

NYSDEC Region 2

Metropolitan Air Quality Control Region
Roof top (Background) Sites**CARBON MONOXIDE** - Continuous Non-Dispersive InfraredAnnual Averages 1989 through 1999
Annual Arithmetic Mean (ppm)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PS 59	7093-10	1.7	1.6	1.4	1.4	1.2	1.3	1.3	1.1	1.0	1.0	1.0
Botanical Gardens	7094-06	---	---	---	---	---	---	0.7	0.6	0.6	0.7	0.7
PS 321	7095-06	1.0	1.0	0.9	0.9	0.8	0.9	0.8	0.8	0.8	0.8	0.8
Queensboro Comm Coll	7096-08	---	---	---	---	---	---	---	---	---	0.7	0.7

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		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	1 st	2 nd	3 rd	Total	>9 PPM	1 st	2 nd	3 rd	Days> 9PPM
PS 59	7093-10	8,530	97	0	8.4 [02/27, 24]	5.0 [02/27, 20]	4.8 [02/27, 23]	8,506	0	3.7 [02/27, 24]	3.6 [10/30, 03]	2.9 [02/16, 14]	0
Botanical Gardens	7094-06	8,581	98	0	6.2 [10/29, 23]	5.7 [02/16, 10]	5.7 [12/08, 21]	8,600	0	4.6 [10/30, 03]	4.0 [12/08, 23]	3.2 [12/10, 09]	0
PS 321	7095-06	8,567	98	0	4.5 [01/21, 09]	3.9 [05/21, 24]	3.9 [05/21, 23]	8,601	0	3.6 [12/13, 16]	3.3 [05/22, 05]	2.8 [01/21, 11]	0
Queensboro Comm. College	7096-08	8,091	92	0	3.5 [05/09, 04]	3.5 [12/03, 09]	3.4 [05/30, 01]	8,008	0	2.8 [12/09, 02]	2.6 [05/09, 08]	2.5 [01/21, 10]	0

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

*New York and Federal Ambient Air Quality Standard

N=NAMS (National Air Monitoring Station)

+ Denotes a contravention of NYS/Federal AAQS (Note: 9PPM standard is not exceeded unless 8-hour avg > 9.4 PPM)

[Date of Occurrence, Hour]

OZONE - Continuous UV Light Absorption

NYSDEC Region **2**

Metropolitan Air Quality Control Region
Bronx and Brooklyn Sites

Annual Averages 1989 through 1999
Annual Arithmetic Mean (ppm)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
IS 155	7094-03	---	---	---	---	---	---	---	---	.020	xxx	.021
Morrisania	7094-05	---	(.014)	(.016)	(.013)	.018	.017	.019	.019	.021	.023	.019
Botanical Gardens	7094-06	---	---	---	---	---	---	.018	.018	.017	.015	.018
IS 52	7094-07	---	---	---	---	---	---	---	---	---	---	.007

Sampling at 7094-03 was terminated on 7/19/99 and commenced at 7094-07 on 10/27/99

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		One Hour Averages							4 th Highest Daily Maximum 8-Hour Average - Not to exceed an avg of 0.08 ppm during the last 3 years *			
		Observations			Highest Values, PPM							
Station	Site No.	Total Obs.	% Avail	>.12 PPM	1 st	2 nd	3 rd	4 th	1997	1998	1999	Avg
IS 155	7094-03	2,953	84	0	.105 [06/07, 14]	.104 [07/03, 18]	.102 [05/31, 15]	.090 [07/06, 16]	.089 [06/25]	.079 [05/16]	.078 [05/31]	.082
Morrisania (Oper. 04/01 - 12/10)	7094-05	5,095	84	1	.128+ [07/18, 14]	.123 [04/16, 13]	.114 [07/17, 14]	.114 [07/16, 14]	.089 [06/25]	.079 [05/16]	.086 [07/17]	.084
Botanical Gardens	7094-06	8,579	98	2	.141+ [07/18, 14]	.139+ [07/17, 15]	.121 [07/16, 14]	.117 [07/30, 14]	.096 [06/21]	.066 [08/23]	.103 [07/30]	.088 +
IS 52	7094-07	1,536	97	0	.036 [11/10, 14]	.035 [11/06, 13]	.029 [11/07, 13]	.027 [10/31, 14]	---	---	.023 [11/02]	---

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

*New York and Federal Ambient Air Quality Standard

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

+ Denotes a contravention of Federal AAQS (Note: .08 PPM standard is not exceeded unless avg. Of 4th max 8-hr concentrations > .084 PPM)

OZONE - Continuous UV Light Absorption

NYSDEC Region **2**

Metropolitan Air Quality Control Region

Annual Averages 1989 through 1999 Annual Arithmetic Mean (ppm)

Manhattan and Brooklyn Sites

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Mabel Dean H.S.	7093-05	---	---	---	---	---	---	---	---	.019	.020	.013
Greenpoint	7095-01	---	---	---	---	(.010)	.021	.022	(.024)	xxx	xxx	xxx

Sampling at 7095-01 was terminated on 10/25/96.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		One Hour Averages							4 th Highest Daily Maximum 8-Hour Average - Not to exceed an avg of 0.08 ppm during the last 3 years *			
		Observations			Highest Values, PPM							
Station	Site No.	Total Obs.	% Avail	>.12 PPM	1 st	2 nd	3 rd	4 th	1997	1998	1999	Avg
Mabel Dean H.S. (Oper. 03/10 - 12/31)	7093-05	7,662	88	0	.122 [07/17, 15]	.120 [07/18, 14]	.116 [07/16, 18]	.099 [07/19, 14]	.082 [08/10]	.075 [08/04]	.075 [06/26]	.077

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

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

*New York and Federal Ambient Air Quality Standard

+ Denotes a contravention of Federal AAQS (Note: .08 PPM standard is not exceeded unless avg. Of 4th max 8-hr concentrations > .084 PPM)

OZONE - Continuous UV Light Absorption

NYSDEC Region **2**

Metropolitan Air Quality Control Region
Queens and Staten Island Sites

Annual Averages 1989 through 1999
Annual Arithmetic Mean (ppm)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Queens College	7096-02N	.017	.017	.020	.017	.017	.016	.017	.017	.024	xxx	xxx
Queensboro Comm Coll	7096-08	---	---	---	---	---	---	---	---	---	.021	.020
College Point P.O.	7096-09	---	---	---	---	---	---	---	---	---	.015	.016
Susan Wagner	7097-01	.029	.028	(.031)	(.023)	(.031)	.031	.030	.032	.035	.033	.033

Sampling at 7096-02 was terminated on 08/29/97; sampling commenced at 7096-08 on 05/20/98 and at 7096-09 on 05/16/98.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		One Hour Averages							4 th Highest Daily Maximum 8-Hour Average - Not to exceed an avg of 0.08 ppm during the last 3 years *			
		Observations			Highest Values, PPM							
Station	Site No.	Total Obs.	% Avail	>.12 PPM	1 st	2 nd	3 rd	4 th	1997	1998	1999	Avg
Queensboro Comm Coll	7096-08	8,209	94	4	.139 + [07/18, 15]	.132 + [07/16, 15]	.132 + [07/17, 14]	.128 + [07/19, 15]	---	.090 [06/26]	.094 [06/07]	.092 +
College Point P.O.	7096-09	8,321	95	0	.104 [07/17, 14]	.100 [07/16, 15]	.098 [07/18, 15]	.090 [07/19, 15]	---	.064 [09/27]	.065 [07/16]	.064
Susan Wagner (Operated 04/01 - 11/01)	7097-01	4,874	94	3	.153 + [07/16, 18]	.145 + [07/17, 15]	.126 + [07/18, 14]	.123 [05/30, 17]	.122 [07/16]	.090 [05/29]	.105 [07/24]	.105 +

Due to EPA Waiver for SLAMS (Non-NAMS), % Availability may be based on operational year of less than 12 months (Susan Wagner)

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

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

*New York and Federal Ambient Air Quality Standard

+ Denotes a contravention of Federal AAQS (Note: .08 PPM standard is not exceeded unless avg. Of 4th max 8-hr concentrations > .084 PPM)

NITRIC OXIDE & NITROGEN DIOXIDE - Continuous Chemiluminescence

NYSDEC Region 2
Metropolitan Air Quality Control Region
Manhattan and Brooklyn Sites

Annual Averages 1989 through 1999 Nitric Oxide - Annual Arithmetic Mean (ppm)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Mabel Dean	7093-05	.042	.043	.039	(.052)	xxx	xxx	xxx	(.036)	.038	.031	.033
PS 59	7093-10	.065	.070	.069	(.080)	.060	.070	.059	.052	.047	.045	.046
Greenpoint	7095-01	---	---	---	---	(.053)	.033	.035	(.032)	xxx	xxx	xxx

Nitrogen Dioxide - Annual Arithmetic Mean (ppm) - Primary Standard (12 month average not to exceed 0.05 PPM *)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Mabel Dean	7093-05	.042	.042	.041	(.034)	xxx	xxx	xxx	(.035)	.035	.036	.037
PS 59	7093-10	.049	.046	.047	(.038)	.043	.046	.042	.042	.040	.040	.041
Greenpoint	7095-01N	---	---	---	---	(.035)	.036	.033	(.035)	xxx	xxx	xxx

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		Nitric Oxide One-Hour Averages					Nitrogen Dioxide One-Hour Averages				
		Observations		Highest Values, PPM			Observations		Highest Values, PPM		
Station	Site No.	Total	% Avail	1 st	2 nd	3 rd	Total	% Avail	1 st	2 nd	3 rd
Mabel Dean	7093-05	7,785	89	.472 [12/09, 10]	.445 [02/16, 10]	.424 [02/16, 11]	7,799	89	.117 [02/16, 12]	.109 [02/16, 11]	.106 [02/16, 13]
PS 59	7093-10	8,499	97	.533 [02/16, 10]	.507 [02/16, 11]	.487 [12/09, 09]	8,499	97	.135 [02/16, 12]	.126 [02/16, 11]	.118 [02/16, 13]

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

N=NAMS (National Air Monitoring Station)

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

NITRIC OXIDE & NITROGEN DIOXIDE - Continuous Chemiluminescence

NYSDEC Region **2**

Metropolitan Air Quality Control Region

Bronx Sites

Annual Averages 1989 through 1999 Nitric Oxide - Annual Arithmetic Mean (ppm)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Morrisania	7094-05	---	.048	(.049)	(.045)	(.033)	.040	.032	.032	.027	.027	.031
Botanical Gardens	7094-06	---	---	---	---	---	---	.024	.023	.023	.022	.024

Nitrogen Dioxide - Annual Arithmetic Mean (ppm) - Primary Standard (12 month average not to exceed 0.05 PPM *)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Morrisania	7094-05N	---	.039	.039	(.037)	(.037)	.039	.036	.036	.035	.036	.033
Botanical Gardens	7094-06	---	---	---	---	---	---	.031	.032	.030	.030	.029

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		Nitric Oxide One-Hour Averages					Nitrogen Dioxide One-Hour Averages				
		Observations		Highest Values, PPM			Observations		Highest Values, PPM		
Station	Site No.	Total	% Avail	1 st	2 nd	3 rd	Total	% Avail	1 st	2 nd	3 rd
Morrisania	7094-05	8,467	97	.616 [02/16, 10]	.489 [02/16, 11]	.477 [10/08, 08]	8,469	97	.108 [07/19, 11]	.107 [02/16, 11]	.100 [02/16, 10]
Botanical Gardens	7094-06	8,598	98	.538 [10/29, 23]	.529 [12/08, 21]	.525 [02/16, 10]	8,599	98	.106 [02/16, 10]	.093 [06/22, 22]	.091 [06/22, 23]

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

N=NAMS (National Air Monitoring Station)

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

NITRIC OXIDE & NITROGEN DIOXIDE - Continuous Chemiluminescence

NYSDEC Region **2**

Metropolitan Air Quality Control Region

Bronx Sites

Annual Averages 1989 through 1999 Nitric Oxide - Annual Arithmetic Mean (ppm)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
IS 155	7094-03	---	---	---	---	---	---	---	---	---	---	(.014)
IS 52	7094-07	---	---	---	---	---	---	---	---	---	---	(.030)

Nitrogen Dioxide - Annual Arithmetic Mean (ppm) - Primary Standard (12 month average not to exceed 0.05 PPM *)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
IS 155	7094-03	---	---	---	---	---	---	---	---	---	---	(.030)
IS 52	7094-07	---	---	---	---	---	---	---	---	---	---	(.032)

Sampling at 7094-03 commenced on 2/23/99 and ended on 7/19/99; sampling commenced at 7094-07 on 10/7/99.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		Nitric Oxide One-Hour Averages					Nitrogen Dioxide One-Hour Averages				
		Observations		Highest Values, PPM			Observations		Highest Values, PPM		
Station	Site No.	Total	% Avail	1 st	2 nd	3 rd	Total	% Avail	1 st	2 nd	3 rd
IS 155	7094-03	2,216	66	.271 [05/21, 24]	.265 [05/22, 01]	.249 [05/21, 23]	2,216	66	.112 [05/31, 12]	.104 [05/31, 11]	.095 [05/31, 13]
IS 52	7094-07	930	32	.415 [10/30, 01]	.414 [10/29, 24]	.358 [10/30, 02]	930	32	.085 [10/29, 17]	.077 [10/17, 11]	.076 [10/29, 16]

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

N=NAMS (National Air Monitoring Station)

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

NITRIC OXIDE & NITROGEN DIOXIDE - Continuous Chemiluminescence

NYSDEC Region 2

Metropolitan Air Quality Control Region

Queens Sites

Annual Averages 1989 through 1999 Nitric Oxide - Annual Arithmetic Mean (ppm)

Station	Site No.	1988	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Queensboro Comm. Coll.	7096-08	---	---	---	---	---	---	---	---	---	.019	.019
College Point P.O.	7096-09	---	---	---	---	---	---	---	---	---	.030	.034

Nitrogen Dioxide - Annual Arithmetic Mean (ppm) - Primary Standard (12 month average not to exceed 0.05 PPM *)

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Queensboro Comm. Coll.	7096-08	---	---	---	---	---	---	---	---	---	.027	.026
College Point P.O.	7096-09	---	---	---	---	---	---	---	---	---	.028	.029

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		Nitric Oxide One-Hour Averages					Nitrogen Dioxide One-Hour Averages				
		Observations		Highest Values, PPM			Observations		Highest Values, PPM		
Station	Site No.	Total	% Avail	1 st	2 nd	3 rd	Total	% Avail	1 st	2 nd	3 rd
Queensboro Comm. Coll.	7096-08	7,503	86	.411 [12/08, 23]	.399 [12/03, 09]	.372 [02/16, 08]	7,768	89	.095 [07/29, 13]	.087 [07/04, 23]	.083 [05/29, 22]
College Point P.O.	7096-09	7,468	85	.534 [12/03, 06]	.519 [12/03, 09]	.492 [12/03, 07]	7,489	86	.114 [12/03, 10]	.107 [07/29, 14]	.105 [04/19, 12]

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

*New York and Federal Ambient Air Quality Standard

N=NAMS (National Air Monitoring Station)

[Date of Occurrence, Hour]

+ Denotes a contravention of NYS/Federal AAQS

LEAD - High Volume Air Samplers (Glass Fiber Filters)NYSDEC Region **2**

Metropolitan Air Quality Control Region

Annual Geometric Means (ug/m³) 1989 through 1999

Station	Site No.	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Midtown	7093-12	---	---	---	---	---	0.04	0.04	0.05	0.05	0.08	xx
Greenpoint	7095-01	0.08	---	---	0.09	0.08	0.09	0.07	0.07	(0.08)	0.07	0.06
PS 314	7095-07N	0.06	---	(0.04)	0.04	0.04	0.05	0.04	xx	xx	xx	xx
Susan Wagner	7097-01	---	---	---	---	---	0.03	0.02	0.02	0.02	0.02	0.03
PS 26	7097-02	---	---	---	---	---	0.03	0.03	0.03	0.03	xx	xx

Sampling at 7095-07 was terminated on 12/31/95; at 7097-02 on 03/31/97; and at 7093-12 on 12/31/98.

Comparison Between NYS Ambient Air Quality and Ambient Air Quality Standards for Calendar Year 1999

		24-Hour Concentrations - ug/m ³								QUARTERLY AVERAGES Maximum not to exceed 1.5 ug/m ³ *		
				Maximum		2 nd Max.		3 rd Max.		Highest Values, ug/m ³ [Quarter]		
Station	Site No.	Total Obs.	% Avail	Value	Date	Value	Date	Value	Date	1 st	2 nd	3 rd
Greenpoint	7095-01	50	82	0.41	03/19	0.37	11/08	0.36	12/02	0.10 [4th]	0.10 [1st]	0.08 [2 nd]
Susan Wagner	7097-01	48	79	0.04	06/23	0.03	07/29	0.02	08/22	0.02 [2 nd]	0.02 [3rd]	0.02 [1 st]

(Annual Means in parentheses are based on less than 75% available data)W - Wedding Sampler

D - Dichotomous Sampler

[Date of Occurrence]

INHALABLE PARTICULATES - SULFATE, NITRATE FRACTIONS

- Dichotomous or Wedding Sampler

NYSDEC Region **2**

Metropolitan Air Quality Control Region

SULFATE FRACTION

Annual Averages 1989 through 1999													1999 Data Summary				
		Annual Arithmetic Mean, (ug/m ³)											Observations		Highest Values, ug/m ³		
Station	Site No.	1989	90	91	92	93	94	95	96	97	98	1999	Total	%	1 st	2 nd	3 rd
Mabel Dean (W)	7093-05	7.4	7.5	8.8	(9.0)	(5.1)	6.8	5.1	5.0	6.0	4.7	4.5	48	79	16.7 [08/28]	15.1 [09/09]	11.6 [07/23]
PS 59 (D)	7093-10	8.6	(7.6)	(7.8)	(6.8)	5.2	6.4	5.6	6.2	5.8		xx	xx	xx	xx	xx	xx
Midtown (D)	7093-12	7.6	(7.5)	(7.9)	6.6	5.7	6.9	5.9	5.2	5.9	6.3	(5.0)	43	70	16.7 [08/28]	16.3 [09/09]	15.6 [07/17]

Sampling at 7093-10 was terminated on 12/31/98 and at 7093-12 on 09/27/99.

NITRATE FRACTION

Annual Averages 1989 through 1999													1999 Data Summary				
		Annual Arithmetic Mean, (ug/m ³)											Observations		Highest Values, ug/m ³		
Station	Site No.	1989	90	91	92	93	94	95	96	97	98	1999	Total	%	1 st	2 nd	3 rd
Mabel Dean (W)	7093-05	0.3	0.2	0.1	0.8	(0.8)	1.0	1.0	1.4	1.8	1.4	0.9	48	79	3.7 [11/14]	3.2 [06/11]	2.6 [05/06]
PS 59 (D)	7093-10	0.6	(0.5)	(0.4)	(0.5)	0.4	0.5	0.5	0.7	0.6		xx	xx	xx	xx	xx	xx
Midtown (D)	7093-12	0.7	(0.7)	(0.6)	0.6	0.6	0.8	0.8	0.6	0.8	0.7	(0.6)	43	70	2.5 [05/06]	2.3 [02/17]	2.2 [05/24]

(Annual Means in parentheses are based on less than 75% available data)W - Wedding Sampler

D - Dichotomous Sampler

[Date of Occurrence]

INHALABLE PARTICULATES - SULFATE, NITRATE FRACTIONS

- Dichotomous or Wedding Sampler

NYSDEC Region **2**

Metropolitan Air Quality Control Region

SULFATE FRACTION

Annual Averages 1989 through 1999

1999 Data Summary

		Annual Arithmetic Mean, (ug/m ³)											Observations		Highest Values, ug/m ³		
Station	Site No.	1989	90	91	92	93	94	95	96	97	98	1999	Total	%	1 st	2 nd	3 rd
IS 52 (W)	7094-07	--	--	--	--	--	--	--	--	--	--	(3.9)	12	25	8.7 [10/03]	6.2 [11/14]	4.9 [11/02]
Greenpoint (W)	7095-01	7.3	7.0	8.2	6.4	5.0	6.6	4.9	4.9	(5.4)	4.6	4.6	50	82	16.5 [08/28]	15.2 [07/17]	14.4 [09/09]
PS 314 (W)	7095-07	9.1	8.6	(7.5)	5.0	5.2	6.6	4.8	4.5	5.9	5.4	xx	xx	xx	xx	xx	xx
Port Richmond (W)	7097-03	(8.9)	7.3	(8.4)	5.6	5.1	5.9	4.7	4.8	(5.9)	(5.0)	xx	xx	xx	xx	xx	xx

Sampling at 7095-07 and 7097-03 was terminated on 12/31/98; and commenced at 7094-07 on 10/03/99.

NITRATE FRACTION

Annual Averages 1989 through 1999

1999 Data Summary

		Annual Arithmetic Mean, (ug/m ³)											Observations		Highest Values, ug/m ³		
Station	Site No.	1989	90	91	92	93	94	95	96	97	98	1999	Total	%	1 st	2 nd	3 rd
IS 52 (W)	7094-07	--	--	--	--	--	--	--	--	--	--	(1.1)	12	25	3.8 [11/14]	2.7 [12/08]	1.2 [11/20]
Greenpoint (W)	7095-01	0.3	0.3	1.0	0.8	0.9	1.3	1.0	1.3	(1.1)	1.2	0.8	50	82	4.4 [01/06]	2.9 [06/11]	2.5 [11/14]
PS 314 (W)	7095-07	1.6	1.2	(1.2)	0.8	1.0	1.5	1.1	1.7	1.7	1.3	xx	xx	xx	xx	xx	xx
Port Richmond (W)	7097-03	0.1	0.2	(0.6)	0.6	0.6	1.0	0.6	1.2	(1.0)	(0.5)	xx	xx	xx	xx	xx	xx

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

W - Wedding Sampler

D - Dichotomous Sampler

[Date of Occurrence]

TOTAL SUSPENDED PARTICULATES - SULFATE, NITRATE FRACTIONS - High Volume Air Sampler

NYSDEC Region **2**

Metropolitan Air Quality Control Region

SULFATE FRACTION

Annual Averages 1989 through 1999													1999 Data Summary				
		Annual Geometric Mean, (ug/m ³)											Observations		Highest Values, ug/m ³		
Station	Site No.	89	90	91	92	93	94	95	96	97	1998	1999	Total	%	1 st	2 nd	3 rd
Greenpoint	7095-01	12.3	14.0	12.1	11.6	11.6	13.9	10.1	8.5	(8.8)	9.0	9.0	51	84	20.0 [07/17]	19.8 [08/28]	19.1 [09/09]

NITRATE FRACTION

Annual Averages 1989 through 1999													1999 Data Summary				
		Annual Geometric Mean, (ug/m ³)											Observations		Highest Values, ug/m ³		
Station	Site No.	89	90	91	92	93	94	95	96	97	1998	1999	Total	%	1 st	2 nd	3 rd
Greenpoint	7095-01	5.9	5.9	5.5	5.2	5.0	6.2	5.4	4.9	(5.5)	5.2	5.1	51	84	12.6 [07/23]	11.6 [05/06]	11.1 [11/14]

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

[Date of Occurrence]