Air

1987 Annual Report on Air Quality in New England



TABLE OF CONTENTS

INTRODUCTION1
NATIONAL AIR QUALITY STANDARDS
1987 SUMMARY OF NEW ENGLAND NAMS/SLAMS.(TABLE 1)4
NUMBER OF STATIONS VIOLATING NATIONAL AIR QUALITY
STANDARDS.(TABLE 2)5
ABBREVIATIONS AND SYMBOLS USED IN TABLE 3
AMBIENT AIR QUALITY DATA INCLUDING STATIONS THAT
EXCEED NATIONAL AIR QUALITY STANDARDS. (TABLE 3)8
NUMBER OF STATIONS VIOLATING NATIONAL AMBIENT AIR QUALITY
STANDARDS BY AIR QUALITY CONTROL REGION. (TABLE 4)31
AIR QUALITY CONTROL REGIONS33
STATIONS WHERE READINGS EXCEED EPISODE LEVELS. (TABLE 5)34
1987 PRECISION AND ACCURACY DATA36
1987 PRECISION DATA FOR NEW ENGLAND ANNUAL AVERAGE
PROBABILITY LIMITS. (TABLE 6)37
1987 ACCURACY DATA FOR NEW ENGLAND ANNUAL AVERAGE
PROBABLITY LIMITS.(TABLE 7)38
REGION I 1987 PERFORMANCE AUDIT PROGRAM39
REGION I PERFORMANCE AUDIT PROGRAM. (TABLE 8)40
REGION I NONATTAINMENT AREAS.(TABLE 9)41
REGION I ATTAINMENT AND UNCLASSIFIED AREAS AS OF
DECEMBER 31, 1987. (TABLE 10)44
AIR QUALITY SUMMARIES AND TRENDS46
1987 CONNECTICUT AMBIENT AIR QUALITY SUMMARY46
1987 MAINE AMBIENT AIR QUALITY SUMMARY47
1987 MASSACHUSETTS AMBIENT AIR QUALITY SUMMARY48
1987 NEW HAMPSHIRE AMBIENT AIR QUALITY SUMMARY50
1987 RHODE ISLAND AMBIENT AIR QUALITY SUMMARY51
1987 VERMONT AMBIENT AIR QUALITY SUMMARY52
1987 FIVE YEAR TRENDS53

1987 ANNUAL REPORT ON AIR QUALITY IN NEW ENGLAND

This report represents 1987 annual air quality information for all states in New England. The majority of the data included in this report were submitted to EPA by the states from their ambient monitoring networks in accordance with 40 CFR 58. The only data from industrial monitors which have been included are from EPA-required networks in New Hampshire and from Maine's licensing program which supplements the state network.

This report is intended to list potential nonattainment areas for planning purposes. The majority of data used has been evaluated and verified by EPA; however, for the areas listed as nonattainment, the data may require further evaluation by both EPA and the states.

Table 1 is a summary of the status of the National Air Monitoring Sites (NAMS) and the State/Local Air Monitoring Sites (SLAMS) submitting data to Region I. This table lists the number of sites operating, the required number of sites, the number of sites reporting precision and accuracy data, and the number of sites not meeting EPA minimum data capture requirements.

Table 2 shows the number of stations violating the National Ambient Air Quality Standards (NAAQS) and the total number of stations reporting data during 1987. There were no stations in violation of the $\rm SO_2$ standards. For particulates, three stations were in violation of the 24 hour primary standard, and 20 stations were in violation of the 24 hour secondary standard. The annual primary standard was violated at six stations. Two stations were in violation of the CO 8-hour primary standard, and no stations were in violation of the 1-hour primary standard. For ozone, there were 21 stations in violation of the 1-hour primary standard. No stations violated the $\rm NO_2$ annual primary standard. No stations violated the quarterly mean for lead.

Table 3 lists every state site in New England. The information presented compares the measured values to each NAAQS. The information included is the number of exceedences, the maximum and second high values, and the annual means (geometric mean for TSP, arithmetic mean or average for SO₂, PM₁₀ and NO₂). Those stations reporting a maximum above the standard, but a second high below the standard are included in this table. For intermittent data, an annual mean is not valid unless there are four valid quarters. To be considered valid for TSP, a quarter must have at least five values; and if any one month is missing, each of the other two months must have two or more values. For PM₁₀, 75% of the scheduled samples must be available for a quarter to be validated. For continuous data, 75 percent of the year must be available to calculate a valid annual average.

Table 4 shows the number of stations violating the NAAQS by Air Quality Control Region (AQCR), as well as the total number of monitors in each AQCR. A map delineating the AQCRs in Region I is included at the end of this table (Figure 1).

Table 5 has been developed to point out areas where air quality levels have exceeded the emergency, warning, or alert episode levels. An air pollution alert (warning or emergency) will be called when specified pollutant concentrations are reached provided that meteorological conditions are such that these levels can be expected to persist for 12 hours or more. In the case of ozone, an alert (warning or emergency) will be called if the situation is likely to recur within the next 24 hours. Episode levels were reached or exceeded for CO at one site.

Tables 6 and 7 list the precision and accuracy data submitted by the six New England states. The 95% probability limits for six criteria pollutants are given as a network average for each state.

Table 8 lists the results from the Region I audit program for TSP, SO_2 , CO, NO_2 , PM_{10} and O_3 . The results presented on a state-bystate basis give the number of satisfactory, marginal, and unsatisfactory audits.

Table 9 and 10, respectively, list the nonattainment areas in New England with the last reported violation and the attainment and unclassified areas in which there were recent violations of the NAAQS.

Following Table 10 is a discussion of air quality in New England for the criteria pollutants. This discussion includes several charts of selected air quality monitoring sites which show a linear regression for TSP, Pb, CO, $\rm CO_2$, and $\rm NO_2$ during the last five years. For ozone, a chart of the number of days exceeding the standard each year for the last five years is used.

NATIONAL AIR QUALITY STANDARDSa

<u>Pollutant</u>	Averaging Time	Primary Standardsb	Secondary Standards ^C
so ₂	Annual Arithmetic Mean	80 u.g/m ³ (0.03 ppm)	
	24 hours	365 ug/m ³ (0.14 ppm)	
	3 hours		1300 ug/m ³ (0.5 ppm)
TSP	Annual Geometric Mean	75 ug/m ³	60 ug/m ³
	24 hours	260 ug/m ³	150 ug/m^3
PM_{10}^d	Annual Arithmetic Mean	50 ug/m ³	Same as Primary Standard
	24 hours	150 ug/m ³	Same as Primary Standard
∞	8 hours	9 ppm	Same as Primary Standard
	1 hour	35 ppm	Same as Primary Standard
03	1 hour	0.12 ppm	Same as Primary Standard
NO ₂	Annual Arithmetic Mean	100 ug/m ³ (0.05 ppm)	Same as Primary Standard
Pb	Calendar Quarter Arithmetic Mean	1.5 ug/m ³	Same as Primary Standard

^a National standards other than those based on annual arithmetic means or annual geometric means are not to be exceeded more than once a year.

b National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

^C National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

 $^{^{}m d}$ PM $_{
m 10}$ replaced TSP as the ambient particulate standard effective July 31, 1987, and includes only those particles with an aerodynamic diameter of less than or equal to a nominal 10 microns.

TABLE 1

1987 SUMMARY OF NEW ENGLAND NAMS/SLAMS

	CT	ME	<u>MA</u>	NH	RI	VI	TOTALS
<u>NAMS</u> a							
Number Operating ^C	36/36	3/3	41/41	3/3	14/14	2/2	66/66
Number NOT meet- ing EPA's minimum data capture requirements ^d	1	0	4	0	0	0	19
<u>slams</u> b							
Number Operating ^C	66/66	15/15	16/16	32/32	10/10	11/11	154/154
Number NOT meet- ing EPA's minimun data capture <u>requirements</u> d	1	0	0	2	0	0	17
NAMS/SLAMS							
Percent of required	:						
<u>Precision Data</u>	100	100	100	100	100	100	
Accuracy Data	100	100	100	100	100	100	

a NAMS - National Air Monitoring Sites

b SIAMS - State/Local air Monitoring Sites

c x/y - x is the number of sites operating

y is the total number of sites required to be operated

d Adjusted for seasonal monitoring and site start-ups and terminations

TABLE 2

NUMBER OF STATIONS VIOLATING
NATIONAL AMBIENT AIR QUALITY STANDARDS

	Standard		CT	ME	MA	NH	RI	VT
<u>so</u> 2	Annual Primary 24-hour Primary* 3-hour Secondary*	80 ug/m ³ 365 ug/m ³ 1300 ug/m ³	0/20 0/20	0/18 0/18	0/11 0/11	0/14 0/14	0/3 0/3 0/3	0/3 0/3
TSP (1	•	75 ug/m ³ 260 ug/m ³ 150 ug/m ³	0/47 0/47 2/47	0/50 1/50 13/50	3/20 1/20 3/20	1/21 0/21 1/21	0/12 0/12 1/12	0/6 0/6 1/6
<u>PM</u> 10	Annual Primary 24-hour Primary	50 ug/m ³ 150 ug/m ³	1/4 1/4	0/13 1/13	0/7 0/7	0/3 0/3	0/2 0/2	0/4 0/4
<u>დ</u>	8-hour Primary* 1-hour Primary*	9 ppm 35 ppm	1/5 0/5	0/1 0/1	0/8 0/8	1/2 0/2	0/2 0/2	0/1 0/1
<u>0</u> 3	1-hour Primary*	0.12 ppm	9/10	5/10	3/14	1/6	2/2	0/2
<u>NO</u> 2	Annual Primary	100 ug/m ³	0/4	0/0	0/6	0/1	0/1	0/1
<u>Pb</u>	Quarterly Mean	1.5 ug/m ³	0/47	0/5	0/6	0/8	0/5	0/0

^{*}Unless the second highest average exceeds the NAAQS, there is no violation.

x/y - x is the number of stations in violation.

y is the total number of stations.

⁻⁻⁻ This pollutant is not monitored in the state.

⁽¹⁾ Includes special study monitoring sites which do not meet TSP siting criteria

TABLE 3

ABBREVIATIONS AND SYMBOLS USED IN TABLE 3

SITE I.D. Site Identification number

POC Parameter Occurrence Code - differentiates between

monitors for a given pollutant

#OBS Number of Observations

MAX 24-HR:

1ST Highest 24-hour value recorded in the year

2ND Second highest 24-hour value recorded in the year

OBS > 260 Number of 24-hour values greater than 260 ug/m³ for TSP

OBS > 150 Number of 24-hour values greater than 150 ug/m³ for TSP

ARITH MEAN Arithmetic mean

GEO MEAN Geometric mean

GEO STD Geometric standard deviation

QUARTERLY ARITH MEANS:

1ST First quarter arithmetic mean

2ND Second quarter arithmetic mean

3RD Third quarter arithmetic mean

4TH Fourth quarter arithmetic mean

MEANS > 1.5 Number of quarterly means greater than 1.5 ug/m³ for

lead

MAX VALUES:

1ST Highest 24-hour value recorded for the year (except

Connecticut and New Hampshire, which are monthly

values).

2ND Second highest 24-hour value recorded for the year

(except Connecticut and New Hampshire, which are

monthly values).

METH Method

MAX 1-HR:

1ST Highest 1-hour value recorded in the year

2ND	Second highest 1-hour value recorded in the year
OBS > 35	Number of observations greater than 35 mg/m 3 for $^{\circ}$
MAX 8-HR	
1ST	Highest 8-hour value recorded in the year
2ND	Second highest 8-hour value recorded in the year
OBS > 9	Number of 8-hour averages greater than 9 ppm for ∞
OBS > 365	Number of 24-hour averages greater than 365 $\mbox{ug/m}^3$ for \mbox{SO}_2
MAX 3-HR:	
1ST	Highest 3-hour value recorded in the year
2ND	Second highest 3-hour value recorded in the year
Olos > 1300	Number of 3-hour averages greater than 1300 $\mbox{ug/m}^3$ for \mbox{SO}_2
NUM MEAS	The valid number of days measured
NUM REQ	The valid number of days in the ozone season
VALID DAILY 1-HR MAXI	MUM:
1ST	Maximum hourly ozone value for the highest day

Maximum hourly ozone value for the highest day

2ND Maximum hourly ozone value for the second highest day

3RD Maximum hourly ozone value for the third highest day

VAIS > .125:

MEAS Number of measured daily maxima greater than or equal to 0.125 ppm for ${\rm O}_3$

Number of expected violations for O₃

MISS DAYS ASSUMED < STANDARD

EST

Number of missing days assumed to be less than the standard

INT Interval Code, 1 = Hourly, C = Composite, and 7 = Weekly

THE DATA IN TABLE 3 CONSISTS OF BOTH STATE AND PRIVATE NETWORKS.

TABLE 3

SUSPENDED PARTICULATE			TE	CONNECTICUT				001	UG/CU	METER	(25 C)	
	P 0					MAX	24-HR	OBS>	OBS>	ARITH	GEO	GE
SITE ID	С	CITY	COUNTY	ADDRESS	#OBS	151	2ND	260	150	MEAN	MEAN	ST
09-001-00	01 2	BRIDGEPORT	FAIRFIELD CO	CITY HALL, 47 LYON TERRACE	60	107	96	0	0	45	42	1.
09-001-00	09 1	BRIDGEPORT	FAIRFIELD CO	BASSICK HIGH SCHOOL	35	93	83	0	0	417	36?	1.6
09-001-00	10 1	BRIDGEPORT	FAIRFIELD CO	680 PARK AVENUE	58	113	109	0	0	51	47	1.
09-001-00	21 1	STAMFORD	FAIRFIELD CO	COMMUNITY CENTER, HENRY ST.	57	114	110	0	0	51	47	1.0
09-001-01	23 1	BRIDGEPORT	FAIRFIELD CO	TRAILER, HALLET STREET	58	117	115	0	0	56	51	1.5
09-001-01	23 3	BRIDGEPORT	FAIRFIELD CO	TRAILER, HALLET STREET	57	124	122	0	0	55	50	1.6
09-001-10	02 1	DANBURY	FAIRFIELD CO	DANBURY PUBLIC LIBRARY	60	135	122	0	0	55	49	1.0
09-001-10	08 1	GREENWICH	FAIRFIELD CO	COS COB PUMPING STATION	58	86	85	0	0	40	37	1.
09-001-11	23 1	DANBURY	FAIRFIELD CO	TRAILER, W. CONNECTICUT ST.	61	106	95	0	0	49	44	1.6
09-001-20	07 1	STAMFORD	FAIRFIELD CO	DPW, MAGEE AVENUE	59	117	102	0	0	50	46	1.!
09-001-20	12 1	NORWALK	FAIRFIELD CO	U.S.POST OFFICE, WASHINGTON	60	110	94	0	0	47	43	1.5
09-001-30	05 1	NORWALK	FAIRFIELD CO	NORWALK HEALTH DEPT.	56	206	154	0	2	61	53	1.
09-001-50	05 1	STRATFORD	FAIRFIELD CO	HEALTH + WELFARE BUILDING	61	100	99	0	0	49	45	1.5
09-001-60	01 1	NORWALK	FAIRFIELD CO	BOARD OF EDUCATION	30	95	89	0	0	50?	46?	1.4
09-001-80	01 1	STAMFORD	FAIRFIELD CO	CENTRAL FIRE STATION	57	124	113	0	0	51	46	1.
09-003-00	08 1	NEW BRITAIN	HARTFORD CO	FIRE HEADQUARTERS, BEAVER ST	57	78	76	0	0	39	35	1.
09-003-00	13 1	HARTFORD	HARTFORD CO	401 FLATBUSH AVENUE	59	83	77	0	0	46	43	1.
09-003-00	14 1	HARTFORD	HARTFORD CO	FIRE STATION, 510 FRANKLIN	60	77	76	0	0	46	42	1.
09-003-00	15 2	HARTFORD	HARTFORD CO	HELCO, 400 SHELDON STREET	58	240	205	0	2	71	63	1.0
09-003-10	01 1	BRISTOL	HARTFORD CO	CITY HALL, MAIN STREET	57	74	72	0	0	39	36	1.5
09-003-10	04 1	EAST HARTFORD	HARTFORD CO	CITY HALL, 740 MAIN STREET	56	92	79	0	0	45	41	1.0
09-003-10	07 1	NEW BRITAIN	HARTFORD CO	FIRE STATION NO.2,S. MAIN	60	72	64	0	0	40	36	1.
09-003-10	09 1	NEW BRITAIN	HARTFORD CO	CHAMBERLAIN SCHOOL	58	74	69	0	0	36	33	1.
09-003-20	01 2	BURLINGTON	HARTFORD CO	FISH HATCHERY, PUNCH BROOK	60	64	54	0	0	22	19	1.
09-003-20	03 1	HARTFORD	HARTFORD CO	HARTFORD LIBRARY, MAIN ST.	59	109	96	0	0	54	51	1.
09-003-20	03 3	HARTFORD	HARTFORD CO	HARTFORD LIBRARY, MAIN ST.	58	104	86	0	0	54	50	1.
09-003-70	01 1	MANCHESTER	HARTFORD CO	TOWN HALL, 41 CENTER STREET	59	82	73	0	0	38	35	1.
09-005-20	01 1		LITCHFIELD CO	MORRIS DAM, ROUTE 109	60	72	56	0	0	26	24	1.4
		TORRINGTON	LITCHFIELD CO	140 MAIN STREET	50	121	92	0	0	43	38	1.
09-007-00			MIDDLESEX CO	CRIMINAL JUSTICE ACADEMY	59	76	67	0	0	30	27	1.
		MIDDLETOWN	MIDDLESEX CO	CITY HALL, DEKOVEN DRIVE	61	112	111	0	0	48	43	1.
09-009-00			NEW HAVEN CO	PUBLIC WORKS, DIVISION ST.	59	83	81	0	0	43	39	1.
		NEW HAVEN	NEW HAVEN CO	FIRE HEADQUARTERS, GRAND AVE	59	93	91	0	0	48	45	1.

SUSPENDED PARTICULATE Continued CONNECTICUT UNITS: 001 UG/CU METER (25 C)
P
O MAX 24-HR OBS> OBS> ARITH GEO
SITE ID C CITY COUNTY ADDRESS #OBS 1ST 2ND 260 150 MEAN MEAN

	0				MAX	24-HR	OBS>	OBS>	ARITH	GEO	GEO
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	15T	2ND	260	150	MEAN	MEAN	STD
09-009-0013	1 NEW HAVEN	NEW HAVEN CO	GRAND AVE FIRE HOUSE	59	93	91	0	0	48	45	1.4
09-009-0018	1 NEW HAVEN*	NEW HAVEN CO	STILES STREET.	39	1121	930	17	22	297?	213?	2.3
09-009-0018	2 NEW HAVEN*	NEW HAVEN CO	STILES STREET.	129	722	418	19	72	171?	144?	1.9
09-009-2123	2 WATERBURY	NEW HAVEN CO	TRAILER AT DOT	55	143	120	0	0	61	57	1.5
09-009-2123	3 WATERBURY	NEW HAVEN CO	TRAILER AT DOT	55	150	140	0	0	63	57	1.6
09-009-3006	1 WATERBURY	NEW HAVEN CO	FIREHOUSE NO.6 , WILLOW ST.	58	77	68	0	0	37	34	1.5
09-009-3007	1 WATERBURY	NEW HAVEN CO	EAST END FIREHOUSE	59	158	108	0	1	58	52	1.6
09-009-3007	2 WATERBURY	NEW HAVEN CO	EAST END FIREHOUSE	60	160	113	0	1	58	52	1.6
09-009-4002	1 MERIDEN	NEW HAVEN CO	STODDARD BUILDING, 165 MILL	60	130	116	0	0	50	45	1.6
09-009-4005	1 WATERBURY	NEW HAVEN CO	COURTHOUSE, GRAND STREET	57	124	100	0	0	46	41	1.7
09-009-5001	1 NAUGATUCK	NEW HAVEN CO	229 CHURCH STREET	57	87	78	0	0	44	40	1.6
09-009-5002	1 MILFORD	NEW HAVEN CO	DEVON COMMUNITY CENTER	11	63	57	0	0	47?	45?	1.4
09-009-7002	1 NEW HAVEN	NEW HAVEN CO	CLINTON SCHOOL, CLINTON AVE	53	134	104	0	0	51	46	1.6
09-009-8003	1 WEST HAVEN	NEW HAVEN CO	195 TOLL	60	154	121	0	1	56	51	1.5
09-009-9001	1 WALLINGFORD	NEW HAVEN CO	TOWN HALL, 350 CENTER ST.	61	94	88	0	0	45	41	1.6
09-011-0006	1 GROTON	NEW LONDON CO	GROTON HIGHWAY GARAGE	58	98	96	0	0	41	36	1.7
09-011-1101	2 WATERFORD	NEW LONDON CO	NEW LONDON COUNTRY CLUB	59	106	91	0	0	33	28	1.8
09-011-3002	1 NORWICH	NEW LONDON CO	22 COURT HOUSE SQUARE	59	101	82	0	0	46	42	1.5
09-011-9001	2 VOLUNTOWN	NEW LONDON CO	PACHAUG STATE FOREST VOLUN.	59	73	55	0	0	22	20	1.5
09-015-1002	1 WILLIMANTIC	WINDHAM CO	108 VALLEY STREET	47	106	106	0	0	50	45	1.6

[?] INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Method: Gravimetric, 24-hour Hi-volume Filter Sample-91

LEAD		CONNECTICUT			UNITS:	001	UG/CU ME	TER (2	5 C)		
P				01	ARTERLY	ADITH ME	ANS	MEANS	MAX V	ALIBES	
O SITE ID C CITY	COUNTY	ADDRESS	#OBS	1ST	2ND	3RD	4TH	>1.5	1ST	2ND	METH
09-001-0001 5 BRIDGEPORT	FAIRFIELD CO	CITY HALL, 47 LYON	ST 12	.06	.04	.04	.05	0	.08	.07	092
09-001-0009 1 BRIDGEPORT	FAIRFIELD CO	BASSICK HIGH SCHOOL	10	.05	.05	.04	.02	0	.06	.06	092
09-001-0010 1 BRIDGEPORT	FAIRFIELD CO	680 PARK AVENUE	12	.07	.07	.05	.05	0	.08	.08	092
09-001-0021 1 STAMFORD	FAIRFIELD CO	COMMUNITY CENTER	12	.06	.05	.08	.10	0	. 23	.10	092
09-001-0123 1 BRIDGEPORT	FAIRFIELD CO	TRAILER, HALLET ST	12	.08	.07	.05	.06	0	.09	.08	092

^{*} Does not meet siting criteria for TSP

	0				al	QUARTERLY ARITH MEANS MEANS MA						MAX VALUES			
SITE ID	C CITY	COUNTY	ADDRESS	OBS	151	2ND	3RD	4TH	>1.5	157	2ND	METH			
09-001-1002	1 DANBURY	FAIRFIELD CO	DANBURY PUBLIC LIB	12	.05	.10	.06	.04	0	.24	.15	092			
09-001-1008	1 GREENWICH	FAIRFIELD CO	COS COB PUMPING ST.	12	.05	.03	.03	.03	0	.07	.05	092			
09-001-1123	1 DANBURY	FAIRFIELD CO	TRAILER, W. CON.	12	.05	.03	.03	.04	0	.07	.06	092			
09-001-2007	1 STAMFORD	FAIRFIELD CO	DPW, MAGEE AVE.	12	.07	.06	.05	.08	0	.12	.08	092			
09-001-2012	1 NORWALK	FAIRFIELD CO	US POST OFFICE	12	.05	.05	.04	.05	0	.06	.06	092			
09-001-3005	1 NORWALK	FAIRFIELD CO	NORWALK HEALTH DEP	12	.06	.04	.06	.04	0	.10	.07	092			
09-001-5005	1 STRATFORD	FAIRFIELD CO	HEALTH & WELFARE	12	.13	. 05	.04	.10	0	.18	.16	092			
09-001-6001	1 NORWALK	FAIRFIELD CO	BOARD OF EDUCATION	6	.04	.04			0	.06	.04	092			
09-001-8001	2 STAMFORD	FAIRFIELD CO	CENTRAL FIRE STATION	12	.05	.06	.05	-04	0	.07	.07	092			
09-003-0008	1 NEW BRITAIN	HARTFORD CO	FIRE HEADQUARTERS	12	.06	.04	.03	.03	0	.08	.06	092			
09-003-0013	1 HARTFORD	HARTFORD CO	401 FLATBUSH AVE.	12	.07	.05	.04	.07	0	.09	.08	092			
09-003-0014	1 HARTFORD	HARTFORD CO	FIRE SATION	12	.07	.04	.04	.04	0	.09	.08	092			
09-003-0015	2 HARTFORD	HARTFORD CO	HELCO, 400 SHELDON ST	12	.11	.08	.05	.07	0	.13	.11	092			
09-003-0016	1 HARTFORD	HARTFORD CO	AETNA INSURANCE	12	.10	.10	.08	.08	0	.12	.12	094			
09-003-1001	1 BRISTOL	HARTFORD CO	CITY HALL, MAIN ST.	12	.06	.03	.03	.03	0	.08	.05	092			
09-003-1004	1 EAST HARTFORD	HARTFORD CO	CITY HALL, 740 MAIN	12	.06	.04	.04	.04	0	.09	.06	092			
09-003-1007	1 NEW BRITAIN	HARTFORD CO	FIRE STAION # 2	12	.05	.03	.03	.03	0	.07	.05	092			
09-003-1009	1 NEW BRITAIN	HARTFORD CO	CHAMBERLAIN SCHOOL	12	.06	.03	.03	.03	0	.08	.05	092			
09-003-2001	1 BURLINGTON	HARTFORD CO	FISH HATCHERY	12	.02	.01	.02	.01	0	.02	.02	092			
09-003-2003	2 HARTFORD	HARTFORD CO	HARTFORD LIBRARY	12	.07	.06	.07	.06	0	.10	.09	092			
09-003-2003	4 HARTFORD	HARTFORD CO	HARTFORD LIBRARY	12	.07	.05	.08	.05	0	.11	.09	092			
09-003-7001	1 MANCHESTER	HARTFORD CO	TOWN HALL	12	.04	.03	.03	.03	0	.06	.04	092			
09-005-2001	1	LITCHFIELD CO	MORRIS DAM	12	.02	.01	.02	.02	0	.03	.02	092			
09-005-6001	1 TORRINGTON	LITCHFIELD CO	140 MAIN STREET	12	.06	.03	.07	.05	0	.11	.07	092			
09-007-0002	2 HADDAM	MIDDLESEX CO	CRIMINAL JUSTICE	12	.02	.02	.02	.02	0	.04	.03	092			
09-007-1003	1 MIDDLETOWN	MIDDLESEX CO	CITY HALL, DEKOVEN ST	12	.07	.04	.03	.04	0	.11	.03	092			
09-009-0004	1 ANSONIA	NEW HAVEN CO	PUBLIC WORKS	12	.06	.04	.04	.05	0	.10	.06	092			
09-009-0013	1 NEW HAVEN	NEW HAVEN CO	FIRE HEADQUARTERS	12	.06	.05	.05	.05	0	.08	.08	092			
09-009-0018	1 NEW HAVEN	NEW HAVEN CO	STILES STREET	12	.22	.15	.10	.11	0	.30	.21	092			
09-009-0018	3 NEW HAVEN	NEW HAVEN CO	STILES STREET	6	.22	.17			0	.27	.23	092			
09-009-2123	2 WATERBURY	NEW HAVEN CO	TRAILER AT DOT	12	.14	.07	.08	.07	0	.18	.14	092			
09-009-2123	3 WATERBURY	NEW HAVEN CO	TRAILER AT DOT	12	.14	.06	.06	.08	0	.18	.15	092			
09-009-3006	1 WATERBURY	NEW HAVEN CO	FIREHOUSE NO. 6	12	.05	.02	.06	.04	0	.08	.07	092			
09-009-3007	1 WATERBURY	NEW HAVEN CO	EAST END FIREHOUSE	12	.10	.07	.09	.08	0	.16	.13	092			
09-009-3007	2 WATERBURY	NEW HAVEN CO	EAST END FIREHOUSE	12	.11	.07	.06	.09	0	.15	.11	092			

LEAD (Continued) CONNECTICUT UNITS: 001 UG/CU METER (25 C)

Ρ ---- QUARTERLY ARITH MEANS---- MEANS MAX VALUES 0 >1.5 1ST METH #OBS 1ST 2ND 3RD 4TH SITE ID C CITY COUNTY ADDRESS .08 092 09-009-4002 1 MERIDEN NEW HAVEN CO STODDARD BUILDING 12 .08 .06 .05 .04 0 .11 .10 .07 .06 0 .16 .09 092 09-009-4005 2 WATERBURY NEW HAVEN CO COURTHOUSE 12 .04 12 .09 .04 .05 .05 0 .14 .08 092 09-009-5001 1 NAUGATUCK NEW HAVEN CO 229 CHURCH STREET .05 .07 .06 092 DEVON COMMUNITY CTR 4 .03? 09-009-5002 1 MILFORD NEW HAVEN CO .13 .09 092 .09 .05 .04 09-009-7002 2 NEW HAVEN NEW HAVEN CO CLINTON SCHOOL 12 .04 0 .11 092 09-009-8003 1 WEST HAVEN NEW HAVEN CO 195 TOLL 12 .12 . 05 .04 . 05 .16 .05 .04 .04 .09 .05 092 09-009-9001 1 WALLINGFORD NEW HAVEN CO TOWN HALL, 350 CENT. 12 .04 0 .04 .03 092 .02 .02 .02 .02 09-011-0006 1 GROTON NEW LONDON CO GROTON HIGHWAY 12 0 .04 .03 092 .03 .02 .02 .01 09-011-1101 2 WATERFORD NEW LONDON CO NEW LONDON COUNTRY 12 .06 092 .06 .04 .04 .03 0 .07 12 09-011-3002 1 NORWICH NEW LONDON CO 22 COURT HOUSE SQ. .02 .01 0 .02 .02 092 09-011-9001 1 VOLUNTOWN NEW LONDON CO PACHAUG STATE FOREST 12 .01 .01 .19 11 . 12 .03 .02 .08 0 .11 092 09-011-1002 1 WILLIMANTIC WINDHAM CO 108 VALLEY STREET

CAR	BON MONOXIDE		CONNECTICUT UNITS			NITS:	007 P	ON			
P 0					MAX	1 - HR	OBS>	MAX	8-HR	OBS>	
SITE ID C	CITY	COUNTY	ADDRESS	#OBS	15T	2ND	35	1ST	2ND	9	METH
9-001-0004 1	BRIDGEPORT	FAIRFIELD CO	JASPER MCLEVY HALL	8357	10.5	8.8	0	6.3	5.3	0	011
9-001-0020 1	STAMFORD	FAIRFIELD CO	LIBRARY 96 BROAD ST.	8686	10.5	10.2	0	6.4	6.3	0	011
9-003-0013 1	HARTFORD	HARTFORD CO	401 FLATBUSH AVENUE	7039	6.0	5.6	0	3.9	3.6	0	011
9-003-0017 1	HARTFORD	HARTFORD CO	COURTHOUSE, 155 MORGAN S	8523	30.0	23.0	0	15.8	11.4	7	011
9-009-0019 1	NEW HAVEN	NEW HAVEN CO	80 TEMPLE STREET	8445	12.8	12.1	0	7.8	7.5	0	011
ethod: Hour	ly values, Nondi	ispersive Infrared	(NDIR) Continuous-11								

s	ULFUR DIOXIDE		CONNECTICUT				ι	JNITS:	001	UG/C	U METI	R (25	C)	
	P							OBS			OBS			
	0				MAX 2	24-HR	>	MAX	3-HR	>	MAX	1-HR	ARIT	
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	151	2ND	365	151	2ND	1300	151	2ND	MEAN	METH
09-001-0012	1 BRIDGEPORT	FAIRFIELD CO	115 BOSTON TERRAC	8212	129	117	0	314	297	0	333	333	33	020
09-001-0017	1 GREENWICH	FAIRFIELD CO	GREENWICH POINT	8061	77	56	0	114	114	0	162	141	12	020
09-001-0025	1 STAMFORD	FAIRFIELD CO	CORTLAND AVENUE	7818	150	111	0	231	211	0	252	241	28	020
09-001-0113	1 BRIDGEPORT	FAIRFIELD CO	30 CONGRESS ST.	682	108	104	0	146	142	0	183	181	53?	020
09-001-0123	2 BRIDGEPORT	FAIRFIELD CO	TRAILER, HALLET ST	7219	138	109	0	238	173	0	307	293	28	020
09-001-1013	1 NORWALK	FAIRFIELD CO	ROGERS SQUARE	8112	142	129	0	207	206	0	265	254	24	020
09-001-1123	2 DANBURY	FAIRFIELD CO	TRAILER, W. CT	8027	121	91	0	237	190	0	272	257	21	020
09-001-2123	3 STAMFORD	FAIRFIELD CO	TRAILER , N. SR.	8162	159	109	0	236	218	0	249	244	29	020
09-003-0005	1 EAST HARTFORD	HARTFORD CO	FIRE STATION	7763	164	142	0	251	236	0	267	259	26	020
09-003-1005	1 ENFIELD	HARTFORD CO	SHAKER ROAD	7944	105	86	0	133	128	0	160	147	17	020
09-003-1011	1 NEW BRITAIN	HARTFORD CO	531 EAST MAIN ST.	8332	136	118	0	288	205	0	356	307	26	020
09-003-1123	3 HARTFORD	HARTFORD CO	TRAILER, WEST ST.	7993	129	117	0	255	207	0	320	244	27	020
09-009-0010	1 MILFORD	NEW HAVEN CO	LENOX AV SCHOOL	7808	134	113	0	402	260	0	409	409	25	020
09-009-0017	1 NEW HAVEN	NEW HAVEN CO	LOMBARD STREET	7935	184	173	0	294	274	0	341	322	36	020
09-009-1003	1 EAST HAVEN	NEW HAVEN CO	ANIMAL SHELTER	8119	135	106	0	265	213	0	286	278	25	020
09-009-1123	2 NEW HAVEN	NEW HAVEN CO	715 STATE STREET	8049	206	179	0	367	313	0	398	375	40	020
09-009-2123	2 WATERBURY	NEW HAVEN CO	TRAILER AT DOT	8092	99	99	0	214	197	0	307	275	24	020
09-009-3008	1 WATERBURY	NEW HAVEN CO	LYDIA STREET	7938	159	154	0	286	256	0	377	341	31	020
09-009-5002	4 MILFORD	NEW HAVEN CO	DEVON COMMUNITY C	191	70	66	0	121	115	0	141	134	45?	020
09-011-0007	1 GROTON	NEW LONDON CO	FIRE HEADQUARTERS	8102	77	75	0	158	155	0	278	238	19	020
? INDICATES	THAT THE MEAN DO	ES NOT SATISFY	SUMMARY CRITERIA											

	PM TOTAL 0-10UM		CONNECTICUT		UNIT	s: 001	UG/CU	METER	(25 C)		
SITE ID	P O C CITY	COUNTY	ADDRESS	#OBS	151	MAXIMUM 2ND	VALUES 3RD	4TH	ARITH MEAN	METH	INT
09-001-0010	1 BRIDGEPORT	FAIRFIELD CO	680 PARK AVENUE	59	82	65	61	46	30.6	052	 -
09-009-0018	1 NEW HAVEN	NEW HAVEN CO	STILES STREET	158	274	202	168	145	58.1	052	7
09-009-2123	1 WATERBURY	NEW HAVEN CO	TRAILER AT DOT ENTRANCE	59	68	66	64	59	33.4	052	7
09-009-8003	1 WEST HAVEN	NEW HAVEN CO	195 TOLL	57	71	65	58	57	30.7	052	7
Method: Gr	avimetric, 24-hour	Filter Sample, 01	- Low-volume SA244E, 51 -	Hi-volu	ıme SA	321, 52 ·	- Hi-vo	lume S	A321A,		

53 - Hi-volume GMW 9000, 54 - Hi-volume W10

Method: Hourly values, Pulsed Flourescent-20

F		
£		١
•	•	•

N	ITROGEN DIOXIDE		CONNECTICUT		UNITS: 007 PARTS PER MILLION								
SITE ID	O C CITY	COUNTY	ADDRESS	#OBS	MAX 1st	1-HR 2ND	MAX 1ST	24 - HR 2ND	ARIT MEAN	METH			
09-001-0113	1 BRIDGEPORT	FAIRFIELD CO	30 CONGRESS ST. BRIDGEPORT	713	.087	.082			.025?	014			
09-001-0123	1 BRIDGEPORT	FAIRFIELD CO	TRAILER, HALLET STREET	7711	.121	.115			.026	014			
09-003-1003	1 EAST HARTFORD	HARTFORD CO	30 REMINGTON ROAD	8524	.097	.095			.020	014			
09-009-1123	1 NEW HAVEN	NEW HAVEN CO	715 STATE STREET	8270	.141	.131			.028	014			
? INDICATES	THAT THE MEAN DO	ES NOT SATISFY SU	MMARY CRITERIA										
Method: Ho	urly values, Chem	iluninescence-14											

0	ZONE		CONNECTIO	CUT				UNITS:	007	PARTS	PER MI	LLION			
			OZONE SEA	SON: A	PR 1	о ост									
	P				*		VALID	DAILY 1	-HR MA	CIMUM		* MIS	* MISS DAYS		
	0			*NUM	NUM		MAX	IMA		VALS>	.125 *	ASSUMED 4	c		
SITE ID	C CITY	COUNTY	ADDRESS	*MEAS	REQ	1ST	2ND	3RD	4TH	MEAS	EST *	STANDARD	METH		
09-001-0017	2 GREENWICH	FAIRFIELD CO	GREENWICH POINT	201	214	.172	.167	.148	.145	10	10.5	3	014		
09-001-0123	2 BRIDGEPORT	FAIRFIELD CO	TRAILER, HALLET	196	214	.126	. 126	.124	.121	5	5.1	3	014		
09-001-1123	2 DANBURY	FAIRFIELD CO	TRAILER, W. CONN	196	214	. 162	. 150	.150	. 143	6	6.4	4	014		
09-001-3007	2 STRATFORD	FAIRFIELD CO	USCG LIGHTHOUSE	195	214	.201	.174	.169	. 152	18	19.2	6	014		
09-003-1003	2 EAST HARTFORD	HARTFORD CO	30 REMINGTON RD.	211	214	.113	.111	.102	.097	0	0.0	3	014		
09-007-0007	2 MIDDLETOWN	MIDDLESEX CO	CONN. VALLEY HOS	209	214	. 195	.167	. 134	.130	5	5.1	1	014		
09-009-1123	2 NEW HAVEN	NEW HAVEN CO	715 STATE STREET	197	214	.192	. 145	. 145	.143	9	9.7	1	014		
09-009-3002	2 MADISON	NEW HAVEN CO	HAMMONASSET ST.	185	214	.170	.156	. 154	. 145	6	6.8	5	014		
09-011-0008	1 GROTON	NEW LONDON CO	UNIVERSITY OF CO	200	214	. 196	. 159	. 155	. 149	11	11.6	3	014		
09-013-1001	2 STAFFORD	TOLLAND CO	ROUTE 190	207	214	.150	. 140	.124	.117	2	2.1	1	014		
Method: Ho	urly Values, Ult	ra Violet Dasil	bi Corporation-14												

P

	0				MAX				ARITH	GEO	GEO
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	1ST	2ND	260	150	MEAN	MEAN	STD
23-001-0008	1 AUBURN	ANDROSCOGGIN CO	LEPAGE BAKERY-60 SECOND ST	60	127	87	0	0	45?	41?	1.6
23-003-0011	1 MADAWASKA	AROOSTOOK CO	ST. JARRE'S-11TH AVENUE	116	342	231	1	6	55	45	1.8
23-003-1005	1 PRESQUE ISLE	AROOSTOOK CO	NORTHEASTLAND HOTEL-MAIN ST	210	476	334	2	6	54	44	1.8
23-003-2001	1 FORT FAIRFIELD	AROOSTOOK CO	264 MAIN STREET	69	117	82	0	0	38?	34?	1.6
23-003-3001	1 FORT KENT	AROOSTOOK CO	UMFK-CYR HALL PHYSICAL PLAN	9	53	45	0	0	23?	18?	2.2
23-005-0002	1 BRIDGTON	CUMBERLAND CO	UPPER RIDGE ROAD, ROUTE #2	113	65	58	0	0	16	13	1.9
23-005-0003	1 BRUNSWICK	CUMBERLAND CO	RT 24-BT. CUMBERLAND FARM	87	143	128	0	0	49?	44?	1.6
23-005-0014	1 PORTLAND	CUMBERLAND CO	SHELTER SITE-OXFORD&ELM ST	119	160	130	0	1	51	48	1.5
23-005-0019	1 PORTLAND	CUMBERLAND CO	(PYWCA) YWCA, 187 SPRING ST	112	102	95	0	0	44	41	1.4
23-005-1008	1 WESTBROOK	CUMBERLAND CO	RESEARCH BUILDING-WARREN AV	180	232	227	0	11	86	71	1.7
23-005-1012	1 WESTBROOK	CUMBERLAND CO	WAREHOUSE NO. 5, MAIN ST.	189	172	159	0	4	66	60	1.5
23-005-6002	1 SOUTH PORTLAND	CUMBERLAND CO	SMVTI-HILDRETH HALL-FORT RD	116	67	64	0	0	31	29	1.6
23-005-7002	2 WESTBROOK	CUMBERLAND CO	N.E.T.&T. COASH STREET	112	128	82	0	0	41	38	1.6
23-007-0003	1 JAY	FRANKLIN CO	JEWELL PROPERTY-CRASH ROAD	357	103	87	0	0	24	19	1.9
23-007-0004	1 JAY	FRANKLIN CO	BOMASTER PROPERTY-JAY HILL	357	118	116	0	0	31	25	2.0
23-007-0008	1 JAY	FRANKLIN CO	IDBURNAM SITE ANDRO MILL	362	131	127	0	0	40	34	1.9
23-007-2001	1 JAY	FRANKLIN CO	INT. PAPER COLAGOON HILL	354	175	147	0	1	41	34	2.0
23-009-0003	1 ACADIA NAT PARK	HANCOCK CO	MCFARLAND HILL, RANGER HDQT	116	44	39	0	0	15	13	1.8
23-009-1003	1 BUCKSPORT	HANCOCK CO	BUCKS MILL ROAD	175	64	53	0	0	17?	13?	2.3
23-009-1004	1 BUCKSPORT	HANCOCK CO	PUBLIC LANDING	176	259	181	0	4	407	32?	2.0
23-011-0005	1 AUGUSTA	KENNEBEC CO	FIRE HOUSE-HARTFORD SQUARE	165	189	185	0	2	45	40	1.7
23-011-1003	1 WATERVILLE	KENNEBEC CO	STERN'S DEPT. STORE-93 MAIN	60	261	117	1	1	62	55	1.5
23-011-2003	1 WINSLOW	KENNEBEC CO	(GHR) GULLEY HILL ROAD	232	184	155	0	2	50	44	1.7
23-013-1007	1 THOMASTON	KNOX CO	MARSH ROAD, THOMASTON, MAIN	197	141	115	0	0	27	23	1.7
23-013-2001	2 THOMASTON	KNOX CO	MITCHELL PROP2 DEXTER AVE	200	156	155	0	2	29	22	2.2
23-013-2003	2 THOMASTON	KNOX CO	SANDERS PROP-OLD COUNTRY RD	197	133	96	0	0	28	23	2.0
23-013-2004	2 THOMASTON	KNOX CO	PEASE PROP-BUTTERMILK LANE	199	111	101	0	0	33	28	1.8
23-017-0008	1 MEXICO	OXFORD CO	LABONVILLE'S-ROUTE#2	223	136	123	0	0	47	41	1.8
23-017-2005	1 RUMFORD	OXFORD CO	TAYLOR MOUNTAIN-1	226	121	89	0	0	35	30	1.8
23-017-2006	1 RUMFORD	OXFORD CO	TAYLOR MOUNTAIN-2	225	116	72	0	0	27	23	1.8
23-017-2007	2 RUMFORD	OXFORD CO	VILLAGE GREEN-ROUTE#108	226	129	96	0	0	31	27	1.7
23-019-0001	1 BANGOR	PENOBSCOT CO	BANGOR OFFICE-31 CENTRAL ST	58	153	128	0	1	49	44	1.6
23-019-0002	1 BANGOR	PENOBSCOT CO	PUMP STATION-WASHINGTON ST.	114	190	153	0	2	61	53	1.8

+

	SUSPENDED PARTICULA	TE Continued	MAINE		UNI	rs:	001	UG/CU	METER	(25 C)	
	0				MAX	24-HR	OBS>	OBS>	ARITH	GEO	GEO
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	1ST	2ND	260	150	MEAN	MEAN	STD
23-019-10	002 1 BREWER	PENOBSCOT CO	JUNIOR HIGH SCH-SOMERSET ST	57	117	82	0	0	41	37	1.6
23-019-10	07 1 LINCOLN	PENOBSCOT CO	THOMAS MOT. TRA. PRKBROAD	361	143	108	0	0	40	34	1.8
23-019-20	002 1 EAST MILLINOCKE	PENOBSCOT CO	KATAHDIN SCHOOL-BIRCH ST.	115	137	123	0	0	26	19	2.3
23-019-20	003 2 LINCOLN	PENOBSCOT CO	POST OFFICE-50 FLEMING ST.	354	186	153	0	2	35	30	1.7
23-019-20	009 1 MILLINOCKET	PENOBSCOT CO	YORK STREET-MILLINOCKET	189	179	176	0	4	41	34	1.8
23-019-30	002 2 LINCOLN	PENOBSCOT CO	VOCA. EDU. BLDG-W. BROADWAY	354	121	120	0	0	34	29	1.8
23-019-30	005 1 OLD TOWN	PENOBSCOT CO	PENOBSCOT SHOE-450 N. MAIN	18	137	131	0	0	58?	47?	2.0
23-019-30	007 1 MILFORD	PENOBSCOT CO	SHUMWAY FIELD-RTE. 178	322	91	87	0	0	30	25	1.8
23-019-40	003 1 OLD TOWN	PENOBSCOT CO	MARSH ISLAND APTS-S. MAIN S	61	198	99	0	1	42	36	1.7
23-019-40	005 1 NEWBURGH	PENOBSCOT CO	NEWBURGH CONSOLIDATED SCH.	341	69	60	0	0	18	15	1.8
23-025-20	001 1 SKOWHEGAN	SOMERSET CO	HINKLEY FARM SCHOOL, HINKLEY	119	93	76	0	0	23	18	2.1
	002 1 SKOWHEGAN	SOMERSET CO	EATON RIDGE-SCOTT PAPER CO.	111	56	47	0	0	19	16	1.9
	007 1 WOODLAND	WASHINGTON CO	SEC. TREAT, PIPELINE	352	245	186	0	3	31	24	2.0
	008 1 WOODLAND	WASHINGTON CO	WOODLAND HIGH SCHOOL	351	181	176	0	5	38	29	2.0
	018 1 WOODLAND	WASHINGTON CO	PIPELINE WEST OF ROUTE #1	344	58	57	0	0	16	14	1.7
	001 1 BERWICK	YORK CO	SCHOOL STREET	117	189	183	0	3	73	60	1.7
23-031-00	DO2 1 BIDDEFORD TES THAT THE MEAN DOE	YORK CO	TREATMENT PLANT-WATER ST.	115	110	99	0	0	39	36	1.5

MAINE			UNITS: 001 UG/CU METER (25 C)									
		QL	JARTERLY	ARITH ME	ANS	MEANS	MAX V	ALUES				
COUNTY ADDRESS	#OBS	15T	2ND	3RD	4TH	>1.5	151	2ND	METH			
ANDROSCOGGIN C LEPAGE BAKERY	60	.08	.06	.07	.04	0	.25	.19	092			
AROOSTOOK CO NORTHEASTLAND HOTE	L 58	.08	.04	.02	.03	0	. 15	.12	092			
CUMBERLAND CO SHELTER SITE-OXFOR	D 117	.12	.07	.05	.06	0	.27	.22	092			
CUMBERLAND CO (PYWCA) YWCA, 187	112	.07	.04	.04	.04	0	.06	.06	092			
PENOBSCOT CO PUMP STATION-WASH.	59	.07	.04	.03	.04	0	.12	.10	092			
	ANDROSCOGGIN C LEPAGE BAKERY AROOSTOOK CO NORTHEASTLAND HOTE CUMBERLAND CO SHELTER SITE-OXFOR CUMBERLAND CO (PYWCA) YWCA, 187	COUNTY ADDRESS #OBS ANDROSCOGGIN C LEPAGE BAKERY 60 AROOSTOOK CO NORTHEASTLAND HOTEL 58 CUMBERLAND CO SHELTER SITE-OXFORD 117 CUMBERLAND CO (PYWCA) YWCA, 187 112	COUNTY ADDRESS #OBS 1ST ANDROSCOGGIN C LEPAGE BAKERY 60 .08 AROOSTOOK CO NORTHEASTLAND HOTEL 58 .08 CUMBERLAND CO SHELTER SITE-OXFORD 117 .12 CUMBERLAND CO (PYWCA) YWCA, 187 112 .07	COUNTY ADDRESS #OBS 1ST 2ND ANDROSCOGGIN C LEPAGE BAKERY 60 .08 .06 AROOSTOOK CO NORTHEASTLAND HOTEL 58 .08 .04 CUMBERLAND CO SHELTER SITE-OXFORD 117 .12 .07 CUMBERLAND CO (PYWCA) YWCA, 187 112 .07 .04	COUNTY ADDRESS #OBS 1ST 2ND 3RD ANDROSCOGGIN C LEPAGE BAKERY 60 .08 .06 .07 AROOSTOOK CO NORTHEASTLAND HOTEL 58 .08 .04 .02 CUMBERLAND CO SHELTER SITE-OXFORD 117 .12 .07 .05 CUMBERLAND CO (PYWCA) YWCA, 187 112 .07 .04 .04	QUARTERLY ARITH MEANS COUNTY ADDRESS #OBS 1ST 2ND 3RD 4TH ANDROSCOGGIN C LEPAGE BAKERY 60 .08 .06 .07 .04 AROOSTOOK CO NORTHEASTLAND HOTEL 58 .08 .04 .02 .03 CUMBERLAND CO SHELTER SITE-OXFORD 117 .12 .07 .05 .06 CUMBERLAND CO (PYWCA) YWCA, 187 112 .07 .04 .04 .04	QUARTERLY ARITH MEANS MEANS COUNTY ADDRESS #OBS 1ST 2ND 3RD 4TH >1.5 ANDROSCOGGIN C LEPAGE BAKERY 60 .08 .06 .07 .04 0 AROOSTOOK CO NORTHEASTLAND HOTEL 58 .08 .04 .02 .03 0 CUMBERLAND CO SHELTER SITE-OXFORD 117 .12 .07 .05 .06 0 CUMBERLAND CO (PYWCA) YWCA, 187 112 .07 .04 .04 .04 0	QUARTERLY ARITH MEANS MEANS MAX VALUE AND MEANS MAX VALUE	QUARTERLY ARITH MEANS MEANS MAX VALUES COUNTY ADDRESS #OBS 1ST 2ND 3RD 4TH >1.5 1ST 2ND ANDROSCOGGIN C LEPAGE BAKERY 60 .08 .06 .07 .04 0 .25 .19 AROOSTOOK CO NORTHEASTLAND HOTEL 58 .08 .04 .02 .03 0 .15 .12 CUMBERLAND CO SHELTER SITE-OXFORD 117 .12 .07 .05 .06 0 .27 .22 CUMBERLAND CO (PYWCA) YWCA, 187 112 .07 .04 .04 .04 .04 0 .06 .06			

? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Method: Gravimetric, 24-hour Hi-volume Filter Sample-91

Method: Atomic Absorbtion-92

001 UG/CU METER (25 C) MAINE UNITS: SULFUR DIOXIDE P OBS OBS MAX 3-HR MAX 24-HR > MAX 1-HR ARIT 2ND 365 1ST #OBS 1ST 2ND 1300 1ST 2ND MEAN METH SITE ID C CITY COUNTY ADDRESS 23 020 23-001-0011 1 LEWISTON ANDROSCOGGIN C COUNTRY KITCHEN 34? 020 23-003-0009 2 MADAWASKA AROOSTOOK CO PORTABLE SHELTER 327 020 23-003-0012 1 MADAWASKA AROOSTOOK CO U.S.POST OFFICE 147 020 HIGH SCHOOL 23-003-1003 2 MADAWASKA AROOSTOOK CO 29 020 23-005-0014 1 PORTLAND CUMBERLAND CO SHELTER STE-OXFOD 25 020 23-017-0011 1 MEXICO OXFORD CO HUNT'S PROPERTY-R 8275 37 020 23-017-2005 1 RUMFORD OXFORD CO TAYLOR MOUNTAIN-1 TAYLOR MOUNTAIN-2 8299 26 020 23-017-2006 1 RUMFORD OXFORD CO 19 020 23-017-2007 2 RUMFORD OXFORD CO VILLAGE GREEN 24? 020 23-019-0002 1 BANGOR PENOBSCOT CO PUMP STATION-WASH 23-019-1007 1 LINCOLN PENOBSCOT CO THOMAS MOT. TRA. 12 020 6 020 23-019-1008 1 LINCOLN PENOBSCOT CO FISH HILL BASE 8 020 23-019-1009 1 LINCOLN PENOBSCOT CO FISH HILL PEAK 18? 020 KATAHDIN SCHOOL-B 1072 23-019-2002 1 EAST MILLINOCK PENOBSCOT CO 22 020 23-019-2006 2 MILLINOCKET PENOBSCOT CO GNP-WASTEWATER TR 7680 18 020 23-019-2009 1 MILLINOCKET PENOBSCOT CO YORK STREET 13 020 23-027-0006 1 SEARSPORT WALDO CO SEARSPORT DOT 9 020 23-029-0007 1 WOODLAND WASHINGTON CO SEC. TREAT, PIPEL 7174 ? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

CARBON MONOXIDE			MAINE		UNITS: 007 PARTS PER MILLION							
SITE ID	O C CITY	COUNTY	ADDRESS	#OBS	MAX 1	1 - HR 2ND	OBS>	MAX 8	B-HR 2nd	OBS>	METH	
	8 1 PORTLAND	CUMBERLAND CO	529 CONGRESS STREET	7285	8.3	7.3	0	5.7	5.7	0	011	

Method: Hourly values, Pulsed Flouresecnt-20, Ultra Violet Stimulated Fluorescence-23

OZONE MAINE UNITS: 007 PARTS PER MILLION

OZONE SEASON: APR TO OCT

	P				*	• •••	VALID	DATLY 1	- HP MAY	TMIIM		* 110	S DAYS		
	0							VALID DAILY 1-HR MAXIMUMMAXIMA VALS				>.125 * ASSUMED <			
SITE ID	C CITY	COUNTY	ADDRESS	*MEAS	REQ	1sr	2ND	3RD	4TH	MEAS	EST *	STANDARD	METH		
23-005-2003	1 CAPE ELIZABET	CUMBERLAND CO	SHELTER SITE	213	214	.156	. 141	.138	.136	4	4.0	0	011		
23-007-1001	1 BIGELOW	FRANKLIN CO	SUGARLOAF MT.	140	214	.093	.092	.087	.085	0	0.0	1	011		
23-007-1002	2 BIGELOW	FRANKLIN CO	SKI TOUR AREA	96	214	.079	.073	.072	.071	0	0.0	0	014		
23-009-0003	1 ACADIA NTL PK	HANCOCK CO	MCFARLAND HILL,	205	214	.130	.121	.117	.112	1	1.0	2	014		
23-009-2003	2 DEDHAM	HANCOCK CO	BALD MTN.	200	214	.125	.110	.104	.097	1	1.1	1	014		
23-011-2001	1 GARDINER	KENNEBEC CO	GARDINER H.S.	205	214	.119	.093	.092	.087	0	0.0	1	011		
23-013-0003	1 ISLE AU HAUT	KNOX CO	FIRE STATION	130	214	.154	.128	.127	.126	4	6.5	2	011		
23-013-0004	2 PORT CLYDE	KNOX CO	MARSHAL PT. LIGHT	138	214	.149	. 142	.129	.120	3	4.7	0	014		
23-031-2002	1 KENNEBUNKPORT	YORK CO	OCEAN AVE/PARSON V	IY 176	214	.152	. 142	. 135	.131	4	4.8	1	011		
23-031-6001	1 YORK	YORK CO	NUBBLE POINT	69	214	. 134	.125	.119	.100	2	6.1	2	014		
Method: Hou	irly values, Cher	miluminescence	·11, Ultra Violet D	asibi	Corp	oratio	n-14			_		-			

PM TOTAL 0-10UM MAINE UNITS: 001 UG/CU METER (25 C) Ρ MAXIMUM VALUES #DAYS ARITH SITE ID C CITY COUNTY ADDRESS #OBS 1ST 2ND 3RD >150 MEAN METH INT 23-003-0013 1 MADAWASKA AROOSTOOK CO BIG DADDY'S RESTAURANT 130 222 143 92 0 21.8 052 7 23-003-1005 2 PRESQUE ISLE AROOSTOOK CO NORTHEASTLAND HOTEL 316 231 172 153 3 29.2 052 7 23-005-0002 2 BRIDGTON CUMBERLAND CO UPPER RIDGE ROAD 40 60 28 27 16.2 052 7 23-005-0014 2 PORTLAND CUMBERLAND CO SHELTER SITE - OXFORD 50 77 60 58 30.9 052 7 23-005-0020 1 PORTLAND CUMBERLAND CO 1945 CONGRESS STREET 65 55 43 42 21.9 059 7 23-005-1012 1 WESTBROOK CUMBERLAND CO WAREHOUSE #5, MAIN ST. 053 7 91 94 71 58 28.4 23-007-0004 1 JAY FRANKLIN CO BOMASTER PROPERTY 115 61 49 49 18.9 052 7 23-009-0003 1 ARCADIA NTL PK HANCOCK CO MCFARLAND HILL 001 7 111 41 37 36 12.4 23-011-0005 1 AUGUSTA KENNEBEC CO FIRE HOUSE 25.3 052 7 150 89 68 67 23-011-2003 1 WINSLOW KENNEBEC CO (GHR) GULLEY HILL RD. 49 73 69 60 28.6 052 7 23-017-0008 2 MEXICO OXFORD CO LEBONVILLE'S ROUTE #2 107 85 67 30.3 055 7 87 23-019-1007 2 LINCOLN PENOBSCOT CO THOMAS MOT. TRAILER PK. 89 71 63 59 30.8? 051 7 23-029-0008 1 WOODLAND WASHINGTON CO WOODLAND HIGH SCHOOL 92 73 65 052 7 116 23.4

Method: Gravimetric, 24-hour Filter Sample, 01 - Low-volume SA244E, 51 - Hi-volume SA321, 52 - Hi-volume SA321A, 53 - Hi-volume GMW 9000, 54 - Hi-volume W10

[?] INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

O MAX 24-HR OBS> OBS> A	ARITH GEO	GEO
SITE ID C CITY COUNTY ADDRESS #OBS 1ST 2ND 260 150 I	MEAN MEAN	STD
25-005-2004 1 NEW BEDFORD BRISTOL CO YMCA, 25 WATER STREET 56 73 71 0 0	40 37	1.4
25-005-3001 2 FALL RIVER BRISTOL CO CENTRAL FIRE STATION, 165 B 58 93 69 0 0	43 40	1.5
25-009-0005 1 LAWRENCE ESSEX CO HIGH STREET, STORROW PARK 30 79 78 0 0	46? 43?	1.5
25-013-0011 1 SPRINGFIELD HAMPDEN CO 59 HOWARD STREET 61 107 100 0 0	54 51	1.5
25-013-1007 1 HOLYOKE HAMPDEN CO ONE COURT SQUARE 60 91 88 0 0	49 46	1.5
25-013-2007 1 SPRINGFIELD* HAMPDEN CO EAST COLUMBUS AVENUE 39 206 199 0 15	131? 124?	1.5
25-013-5003 1 WEST SPRINGFIEL HAMPDEN CO W. SPRINGFIELD FIRE DEPT., 57 94 90 0 0	48 45	1.5
25-015-4002 1 WARE HAMPSHIRE CO QUABBIN SUMMIT 105 61 60 0 0	20 16	
25-017-0006 1 LOWELL MIDDLESEX CO LOWELL YMCA, 35 YMCA DRIVE 58 143 120 0 0	49 44	1.6
25-017-3002 1 MEDFORD MIDDLESEX CO 100 TO 120 MAIN STREET 49 150 124 0 0	64? 59?	1.6
25-017-7002 1 WOBURN MIDDLESEX CO WOBURN STREET AND MONTVALE 58 124 96 0 0	49 46	1.5
25-021-0007 1 QUINCY NORFOLK CO HANCOCK STREET 57 90 88 0 0	44 42	1.4
25-023-0003 1 BROCKTON PLYMOUTH CO CRESCENT STREET (ROUTE 27) 59 81 65 0 0	40 37	1.5
25-025-0002 1 BOSTON* SUFFOLK CO KENMORE SQUARE, 590 COMWELTH 5 147 122 0 0	99? 95?	1.4
25-025-0012 1 BOSTON SUFFOLK CO 115 SOUTHAMPTON STREET 54 190 174 0 2	69? 63?	1.5
25-025-0021 1 BOSTON SUFFOLK CO 340 BREMAN STREET, EAST BOS 61 118 103 0 0	62 59	1.4
25-025-0024 1 BOSTON SUFFOLK CO 200 COLUMBUS AVENUE 59 132 112 0 0	66 63	1.4
25-025-0027 1 BOSTON SUFFOLK CO ONE CITY SQUARE, CHARLESTOWN 61 313 290 3 17	124 107	1.8
25-025-1003 1 CHELSEA SUFFOLK CO POWDER HORN HILL 59 95 85 0 0	47 44	1.5
25-027-0013 1 WORCESTER WORCESTER CO 419 BELMONT STREET 58 92 77 0 0	44 39	1.7
25-027-0016 1 WORCESTER WORCESTER CO 2 WASHINGTON STREET 48 119 110 0 0	59? 56?	1.4

[?] INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Method: Gravimetric, 24-hour Hi-volume Filter Sample-91

^{*} Micro scale Pb site, does not meet siting criteria for TSP

	_
ŧ	\sim
٠	v

ı	.EAD		MASSACHUSETTS					UNITS: 001 UG/CU METER (25 C)								
	P O				ฉเ	JARTERLY	ARITH ME	ANS	- MEANS MAX VALUES							
SITE ID	C CITY	COUNTY	ADDRESS	#OB\$	157	2ND	3RD	4TH	>1.5	151	2ND	METH				
25-013-001	1 2 SPRINGFIELD	HAMPDEN CO	59 HOWARD STREET	50	.11	.06	.06	.07?	0	.21	.21	092				
25-013-200	7 1 SPRINGFIELD	HAMPDEN CO	EAST COLUMBUS AVE.	54	.16	.11	.08	.11	0	.40	.34	092				
25-017-000	5 2 LOWELL	MIDDLESEX CO	LOWELL YMCA, 35 YMCA	53	.09	.04	.04	.06?	0	.20	.20	092				
25-025-000	2 1 BOSTON	SUFFOLK CO	KENMORE SQUARE	44	.11	.09?	.11	.08?	0	.29	.23	092				
25-025-002	7 2 BOSTON	SUFFOLK CO	ONE CITY SQUARE	50	.10	.12	.12	.07?	0	.27	.26	092				
25-027-001	5 2 WORCESTER	WORCESTER CO	2 WASHINGTON ST.	44	.06	.05	.04?	.04?	0	.16	.11	092				
? INDICATES	S THAT THE MEAN D	OCES NOT SATISFY	SUMMARY CRITERIA													

C	ARBON MONOXIDE		MASSACHUSETTS		UN	ITS:	007 PA	RTS PER	MILLIC	N	
	P O				MAX	1 - HR	OBS>	MAX 8	S-HR	OBS>	
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	15T	2ND	35	1ST	2ND	9	METH
25-013-0014	1 SPRINGFIELD	HAMPDEN CO	FERNBANK STREET NEAR BOS	8430	10.0	8.0	0	4.9	4.7	0	011
25-013-2007	1 SPRINGFIELD	HAMPDEN CO	EAST COLUMBUS AVENUE	8646	14.0	14.0	0	9.5	8.9	1	011
25-025-0002	1 BOSTON	SUFFOLK CO	KENMORE SQUARE, 590 COM.	8213	12.0	11.0	0	8.8	6.3	0	011
25-025-0016	1 BOSTON	SUFFOLK CO	VISCONTI STREET, E.BOST.	1937	10.0	10.0	0	6.6	6.6	0	011
25-025-0021	1 BOSTON	SUFFOLK CO	340 BREMAN STREET, E.BOS	8431	15.0	12.0	0	9.1	5.9	0	011
25-025-0022	1 BOSTON	SUFFOLK CO	600 WASHINGTON STREET	8631	11.0	11.0	0	7.1	7.1	0	011
25-027-0020	1 WORCESTER	WORCESTER CO	CENTRAL STREET FIRE STA.	8562	17.0	17.0	0	8.8	7.1	0	011

UNITS:

OBS

001 UG/CU METER (25 C)

OBS

MASSACHUSETTS

N1	TROGEN DIOXIDE		MASSACHUSETTS		UNIT	s: 007	PART	S PER MI	LLION	
SITE ID	O C CITY	COUNTY	ADDRESS	#OBS	MAX 1st	1-HR 2ND	MAX 1st	24-HR 2ND	ARIT MEAN	METH
25-013-0015	1 SPRINGFIELD	HAMPDEN CO	SPRINGFIELD COMMUNITY COLL	8509	.139	.112			.022	014
25-015-4002	1 WARE	HAMPSHIRE CO	QUABBIN SUMMIT	7596	.064	.060			.008	014
25-025-0002	3 BOSTON	SUFFOLK CO	KENMORE SQUARE, 590 COMM.	7496	.172	.172			.038	014
25-025-0021	1 BOSTON	SUFFOLK CO	340 BREMAN STREET, E.BOST.	8072	.117	.117			.034	014
25-025-1003	2 CHELSEA	SUFFOLK CO	POWDER HORN HILL	8003	.108	.105			.024	014
25-027-0020	1 WORCESTER	WORCESTER CO	CENTRAL STREET FIRE STA.	8517	.168	.163			.034	014

SULFUR DIOXIDE

Ρ

OZONE MASSACHUSETTS UNITS: 007 PARTS PER MILLION

OZONE SEASON: APR TO OCT

	Р		520112 527		*	001	VALID	DAILY 1	-HR MAX	(I MUM		* MIS	S DAYS
	0			*NUM	NUM						.125 *	ASSUMED <	(
SITE ID	C CITY	COUNTY	ADDRESS	*MEAS	REQ	15T	2ND	3RD	4TH	MEAS	EST *	STANDARD	METH
25-001-0002	1 TRURO	BARNSTABLE CO	FOX BOTTOM AREA	179	214	.115	. 115	.114	.110	0	0.0	3	014
25-005-1001	2 EASTON	BRISTOL CO	NORTH EASTON PO	194	214	.136	.120	.108	.105	1	1.1	4	014
25-005-1002	2 FAIRHAVEN	BRISTOL CO	LEROY WOOD SCH.	211	214	. 134	.124	.124	.122	1	1.0	3	014
25-009-0005	1 LAWRENCE	ESSEX CO	HIGH STREET	212	214	. 126	.110	.091	.088	1	1.0	0	011
25-009-4003	2 NEWBURYPORT	ESSEX CO	PARKER RIVER NWR	184	214	.136	.127	.119	.101	2	2.3	0	014
25-013-0003	2 AGAWAM	HAMPDEN CO	152 S.WESTFIELD	210	214	.103	. 102	.098	.095	0	0.0	1	014
25-013-0008	1 CHICOPEE	HAMPDEN CO	ANDERSON ROAD	208	214	.141	.121	.113	.103	1	1.0	0	014
25-015-0002	2 AMHERST	HAMPSHIRE CO	SOLAR HABITAT	208	214	.110	.097	.097	.090	0	0.0	0	014
25-015-4002	1 WARE	HAMPSHIRE CO	QUABBIN SUMMIT	210	214	.118	. 105	.103	.096	0	0.0	3	014
25-017-1801	2 SUDBURY	MIDDLESEX CO	WATER ROW RD	197	214	.143	.138	.126	.126	4	4.3	3	014
25-017-6001	2 LEXINGTON	MIDDLESEX CO	N.E.REGIONAL OFS.	165	214	.129	.128	.113	.112	2	2.5	7	014
25-023-2001	1 SCITUATE	PLYMOUTH CO	SCITUATE POLICE	166	214	.118	.113	.098	.097	0	0.0	2	000
25-025-1003	2 CHELSEA	SUFFOLK CO	POWDER HORN HILL	212	214	.126	.116	.115	.107	1	1.0	2	014
25-027-0019	2 WORCESTER	WORCESTER CO	DPW YARD, BELMONT	210	214	.111	.111	.110	.101	0	0.0	1	014
Method: Ho	urly values, Ch	emiluminescence	-11, Ultra Violet	Dasibi	Corp	oratio	n-14						

P	M TOTAL 0-10UM	MA	SSACHUSETTS	ι	INITS:	001	UG/CU ME	TER (25 C)		
SITE ID	P O C CITY	COUNTY	ADDRESS	#OBS	151	MAXIMUM 2ND	VALUES 3RD	4TH	ARITH MEAN	METH	TNT
3116 10	CCIT	COUNTY	ADDRESS	#063	131	ZND	טאנ	411	MEAN	MEIN	1141
25-009-0005	1 LAWRENCE	ESSEX CO	HIGH ST. STORROW PARK	19	65	47	44	39	29.0?	000	7
25-013-0011	1 SPRINGFIELD	HAMPDEN CO	59 HOWARD STREET	50	123	90	84	52	31.6?	000	7
25-013-2007	1 SPRINGFIELD	HAMPDEN CO	EAST COLUMBUS STREET	57	105	98	82	75	41.9?	000	7
25-025-0002	1 BOSTON	SUFFOLK CO	KENMORE SQ. 590 COMM AVE.	37	68	66	61	55	32.8?	058	7
25-025-0024	1 BOSTON	SUFFOLK CO	200 COLUMBUS AVE.	53	86	59	58	52	29.5?	000	7
25-025-0027	1 BOSTON	SUFFOLK CO	ONE CITY SQUARE	57	75	72	68	64	39.0	000	7
25-027-0016 ? INDICATES	1 WORCESTER THAT THE MEAN DOES	WORCESTER CO NOT SATISFY SUMMARY	2 WASHINGTON STREET Y CRITERIA	43	54	53	49	48	29.2?	000	7

Method: Gravimetric, 24-hour Filter Sample, 01 - Low-volume SA244E, 51 - Hi-volume SA321, 52 - Hi-volume SA321A, 53 - Hi-volume GMW 9000, 54 - Hi-volume W10

SUSPENDED PARTICULATE NEW HAMPSHIRE UNITS: 001 UG/CU METER (25 C)

•	SUSPENDED PARTICUL!	ATE	NEW HAMPSHIRE		UNITS	: 00	1 UG	/CU M	ETER (25	, C)	
	P										
	0				MAX	24-HR	OBS>	OB\$>	ARITH	GEO	GEO
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	1ST	2ND	260	150	MEAN	MEAN	STD
33-007-0001	1 1 BERLIN	coos co	ANGEL GUARDIAN SCHOOL	57	99	95	0	0	53	51	1.4
33-007-0001	2 BERLIN	coos co	ANGEL GUARDIAN SCHOOL	21	98	82	0	0	61?	57?	1.5
33-007-0008	3 1 BERLIN	coos co	OFF HUTCHINS STREET	19	88	68	0	0	37?	32?	1.9
33-007-0010) 1 BERLIN	coos co	BURGESS SCHOOL, SCHOOL ST.	3	65	63	0	0	57?	56?	1.3
33-007-0014	1 BERLIN	coos co	LANCASTER STREET TRAILER	59	250	194	0	4	88	78	1.7
33-007-0014	3 BERLIN	coos co	LANCASTER STREET TRAILER	21	154	126	0	1	69?	56?	2.2
33-007-0016	5 1 BERLIN	coos co	200 ENMAN HILL ROAD	11	54	51	0	0	38?	36?	1.5
33-007-0019	1 BERLIN	coos co	CATES HILL RD	8	38	25	0	0	20?	19?	1.5
33-007-1005	1 NORTHUMBERLAND	coos co	ST. FRANCIS HALL, STATE ST.	56	63	61	0	0	33	31	1.5
33-007-1006	1 NORTHUMBERLAND	coos co	WEMYSS DRIVE POWER LINE PO	58	72	66	0	0	35	32	1.6
33-007-2003	2 NORTHUMBERLAND	coos co	BROOKLYN STREET	58	79	72	0	0	35	32	1.7
33-011-0008	3 1 MANCHESTER	HILLSBOROUGH CO	NOTRE DAME AVENUE	58	83	80	0	0	45	41	1.5
33-011-0015	1 MANCHESTER	HILLSBOROUGH CO	351 CHESTNUT STREET	60	76	76	0	0	43	40	1.5
33-011-0015	2 MANCHESTER	HILLSBOROUGH CO	351 CHESTNUT STREET	59	78	76	0	0	44	41	1.5
33-011-0016	2 MANCHESTER	HILLSBOROUGH CO	HARNETT PARK, MUNICIPAL PARK	56	110	102	0	0	47?	43?	1.5
33-011-0016	3 MANCHESTER	HILLSBOROUGH CO	HARNETT PARK, MUNICIPAL PARK	54	113	102	0	0	48?	44?	1.5
33-011-1007	7 1 NASHUA	HILLSBOROUGH CO	MAIN STREET	58	71	66	0	0	40	38	1.4
33-011-1007	7 2 NASHUA	HILLSBOROUGH CO	MAIN STREET	59	97	71	0	0	43	40	1.5
33-011-1010	1 NASHUA	HILLSBOROUGH CO	SANDERS ASSOCIATES, PARKING	56	125	88	0	0	45	40	1.7
33-011-2001	1 1 HOLLIS	HILLSBOROUGH CO	RTE. 122, SILVER LAKE RD.	52	106	100	0	0	35?	29?	1.9
33-013-0003	1 CONCORD	MERRIMACK CO	NO. STATE HOUSE	59	71	67	0	0	36	33	1.6
33-013-0004	1 CONCORD	MERRIMACK CO	JUNCTION RTS. 3 AND 93	46	102	97	0	0	55?	52?	1.4
33-015-0006	5 1 PORTSMOUTH	ROCKINGHAM CO	COURT STREET	58	105	97	0	0	48	45	1.5
33-015-0009	2 1 PORTSMOUTH	ROCKINGHAM CO	VAUGHAN STREET	56	118	107	0	0	57	52	1.6
33-015-001	1 1 PORTSMOUTH	ROCKINGHAM CO	SCHILLER SUB STATION - PSCH	54	84	66	0	0	39?	35?	1.6

CENTRAL AVE

120

50?

45? 1.6

STRAFFORD CO

Method: Gravimetric, 24-hour Hi-volume Filter Sample-91

33-017-0001 1 DOVER

[?] INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

LEAD	NEW HAMPSHIRE	UNITS:	001	UG/CU METER (25 C)
------	---------------	--------	-----	--------------------

	P											
	0				ฉุบ	JARTERLY	ARITH ME	ANS	MEANS	MAX V	ALUES	
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	1ST	2ND	3RD	4TH	>1.5	151	2ND	METH
33-007-0001	1 BERLIN	coos co	ANGEL GUAR. SCHOOL	12	.03	.02	.01	.02	0	.04	.03	092
33-011-0015	1 MANCHESTER	HILLSBOROUGH	351 CHESTNUT ST.	12	.06	.03	.02	.04	0	.11	.04	092
33-011-0015	2 MANCHESTER	HILLSBOROUGH	351 CHESTNUT ST.	12	.06	.03	.02	.04	0	.12	.04	092
33-011-1007	1 NASHUA	HILLSBOROUGH	MAIN STREET	11	.05	.03	.02	.03	0	.09	.04	092
33-011-1007	3 NASHUA	HILLSBOROUGH	MAIN STREET	11	. 05	.04	.02	.04	0	.08	.04	092
33-011-1010	2 NASHUA	HILLSBOROUGH	SANDERS ASSOC.	12	.04	.02	.01	.02	0	.06	.03	092
33-011-2001	1 HOLLIS	HILLSBOROUGH	RT.122, SILVER LAKE	12	.02	.02	.01	.02	0	.03	.03	092
33-013-0003	1 CONCORD	MERRIMACK CO	NO. STATE HOUSE	12	.05	.03	.02	.03	0	.08	.04	092
33-013-0004	1 CONCORD	MERRIMACK CO	JUNCTION RTE.3 &	12	.09	.06	.04	.06	0	. 13	.08	092
33-015-0006	1 PORTSMOUTH	ROCKINGHAM CO	COURT STREET	11	.06	.04	.02	.03	0	.08	.04	092

С	ARBON MONOXIDE		NEW HAMPSHIRE		UN	IITS:	007 PA	RTS PE	R MILLIC	ИС	
SITE ID	P O C CITY	COUNTY	ADDRESS	#OBS	MAX 1st	1-HR 2ND	OBS> 35	MAX 1st	8-HR 2nd	OBS>	METH
33-011-0017	1 MANCHESTER	HILLSBOROUGH CO	1170 ELM STREET	8151	16.5	14.8	0	10.4	10.3	4	011
33-011-1009 Method: Ho		HILLSBOROUGH CO dispersive Infrared	25 MAIN STREET, MATARAZZ (NDIR) Continuous-11	8105	20.0	16.0	0	9.2	9.1	0	011

SUI	FUR DIOXIDE		NEW HAMPSHIRE				UN	ITS:	001	UG/CU	METER	(25	C)	
	P							OBS			OBS			
	0				MAX 2	24 - HR	>	MAX	3-HR	>	MAX	1-HR	ARIT	
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	1ST	2ND	365	1ST	2ND	1300	151	2ND	MEAN	METH
33-007-0011	7 BERLIN	coos co	116 POPLAR STREET	6527	98	94	0	288	262	0	437	419	19?	020
33-007-0014	6 BERLIN	coos co	LANCASTER STREET	8424	68	65	0	301	276	0	515	393	17	020
33-007-0016	1 BERLIN	coos co	200 ENMAN HILL RD	8182	130	111	0	426	345	0	737	589	18	020
33-007-0017	1 BERLIN	coos co	EAST HILL	5579	69	66	0	256	207	0	307	306	10?	020
33-007-0019	1 BERLIN	coos co	CATES HILL RD	8664	106	103	0	404	378	0	598	537	16	020
33-007-1006	1 NORTHUMBERLAND	coos co	WEMYSS DRIVE POW	8611	72	71	0	183	171	0	317	296	5 13	023
33-007-1007	1 NORTHUMBERLAND	coos co	ROUTES 110 AND 3,	8602	163	140	0	344	277	0	490	466	5 12	023
33-007-2008	1 NORTHUMBERLAND	coos co	WEMYSS DRIVE, POW	8535	60	60	0	162	154	0	280	267	12	023
33-011-0016	1 MANCHESTER	HILLSBOROUGH C	HARNETT PARK	8365	132	104	0	232	210	0	304	275	23	023
33-011-1005	3 NASHUA	HILLSBOROUGH C	18 MULLBERRY ST	8445	92	90	0	171	145	0	178	178	3 21	023
33-011-1010	1 NASHUA	HILLSBOROUGH C	SANDERS ASSOCIATE	8339	104	80	0	187	140	0	204	191	32?	023
33-013-0006	1 BOW	MERRIMACK CO	SOUTH BOW AND DUN	8553	79	65	0	214	199	0	385	356	5 15	023
33-013-1003	1 PEMBROKE	MERRIMACK CO	PEMBROKE HILL	8451	171	170	0	457	455	0	707	681	18	023
33-015-0009	2 PORTSMOUTH	ROCKINGHAM CO	VAUGHAN STREET	8530	67	65	0	182	142	O	262	236	14	023
	THAT THE MEAN DO urly values, Puls		SUMMARY CRITERIA 20, Ultra Violet St	imulat	ed Flu	Jorenc	ence-	23						

:	NITROGEN DIOXIDE		NEW HAMPSHIRE		UNIT	s: 007	PART	S PER MI	LLION	
SITE ID	O C CITY	COUNTY	ADDRESS	#OBS	MAX 1st	1-HR 2ND	MAX 1st	24-HR 2ND	ARIT MEAN	METH
	6 1 MANCHESTER ourly values, Cher	HILLSBOROUGH CO	HARNETT PARK, MUNICIPAL PA	6815	.312	.294			.020	014

OZONE NEW HAMPSHIRE UNITS: 007 PARTS PER MILLION

OZONE SEASON: APR TO OCT

	Р				*		VALID I	DAILY 1	HR MAX	IMUM		* MIS	S DAYS
	0			*NUM	NUM		MAX	IMA		VALS>	.125	ASSUMED	•
SITE ID	C CITY	COUNTY	ADDRESS	*MEAS	REQ	157	2ND	3RD	4TH	MEAS	EST	* STANDARD	METH
33-007-0014	1 BERLIN	coos co	LANCASTER STREET	209	214				.090	0	0.0	1	011
33-011-0016	1 MANCHESTER	HILLSBOROUGH	HARNETT PARK	207	214	.095	.088	.087	.081	0	0.0	7	011
33-011-1010	2 NASHUA	HILLSBOROUGH	SANDERS ASSOCIAT	206	214	.109	.101	.101	.095	0	0.0	4	011
33-013-0006	1 BOW	MERRIMACK CO	S. BOW AND DUN	207	214	.097	.095	.092	.092	0	0.0	2	011
33-015-0009	1 PORTSMOUTH	ROCKINGHAM CO	VAUGHAN STREET	211	214	.125	.120	.115	.090	1	1.0	3	011
33-015-0012	1 RYE	ROCKINGHAM CO	RYE HARBOR STATE	190	214	.180	.155	.127	.125	4	4.5	0	011
Method: No	urty values. Ch	remiluminescence	-14										

PM TOTAL 0-10UM NEW HAMPSHIRE UNITS: 001 UG/CU METER (25 C) MAXIMUM VALUES ARITH SITE ID C CITY COUNTY ADDRESS #OBS 1ST 2ND 3RD 4TH MEAN METH INT 33-007-0008 1 BERLIN 24.9? 052 7 coos co OFF HUTCHINS STREET 40 49 49 46 41 33-007-0014 1 BERLIN coos co LANCASTER STREET TRAILER 67 60 58 56 35.1? 052 7 60 34.0? 054 7 33-007-0014 2 BERLIN coos co 51 47 LANCASTER STREET TRAILER 13 64 33-011-0015 1 MANCHESTER 351 CHESTNUT STREET 63 62 39 26.5? 052 7 HILLSBOROUGH CO 14 22.6? 058 7 33-011-0015 2 MANCHESTER 42 35 35 HILLSBOROUGH CO 351 CHESTNUT STREET 28 66 33-011-0015 3 MANCHESTER 70 42 32 27 21.3? 058 7 HILLSBOROUGH CO 351 CHESTNUT STREET 26 ? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Method: Gravimetric, 24-hour Filter Sample, 01 - Low-volume SA244E, 51 - Hi-volume SA321, 52 - Hi-volume SA321A, 53 - Hi-volume GMW 9000, 54 - Hi-volume W10

SUSPENDED PARTICULATE	RHODE ISLAND	UNITS:	001	UG/CU METER (25 C)
P	•			

SITE ID	0 C	CITY	COUNTY		ADDRESS	#08S	MAX 1ST	24-HR 2ND	OBS> 260		ARITH MEAN	GEO MEAN	GEO STD
44-003-0002	1	 	KENT CO		W. ALTON JONES CAMPUS URI	57	65	60	0	0	20	18	1.7
44-005-2001	1	NEWPORT	NEWPORT CO		NEWPORT CITY HALL	58	81	64	0	0	34	32	1.4
44-007-0003	1	CRANSTON	PROVIDENCE (CO	CRANSTON FIRE DEPT	58	85	85	0	0	45	42	1.5
44-007-0008	1	EAST PROVIDENCE	PROVIDENCE (co	E. PROV. FIRE STATION NORTH	53	88	84	0	0	45?	42?	1.5
44-007-0009	1	EAST PROVIDENCE	PROVIDENCE (CO	PAWTUCKET AVENUE	54	76	66	0	0	39?	36?	1.5
44-007-0011	1	PROVIDENCE	PROVIDENCE (СО	HEALTH DEPT. PARKING LOT	59	190	163	0	2	68	60	1.7
44-007-0015	1	PROVIDENCE	PROVIDENCE (co	DEPT. OF HEALTH BUILDING	59	110	99	0	0	55	51	1.5
44-007-0017	1	PROVIDENCE	PROVIDENCE (СО	SABIN STREET PROVIDENCE	61	217	103	0	1	64	58	1.6
44-007-1004	1	PAWTUCKET	PROVIDENCE (co	HOSPITAL TRUST 215 MAIN ST	54	106	89	0	0	52?	48?	1.5
44-007-1006	1	PROVIDENCE	PROVIDENCE (co	187 WESTMINSTER STREET	58	147	147	0	0	63	57	1.6
44-007-4002	1	WOONSOCKET	PROVIDENCE (co	127 SOCIAL STREET, WOONSOCK	60	107	85	0	0	52	47	1.6
44-009-4002	1	WESTERLY	WASHINGTON (co	WESTERLY POLICE DEPARTMENT	57	110	84	0	0	51	47	1.5

? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Method: Gravimetric, 24-hour Hi-volume Filter Sample-91

LI	AD		RHODE ISLAND			U	NITS:	001 UG/	CU MET	METER (25 C)						
	P 0				QU	JARTERLY	ARITH ME	ANS	MEANS	MAX V	ALUES					
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	157	2ND	3RD	4TH	>1.5	151	2ND	METH				
44-003-0002	3	KENT CO	W. ALTON JONES CAM	41	.02	.02		.02	0	.04	.03	090				
44-003-0002	4	KENT CO	W. ALTON JONES CAM	16			.02		0	.02	.02	092				
44-007-0003	1 CRANSTON	PROVIDENCE CO	CRANSTON FIRE DEPT	42	.06	.05		.05	O	.12	.10	090				
44-007-0003	2 CRANSTON	PROVIDENCE CO	CRANSTON FIRE DEPT	16			.04		0	.06	.05	092				
44-007-0017	2 PROVIDENCE	PROVIDENCE CO	SABIN STREET	45	.09	.08		.07	0	.22	.15	090				
44-007-0017	3 PROVIDENCE	PROVIDENCE CO	SABIN STREET	16			.06		0	.18	.10	092				
44-007-1006	1 PROVIDENCE	PROVIDENCE CO	187 WESTMINSTER ST	42	.10	.14		.08	0	.33	.26	090				
44-007-1006	2 PROVIDENCE	PROVIDENCE CO	187 WESTMINSTER ST	16			.13		0	.60	.19	092				
44-007-1007	1 PROVIDENCE	PROVIDENCE CO	TRAILER, 120 DYER	45	.12	.11		.09	0	.27	.19	090				
	2 PROVIDENCE	PROVIDENCE CO	TRAILER, 120 DYER	16			.09		0	.16	.16	092				

Method: Atomic Absorbtion-92

ICAP-90

г	v

	CARBON MONOXIDE		RHODE ISLAN	D			U	NITS:	007	PAR	TS PER	MILLIC	N	
	0						MAX	1-HR	٥	BS>	MAX 8	- HR	OBS>	
SITE ID	C CITY	COUNTY	ADDRESS			#OBS	1\$T	2NC	-	-	15T	2ND	9	METH
4-007-001	5 1 PROVIDENCE	PROVIDENCE CO	DEPT. OF HEAL	TH BUILD	ING	8357	11.4	11.4		0	8.1	7.4	0	011
4-007-100	9 1 PROVIDENCE	PROVIDENCE CO	76 DORRANCE S	TREET		8603	12.2	12.2	?	0	8.6	8.1	0	011
ethod: K	, ,	•	red (NDIR) Continu		مهجوع	ngaq g	h agan	gacasti:				ha e mpar		
	SULFUR DIOXIDE		RHODE ISLA	ND				UNITS:	00	1 UG.	CN WE	TER (25	i c)	
	Р							OBS			OBS			
	0				MAX 2	4-HR	>	MAX 3	-HR	>	MAX	1-HR	ARIT	
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	181	2ND	365	1ST	2ND	1300	151	2ND	MEAN	METH
4-007-001	5 1 PROVIDENCE	PROVIDENCE CO	DEPT. OF HEALTH	8469	158	132	0	378	303	0	381	378	31	023
4-007-100	5 2 PAWTUCKET	PROVIDENCE CO	SUMMIT STREET	8147	134	130	0	290	248	0	402	351	32	023
4-007-100	9 1 PROVIDENCE	PROVIDENCE CO	76 DORRANCE ST.	8216	171	137	0	415	390	0	439	432	41	020
	ITROGEN DIOXIDE	sed Fluorescent-	20, Ultra Violet S		:a Flu	orenc			007	DART		11LL10N		
	P P		KHODE ISLAND				UN	115:	007	PARIS	PERF	ILLLION		
	0						M.	AX 1-1	R	MAX	24 - HI	R AR	IT.	
	C CITY	COUNTY	ADDRESS			#OB			ND	1ST	211	-	AN	METH
SITE ID														

02	ONE		RHODE ISLA	AND				UNITS	: 007	PARTS	S PEI	R MIL	LION		
			OZONE SEA	ASON: A	PR T	0 00	Г								
	P				*		VALID	DAIL	Y 1-HR	IUMIKAN	4		*	MISS	DAYS
	0			*NUM	NUM		MA	XIMA-		VAI	LS>.	125 *	ASSUM	IED <	
SITE ID	C CITY	COUNTY	ADDRESS	*MEAS	REQ	157	2ND	3RI) 4T	H ME	AS I	EST *	STAND	ARD	METH
44-003-0002	2	KENT CO	W. ALTON JONES C	184	214	. 163	. 162	. 1	51 .1	45	7	8.1		0	014
44-007-0012	1 PROVIDENCE	PROVIDENCE C	CO ROCKEFELLER LIB.	166	214	.155	. 135	. 1:	24 .1	15	2	2.6		0	011,014
Method: Ho	urly values, Ch	emiluminescend	ce-11, Ultra Violet	Dasibi	Corp	orati	on- 14								
	urly values, Ch	emiluminescend	ce-11, Ultra Violet		Corp	محدث و	JNITS:	001	ug/cu	METER	(25	C)			
	M TOTAL 0-10UM	emiluminescend			Corp	محدث و					·				*******
P	M TOTAL 0-10UM P O		RHODE ISLAN		Corp	محدث و	JNITS:	1	MUMIXAM	VALUE	s	,	ARITH	MET.	
	M TOTAL 0-10UM	emiluminescend			Corp	محدث و		1			s		ARITH MEAN	METH	INT
P	M TOTAL 0-10UM P O C CITY		RHODE ISLAN	ND		 	JNITS:	1	MUMIXAM	VALUE	s 4	,		METH	

Method: Gravimetric, 24-hour Filter Sample, 01 - Low-volume SA244E, 51 - Hi-volume SA321, 52 - Hi-volume SA321A,

53 - Hi-volume GMW 9000, 54 - Hi-volume W10

UNITS: 001 UG/CU METER (25 C) SUSPENDED PARTICULATE VERMONT

	P										
	0				MAX	24-HR	OBS>	0 8 \$>	ARITH	GEO	GEO
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	1ST	2ND	260	150	MEAN	MEAN	STD
50-003-0003	1 BENNINGTON	BENNINGTON CO	ROUTE 7, BENNINGTON	55	77	73	0	0	40	37	1.6
50-007-0005	1 BURLINGTON	CHITTENDEN CO	39 PEARL STREET	59	138	75	0	0	45	41	1.5
50-017-1001	2 RANDOLPH	ORANGE CO	VERMONT TECHNICAL COLLEGE	55	65	64	0	0	28	26	1.5
50-021-0004	1 RUTLAND	RUTLAND CO	15-19 WALES STREET	45	183	177	0	2	68?	60?	1.6
50-023-0003	1 BARRE	WASHINGTON CO	SOUTH SEMINARY STREET	56	151	144	0	1	63	57	1.6
50-025-0003	1 BRATTLEBORO	WINDHAM CO	232 MAIN STREET	57	92	90	0	0	43	40	1.5
? INDICATES	THAT THE MEAN	DOES NOT SATISFY SUM	MARY CRITERIA								

Method: Gravimetric, 24-hour Hi-volume Filter Sample-91

	CARBON MONOXIDE		VERMONT		UN	ITS:	007 PA	RTS PE	R MILLIC	ON	
SITE ID	P O C CITY	COUNTY	ADDRESS	#OBS	MAX 1ST	1-HR 2ND	08S> 35	MAX 1st	8-HR 2ND	OBS>	METH
	3 1 BURLINGTON	CHITTENDEN CO	82 S.WINOOSKI AVE	8079	11.9	10.3	0	6.6	4.7	0	011

SI	JLFUR DIOXIDE		VERMONT				U	NITS:	001	UG/C	U METE	R (25	C)	
SITE ID	C CITY	COUNTY	ADDRESS	#OBS	MAX 1	24-HR 2ND	> 365		3-HR 2ND	> 1300	MAX 1ST	1-HR 2ND	ARIT MEAN	METH
50-007-0003	2 BURLINGTON	CHITTENDEN CO	82 S.WINOOSKI AVE	7784	49	48	0	101	66	0	128	123	15	020
50-021-0002	2 RUTLAND	RUTLAND CO	PARKING LOT	5148	101	100	0	218	183	0	280	236	32?	020
50-023-0003 ? INDICATES		WASHINGTON CO	SOUTH SEMINARY ST SUMMARY CRITERIA	5355	68	52	0	101	100	0	126	105	19?	020

Method: Hourly values, Pulsed Fluorescent-20

NITROGEN DIOXIDE VERMONT UNITS: 007 PARTS PER MILLION

P

50-007-0006 1 BURLINGTON

O MAX 1-HR MAX 24-HR ARIT
SITE ID C CITY COUNTY ADDRESS #OBS 1ST 2ND 1ST 2ND MEAN

50-007-0003 1 BURLINGTON CHITTENDEN CO ADJ. TO 82 S. WINOOSKI AVE 7845 .081 .075 .019 014

METH

Method: Hourly value, Chemiluminescence-14

OZONE VERMONT UNITS: 007 PARTS PER MILLION

OZONE SEASON: APR TO OCT

P VALID DAILY 1-HR MAXIMUM * MISS DAYS 0 *NUM NUM ------ WAXIMA----- VALS>.125 * ASSUMED < SITE ID C CITY COUNTY ADDRESS 4TH MEAS EST * STANDARD METH *MEAS REQ 1ST 2ND 3RD 50-003-0004 1 BENNINGTON 196 214 .101 BENNINGTON CO AIRPORT RD .100 .095 .092 0 0.0 014 1

205 214 .089

.087

.080

0

0.0

5

014

.089

Method: Hourly values, Ultra Violet Dasibi Corporation-14

CHITTENDEN CO SPEAR STREET

PM TOTAL 0-10UM VERMONT UNITS: 001 UG/CU METER (25 C) Ρ MAXIMUM VALUES ARITH SITE ID C CITY COUNTY **ADDRESS** #OBS 1ST 2ND 3RD 4TH MEAN METH INT 50-007-0003 1 BURLINGTON 82 S.WINOOSKI AVE 64 CHITTENDEN CO 45 48 48 44 27.6? 000 7 50-007-0003 2 BURLINGTON 35.3? CHITTENDEN CO 82 S.WINOOSKI AVE 6 51 42 38 38 052 7 50-007-0003 3 BURLINGTON CHITTENDEN CO 82 S.WINOOSKI AVE 44 68 52 48 44 30.1? 058 7 50-021-0002 1 RUTLAND RUTLAND CO PARKING LOT 45 78 57 53 48 30.6? 000 7 50-021-0002 2 RUTLAND RUTLAND CO 57 48 42.5? PARKING LOT 41 24 052 7 50-021-0002 4 RUTLAND 83 RUTLAND CO PARKING LOT 42 51 51 44 31.5? 058 7 50-023-0003 2 BARRE WASHINGTON CO SOUTH SEMINARY STREET 105 75 70 65 65 29.8 000 7 50-025-0003 1 BRATTLEBORO WINDHAM CO 232 MAIN STREET 52 62 42 39 39 24.8? 000 7 ? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Method: Gravimetric, 24-hour Filter Sample, 01 - Low-volume SA244E, 51 - Hi-volume SA321, 52 - Hi-volume SA321A, 53 - Hi-volume GMW 9000, 54 - Hi-volume W10

TABLE 4 NUMBER OF STATIONS VIOLATING NATIONAL AMBIENT AIR QUALITY STANDARDS BY AIR QUALITY CONTROL REGION

				TSP		PM 10-			со	sc	2	NO2	<u>0</u> 3	Pb
AQCR	AQCR No.	State	24-Hour* Secondry 150ug/m	24-Hour* Primary 260ug/m ³	Annual Geometric Mean 75ug/m ³	* 24-hour_ 150ug/m ³	Annual Arithmetic Mean 50ug/m ³	# Hour 35ppm	* 8-Hour 9ppm	* 24-Hour 365ug/m ³	Annual Average 80ug/m ³	Annual Average 100ug/m ³	* 1-Hour 0.12ppm	Quarterly Average 1.5ug/m ³
Eastern Connecticut	041	СТ	0/5	0/5	0/5				•••	0/1	0/1		2/2	0/5
Hartford New Haven Springfield	042	СТ	1/26	0/26	0/26	1/3	1/3	0/3	1/3	0/11	0/11	0/2	3/4	0/26
Hartford New Haven Springfield	042	MA	0/4	0/4	1/4	0/2	0/2	0/3	0/3	0/3	0/3	0/2	0/4	0/2
New Jersey New York Connecticut	043	ст	1/14	0/14	0/14	0/1	0/1	0/2	0/2	0/8	0/8	0/2	4/4	0/14
Northwestern Connecticut	044	СТ	0/2	0/2	0/2									0/2
Androscoggin Valley	107	ME	2/18	0/18	0/18	0/4	0/4			0/6	0/6		2/3	0/1
Androscoggin Valley	107	NH	1/9	0/9	1/9	0/2	0/2			0/8	0/8		0/1	0/1
Aroostook	108	ME	2/4	1/4	0/4	1/2	0/2			0/3	0/3			0/1
Down East	109	ME	6/18	0/18	0/18	0/3	0/3			0/8	0/8		0/2	0/1
Metropolitan Portland	110	ME	3/10	0/10	0/10	0/4	0/4	0/1	0/1	0/1	0/1		3/3	0/2

^{*} Unless the second highest average exceeds the NAAQS, there is no violation.

x/y: x is the number of stations in violation, y is the number of stations reporting data for time period.

--- This pollutant is not monitored in the AQCR (state portion).

TABLE 4 (Continued) NUMBER OF STATIONS VIOLATING NATIONAL AMBIENT AIR QUALITY STANDARDS BY AIR QUALITY CONTROL REGION

				TSP		PM10-			0	sc	2	NO ₂	<u> </u>	Pb
AQCR	AQCR No.	State	24-Hour* Secondry 150ug/m ³	24-Hour* Primary 260ug/m ³	Annual Geometric Mean 75ug/m ³	* 24-hour_ 150ug/m ³	Annual Arithmetic Mean 50ug/m ³	# Hour 35ppm	* 8-Hour 9ppm	* 24-Hour 365ug/m ³	Annual Average 80ug/m ³	Annual Average 100ug/m ³	+ 1-Hour 0.12ppm	Quarterly Average 1.5ug/m ³
Northwest Maine	111	ME											0/2	•••
Berkshire	117	MA	~		•••									
Central Massachusetts	118	MA	0/2	0/2	0/2	0/1	0/1	0/1	0/1	0/2	0/2	0/1	0/1	0/1
Metropolitan Boston	119	MA	2/9	1/9	2/9	0/3	0/3	0/4	0/4	0/4	0/4	0/3	2/3	0/2
Metropolitan Providence	120	MA	0/3	0/3	0/3					0/1	0/1		0/4	
Metropolitan Providence	120	RI	1/12	0/12	0/12	0/2	0/2	0/2	0/2	0/3	0/3	0/1	2/2	0/5
Merrimack Valley	121	MA	0/2	0/2	0/2	0/1	0/1			0/1	0/1		1/2	0/1
Merrimack Valley	121	NH	0/12	0/12	0/12	0/1	0/1	0/2	1/2	0/6	0/6	0/1	1/5	0/7
Central New Hampshire	149	NH												
Champlain Valley	159	VT	1/2	0/2	0/2	0/2	0/2	0/1	0/1	0/2	0/2	0/1	0/1	
Vermont	221	VT	0/4	0/4	0/4	0/2	0/2			0/1	0/1		0/1	

^{*} Unless the second highest average exceeds the NAAQS, there is no violation.

x/y: x is the number of stations in violation, y is the number of stations reporting data for time period.

--- This pollutant is not monitored in the AQCR (state portion).

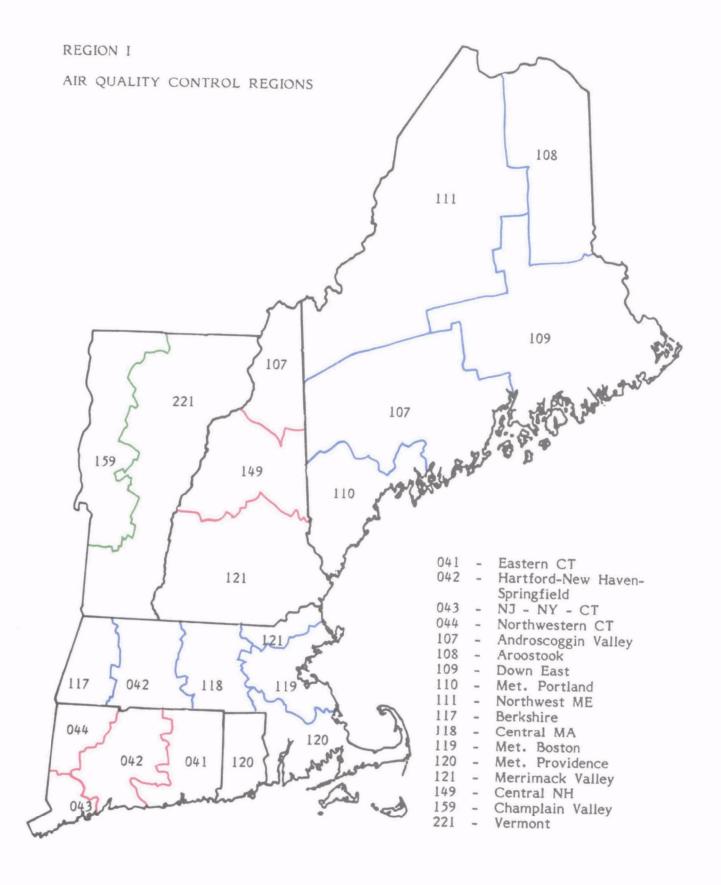


TABLE 5

STATIONS WHERE READINGS EXCEEDED EPISODE LEVELS

January-December 1987 Total Suspended Particulates

			Total Susper	nded Particulat	tes		
			City			Hic	ghest Level
Standard	State	AQCR	(Address)	Site No.	Mo./Day	Duration	Reached
Emergency 24-hour avg. 875 ug/m ³	None						
Warning 24-hour avg. 625 ug/m ³	None						
Alert 24-hour avg. 375 ug/m ³	None						
			January-	December 1987 PM ₁₀			
			City			Hic	ghest Level
<u>Standard</u>	State	AQCR	(Address)	Site No.	Mo./Day	Duration	Reached
Emergency 24-hour avg. 500 ug/m ³	None						
Warning 24-hour avg. 420 ug/m ³	None						
Alert 24-hour avg. 350 ug/m ³	None		.Tamiars/-	December 1987			
				gen Dioxide			
Standard	State	AQCR	City (Address)	Site No.	Mo./Day	Hic Duration	ghest Level <u>Reached</u>
Emergency 1.6ppm - 1-ho 0.4ppm - 24-h	ur avg.	None			-		
Warning 1.2ppm - 1-ho 0.3ppm - 24-h	_						

Alert

0.6ppm - 1-hour avg. None 0.15ppm - 24-hour avg.

TABLE 5 (Continued)

STATIONS WHERE READINGS EXCEEDED EPISODE LEVELS

January-December 1987 Carbon Monoxide

			City			Hic	ghest Level
Standard	State	AOCR	(Address)	Site No.	Mo./Day	Duration	Reached
Emergency 8-hour avg. 46 mg/m ³	None						
Warning 8-hour avg. 34 mg/m ³	None						
Alert 8-hour avg. 17 mg/m ³	CT	042	Courthouse 155 Morgan S Hartford, Cl		2/2+3	5 hours	18.1
				y-December 1987 fur Dioxide			
			City			Hi	ghest Level
Standard	State	AQCR	(Address)	Site No.	Mo./Day	Duration	Reached
Emergency 3-hour avg. 2100 ug/m ³	None						
Warning 3-hour avg. 1600 ug/m ³	None						
Alert 3-hour avg. 800 ug/m ³	None						
			Januar	y-December 1987 Ozone			
			City				ghest Level
Standard	State	AQCR	(Address)	Site No.	Mo./Day	Duration	Reached
Alert 1-hour avg. 0.204ppm	None						

1987 PRECISION AND ACCURACY DATA

Current Federal Regulations require that each state report both precision and accuracy data from National Air Monitoring sites (NAMS) and State/Local Monitoring Sites (SLAMS). Tables 6 and 7 list the precision and accuracy data submitted by the six New England States. The data listed in these tables are calculated from a known standard and are arithmetic averages of quarterly summary data. The accuracy data in Table 7 are only for the lowest report concentration range. For TSP, the accuracy limits apply only to the flow measurement, and the precision limits are the 95% confidence limits between co-located monitors.

From these tables, CO has the lowest probability limits; they are generally within \pm 10%. All the other pollutants reported are, in general, within approximately \pm 17%. Although no acceptance criteria have been set by EPA to date, Region I expects this type of performance to be satisfactory. For comparison, the 1986 National Statistics are also included in Tables 6A and 7A.

Several States have shown a deterioration in these parameters. This is primarily a result of aging equipment.

TABLE 6

1987 PRECISION DATA FOR NEW ENGLAND
ANNUAL AVERAGE PROBABILITY LIMITS IN PERCENT

	CT*	ME	MA	NH	RI	VT
so ₂	-09 to +08	-13 to +08	-16 to +08	-12 to +10	-09 to +06	-11 to +04
ω	-09 to +07	-03 to +02	-04 to +05	-09 to +06	-04 to +07	-05 to +01
NO_2	-10 to +08		-13 to +10		-02 to +11	
03	-09 to +07	-09 to +09	-09 to +08		-11 to +01	-04 to +04
TSP	-09 to +11	-08 to +12	-15 to +15	-08 to +15	-10 to +13	-06 to +05
Pb (ana	** lysis)	-12 to +10	-16 to +17		-07 to +06	

^{*} partial data

TABLE 6A

1986 NATIONAL STATISTICS

so ₂	-10 to +10
∞	-09 to +09
NO_2	-11 to +11
03	-10 to +08
TSP	-12 to +13
Plo	-20 to +20

^{**} insufficient data

TABLE 7

1987 ACCURACY DATA FOR NEW ENGLAND ANNUAL AVERAGE PROBABILITY LIMITS
FOR THE LOWEST CONCENTRATION (CONTINUOUS METHODS),
FLOW RATE (TSP), AND ANALYSIS (Pb) REPORTED IN PERCENT

	CT*	ME	MA	NH	RI	VT
so ₂	-08 to +08	-08 to +13	-13 to +13		-12 to +11	-08 to +07
∞	-10 to +06	-14 to +07	-06 to +10	-10 to +02	-01 to +09	-15 to +09
NO_2	**		-13 to +14		-22 to +24	
03	-08 to +06	-11 to +11	-09 to +03	-05 to +10	-04 to +05	-13 to +09
TSP	-06 to +03	-03 to +08	-08 to +05	-07 to +07	-06 to +05	-05 to +04
Pb	-07 to +02	-12 to +17	-17 to +15		-11 to +08	

^{*} Partial data

TABLE 7A

1986 NATIONAL STATISTICS					
so_2	-13 to +12				
∞	-08 to +08				
NO_2	-13 to +11				
03	-17 to +16				
TSP	-08 to +08				
Pb	-11 to +09				

^{**} Insufficient data

REGION I 1987 PERFORMANCE AUDIT PROGRAM

Region I conducts an audit program to determine the performance of ambient air monitoring systems and to provide their operators with technical assistance in improving data quality. Continuous air monitors are audited by allowing them to sample gas mixtrues containing known concentrations of specific pollutants and noting the analyzers' responses. High-volume air samplers for TSP, lead and inhalable particulates (PM-10) are audited by attaching a flow reference device and comparing a known air flow rate with the rate recorded or indicated by the sampler.

A total of 74 audits were conducted in the six New England states for particulates (TSP, lead, and PM_{10}), SO_2 , CO, NO_2 and ozone by personnel from Region I. In general, the results were very good with 70 audits (95%) satisfactory, 3 audits (4%) marginal, and only 1 audit (1%) unsatisfactory. These results are similar to those achieved in 1986.

Particulate sampler audit results were relatively unchanged from 1986, during which 4% of the audits were marginal and 3% were unsatisfactory. In 1987, 5% were marginal, and 3% were unsatisfactory.

Sulfur Dioxide and ozone audits were generally good in all six states.

Table 8 summarizes the results of the audit program on a state-by-state basis.



TABLE 8

REGION 1 PERFORMANCE AUDIT PROGRAM¹ - 1987

Pollutant/Parameter	CT	ME	<u>MA</u>	<u>NH</u>	<u>RI</u>	<u>VT</u>
Particulates ²						
Number of Audits	9	15	16	0	0	8
Number of Satisfactory Audits	8	14	15	0	0	8
Number of Marginal Audits	1	1	0	0	0	0
Number of Unsatisfactory Audits	0	0	1	0	0	0
<u>so</u> ₂						
Number of Audits	2	0	3	1	0	3
Number of Satisfactory Audits	2	0	3	1	0	3
Number of Marginal Audits	0	0	0	0	0	0
Number of Unsatisfactory Audits	0	0	0	0	0	0
<u> </u>						
Number of Audits	0	0	0	0	0	1
Number of Satisfactory Audits	0	0	0	0	0	1
Number of Marginal Audits	0	0	0	0	0	0
Number of Unsatisfactory Audits	0	0	0	0	0	0
<u>NO</u> 2						
Number of Audits	0	0	0	0	0	1
Number of Satisfactory Audits	0	0	0	0	0	1
Number of Marginal Audits	0	0	0	0	0	0
Number of Unsatisfactory Audits	0	0	0	0	0	0
<u>0</u> ₃	_	_			_	
Number of Audits	8	0	3	2	2	0
Number of Satisfactory Audits	7	0	3	2	2	0
Number of Marginal Audits	1	0	0	0	0	Ü
Number of Unsatisfactory Audits	0	0	0	0	0	0

¹Seven of the reported audits were performed by an EPA contractor (RTI). The remainder were done by Region I personnel. Includes only state operated NAMS, SIAMS, and special study monitors.

 $^2\mathrm{Flow}$ rate audits of high-volume air samplers including those sampling for lead, TSP, and $\mathrm{PM}_{10}.$

Satisfactory audit is defined as an average percent difference less than 6% for TSP; 10% for SO_2 , CO, and O_3 ; and 15% for NO_2 .

Marginal audit is defined as an average percent difference between 6 - 10% for TSP; 10 - 15% for SO_2 , CO, and O_3 ; and 15 - 20% for NO_2 .

Unsatisfactory audit is defined as an average percent difference of greater than 10% for TSP; 15% for SO_2 , CO, and O_3 ; and 20% for NO_2 .

TABLE 9

REGION I NONATTAINMENT AREAS

AS OF DECEMBER 31,1987

All values listed are the second highest values reported. (Except exceedence only)

Only data currently in the EPA system are listed.

CONNECTICUT	Date and Magnitude of Last Reported Violation to NAAC			
- Secondary 24-hour Standards for TSP				
AQCR 41	1976	$163 \text{ ug/m}^3 \text{ a}$		
AQCR 42	1987	205 ug/m ³		
AQCR 43	1987	154 ug/m ³		
AQCR 44	1986	449 ug/m ³		
- Primary 8-hour Standards for CO				
AQCR 42	1987	11.4 ppm		
AQCR 43 (Exceedence only)	1986	12.5 mg/m ³		
- Primary 1-hour Standard for 03				
AOCR 41	1987	0.159 ppm		
AOCR 42	1987	0.167 ppm		
AQCR 43	1987	0.174 ppm		
AQCR 44	1980	0.211 ppm		
-Primary 24-hour Standard for PM ₁₀ *				
AQCR 42 New Haven	1987	202 ug/m^3		
MAINE				
- Secondary Standards for TSP				
AQCR 107 Augusta (Exceedence only)	1987	185 ug/m ³		
AQCR 109				
Woodland	1987	186 ug/m ³		
Bangor-Brewer	1987	153 ug/m ³		
Lincoln	1987	153 ug/m ³		
шки	130,	200 49/ 511		
- Primary 24-hour Standard for SO ₂		2		
AQCR 109 Millinocket	1980	548 ug/m ³		
- Primary 24-hour Standards for 03				
AQCR 107	1987	0.142 ppm		
AQCR 110	1987	0.141 ppm		
Driver 24-hour Standard for DM-				
-Primary 24-hour Standard for PM ₁₀ AQCR 108	1987	172 ug/m ³		

a This site does not meet EPA TSP siting criteria, TSP monitor collocated with PM_{10} monitor for special study only.

b Exceedence only: No violations in the last five years.

^{*} Group 1 area - not technically a nonattainment area.

TABLE 9 (Continued)

REGION I NONATTAINMENT AREAS AS OF DECEMBER 31,1987

MASSACHUSETTS

- Secondary 24-hour Standards for TSP		2 -
AQCR 042 Springfield	1987	199 ug/m ^{3 a}
AQCR 117		
Adams b	1977	152 ug/m^3
North Adams ^b	1977	197ug/m^3
Pittsfield (Exceedence only)	1986	152 ug/m^3
AQCR 118		 -
Athol b	1980	158 ug/m ³
Worcester	1981	156 ug/m ³
AQCR 119		
Cambridge b	1978	237 u.g/m ³
Danvers b	1975	185 ug/m^3
Framingham	1973	151 ug/m^3
Lynn b _	1975	159 ug/m ³
Marblehead ^D	1975	171 ug/m^3
Medford b	1978	167 ug/m ³
Norwood b	1973	235 ug/m^3
Peabody b	1977	190 ug/m ³
Quincy b	1982	182 ug/m ³
Revere b	1980	166 ug/m ³
Swampscott (No sites at this location)		
Waltham	1978	184 ug/m^3
AQCR 120 Fall River	1975	188 ug/m ³
AQCR 121		
Haverhill	1975	163 ug/m^3
Lawrence (Exceedence only)	1978	172 ug/m ³
- Primary 8-hour Standards for CO		
AQCR 042 Springfield (Exceedence only)	1987	9.5 ppm
AQCR 118 Worcester (Exceedence only)	1986	16.7 mg/m ³
AQCR 119		•
Boston	1986	11.2 mg/m^3
Cambridge	1978	10.9 mg/m^3
Medford	1980	12.2 mg/m^3
Quincy	1977	10.9 mg/m^3
Waltham	1978	10.6 mg/m^3
AQCR 121 Lowell	1984	12.8 mg/m^3

a This site does not meet EPA TSP siting criteria, TSP monitor collocated with PM_{10} monitor for special study only. b Exceedence only: No violations in the last five years.

TABLE 9 (Continued)

REGION I NONATTATNMENT AREAS AS OF DECEMBER 31,1987

MASSACHUSETTS

- Primary 1-hour Standard for 0 ₃ AQCR 042 (Exceedence only) AQCR 117 AQCR 118 AQCR 119 AQCR 120 (Exceedence only) AQCR 121	1987 1983 1985 1987 1987 1987	0.141 ppm 0.135 ppm 0.140 ppm 0.138 ppm 0.136 ppm 0.127 ppm
New Hampshire		
- Primary 24-hour Standard for TSP AQCR 107 Metropolitan Berlin	1986	224 ug/m ³
- Secondary 24-hour Standard for TSP AQCR 121 Metropolitan Manchester	1980	156 ug/m ³
- Primary 8-hour Standard for CO AQCR 121 City of Manchester Nashua	1987 1986	10.3 ppm 11.8 mg/m ³
- Primary 1-hour Standard for 03 AQCR 121	1987	0.155 ppm
RHODE ISLAND		
- Secondary 24-hour Standard for TSP AQCR 120 Providence	1987	163 ug/m ³
- Primary 8-hour Standard for CO AQCR 120 Providence (Exceedence only)	1986	10.7 mg/m ³
- Primary 1-hour Standard for O ₃ AQCR 120	1987	0.162 ppm
VERMONT		
- Secondary 24-hour Standard for TSP AQCR 159 Burlington and adjacent cities and towns AQCR 221 Barre	1984 1987	156 ug/m ³ 151 ug/m ³

TABLE 10

REGION I ATTAINMENT AND UNCLASSIFIED AREAS AS OF DECEMBER 31, 1987, WITH VIOLATIONS IN THE LAST THREE YEARS

All values listed are the second highest values reported.

(except exceedence only)

Only data currently in the EPA system are listed.

Date and Magnitude of Last Reported Violation to NAAQS

MAINE

- Primary 24-hour Standard for TSP		_
AQCR 107 (Exceedence only)	1987	261 ug/m ³
AQCR 108	1987	342 ug/m^3
- Secondary 24-hour Standard for TSP		
AQCR 107		
Lewiston-Auburn (Exceedence only)	1986	156 ug/m ³
Oxford County	1986	213 ug/m^3
Winslow	1987	155 ug/m^3
Jay (Exceedence only)	1987	175 ug/m^3
Waterville (Exceedence only)	1987	161 ug/m^3
AQCR 108		
Madawaska	1987	231 ug/m^3
Presque Isle	1987	334 ug/m^3
AQCR 109		_
Millinocket	1987	176 ug/m^3
Old Town (Exceedence only)	1987	198 ug/m ³
Bucksport	1987	181 ug/m ³
AQCR 110		•
Berwick	1987	183 ug/m ³
Westbrook	1987	227 ug/m^3
Portland (Exceedence only)	1987	160 ug/m^3
AQCR 111 Jay	1984	160 ug/m ³
- Primary 1-hour Standard for O ₃		
AQCR 109 (Exceedence only)	1987	0.130 ppm
MASSACHUSETTS		
- Primary 24-hour Standard for TSP		
AQCR 119 Boston	1987	290ug/m ³
- Secondary 24-hour Standard for TSP		
AOCR 119 Boston	1987	290 uq/m3
War III mone	1301	220 000/110

TABLE 10 (Continued)

REGION I ATTAINMENT AND UNCLASSIFIED AREAS AS OF DECEMBER 31, 1987, WITH VIOLATIONS IN THE LAST THREE YEARS

All values listed are the second highest values reported. Only data currently in the EPA system are listed.

New Hampshire

- Secondary 24-hour Standard for TSP AQCR 107	1987	194 ug/m ³
AQCR 121 Hollis (Exceedence only) Nashua (Exceedence only)	1986 1986	188 ug/m ³ 172 ug/m ³
VERMONT		
- Primary 1-hour Standard for TSP AQCR 159 Rutland (Exceedence only)	1986	278 ug/m ³
- Secondary 24-hour Standard for TSP AQCR 159 Rutland	1987	177 ug/m ³

AIR QUALITY SUMMARIES AND TRENDS

The next several pages contain a discussion of the air quality for each of the New England States. The data for these analyses were collected by the New England States and were submitted to EPA in fulfillment of the Federal monitoring requirements.

1987 CONNECTICUT AMBIENT AIR QUALITY SUMMARY

TSP/PM10

The highest annual geometric mean for TSP was measured in Hartford at 63 ug/m^3 or 84% of the annual primary NAAQS. Annual geometric means were 76% of the standard in Waterbury, 71% in Norwalk. The maximum second highest daily average was measured in Hartford and was 79% of the primary daily NAAQS.

There are four PM_{10} sites, in Bridgeport, New Haven, Waterbury and West Haven. Only the site in New Haven reported levels above the new PM_{10} annual standard. The other sites' values ranged from 61% to 67% of the new standard.

Pb

There were no violations of the NAAQS reporting in 1987. The highest quarterly average was measured in New Haven at 15% of the NAAQS. Waterbury had the second highest quarterly average at 9% of the standard. In general, lead levels are lower than those reported in 1986, 1985, and 1984.

CO

There were no exceedences of violations of the 1 hour NAAQS reported in 1987. Hartford reported violations of the 8-hour NAAQS. In total, seven 8-hour violations were reported in 1987. The CO trend plot shows a slight downward trend in mean CO levels over the past five years, in Hartford.

SO₂

No violations or exceedences to the NAAQS were reported in 1987. The maximum SO_2 annual averages occurred in New Haven at 50% and 45% of the standard. The highest second high 24-hour average occurred in New Haven at 49% of the NAAQS. The SO_2 trend plot shows and increase in mean SO_2 levels in New Haven over the past five years.

NO2

The NO_2 sites in Bridgeport, East Hartford and New Haven reported values of 52%, 40% and 56% of the annual standard, respectively. These values are generally in line with those reported in 1986, 1985 and 1984.

Every site in Connecticut measured either exceedences or violations of the primary NAAQS, except one site in East Hartford. The highest second high daily maximum reading during 1987 was .174 ppm, which occurred in Stratford. The O₃ trend plot shows the five year trend in readings over the NAAQS for the Stratford site.

1987 MAINE AMBIENT AIR QUALITY SUMMARY

TSP/PM10

A Primary National Ambient Air Quality Standards (NAAQS) TSP violation and three exceedences were measured in Maine. The violation was in Presque Isle. Secondary TSP standards violations were reported in Bucksport, Winslow, Thomaston, Millinocket, Auburn, Bangor, Madawaska, Oxford County, Presque Isle, Washington County, and Westbrook. Exceedences were reported in Augusta, Berwick, Lincoln and Portland. There were no violations of the annual standard. The annual geometric mean was 71% of the NAAQS in Bangor, and 59% in Presque Isle. The TSP sites with the best air quality were Acadia National Park and Bridgton which both reported levels of 17% of the annual NAAQS.

Thirteen sites were operated to measure PM_{10} . Only Presque Isle had a violation of the standard. There was one exceedence measured in Madawaska.

Lead

There were no violations of the quarterly lead NAAQS. The highest statewide concentration was measured in Portland and was 18% of the standard. Maximum levels, measured in Bangor and Presque Isle, were approximately 8% of the standard. Lead levels generally followed a decreasing trend throughout the State.

CO

The only CO monitoring site in the State is located in Portland. There were no violations to the Maximum 1-hour standard measured levels were 24% of the national standard. The maximum 8-hour measurement was 63% of the standard. The five year trend in Portland shows a very slight upward trend.

SO2

There were no violations or exceedences of the standard in 1987. The highest annual arithmetic mean was in Lewiston, at 29% of the standard. The highest 24-hour average was in Rumford, at 70% of the standard. The five year trend in Lewiston shows a decreasing trend, which is consistant with previous years.

NO2

Maine is not required to monitor NO2.

03

Of the ten sites operated in Maine, seven monitors had exceedences or violations of the NAAQS.

The highest value recorded (.156 ppm) was measured at the Cape Elizabeth site. The value was 130% of the NAAQS. The site measuring the lowest values is located in Bigelow. This site measured a maximum value of .079 ppm or 66% of the NAAQS. The five year trend of the number of days over the NAAQS shows a consistant pattern for the last five years of 1 to 4 days per year over the standard.

1987 MASSACHUSETTS AMBIENT AIR QUALITY SUMMARY

TSP/PM₁₀

The primary annual and the secondary 24-hour TSP NAAQS were violated at only one site in Massachusetts, the City Square site in the Charlestown section of Boston. Two other sites, the Southhampton Street site in Boston and the East Columbus Avenue site in Springfield, reported violations to the secondary 24-hour NAAQS. TSP sites with the highest annual geometric means were located in Boston, measuring 143% and 84% of the NAAQS. The highest second maximum daily TSP values were measured in Boston at 112% of the secondary NAAQS. The lowest TSP levels were measured at a rural background site in Ware with levels at 21% of the primary annual geometric mean, and 23% of the secondary NAAQS.

For PM_{10} there are seven sites operating in Boston, Lawrence, Springfield and Worcester. No sites are in violation of the new PM_{10} standard.

Lead

Routine monitoring for lead began in 1982 with sites established in Boston, Lowell, Springfield and Worcester. No violations to the quarterly lead NAAQS have been reported from the present network to date. Maximum quarterly lead levels decreased from 1985 and 1986 levels at all sites. The highest site in the State was in Springfield with a maximum quarterly average of 11% of the NAAQS. Maximum quarterly lead levels from other urban areas in the state ranged from 3% to 8% of the NAAQS.

CO

No exceedences to the 1-hour NAAQS were reported for the seven sites which monitored CO in the State for 1987. One site in Worcester and one in Springfield reported exceedences of the 8-hour standard.

The highest second maximum 1-hour average for the State in 1987 was measured at the Central Street Fire Station in Worcester, at 49% of the 1-hour NAAQS. The highest second maximum 8-hour average for the State was measured at the East Columbus Ave site in Springfield, at 99% of the NAAQS.

There were no violations of the NAAQS at any of the eleven sites which reported SO₂ data for 1987 in Massachusetts. Maximum SO₂ levels for Massachusetts on an annual basis were reported in Boston at the Kenmore Square site at 55% of the the annual NAAQS. Minimum SO₂ levels on an annual basis were measured in Ware at 15% of the NAAQS. Highest second maximum daily SO₂ levels were reported for Fall River and Springfield at 38% of the NAAQS.

 ${
m NO_2}$ In 1987, six sites collected ${
m NO_2}$ data in Massachusetts. The maximum site in the State was located in Kenmore Square, Boston, where the annual mean was 76% of the NAAQS.

As in past years, ozone violations were reported throughout Massachusetts for 1987. Exceedances were recorded at eight out of fourteen sites which operated in 1987. The maximum daily value for 1987 in Massachusetts was recorded in Sudbury at .143 ppm.

1987 NEW HAMPSHIRE AMBIENT AIR QUALITY SUMMARY

TSP/PM₁₀

New Hampshire had no violations or exceedences of the primary TSP NAAQS in 1987. There were one violation and two exceedences of the secondary standard.

The air quality in Berlin is influenced by manufacturing activity at a local paper mill. The annual geometric means for other areas in New Hampshire were 55% of the standard in Manchester, 53% in Nashua and 76% in Portsmouth. Background levels in Hollis are 39% of the annual standard.

Three PM_{10} sites were operated in New Hampshire in 1987. Three in Berlin, one in Manchester (with two samplers), and a new site in Portsmouth. None reported any violations of the standards.

Lead

There were no lead violations reported in 1987 at the eight sites which monitor this pollutant in New Hampshire. The highest site—a microscale site in Concord—reported a maximum quarterly average which was 6% of the NAAQS. The lowest site in the State, which is located in Hollis, had a maximum quarterly average of 1% of the standard.

സ

No violations of the 1-hour NAAQS were reported in 1987; however, a total of four violations of the 8-hour NAAQS were monitored in Manchester for 1987, compared to nine violations reported for 1986. The maximum 8-hour level was 116% of the standard in 1987. For Manchester, the frequency of violations decreased in 1987 while the magnitude of the violations increased significantly.

SO₂

No violations of the NAAQS were monitored in 1987. The last violation measured in New Hampshire occured in 1980 at a site in Berlin.

NO₂

Only one site in Manchester collected NO₂ data in 1987. This site was 40% of the annual aritimetic mean.

03

There were two sites with violations for O_3 and another with an exceedence of the 1-hour standard. The highest 1-hour maximum was in Rye Harbor at 150% of the standard.

1987 RHODE ISLAND AMBIENT AIR QUALITY SUMMARY

TSP/PM₁₀

For TSP, one violation and two exceedences of the secondary 24-hour NAAQS were reported in 1987; all were measured in Providence. An annual geometric mean equal to the annual secondary standard was reported at the Health Dept. Parking Lot (State Street) site. This value is equivalent to 80% of the primary TSP annual standard. The Sabin St. site, also in Providence, had the highest 24-hour average, at 84% of the primary 24-hour TSP standard. The lowest levels in the state were measured at the University of Rhode Island's Alton Jones campus. At 24% of the primary annual NAAQS and 25% of the 24-hour standard, these background levels are slightly lower than last years.'

For PM_{10} , two sites in Providence and Pawtucket were operated. Both sites reported levels below standards.

Lead

There were no calendar quarter arithmetic means measured which were greater either than the primary or the secondary NAAQS in 1987. The second highest quarterly average occurred at Westminster Street at 9% of the standard. Pb levels have shown a decrease from 1982 to 1987.

CO

There were no exceedences of the 1-hour NAAQS in 1987. CO levels measured at the Dorrance Street site in Providence continue to show a downward trend.

SO₂

No violations of NAAQS were reported in Rhode Island over the past six years. The second highest 24-hour value was reported in Providence at 43% of the 24-hour standard. Levels at the Dorrance Street site showed no significant increase over those measured in 1986.

NO₂

The only NO2 site in Rhode Island, located in Providence, reported an annual average which was 50% of the standard. This annual average equaled last year's value.

03

The highest second high daily maximum value reported in Kent County (Alton Jones) was .162 ppm, (130% of the NAAQS) which is the same as the 1986 value of .162 ppm. The highest second high daily maximum value in Providence was .135 ppm or approximately 108% of the NAAQS. Seven days were measured over the standard at the Alton Jones site, while 2 days over the standard were measured at the Rockefeller Library site in Providence. The five year trend illustrated is for the Alton Jones site.

1987 VERMONT AMBIENT AIR QUALITY SUMMARY

TSP/PM₁₀

There was one exceedence and one violation of the secondary TSP 24-hour standards (150 ug/m³) observed in Vermont for 1987. The violation occurred at the Rutland site where a value of 183 ug/m³ was recorded. The next highest value at this site was 177 ug/m³. The exceedence occured at the Barre site, where the value was 151 ug/m³. Maximum 24-hour TSP levels for the rest of Vermont were below the NAAQS. The 1987 daily maxima for each of these sites ranged from 138 ug/m³ in Burlington to 65 ug/m³ in Randolph. The annual geometric mean for Barre was 76% of the primary annual NAAQS, while Burlington TSP levels averaged 55% of the standard. Levels at the remaining sites were all less than 53% of the standard with the lowest levels measured at the Randolph site, at 35% of the standard.

For ${\tt PM}_{10}$, eight sites are being operated. All show attainment.

Tead

Vermont is not required to and does not operate a monitoring network for lead.

- CO
- Carbon monoxide is monitored only in Burlington. Maximum levels at this site were 34% of the 1-hour NAAQS and 73% of the 8-hour standard. These levels were lower than 1986 maxima. The five year trend line for Burlington shows a slight upward trend.
- The Burlington site is the only site which monitors SO₂ year-round in Vermont. Levels at this site for 1987 were 13% of the daily NAAQS and 19% of the annual NAAQS. Monitors in Barre and Rutland operate from September through April each heating season. Maximum levels at these two sites were 19% of the daily standard in Barre and 28% of the daily standard in Rutland. The five year trend line for Burlington shows a slight downward trend.
- $_{\rm NO_2}$ is monitored at one site in Burlington. The arithmetic mean for 1987 is 38% of the annual NAAQS.
- No violations of the ozone NAAQS were monitored in Vermont for 1987. The maximum daily values for the year were 0.101 ppm for Bennington and 0.089 ppm for Burlington. Ozone levels have remained relatively stable in Vermont since 1981 and show attainment through 1987.

