

STATE AND LOCAL AIR MONITORING STATIONS (SLAMS) NETWORK

Including National Air Monitoring Stations (NAMS)

1986 STATUS REPORT

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Monitoring Section
Monitoring and Reports Branch
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Summary of State and Local Air Monitoring Stations (SLAMS)

This report is for calendar year 1986 and summarizes information submitted to MDAD as of December 31, 1986. The information includes the status of the National Air Monitoring Stations (NAMS) as well as the State and Local Air Monitoring Stations (SLAMS). Some of the changes which occurred in 1986 and some of those planned for 1987 are the result of the generic revisions to 40 CFR 58 which were promulgated on March 19, 1986. The definition of the urbanized area population was changed to specify the most recent decennial U. S. Bureau of Census Report, which currently is the 1980 census. This affected the number of NAMS monitors for all pollutants because the number of required monitors for ozone, carbon monoxide, nitrogen dioxide, and lead in the urbanized areas are based upon population. The generic revisions also changed the minimum population requirements for NAMS TSP and SO₂ monitors from 50,000 to 100,000. For these two pollutants the population and the pollutant levels in each urbanized area affect the number of required NAMS monitors. Because of these regulatory changes, the required number of NAMS TSP and SO₂ monitors decreased by 22 and 15, respectively, while the required NAMS NO₂, CO, O₃, and Pb monitors increased by 2, 5, 3, and 8, respectively. Although PM₁₀ is not a criteria pollutant at this time, there are PM₁₀ samplers at 548 sites.

Table 1 provides a summary by Region, State, and pollutant for the number of SLAMS monitors (excluding NAMS) operating in 1986 and planned for 1987, as well as the operating NAMS in 1986 and required for 1987. Table 1 shows that there were 4545 monitors operating on December 31, 1986, which is a decrease of 129 from the 4674 monitors operating on December 31, 1985. A reduction of another 145 monitors is anticipated during 1987 for a total of 4400.

The pollutant with the largest change was TSP which decreased by 74 samplers (2424 to 2350). The TSP NAMS decreased by 22 and the SLAMS (excluding the NAMS) decreased by 52 from 1785 to 1733. The NAMS samplers are expected to decrease by 33 during 1987 from 617 to 584, while the SLAMS (excluding the NAMS) is expected to decrease by 105 from 1733 to 1626. The decrease may be larger than predicted due to a delay (from the planned March 1987 date) in the promulgation of the PM₁₀ NAAQS.

The SO₂ monitors show a decrease of 20 in 1986 from 1985 (544 to 524). The NAMS monitors decreased by 15 (216 to 201) and the continuous SLAMS (excluding the NAMS) decreased by 5 (322 to 317). An additional six SO₂ bubblers are also operating. Fifteen SO₂ monitors are expected to be shutdown in 1987 which would result in 509 monitors operating.

The number of NO₂ monitors decreased by 19 during 1986 from 246 to 227. Fourteen of the 19-monitor decrease was due to the discontinuance of NO₂ bubblers in Regions VI and VII. The number of NAMS NO₂ monitors increased by two because of changes in population of urbanized areas. The continuous SLAMS (excluding the NAMS) decreased by seven (175 to 168). One additional NO₂ monitor is predicted to be discontinued in 1987.

CO is the only pollutant which showed an increase in monitors in 1986 from 1985 where three new monitors became operational (440 to 443). The NAMS monitors increased by five from 112 to 117 due to changes in population of the urbanized areas. The SLAMS (excluding the NAMS) decreased by two from 328 to 326. One additional CO monitor is expected in 1987.

There were 18 fewer O₃ monitors in 1986 than in 1985 (617 to 599). The NAMS O₃ monitors increased by three from 215 to 218 because of changes in the population of urbanized areas, while the SLAMS (excluding the NAMS)

decreased by 21 (402 to 381). There are 11 new O₃ monitors which are scheduled to be operational in 1987.

The Pb samplers show a decrease of one in 1986 (403 to 402). The number of NAMS increased by eight from 105 to 113 due to changes in population of the urbanized areas. The SLAMS (excluding the NAMS) decreased by nine from 298 to 289. One less Pb sampler is expected to be operational in 1987.

The highlights for each Region are discussed below.

Region I - For the Region, there were two less monitors operating in 1986 than in 1985 (250 to 248) because of an increase of two SLAMS monitors and a decrease of four NAMS monitors. The number of monitors planned for 1987 is 247, or a decrease of one monitor.

Connecticut has seven more monitors in 1986 than were operating in 1985 which were all Pb SLAMS. Two CO NAMS monitors are planned for 1987. Maine had one new O₃ monitor in 1986. Massachusetts shows ten fewer SLAMS monitors operating in 1986 than in 1985 which included four SO₂ and three O₃ monitors. Also, three TSP and one SO₂ NAMS monitors were discontinued in 1986. New Hampshire put into operation during 1986 two TSP, one SO₂, one NO₂, and one Pb SLAMS additional monitors. Rhode Island has discontinued one SO₂ SLAMS monitor in 1986 and plans to discontinue three TSP SLAMS samplers in 1987. There is no change to the Vermont network.

Region II - There are 302 monitors operational for Region II, which is a decrease of six from the 308 monitors operating in 1985. Four of the six monitors are SLAMS and two are NAMS monitors. There are 292 monitors planned for 1987 which is a decrease of ten from the 312 monitors operating in 1986.

New Jersey had five less monitors in 1986 which included two TSP and one O₃ SLAMS, and two SO₂ NAMS monitors. Five TSP SLAMS are expected to be discontinued in 1987. New York had changes in 1986 of one less TSP SLAMS, one additional SO₂ SLAMS, and two less SO₂ NAMS monitors. In 1987, New York plans to discontinue six TSP and two SO₂ SLAMS monitors. Puerto Rico had a reduction of one CO SLAMS in 1986 but plans to operate it in 1987. There was one additional NAMS O₃ and Pb monitor operating in 1986 with plans to operate an additional NAMS O₃ monitor in 1987. The Virgin Islands plan to have one additional SO₂ monitor operating in 1987.

Region III - The number of SLAMS operating in 1986 was the same as 1985 at 378 monitors and the number of NAMS is 178, which is down one from the previous 179. The total number of monitors operating in 1986 was 556 which is also the same number as planned for 1987.

There are no changes in the networks of Delaware, District of Columbia, Maryland, or West Virginia from 1985. Pennsylvania shows 167 SLAMS monitors operating in 1986 which is an increase of two from the 165 in 1985. Pennsylvania operated four more TSP, one SO₂, and one Pb monitor and four fewer NO₂ monitors in 1986 than in 1985. The Virginia network shows a net decrease of two SLAMS monitors due to a reduction of five TSP monitors and an increase of one SO₂ and two O₃ monitors. One TSP NAMS sampler was discontinued in 1986.

Region IV - The Regional totals show that there were 735 monitors operating in 1986 which is an increase of 17 from the 718 operating in 1985. The SLAMS show an increase of 18 from 538 to 556 while the NAMS decreased by

one to 179. The number of monitors planned for 1987 is 725, or a decrease of two from the 727 monitors planned for 1986.

Alabama had two fewer monitors operating in 1986 than in 1985 and the changes consisted of one additional SLAMS TSP sampler and a reduction of two TSP and one SO₂ NAMS monitors. The number of monitors planned in Alabama for 1987 is 79 which is down from the 87 planned for 1986. Florida had had eight new monitors in 1986 which consisted of two TSP, three SO₂, and one Pb SLAMS monitors and one each CO and Pb NAMS monitors. There are 185 total monitors planned for 1987. Georgia increased its network by six monitors in 1986 from 72 to 78 monitors. The increases consisted of one TSP and three CO SLAMS monitors plus two Pb NAMS monitors. An additional four monitors are planned for 1987. The Kentucky network increased by seven monitors in 1986 to 114. The changes consisted of two TSP, one CO, and two O₃ SLAMS plus two CO NAMS monitors. Four NAMS SO₂ monitors are planned to be discontinued in 1987 with the resulting network consisting of 110 monitors. Mississippi had no changes for 1986 in the SLAMS network, but there was a decrease of three NAMS TSP samplers. The NAMS SO₂ monitor is planned to be discontinued in 1987. North Carolina had a net decrease of three monitors in 1986 from 115 to 112. The changes consisted of three new TSP SLAMS samplers and a decrease of one SO₂, one CO, and three O₃ SLAMS monitors and also one NAMS SO₂ monitor. No changes are anticipated for 1987. South Carolina started two additional TSP SLAMS samplers in 1986 and the network now has 33 monitors and the same is planned for 1987. Tennessee added one CO and one Pb SLAMS monitor in 1986 bringing the total to 96 monitors. Tennessee plans to discontinue a SO₂ NAMS monitor in 1987.

Region V - Region V, with 78, had the largest decrease in the number of monitors operating with the network now at 992 monitors compared with 1070 monitors in 1985. Seventy of the monitors were SLAMS with the remaining eight being NAMS monitors. Of the 78 monitors, 55 are TSP, 11 are SO₂, and 9 are O₃ monitors. In 1987 there are planned reductions of 94 monitors to 898 monitors.

Illinois had a decrease of six monitors in 1986 which included a reduction of eight TSP, one SO₂, one CO, and three O₃ SLAMS monitors; an increase of seven Pb SLAMS samplers; a decrease of two SO₂ NAMS monitors; and an increase of one O₃ and one Pb NAMS monitors. Sixteen additional monitors are scheduled to be discontinued in 1987. Indiana shows a decrease of 39 monitors in 1986 and all were SLAMS. The 39 monitors consisted of 13 TSP, 5 SO₂, 1 NO₂, 8 O₃, and 12 Pb monitors. There was an increase of one NO₂ NAMS monitor in 1986 for Michigan, but 24 monitors are scheduled to be discontinued in 1987 of which 15 are TSP samplers. Minnesota had a reduction of seven monitors in 1986 from 71 to 64. The changes were a reduction of seven TSP and one O₃ SLAMS monitors and an increase of one Pb SLAMS sampler. There was a decrease of seven monitors in Ohio for 1986. The changes for SLAMS were a reduction of two CO and one Pb monitor, and an increase of one NO₂ and one O₃ monitor. Six TSP NAMS samplers were discontinued in 1986. There are 56 monitors scheduled to be discontinued in 1987 of which 51 are SLAMS TSP samplers. Wisconsin had a decrease of 20 monitors in 1986. The changes in the SLAMS were reductions of 16 TSP and 1 SO₂ monitors and an increase of one O₃ monitor. Three TSP and one SO₂ NAMS monitors were discontinued in 1986.

Region VI - There were 382 monitors operating in Region VI which is a decrease of 17 from the 399 operating in 1985. Thirteen of the 17 were SLAMS NO₂ bubblers, two were SO₂ SLAMS and two were SO₂ NAMS monitors. Five new SLAMS O₃ monitors are scheduled to start in 1987 which would result in a network of 387 monitors.

There was no change to the Arkansas network in 1986 and the only change for Louisiana was discontinuing 13 NO₂ SLAMS bubblers. The New Mexico network was reduced by four monitors to 78 from 82. The largest change was a reduction of three SLAMS TSP samplers. Oklahoma also reduced its network by four monitors to 51. There was a reduction of two TSP and two SO₂ SLAMS monitors. Texas increased its network from 155 to 159 monitors. The major changes were an increase of five TSP SLAMS and a reduction of two O₃ SLAMS monitors. Texas plans five new O₃ SLAMS monitors in 1987.

Region VII - Region VII had an increase of two monitors in 1986 from 247 to 249. The changes included additions of five SLAMS TSP, two SLAMS SO₂, and two NAMS CO and deletions of two NAMS TSP and two NAMS Pb samplers. The 1987 network is planned to be 226 monitors for a reduction of 23 monitors of which most are TSP and SO₂ NAMS monitors.

Iowa increased its network in 1986 by five monitors to 68 with the addition of three TSP and two SO₂ SLAMS monitors. Ten TSP and three SO₂ NAMS are scheduled to be deleted in 1987. Kansas had a reduction of one NO₂ monitor in 1986 and plans reductions of five TSP NAMS samplers in 1987. Missouri had an increase of one monitor by adding three TSP SLAMS and deleting two Pb SLAMS samplers. Missouri plans to delete six TSP NAMS in

1987. Nebraska had a net reduction of three monitors in 1986. The changes included a reduction of one SLAMS and two NAMS TSP samplers and the addition of two CO NAMS monitors.

Region VIII - There were 218 monitors operating in 1986 which is seven less than the 225 in 1985. The changes included a reduction of five TSP and two CO SLAMS, and the addition of three Pb SLAMS monitors. The planned network in 1987 shows a reduction of 12 monitors to 206 with the biggest change being the reduction of 17 TSP SLAMS samplers.

Colorado increased its network by 20 monitors from 81 to 101 during 1986 with the major changes the addition of 17 TSP and 4 Pb SLAMS samplers. However, Colorado then plans to delete 14 of the TSP SLAMS in 1987. Montana reduced its network by eight from 45 to 37 by deleting six TSP, one CO, and one Pb monitors. North Dakota has four fewer monitors than were operating in 1985 with the changes being the deletion of five TSP and the addition of one SO₂ SLAMS monitor. South Dakota deleted nine TSP SLAMS samplers and the network now stands at 14. Utah shows five fewer monitors in 1986 with a network of 38 monitors. The major reduction was the deletion of three SO₂ monitors. The Wyoming network is now at eight monitors with a deletion of one TSP SLAMS sampler.

Region IX - The Regional totals show that there were 668 monitors operating which is a decrease of 34 from the 702 monitors operating in 1985. The SLAMS show a decrease of 36 while the NAMS increased by two monitors. Most of the reductions were 20 TSP, 7 O₃, and 13 Pb SLAMS monitors. No additional changes are planned for 1987.

Arizona reduced its network by 19 from 102 to 83 monitors. Most of the changes were reductions of three TSP, two O₃, and ten Pb SLAMS monitors. The California network is now at 528 monitors, or down four from the 532 in 1985. The changes included reductions of three TSP, five O₃, and three Pb SLAMS, and additions of the three SO₂ and three CO SLAMS monitors. There was no change to the Guam network of eight monitors. Hawaii increased its network by two monitors to 14 with the addition of one TSP and two Pb NAMS monitors and the deletion of one CO SLAMS monitors. Nevada shows a net decrease of 13 monitors to 35 with the major change being the deletion of 14 TSP SLAMS samplers.

Region X - Region X had a decrease of three monitors in 1986 from 198 to 195. The changes included additions of four TSP SLAMS and deletions of two SO₂ and three Pb SLAMS monitors. No changes to the 195 monitors are planned for 1987.

The only change for Alaska was the deletion of one TSP SLAMS sampler which results in a network of 22 monitors. Idaho deleted one TSP, SO₂, and Pb SLAMS monitor since 1985 with a network now at 27 monitors. The Oregon network changes consisted of deleting one SO₂ NAMS monitor. Washington shows a net increase of two monitors in 1986 with the major changes being the addition of six TSP SLAMS and the deletion of two Pb SLAMS samplers.

Table 2 shows a summary of the changes to the SLAMS and NAMS network by Region and pollutant from 1983 thru 1986. Nine of the Regions show decreases in the number of operating monitors ranging from 0.8 percent in Region VII to 14 percent in Region II. Region X had an increase of 5.4 percent in the number of operating monitors. The overall reductions were

218 monitors or 4.6 percent. The SLAMS portion of the network was reduced by 192 monitors (5.6 percent) and the NAMS network was reduced by 26 monitors (1.9 percent). The changes by pollutant show reductions of 152 TSP (6.1 percent), 44 SO₂ (7.7 percent), 55 NO₂ (19.5 percent), 8 O₃ (1.3 percent), and 37 Pb (10.1 percent). CO increased by four monitors for a gain of 0.9 percent. The largest percent change was with NO₂ where 40 bubblers were discontinued.

TABLE 1. National Summary for SLAMS and NAMS by Region, State, and Pollutant

February 1987

Region	State	TSP		SO ₂			NO ₂		CO		O ₃		Pb		Subtotal		TOTAL
		SLAMS ^a	NAMS	SLAMS ^a	Bubbler SLAMS ^a	NAMS	SLAMS ^a	NAMS	SLAMS ^a	NAMS	SLAMS ^a	NAMS	SLAMS ^a	NAMS	SLAMS ^a	NAMS	
I	CT	18/18 ^b	22/22 ^c	16/16 ^b	-	2/2 ^c	3/3 ^b	-	5/4 ^b	0/2 ^c	3/3 ^b	6/6 ^c	25/25 ^b	2/2 ^c	70/69 ^b	32/34 ^c	102/103
	ME	10/10	1/1	-	-	2/2	-	-	1/1	-	3/3	-	2/2	-	16/16	3/3	19/19
	MA	3/3	14/14	2/2	-	9/9	2/2	2/2 ^c	3/4	4/4	2/2	8/8	2/2	4/4	14/15	41/41	55/56
	NH	13/13	1/1	6/6	-	1/1	1/1	-	2/2	-	3/3	1/1	7/7	-	32/32	3/3	35/35
	RI	6/3	6/6	-	-	3/3	1/1	-	-	2/2	1/1	1/1	2/2	2/2	10/7	14/14	24/21
	VT	5/5	1/1	2/2	-	1/1	1/1	-	1/1	-	2/2	-	-	-	11/11	2/2	13/13
Regional Total		55/52	45/45	26/26	-	18/18	8/8	2/2	12/12	6/8	14/14	16/16	38/38	8/8	153/150	95/97	248/247
II	NY	20/15	9/9	11/11	-	6/6	6/6	2/2	12/12	2/2	8/9	6/6	9/8	2/2	66/61	21/27	93/94
	NY	73/67	25/25	14/12	-	15/15	1/1	4/4	6/6	7/7	8/8	11/11	7/7	6/6	109/101	63/64	177/169
	PR	7/7	7/7	3/3	-	-	-	-	0/1	2/2	-	1/2	2/2	3/3	12/13	13/14	25/27
	VI	5/5	-	2/3	-	-	-	-	-	-	-	-	-	-	7/8	-	7/8
Regional Total		105/94	41/41	30/29	-	21/21	7/7	6/6	18/19	11/11	16/17	18/19	18/17	11/11	194/183	108/109	302/292
III	DE	6/6	3/3	7/7	-	1/1	2/2	-	2/2	-	4/4	1/1	2/2	-	23/23	5/5	29/28
	DC	2/2	4/4	-	-	2/2	-	2/2	-	2/2	1/1	1/1	-	2/2	3/3	13/13	15/16
	MD	19/19	9/9	3/3	-	5/5	1/1	2/2	4/4	2/2	11/11	3/3	4/4	2/2	42/42	23/23	65/65
	PA	77/77	44/44	17/17	-	22/22	12/12	4/4	23/23	4/4	24/24	11/11	14/14	4/4	167/167	89/89	256/256
	VA	46/46	16/16	7/7	-	7/7	9/9	-	10/10	2/2	12/12	5/5	6/6	2/2	90/90	32/32	122/122
	WV	20/20	11/11	7/7	-	5/5	5/5	-	4/4	-	5/5	-	12/12	-	53/53	16/16	69/69
	Regional Total		170/170	87/87	41/41	-	42/42	29/29	8/8	43/43	10/10	57/57	21/21	38/38	10/10	378/378	178/178
IV	AL	53/47	14/14	2/2	-	-	-	-	2/2	2/2	2/3	4/4	3/3	2/2	62/57	22/22	84/79
	FL	89/89	15/15	20/20	-	5/2	4/4	2/2	17/17	10/10	6/6	13/13	1/1	6/6	137/137	51/48	188/185
	GA	40/40	11/11	10/10	-	1/2	-	2/2	5/5	2/2	0/3	4/4	-	3/3	55/58	23/24	78/82
	KY	51/51	12/12	8/8	-	4/0	7/7	-	7/7	2/2	15/15	1/1	5/5	2/2	93/93	21/17	114/110
	MS	19/19	1/1	1/1	-	1/0	-	-	1/1	-	2/2	-	5/5	-	28/28	2/1	30/29
	NC	79/79	9/9	4/4	-	-	0/0	-	8/8	2/2	8/8	2/2	-	-	99/99	13/13	112/112
	SC	12/12	8/8	3/3	-	1/1	-	-	2/2	-	3/3	4/4	-	-	20/20	13/13	33/33
	TN	45/45	21/21	3/3	-	1/0	1/1	-	7/7	4/4	4/4	6/6	2/2	2/2	62/62	34/33	96/95
Regional Total		388/382	91/91	51/51	-	13/5	12/12	4/4	49/49	22/22	40/44	34/34	16/16	15/15	556/554	179/171	735/725
V	IL	65/56	26/26	16/13	-	13/13	8/7	2/2	11/10	2/2	23/22	12/12	18/17	2/2	141/125	57/57	198/182
	IN	85/85	20/20	10/10	-	6/6	3/3	-	7/7	2/2	7/7	7/7	10/10	4/4	122/122	39/39	161/161
	MI	51/36	21/15	6/5	-	11/9	-	2/2	8/8	2/2	7/7	8/8	15/15	2/2	87/71	46/38	133/109
	MN	25/27	11/9	2/5	-	6/4	-	2/2	5/5	2/2	4/3	2/2	3/3	2/2	34/43	25/21	59/64
	OH	179/128	44/44	19/18	-	25/23	3/1	4/4	8/8	10/10	17/17	15/15	-	10/10	226/172	108/106	334/278
	WI	43/46	13/11	3/4	-	12/11	-	2/2	5/5	2/2	16/17	4/4	-	2/2	67/72	35/32	102/104
Regional Total		448/378	135/125	56/55	-	73/66	14/11	12/12	44/43	20/20	74/73	48/48	46/45	22/22	682/605	310/293	992/898

TABLE 1. National Summary for SLAMS and NAMS by Region, State, and Pollutant

February 1987

Region	State	TSP		SO ₂			NO ₂		CO		O ₃		Pb		Subtotal		TOTAL
		SLAMS ^a	NAMS	Continuous SLAMS ^a	Rubbler SLAMS ^a	NAMS	SLAMS ^a	NAMS	SLAMS ^a	NAMS	SLAMS ^a	NAMS	SLAMS ^a	NAMS	SLAMS ^a	NAMS	
VI	AR	23/23 ^b	3/3 ^c	1/1 ^b	-	1/1 ^c	1/1 ^b	-	-	-	2/2 ^c	2/2 ^b	-	27/27 ^b	6/6 ^c	33/33 ^d	
	LA	22/22	7/7	5/5	-	1/1	2/2	2/2 ^c	1/1 ^b	2/2 ^c	9/9 ^b	6/6	2/2	2/2 ^c	41/41	20/20	61/61
	NM	43/43	4/4	9/9	-	-	1/1	-	7/7	2/2	6/6	2/2	2/2	2/2	68/68	10/10	78/78
	OK	16/16	7/7	3/3	-	1/1	6/6	-	4/4	2/2	3/3	4/4	3/3	2/2	35/35	16/16	51/51
	TX	31/31	45/45	6/7	-	3/3	5/5	4/4	6/5	8/8	11/16	14/14	16/16	10/10	75/80	84/84	159/164
Regional Total		135/135	66/66	24/25	-	6/6	15/15	6/6	18/17	14/14	29/34	28/28	25/25	16/16	246/251	136/136	382/387
VII	IA	33/33	14/4	4/4	-	3/0	-	-	5/5	-	3/3	3/3	3/3	-	48/48	20/7	68/55
	KS	12/12	8/3	-	-	2/2	0/1	-	3/3	-	1/1	2/2	1/1	1/1	17/18	13/8	30/26
	MO	31/31	14/8	10/10	-	4/4	7/7	4/4	7/7	4/4	13/13	4/4	4/5	3/3	72/73	33/27	105/100
	NE	30/30	4/2	-	-	0/1	-	-	2/2	2/2	2/2	2/2	2/2	2/2	36/36	10/9	46/45
Regional Total		106/106	40/17	14/14	-	9/7	7/8	4/4	17/17	6/6	19/19	11/11	10/11	6/6	173/175	76/51	249/226
VIII	CO	51/37	12/12	-	-	2/2	1/1	2/2	10/10	2/2	7/7	4/4	8/8	2/2	77/63	24/24	101/87
	MT	26/26	2/2	2/2	-	1/1	-	-	3/3	-	-	-	3/3	-	34/34	3/3	37/37
	ND	10/7	1/1	5/6	-	-	2/3	-	-	-	2/3	-	-	-	19/19	1/1	20/20
	SD	12/12	2/2	-	-	-	-	-	-	-	-	-	-	-	12/12	2/2	14/14
	UT	6/6	8/8	2/3	-	1/2	3/3	-	6/6	2/2	4/3	2/2	3/3	2/2	23/24	15/16	38/40
	WY	7/7	1/1	-	-	-	-	-	-	-	-	-	-	-	7/7	1/1	8/8
Regional Total		112/952	26/26	9/11	-	4/5	6/7	2/2	19/19	4/4	12/13	6/6	14/14	4/4	172/159	46/47	218/206
IX	AZ	27/27	8/8	7/7	-	1/1	1/1	2/2	10/10	4/4	10/10	4/4	7/7	2/2	62/62	21/21	83/83
	CA	85/85	43/43	50/50	-	10/10	64/64	11/11	66/66	12/12	100/100	19/19	55/55	13/13	420/420	108/108	528/528
	GUAM	4/4	-	1/1	3/3 ^b	-	-	-	-	-	-	-	-	-	8/8	-	8/8
	HI	2/2	3/3	-	3/3	-	1/1	-	-	2/2	-	2/2	-	2/2	6/6	8/8	14/14
	NV	14/14	5/5	-	-	-	3/3	-	4/4	2/2	2/2	5/5	-	-	23/23	12/12	35/35
Regional Total		132/132	59/59	58/58	6/6	11/11	69/69	13/13	80/80	20/20	112/112	29/29	62/62	17/17	519/519	149/149	668/668
X	AK	11/11	3/3	-	-	-	-	-	6/6	-	-	-	2/2	-	19/19	3/3	22/22
	ID	17/17	2/2	2/2	-	-	-	-	2/2	-	-	-	4/4	-	25/25	2/2	27/27
	OR	21/21	9/9	-	-	1/1	1/1	-	6/6	2/2	4/4	2/2	11/11	2/2	43/43	16/16	59/59
	WA	33/33	13/13	6/6	-	3/3	-	2/2	12/12	2/2	4/4	5/5	5/5	2/2	60/60	27/27	87/87
Regional Total		82/82	27/27	8/8	-	4/4	1/1	2/2	26/26	4/4	8/8	7/7	22/22	4/4	147/147	48/48	195/195
NATIONAL TOTAL		1733/1626	617/584	317/318	6/6	201/185	168/167	59/59	326/325	117/119	381/391	218/219	289/288	113/113	3220/3121	1325/1279	4545/4400
COMBINED NATIONAL TOTAL		2350/2210 ^d		524/509 ^d			227/226 ^d		443/444 ^d		599/610 ^d		402/401 ^d		4545/4400 ^d		

^aNumber of SLAMS monitors excluding NAMS.

^bNumber of monitors operating in 1986/planned in 1987.

^cNumber of monitors operating/required.

^dCombined SLAMS and NAMS operating in 1986/planned or required in 1987.

TABLE 2. National Summary for SLAMS and NMS by Region and Pollutant, 1983-1986

February 1987

RES.	YEAR ENDING 12/31	TSP		SO ₂			NO ₂			CO		O ₃		PB		SUBTOTAL		TOTAL
		SLAMS ^a	NMS	CONT.	BUBB.	NMS	CONT.	BUBB.	NMS	SLAMS ^a	NMS	SLAMS ^a	NMS	SLAMS ^a	NMS	SLAMS ^a	NMS	
I	1983	58 / 59 ^b	48 / 48 ^c	30 / 31 ^b	-	20 / 20 ^c	10 / 10 ^b	-	1 / 2 ^c	13 / 13 ^b	6 / 6 ^c	16 / 16 ^b	16 / 16 ^c	29 / 29 ^b	6 / 6 ^c	156 / 158 ^b	97 / 98 ^c	253 / 256 ^d
	1984	55 / 53	48 / 48	29 / 29	-	20 / 20	9 / 9	-	2 / 2	13 / 13	6 / 6	16 / 16	16 / 16	31 / 31	8 / 8	153 / 151	100 / 100	253 / 251
	1985	54 / 53	48 / 48	30 / 26	-	19 / 20	8 / 7	-	2 / 2	13 / 12	6 / 6	16 / 13	16 / 16	30 / 30	8 / 8	151 / 141	99 / 100	250 / 241
	1986	55 / 52	45 / 45	26 / 26	-	18 / 18	8 / 8	-	2 / 2	12 / 12	6 / 8	14 / 14	16 / 16	38 / 38	8 / 8	153 / 150	95 / 97	248 / 247
II	1983	159 / 166	42 / 43	28 / 31	-	24 / 26	5 / 7	-	6 / 6	15 / 18	11 / 11	18 / 19	17 / 18	15 / 16	11 / 11	240 / 257	111 / 115	351 / 372
	1984	104 / 108	43 / 43	29 / 32	-	25 / 25	6 / 7	-	6 / 6	17 / 19	11 / 11	16 / 19	17 / 18	17 / 18	11 / 11	189 / 203	113 / 114	302 / 317
	1985	108 / 109	41 / 41	29 / 30	-	25 / 25	7 / 7	-	6 / 6	19 / 19	11 / 11	17 / 17	17 / 18	18 / 18	10 / 11	198 / 200	110 / 112	308 / 312
	1986	105 / 94	41 / 41	30 / 29	-	21 / 21	7 / 7	-	6 / 6	18 / 19	11 / 11	16 / 17	18 / 19	18 / 17	11 / 11	194 / 183	108 / 109	302 / 292
III	1983	204 / 204	88 / 88	40 / 40	-	43 / 43	41 / 41	8 / 8 ^b	8 / 8 ^c	44 / 44	10 / 10	55 / 55	21 / 21	30 / 30	10 / 10	422 / 422	180 / 180	602 / 602
	1984	206 / 114	88 / 88	40 / 12	-	42 / 42	40 / 12	-	8 / 8	42 / 26	10 / 10	55 / 47	21 / 21	28 / 26	10 / 10	411 / 237	179 / 179	590 / 416
	1985	171 / 171	88 / 88	39 / 39	-	42 / 42	33 / 33	-	8 / 8	43 / 43	10 / 10	55 / 55	21 / 21	37 / 37	10 / 10	378 / 378	179 / 179	557 / 557
	1986	170 / 170	87 / 87	41 / 41	-	42 / 42	29 / 29	-	8 / 8	43 / 43	10 / 10	57 / 57	21 / 21	38 / 38	10 / 10	378 / 378	178 / 178	556 / 556
IV	1983	385 / 385	97 / 98	52 / 52	6 / 6 ^b	15 / 15	19 / 20	3 / 3	4 / 4	52 / 54	22 / 22	42 / 42	34 / 34	13 / 13	13 / 14	572 / 575	185 / 187	757 / 762
	1984	382 / 383	96 / 96	62 / 62	3 / 3	15 / 15	16 / 16	3 / 3	3 / 4	47 / 48	21 / 22	37 / 37	33 / 34	13 / 13	13 / 14	563 / 565	181 / 185	744 / 750
	1985	377 / 377	96 / 96	48 / 49	-	15 / 15	13 / 13	-	4 / 4	45 / 48	19 / 22	41 / 41	34 / 34	14 / 14	12 / 14	538 / 542	180 / 185	718 / 727
	1986	388 / 382	91 / 91	51 / 51	-	13 / 5	12 / 12	-	4 / 4	49 / 49	22 / 22	40 / 44	34 / 34	16 / 16	15 / 15	556 / 554	179 / 171	735 / 725
V	1983	462 / 514	144 / 144	58 / 63	-	78 / 78	15 / 25	13 / 13	12 / 12	44 / 47	20 / 20	75 / 76	47 / 47	44 / 44	21 / 22	711 / 782	322 / 323	1033 / 1105
	1984	489 / 490	142 / 144	62 / 61	-	76 / 78	15 / 15	-	12 / 12	47 / 47	20 / 20	77 / 77	47 / 47	40 / 40	20 / 22	730 / 730	317 / 323	1047 / 1053
	1985	492 / 466	144 / 144	63 / 64	-	75 / 78	15 / 19	-	11 / 12	47 / 48	20 / 20	84 / 82	47 / 47	51 / 60	21 / 22	752 / 739	318 / 323	1070 / 1062
	1986	448 / 378	135 / 125	56 / 55	-	73 / 66	14 / 11	-	12 / 12	44 / 43	20 / 20	74 / 73	48 / 48	46 / 45	22 / 22	682 / 605	310 / 293	992 / 898
VI	1983	144 / 149	66 / 66	30 / 31	1 / 1	8 / 8	16 / 16	15 / 15	6 / 6	15 / 17	14 / 14	32 / 34	28 / 28	26 / 27	14 / 16	279 / 290	136 / 138	415 / 428
	1984	145 / 138	66 / 66	28 / 29	0 / 1	8 / 8	16 / 16	13 / 13	6 / 6	16 / 17	14 / 14	33 / 31	28 / 28	25 / 26	15 / 16	276 / 271	137 / 138	413 / 409
	1985	135 / 138	66 / 66	26 / 27	-	8 / 8	15 / 16	13 / 13	6 / 6	17 / 17	14 / 14	30 / 33	28 / 28	25 / 25	16 / 16	261 / 269	138 / 138	399 / 407
	1986	135 / 135	66 / 66	24 / 25	-	6 / 6	15 / 15	-	6 / 6	18 / 17	14 / 14	29 / 34	28 / 28	25 / 25	16 / 16	246 / 251	136 / 136	382 / 387
VII	1983	106 / 107	42 / 42	13 / 16	-	11 / 11	6 / 7	0 / 1	4 / 4	18 / 18	4 / 4	18 / 18	11 / 11	12 / 12	6 / 6	173 / 179	78 / 78	251 / 257
	1984	105 / 107	42 / 42	13 / 16	-	10 / 10	7 / 7	-	4 / 4	18 / 19	4 / 4	20 / 20	11 / 11	12 / 12	6 / 6	175 / 181	77 / 77	252 / 258
	1985	101 / 101	42 / 42	12 / 12	-	10 / 10	8 / 8	1 / 1	4 / 4	17 / 19	4 / 4	19 / 19	11 / 11	12 / 12	6 / 6	170 / 172	77 / 77	247 / 249
	1986	106 / 106	40 / 17	14 / 14	-	9 / 7	7 / 8	-	4 / 4	17 / 17	6 / 6	19 / 19	11 / 11	10 / 11	6 / 6	173 / 175	76 / 51	249 / 226
VIII	1983	112 / 112	26 / 26	9 / 9	-	5 / 5	7 / 7	-	2 / 2	20 / 20	4 / 4	13 / 13	6 / 6	13 / 13	4 / 4	174 / 174	47 / 47	221 / 221
	1984	140 / 125	26 / 26	13 / 11	-	5 / 5	6 / 6	-	2 / 2	20 / 19	4 / 4	12 / 12	6 / 6	15 / 15	4 / 4	206 / 188	47 / 47	253 / 235
	1985	117 / 112	26 / 26	10 / 9	-	5 / 5	6 / 7	-	2 / 2	21 / 20	4 / 4	13 / 13	6 / 6	11 / 11	4 / 4	178 / 172	47 / 47	225 / 219
	1986	112 / 95	26 / 26	9 / 11	-	4 / 5	6 / 7	-	2 / 2	19 / 19	4 / 4	12 / 13	6 / 6	14 / 14	4 / 4	172 / 159	46 / 47	218 / 206
IX	1983	154 / 158	62 / 62	57 / 57	12 / 12	11 / 11	66 / 66	-	12 / 12	78 / 78	19 / 20	116 / 116	28 / 28	66 / 66	14 / 14	549 / 553	146 / 147	695 / 700
	1984	150 / 150	62 / 62	52 / 52	7 / 7	12 / 12	61 / 61	-	12 / 12	74 / 74	19 / 20	112 / 112	28 / 28	73 / 73	14 / 14	529 / 529	147 / 148	676 / 677
	1985	152 / 152	61 / 61	55 / 55	6 / 6	12 / 12	69 / 69	-	12 / 12	79 / 79	20 / 20	119 / 119	28 / 28	75 / 75	14 / 14	555 / 555	147 / 147	702 / 702
	1986	132 / 132	59 / 59	58 / 58	6 / 6	11 / 11	69 / 69	-	13 / 13	80 / 80	20 / 20	112 / 112	29 / 29	62 / 62	17 / 17	519 / 519	149 / 149	668 / 668
X	1983	76 / 76	27 / 27	12 / 12	-	5 / 5	1 / 1	-	2 / 2	26 / 26	4 / 4	7 / 7	7 / 7	14 / 14	4 / 4	136 / 136	49 / 49	185 / 185
	1984	78 / 78	25 / 27	10 / 10	-	5 / 5	1 / 1	-	2 / 2	26 / 26	4 / 4	7 / 7	7 / 7	24 / 24	4 / 4	146 / 146	47 / 49	193 / 195
	1985	78 / 78	27 / 27	10 / 10	-	5 / 5	1 / 1	-	2 / 2	27 / 27	4 / 4	8 / 8	7 / 7	25 / 25	4 / 4	149 / 149	49 / 49	198 / 198
	1986	82 / 82	27 / 27	8 / 8	-	4 / 4	1 / 1	-	2 / 2	26 / 26	4 / 4	8 / 8	7 / 7	22 / 22	4 / 4	147 / 147	48 / 48	195 / 195
NAT.	1983	1860 / 1930	642 / 644	329 / 342	19 / 19	220 / 222	186 / 200	39 / 40	57 / 58	325 / 335	114 / 115	392 / 396	215 / 216	262 / 264	103 / 107	3412 / 3526	1351 / 1362	4763 / 4888
TOTAL	1984	1854 / 1746	638 / 642	338 / 314	10 / 11	218 / 220	177 / 150	16 / 16	57 / 58	320 / 308	113 / 115	385 / 378	214 / 216	278 / 278	105 / 109	3378 / 3201	1345 / 1360	4723 / 4561
	1985	1785 / 1757	639 / 639	322 / 321	6 / 6	216 / 220	175 / 180	14 / 14	57 / 58	328 / 332	112 / 115	402 / 400	215 / 216	298 / 307	105 / 109	3330 / 3317	1344 / 1357	4674 / 4674
	1986	1733 / 1626	617 / 584	317 / 318	6 / 6	201 / 185	168 / 167	-	59 / 59	326 / 325	117 / 119	381 / 391	218 / 219	289 / 288	113 / 113	3220 / 3121	1325 / 1279	4545 / 4400

^a Number of SLAMS monitors excluding NMS.

^b Number of monitors operating in current year/planned during next year.

^c Number of monitors operating/required.

^d Combined SLAMS and NMS operating in current year/planned or required during next year.