

DEPARTMENT OF
SCIENTIFIC AND INDUSTRIAL RESEARCH

The Investigation of
ATMOSPHERIC
POLLUTION

A Report on Observations in the Year ended
31st March, 1955

TWENTY-EIGHTH REPORT

LONDON
HER MAJESTY'S STATIONERY OFFICE
1957

TABLE 8 (contd.)

Site of deposit gauge	Number of months		Rainfall measured by deposit gauge, mm/month		pH of filtrate from deposit gauge		Deposited matter, grammes per 100 square metres per month																	
							Undissolved matter						Dissolved matter											
							Tar		Ash		Other combustible matter		Total			Ca++		Cl'		SO ₄ '		Total		
							S	W	S	W	S	W	S	W	S	W	Y	S	W	S	W	S	W	Y
Willesden 3	6	6	60	54	5.6	5.6	c	c	1007	1616	361	610	1368	2226	1797	—	—	—	—	—	—	385	770	578
Willesden 4	6	6	56	47	5.6	5.6	c	c	342	451	151	231	493	682	588	—	—	—	—	—	—	275	617	446
Willesden 5	5	5	58	58	5.6	5.6	c	c	581	377	220	204	801	581	691	—	—	—	—	—	—	318	825	572
Willesden 7	6	6	55	47	5.6	5.6	c	c	200	258	93	117	293	375	334	—	—	—	—	—	—	257	632	445
Willington 1	3	6	73	62	6.0	5.2	c	c	64	76	59	55	123	131	127	18†	16§	19†	38§	77†	46§	214	178	196
Willington 2	3	5	71	65	6.4	4.8	c	c	117	53	76	41	193	94	144	24†	20†	23†	24†	100†	41†	224	152	188
Willington 3	3	6	67	60	6.1	5.4	c	c	81	69	71	47	152	116	134	13†	19§	18†	40§	73†	70§	213	189	201
Willington 4	2	6	46	63	5.6	4.9	c	c	101	120	48	54	149	174	162	18†	22§	9†	36§	41†	58§	196	158	177
Willington 5	2	6	65	58	6.9	5.0	c	c	97	67	56	57	153	124	139	13†	6§	16†	36§	73†	58§	177	172	175
Willington 6	3	6	73	68	5.1	5.1	c	c	57	80	68	51	126	131	129	15†	18§	15†	37§	61†	57§	215	156	186
Willington 7	3	6	53	62	6.4	4.9	c	c	55	67	39	47	94	114	104	14†	18§	7†	39§	43†	68§	224	172	198
Willington 8	3	6	75	63	6.3	5.1	c	c	164	86	151	55	315	141	228	20†	29§	12†	39§	73†	66§	253	168	211
Willington 9	3	5	53	64	6.1	4.8	c	c	76	61	67	46	143	107	125	12†	22†	7†	23†	33†	49†	171	158	165
Wolverhampton 1	6	4	69	73	5.2	3.6	12	10	241	306	90	176	343	492	418	46	66	62	84	111	62	609	513	561
Wolverhampton 2	6	2	68	107	5.1	5.2	9	3	83	67	40	38	132	108	120	40	59	41	65	83	74	516	535	526
Wombwell 1	5	6	41	73	5.4	4.5	7	5	239	223	176	122	422	350	386	15	9	22	47	77	79	210	244	227
Wrexham 1	6	6	59	79	6.2	4.5	2	5	84	76	84	58	170	139	155	23	18	30	59	65	93	188	293	241
Wrexham 2	6	6	60	86	6.4	4.8	2	5	329	262	352	179	683	446	565	27	25	34	61	73	85	247	299	273
Yeadon 2	3	6	30	45	4.8	4.1	6	6	179	149	80	79	265	234	250	14	11	41	48	124	143	312	337	325
York 1	6	6	57	63	5.1	4.4	5	10	180	271	156	220	341	501	421	21	26	28	56	106	110	264	271	268
York 2	6	6	61	58	5.0	4.2	3	8	127	127	82	80	212	215	214	15	20	29	52	96	97	253	243	248

† 1 month only. § Average for 2 months only.

TABLE 9.—Suspended Matter (Smoke)—Monthly and Seasonal Averages, 1954-5

Average daily or hourly smoke concentrations were determined by the Daily Smoke Filter or the Owens Automatic Filter respectively. Where observations are made with the Daily Smoke Filter, the 'highest daily mean' shown in the table is the highest observed value and is, therefore, the mean value of the smoke concentration on the day concerned. Where observations are made with the Owens Automatic Filter the 'highest daily mean' is the highest of the daily smoke concentrations obtained by averaging the hourly readings for each day.

T indicates trace, i.e., less than 0.5 milligrammes per 100 cubic metres.

Site of instrument	Result reported	Smoke concentration, milligrammes per 100 cubic metres												Summer	Winter	Year
		Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.			
Batley 1	average	19	9	9	10	9	14	13	33	26	25	34	23	12	26	19
Batley 1	highest daily mean	39	26	14	15	16	27	42	76	76	75	55	56	—	—	—
Bentley-with-Arksey 1	average	12	9	9	9	10	13	16	25	20	23	14	17	10	19	15
Bentley-with-Arksey 1	highest daily mean	30	22	15	21	17	27	38	63	50	63	26	42	—	—	—
Bilston 3	average	13	11	—	—	—	—	—	—	—	—	22	18	15	—	—
Bilston 3	highest daily mean	25	23	—	—	—	—	—	—	—	—	22	18	15	—	—
Bingley 1	average	5	5	3	3	4	4	4	7	5	7	88	24	46	—	—
Bingley 1	highest daily mean	10	8	6	5	7	8	9	19	14	21	19	19	19	—	—
Bolton 9	average	26	23	12	12	14	13	21	37	18	27	19	15	17	23	20
Bolton 9	highest daily mean	66	39	29	24	52	41	80	149	77	74	27	53	—	—	—
Bradford 6	average	30	24	20	—	17	21	28	39	37	57	50	52	22	44	33
Bradford 6	highest daily mean	59	44	33	—	28	60	56	106	106	143	82	110	—	—	—
Brentford 1	average	—	—	—	—	—	—	—	—	—	—	14	15	—	—	—
Brentford 1	highest daily mean	—	—	—	—	—	—	—	—	—	—	14	15	—	—	—
Brentford 2	average	10	6	2	2	2	3	5	12	10	18	—	—	—	—	—
Brentford 2	highest daily mean	19	11	4	4	5	11	23	43	58	90	—	—	4	11	8
Brierley Hill 9	average	9	12	9	7	8	10	11	19	14	19	18	20	11	17	14
Brierley Hill 9	highest daily mean	38	23	20	10	15	19	25	55	24	38	32	50	—	—	—
Bristol 8	average	—	—	—	—	—	—	—	—	—	18	22	21	—	21	—
Bristol 8	highest daily mean	—	—	—	—	—	—	—	—	—	18	22	21	—	21	—
Burnley 4	average	17	12	10	10	13	13	16	26	20	29	21	23	13	23	18
Burnley 4	highest daily mean	36	26	18	23	20	31	44	102	47	57	33	52	—	—	—
Cannock 1	average	6	5	4	3	4	4	7	14	9	10	10	8	4	10	7
Cannock 1	highest daily mean	11	7	5	6	11	8	24	42	23	33	16	25	—	—	—
Cardiff 2	average	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cardiff 2	highest daily mean	—	—	—	—	—	15	14	38	31	22	11	11	—	7	—

TABLE 9 (contd.)

Site of instrument	Result reported	Smoke concentration, milligrammes per 100 cubic metres														
		Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Summer	Winter	Year
Cardington 1	average	2	2	2	2	1	2	3	7	5	8	7	6	2	6	4
	highest daily mean	7	7	5	5	2	7	11	19	19	23	14	26			
Carshalton 4	average	—	—	—	—	2	3	5	13	11	13	22	20	—	14	—
	highest daily mean	—	—	—	—	7	15	22	50	37	42	60	51			
Castleford 5	average	17	9	11	10	10	14	19	35	28	29	28	21	12	27	20
	highest daily mean	47	38	23	15	21	28	51	87	58	80	46	46			
Chapelton 2	average	9	10	5	5	5	4	8	17	15	12	20	11	6	14	10
	highest daily mean	29	18	10	8	12	10	24	30	30	46	30	24			
Chiswick 1	average	16	12	7	6	—	—	—	—	15	19	16	15	10	16	13
	highest daily mean	39	23	13	13	—	—	—	—	49	85	39	45			
Church Fenton 1	average	7	4	3	5	5	8	8	11	12	14	8	9	5	10	8
	highest daily mean	19	12	7	12	15	23	20	41	28	47	23	24			
Cleckheaton 2	average	13	10	7	7	9	11	20	31	25	22	28	17	10	24	17
	highest daily mean	26	25	13	14	16	19	47	76	45	72	41	37			
Darton 1	average	16	14	12	11	14	15	14	17	18	21	21	19	14	18	16
	highest daily mean	41	30	19	19	22	24	26	45	42	46	28	52			
Doncaster 16	average	—	—	—	19	24	28	30	35	33	36	28	28	24	32	28
	highest daily mean	—	—	—	27	48	47	75	145	67	134	40	66			
East Kilbride 1	average	2	4	3	2	2	1	3	4	4	9	9	8	2	6	4
	highest daily mean	8	9	10	4	7	5	10	19	23	38	17	23			
Elland 2	average	15	12	8	8	8	8	13	26	22	26	31	20	10	23	17
	highest daily mean	29	23	14	20	15	16	42	67	54	71	39	40			
Erith 1	average	9	7	3	5	4	2	3	17	15	18	14	12	5	13	9
	highest daily mean	22	16	7	17	11	7	2	68	37	51	43	24			
Eskdalemuir 1	average	1	1	T	T	T	1	1	1	1	2	1	2	1	1	1
	highest daily mean	2	2	1	1	1	2	1	4	4	7	3	3			
Fakenham 1	average	1	1	1	1	1	2	2	3	3	3	2	2	1	3	2
	highest daily mean	4	3	1	3	3	3	5	7	8	10	5	5			
Glasgow 1	average	88	65	49	45	57	66	73	101	69	87	79	82	62	82	72
	highest daily mean	130	88	93	88	90	107	135	323	183	182	104	179			
Glasgow 5	average	13	9	8	—	14	10	21	—	—	53	49	33	11	39	25
	highest daily mean	40	35	41	—	45	39	79	—	—	135	101	103			
Glasgow 10	average	38	17	14	15	21	16	33	57	35	52	57	48	20	47	34
	highest daily mean	80	41	44	34	41	34	85	295	135	179	94	155			
Goole 2	average	—	15	16	15	12	17	25	30	25	30	28	29	15	28	22
	highest daily mean	—	39	45	26	27	32	68	85	46	85	55	50			
Harrogate 1	average	7	5	4	3	5	5	7	10	12	12	10	13	5	11	8
	highest daily mean	14	10	8	9	8	10	17	22	25	39	18	27			
Hemsworth 2	average	14	13	12	9	8	8	9	25	—	22	20	14	11	18	15
	highest daily mean	29	24	25	21	21	17	30	53	—	57	53	30			
Horbury 2	average	9	8	5	5	5	5	7	19	12	19	22	13	6	15	11
	highest daily mean	17	19	10	12	12	11	25	51	37	64	41	31			
Hornchurch 1	average	9	5	4	4	4	5	14	26	27	21	23	16	5	21	13
	highest daily mean	21	11	14	7	10	18	71	75	120	128	68	38			
Hull see Kingston upon Hull																
Keighley 7	average	19	13	8	10	9	—	12	22	21	24	20	18	12	20	16
	highest daily mean	56	33	19	22	17	—	27	77	43	53	31	41			
Kew 1	average	8	5	3	3	4	5	7	15	14	19	15	12	5	14	10
	highest daily mean	26	11	9	10	11	20	33	43	57	74	35	43			
Kingston upon Hull 2	average	22	12	18	29	23	30	37	40	41	42	37	31	22	38	30
	highest daily mean	48	21	35	45	37	58	101	139	102	165	103	56			
Lancaster 4	average	25	19	14	16	23	23	25	39	33	47	41	31	20	36	28
	highest daily mean	89	44	26	40	41	46	65	91	64	159	74	62			
Leeds 4	average	75	70	42	32	27	36	80	89	98	89	64	59	47	80	64
	highest daily mean	167	173	145	58	61	65	181	207	175	172	95	104			
Leeds 8	average	24	9	8	16	11	14	18	40	28	30	45	37	14	33	24
	highest daily mean	62	35	17	33	23	36	46	114	134	162	83	87			
Leicester 5	average	15	12	6	11	10	10	16	21	16	27	26	28	11	22	17
	highest daily mean	30	25	14	24	24	29	45	82	36	78	42	63			
Lerwick 1	average	T	—	T	T	T	T	T	T	T	T	T	T	T	T	T
	highest daily mean	3	—	1	1	1	1	1	2	3	4	2	1			
Leyton 1	average	16	9	5	4	5	6	13	35	29	38	35	29	8	30	19
	highest daily mean	41	21	7	7	7	18	65	138	100	116	69	73			
Liverpool 12	average	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	highest daily mean	25	—	—	—	—	—	—	—	—	—	—	—			
Liverpool 13	average	—	—	13	11	14	14	22	34	23	24	36	31	13	28	21
	highest daily mean	—	—	23	19	26	26	43	105	49	65	62	95			
London, Camberwell 3	average	—	—	—	—	—	—	—	—	—	—	20	21	—	—	—
	highest daily mean	—	—	—	—	—	—	—	—	—	—	49	49			
London, Chelsea 2	average	—	—	—	—	—	—	—	61	53	63	54	45	—	55	—
	highest daily mean	—	—	—	—	—	—	—	130	174	180	122	98			
London, City 1	average	16	12	4	4	5	5	7	28	23	37	16	15	8	21	15
	highest daily mean	26	31	9	8	9	13	23	125	135	194	32	41			
London, City 9	average	35	23	16	12	11	10	17	22	18	35	24	22	18	23	21
	highest daily mean	74	49	32	29	25	27	35	61	53	213	52	52			

TABLE 9 (contd.)

Site of instrument	Result reported	Smoke concentration, milligrammes per 100 cubic metres														
		Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Summer	Winter	Year
London, Deptford 1 ..	average	—	—	—	—	—	—	—	49	37	69	56	48	—	52	—
	highest daily mean	—	—	—	—	—	—	—	154	112	193	114	105	—	—	—
London, Finsbury 1 ..	average	—	—	—	—	—	—	—	—	—	—	—	29	—	—	—
	highest daily mean	—	—	—	—	—	—	—	—	—	—	—	51	—	—	—
London, Greenwich 3 ..	average	12	10	9	5	7	7	9	17	17	24	18	18	8	17	18
	highest daily mean	24	18	24	7	14	17	29	66	62	75	48	38	—	—	—
London, Hackney 4 ..	average	—	—	—	—	—	—	—	60	56	70	51	43	—	56	—
	highest daily mean	—	—	—	—	—	—	—	158	187	224	95	96	—	—	—
London, Hampstead 3	average	—	—	—	—	—	—	—	—	36	43	29	26	—	34	—
	highest daily mean	—	—	—	—	—	—	—	—	140	187	53	58	—	—	—
London, Hampstead 4	average	—	—	—	—	—	—	—	49	46	60	46	41	—	48	—
	highest daily mean	—	—	—	—	—	—	—	160	182	177	86	100	—	—	—
London, Lambeth 2 ..	average	24	15	8	7	11	10	18	45	39	53	40	33	13	38	26
	highest daily mean	52	25	17	18	37	34	62	130	180	175	69	62	—	—	—
London, Lambeth 6 ..	average	24	14	9	10	13	12	21	44	36	53	39	34	14	38	26
	highest daily mean	53	23	18	22	35	31	56	132	169	195	72	77	—	—	—
London, Lambeth 7 ..	average	—	—	—	—	—	—	—	—	63	72	61	52	—	62	—
	highest daily mean	—	—	—	—	—	—	—	—	203	207	121	107	—	—	—
London, Lambeth 8 ..	average	—	—	—	—	—	—	—	39	33	39	30	23	—	33	—
	highest daily mean	—	—	—	—	—	—	—	101	93	103	57	56	—	—	—
London, Lewisham 4 ..	average	—	—	—	5	7	7	10	—	21	27	23	28	6	22	14
	highest daily mean	—	—	—	8	11	9	19	—	40	49	32	47	—	—	—
London, Lewisham 5 ..	average	—	—	—	—	8	10	12	28	23	25	22	22	—	22	—
	highest daily mean	—	—	—	—	11	13	19	120	42	41	30	33	—	—	—
London, Lewisham 6 ..	average	—	—	—	5	6	6	9	22	21	23	23	22	6	20	13
	highest daily mean	—	—	—	8	7	10	15	41	34	44	30	30	—	—	—
London, Shoreditch 1 ..	average	—	—	—	—	—	—	—	—	—	—	21	12	—	—	—
	highest daily mean	—	—	—	—	—	—	—	—	—	—	32	30	—	—	—
London, Southwark 3	average	34	22	13	—	13	11	24	43	50	66	44	45	19	45	32
	highest daily mean	61	43	33	—	35	23	96	153	178	179	100	100	—	—	—
London, Stoke Newington 3	average	—	—	—	—	—	—	—	—	—	49	34	32	—	38	—
	highest daily mean	—	—	—	—	—	—	—	—	—	188	73	74	—	—	—
London, Westminster 6	average	—	—	—	—	—	—	—	12	33	32	—	—	—	26	—
	highest daily mean	—	—	—	—	—	—	—	54	97	118	—	—	—	—	—
London, Westminster 7	average	17	12	6	6	7	7	12	27	19	27	21	15	9	20	15
	highest daily mean	45	20	12	11	21	16	51	89	102	98	39	51	—	—	—
London, Woolwich 1 ..	average	18	14	13	20	9	25	38	45	47	41	37	20	17	38	28
	highest daily mean	52	35	35	38	26	57	104	132	124	144	80	58	—	—	—
London, Woolwich 7 ..	average	—	—	—	—	—	—	—	—	37	41	40	32	—	38	—
	highest daily mean	—	—	—	—	—	—	—	—	110	129	107	78	—	—	—
Longbenton 1 ..	average	11	7	8	5	6	7	9	22	20	25	15	17	7	18	13
	highest daily mean	40	11	22	10	14	19	19	77	58	81	35	40	—	—	—
Luton 1 ..	average	8	6	2	2	3	2	5	15	11	19	13	9	4	12	8
	highest daily mean	32	18	5	8	12	8	16	36	54	81	21	36	—	—	—
Lytham St. Annes 1 ..	average	4	4	2	2	3	3	4	10	6	13	12	13	3	10	7
	highest daily mean	13	12	5	6	8	9	18	32	24	36	22	28	—	—	—
Maltby 1 ..	average	16	—	5	7	—	—	—	12	11	14	19	20	9	16	13
	highest daily mean	36	—	9	12	—	—	—	36	25	46	36	46	—	—	—
Manchester 5 ..	average	22	22	15	18	23	20	19	35	25	33	23	31	20	28	24
	highest daily mean	40	45	28	30	40	55	59	120	62	87	43	67	—	—	—
Morley 2 ..	average	14	13	8	7	8	9	19	30	20	25	22	21	10	23	17
	highest daily mean	26	30	16	15	20	20	46	68	44	66	39	40	—	—	—
Mytholmroyd 1 ..	average	9	7	5	7	8	10	12	18	17	21	13	13	8	16	12
	highest daily mean	21	18	11	12	16	18	29	57	44	72	46	31	—	—	—
Nafferton 1 ..	average	—	—	T	—	—	—	—	—	—	—	—	—	—	—	—
	highest daily mean	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Newcastle upon Tyne 10	average	17	9	—	—	10	13	17	28	21	31	5	5	12	18	15
	highest daily mean	43	15	—	—	49	35	32	66	52	62	11	13	—	—	—
Nottingham 1 ..	average	10	8	3	4	6	11	13	—	—	20	12	10	7	14	11
	highest daily mean	23	18	6	6	11	27	41	—	—	62	31	57	—	—	—
Otley 2 ..	average	8	6	4	3	4	5	8	17	16	14	19	10	5	14	10
	highest daily mean	18	11	7	12	8	11	13	32	47	39	47	26	—	—	—
Pembroke Dock 1 ..	average	2	1	1	1	1	1	1	2	1	2	2	1	1	2	2
	highest daily mean	4	2	2	1	2	3	3	7	3	6	3	3	—	—	—
Pontefract 1 ..	average	—	—	—	16	14	18	19	27	23	28	23	24	16	24	20
	highest daily mean	—	—	—	27	33	34	52	59	50	65	37	52	—	—	—
Preston 4 ..	average	21	16	15	17	18	15	22	33	28	32	30	25	17	28	23
	highest daily mean	32	26	30	28	30	28	64	76	69	63	49	56	—	—	—
Rawmarsh 2 ..	average	36	28	17	21	23	24	29	43	38	45	37	38	25	38	32
	highest daily mean	68	60	29	33	38	38	51	77	74	84	50	59	—	—	—
Ripon 1 ..	average	8	5	6	5	5	5	10	21	16	14	20	14	66	16	11
	highest daily mean	20	8	13	8	8	11	24	56	39	27	41	33	—	—	—
Rothwell 1 ..	average	11	6	7	7	6	8	16	28	20	16	20	13	8	19	14
	highest daily mean	26	20	14	10	16	15	44	78	45	59	35	34	—	—	—
Rye 1 ..	average	1	1	1	1	1	1	1	3	—	—	—	—	1	2	—
	highest daily mean	3	2	1	2	3	9	4	12	—	—	—	—	—	—	—

TABLE 9 (contd.)

Site of instrument	Result reported	Smoke concentration, milligrammes per 100 cubic metres														
		Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Summer	Winter	Year
Saddleworth 1 ..	average	5	6	6	6	—	5	13	11	9	8	11	18	6	12	9
	highest daily mean	11	12	10	11	—	10	21	27	19	14	16	26			
St. Helens 7 ..	average	53	45	37	38	43	44	45	66	44	55	41	47	43	50	47
	highest daily mean	78	60	50	44	55	52	77	171	64	198	63	84			
Sale 4 ..	average	21	15	12	11	12	12	18	44	26	39	33	36	14	33	24
	highest daily mean	46	28	23	23	24	28	66	179	85	108	55	89			
Salford 2 ..	average	40	33	24	22	28	33	38	64	52	65	62	69	30	58	44
	highest daily mean	95	74	38	28	37	58	75	161	102	179	134	163			
Sheffield 2 ..	average	29	23	15	13	16	19	28	45	30	52	44	46	19	41	30
	highest daily mean	79	58	27	24	29	62	112	130	74	157	82	104			
Sheffield 8 ..	average	18	13	10	9	10	11	14	19	30	44	35	37	12	30	21
	highest daily mean	35	21	20	14	22	21	24	36	49	72	49	63			
Sheffield 14 ..	average	31	22	—	—	—	—	—	—	—	—	—	—	—	—	—
	highest daily mean	76	63	—	—	—	—	—	—	—	—	—	—			
54 Sheffield 32 ..	average	33	27	17	17	19	20	31	46	37	63	54	56	22	48	35
	highest daily mean	81	65	26	25	32	51	79	148	71	147	79	120			
Skipton 1 ..	average	18	17	14	15	—	20	18	26	18	21	21	23	17	21	19
	highest daily mean	27	31	21	21	—	29	26	39	25	33	29	29			
Slaithwaite 2 ..	average	10	9	7	9	7	7	12	20	15	18	27	18	8	18	13
	highest daily mean	21	18	12	13	17	14	22	42	39	41	41	37			
Stocksbridge 9 ..	average	44	40	42	36	40	41	—	—	—	—	—	—	41	—	—
	highest daily mean	66	62	64	77	66	64	—	—	—	—	—	—			
Stornoway 1 ..	average	T	T	T	T	T	T	1	1	1	1	T	T	T	1	1
	highest daily mean	1	1	T	T	T	T	1	2	2	3	3	3			
Stourbridge 1 ..	average	24	17	15	11	15	12	13	20	13	20	19	19	16	17	17
	highest daily mean	46	33	30	27	33	27	39	63	18	53	44	47			
Teddington 2 ..	average	7	2	2	2	2	2	5	16	13	19	14	18	3	14	9
	highest daily mean	16	7	5	5	6	8	25	67	48	88	38	51			
Thorne 1 ..	average	10	10	6	9	6	9	15	26	20	22	20	19	8	20	14
	highest daily mean	27	25	11	15	18	32	68	58	48	50	36	35			
Wadebridge 1 ..	average	1	T	T	T	T	T	T	1	2	1	2	2	T	1	1
	highest daily mean	2	1	1	1	1	2	1	3	1	4	5	5			
Walsall 11 ..	average	—	—	—	—	—	—	—	—	—	—	—	23	—	—	—
	highest daily mean	—	—	—	—	—	—	—	—	—	—	—	46			
Warrington 8 ..	average	16	10	6	7	9	10	17	25	13	18	12	34	10	20	15
	highest daily mean	31	25	14	31	21	23	49	108	41	44	27	89			
Wednesfield 1 ..	average	40	23	24	21	21	24	35	63	46	71	42	27	26	47	37
	highest daily mean	60	65	39	35	52	54	72	167	98	193	66	69			
Wetherby 1 ..	average	18	15	10	9	9	8	9	22	22	24	15	14	12	18	15
	highest daily mean	45	37	17	19	21	18	26	56	61	61	28	38			
Willenhall 1 ..	average	62	46	49	51	69	61	67	67	55	57	50	46	56	57	57
	highest daily mean	111	74	86	92	145	120	117	169	87	141	87	77			
Wolverhampton 3 ..	average	4	5	2	1	2	3	4	8	5	9	6	8	3	7	5
	highest daily mean	9	15	6	2	6	6	17	23	11	38	12	27			
Wombwell 1 ..	average	21	16	10	8	17	17	17	30	22	31	29	29	15	26	21
	highest daily mean	55	30	18	20	40	53	41	72	62	65	38	70			
Woodford 1 ..	average	—	—	—	—	—	5	13	34	44	47	27	13	—	30	—
	highest daily mean	—	—	—	—	—	11	47	149	117	154	72	28			
Yeadon 1 ..	average	10	8	7	8	8	8	9	16	14	13	12	12	8	13	11
	highest daily mean	20	12	14	13	16	21	30	31	48	19	28	27			

TABLE 10.—Suspended Matter (Smoke)—*Weekday and Week-end Averages*, 1954-5

T indicates trace, i.e., less than 0.5 milligrammes per 100 cubic metres

Site of instrument	Average smoke concentration, milligrammes per 100 cubic metres					
	Summer		Winter		Year	
	Week-day	Week-end	Week-day	Week-end	Week-day	Week-end
Batley 1	12	11	27	21	20	16
Bentley-with-Arksey 1	11	10	20	18	16	14
Bilston 3	12†	10†	208	158	16	13
Bingley 1	4	4	6	6	5	5
Bolton 9	17	16	24	20	21	18
Bradford 6	22	17	48	35	35	25
Brentford 1	—	—	15†	14†	—	—
Brentford 2	—	—	12†	9†	—	—
Brierley Hill 9	12	4	19	13	8	7
Bristol 8	—	—	23†	17†	16	11
Burnley 4	14	9	23	20	19	15
Cannock 1	4	4	10	10	7	6
Cardiff 2	7†	5†	7	7	7	6
Cardington 1	—	—	6	6	4	4
Carshalton 4	3†	2†	17	17	10	8
Castelford 5	12	12	28	23	20	18
Chapelton 2	7	6	14	13	11	10
Chiswick 1	11†	9†	17†	14†	14	12
Church Fenton 1	5	5	11	9	8	7
Cleekeaton 2	9	9	25	21	17	15
Darton 1	13	14	19	16	16	15
Dorchester 16	278	218	38	25	33	23
East Kilbride 1	2	2	6	6	4	4
Elland 2	10	9	25	20	18	15
Erith 1	5	5	14	10	10	8
Eskaledunair 1	T	T	1	1	1	1
Fakenham 1	1	1	3	2	2	2
Glasgow 1*	58	53	84	77	71	65
Glasgow 5*	12**	8**	39†	35†	26	22
Glasgow 10*	21	17	46	49	34	33
Goolie 2	17**	11**	30	22	24	17
Hartogate 1	4	6	10	10	7	9
Harrsworth 2	10	11	19**	15**	15	13
Horbury 2	4	5	16	13	12	9
Hornchurch 1	6	4	22	13	14	10
Hull see Kingston upon Hull	—	—	—	—	—	—
Keighley 7	15**	10**	19	13	17	15
Kew 1	5	5	14	19	10	9
Kingston upon Hull 2	24	18	41	30	33	24
Lancaster 4	21	18	36	32	29	25
Leeds 4	51	37	86	62	69	50
Leeds 8	15	13	36	29	26	21
Leicester 5	11	9	24	20	18	15
Letwick 1	T	T	T	T	T	T
Leyton 1	8	7	31	27	20	17
Liverpool 12*	13†	9†	31	24	22	18
Liverpool 13*	14†	11†	30	24	22	18
London, Canberwell 3	—	—	21†	19†	—	—
London, Chelsea 2	—	—	59**	47**	—	—
London, City 1	—	—	22	16	15	12
London, City 9	18	15	24	23	21	19
London, Deptford 1	—	—	34	46	—	—
London, Finsbury 1	—	—	31†	23†	—	—
London, Greenwich 3	—	—	19	14	14	11
London, Hackney 4	—	—	60**	47**	—	—
London, Hampstead 3	—	—	37†	28†	—	—

Table 10 (contd.)

Site of instrument	Average smoke concentration, milligrammes per 100 cubic metres					
	Summer		Winter		Year	
	Week-day	Week-end	Week-day	Week-end	Week-day	Week-end
London, Hampstead 4	—	—	—	—	—	—
London, Lambeth 2	13	12	52**	40**	27	23
London, Lambeth 6	15	13	40	33	28	22
London, Lambeth 7	—	—	41	30	—	—
London, Lambeth 8	—	—	64†	57†	—	—
London, Shoreditch 1	—	—	34**	28**	—	—
London, Southwark 3	—	—	16†	17†	—	—
London, Stoke Newington 3	19**	18**	48	43	34	31
London, Westminster 6	—	—	418	358	—	—
London, Westminster 7	—	—	268	238	—	—
London, Woolwich 1	9	17	21	19	15	18
London, Woolwich 7	17	15	41	32	29	24
Longbenton 1	—	—	40†	31†	—	—
Luton 1	8	6	19	16	14	11
Lytham St. Annes 1	4	4	13	12	9	8
Maltby 1	3	3	10	9	7	6
Manchester 5	98	88	16	16	13	13
Morley 2	21	18	29	24	25	21
Mytholmroyd 1	10	9	17	17	17	15
Newcastle upon Tyne 10	8	6	24	21	17	15
Nottingham 1	12†	11†	19	17	13	13
Nottingham 2	8	6	14†	12†	11	11
Otley 2	5	5	15	12	10	9
Penbroke Dock 1	1	1	15	12	10	9
Pontrict 1	178	158	27	19	22	17
Preston 4	19	13	30	25	22	18
Rawmarsh 2	26	21	41	31	34	26
Ripon 1	6	5	16	14	14	10
Rothwell 1	8	6	20	15	11	11
Rye 1	1	1	2†	2†	2	2
Saddleworth 1	6**	6**	11	11	10	9
St. Helens 7	43	43	52	45	48	44
Sale 4	14	13	33	31	24	22
Salford 2	31	29	60	55	46	42
Sheffield 2	19	17	39	32	29	26
Sheffield 8	11	11	29	22	20	18
Sheffield 14	29†	18†	—	—	—	—
Sheffield 32	22	22	49	36	36	34
Skipton 1	17**	16**	19	19	20	18
Slathwaite 2	9	9	19	15	15	11
Stockbridge 9	42	34	—	—	—	—
Stornoway 1	T	T	—	—	—	—
Stourbridge 1	17	12	19	13	18	13
Teddington 2	3	3	14	14	9	9
Thorne 1	9	8	21	15	15	11
Wadebridge 1	T	T	1	1	1	1
Walsall 11	—	—	25†	19†	—	—
Warrington 8	10	9	21	16	16	13
Wednesfield 1	21	15	50	40	36	28
Weberby 1	12	12	19	15	16	12
Willenhall 1	66	66	67	67	67	67
Wolverhampton 3	3	3	7	7	5	5
Wombwell 1	15	15	27	24	21	19
Woodford 1	5†	5†	32	32	24	24
Yendon 1	9	7	14	10	19	15

* Automatic filter.
 † 1 month only.
 ‡ 2 months only.
 § 3 months only.
 ¶ 4 months only.
 ** 5 months only.

TABLE 11.—Suspended Matter (Smoke)—Hourly Averages, 1954-5

Times of day are given as local time, which may be either Greenwich Mean Time (G.M.T.) or British Summer Time (B.S.T.).
B.S.T. was in force from 11th April to 3rd October.

Site of instrument	Number of months S W	Days of the week	Average smoke concentration, milligrammes per 100 cubic metres, for the hour ending :																							
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
			a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	noon	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	mdt.
Glasgow 1	6	weekdays	37	36	38	41	46	51	76	92	99	90	81	73	72	69	62	64	67	72	76	74	78	73	59	46
	6	Saturdays	39	35	32	39	44	52	62	73	79	81	70	71	72	65	58	52	55	59	68	70	71	70	65	49
	6	Sundays	30	23	21	23	20	23	31	33	39	34	36	36	38	42	47	53	55	61	62	70	63	64	58	42
	6	weekdays	43	39	36	39	42	53	74	101	118	110	87	104	101	94	91	94	106	117	115	112	103	88	73	57
	6	Saturdays	47	42	35	37	36	45	59	83	109	110	111	109	104	98	98	98	106	118	122	114	109	104	93	69
	6	Sundays	74	45	31	30	30	29	35	49	61	65	72	81	80	82	87	83	91	105	97	103	100	92	83	69
Glasgow 5	5	weekdays	6	6	6	6	7	10	12	16	16	16	17	14	12	12	13	13	13	13	13	15	16	13	12	10
	5	Saturdays	8	10	9	7	8	10	13	16	18	17	11	9	7	6	7	9	9	10	10	13	14	10	10	5
	5	Sundays	3	2	1	2	2	2	2	5	5	5	8	8	8	8	8	11	9	9	10	12	11	11	10	7
	4	weekdays	25	23	17	17	20	24	31	47	56	52	49	44	38	33	31	31	38	44	52	55	54	52	50	41
	4	Saturdays	45	38	36	26	22	17	26	33	44	37	46	44	33	29	24	24	28	49	53	48	56	54	51	38
	4	Sundays	28	30	27	21	18	21	24	25	30	29	33	35	38	35	38	35	35	36	45	45	45	35	33	28
Glasgow 10	6	weekdays	14	13	14	13	15	18	23	31	32	29	25	19	17	17	19	19	19	21	24	29	30	27	22	19
	6	Saturdays	11	9	9	12	13	13	21	23	26	23	18	23	18	15	13	14	13	13	22	23	28	32	29	23
	6	Sundays	14	10	8	6	8	9	11	13	12	15	17	14	14	15	18	20	17	16	25	25	28	28	24	19
	6	weekdays	26	21	20	18	20	24	32	52	60	59	58	56	50	48	49	50	57	66	71	71	68	58	45	36
	6	Saturdays	38	35	30	25	25	27	36	40	54	65	74	76	60	58	59	62	65	73	76	75	83	75	69	57
	6	Sundays	40	31	21	17	15	14	15	20	28	41	59	57	51	53	52	55	52	57	71	71	67	59	40	30
Kew 1	6	weekdays	8	8	8	8	9	9	10	10	10	9	8	8	7	8	7	7	8	9	10	12	10	10	9	
	6	Saturdays	9	8	8	8	8	9	10	13	12	10	8	8	7	7	7	6	8	8	9	12	11	12	12	9
	6	Sundays	9	9	9	8	8	8	10	10	10	8	9	8	8	8	8	7	7	8	9	11	11	11	11	10
	5	weekdays	16	13	12	11	10	10	11	13	15	15	15	12	13	13	13	14	17	21	23	24	24	24	22	19
	5	Saturdays	18	14	13	13	12	12	11	13	13	14	14	13	13	13	13	16	17	17	17	18	20	17	15	13
	5	Sundays	12	11	9	8	8	8	7	7	7	12	13	13	13	13	13	13	14	17	19	21	19	19	18	14
Liverpool 12	1	weekdays	12	9	9	13	11	13	16	22	15	13	13	11	11	11	8	11	12	11	15	15	24	23	18	13
	1	Saturdays	5	0	5	11	21	27	16	11	21	16	8	16	8	16	0	16	8	8	16	32	24	16	8	16
	1	Sundays	16	8	8	8	0	0	0	0	0	0	16	8	0	16	8	16	8	8	8	0	8	8	16	8
Liverpool 13	4	weekdays	7	7	5	5	4	7	12	16	15	15	16	14	15	13	15	15	15	19	20	23	24	20	16	11
	4	Saturdays	8	7	7	5	8	9	10	16	20	20	21	16	14	12	11	12	9	10	10	19	14	16	14	10
	4	Sundays	6	5	1	2	2	4	3	8	7	13	12	13	13	10	11	11	10	11	14	13	19	20	14	8
	6	weekdays	11	9	8	7	9	13	21	35	40	36	36	36	35	32	32	37	45	53	54	50	44	33	25	15
London, Westminster 7	6	Saturdays	9	8	9	7	9	12	21	27	39	42	39	35	30	28	31	35	42	44	45	43	36	31	22	12
	6	Sundays	10	7	5	2	6	4	12	15	26	38	34	32	25	28	21	28	34	34	28	31	32	22	17	9
	6	weekdays	17	17	17	17	18	20	20	20	20	19	19	18	19	18	19	19	20	21	23	23	21	20	18	18
Teddington 1	6	Saturdays	17	17	17	19	17	17	19	21	20	19	20	19	17	18	19	17	17	19	20	21	19	20	18	19
	6	Sundays	17	18	18	17	17	18	19	17	22	19	19	19	18	17	19	17	18	18	19	23	22	20	19	19
	6	weekdays	20	19	19	19	19	20	25	28	31	28	25	24	22	25	27	30	38	40	39	37	33	28	25	22
	6	Saturdays	22	20	21	22	20	18	24	23	24	25	23	24	25	26	23	25	26	26	30	25	18	17	17	16
	6	Sundays	16	16	17	16	16	16	19	22	23	29	31	32	29	28	26	33	36	40	38	38	31	26	23	22
	6	weekdays	2	2	2	2	2	2	3	3	3	3	3	2	2	2	2	2	3	3	4	3	3	3	3	3
Teddington 1	6	Saturdays	2	2	2	2	2	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	6	Sundays	1	1	1	1	1	1	1	2	2	2	1	2	2	2	2	2	2	2	2	1	2	2	2	1
	6	weekdays	10	10	9	8	7	7	9	11	12	11	10	9	9	9	10	12	15	18	21	21	20	18	16	14
	6	Saturdays	11	10	10	8	8	8	9	12	14	14	13	12	9	9	8	8	9	10	10	11	10	8	7	6
	6	Sundays	4	4	4	4	3	3	4	4	5	5	5	6	6	6	6	7	8	10	10	10	10	10	9	8

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TABLE 12.—*Sulphur Dioxide (Volumetric Method)—Monthly and Seasonal Averages, 1954-5*

The results in this table are derived from measurements of the mean daily concentrations of sulphur dioxide.

T indicates trace, i.e., less than 0.5 parts per 100 million by volume.

One part of sulphur dioxide per 100 million by volume equals 2.86 mg/100 cu. m.

Site of instrument	Result reported	Sulphur dioxide concentration, parts per 100 million, by volume														
		Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Summer	Winter	Year
Bilston 3	average	6	6	—	—	—	—	—	—	—	6	6	6	6	6	—
	highest daily mean	9	10	—	—	—	—	—	—	—	39	8	16	—	—	—
Bolton 9	average	9	7	3	3	5	10	8	14	9	13	12	11	6	11	9
	highest daily mean	19	13	5	5	11	16	28	45	20	40	52	23	—	—	—
Bradford 6	average	10	7	6	3	5	7	8	15	12	18	14	15	7	14	11
	highest daily mean	19	12	8	5	9	15	24	39	38	45	22	32	—	—	—
Brentford 1	average	—	—	—	—	—	—	—	—	—	—	7	9	—	8	—
	highest daily mean	—	—	—	—	—	—	—	—	—	—	13	21	—	—	—
Brentford 2	average	6	3	3	2	4	3	3	7	6	8	—	—	4	6	5
	highest daily mean	11	6	5	6	12	11	7	20	21	16	—	—	—	—	—
Brierley Hill 9	average	5	3	1	1	1	1	2	5	4	7	7	8	2	6	4
	highest daily mean	9	5	4	1	3	4	5	18	6	14	15	22	—	—	—
Bristol 8	average	—	—	—	—	—	—	—	—	2	6	3	1	—	3	—
	highest daily mean	—	—	—	—	—	—	—	—	37	16	24	6	—	—	—
Burnley 4	average	7	5	3	3	3	4	4	8	6	9	9	10	4	8	6
	highest daily mean	14	11	6	4	8	9	14	31	17	20	15	22	—	—	—
Cannock 1	average	1	1	1	1	T	1	T	1	1	1	1	1	1	1	1
	highest daily mean	2	1	1	2	1	1	1	1	1	1	1	2	—	—	—
Cardiff 2	average	—	—	—	—	—	2	3	5	4	7	5	5	—	5	—
	highest daily mean	—	—	—	—	—	6	7	14	10	13	11	10	—	—	—
Carshalton 4	average	—	—	—	—	T	2	T	3	3	4	4	7	—	4	—
	highest daily mean	—	—	—	—	T	6	1	13	41	13	12	20	—	—	—
Chiswick 1	average	8	5	3	3	—	—	—	—	7	10	8	8	5	8	7
	highest daily mean	13	10	6	5	—	—	—	—	24	57	18	32	—	—	—
Doncaster 16	average	—	—	—	2	4	6	7	11	10	12	11	10	4	10	7
	highest daily mean	—	—	—	5	9	12	18	23	21	44	18	21	—	—	—
East Kilbride 1	average	1	1	1	T	T	T	1	1	1	2	2	2	1	2	1
	highest daily mean	2	4	2	1	1	T	2	2	2	8	3	4	—	—	—
Erith 1	average	3	3	1	2	2	1	1	2	3	2	3	5	2	3	3
	highest daily mean	10	8	6	4	8	3	4	10	12	11	8	11	—	—	—
Glasgow 1	average	9	8	4	4	5	6	8	16	12	14	13	15	6	13	10
	highest daily mean	13	20	7	8	8	12	21	75	40	31	20	34	—	—	—
Hornchurch 1	average	4	4	2	3	3	5	5	9	9	9	8	5	4	8	6
	highest daily mean	11	35	6	8	6	15	13	30	30	35	19	14	—	—	—
Hull see Kingston upon Hull	average	4	4	3	3	4	3	5	6	4	6	6	7	4	6	5
	highest daily mean	9	7	6	7	11	16	11	17	13	24	21	12	—	—	—
Lancaster 4	average	3	2	3	4	4	5	5	8	6	9	7	5	4	7	6
	highest daily mean	5	6	6	8	8	10	13	21	12	32	15	10	—	—	—
Leeds 4	average	13	15	18	12	8	11	10	16	14	14	3	2	13	10	12
	highest daily mean	27	40	40	33	16	20	26	43	24	37	4	4	—	—	—
Leeds 8	average	7	5	2	2	2	3	7	15	11	17	11	9	4	12	8
	highest daily mean	15	14	4	5	7	6	30	38	43	55	23	29	—	—	—
Leicester 5	average	4	4	2	3	3	3	3	5	6	8	9	9	3	6	5
	highest daily mean	8	7	4	4	5	8	8	11	12	26	25	27	—	—	—
Leyton 1	average	6	5	3	3	4	4	7	14	12	15	11	8	4	11	8
	highest daily mean	17	9	5	6	6	8	21	42	29	36	20	19	—	—	—
London, Camberwell 3	average	—	—	—	—	—	—	—	—	—	—	11	10	—	11	—
	highest daily mean	—	—	—	—	—	—	—	—	—	—	23	25	—	—	—
London, Chelsea 2	average	—	—	—	—	—	—	—	17	15	19	15	14	—	16	—
	highest daily mean	—	—	—	—	—	—	—	32	39	34	29	32	—	—	—
London, City 1	average	10	7	5	4	5	6	9	14	14	17	13	13	6	13	10
	highest daily mean	20	12	9	8	9	15	18	45	37	69	35	29	—	—	—
London, City 9	average	13	9	8	7	9	11	18	21	19	17	13	12	10	17	14
	highest daily mean	23	19	20	14	15	19	33	44	35	54	25	25	—	—	—
London, Deptford 1	average	—	—	—	—	—	—	—	8	7	12	12	12	—	10	—
	highest daily mean	—	—	—	—	—	—	—	32	24	43	26	29	—	—	—
London, Greenwich 3	average	10	8	6	4	6	4	9	12	12	13	12	11	6	12	9
	highest daily mean	19	14	9	10	16	7	16	39	29	37	24	20	—	—	—
London, Hackney 4	average	—	—	—	—	—	—	—	9	9	10	7	8	—	9	—
	highest daily mean	—	—	—	—	—	—	—	30	32	51	20	18	—	—	—
London, Hampstead 3	average	—	—	—	—	—	—	—	—	—	15	10	10	—	12	—
	highest daily mean	—	—	—	—	—	—	—	—	—	60	21	22	—	—	—
London, Hampstead 4	average	—	—	—	—	—	—	—	10	9	11	9	8	—	9	—
	highest daily mean	—	—	—	—	—	—	—	32	30	42	19	23	—	—	—
London, Lambeth 2	average	11	10	6	5	7	7	14	22	20	21	17	13	8	18	13
	highest daily mean	27	20	11	8	14	15	26	37	44	56	28	30	—	—	—
London, Lambeth 6	average	9	7	5	4	5	6	8	16	13	16	12	11	6	13	10
	highest daily mean	21	13	10	7	13	12	20	44	35	55	20	29	—	—	—
London, Lambeth 7	average	—	—	—	—	—	—	—	—	—	12	14	12	—	14	—
	highest daily mean	—	—	—	—	—	—	—	—	—	42	53	27	—	—	—

TABLE 12 (contd.)

Site of instrument	Result reported	Sulphur dioxide concentration, parts per 100 million, by volume														
		Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Summer	Winter	Year
London, Lambeth 8 ..	average	—	—	—	—	—	—	—	12	12	15	12	11	—	12	—
	highest daily mean	—	—	—	—	—	—	—	33	27	40	18	34	—	12	—
London, Shoreditch 1 ..	average	—	—	—	—	—	—	—	—	—	—	—	22	26	—	12
	highest daily mean	—	—	—	—	—	—	—	—	—	—	—	22	26	—	12
London, Southwark 3 ..	average	10	8	4	—	3	4	5	12	14	16	11	12	6	12	9
	highest daily mean	17	23	10	—	7	7	16	34	44	52	23	24	—	12	—
London, Westminster 6	average	10	7	14	6	7	6	11	16	18	21	15	15	8	16	12
	highest daily mean	19	17	53	15	16	14	84	36	36	37	27	32	—	16	12
London, Westminster 7	average	17	11	5	4	7	7	11	18	19	20	21	18	9	18	14
	highest daily mean	61	19	8	6	12	14	22	39	40	53	37	47	—	18	14
London, Woolwich 1 ..	average	10	9	9	13	9	13	17	15	19	10	13	7	11	14	13
	highest daily mean	33	25	26	23	32	27	40	41	42	32	33	25	—	14	13
London, Woolwich 7 ..	average	—	—	—	—	—	—	—	—	—	7	8	8	—	8	—
	highest daily mean	—	—	—	—	—	—	—	—	—	20	31	23	—	8	—
62 Longbenton 1	average	3	3	2	2	2	3	3	5	4	6	3	3	3	4	4
	highest daily mean	9	6	9	5	6	6	4	20	13	18	8	12	—	4	4
Luton 1	average	1	T	T	T	1	1	3	5	2	1	2	3	1	3	2
	highest daily mean	2	1	1	3	6	5	7	11	5	7	5	9	—	3	—
Manchester 5	average	11	8	5	5	6	5	7	13	10	14	13	15	7	12	10
	highest daily mean	20	15	8	8	10	11	21	45	17	31	27	28	—	12	10
Mytholmroyd 1	average	4	3	2	2	1	2	3	6	5	8	10	11	2	7	5
	highest daily mean	8	7	3	3	4	4	7	18	12	49	22	28	—	7	5
Nafferton 1	average	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
	highest daily mean	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Newcastle upon Tyne 5*	average	9	4	5	6	6	8	7	6	5	10	7	6	6	7	7
	highest daily mean	21	14	12	9	12	15	11	9	6	23	13	7	—	7	7
Newcastle upon Tyne 10	average	3	3	—	—	6	5	5	8	7	8	6	5	4	7	6
	highest daily mean	8	7	—	—	47	15	14	17	16	22	17	14	—	7	6
Nottingham 1	average	4	4	2	2	2	3	5	—	—	8	5	3	3	5	4
	highest daily mean	11	11	4	3	5	7	24	—	—	19	9	11	—	5	4
Preston 4	average	10	5	5	5	7	5	7	13	9	13	12	13	6	11	9
	highest daily mean	17	9	9	8	14	13	15	49	27	26	21	33	—	11	9
Sale 4	average	6	5	3	3	4	3	5	11	6	11	12	13	4	10	7
	highest daily mean	13	11	7	6	9	7	17	43	18	31	21	27	—	10	7
Salford 2	average	14	11	8	8	8	9	12	19	14	20	23	26	10	19	15
	highest daily mean	25	22	13	12	12	15	23	59	24	50	43	53	—	19	15
Sheffield 2	average	12	10	7	8	7	7	9	14	11	16	16	17	9	14	12
	highest daily mean	24	19	11	13	11	12	20	39	21	39	23	39	—	14	12
Sheffield 8	average	13	12	10	7	8	11	12	17	15	20	17	18	10	17	14
	highest daily mean	24	21	19	12	19	20	21	30	22	48	26	31	—	17	14
Sheffield 14	average	16	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	highest daily mean	45	17	—	—	—	—	—	—	—	—	—	—	12	—	—
Sheffield 32	average	10	8	6	5	4	5	7	12	11	16	16	17	6	13	10
	highest daily mean	20	16	11	12	8	8	18	35	25	36	22	42	—	13	10
Stocksbridge 9	average	3	3	3	3	3	3	—	—	—	—	—	—	3	—	—
	highest daily mean	6	5	4	5	4	4	—	—	—	—	—	—	—	—	—
Teddington 2	average	6	3	2	1	2	2	4	11	9	29	39	54	3	24	14
	highest daily mean	19	9	6	2	4	4	17	40	31	83	156	114	—	24	14
Walsall 11	average	—	—	—	—	—	—	—	—	—	—	—	10	—	—	—
	highest daily mean	—	—	—	—	—	—	—	—	—	—	—	27	—	—	—
Warrington 8	average	10	7	7	5	6	9	11	15	11	12	12	14	7	13	10
	highest daily mean	18	12	9	9	10	15	19	41	20	24	21	23	—	13	10
Wednesfield 1	average	2	1	1	T	T	1	2	5	3	3	4	3	7	3	5
	highest daily mean	5	3	1	1	1	1	4	14	6	10	6	7	—	3	5
Willenhall 1	average	4	3	2	2	2	3	3	4	3	2	2	2	3	3	3
	highest daily mean	6	5	4	4	4	4	5	8	4	6	4	4	—	3	3
Wolverhampton 3	average	4	4	2	1	2	2	2	6	4	9	7	8	3	6	5
	highest daily mean	7	12	4	2	7	4	8	15	12	35	11	23	—	6	5
Woodford 1	average	—	—	—	—	—	5	5	10	10	11	7	5	—	8	—
	highest daily mean	—	—	—	—	—	3	5	14	38	31	19	10	—	8	—
Yeadon 1	average	3	3	2	3	3	3	3	6	5	4	4	4	3	4	4
	highest daily mean	8	5	6	9	6	7	6	15	25	6	5	11	—	4	4

* Less than 20 days.

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TABLE 13.—Sulphur Dioxide (Volumetric Method)—Weekday and Week-end Averages, 1954-5

T indicates trace, i.e., less than 0.5 parts per 100 million, by volume. One part of sulphur dioxide per 100 million by volume equals 2.86 mg/100 cu. m.

Site of instrument	Sulphur dioxide concentration, parts per 100 million by volume					
	Summer		Winter		Year	
	Week-day	Week-end	Week-day	Week-end	Week-day	Week-end
Bilston 3	6†	5†	7†	5†	7	5
Bolton 9	6	5	13	8	10	7
Bradford 6	7	7	15	10	11	9
Brentford 1 .. .. .	..	..	8†	8†	..	..
Brentford 2	3	3	68	58	5	4
Brierley Hill 9	2	2	6	5	4	4
Bristol 8 .. .. .	..	..	38	18	..	..
Burnley 4	5	3	8	6	7	5
Cannock 1	1*	1*	1	T	1	1
Cardiff 2 .. .. .	..	..	5	T	4	3
Cardinalton 4 .. .. .	..	..	4	2	2	1
Chiswick 1	T†	T†	4	2	7	6
Doncaster 16	5†	5†	98	78	9	6
East Kilbride 1 .. .. .	..	..	12	8	9	1
Erith 1	1	1	1	1	3	2
Glasgow 1	2	1	3	2	10	10
Hornchurch 1	6	4	13	6	6	5
Hull see Kingston upon Hull	..	..	..	..	..	..
Kingston upon Hull 2	4	3	6	5	5	4
Lancaster 4	3	2	7	6	5	4
Leeds 4	14	10	11	6	13	9
Leeds 8	3	3	13	10	7	7
Leicester 5	3	3	6	4	5	4
Leyton 1	5	4	12	9†	9	7
London, Camberwell 3 .. .. .	..	..	11†	9†	..	..
London, Chelsea 2 .. .. .	..	..	17†	14†	..	..
London, City 1	6	6	15	10	11	8
London, City 9	10	8	18	15	14	12
London, Deptford 1 .. .. .	..	..	11†	8†	..	..
London, Greenwich 3	7	6	13	9	10	8
London, Hackney 4 .. .. .	..	..	9†	6†	..	..
London, Hampstead 3 .. .. .	..	..	14†	8†	..	..
London, Hampstead 4 .. .. .	..	..	11†	8†	..	..
London, Lambeth 2	8	7	14	10	14	11
London, Lambeth 6	6	5	148	128	..	..
London, Lambeth 7 .. .. .	..	..	10	10	..	..
London, Lambeth 8 .. .. .	..	..	13†	10†	..	..
London, Shoreditch 1 .. .. .	..	..	13†	10†	..	..
London, Southwark 3 .. .. .	..	..	13	9	..	..
London, Westminster 3	6†	5†	68	4	3	3
London, Westminster 6	7*	5*	17	13	7	9
London, Westminster 7	8	10	17	13	14	14
London, Woolwich 1	11	9	16	16	13	13
London, Woolwich 7 .. .. .	..	..	88	68	..	..
Longbeaton 1	2	2	4	2	3	3
Luton 1	1	T	3	2	1	1
Manchester 5	7	6	13	10	10	8
Mytholmroyd 1	2	1	9	4	6	3
Newcastle upon Tyne 10	58	38	7	5	4	4
Nottingham 1	3	2	68	48	5	3
Preston 4	7	5	13	8	10	7
Sale 4	4	4	10	8	7	6
Salford 2	10	9	20	15	15	12
Sheffield 2	8	8	14	14	11	11
Sheffield 8	12	8	18	14	11	11

TABLE 13 (contd.)

Site of instrument	Sulphur dioxide concentration, parts per 100 million by volume					
	Summer		Winter		Year	
	Week-day	Week-end	Week-day	Week-end	Week-day	Week-end
Sheffield 14	14†	6†	14	11	10	8
Sheffield 32	6	5	26	21	10	12
Stocksbridge 9	3	2	10*	8*	14	8
Teddington 2	2	3	14	9	11	2
Walsall 11 .. .. .	..	..	3	3	3	2
Warrington 8	8	6	3	2	3	2
Wednesfield 1	1	1	3	5	4	4
Willenhall 1	3*	3*	6	6	4	4
Wolverhampton 3 .. .. .	..	..	..	..	..	..
Woodford 1 .. .. .	..	..	..	..	..	..
Yeading 1	3	2	5	3	4	3

* 1 month only.
† 2 months only.
‡ 3 months only.
§ 4 months only.
|| 5 months only.