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for information

AIR QUALITY OF HONG KONG

INTRODUCTION

This paper introduces the report "1994 Air Quality in Hong Kong", provides a preview of the validated air quality data in 1995 and a CD-ROM entitled "Air Quality in Hong Kong 1986-1995".

AIR QUALITY OF HONG KONG IN 1994

2. The publication of the report "1994 Air Quality in Hong Kong" is EPD's continued effort to make available to the public air quality data gathered through the air quality monitoring network. In 1994, the high levels of particulates continued to be the focus of concern. Seven out of the eight monitoring stations recorded annual averages of total suspended particulates higher than the air quality objective value of 80 microgrammes per cubic metre ($\mu\text{g}/\text{m}^3$). The level of the respirable fraction, which is of more concern in terms of health effects, was also very high. The air quality objective value of 55 $\mu\text{g}/\text{m}^3$ was exceeded at five stations. The annual averages ranged from 50 $\mu\text{g}/\text{m}^3$ to 69 $\mu\text{g}/\text{m}^3$.

3. Apart from particulates, the level of nitrogen dioxide at Mong Kok also exceeded the air quality objectives. Like respirable suspended particulates, motor vehicles, especially the diesel vehicles, are the major source of nitrogen dioxide at busy urban areas.

AIR QUALITY OF HONG KONG IN 1995

4. Although the validation of the air quality monitoring data of 1995 have already been completed, it would still need to take a little while for the preparation and printing of the "1995 Air Quality in Hong Kong". To facilitate Members a quick reference of the updated air quality data, a summary of the air quality measurement results of 1995 is presented in the Appendix 1. Similar to 1994, suspended particulates and nitrogen dioxide were maintained at unacceptable levels. The annual levels of total suspended particulates, respirable suspended particulates and nitrogen dioxide were ranged from 73 $\mu\text{g}/\text{m}^3$ to 135 $\mu\text{g}/\text{m}^3$, 50 $\mu\text{g}/\text{m}^3$ to 75 $\mu\text{g}/\text{m}^3$ and 42 $\mu\text{g}/\text{m}^3$ to 84 $\mu\text{g}/\text{m}^3$, respectively. In 1995, seven stations recorded at least one exceedance of the relevant air quality objectives.

CD-ROM ON AIR QUALITY

5. To further enhance the distribution of information on air pollution and its control, the EPD is preparing a CD-ROM. The CD-ROM is to provide a simple and yet comprehensive source of information on Hong Kong's air quality in the past 10 years as well as much related information which includes the effects of air pollution and the relevant legislation in Hong Kong. It will not only help the public to get access to comprehensive information readily but also provide a useful database for scientific and research applications. If the response is good, this CD-ROM may be produced and updated on a periodical basis. The CD-ROM can easily be read with a personal computer with a Windows operation system.

Environmental Protection Department
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APPENDIX 1 AIR QUALITY OF HONG KONG 1995
TABLE A MONTHLY ANNUAL AVERAGES
OF GASEOUS POLLUTANTS

Pollutant: Sulphur Dioxide Unit : Microgramme per Cubic Metre

Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kwun Tong	13	15	9	6	5	6	11	7	4	5	18	18	10
Shatin	16	13	12	13	13	11	18	12	12	8	15	16	13
Yuen Long								16*	11	7	9	25	13*
Sham Shui Po	28	20	29	25	19	14	15	19	19	11	18	19	20
Central / Western	22	21	22	24	19	17	25	20	20	17	22	22	21
Tsuen Wan	22	29	35	30	29	19	27	22	18	11	13	19	23
Kwai Chung	18	16	20	31	24	23	29	21	15	11	15	17	20
Mong Kok	53	47	43	36	27	19	33	29	28	22	26	29	33
Average	25	23	24	23	20	16	23	18	16	11	17	21	20**

Pollutant: Nitrogen Dioxide Unit : Microgramme per Cubic Metre

Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kwun Tong	65	65	66	54	53	37	37	40	54	55	81	82	57
Shatin	53	49	49	40	43	30	36	31	40	40	61	59	44
Tai Po	51	53	52	41	42	29	36	32	43	42	60	63	45
Yuen Long								29	38	33	39	72	42*
Sham Shui Po	76	75	85	69	66	39	53	56	60	59	79	81	67
Central / Western	65	59	58	52	50	25	34	38	54	55	77	78	54
Tsuen Wan	67	66	73	62	59	39	45	43	59	60	83	76	61
Kwai Chung	55	51	55	48	47	36	39	34	40	41	52	53	46
Mong Kok	93	96	105	91*	78	52*	61	59	82	78	105	101	84*
Average	66	64	68	56	55	35	42	40	52	51	71	73	57**

Pollutant: Nitric Oxide Unit : Microgramme per Cubic Metre

Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kwun Tong	91	89	90	71	61	69	92	88	64	54	65	81	76
Shatin	41	39	36	27	21	21	46	35	25	16	44	49	33
Tai Po	39	31	25	23	19	20	40	26	23	15	40	57	30
Yuen Long								39	24	19	31	41	31*
Sham Shui Po	65	51	80	69	42	41	66	59	40	31	38	55	54
Central / Western	37	34	34	39	22	16	39	36	22	15	19	27	28
Tsuen Wan	44	54	92	72	46	43	68	63	38	37	34	50	54
Kwai Chung	21	32	47	40	21	27	37	26	14	8	11	14	25
Mong Kok	163	152	162	144*	108	96*	131	128	110	101	112	134	129*
Average	65	60	72	57	43	40	64	55	40	33	44	55	53**

Pollutant: Nitrogen Oxides Unit : Microgramme per Cubic Metre

Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kwun Tong	204	201	204	164	147	143	178	175	152	139	182	206	174
Shatin	116	109	105	83	76	62	107	85	79	65	129	134	96
Tai Po	111	101	91	77	72	60	97	73	78	66	123	150	91
Yuen Long								90	76	63	87	135	91*
Sham Shui Po	176	154	208	176	130	103	155	146	122	108	138	166	149
Central / Western	123	111	110	112	85	50	95	94	88	79	107	119	97
Tsuen Wan	136	150	214	172	131	106	150	140	118	117	135	153	144
Kwai Chung	88	101	127	109	81	77	97	75	63	54	70	74	84
Mong Kok	344	329	353	312*	244	200*	262	255	251	233	276	306	282
Average	166	157	178	143	121	96	141	124	114	102	138	159	138**

Pollutant: Carbon Monoxide Unit : Microgramme per Cubic Metre

Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Mong Kok	1649	1373	1247	1277	1148	940	1024	1003	1019	1149	1240	1514	1220
Average	1649	1373	1247	1277	1148	940	1024	1003	1019	1149	1240	1514	1220

Pollutant: Ozone Unit : Microgramme per Cubic Metre

Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Yuen Long								10	19	14	12	29	17*
Central / Western	20	28	24	20	21	16	12	10	30	35	36	34	24
Kwai Chung	30	33	22	24	26	15	8	15	34	39	52	49	29
Average	25	30	23	22	23	15	10	12	27	29	34	37	26**

- Note: 1. Value with an "*" is valid but below minimum data requirement for no. of data within the period.
2. Shaded value is valid but below minimum data requirement for no. of data within a quarter.
3. Value with an "**" is the annual average for Hong Kong which excluded YL station

TABLE B MONTHLY AND ANNUAL AVERAGES OF PARTICULATE CONCENTRATIONS

Pollutant : Total Suspended Particulates

Unit : Microgramme per Cubic Metr

Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kwun Tong	108	101*	114	121	106	76	73	68	87	85	185	149	107
Shatin	90		57	73	64	36	55	33	66	56	142	113	73*
Tai Po	115	79	103	86	65	40	57	38	68	63	154	133	84
Yuen Long								54	95	93	214	200	131*
Sham Shui Po	105	66*	122	113	96	69	72	63	85	72	152	133	99
Central/Western	97	92	122	107	83	42	53	51	83	80	173	140	93
Tsuen Wan	123	88	112	103	87	57	75	56	71	80	157	143	97
Kwai Chung	92	71	99	98	77	49	58	40	68	62	140	113	81
Mong Kok	150	138	174	174	122	105	112	82	119	101	184	167	135
Average	108	92	117	109	87	59	70	54	83	76	166	143	96**

Pollutant : Respirable Suspended Particulates

Unit : Microgramme per Cubic Metr

Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Kwun Tong	62	46*	71	85	61	33	39	35	51	52	102	87	62
Shatin				57	46	21	31	22	44	39	97	81	50*
Tai Po	68	53	69	60	45	22	35	23	48	42	103	89	56
Yuen Long								31	55	50	125	116	75*
Sham Shui Po				53	63	35	43	39	59	52	104	91	60*
Central/Western	67*	66	82	72	57	22	30	27	50	46	108	93	59
Tsuen Wan	77	59	78	71	55	31	40	32	49	48	104	95	62
Kwai Chung	61	46*	69	66	47	24	29	22	43	40	96	78	52
Mong Kok	107	73*	98	98	65	46	57	46	65	51	104	95	75
Average	71	58	74	70	55	29	38	31	52	46	105	92	60**

- Note : 1. Value with an "*" is valid but below minimum data requirement for no. of data within the period.
 2. Shaded value is valid but below minimum data requirement for no. of data within a quarter.
 3. Value with an "**" is the annual average for Hong Kong which excluded YL station.