

香港電燈有限公司
The Hongkong Electric Co., Ltd.



**Lamma Power Station
Units L2, L4 & L5 Flue Gas Desulphurization
Plants Retrofit**

Operational Phase

Quarterly Environmental Monitoring & Audit Report

January – March 2019

香港電燈有限公司
The Hongkong Electric Co., Ltd.



ENVIRONMENTAL IMPACT ASSESSMENT (EIA) ORDINANCE, CAP. 499

ENVIRONMENTAL PERMITS NO. EP-248/2006 & EP-287/2007

**LAMMA POWER STATION
UNITS L2, L4 & L5 FLUE GAS DESULPHURIZATION PLANTS RETROFIT**

**ENVIRONMENTAL MONITORING & AUDIT PROGRAMME
AT OPERATIONAL PHASE**


Report Title	Quarterly EM&A Report (January to March 2019)
Date	25 June 2019
Certified by	 (Mr. IP Tat-Yap, Environmental Team Leader)

TABLE OF CONTENT

EXECUTIVE SUMMARY

1.	INTRODUCTION	1
1.1	Background	1
1.2	Project Organisation	1
1.3	Plant Availability during the Reporting Period	2
1.4	Malfunction/Outage Records of Pollution Control Equipment	2
1.5	Summary of EM&A Requirements	3
2.	AIR QUALITY	11
2.1	Monitoring Requirements	11
2.2	Summary of Results and Observations	11
3.	WATER QUALITY	12
3.1	Monitoring Requirements	12
3.2	Summary of Results and Observations	12
4.	ENVIRONMENTAL AUDIT	13
4.1	Review of Environmental Monitoring Procedures	13
4.2	Assessment of Environmental Monitoring Results	13
4.3	Status of Environmental Licensing and Permitting	14
4.4	Implementation Status of Environmental Mitigation Measures	15
4.5	Implementation Status of Event/Action Plan	15
4.6	Implementation Status of Environmental Complaint Handling Procedures	15
5.	FUTURE KEY ISSUES	17
5.1	Outage Plan for the coming 3 months	17
5.2	Key issues for the coming 3 months	17
6.	CONCLUSION	18

LIST OF TABLES

Table 2.1	Air Quality Monitoring Parameters and Frequency
Table 3.1	Water Quality Monitoring Parameters and Frequencies
Table 4.1	Summary of Action/Limit Level Exceedances on Monitoring Parameters
Table 4.2	Amount of Gypsum and Sludge Collected for Reuse by Contractor
Table 4.3	Summary of Environmental Licensing and Permit Status
Table 4.4	Environmental Complaints Received
Table 4.5	Outstanding Environmental Complaints Carried Over

LIST OF FIGURES

Figure 1.1a	Location of New Facilities for L4 & L5 FGD Plant
Figure 1.1b	Location of New Facilities for L2 FGD Plant
Figure 1.2a	General Arrangement of L4 & L5 FGD Plant
Figure 1.2b	General Arrangement of L2 FGD Plant
Figure 1.3	Schematic Diagram of L2, L4 & L5 FGD Plant
Figure 1.4	Simplified Schematic Diagram of FGD Wastewater Treatment Plant
Figure 1.5	Organization Chart at Operational Phase

APPENDIX

Appendix A	Event/Action Plans in Response to Exceedance of AL Levels
Appendix B	Air Quality Monitoring Results
Appendix C	Summary Results on Water Quality Monitoring
Appendix D	Summary of EMIS

EXECUTIVE SUMMARY

This is the quarterly Environmental Monitoring and Audit (EM&A) report for the Projects “Lamma Power Station Units L4 & L5 Flue Gas Desulphurization Plant Retrofit” and “Lamma Power Station Unit L2 Flue Gas Desulphurization Plant Retrofit” prepared by the Environmental Team (ET). This report presents the results of impact monitoring on air and water quality and environmental audit for the operation of the said projects in the period from January to March 2019.

Environmental monitoring for air quality and water quality were carried out for the purpose of this EM&A program as well as for fulfilling the requirements stipulated in the relevant licences. The results were checked against the established Action/Limit (AL) levels. The implementation status of the environmental mitigation measures, Event/Action Plan and environmental complaint handling procedures were also checked.

Plant Availability

Units L2, L4 and L5 were out of service during the following period:

Unit	Period	Remark
L4	01/01/2019 00:00 to 14/02/2019 21:06	Unit overhaul
L4	16/03/2019 19:06 to 18/03/2019 06:10	Busbar inspection
L5	15/02/2019 00:07 to 15/02/2019 11:25	Defect rectification

Malfunction/Outage Records of Pollution Control Equipment

Major outages of the Pollution Control Equipment during the reporting period are listed below:

Equipment	Period	Cause	Actions Taken
L2 FGD	09:16 on 16/02/2019 to 10:57 on 17/02/2019	Defect rectification	EPD was informed on 22/02/2019
L4 FGD	07:00 on 20/12/2018 to 13:07 on 15/02/2019	Defect rectification	EPD was informed on 19/02/2019
L4 FGD	03:06 on 24/03/2019 to 17:01 on 24/03/2019	To facilitate 275 kV switch station Busbar 1 outage	EPD was informed on 27/03/2019
L4 FGD	04:02 on 31/03/2019 to 17:26 on 31/03/2019	To facilitate 275 kV switch station Busbar 2 outage	EPD was informed on 03/04/2019
L5 FGD	03:06 on 24/03/2019 to 17:01 on 24/03/2019	To facilitate 275 kV switch station Busbar 1 outage	EPD was informed on 27/03/2019

Equipment	Period	Cause	Actions Taken
L5 FGD	04:02 on 31/03/2019 to 17:26 on 31/03/2019	To facilitate 275 kV switch station Busbar 2 outage	EPD was informed on 03/04/2019

For other minor outages, please refer to section 1.4 of the report.

Environmental Monitoring Works

Environmental monitoring works were performed during the operation of Units L2, L4 and L5 FGD Plants in the reporting period.

Air Quality

No exceedance of Action and Limit levels for air quality were recorded in the reporting period.

Water Quality

No exceedance of Action and Limit levels for water quality were recorded in the reporting period.

Environmental Licensing and Permitting

Description	Permit / Licence No.	Valid Period		Issued To	Date of Issuance
		From	To		
Environmental Permit for L4/5 FGD plants retrofit project	EP-248/2006	25/04/2006	-	HK Electric	25/04/2006
Environmental Permit for Unit L2 FGD plant retrofit project	EP-287/2007	02/10/2007	-	HK Electric	02/10/2007
Specified Process Licence issued under APCO	L-7-002(12)	01/01/2019	31/12/2020	HK Electric	17/12/2018
WPCO discharge licence for Ash Lagoon	WT00027218-2017	24/02/2017	31/12/2021	HK Electric	24/02/2017

Implementation Status of Environmental Mitigation Measures

Environmental mitigation measures were implemented in the reporting period.

Environmental Complaints

There was no environmental complaint against the operation of Lamma Power Station during the reporting period.

Future key issues

Key issues to be considered in the coming months include:

Air Impact

- To continuously carry out the air quality monitoring for Units L2, L4 and L5.

Water Impact

- To continuously carry out the water quality monitoring for FGD WWT plant.

Concluding Remarks

The environmental performance of the projects was generally satisfactory.

1. INTRODUCTION

The Environmental Team (hereinafter called the “ET”) was formed within The Hongkong Electric Co. Ltd (HK Electric) to undertake Environmental Monitoring and Audit for the “Operation of Lamma Power Station Units L4 & L5 Flue Gas Desulphurization Plant Retrofit Project” under the requirements of Clause 2.18 of Environmental Permit (EP) No. EP-248/2006 and “Operation of Lamma Power Station Unit L2 Flue Gas Desulphurization Plant Retrofit Project” under the requirements of Clause 2.10 of Environmental Permit (EP) No. EP-287/2007.

This report summarizes the environmental monitoring and audit work for the said Projects for the period from January to March 2019.

1.1 Background

The Projects involves retrofitting the three existing coal-fired generating Units L2, L4 and L5 of Lamma Power Station with Flue Gas Desulphurisation (FGD) plants for reducing sulphur dioxide emissions in support of Government policy to improve the air quality of the Pearl River Delta.

The Projects include the installation and operation of FGD plants with flue gas desulphurization efficiency of 90% for the three coal-fired Units L2, L4 & L5 to reduce the overall SO₂ emissions from Lamma Power Station. The process adopted for the FGD plants is “Wet Limestone-Gypsum”, a technology which has already been used in, and proved effective and reliable for the existing coal-fired units L6, L7 & L8. The flue gas from the boiler is directed to the FGD absorber inside which removal of SO₂ is take place by reaction with limestone slurry. After passing through the absorber, the treated flue gas is heated up by a gas-gas heater to over 80°C at boiler rated capacity and directed back to the existing chimney for discharge to the atmosphere. [Figure 1.1a](#), [Figure 1.1b](#), [Figure 1.2a](#), [Figure 1.2b](#) and [Figure 1.3](#) show the location and schematic of the FGD plants.

Wastewater filtrated from the reacted limestone slurry, i.e. gypsum slurry, is produced and it is directed to the existing FGD wastewater treatment plant (WWTP). The FGD WWTP is designed to treat the effluent from FGD plants by alkalization, precipitation and neutralization processes. The schematic diagram of the FGD WWTP is illustrated in [Figure 1.4](#).

The additional equipment for the FGD Plants retrofit projects for Units L2, L4 and L5 includes:

- Three sets of FGD absorbers and associated ductworks
- Three sets of booster fans
- Three sets of gas-gas heaters
- Two FGD Switchgear and Equipment Buildings
- Gypsum dewatering system comprising two sets of hydrocyclones and belt filters

1.2 Project Organisation

The management structure to oversee the Projects includes the following:

- Environmental Protection Department (The Authority);

- General Manager (Corporate Development) (The official contact person between HK Electric and EPD);
- Environmental Team Leader (ET Leader);
- Environmental Team (ET).

The organization chart for the Operation EM&A programme is shown in [Figure 1.5](#).

1.3 Plant Availability during the Reporting Period

Units L2, L4 and L5 were out of service during the following period:

Unit	Period	Remark
L4	01/01/2019 00:00 to 14/02/2019 21:06	Unit overhaul
L4	16/03/2019 19:06 to 18/03/2019 06:10	Busbar inspection
L5	15/02/2019 00:07 to 15/02/2019 11:25	Defect rectification

1.4 Malfunction/Outage Records of Pollution Control Equipment

Equipment	Period	Cause	Actions Taken
L2 FGD	09:16 on 16/02/2019 to 10:57 on 17/02/2019	Defect rectification	EPD was informed on 22/02/2019
L4 FGD	07:00 on 20/12/2018 to 13:07 on 15/02/2019	Defect rectification	EPD was informed on 19/02/2019
L4 FGD	02:41 on 03/03/2019 to 02:45 on 03/03/2019	Routine Dampers Exercise	EPD was informed on 04/03/2019
L4 FGD	02:05 on 09/03/2019 to 02:10 on 09/03/2019	Routine Dampers Exercise	EPD was informed on 14/03/2019
L4 FGD	03:06 on 24/03/2019 to 17:01 on 24/03/2019	To facilitate 275 kV switch station Busbar 1 outage	EPD was informed on 27/03/2019
L4 FGD	04:02 on 31/03/2019 to 17:26 on 31/03/2019	To facilitate 275 kV switch station Busbar 2 outage	EPD was informed on 03/04/2019
L5 FGD	02:35 on 03/03/2019 to 02:38 on 03/03/2019	Routine Dampers Exercise	EPD was informed on 04/03/2019
L5 FGD	02:13 on 09/03/2019 to 02:17 on 09/03/2019	Routine Dampers Exercise	EPD was informed on 14/03/2019

L5 FGD	02:27 on 16/03/2019 to 02:29 on 16/03/2019	Routine Dampers Exercise	EPD was informed on 22/03/2019
L5 FGD	03:06 on 24/03/2019 to 17:01 on 24/03/2019	To facilitate 275 kV switch station Busbar 1 outage	EPD was informed on 27/03/2019
L5 FGD	04:02 on 31/03/2019 to 17:26 on 31/03/2019	To facilitate 275 kV switch station Busbar 2 outage	EPD was informed on 03/04/2019

1.5 Summary of EM&A Requirements

Environmental Monitoring and Audit (EM&A) requirements have been discussed in the Environmental Impact Assessment (EIA) Report/ Project Profile for the Projects. The assessment results indicate that environmental monitoring works required for the EM&A programmes of these Projects are already in place or would be implemented under Lamma Power Station Extension Environmental Permit or environmental licenses for the operation of the existing Lamma Power Station. Such monitoring works are considered adequate for the Projects and no additional EM&A activities are required. Hence, environmental monitoring for air quality and water quality are carried out for the purpose of this EM&A program as well as for fulfilling the requirements stipulated in the relevant licences.

The EM&A monitoring work for air and water quality are described in [Section 2](#) and [Section 3](#) respectively.

The following environmental audits are summarized in [Section 4](#) of the report:

- Environmental monitoring results;
- The status of environmental licensing and permits for the Projects;
- The implementation status of environmental protection and pollution control / mitigation measures.

The future key issues for the Projects will be reported in [Section 5](#) of this report.

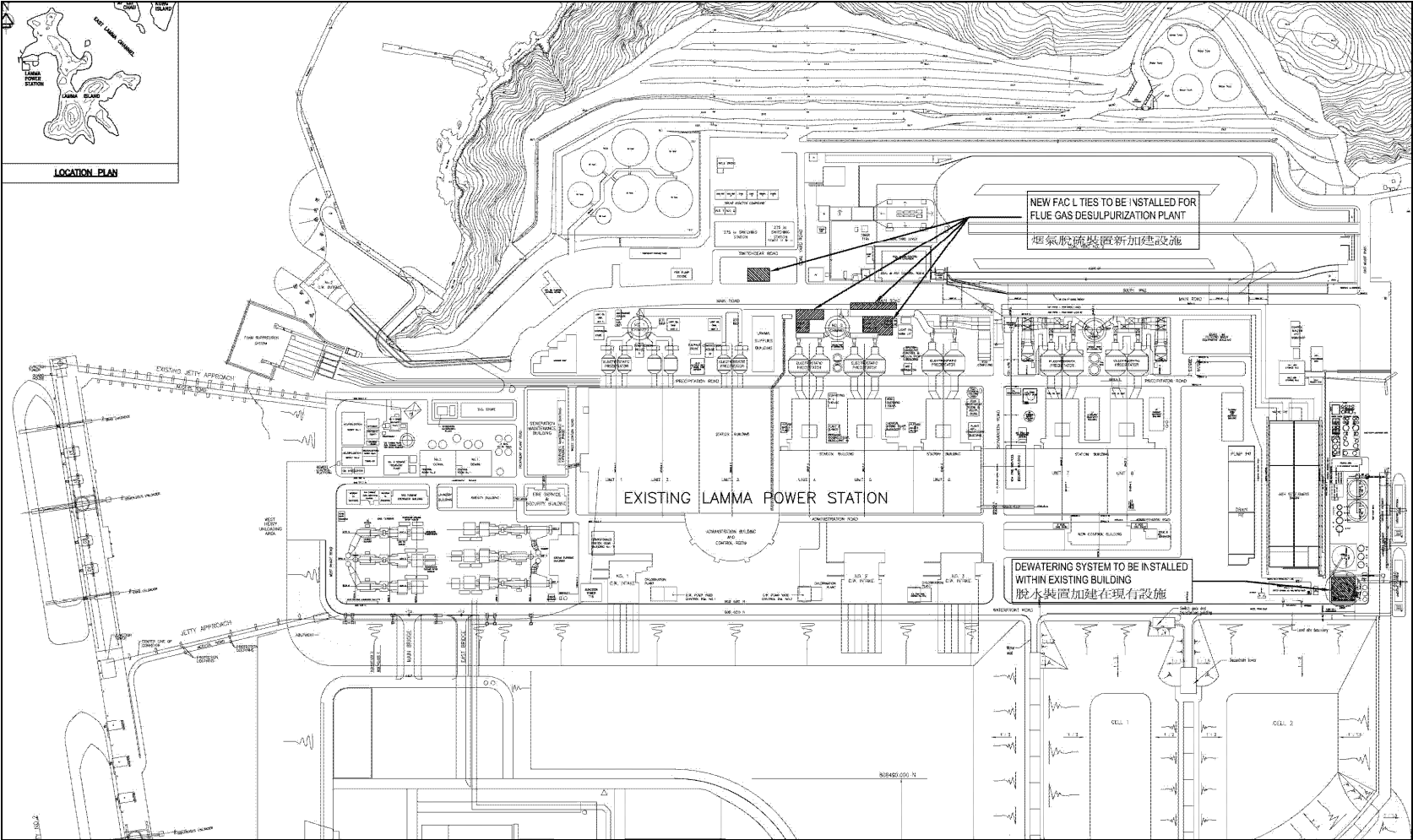


Figure 1.1a Location of New Facilities for L4 & L5 FGD Plants

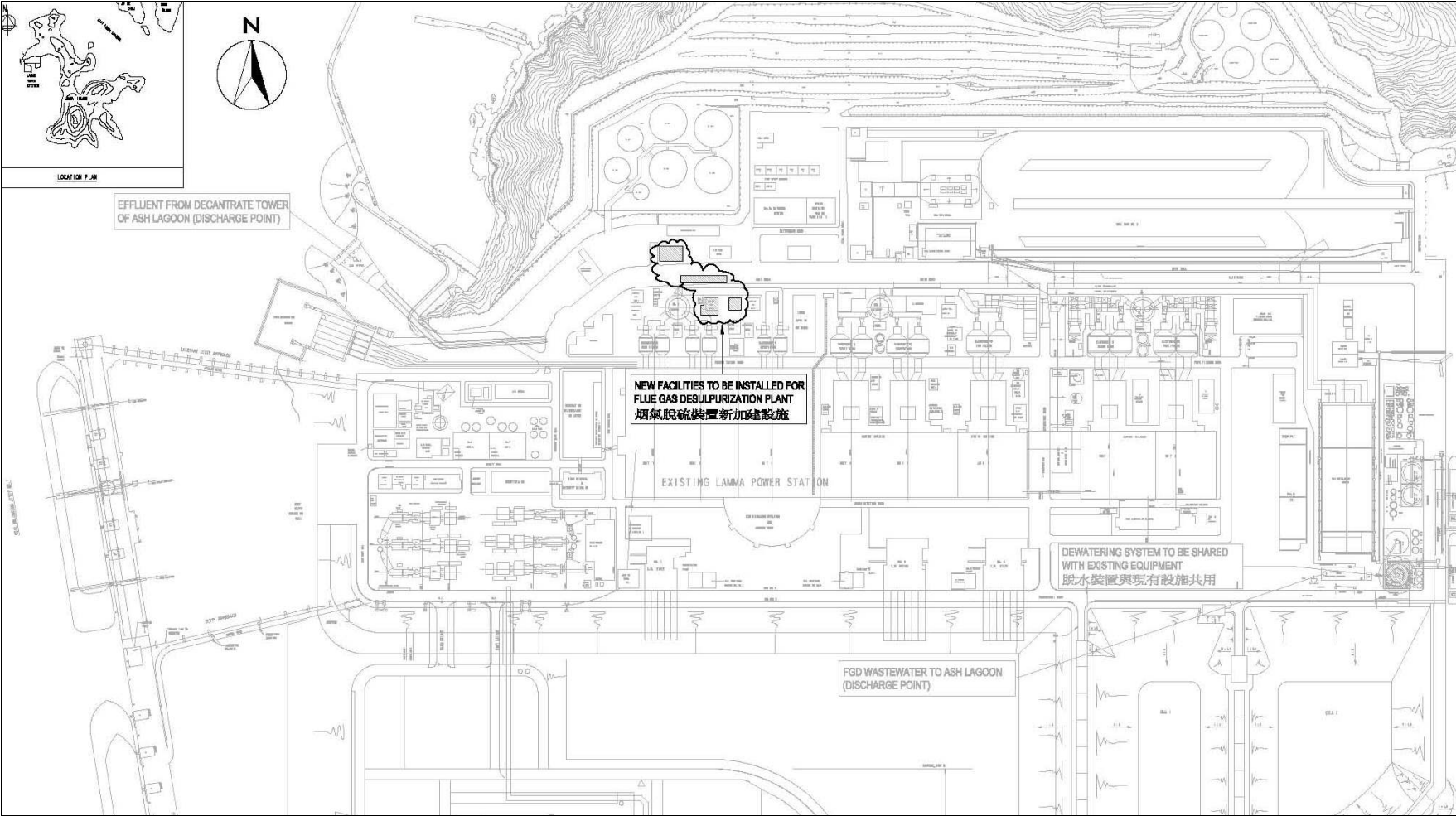


Figure 1.1b Location of New Facilities for L2 FGD Plant

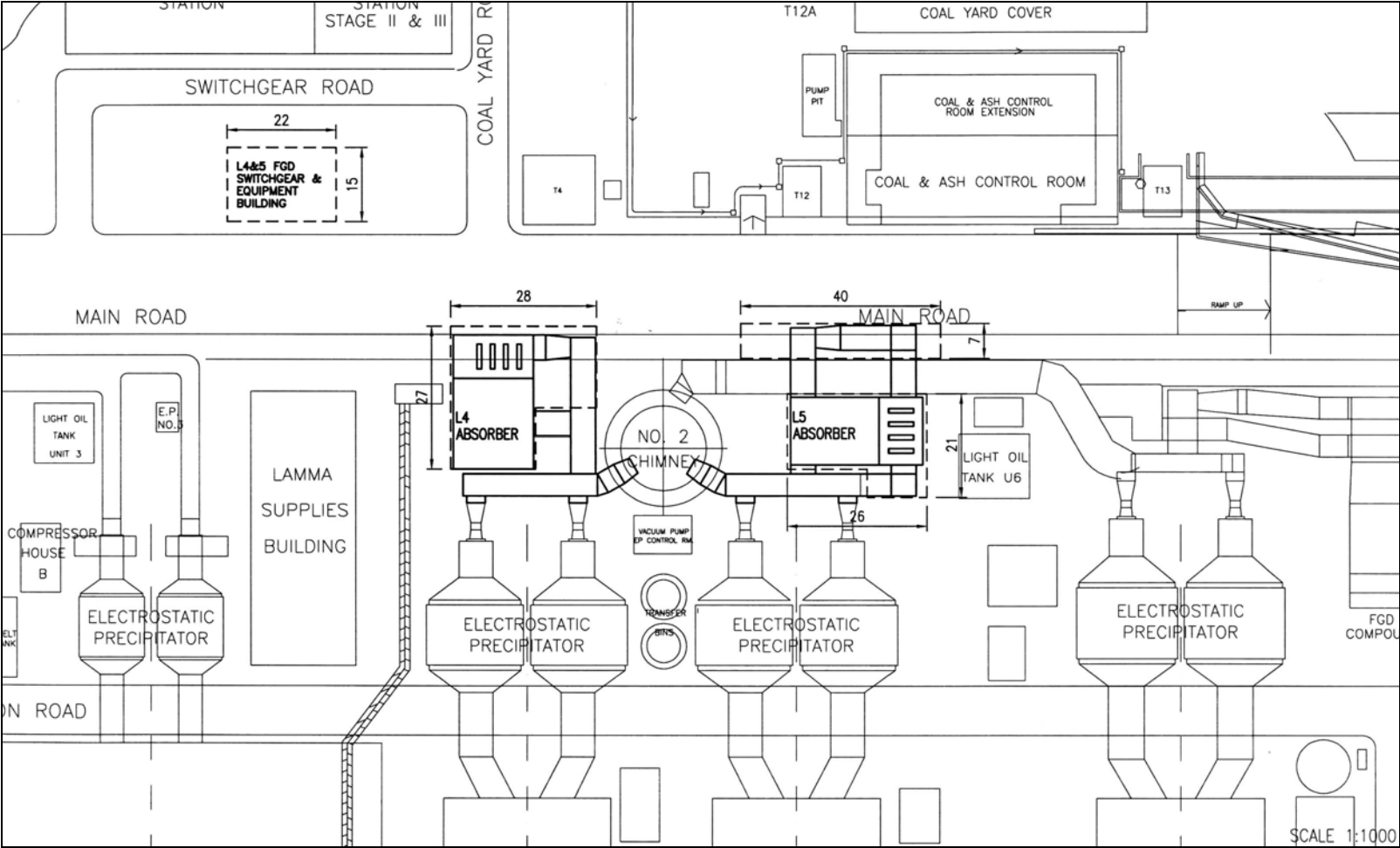


Figure 1.2a General Arrangement of L4 & L5 FGD Plants

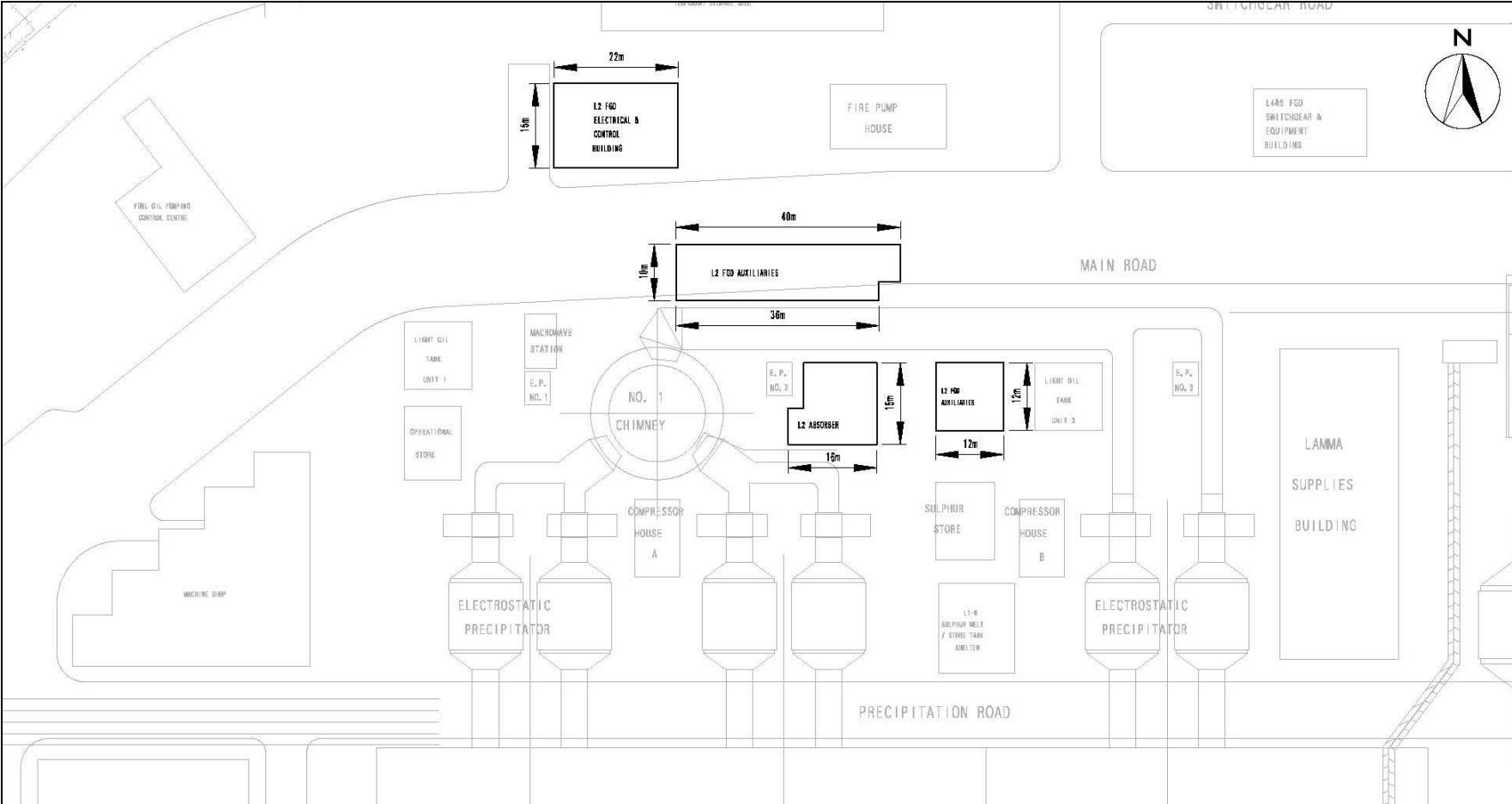


Figure 1.2b General Arrangement of L2 FGD Plant

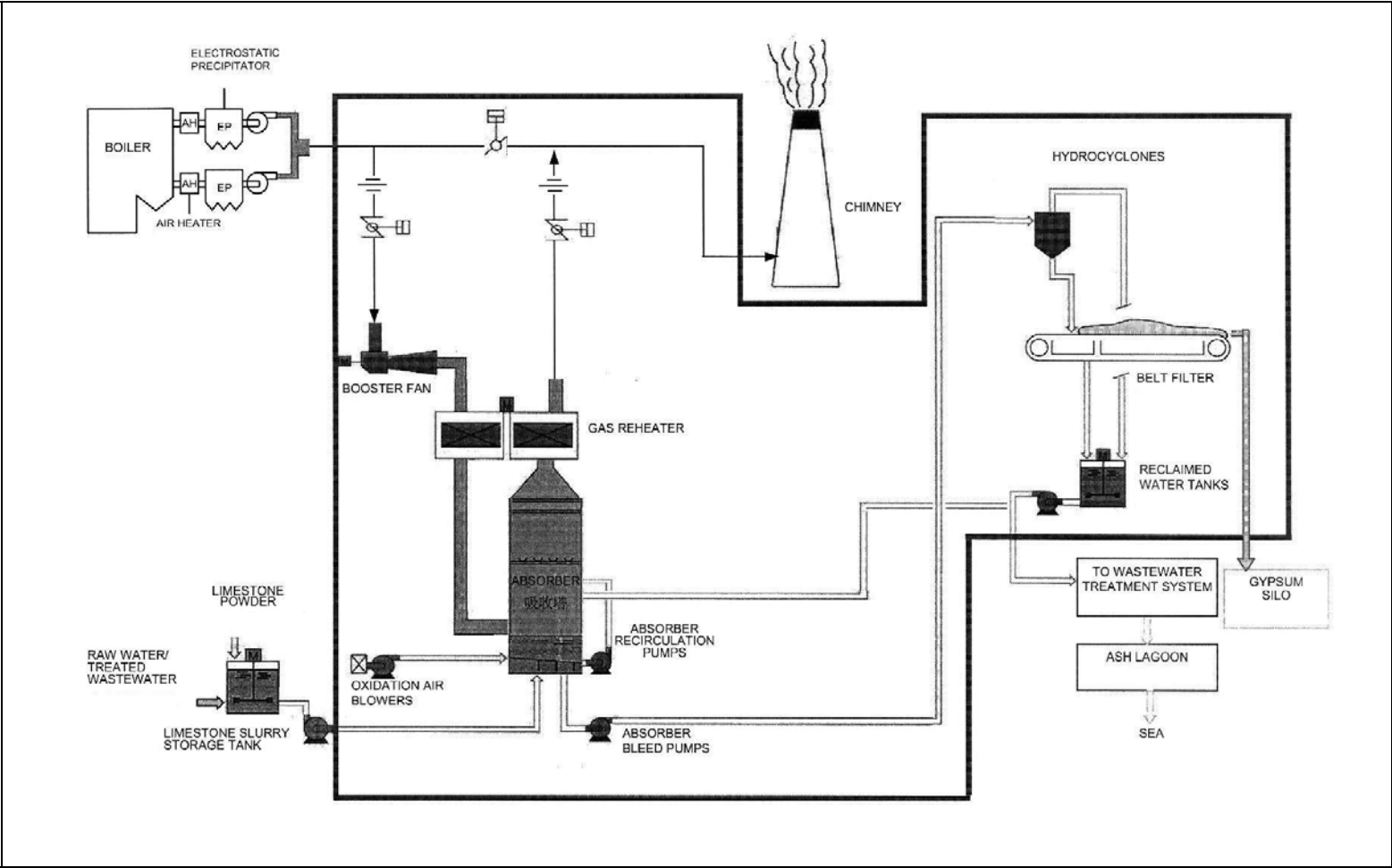


Figure 1.3 Schematic Diagram of the L2, L4 & L5 FGD Plant

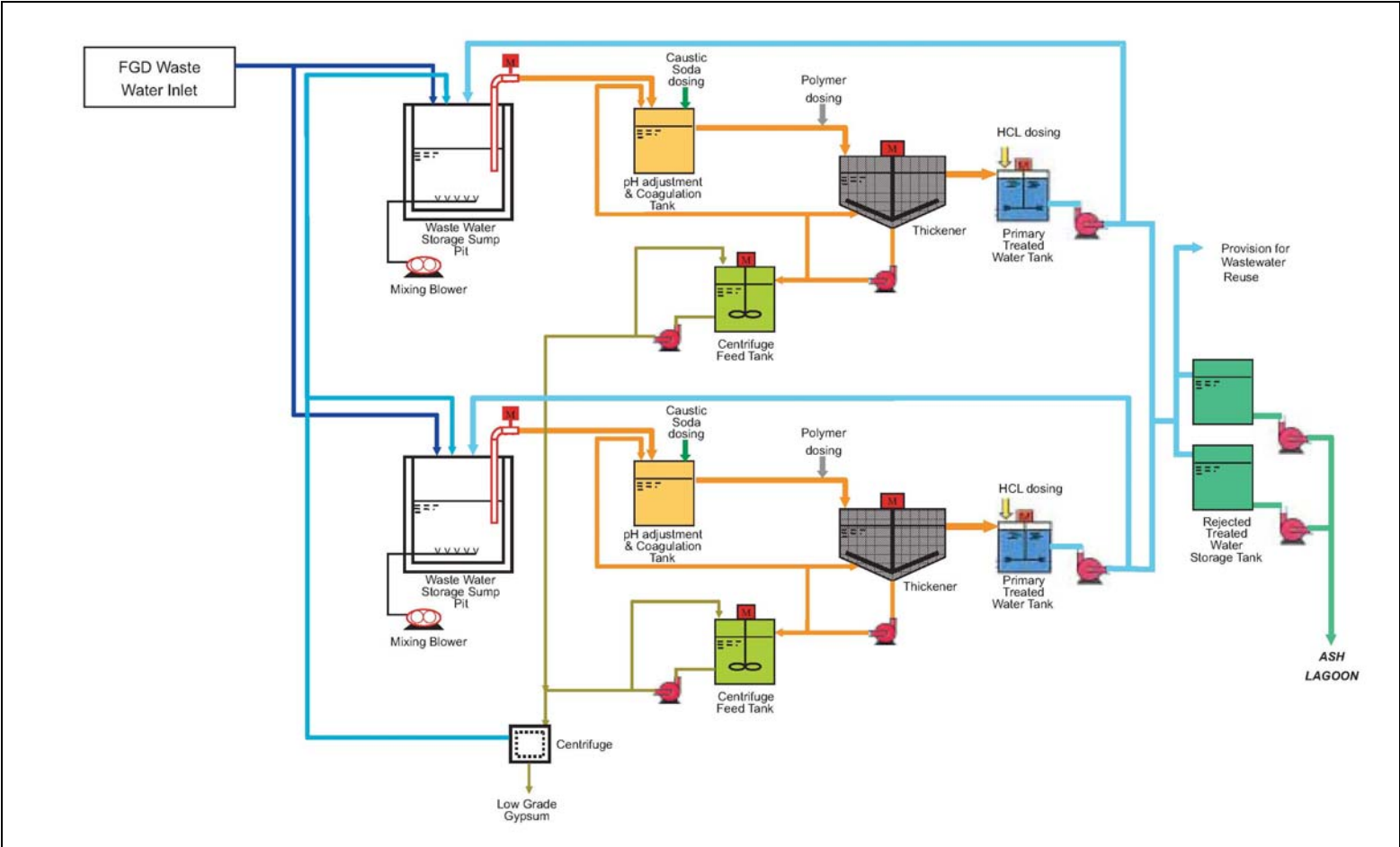


Figure 1.4 Simplified Schematic Diagram of FGD Wastewater Treatment Plant

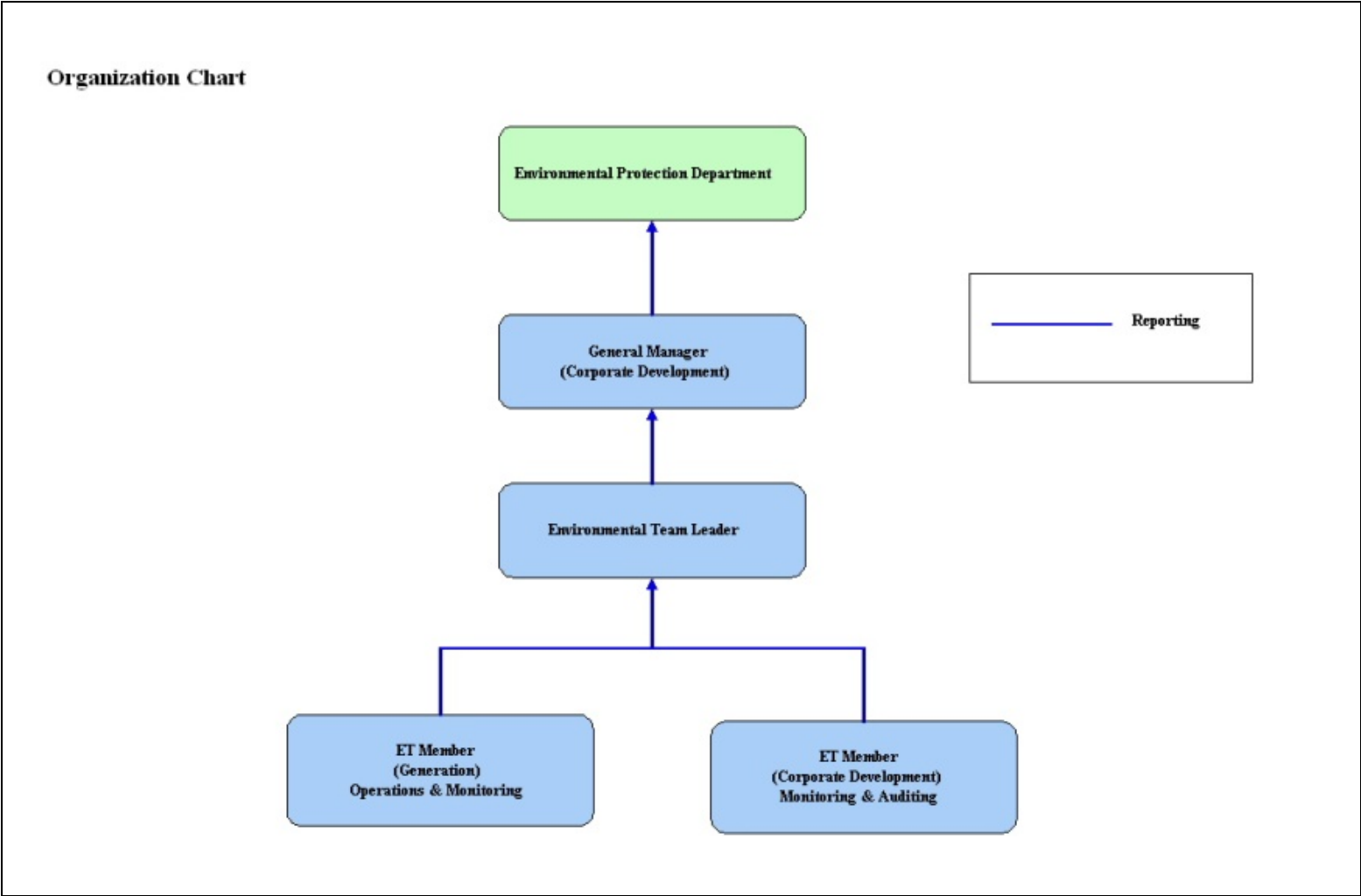


Figure 1.5 Organization Structure at Operational Phase of the Projects

2. AIR QUALITY

2.1 Monitoring Requirements

Since the Projects will bring a general air quality improvement, no additional EM&A activities are considered required, besides those already in place, such as those required by specified process licenses for the operation of the existing Lamma Power Station. Total Suspended Particulate (TSP) monitoring at East Gate and Reservoir area of Lamma Power Station is no longer required under the current SP Licence L-7-002(12) commencing from January 2019. It is agreed with EPD that the results of continuous Respirable Suspended Particulate (RSP) monitoring at Lamma Power Station would be reported. In accordance with the requirements stipulated in the Specified Processes Licence issued under Air Pollution Control Ordinance, various operation parameters as stated in [Table 2.1](#) were monitored. Those parameters have to be checked against the Action/Limit Levels are shown in [Appendix A](#).

Table 2.1 Air Quality Monitoring Parameters and Frequency

Sources of Emission	Parameter	Frequency
Steam boilers L2, L4 & L5	Particulate	Once / year
	Particulate (Opacity)	Continuous
	SO ₂	Continuous
	NO _x expressed as NO ₂ (For L4 and L5 only)	Continuous
Fugitive Dust (Coal, PFA, Limestone, gypsum)	Respirable Suspended Particulate	Continuous
Chimney emissions	Ambient air	Continuous at existing ambient air monitoring stations
	SO ₂	
	NO ₂	

2.2 Summary of Results and Observations

Monitoring of various parameters as listed in [Table 2.1](#) above was conducted during the operation of Units L2, L4 and L5 in the reporting period. A summary of monitoring data is shown in [Appendix B](#).

No Action/Limit Level exceedance was recorded in the reporting period.

3. WATER QUALITY

3.1 Monitoring Requirements

According to the EIA Report/ Project Profile for the Projects, the current monitoring programme for the Lamma Power Station can cover the Projects and no additional EM&A measures are required besides those already in place. Hence, the EM&A work on water quality should strictly follow the relevant monitoring requirements stipulated in the discharge licence for Ash Lagoon issued under the Water Pollution Control Ordinance (WPCO).

Water quality monitoring was carried out for FGD Waste Water Treatment Plant (WWTP) in the reporting period. The parameters stated in [Table 3.1](#) were monitored and checked against the Action/Limit Levels as given in [Appendix A](#).

Table 3.1 Water Quality Monitoring Parameters and Frequencies

Item	Parameters	Frequencies
1	pH	Daily
2	Suspended Solids	Daily
3	Iron	Monthly
4	Barium	Monthly
5	Mercury	Monthly
6	Cadmium	Monthly
7	Cyanide	Monthly
8	Total Phosphorus	Monthly
9	Total Nitrogen	Monthly

3.2 Summary of Results and Observations

Monitoring of various parameters as listed in [Table 3.1](#) above was carried out during the discharge of the WWTP in the reporting period. A summary of the data is shown in [Appendix C](#).

The data recorded for the monitoring parameters were all below their corresponding Action/Limit Levels. No Action/Limit level exceedance was recorded in the reporting period. The effluent quality was generally satisfactory.

4. ENVIRONMENTAL AUDIT

4.1 Review of Environmental Monitoring Procedures

The environmental monitoring procedures were regularly reviewed by the Environmental Team. No modification to the existing monitoring procedures was recommended.

4.2 Assessment of Environmental Monitoring Results

Monitoring results for Air Quality and Water Quality

The environmental monitoring results for air quality and water quality are presented in [Sections 2 and 3](#) respectively are summarized in [Table 4.1](#).

Table 4.1 Summary of Action/Limit Level Exceedances on Monitoring Parameters

Item	Parameter Monitored	Monitoring Period	No. of Exceedances In		Event/Action Plan Implementation Status and Results
			Action Level	Limit Level	
Air					
1	Annual analysis of dust particulate emission rates at chimney stacks.	01/01/19-31/03/19	N.A.	0	No L4, L5 PM stack sampling tests were conducted in the reporting period.
2	Continuous monitoring of opacity, NOx, SO2 and CO2 in the flue gas at the chimney stacks	01/01/19-31/03/19	0	0	
3	Ambient SO2 & NOx monitoring at the Peak, Queen Mary Hospital, Victoria Road, Chung Hom Kok, Ap Lei Chau and Cheung Chau.	01/01/19-31/03/19	0	0	
Water					
1	pH in WWTP Effluent	01/01/19-31/03/19	0	0	
2	Suspended Solids in WWTP Effluent	01/01/19-31/03/19	0	0	

Item	Parameter Monitored	Monitoring Period	No. of Exceedances In		Event/Action Plan Implementation Status and Results
			Action Level	Limit Level	
3	Iron in WWTP Effluent	01/01/19-31/03/19	0	0	
4	Barium in WWTP Effluent	01/01/19-31/03/19	0	0	
5	Mercury in WWTP Effluent	01/01/19-31/03/19	0	0	
6	Cadmium in WWTP Effluent	01/01/19-31/03/19	0	0	
7	Cyanide in WWTP Effluent	01/01/19-31/03/19	0	0	
8	Total Phosphorus in WWTP Effluent	01/01/19-31/03/19	0	0	
9	Total Nitrogen in WWTP Effluent	01/01/19-31/03/19	0	0	

Waste Management Records

The quantity of FGD gypsum and sludge collected for reuse by contractor in the reporting period are shown in [Table 4.2](#).

Table 4.2 Amount of Gypsum and Sludge Collected for Reuse by Contractor

Period	Amount of Gypsum Collected	Amount of Sludge Collected
January 2019	3,002.49 MT	82.88 MT
February 2019	3,039.59 MT	0 MT
March 2019	6,046.10 MT	49.80 MT

4.3 Status of Environmental Licensing and Permitting

All permits/licenses obtained as of March 2019 are summarised in [Table 4.3](#).

Table 4.3 Summary of Environmental Licensing and Permit Status

Description	Permit / Licence No.	Valid Period		Status
		From	To	
Environmental Permit for Units L4/5 FGD Plants Retrofit	EP-248/2006	25/04/2006	-	Valid
Environmental Permit for Unit L2 FGD Plant Retrofit	EP-287/2007	02/10/2007	-	Valid
Specified Process Licence issued under APCO	L-7-002(12)	01/01/2019	31/12/2020	Valid
WPCO discharge licence for Ash Lagoon	WT00027218-2017	24/02/2017	31/12/2021	Valid

4.4 Implementation Status of Environmental Mitigation Measures

Mitigation measures detailed in the EIA Report and EP are required to be implemented. A summary of the Environmental Mitigation Implementation Schedule (EMIS) is presented in [Appendix D](#).

4.5 Implementation Status of Event/Action Plan

A list of specific actions in the event of exceedances of the various threshold levels for specific emission and discharge sources is given in [Appendix A](#).

As no Action/Limit level exceedance was recorded, no action has been devised.

4.6 Implementation Status of Environmental Complaint Handling Procedures

During the reporting period, there was no environmental complaint against the operation of Lamma Power Station.

Table 4.4 Environmental Complaint(s) Received

Case Reference / Date, Time Received / Date, Time Concerned	Descriptions / Actions Taken	Conclusion / Status
Nil	N/A	N/A

Table 4.5 Outstanding Environmental Complaint(s) Carried Over

Case Reference / Date, Time Received / Date, Time Concerned	Descriptions / Actions Taken	Conclusion / Status
Nil	N/A	N/A

5. FUTURE KEY ISSUES

5.1 Outage Plan for the coming 3 months

No major outage planned in the coming 3 months

5.2 Key issues for the coming 3 months

Key issues to be considered in the coming 3 months include:

Air Impact

- To continuously carry out the air quality monitoring for Units L2, L4 and L5.

Water Impact

- To continuously carry out the water quality monitoring for FGD Waste Water Treatment Plant.

6. CONCLUSION

Environmental monitoring was performed as required in the reporting period from January to March 2019. All monitoring results were checked and reviewed.

No Action/Limit level exceedance on air quality parameters were recorded in the reporting period.

No Action/Limit level exceedance on water quality parameters were recorded in the reporting period.

Environmental mitigation measures recommended in the EIA Report and EP were implemented in the reporting period.

There was no environmental complaint against the operation of Lamma Power Station during the reporting period.

No prosecution was received for the Projects in the reporting period.

The environmental performance of the Projects was generally satisfactory.

Appendix A Event/Action Plans in Response to Exceedance of AL Levels

A.1 Air

Source of Emissions	Parameters to be Monitored	Frequency	Concentration Not to Be Exceeded	Action	Limit	Proposed Action
Steam boilers L2, L4 and L5	Particulate	once/year	50 mg/Nm3	-	50	ET Leader informs Generation Division at action level. Maintenance initiated. Temporary load shift until pollution control equipment repaired and reinstated. Report to EPD.
	Particulate (Opacity)	continuous	40% (bihourly)	35	40	
	SO2	continuous	200 mg/Nm3 (1h)	190	200	
	NOx expressed as NO2 (For L4 and L5 only)	continuous	615 mg/Nm3 (1h)	585	615	
Chimney emissions	Ambient air	Continuous at existing ambient air monitoring stations				ET to review data on post-hoc basis and check for possible power station contribution.
	SO2		800 (µg/m3) (1h)	-	800	
	NO2		300 (µg/m3) (1h)	-	300	

A.2 Water

Source of Discharges	Parameters to be Monitored	Frequency	Concentration Not to Be Exceeded	Action	Limit	Proposed Action
FGD Wastewater Treatment Plant	pH	Daily	6-9	-	6-9	If pH exceeds limit level, consideration to be given to adjust chemical dosing. ET Leader inform Generation Division and investigation be initiated to identify and remedy cause.
	Suspended Solids	Daily	30 mg/L	25	30	
	Iron	Monthly	4 mg/L	3.6	4	For all other parameters except pH, Generation Division to be informed, frequency of monitoring to be increased, and investigations to be initiated to identify cause and remedy if concentration exceeds action level. If problem persists to exceed the limit level, ET Leader verbally informs EPD and ensures remedial actions implemented.
	Barium	Monthly	1.5 mg/L	1.3	1.5	
	Mercury	Monthly	0.005 mg/L	0.0045	0.005	
	Cadmium	Monthly	0.005 mg/L	0.0045	0.005	
	Cyanide	Monthly	0.1 mg/L	0.09	0.1	
	Total Phosphorus	Monthly	8 mg/L	7.2	8	
	Total Nitrogen	Monthly	400 mg/L	360	400	

Appendix B

Air Quality Monitoring Results

B.1 Ambient Respirable Suspended Particulate Monitoring at Lamma Power Station

Date: First Quarter of 2019 (January – March)

Date	RSP concentration ($\mu\text{g}/\text{m}^3$)	
	Reservoir	East Gate
01/01/2019	25	45
02/01/2019	27	57
03/01/2019	17	27
04/01/2019	23	35
05/01/2019	65	116
06/01/2019	24	37
07/01/2019	18	27
08/01/2019	38	54
09/01/2019	19	24
10/01/2019	21	31
11/01/2019	26	38
12/01/2019	70	114
13/01/2019	20	23
14/01/2019	26	33
15/01/2019	27	39
16/01/2019	26	43
17/01/2019	20	36
18/01/2019	25	38
19/01/2019	30	46
20/01/2019	18	24
21/01/2019	30	55
22/01/2019	47	78
23/01/2019	37	63
24/01/2019	36	53
25/01/2019	34	50
26/01/2019	40	56
27/01/2019	38	59
28/01/2019	23	34
29/01/2019	22	33
30/01/2019	20	28
31/01/2019	27	36

Date	RSP concentration ($\mu\text{g}/\text{m}^3$)	
	Reservoir	East Gate
01/02/2019	26	50
02/02/2019	26	41
03/02/2019	42	55
04/02/2019	31	41
05/02/2019	32	46
06/02/2019	39	39
07/02/2019	15	19
08/02/2019	21	25
09/02/2019	25	29
10/02/2019	14	17
11/02/2019	15	22
12/02/2019	15	19
13/02/2019	19	28
14/02/2019	14	19
15/02/2019	13	17
16/02/2019	17	22
17/02/2019	14	19
18/02/2019	13	17
19/02/2019	11	16
20/02/2019	22	25
21/02/2019	21	24
22/02/2019	23	36
23/02/2019	18	25
24/02/2019	15	19
25/02/2019	20	35
26/02/2019	26	36
27/02/2019	26	35
28/02/2019	27	37

Date	RSP concentration ($\mu\text{g}/\text{m}^3$)	
	Reservoir	East Gate
01/03/2019	21	26
02/03/2019	20	28
03/03/2019	21	17
04/03/2019	18	23
05/03/2019	19	25
06/03/2019	18	19
07/03/2019	9	8
08/03/2019	10	13
09/03/2019	12	14
10/03/2019	15	18
11/03/2019	17	21
12/03/2019	22	26
13/03/2019	30	38
14/03/2019	30	38
15/03/2019	24	27
16/03/2019	25	34
17/03/2019	30	44
18/03/2019	23	28
19/03/2019	27	25
20/03/2019	22	30
21/03/2019	25	34
22/03/2019	29	32
23/03/2019	14	12
24/03/2019	10	13
25/03/2019	18	25
26/03/2019	21	25
27/03/2019	22	26
28/03/2019	25	24
29/03/2019	21	20
30/03/2019	20	24
31/03/2019	31	43

B.2 Unit L2, L4 and L5 Stack Monitoring at Lamma Power Station

B.2.1 Monthly Summary of Stack NO_x and SO₂ for Unit L5

Date	Daily Maximum		
	SO ₂ concentration (mg/Nm ³) [#]	NO _x concentration (mg/Nm ³) [#]	Opacity (%)
1/1/2019	71	354	13
2/1/2019	60	390	12
3/1/2019	61	370	12
4/1/2019	77	370	12
5/1/2019	40	369	13
6/1/2019	36	393	11
7/1/2019	26	296	12
8/1/2019	26	299	12
9/1/2019	22	275	12
10/1/2019	31	267	12
11/1/2019	54	311	13
12/1/2019	42	404	12
13/1/2019	36	418	12
14/1/2019	49	405	12
15/1/2019	30	251	12
16/1/2019	34	288	12
17/1/2019	40	426	11
18/1/2019	42	429	11
19/1/2019	55	387	12
20/1/2019	70	363	12
21/1/2019	40	390	11
22/1/2019	35	338	11
23/1/2019	44	402	12
24/1/2019	37	319	10
25/1/2019	29	345	12
26/1/2019	40	414	11
27/1/2019	50	427	11
28/1/2019	26	284	12
29/1/2019	34	397	12
30/1/2019	32	314	12
31/1/2019	29	279	12

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/2/2019	35	291	12
2/2/2019	27	260	11
3/2/2019	29	258	12
4/2/2019	30	402	12
5/2/2019	*	*	*
6/2/2019	*	*	*
7/2/2019	*	*	*
8/2/2019	*	*	*
9/2/2019	*	*	*
10/2/2019	*	*	*
11/2/2019	39	300	11
12/2/2019	49	249	12
13/2/2019	49	267	12
14/2/2019	60	403	12
15/2/2019	41	288	12
16/2/2019	25	284	12
17/2/2019	34	313	12
18/2/2019	35	374	13
19/2/2019	32	401	13
20/2/2019	54	384	13
21/2/2019	52	323	13
22/2/2019	54	333	13
23/2/2019	62	342	13
24/2/2019	64	370	12
25/2/2019	71	382	13
26/2/2019	45	358	13
27/2/2019	36	383	13
28/2/2019	29	356	13

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/3/2019	25	333	13
2/3/2019	35	376	13
3/3/2019	28	324	13
4/3/2019	31	415	13
5/3/2019	44	367	13
6/3/2019	27	328	13
7/3/2019	61	375	13
8/3/2019	65	371	13
9/3/2019	58	341	12
10/3/2019	42	362	11
11/3/2019	39	372	12
12/3/2019	43	374	12
13/3/2019	31	369	12
14/3/2019	43	354	12
15/3/2019	52	378	13
16/3/2019	65	366	13
17/3/2019	67	346	12
18/3/2019	44	359	13
19/3/2019	37	377	13
20/3/2019	*	*	*
21/3/2019	57	411	12
22/3/2019	31	366	13
23/3/2019	65	367	12
24/3/2019	62	396	12
25/3/2019	78	385	12
26/3/2019	88	421	12
27/3/2019	99	416	13
28/3/2019	95	370	12
29/3/2019	81	355	12
30/3/2019	64	375	12
31/3/2019	99	410	12

Note: # - Hourly average value. Expressed as at 0°C, 101.325kPa, dry and corrected to 12% CO₂ condition.

* - Unit L5 was not on load

B.2.2 Monthly Summary of Stack NOx and SO2 for Unit L4

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/1/2019	*	*	*
2/1/2019	*	*	*
3/1/2019	*	*	*
4/1/2019	*	*	*
5/1/2019	*	*	*
6/1/2019	*	*	*
7/1/2019	*	*	*
8/1/2019	*	*	*
9/1/2019	*	*	*
10/1/2019	*	*	*
11/1/2019	*	*	*
12/1/2019	*	*	*
13/1/2019	*	*	*
14/1/2019	*	*	*
15/1/2019	*	*	*
16/1/2019	*	*	*
17/1/2019	*	*	*
18/1/2019	*	*	*
19/1/2019	*	*	*
20/1/2019	*	*	*
21/1/2019	*	*	*
22/1/2019	*	*	*
23/1/2019	*	*	*
24/1/2019	*	*	*
25/1/2019	*	*	*
26/1/2019	*	*	*
27/1/2019	*	*	*
28/1/2019	*	*	*
29/1/2019	*	*	*
30/1/2019	*	*	*
31/1/2019	*	*	*

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/2/2019	*	*	*
2/2/2019	*	*	*
3/2/2019	*	*	*
4/2/2019	*	*	*
5/2/2019	*	*	*
6/2/2019	*	*	*
7/2/2019	*	*	*
8/2/2019	*	*	*
9/2/2019	*	*	*
10/2/2019	*	*	*
11/2/2019	*	*	*
12/2/2019	*	*	*
13/2/2019	*	*	*
14/2/2019	*	*	*
15/2/2019	51	363	7
16/2/2019	53	378	19
17/2/2019	38	299	19
18/2/2019	40	427	8
19/2/2019	31	424	19
20/2/2019	83	401	21
21/2/2019	77	428	19
22/2/2019	69	390	19
23/2/2019	107	359	19
24/2/2019	87	368	18
25/2/2019	67	375	17
26/2/2019	52	382	19
27/2/2019	36	419	20
28/2/2019	61	396	24

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/3/2019	44	361	18
2/3/2019	44	358	20
3/3/2019	37	376	17
4/3/2019	50	424	19
5/3/2019	71	351	24
6/3/2019	46	334	18
7/3/2019	102	351	20
8/3/2019	81	364	24
9/3/2019	62	362	21
10/3/2019	35	329	10
11/3/2019	39	362	18
12/3/2019	38	392	19
13/3/2019	44	360	23
14/3/2019	71	347	23
15/3/2019	99	378	21
16/3/2019	93	374	20
17/3/2019	*	*	*
18/3/2019	82	314	22
19/3/2019	43	390	17
20/3/2019	30	448	11
21/3/2019	75	451	20
22/3/2019	58	369	20
23/3/2019	109	359	18
24/3/2019	73	394	21
25/3/2019	139	390	18
26/3/2019	86	390	23
27/3/2019	102	398	23
28/3/2019	97	387	22
29/3/2019	80	346	20
30/3/2019	66	376	23
31/3/2019	98	405	18

Note: # - Hourly average value. Expressed as at 0°C, 101.325kPa, dry and corrected to 12% CO₂ condition.

* - Unit L4 was not on load.

B.2.3 Monthly Summary of Stack SO₂ for Unit L2

Date	Daily Maximum	
	SO ₂ concentration (mg/Nm ³) [#]	Opacity (%)
1/1/2019	*	*
2/1/2019	108	12
3/1/2019	88	13
4/1/2019	61	14
5/1/2019	66	13
6/1/2019	*	*
7/1/2019	76	12
8/1/2019	78	12
9/1/2019	76	12
10/1/2019	67	13
11/1/2019	46	14
12/1/2019	48	13
13/1/2019	*	*
14/1/2019	35	12
15/1/2019	44	12
16/1/2019	50	11
17/1/2019	48	11
18/1/2019	52	15
19/1/2019	44	11
20/1/2019	61	11
21/1/2019	45	11
22/1/2019	48	11
23/1/2019	50	11
24/1/2019	*	*
25/1/2019	*	*
26/1/2019	43	11
27/1/2019	*	*
28/1/2019	44	11
29/1/2019	43	11
30/1/2019	46	11
31/1/2019	33	13

Date	Daily Maximum	
	SO2 concentration (mg/Nm3) #	Opacity (%)
1/2/2019	35	11
2/2/2019	*	*
3/2/2019	*	*
4/2/2019	36	11
5/2/2019	*	*
6/2/2019	39	11
7/2/2019	46	12
8/2/2019	70	12
9/2/2019	50	12
10/2/2019	*	*
11/2/2019	*	*
12/2/2019	*	*
13/2/2019	*	*
14/2/2019	*	*
15/2/2019	*	*
16/2/2019	0	14
17/2/2019	41	12
18/2/2019	35	11
19/2/2019	63	14
20/2/2019	48	13
21/2/2019	37	11
22/2/2019	40	12
23/2/2019	*	*
24/2/2019	*	*
25/2/2019	59	11
26/2/2019	44	12
27/2/2019	33	12
28/2/2019	31	11

Date	Daily Maximum	
	SO2 concentration (mg/Nm3) [#]	Opacity (%)
1/3/2019	38	11
2/3/2019	37	12
3/3/2019	39	13
4/3/2019	49	11
5/3/2019	39	12
6/3/2019	39	12
7/3/2019	55	12
8/3/2019	60	13
9/3/2019	47	12
10/3/2019	39	12
11/3/2019	33	11
12/3/2019	31	12
13/3/2019	36	11
14/3/2019	57	12
15/3/2019	61	12
16/3/2019	56	11
17/3/2019	84	12
18/3/2019	61	11
19/3/2019	55	11
20/3/2019	49	11
21/3/2019	*	*
22/3/2019	78	13
23/3/2019	127	12
24/3/2019	*	*
25/3/2019	99	12
26/3/2019	72	12
27/3/2019	*	*
28/3/2019	74	12
29/3/2019	62	13
30/3/2019	61	12
31/3/2019	*	*

Note: # - Hourly average value. Expressed as at 0°C, 101.325kPa, dry and corrected to 12% CO₂ condition.

* - Unit L2 was not on load.

B.2.4 Summary of Annual Stack Particulate Sampling

No annual stack particulate sampling was conducted in the reporting months.

B.3 Ambient SO₂ and NO₂ monitoring Data at Southern District and Cheung Chau

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT

STATION : CHUNG HOM KOK ZONE SUBSTATION
POLLUTANT : SULPHUR DIOXIDE

MONTH: JANUARY

YEAR : 2019

UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	2	2	2	2	2	2	2	1	2	2	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2
2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2
3	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	2	1	1
5	1	1	1	3	3	3	2	2	2	3	3	4	5	5	4	3	3	4	4	4	4	6	4	3	3
6	3	3	2	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	1	1	1	2	2	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
10	1	1	0	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	2	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	2	2	2	2	4	8	9	8	12	13	10	10	10	8	7	5	4	3	3	2	5
13	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	2	1	1	1	1	1
14	0	0	0	0	0	0	0	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	0	0	1
15	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	1	0
16	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0
19	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	1
20	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1	1	1	0
21	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	25	1	2
22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	3	3	3	3	2	2
23	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2
24	1	1	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2
25	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	2	1	1	2	2	2	2	2	1
26	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	2	1	1	1	1	1	1	2
27	1	0	0	1	1	1	1	1	1	1	1	1	M	1	1	1	1	1	1	1	1	1	1	1	1
28	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1
31	0	0	0	0	0	0	1	1	0	2	1	2	3	2	5	2	2	7	3	2	2	2	2	2	2

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----								-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
1	1	1	1	2	3	5	8	0	-	25	0	-	5	2	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT

STATION : CHUNG HOM KOK ZONE SUBSTATION
POLLUTANT : NITROGEN DIOXIDE

MONTH: JANUARY

YEAR : 2019

UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	31	30	8	11	12	11	13	15	15	14	11	8	6	3	11	27	36	43	41	34	33	19	17	12	19
2	15	13	9	8	7	9	12	15	24	24	26	27	29	20	31	38	55	64	69	61	46	26	11	13	27
3	8	6	5	3	2	3	5	6	9	11	8	8	7	6	7	11	11	12	10	9	8	7	10	8	8
4	6	4	3	2	2	2	2	4	5	6	5	3	0	0	1	5	5	5	17	16	11	15	61	32	9
5	26	51	41	65	70	68	36	51	63	63	66	68	86	102	108	116	120	123	118	119	115	111	77	84	81
6	79	65	56	49	44	35	33	31	27	26	30	30	33	11	8	9	11	12	12	12	13	14	11	7	27
7	4	4	6	5	5	4	2	9	6	5	5	4	3	4	6	11	12	8	4	13	18	17	10	11	7
8	17	14	18	49	55	33	25	25	26	21	20	17	14	14	12	12	14	14	17	12	15	15	5	16	20
9	9	M	8	12	12	5	6	6	6	7	6	7	6	4	2	3	3	4	6	3	4	3	1	2	5
10	1	1	1	2	3	2	2	4	3	4	5	5	6	5	6	11	4	4	13	5	6	14	7	10	5
11	0	4	3	0	1	3	6	13	7	8	14	13	6	6	6	3	4	13	15	18	29	26	27	24	10
12	24	24	20	23	62	67	60	69	68	84	98	110	91	118	135	156	168	176	175	107	88	107	47	15	87
13	8	6	5	5	6	11	8	10	12	13	14	14	9	14	14	12	18	17	14	15	14	8	10	10	11
14	7	7	4	4	8	5	8	11	9	7	8	8	8	9	7	9	20	19	12	6	8	7	4	4	8
15	2	3	4	2	1	2	5	7	10	23	24	22	24	47	70	54	53	37	58	42	31	18	22	12	24
16	11	12	10	10	10	6	7	8	8	6	5	5	6	8	42	60	61	58	57	51	39	25	16	8	22
17	2	5	4	11	12	6	6	17	19	12	9	7	6	5	10	10	8	12	5	5	11	13	11	13	9
18	5	6	7	5	5	4	4	5	4	4	5	4	5	4	10	18	21	32	23	17	18	14	11	6	10
19	5	4	4	4	3	3	5	5	6	7	12	9	2	2	3	4	3	10	6	1	2	2	2	0	4
20	0	1	0	0	0	0	0	0	0	0	2	3	1	0	1	0	1	0	0	1	1	3	3	4	1
21	4	10	8	5	6	6	13	19	25	27	18	28	30	33	36	46	49	33	20	17	16	18	15	7	20
22	3	3	5	8	9	10	12	21	22	21	27	55	52	40	33	33	26	45	41	16	19	12	9	8	22
23	5	M	6	6	4	2	2	5	8	13	12	10	8	7	7	11	10	10	6	12	22	46	41	11	11
24	8	6	7	5	6	6	7	11	10	10	7	7	6	6	7	8	9	8	10	8	7	5	5	4	7
25	5	3	1	1	0	0	1	2	4	9	12	11	10	7	8	9	9	10	46	42	35	19	23	44	13
26	27	13	11	8	5	5	5	6	3	5	5	5	6	6	6	8	9	9	5	8	9	5	3	3	7
27	2	2	1	1	1	1	2	3	3	5	6	6	M	6	10	9	7	7	7	5	4	4	2	2	4
28	1	1	0	0	0	0	1	2	2	2	4	3	2	1	2	2	2	1	2	5	5	2	2	1	2
29	6	7	3	3	3	2	3	5	4	2	1	1	0	1	0	0	2	3	2	3	3	2	2	1	2
30	0	1	3	1	0	0	1	1	1	2	0	0	0	0	3	1	2	2	1	0	0	0	0	0	1
31	0	0	0	0	0	2	21	46	18	62	67	67	80	51	55	30	23	48	35	66	57	51	62	69	38

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----									-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
9	8	17	8	47	67	107	119	0	-	176	1	-	87	3	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: JANUARY

STATION : VICTORIA ROAD SUBSTATION
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	10	10	10	10	10	10	10	9	10	10	9	10	9	10	11	11	10	10	10	10	10	10	10	10	10
2	9	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	10	10	10	10	10	10	9	10
3	9	9	9	9	8	9	9	9	9	9	9	10	10	10	9	9	11	10	9	9	9	9	9	8	9
4	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	8	9	9	9	9	9	11	12	9
5	12	13	13	12	13	13	13	13	13	13	13	13	14	14	15	15	15	15	14	15	15	15	15	15	14
6	15	15	14	14	13	13	12	11	11	11	11	10	10	11	10	10	10	10	10	10	10	10	9	9	11
7	9	9	9	9	9	9	9	9	9	9	10	9	10	9	9	9	9	9	9	9	9	9	9	10	9
8	9	9	9	10	10	10	10	10	10	10	11	11	12	12	11	11	10	10	9	9	9	10	10	10	10
9	9	10	9	10	9	9	9	9	9	9	9	10	10	9	10	9	9	9	9	9	9	9	9	9	9
10	8	9	8	9	9	9	8	8	9	9	9	9	9	10	9	9	9	10	10	9	9	9	9	9	9
11	9	8	9	9	9	9	9	9	10	10	10	10	11	11	10	10	10	10	10	10	10	10	9	10	10
12	10	11	11	11	11	11	11	12	13	14	15	15	16	16	16	17	14	13	12	12	12	12	12	11	13
13	11	10	10	10	10	9	9	9	9	9	9	9	9	9	10	10	10	10	9	9	9	9	9	9	9
14	9	9	9	9	9	9	9	9	9	8	9	9	10	10	10	10	10	10	10	10	9	9	9	10	9
15	9	10	10	10	9	10	10	9	9	10	10	10	11	11	11	11	12	12	12	11	12	11	11	10	10
16	10	10	10	10	10	9	10	10	10	10	10	9	10	10	10	10	10	10	10	8	9	9	9	9	10
17	9	9	9	9	9	9	9	9	9	9	10	9	9	9	9	9	8	8	9	9	8	8	8	9	9
18	9	9	9	9	9	9	9	9	9	9	9	9	10	10	9	10	10	10	10	9	10	10	9	10	9
19	9	10	10	10	10	10	9	10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	10
20	9	9	9	9	9	9	9	9	9	10	9	9	9	10	9	9	9	10	9	9	8	8	9	9	9
21	9	9	9	9	8	9	9	9	9	9	9	8	9	9	9	9	9	9	9	9	9	9	8	10	9
22	10	10	10	10	10	10	10	10	10	10	10	10	10	9	10	M	M	9	7	7	7	7	7	10	9
23	9	10	10	9	9	9	9	10	10	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	10
24	8	8	9	9	8	9	9	9	9	9	9	9	9	9	9	8	9	9	8	9	8	8	8	9	9
25	9	9	9	8	9	9	9	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10	9
26	10	9	10	10	10	10	9	9	9	9	8	9	10	10	10	10	9	9	9	8	9	9	9	10	9
27	10	10	10	9	10	9	10	10	10	10	10	10	10	10	10	11	10	10	10	10	10	10	10	9	10
28	9	9	6	7	9	9	9	9	9	9	9	9	9	10	10	9	9	9	9	9	9	9	9	9	9
29	9	8	8	9	8	9	9	9	9	9	8	8	8	8	8	9	9	9	9	9	9	9	8	9	9
30	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	10	10	9	9	10	9	10	9	10
31	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	9	10	10	9	10	10

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL
10	9	10	9	11	13	15	15	6	-	17	9	-	14	1	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: JANUARY

STATION : VICTORIA ROAD SUBSTATION
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	19	18	19	18	16	14	15	14	12	12	14	13	14	16	20	20	19	22	23	24	24	23	21	20	18
2	19	19	15	13	11	13	15	18	18	16	19	21	23	23	26	28	29	29	29	27	25	23	20	18	21
3	17	18	18	15	15	16	17	17	19	21	22	22	22	26	24	34	44	28	21	16	14	12	12	11	20
4	10	9	8	8	8	8	9	11	12	12	11	11	11	18	22	30	22	26	40	45	48	36	40	37	21
5	37	38	35	33	31	30	29	28	28	28	29	33	38	44	47	50	55	48	44	41	39	36	31	29	37
6	26	23	21	18	17	16	16	14	15	15	16	17	17	20	19	16	19	25	15	13	12	12	11	10	17
7	9	8	8	8	7	7	9	15	15	13	15	17	18	19	20	24	27	19	19	37	24	18	23	25	17
8	26	25	24	26	25	25	25	26	25	22	26	28	35	34	34	32	27	27	26	20	23	25	25	24	26
9	19	M	14	12	11	10	11	12	14	14	14	14	13	12	13	13	15	15	13	11	10	9	10	8	12
10	7	8	7	7	7	7	10	12	11	11	11	13	19	23	24	27	26	30	33	27	26	22	20	29	17
11	27	25	24	19	21	21	23	25	26	26	30	37	48	31	27	26	26	27	32	29	29	30	29	28	28
12	29	28	27	26	27	27	25	29	30	36	42	47	55	57	65	73	71	70	80	64	59	60	50	25	46
13	17	13	11	9	9	9	11	12	12	12	12	13	12	13	16	17	19	19	14	16	13	11	11	9	13
14	8	8	7	7	7	8	12	15	17	15	16	16	15	14	14	15	23	31	23	28	20	12	12	9	15
15	9	8	8	7	6	7	10	15	26	27	29	37	38	35	34	43	50	50	44	43	40	28	22	18	26
16	17	15	12	11	10	10	11	13	14	15	16	16	17	18	23	26	24	27	27	24	21	19	17	18	18
17	17	19	17	19	15	16	15	16	17	18	19	21	30	30	34	39	28	28	18	23	28	25	22	18	22
18	15	15	11	9	8	8	10	11	12	12	12	12	15	16	21	28	21	31	31	27	26	22	19	12	17
19	12	14	13	11	10	9	10	13	19	30	34	28	28	35	35	37	26	22	24	21	27	31	30	24	23
20	21	11	20	16	10	13	16	17	18	28	29	32	31	38	28	22	26	36	28	22	13	13	14	11	21
21	11	12	10	9	9	9	11	16	18	18	18	20	23	24	25	28	31	35	32	24	19	16	16	15	19
22	13	12	11	9	9	8	11	13	18	22	23	24	25	24	31	M	M	52	33	28	28	25	24	18	21
23	20	M	12	12	14	14	16	27	28	24	26	22	26	22	15	15	14	14	16	19	25	30	42	39	21
24	27	16	12	10	9	10	13	16	16	16	15	12	12	13	15	18	20	19	20	20	15	12	11	11	15
25	12	11	9	7	7	7	10	20	17	20	24	38	26	23	34	32	23	33	31	39	40	44	43	38	25
26	28	37	43	38	22	17	16	15	16	15	16	16	15	17	18	17	24	17	21	22	19	14	11	11	20
27	10	10	9	8	8	8	10	11	11	11	11	11	12	14	15	15	15	12	14	13	11	11	10	9	11
28	9	9	8	7	7	7	9	12	14	16	16	16	17	28	28	21	26	28	27	23	23	21	18	12	17
29	16	21	24	24	10	8	10	13	12	13	13	13	12	10	10	12	11	10	11	11	13	15	22	9	13
30	8	8	7	6	7	13	16	23	23	18	25	25	24	23	20	16	16	17	13	14	12	13	20	17	16
31	18	22	22	18	15	13	15	23	26	26	37	37	30	31	31	29	40	48	40	26	21	22	30	31	27

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
18	18	21	18	34	40	50	58	6	-	80	11	-	46	2	99	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: JANUARY

STATION : POK FU LAM
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	6	5	4	4	4	4	4	4	4	5	5	5	6	6	5	6	5	5	5	5	6	5	4	4	5
2	4	5	5	5	5	4	5	5	6	5	7	5	6	8	7	7	6	6	6	5	5	4	3	3	5
3	3	3	4	4	3	3	4	4	4	5	M	M	6	7	7	5	5	4	5	4	4	4	4	4	4
4	5	4	4	4	5	5	4	5	5	6	7	6	6	7	6	5	6	11	7	8	9	14	17	16	7
5	19	18	17	15	14	13	13	12	14	14	15	16	17	17	15	16	18	19	17	17	15	14	16	16	16
6	14	14	13	13	11	9	9	8	8	8	10	10	9	9	8	6	6	6	6	5	5	6	5	6	9
7	6	6	6	6	6	6	6	6	6	7	8	8	7	7	7	6	6	6	6	7	7	5	6	8	6
8	7	6	7	7	8	9	10	10	10	12	12	15	14	13	12	10	8	7	9	8	8	11	10	7	10
9	7	7	6	6	5	6	6	6	6	6	6	7	7	7	7	6	6	5	5	5	5	5	5	4	6
10	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	7	6	5	6	8	7	7	6	5	6
11	5	6	6	6	6	6	6	7	13	12	9	11	13	10	7	8	7	7	6	7	7	7	7	9	8
12	10	10	10	10	13	13	14	22	25	24	21	20	22	23	25	31	20	16	16	17	17	15	14	9	17
13	8	7	6	6	6	5	5	5	5	5	5	6	6	6	6	6	7	7	6	5	5	5	5	5	6
14	5	5	5	5	5	5	5	5	5	5	6	7	6	7	7	7	7	9	7	7	7	6	5	6	6
15	5	5	4	5	4	5	5	5	7	7	7	8	9	8	7	10	11	11	10	10	9	7	7	7	7
16	6	6	6	6	5	6	6	7	7	8	7	6	7	6	7	8	8	7	8	8	7	6	6	6	7
17	6	6	5	5	5	5	5	6	7	7	8	7	7	7	7	8	6	6	5	5	5	6	6	5	6
18	6	6	6	6	5	6	5	5	5	5	5	5	5	5	5	6	6	5	6	6	5	5	5	6	5
19	6	6	6	6	6	6	6	6	6	7	8	7	7	8	7	7	6	5	5	5	5	5	5	4	6
20	4	4	5	4	4	4	4	4	7	9	8	8	7	7	7	6	8	6	5	5	5	6	6	6	6
21	6	5	6	5	5	5	5	6	6	6	6	6	7	6	6	7	7	7	6	6	6	5	6	7	6
22	6	6	5	5	5	5	5	5	5	6	6	6	6	6	7	8	10	8	8	8	8	9	9	9	7
23	9	7	8	8	7	7	7	8	8	10	11	9	12	9	8	7	8	7	6	6	7	6	6	6	8
24	6	6	5	6	5	5	5	6	8	9	8	7	6	7	7	7	6	6	6	6	6	5	5	5	6
25	5	5	5	6	6	6	6	6	6	6	8	10	6	7	6	7	6	8	8	7	9	10	10	8	7
26	10	11	11	9	8	8	8	8	7	7	6	7	7	7	7	7	8	7	6	6	6	6	5	5	7
27	5	5	5	5	5	4	6	5	7	6	6	6	6	7	7	6	7	6	5	6	5	5	6	4	6
28	4	4	5	4	4	4	4	4	4	5	5	4	7	8	8	6	5	5	5	5	6	12	6	5	5
29	5	5	6	5	5	5	6	6	6	5	6	6	5	5	5	5	4	5	5	4	5	4	4	4	5
30	4	4	4	4	4	4	5	4	5	7	5	5	5	5	5	5	5	4	4	5	4	5	5	5	5
31	4	4	4	4	4	4	4	4	6	7	7	6	8	7	8	7	7	8	7	8	8	8	8	9	6

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----									-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
6	6	7	6	10	14	17	21	3	-	31	4	-	17	1	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: JANUARY

STATION : POK FU LAM
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
2	M	M	M	M	M	M	M	M	M	M	M	M	27	39	50	57	65	71	73	65	54	43	34	24	
3	26	37	26	19	23	34	32	35	40	46	M	M	61	62	53	67	47	33	27	22	21	19	18	36	
4	15	14	12	12	12	11	12	19	26	23	21	24	27	34	40	35	44	91	71	110	114	118	99	101	45
5	103	101	93	90	85	81	77	75	77	73	74	77	102	114	120	135	141	132	126	118	111	90	94	78	99
6	65	57	48	42	38	37	34	35	36	35	39	43	40	43	41	23	28	29	28	28	22	18	23	19	35
7	13	12	11	13	16	13	15	32	38	36	31	37	42	44	49	37	39	57	61	91	83	52	49	83	40
8	70	75	73	75	78	77	76	77	70	62	63	70	80	77	88	85	66	52	88	64	73	85	80	51	73
9	44	27	18	16	18	16	18	24	32	35	30	29	25	16	20	24	26	33	22	19	16	14	14	12	23
10	10	10	13	14	12	12	14	26	38	22	30	28	24	41	69	77	71	57	65	91	76	83	56	74	42
11	61	56	66	59	49	49	43	72	89	78	78	84	84	58	35	35	54	76	89	91	99	97	88	94	70
12	96	90	88	91	111	99	94	106	97	102	123	132	140	145	160	185	192	199	222	199	191	200	185	47	137
13	25	M	20	19	19	18	23	26	30	37	42	33	33	51	49	56	68	70	39	36	42	31	25	17	35
14	17	13	11	10	9	10	19	33	42	43	40	48	37	30	25	30	62	88	74	107	78	40	41	24	39
15	18	19	23	20	20	67	63	77	92	86	78	97	93	89	83	106	140	150	140	135	122	62	61	47	79
16	39	37	29	30	27	28	32	45	46	44	41	41	41	42	65	76	66	76	84	78	64	54	44	33	48
17	48	50	52	56	41	41	38	50	50	45	47	44	50	51	57	53	53	61	50	53	59	41	34	28	48
18	43	79	42	13	12	13	14	22	23	24	25	23	27	28	36	60	61	88	110	85	59	42	45	45	42
19	51	20	17	15	14	15	18	29	36	51	67	55	67	88	77	85	65	53	47	51	87	95	92	65	53
20	59	50	37	12	19	11	16	20	87	97	91	93	75	68	43	34	88	95	66	18	14	10	13	15	47
21	27	35	27	21	23	30	39	52	54	57	54	43	49	48	58	77	72	97	70	58	54	47	44	36	49
22	36	30	27	22	26	26	35	42	52	70	63	57	51	49	52	59	75	82	65	85	72	62	76	44	52
23	34	16	22	20	19	20	58	91	87	77	70	40	47	33	26	24	30	44	49	50	92	123	139	116	55
24	52	23	19	15	14	14	22	37	47	45	33	28	27	29	34	32	38	35	44	39	23	22	17	19	30
25	25	29	14	11	8	22	26	43	61	54	66	89	45	39	53	68	48	79	119	130	145	139	128	129	65
26	139	166	85	32	52	22	16	17	22	27	27	25	27	24	25	24	47	33	50	65	46	24	19	18	43
27	12	M	10	8	9	10	13	17	19	19	19	19	21	23	23	28	28	28	28	23	24	21	23	16	19
28	15	12	10	8	8	7	12	21	23	26	26	32	38	51	53	61	64	73	94	110	103	90	42	30	42
29	61	43	47	21	17	16	18	29	34	33	27	24	22	20	21	20	22	24	26	33	20	13	18	12	26
30	10	9	8	8	9	15	23	44	68	67	40	47	47	38	28	33	35	35	30	34	26	30	84	63	35
31	63	18	12	33	17	18	28	61	84	93	80	78	57	52	50	50	64	71	65	52	56	65	104	106	57

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL
40	42	51	42	93	116	140	185	7	-	222	19	-	137	2	94	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: JANUARY

STATION : AP LEI CHAU
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	2	2	2	3	3	2	2	2	2	2	3	4	5	6	5	5	4	3	3	4	4	3	3	3	3
2	3	3	2	2	3	3	3	2	3	4	5	5	6	6	6	6	5	5	5	4	3	3	3	3	4
3	2	2	2	2	2	2	3	2	2	2	2	1	1	2	2	2	2	1	1	1	1	1	1	1	2
4	1	1	2	2	2	2	3	2	2	2	3	3	4	4	3	3	3	3	3	3	4	5	12	11	3
5	18	18	17	9	8	9	7	11	9	9	10	13	15	13	11	13	13	16	15	14	13	12	9	8	12
6	8	7	7	7	6	4	3	3	3	3	3	4	3	4	2	1	1	1	1	0	0	0	1	3	3
7	2	2	2	3	3	3	2	2	3	3	4	4	4	3	3	3	3	2	2	2	2	2	3	3	3
8	3	3	8	6	6	7	6	5	5	5	6	8	8	8	4	3	3	4	6	4	4	4	5	3	5
9	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2	2	2	2	1	1	2	2
10	1	1	1	1	2	2	2	2	3	3	3	4	4	2	3	3	2	2	2	2	2	2	2	2	2
11	2	3	3	3	4	3	3	3	5	7	7	9	8	6	5	4	4	3	3	4	6	6	6	6	5
12	11	11	13	12	8	6	10	11	16	19	19	22	24	22	22	25	20	16	14	14	14	12	7	4	15
13	2	1	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1	1	0	0	0	0	0	2	1
14	2	2	2	1	1	2	2	2	2	2	3	3	4	5	5	4	4	3	3	3	3	3	3	2	3
15	1	1	1	1	1	1	1	2	1	3	3	4	7	7	4	6	9	9	7	8	7	4	3	3	4
16	2	2	2	2	2	2	2	3	3	3	4	4	4	4	4	5	5	5	4	4	3	3	2	2	3
17	2	3	2	2	3	2	3	2	3	5	5	6	6	4	7	4	4	3	3	3	3	3	2	3	3
18	2	2	2	2	3	2	2	2	1	1	1	2	2	2	2	3	2	3	3	4	3	3	3	4	2
19	4	4	4	5	5	4	4	4	4	4	7	6	6	7	8	5	4	4	3	3	3	3	2	1	4
20	2	2	1	2	2	2	2	2	2	2	3	4	5	5	3	3	3	5	2	2	2	3	3	4	3
21	3	3	3	3	3	2	2	2	2	2	4	4	4	5	5	5	5	6	7	4	3	3	3	3	4
22	3	2	3	2	2	2	2	2	2	3	4	5	4	4	5	5	5	7	6	6	6	6	6	6	4
23	5	4	5	4	4	4	4	4	4	5	5	6	6	5	6	5	4	3	3	3	3	5	4	4	4
24	3	3	3	3	3	3	3	4	6	6	5	4	4	5	6	M	M	M	M	M	M	M	M	4	
25	5	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	8	6	6	6	6	7	4	5	
26	3	4	4	4	4	4	3	2	2	2	3	4	5	4	4	4	4	3	2	2	2	1	1	3	3
27	2	2	2	2	2	3	3	3	3	3	4	4	5	5	4	4	4	3	3	3	3	2	3	3	3
28	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4	6	5	4	3	2	2	2	2	3	3
29	3	3	3	4	4	3	4	3	4	3	3	3	3	3	3	3	3	3	2	2	2	1	2	3	3
30	2	2	2	2	2	2	2	1	2	2	2	3	3	3	2	2	2	2	2	2	2	2	1	2	2
31	1	1	1	2	2	2	2	2	3	4	6	6	5	5	5	5	5	7	6	5	5	5	5	5	4

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----					STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
3	3	4	3	7	10	15	19	0	-	25	1	-	15	2	99	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: JANUARY

STATION : AP LEI CHAU
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	34	28	39	40	37	26	24	25	22	20	21	24	26	27	30	30	37	50	57	59	56	53	56	55	37
2	53	30	21	15	12	19	24	33	44	42	42	41	33	41	57	70	67	72	73	68	62	53	50	50	45
3	41	31	26	20	20	31	37	39	41	24	16	15	11	10	11	15	19	21	21	14	4	7	6	8	20
4	7	5	3	2	2	2	4	8	10	7	2	2	3	3	5	20	16	21	26	20	32	31	95	94	18
5	93	91	90	74	72	72	68	70	69	72	71	77	91	106	109	120	132	132	121	118	115	107	81	77	93
6	73	60	51	41	34	34	32	32	33	33	35	40	42	44	32	20	16	16	20	15	11	12	9	9	31
7	5	4	7	6	5	8	11	21	18	13	11	10	12	10	18	23	20	15	18	27	19	19	28	21	15
8	38	61	68	66	65	71	67	57	42	42	44	52	60	58	23	23	17	29	39	33	30	33	73	52	48
9	30	M	11	11	11	11	13	13	22	18	12	10	8	6	5	6	8	8	10	8	7	5	3	2	10
10	3	1	2	2	5	5	8	6	9	8	12	13	14	17	20	24	13	22	26	20	17	11	13	14	12
11	30	32	41	21	39	19	33	20	38	61	65	64	44	27	19	3	14	34	49	77	85	87	83	82	44
12	83	83	89	86	80	70	82	84	91	96	108	114	133	137	144	166	177	195	200	191	192	151	49	29	118
13	10	10	8	8	7	10	12	14	21	20	19	18	15	21	19	19	23	23	17	13	11	10	9	8	14
14	6	6	4	4	5	6	12	15	17	15	16	13	10	8	7	13	40	27	26	18	12	13	13	9	13
15	3	4	5	4	4	3	11	22	30	58	63	68	73	81	69	88	127	129	121	124	116	70	46	32	56
16	24	23	20	16	17	20	25	33	36	35	38	41	44	42	55	72	58	80	77	70	52	41	40	29	41
17	28	47	37	46	30	19	25	33	40	42	42	39	43	45	41	26	28	15	13	22	27	24	27	31	32
18	29	20	10	6	5	7	10	7	8	7	10	12	12	13	22	24	26	60	46	49	24	21	18	15	19
19	9	7	4	5	6	8	13	14	21	22	53	36	46	54	94	31	21	10	11	22	9	16	2	17	22
20	7	1	5	1	0	0	5	11	10	31	18	48	50	47	4	3	2	62	49	18	8	8	2	9	17
21	15	21	15	11	12	13	19	34	37	41	44	40	34	38	54	70	66	67	62	57	51	30	28	28	37
22	18	16	17	18	17	17	23	32	40	46	58	61	58	60	56	43	61	67	57	62	63	52	45	28	42
23	26	M	14	12	10	11	22	41	27	17	22	13	11	11	8	8	8	10	7	32	50	69	87	80	26
24	32	21	12	9	7	8	17	34	21	17	11	9	9	10	10	8	6	12	8	7	7	5	4	7	12
25	7	3	1	1	1	3	9	21	21	19	22	23	20	19	15	21	25	67	73	107	97	109	100	24	34
26	27	84	77	30	13	8	8	11	10	14	12	12	10	8	8	8	10	21	22	29	21	9	7	10	20
27	5	3	3	2	3	5	6	8	9	9	11	11	11	9	10	10	10	8	11	9	9	14	10	11	8
28	8	4	2	0	0	1	4	10	12	10	16	13	8	10	15	16	17	22	33	31	23	20	12	6	12
29	8	7	4	8	6	6	11	14	10	6	4	1	0	1	4	3	3	2	2	1	1	1	0	5	5
30	3	1	0	2	4	4	12	20	18	15	5	5	11	10	12	15	14	17	5	7	1	0	0	1	8
31	0	4	0	5	5	22	33	36	62	67	74	79	62	44	37	39	45	63	90	59	64	48	43	81	44

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----									-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
19	20	31	20	72	91	122	141	0	-	200	5	-	118	3	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: JANUARY

STATION : CHEUNG CHAU
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	
1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3	2	0	0	0	0	0	0	0	1	0
2	0	0	0	0	0	0	0	0	0	0	1	1	2	3	3	2	1	1	1	0	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4	0	0	0	0	0	0	0	2	0	0	0	1	2	2	1	1	0	2	4	2	3	4	7	9	2	
5	7	8	8	5	5	4	2	2	5	7	7	5	6	7	7	6	6	6	8	8	7	5	7	7	6	
6	5	5	5	3	2	2	1	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7	0	0	0	0	0	0	0	0	0	0	1	1	0	M	14	1	0	0	0	0	0	0	0	1	1	
8	0	0	4	7	5	3	2	4	4	5	4	6	6	5	2	0	0	0	0	1	1	4	4	3		
9	1	2	2	3	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	0	
11	0	0	0	0	0	0	0	0	0	2	5	7	4	1	1	2	0	2	0	0	0	0	1	2	1	
12	1	1	1	1	3	2	2	10	10	12	14	14	9	6	6	12	12	14	8	6	5	8	10	6	7	
13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
14	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1	0	0	0	0	0	0	0	1	0	
15	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	3	1	1	3	2	1	0	0	1	1	
16	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3	1	1	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
18	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
19	0	0	0	0	0	0	0	0	1	2	3	2	2	2	2	1	0	0	0	0	0	0	0	0	1	
20	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	2	0	
21	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0	
22	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	4	3	2	2	2	3	4	1		
23	3	2	2	1	1	1	1	1	2	3	4	3	3	3	2	1	1	0	0	0	0	0	0	1	1	
24	0	0	0	0	0	0	0	0	1	4	3	2	2	1	1	1	1	0	0	0	0	0	0	1	1	
25	0	0	0	0	0	0	0	0	1	2	1	1	1	3	3	1	3	5	2	2	3	3	2	5	2	
26	4	3	2	2	1	2	0	2	1	1	1	2	2	2	2	2	1	0	0	0	0	0	0	1	1	
27	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0	
28	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	
29	2	2	3	5	4	4	2	1	1	1	1	0	0	0	0	1	9	9	9	9	9	10	10	11	4	
30	10	10	10	10	10	10	10	10	11	12	12	11	10	12	11	9	8	9	9	9	9	10	10	11	10	
31	10	10	10	10	10	10	10	10	10	10	10	9	12	18	20	9	3	12	13	12	11	13	13	13	11	

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE LIMIT LEVEL		
3	0	2	0	7	10	12	13	0	-	20	0	-	11	3	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: JANUARY

STATION : CHEUNG CHAU
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	66	67	64	58	52	49	48	47	39	36	32	41	49	56	68	63	69	66	57	56	53	57	71	68	56
2	60	58	55	55	51	52	53	50	51	53	54	55	59	64	72	72	75	81	81	82	81	71	62	47	62
3	49	58	43	37	43	50	49	52	47	57	56	63	57	57	61	69	82	91	105	107	85	49	45	53	61
4	54	39	27	24	28	23	34	35	32	26	24	33	52	52	65	71	45	104	150	139	138	139	126	126	66
5	126	128	119	112	102	101	94	91	96	95	98	93	110	124	138	149	145	173	154	145	135	138	111	83	119
6	84	71	62	54	49	48	51	48	48	55	54	51	55	49	64	67	56	33	53	61	56	27	25	18	52
7	24	21	19	30	32	29	22	24	23	19	16	23	42	39	M	47	37	48	34	47	44	55	40	49	33
8	48	95	139	148	123	110	101	101	101	99	73	74	82	81	38	30	33	42	88	52	40	77	89	90	81
9	88	M	85	83	53	29	36	39	44	31	32	21	17	15	13	18	16	13	19	19	25	19	27	27	33
10	21	42	22	22	19	33	40	25	42	41	44	47	57	47	22	31	30	42	56	61	71	94	50	53	42
11	105	115	57	37	82	69	77	40	36	91	122	108	62	34	26	29	38	68	58	66	63	74	66	72	66
12	63	69	99	94	110	98	99	120	109	128	129	133	111	107	121	208	218	237	267	271	216	235	242	137	151
13	16	12	19	18	17	45	27	14	29	26	20	19	22	18	21	22	21	22	19	13	17	12	10	8	19
14	12	18	14	6	14	17	17	22	25	21	20	15	11	7	7	16	22	19	26	20	12	10	25	8	16
15	7	5	8	10	11	22	12	15	56	94	110	105	82	66	70	89	49	66	157	135	79	52	44	47	58
16	36	32	19	21	22	23	28	35	36	42	50	51	53	66	85	86	86	72	67	67	59	60	43	59	50
17	69	53	49	42	38	38	31	28	38	42	42	43	53	59	39	24	17	16	14	22	21	40	86	25	39
18	90	62	53	68	25	16	11	13	15	14	23	22	36	37	36	14	25	33	41	46	35	28	20	15	32
19	17	12	33	26	13	42	28	44	81	100	99	105	101	81	50	41	24	27	22	45	106	84	14	51	52
20	45	47	48	42	44	50	60	71	75	84	99	92	81	48	20	24	67	66	99	117	110	56	8	29	62
21	50	48	20	15	14	19	22	35	33	45	43	53	63	67	69	64	52	77	59	54	89	41	36	22	45
22	17	18	17	21	14	16	24	31	46	50	55	54	53	60	50	45	47	89	101	71	75	76	58	48	47
23	33	M	32	40	49	51	54	59	79	83	83	38	40	16	16	15	17	17	15	23	89	69	159	81	50
24	92	26	23	13	9	53	17	24	32	48	55	27	34	11	12	11	16	12	10	18	18	22	19	51	27
25	51	30	18	19	24	40	55	79	98	85	57	43	33	32	33	29	36	53	43	43	72	53	66	64	48
26	112	148	135	144	152	167	42	26	42	28	48	24	17	21	18	23	33	25	27	25	46	30	24	18	57
27	18	23	18	27	17	21	18	19	19	23	26	24	18	14	15	16	14	14	22	28	22	20	25	16	20
28	21	25	29	26	19	14	18	26	27	34	29	40	40	44	28	14	19	17	12	34	33	78	126	54	34
29	44	35	32	56	55	100	109	104	105	85	60	35	29	26	27	23	21	22	33	32	32	28	30	45	49
30	71	59	48	32	37	46	66	66	52	85	62	47	67	80	45	74	96	112	39	47	33	31	47	22	57
31	72	75	61	84	114	62	50	69	68	69	53	70	42	51	62	46	34	23	155	173	161	126	109	94	80

MONTHLY STATISTICS:

GEOM	ARITH ----- PERCENTILES -----							RANGE -----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
43	46	54	46	104	128	154	194	5	-	271	16	-	151	2	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
 AIR QUALITY DATA MONTHLY TIME SERIES REPORT

STATION : CHUNG HOM KOK ZONE SUBSTATION
 POLLUTANT : SULPHUR DIOXIDE

MONTH: FEBRUARY

YEAR : 2019
 UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	0	0	0	0	0	0	0	1
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0
8	0	1	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
13	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	0	0	0	0	1	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	0	1	1	1	1	1	0	1
23	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
26	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1
27	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	1	2	0

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE LIMIT LEVEL		
1	0	0	0	1	1	1	2	0	-	12	0	-	1	1	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT

STATION : CHUNG HOM KOK ZONE SUBSTATION
POLLUTANT : NITROGEN DIOXIDE

MONTH: FEBRUARY

YEAR : 2019

UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	30	5	3	26	25	12	3	5	8	9	7	4	4	6	9	8	8	11	7	4	5	3	2	2	9
2	1	0	0	0	0	0	0	0	1	3	3	2	1	0	0	1	2	2	1	1	0	0	0	0	1
3	0	0	0	0	0	0	1	9	10	6	17	3	1	1	1	3	2	3	7	13	9	6	6	45	6
4	70	83	65	41	39	31	31	43	34	36	38	38	24	18	7	4	2	2	0	0	0	0	0	0	25
5	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	3	2	0	1	1	0	0	0	0
6	0	M	0	0	0	0	0	2	1	1	0	1	0	0	0	1	0	7	5	7	5	4	2	5	2
7	9	12	12	4	0	0	1	2	6	6	7	1	1	0	0	0	0	6	9	11	6	4	5	5	4
8	3	4	1	0	0	0	5	5	5	2	2	1	0	0	0	0	0	0	0	0	0	1	0	1	1
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	1	5	3	4	2	0	0	0	2	3	5	5	5	4	3	2	1	1	2
12	2	1	0	0	0	0	0	6	1	3	3	1	0	0	0	0	0	2	2	3	3	4	4	1	2
13	2	1	0	0	0	0	1	1	11	18	16	9	14	11	7	2	2	4	0	1	0	0	1	4	4
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	2	0
15	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	6	4	7	1	0	0	2	0	1
16	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	12	2	1	1	0	0	0	1
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	22	15	15	22	35	37	20	10	4	8
19	1	0	2	2	4	4	3	4	3	3	4	4	1	0	0	3	3	2	4	3	0	3	2	1	2
20	0	M	0	0	0	0	2	7	6	1	1	1	0	0	1	1	4	4	2	2	5	9	8	3	2
21	1	1	5	3	2	1	2	5	4	4	2	2	3	3	7	6	4	3	0	1	2	2	2	3	3
22	6	37	40	36	34	29	27	27	25	23	24	28	35	37	8	3	5	7	3	4	6	10	6	4	19
23	3	3	5	2	2	2	1	0	1	0	1	2	0	0	0	0	5	4	3	5	12	10	10	1	3
24	0	0	0	1	7	9	15	13	17	20	15	2	1	3	5	5	4	19	59	16	8	8	4	6	10
25	4	8	3	2	3	4	4	4	5	7	7	8	12	11	11	13	10	11	12	7	7	4	3	2	7
26	4	4	2	0	0	0	0	1	0	1	0	1	0	0	2	1	0	1	0	0	0	0	0	0	1
27	0	0	0	0	0	0	0	0	0	2	0	1	2	1	2	3	4	8	2	2	4	0	1	1	1
28	0	0	0	0	0	0	0	4	2	20	8	0	0	0	0	1	3	14	4	6	5	4	4	1	3

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL	
4	1	4	1	11	22	37	40	0	-	83	0	-	25	3	100	0	

NOTES:

1. FLAGS FOR INVALID DATA :
 - D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: FEBRUARY

STATION : VICTORIA ROAD SUBSTATION
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	9	9	9	9	9	9	9	9	9	9	9	8	9	9	9	9	9	9	9	9	9	9	9	10	9
2	10	10	10	10	11	11	10	10	10	10	10	11	11	10	11	11	11	11	11	11	11	11	11	11	11
3	11	11	12	11	11	11	11	11	11	12	12	11	9	12	12	13	12	12	12	12	12	12	13	13	12
4	13	13	13	13	13	13	13	13	13	13	14	15	14	14	14	13	13	13	12	12	12	11	11	11	13
5	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	11	11	11	11	11	11	11	11	11	11
6	12	11	11	12	12	12	12	12	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	12
7	11	12	12	11	11	11	11	11	10	11	11	11	12	12	12	12	12	12	11	11	11	11	11	11	11
8	11	11	11	11	11	11	11	11	11	11	11	11	12	12	11	11	11	11	11	11	11	11	11	9	11
9	9	9	9	9	9	9	9	9	8	8	9	9	9	8	9	9	9	8	8	8	8	8	8	9	9
10	9	8	8	9	9	8	8	9	8	8	8	9	8	8	9	8	8	8	8	8	8	8	8	9	8
11	8	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
13	1	0	0	0	0	0	0	0	0	0	0	11	3	3	3	3	2	2	2	1	1	1	1	2	2
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0
16	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	M	M	2	3	3	3	3	3	3	3	3	3	3	1	2
19	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	2	1
20	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1
21	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
22	1	1	1	1	2	2	2	2	2	2	2	2	2	3	2	1	1	1	1	1	1	1	1	1	2
23	1	1	1	1	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	1	1	1	1
24	1	1	1	1	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	1	1	1	0	1	1	0	0	0	0	0	1	1	1	2	2	2	2	2	2	2	1	1	1	1
26	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
27	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	0	0	1	1	1	0	0	1	1	1
28	1	1	1	1	1	1	2	2	2	2	3	2	1	2	1	1	1	1	1	1	1	1	1	1	1

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE LIMIT LEVEL		
4	1	4	1	11	12	13	13	0	-	15	0	-	13	3	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: FEBRUARY

STATION : VICTORIA ROAD SUBSTATION
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	27	21	19	16	11	11	10	14	18	20	15	12	14	14	22	28	27	23	19	13	11	9	9	8	16
2	8	7	6	6	6	6	8	9	10	12	13	17	20	14	12	12	14	10	11	13	12	18	8	8	11
3	22	16	19	18	14	16	16	12	24	28	25	29	35	23	18	25	19	22	33	33	27	22	23	24	23
4	20	13	13	10	21	19	22	22	22	29	41	43	42	42	37	30	49	19	11	9	8	7	8	7	23
5	7	7	6	5	5	4	6	7	10	12	10	9	9	9	8	10	11	12	11	9	9	11	16	11	9
6	14	M	15	19	10	12	15	17	20	19	12	10	10	20	21	10	10	19	13	14	16	16	20	18	15
7	13	11	12	4	5	5	5	7	6	7	7	10	8	9	8	12	10	11	12	10	13	10	7	7	9
8	8	6	4	4	4	5	5	7	13	12	9	9	9	7	7	8	6	6	6	5	5	5	5	6	7
9	6	5	4	4	4	4	5	6	6	6	7	7	7	6	7	7	7	7	7	7	6	5	5	4	6
10	4	3	3	3	3	4	4	4	5	5	5	5	6	5	5	6	6	6	6	6	6	7	5	5	5
11	6	5	4	4	4	4	6	7	11	10	11	14	11	8	10	12	13	14	13	10	9	7	7	7	9
12	6	6	5	5	5	6	8	11	12	13	13	12	13	11	10	10	11	18	19	12	12	9	7	11	10
13	14	15	15	11	11	11	20	29	26	27	30	36	34	39	39	38	24	18	18	13	14	10	9	8	21
14	6	5	4	4	4	4	5	8	11	15	15	20	20	17	18	14	12	13	13	10	8	7	6	6	10
15	5	4	4	4	4	4	6	7	9	8	8	12	13	18	18	18	26	31	31	22	8	6	6	7	12
16	13	20	10	7	8	7	15	19	21	22	30	23	13	11	11	10	12	13	11	9	8	7	7	6	13
17	6	5	4	4	4	4	5	5	6	6	5	5	6	6	7	6	6	7	6	6	5	5	5	5	5
18	5	4	4	4	4	4	6	7	8	7	8	8	8	12	18	17	13	14	30	30	31	29	29	25	14
19	24	21	20	20	17	19	18	19	16	16	20	22	19	20	15	16	19	25	30	31	29	27	27	24	21
20	19	M	9	7	6	6	12	16	15	16	15	14	12	11	14	12	16	15	13	9	9	9	9	7	12
21	6	5	5	9	6	6	8	9	9	9	16	17	12	13	15	14	15	15	12	10	10	10	20	23	11
22	21	19	17	16	16	15	14	13	13	13	14	16	20	27	30	28	19	19	29	31	28	27	42	23	21
23	14	8	6	6	6	7	7	6	7	7	7	8	9	8	9	11	16	21	15	16	18	18	19	18	11
24	18	16	17	13	12	13	12	14	14	14	15	18	17	16	19	19	25	28	29	29	27	20	27	23	19
25	21	19	13	9	12	12	10	12	12	16	14	20	24	23	22	24	26	28	31	31	33	22	17	16	19
26	22	19	12	7	6	6	9	10	9	9	9	10	9	9	10	11	10	10	9	8	7	7	7	7	10
27	6	6	7	6	5	6	12	21	22	19	20	19	19	13	11	11	12	13	28	33	31	31	34	24	17
28	28	25	27	29	28	26	28	28	30	43	41	40	36	19	21	20	18	23	18	22	21	11	9	8	25

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE	LIMIT LEVEL	
11	12	14	12	27	30	36	41	3	-	49	5	-	25	2	100	0

NOTES: 1. FLAGS FOR INVALID DATA :
D: DYNAMIC CALIBRATION
T: TELEMETRY/DATALOGGR FAULT
M: MAINTENANCE OR ANALYZER FAULT
P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: FEBRUARY

STATION : POK FU LAM
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	5	5	5	5	5	5	4	5	5	5	5	5	5	5	6	6	5	5	5	5	4	4	4	4	5
2	4	4	4	4	4	4	4	4	4	4	4	5	5	6	5	5	5	4	6	6	5	5	5	5	5
3	5	5	5	5	5	5	4	5	5	7	9	9	6	6	7	6	5	6	6	6	6	7	7	7	6
4	6	6	6	6	8	13	10	8	10	11	14	14	11	9	8	8	7	6	5	5	5	4	4	4	8
5	5	4	4	4	4	5	4	4	5	6	5	5	5	4	5	5	6	5	5	5	5	4	4	5	5
6	4	5	4	5	5	5	5	5	6	6	5	5	6	5	6	5	5	5	5	5	5	6	5	5	5
7	5	6	6	5	5	5	5	5	5	4	5	5	6	6	5	5	4	5	5	5	5	5	6	6	5
8	5	5	4	4	4	4	4	4	4	4	4	5	6	5	5	4	4	4	4	4	4	4	4	4	4
9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4
10	4	4	3	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4
11	4	4	4	4	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
12	4	3	3	4	3	3	4	4	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4
13	4	5	5	5	6	6	5	6	6	8	8	7	7	8	7	8	5	6	5	5	5	5	5	5	6
14	4	4	4	4	4	4	4	4	4	5	5	5	6	5	5	5	4	5	5	5	4	4	4	4	4
15	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	6	6	8	6	6	5	4	5	5	5
16	5	5	5	5	4	4	4	4	5	5	7	5	4	5	5	5	5	5	5	5	5	5	4	4	5
17	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
18	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	5	4	4	5	5	5	7	7	4
19	6	5	6	6	5	5	5	6	5	5	5	5	6	6	6	5	5	6	6	6	6	6	6	7	6
20	5	5	4	5	5	4	5	4	4	4	4	6	5	5	5	5	5	5	5	5	4	5	4	4	5
21	4	4	5	4	4	4	5	4	5	4	4	5	5	5	6	5	5	5	4	4	5	4	4	5	5
22	6	7	7	7	7	7	7	7	7	7	7	8	8	8	7	8	6	7	7	8	8	9	8	7	7
23	7	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	6	6	5	6	7	7	6	6	6
24	6	6	6	6	6	6	6	6	6	6	7	7	7	8	7	7	8	7	7	7	7	6	6	7	7
25	7	6	6	6	6	6	6	6	6	6	6	7	8	8	8	8	7	8	9	7	5	6	5	6	7
26	6	6	6	5	5	5	6	5	5	5	5	5	5	5	5	5	5	5	4	5	4	5	5	5	5
27	4	4	5	5	5	5	5	5	5	7	8	6	6	6	5	6	6	5	6	6	5	6	6	7	6
28	6	6	6	7	8	7	9	9	9	9	9	8	9	7	6	6	6	6	6	6	6	5	5	6	7

MONTHLY STATISTICS:

GEOM	ARITH ----- PERCENTILES -----							----- RANGE -----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT LEVEL		
5	5	5	5	7	8	9	9	3	-	14	4	-	8	1	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: FEBRUARY

STATION : POK FU LAM
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	56	34	32	36	30	39	30	47	61	59	52	48	46	41	52	63	63	46	46	42	26	19	21	14	42
2	11	10	8	8	8	9	10	15	18	23	45	44	55	51	42	28	42	56	51	73	36	59	76	53	35
3	69	39	60	47	34	64	33	23	51	63	49	48	31	40	16	27	32	38	58	84	90	89	84	83	52
4	82	69	68	65	80	85	84	72	65	76	89	84	71	60	41	42	81	25	11	13	9	10	12	10	54
5	10	11	8	7	7	9	11	21	24	35	20	18	21	23	15	55	37	16	10	13	12	34	60	13	20
6	33	56	44	86	46	32	45	58	59	40	19	11	9	11	13	8	10	23	17	19	24	24	30	28	31
7	18	18	19	5	6	8	4	5	7	8	7	8	4	7	5	8	7	15	16	10	20	11	7	10	10
8	10	5	5	5	3	3	3	7	20	21	9	11	9	7	9	6	8	8	8	6	5	5	6	7	8
9	6	6	4	3	4	4	5	8	7	8	8	9	7	10	20	16	23	19	13	9	7	7	8	8	9
10	7	M	5	5	5	5	6	7	9	12	11	10	10	9	11	13	13	15	16	16	10	13	11	7	10
11	10	9	7	6	9	7	10	17	27	33	36	41	28	25	34	35	35	42	37	33	30	19	17	10	23
12	10	10	7	7	7	6	11	16	30	36	31	32	35	22	17	19	24	53	59	32	31	17	11	21	23
13	56	48	65	55	34	33	37	70	77	78	77	60	64	84	75	82	31	38	65	30	41	64	23	21	55
14	13	7	6	5	5	6	6	15	29	39	35	32	44	28	41	34	24	34	50	56	25	12	7	13	24
15	11	6	4	4	3	5	9	13	15	28	25	41	42	41	41	52	61	89	81	80	11	9	12	33	30
16	37	34	21	9	7	7	17	11	24	50	63	40	11	9	10	13	13	11	11	8	8	7	7	11	18
17	9	7	7	8	8	6	7	8	11	11	12	11	8	11	11	13	15	14	11	13	11	7	8	7	10
18	6	5	5	5	4	5	8	8	10	10	9	7	7	33	56	52	38	31	60	70	74	73	83	77	31
19	72	58	58	55	40	35	31	31	33	30	44	56	45	47	46	33	44	76	83	87	87	83	81	72	55
20	32	7	3	4	4	5	7	13	16	21	16	10	7	7	10	8	14	11	9	8	8	9	8	5	10
21	6	19	33	30	19	16	10	10	10	11	9	8	7	22	40	18	18	14	12	9	9	17	74	61	20
22	55	50	46	42	39	37	35	33	32	29	30	36	45	51	46	66	43	64	89	86	92	113	101	98	57
23	82	17	14	12	13	13	14	13	16	16	14	13	14	21	26	32	61	41	16	43	54	59	60	51	30
24	46	M	46	26	26	37	32	41	37	34	36	32	32	35	40	43	66	76	80	77	72	52	43	63	47
25	57	40	26	23	46	34	28	23	31	38	38	43	54	52	55	60	66	74	78	80	64	39	30	28	46
26	55	23	11	8	6	6	10	13	19	15	14	25	18	22	17	13	13	16	12	9	6	6	6	10	15
27	14	12	15	9	10	35	28	44	57	70	55	41	42	32	10	10	12	61	104	100	76	90	98	91	47
28	82	81	88	91	90	69	83	80	76	82	82	57	66	30	16	17	22	36	24	9	10	20	20	27	52

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
21	23	31	23	72	82	89	91	3	-	113	8	-	57	2	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
D: DYNAMIC CALIBRATION
T: TELEMETRY/DATALOGGR FAULT
M: MAINTENANCE OR ANALYZER FAULT
P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: FEBRUARY

STATION : AP LEI CHAU
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	3	2	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	2	2
2	1	2	1	2	2	2	2	1	2	2	2	2	2	3	3	3	3	2	2	2	2	2	1	2	2
3	2	2	2	2	2	4	4	3	3	8	7	6	5	4	4	8	4	3	6	3	3	3	5	7	4
4	5	5	4	4	7	10	13	8	8	9	13	8	8	6	5	5	4	3	2	2	2	1	2	2	6
5	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2
6	2	2	2	2	1	2	2	2	2	2	2	3	3	4	3	4	3	3	3	3	4	4	2	4	3
7	3	3	2	2	2	2	2	2	2	3	3	3	3	3	2	3	2	2	1	2	2	2	3	4	2
8	4	3	2	2	2	2	2	2	2	4	3	3	3	2	2	2	2	2	1	1	1	1	2	1	2
9	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	0	2	1
10	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	2	1
11	1	1	1	2	2	2	1	1	1	1	1	1	1	2	2	2	2	1	2	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	1	1	1	2	3	3	2
13	2	3	3	3	3	3	4	4	4	4	5	6	7	7	6	8	5	5	4	5	5	4	4	3	4
14	2	2	1	1	1	1	1	1	1	2	2	2	3	3	3	3	3	3	2	2	2	2	1	2	2
15	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	5	4	3	3	3	2	2	2	2	3
16	1	1	1	1	2	1	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	1	2	2
17	2	2	2	1	2	2	1	1	1	2	1	2	1	2	2	2	2	2	2	2	1	1	1	1	2
18	1	1	1	1	1	0	1	0	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	2	1
19	2	2	1	1	2	2	3	2	2	1	1	2	2	3	3	3	3	2	2	2	2	2	2	2	2
20	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	2	2	2	1
21	2	2	2	2	2	2	2	2	2	3	3	3	3	2	3	3	2	2	1	1	1	1	2	2	2
22	2	3	3	4	4	3	3	4	4	4	4	5	5	5	6	4	3	3	4	4	5	5	2	2	4
23	1	1	2	2	2	2	2	1	1	1	1	1	1	1	2	1	1	1	1	1	2	2	2	1	1
24	1	1	1	1	1	1	0	1	1	1	1	2	2	3	3	2	2	3	3	2	1	1	1	3	2
25	2	2	1	1	2	1	1	2	1	1	2	5	4	4	4	5	5	6	4	3	3	2	2	2	3
26	1	1	1	1	1	1	1	1	0	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	4	4	2	2	2	3	2	2	3	2
28	2	2	2	6	3	2	2	2	7	8	11	6	4	7	4	2	3	3	2	2	2	2	2	2	4

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT LEVEL		
2	2	2	2	4	5	7	8	0	-	13	1	-	6	2	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: FEBRUARY

STATION : AP LEI CHAU
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	65	32	35	32	25	21	15	20	26	36	27	20	8	15	16	26	31	18	14	8	5	5	6	5	21
2	2	2	0	0	0	1	1	3	6	7	10	5	5	2	2	2	1	6	5	3	5	8	1	1	3
3	3	3	0	1	5	39	45	32	32	48	45	44	30	5	4	23	8	17	27	13	24	72	75	98	29
4	88	71	36	49	84	75	71	67	60	62	65	54	42	33	16	13	15	1	0	0	0	0	0	1	38
5	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	4	1	2	0
6	0	M	0	0	0	0	9	10	19	0	0	1	0	16	6	0	5	10	3	5	22	14	22	56	9
7	17	18	17	1	17	10	0	0	2	1	2	0	0	2	0	2	5	9	8	4	31	3	15	12	7
8	23	9	7	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	7	2	3	1	0	0	0	0	0	1
10	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	2	3	1	0	0	0	0
11	2	0	0	0	0	0	5	11	14	21	11	9	6	5	7	11	15	10	16	12	8	7	7	8	8
12	4	3	1	0	0	0	7	17	16	7	5	2	1	0	0	0	1	10	6	0	0	1	1	11	4
13	17	11	10	3	4	17	47	47	54	35	31	28	53	50	38	26	10	5	2	0	1	0	3	7	21
14	4	4	0	0	0	0	0	2	3	5	4	4	3	0	0	2	2	1	0	0	0	0	0	5	2
15	7	0	0	0	0	0	0	0	5	5	5	5	3	3	2	10	20	13	8	0	0	0	3	1	4
16	2	2	1	2	4	1	9	17	10	4	38	9	0	0	0	0	0	3	1	0	0	0	0	2	4
17	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
18	0	0	0	0	0	0	0	0	1	3	2	2	1	6	30	11	6	21	52	57	56	36	29	14	14
19	8	11	4	4	4	5	12	17	7	9	25	21	1	0	0	0	0	14	15	19	19	15	16	9	10
20	0	M	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	2	0	1	0
21	0	2	0	1	0	1	4	0	0	1	1	0	0	0	4	2	3	0	0	0	0	0	3	4	1
22	33	41	38	33	29	26	25	23	21	17	20	26	34	40	28	13	7	26	66	60	72	30	12	14	31
23	4	0	1	0	1	2	2	1	2	3	3	1	1	3	4	7	17	16	9	19	48	49	47	19	11
24	10	5	3	15	19	27	29	29	28	27	25	28	30	27	36	37	44	64	68	54	11	8	6	37	28
25	39	8	6	1	4	4	10	8	15	20	18	28	39	44	46	50	55	64	47	40	60	14	9	5	26
26	4	12	0	0	0	0	0	0	3	1	0	5	0	0	0	0	0	1	2	2	1	1	0	1	1
27	1	0	0	0	0	0	3	8	9	3	1	0	0	0	0	0	1	7	6	15	30	34	71	52	10
28	46	14	4	79	42	25	10	18	54	72	71	36	21	6	20	0	1	11	1	1	1	4	0	0	22

MONTHLY STATISTICS:

GEOM	ARITH ----- PERCENTILES -----							----- RANGE -----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE LIMIT LEVEL		
8	3	11	3	36	52	68	72	0	-	98	0	-	38	4	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: FEBRUARY

STATION : CHEUNG CHAU
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	12	11	10	10	10	10	10	10	10	10	10	11	11	11	11	10	10	10	10	10	11	10	11	13	11
2	11	11	11	10	11	10	10	10	10	11	11	12	12	10	10	10	11	10	10	11	11	11	10	12	11
3	11	11	11	11	11	11	11	11	12	12	12	12	12	14	12	12	16	12	13	13	14	15	13	13	12
4	12	12	12	11	11	11	12	12	14	16	11	10	9	5	5	8	8	3	1	1	1	1	1	0	8
5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	0	0	0	0	0	0	1	0
7	0	0	0	0	0	0	0	0	0	0	1	1	2	2	1	0	0	0	0	0	0	0	0	1	0
8	0	1	0	0	0	0	0	0	1	1	2	3	3	1	0	0	0	0	0	0	0	0	0	0	1
9	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	1	1	3	1	0	1	2	3	4	1	1	0	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0	0	0	2	2	1	1	2	1	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0
20	0	0	0	0	0	0	0	0	0	0	1	1	3	3	4	1	1	0	0	1	0	0	0	1	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	1	1	2	1	0	1	1	2	3	5	4	2	3	2	1	1	1	1	1	1	2	2	2
23	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0
25	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2	1	0	1	1
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	4	5	0	0	0	0	0	0	1

MONTHLY STATISTICS:

GEOM	ARITH -----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE LIMIT LEVEL		
3	0	2	0	10	11	12	13	0	-	16	0	-	12	3	100	0

NOTES: 1. FLAGS FOR INVALID DATA :
D: DYNAMIC CALIBRATION
T: TELEMETRY/DATALOGGR FAULT
M: MAINTENANCE OR ANALYZER FAULT
P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: FEBRUARY

STATION : CHEUNG CHAU
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	76	48	28	24	21	20	24	35	49	59	59	63	60	67	64	61	51	28	32	33	45	27	38	36	44
2	36	35	36	31	29	28	31	30	77	87	65	62	69	20	13	12	17	22	33	30	62	58	95	33	42
3	51	50	59	42	37	53	63	78	86	85	60	71	29	35	24	32	69	50	77	53	96	135	100	90	64
4	85	94	80	53	51	59	94	77	100	M	108	89	80	53	74	63	67	51	15	18	20	20	19	15	60
5	15	16	18	20	13	13	18	22	23	16	26	13	31	24	10	24	16	29	12	15	39	103	62	59	27
6	73	M	79	64	77	75	45	41	60	51	23	13	12	15	19	29	38	28	31	39	31	19	17	17	39
7	20	20	22	31	34	20	40	41	45	24	19	26	33	20	16	13	15	33	24	22	19	12	23	50	26
8	74	74	38	25	59	49	56	65	51	21	17	18	20	11	9	12	16	14	9	12	11	10	10	11	29
9	11	28	25	24	24	32	28	29	37	32	31	32	37	39	33	56	56	46	39	33	28	26	22	16	32
10	15	24	23	24	25	25	25	24	20	14	15	13	34	19	26	26	26	18	12	51	42	13	7	18	22
11	7	35	33	16	13	21	37	58	65	65	50	51	21	29	38	57	60	62	66	71	71	72	78	70	48
12	52	51	36	21	22	23	20	43	41	65	63	45	29	6	1	4	1	4	6	17	16	11	28	72	28
13	79	72	55	51	44	47	44	54	70	93	78	88	87	61	54	37	28	25	15	4	13	15	17	103	51
14	60	13	14	15	18	8	5	9	13	46	28	24	27	3	0	4	3	3	8	4	0	0	0	70	16
15	52	24	7	9	4	7	10	14	13	31	50	28	19	5	31	40	23	10	34	11	10	12	11	58	21
16	72	87	72	51	57	75	76	75	71	80	41	27	12	19	26	23	14	20	8	4	2	5	3	11	39
17	2	7	7	19	13	15	6	6	5	11	20	15	17	22	21	16	12	14	13	12	16	14	10	13	13
18	17	27	22	33	22	29	5	3	4	4	5	3	4	42	53	53	52	38	35	47	58	55	29	12	27
19	7	8	51	48	32	26	30	38	8	26	46	71	47	18	24	20	21	45	14	29	72	101	90	77	40
20	66	M	25	15	2	14	6	4	3	14	8	14	18	18	18	20	26	36	38	33	49	33	30	9	22
21	10	8	1	5	1	4	4	5	3	24	21	2	3	12	3	7	3	10	7	4	29	32	57	37	12
22	55	51	49	44	41	38	37	36	35	32	37	38	48	46	47	33	17	20	38	62	53	71	138	87	48
23	45	28	16	15	23	31	33	32	24	19	18	11	11	19	31	51	79	82	102	86	67	59	39	30	40
24	30	37	28	31	22	20	26	25	29	30	19	21	21	30	42	58	59	69	87	92	90	90	90	83	47
25	68	56	51	33	29	33	34	39	47	54	49	49	58	58	67	71	78	92	98	102	106	107	107	104	66
26	93	90	87	84	26	19	22	25	25	20	12	29	17	17	21	11	8	14	23	12	14	15	14	19	30
27	10	9	15	33	33	43	26	14	10	11	12	M	M	0	6	4	6	5	45	92	73	74	74	68	30
28	74	63	67	61	31	40	42	48	37	46	59	34	29	18	13	34	42	53	50	50	28	24	14	15	41

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL	
26	29	36	29	74	87	99	103	0	-	138	12	-	66	2	99	0	

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT

STATION : CHUNG HOM KOK ZONE SUBSTATION
POLLUTANT : SULPHUR DIOXIDE

MONTH: MARCH

YEAR : 2019

UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	1	1	1	0
3	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	2	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1
5	0	0	0	0	0	1	1	0	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0	1
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	0	0	0	0	11	0	1
11	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
12	1	1	0	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	10	1	1
13	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2
14	2	2	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1	1	1	0	2
15	0	0	0	0	0	0	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	2	2	2	2	3	3	3	3	3	3	3	2	2	2	2	2	2	1	2	2
17	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	1
19	0	0	1	1	0	0	0	0	0	1	1	1	0	1	2	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
22	1	2	2	2	2	1	2	2	2	3	2	2	1	3	3	M	2	1	1	2	2	2	1	0	2
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	1	3	2	2	2	1	1	0	0	0	1	1	1	1
26	1	1	1	1	1	1	1	1	2	2	3	4	3	2	1	1	1	1	1	1	1	1	1	0	1
27	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0
28	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	2	2	2	2	2	2	1	1	1
29	1	1	1	1	1	1	1	1	1	1	3	3	5	3	3	3	3	2	1	1	1	2	1	5	2
30	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0	0	1	1	7	1	1	
31	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	0	1

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE LIMIT LEVEL		
1	1	1	1	2	2	3	3	0	-	11	0	-	2	2	100	0

NOTES:

1. FLAGS FOR INVALID DATA :
 - D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT

STATION : CHUNG HOM KOK ZONE SUBSTATION
POLLUTANT : NITROGEN DIOXIDE

MONTH: MARCH

YEAR : 2019

UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7	2	3	2	2	0	0	1	1
2	0	1	0	0	1	0	0	0	2	1	4	2	1	1	0	1	1	2	2	0	2	1	1	0	1
3	3	1	1	0	0	8	3	2	17	9	13	17	9	6	24	17	10	6	9	2	0	14	10	5	8
4	2	5	4	1	1	0	1	2	3	3	1	3	2	0	1	1	3	4	3	2	0	1	0	0	2
5	0	0	0	0	0	0	1	2	5	7	7	5	3	2	3	2	5	6	7	8	4	8	8	4	4
6	2	4	5	5	6	3	4	2	2	1	2	4	3	3	5	5	2	5	5	5	2	2	5	4	4
7	4	1	2	1	0	0	2	5	3	4	4	3	2	5	10	14	13	8	9	4	0	0	0	0	4
8	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	1	1	0	0	0	0	0	1
9	0	0	0	0	0	0	0	0	0	0	2	3	9	8	6	16	12	7	53	55	55	53	54	55	16
10	52	52	52	48	45	43	42	40	37	34	21	32	41	36	49	51	52	50	51	42	43	39	32	37	43
11	35	32	34	31	12	10	8	13	18	35	40	38	45	44	22	5	6	4	2	3	6	3	3	5	19
12	4	4	2	2	1	2	3	5	11	9	6	6	4	4	5	7	8	7	9	13	12	7	5	4	6
13	5	4	2	1	1	2	3	5	6	7	6	4	4	5	4	6	6	3	4	3	3	2	1	0	4
14	1	0	0	0	0	2	0	1	3	3	3	2	2	3	7	8	10	16	41	3	0	0	0	2	4
15	0	1	0	0	0	0	1	4	5	5	7	10	10	7	8	12	14	14	13	10	8	6	5	7	6
16	5	5	4	2	2	2	2	1	2	2	2	2	2	2	2	1	1	1	1	3	2	2	1	5	2
17	1	1	1	1	2	2	1	3	4	5	7	6	4	5	5	4	5	4	4	3	4	3	4	4	3
18	2	3	1	0	2	1	3	6	4	4	3	2	5	6	8	5	4	10	7	6	4	4	2	0	4
19	2	3	3	2	2	3	1	6	11	9	12	18	1	0	4	5	16	10	14	13	10	9	10	1	7
20	3	M	1	M	6	2	1	2	6	5	8	8	8	4	2	2	4	7	7	8	4	1	4	8	5
21	7	22	13	10	7	6	2	4	7	6	4	0	5	0	1	4	5	1	10	10	6	17	19	17	8
22	6	18	14	10	11	5	16	9	10	17	11	7	2	9	9	M	2	2	6	25	22	11	2	13	10
23	7	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	1	1	2	10	9	7	6	4	2
24	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	1	7	26	27	24	39	64	52	48	52	58	60	24	22	7	9	9	3	22
26	4	4	2	0	0	1	0	4	1	1	1	4	4	2	0	0	1	2	0	2	0	2	0	0	1
27	0	1	0	0	0	0	0	0	0	1	2	5	3	1	1	2	1	2	0	0	0	0	0	0	1
28	1	0	0	0	29	7	0	9	6	2	2	2	3	0	0	0	11	12	9	20	11	7	8	14	6
29	11	9	7	12	12	17	13	16	13	10	10	4	4	1	5	8	19	26	30	8	5	15	3	28	12
30	7	12	8	12	16	20	34	18	5	3	2	1	0	0	1	1	1	2	3	1	1	1	1	0	6
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2	0	0	0	0	0	0

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----					STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR			DEVIATION	VALID DATA	ABOVE LIMIT LEVEL	
5	3	7	3	17	36	51	53	0	-	64	0	-	43	3	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: MARCH

STATION : VICTORIA ROAD SUBSTATION
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	2	1	1	1	1	2	1
4	1	1	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0
8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	1	0	0	0	0	0	0	0	1	1	1	2	1	1	1	M	M	1	2	2	2	2	2	0	1
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
13	1	1	0	0	0	0	0	0	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	1	1
14	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	1	0
15	1	1	1	0	0	0	0	0	1	0	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1
18	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	1	1	0	0	0	0	1	0
19	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1
20	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0	1	1
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	0	1	1	1	1	1
22	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	1	2	2	1	2	2	2	1	2	2	2	2	2	2	1
26	2	1	2	1	1	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1
27	1	1	1	1	1	0	0	0	0	0	1	1	1	2	1	1	1	1	1	0	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	3	2	1	2	1	3	2	1	1
29	1	1	1	1	1	1	1	1	1	1	1	1	4	3	2	2	2	1	1	1	0	1	1	1	1
30	0	1	1	1	1	1	1	2	6	2	1	1	0	0	0	1	0	0	0	0	0	0	0	1	1
31	1	0	0	0	1	1	1	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE	LIMIT LEVEL	
1	1	1	1	1	2	2	2	0	-	6	0	-	1	1	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: MARCH

STATION : VICTORIA ROAD SUBSTATION
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	8	6	5	5	5	5	7	9	8	10	11	9	9	10	11	12	10	11	11	8	8	8	7	6	8
2	5	5	5	4	5	5	6	7	7	8	8	9	9	8	9	10	9	7	8	7	7	8	5	6	7
3	6	5	4	3	3	3	8	11	9	12	19	24	19	21	25	28	29	32	33	27	23	29	33	32	18
4	27	29	29	25	14	19	13	24	21	23	16	13	12	12	11	11	12	10	10	8	7	6	6	5	15
5	5	5	5	5	5	5	7	8	11	15	14	13	14	16	15	17	16	18	13	10	8	8	9	6	10
6	7	M	6	5	10	18	18	18	14	13	13	11	12	20	19	26	28	31	25	22	16	18	21	14	17
7	12	8	7	7	6	6	11	12	11	15	14	13	13	14	20	20	22	16	14	12	9	8	8	8	12
8	6	5	5	5	5	5	7	8	9	9	10	10	10	10	11	11	11	11	11	9	8	8	7	7	8
9	6	6	6	7	5	7	14	14	10	11	17	23	25	24	24	21	23	25	26	24	24	23	22	21	17
10	21	20	19	19	18	17	17	18	17	16	22	22	18	21	23	23	24	24	26	24	20	22	25	18	21
11	21	20	15	13	13	13	16	21	20	19	20	24	27	31	33	M	M	18	13	12	14	14	12	15	18
12	13	11	8	6	6	7	10	15	16	19	14	12	11	11	12	13	12	14	14	13	13	11	10	10	12
13	8	8	6	5	6	7	11	19	20	20	21	25	18	12	14	17	16	12	10	9	8	8	7	6	12
14	6	5	5	4	5	5	6	9	10	10	9	9	11	19	24	23	26	40	41	39	37	29	28	22	18
15	17	17	15	12	7	6	9	11	17	23	23	22	21	22	25	19	24	28	28	28	21	16	15	12	18
16	12	16	8	6	5	6	7	10	10	9	10	10	13	12	12	13	12	11	11	11	10	9	8	9	10
17	8	7	6	6	6	7	8	10	9	9	9	9	9	10	9	10	10	9	8	10	9	8	8	7	8
18	7	6	6	5	5	6	12	16	15	25	24	21	25	17	19	14	19	19	29	18	11	16	18	19	16
19	20	14	13	6	5	7	14	22	23	29	31	23	40	15	11	13	15	13	14	11	9	8	8	7	15
20	6	M	6	5	5	5	9	11	13	11	13	11	10	16	12	17	16	14	19	12	14	14	9	12	11
21	10	10	10	8	6	6	8	15	14	16	16	15	16	12	16	11	10	15	17	14	15	15	21	13	13
22	12	11	8	9	9	10	15	17	17	20	22	16	14	15	15	15	17	15	17	17	18	12	10	8	14
23	7	6	5	4	5	5	6	7	7	8	8	8	10	9	9	10	11	17	22	16	12	11	10	9	9
24	9	8	6	5	4	5	6	6	8	8	8	7	7	7	9	8	8	8	8	8	7	8	9	9	7
25	7	6	6	6	7	6	9	16	26	28	40	47	35	39	49	51	50	53	56	54	52	51	52	49	33
26	49	33	39	34	34	42	32	28	37	39	18	16	16	12	12	13	13	15	13	12	11	11	8	6	23
27	5	5	4	4	3	4	7	9	10	10	9	18	27	33	30	23	25	19	14	11	17	25	34	35	16
28	22	36	29	17	10	20	26	30	32	31	25	15	18	15	17	16	22	17	11	19	17	25	20	9	21
29	9	7	10	7	9	9	10	11	12	13	12	12	24	15	9	20	20	15	23	16	15	14	12	6	13
30	6	7	8	11	16	16	16	19	34	19	14	12	11	11	14	11	11	11	11	10	9	8	7	5	12
31	5	4	5	4	3	4	5	5	6	6	6	6	6	6	6	7	6	7	7	7	7	6	6	5	6

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
12	11	14	11	25	32	40	50	3	-	56	6	-	33	2	99	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: MARCH

STATION : POK FU LAM
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	5	5	5	5	5	5	5	5	5
2	5	5	5	5	5	5	5	5	5	5	5	8	6	6	5	5	5	5	5	5	5	5	5	5	5
3	5	5	5	5	5	5	6	6	5	5	5	6	6	7	7	8	10	13	13	9	7	7	12	10	7
4	9	9	9	8	7	7	7	6	7	10	7	7	7	7	6	7	6	6	5	5	5	5	5	5	7
5	5	5	5	5	5	5	5	5	5	5	6	6	7	7	7	7	6	6	6	6	6	6	6	5	6
6	6	5	5	6	6	6	5	6	6	7	6	5	6	5	5	6	7	6	5	5	6	6	6	6	6
7	5	6	6	5	5	5	5	5	5	6	5	5	6	5	5	6	5	6	6	6	6	5	5	5	5
8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	4	5	5
9	5	5	5	5	4	5	5	4	5	6	6	6	6	7	7	6	7	7	9	8	8	8	8	8	6
10	8	8	8	9	8	9	8	8	7	7	7	7	7	7	8	7	7	7	7	7	7	7	7	7	7
11	7	6	6	6	6	6	6	6	7	7	7	8	8	7	8	7	7	7	6	6	6	6	6	6	7
12	6	6	6	6	6	6	6	7	8	8	7	7	7	7	6	6	6	6	6	7	7	7	7	6	7
13	6	6	6	6	6	6	7	7	7	8	8	8	7	7	8	8	7	6	6	6	6	6	6	6	7
14	6	6	6	6	6	6	6	6	6	5	5	6	6	6	5	6	6	8	8	7	7	7	6	6	6
15	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	6	6	7	7	7	7	6	6	6
16	6	6	6	6	6	6	7	7	7	M	8	8	9	9	9	7	7	7	7	7	7	6	6	6	7
17	6	6	6	6	6	7	6	7	7	7	6	6	7	7	6	6	5	5	5	6	5	6	5	5	6
18	5	5	5	5	5	5	5	5	6	9	8	7	7	7	6	6	5	6	6	6	6	6	7	7	6
19	7	7	6	6	6	5	5	6	7	7	7	7	7	7	7	7	7	6	6	6	6	6	5	6	6
20	5	6	6	5	6	6	5	5	5	5	5	6	6	6	6	6	8	6	6	6	6	6	6	6	6
21	6	6	6	6	6	6	6	6	6	6	10	7	7	11	10	11	7	7	6	6	6	6	5	7	7
22	6	7	7	6	7	7	6	6	8	7	7	6	7	7	7	7	7	6	7	7	7	6	6	6	7
23	5	6	5	5	5	6	5	5	5	5	5	6	5	5	5	5	5	6	5	5	5	5	5	6	5
24	5	5	6	5	5	6	5	5	5	5	5	5	5	6	6	5	5	5	5	5	5	5	5	5	5
25	5	5	5	5	5	5	5	5	6	7	8	8	9	9	8	9	9	8	9	9	9	9	11	10	7
26	10	8	7	7	7	7	8	8	8	8	7	7	8	7	7	7	6	6	5	5	5	5	4	4	7
27	5	4	5	5	5	5	5	5	5	6	6	6	6	8	7	7	7	6	6	6	6	7	7	8	6
28	6	7	7	6	6	6	6	7	8	8	9	7	6	6	9	8	7	7	7	7	7	8	7	6	7
29	6	6	7	6	6	6	7	6	8	8	8	7	9	9	8	8	8	7	7	6	6	6	7	6	7
30	6	9	8	8	8	8	9	8	15	10	7	7	7	7	6	7	7	6	6	6	6	6	6	6	7
31	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	5	6	6	5	5	5	6	6	6

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
6	6	6	6	8	9	9	10	4	-	15	5	-	7	1	100	0

NOTES: 1. FLAGS FOR INVALID DATA :
D: DYNAMIC CALIBRATION
T: TELEMETRY/DATALOGGR FAULT
M: MAINTENANCE OR ANALYZER FAULT
P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: MARCH

STATION : POK FU LAM
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	17	11	6	5	5	6	8	16	20	22	23	19	12	27	22	22	23	19	21	12	28	14	7	5	15
2	5	5	6	5	7	5	7	9	11	13	17	36	34	41	17	9	10	11	12	10	8	8	6	4	12
3	5	4	2	1	1	3	8	15	20	21	30	40	39	45	43	56	66	73	101	85	76	94	113	102	43
4	97	96	75	68	52	56	46	39	41	44	38	24	25	21	17	16	20	15	15	9	7	12	9	6	35
5	5	4	4	4	3	2	4	6	8	10	9	8	11	14	16	16	16	15	11	6	4	5	8	6	8
6	7	5	5	10	18	40	33	42	55	59	38	23	30	41	36	70	85	74	52	50	51	29	51	48	40
7	17	10	9	9	6	7	24	34	23	38	19	17	22	39	47	37	51	40	42	30	14	12	10	11	24
8	8	6	5	5	8	6	10	18	22	18	20	15	18	19	17	18	22	25	20	13	11	9	8	7	14
9	8	8	9	8	7	14	19	16	47	47	54	66	63	65	67	69	69	73	65	66	65	67	63	63	46
10	61	M	53	53	48	50	50	50	46	41	42	56	41	54	60	57	60	64	70	60	58	54	63	48	54
11	56	51	37	29	35	30	41	58	61	57	55	60	53	49	54	51	34	47	59	57	65	44	33	26	48
12	18	25	37	46	57	55	46	50	44	39	23	19	22	21	14	18	23	31	29	22	16	13	14	17	29
13	19	19	43	39	35	25	22	50	62	53	46	59	26	24	34	36	41	27	18	13	15	13	11	8	31
14	7	8	5	5	4	6	9	16	19	15	17	22	23	40	40	55	86	128	128	117	109	96	78	32	44
15	30	21	25	20	10	15	23	27	47	61	67	55	54	62	67	77	71	76	88	83	58	70	59	58	51
16	69	52	13	10	10	9	11	19	22	M	19	22	18	16	18	20	20	18	17	18	17	16	14	18	20
17	14	10	8	8	8	8	8	11	14	16	12	14	11	17	18	20	19	14	15	21	16	17	10	7	13
18	7	7	6	7	7	8	21	36	39	75	62	48	49	44	37	25	18	29	57	25	20	35	62	57	33
19	52	49	34	25	8	18	18	35	57	61	49	48	41	14	13	16	17	17	16	12	14	12	9	7	27
20	3	4	3	4	4	5	7	29	17	11	9	10	9	12	9	16	20	17	21	13	12	13	7	13	11
21	13	14	15	8	6	6	7	17	21	18	22	10	10	20	22	22	10	19	17	14	16	15	25	10	15
22	8	14	17	11	13	13	18	23	29	39	31	18	14	13	15	15	17	15	18	21	18	9	9	4	17
23	5	4	6	7	6	5	5	9	14	14	17	18	18	18	19	17	12	43	45	32	21	17	17	17	16
24	18	M	9	6	6	7	8	10	13	13	12	9	11	11	15	15	15	15	12	12	11	10	12	12	11
25	12	9	9	8	9	11	17	48	65	67	69	68	59	78	79	75	89	100	107	107	109	104	112	104	63
26	101	79	49	70	55	64	73	71	55	52	28	31	23	9	16	17	20	27	19	28	20	21	17	11	40
27	10	7	5	5	4	4	8	14	33	40	38	53	58	64	56	45	44	67	56	25	46	77	84	105	40
28	55	66	28	14	12	16	41	57	65	61	36	16	17	12	20	23	28	17	21	31	28	33	22	14	31
29	13	9	27	8	13	16	11	14	23	21	14	13	17	15	9	15	36	23	33	12	15	15	33	18	18
30	14	31	26	39	37	42	44	38	55	34	19	15	15	21	24	23	23	20	22	18	15	14	9	11	25
31	12	8	8	15	5	6	7	9	10	11	9	9	11	12	10	12	13	12	13	13	12	10	10	8	10

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----		STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE	LIMIT LEVEL	
20	18	28	18	63	75	100	107	1	-	128	8	-	63	2	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: MARCH

STATION : AP LEI CHAU
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	2	1	1	1	1	1	0	0	0	1	1	1	1	2	2	1	1	1	1	1	1	0	1	2	1
2	1	2	2	2	1	2	2	2	2	2	2	3	2	2	3	3	3	2	2	2	2	2	3	2	
3	3	3	3	3	3	3	3	3	3	2	3	3	3	5	6	5	5	11	5	3	3	3	4	7	4
4	3	3	3	3	3	3	3	3	4	5	4	4	4	5	6	4	2	2	2	2	2	1	1	2	3
5	2	2	1	1	1	1	1	2	2	2	3	4	4	6	8	8	8	5	4	5	3	3	2	3	3
6	2	3	3	3	2	2	2	2	2	2	2	2	4	4	3	3	3	3	2	2	1	1	2	2	2
7	1	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	0	0	0	2	1
8	1	1	2	1	1	1	2	1	1	1	1	2	2	2	2	2	2	0	1	1	1	1	1	2	1
9	2	2	2	2	2	2	2	2	2	2	2	3	3	3	4	5	5	5	6	4	5	6	5	4	3
10	4	3	4	4	4	4	4	4	4	3	3	3	3	4	4	4	3	4	3	3	3	2	2	3	3
11	2	2	3	3	3	2	2	2	2	3	4	5	6	5	5	3	4	3	2	2	2	2	3	3	3
12	2	2	2	2	2	2	2	3	4	4	5	6	4	4	5	5	5	4	3	3	2	3	3	3	3
13	3	3	3	3	3	3	4	4	4	4	4	5	3	4	5	4	3	3	3	3	3	2	2	3	3
14	3	3	3	2	3	3	3	2	3	3	3	3	3	2	2	2	2	3	2	3	3	2	2	2	3
15	1	1	2	1	1	1	1	2	1	1	2	5	4	3	3	2	2	2	3	3	3	3	2	2	2
16	2	2	2	2	3	3	4	3	4	4	5	6	4	5	6	5	4	4	3	3	3	3	3	4	4
17	3	3	3	4	4	3	3	4	4	4	4	4	4	4	3	3	3	3	2	2	1	2	2	3	3
18	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	3	2	2	2	2	1	2	2
19	2	2	3	3	2	2	2	2	4	6	4	4	4	3	5	5	4	4	4	3	4	4	4	3	3
20	3	3	3	3	3	3	2	2	2	2	3	3	3	3	4	4	4	3	2	2	2	3	3	3	3
21	3	3	5	3	3	3	2	2	3	5	5	4	4	4	5	5	4	4	3	4	4	4	4	4	4
22	2	3	3	4	3	3	5	4	5	5	5	4	5	5	6	8	5	6	5	5	4	4	3	4	4
23	3	2	2	2	2	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	0	0	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	0
25	1	1	2	2	2	1	2	2	1	2	4	6	5	6	7	8	6	7	6	7	4	5	3	3	4
26	2	2	3	3	2	3	2	2	2	4	4	6	5	3	3	3	3	2	2	2	1	1	1	2	3
27	1	2	2	2	2	2	1	1	2	2	3	2	2	3	3	3	3	3	2	2	2	2	2	2	2
28	2	1	1	3	5	3	2	2	4	3	3	3	4	3	4	5	6	5	4	4	4	3	3	6	3
29	4	4	3	4	3	4	4	5	4	5	7	5	M	9	7	6	7	6	4	4	3	3	3	3	5
30	3	3	4	5	5	7	8	7	6	4	4	4	4	4	4	4	3	3	3	2	2	2	3	3	4
31	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2	1	1	1	1	1	1	1	1	2	2

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR		DEVIATION	VALID DATA	ABOVE LIMIT LEVEL		
3	3	3	3	5	6	7	8	0	-	11	0	-	5	2	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: MARCH

STATION : AP LEI CHAU
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	0	0	0	0	0	1	1	1	2	3	3	1	0	2	1	1	2	3	3	0	0	0	0	0	1
2	0	0	1	0	0	0	2	1	3	4	4	2	0	0	1	0	0	0	3	0	1	0	1	1	1
3	2	7	1	0	1	5	4	11	18	24	33	29	20	31	42	38	27	48	28	12	27	43	60	74	24
4	15	16	12	4	3	6	25	28	18	9	11	7	7	5	3	4	5	4	4	1	0	3	1	1	8
5	0	0	0	0	0	0	0	0	0	1	1	1	0	6	6	4	8	2	1	2	0	0	0	1	1
6	0	M	1	2	4	4	8	11	9	7	5	12	12	26	29	17	22	49	23	22	13	14	12	10	14
7	9	5	2	2	0	2	9	19	17	20	18	10	13	13	21	39	34	17	15	5	0	1	2	4	12
8	1	0	0	0	0	1	2	3	1	2	4	2	4	3	3	4	5	7	5	2	1	1	1	1	2
9	0	0	0	0	0	1	3	7	9	14	14	45	53	35	36	54	51	57	57	57	57	57	55	53	30
10	51	47	45	43	41	40	40	40	40	34	33	48	36	43	53	53	51	56	59	64	55	43	41	41	46
11	50	50	46	35	29	25	39	35	52	47	48	49	53	51	41	13	5	8	2	18	32	27	15	14	33
12	12	11	5	2	2	5	17	44	32	16	9	5	4	2	2	3	6	7	9	15	11	6	7	9	10
13	11	5	3	1	0	3	9	12	23	11	7	8	7	8	11	11	12	10	4	2	3	4	2	3	7
14	1	0	0	0	0	1	2	9	9	7	8	10	13	14	15	24	26	48	69	87	55	30	43	34	21
15	27	16	6	2	2	2	12	23	34	43	48	48	43	27	31	31	43	57	57	36	23	26	17	13	28
16	14	9	4	0	1	0	1	2	5	2	3	3	10	8	7	8	3	4	3	5	3	1	1	6	4
17	1	1	1	1	2	3	2	3	4	3	4	5	5	5	6	7	9	9	10	8	8	6	4	2	5
18	1	0	0	0	0	0	2	10	3	6	4	2	1	4	16	2	5	7	11	0	5	7	0	7	4
19	0	1	0	5	0	3	19	42	52	53	14	10	9	0	0	0	0	0	5	1	0	0	1	0	9
20	0	M	0	0	0	0	1	9	5	1	2	1	0	0	0	0	0	4	3	0	2	0	0	11	2
21	5	20	26	12	10	8	4	9	8	17	10	11	10	10	16	14	10	13	4	11	15	13	28	6	12
22	4	16	3	8	15	10	18	11	12	28	17	9	10	6	11	14	7	9	11	18	13	6	1	5	11
23	4	1	0	0	0	0	0	2	2	2	3	3	2	2	1	5	7	13	11	16	18	13	9	14	5
24	10	6	2	0	0	0	0	1	1	2	2	2	1	1	4	6	3	2	2	2	2	1	2	3	2
25	3	1	0	0	2	5	13	21	43	55	56	64	57	61	68	77	87	87	93	99	85	83	24	17	46
26	2	5	10	21	22	11	7	12	12	8	5	7	4	2	3	5	3	9	9	4	5	7	1	1	7
27	0	0	0	0	0	0	0	2	0	0	6	4	5	2	1	0	0	1	6	0	2	9	3	0	2
28	1	1	2	51	67	41	31	43	34	17	2	0	2	5	19	34	34	28	19	34	14	8	11	17	21
29	9	18	15	14	4	6	15	21	9	17	14	9	M	18	23	17	32	34	30	13	4	10	14	10	15
30	26	15	32	37	39	45	47	42	27	8	7	5	3	3	4	4	5	7	4	0	3	2	0	2	15
31	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	2	1	0	0	0	1	0

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
8	5	13	5	42	53	60	76	0	-	99	0	-	46	3	100	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: MARCH

STATION : CHEUNG CHAU
POLLUTANT : SULPHUR DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	1	3	2	3	0	0	0	0	0	3	2	4	5	4	3	1	0	0	0	0	1
4	1	0	0	0	0	0	0	0	1	2	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0
5	0	0	0	0	0	0	0	0	0	0	1	M	M	M	11	5	2	2	1	1	1	1	1	1	1
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0
9	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	2	3	4	3	4	9	1
10	5	4	5	3	2	1	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1
11	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	1	0
12	1	1	0	0	0	0	1	1	2	3	2	2	2	2	2	1	1	1	0	0	0	0	0	1	1
13	0	0	0	0	0	0	0	1	1	3	2	2	3	2	1	2	1	1	1	1	1	0	0	2	1
14	1	1	1	1	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16	0	0	0	0	0	0	0	2	3	9	7	8	6	3	3	3	2	3	3	4	4	4	2	2	3
17	1	2	1	1	4	2	1	1	3	2	2	3	2	8	8	3	1	1	1	0	0	0	0	1	2
18	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	1	1	1	0	0	0	0	0
19	0	0	0	0	0	0	0	0	3	3	1	0	1	3	4	2	1	2	1	1	1	1	1	2	1
20	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	3	0
21	2	2	1	1	1	1	2	2	3	5	6	6	5	1	1	3	2	2	2	1	1	0	0	1	2
22	0	0	0	1	0	1	2	1	2	2	2	2	1	2	3	3	6	5	2	0	0	1	0	3	2
23	1	0	0	0	0	0	0	0	0	0	2	3	1	1	2	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	12	3	19	13	10	23	22	20	27	29	18	17	34	8	4	4	3	2	1	0	11
25	0	0	0	0	0	0	0	1	2	1	2	1	1	1	1	1	0	0	0	0	2	3	4	1	1
26	2	2	1	0	1	3	4	3	2	2	1	3	2	1	0	0	0	1	1	0	1	0	0	1	1
27	0	0	0	1	1	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	1	1	1	1	3	2	3	1	1	2	2	3	1	1	0	0	1	1
29	0	0	0	1	1	0	0	0	1	2	3	3	M	6	4	3	2	2	0	0	0	0	1	2	1
30	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
31	0	0	0	0	0	4	13	15	26	34	42	19	12	29	30	29	27	6	1	4	5	4	4	4	13

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----				STN GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
2	0	2	0	3	5	18	27	0	-	42	0	-	13	2	99	0

- NOTES: 1. FLAGS FOR INVALID DATA :
- D: DYNAMIC CALIBRATION
 - T: TELEMETRY/DATALOGGR FAULT
 - M: MAINTENANCE OR ANALYZER FAULT
 - P: POWER FAILURE

THE HONGKONG ELECTRIC COMPANY, LTD.
AIR QUALITY DATA MONTHLY TIME SERIES REPORT
MONTH: MARCH

STATION : CHEUNG CHAU
POLLUTANT : NITROGEN DIOXIDE

YEAR : 2019
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	12	12	12	8	9	10	9	14	14	17	19	16	4	5	8	5	12	9	10	9	10	8	14	5	10
2	6	6	10	10	6	5	7	8	5	10	9	11	7	5	4	4	5	6	11	8	7	9	26	29	9
3	21	27	24	23	17	39	44	37	18	28	19	23	20	20	25	37	36	36	38	42	30	21	63	30	
4	71	66	62	71	51	51	48	49	40	39	19	8	11	6	5	5	9	9	8	9	6	15	21	15	29
5	7	8	4	4	6	5	8	13	9	23	15	M	M	M	10	7	12	11	26	29	29	29	22	17	14
6	11	M	32	39	40	37	35	15	30	24	54	47	43	88	70	54	48	93	115	91	48	81	96	28	53
7	69	41	31	16	24	31	28	28	40	49	43	55	49	52	80	76	80	84	48	36	22	12	11	55	44
8	15	18	15	10	21	16	18	21	17	11	14	15	22	28	9	12	20	39	19	22	9	16	17	13	17
9	10	14	11	18	13	9	16	41	11	15	34	77	85	78	85	99	90	96	80	81	88	90	83	83	54
10	81	74	73	68	66	52	46	47	45	48	32	49	52	50	58	59	60	62	65	66	55	46	39	41	56
11	36	35	41	22	20	28	27	40	48	61	53	44	41	51	48	51	19	16	9	9	36	55	77	87	40
12	101	99	95	87	69	77	94	85	85	78	23	9	11	34	21	16	14	12	12	18	22	23	36	49	49
13	71	96	78	73	49	59	13	19	74	43	23	23	29	40	42	53	25	19	17	14	13	16	35	21	39
14	15	16	21	18	14	19	18	30	48	25	25	58	80	82	100	107	103	132	133	112	77	55	39	35	57
15	21	34	34	29	17	18	30	32	47	80	72	61	62	72	75	62	61	55	62	74	85	72	63	63	53
16	50	51	67	34	23	14	16	20	21	26	26	32	48	19	23	20	16	28	33	32	37	30	25	19	30
17	18	21	14	12	40	24	16	21	24	19	15	15	13	40	48	34	36	43	25	72	37	59	44	25	30
18	16	17	14	13	9	20	10	15	14	14	13	14	59	58	28	16	14	47	57	60	37	77	85	41	31
19	53	60	56	73	42	37	52	74	98	79	53	26	27	46	42	28	27	34	44	30	26	25	18	22	45
20	12	M	11	13	15	13	15	23	25	14	14	13	16	22	21	24	23	37	47	34	20	32	27	41	22
21	39	32	26	21	29	35	32	34	30	23	24	29	23	4	7	15	11	12	28	22	22	14	17	27	23
22	15	12	16	21	23	30	30	20	36	34	20	20	12	8	14	21	25	24	22	18	17	30	31	51	23
23	41	19	20	11	18	10	13	20	17	21	32	41	27	22	45	18	32	49	33	19	23	71	51	51	29
24	47	28	18	12	24	15	32	21	18	26	24	24	26	23	20	21	33	19	33	33	24	20	13	38	25
25	36	14	13	33	29	36	53	61	66	51	50	55	69	66	70	89	89	84	70	58	60	101	127	114	62
26	115	114	93	73	90	113	117	99	58	36	10	14	15	13	13	9	10	27	28	19	22	57	21	19	49
27	26	40	23	22	26	18	17	22	23	30	32	41	28	43	29	16	7	17	11	16	11	11	14	46	24
28	11	28	46	27	35	63	81	75	57	29	24	32	34	30	11	10	11	27	75	65	55	46	30	52	40
29	40	31	25	38	36	34	25	16	25	23	24	18	M	15	11	18	22	42	22	11	21	13	71	76	29
30	43	43	39	48	42	44	58	57	50	37	22	23	23	20	23	21	28	27	23	19	24	25	32	17	33
31	18	14	19	15	11	16	22	21	30	30	31	16	16	22	26	25	35	35	25	36	38	27	32	26	24

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----							-----RANGE-----					STN GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE	LIMIT	LEVEL		
27	27	35	27	73	85	99	114	4	-	133	9	-	62	2	99	0

NOTES: 1. FLAGS FOR INVALID DATA :
D: DYNAMIC CALIBRATION
T: TELEMETRY/DATALOGGR FAULT
M: MAINTENANCE OR ANALYZER FAULT
P: POWER FAILURE

Appendix C Summary Results on Water Quality Monitoring

LAMMA POWER STATION FGD WASTEWATER TREATMENT PLANT EFFLUENT DISCHARGE TO ASH LAGOON SUSPENDED SOLIDS AND PH

Period : January - March 2019

Week Ending	No. of Samples	Suspended Solids, mg/L			pH		
		Maximum	Minimum	Average	Maximum	Minimum	Average
05/01/19	6*	21	13	16	8.2	7.7	7.9
12/01/19	7	22	16	19	8.3	7.6	7.9
19/01/19	7	22	11	16	8.3	7.6	8.0
26/01/19	7	21	12	17	8.2	7.6	8.0
02/02/19	7	22	13	18	8.3	8.0	8.2
09/02/19	7	21	14	17	8.2	7.5	7.8
16/02/19	7	22	14	17	8.1	7.6	7.9
23/02/19	7	22	13	17	8.3	7.6	8.0
02/03/19	7	21	13	18	8.3	7.5	8.0
09/03/19	7	22	12	17	8.3	7.7	8.1
16/03/19	7	20	14	17	8.1	7.5	7.9
23/03/19	7	23	12	18	8.3	7.5	7.9
30/03/19	6*	22	12	15	8.4	7.8	8.1

Remark :

* - No sampling for the remaining day(s) of the week / no sampling due to no discharge

LAMMA POWER STATION
FGD WASTEWATER TREATMENT PLANT
EFFLUENT DISCHARGE TO ASH LAGOON
TRACE METAL, TOTAL PHOSPHORUS
AND TOTAL NITROGEN ANALYSIS

Period : January - March 2019

Sampling date		8/1/2019	12/2/2019	7/3/2019
Barium,	ug/L	<150	<150	<150
Mercury,	ug/L	<0.5	<0.5	<0.5
Cadmium,	ug/L	3.5	1.5	1.5
Iron,	ug/L	<400	<400	<400
Total Phosphorous,	mg/L	<0.8	<0.8	<0.8
Total Nitrogen,	mg/L	69	74	37
Cyanide,	mg/L	<0.01	0.02	<0.01

Remark:

According to the WPCO Ash Lagoon Discharge Licence, contents at exact levels of trace metals below 1/10 th of the WPCO Licence permitted limits will not be reported. When the concentration of a metal exceeds 1/10 th of the limit, the exact value of the metal concentration will be reported.

Appendix D Summary of EMIS

EM&A Log Ref.	Mitigation Measures	Implementation Status
	GENERAL	
A1	No other process, except the Wet Limestone-Gypsum process used in the FGD plants of the coal-fired Units L6, L7 and L8 within the Lamma Power Station, shall be used in the FGD plants for the projects unless otherwise agreed by EPD.	Complied
	WATER QUALITY	
B1	All wastewater arising from the operation of the projects shall be collected and directed to the existing wastewater treatment plant within the Lamma Power Station for treatment.	Complied
B2	The operational plant effluent from the FGD plants should be reused as much as possible in order to minimise discharge to the WWTP.	Complied
B3	Maintenance of the WWTP should be performed regularly to ensure the effluent from the WWTP would not exceed the current requirements stipulated in the WPCO licence for Ash Lagoon.	Complied
	WASTE	
C1	No gypsum or sludge arising from the operation of the projects shall be disposed of anywhere. All gypsum and sludge shall be collected and reused.	Complied
	NOISE	
D1	Equipment including the Absorber Recirculation Pump, Oxidation Air Blower, Booster Fan and Booster Fan Motor of the FGD plants shall be acoustically insulated and the Gas-Gas Heater (untreated side) of the FGD plants shall be provided with reinforced lagging to reduce the noise impact.	Complied