

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**

**July – September 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 (July to September 2019)
Date	30 December 2019
Certified by	 (Mr. IP Tat-Yan, Environmental Team Leader)

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## 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 July to September 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
L2	28/06/2019 19:59 to 01/07/2019 06:56	Defect rectification
L5	27/07/2019 21:33 to 28/07/2019 16:24	Defect rectification
L5	13/09/2019 21:16 to 18/09/2019 13:08	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
L5 FGD	00:05 on 10/07/2019 to 04:57 on 14/07/2019	Defect rectification	EPD was informed on 15/07/2019
L5 FGD	03:27 on 06/09/2019 to 19:46 on 06/09/2019	Defect rectification	EPD was informed on 09/09/2019

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 July to September 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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
L2	28/06/2019 19:59 to 01/07/2019 06:56	Defect rectification
L5	27/07/2019 21:33 to 28/07/2019 16:24	Defect rectification
L5	13/09/2019 21:16 to 18/09/2019 13:08	Defect rectification

### 1.4 Malfunction/Outage Records of Pollution Control Equipment

Equipment	Period	Cause	Actions Taken
L4 FGD	02:54 on 06/07/2019 to 03:06 on 06/07/2019	Routine Dampers Exercise	EPD was informed on 09/07/2019
L4 FGD	01:50 on 13/07/2019 to 01:52 on 13/07/2019	Routine Dampers Exercise	EPD was informed on 23/07/2019
L4 FGD	02:42 on 20/07/2019 to 02:44 on 20/07/2019	Routine Dampers Exercise	EPD was informed on 23/07/2019
L4 FGD	02:30 on 10/08/2019 to 02:34 on 10/08/2019	Routine Dampers Exercise	EPD was informed on 15/08/2019
L4 FGD	03:19 on 17/08/2019 to 03:21 on 17/08/2019	Routine Dampers Exercise	EPD was informed on 19/08/2019
L4 FGD	04:22 on 24/08/2019 to 04:30 on 24/08/2019	Routine Dampers Exercise	EPD was informed on 26/08/2019
L4 FGD	04:03 on 31/08/2019 to 04:06 on 31/08/2019	Routine Dampers Exercise	EPD was informed on 02/09/2019
L4 FGD	03:10 on 14/09/2019 to 03:13 on 14/09/2019	Routine Dampers Exercise	EPD was informed on 20/09/2019
L5 FGD	03:18 on 06/07/2019 to 03:28 on 06/07/2019	Routine Dampers Exercise	EPD was informed on 09/07/2019

L5 FGD	00:05 on 10/07/2019 to 04:57 on 14/07/2019	Defect rectification	EPD was informed on 15/07/2019
L5 FGD	03:40 on 03/08/2019 to 03:43 on 03/08/2019	Routine Dampers Exercise	EPD was informed on 09/08/2019
L5 FGD	02:24 on 10/08/2019 to 02:29 on 10/08/2019	Routine Dampers Exercise	EPD was informed on 15/08/2019
L5 FGD	03:23 on 17/08/2019 to 03:27 on 17/08/2019	Routine Dampers Exercise	EPD was informed on 19/08/2019
L5 FGD	03:21 on 24/08/2019 to 03:25 on 24/08/2019	Routine Dampers Exercise	EPD was informed on 26/08/2019
L5 FGD	04:07 on 31/08/2019 to 04:12 on 31/08/2019	Routine Dampers Exercise	EPD was informed on 02/09/2019
L5 FGD	03:27 on 06/09/2019 to 19:46 on 06/09/2019	Defect rectification	EPD was informed on 09/09/2019

## 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.

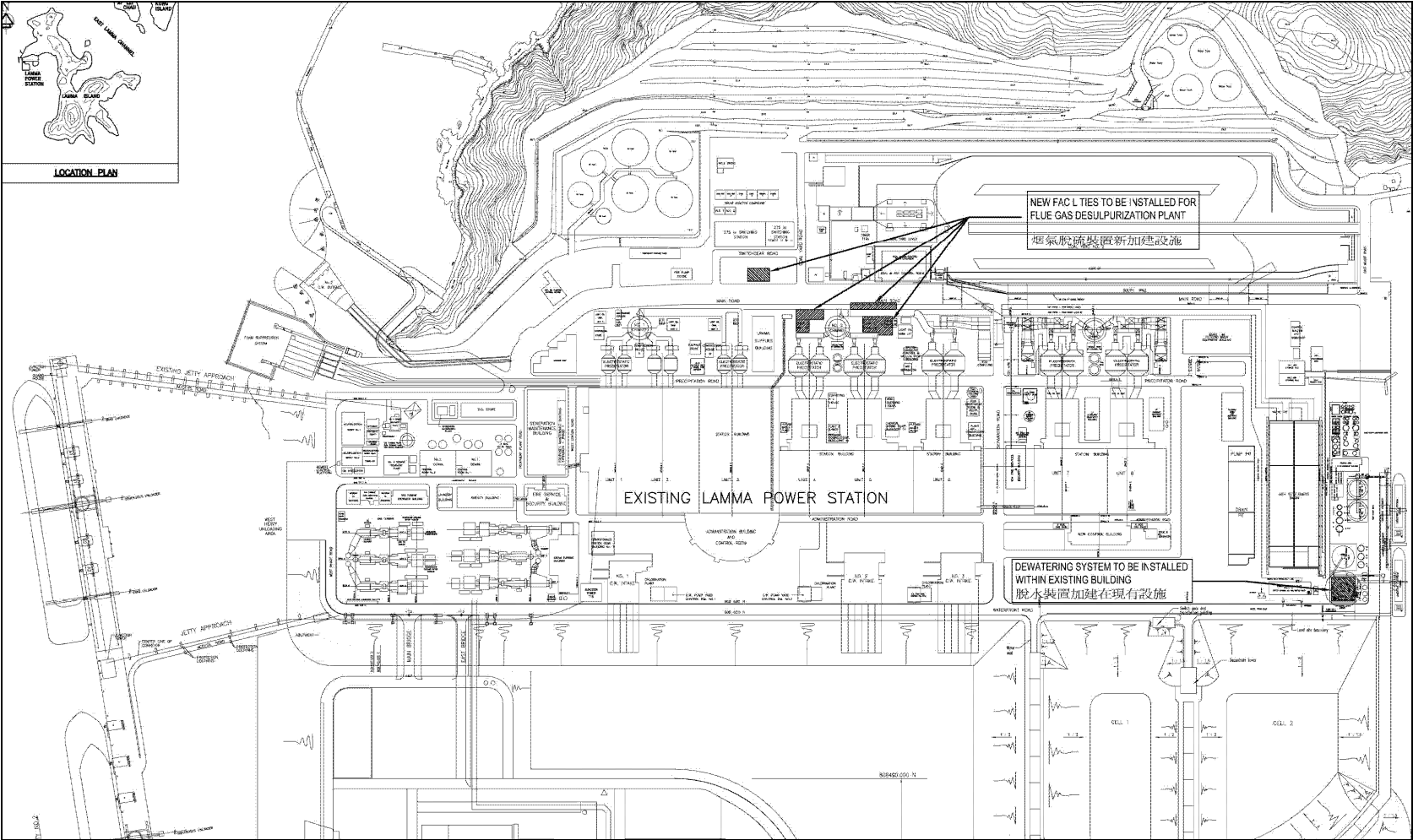


Figure 1.1a Location of New Facilities for L4 & L5 FGD Plants

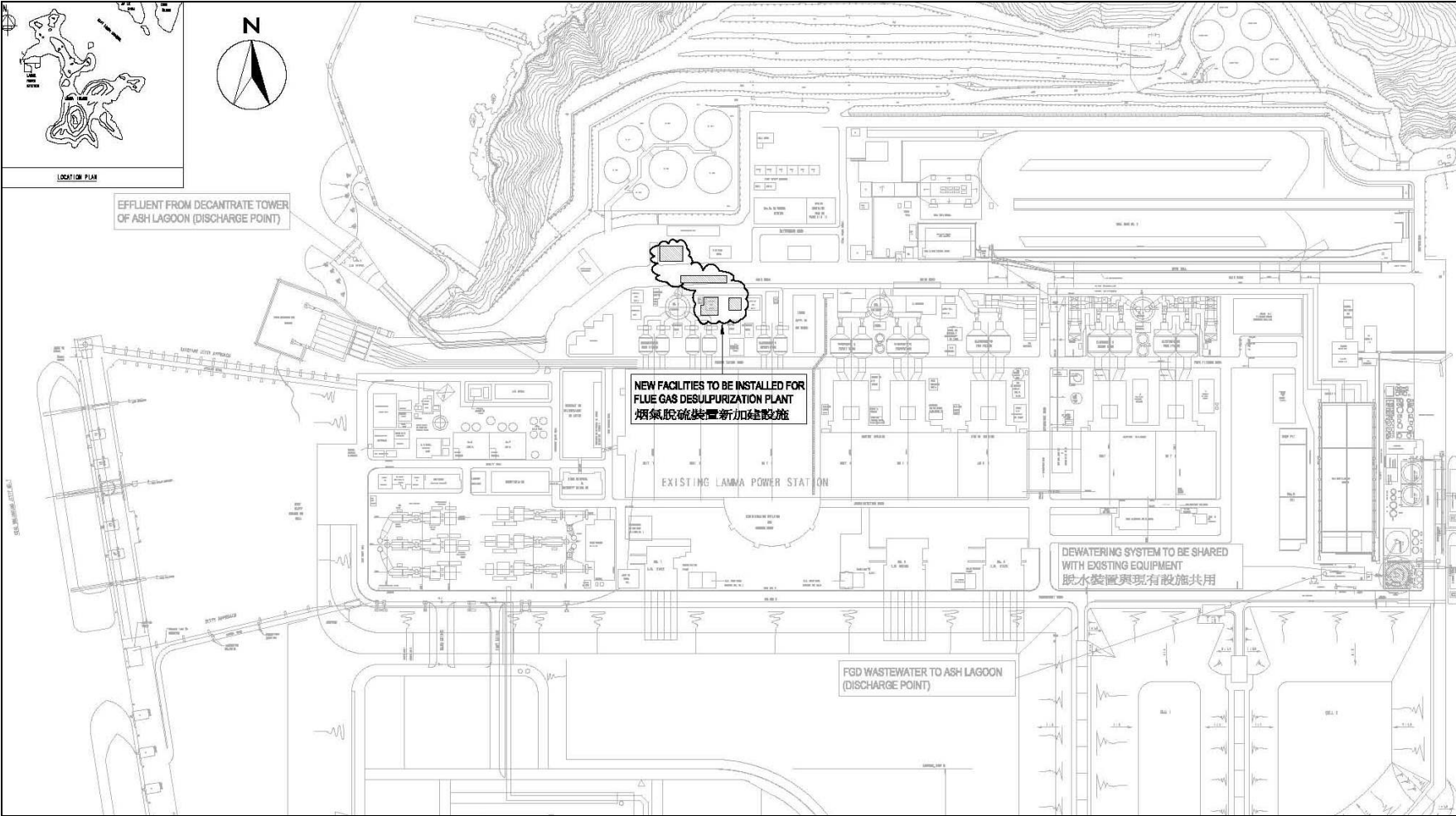


Figure 1.1b Location of New Facilities for L2 FGD Plant

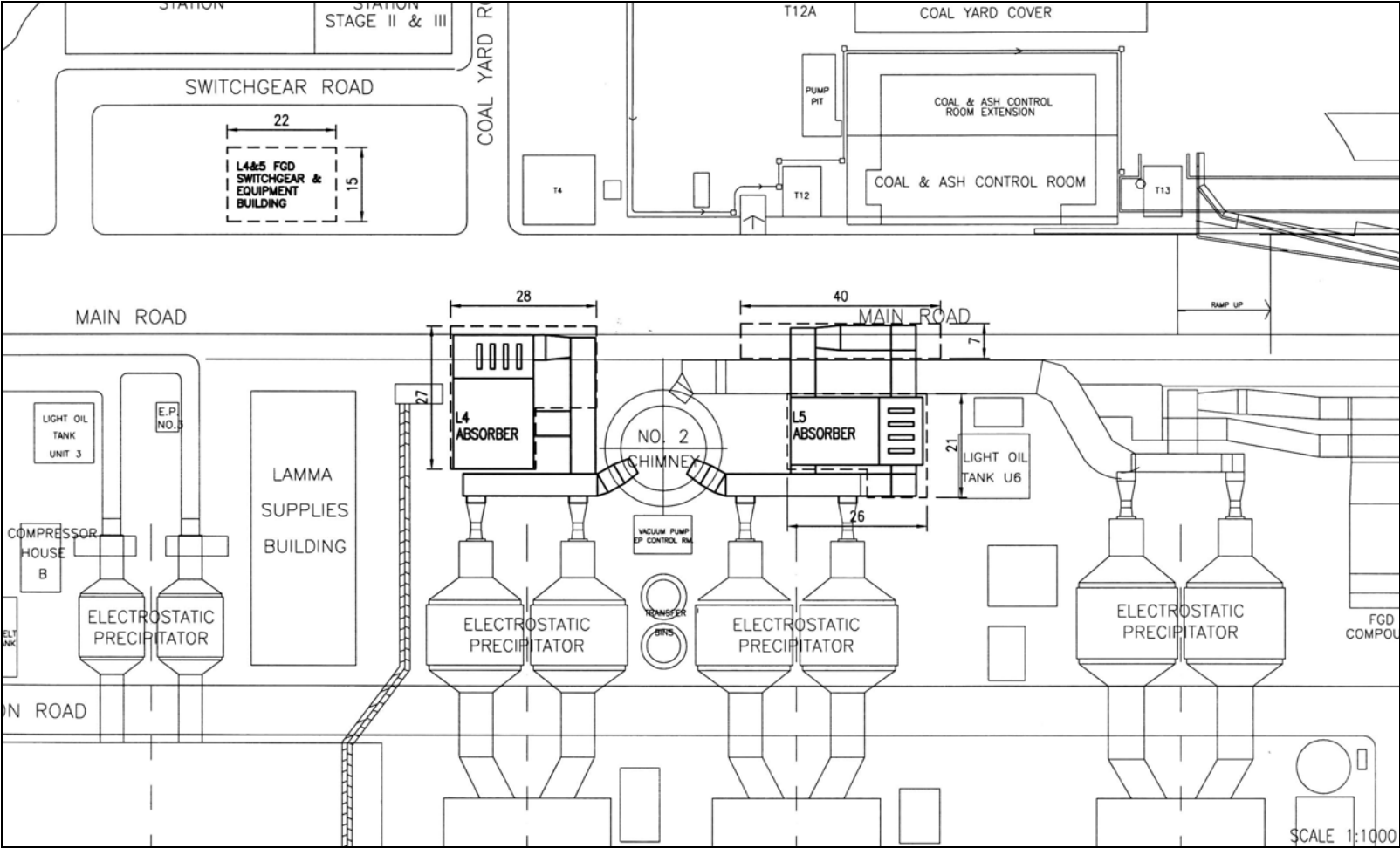


Figure 1.2a General Arrangement of L4 & L5 FGD Plants

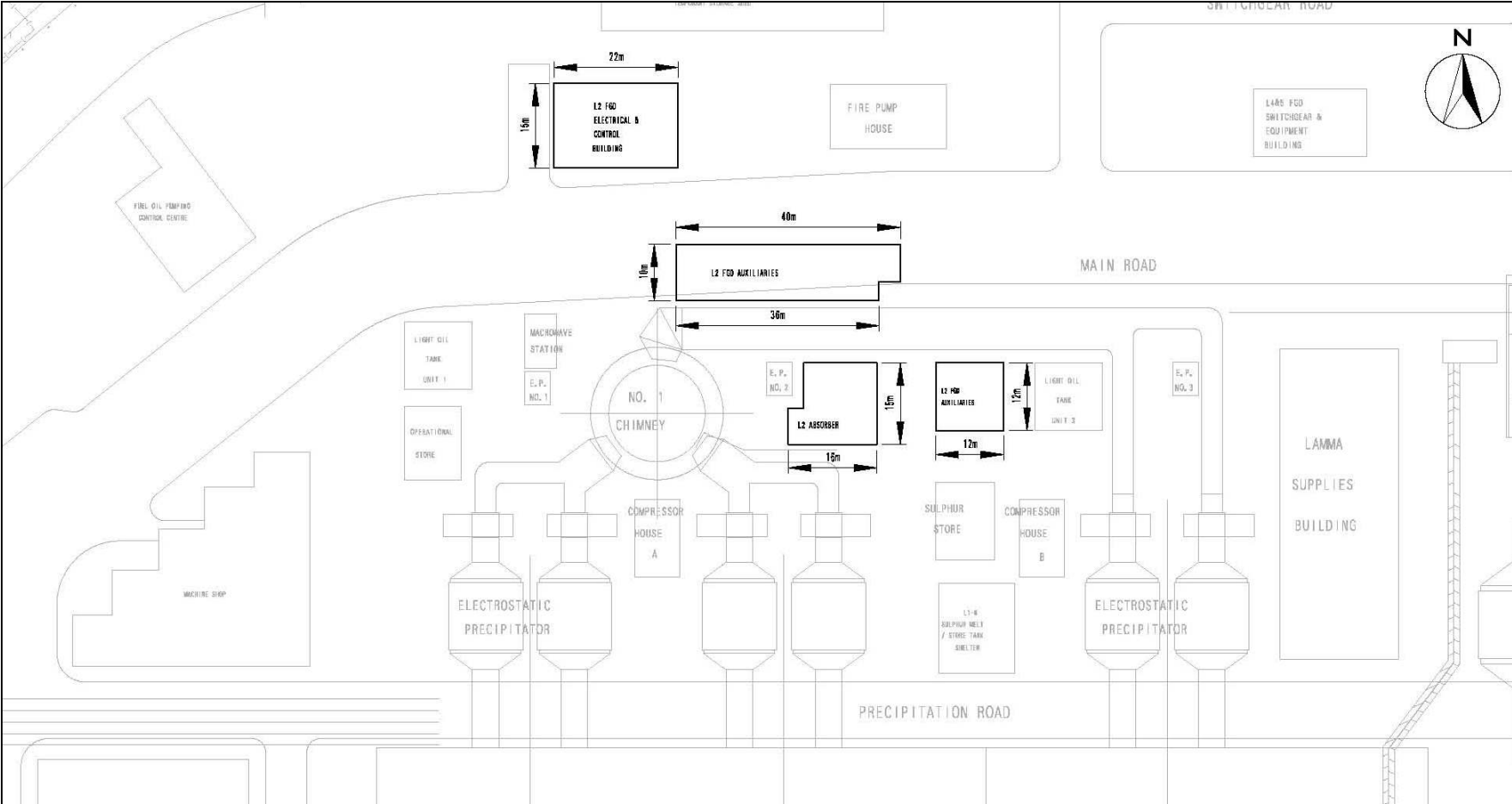


Figure 1.2b General Arrangement of L2 FGD Plant

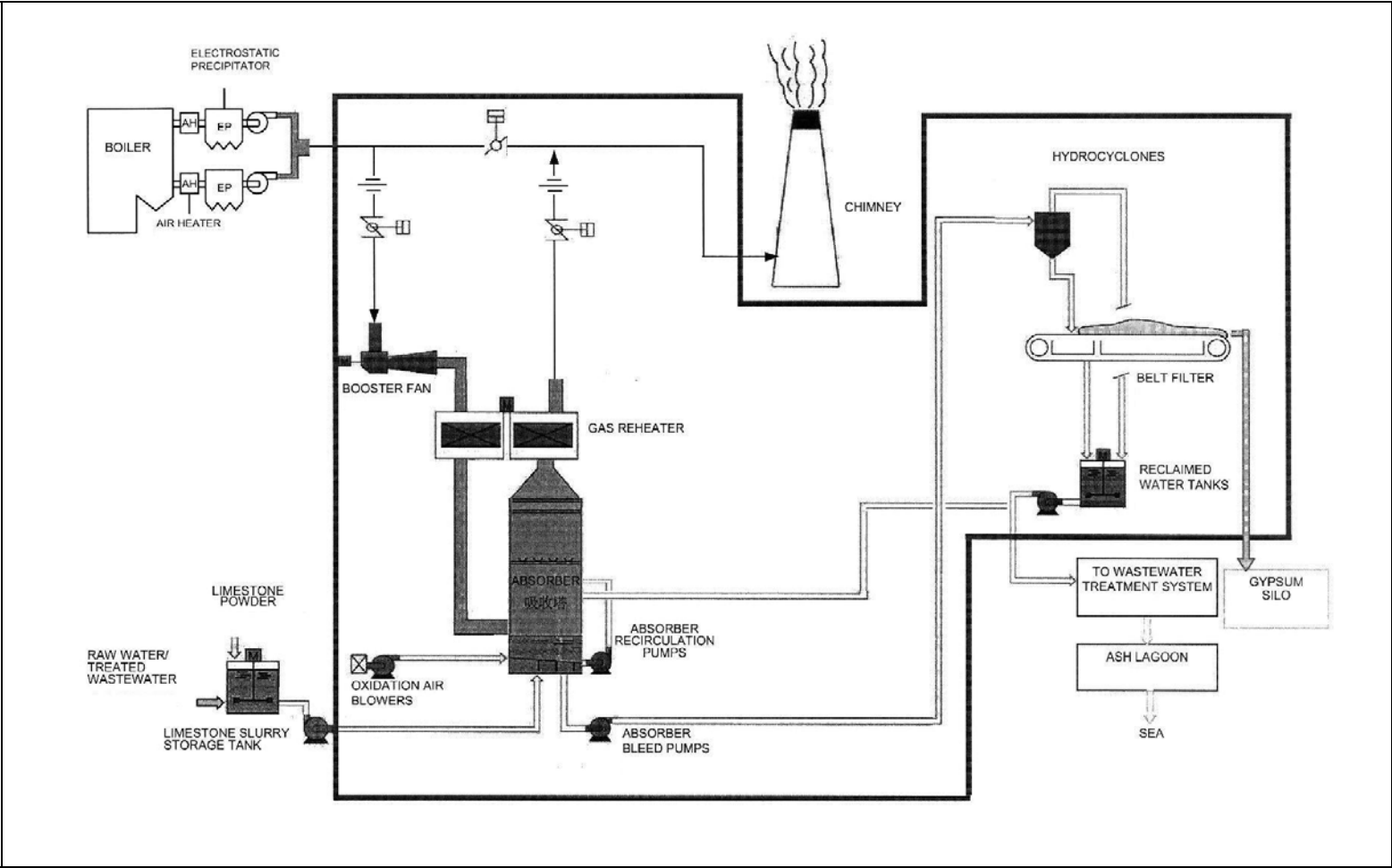


Figure 1.3 Schematic Diagram of the L2, L4 & L5 FGD Plant

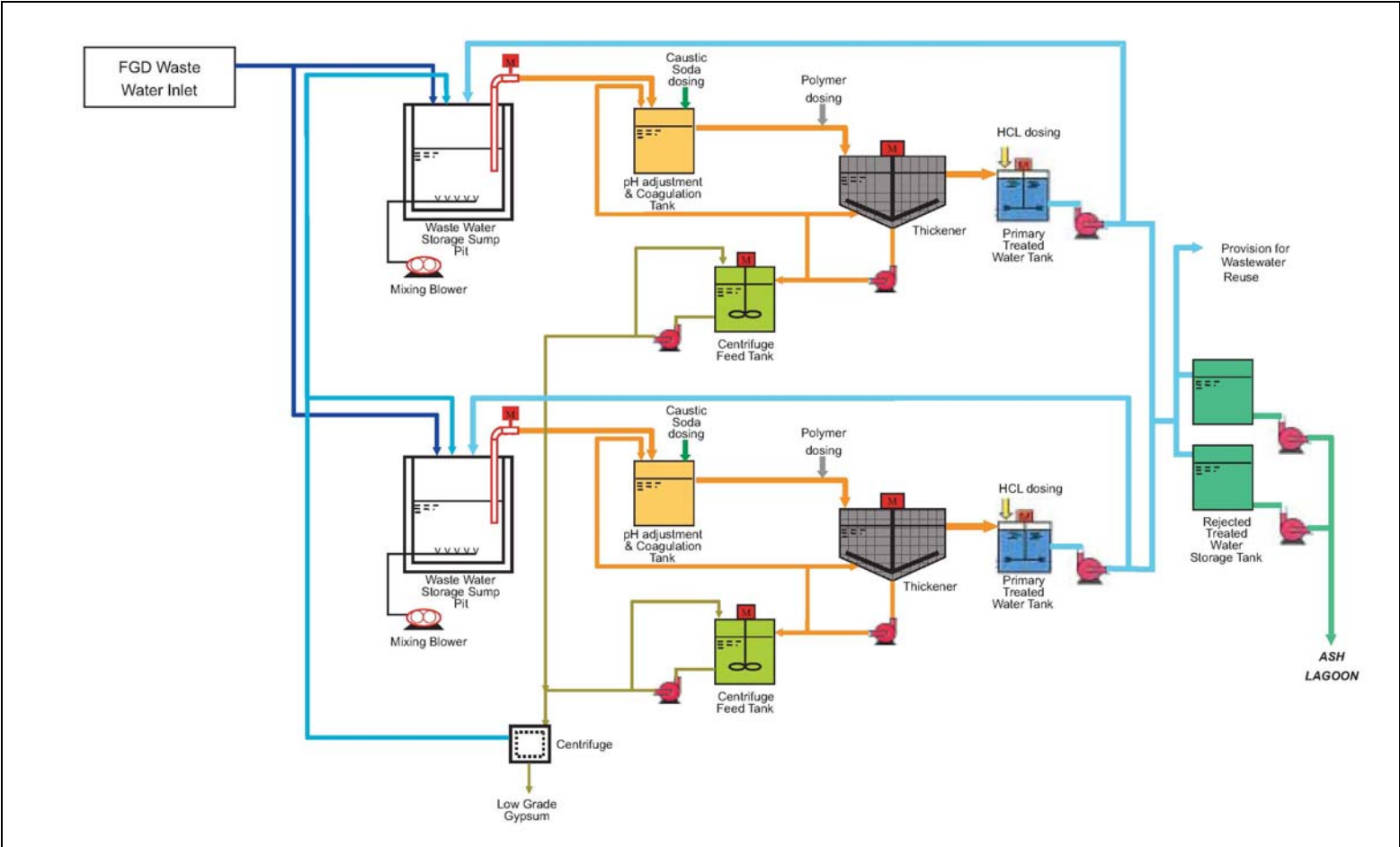


Figure 1.4 Simplified Schematic Diagram of FGD Wastewater Treatment Plant

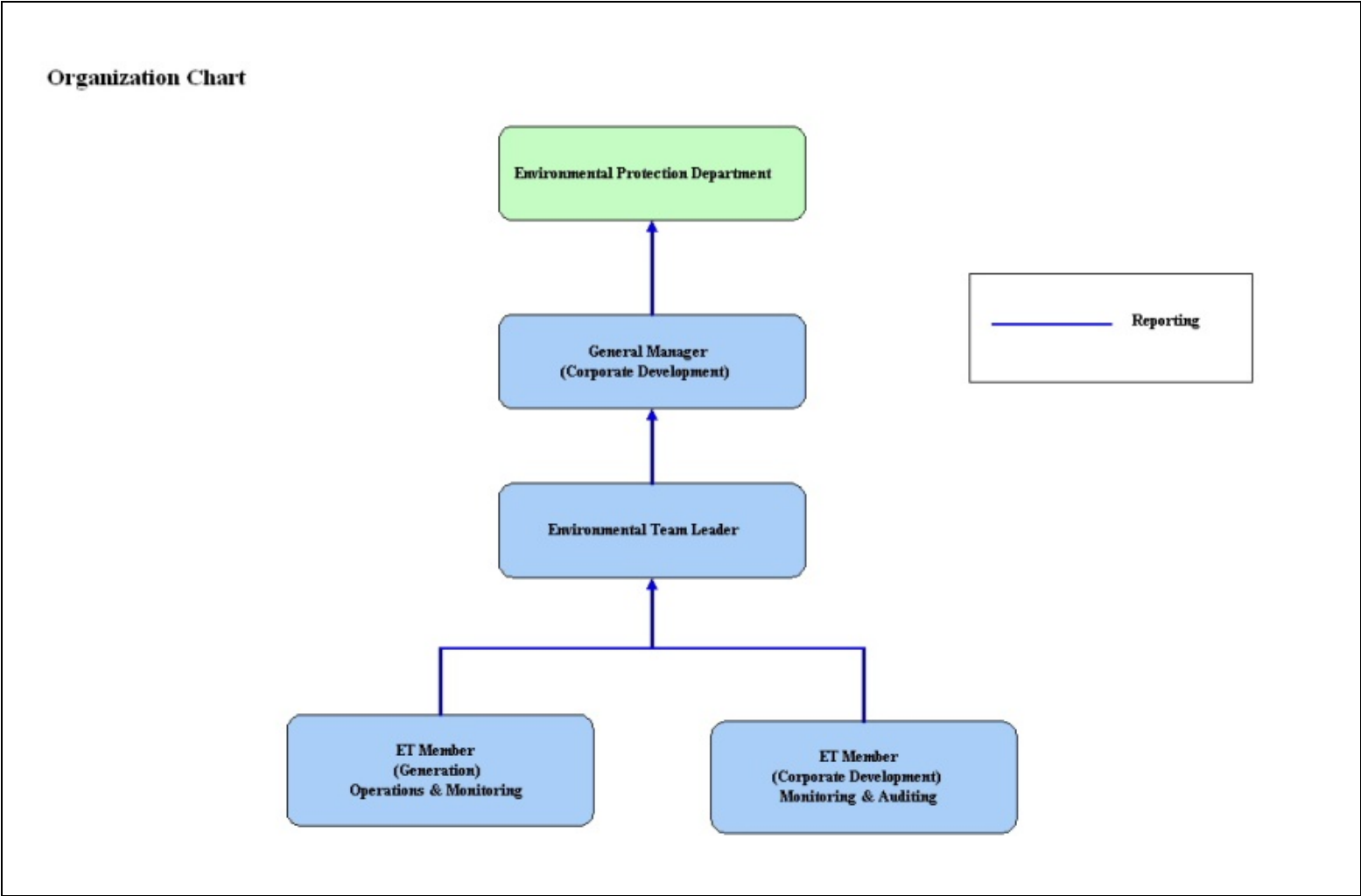


Figure 1.5 Organization Structure at Operational Phase of the Projects

## 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 <sub>2</sub>	Continuous
	NO <sub>x</sub> expressed as NO <sub>2</sub> (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 <sub>2</sub>	
	NO <sub>2</sub>	

### 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.	01/07/19-31/09/19	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	01/07/19-31/09/19	0	0	
3	Ambient SO2 & NOx monitoring at the Peak, Queen Mary Hospital, Victoria Road, Chung Hom Kok, Ap Lei Chau and Cheung Chau.	01/07/19-31/09/19	0	0	
Water					
1	pH in WWTP Effluent	01/07/19-31/09/19	0	0	
2	Suspended Solids in WWTP Effluent	01/07/19-31/09/19	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	01/07/19-31/09/19	0	0	
4	Barium in WWTP Effluent	01/07/19-31/09/19	0	0	
5	Mercury in WWTP Effluent	01/07/19-31/09/19	0	0	
6	Cadmium in WWTP Effluent	01/07/19-31/09/19	0	0	
7	Cyanide in WWTP Effluent	01/07/19-31/09/19	0	0	
8	Total Phosphorus in WWTP Effluent	01/07/19-31/09/19	0	0	
9	Total Nitrogen in WWTP Effluent	01/07/19-31/09/19	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
July 2019	9,629.68 MT	0 MT
August 2019	7,929.60 MT	59.60 MT
September 2019	4,400.68 MT	62.26 MT

#### **4.3 Status of Environmental Licensing and Permitting**

All permits/licenses obtained as of September 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 July to September 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: Third Quarter of 2019 (July – September)

Date	RSP concentration ( $\mu\text{g}/\text{m}^3$ )	
	Reservoir	East Gate
01/07/2019	33	29
02/07/2019	33	21
03/07/2019	27	38
04/07/2019	41	43
05/07/2019	32	40
06/07/2019	34	33
07/07/2019	33	40
08/07/2019	33	44
09/07/2019	37	51
10/07/2019	19	34
11/07/2019	24	35
12/07/2019	25	41
13/07/2019	28	38
14/07/2019	30	38
15/07/2019	23	27
16/07/2019	24	28
17/07/2019	35	46
18/07/2019	47	63
19/07/2019	28	46
20/07/2019	20	35
21/07/2019	20	25
22/07/2019	15	18
23/07/2019	16	21
24/07/2019	16	22
25/07/2019	15	29
26/07/2019	16	32
27/07/2019	13	29
28/07/2019	15	23
29/07/2019	11	15
30/07/2019	12	20
31/07/2019	12	19

Date	RSP concentration ( $\mu\text{g}/\text{m}^3$ )	
	Reservoir	East Gate
01/08/2019	17	39
02/08/2019	17	38
03/08/2019	15	26
04/08/2019	16	24
05/08/2019	17	27
06/08/2019	17	42
07/08/2019	16	30
08/08/2019	35	83
09/08/2019	40	94
10/08/2019	27	39
11/08/2019	17	30
12/08/2019	16	32
13/08/2019	16	38
14/08/2019	18	51
15/08/2019	23	59
16/08/2019	22	55
17/08/2019	18	36
18/08/2019	17	39
19/08/2019	19	39
20/08/2019	19	28
21/08/2019	17	23
22/08/2019	24	28
23/08/2019	28	31
24/08/2019	47	77
25/08/2019	32	43
26/08/2019	15	30
27/08/2019	13	22
28/08/2019	22	43
29/08/2019	12	20
30/08/2019	11	24
31/08/2019	12	20

Date	RSP concentration ( $\mu\text{g}/\text{m}^3$ )	
	Reservoir	East Gate
01/09/2019	14	20
02/09/2019	12	23
03/09/2019	15	27
04/09/2019	11	18
05/09/2019	12	36
06/09/2019	14	31
07/09/2019	17	60
08/09/2019	18	41
09/09/2019	16	26
10/09/2019	12	22
11/09/2019	12	21
12/09/2019	20	34
13/09/2019	21	26
14/09/2019	20	29
15/09/2019	20	23
16/09/2019	24	44
17/09/2019	25	42
18/09/2019	31	37
19/09/2019	42	43
20/09/2019	44	60
21/09/2019	40	49
22/09/2019	34	##
23/09/2019	31	38
24/09/2019	31	31
25/09/2019	38	46
26/09/2019	34	37
27/09/2019	42	49
28/09/2019	37	44
29/09/2019	50	61
30/09/2019	68	##

Remark: ## - No valid daily average of RSP due to equipment failure

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

### B.2.1 Monthly Summary of Stack NO<sub>x</sub> and SO<sub>2</sub> for Unit L5

Date	Daily Maximum		
	SO <sub>2</sub> concentration (mg/Nm <sup>3</sup> ) <sup>#</sup>	NO <sub>x</sub> concentration (mg/Nm <sup>3</sup> ) <sup>#</sup>	Opacity (%)
1/7/2019	31	369	21
2/7/2019	27	367	20
3/7/2019	42	379	20
4/7/2019	49	384	23
5/7/2019	32	385	22
6/7/2019	25	410	19
7/7/2019	45	403	22
8/7/2019	61	367	21
9/7/2019	75	386	24
10/7/2019	*	390	6
11/7/2019	*	361	5
12/7/2019	*	350	5
13/7/2019	*	355	4
14/7/2019	86	333	24
15/7/2019	57	355	27
16/7/2019	55	288	22
17/7/2019	75	345	25
18/7/2019	47	296	28
19/7/2019	22	261	24
20/7/2019	29	252	15
21/7/2019	21	321	24
22/7/2019	23	362	22
23/7/2019	28	434	22
24/7/2019	18	359	24
25/7/2019	25	343	21
26/7/2019	44	328	23
27/7/2019	42	365	21
28/7/2019	29	354	8
29/7/2019	48	486	17
30/7/2019	59	416	20
31/7/2019	55	414	15

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) <sup>#</sup>	NOx concentration (mg/Nm3) <sup>#</sup>	Opacity (%)
1/8/2019	79	441	14
2/8/2019	73	406	16
3/8/2019	94	417	21
4/8/2019	80	408	18
5/8/2019	52	501	18
6/8/2019	36	285	17
7/8/2019	33	327	24
8/8/2019	21	315	21
9/8/2019	21	318	21
10/8/2019	43	398	23
11/8/2019	24	401	20
12/8/2019	45	346	24
13/8/2019	75	297	23
14/8/2019	75	333	20
15/8/2019	40	352	22
16/8/2019	31	374	21
17/8/2019	31	290	21
18/8/2019	23	282	17
19/8/2019	24	353	22
20/8/2019	29	307	25
21/8/2019	31	355	26
22/8/2019	27	294	24
23/8/2019	18	335	26
24/8/2019	18	325	26
25/8/2019	18	316	15
26/8/2019	20	349	15
27/8/2019	21	357	22
28/8/2019	32	348	19
29/8/2019	32	351	18
30/8/2019	39	370	17
31/8/2019	51	333	14

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) <sup>#</sup>	NOx concentration (mg/Nm3) <sup>#</sup>	Opacity (%)
1/9/2019	45	319	18
2/9/2019	49	321	12
3/9/2019	33	338	10
4/9/2019	39	306	8
5/9/2019	61	359	8
6/9/2019	38	376	13
7/9/2019	42	326	6
8/9/2019	34	334	8
9/9/2019	30	327	15
10/9/2019	27	336	20
11/9/2019	26	347	14
12/9/2019	19	343	10
13/9/2019	17	336	9
14/9/2019	*	*	*
15/9/2019	*	*	*
16/9/2019	*	*	*
17/9/2019	*	*	*
18/9/2019	23	265	16
19/9/2019	31	383	13
20/9/2019	25	345	9
21/9/2019	27	397	10
22/9/2019	27	380	9
23/9/2019	19	406	8
24/9/2019	18	346	7
25/9/2019	18	384	6
26/9/2019	17	350	7
27/9/2019	18	323	7
28/9/2019	28	324	11
29/9/2019	30	296	11
30/9/2019	40	305	11

Note: # - Hourly average value. Expressed as at 0°C, 101.325kPa, dry and corrected to 12% CO<sub>2</sub> 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) <sup>#</sup>	NOx concentration (mg/Nm3) <sup>#</sup>	Opacity (%)
1/7/2019	41	324	19
2/7/2019	52	327	19
3/7/2019	38	348	16
4/7/2019	48	377	21
5/7/2019	67	351	20
6/7/2019	52	317	27
7/7/2019	82	274	21
8/7/2019	66	307	23
9/7/2019	62	305	20
10/7/2019	74	355	22
11/7/2019	74	305	25
12/7/2019	81	316	23
13/7/2019	59	286	23
14/7/2019	60	271	22
15/7/2019	52	296	21
16/7/2019	62	327	21
17/7/2019	65	327	23
18/7/2019	35	308	19
19/7/2019	50	333	17
20/7/2019	63	351	18
21/7/2019	32	381	18
22/7/2019	28	347	16
23/7/2019	24	349	18
24/7/2019	69	333	23
25/7/2019	69	372	19
26/7/2019	87	322	22
27/7/2019	85	312	23
28/7/2019	75	293	28
29/7/2019	69	350	23
30/7/2019	84	357	24
31/7/2019	86	406	21

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) <sup>#</sup>	NOx concentration (mg/Nm3) <sup>#</sup>	Opacity (%)
1/8/2019	73	308	21
2/8/2019	72	355	22
3/8/2019	95	346	24
4/8/2019	58	381	24
5/8/2019	57	367	23
6/8/2019	41	305	20
7/8/2019	45	311	24
8/8/2019	54	272	18
9/8/2019	56	323	20
10/8/2019	71	352	23
11/8/2019	49	303	23
12/8/2019	70	331	21
13/8/2019	73	375	24
14/8/2019	87	383	26
15/8/2019	70	328	24
16/8/2019	48	261	21
17/8/2019	57	338	26
18/8/2019	44	316	28
19/8/2019	44	376	27
20/8/2019	39	312	23
21/8/2019	39	340	24
22/8/2019	53	326	27
23/8/2019	45	361	24
24/8/2019	30	326	24
25/8/2019	28	326	17
26/8/2019	29	334	20
27/8/2019	31	323	21
28/8/2019	50	284	23
29/8/2019	65	323	19
30/8/2019	57	337	23
31/8/2019	56	370	18

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) <sup>#</sup>	NOx concentration (mg/Nm3) <sup>#</sup>	Opacity (%)
1/9/2019	37	381	101
2/9/2019	76	335	24
3/9/2019	51	328	19
4/9/2019	42	342	19
5/9/2019	66	369	20
6/9/2019	78	352	13
7/9/2019	57	339	21
8/9/2019	92	371	22
9/9/2019	57	400	22
10/9/2019	39	426	22
11/9/2019	30	389	23
12/9/2019	49	308	19
13/9/2019	42	291	19
14/9/2019	48	255	22
15/9/2019	22	248	19
16/9/2019	37	305	22
17/9/2019	81	322	18
18/9/2019	52	421	17
19/9/2019	55	375	13
20/9/2019	49	323	20
21/9/2019	36	398	24
22/9/2019	43	329	21
23/9/2019	52	433	23
24/9/2019	36	292	25
25/9/2019	27	321	19
26/9/2019	24	376	23
27/9/2019	26	345	20
28/9/2019	42	343	18
29/9/2019	55	312	24
30/9/2019	71	324	24

Note: # - Hourly average value. Expressed as at 0°C, 101.325kPa, dry and corrected to 12% CO<sub>2</sub> condition.

\* - Unit L4 was not on load.

### B.2.3 Monthly Summary of Stack SO<sub>2</sub> for Unit L2

Date	Daily Maximum	
	SO <sub>2</sub> concentration (mg/Nm <sup>3</sup> ) <sup>#</sup>	Opacity (%)
1/7/2019	*	*
2/7/2019	45	14
3/7/2019	49	15
4/7/2019	55	15
5/7/2019	60	15
6/7/2019	42	18
7/7/2019	73	17
8/7/2019	68	17
9/7/2019	68	15
10/7/2019	113	15
11/7/2019	56	15
12/7/2019	60	15
13/7/2019	55	16
14/7/2019	58	17
15/7/2019	66	16
16/7/2019	64	15
17/7/2019	71	15
18/7/2019	59	17
19/7/2019	45	17
20/7/2019	53	16
21/7/2019	46	16
22/7/2019	51	18
23/7/2019	43	17
24/7/2019	74	16
25/7/2019	75	15
26/7/2019	66	16
27/7/2019	80	17
28/7/2019	96	17
29/7/2019	85	17
30/7/2019	80	14
31/7/2019	*	*

Date	Daily Maximum	
	SO2 concentration (mg/Nm3) <sup>#</sup>	Opacity (%)
1/8/2019	*	*
2/8/2019	*	*
3/8/2019	*	*
4/8/2019	75	14
5/8/2019	68	15
6/8/2019	50	14
7/8/2019	42	13
8/8/2019	45	14
9/8/2019	46	15
10/8/2019	47	15
11/8/2019	65	14
12/8/2019	53	15
13/8/2019	60	14
14/8/2019	77	16
15/8/2019	67	16
16/8/2019	42	16
17/8/2019	66	16
18/8/2019	55	16
19/8/2019	53	16
20/8/2019	49	17
21/8/2019	51	16
22/8/2019	45	15
23/8/2019	48	17
24/8/2019	41	17
25/8/2019	64	16
26/8/2019	58	17
27/8/2019	51	16
28/8/2019	57	15
29/8/2019	67	16
30/8/2019	58	15
31/8/2019	59	15

Date	Daily Maximum	
	SO2 concentration (mg/Nm3) <sup>#</sup>	Opacity (%)
1/9/2019	67	15
2/9/2019	56	15
3/9/2019	*	*
4/9/2019	*	*
5/9/2019	*	*
6/9/2019	*	*
7/9/2019	*	*
8/9/2019	*	*
9/9/2019	53	16
10/9/2019	53	15
11/9/2019	47	16
12/9/2019	41	16
13/9/2019	36	15
14/9/2019	38	17
15/9/2019	41	16
16/9/2019	59	16
17/9/2019	70	16
18/9/2019	54	18
19/9/2019	60	14
20/9/2019	57	15
21/9/2019	49	17
22/9/2019	56	18
23/9/2019	*	*
24/9/2019	*	*
25/9/2019	*	*
26/9/2019	*	*
27/9/2019	*	*
28/9/2019	35	13
29/9/2019	*	*
30/9/2019	37	13

Note: # - Hourly average value. Expressed as at 0°C, 101.325kPa, dry and corrected to 12% CO<sub>2</sub> condition.

\* - Unit L2 was not on load.

#### **B.2.4 Summary of Annual Stack Particulate Sampling**

No annual stack particulate samplings were conducted in the period July 2019 to September 2019.

Monitoring Equipment: APEX model XC-522-V (Manual stack sampling system)

### **B.3 Ambient SO<sub>2</sub> and NO<sub>2</sub> monitoring Data at Southern District and Cheung Chau**

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

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

Ambient air monitoring at Victoria Peak air monitoring station resumed on 15 July 2019

MONTHLY STATISTICS:

GEOM	ARITH-----PERCENTILES-----										RANGE-----			STN GEOM	PERCENT	NO. OF TIMES
MEAN	MEDIAN	50	90	95	98	99	1-HR			24-HR			DEVIATION	VALID DATA	ABOVE LIMIT LEVEL	
#####	6	5	6	8	10	12	13	0	-	16	0	-	9	#VALUE!	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: JULY

STATION : VICTORIA PEAK  
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																										
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										
15	1	2	0	2	5	0	1	2	2	3	3	3	2	2	8	15	4	5	3	8	6	8	3	2	4	
16	0	0	1	0	0	0	0	0	2	12	15	12	9	3	7	23	16	5	6	22	23	30	16	10	9	
17	13	2	4	20	46	21	26	36	22	26	35	36	30	45	38	44	24	22	9	4	10	19	23	21	24	
18	20	23	14	10	17	26	40	49	48	50	68	70	15	19	22	32	30	18	12	11	10	16	9	25	27	
19	12	3	11	3	1	0	1	10	11	12	10	8	9	3	9	13	8	8	6	6	4	9	9	6	7	
20	4	3	0	0	0	0	0	1	0	2	1	2	0	0	12	14	16	8	3	17	20	0	18	47	7	
21	3	0	18	2	0	1	1	5	12	7	4	11	13	15	1	7	7	8	8	8	9	5	7	14	7	
22	2	7	0	1	21	8	1	2	1	5	6	10	5	7	11	18	13	10	11	14	25	7	4	37	9	
23	4	0	0	0	0	1	11	10	9	8	12	9	5	6	10	12	18	16	8	12	11	9	10	10	8	
24	7	M	6	0	0	0	2	6	12	11	7	11	6	7	13	18	11	9	7	9	7	8	5	10	7	
25	6	9	3	3	2	1	4	8	11	7	6	7	10	10	2	5	3	13	4	5	10	12	6	5	6	
26	7	3	1	3	1	1	1	2	2	6	18	12	11	6	5	7	12	11	15	14	10	12	9	10	7	
27	9	1	1	2	7	9	9	4	3	2	2	2	0	0	1	4	15	18	14	13	13	11	7	6	6	
28	2	1	0	1	9	5	6	4	11	11	18	8	9	13	18	18	13	10	11	4	0	3	3	2	8	
29	0	0	0	0	0	0	2	4	10	19	18	19	11	8	5	11	12	9	14	11	8	7	4	2	7	
30	0	0	0	0	0	0	0	3	4	4	5	4	1	0	2	3	5	2	0	2	2	1	1	1	2	
31	0	0	0	0	0	0	0	1	8	5	6	3	3	2	0	0	0	0	0	0	0	0	0	0	1	1

Ambient air monitoring at Victoria Peak air monitoring station resumed on 15 July 2019

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		
7	6	9	6	19	26	43	48	0	-	70	1	-	27	3	55	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: JULY

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	31	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	0	0
4	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
5	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
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	0	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	30	0	1
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	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
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	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	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	23	0	1
18	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
19	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	M	M	M	M	M	M	M	0
21	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	4	4	4	4	4	4	4	4	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	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	M	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	1	0
28	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
29	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
30	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
31	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

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	0	0	0	0	1	4	0	-	31	0	-	1	3	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

STATION : CHUNG HOM KOK ZONE SUBSTATION  
POLLUTANT : NITROGEN DIOXIDE

MONTH: JULY

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	1	1	0	0	1	0	1	2	1	1	0	0	0	0	0	1	1	0	3	1	2	0	1
2	0	0	0	0	0	2	2	2	0	0	0	0	0	1	1	0	1	0	1	1	0	1	1	0	1
3	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3	0	0	0	0	0	2	1	0	0	0
4	0	2	0	0	0	0	5	2	4	4	1	1	1	0	0	0	0	1	1	3	4	13	5	12	2
5	4	7	5	2	0	1	6	2	0	3	2	1	1	0	1	0	0	1	1	11	5	3	7	16	3
6	10	9	3	11	7	6	10	3	1	1	1	1	1	2	2	0	3	5	5	7	13	4	5	10	5
7	4	13	4	10	8	2	9	8	6	7	2	2	2	3	2	2	7	11	6	6	5	2	1	2	5
8	7	3	1	3	6	4	10	12	5	2	3	3	2	5	1	0	4	8	3	5	4	5	5	2	4
9	3	4	5	4	9	1	8	5	5	3	2	1	2	1	2	2	2	5	5	5	6	15	11	8	5
10	13	M	8	3	6	1	10	5	2	2	4	6	3	1	3	12	5	9	14	25	13	4	3	16	7
11	14	10	14	9	2	6	8	8	11	15	13	2	2	3	1	6	5	7	6	5	2	7	8	8	7
12	9	7	6	3	1	2	11	7	3	6	4	0	1	1	0	1	5	5	6	6	13	5	7	11	5
13	10	11	8	9	11	10	14	10	4	5	8	5	4	5	5	5	6	5	11	14	12	13	7	15	9
14	10	10	5	5	11	16	16	13	8	11	7	7	10	8	12	12	10	10	14	10	9	24	16	10	11
15	15	22	11	11	14	17	21	16	15	13	10	5	8	10	5	4	5	5	6	15	12	8	8	5	11
16	6	5	5	15	14	11	11	8	4	17	8	7	1	2	2	4	3	6	7	15	33	28	22	15	10
17	15	19	10	5	8	24	23	27	35	41	50	52	46	37	26	15	28	28	15	10	7	35	41	52	27
18	54	42	35	20	22	7	14	14	24	36	8	7	7	2	4	7	15	21	25	24	32	35	31	82	24
19	53	45	68	44	22	13	16	22	29	28	15	14	15	11	9	8	20	13	14	18	13	10	17	16	22
20	29	20	5	5	4	7	4	3	3	1	10	12	4	5	5	5	5	M	M	M	M	M	M	M	7
21	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M	M	M	M	3	0	2	7	23	5	6	8	3	6	5	0	0	
23	0	0	0	0	0	1	4	4	1	3	5	0	0	0	1	0	2	4	5	5	7	10	10	7	3
24	6	M	8	6	4	4	6	10	6	9	6	5	2	3	4	5	5	6	6	7	9	8	9	10	6
25	11	9	5	6	2	6	10	9	9	10	7	4	4	9	4	6	5	11	11	10	17	18	15	13	9
26	19	12	11	12	12	18	22	22	19	11	8	6	M	3	4	8	7	10	14	10	16	16	25	9	13
27	10	12	9	7	15	26	26	20	10	16	13	7	5	10	11	7	10	16	13	17	11	13	20	18	13
28	21	23	20	27	15	21	16	13	14	16	21	17	4	17	13	9	11	16	18	16	17	17	12	10	16
29	4	4	3	2	3	3	5	5	3	9	6	6	6	3	3	4	6	3	3	5	5	4	2	1	4
30	2	2	2	1	3	2	2	3	2	2	2	2	1	1	1	2	2	1	2	2	4	2	1	2	2
31	2	2	2	2	2	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	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		
6	5	8	5	17	25	36	46	0	-	82	0	-	27	3	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: JULY

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	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
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	2 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	0	2 0
4	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
5	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
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	2 0
7	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
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	2 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 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	1 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	1 0
12	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
13	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
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	1 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	0	1 0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	M	11	5	7	5	3	4	2	4	2
17	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2 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	2 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	2 0
20	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
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	2 0
22	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
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	2 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	2 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	0	1 0
26	0	0	0	0	0	0	0	0	0	0	0	M	0	0	0	M	M	1	M	M	M	M	M	M	
27	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
28	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
29	M	M	M	M	M	M	M	M	M	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30	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
31	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

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	0	0	0	1	2	2	0	-	11	0	-	2	2	91	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: JULY

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	22	13	14	14	6	5	10	16	9	14	20	10	19	18	17	11	10	10	10	9	9	7	6	5	12
2	3	2	1	1	2	1	3	5	6	6	3	3	4	8	7	4	4	5	4	2	2	2	1	3	3
3	3	4	6	19	88	51	47	18	20	13	16	15	13	12	9	21	14	16	18	19	15	14	12	13	20
4	19	14	18	11	7	5	16	29	22	18	18	18	15	15	12	14	15	18	19	16	17	20	15	12	16
5	10	6	4	4	3	4	14	8	10	9	10	15	19	15	18	17	20	25	22	21	19	18	14	10	13
6	8	8	7	7	7	7	14	8	9	13	20	11	12	15	13	33	22	12	8	10	11	9	8	11	12
7	13	8	7	6	7	6	12	12	13	15	22	20	21	23	21	22	27	26	26	21	16	12	13	15	16
8	14	13	11	10	10	12	18	14	30	17	15	21	15	17	17	14	12	16	13	10	11	11	12	8	14
9	15	11	5	7	5	9	8	8	19	23	16	13	14	15	16	16	17	18	17	12	34	22	10	12	14
10	13	M	30	16	17	12	18	19	16	15	15	15	44	26	17	14	12	24	25	18	16	12	13	12	18
11	19	34	83	54	21	16	17	23	20	26	15	16	22	17	12	15	13	9	12	19	24	23	14	13	22
12	15	15	10	10	8	9	13	13	9	9	7	8	8	10	13	17	13	14	18	12	15	11	7	10	11
13	9	7	5	4	7	6	13	11	8	8	17	16	17	13	9	8	11	10	12	12	9	8	14	15	10
14	11	10	9	6	7	7	10	15	18	13	17	17	22	24	16	30	26	21	15	10	15	15	11	11	15
15	11	59	32	30	10	9	13	14	18	17	14	49	27	11	9	12	22	22	13	14	9	8	10	11	19
16	12	10	8	9	8	9	10	14	14	20	25	23	11	11	12	M	34	33	39	38	46	41	38	26	21
17	31	26	15	15	36	21	23	26	30	35	41	39	34	42	38	22	36	28	17	12	12	23	28	26	27
18	22	23	25	24	18	17	26	41	47	48	74	68	34	25	29	27	30	25	25	27	25	19	34	53	33
19	21	11	23	17	12	11	16	24	21	26	21	16	15	13	15	24	20	18	14	11	13	14	16	12	17
20	13	16	9	6	7	9	7	11	10	11	10	18	9	6	21	21	21	28	56	27	22	8	7	16	15
21	9	5	12	7	5	8	10	16	17	12	8	10	10	11	6	11	10	11	10	11	14	11	9	10	10
22	8	6	8	8	13	13	8	9	10	9	8	7	10	13	18	17	20	17	19	16	21	16	7	17	12
23	14	9	14	12	14	14	19	16	17	20	20	11	12	8	10	6	5	9	10	9	11	13	12	14	12
24	16	M	16	12	9	9	13	14	17	18	16	16	13	17	20	22	22	15	18	18	15	16	17	13	16
25	12	16	12	12	10	10	11	14	17	11	7	13	16	14	8	6	6	11	10	7	11	11	15	8	11
26	11	10	9	11	4	7	7	13	11	9	10	M	8	2	1	M	M	7	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
29	M	M	M	M	M	M	M	M	M	M	M	4	0	0	0	0	0	0	0	0	0	0	0	7	
30	3	4	1	1	4	4	5	2	7	5	4	5	6	5	5	M	22	19	19	18	17	16	16	11	9
31	11	11	10	10	10	10	10	11	11	12	12	12	11	10	11	10	10	10	10	10	10	11	11	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		
13	13	15	13	25	33	45	53	0	-	88	3	-	33	2	90	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: JULY

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	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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	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	0	0	0	0	0	0	0	0	0	0	1	0
7	0	0	0	0	0	0	0	0	0	0	1	2	2	3	4	3	3	2	2	2	2	1	1	1	1
8	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
9	1	2	1	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0	1	0	1	0	1	1	1
10	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	7	9	2	1
11	0	0	0	0	0	2	0	2	1	4	3	2	8	1	1	1	7	2	0	0	0	0	0	0	1
12	0	1	0	0	0	0	0	0	0	0	0	0	0	1	3	0	2	0	0	0	0	0	0	1	0
13	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
14	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
15	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
16	0	0	0	0	0	0	0	1	1	6	2	0	0	0	0	1	1	1	0	0	0	0	32	0	2
17	0	0	0	0	1	0	2	2	3	4	7	8	7	6	6	6	5	2	1	1	1	2	3	5	3
18	4	5	5	4	6	6	8	8	14	18	18	14	5	1	2	2	2	1	1	1	1	1	1	3	6
19	2	1	3	4	1	1	0	2	3	6	5	2	2	0	0	0	0	0	0	0	0	0	0	1	1
20	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0
21	0	0	0	1	1	0	0	1	1	0	1	1	1	0	0	0	0	1	1	0	1	22	0	1	
22	0	1	0	1	1	1	1	1	0	1	1	1	0	1	1	1	1	0	0	1	1	0	1	1	1
23	2	1	0	0	0	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0
25	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
26	1	0	1	1	0	0	0	0	1	0	0	1	0	0	0	1	0	1	0	1	1	1	1	2	1
27	0	0	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0
28	0	0	0	1	1	2	1	0	0	0	11	17	7	2	0	1	1	0	0	0	0	0	0	1	2
29	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
30	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
31	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

MONTHLY STATISTICS:

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	1	0	2	4	7	13	0	-	32	0	-	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: JULY

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	5	3	4	6	3	4	8	12	12	22	15	6	4	5	4	4	5	5	4	5	6	7	8	5	7	
2	5	4	4	2	4	3	5	9	15	16	10	8	4	5	6	10	14	8	14	14	7	7	3	2	7	
3	2	2	3	3	3	2	4	7	9	8	5	6	6	5	7	16	6	7	11	13	11	10	10	10	7	
4	17	12	5	6	3	4	15	11	14	14	13	10	6	9	4	8	15	16	21	12	10	17	15	10	11	
5	8	6	9	5	6	22	19	14	25	16	16	22	18	10	9	8	10	19	17	9	12	11	15	21	14	
6	14	13	10	12	11	11	15	14	15	22	19	14	11	11	12	7	12	10	13	14	19	16	11	16	13	
7	19	12	6	5	6	5	11	11	11	11	11	7	7	11	19	9	13	16	11	18	14	9	13	7	11	
8	4	4	4	2	4	7	14	12	13	15	9	7	13	9	11	9	10	16	15	10	10	10	10	7	9	
9	4	13	9	10	4	5	6	9	13	12	11	6	11	9	17	12	12	8	12	8	19	14	16	16	11	
10	23	16	7	11	11	6	21	25	29	19	17	17	15	20	29	46	32	39	43	42	30	38	33	21	25	
11	12	10	7	4	5	21	13	27	23	28	22	12	25	9	9	11	29	20	20	21	14	12	14	10	16	
12	9	9	6	9	4	6	13	13	10	14	7	8	9	8	12	8	10	8	10	14	11	13	9	8	10	
13	8	7	5	4	13	8	13	19	12	12	10	5	6	6	9	6	10	11	8	15	10	13	19	18	10	
14	12	M	9	5	14	11	12	12	14	14	11	19	15	5	5	12	9	10	16	13	17	18	12	10	12	
15	11	12	9	10	8	9	14	16	11	6	15	18	9	13	12	7	5	12	15	19	19	25	22	14	13	
16	10	11	10	10	13	10	7	6	18	46	33	20	12	10	6	11	12	11	34	25	22	21	18	12	16	
17	11	11	9	37	62	47	48	46	42	43	51	54	43	62	47	29	41	37	21	15	18	51	56	47	39	
18	44	48	46	46	42	42	52	65	73	66	79	87	28	19	23	24	34	24	31	31	51	32	32	77	46	
19	37	21	31	19	12	12	11	24	25	35	26	18	16	9	34	14	17	17	18	23	29	22	13	15	21	
20	14	22	16	12	6	11	11	12	10	8	9	10	8	14	17	33	38	27	23	19	23	5	2	2	15	
21	1	0	2	12	14	5	7	13	12	6	2	6	4	2	0	7	1	10	9	14	20	8	2	4	7	
22	5	2	3	4	5	10	6	2	2	2	1	0	3	0	6	6	8	6	10	4	23	10	0	22	6	
23	21	9	0	4	20	18	23	5	14	30	15	4	4	3	8	12	9	11	11	10	13	13	15	8	12	
24	7	5	4	0	0	0	1	2	4	6	5	6	3	4	6	11	8	9	10	15	9	12	10	17	6	
25	10	16	10	7	11	8	6	12	17	11	6	9	12	8	6	2	6	9	8	6	13	18	21	6	10	
26	18	12	10	15	8	8	6	14	9	5	9	4	5	6	3	9	11	7	17	6	17	21	12	14	10	
27	16	7	11	13	18	25	23	10	15	16	10	4	10	6	5	5	9	9	15	13	20	9	8	8	12	
28	12	M	3	9	25	10	15	8	23	22	17	20	18	21	22	19	16	8	11	6	3	6	7	5	13	
29	3	1	2	2	1	2	4	10	10	19	14	16	20	17	10	17	15	11	9	10	7	6	6	2	9	
30	1	0	0	0	0	0	0	3	7	7	9	10	2	1	2	4	5	5	4	4	3	1	2	1	3	
31	1	1	0	0	0	0	1	3	10	9	7	4	4	5	0	0	0	0	0	0	0	0	0	0	0	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		
10	10	13	10	24	37	48	60	0	-	87	2	-	46	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: JULY

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

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	4	4	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
2	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	M	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	1	0	0	1	0	0	0	0	1	0
4	15	6	0	0	0	0	4	5	1	1	0	2	1	1	1	0	0	1	2	0	0	3	0	3	2	
5	0	1	1	1	3	2	4	1	5	2	4	11	7	1	2	0	3	7	1	2	3	0	1	5	3	
6	4	1	0	7	4	1	7	0	1	5	10	3	4	8	7	4	4	2	3	4	3	1	0	3	4	
7	4	0	2	2	0	0	2	0	1	0	0	0	1	0	0	2	4	3	1	2	0	0	0	2	1	
8	0	0	0	0	0	1	0	1	1	2	0	2	4	2	4	6	9	13	5	2	7	8	6	10	3	
9	8	9	7	9	6	13	7	7	14	17	13	14	13	15	20	16	16	14	15	13	19	10	14	13	13	
10	9	M	7	11	12	8	19	18	18	20	24	29	14	21	19	24	24	42	42	53	35	23	21	23	22	
11	28	30	17	11	16	18	32	25	29	36	23	20	18	11	9	12	20	12	11	23	14	11	7	16	19	
12	12	14	8	7	5	9	15	14	9	13	10	5	11	9	14	12	11	10	13	8	10	9	5	13	10	
13	8	8	5	6	9	4	12	14	4	10	16	13	12	10	14	14	17	15	12	16	9	9	8	25	11	
14	7	6	6	4	10	6	10	5	6	9	9	10	13	4	8	14	11	6	16	9	13	19	4	12	9	
15	17	21	9	17	11	13	13	25	22	19	13	12	13	10	11	14	8	17	11	21	22	12	9	10	15	
16	17	16	13	17	22	28	18	11	16	25	27	16	19	20	17	19	18	19	32	30	31	32	32	22	22	
17	30	24	8	32	55	56	53	51	46	52	60	M	72	46	32	48	69	54	28	12	13	30	29	37	41	
18	34	41	34	17	22	24	57	57	65	72	85	34	9	7	25	19	42	39	27	25	64	36	61	52	40	
19	37	28	74	38	10	17	28	20	28	28	29	32	27	25	16	20	35	44	24	21	24	49	33	13	29	
20	26	17	13	10	10	17	15	21	17	22	19	12	13	5	24	19	33	26	47	26	31	6	37	20	20	
21	12	9	11	25	20	20	17	31	29	24	10	7	13	18	19	22	19	28	13	16	24	13	30	12	18	
22	3	7	15	9	13	23	18	13	16	10	12	16	20	9	14	12	11	1	8	2	22	10	1	19	12	
23	12	5	0	0	0	5	15	17	16	12	6	2	1	0	0	0	0	0	0	0	2	6	6	5	5	
24	6	M	8	0	0	0	0	0	1	1	0	0	0	1	3	13	14	6	6	2	3	1	4	9	3	
25	7	18	9	3	0	1	6	8	15	5	5	8	13	10	11	12	12	17	16	3	9	9	14	7	9	
26	17	10	13	14	6	14	7	22	14	14	20	12	13	10	12	21	16	13	17	3	8	13	3	5	12	
27	11	6	4	7	17	23	23	22	14	12	17	16	19	16	14	12	20	15	13	3	10	6	4	15	13	
28	29	8	14	20	22	25	20	11	17	24	27	36	19	38	35	18	20	12	22	8	8	10	9	4	19	
29	1	0	0	0	0	0	4	3	10	13	10	9	2	3	3	6	5	3	3	3	3	1	0	2	4	
30	0	0	0	0	0	0	0	0	1	2	1	3	0	0	0	1	1	0	0	0	0	0	0	1	0	
31	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	

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	12	9	28	36	53	61	0	-	85	0	-	41	3	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: JULY

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

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	16	19	28	14	5	22	26	22	28	19	24	23	8	6	7	26	21	11	10	12	10	11	9	15	16
2	14	18	8	15	5	24	22	21	21	16	8	14	4	3	6	10	8	8	12	11	14	3	1	24	12
3	20	10	12	37	14	4	14	4	6	6	4	5	3	3	0	12	3	3	6	1	0	1	1	2	7
4	2	0	2	1	1	4	1	2	5	1	0	2	1	0	0	0	1	1	87	7	4	4	0	7	6
5	8	3	5	2	1	3	0	2	5	1	0	0	0	1	0	0	1	0	5	3	2	2	4	2	2
6	3	1	3	1	1	1	2	3	2	1	0	2	0	0	0	0	4	1	3	3	4	3	0	2	2
7	4	2	0	0	3	1	1	0	1	0	0	0	0	0	0	0	0	1	1	5	1	0	2	0	1
8	2	0	0	2	0	3	3	1	1	1	0	1	0	0	1	2	0	1	0	1	1	0	0	1	1
9	1	2	1	0	0	0	1	0	1	0	0	0	1	0	0	0	1	2	0	2	3	2	4	7	1
10	5	M	14	8	6	5	10	5	7	4	10	7	5	1	4	7	11	6	13	5	3	5	18	39	9
11	42	20	29	20	15	18	23	24	16	9	7	5	5	5	3	2	4	3	2	2	6	4	2	3	11
12	5	6	5	5	6	5	3	2	3	2	0	0	0	1	0	0	1	0	0	0	1	0	0	0	2
13	1	1	2	3	1	1	1	0	0	0	0	0	0	0	0	1	1	3	1	4	2	1	3	4	1
14	4	2	3	2	1	6	4	2	1	1	1	1	1	0	0	2	1	1	0	2	1	2	4	9	2
15	5	6	7	8	4	6	10	7	5	5	4	0	0	0	0	0	0	0	0	0	0	0	1	1	3
16	1	3	2	5	7	5	31	16	19	6	6	2	1	3	3	4	1	3	4	8	20	35	24	18	9
17	18	14	7	10	49	50	53	42	41	29	66	M	M	17	13	21	28	26	20	34	28	37	32	52	31
18	51	89	87	51	14	33	62	67	49	60	70	40	37	38	32	17	18	30	58	28	70	112	70	72	52
19	70	53	65	34	15	23	27	26	14	25	20	12	3	5	13	39	46	10	28	21	55	76	30	25	31
20	21	15	4	5	12	20	26	17	15	17	9	2	5	20	56	53	50	47	54	20	15	25	31	56	25
21	40	57	50	45	47	20	37	50	43	21	16	12	21	25	34	20	22	32	42	45	25	60	45	57	36
22	51	46	47	45	41	43	21	41	35	27	14	20	11	9	22	15	7	23	48	21	26	34	64	51	32
23	45	29	54	52	40	10	9	24	53	42	20	19	12	0	4	1	4	12	12	20	12	15	5	13	21
24	13	M	26	29	19	9	8	7	5	4	4	4	2	2	2	2	2	2	2	2	3	2	1	3	7
25	5	4	6	3	3	3	32	22	7	3	3	12	3	3	3	3	3	4	5	10	6	7	10	11	7
26	11	10	10	11	10	9	M	M	M	M	M	M	M	5	3	5	11	8	5	6	6	10	13	26	9
27	14	13	18	14	14	16	13	5	5	25	16	6	5	4	8	3	6	5	4	3	5	7	9	11	10
28	9	14	15	21	15	21	17	16	8	27	29	39	31	16	13	7	14	8	17	38	28	21	20	21	19
29	14	9	6	9	5	9	18	30	16	23	32	30	15	4	2	2	5	15	9	17	14	10	10	12	13
30	15	17	21	22	15	18	12	13	11	12	13	10	12	7	10	15	19	23	27	32	33	28	22	22	18
31	19	7	6	3	11	22	10	17	6	11	16	9	3	10	10	22	11	10	16	5	2	12	12	1	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		
8	6	13	6	35	50	61	70	0	-	112	1	-	52	3	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: AUGUST

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

STATION : VICTORIA PEAK  
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	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	2	3	0
2	0	0	0	0	0	0	1	4	5	6	8	3	3	3	4	6	6	5	3	2	2	1	0	1	3
3	0	0	0	0	0	0	0	3	7	10	14	13	13	17	15	18	16	11	5	3	3	2	0	3	6
4	2	1	0	1	2	2	3	4	8	6	11	7	5	3	2	0	1	2	5	4	6	1	4	3	3
5	1	1	0	0	0	0	1	4	14	12	15	12	7	5	10	7	6	2	4	0	0	1	1	3	4
6	1	1	1	1	1	1	3	6	11	15	17	29	28	35	35	36	28	5	5	3	5	6	5	7	12
7	4	M	2	1	3	2	3	7	8	9	9	7	10	10	12	12	11	11	11	11	7	9	5	10	8
8	9	4	3	7	1	17	18	10	16	27	32	32	25	22	40	42	59	49	23	17	9	9	14	13	21
9	23	18	10	10	9	17	25	29	36	36	41	34	43	50	21	18	16	13	9	9	5	6	4	8	20
10	2	1	2	0	0	3	4	4	4	6	4	10	6	5	5	7	4	5	7	5	4	4	6	4	4
11	2	0	0	0	1	0	2	2	2	1	1	1	1	3	4	15	24	27	11	24	7	2	1	7	6
12	1	0	2	2	1	0	1	3	4	4	4	3	6	5	4	4	5	4	9	6	2	2	6	4	3
13	1	1	1	2	3	1	1	4	6	8	4	4	5	4	5	2	5	5	3	6	9	2	0	5	4
14	3	0	2	3	0	0	0	1	2	4	9	7	17	10	10	11	9	8	7	9	14	11	11	16	7
15	2	0	0	0	6	1	2	16	13	15	10	11	8	5	7	4	5	6	4	6	13	10	5	6	6
16	4	8	4	1	3	3	3	9	3	4	8	4	8	6	5	13	11	14	31	15	6	16	9	24	9
17	11	8	11	8	2	2	5	7	5	10	14	17	11	11	11	9	22	13	14	38	18	14	21	13	12
18	17	19	6	2	1	4	7	6	2	2	1	1	4	5	3	3	9	5	11	14	23	21	1	17	8
19	4	4	3	4	6	9	7	4	16	17	20	29	36	39	41	42	37	25	30	22	12	10	5	7	18
20	7	13	4	9	6	1	2	8	16	12	10	10	5	4	4	5	6	7	3	2	3	4	2	5	6
21	4	M	2	1	0	2	3	9	21	26	23	16	15	17	18	14	6	6	9	3	6	7	13	2	10
22	12	14	3	2	0	2	6	17	16	13	19	15	14	18	13	17	14	22	39	38	29	16	17	52	17
23	39	37	10	5	16	18	18	37	43	34	41	M	25	20	36	29	13	11	18	35	14	6	13	30	24
24	69	75	41	29	13	29	26	30	31	48	50	55	48	46	40	37	34	28	26	19	18	30	31	51	38
25	35	5	5	25	33	28	20	13	15	31	24	18	11	16	14	6	12	12	22	14	27	48	4	19	19
26	3	0	0	0	0	0	6	6	15	8	8	7	5	4	16	8	3	24	35	42	13	9	3	5	9
27	1	1	0	0	0	0	5	7	12	10	9	7	6	4	7	8	6	4	1	1	3	1	1	13	4
28	5	11	7	15	8	3	9	12	26	32	43	41	27	19	29	22	16	19	20	14	6	6	9	6	17
29	4	3	0	0	1	0	3	3	5	5	M	M	0	1	2	1	3	0	0	1	1	0	0	3	2
30	0	0	0	0	0	0	0	5	3	1	5	9	5	10	11	1	3	6	7	3	0	0	1	1	3
31	1	2	0	0	0	0	0	2	3	11	12	9	3	1	1	2	4	1	1	0	0	1	0	1	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	
7	6	10	6	27	36	43	50	0	-	75	0	-	38	3	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: AUGUST

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	1
3	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	0	0	1	0	0	1
4	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
5	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
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	0	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	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	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	0	0	1
13	1	1	1	0	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	0	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
20	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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1
25	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
26	0	0	0	0	0	0	0	0	0	0	M	M	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	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
30	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
31	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

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	0	1	1	1	0	-	1	0	-	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: AUGUST

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	1	3	3	3	5	3	2	8	11	2
2	5	4	4	3	5	4	5	7	8	5	8	4	5	5	4	3	2	4	4	4	4	4	3	4	5
3	4	3	3	3	3	2	4	3	5	3	6	4	4	6	5	3	4	4	5	6	6	6	4	2	4
4	0	0	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	0	1	3	2	1	4	1	1
5	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	4	1	1	2	1	4	1
6	7	5	5	5	5	3	3	4	5	6	10	15	34	44	51	25	8	8	5	3	4	5	3	6	11
7	5	M	5	6	5	5	5	4	3	3	2	3	3	5	4	4	8	11	15	16	13	13	11	13	7
8	7	12	13	13	10	6	10	22	23	28	50	49	49	76	72	53	49	37	31	23	22	20	18	26	30
9	30	38	35	18	18	19	30	47	46	50	69	54	86	67	22	40	25	24	15	25	17	15	8	17	34
10	14	12	11	8	2	5	12	7	4	4	6	6	6	7	7	6	1	12	7	2	1	4	2	8	6
11	7	6	7	3	5	4	4	2	2	7	7	5	8	7	2	4	8	5	9	17	6	4	2	6	6
12	6	4	1	6	3	2	7	3	7	3	4	7	5	5	9	7	7	8	9	16	4	5	9	7	6
13	6	7	7	7	7	7	7	10	10	6	4	7	8	9	8	6	6	5	3	11	7	8	6	11	7
14	12	11	7	7	5	2	9	14	18	23	16	23	12	11	13	12	11	9	15	10	13	12	13	11	12
15	9	7	5	7	10	4	8	14	18	30	18	13	11	12	10	9	12	9	11	15	23	16	21	15	13
16	6	14	22	15	11	7	9	20	16	10	10	11	22	9	11	13	13	15	22	20	14	17	23	20	15
17	19	20	18	6	8	7	20	20	11	12	9	8	11	8	10	22	9	16	18	23	19	16	10	16	14
18	19	15	5	8	10	19	25	13	12	11	8	9	11	10	9	7	18	20	31	26	15	16	16	12	14
19	8	14	16	18	14	16	21	20	26	28	29	28	26	31	27	23	14	11	12	19	16	3	3	3	18
20	3	4	4	4	6	5	5	7	6	6	4	4	4	3	7	6	6	9	13	11	13	6	10	3	6
21	1	M	5	3	2	1	3	4	8	8	5	2	3	3	5	6	7	13	13	13	9	10	6	5	6
22	8	7	5	3	3	3	6	8	9	11	9	7	5	5	4	5	9	14	18	21	15	17	19	11	9
23	21	13	6	5	4	7	7	11	13	11	30	39	28	14	8	7	8	8	6	6	10	8	7	14	12
24	12	26	70	72	79	70	56	56	36	45	64	70	62	62	75	62	49	30	29	18	24	22	40	40	49
25	43	10	16	19	36	46	33	41	28	35	39	19	20	35	21	18	22	28	19	17	22	15	10	8	25
26	5	7	7	6	10	1	3	8	12	5	M	M	8	7	7	9	8	11	10	10	10	9	10	8	8
27	5	7	6	4	3	8	11	13	10	7	8	9	5	4	9	6	7	7	8	10	9	9	6	9	8
28	6	4	5	11	19	24	24	24	28	34	40	42	20	12	12	16	11	7	9	9	7	8	7	9	16
29	9	6	5	5	5	4	5	5	3	3	2	3	4	3	4	4	5	4	9	7	10	9	7	10	5
30	7	7	6	5	5	4	4	7	3	7	10	8	9	26	8	5	5	5	2	6	6	3	10	3	7
31	5	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	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		
9	7	11	7	25	40	57	70	0	-	86	0	-	49	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 : VICTORIA ROAD SUBSTATION  
POLLUTANT : SULPHUR DIOXIDE

MONTH: AUGUST

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	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	0	1	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	0	1	0	
4	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	
5	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	
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	
7	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	
8	0	1	1	0	0	0	0	0	1	1	2	2	1	2	2	1	1	0	0	0	0	0	0	0	1	1	
9	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	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	1	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	2	0	
12	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	
13	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	
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	2	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	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	M	0	0	0	0	0	0	0	0	0	0	0	0	2	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	3	0
18	1	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	
19	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	
20	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	
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	2	0	
22	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	
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	2	0	
24	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	2	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	0	2	0	
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	2	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	2	0	
28	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	
29	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	
30	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	
31	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	

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	0	1	2	2	0	-	3	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: AUGUST

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	13	13	13	13	14	14	14	15	15	15	16	15	16	15	15	15	15	16	16	15	14	14	15	6	14
2	4	3	3	3	3	4	4	5	6	4	4	3	4	4	4	M	5	5	6	5	5	4	4	4	4
3	3	3	3	3	3	4	10	6	6	6	5	8	8	9	8	9	9	7	7	6	6	6	6	5	6
4	5	4	3	3	3	4	4	5	7	6	8	8	7	6	6	5	5	5	7	8	15	17	21	7	7
5	5	5	4	4	6	4	5	5	8	10	10	12	14	10	11	12	15	21	20	12	9	9	10	8	10
6	10	7	14	11	18	6	5	8	11	11	19	22	16	28	29	34	53	25	16	13	12	9	9	7	16
7	5	M	3	4	4	4	5	5	7	7	7	7	10	11	12	21	33	22	15	11	11	9	12	10	
8	19	15	8	6	6	7	19	21	19	26	31	31	39	36	49	45	46	39	25	21	18	15	16	17	24
9	20	17	22	18	21	21	36	36	38	36	38	37	58	50	27	26	23	16	17	15	13	13	9	13	26
10	11	8	8	7	7	10	13	13	11	14	14	16	15	12	13	12	9	12	11	10	8	9	12	8	11
11	8	7	4	4	5	5	6	6	7	7	5	6	6	7	7	14	17	17	12	15	10	7	6	7	8
12	6	6	7	6	3	2	5	8	16	16	15	10	13	7	13	10	13	18	13	10	6	5	6	6	9
13	5	5	5	9	9	8	10	11	12	18	16	10	11	10	13	10	14	12	11	10	11	8	17	15	11
14	10	6	5	13	10	6	16	17	19	18	14	16	13	18	16	14	18	15	11	10	14	11	15	10	13
15	4	3	2	7	9	5	11	15	17	23	19	21	15	16	21	16	13	16	12	11	16	13	13	12	13
16	10	11	10	11	11	11	10	20	17	15	17	M	21	16	15	16	14	11	24	17	9	17	13	15	14
17	12	12	15	15	14	14	10	13	11	15	16	19	18	12	19	26	15	16	15	16	20	14	14	14	15
18	14	8	7	7	6	6	7	8	7	9	8	11	8	9	10	8	11	8	19	16	14	12	9	11	10
19	8	7	5	5	6	8	8	9	12	11	14	19	29	25	26	31	26	22	16	18	19	15	11	21	15
20	13	18	14	8	27	13	9	11	14	12	11	11	9	8	12	12	12	11	10	11	11	9	9	7	12
21	6	M	6	5	5	5	7	10	15	26	32	20	22	15	19	14	14	20	21	15	15	14	20	22	15
22	15	10	7	6	7	13	14	20	39	41	36	22	24	23	30	23	19	38	42	33	23	13	20	12	22
23	21	21	19	9	16	24	21	27	34	43	34	30	23	19	21	22	12	12	19	24	26	14	15	26	22
24	35	46	37	23	25	22	27	35	24	39	42	42	48	47	47	43	41	32	27	21	20	24	27	29	33
25	29	16	9	12	20	25	21	20	15	20	26	21	16	23	14	10	13	15	19	15	12	17	11	17	17
26	11	5	4	7	6	4	10	17	19	11	10	10	10	9	11	13	16	12	16	15	11	10	9	8	11
27	8	6	6	6	6	6	9	11	14	12	10	13	16	12	12	12	12	12	9	9	10	9	10	12	10
28	11	8	11	12	9	9	11	18	24	22	35	38	31	45	40	34	23	17	22	14	9	9	8	7	19
29	7	6	4	3	4	4	6	7	7	7	7	7	7	8	7	8	9	9	8	8	7	8	6	8	7
30	6	5	5	5	4	5	7	12	9	9	10	14	19	18	20	24	27	28	18	22	11	8	8	7	13
31	7	6	4	4	3	3	3	5	6	9	12	14	10	9	7	6	7	8	6	6	6	6	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		
11	12	14	12	25	34	42	46	2	-	58	4	-	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: AUGUST

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

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	1	0	2	4	9	12	0	-	18	0	-	5	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: AUGUST

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	2	1	0
2	0	0	0	0	0	0	1	1	3	1	1	0	0	0	1	2	3	4	6	3	3	2	1	2	1
3	0	1	0	1	1	1	8	3	7	12	16	12	10	7	15	13	14	13	12	9	6	5	4	5	7
4	5	3	2	2	1	1	3	4	8	7	8	7	4	5	6	4	6	9	9	12	29	50	69	5	11
5	2	2	6	0	0	1	2	5	15	17	23	18	21	11	5	11	16	24	19	2	1	3	7	31	10
6	17	34	34	40	7	0	2	9	16	19	22	39	31	46	45	55	60	25	10	10	12	22	19	5	24
7	2	0	0	0	0	2	2	6	16	10	11	8	6	9	13	12	16	34	21	10	6	7	3	5	8
8	12	42	28	7	4	22	35	26	35	36	39	44	47	47	85	72	61	40	20	17	13	12	18	37	33
9	32	35	27	35	32	37	54	44	48	52	52	63	91	62	33	28	26	15	11	10	3	11	4	10	34
10	12	3	9	7	3	17	15	14	12	16	9	15	7	7	10	9	8	14	6	14	6	9	12	5	10
11	6	M	0	1	2	2	6	5	6	3	1	0	1	1	1	4	3	2	6	2	5	0	1	3	3
12	3	0	2	4	4	0	3	8	14	11	4	0	5	1	3	2	6	3	11	12	3	1	2	2	4
13	0	3	4	11	13	8	5	10	10	11	6	4	8	4	4	5	7	6	10	8	7	3	1	20	7
14	10	4	1	8	0	2	7	7	19	14	12	15	9	8	7	8	14	8	15	10	6	6	8	3	8
15	2	1	0	5	12	1	3	21	30	33	12	18	7	6	13	9	11	15	14	9	20	16	16	29	13
16	10	20	12	2	11	8	9	17	9	10	17	4	15	8	5	9	14	14	17	12	12	21	16	31	13
17	13	9	8	3	13	6	6	6	12	23	12	24	21	7	8	13	14	14	15	37	13	13	22	15	14
18	19	6	2	0	1	4	7	6	3	1	1	2	9	4	3	9	12	12	22	21	16	10	3	20	8
19	6	5	6	5	12	14	16	15	20	16	24	30	36	38	38	37	24	19	20	16	9	8	8	4	18
20	8	45	7	10	18	4	1	9	12	17	8	7	3	1	3	2	4	1	2	2	3	3	0	2	7
21	0	0	0	0	0	0	1	8	16	24	36	M	29	15	25	12	11	14	7	8	5	7	11	15	11
22	18	9	4	3	4	23	19	18	49	51	42	M	24	10	17	14	9	35	45	31	19	11	7	4	20
23	17	27	27	16	41	47	38	30	47	57	30	M	19	14	24	19	9	9	23	31	41	18	37	67	30
24	74	71	56	54	61	62	65	48	39	62	66	M	78	65	59	57	45	43	29	17	18	27	36	52	51
25	43	M	8	16	27	31	18	16	17	31	34	M	19	32	29	12	21	18	18	24	9	30	7	6	21
26	7	0	0	3	2	1	9	23	26	1	3	M	2	1	15	12	7	7	36	30	3	1	0	0	8
27	0	0	0	0	0	0	1	3	6	2	0	M	3	1	4	2	4	3	0	1	1	1	7	17	2
28	21	24	26	26	23	22	25	25	32	39	48	M	45	51	47	39	17	16	24	19	8	8	9	4	26
29	2	2	0	0	0	0	1	4	4	6	2	M	1	1	0	1	1	0	1	1	1	0	0	0	1
30	0	0	0	0	0	0	2	6	5	8	15	M	29	33	27	23	M	47	23	26	4	4	5	1	12
31	0	2	1	0	0	0	0	0	3	19	28	25	12	1	0	0	6	6	2	1	2	1	1	4	5

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	14	8	36	47	61	67	0	-	91	0	-	51	3	98	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: AUGUST

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

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	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	0	0	0	2	2	0	1	4	1	2	11	2	2	0	1	0	0	0	0	0	1
4	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
5	0	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0	1	13	6	0	0	0	0	1	0
6	0	0	0	0	0	0	0	1	0	1	13	29	32	43	47	46	39	0	0	0	0	0	0	3	11
7	0	M	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	2	1	0	0	0	1	0
8	28	42	35	1	0	22	32	25	27	35	40	48	45	60	75	56	66	48	23	20	12	6	10	15	32
9	15	8	24	12	31	18	46	44	48	50	55	49	74	52	40	40	35	19	19	23	13	5	10	17	31
10	23	10	3	9	8	14	23	10	8	17	15	20	14	10	11	9	9	11	4	5	9	8	5	7	11
11	8	3	4	1	10	6	18	11	11	11	6	9	8	6	9	13	8	11	10	8	4	2	1	11	8
12	5	4	4	11	13	4	14	18	17	19	19	13	20	13	19	17	21	14	11	17	5	4	5	7	12
13	3	6	2	15	16	21	3	11	19	24	19	22	19	19	23	19	21	12	7	14	9	4	4	17	14
14	13	4	4	5	9	2	16	29	37	36	28	39	25	29	26	21	19	18	18	19	12	17	17	14	19
15	8	4	1	7	17	4	15	22	25	32	30	M	39	27	28	18	24	16	27	17	29	14	29	22	20
16	10	19	22	13	13	7	6	23	27	32	39	24	29	19	21	M	20	19	21	18	19	27	21	23	21
17	17	15	28	9	10	8	17	22	15	16	20	11	18	22	25	35	22	14	17	25	18	11	24	28	19
18	26	6	13	10	17	17	17	13	11	20	12	11	14	10	14	10	21	26	40	30	21	15	10	14	17
19	19	15	11	12	15	27	26	21	26	31	31	38	45	40	22	19	12	12	15	28	18	11	10	9	21
20	4	43	15	5	19	14	9	8	6	5	2	5	2	1	1	1	1	2	4	5	4	2	2	4	7
21	2	M	1	1	1	2	4	7	6	9	8	8	4	2	2	2	2	5	8	7	7	7	11	6	5
22	30	4	2	0	2	13	11	29	38	18	29	14	14	14	10	6	15	41	25	21	23	23	10	6	17
23	26	10	15	1	8	33	44	29	12	52	55	44	32	15	44	23	1	1	3	8	6	12	8	29	21
24	59	73	69	62	32	58	65	53	40	61	76	66	66	62	69	69	86	38	32	18	20	20	41	63	54
25	42	13	9	16	37	38	29	26	20	35	41	31	20	32	24	14	30	34	13	22	20	10	20	10	24
26	9	3	3	4	8	5	17	27	33	12	7	5	5	7	12	13	21	21	32	12	9	8	16	14	13
27	7	4	4	3	3	5	5	8	9	6	3	7	5	3	5	5	5	4	4	4	5	7	14	13	6
28	19	25	27	28	27	17	26	28	32	45	57	66	46	63	57	28	12	8	13	11	7	6	9	7	28
29	4	3	1	1	1	1	2	1	2	2	2	2	1	1	2	2	3	4	4	3	4	3	1	4	2
30	0	0	1	1	0	0	5	8	4	6	17	29	33	27	5	8	29	9	13	16	10	2	4	11	10
31	5	3	2	2	3	2	7	7	4	9	16	21	6	4	2	3	3	2	3	2	2	3	2	7	5

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	9	14	9	34	46	62	68	0	-	86	0	-	54	3	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: AUGUST

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

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4	5	3	10	1
2	9	12	17	3	10	13	11	10	3	14	15	5	3	5	5	3	2	5	15	6	13	7	7	17	9
3	8	5	13	11	9	3	4	29	47	51	26	23	15	28	25	32	22	15	14	22	22	15	17	13	20
4	14	22	53	52	48	38	58	45	16	35	42	26	24	16	17	15	21	20	20	13	30	74	72	41	34
5	63	48	50	30	47	75	50	63	48	53	32	13	11	11	11	11	29	36	39	43	37	50	55	77	41
6	86	62	43	41	53	56	57	41	42	41	47	49	40	38	46	40	38	56	33	16	45	23	33	61	45
7	67	M	31	36	50	55	55	49	39	29	16	13	9	12	15	23	28	42	47	54	43	38	30	44	36
8	45	54	24	11	19	22	65	59	47	41	25	28	27	23	28	52	46	27	27	19	20	13	45	48	34
9	40	34	32	29	28	22	34	38	67	63	61	52	38	31	33	23	25	17	13	11	12	23	11	23	32
10	14	8	8	8	11	15	22	9	11	14	9	14	12	9	22	19	56	18	12	14	7	7	9	6	14
11	127	15	9	95	19	10	12	7	9	6	6	4	7	6	6	5	7	5	5	6	5	4	5	9	16
12	159	33	22	15	11	11	9	10	9	9	6	6	8	6	8	5	4	7	26	27	7	3	6	1	17
13	1	4	97	19	17	13	12	16	13	9	5	8	8	8	5	5	3	7	5	6	5	3	3	4	12
14	4	3	4	4	3	49	6	13	30	20	11	10	3	7	2	1	2	2	7	8	3	2	2	3	8
15	3	3	3	4	3	0	4	6	8	12	12	15	4	4	3	1	3	6	6	2	9	19	22	3	6
16	17	31	15	8	4	3	14	13	5	6	5	5	7	4	6	14	4	3	5	6	9	11	25	23	10
17	24	39	11	5	6	7	9	11	18	14	6	4	4	4	5	6	6	9	9	9	9	5	4	3	9
18	4	3	6	10	13	12	14	18	15	7	5	3	2	7	7	7	14	13	21	27	34	37	35	22	14
19	36	16	31	40	36	33	30	31	25	18	46	20	16	16	15	27	16	13	12	10	10	7	37	16	23
20	55	37	38	61	54	71	79	64	27	11	7	8	9	6	7	10	14	10	13	17	23	16	12	16	28
21	19	M	32	45	26	21	38	27	26	36	37	10	9	16	7	10	11	14	6	15	6	6	12	11	19
22	29	27	29	20	11	15	33	42	20	15	15	3	1	1	4	8	3	5	8	7	7	1	3	26	14
23	22	41	25	16	7	13	32	46	37	49	34	21	18	15	15	6	8	10	9	3	11	13	23	55	22
24	59	58	52	34	41	52	28	28	32	187	35	33	41	47	48	54	40	27	36	25	19	21	32	32	44
25	27	22	25	19	34	29	21	22	26	36	18	11	18	14	8	12	12	11	3	17	18	21	10	10	19
26	11	8	21	11	9	23	41	49	33	32	49	45	36	43	12	15	9	34	39	23	49	67	49	38	31
27	30	54	27	37	21	48	21	16	13	12	8	6	M	M	M	3	0	1	1	4	3	3	16	30	17
28	27	29	25	24	31	36	41	48	58	68	78	72	72	70	36	39	22	8	8	16	23	8	42	23	38
29	16	9	20	25	16	23	19	20	15	11	14	4	4	0	4	10	3	17	4	17	10	5	19	23	13
30	20	7	9	8	1	2	0	11	27	0	1	35	27	24	10	24	28	22	17	1	5	41	30	46	17
31	34	32	7	10	21	18	17	39	35	12	24	34	22	0	0	0	30	9	1	5	5	11	12	7	16

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		
15	15	21	15	48	56	70	78	0	-	187	1	-	45	3	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: SEPTEMBER

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

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	1	2	1	4	6	8	10	0	-	25	0	-	8	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: SEPTEMBER

STATION : VICTORIA PEAK  
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	0	0	2	9	12	11	8	6	0	0	0	0	0	1	0	0	0	0	0	1	2
2	0	0	0	0	0	0	0	0	0	2	3	4	2	1	1	2	1	5	4	5	2	1	0	1	1	
3	0	0	0	0	0	0	5	13	19	19	11	12	7	6	3	5	3	0	1	0	0	0	0	0	1	4
4	0	M	0	0	0	0	1	5	12	14	18	18	9	8	6	9	9	4	1	0	0	0	0	0	1	5
5	0	1	1	0	0	0	3	11	14	20	19	7	3	1	4	2	1	4	7	1	0	0	0	0	4	4
6	4	0	0	1	1	2	6	11	12	14	12	5	2	6	3	5	11	4	1	1	0	1	4	1	4	
7	0	10	12	2	1	8	39	30	41	45	55	54	44	38	44	23	23	29	22	21	3	6	23	13	24	
8	6	1	1	25	48	17	7	12	25	46	31	27	24	28	17	22	20	12	19	23	13	5	14	9	19	
9	3	5	16	14	48	6	28	24	12	9	11	11	11	7	10	10	17	21	16	14	14	8	12	9	14	
10	7	3	2	1	3	0	4	3	6	10	10	8	1	2	0	0	0	3	3	8	5	1	0	1	3	
11	0	0	0	1	0	0	1	2	4	10	5	3	2	0	4	13	9	3	3	3	11	0	0	11	4	
12	3	5	6	8	0	0	3	9	16	17	14	13	10	10	11	13	14	14	17	9	3	1	0	2	8	
13	0	0	3	1	3	3	4	10	8	8	6	5	5	6	8	12	13	8	7	7	6	4	5	10	6	
14	3	0	0	1	0	1	13	20	4	19	8	8	11	6	10	6	6	10	9	0	0	3	3	2	6	
15	0	0	0	2	0	0	0	0	9	2	0	9	7	1	4	1	2	1	7	14	29	18	9	7	5	
16	2	1	1	0	1	1	5	13	20	14	4	4	3	3	4	3	1	3	1	1	0	0	0	1	4	
17	0	0	0	0	0	0	0	3	8	15	12	4	2	3	3	3	5	6	2	2	1	1	1	2	3	
18	0	M	1	1	0	1	2	13	17	30	33	18	15	10	17	23	19	16	9	5	5	7	0	3	11	
19	2	1	0	0	0	0	8	27	35	44	M	30	26	22	20	20	23	23	20	12	13	7	3	3	15	
20	2	8	10	1	6	18	18	20	42	41	33	28	20	18	19	27	29	24	26	41	42	51	43	32	25	
21	30	13	11	6	3	2	7	17	18	19	20	18	19	22	17	22	32	17	24	36	30	41	39	26	20	
22	17	3	1	1	1	2	3	7	9	10	15	14	13	13	12	11	15	15	18	33	23	24	22	12	12	
23	14	1	2	3	1	0	6	20	32	23	20	13	6	7	5	4	4	2	3	1	1	3	0	1	7	
24	0	0	0	0	0	0	4	9	16	22	20	12	6	2	2	0	0	0	0	0	0	0	0	0	1	4
25	0	0	0	0	0	0	1	15	25	24	26	22	14	14	18	8	1	2	1	0	0	0	0	1	7	
26	0	0	0	0	0	0	0	18	26	27	22	13	11	10	9	12	6	1	0	0	0	0	1	2	7	
27	3	0	0	0	0	0	2	11	27	26	26	26	25	24	24	20	4	13	10	3	0	3	1	2	10	
28	0	0	1	2	4	0	0	11	28	32	32	35	27	18	8	14	15	13	17	10	0	0	0	7	11	
29	4	1	0	0	0	5	22	23	8	21	23	24	26	27	19	23	18	16	13	108	85	6	2	7	20	
30	4	1	3	8	7	6	12	25	46	51	43	37	31	48	43	30	40	29	33	41	30	26	17	23	26	

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		
7	5	10	5	26	33	44	48	0	-	108	1	-	26	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

STATION : CHUNG HOM KOK ZONE SUBSTATION  
POLLUTANT : SULPHUR DIOXIDE

MONTH: SEPTEMBER

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	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
5	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
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	0	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	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	1
11	1	0	1	1	0	1	0	0	0	0	0	1	1	1	1	1	0	1	1	0	1	0	0	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	0	0
13	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
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	0	0	0
16	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
17	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	1	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	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	1	2	1	1	1	1	1	1	2
21	2	2	3	2	3	2	2	2	2	2	3	3	3	3	4	3	3	3	2	2	2	2	2	2	2
22	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1
23	2	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	0	0	1	1
24	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	2	1
25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	1	1	1
27	1	1	1	1	0	1	0	0	0	1	1	1	1	0	0	M	M	1	1	1	1	1	1	1	1
28	1	1	0	0	0	0	0	0	1	1	2	2	1	2	1	1	2	1	1	0	0	0	0	1	1
29	1	1	0	0	0	0	0	0	1	2	2	3	3	3	3	3	3	3	2	2	2	2	2	4	2
30	5	5	4	3	4	4	4	4	6	9	8	7	8	10	18	11	10	10	9	9	8	5	3	2	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	
2	0	1	0	2	3	5	9	0	-	18	0	-	7	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: SEPTEMBER

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	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	M	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0
5	2	2	1	3	0	0	1	2	1	2	1	0	0	0	0	0	0	1	3	1	1	2	1	0	1
6	1	1	0	0	1	2	3	3	2	3	0	0	0	0	0	1	1	4	5	5	4	3	4	6	2
7	4	6	8	32	11	6	4	18	28	29	15	11	13	28	26	10	11	11	14	14	12	18	35	27	16
8	9	9	7	7	10	21	22	21	15	13	12	16	19	11	5	9	14	16	24	17	17	11	12	12	14
9	12	9	10	12	8	27	30	26	21	8	11	6	5	1	2	2	5	5	7	11	12	14	12	6	11
10	6	6	2	5	4	3	7	8	5	5	1	1	0	0	0	1	1	3	2	4	4	4	2	2	3
11	1	1	0	1	1	0	1	5	1	1	1	0	0	0	0	1	1	5	6	10	11	23	5	8	3
12	14	6	5	9	6	4	3	7	8	7	5	4	4	4	5	6	9	13	10	14	13	13	6	8	8
13	6	4	5	7	7	6	6	6	5	5	4	4	3	3	6	6	7	9	13	10	10	11	11	9	7
14	8	5	8	6	5	5	7	7	7	5	7	5	4	8	6	4	6	11	10	7	3	3	3	7	6
15	7	4	3	2	2	2	3	4	5	4	9	11	10	3	5	6	5	9	10	22	20	20	16	13	8
16	20	11	8	5	4	3	6	9	8	10	6	4	4	5	6	7	8	16	11	10	8	6	6	4	8
17	4	4	3	3	3	3	5	8	7	5	6	6	8	8	10	13	10	14	13	12	12	10	10	4	8
18	1	M	3	1	1	0	1	3	5	13	13	8	5	4	6	5	8	16	11	12	10	10	4	6	6
19	2	3	2	2	1	2	4	13	16	13	13	10	10	8	7	15	29	12	15	10	9	8	7	4	9
20	4	4	3	6	6	8	16	12	16	16	17	13	12	11	10	29	25	17	19	22	31	35	35	24	16
21	21	10	4	2	3	3	4	5	11	12	11	9	16	21	22	21	27	28	20	18	12	14	17	9	13
22	5	2	1	1	1	1	1	2	4	4	4	5	6	6	6	4	6	6	8	9	6	5	6	4	4
23	3	2	1	2	1	2	3	6	8	8	7	4	3	2	3	3	2	6	7	4	2	2	1	4	4
24	1	2	5	3	4	5	6	8	7	7	5	4	4	4	5	6	6	12	7	3	3	4	5	2	5
25	1	1	0	0	0	0	2	9	8	9	7	5	4	4	5	6	10	15	11	6	3	5	2	3	5
26	3	1	0	0	0	1	4	8	6	6	4	5	3	3	3	4	6	10	10	6	5	4	3	1	4
27	0	0	0	1	1	2	3	6	7	10	10	12	5	6	10	M	M	13	10	8	2	2	3	2	5
28	1	0	0	2	4	3	0	0	9	24	50	40	8	7	4	6	7	5	10	10	6	5	6	0	9
29	1	3	1	0	1	0	1	8	40	31	32	42	28	24	19	23	16	20	17	12	14	14	11	11	15
30	10	12	9	8	8	19	14	23	45	73	76	69	65	71	81	67	57	48	41	34	32	25	15	28	39

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	5	8	5	17	26	38	56	0	-	81	0	-	39	3	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: SEPTEMBER

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	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	
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	2	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	0	1	0	
4	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	0	0
5	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	0	0
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	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	0	0	0	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	0	0
9	0	0	0	0	0	0	0	0	0	0	0	M	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	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	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	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	M	0	0	0	0	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	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	0	0	0	0
16	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	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	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	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	0	0
20	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	1	0
21	1	1	0	1	1	0	1	1	0	0	0	1	1	0	1	0	1	0	0	0	0	0	0	1	0	0	0
22	0	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
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	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	1	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	0	0	2	0
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	2	0
27	1	1	0	1	1	1	0	0	1	0	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1
28	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	
29	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	
30	1	0	0	0	0	0	0	0	1	2	1	1	1	3	2	1	2	1	1	0	1	0	0	2	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		
1	0	0	0	0	1	1	2	0	-	3	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: SEPTEMBER

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	5	5	5	4	4	4	5	5	8	8	9	10	8	6	6	6	5	5	5	5	5	5	5	5	6
2	4	4	3	4	4	4	4	5	5	6	5	5	6	6	6	6	5	6	5	5	5	5	4	4	5
3	4	4	3	3	3	3	5	8	10	10	9	8	6	6	7	7	7	7	6	6	6	5	5	5	6
4	5	M	5	3	3	4	4	4	10	8	7	9	8	7	7	7	8	8	6	8	5	5	5	5	6
5	5	4	4	5	3	4	6	7	11	11	9	8	7	7	8	7	7	8	11	7	5	6	5	6	7
6	6	4	4	4	4	5	6	8	10	10	11	10	6	8	7	10	11	14	10	8	8	8	10	10	8
7	10	10	17	18	16	13	17	22	19	26	39	46	46	51	29	22	28	26	27	24	27	31	34	15	26
8	12	8	8	8	13	20	18	17	33	31	26	24	30	23	19	16	26	19	19	12	14	13	16	12	18
9	13	10	10	6	6	8	25	26	16	18	M	M	21	14	17	15	17	31	28	21	21	17	19	17	17
10	15	14	12	11	12	12	14	17	23	22	22	13	13	14	16	18	18	16	14	13	15	12	11	10	15
11	11	10	9	10	10	10	11	14	15	17	15	15	14	14	13	24	28	35	37	37	38	25	25	28	19
12	28	18	33	20	14	14	15	23	28	27	21	22	21	16	23	18	17	28	30	21	17	15	14	12	21
13	13	10	10	10	11	12	14	17	18	18	M	17	14	14	16	21	17	24	21	17	16	15	16	10	15
14	10	8	8	9	10	14	19	19	30	26	13	15	24	13	10	15	15	17	16	12	10	9	15	11	15
15	10	9	8	7	7	7	9	9	11	12	15	33	30	21	17	14	16	16	27	39	35	30	26	19	18
16	20	15	9	8	9	13	14	23	37	39	45	33	15	13	13	15	14	15	15	14	11	10	8	9	17
17	8	6	6	6	6	6	10	14	15	14	14	13	15	13	16	13	12	20	13	13	11	10	9	9	11
18	7	M	6	6	8	8	12	21	37	55	41	20	16	18	29	17	21	30	21	13	11	11	9	13	19
19	9	10	8	6	5	6	10	27	25	24	28	21	21	26	23	19	26	21	24	21	15	11	12	11	17
20	11	16	11	7	8	10	11	16	21	22	24	29	21	19	20	27	24	32	33	24	21	20	21	29	20
21	37	23	17	11	8	9	11	15	16	18	22	16	16	23	21	22	31	26	25	21	27	31	28	21	21
22	14	9	8	7	8	8	7	8	8	9	9	10	14	13	11	14	14	13	15	22	21	15	12	16	12
23	12	9	8	9	7	7	9	15	20	16	14	16	14	11	12	13	15	16	14	13	13	13	11	10	12
24	9	8	9	8	7	8	12	16	13	12	16	27	13	11	15	16	15	15	11	10	10	10	9	10	12
25	8	7	7	6	7	7	11	19	16	20	24	18	17	15	19	18	15	20	16	11	9	9	10	8	13
26	9	8	6	6	6	7	11	17	18	16	16	12	14	16	15	14	16	17	13	11	11	11	12	12	12
27	10	8	8	7	6	6	13	16	17	18	17	25	22	19	24	20	17	16	20	17	15	14	14	14	15
28	13	10	8	7	12	7	7	13	18	24	22	19	24	21	19	15	18	20	20	21	13	10	10	17	15
29	14	9	9	10	8	12	17	17	15	16	22	23	18	24	25	27	28	29	26	26	27	20	18	19	19
30	18	13	14	11	9	9	10	28	48	45	44	43	42	50	47	38	43	40	32	32	31	33	26	20	30

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	
13	13	15	13	27	32	40	45	3	-	55	5	-	30	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: SEPTEMBER

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

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	1	0	4	5	8	10	0	-	31	0	-	9	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: SEPTEMBER

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	0	0	0	0	0	0	0	0	1	3	5	4	0	0	0	0	0	1	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	2	5	5	2	3	2	3	3	6	7	7	4	2	1	1	2
3	0	0	0	0	0	0	2	4	12	10	7	7	5	3	3	4	1	0	2	0	0	0	0	0	3
4	0	0	0	0	0	0	0	3	4	7	5	4	2	2	5	7	5	5	3	1	0	0	0	0	2
5	0	0	1	1	0	0	1	3	8	6	7	8	2	2	4	0	0	6	12	2	0	0	0	4	3
6	2	0	0	0	0	0	1	5	4	4	4	4	0	3	2	9	12	8	3	1	2	1	3	4	3
7	9	17	29	21	21	23	37	40	35	39	50	55	51	45	20	18	29	33	42	30	23	32	33	7	31
8	5	M	2	2	7	20	18	25	34	36	28	18	22	16	13	15	9	9	15	8	7	10	16	11	15
9	7	2	4	1	1	1	11	14	8	11	18	13	6	0	1	1	5	16	14	6	15	6	12	10	8
10	4	2	2	2	2	0	2	4	11	9	10	1	1	0	3	5	3	3	6	14	12	3	1	4	4
11	0	0	0	0	0	0	0	1	2	9	6	4	4	2	3	13	21	38	16	16	20	6	4	31	8
12	18	26	74	44	6	15	13	40	13	M	13	23	16	7	10	10	12	14	14	8	4	1	1	2	17
13	0	0	1	1	1	2	7	13	22	25	12	4	3	1	1	9	8	10	11	7	4	3	3	3	6
14	3	1	0	2	1	15	33	26	34	29	11	6	11	3	1	10	4	6	5	1	2	9	13	3	10
15	0	0	1	4	0	0	0	2	5	5	10	37	31	9	12	7	9	8	10	29	36	28	15	17	11
16	19	13	1	3	3	10	25	68	60	57	27	6	3	3	5	3	5	5	6	5	0	0	0	0	14
17	0	0	0	0	0	0	3	7	12	15	12	8	9	2	4	15	17	6	4	15	3	3	4	2	6
18	0	0	0	0	0	0	4	21	56	64	39	17	16	11	21	17	21	20	8	4	2	1	1	6	14
19	1	16	2	0	0	3	21	60	66	65	50	32	22	18	15	13	19	16	16	10	5	3	4	7	19
20	5	11	12	3	20	33	40	41	56	56	50	41	29	28	33	39	30	52	53	64	65	56	80	65	40
21	82	44	38	21	12	17	22	37	48	49	46	38	27	30	27	31	49	36	37	36	49	50	43	26	37
22	19	M	16	18	21	21	18	22	19	15	14	20	24	22	20	19	23	24	27	29	26	25	23	22	21
23	21	18	18	16	15	16	20	31	54	52	21	18	16	15	15	17	20	17	16	15	14	19	17	14	21
24	9	9	5	5	6	9	8	14	25	22	18	20	20	14	14	12	12	10	8	8	12	12	8	8	12
25	6	5	5	7	8	9	12	14	28	59	41	38	27	17	20	17	17	17	17	12	10	7	11	14	17
26	12	11	10	10	12	11	16	23	28	31	47	19	26	21	19	26	24	18	17	14	15	15	15	17	19
27	14	15	8	8	6	7	14	19	54	55	47	53	34	24	27	27	27	27	26	25	19	17	18	14	24
28	14	9	11	24	44	34	45	41	53	71	49	44	34	23	22	15	21	24	29	19	10	7	10	18	28
29	28	31	19	17	24	66	67	55	31	36	40	42	41	41	32	31	32	34	30	27	29	25	17	23	34
30	22	34	28	20	25	31	36	66	115	111	90	83	82	117	84	83	72	68	74	92	75	41	30	52	64

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	11	16	11	41	55	72	83	0	-	117	1	-	64	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: SEPTEMBER

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

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	3	2	2	2	2	2	3	3	7	8	7	4	3	2	2	2	2	2	2	2	2	2	2	2	3
2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	2	3	2	1	0	0	0	4	1
3	2	2	2	2	2	2	5	13	13	11	7	6	5	3	3	2	2	2	2	2	2	2	2	3	4
4	2	M	2	2	2	2	3	3	12	9	10	10	6	5	5	2	4	2	2	2	2	2	2	2	4
5	0	0	0	2	0	1	12	13	9	7	6	3	0	0	1	0	0	0	0	0	0	0	0	2	2
6	1	3	0	0	1	4	7	12	9	9	4	2	1	1	1	0	0	1	0	1	1	0	1	5	3
7	6	18	43	43	36	47	44	39	38	38	36	37	32	42	16	15	15	13	16	32	24	45	31	21	30
8	10	18	12	14	9	31	59	49	29	25	20	24	31	30	21	24	19	21	29	15	18	12	26	15	23
9	13	21	27	7	29	40	43	28	7	29	26	21	13	6	13	12	12	15	6	7	8	5	9	7	17
10	2	1	1	2	0	0	0	2	2	8	4	0	0	0	0	0	0	0	0	0	0	0	0	3	1
11	1	2	1	1	1	1	2	2	1	1	1	1	1	1	1	2	8	13	17	15	24	12	10	38	7
12	22	8	52	47	9	6	12	27	14	10	7	7	4	3	7	3	4	11	6	7	7	6	5	3	12
13	0	0	0	1	2	6	6	11	7	7	1	1	0	0	0	7	10	4	2	2	1	2	4	10	4
14	6	3	3	3	9	24	42	32	10	18	7	8	6	10	5	14	5	12	10	6	5	4	6	4	11
15	3	6	5	3	3	8	7	7	11	10	8	26	47	35	5	3	5	6	35	37	31	16	16	5	14
16	11	2	3	2	2	27	30	22	25	54	52	12	1	0	0	0	0	3	2	1	1	1	0	1	11
17	0	0	0	0	0	0	0	0	1	3	7	5	0	0	0	0	0	0	1	0	0	1	1	0	1
18	0	M	0	0	0	0	5	14	32	62	20	8	0	2	3	6	11	1	0	0	0	0	3	4	7
19	3	2	0	0	0	3	7	39	41	36	32	27	34	21	22	19	34	20	4	4	0	0	0	1	15
20	0	10	6	10	2	18	31	39	35	35	33	31	35	17	31	42	30	20	25	34	34	31	39	29	26
21	26	15	7	6	4	3	7	15	22	19	21	24	24	28	26	24	37	33	21	M	27	33	33	24	21
22	13	2	0	0	0	0	1	4	5	7	9	7	10	10	11	10	8	10	16	20	11	12	11	9	8
23	8	3	3	3	3	3	10	22	23	23	15	4	1	3	4	1	0	0	0	0	0	3	1	1	6
24	1	1	0	0	0	2	9	13	11	8	3	3	2	0	0	0	0	0	0	1	0	1	1	8	3
25	3	1	1	0	2	5	17	29	14	17	14	40	M	3	0	0	1	0	0	0	0	3	1	1	7
26	0	0	0	0	0	3	14	26	13	2	2	2	1	1	0	0	0	0	0	2	1	1	1	4	3
27	1	4	5	3	0	2	13	17	22	31	55	72	34	7	7	1	1	0	3	4	2	4	8	13	13
28	7	9	5	1	2	1	9	10	29	72	64	54	23	14	7	8	7	8	6	5	0	1	1	10	15
29	8	6	2	0	0	3	20	44	37	31	32	40	33	16	16	19	16	16	12	14	30	20	7	15	18
30	14	30	7	7	12	12	22	43	78	96	87	78	70	79	74	60	62	64	62	77	56	22	17	89	51

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		
7	5	11	5	32	42	62	74	0	-	96	1	-	51	3	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: SEPTEMBER

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	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
3	2	1	1	1	1	1	0	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	2	1
4	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
5	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	0
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	0
7	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
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	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	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	2	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	2	0
12	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
13	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
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	1	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	0	2	0
16	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
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	2	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	2	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	2	0
20	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
21	0	0	0	0	0	0	0	2	2	2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	2	1
22	0	0	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
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	1	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	1	0
25	0	0	0	0	0	0	0	0	0	0	0	0	M	5	0	0	0	0	0	0	0	0	0	0	0	0
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	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	0
28	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	0
29	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	2	1	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	1	10	12	8	7	6	4	5	9	3	0	0	0	0	0	0	0	0	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		
2	0	0	0	0	2	3	5	0	-	12	0	-	3	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: SEPTEMBER

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	5	3	13	8	7	1	1	5	28	33	18	30	21	1	7	7	4	1	0	7	4	8	13	8	10
2	12	14	13	6	3	11	5	6	3	11	3	10	7	13	16	19	12	16	9	17	3	4	2	0	9
3	0	0	0	0	0	2	23	39	45	38	25	7	0	0	2	11	0	0	0	2	0	0	0	0	8
4	15	M	27	21	34	4	26	17	33	20	30	35	27	6	4	15	8	5	1	3	0	0	7	6	15
5	1	1	1	1	25	36	35	46	38	39	41	22	0	2	5	0	0	11	8	6	3	8	7	6	14
6	4	29	14	21	19	41	38	34	37	25	20	16	3	3	1	2	7	13	10	6	11	11	14	35	17
7	39	48	46	49	40	50	51	48	54	39	39	36	33	31	34	39	43	20	12	14	17	27	31	9	35
8	13	15	19	13	23	34	47	53	52	59	53	37	20	9	6	10	5	5	4	2	7	2	0	8	21
9	9	5	5	3	8	5	12	22	11	19	11	13	3	40	7	5	3	2	5	4	12	3	3	5	9
10	10	4	9	5	4	1	2	1	1	3	9	5	4	7	7	6	2	3	3	7	8	6	8	6	5
11	4	4	13	7	7	15	6	5	14	9	2	3	6	7	9	8	9	9	6	10	16	13	13	18	9
12	13	28	26	12	25	47	64	51	44	36	35	19	8	9	5	20	32	17	3	8	9	15	19	13	23
13	10	25	19	26	22	8	11	16	19	17	8	6	4	9	6	3	3	3	9	12	18	9	5	8	12
14	3	6	13	17	11	7	21	20	13	13	11	10	3	1	2	5	7	5	15	17	18	24	9	11	11
15	15	30	45	28	7	43	46	54	17	27	14	10	21	18	6	3	12	12	13	17	8	5	15	8	20
16	18	20	9	7	32	32	41	42	34	34	31	31	5	3	2	2	5	6	12	21	18	21	42	7	20
17	3	3	2	5	6	10	8	5	13	6	22	7	2	1	5	6	12	27	21	43	14	9	8	7	10
18	9	M	26	35	31	47	31	50	48	39	29	23	7	3	4	5	7	9	5	5	7	5	4	40	20
19	33	12	15	16	29	53	62	47	37	44	52	42	41	22	13	12	11	16	9	8	8	8	7	7	25
20	6	7	10	8	17	60	63	70	53	49	30	36	43	45	44	38	34	39	52	67	81	69	73	86	45
21	68	38	34	36	38	34	57	51	43	39	34	33	29	29	28	38	33	38	48	46	48	48	51	37	41
22	38	19	21	44	31	32	26	22	27	28	21	21	26	31	42	35	24	32	31	29	52	46	26	14	30
23	20	21	20	17	21	24	26	30	33	39	44	40	15	7	8	6	3	2	6	7	7	10	11	12	18
24	10	8	8	4	5	6	50	63	53	42	45	17	11	4	3	2	2	3	8	3	3	4	5	14	16
25	9	4	4	8	6	16	52	48	51	37	27	19	M	9	7	12	28	13	9	12	6	4	4	4	17
26	4	6	5	5	6	8	32	59	56	56	45	16	5	6	7	6	11	7	13	8	4	5	6	16	16
27	6	5	5	6	6	27	46	50	51	30	29	37	35	20	11	12	16	20	20	20	16	10	9	8	21
28	6	4	10	21	20	29	51	61	46	46	29	32	24	18	16	13	9	11	5	5	6	11	7	25	21
29	22	36	24	31	25	38	51	43	30	32	36	40	46	27	21	27	32	25	18	17	14	24	19	20	29
30	18	20	19	14	22	14	15	65	95	80	120	102	82	57	50	66	54	39	32	37	32	24	47	45	48

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		
13	13	20	13	46	52	64	73	0	-	120	5	-	48	3	100	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 : July - September 2019

Week Ending	No. of Samples	Suspended Solids, mg/L			pH		
		Maximum	Minimum	Average	Maximum	Minimum	Average
06/07/19	7	22	15	18	8.3	7.4	8.0
13/07/19	7	22	12	16	8.4	7.5	8.0
20/07/19	7	21	12	16	8.3	7.8	8.1
27/07/19	7	22	12	17	8.3	7.8	8.1
03/08/19	7	21	13	17	8.2	7.7	7.9
10/08/19	7	21	12	17	8.3	7.8	8.1
17/08/19	6*	20	13	16	8.4	7.9	8.2
24/08/19	6*	22	13	17	8.3	7.8	8.1
31/08/19	7	23	13	17	8.4	7.6	8.0
07/09/19	7	23	13	17	8.3	7.9	8.2
14/09/19	7	18	12	15	8.2	7.7	8.0
21/09/19	6*	20	12	15	8.2	7.8	8.0
28/09/19	7	22	11	18	8.3	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 : July - September 2019

Sampling date		4/7/2019	6/8/2019	12/9/2019
Barium,	ug/L	<150	<150	<150
Mercury,	ug/L	<0.5	<0.5	<0.5
Cadmium,	ug/L	3.1	3.1	3.5
Iron,	ug/L	<400	<400	<400
Total Phosphorous,	mg/L	<0.8	<0.8	<0.8
Total Nitrogen,	mg/L	79	85	164
Cyanide,	mg/L	0.02	<0.01	0.02

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
	<b>GENERAL</b>	
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
	<b>WATER QUALITY</b>	
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
	<b>WASTE</b>	
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
	<b>NOISE</b>	
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