

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



**Lamma Power Station
Units L4 & L5 Flue Gas Desulphurization Plant
Retrofit
Operational Phase
Quarterly Environmental Monitoring & Audit Report
July – September 2010**

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 2010)
Date	10 December 2010
Certified by	 (Mr. IP Tat-Yan, Environmental Team Leader)

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EXECUTIVE SUMMARY

Unit L5 Flue Gas Desulphurization (FGD) Plant commenced operation in July 2009, followed by Units L2 and L4 FGD Plants in April 2010 after completion of erection works and a series of commissioning tests. 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 2010.

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

Plant Availability

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

Unit	Period	Remark
L4	26/7/2010 10:12 to 19:14	Unit was tripped due to faulty FGD Outlet damper limits switch
L4	27/08/2010 19:58 to 30/08/2010 05:58	Turbine TVEH converter check
L4	16/09/2010 01:03 to 18/09/2010 07:37	Boiler RH tube leakage
L5	20/08/2010 20:08 to 21/08/2010 05:37	30% Boiler MCR light oil firing test

Malfunction/Outage Records of Pollution Control Equipment

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

Equipment	Period	Cause	Actions Taken
L2 FGD	24/07/2010 00:03 to 14/08/2010 21:28	Defect rectification	EPD was informed by letters on 22/07/2010 & 16/08/2010
L2 FGD	13/09/2010 09:46 to 18/10/2010 15:41	Booster fan vibration high	EPD was informed by letters on 15/09/2010 & 19/10/2010
L4 FGD	25/08/2010 00:03 to 15/09/2010 01:19	Defect rectification and lining inspection	EPD was informed by letters on 25/08/2010, 03/09/2010 & 15/09/2010

Equipment	Period	Cause	Actions Taken
L5 FGD	15/08/2010 01:36 to 24/08/2010 19:58	Plant computer system upgrading work	EPD was informed by letters on 14/08/2010 & 25/08/2010
L5 FGD	30/08/2010 01:36 to 19:00	Booster fan blade angle control fault	EPD was informed by letter on 31/08/2010

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 Processes Licence issued under APCO	L-7-002(7)	01/01/2009	31/12/2010	HK Electric	31/12/2008
WPCO discharge licence for Ash Lagoon	EP890/W2/XD018	16/04/2007	31/12/2011	HK Electric	16/04/2007

Implementation Status of Environmental Mitigation Measures

Environmental mitigation measures were implemented in the reporting period.

Environmental Complaints

During the reporting period, there was one (1) enquiry concerning “dark smoke and combustion smell from Lamma P/S”. Yet no abnormality that might have caused the alleged

observation was identified. There was no further enquiry since then. The case has already been mentioned in the last quarterly report.

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

Unit L5 Flue Gas Desulphurization (FGD) Plant commenced operation in July 2009, followed by Units L2 and L4 FGD Plants in April 2010 after completion of erection works and a series of commissioning tests. 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 2010.

1.1 Background

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

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

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

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

- Three sets of FGD absorbers and associated ductworks
- Three sets of booster fans

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

1.2 Project Organisation

The management structure to oversee the Projects includes the following:

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

The organization chart for the Operation EM&A programme is shown in Figure 1.5.

1.3 Plant Availability during the Reporting Period

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

Unit	Period	Remark
L4	26/7/2010 10:12 to 19:14	Unit was tripped due to faulty FGD Outlet damper limits switch
L4	27/08/2010 19:58 to 30/08/2010 05:58	Turbine TVEH converter check
L4	16/09/2010 01:03 to 18/09/2010 07:37	Boiler RH tube leakage
L5	20/08/2010 20:08 to 21/08/2010 05:37	30% Boiler MCR light oil firing test

1.4 Malfunction/Outage Records of Pollution Control Equipment

Equipment	Period	Cause	Actions Taken
L2 FGD	02/07/2010 21:40 to 21:47	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 05/07/2010
L2 FGD	10/07/2010 04:12 to 04:14	Routine checking of bypass dampers	EPD was informed by letter on 13/07/2010

Equipment	Period	Cause	Actions Taken
L2 FGD	17/07/2010 23:42 to 18/07/2010 00:02	Routine checking of bypass dampers	EPD was informed by letter on 19/07/2010
L2 FGD	21/07/2010 13:11 to 13:14 17:29 to 17:37	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 22/07/2010
L2 FGD	24/07/2010 00:03 to 14/08/2010 21:28	Defect rectification	EPD was informed by letters on 22/07/2010 & 16/08/2010
L2 FGD	20/08/2010 06:18 to 06:23	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 24/08/2010
L2 FGD	23/08/2010 05:41 to 05:59	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 24/08/2010
L2 FGD	24/08/2010 09:47 to 10:23	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 24/08/2010
L2 FGD	25/08/2010 00:17 to 00:26 19:07 to 19:17	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 27/08/2010
L2 FGD	05/09/2010 04:29 to 04:36	Routine checking of bypass dampers	EPD was informed by letter on 07/09/2010
L2 FGD	09/09/2010 18:40 to 18:45	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 13/09/2010
L2 FGD	12/09/2010 13:14 to 13:17	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 13/09/2010
L2 FGD	13/09/2010 09:46 to 18/10/2010 15:41	Booster fan vibration high	EPD was informed by letters on 15/09/2010 & 19/10/2010
L2 FGD	09/09/2010 18:40 to 18:45	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter on 13/09/2010
L2 FGD	12/09/2010 13:14 to 13:17	FGD was bypassed due to booster fan inlet damper control sluggish	EPD was informed by letter dated 13/09/2010
L4 FGD	03/07/2010 02:15 to 02:18	Routine checking of bypass dampers	EPD was informed by letter dated 05/07/2010
L4 FGD	10/07/2010 04:08 to 04:13	Routine checking of bypass dampers	EPD was informed by letter dated 13/07/2010

Equipment	Period	Cause	Actions Taken
L4 FGD	17/07/2010 03:12 to 03:18	Routine checking of bypass dampers	EPD was informed by letter dated 19/07/2010
L4 FGD	24/07/2010 01:46 to 02:18	Routine checking of bypass dampers	EPD was informed by letter dated 26/07/2010
L4 FGD	07/08/2010 02:28 to 02:33	Routine checking of bypass dampers	EPD was informed by letter dated 09/08/2010
L4 FGD	14/08/2010 03:08 to 03:13	Routine checking of bypass dampers	EPD was informed by letter dated 14/08/2010
L4 FGD	21/08/2010 03:26 to 03:43	Routine checking of bypass dampers	EPD was informed by letter dated 24/08/2010
L4 FGD	25/08/2010 00:03 to 15/09/2010 01:19	Defect rectification and lining inspection	EPD was informed by letters on 25/08/2010, 03/09/2010 & 15/09/2010
L4 FGD	26/09/2010 15:20 to 15:33	Tripping of absorber recirculating pump	EPD was informed by letter on 27/09/2010
L5 FGD	02/07/2010 16:00 to 16:37	FGD was bypassed due to Mal-operation of booster fan vibration high alarm	EPD was informed by letter on 05/07/2010
L5 FGD	10/07/2010 03:38 to 03:42	Routine checking of bypass dampers	EPD was informed by letter on 13/07/2010
L5 FGD	10/07/2010 05:23 to 06:02	FGD was bypassed due to booster fan control oil temperature high	EPD was informed by letter on 13/07/2010
L5 FGD	17/07/2010 03:22 to 03:29	Routine checking of bypass dampers	EPD was informed by letter on 19/07/2010
L5 FGD	24/07/2010 02:28 to 02:50	Routine checking of bypass dampers	EPD was informed by letter on 26/07/2010
L5 FGD	26/07/2010 19:29 to 21:27	Repair work of FGD inlet and outlet damper limits	EPD was informed by letter on 27/07/2010
L5 FGD	31/07/2010 01:25 to 01:27	Routine checking of bypass dampers	EPD was informed by letter on 02/08/2010
L5 FGD	07/08/2010 02:21 to 02:26	Routine checking of bypass dampers	EPD was informed by letter on 09/08/2010
L5 FGD	15/08/2010 01:36 to 24/08/2010 19:58	Plant computer system upgrading work	EPD was informed by letters on 14/08/2010 & 25/08/2010
L5 FGD	30/08/2010 01:36 to 19:00	Booster fan blade angle control fault	EPD was informed by letter on 31/08/2010

Equipment	Period	Cause	Actions Taken
L5 FGD	02/09/2010 15:54 to 15:57	FGD was bypassed due to inlet temperature high	EPD was informed by letter on 03/09/2010
L5 FGD	04/09/2010 02:07 to 02:12	Routine checking of bypass dampers	EPD was informed by letter on 07/09/2010
L5 FGD	11/09/2010 04:27 to 04:33	Routine checking of bypass dampers	EPD was informed by letter on 13/09/2010
L5 FGD	18/09/2010 02:44 to 03:03	Routine checking of bypass dampers	EPD was informed by letter on 20/09/2010
L5 FGD	25/09/2010 01:11 to 01:14	Routine checking of bypass dampers	EPD was informed by letter on 27/09/2010

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.

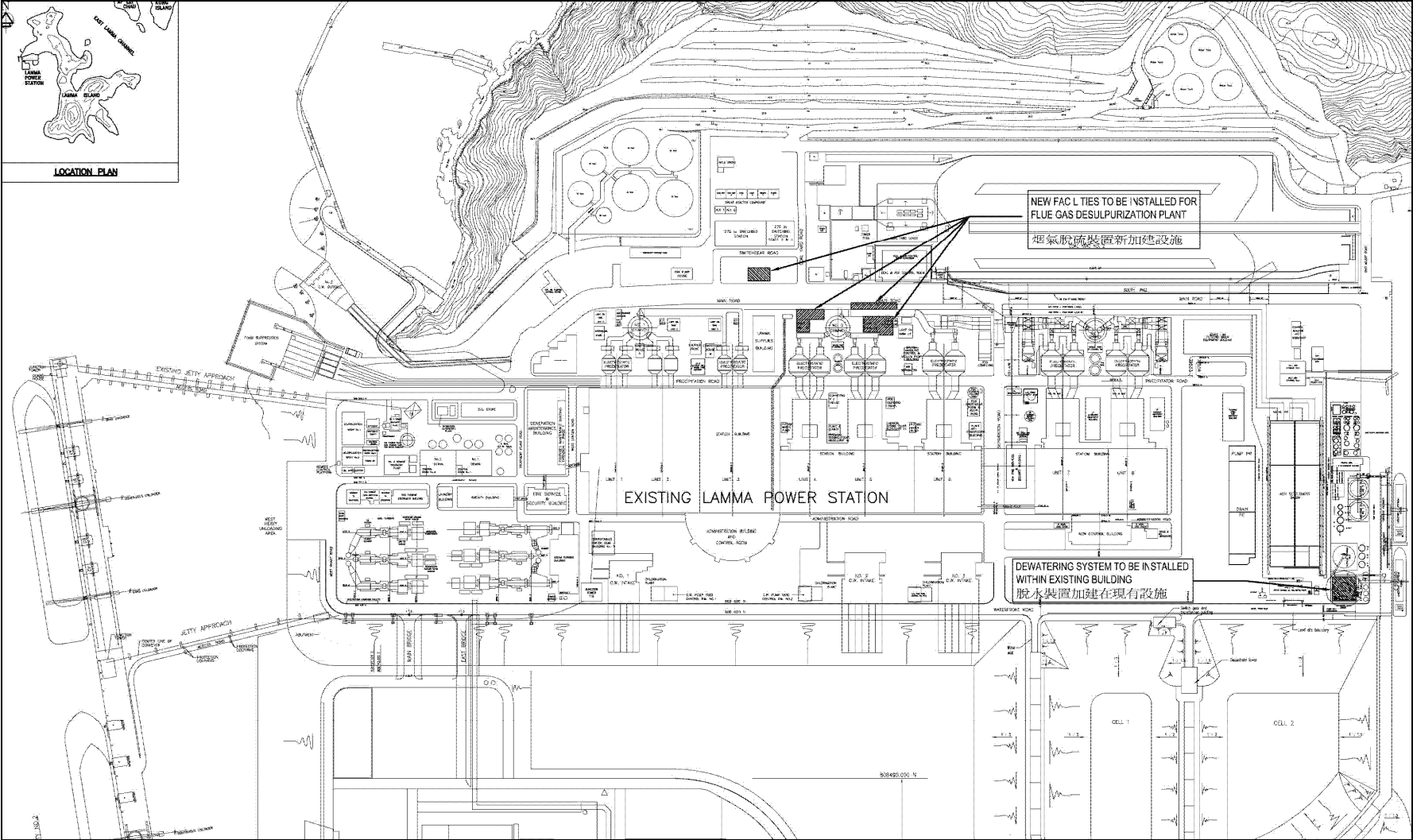


Figure 1.1a Location of New Facilities for L4 & L5 FGD Plants

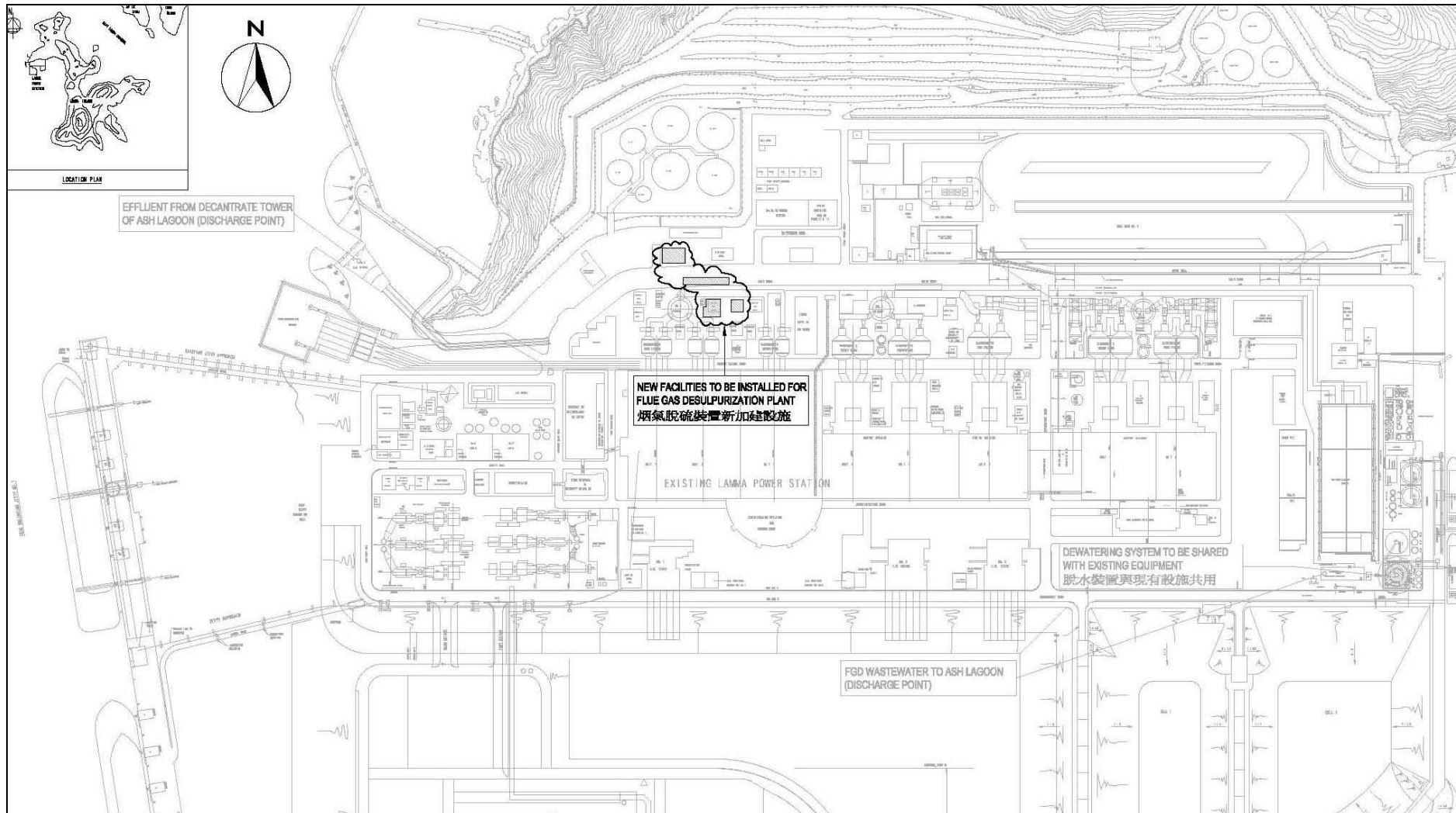


Figure 1.1b Location of New Facilities for L2 FGD Plant

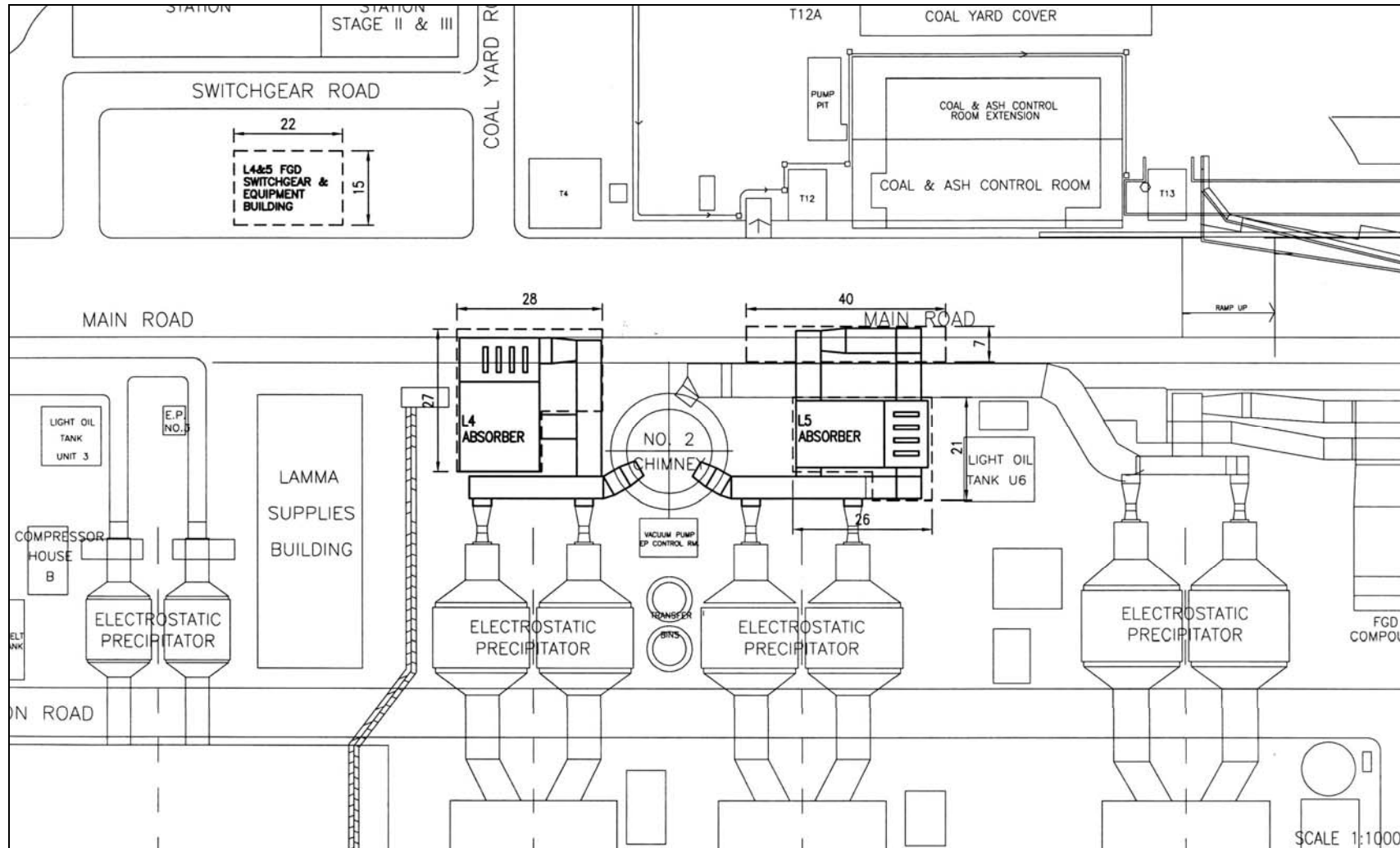


Figure 1.2a General Arrangement of L4 & L5 FGD Plants

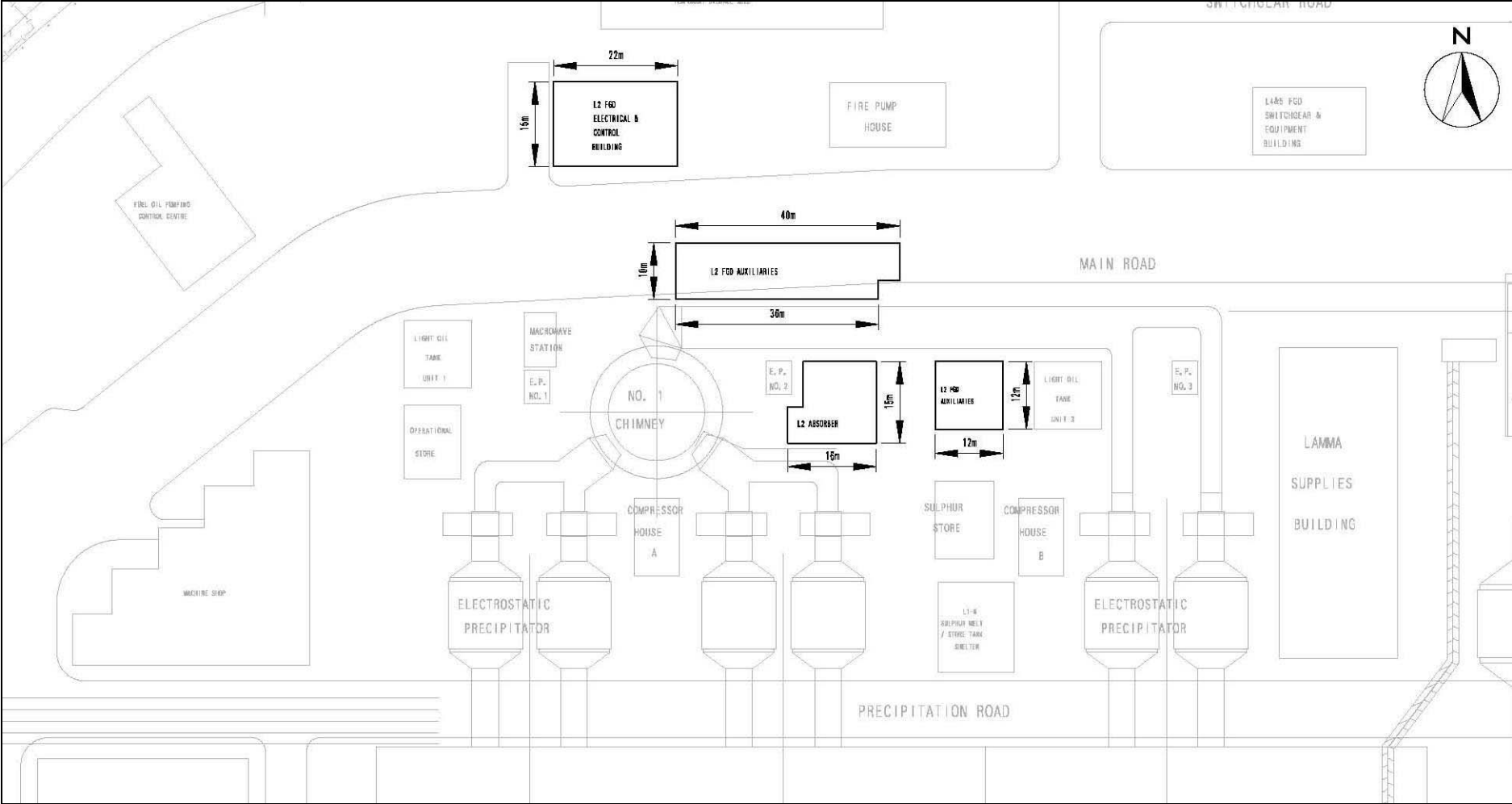


Figure 1.2b General Arrangement of L2 FGD Plant

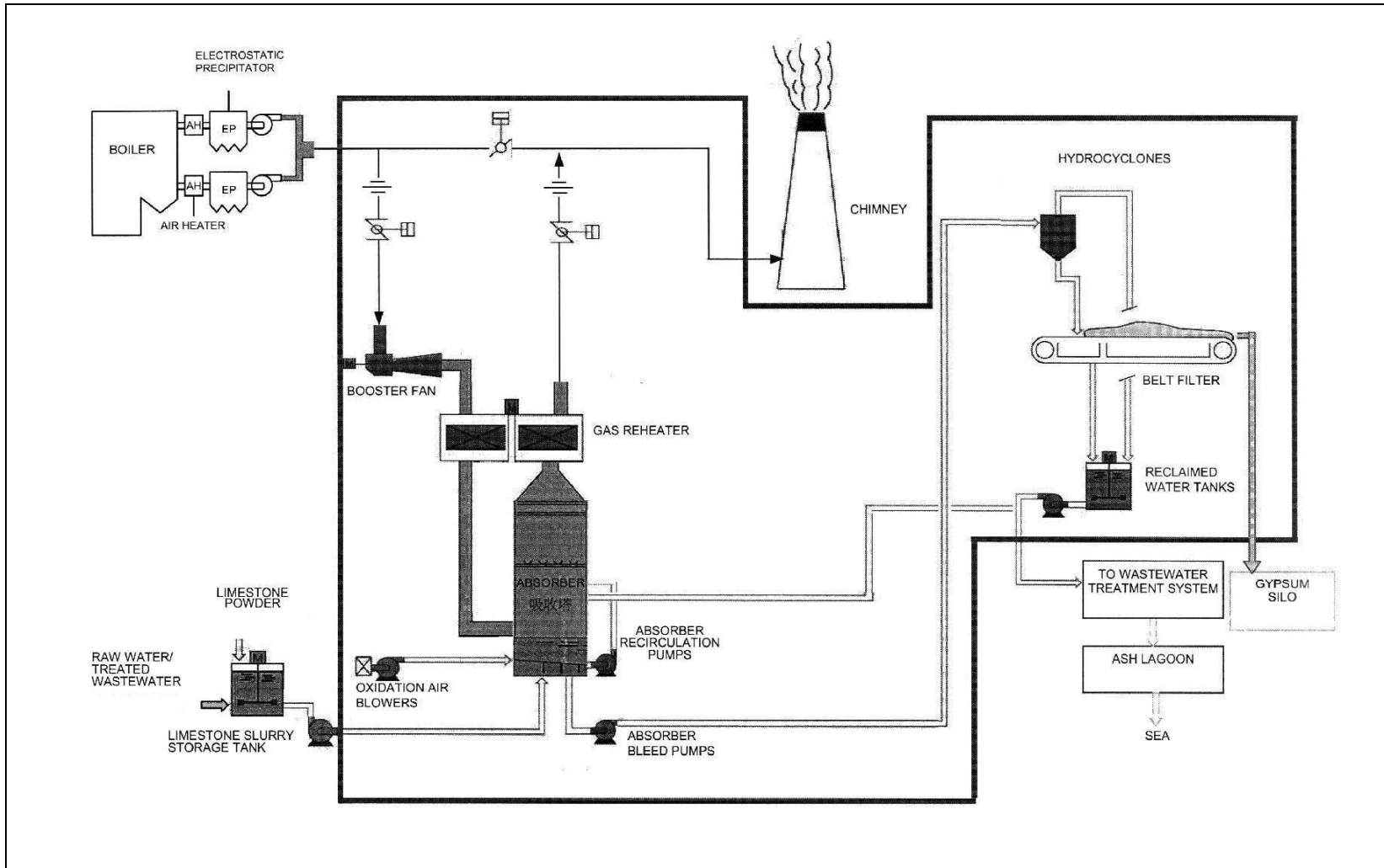


Figure 1.3 Schematic Diagram of the L4 & L5 FGD Plant

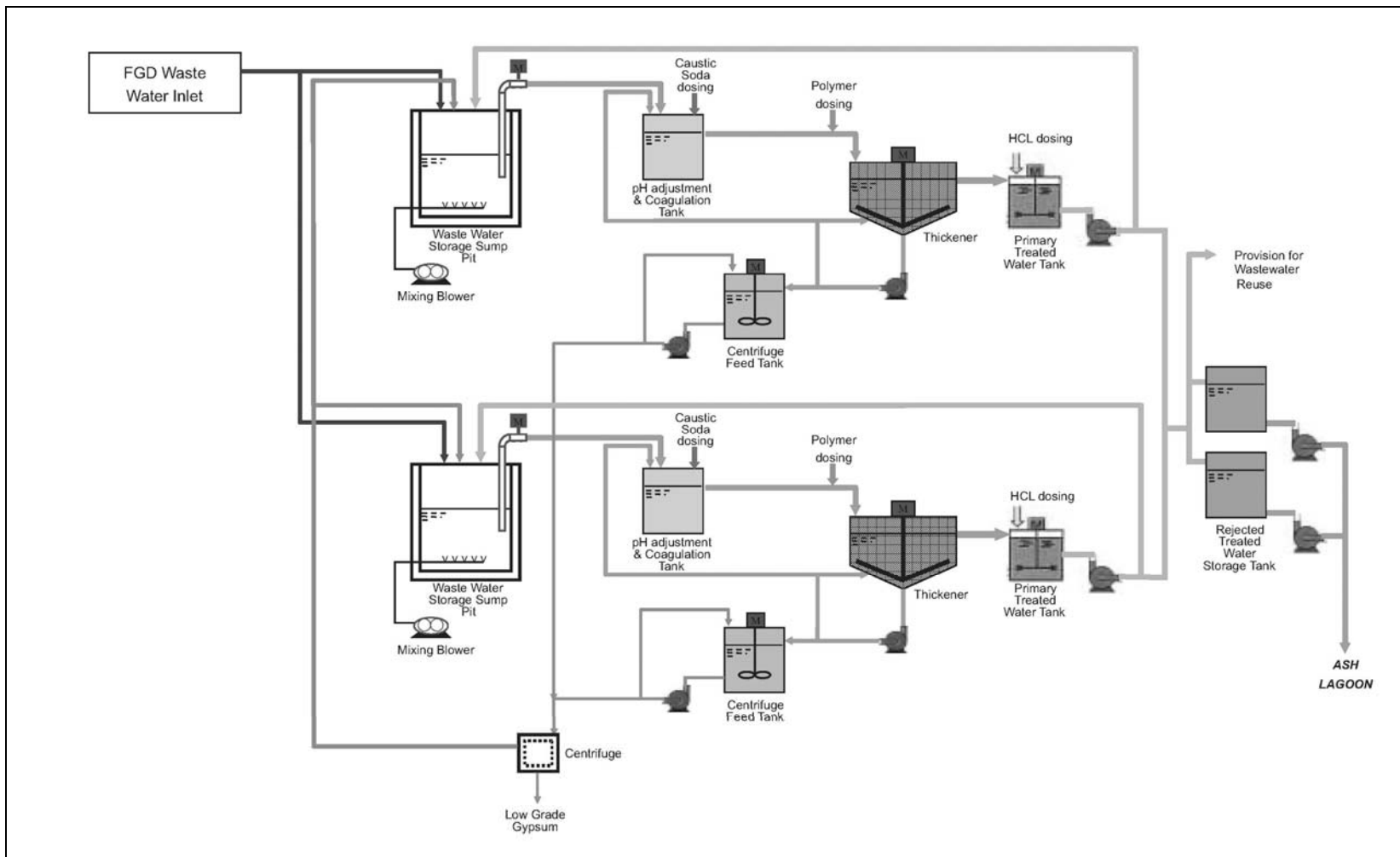


Figure 1.4 Simplified Schematic Diagram of FGD Wastewater Treatment Plant

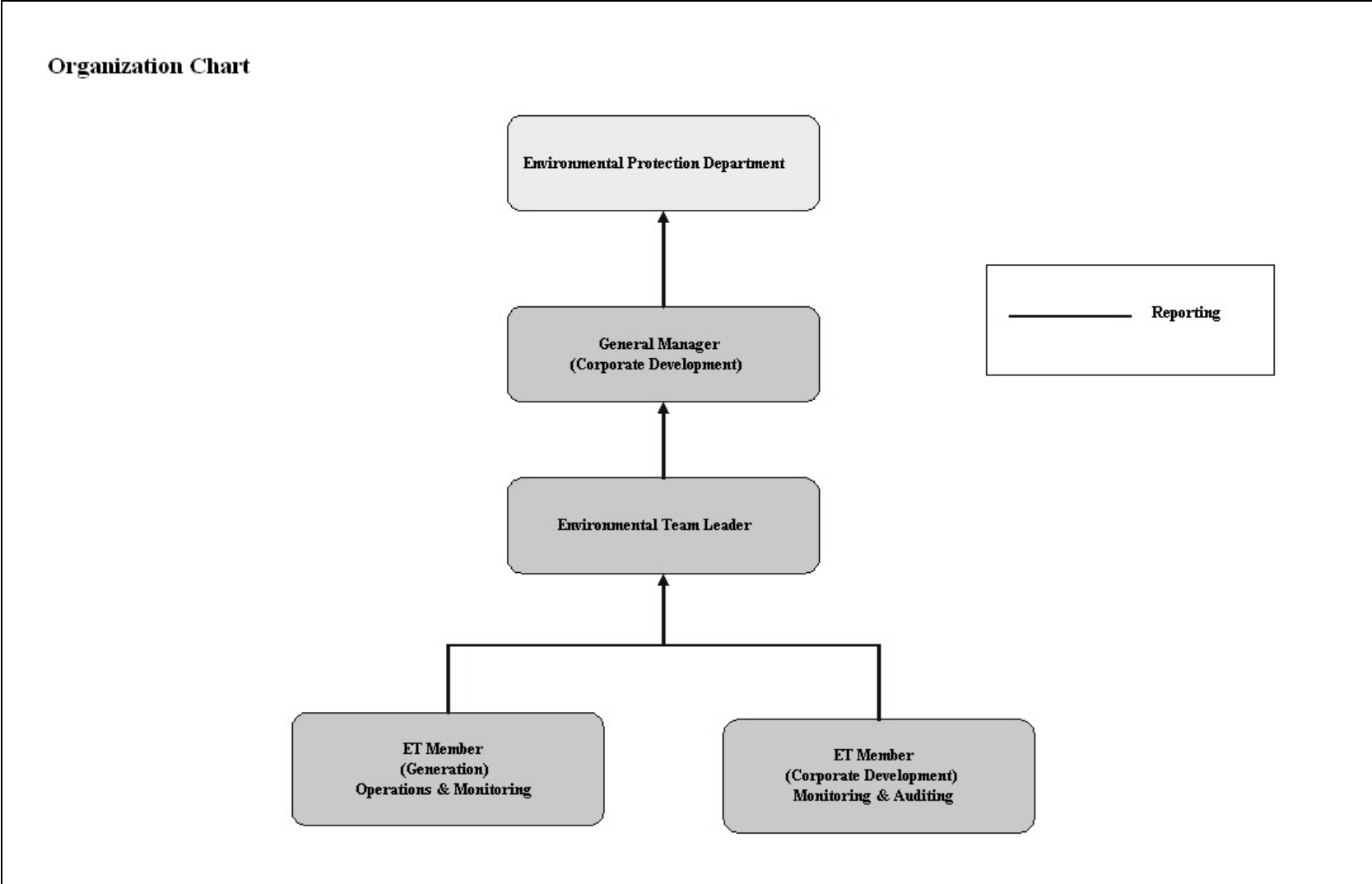


Figure 1.5 Organization Structure at Operational Phase of the Projects

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. 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 and checked against the Action/Limit Levels shown in Appendix A.

Table 2.1 Air Quality Monitoring Parameters and Frequency

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

2.2 Summary of Results and Observations

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

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

3. WATER QUALITY

3.1 Monitoring Requirements

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

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

Table 3.1 Water Quality Monitoring Parameters and Frequencies

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

3.2 Summary of Results and Observations

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

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

4. ENVIRONMENTAL AUDIT

4.1 Review of Environmental Monitoring Procedures

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

4.2 Assessment of Environmental Monitoring Results

Monitoring results for Air Quality and Water Quality

The environmental monitoring results for air quality, noise and water quality are presented in Sections 2, 3 and 4 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.	01/07/10-30/09/10	N.A.	0	
2	Continuous monitoring of opacity, NOx, SO2 and CO2 in the flue gas at the chimney stacks	01/07/10-30/09/10	0	0	
3	TSP monitoring at Lamma Power Station Boundary (ie East Gate and Reservoir).	01/07/10-30/09/10	0	0	
4	Ambient SO2 & NOx monitoring at the Peak, Queen Mary Hospital, Victoria Road, Chung Hom Kok, Ap Lei Chau and	01/07/10-30/09/10	0	0	

Item	Parameter Monitored	Monitoring Period	No. of Exceedances In		Event/Action Plan Implementation Status and Results
			Action Level	Limit Level	
	Cheung Chau.				
Water					
1	pH in WWTP Effluent	01/07/10-30/09/10	0	0	
2	Suspended Solids in WWTP Effluent	01/07/10-30/09/10	0	0	
3	Iron in WWTP Effluent	01/07/10-30/09/10	0	0	
4	Barium in WWTP Effluent	01/07/10-30/09/10	0	0	
5	Mercury in WWTP Effluent	01/07/10-30/09/10	0	0	
6	Cadmium in WWTP Effluent	01/07/10-30/09/10	0	0	
7	Cyanide in WWTP Effluent	01/07/10-30/09/10	0	0	
8	Total Phosphorus in WWTP Effluent	01/07/10-30/09/10	0	0	
9	Total Nitrogen in WWTP Effluent	01/07/10-30/09/10	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 2010	9,705.9 MT	25.0 MT
August 2010	11,449.4 MT	50.0 MT
September 2010	10,244.1 MT	45.9 MT

4.3 Status of Environmental Licensing and Permitting

All permits/licenses obtained as of June 2010 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 Processes Licence issued under APCO	L-7-002(7)	01/01/2009	31/12/2010	Valid
WPCO discharge licence for Ash Lagoon	EP890/W2/XD018	16/04/2007	31/12/2011	Valid

4.4 Implementation Status of Environmental Mitigation Measures

Mitigation measures detailed in the EIA Report and EP are required to be implemented. An updated 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 one (1) enquiry concerning “dark smoke and combustion smell from Lamma P/S” as summarized in Table 4.4. The case has already been mentioned in the last quarterly report.

Table 4.4 Environmental Complaints / Enquiries Received

Case Reference / Date, Time Received / Date, Time Concerned	Descriptions / Actions Taken	Conclusion / Status
<p><i>Reference:</i> EC100700165</p> <p><i>Received:</i> 08/07/2010 p.m.</p> <p><i>Concerned:</i> 23/06/2010 – 07/07/2010 at night and mid-night</p>	<p>EPD informed HK Electric via email that the Department had received two complaints against “dark smoke and combustion smell from the chimneys of Lamma P/S at night and mid-night”. After investigation, HK Electric found no abnormality that might have caused the alleged observation. HK Electric has also provided relevant monitoring data to EPD for reference as requested. There was no further enquiry since then.</p>	<p>Nothing abnormal was identified. EPD was replied and there was no further enquiry.</p>

Table 4.4 Outstanding Environmental Complaints / Enquiries 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 for the next 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 2010. 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 one (1) enquiry concerning “dark smoke and combustion smell from Lamma P/S”. Yet no abnormality that might have caused the alleged observation was identified. The case has already been mentioned in the last quarterly report. 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	85 mg/Nm ³	-	85	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	
	SO ₂	continuous	200 mg/Nm ³ (1h)	190	200	
	NO _x expressed as NO ₂ (For L4 and L5 only)	continuous	615 mg/Nm ³ (1h)	585	615	
Fugitive dust (Coal, PFA, limestone, gypsum)	TSP	Once every six days.	260 (µg/m ³) (24 hours)	-	260	Investigation of sources and additional dust suppression to be employed at Limit level. Frequency of monitoring to be increased as necessary.
Chimney emissions	Ambient air SO ₂	Continuous at existing ambient air monitoring stations	800 (µg/m ³) (1h)	-	800	ET to review data on post-hoc basis and check for possible power station contribution.
	NO ₂		300 (µg/m ³) (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 Total Suspended Particulate Monitoring at Lamma Power Station

Date: Second Quarter of 2010 (July - September)

DATE	TSP CONCENTRATION ($\mu\text{g}/\text{m}^3$)		WEATHER INFORMATION (from Hong Kong Observatory)		
	Reservoir	East Gate	Mean Wind Speed (km/hr)	Prevailing Wind Dir. ($^{\circ}$)	Mean R.H. (%)
04/07/2010	29	43	30.3	230	79
10/07/2010	61	26	18.4	210	76
16/07/2010	44	102	23.9	120	88
22/07/2010	32	78	35.6	120	93
28/07/2010	34	39	23.5	210	93
03/08/2010	44	38	17.9	230	76
09/08/2010	35	33	17.3	090	82
15/08/2010	27	24	13.7	210	83
21/08/2010	53	48	18.6	060	78
27/08/2010	34	22	5.3	340	78
02/09/2010	100	86	14.5	290	70
08/09/2010	44	42	16.5	250	80
14/09/2010	23	20	17.8	040	86
20/09/2010	122	147	35.2	260	82
26/09/2010	34	32	20.7	060	82

TSP ($\mu\text{g}/\text{m}^3$)

Action Level -
 Limit Level 260

Equipment used: Reservoir & East Gate : High Volume Air Sampler

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

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

Date	Daily Maximum		
	SO ₂ concentration (mg/Nm ³) [#]	NO _x concentration (mg/Nm ³) [#]	Opacity (%)
1/7/2010	16	373	14
2/7/2010	109	378	15
3/7/2010	59	291	15
4/7/2010	23	303	14
5/7/2010	58	354	15
6/7/2010	74	347	15
7/7/2010	46	361	15
8/7/2010	23	332	15
9/7/2010	42	309	16
10/7/2010	41	310	17
11/7/2010	35	417	17
12/7/2010	36	418	18
13/7/2010	38	377	17
14/7/2010	43	341	16
15/7/2010	55	342	17
16/7/2010	52	309	15
17/7/2010	26	319	15
18/7/2010	20	317	14
19/7/2010	36	337	14
20/7/2010	39	306	14
21/7/2010	54	310	14
22/7/2010	63	312	14
23/7/2010	86	339	15
24/7/2010	80	310	17
25/7/2010	50	300	14
26/7/2010	48	336	15
27/7/2010	62	282	15
28/7/2010	42	272	15
29/7/2010	51	312	15
30/7/2010	37	327	15
31/7/2010	44	317	15

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/8/2010	53	319	15
2/8/2010	66	391	18
3/8/2010	31	366	14
4/8/2010	50	356	15
5/8/2010	100	403	15
6/8/2010	72	357	15
7/8/2010	77	378	20
8/8/2010	58	358	15
9/8/2010	62	386	15
10/8/2010	61	380	15
11/8/2010	76	357	15
12/8/2010	60	442	18
13/8/2010	53	454	18
14/8/2010	39	477	20
15/8/2010	6	438	15
16/8/2010	FGD bypassed	445	23
17/8/2010	FGD bypassed	423	18
18/8/2010	FGD bypassed	418	19
19/8/2010	FGD bypassed	399	19
20/8/2010	FGD bypassed	314	16
21/8/2010	FGD bypassed	329	15
22/8/2010	FGD bypassed	453	15
23/8/2010	FGD bypassed	529	19
24/8/2010	42	424	17
25/8/2010	47	404	20
26/8/2010	47	415	19
27/8/2010	99	412	15
28/8/2010	88	366	15
29/8/2010	70	355	15
30/8/2010	92	303	17
31/8/2010	112	321	15

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/9/2010	83	238	15
2/9/2010	78	267	14
3/9/2010	84	315	15
4/9/2010	80	344	15
5/9/2010	59	283	15
6/9/2010	97	298	15
7/9/2010	99	306	15
8/9/2010	92	322	16
9/9/2010	81	290	15
10/9/2010	72	420	21
11/9/2010	96	305	16
12/9/2010	115	304	15
13/9/2010	140	378	17
14/9/2010	96	320	15
15/9/2010	101	290	14
16/9/2010	78	308	15
17/9/2010	58	423	21
18/9/2010	29	358	22
19/9/2010	21	418	20
20/9/2010	53	450	22
21/9/2010	78	386	21
22/9/2010	103	389	18
23/9/2010	42	336	15
24/9/2010	41	303	19
25/9/2010	73	364	16
26/9/2010	55	317	14
27/9/2010	65	334	20
28/9/2010	84	266	21
29/9/2010	71	302	14
30/9/2010	93	253	14

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

* - Unit L5 was not on load.

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

Date	Daily Maximum		
	SO ₂ concentration (mg/Nm ³) [#]	NO _x concentration (mg/Nm ³) [#]	Opacity (%)
1/7/2010	29	374	7
2/7/2010	108	366	9
3/7/2010	106	416	12
4/7/2010	77	443	8
5/7/2010	91	439	8
6/7/2010	116	326	12
7/7/2010	93	436	9
8/7/2010	52	274	8
9/7/2010	78	342	8
10/7/2010	44	292	9
11/7/2010	86	346	10
12/7/2010	91	306	11
13/7/2010	78	325	15
14/7/2010	91	339	16
15/7/2010	103	374	16
16/7/2010	93	476	14
17/7/2010	111	358	14
18/7/2010	117	358	15
19/7/2010	134	382	16
20/7/2010	128	415	13
21/7/2010	129	388	13
22/7/2010	119	412	13
23/7/2010	126	441	14
24/7/2010	127	435	14
25/7/2010	131	364	14
26/7/2010	118	447	15
27/7/2010	117	394	14
28/7/2010	116	376	12
29/7/2010	93	303	17
30/7/2010	91	318	16
31/7/2010	154	364	15

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/8/2010	116	330	15
2/8/2010	104	384	15
3/8/2010	93	473	14
4/8/2010	102	411	16
5/8/2010	87	412	16
6/8/2010	100	458	15
7/8/2010	115	308	16
8/8/2010	88	355	14
9/8/2010	108	416	15
10/8/2010	125	339	16
11/8/2010	120	370	12
12/8/2010	125	468	16
13/8/2010	98	317	13
14/8/2010	104	387	14
15/8/2010	82	368	14
16/8/2010	67	388	19
17/8/2010	66	389	22
18/8/2010	63	459	14
19/8/2010	70	346	18
20/8/2010	80	444	18
21/8/2010	53	342	15
22/8/2010	50	367	14
23/8/2010	102	492	18
24/8/2010	34	383	16
25/8/2010	FGD bypassed	429	17
26/8/2010	FGD bypassed	456	20
27/8/2010	FGD bypassed	356	15
28/8/2010	*	*	*
29/8/2010	*	*	*
30/8/2010	FGD bypassed	406	19
31/8/2010	FGD bypassed	445	20

Date	Daily Maximum		
	SO2 concentration (mg/Nm3) [#]	NOx concentration (mg/Nm3) [#]	Opacity (%)
1/9/2010	FGD bypassed	393	19
2/9/2010	FGD bypassed	386	20
3/9/2010	FGD bypassed	425	20
4/9/2010	FGD bypassed	427	20
5/9/2010	FGD bypassed	399	14
6/9/2010	FGD bypassed	413	24
7/9/2010	FGD bypassed	401	14
8/9/2010	FGD bypassed	457	17
9/9/2010	FGD bypassed	467	14
10/9/2010	FGD bypassed	461	20
11/9/2010	FGD bypassed	388	24
12/9/2010	FGD bypassed	443	19
13/9/2010	FGD bypassed	470	19
14/9/2010	FGD bypassed	375	11
15/9/2010	121	363	14
16/9/2010	*	*	*
17/9/2010	*	*	*
18/9/2010	64	450	14
19/9/2010	41	499	14
20/9/2010	101	443	18
21/9/2010	100	413	13
22/9/2010	98	410	18
23/9/2010	68	474	13
24/9/2010	84	344	19
25/9/2010	38	507	18
26/9/2010	28	319	12
27/9/2010	19	350	13
28/9/2010	6	353	13
29/9/2010	3	410	18
30/9/2010	2	468	11

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

* - Unit L4 was not on load.

B.2.3 Monthly Summary of Stack SO₂ for Unit L2

Date	Daily Maximum	
	SO ₂ concentration (mg/Nm ³) [#]	Opacity (%)
1/7/2010	62	13
2/7/2010	113	13
3/7/2010	70	13
4/7/2010	59	13
5/7/2010	90	14
6/7/2010	107	13
7/7/2010	112	14
8/7/2010	77	15
9/7/2010	86	15
10/7/2010	116	16
11/7/2010	113	17
12/7/2010	89	16
13/7/2010	98	17
14/7/2010	104	16
15/7/2010	128	16
16/7/2010	115	16
17/7/2010	91	15
18/7/2010	105	14
19/7/2010	51	14
20/7/2010	123	13
21/7/2010	105	13
22/7/2010	75	13
23/7/2010	93	13
24/7/2010	FGD bypassed	16
25/7/2010	FGD bypassed	15
26/7/2010	FGD bypassed	18
27/7/2010	*	*
28/7/2010	*	*
29/7/2010	*	*
30/7/2010	*	*
31/7/2010	*	*

Date	Daily Maximum	
	SO2 concentration (mg/Nm3) #	Opacity (%)
1/8/2010	*	*
2/8/2010	FGD bypassed	14
3/8/2010	FGD bypassed	21
4/8/2010	FGD bypassed	21
5/8/2010	*	*
6/8/2010	*	*
7/8/2010	*	*
8/8/2010	*	*
9/8/2010	*	*
10/8/2010	*	*
11/8/2010	*	*
12/8/2010	*	*
13/8/2010	*	*
14/8/2010	*	*
15/8/2010	77	14
16/8/2010	113	13
17/8/2010	76	16
18/8/2010	120	16
19/8/2010	91	17
20/8/2010	105	16
21/8/2010	104	18
22/8/2010	117	19
23/8/2010	134	21
24/8/2010	100	20
25/8/2010	89	24
26/8/2010	106	22
27/8/2010	135	16
28/8/2010	127	15
29/8/2010	135	16
30/8/2010	127	15
31/8/2010	98	14

Date	Daily Maximum	
	SO2 concentration (mg/Nm3) [#]	Opacity (%)
1/9/2010	89	16
2/9/2010	103	17
3/9/2010	106	15
4/9/2010	116	16
5/9/2010	102	15
6/9/2010	132	16
7/9/2010	143	14
8/9/2010	143	14
9/9/2010	101	16
10/9/2010	80	16
11/9/2010	67	21
12/9/2010	144	16
13/9/2010	124	15
14/9/2010	FGD bypassed	14
15/9/2010	*	*
16/9/2010	FGD bypassed	19
17/9/2010	FGD bypassed	26
18/9/2010	FGD bypassed	28
19/9/2010	FGD bypassed	24
20/9/2010	FGD bypassed	29
21/9/2010	*	*
22/9/2010	*	*
23/9/2010	*	*
24/9/2010	*	*
25/9/2010	*	*
26/9/2010	*	*
27/9/2010	FGD bypassed	19
28/9/2010	FGD bypassed	20
29/9/2010	FGD bypassed	20
30/9/2010	FGD bypassed	21

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

* - Unit L2 was not on load.

B.2.4 Summary of Annual Stack Particulate Sampling

Unit	Date	Results (mg/Nm ³)
L2	02/07/2010	9

Monitoring Equipment: Napp model 32 (Manual stack sampling system)

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

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

STATION : VICTORIA PEAK
POLLUTANT : SULPHUR DIOXIDE
MONTH: JULY
YEAR : 2010
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	2	2	2	0	0	1	2	1	1	1	1	2	2	1	2	2	1	2	2	2	2	2	****	3	2
2	2	2	1	2	2	2	1	1	2	2	1	1	1	1	1	2	2	2	3	3	4	4	****	6	2
3	4	3	1	1	3	2	2	2	2	2	1	1	1	1	1	0	0	1	1	1	1	1	****	2	1
4	3	2	1	2	1	1	1	1	1	1	1	2	0	0	0	1	1	2	2	1	1	1	****	1	1
5	2	2	2	2	2	1	0	0	1	1	1	1	0	0	0	1	1	5	6	3	1	2	****	3	2
6	2	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	2	1	1	****	1	1
7	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	****	2	0
8	1	1	0	1	1	0	1	0	1	0	1	1	0	1	0	1	1	0	1	1	1	2	****	2	1
9	1	1	1	1	1	2	2	1	1	1	1	0	1	0	0	0	1	1	0	1	1	1	****	2	1
10	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	****	0	1
11	0	0	0	0	0	1	0	1	1	1	0	0	1	0	0	1	1	1	1	1	1	1	****	2	1
12	2	2	2	3	3	3	3	3	2	3	3	3	2	3	3	4	4	4	4	5	5	4	****	5	3
13	5	3	4	4	4	4	4	3	3	3	3	2	2	1	2	2	1	1	1	1	1	1	****	2	2
14	2	2	2	3	2	2	2	2	2	2	1	1	0	1	1	0	1	1	1	1	1	1	****	1	1
15	1	1	1	1	1	1	1	2	2	2	1	2	2	1	2	2	0	1	2	2	3	3	****	5	2
16	3	2	3	3	2	3	3	3	3	2	2	1	1	1	1	1	1	1	1	2	1	1	****	1	2
17	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	****	1	0
18	1	1	2	2	2	2	1	1	1	2	2	2	1	0	0	1	1	0	2	3	3	3	****	5	2
19	3	3	3	3	4	4	3	4	4	3	11	19	18	5	4	3	4	14	8	11	4	5	****	6	6
20	7	3	4	2	3	2	2	3	3	3	3	2	1	0	0	<-- M -->	2	5	5	5	7	****	6	3	
21	3	3	4	4	3	4	5	4	5	4	2	2	3	3	2	1	2	3	2	3	3	3	****	4	3
22	4	3	2	2	3	3	3	2	2	2	2	2	1	2	1	2	1	1	1	2	1	1	****	2	2
23	2	2	2	3	3	2	0	1	2	3	4	4	5	0	0	0	1	1	1	1	1	2	****	2	2
24	3	2	3	3	3	3	3	1	1	1	1	2	2	4	1	1	1	3	3	3	3	3	****	3	2
25	5	6	5	4	2	2	2	8	8	2	3	4	1	0	0	0	0	0	0	3	2	1	****	3	3
26	2	4	3	4	3	3	2	2	4	3	1	0	0	0	0	1	2	2	3	3	2	3	****	10	2
27	5	3	9	3	5	9	5	3	5	5	7	9	23	12	6	5	8	31	13	21	9	8	****	9	9
28	19	21	9	6	8	8	17	6	33	36	36	36	20	36	24	6	4	2	2	0	14	69	****	29	19
29	7	5	3	2	3	3	3	2	2	3	4	3	3	2	0	2	10	11	2	5	1	5	****	4	4
30	5	6	3	5	4	4	4	4	12	5	8	4	6	18	5	4	3	3	4	4	4	5	****	6	6
31	5	3	2	2	3	3	2	6	5	3	3	1	0	1	1	1	1	1	1	3	4	1	****	4	2

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->			STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	1-HR	24-HR
2	2	2	5	8	19	24	0	-	69	3	96	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : VICTORIA PEAK
POLLUTANT : NITROGEN DIOXIDE
MONTH: JULY
YEAR : 2010
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	9	10	1	0	0	2	0	0	1	9	6	4	1	7	0	11	11	17	17	10	6	****	0	6
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	8	7	10	18	23	14	****	11	4
3	3	0	3	1	2	1	0	2	1	3	2	3	4	8	5	8	9	9	16	27	18	25	****	19	7
4	12	4	1	4	0	4	2	6	12	12	9	7	5	4	17	30	36	34	25	20	11	10	****	5	12
5	1	0	2	3	3	2	3	6	8	8	7	7	17	21	11	15	21	18	17	23	18	21	****	3	10
6	1	0	0	0	0	0	1	7	3	4	1	0	1	0	0	1	7	19	16	14	11	1	****	0	4
7	0	0	0	0	0	0	0	3	4	4	1	1	0	1	2	10	17	9	10	10	15	19	****	7	5
8	5	2	0	2	7	0	6	10	8	8	8	5	9	16	14	20	19	18	12	16	11	12	****	6	9
9	5	3	1	1	3	13	17	8	7	9	14	14	17	19	13	8	11	13	20	17	19	17	****	10	11
10	8	5	1	1	0	3	4	3	4	4	2	3	11	17	12	14	11	10	17	14	16	15	****	5	8
11	3	0	0	0	0	3	4	6	10	13	11	12	5	4	0	15	13	18	23	23	21	18	****	11	9
12	11	6	6	4	9	8	6	7	8	9	8	17	9	12	7	9	10	15	19	14	20	24	****	20	11
13	16	13	7	6	2	3	5	4	8	7	14	M	9	8	7	6	8	12	11	11	13	13	****	5	9
14	1	2	2	4	1	0	5	5	8	13	17	10	9	8	7	11	9	11	12	19	10	12	****	8	8
15	4	0	0	0	0	0	0	2	4	5	6	8	4	6	6	8	8	9	10	5	10	5	****	9	5
16	7	0	0	0	0	2	2	3	5	5	4	2	3	2	8	12	11	12	9	9	13	8	****	8	5
17	5	1	0	0	1	1	4	4	8	8	10	11	11	5	6	5	7	13	21	13	13	19	****	16	8
18	13	3	2	2	0	0	0	5	4	5	11	12	15	10	17	17	18	19	22	30	28	19	****	15	12
19	10	1	9	0	0	0	1	4	10	10	18	18	25	11	22	21	28	42	39	41	33	26	****	24	17
20	18	7	2	0	0	0	3	6	7	9	8	7	7	7	<-- M -->	11	5	10	16	14	****	4	7		
21	0	0	0	1	0	0	6	6	6	10	7	5	6	6	2	2	5	6	6	4	2	****	1	4	
22	0	0	0	0	0	0	0	0	3	6	9	7	8	8	3	7	9	14	6	2	0	1	****	2	4
23	5	1	0	1	0	0	3	5	9	16	21	19	14	10	15	14	14	9	9	6	6	8	****	5	8
24	5	3	5	4	1	3	4	1	11	8	9	19	19	14	14	20	24	21	20	23	17	14	****	3	11
25	7	8	9	3	0	0	4	21	22	15	20	22	13	10	6	5	10	16	14	18	7	6	****	4	11
26	7	10	8	7	7	7	9	21	32	32	14	12	5	6	17	19	19	19	22	16	13	13	****	19	14
27	8	2	6	1	3	8	6	6	6	5	9	12	13	6	7	8	14	20	16	15	9	6	****	7	8
28	12	29	13	0	5	10	17	8	20	22	21	20	16	13	14	10	7	11	13	2	20	30	****	24	15
29	14	10	3	0	1	1	3	6	8	11	14	8	11	7	6	9	10	11	10	17	8	18	****	13	9
30	15	21	5	4	0	1	3	5	14	11	17	5	10	16	13	16	15	18	25	24	24	18	****	12	13
31	7	1	2	0	0	2	3	9	9	9	11	6	8	9	7	16	13	21	22	21	23	25	****	21	11

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->			STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
6	8	8	19	22	27	31	0	42	4	95	0	0	

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : VICTORIA PEAK
POLLUTANT : SULPHUR DIOXIDE
MONTH: AUGUST
YEAR : 2010
UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	
1	2	1	2	2	4	3	4	3	3	3	5	13	5	4	2	2	2	3	2	3	3	3	****	5	3	
2	5	4	5	5	3	5	4	5	2	1	2	1	2	2	1	0	0	0	2	1	2	4	****	4	3	
3	2	2	2	2	12	11	7	8	3	2	2	3	5	4	6	0	0	1	2	3	4	4	****	6	4	
4	5	6	2	2	1	2	2	8	19	26	15	12	27	22	21	18	10	8	4	4	4	13	****	19	11	
5	22	26	27	30	48	34	44	36	28	18	10	8	7	6	6	5	3	4	6	0	0	1	****	3	16	
6	6	22	15	10	7	6	7	9	8	7	9	8	7	5	3	2	2	3	3	5	5	5	****	5	7	
7	5	5	6	6	6	6	6	5	5	5	5	4	4	2	1	2	2	3	5	6	6	6	****	4	5	
8	4	3	2	3	3	5	5	5	5	5	5	4	3	2	1	1	2	2	2	2	4	4	****	3	3	
9	3	3	3	3	4	5	4	4	3	2	3	2	1	1	0	0	1	1	0	0	0	3	****	5	2	
10	7	6	5	6	5	6	5	1	4	7	6	4	2	0	0	0	0	1	4	3	3	8	****	3	4	
11	5	5	5	6	9	7	2	3	2	2	3	4	3	3	1	4	4	6	3	3	3	3	****	6	4	
12	6	4	8	7	7	8	5	6	4	9	12	14	36	41	32	13	19	6	5	5	8	14	****	12	12	
13	12	5	4	9	6	7	6	8	7	6	4	11	10	6	11	14	9	2	1	2	2	3	****	4	7	
14	6	8	5	4	6	11	4	4	6	6	13	30	14	12	3	5	3	3	3	4	6	5	****	5	7	
15	4	5	37	5	3	4	4	6	7	13	12	8	6	4	4	3	18	24	9	7	5	6	****	7	9	
16	8	5	6	6	6	7	4	3	2	4	4	3	5	25	3	4	19	6	2	18	3	3	****	3	7	
17	2	3	4	7	6	9	10	9	5	3	3	2	2	1	1	2	4	1	1	4	8	****	3	4		
18	3	2	2	2	2	2	2	2	3	4	3	3	3	3	2	2	2	2	2	2	2	2	****	3	2	
19	2	1	2	2	2	3	3	3	1	1	1	2	1	1	1	1	1	2	1	2	2	2	****	3	2	
20	1	0	1	1	2	1	1	3	2	2	2	3	1	1	0	0	1	0	1	0	1	3	5	****	7	2
21	6	8	10	5	3	2	2	2	3	4	4	2	2	2	2	2	2	2	2	3	8	6	****	5	4	
22	4	3	3	4	3	3	3	4	3	4	5	5	5	5	3	1	1	4	3	3	3	3	****	3	3	
23	4	4	4	4	3	5	4	5	4	4	4	4	4	4	5	4	4	4	3	4	4	6	****	5	4	
24	4	4	4	4	3	2	3	2	2	2	1	1	2	2	1	1	3	2	4	3	2	2	****	1	2	
25	1	1	3	3	3	2	3	3	3	6	3	4	25	12	10	11	19	6	14	24	7	3	****	9	8	
26	2	6	7	18	10	3	5	7	3	8	24	8	9	8	10	3	2	5	4	2	2	1	****	2	7	
27	1	1	3	3	1	1	1	1	5	10	13	7	4	3	6	9	10	7	12	9	10	8	****	11	6	
28	9	10	13	25	28	36	24	32	55	49	44	33	43	46	5	3	3	6	15	8	9	7	****	3	22	
29	4	3	3	3	6	9	16	17	7	6	6	5	4	6	12	13	9	9	2	2	4	5	****	3	7	
30	4	7	11	13	32	29	13	24	12	17	14	24	14	13	19	20	25	29	20	24	19	10	****	10	17	
31	9	15	23	22	26	29	34	18	13	13	14	10	9	7	7	10	11	21	36	34	39	54	****	21	21	

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE----->					-----RANGE----->				STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
4	4	4	15	25	35	42	0	-	55	3	96	0	0	

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : VICTORIA PEAK
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: AUGUST
 YEAR : 2010
 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	14	8	5	2	6	6	7	10	9	8	12	21	13	12	8	14	12	12	19	18	19	13	****	8	11
2	9	6	5	3	1	3	5	8	11	9	9	15	10	12	13	10	11	11	16	15	19	19	****	13	10
3	7	2	4	3	14	19	11	16	8	4	5	10	15	10	10	7	5	9	14	19	19	15	****	11	10
4	7	10	4	5	7	9	2	13	21	22	25	25	33	33	40	42	27	29	34	28	43	82	****	31	25
5	30	36	63	93	97	80	62	66	81	66	34	20	18	16	15	17	20	39	53	22	42	32	****	12	44
6	24	60	54	31	16	17	20	25	30	33	29	24	26	16	17	19	17	25	23	23	35	23	****	11	26
7	11	20	34	24	14	9	15	17	18	19	14	18	14	17	23	27	15	11	19	16	15	14	****	17	17
8	13	4	2	3	5	7	8	12	10	11	12	14	12	9	13	7	7	8	10	10	17	13	****	9	9
9	10	4	1	1	3	7	5	16	16	18	27	27	21	14	11	9	10	11	15	21	34	25	****	21	14
10	19	13	6	7	5	6	15	15	24	23	20	21	18	14	19	21	25	26	34	23	26	30	****	18	18
11	21	17	14	10	15	16	2	7	18	18	23	16	21	48	26	26	23	23	30	33	19	15	****	22	20
12	19	13	13	10	6	11	10	24	15	22	24	19	22	28	27	17	22	17	29	34	27	31	****	26	20
13	24	8	6	8	6	7	11	18	18	18	19	19	23	16	19	22	24	17	24	22	32	25	****	20	18
14	17	16	9	6	6	20	13	14	19	17	18	27	19	24	19	20	26	22	39	46	47	38	****	19	22
15	11	11	21	8	4	5	9	17	14	24	23	16	15	8	5	8	24	45	51	38	38	24	****	19	19
16	17	9	8	8	8	10	10	10	8	12	11	7	12	30	12	12	33	24	22	22	12	19	****	14	14
17	13	16	10	14	15	20	21	20	16	15	11	14	12	11	12	17	21	25	17	14	22	32	****	9	16
18	10	7	4	1	0	3	3	6	11	21	16	20	17	26	26	27	25	13	13	18	15	14	****	10	13
19	8	4	4	3	2	4	7	9	6	7	20	10	6	5	9	11	13	16	6	7	10	10	****	6	8
20	5	2	3	2	1	1	2	10	14	12	15	17	8	6	5	11	16	14	26	58	61	69	****	41	17
21	38	53	30	17	8	8	11	14	14	19	18	14	16	21	23	31	36	22	23	39	39	31	****	18	24
22	10	10	7	7	12	11	14	12	10	14	18	14	17	13	12	12	12	13	19	15	11	10	****	5	12
23	5	3	3	3	2	4	5	12	13	16	9	9	8	7	6	7	6	7	9	12	7	12	****	9	7
24	8	5	5	4	3	1	4	5	6	8	6	5	5	10	16	12	18	23	26	16	10	****	14	9	
25	5	4	7	10	11	7	11	10	17	24	21	23	34	22	24	25	38	32	37	39	24	19	****	23	20
26	5	18	21	42	31	10	15	22	14	24	30	20	19	22	25	16	15	18	29	13	9	15	****	12	19
27	1	0	9	18	2	0	2	5	20	32	28	21	21	16	23	25	28	28	37	39	38	28	****	17	19
28	26	31	37	50	58	57	29	40	66	94	99	87	88	90	23	14	19	12	92	141	160	113	****	77	65
29	67	50	40	29	31	60	37	53	51	43	34	34	28	38	50	61	55	43	29	40	23	23	****	34	41
30	36	46	61	21	34	51	42	50	51	54	49	55	37	38	49	46	51	67	60	67	89	63	****	69	52
31	75	66	60	57	64	56	46	45	51	49	54	47	33	32	39	48	49	48	58	56	64	109	****	52	55

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----					-----RANGE-----		STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR
16	17	17	48	60	81	93	0	- 160	3	96	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : VICTORIA PEAK
POLLUTANT : SULPHUR DIOXIDE
MONTH: SEPTEMBER
YEAR : 2010
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	20	26	33	34	32	20	21	25	29	25	24	20	13	13	27	30	29	32	38	37	34	15	****	7	25
2	6	10	10	19	23	26	15	51	62	47	51	19	16	38	41	48	40	34	48	39	20	12	****	19	30
3	27	18	14	14	12	24	14	9	16	17	10	10	14	6	8	1	2	1	1	2	2	1	****	1	10
4	1	1	1	1	1	2	1	2	6	2	2	4	5	3	3	3	2	2	1	2	2	2	****	3	2
5	2	1	1	2	4	4	3	3	3	2	2	3	3	2	2	2	0	1	1	2	3	2	****	4	2
6	8	8	9	5	3	11	4	3	2	2	3	9	5	3	3	9	7	3	4	3	3	3	****	4	5
7	3	3	4	3	5	5	3	2	2	2	4	3	1	2	0	0	3	3	2	1	1	2	****	1	2
8	1	1	1	2	2	6	9	11	12	8	11	15	18	16	13	12	10	12	4	3	3	2	****	0	7
9	0	0	1	3	4	5	7	10	11	8	10	17	23	22	20	18	15	12	12	9	11	17	****	14	11
10	5	6	6	1	0	7	10	13	8	6	10	8	20	28	30	26	11	7	9	7	5	3	****	2	10
11	2	8	19	3	5	8	13	5	4	2	3	4	4	5	3	9	9	7	9	5	5	6	****	5	6
12	4	5	27	33	23	5	3	8	7	2	6	4	2	1	28	8	3	11	2	7	32	25	****	9	11
13	8	8	3	2	0	0	1	2	3	2	3	2	1	1	1	1	1	1	1	3	3	3	****	4	2
14	4	4	3	3	3	3	3	4	4	3	1	2	2	3	2	2	1	2	2	2	2	3	****	4	3
15	3	2	2	3	3	3	2	3	3	3	3	2	2	1	1	1	1	2	2	2	3	2	****	3	2
16	1	2	1	3	5	5	4	19	38	34	40	36	25	12	14	11	4	4	4	5	9	10	****	7	13
17	6	5	12	16	20	18	5	5	9	53	45	27	17	17	30	40	38	19	13	10	10	11	****	18	19
18	15	10	9	7	5	5	10	31	11	13	16	18	14	14	6	8	17	17	3	2	2	2	****	2	10
19	4	12	14	6	13	25	11	7	24	28	26	29	36	25	20	17	16	13	7	4	7	10	****	15	16
20	13	17	14	14	13	31	43	55	57	57	52	41	31	32	19	15	7	5	6	1	1	5	****	1	23
21	0	1	0	0	0	0	1	5	1	0	0	0	1	21	12	8	3	13	0	0	0	2	****	1	3
22	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	****	1	0
23	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	4	1	1	2	2	2	****	3	1
24	3	2	3	4	4	2	2	2	4	2	2	1	1	0	0	0	1	0	1	1	1	2	****	1	2
25	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	2	4	2	****	0	1
26	0	0	0	1	0	0	0	0	1	2	3	2	1	0	0	0	0	0	0	1	1	0	****	1	1
27	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	****	1	0
28	2	1	1	1	1	1	2	1	3	0	0	0	0	0	0	1	0	0	0	0	1	1	****	1	1
29	2	0	0	0	0	0	1	0	0	0	<--- D --->	0	0	0	0	0	0	0	0	0	0	0	****	0	0
30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	3	1	****	1	0

MONTHLY STATISTICS:										NO. OF TIMES				
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->			STD GEOM	PERCENT	ABOVE	OBJECTIVE
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
3	3	7	3	22	32	41	51	0	- 62	6	96	0	0	

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : VICTORIA PEAK
POLLUTANT : NITROGEN DIOXIDE
MONTH: SEPTEMBER
YEAR : 2010
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	45	55	49	45	37	21	24	35	53	62	56	45	36	38	43	47	42	54	68	66	79	57	****	26	47
2	28	44	27	37	33	20	19	48	49	51	56	35	33	65	76	79	69	68	99	91	44	52	****	45	51
3	57	42	23	16	16	19	17	16	48	53	26	28	29	24	33	37	26	22	26	21	23	18	****	11	27
4	10	7	4	4	5	5	7	13	26	16	27	34	31	18	24	27	30	33	31	27	25	20	****	12	19
5	10	4	5	6	13	8	12	14	10	10	16	21	21	17	24	29	25	22	16	25	22	12	****	7	15
6	17	18	15	5	3	23	10	7	12	11	11	24	17	10	13	34	27	17	20	16	16	11	****	10	15
7	10	2	9	2	9	8	6	9	10	10	12	10	10	8	6	9	21	21	28	18	12	10	****	9	11
8	7	7	4	3	4	9	21	22	20	18	30	39	44	57	58	62	71	76	36	30	16	14	****	8	28
9	0	0	2	5	10	6	26	50	53	48	50	57	62	57	50	44	54	43	46	42	53	56	****	28	37
10	14	7	8	2	0	17	22	27	20	15	30	26	34	41	43	32	27	28	58	37	30	20	****	8	24
11	4	14	33	3	10	22	46	22	29	10	13	25	14	34	23	46	38	28	28	18	21	20	****	17	22
12	19	14	52	39	37	17	9	23	17	12	24	27	22	11	43	20	16	28	17	21	32	27	****	20	24
13	19	18	10	21	8	7	9	10	11	10	9	12	9	7	9	9	10	8	8	9	7	11	****	6	10
14	7	5	3	3	4	4	10	13	22	14	16	16	13	20	26	33	19	18	18	30	16	13	****	20	15
15	12	5	4	5	4	7	5	13	16	20	19	17	11	16	12	9	6	11	15	10	8	7	****	3	10
16	1	2	2	7	9	17	14	34	43	39	32	30	29	22	28	24	18	16	26	27	32	25	****	23	22
17	16	10	23	26	25	27	8	11	15	25	38	35	31	32	43	51	49	45	40	40	42	34	****	24	30
18	28	18	15	9	11	13	24	35	24	30	39	44	41	39	30	46	47	35	29	22	27	22	****	16	28
19	11	24	25	15	16	41	26	8	35	39	35	38	41	37	46	41	28	37	49	30	24	31	****	27	31
20	17	12	7	8	7	32	34	36	38	38	34	32	25	36	33	31	29	19	24	14	15	27	****	17	25
21	12	26	19	9	5	8	27	18	14	14	15	22	19	28	32	29	24	30	28	24	17	25	****	15	20
22	11	8	4	2	5	5	12	13	18	16	18	14	15	14	15	14	19	26	49	49	17	9	****	11	16
23	10	4	6	5	8	6	8	7	7	10	12	8	14	8	12	24	56	34	52	77	55	56	****	62	24
24	60	19	11	10	13	8	10	23	36	45	28	26	19	11	10	12	17	17	14	14	17	14	****	14	20
25	13	11	6	4	6	8	11	17	22	20	24	25	16	16	18	21	13	14	17	28	28	25	****	11	16
26	9	13	9	12	9	11	9	14	17	22	28	21	17	19	16	17	15	15	15	27	21	21	****	13	16
27	10	7	7	9	3	2	3	16	19	22	32	29	13	23	12	20	18	23	25	23	17	11	****	12	15
28	6	10	9	9	11	13	15	28	41	34	32	20	16	16	15	18	20	26	23	22	20	14	****	10	19
29	9	8	9	7	6	5	10	20	35	29	<--- D --->	19	19	18	14	17	18	17	19	14	10	****	10	15	
30	9	12	8	8	6	4	9	19	16	29	30	34	19	22	32	40	40	45	38	44	47	22	****	6	23

MONTHLY STATISTICS:										NO. OF TIMES				
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->			STD GEOM	PERCENT	ABOVE	OBJECTIVE
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
18	19	22	19	45	53	62	74	0	- 99	2	96	0	0	

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : CHUNG HOM KOK ZONE SUBSTATION MONTH: JULY YEAR : 2010
 POLLUTANT : SULPHUR DIOXIDE UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	19	25	16	22	25	38	17	13	9	10	39	36	18	23	19	16	23	22	12	14	13	18	****	15	20
2	20	18	11	14	14	12	16	23	27	17	15	12	14	10	11	16	14	13	11	16	15	14	****	11	15
3	17	32	14	10	12	13	23	17	10	8	11	11	10	9	12	15	13	10	10	11	12	15	****	11	13
4	16	13	11	10	13	14	8	6	8	12	12	6	14	15	15	13	10	10	11	11	10	9	****	7	11
5	9	7	12	11	13	10	8	12	10	11	6	5	10	15	18	9	8	8	10	9	9	6	****	8	10
6	5	6	6	5	8	4	12	9	9	13	8	7	8	6	4	6	5	8	9	15	8	9	****	13	8
7	14	8	10	10	12	8	9	7	13	10	7	5	7	7	11	10	8	10	13	11	10	14	****	9	10
8	5	10	7	15	13	12	5	9	10	19	13	12	14	9	11	14	17	18	14	11	14	18	****	14	12
9	10	13	16	11	14	10	12	12	11	12	17	20	14	12	12	16	16	13	18	17	22	17	****	16	14
10	11	16	10	9	14	13	15	14	19	17	13	18	15	13	12	13	16	12	14	16	15	12	****	13	14
11	12	10	11	6	11	14	8	14	14	16	25	25	15	14	17	16	15	13	17	21	13	13	****	17	15
12	15	9	10	12	21	16	18	23	13	23	13	15	17	18	15	16	21	16	15	14	13	15	****	16	16
13	13	12	11	9	8	8	8	12	13	16	15	11	13	10	10	10	17	14	13	14	11	12	****	9	12
14	8	9	10	10	8	7	9	12	8	7	7	9	8	10	10	12	10	8	8	9	11	10	****	12	9
15	9	9	8	9	6	9	11	10	8	7	7	6	6	6	8	10	10	9	8	7	11	11	****	12	9
16	10	10	9	7	6	9	13	10	10	8	10	9	8	8	6	10	9	13	6	7	9	10	****	10	9
17	8	9	7	8	8	6	9	8	10	8	8	9	9	9	8	10	11	12	9	13	14	18	****	9	10
18	7	6	5	6	7	8	8	10	10	9	9	6	6	5	8	8	10	12	17	14	11	12	****	12	9
19	6	4	6	8	10	13	10	8	5	8	7	16	14	17	19	18	23	19	21	18	14	15	****	18	13
20	25	19	15	15	14	9	11	13	17	10	8	10	9	13	12	12	11	13	12	15	11	12	****	9	13
21	10	8	7	9	10	9	8	9	10	7	5	4	4	5	8	9	7	9	8	7	9	6	****	7	8
22	6	7	6	6	6	6	6	6	7	5	7	6	6	8	6	5	3	4	6	8	7	7	****	10	6
23	8	8	7	7	8	7	6	4	8	8	10	14	19	14	11	10	11	13	8	6	14	9	****	11	10
24	9	9	13	11	10	7	5	3	7	7	7	7	6	9	8	10	17	17	11	6	8	11	****	12	9
25	15	15	9	13	12	10	10	13	9	7	7	8	7	8	9	11	11	12	24	18	10	14	****	15	12
26	15	12	11	11	9	8	9	9	8	6	8	8	9	12	11	10	18	18	12	16	27	21	****	20	12
27	31	35	24	8	9	9	11	9	8	11	10	14	10	7	9	8	8	9	10	5	3	6	****	6	11
28	10	11	10	10	7	9	10	8	11	7	9	7	<-- D -->	1	0	0	1	0	0	5	7	****	5	6	
29	11	8	5	2	3	3	3	2	5	1	6	9	4	2	5	5	4	8	6	4	4	7	****	16	5
30	19	16	11	3	3	3	0	12	5	8	4	2	4	4	4	3	8	5	9	11	10	4	****	4	7
31	5	9	6	10	10	4	2	17	14	10	4	5	4	8	3	12	5	2	4	6	10	3	****	4	7

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----					-----RANGE-----				STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
9	10	10	17	19	24	26	0	-	39	2	96	0	0	

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : CHUNG HOM KOK ZONE SUBSTATION MONTH: JULY YEAR : 2010
 POLLUTANT : NITROGEN DIOXIDE 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	20	19	13	17	20	23	14	10	8	12	20	19	16	17	18	18	22	21	22	26	20	22	****	19	18
2	20	18	9	13	14	11	12	14	16	12	13	9	13	11	10	14	11	14	13	12	10	13	****	13	13
3	17	23	12	6	10	11	14	9	9	4	7	9	11	11	12	15	13	17	16	16	14	21	****	16	13
4	18	12	8	8	9	12	7	7	7	9	11	8	15	18	16	18	19	17	18	19	12	7	****	9	12
5	5	4	9	9	11	7	10	11	8	9	6	7	13	15	16	13	8	11	11	12	9	7	****	10	10
6	6	4	5	4	5	3	11	10	9	11	7	11	12	9	7	8	11	13	15	19	12	14	****	18	10
7	14	11	10	10	8	6	8	8	11	7	5	7	9	9	13	10	11	13	17	18	19	15	****	15	11
8	8	9	7	15	12	11	6	10	8	14	10	14	12	11	11	11	11	14	15	11	12	13	****	15	11
9	14	12	13	10	10	8	13	12	8	11	12	10	9	7	7	10	10	12	19	20	22	13	****	20	12
10	7	12	7	5	14	10	8	13	12	13	8	14	12	9	10	11	12	9	13	14	15	12	****	15	11
11	9	9	10	6	12	13	8	10	9	9	14	8	9	10	14	11	14	12	21	26	15	12	****	24	13
12	18	5	6	8	14	13	13	17	11	14	8	10	9	10	9	8	11	11	17	15	16	13	****	20	12
13	16	10	7	6	6	6	7	11	12	12	12	8	6	8	9	10	13	17	18	16	13	15	****	12	11
14	8	6	7	8	6	5	5	10	9	8	9	10	5	8	7	7	8	4	4	3	6	6	****	12	7
15	5	3	3	5	2	6	7	6	7	7	6	4	5	5	6	7	8	10	7	8	12	13	****	17	7
16	11	6	5	2	2	5	13	11	9	7	8	7	6	6	6	11	10	19	13	11	8	10	****	21	9
17	13	10	8	8	8	5	12	11	13	9	11	8	8	8	9	11	10	15	18	19	18	18	****	15	12
18	8	9	10	9	9	4	5	9	9	9	8	7	6	5	9	7	13	19	27	22	9	10	****	13	10
19	4	2	3	5	7	11	8	8	9	9	9	16	14	15	15	12	17	17	23	25	18	12	****	16	12
20	17	11	9	9	8	4	8	12	19	15	12	13	10	14	13	14	19	17	14	12	8	10	****	12	12
21	9	5	3	4	8	6	6	7	7	5	5	6	4	10	8	8	5	6	4	5	5	3	****	7	6
22	4	4	2	2	1	3	5	6	7	7	11	10	9	9	8	8	9	7	7	11	8	6	****	12	7
23	7	5	4	5	7	4	7	7	17	13	13	14	13	12	15	14	17	19	13	14	26	12	****	18	12
24	15	13	18	11	11	8	8	9	9	11	7	9	8	9	10	14	19	20	19	18	16	14	****	16	13
25	16	16	9	12	13	9	9	11	10	8	8	10	9	8	9	14	14	18	34	26	9	13	****	14	13
26	10	6	6	6	5	4	5	5	12	10	10	12	10	9	9	8	13	16	13	10	16	14	****	12	10
27	21	23	18	5	7	7	9	5	8	7	5	6	5	2	6	7	12	14	12	11	3	7	****	6	9
28	9	9	10	12	7	11	11	9	11	11	12	4	<-- D -->	8	11	21	15	21	24	29	21	****	11	13	
29	20	16	9	6	10	11	15	8	13	9	10	12	6	5	11	11	10	16	12	21	24	25	****	25	13
30	27	23	14	6	7	6	7	13	14	15	11	9	10	10	10	12	14	16	19	21	20	10	****	11	13
31	11	11	11	12	13	6	5	17	12	16	11	11	10	10	10	12	11	10	15	16	18	9	****	15	12

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->		STD GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE OBJECTIVE	
												1-HR	24-HR
10	10	11	10	18	20	23	26	1	- 34	2	96	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : CHUNG HOM KOK ZONE SUBSTATION MONTH: AUGUST YEAR : 2010
 POLLUTANT : SULPHUR DIOXIDE 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	1	1	3	3	3	1	2	2	6	5	9	6	5	5	12	5	5	4	2	3	****	5	4
2	2	3	1	3	4	5	6	5	4	4	2	3	8	12	6	4	4	7	6	5	4	3	****	4	5
3	3	2	6	4	9	8	13	14	14	6	20	27	29	16	7	5	7	9	7	14	7	8	****	7	11
4	6	8	5	13	7	13	7	4	10	15	21	37	59	60	30	20	20	16	13	13	12	19	****	24	19
5	23	42	34	28	19	18	24	29	27	16	12	12	15	19	15	11	9	11	13	4	3	2	****	3	17
6	6	7	7	6	5	6	7	6	6	5	9	7	6	6	7	4	5	3	7	7	7	6	****	3	6
7	4	6	7	6	6	6	6	3	4	4	6	4	4	4	5	7	6	8	10	12	8	5	****	6	6
8	5	2	2	3	3	4	4	4	4	4	7	6	6	5	6	7	6	11	6	6	6	5	****	3	5
9	5	4	5	2	5	9	5	5	5	5	4	3	4	4	6	5	3	3	6	10	15	10	****	11	6
10	11	10	37	35	36	30	28	19	7	15	7	14	6	7	3	7	5	6	6	7	2	6	****	7	14
11	9	6	11	10	10	10	7	5	2	2	3	11	12	5	5	5	6	3	2	3	4	6	****	8	6
12	6	5	6	7	7	8	7	6	3	4	0	3	9	27	25	8	5	16	17	11	10	17	****	10	9
13	12	11	9	17	20	8	9	9	12	16	11	11	8	14	14	13	6	6	6	9	5	7	****	5	10
14	15	12	8	12	8	12	16	21	6	16	25	24	21	7	14	5	7	4	6	16	10	6	****	6	12
15	5	7	5	8	9	9	6	6	19	17	6	9	11	13	12	14	15	13	5	18	12	7	****	6	10
16	5	4	5	5	19	15	4	3	11	9	7	14	25	13	6	5	5	12	10	10	8	13	****	8	9
17	8	9	10	8	11	10	8	10	9	5	4	4	6	4	1	4	7	3	0	1	3	8	****	1	6
18	2	1	5	6	4	2	2	2	2	1	1	1	1	0	0	0	0	4	1	2	2	2	****	2	2
19	2	1	1	1	0	1	1	1	1	0	0	0	1	0	0	0	1	2	0	1	1	0	****	3	1
20	1	0	0	1	0	0	0	2	1	0	2	4	5	2	1	1	2	4	4	7	8	9	****	11	3
21	8	11	9	7	5	4	2	3	3	5	6	5	7	5	5	6	6	9	6	8	12	9	****	8	6
22	6	8	7	5	5	5	5	8	5	6	5	5	9	8	7	7	9	12	9	8	7	6	****	5	7
23	3	4	7	3	3	3	3	4	2	3	3	4	4	5	4	2	7	5	4	4	2	6	****	5	4
24	4	2	4	2	2	2	4	4	2	3	2	3	4	4	5	2	5	6	4	8	7	6	****	6	4
25	5	6	11	9	7	7	4	4	4	12	7	8	13	8	21	8	11	7	12	16	8	11	****	18	10
26	31	20	30	18	31	102	36	14	12	6	20	45	29	23	15	9	7	6	14	14	8	5	****	8	22
27	8	11	9	6	6	9	8	6	5	5	8	4	7	11	13	6	12	10	19	18	12	21	****	38	11
28	17	12	12	13	15	20	30	33	32	41	64	44	66	56	16	9	8	10	9	8	10	8	****	4	23
29	4	4	3	3	3	5	8	8	8	5	4	3	31	20	11	15	28	7	0	1	6	4	****	5	8
30	6	9	48	22	23	40	32	18	9	7	7	19	22	22	34	39	28	37	35	27	11	14	****	7	22
31	8	16	34	21	48	56	44	21	13	17	9	8	22	33	38	25	19	24	50	77	88	100	****	56	36

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->		STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR
6	7	7	21	32	45	58	0 -	102	3	96	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : CHUNG HOM KOK ZONE SUBSTATION MONTH: AUGUST YEAR : 2010
 POLLUTANT : NITROGEN DIOXIDE UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	10	7	4	4	6	6	9	7	6	7	11	8	9	9	9	11	15	15	15	13	12	12	****	12	9
2	7	8	4	7	7	6	10	12	16	12	8	5	6	9	10	9	9	13	10	12	15	11	****	9	9
3	9	5	7	7	14	14	19	16	13	9	14	19	24	16	9	8	9	14	16	18	8	8	****	8	12
4	6	7	6	16	9	20	11	14	17	18	28	37	45	47	40	32	29	32	23	16	14	24	****	48	23
5	45	56	50	39	28	32	53	53	55	40	22	21	20	23	24	23	24	22	12	6	8	7	****	24	30
6	60	44	23	13	8	8	9	11	10	11	11	12	9	8	8	11	14	10	10	12	6	6	****	5	14
7	4	7	6	4	4	5	6	4	6	7	7	9	8	8	7	10	12	18	20	14	14	8	****	8	9
8	4	2	2	3	2	2	5	7	8	7	9	10	10	10	10	16	16	26	25	16	10	6	****	8	9
9	7	6	5	2	6	9	7	8	10	9	7	9	7	10	10	12	13	14	17	21	29	20	****	16	11
10	16	11	26	17	10	12	13	13	14	15	12	17	8	7	8	12	12	16	16	19	16	18	****	15	14
11	9	5	12	10	10	11	12	13	10	9	7	13	15	7	7	11	10	10	11	13	12	10	****	16	11
12	14	10	7	10	8	13	12	9	6	9	6	10	12	21	17	12	10	17	24	25	22	25	****	22	14
13	24	16	11	20	24	14	14	17	17	15	13	12	12	16	17	18	14	17	22	26	23	23	****	15	17
14	25	19	12	23	12	13	15	18	11	15	19	18	19	11	14	11	13	16	14	24	19	18	****	15	16
15	17	18	8	10	10	14	11	11	17	17	12	11	10	12	15	22	23	20	17	26	23	17	****	11	15
16	10	7	6	6	17	15	11	11	21	18	18	23	22	13	12	17	14	23	19	26	28	27	****	11	16
17	14	17	16	12	17	15	14	15	12	9	8	8	9	6	5	7	12	11	9	8	17	25	****	12	12
18	12	6	8	7	7	6	7	10	11	11	7	7	6	7	6	7	8	9	6	6	12	9	****	6	8
19	5	4	3	3	1	2	3	5	6	5	5	5	5	5	3	4	6	5	3	9	8	4	****	8	5
20	3	3	1	2	2	2	2	8	7	7	5	10	9	10	8	14	21	25	13	9	7	5	****	6	8
21	5	7	8	6	5	5	6	5	8	8	11	11	9	9	12	16	14	22	11	8	11	6	****	13	9
22	6	4	2	2	1	1	2	3	5	7	7	11	11	11	11	10	17	17	14	13	8	6	****	7	8
23	5	3	6	2	1	1	2	6	5	6	9	7	7	6	8	7	11	13	14	10	9	14	****	11	7
24	9	3	7	3	1	2	4	8	8	9	9	7	5	7	7	9	15	11	6	14	12	7	****	8	8
25	8	8	15	15	11	10	11	11	10	17	12	12	18	13	20	17	19	17	24	29	11	28	****	28	16
26	35	28	24	14	22	39	22	16	14	10	19	26	18	19	16	13	12	13	20	16	17	11	****	9	19
27	6	9	7	5	5	6	9	11	17	12	10	8	6	8	11	13	18	20	30	16	20	20	****	40	13
28	25	29	30	35	43	49	49	49	47	58	73	67	80	66	43	56	63	70	48	35	22	18	****	13	46
29	11	12	11	8	9	9	28	24	21	13	24	20	47	39	27	41	44	24	20	17	17	13	****	6	21
30	5	14	60	50	57	60	56	43	26	33	37	62	60	47	43	53	45	69	69	68	19	14	****	10	43
31	16	20	33	16	52	48	50	33	22	41	26	22	39	55	47	34	27	42	54	62	71	74	****	85	42

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----						-----RANGE-----				STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
12	12	16	12	33	49	60	69	1	-	85	2	96	0	0	

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : CHUNG HOM KOK ZONE SUBSTATION MONTH: SEPTEMBER YEAR : 2010
 POLLUTANT : SULPHUR DIOXIDE 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	58	37	32	20	22	22	32	25	20	17	13	19	34	51	73	50	42	43	45	48	48	35	****	11	35
2	12	10	42	47	60	52	30	23	55	44	47	39	25	37	49	55	54	63	116	67	44	10	****	32	44
3	23	18	14	21	30	42	23	7	10	7	7	8	6	4	12	5	4	3	4	5	5	5	****	8	12
4	9	7	5	6	5	7	9	6	6	9	11	11	10	10	10	8	5	3	2	3	2	3	****	4	7
5	4	3	4	3	5	7	2	1	1	1	3	3	4	3	5	8	5	6	8	10	8	6	****	8	5
6	20	18	17	21	16	10	7	5	6	5	23	21	41	24	16	9	15	8	11	11	9	9	****	9	14
7	14	19	15	13	14	9	6	7	7	9	4	2	5	10	12	6	8	10	10	5	7	7	****	9	9
8	8	10	19	19	13	13	14	8	17	11	6	34	34	24	32	41	34	29	19	17	12	27	****	3	19
9	0	0	0	6	12	1	2	2	16	31	29	53	52	34	23	21	30	25	25	34	31	32	****	37	22
10	2	11	20	8	13	19	18	18	53	25	52	61	77	25	24	20	30	25	21	28	17	5	****	3	25
11	3	12	5	12	4	28	12	10	12	7	15	8	5	9	26	11	6	6	13	11	7	11	****	8	11
12	8	12	14	15	13	11	14	19	27	15	24	17	8	21	6	15	10	8	9	2	3	2	****	6	12
13	11	7	6	5	4	6	7	5	4	6	7	9	5	5	7	8	9	7	8	7	10	9	****	5	7
14	6	7	8	3	4	4	5	3	2	3	2	4	3	3	0	1	1	1	2	4	6	8	****	5	4
15	3	4	3	3	3	4	5	3	4	3	4	4	2	3	5	9	8	8	11	13	20	20	****	9	7
16	12	13	9	14	12	8	7	6	6	10	7	11	11	33	25	21	7	11	13	10	11	16	****	20	13
17	40	16	15	22	23	21	19	14	24	45	55	28	19	22	19	13	14	14	23	20	24	20	****	24	23
18	20	13	8	13	15	6	7	16	21	59	59	38	33	17	15	14	18	20	9	12	8	11	****	21	20
19	31	18	10	14	24	52	37	34	19	31	41	43	53	58	58	49	43	25	17	18	17	25	****	24	32
20	27	28	30	19	34	46	38	55	61	64	62	61	26	18	18	9	11	6	5	3	5	3	****	1	27
21	0	2	4	0	1	0	3	3	1	3	2	2	8	7	9	6	5	5	2	2	2	5	****	7	3
22	0	1	1	4	3	3	6	5	4	3	4	3	7	5	3	2	2	3	4	3	1	2	****	4	3
23	3	2	3	4	3	3	3	3	4	4	3	3	5	6	4	3	3	4	5	3	2	1	****	7	3
24	13	7	10	10	6	5	6	5	4	3	4	3	5	7	8	9	13	12	8	7	11	****	6	8	
25	5	4	5	5	3	2	2	2	5	4	3	2	3	5	3	5	4	5	12	11	12	7	****	6	5
26	4	4	3	6	5	4	5	5	8	7	9	9	8	8	7	7	6	8	11	10	9	7	****	10	7
27	7	7	7	6	4	3	5	6	5	5	4	4	4	5	5	6	6	10	8	8	10	8	****	7	6
28	5	7	5	5	5	5	6	5	6	2	2	2	3	5	7	5	6	8	3	4	7	7	****	6	5
29	5	3	3	4	2	3	5	3	3	1	1	2	2	2	0	1	2	3	2	3	2	2	****	0	2
30	1	0	1	2	1	0	2	3	1	1	3	5	4	4	4	3	4	6	3	4	3	1	****	0	2

MONTHLY STATISTICS:											STD GEOM		PERCENT		NO. OF TIMES ABOVE OBJECTIVE		
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->				DEVIATION	VALID DATA	1-HR	24-HR		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR								
8	7	13	7	32	47	58	62	0	-	116	2	-	44	3	96	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : CHUNG HOM KOK ZONE SUBSTATION MONTH: SEPTEMBER YEAR : 2010
 POLLUTANT : NITROGEN DIOXIDE 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	103	87	74	38	34	29	41	45	46	51	43	54	48	60	68	57	49	62	68	69	66	65	****	26	56
2	27	24	49	47	65	64	42	36	49	49	54	52	43	54	80	92	81	79	131	121	87	32	****	47	61
3	31	27	27	28	30	42	31	26	28	23	20	19	16	16	25	24	17	15	19	16	16	20	****	11	23
4	13	7	5	7	6	8	13	13	15	15	16	19	22	24	23	19	13	6	4	6	7	6	****	9	12
5	7	7	6	6	5	6	8	7	6	4	3	8	15	15	13	21	16	19	29	18	13	13	****	15	11
6	27	22	21	21	12	8	11	19	17	15	27	26	25	19	17	15	21	17	24	28	25	19	****	15	20
7	20	21	15	15	12	10	9	14	11	15	10	4	5	12	17	17	17	20	24	17	12	11	****	12	14
8	13	20	27	23	19	21	21	23	23	23	30	43	47	31	38	54	48	48	32	25	11	24	****	20	29
9	6	4	6	20	35	9	6	10	43	49	45	50	56	46	38	31	35	38	19	27	16	18	****	28	27
10	8	9	18	15	25	33	41	42	55	39	53	53	57	48	42	36	43	49	35	20	20	10	****	11	33
11	15	24	12	28	19	51	49	50	28	17	28	32	36	38	43	37	20	19	32	20	15	25	****	14	28
12	14	17	23	19	15	17	20	25	18	13	17	20	13	21	15	23	23	29	32	16	14	13	****	9	19
13	16	15	13	16	13	9	9	10	8	10	9	10	11	10	10	13	14	14	15	13	13	13	****	9	12
14	11	9	11	5	7	6	8	7	10	9	7	8	9	11	3	8	11	7	8	7	9	7	****	9	8
15	4	4	2	2	3	3	3	6	6	4	4	4	4	4	5	6	8	13	11	11	17	14	****	1	6
16	0	1	3	5	4	1	6	10	10	10	5	9	7	16	16	15	12	18	15	11	9	15	****	17	9
17	31	22	17	26	23	25	22	19	21	22	25	20	16	20	24	21	21	25	38	35	30	15	****	28	24
18	29	18	12	16	15	10	15	28	28	32	34	34	32	22	24	24	28	28	19	19	13	13	****	24	22
19	34	23	11	14	23	51	45	41	28	41	49	50	45	46	57	39	42	30	24	21	18	28	****	28	34
20	36	29	35	18	23	47	27	34	37	40	31	23	19	24	13	28	38	17	13	18	14	****	7	26	
21	4	6	7	2	3	3	11	14	9	11	10	13	26	18	21	18	16	20	18	8	14	19	****	20	13
22	9	8	5	6	9	8	19	29	19	17	17	16	18	16	12	15	19	12	19	23	13	9	****	10	14
23	8	7	7	5	4	3	4	5	6	10	10	12	17	14	16	15	21	16	13	13	8	13	****	26	11
24	28	9	13	12	7	5	8	9	12	10	10	12	13	13	13	17	24	23	26	19	15	11	****	8	14
25	6	4	4	3	3	2	4	7	8	11	10	11	9	15	16	19	24	29	24	25	16	13	****	10	12
26	7	4	5	4	5	5	6	9	14	15	15	18	15	16	18	20	25	21	29	11	13	8	****	11	13
27	6	6	5	5	4	2	6	10	14	11	12	11	12	11	10	12	18	24	29	15	16	18	****	11	12
28	10	6	5	4	4	5	7	10	15	13	10	10	11	12	13	13	19	21	8	7	13	11	****	12	10
29	6	3	3	4	3	4	6	9	8	7	7	10	8	9	9	13	15	14	16	14	14	9	****	9	9
30	7	3	3	5	4	3	5	10	11	8	8	10	9	12	10	11	15	11	13	11	11	10	****	7	9

MONTHLY STATISTICS:										NO. OF TIMES				
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->			STD GEOM	PERCENT	ABOVE	OBJECTIVE
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
15	15	20	15	42	50	66	81	0	- 131	2	96	0	0	

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : VICTORIA ROAD SUBSTATION MONTH: JULY YEAR : 2010
POLLUTANT : SULPHUR DIOXIDE UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	8	0	1	2	7	12	8	13	5	11	36	10	12	4	3	4	15	6	10	4	1	10	****	10	8
2	2	2	4	7	9	1	2	9	11	6	10	2	4	7	4	8	4	5	5	2	4	6	****	14	6
3	7	3	4	2	3	5	6	11	4	7	6	2	3	3	3	2	3	2	0	0	2	4	****	5	4
4	0	1	2	0	0	1	0	0	1	3	3	0	2	0	2	3	1	2	0	0	1	0	****	3	1
5	0	0	0	1	0	1	0	0	0	1	0	0	11	4	1	1	1	0	0	2	1	1	****	1	1
6	0	0	0	0	0	0	1	3	2	1	1	1	0	0	0	0	2	4	3	3	1	1	****	4	1
7	1	1	1	1	0	0	0	2	6	4	2	0	1	0	2	5	3	1	3	3	4	8	****	4	2
8	0	1	0	4	4	0	0	3	2	5	2	0	1	2	1	1	1	2	0	1	1	1	****	2	2
9	0	1	0	0	2	1	1	1	3	4	3	2	0	0	0	2	0	0	1	5	10	8	****	4	2
10	1	0	0	0	2	6	0	1	4	3	2	7	2	2	9	3	1	3	7	7	9	3	****	5	3
11	2	1	2	2	2	0	2	0	0	0	1	14	0	1	0	3	0	0	0	26	0	0	****	1	2
12	0	0	0	0	1	0	1	0	1	6	3	0	0	0	0	3	3	1	9	2	11	12	****	9	3
13	0	0	0	0	0	0	0	3	18	1	9	0	0	0	0	0	0	0	0	0	0	0	****	1	1
14	0	0	0	0	0	0	0	0	0	10	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	****	1	0
16	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	3	3	0	0	0	0	****	2	1
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	****	2	0
18	0	0	0	0	0	1	20	19	26	37	10	2	14	2	12	0	0	0	0	0	0	0	****	2	6
19	0	0	0	0	0	0	0	1	19	1	7	10	15	2	4	3	9	7	17	5	1	4	****	4	5
20	3	1	0	0	0	0	0	4	6	1	0	0	0	0	0	0	0	0	0	0	0	0	****	1	1
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
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	M	0	1	0	0	0	0	****	1	0
23	0	0	0	0	0	0	0	0	1	4	5	5	7	3	3	2	2	3	0	0	0	0	****	2	2
24	0	0	1	1	1	2	1	1	11	1	12	10	3	2	2	4	7	6	5	4	3	3	****	5	4
25	4	4	4	4	2	2	2	3	32	39	33	11	6	2	2	1	4	6	3	5	2	0	****	2	7
26	2	1	1	6	16	8	152	23	13	45	3	3	2	5	11	8	12	7	5	6	6	9	****	8	15
27	7	4	4	2	3	2	3	3	4	4	5	7	10	7	3	1	1	1	0	0	0	1	****	0	3
28	0	0	0	0	0	1	2	3	3	5	10	6	4	10	14	1	1	0	1	2	0	2	****	3	3
29	2	2	2	1	0	1	1	0	0	1	2	3	3	0	1	0	1	1	0	1	0	4	****	1	1
30	0	0	2	2	0	1	1	1	3	1	5	3	4	7	5	5	3	2	7	6	5	5	****	6	3
31	7	3	4	3	3	2	1	3	5	8	5	6	4	3	3	6	6	6	3	7	7	5	****	5	4

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->		STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR
2	1	1	7	11	17	26	0	- 152	4	96	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : VICTORIA ROAD SUBSTATION MONTH: AUGUST YEAR : 2010
 POLLUTANT : NITROGEN DIOXIDE 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	14	13	11	12	13	15	19	16	12	15	16	13	12	12	7	12	12	13	13	13	12	****	13	13
2	12	12	9	7	7	8	13	16	20	19	18	7	13	15	10	5	10	11	15	16	10	14	****	10	12
3	9	7	6	9	17	17	16	18	17	13	14	22	23	16	15	13	13	13	18	25	31	26	****	23	17
4	21	19	19	15	16	19	20	20	23	25	29	36	48	54	59	38	30	28	23	28	27	41	****	52	30
5	66	51	39	21	42	50	43	48	59	60	56	33	26	30	33	20	34	49	52	22	42	66	****	67	44
6	61	64	61	38	20	19	44	39	35	38	30	24	28	21	23	21	26	32	26	32	47	34	****	23	34
7	28	30	38	46	33	16	16	14	16	19	18	19	17	21	25	26	25	24	24	21	15	14	****	25	23
8	14	8	6	5	5	7	11	14	14	13	12	13	12	13	11	14	17	17	17	12	11	14	****	11	12
9	11	7	4	3	4	9	12	20	22	21	17	16	12	10	10	18	27	32	32	28	26	27	****	23	17
10	22	15	13	8	8	17	32	31	19	21	<-----D----->					13	13	11	18	12	18	18	****	16	17
11	11	19	21	18	23	15	14	19	20	11	16	21	15	17	7	24	26	27	23	27	22	22	****	22	19
12	19	13	18	11	13	22	30	21	20	25	27	28	15	14	16	9	10	11	21	22	24	29	****	34	20
13	27	17	11	14	14	15	26	22	21	18	14	16	12	14	10	11	12	16	15	17	22	25	****	32	17
14	26	23	18	16	18	26	22	20	19	16	15	12	15	12	24	13	11	18	14	22	22	18	****	16	18
15	17	15	11	11	10	11	16	17	19	19	16	15	16	14	12	13	17	18	23	32	31	31	****	32	18
16	22	18	18	15	12	15	18	19	17	26	24	16	15	22	20	21	33	29	28	25	26	27	****	31	22
17	25	17	15	19	18	22	27	29	25	17	13	13	12	10	8	14	23	24	21	23	27	30	****	23	20
18	15	14	11	12	9	10	18	23	26	29	21	20	21	24	28	24	23	16	16	17	14	15	****	16	18
19	9	7	5	4	5	5	9	12	17	16	17	12	11	14	16	16	17	17	16	13	14	14	****	14	12
20	9	6	6	4	3	5	11	18	19	21	19	24	35	22	20	18	16	31	43	68	72	77	****	71	27
21	45	70	61	30	17	11	15	19	19	21	20	19	17	27	31	31	27	41	30	32	29	19	****	20	28
22	16	14	8	6	10	9	13	10	11	14	14	14	13	13	11	12	13	15	14	13	10	11	****	12	12
23	9	6	5	4	3	4	12	18	19	21	14	13	11	15	19	17	20	19	23	22	13	15	****	12	14
24	9	6	4	4	4	6	11	13	14	18	15	11	12	16	18	24	26	29	32	28	28	30	****	33	17
25	23	10	11	12	15	10	24	24	26	26	16	31	30	27	17	20	25	14	36	45	36	36	****	31	24
26	33	39	33	32	31	32	31	30	24	28	27	22	29	29	24	16	15	23	24	46	47	40	****	30	30
27	30	22	13	16	18	10	35	37	43	38	26	21	14	16	19	26	24	18	21	25	27	35	****	22	24
28	14	16	34	44	51	52	52	57	75	89	93	91	99	94	58	68	63	105	135	142	152	145	****	117	80
29	92	57	52	49	81	75	60	55	48	39	36	55	67	55	56	49	53	42	41	53	27	30	****	46	53
30	60	63	54	56	58	63	58	62	76	74	74	61	54	64	71	76	73	98	130	138	111	83	****	70	75
31	54	56	46	35	45	66	68	61	74	78	67	80	74	44	66	65	108	94	120	137	74	108	****	83	74

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----					-----RANGE-----				STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
21	20	27	20	58	74	96	119	3	- 152	2	95	0	0	

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : VICTORIA ROAD SUBSTATION MONTH: SEPTEMBER YEAR : 2010
POLLUTANT : SULPHUR DIOXIDE 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	7	11	13	9	6	6	6	5	6	8	5	4	8	8	14	10	8	8	12	14	19	5	****	1	8
2	1	1	1	10	12	7	6	27	43	30	26	5	5	13	12	19	38	14	19	17	5	2	****	6	14
3	10	1	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	****	1	1
4	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	1	8	2	0	0	5	0	0	0	0	0	0	****	1	1
6	0	1	3	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	****	1	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	****	1	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	****	1	0
9	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	****	1	0
10	0	0	0	0	0	0	0	0	0	0	1	2	1	0	1	0	0	0	0	0	0	0	****	1	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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	****	1	0
13	0	0	0	0	0	0	0	0	8	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	****	1	0
15	0	0	0	0	0	0	0	0	0	0	12	3	3	2	2	2	2	3	3	2	3	2	****	5	2
16	2	2	2	1	1	2	2	5	13	22	36	22	19	7	8	4	5	3	2	1	2	4	****	10	8
17	6	3	5	7	7	6	3	4	10	14	32	7	8	8	6	6	2	5	6	8	7	5	****	8	7
18	5	3	5	5	4	3	5	7	13	15	26	15	16	7	5	4	5	4	2	3	2	2	****	5	7
19	7	9	6	4	4	14	10	5	9	14	14	15	17	12	8	5	4	3	2	2	2	3	****	9	8
20	8	8	10	8	8	9	10	18	23	24	19	17	13	9	5	3	2	2	1	1	1	1	****	4	9
21	1	1	0	0	1	1	1	1	1	1	1	1	1	2	3	2	2	6	1	1	1	1	****	3	1
22	1	0	0	0	1	0	1	1	1	0	1	1	1	1	0	0	0	1	1	1	4	1	****	3	1
23	1	0	1	0	0	0	1	1	2	8	11	6	2	2	1	8	4	3	7	22	15	11	****	26	6
24	16	13	7	7	3	2	2	3	9	5	2	2	2	2	2	2	2	2	2	2	1	2	****	4	4
25	1	1	1	1	0	0	0	1	1	1	1	1	1	0	1	1	1	1	1	2	2	2	****	4	1
26	1	1	0	0	0	0	0	0	1	1	1	1	1	3	1	1	0	0	0	0	0	0	****	2	1
27	1	0	3	2	4	6	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	****	4	2
28	1	1	1	1	2	2	3	12	33	36	20	2	2	1	1	1	1	1	1	1	1	1	****	3	6
29	1	1	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	1	0	1	1	1	1	1	1	1	1	2	2	1	1	1	****	4	1

MONTHLY STATISTICS:											STD GEOM		PERCENT		NO. OF TIMES		
GEOM	ARITH			PERCENTILE					RANGE			DEVIATION	VALID DATA	ABOVE	OBJECTIVE		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR				1-HR	24-HR			
2	1	3	1	8	14	22	29	0	-	43	0	-	14	4	96	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : VICTORIA ROAD SUBSTATION
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: SEPTEMBER
 YEAR : 2010
 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	74	83	77	57	45	47	62	72	82	88	72	58	74	65	76	70	67	82	94	96	117	75	****	34	72
2	39	42	34	52	53	27	48	72	73	71	72	66	60	81	102	122	133	93	117	120	53	55	****	50	71
3	52	17	14	14	13	16	41	72	63	48	35	37	22	28	46	52	59	34	35	23	13	12	****	17	33
4	7	1	0	0	0	9	20	35	45	15	39	36	33	20	33	40	41	26	20	11	9	5	****	12	20
5	1	1	0	0	0	1	26	17	30	8	19	47	32	3	7	25	14	21	17	28	28	25	****	20	16
6	17	26	36	9	1	4	20	26	20	8	7	14	10	18	21	15	17	19	29	11	32	21	****	23	18
7	15	13	13	10	13	16	22	20	22	25	20	17	10	12	10	11	17	16	16	12	15	13	****	21	16
8	14	20	16	9	9	12	19	24	24	26	28	35	42	52	64	77	70	48	24	20	24	24	****	17	30
9	11	16	16	12	22	22	24	51	49	49	48	61	55	41	37	34	27	22	20	17	31	30	****	47	32
10	19	12	8	8	31	33	42	48	52	45	59	61	57	49	32	27	32	18	38	38	22	21	****	23	34
11	36	33	28	17	21	48	47	56	36	26	28	42	37	44	49	36	32	40	50	31	35	31	****	30	36
12	22	16	36	19	30	13	18	36	26	13	24	27	28	23	23	24	18	19	19	25	29	24	****	29	24
13	17	7	13	10	11	13	19	21	25	13	14	15	13	15	18	19	20	20	16	12	15	15	****	13	15
14	11	7	2	1	0	4	14	20	19	17	17	18	17	19	26	30	24	26	30	18	13	10	****	13	15
15	10	3	1	2	2	8	19	21	19	19	17	17	18	22	19	19	19	30	25	25	24	19	****	27	17
16	14	5	10	8	7	14	26	28	31	32	30	27	24	14	15	13	14	17	12	22	27	28	****	38	20
17	23	18	23	22	22	14	20	28	24	29	21	24	28	25	21	7	23	29	47	41	31	****	27	25	
18	21	15	15	13	12	15	30	30	33	35	42	45	46	29	13	23	18	23	16	24	33	28	****	25	25
19	34	43	21	18	15	57	50	32	34	48	57	62	57	50	51	31	25	25	21	18	18	24	****	55	37
20	47	26	13	15	14	19	23	41	48	53	51	45	58	47	48	39	54	54	49	25	36	44	****	17	38
21	3	2	17	4	0	3	11	21	30	38	30	29	42	41	40	39	52	59	51	35	29	38	****	23	28
22	6	2	0	0	0	1	18	27	26	25	31	31	20	26	22	28	27	30	36	49	37	11	****	17	20
23	5	0	0	0	0	0	15	8	15	27	36	29	8	4	8	46	33	43	50	79	71	73	****	73	27
24	62	54	50	36	0	0	18	37	40	36	9	7	6	10	8	7	23	21	23	10	2	5	****	13	21
25	0	0	0	0	0	0	1	3	15	17	8	8	8	9	13	13	17	15	22	15	16	22	****	15	9
26	5	2	0	0	0	0	1	5	6	9	9	5	10	27	5	2	6	6	5	15	23	30	****	9	8
27	1	8	31	24	52	53	29	43	23	22	15	6	4	2	9	0	4	22	24	11	9	2	****	8	17
28	0	0	5	1	13	14	34	45	55	53	42	18	17	18	21	23	24	21	47	22	12	6	****	11	22
29	3	0	0	0	0	0	2	11	21	14	9	12	9	13	9	15	11	15	16	9	7	5	****	5	8
30	0	0	0	0	0	0	4	13	15	22	15	21	12	12	17	24	36	58	39	52	51	16	****	8	18

MONTHLY STATISTICS:											NO. OF TIMES				
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->				STD GEOM	PERCENT	ABOVE	OBJECTIVE
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR		
17	21	26	21	52	66	80	95	0	- 133	4	96	0	0		

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : QUEEN MARY HOSPITAL
POLLUTANT : SULPHUR DIOXIDE
MONTH: JULY
YEAR : 2010
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	7	3	2	5	7	7	7	11	6	3	32	12	8	5	4	4	12	8	10	5	6	16	****	7	8
2	7	6	11	14	6	2	5	6	12	8	8	5	6	11	9	4	5	3	4	1	3	3	****	7	6
3	6	4	6	5	10	10	8	9	8	8	14	10	6	7	6	11	10	13	9	17	4	5	****	4	8
4	3	6	7	5	1	6	2	1	5	7	7	4	7	3	5	4	1	2	7	6	6	6	****	7	5
5	2	3	6	8	7	5	3	5	3	6	4	3	8	43	8	4	2	4	5	5	2	1	****	1	6
6	20	5	2	1	18	3	5	9	9	4	4	5	6	2	3	0	4	5	6	3	2	****	3	6	
7	2	2	4	3	5	5	6	10	6	11	5	4	4	4	5	7	6	6	8	6	3	8	****	4	5
8	2	3	2	4	7	3	4	6	6	9	8	6	3	3	2	2	7	7	2	1	1	3	****	1	4
9	1	4	2	1	2	4	3	10	10	11	8	3	3	2	2	5	4	5	3	9	9	8	****	5	5
10	4	3	2	3	4	7	3	3	6	6	5	7	5	3	12	15	5	6	5	6	6	3	****	4	5
11	4	3	5	4	6	7	7	7	3	8	6	16	8	9	3	4	2	5	3	3	4	4	****	2	5
12	4	4	5	6	12	6	8	6	9	4	6	7	8	9	4	7	8	9	11	7	11	15	****	10	8
13	6	5	3	4	4	3	1	2	8	2	3	1	0	0	0	0	2	3	3	2	3	3	****	1	3
14	0	1	2	2	1	0	1	1	15	22	7	2	0	0	0	0	0	0	0	0	1	1	****	1	3
15	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3	2	****	1	1
16	2	0	0	0	1	0	0	0	1	0	0	1	0	1	0	1	3	2	0	0	1	1	****	1	1
17	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	1	3	****	5	1
18	0	0	0	0	0	0	3	4	2	41	20	4	15	3	8	1	1	2	2	2	0	0	****	2	5
19	2	1	3	0	0	0	0	1	37	24	18	8	18	11	10	8	10	18	30	15	7	14	****	9	11
20	15	6	3	0	0	0	0	2	10	33	4	2	3	3	2	3	2	2	3	3	3	3	****	2	5
21	0	0	0	1	0	1	3	2	3	2	0	0	0	0	0	0	0	0	0	0	1	0	****	0	1
22	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	****	0	0
23	0	0	0	0	0	0	0	1	8	9	6	7	8	2	4	3	1	1	0	0	0	1	****	1	2
24	1	1	2	2	1	1	1	3	15	26	12	16	5	2	1	3	4	7	4	2	1	1	****	1	5
25	3	4	4	3	1	1	2	7	9	44	39	9	15	1	1	1	2	2	2	7	3	1	****	1	7
26	1	2	2	2	2	1	12	27	18	8	2	1	1	3	M	5	11	6	8	9	6	5	****	6	6
27	6	5	4	4	5	4	4	4	7	6	8	11	13	2	2	1	5	12	5	6	12	7	****	4	6
28	10	9	18	4	5	6	6	15	4	4	5	17	8	3	12	4	0	0	0	0	36	63	****	35	11
29	17	9	8	4	7	5	6	6	6	6	18	12	8	5	4	5	5	3	6	2	4	10	****	14	7
30	9	5	7	10	10	10	3	7	5	6	2	10	16	8	12	10	7	4	8	5	5	4	****	6	7
31	3	2	3	1	4	4	3	6	6	8	4	8	6	4	3	13	3	8	5	11	10	5	****	8	6

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->					STD GEOM	PERCENT	NO. OF TIMES				
MEAN	MEDIAN	50	90	95	98	99	1-HR					24-HR	VALID DATA	1-HR	24-HR			
3	4	4	10	15	21	34	0	-	63			0	-	11	4	96	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : QUEEN MARY HOSPITAL
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: JULY
 YEAR : 2010
 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	7	5	8	6	8	5	1	2	4	17	8	8	3	2	1	8	6	11	12	8	17	****	12	7
2	8	5	7	8	3	0	0	1	6	3	3	2	2	6	5	1	5	5	6	2	5	6	****	11	4
3	14	7	5	2	6	7	4	4	5	5	10	4	2	1	1	4	4	7	5	4	3	6	****	6	5
4	0	2	2	2	0	3	1	1	4	5	3	0	0	0	2	2	0	3	3	4	3	4	****	7	2
5	0	0	0	2	2	0	2	2	2	4	3	1	3	1	4	1	1	1	2	3	2	0	****	2	2
6	1	1	0	0	0	3	3	9	8	9	2	3	2	3	0	3	1	6	1	3	2	1	****	7	3
7	1	3	6	1	1	5	8	9	8	11	1	4	1	0	2	3	1	3	8	7	6	9	****	5	4
8	0	0	0	2	5	2	5	8	4	7	5	1	0	1	0	0	6	7	5	1	2	2	****	4	3
9	1	1	0	0	1	1	5	12	8	7	5	0	0	0	0	3	2	9	7	13	13	8	****	8	5
10	4	0	0	1	2	6	0	3	3	1	1	2	0	0	3	2	3	2	5	7	8	5	****	8	3
11	5	1	3	0	6	7	7	0	0	9	6	9	1	1	1	3	2	5	6	8	8	10	****	10	5
12	7	5	3	2	13	4	7	7	6	3	6	5	6	6	5	5	7	9	12	10	17	14	****	14	7
13	9	7	3	4	3	1	0	0	11	3	7	4	2	2	2	4	5	5	7	4	6	8	****	5	4
14	1	1	4	3	1	0	3	6	22	29	22	13	8	8	5	10	6	11	13	23	13	10	****	9	10
15	6	0	0	0	0	0	1	1	1	0	2	7	1	3	1	3	4	6	7	5	8	4	****	6	3
16	5	1	2	1	2	3	2	1	2	2	2	1	2	1	3	4	5	9	4	3	5	5	****	8	3
17	4	2	2	2	4	4	2	2	2	3	3	1	1	2	2	3	3	6	8	5	4	9	****	19	4
18	8	3	2	4	1	1	11	8	6	30	24	9	13	8	11	8	6	7	10	11	5	9	****	13	9
19	13	23	18	1	1	0	1	3	26	26	17	10	14	13	18	16	18	26	37	25	14	21	****	13	15
20	22	13	10	0	1	1	2	11	21	41	20	12	13	13	6	15	19	10	8	14	30	28	****	7	14
21	2	2	2	4	2	3	9	7	8	10	6	5	8	8	2	3	7	8	8	8	7	5	****	3	6
22	2	2	1	1	0	1	2	2	3	2	3	2	2	2	1	6	5	5	4	2	3	2	****	4	2
23	3	2	2	2	2	2	3	4	7	11	7	7	9	6	5	5	6	4	5	3	4	7	****	10	5
24	7	7	8	7	5	6	8	14	21	20	19	30	27	17	11	20	13	14	12	13	8	8	****	5	13
25	7	8	8	6	3	3	8	18	22	27	29	18	22	12	9	10	14	16	15	17	13	6	****	8	13
26	9	12	8	8	13	8	32	42	35	28	19	14	10	10	M	13	17	16	20	20	17	13	****	14	17
27	9	8	7	5	8	9	9	10	13	12	14	15	11	2	3	4	15	15	12	11	12	10	****	9	10
28	11	10	17	6	6	8	8	17	10	10	11	12	11	7	16	13	6	9	19	3	20	30	****	29	13
29	26	16	11	10	13	13	16	15	16	18	24	18	12	10	10	9	11	13	19	19	15	23	****	27	16
30	25	15	12	10	13	13	10	11	10	11	8	10	12	9	11	11	11	13	18	17	20	15	****	16	13
31	9	6	8	3	10	10	10	9	11	12	13	14	9	8	8	13	6	13	16	21	20	18	****	19	12

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----					-----RANGE-----					STD GEOM	PERCENT	NO. OF TIMES				
MEAN	MEDIAN	50	90	95	98	99	1-HR					24-HR	VALID DATA	1-HR	24-HR			
5	6	6	17	21	27	30	0	-	42			2	-	17	3	96	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : QUEEN MARY HOSPITAL
 POLLUTANT : SULPHUR DIOXIDE
 MONTH: AUGUST
 YEAR : 2010
 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	4	5	3	6	4	5	4	5	7	26	31	9	6	2	2	6	4	2	3	2	1	****	3	6
2	2	5	6	3	3	5	6	5	3	1	0	4	10	18	5	2	4	5	6	5	4	7	****	4	5
3	3	4	4	5	12	12	13	7	5	2	3	7	16	6	8	5	8	6	8	5	6	5	****	6	7
4	5	6	5	3	7	5	2	10	20	27	18	25	53	38	37	16	18	17	14	9	10	13	****	18	16
5	24	20	13	16	20	49	32	21	30	48	19	8	10	12	10	7	3	3	6	0	1	3	****	8	16
6	11	17	5	3	3	3	4	6	4	3	5	5	3	3	2	1	2	2	1	3	2	2	****	1	4
7	1	2	2	5	3	3	3	3	3	3	3	3	3	2	2	2	2	3	4	4	3	3	****	0	3
8	0	0	0	0	0	2	3	3	3	2	4	4	3	2	2	2	3	3	3	2	2	2	****	1	2
9	1	1	1	2	2	3	2	2	3	2	2	16	6	2	1	1	1	0	0	1	2	5	****	6	3
10	7	5	6	4	2	4	7	8	9	17	14	15	10	4	4	4	5	12	5	5	8	****	2	7	
11	1	7	11	9	11	6	2	3	3	5	3	6	6	2	11	5	4	2	2	1	1	1	****	3	5
12	4	4	14	6	7	13	4	5	3	6	13	12	5	16	17	8	7	5	7	4	8	14	****	15	9
13	16	4	2	7	5	5	7	11	11	10	10	8	7	13	5	13	9	4	4	4	3	8	****	7	7
14	7	10	7	7	3	9	6	3	7	9	8	14	5	6	20	5	2	1	2	7	5	8	****	4	7
15	6	6	15	3	2	2	4	10	10	21	13	8	8	4	3	2	13	7	3	5	4	4	****	7	7
16	8	3	5	4	2	7	6	2	1	9	4	1	3	9	2	0	3	10	5	3	2	5	****	5	4
17	8	4	4	8	8	12	13	9	7	3	2	4	3	2	2	3	14	21	1	2	12	5	****	2	6
18	2	1	2	1	1	0	1	1	6	5	3	2	1	2	1	0	1	0	0	0	1	2	****	2	2
19	1	1	1	1	0	1	2	2	1	0	1	1	1	0	0	0	0	1	0	1	1	1	****	1	1
20	0	0	0	0	0	0	0	2	1	1	2	3	3	1	1	1	2	2	2	2	3	6	****	8	2
21	15	30	19	6	5	3	3	2	3	3	2	2	3	3	3	6	3	3	3	3	6	5	****	3	6
22	2	3	1	3	2	3	2	3	3	3	3	3	3	5	4	2	2	5	2	1	1	1	****	1	3
23	1	1	2	1	1	1	1	2	1	1	2	1	1	2	1	0	1	1	1	1	0	2	****	0	1
24	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	5	2	3	2	****	1	1
25	1	1	3	4	6	3	5	5	8	14	13	35	33	17	11	14	17	6	18	20	5	3	****	7	11
26	3	11	11	8	13	14	7	8	6	18	74	16	15	12	10	4	3	10	10	2	1	1	****	1	11
27	0	0	2	6	2	0	0	0	22	35	31	17	6	7	19	11	16	12	12	10	9	7	****	9	10
28	9	10	10	16	42	52	47	55	67	52	44	29	53	44	7	4	2	5	3	5	9	9	****	5	25
29	3	4	3	21	36	25	26	17	6	6	7	10	22	17	22	25	22	17	1	1	3	3	****	2	13
30	11	21	18	18	25	19	12	16	27	21	23	16	14	23	36	33	33	33	38	41	14	7	****	6	22
31	9	15	22	17	20	27	48	16	11	13	8	10	15	13	15	16	18	29	37	34	37	44	****	25	22

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----						-----RANGE-----				STD GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	50	90	95	98	99	1-HR			24-HR	DEVIATION	VALID DATA	1-HR	24-HR		
4	4	4	18	29	42	49	0	-	74	1	-	25	4	96	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : QUEEN MARY HOSPITAL
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: AUGUST
 YEAR : 2010
 UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	9	10	8	5	12	8	12	10	8	9	19	23	12	7	5	5	7	6	5	7	6	5	****	7	9
2	7	8	8	5	5	6	7	7	8	7	4	12	12	14	9	7	8	10	11	13	13	14	****	12	9
3	8	7	9	12	23	19	18	17	18	6	12	16	23	16	15	12	13	14	22	18	17	14	****	16	15
4	13	13	12	9	15	14	10	18	21	25	29	29	42	35	47	33	30	24	23	16	14	20	****	35	23
5	57	44	27	31	60	59	40	50	64	76	70	12	8	12	7	12	6	24	42	9	31	47	****	53	36
6	55	56	24	14	7	6	10	18	20	15	19	15	14	12	11	14	13	26	17	20	22	20	****	9	19
7	10	17	24	31	14	5	7	10	14	16	10	14	13	12	17	15	7	6	11	15	10	7	****	10	13
8	10	5	6	5	4	6	7	10	6	6	7	8	6	2	2	1	1	2	4	12	12	11	****	12	6
9	10	3	1	1	0	2	2	11	11	9	16	29	20	19	9	4	6	2	5	6	6	9	****	11	8
10	11	8	6	3	0	4	11	8	17	19	14	14	10	7	7	8	8	12	22	15	18	19	****	9	11
11	4	7	13	10	13	8	1	11	16	15	8	5	23	30	27	6	2	2	8	11	2	4	****	8	10
12	7	5	14	4	5	13	6	15	12	17	12	19	4	10	13	11	8	15	14	7	11	17	****	28	12
13	21	4	0	7	4	6	12	17	17	15	13	9	2	10	4	8	11	6	6	7	15	15	****	13	10
14	9	11	8	8	2	7	7	5	9	10	7	10	8	10	20	8	6	8	17	17	15	16	****	11	10
15	12	10	15	3	1	1	7	14	16	20	11	7	9	2	3	2	13	12	11	11	12	10	****	13	9
16	9	5	5	5	1	8	11	5	3	19	11	6	6	19	9	0	8	18	13	8	4	7	****	12	8
17	15	5	4	10	11	14	11	8	7	10	5	5	3	3	4	4	16	23	3	2	22	21	****	8	9
18	2	1	1	0	0	1	1	0	14	17	14	11	10	8	10	11	15	9	10	14	10	9	****	8	8
19	5	3	1	1	0	1	4	5	1	1	11	3	1	1	4	5	7	10	1	4	4	4	****	4	3
20	1	0	0	0	0	0	1	5	10	6	5	11	2	0	1	3	15	7	28	42	50	41	****	47	12
21	79	84	46	5	1	2	5	6	8	9	5	3	4	6	10	14	21	18	9	19	18	7	****	11	17
22	2	2	1	0	0	1	1	2	0	2	3	1	3	1	1	0	0	3	5	4	1	1	****	5	2
23	0	0	0	0	0	0	1	6	11	10	1	0	0	0	0	0	0	1	0	0	0	0	****	1	1
24	0	0	1	0	0	1	2	1	1	3	0	0	1	3	2	3	6	14	5	5	5	5	****	16	3
25	5	2	6	8	9	3	8	6	13	22	18	24	26	20	21	17	18	21	28	27	10	13	****	13	15
26	4	29	22	18	21	21	9	14	12	17	27	17	13	13	17	7	7	16	30	5	4	1	****	0	14
27	0	0	12	35	10	0	0	35	38	29	22	11	6	16	14	19	23	25	25	12	6	****	9	15	
28	9	14	39	44	51	52	53	58	75	87	83	50	80	71	29	21	15	15	15	42	115	121	****	41	51
29	37	47	28	73	76	61	57	50	41	39	29	35	46	36	45	49	43	35	15	37	21	18	****	33	41
30	49	59	37	44	59	61	55	54	69	69	73	65	41	47	53	46	46	82	118	149	65	35	****	64	63
31	71	51	36	26	65	68	66	38	42	50	46	51	40	29	39	44	54	58	57	73	77	98	****	77	55

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----					-----RANGE-----		STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	ABOVE OBJECTIVE	
9	10	10	45	59	76	83	0	- 149	4	96	1-HR	
											24-HR	
											0	
											0	

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : QUEEN MARY HOSPITAL
 POLLUTANT : SULPHUR DIOXIDE
 MONTH: SEPTEMBER
 YEAR : 2010
 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	20	26	33	24	22	22	22	20	21	23	18	16	20	29	44	39	35	38	44	47	45	15	****	5	27
2	8	12	11	26	24	21	21	41	63	48	48	15	16	33	35	44	39	30	42	32	15	14	****	18	29
3	26	17	15	21	14	23	15	10	10	9	7	6	11	4	6	3	5	5	1	2	2	1	****	1	9
4	2	1	2	1	1	3	4	3	8	5	2	4	5	3	2	2	2	1	1	1	0	1	****	1	2
5	1	1	1	1	2	2	5	2	2	2	3	26	27	5	3	11	3	1	1	2	2	2	****	3	5
6	6	9	19	8	4	3	1	3	4	1	3	6	4	7	8	8	4	7	10	4	5	3	****	3	6
7	4	5	11	6	5	8	8	4	3	9	6	7	9	12	8	6	7	8	4	2	5	5	****	11	7
8	5	5	6	13	7	11	11	16	30	14	14	25	29	34	38	48	46	23	10	6	5	7	****	<--	18
9	T	----->																							
10	5	5	8	3	17	11	9	13	7	7	19	11	16	21	32	30	32	14	8	8	6	7	****	2	13
11	2	9	10	2	4	8	9	6	5	2	3	3	1	2	14	10	5	3	11	9	9	10	****	6	6
12	7	3	12	6	8	5	4	36	19	15	10	6	6	2	1	2	3	1	2	7	5	16	****	25	9
13	7	2	12	2	2	8	3	7	47	17	3	4	2	1	2	2	3	2	2	3	3	2	****	2	6
14	2	3	2	1	1	2	2	2	2	1	1	1	1	2	2	6	1	0	2	1	2	2	****	2	2
15	1	1	1	2	2	2	2	1	2	2	2	1	1	1	1	0	2	1	0	1	1	1	****	2	1
16	1	1	0	2	5	3	7	6	20	42	40	33	33	14	19	12	11	10	13	5	7	9	****	9	13
17	11	7	13	18	19	18	8	6	11	27	43	22	24	29	16	12	8	15	12	14	14	9	****	10	16
18	11	8	12	6	6	11	17	15	27	14	30	25	32	16	10	17	17	9	8	7	9	6	****	7	14
19	12	21	12	8	18	25	14	7	25	30	27	34	49	47	38	36	34	22	13	7	8	9	****	15	22
20	21	28	23	19	17	24	33	49	54	54	47	39	31	32	22	20	8	8	10	3	5	10	****	4	24
21	4	2	1	1	2	1	2	4	3	2	3	3	33	50	28	10	12	77	8	2	2	5	****	4	11
22	2	1	1	0	2	2	5	2	2	1	2	2	1	0	1	0	0	3	3	3	2	2	****	2	2
23	1	1	1	2	1	2	1	1	3	16	47	32	8	3	5	25	24	9	8	15	16	11	****	7	10
24	24	13	15	5	4	3	3	4	3	4	3	3	2	2	2	3	4	3	2	2	2	2	****	1	5
25	1	2	2	2	1	1	1	2	2	1	2	2	1	1	1	1	2	2	2	5	5	4	****	2	2
26	1	2	2	1	2	2	7	4	3	3	4	5	5	21	3	2	2	2	2	2	3	2	****	2	4
27	3	3	3	2	5	3	2	2	4	4	17	10	4	2	1	1	1	1	1	1	2	2	****	2	3
28	2	2	2	2	2	2	2	25	35	58	37	14	11	3	3	4	2	2	2	2	3	3	****	4	10
29	3	3	2	2	2	2	3	3	2	2	2	2	<-----	D	----->								****	2	2
30	2	2	1	2	2	1	2	3	2	3	3	3	2	1	2	2	3	3	5	2	5	3	****	2	2

MONTHLY STATISTICS:													NO. OF TIMES			
GEOM	ARITH		-----PERCENTILE----->						-----RANGE----->				STD GEOM	PERCENT	ABOVE	OBJECTIVE
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR			
5	5	10	5	27	36	47	49	0	- 77	3	94	0	0			

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : QUEEN MARY HOSPITAL
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: SEPTEMBER
 YEAR : 2010
 UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN																		
1	66	68	75	50	36	41	50	51	55	70	72	62	45	43	46	41	38	50	74	86	110	56	****	19	57																		
2	34	49	29	55	42	34	45	64	70	73	78	47	44	70	87	90	87	65	97	92	38	49	****	43	60																		
3	54	30	21	24	13	17	15	13	27	31	21	20	24	23	17	7	9	13	4	4	7	3	****	5	18																		
4	4	3	1	1	1	5	12	10	13	14	14	10	8	15	26	27	39	28	18	18	16	15	****	12	13																		
5	10	7	5	5	9	8	15	6	9	5	9	34	36	16	14	25	20	17	10	18	19	18	****	9	14																		
6	8	14	30	7	2	1	0	5	16	4	4	7	4	8	11	15	14	16	17	8	16	6	****	6	10																		
7	6	7	11	5	5	7	12	9	4	5	6	7	6	5	5	4	10	10	12	11	10	9	****	12	8																		
8	6	3	3	7	3	10	15	21	24	22	29	30	36	53	64	74	75	47	15	7	6	14	****	<--	26																		
9	T	----->																				50	48	61	51	39	27	29	25	30	26	18	9	8	****	24							
10	1	0	3	2	20	19	18	20	18	21	46	34	32	30	31	32	42	17	13	15	8	10	****	6	19																		
11	3	14	19	5	15	28	38	46	18	3	13	32	9	32	47	32	16	11	30	15	23	20	****	13	21																		
12	15	6	24	10	10	10	9	26	19	12	13	8	10	5	7	16	13	3	13	18	16	15	****	22	13																		
13	10	2	12	9	6	12	7	11	28	18	5	12	6	3	5	5	6	4	6	7	8	12	****	6	9																		
14	5	4	3	4	4	6	9	14	20	10	11	14	8	17	20	28	19	23	21	33	17	15	****	22	14																		
15	14	7	6	6	5	8	5	15	18	19	16	11	8	12	7	6	7	10	7	5	7	6	****	6	9																		
16	2	2	3	10	21	20	22	16	29	40	30	27	26	16	22	20	21	24	25	18	17	13	****	17	19																		
17	17	13	25	22	19	25	11	13	20	25	30	23	24	31	28	28	24	38	36	33	33	24	****	19	24																		
18	22	19	18	10	14	21	30	27	31	31	35	43	44	28	20	30	28	24	24	22	20	16	****	17	25																		
19	20	39	29	17	27	45	34	17	31	42	37	40	45	52	49	36	25	29	28	18	19	26	****	31	32																		
20	32	25	17	12	9	21	24	32	39	34	30	28	20	32	28	29	22	20	17	3	10	23	****	5	22																		
21	1	1	4	4	0	0	2	9	10	3	11	10	21	30	24	21	20	39	7	1	15	16	****	15	12																		
22	6	3	2	2	4	4	10	6	6	3	5	5	4	4	6	6	14	36	45	26	13	****	13	10																			
23	10	4	8	8	9	9	9	7	6	21	37	33	25	13	27	60	62	54	54	68	65	65	****	63	31																		
24	66	54	40	11	13	10	12	19	24	24	21	20	18	11	7	12	13	10	13	12	23	22	****	15	20																		
25	13	13	8	6	9	8	11	16	21	18	17	16	10	8	11	17	19	22	23	36	28	20	****	17	16																		
26	16	16	13	7	5	6	18	18	17	21	28	20	18	37	18	12	15	8	17	20	20	25	****	16	17																		
27	13	6	14	8	20	12	11	27	36	21	39	36	34	23	11	20	18	29	14	31	14	11	****	9	20																		
28	6	13	14	11	13	12	16	36	47	50	47	31	29	19	17	18	12	18	19	27	27	16	****	16	22																		
29	13	9	7	5	5	6	9	17	18	21	19	15	<-----D----->			28	23	20	16	14	****	13	14																				
30	13	10	7	6	8	7	8	19	23	21	17	15	15	13	13	15	17	30	29	25	34	33	****	8	17																		

MONTHLY STATISTICS:											NO. OF TIMES						
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->				STD GEOM	PERCENT	ABOVE OBJECTIVE			
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR			
15	17	21	17	43	55	71	82	0	-	110	8	-	60	2	94	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : AP LEI CHAU
 POLLUTANT : SULPHUR DIOXIDE
 MONTH: JULY
 YEAR : 2010
 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	36	13	18	28	36	45	22	15	16	14	27	21	18	20	10	8	16	9	17	11	10	32	****	25	20
2	16	12	14	14	16	8	12	21	17	15	19	12	11	13	9	5	8	8	5	6	19	13	****	29	13
3	18	8	5	5	15	29	16	13	14	5	10	9	5	11	11	5	12	6	6	3	7	14	****	14	10
4	7	9	9	6	8	9	5	3	4	14	13	5	11	8	9	7	4	4	6	5	6	5	****	11	7
5	4	4	11	7	7	6	5	8	8	25	15	5	7	12	6	7	4	4	10	7	7	7	****	13	8
6	7	7	7	5	6	6	11	9	8	8	8	6	5	3	2	2	1	0	0	4	4	2	****	5	5
7	2	2	4	6	11	6	5	5	6	7	3	2	4	3	2	2	2	2	8	7	12	11	****	12	5
8	5	10	5	9	17	6	5	7	7	11	8	7	2	4	4	3	8	8	7	8	9	10	****	12	7
9	7	10	8	7	5	5	7	9	9	10	7	4	6	5	6	12	3	6	8	12	18	10	****	11	8
10	7	7	4	5	8	11	6	10	15	14	4	10	4	2	15	5	6	3	7	10	7	7	****	10	8
11	11	6	11	6	12	10	9	10	7	11	10	29	2	7	3	6	3	4	8	9	14	11	****	9	9
12	11	6	9	8	17	7	9	8	14	9	8	10	9	4	5	3	15	7	13	6	12	17	****	16	10
13	8	7	4	5	5	4	3	6	8	6	8	3	2	1	0	0	2	2	4	5	5	3	****	6	4
14	2	3	3	5	3	2	2	2	3	1	1	0	0	0	0	0	0	0	1	1	2	1	****	6	2
15	1	0	1	1	1	2	3	2	3	3	4	2	1	2	3	4	1	2	6	4	6	7	****	11	3
16	6	3	4	3	3	3	3	5	4	3	4	4	3	3	2	5	4	2	2	1	2	****	7	4	
17	2	2	2	2	2	1	1	0	1	2	1	0	2	2	0	0	0	2	3	3	3	4	****	13	2
18	2	5	3	1	1	1	13	31	14	6	4	3	6	3	3	1	3	7	9	8	6	5	****	15	6
19	5	8	14	5	6	5	5	10	5	4	11	14	25	17	12	6	8	7	20	10	8	10	****	14	10
20	21	15	11	7	4	3	4	3	5	5	4	4	3	3	2	3	4	3	7	6	5	4	****	8	6
21	2	2	2	2	3	4	4	3	3	4	2	1	2	1	1	1	1	1	1	2	1	1	****	6	2
22	2	2	2	2	2	3	3	3	3	3	4	4	4	3	5	6	4	3	1	2	3	3	****	9	3
23	4	3	4	4	3	3	2	6	6	7	16	18	20	12	9	6	5	6	5	4	4	4	****	8	7
24	4	4	5	4	2	4	1	1	1	1	0	0	1	1	1	3	11	5	1	2	4	****	5	3	
25	6	7	5	4	4	4	2	3	12	14	1	2	0	0	0	0	0	1	7	7	4	3	****	8	4
26	3	3	2	3	25	7	2	4	36	32	2	2	2	4	5	13	9	8	9	12	21	38	****	28	12
27	22	20	9	5	7	5	7	8	9	8	7	13	9	16	12	17	8	11	8	5	3	6	****	11	10
28	11	12	12	12	3	6	9	6	8	8	12	15	13	7	6	4	2	2	4	4	12	8	****	13	8
29	23	13	13	6	8	6	7	6	10	7	14	14	11	6	6	2	3	4	7	2	2	5	****	31	9
30	21	7	18	7	5	6	2	15	9	8	4	8	4	4	7	4	3	6	12	17	16	12	****	19	9
31	7	6	6	11	7	9	7	28	11	19	3	6	7	3	2	12	4	6	2	8	5	5	****	9	8

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----					-----RANGE-----				STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
5	6	6	14	19	28	31	0	-	45	3	96	0	0	

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : AP LEI CHAU
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: JULY
 YEAR : 2010
 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	29	9	17	20	24	24	15	12	11	6	14	21	18	18	8	14	19	10	17	9	10	31	****	15	16
2	14	13	15	15	17	4	9	14	12	13	16	17	16	17	11	13	9	15	6	7	21	18	****	20	14
3	14	10	6	6	13	17	13	11	13	7	13	13	12	11	11	12	19	7	5	3	8	17	****	8	11
4	5	8	6	7	12	15	2	5	3	16	15	8	10	9	9	5	5	5	8	6	8	3	****	6	8
5	1	4	7	5	6	5	4	10	9	21	11	7	13	14	15	14	8	7	6	3	5	2	****	4	8
6	1	4	1	0	2	2	12	9	14	16	19	8	3	11	14	14	5	0	1	6	6	2	****	6	7
7	1	1	3	5	1	2	7	10	9	9	10	9	7	6	9	8	7	5	6	6	14	11	****	5	7
8	2	4	1	7	13	2	4	9	9	14	12	6	3	4	6	10	10	10	4	3	3	5	****	1	6
9	1	4	3	4	1	1	5	13	9	10	10	4	6	4	3	10	5	5	7	11	21	11	****	7	7
10	6	4	1	3	5	7	7	8	12	12	4	10	7	7	12	11	8	9	7	13	4	8	****	8	8
11	10	4	9	3	8	10	10	9	4	8	7	14	4	6	3	7	7	8	7	11	15	12	****	7	8
12	10	6	6	5	17	3	7	5	10	8	10	10	8	6	7	6	13	10	11	7	10	15	****	12	9
13	6	5	2	3	3	2	1	9	6	3	5	1	0	0	0	0	3	3	6	2	3	3	****	2	3
14	1	1	1	4	1	1	3	2	2	0	4	1	0	0	0	3	1	2	2	9	1	0	****	2	2
15	1	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	2	0	0	1	1	****	2	1
16	1	0	0	0	0	2	1	2	0	0	0	0	0	1	0	3	4	2	11	2	3	3	****	10	2
17	7	1	1	0	0	2	2	1	1	0	2	4	4	0	0	0	0	4	3	2	3	8	****	24	3
18	22	29	16	8	3	5	16	19	14	2	1	1	3	0	0	0	1	10	11	11	2	0	****	10	8
19	1	8	10	0	3	2	5	7	1	1	7	12	15	15	14	6	8	5	18	5	1	8	****	10	7
20	16	10	1	2	1	0	4	11	3	1	0	0	0	0	0	0	0	0	0	1	9	6	****	3	3
21	0	0	0	0	1	1	1	1	1	4	1	1	1	0	0	1	0	0	0	1	1	0	****	1	1
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	5	0	0	0	0	0	****	1	0
23	0	0	0	0	0	0	0	5	6	4	11	12	8	3	3	3	1	1	0	2	3	3	****	7	3
24	2	2	5	4	1	3	11	5	3	0	0	0	0	1	1	3	12	6	3	3	7	****	4	3	
25	7	5	2	2	7	6	11	11	11	11	0	0	1	0	0	1	0	15	14	3	1	****	4	5	
26	3	2	7	8	37	11	6	14	35	35	1	0	0	3	4	3	8	7	10	15	15	****	20	11	
27	17	13	5	0	5	2	3	4	7	5	6	11	5	6	6	8	9	7	4	2	0	2	****	7	6
28	7	8	6	5	1	1	3	2	2	4	7	4	6	2	2	2	13	7	28	31	22	22	****	11	8
29	13	8	5	2	5	1	5	5	8	6	13	9	8	7	9	5	5	11	6	6	13	28	****	25	9
30	15	14	15	3	2	2	0	8	4	3	3	3	2	2	6	2	2	3	13	15	11	4	****	8	6
31	0	0	0	2	1	3	6	14	4	10	1	4	4	1	0	5	0	6	2	5	1	1	****	3	3

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----						-----RANGE-----				STD GEOM	PERCENT	NO. OF TIMES			
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR		DEVIATION	VALID DATA	1-HR	24-HR			
3	5	6	5	14	17	22	28	0	-	37	0	-	16	4	96	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : AP LEI CHAU
POLLUTANT : SULPHUR DIOXIDE
MONTH: AUGUST
YEAR : 2010
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	7	6	5	8	5	9	5	4	10	26	18	10	8	4	4	8	3	6	5	6	5	****	11	8								
2	6	9	9	7	7	8	10	11	10	8	7	8	12	13	9	8	9	12	14	14	9	16	****	13	10								
3	10	11	9	9	19	11	22	18	14	12	16	17	16	9	16	5	17	8	14	14	8	12	****	15	13								
4	8	7	9	12	13	15	6	10	17	18	19	31	50	41	40	16	15	12	15	5	6	20	****	35	18								
5	23	30	27	22	17	18	22	28	35	20	3	5	7	9	7	1	0	2	4	1	2	2	****	14	13								
6	7	7	9	4	2	2	2	3	3	2	3	<-----D----->										5	5	6	8	7	****	7					
7	3	5	10	6	6	6	5	4	4	4	5	4	4	5	4	3	3	5	6	8	5	4	****	3	5								
8	1	0	0	0	2	1	2	2	2	2	4	4	1	3	1	1	2	5	3	1	2	2	****	2	2								
9	2	1	2	0	1	3	3	2	3	2	2	1	1	1	1	0	0	0	2	5	11	8	****	10	3								
10	29	11	37	20	10	22	40	34	18	27	20	53	20	15	4	10	4	5	8	4	8	9	****	8	18								
11	0	13	25	28	21	6	1	0	1	2	6	4	0	0	0	0	2	2	0	0	0	0	****	1	5								
12	0	0	7	2	2	8	3	1	0	9	0	18	5	61	31	2	1	1	14	13	13	27	****	54	12								
13	46	9	12	32	26	22	25	31	46	12	6	8	7	21	10	9	5	7	14	8	10	25	****	29	18								
14	15	30	16	21	21	33	15	19	20	27	6	27	53	6	22	5	4	2	11	23	12	16	****	19	18								
15	29	33	7	14	26	14	12	25	44	49	18	13	17	14	16	10	18	6	10	32	14	17	****	16	20								
16	15	8	16	15	17	9	11	9	4	11	10	8	13	12	8	7	25	10	9	13	18	15	****	29	13								
17	19	9	13	16	12	18	25	27	18	8	6	7	7	3	1	3	11	9	3	4	8	8	****	7	11								
18	3	4	3	7	3	3	4	3	13	26	2	2	0	1	0	0	0	1	2	1	3	3	****	5	4								
19	2	2	1	3	2	3	3	3	2	1	2	4	2	2	2	4	4	3	3	4	4	3	****	8	3								
20	2	1	1	1	1	1	2	4	2	2	5	7	5	3	4	<-- M -->										1	5	7	6	6	****	11	4
21	8	6	7	4	5	3	2	2	3	4	4	1	2	1	1	0	0	1	2	6	3	****	6	3									
22	2	2	1	1	1	1	1	1	2	5	3	2	1	3	2	0	1	5	2	2	1	2	****	4	2								
23	2	2	2	1	1	1	1	1	1	1	0	3	3	2	1	1	0	0	1	1	0	1	****	3	1								
24	1	1	0	1	1	1	1	1	1	0	0	1	2	1	2	3	5	7	8	12	14	7	****	7	3								
25	2	4	6	6	9	5	6	7	11	12	10	31	40	26	22	18	10	12	12	21	13	9	****	19	14								
26	30	67	21	29	50	54	67	38	50	59	44	33	45	41	19	10	8	21	25	18	17	9	****	13	33								
27	7	8	43	41	39	6	6	9	29	27	24	22	10	24	47	24	17	13	15	16	30	23	****	32	22								
28	13	25	21	16	31	43	44	50	62	70	71	54	88	47	13	6	6	8	8	16	11	21	****	29	33								
29	38	5	42	66	41	94	45	27	14	7	9	25	26	31	20	31	33	14	5	3	7	9	****	9	26								
30	7	24	62	59	66	22	13	16	15	15	25	21	13	22	35	32	30	31	35	20	9	4	****	4	25								
31	5	26	31	53	34	39	42	19	18	15	18	17	37	15	18	20	14	18	45	63	52	78	****	32	31								

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->			STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	1-HR	24-HR
7	8	8	31	44	57	66	0	-	94	4	95	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : AP LEI CHAU
POLLUTANT : NITROGEN DIOXIDE
MONTH: AUGUST
YEAR : 2010
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	3	0	0	5	0	2	2	0	1	10	5	2	1	0	0	2	1	2	0	0	0	****	1	2
2	0	1	1	0	0	0	3	9	0	1	6	1	4	4	3	3	1	5	2	3	1	5	****	4	2
3	0	1	0	0	13	5	11	10	5	2	7	12	10	9	11	7	11	9	11	9	1	2	****	7	7
4	0	1	3	3	8	14	2	11	16	16	22	28	39	38	43	29	27	27	23	5	8	38	****	46	19
5	36	40	32	43	40	43	44	47	53	43	8	1	0	1	2	1	2	1	19	13	22	45	****	73	26
6	58	66	54	28	15	6	9	19	14	8	8	<-----D----->				4	0	1	4	6	****	5			
7	15	22	22	25	17	6	7	4	3	2	0	1	1	1	0	0	0	1	0	2	0	0	****	2	6
8	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	2	0	0	0	****	1	0
9	0	0	0	0	0	0	0	2	1	2	3	0	0	0	0	0	0	0	0	5	0	****	4	1	
10	15	2	22	6	7	11	18	10	7	3	6	23	9	6	1	4	2	4	7	1	1	2	****	1	7
11	0	16	19	13	14	1	0	1	5	0	1	4	2	0	0	0	0	1	0	0	0	0	****	1	3
12	0	0	13	2	1	12	6	10	4	12	15	15	9	24	15	4	6	10	10	9	6	18	****	23	10
13	20	2	3	15	10	14	10	10	13	4	6	7	2	9	5	6	7	4	7	4	7	15	****	17	9
14	5	17	10	9	9	18	3	5	4	7	3	8	16	2	7	1	3	3	8	15	11	15	****	7	8
15	13	16	2	5	12	5	3	13	15	13	8	7	6	5	8	7	9	4	9	21	7	10	****	9	9
16	6	3	5	7	10	6	8	7	10	12	13	10	11	10	9	23	21	8	9	20	21	19	****	21	12
17	12	7	6	9	6	12	12	8	3	0	0	0	0	0	0	1	4	3	1	3	8	12	****	15	5
18	7	4	1	3	4	4	5	6	10	10	3	3	1	1	2	4	3	0	1	2	0	0	****	0	3
19	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	5	1	0	0	0	****	0	1
20	0	4	1	0	0	0	6	10	2	3	7	5	0	0	0	<-- M -->		1	1	22	27	24	****	17	6
21	20	19	9	7	7	8	5	6	3	5	3	0	0	0	0	0	0	1	0	7	6	6	****	3	5
22	0	0	1	0	1	0	1	0	0	0	1	1	0	0	0	0	0	4	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	****	4	0
24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	3	3	8	17	17	****	16	3	
25	15	3	4	2	4	1	2	1	4	11	7	14	21	11	7	11	11	4	5	15	3	1	****	9	7
26	19	27	8	13	26	25	27	23	24	23	18	10	16	19	4	2	3	10	14	12	17	6	****	3	15
27	0	3	39	38	28	0	3	20	32	15	13	15	1	8	22	14	9	10	5	6	12	7	****	20	14
28	12	20	25	31	35	40	43	45	53	74	74	48	77	41	34	45	84	92	115	141	125	123	****	71	63
29	92	11	47	64	41	69	53	46	39	28	25	37	41	33	17	23	20	8	7	4	0	****	19	31	
30	17	52	58	54	59	46	37	38	41	49	65	55	28	25	36	38	34	52	67	49	31	17	****	5	41
31	2	18	33	40	23	28	55	57	59	52	55	43	57	8	23	15	3	36	47	76	40	52	****	34	37

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->		STD GEOM	PERCENT	NO. OF TIMES ABOVE OBJECTIVE	
MEAN	MEDIAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR
5	5	5	38	51	67	77	0 - 141	0 - 63	7	95	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : AP LEI CHAU
 POLLUTANT : SULPHUR DIOXIDE
 MONTH: SEPTEMBER
 YEAR : 2010
 UNIT : MICROGRAMS/CUBIC METER

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	
1	30	19	31	32	25	20	21	22	23	26	27	27	45	35	51	50	41	41	46	51	51	21	****	15	33	
2	19	26	43	49	47	26	19	47	75	47	52	28	30	39	45	46	69	51	36	45	28	16	****	28	40	
3	17	19	13	30	60	35	16	4	12	6	6	13	6	9	12	6	8	11	3	4	8	4	****	8	14	
4	6	5	5	4	3	7	10	10	18	11	10	16	11	7	6	7	4	3	2	2	2	1	****	5	7	
5	2	3	3	3	3	3	13	2	1	2	5	2	3	7	5	3	1	1	6	6	7	7	****	11	4	
6	16	27	42	24	11	12	9	13	15	22	21	12	16	22	12	7	6	12	19	11	14	14	****	17	16	
7	15	18	31	9	13	20	16	11	13	6	13	5	14	15	20	8	13	10	9	5	13	28	****	22	14	
8	15	10	13	23	21	17	23	14	32	17	18	37	37	30	48	71	38	23	16	12	16	19	****	16	25	
9	4	11	13	35	26	9	6	47	29	28	26	62	40	20	26	33	28	21	29	24	26	40	****	23	26	
10	13	18	23	5	21	32	17	14	28	22	90	80	34	16	31	20	20	10	9	13	7	11	****	4	23	
11	7	14	7	7	2	13	13	17	9	5	4	22	2	10	20	12	11	9	22	14	5	12	****	11	11	
12	7	9	13	8	8	11	10	41	26	8	32	22	11	4	18	11	13	32	7	11	6	3	****	9	14	
13	14	8	8	5	2	1	2	3	5	7	6	4	3	2	3	4	5	4	6	6	7	7	****	8	5	
14	6	6	6	5	5	4	4	4	4	4	4	4	3	1	4	4	1	4	5	3	4	6	****	6	4	
15	3	3	2	2	3	3	3	4	4	4	6	5	4	2	3	3	4	2	5	8	9	13	11	****	15	5
16	9	10	9	9	11	9	23	44	58	123	79	48	40	23	30	21	21	17	13	10	30	24	****	47	31	
17	20	15	19	35	30	29	21	22	33	47	81	23	22	26	20	16	9	23	25	21	32	26	****	23	27	
18	24	13	7	16	15	10	11	12	29	54	65	39	41	21	14	12	13	14	12	12	13	5	****	14	20	
19	32	19	6	12	27	33	30	23	16	34	35	37	53	64	54	43	35	24	14	15	18	19	****	25	29	
20	18	18	29	25	29	24	24	41	54	55	51	53	28	21	20	22	10	10	12	15	8	11	****	8	25	
21	3	1	0	0	0	0	4	1	2	2	3	4	3	2	11	6	6	1	1	1	1	13	****	6	3	
22	1	1	0	0	3	2	5	2	1	0	1	1	0	1	1	1	0	2	2	17	2	1	****	4	2	
23	1	1	1	1	0	1	1	2	3	3	3	3	2	3	3	4	6	6	6	29	53	101	****	131	16	
24	94	17	7	8	9	5	5	4	2	2	3	4	1	0	3	6	9	7	6	6	6	6	****	5	9	
25	3	3	4	3	3	2	2	2	2	4	3	2	2	2	3	5	5	6	11	11	11	9	****	8	5	
26	5	4	4	4	4	3	3	3	4	5	7	6	3	1	0	0	0	2	4	6	4	3	****	7	4	
27	4	5	9	11	2	2	3	2	1	2	0	0	0	1	0	0	1	3	3	5	4	****	7	3		
28	4	3	3	3	3	7	3	6	34	52	29	1	1	0	3	3	0	2	2	3	5	6	****	7	8	
29	4	3	2	2	2	1	3	3	2	2	4	2	0	1	2	0	0	0	2	2	2	1	****	5	2	
30	2	2	2	2	2	2	3	3	3	5	5	3	4	5	3	3	2	7	6	6	7	6	****	8	4	

MONTHLY STATISTICS:											STD GEOM		PERCENT		NO. OF TIMES ABOVE OBJECTIVE	
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->				DEVIATION	VALID DATA	1-HR	24-HR	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	1-HR	24-HR	3	96	0	0	
8	8	14	8	35	47	61	80	0	- 131	2	- 40	3	96	0	0	

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : AP LEI CHAU
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: SEPTEMBER
 YEAR : 2010
 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	54	11	26	13	3	0	3	11	22	49	52	39	33	28	37	37	29	39	56	48	64	49	****	20	31
2	37	51	56	56	51	16	14	41	52	44	45	40	41	50	79	92	76	76	78	98	51	35	****	36	53
3	21	20	8	22	57	28	9	3	8	5	14	13	4	6	7	1	1	6	0	0	6	0	****	2	10
4	0	0	0	0	0	0	6	1	10	7	0	2	0	0	6	12	15	9	7	4	3	0	****	3	4
5	0	0	0	0	0	0	5	11	4	3	4	4	1	0	0	0	0	1	6	0	0	0	****	6	2
6	8	13	32	8	0	6	17	26	11	16	16	10	10	14	13	9	5	5	11	7	8	3	****	8	11
7	5	7	10	0	5	9	5	1	7	3	7	4	9	13	6	3	9	9	4	1	12	13	****	19	7
8	8	5	3	13	11	10	15	14	17	15	20	27	37	38	49	56	35	20	6	2	9	5	****	7	18
9	0	1	1	20	28	21	21	50	43	43	41	50	47	36	33	33	18	16	11	15	11	15	****	19	25
10	10	21	18	3	20	33	33	27	32	27	57	52	33	20	22	23	26	14	6	7	3	7	****	12	22
11	16	18	15	10	4	29	33	33	15	10	9	23	20	27	23	23	14	16	27	12	3	12	****	8	17
12	5	5	18	4	3	9	16	27	11	1	11	11	11	2	13	11	12	20	10	7	6	9	****	9	10
13	19	22	23	20	9	9	7	8	1	0	0	0	0	0	0	0	0	0	0	0	0	1	****	4	5
14	1	0	0	0	0	0	1	3	3	0	0	0	0	0	3	1	0	0	0	2	0	0	****	3	1
15	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	8	2	****	15	1
16	8	7	2	0	0	6	14	17	19	19	14	8	3	2	2	1	2	3	2	0	8	4	****	13	7
17	4	1	2	5	4	4	0	2	6	5	12	5	10	16	18	14	5	21	22	14	16	10	****	13	9
18	6	3	0	0	0	0	7	14	17	22	28	35	39	23	8	4	10	13	3	10	0	0	****	8	11
19	16	4	0	3	10	33	26	24	4	34	36	41	35	41	50	24	16	11	4	4	1	13	****	26	20
20	14	5	14	10	19	9	5	22	28	31	28	26	24	15	16	17	17	17	5	20	14	15	****	15	17
21	9	1	2	0	0	0	3	1	1	1	3	2	2	1	7	7	4	5	9	13	3	15	****	5	4
22	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1	0	1	23	31	19	1	****	5	4
23	2	1	0	0	0	3	7	4	2	2	0	0	0	0	0	0	1	9	43	61	62	****	62	11	
24	56	17	4	0	0	0	0	5	9	3	1	0	0	0	0	0	0	0	0	0	0	0	****	2	4
25	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	1	0	0	0	0	0	0	0	0	7	3	0	****	5	1
27	0	0	10	14	0	0	2	11	4	1	0	0	0	0	0	0	0	1	0	0	0	0	****	2	2
28	0	3	0	0	2	10	3	19	23	35	22	0	0	0	0	0	0	0	0	0	0	0	****	4	5
29	0	0	0	0	0	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	****	3	0
30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	8	7	0	1	13	0	****	2	2

MONTHLY STATISTICS:											STD GEOM		PERCENT		NO. OF TIMES		
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->				DEVIATION	VALID DATA	ABOVE	OBJECTIVE		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	24-HR	6	96	1-HR	24-HR			
6	4	11	4	33	44	56	63	0	-	98	0	-	53	6	96	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : CHEUNG CHAU
 POLLUTANT : SULPHUR DIOXIDE
 MONTH: JULY
 YEAR : 2010
 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	4	6	5	5	5	5	6	10	8	18	16	7	6	5	4	3	4	3	3	3	3	2	****	3	6
2	2	3	4	3	3	3	2	3	8	6	4	3	2	4	3	2	2	1	1	1	3	2	****	2	3
3	2	3	2	3	2	2	2	5	2	2	3	1	3	2	2	1	1	2	2	2	3	4	****	4	2
4	3	1	1	1	1	1	2	1	1	1	1	2	1	1	2	2	1	2	2	1	1	0	****	1	1
5	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	2	2	0	0	0	1	1	****	2	1
6	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	1	1	1	****	2	1
7	1	1	0	1	1	1	1	0	1	1	0	1	1	2	1	2	2	1	0	0	0	1	****	1	1
8	1	0	0	0	0	1	1	2	4	3	1	1	1	2	2	2	1	1	1	0	0	0	****	1	1
9	0	0	1	0	0	0	0	1	1	1	1	0	1	1	1	1	2	1	1	1	2	1	****	1	1
10	1	1	1	1	1	1	1	3	2	3	1	1	2	2	2	2	2	1	1	0	1	2	****	1	1
11	0	2	1	2	1	1	1	2	3	1	1	1	1	2	0	1	1	1	1	2	1	1	****	2	1
12	0	1	1	0	2	1	2	3	3	2	1	0	1	1	1	1	2	1	0	1	2	1	****	2	1
13	2	2	2	4	3	2	6	12	16	20	11	9	13	6	3	4	14	10	3	6	11	5	****	9	8
14	10	5	8	7	5	8	11	12	10	6	3	5	3	3	3	3	2	4	2	2	2	4	****	5	5
15	4	2	2	3	5	5	5	5	5	5	3	3	3	3	2	3	4	3	4	3	4	5	****	3	4
16	6	6	5	3	2	0	4	6	3	3	M	3	1	5	2	3	2	1	0	2	3	4	****	2	3
17	1	3	5	4	2	0	3	4	4	2	4	6	5	7	8	4	7	5	10	13	4	1	****	1	4
18	3	8	9	7	11	12	11	13	18	14	13	14	10	8	4	11	9	15	16	10	15	17	****	15	11
19	12	10	17	21	16	11	13	18	17	8	6	4	4	4	4	4	4	4	2	3	5	4	****	7	9
20	6	9	11	20	16	14	16	16	15	15	8	5	7	10	18	16	17	7	8	9	9	10	****	6	12
21	5	5	4	3	3	5	6	6	7	5	4	1	4	3	2	1	1	2	2	2	3	3	****	3	3
22	2	2	1	1	2	5	2	9	7	4	2	1	1	0	1	1	2	2	1	4	6	17	****	4	3
23	1	3	2	2	1	1	1	0	2	2	3	4	3	2	4	16	10	6	3	6	9	9	****	5	4
24	6	8	8	8	7	7	3	9	10	16	7	4	5	20	6	13	11	14	7	2	3	11	****	9	8
25	9	11	12	8	8	6	7	20	26	39	54	21	28	12	13	18	21	19	14	16	20	14	****	12	18
26	9	13	11	14	22	17	21	31	37	27	24	7	6	8	2	2	2	1	1	1	2	2	****	3	11
27	2	2	1	1	2	1	1	2	2	1	1	1	0	1	1	1	1	0	1	1	0	0	****	1	1
28	1	0	0	0	0	1	0	1	1	1	1	1	0	0	1	0	0	1	1	1	1	1	****	2	1
29	1	1	1	2	2	1	1	1	1	2	1	2	1	1	1	1	1	0	1	2	2	2	****	2	1
30	2	2	2	1	3	1	1	1	1	1	1	1	2	2	1	0	0	1	1	1	2	1	****	2	1
31	1	0	0	0	0	0	1	2	1	1	2	2	2	2	1	0	1	1	1	1	1	1	****	2	1

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----						-----RANGE-----				STD GEOM	PERCENT	NO. OF TIMES		
MEAN	MEDIAN	50	90	95	98	99	1-HR				24-HR	VALID DATA	1-HR	24-HR		
2	2	2	11	16	20	23	0	-	54	1	-	18	3	96	0	0

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : CHEUNG CHAU
POLLUTANT : NITROGEN DIOXIDE
MONTH: JULY
YEAR : 2010
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	8	4	4	3	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	****	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
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
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
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
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
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
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
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
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
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
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
13	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	****	0	0
14	0	0	0	0	0	2	3	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
16	0	0	0	0	0	0	0	0	0	M	0	0	0	1	1	1	0	0	11	11	13	****	6	2	
17	10	22	18	9	2	1	19	14	9	4	10	11	5	7	8	5	7	8	18	21	7	2	****	12	10
18	18	33	32	28	30	29	25	21	21	15	15	11	8	5	4	10	8	17	21	12	25	29	****	36	20
19	34	27	28	25	24	22	23	17	13	6	5	3	3	3	4	2	2	3	3	6	5	5	****	11	12
20	25	41	27	36	31	22	20	18	19	18	7	5	4	10	20	17	18	5	9	10	10	12	****	8	17
21	8	7	6	4	5	9	9	7	7	7	7	3	11	4	3	3	2	7	9	10	15	10	****	7	7
22	4	2	0	0	0	5	2	5	2	0	0	0	0	1	0	4	4	6	5	5	21	****	1	3	
23	0	1	1	1	0	1	3	0	9	2	2	0	0	1	2	13	9	7	6	14	16	****	7	4	
24	9	14	13	12	8	7	3	8	9	11	1	0	0	0	9	4	7	2	2	17	****	9	6		
25	14	22	20	15	15	13	9	9	7	9	18	6	3	0	2	6	10	14	12	10	14	14	****	22	12
26	5	21	20	26	30	22	17	28	27	23	18	0	0	0	0	0	0	0	0	0	0	0	****	0	10
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
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	11	10	2	2	****	4	1
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	6	10	****	8	1
30	7	2	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

MONTHLY STATISTICS:

GEOM	ARITH	<-----PERCENTILE----->					<-----RANGE----->		STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR
4	0	0	13	21	27	30	0	- 41	6	96	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : CHEUNG CHAU
 POLLUTANT : SULPHUR DIOXIDE
 MONTH: AUGUST
 YEAR : 2010
 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	2	3	5	4	2	1	2	1	2	2	2	2	****	2	2
2	2	0	1	1	1	1	3	10	14	6	2	2	1	1	1	1	1	0	0	0	0	0	****	1	2
3	1	1	1	1	1	0	1	1	1	2	3	1	1	1	2	2	1	1	0	1	1	1	****	1	1
4	1	0	1	1	1	1	2	2	2	3	13	7	5	8	8	10	16	11	6	4	4	3	****	4	5
5	4	5	5	7	6	6	10	20	17	37	30	10	13	16	15	16	12	9	9	2	4	5	****	7	12
6	7	11	9	7	10	11	12	18	24	21	19	10	8	9	5	5	6	6	6	5	6	****	6	10	
7	2	2	2	4	4	12	20	6	8	10	24	17	9	7	4	5	5	6	8	8	8	7	****	2	8
8	1	1	2	5	5	4	3	6	8	6	5	7	5	4	5	5	8	11	11	5	10	8	****	5	6
9	5	7	6	5	5	6	7	6	6	10	7	5	4	6	5	6	3	4	9	24	27	8	****	4	8
10	3	3	3	2	3	4	6	8	14	20	13	14	12	9	4	2	2	2	2	1	1	1	****	2	6
11	1	1	2	2	4	3	8	16	9	6	10	11	24	19	19	2	2	3	5	7	11	11	****	13	8
12	11	4	2	2	2	1	1	1	2	1	2	3	4	2	2	6	1	2	2	4	4	3	****	2	3
13	2	2	2	2	1	1	1	2	2	1	1	1	1	1	2	2	3	1	0	0	0	0	****	0	1
14	0	0	0	0	0	0	1	3	2	1	2	2	1	1	1	1	2	2	2	2	2	1	****	2	1
15	1	1	2	1	1	2	3	3	4	2	2	1	2	2	2	2	2	1	1	1	2	1	****	1	2
16	1	1	2	1	0	1	0	1	2	2	2	3	7	2	1	1	1	1	1	1	1	1	****	3	1
17	3	10	6	2	3	2	2	3	6	10	8	6	4	5	7	3	4	5	2	2	2	3	****	6	4
18	10	10	11	9	9	7	7	11	15	34	29	12	8	5	3	5	5	3	3	4	4	3	****	4	9
19	5	6	6	2	2	4	10	8	4	2	5	9	7	2	5	10	14	5	3	3	5	4	****	6	6
20	3	2	4	3	3	4	4	13	9	14	8	4	3	6	3	3	4	5	8	9	7	8	****	12	6
21	7	10	15	18	15	20	15	7	6	5	7	7	5	4	9	8	11	8	6	5	8	9	****	10	9
22	7	5	4	1	5	19	6	6	5	5	6	6	7	5	11	3	3	5	5	3	3	2	****	2	5
23	1	3	3	4	2	6	7	6	5	1	1	2	2	4	4	2	4	6	1	2	5	4	****	7	4
24	9	3	3	3	5	4	3	3	3	2	2	3	3	3	2	1	2	3	3	2	3	6	****	13	4
25	16	9	8	7	5	3	4	4	3	3	3	3	3	4	6	6	5	3	3	3	4	3	****	3	5
26	6	4	4	5	5	5	5	8	7	5	6	6	7	6	3	2	3	2	2	2	2	2	****	5	4
27	6	13	10	10	9	6	8	18	25	10	8	14	20	17	13	11	9	9	7	6	5	6	****	6	11
28	6	8	5	7	32	32	28	16	48	52	48	45	41	55	13	8	9	6	4	13	28	12	****	9	23
29	26	33	22	24	12	13	14	10	9	9	8	7	10	16	15	10	9	11	14	5	4	5	****	6	13
30	9	8	6	8	13	33	23	22	13	14	15	18	18	26	35	26	46	36	31	28	38	18	****	15	22
31	13	16	12	14	16	17	21	22	26	23	23	22	17	15	17	17	18	27	31	29	21	20	****	27	20

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----					-----RANGE-----			STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	50	90	95	98	99	1-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
4	5	5	16	24	32	38	0	- 55	3	96	0	0	

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : CHEUNG CHAU
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: AUGUST
 YEAR : 2010
 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	0	0	0	0	0	0	3	2	0	1	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	
4	0	0	0	0	0	0	0	1	0	4	1	0	0	0	0	0	0	0	0	0	0	****	18	1	
5	8	9	12	4	10	7	15	31	33	40	20	0	0	0	0	0	0	0	1	1	15	21	****	15	11
6	26	34	22	7	15	17	21	27	26	21	22	2	0	0	0	0	0	0	0	0	0	****	0	10	
7	0	1	8	9	9	22	26	0	0	1	1	1	0	0	0	0	0	0	0	0	0	****	0	3	
8	0	1	1	11	5	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	****	0	1
9	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	14	22	0	****	0	2
10	0	0	0	3	8	8	9	7	1	3	1	1	0	0	0	0	0	0	0	0	0	****	0	2	
11	0	2	4	1	2	3	12	13	0	0	0	0	6	7	6	0	0	0	0	1	4	10	****	13	4
12	9	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	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	
14	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	1	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	5	2	1	1	1	0	0	0	0	0	0	1	1	0	****	15	1
17	16	19	9	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	0	2	0	1	****	6	3
18	10	8	8	10	8	4	3	4	5	10	8	3	1	0	0	0	0	0	0	0	0	****	0	4	
19	0	0	1	0	0	0	3	1	0	0	5	10	3	0	0	7	13	0	0	0	0	****	0	2	
20	0	0	3	1	2	15	9	16	7	14	0	0	0	0	0	0	0	0	0	0	0	****	0	3	
21	0	7	18	44	41	28	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	****	2	7	
22	0	0	0	0	4	16	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	****	0	1	
23	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	****	5	0	
24	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	7	10	****	11	2
25	13	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	****	0	1	
26	0	0	0	0	0	0	4	3	1	0	0	0	0	0	0	0	0	0	0	1	0	****	2	0	
27	10	12	11	12	6	0	5	2	3	0	0	0	0	0	0	0	0	0	0	0	0	****	9	3	
28	10	10	2	9	27	30	26	8	40	48	49	41	25	21	6	11	14	17	17	56	97	49	****	27	28
29	43	51	39	21	2	22	44	17	4	4	2	3	7	20	21	0	0	12	4	0	0	****	6	14	
30	26	8	6	15	35	47	33	24	11	17	23	23	19	30	35	14	53	45	55	101	90	18	****	9	32
31	2	13	11	16	23	24	30	33	34	14	19	22	12	13	5	22	23	26	27	41	12	9	****	40	21

MONTHLY STATISTICS:

GEOM	ARITH	-----PERCENTILE-----						-----RANGE-----				STD GEOM	PERCENT	NO. OF TIMES	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR		24-HR	DEVIATION	VALID DATA	1-HR	24-HR	
3	0	5	0	18	27	42	49	0	-	101	8	96	0	0	

- NOTES: 1. FLAGS FOR INVALID DATA :
 **** : DAILY ZERO/SPAN CHECK
 D : DYNAMIC CALIBRATION
 T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 M : MAINTENANCE OR MACHINE SHUTDOWN
 P : POWER FAILURE
2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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

STATION : CHEUNG CHAU
 POLLUTANT : SULPHUR DIOXIDE
 MONTH: SEPTEMBER
 YEAR : 2010
 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	33	49	31	19	30	67	74	89	61	28	25	32	39	31	39	37	40	37	46	44	41	37	****	17	41
2	13	11	12	14	17	20	33	70	80	100	79	41	18	23	23	24	21	21	23	19	26	13	****	8	31
3	8	6	9	9	11	8	9	6	4	3	3	2	2	2	2	4	2	1	1	1	1	1	****	1	4
4	1	1	1	1	1	1	1	1	2	2	2	2	3	8	7	7	5	5	6	5	7	11	****	8	4
5	7	5	4	2	2	2	3	5	9	8	11	15	9	6	23	10	24	17	18	17	13	15	****	29	11
6	12	12	4	2	2	1	1	6	10	8	3	4	7	5	3	3	3	1	1	2	2	1	****	3	4
7	2	1	1	2	2	3	3	4	4	3	3	2	1	1	3	2	1	1	2	2	2	2	****	2	2
8	2	2	2	3	2	3	11	9	8	10	29	9	9	16	32	33	24	10	7	7	4	5	****	6	11
9	4	2	2	2	2	5	6	6	14	20	17	13	14	21	20	15	10	13	8	9	9	7	****	4	10
10	2	2	2	4	3	2	2	3	4	8	7	8	8	11	12	10	10	8	6	7	5	3	****	2	6
11	2	1	1	1	2	2	2	8	3	2	2	4	8	4	3	4	3	3	2	2	2	2	****	3	3
12	2	2	1	2	2	2	2	5	6	4	4	2	1	1	2	2	1	1	1	1	1	1	****	1	2
13	1	1	8	10	12	11	9	16	16	8	4	4	5	3	2	3	5	5	6	6	11	6	****	8	7
14	9	5	3	5	2	2	3	7	9	6	6	2	2	3	3	5	4	4	3	6	7	5	****	11	5
15	5	2	1	2	2	3	10	21	21	19	13	5	2	2	2	4	2	9	10	6	15	9	****	15	8
16	13	11	15	13	12	11	13	24	22	20	34	12	9	16	15	9	4	2	1	3	2	2	****	3	12
17	4	3	3	2	1	1	3	5	8	5	5	10	12	11	14	9	7	4	4	3	3	3	****	5	6
18	4	4	4	3	2	6	7	10	9	12	12	13	10	9	12	7	7	5	5	4	3	4	****	4	7
19	4	4	4	6	18	12	5	7	10	14	14	18	26	33	33	34	14	8	4	4	6	8	****	13	13
20	12	9	8	10	12	12	14	21	27	30	26	25	22	15	8	4	3	2	1	1	1	1	****	1	11
21	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	1	1	1	4	6	3	7	5	4	3	3	2	3	4	17	9	****	7	3
23	7	7	5	5	7	17	16	25	24	30	18	11	5	15	14	13	17	11	7	8	14	13	****	9	13
24	11	12	15	15	22	33	14	26	30	26	16	8	<--- D --->	4	14	11	9	8	7	11	10	****	5	15	
25	4	7	7	9	5	5	3	5	3	5	4	4	3	3	3	2	3	4	7	8	10	****	6	5	
26	5	6	7	7	9	16	7	6	6	10	16	14	10	7	5	4	5	5	6	8	12	8	****	9	8
27	10	9	8	8	15	26	26	34	33	25	14	5	6	4	5	5	6	14	18	12	12	8	****	11	14
28	11	11	14	15	9	6	9	22	32	28	15	10	6	3	4	5	3	5	4	7	6	8	****	6	10
29	9	6	5	8	5	3	4	7	9	6	5	5	7	6	4	2	3	2	3	5	6	3	****	5	5
30	4	7	19	9	2	4	6	3	5	5	3	7	5	3	6	3	4	7	9	5	4	7	****	2	6

MONTHLY STATISTICS:													NO. OF TIMES				
GEOM	ARITH		-----PERCENTILE-----					-----RANGE-----					STD GEOM	PERCENT	ABOVE	OBJECTIVE	
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	24-HR	DEVIATION	VALID DATA	1-HR	24-HR			
5	6	9	6	21	30	40	64	0	-	100	0	-	41	3	96	0	0

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 800 OR 24-HR OBJECTIVE 350

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

STATION : CHEUNG CHAU
 POLLUTANT : NITROGEN DIOXIDE
 MONTH: SEPTEMBER
 YEAR : 2010
 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	60	63	42	16	34	49	49	52	26	12	14	16	23	19	21	13	9	23	49	48	50	61	****	40	34
2	29	12	9	7	7	23	41	41	52	65	65	38	13	21	20	21	15	9	19	36	36	7	****	2	26
3	0	1	15	0	0	2	11	1	0	0	0	0	0	0	0	1	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	4	2	0	0	2	****	0	0
5	0	0	0	0	0	0	0	2	13	1	3	4	0	0	0	0	1	6	6	10	4	3	****	14	3
6	0	1	0	0	3	0	0	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	****	0	1
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	****	0	0
8	0	0	0	0	0	0	1	0	0	1	7	1	0	1	16	13	4	0	0	0	0	0	****	0	2
9	0	0	0	0	0	19	15	10	22	24	20	9	1	0	0	0	0	0	0	0	0	0	****	0	5
10	0	0	0	3	0	0	0	0	0	9	12	12	1	2	0	0	0	0	2	0	0	0	****	0	2
11	0	0	0	0	0	0	4	30	6	0	3	7	17	1	0	0	0	5	1	0	0	0	****	0	3
12	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	****	0	0
13	5	2	11	12	13	9	6	4	1	0	0	0	0	0	0	0	0	0	0	0	2	0	****	1	3
14	5	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	****	23	1
15	1	0	0	0	0	2	8	7	13	10	4	0	0	0	0	0	0	0	0	0	1	0	****	2	2
16	7	2	6	4	2	3	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	****	0	1
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	****	0	0
18	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	****	0	0
19	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	****	1	0
20	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	5	0	0	0	0	2	****	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	****	1	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	6	20	11	****	1	2
23	3	7	5	2	5	9	9	8	8	11	5	1	0	5	2	0	2	4	0	21	32	33	****	32	9
24	33	30	29	27	28	32	24	27	25	27	13	0	<--- D --->	0	0	1	0	0	0	0	4	1	****	0	14
25	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	****	0	0
26	2	2	5	2	9	21	0	0	0	0	13	9	0	0	0	0	0	0	0	0	1	0	****	0	3
27	5	0	0	0	16	31	28	30	30	31	11	0	0	0	0	0	0	4	3	0	0	****	0	8	
28	0	0	3	7	7	2	5	18	20	18	3	1	0	0	0	0	0	0	0	0	0	0	****	0	4
29	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	****	0	0
30	0	12	14	6	0	0	0	0	0	0	0	11	13	0	0	0	0	1	16	9	16	28	****	0	6

MONTHLY STATISTICS:													STD GEOM		PERCENT		NO. OF TIMES	
GEOM	ARITH		<-----PERCENTILE----->					<-----RANGE----->					DEVIATION	VALID DATA	ABOVE	OBJECTIVE		
MEAN	MEDIAN	MEAN	50	90	95	98	99	1-HR	24-HR	24-HR	24-HR	11	96	1-HR	24-HR			
2	0	4	0	16	28	41	51	0	-	65	0	-	34	11	96	0	0	

- NOTES:
1. FLAGS FOR INVALID DATA :
 - **** : DAILY ZERO/SPAN CHECK
 - D : DYNAMIC CALIBRATION
 - T : TELEMETRY/DATALOGGR/ANALYZER FAULT
 - M : MAINTENANCE OR MACHINE SHUTDOWN
 - P : POWER FAILURE
 2. BRACKETED READINGS EXCEED 1-HR OBJECTIVE 300 OR 24-HR OBJECTIVE 150

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 2010

Week Ending	No. of Samples	Suspended Solids, mg/L			pH		
		Maximum	Minimum	Average	Maximum	Minimum	Average
03/07/10	6*	17	13	15	7.9	7.8	7.9
10/07/10	6*	17	14	16	7.9	7.8	7.8
17/07/10	7	16	12	14	8.0	7.9	7.9
24/07/10	6*	19	12	15	8.0	7.8	7.9
31/07/10	7	18	13	15	8.0	7.9	8.0
07/08/10	5*	20	12	16	8.1	7.9	8.0
14/08/10	6*	19	14	16	8.3	8.2	8.2
21/08/10	5*	18	14	16	8.2	8.0	8.2
28/08/10	7	19	12	16	8.2	8.0	8.1
04/09/10	7	19	13	16	8.2	8.0	8.1
11/09/10	7	19	13	16	8.3	8.1	8.2
18/09/10	7	18	13	15	8.4	8.2	8.3
25/09/10	7	20	12	17	8.3	8.2	8.3

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 2010

Sampling date		5/7/2010	3/8/2010	7/9/2010
Barium,	ug/L	<150	<150	<150
Mercury,	ug/L	<0.5	<0.5	0.8
Cadmium,	ug/L	3	1	2
Iron,	ug/L	<400	<400	<400
Total Phosphorous,	mg/L	<0.8	<0.8	<0.8
Total Nitrogen,	mg/L	90	107	193
Cyanide,	mg/L	0.03	0.02	0.03

Remark:

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

Appendix D Summary of EMIS

EM&A Log Ref.	Mitigation Measures	Implementation Status
	GENERAL	
A1	No other process, except the Wet Limestone-Gypsum process used in the FGD plants of the coal-fired Units L6, L7 and L8 within the Lamma Power Station, shall be used in the FGD plants for the projects unless otherwise agreed by EPD.	Complied
	WATER QUALITY	
B1	All wastewater arising from the operation of the projects shall be collected and directed to the existing wastewater treatment plant within the Lamma Power Station for treatment.	Complied
B2	The operational plant effluent from the FGD plants should be reused as much as possible in order to minimise discharge to the WWTP.	Complied
B3	Maintenance of the WWTP should be performed regularly to ensure the effluent from the WWTP would not exceed the current requirements stipulated in the WPCO licence for Ash Lagoon.	Complied
	WASTE	
C1	No gypsum or sludge arising from the operation of the projects shall be disposed of anywhere. All gypsum and sludge shall be collected and reused.	Complied
	NOISE	
D1	Equipments 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