The Hongkong Electric Co Ltd

香港電燈有限公司



ENVIRONMENTAL IMPACT ASSESSMENT (EIA) ORDINANCE, CAP. 499

ENVIRONMENTAL PERMIT NO. EP-071/2000/C

LAMMA POWER STATION EXTENSION ENVIRONMENTAL MONITORING & AUDIT PROGRAMME AT CONSTRUCTION PHASE

Report Title

Environmental Monitoring and Audit Report

(July 2006)

Date

14/08/2006

Certified by

(Mr. IP Yat-Yan, Environmental Team Leader)

Verified by

(Hong Kong Productivity Council, Independent Environmental Checker)

TABLE OF CONTENT

EXECUTIVE SUMMARY

1.	INTRODUCTION	1
1.1 1.2 1.3 1.4	Background Project Organisation Construction Works undertaken during the Reporting Month Summary of EM&A Requirements	1 1 2 10
2.	AIR QUALITY	14
2.1 2.2 2.3 2.4 2.5 2.6	Monitoring Requirements Monitoring Locations Monitoring Equipment Monitoring Parameters, Frequency and Duration Monitoring Procedures and Calibration Details Results and Observations	14 14 14 15 15
3.	NOISE	19
3.1 3.2 3.3 3.4 3.5 3.6	Monitoring Requirements Monitoring Locations Monitoring Equipment Monitoring Parameters, Frequency and Duration Monitoring Procedures and Calibration Details Results and Observations	19 19 19 20 20 21
4.	ENVIRONMENTAL AUDIT	24
4.1 4.2 4.3 4.4 4.5 4.6 4.7	Review of Environmental Monitoring Procedures Assessment of Environmental Monitoring Results Site Environmental Audit Status of Environmental Licensing and Permitting Implementation Status of Environmental Mitigation Measures Implementation Status of Event/Action Plans Implementation Status of Environmental Complaint Handling Procedures	24 24 25 25 27 27 27
5.	FUTURE KEY ISSUES	29
5.1 5.2 5.3 5.4	Status of Natural Gas supply Key Issues for the Coming Month Monitoring Schedules for the Next 3 Months Construction Program for the Next 3 Months	29 29 30 30
6	CONCLUSION	31

LIST OF TABLES

Mitigation
•

LIST OF FIGURES

Figure 1.1	Layout of Work Site
Figure 1.2	Cable Route of Transmission System
Figure 2.1	Location of Air Quality Monitoring Stations
Figure 3.1	Location of Noise Monitoring Stations
Figure 3.2	Location of Manual Noise Monitoring

APPENDICES

Appendix A	Organization Chart
Appendix B	Action and Limit Levels for Air Quality and Noise
Appendix C	Environmental Monitoring Schedule
Appendix D	Air Quality Monitoring Results for July 2006
Appendix E	Noise Monitoring Results for July 2006
Appendix F	The QA/QC Procedures and Results
Appendix G	Event/Action Plans
Appendix H	Site Audit Summary
Appendix I	Summary of EMIS
Appendix J	Tentative Construction Programme

EXECUTIVE SUMMARY

This is the sixty-fourth monthly Environmental Monitoring and Audit (EM&A) report for the Project "Construction of Lamma Power Station Extension" prepared by the Environmental Team (ET). This report presents the results of impact monitoring on air quality and noise for the said project in July 2006.

After successful completion of post-project monitoring in September 2002, no further marine water quality monitoring for the reclamation works would be required.

Air and noise monitoring were performed. The results were checked against the established Action/Limit (AL) levels. An on-site audit was conducted once per week. The implementation status of the environmental mitigation measures, Event/Action Plan and environmental complaint handling procedures were also checked.

Construction Activities Undertaken

Construction activities for Lamma Extension during the reporting month are tabulated as follows:

Item	Construction Activities
Unit L9 Civil and Building Works	Main Station Building, 275kV Switching Station Building, Shunt Reactor, Chimney, Drainage & Road, Fire Services Water Tank and Fire Pump House, C.W. Culvert System & Equipment Room, C.W. Pump Equipment Room, Gas Receiving Station, Pipe & Cable Rack and Lamma Power Station Addition and Alteration (LPS A&A) Works
Unit L9 Mechanical Erection	Erection of HRSG, Steam Turbine, Gas Turbine, Generator, Condenser, Aux Equipment, Air duct / Inlet Filter, HRSG Inlet Duct and Piping Support / Piping Erection; Insulation Work; and Installation of Platform, Pipe Rack, Intake Aux Equipment, Bop piping and GRS piping
Unit L9 Electrical, Instrumentation & Control Erection	Cable Tray Cover Installation, Instrument Piping Installation and Cable Termination
Transmission System	Backfilling above portal structure for Cable Duct 2 and cable trench from N4 landing point to Cable Duct no.2 Entrance
Miscellaneous	Slurry ash piping & filling

Environmental Monitoring Works

All monitoring work at designated stations was performed as scheduled satisfactorily.

Air Quality

No exceedance of Action/Limit levels on 1-hour TSP and 24-hour TSP for air quality was recorded in the month.

Noise

Construction work for Lamma Extension was carried out during the restricted hours including evening-time, holidays and night-time under valid Construction Noise Permits. No exceedance of Action and Limit levels for noise arising from the construction of Lamma Extension and transmission system was recorded in the month.

Site Environmental Audit

Independent Environmental Checker (IEC) conducted a site inspection on 19/07/2006. The inspection result is attached in Appendix H.

Site audits were carried out on a weekly basis to monitor environmental issues on the construction site. The site conditions were generally satisfactory. All required mitigation measures were implemented.

Environmental Licensing and Permitting

Description	Permit No.	Valid	Period	Issued To	Date of
_		From	To		Issuance
Varied Environmental Permit	EP-071/2000/C	18/05/05	-	HEC	18/05/05
Construction Noise Permit	GW-RS0032-06	11/02/06	10/08/06	Contractor	27/01/06
Construction Noise Permit	GW-RS0138-06	24/03/06	21/09/06	Contractor	24/03/06
Construction Noise Permit	GW-RS0278-06	24/05/06	19/11/06	Contractor	24/05/06
Registration of Chemical Waste Producer	WPN5213-912-P2781-07	11/06/04	-	Contractor	11/06/04
Registration of Chemical Waste Producer	WPN5213-912-K2801-03	15/09/04	-	Contractor	15/09/04
Registration of Chemical Waste Producer	WPN5517-912-T2007-02	17/03/05	-	Contractor	17/03/05
Registration of Chemical Waste Producer	WPN5213-912-W2852-09	25/01/05	-	Contractor	25/01/05
Registration of Chemical Waste Producer	WPN4111-912-M2534-09	20/06/05	-	Contractor	20/06/05
WPCO Discharge Licence	EP890/W2/XD020	22/11/04	30/11/09	Contractor	22/11/04
WPCO Discharge Licence	EP890/W2/XD021	03/02/05	28/02/10	Contractor	03/02/05

Description	Permit No.	Valid Period		Issued To	Date of
		From	To		Issuance
WPCO Discharge	EP890/W2/XD008 (V.1)	29/06/06	30/11/09	HEC	29/06/06
Licence					
APCO Specified	L-7-028	22/06/06	31/12/08	HEC	22/06/06
Process Licence					

Implementation Status of Environmental Mitigation Measures

Environmental mitigation measures for the construction activities as recommended in the EM&A manual were implemented in the reporting month.

Environmental Complaints

No complaint against the construction activities was received in the reporting month.

Future Key Issues

The future key issues to be considered in the coming month are as follows:

Unit L9 Civil and Building Works

- to continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained;
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary;

Unit L9 Mechanical Erection

- to continue monitoring the noise level during construction
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary;

Unit L9 Electrical Erection

- to continue monitoring the noise level during construction
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary;

Transmission System

- to continue monitoring the noise level during construction;
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary;

- to closely monitor the construction activities in order to avoid disturbance to the rare plants;
- to provide temporary fire fighting equipment for prevention of fire within the work sites.

Concluding Remarks

The environmental performance of the project was generally satisfactory.

1. INTRODUCTION

1.1 Background

The Environmental Team (hereinafter called the "ET") was formed within the Hongkong Electric Co. Ltd (HEC) to undertake Environmental Monitoring and Audit for "Construction of Lamma Power Station Extension" (hereinafter called the "Project"). Under the requirements of Section 6 of Environmental Permit EP-071/2000/C, an EM&A programme for impact environmental monitoring set out in the EM&A Manual (Construction Phase) is required to be implemented. In accordance with the EM&A Manual, environmental monitoring of air quality, noise and water quality and regular environmental audits are required for the Project. As the post-project marine water monitoring was successfully completed in September 2002, no further water quality monitoring for the reclamation works would be required.

The Project involves the construction of a gas-fired power station employing combined cycled gas turbine technology, forming an extension to the existing Lamma Power Station. The key elements of the Project including the construction activities associated with the transmission system and submarine gas pipeline are outlined as follows.

- dredging and reclamation to form approximately 22 hectares of usable area;
- construction of six 300MW class gas-fired combined cycle units;
- construction of a gas receiving station;
- construction of a new transmission system linking the Lamma Extension to load centres on Hong Kong Island;
- laying of a gas pipeline for the supply of natural gas to the new power station

This report summarizes the environmental monitoring and audit work for the Project for the month of July 2006.

1.2 Project Organisation

An Environmental Management Committee (EMC) has been set up in HEC to oversee the Project. The management structure includes the following:

- Environmental Protection Department (The Authority);
- Environmental Manager (The Chairman of the Environmental Management Committee);
- Engineer;
- Independent Environmental Checker (IEC);
- Environmental Team (ET);
- · Contractor.

The project organisation chart for the construction EM&A programme is shown in Appendix A.

1

1.3 Construction Works undertaken during the Reporting Month

Construction activities for Unit L9 civil and building works were for the Main Station Building, 275kV Switching Station Building, Shunt Reactor, Chimney, Drainage & Road, Fire Services Water Tank and Fire Pump House, C.W. Culvert System & Equipment Room, C.W. Pump Equipment Room, Gas Receiving Station, Pipe & Cable Rack and LPS A&A Works. Construction activities for Unit L9 mechanical works were the erection of HRSG, Steam Turbine, Gas Turbine, Generator, Condenser, Auxiliary Equipment, Air duct / Inlet Filter, HRSG Inlet Duct, Piping Support / Piping, Insulation Work, and installation of Platform, Pipe Rack, Intake Auxiliary Equipment, Bop piping and GRS piping. Construction activities for Unit L9 electrical, instrumentation & control erection were Cable Tray Cover installation, Instrument Piping Installation and Construction activities for Unit L9's associated transmission Cable Termination. system were backfilling above portal structure for Cable Duct 2 and cable trench from N4 landing point to Cable Duct no.2 Entrance, and backfilling & cable protection. Layout plans for construction site and transmission system are shown in Figure 1.1 and Figure 1.2 respectively.

The main construction activities carried out during the reporting month and the corresponding environmental mitigation measures are summarized in Table 1.1. The implementation of major mitigation measures in the month is provided in Appendix I.

Table 1.1 Construction Activities and Their Corresponding Environmental Mitigation Measures

Item	Construction Activities	Environmental Mitigation Measures
Unit L9	Civil and Buildin	ng Works
1	Main Station Building	Air Dust suppression measures implemented. Noise General noise mitigation measures employed at all work sites throughout the construction phase.
		Waste Management - Waste Management Plan submitted and implemented.

Item	Construction Activities	Environmental Mitigation Measures
2	275kV Switching Station Building	Air Dust suppression measures implemented. Noise General noise mitigation measures employed at
		 all work sites throughout the construction phase. Waste Management Waste Management Plan submitted and implemented.
3	Shunt Reactor	Air Dust suppression measures implemented. Noise
		 General noise mitigation measures employed at all work sites throughout the construction phase. Waste Management Waste Management Plan submitted and implemented.
4	Chimney	Air Dust suppression measures implemented. Noise General noise mitigation measures employed at all work sites throughout the construction phase.
		 Waste Management Waste Management Plan submitted and implemented.
5	Drainage & Road Works	Air — Dust suppression measures implemented.
		Noise General noise mitigation measures employed at all work sites throughout the construction phase.
		Waste ManagementWaste Management Plan submitted and implemented.

Item	Construction Activities	Environmental Mitigation Measures
6	Fire Services Water Tank and Fire Pump House	Air Dust suppression measures implemented. Noise General noise mitigation measures employed at
		all work sites throughout the construction phase.
		Waste ManagementWaste Management Plan submitted and implemented.
7	C.W. Culvert System & Equipment	AirDust suppression measures implemented.
	Room	Noise General noise mitigation measures employed at all work sites throughout the construction phase.
		Waste ManagementWaste Management Plan submitted and implemented.
8	C.W. Pump Equipment Room	AirDust suppression measures implemented.
		Noise General noise mitigation measures employed at all work sites throughout the construction phase.
		Waste ManagementWaste Management Plan submitted and implemented.
9	Gas Receiving Station	AirDust suppression measures implemented.
		Noise General noise mitigation measures employed at all work sites throughout the construction phase.
		Waste ManagementWaste Management Plan submitted and implemented.

Item	Construction Activities	Environmental Mitigation Measures
10	Pipe & Cable Rack	Air Dust suppression measures implemented. Noise General noise mitigation measures employed at all work sites throughout the construction phase. Waste Management
		 Waste Management Plan submitted and implemented.
11	LPS A&A Works	Air – Dust suppression measures implemented.
		Noise — General noise mitigation measures employed at all work sites throughout the construction phase.
		 Waste Management Waste Management Plan submitted and implemented.
Constru	action of Transmi	ssion System
12	Backfilling above portal structure for Cable Duct 2 and cable trench from N4 landing point to Cable Duct no.2 Entrance	 Terrestrial Ecology Special care and close monitoring to avoid disturbances to the rare plant species. Temporary fire fighting equipment provided within the work area during construction.
13	Backfilling & Cable Protection	Noise — General noise mitigation measures employed at all work sites throughout the construction phase.

Item	Construction Activities	Environmental Mitigation Measures				
Unit L9	Unit L9 Mechanical Erection					
14	HRSG Erection	Air — Dust suppression measures implemented.				
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.				
		Waste Management - Waste Management Plan submitted and implemented.				
15	Steam Turbine Erection	Air – Dust suppression measures implemented.				
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.				
		Waste Management - Waste Management Plan submitted and implemented.				
16	Gas Turbine Erection	Air – Dust suppression measures implemented.				
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.				
		Waste Management - Waste Management Plan submitted and implemented.				
17	Generator Erection	Air - Dust suppression measures implemented.				
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.				
		Waste Management - Waste Management Plan submitted and implemented.				

Item	Construction Activities	Environmental Mitigation Measures		
18	Condenser Erection	Air – Dust suppression measures implemented.		
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.		
		Waste Management - Waste Management Plan submitted and implemented.		
19	Auxiliary Equipment Erection	Air – Dust suppression measures implemented.		
		Noise General noise mitigation measures employed at all work sites throughout the construction phase.		
		Waste Management - Waste Management Plan submitted and implemented.		
20	Air duct / Inlet Filter	Air – Dust suppression measures implemented.		
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.		
		Waste Management - Waste Management Plan submitted and implemented.		
21	HRSG Inlet Duct	Air – Dust suppression measures implemented.		
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.		
		 Waste Management Waste Management Plan submitted and implemented. 		

Item	Construction Activities	Environmental Mitigation Measures		
22	Piping Support / Piping Erection	Air -	Dust suppression measures implemented.	
			General noise mitigation measures employed at all work sites throughout the construction phase.	
		_	Management Waste Management Plan submitted and implemented.	
23	Insulation Work	Air -	Dust suppression measures implemented.	
		Noise -	General noise mitigation measures employed at all work sites throughout the construction phase.	
		_	Management Waste Management Plan submitted and implemented.	
24	Platform Installation	Air -	Dust suppression measures implemented.	
			General noise mitigation measures employed at all work sites throughout the construction phase.	
		_	Management Waste Management Plan submitted and implemented.	
25	Pipe Rack Installation	Air –	Dust suppression measures implemented.	
		Noise -	General noise mitigation measures employed at all work sites throughout the construction phase.	
		_	Management Waste Management Plan submitted and implemented.	

Item	Construction Activities	Environmental Mitigation Measures		
26	Intake Aux Equipment Installation	Air – Dust suppression measures implemented.		
		Noise General noise mitigation measures employed at all work sites throughout the construction phase.		
		 Waste Management Waste Management Plan submitted and implemented. 		
27	Bop piping installation	Air – Dust suppression measures implemented.		
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.		
		Waste Management - Waste Management Plan submitted and implemented.		
28	GRS piping installation	Air – Dust suppression measures implemented.		
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.		
		 Waste Management Waste Management Plan submitted and implemented. 		
Unit L9	Electrical, Instr	umentation & Control Erection		
29	Cable Tray Cover Installation	Air – Dust suppression measures implemented.		
		Noise - General noise mitigation measures employed at all work sites throughout the construction phase.		
		Waste Management - Waste Management Plan submitted and implemented.		

Item	Construction Activities	Environmental Mitigation Measures		
30	Instrument Piping Installation	Air Dust suppression measures implemented.		
		Noise General noise mitigation measures employed at all work sites throughout the construction phase.		
		Waste Management - Waste Management Plan submitted and implemented.		
31	Cable Termination	Air Dust suppression measures implemented.		
		Noise General noise mitigation measures employed at all work sites throughout the construction phase.		
		Waste Management - Waste Management Plan submitted and implemented.		
Miscella	aneous			
32	Slurry ash piping & filling	Noise General noise mitigation measures implemented and silent type equipment deployed.		

1.4 Summary of EM&A Requirements

The EM&A program requires environmental monitoring for air, noise and water quality. As the post-project marine water monitoring was successfully completed in September 2002, no further water quality monitoring for the reclamation works would be required. The detailed EM&A monitoring work for air quality and noise are described in Sections 2 and 3 respectively. Regular environmental site audits for air quality, noise, water quality and waste management were carried out.

The following environmental audits are summarized in Section 4 of this report:

- Environmental monitoring results;
- Waste Management Records;
- Weekly site audit results;
- The status of environmental licensing and permits for the Project;

• The implementation status of environmental protection and pollution control/mitigation measures.

Future key issues will be reported in Section 5 of this report.

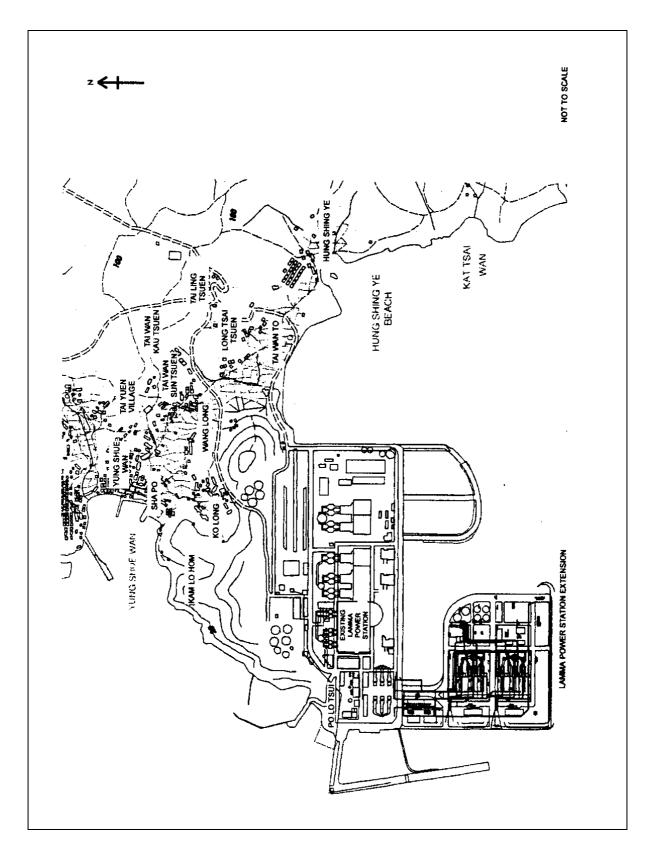


Figure 1.1 Layout of Work Site

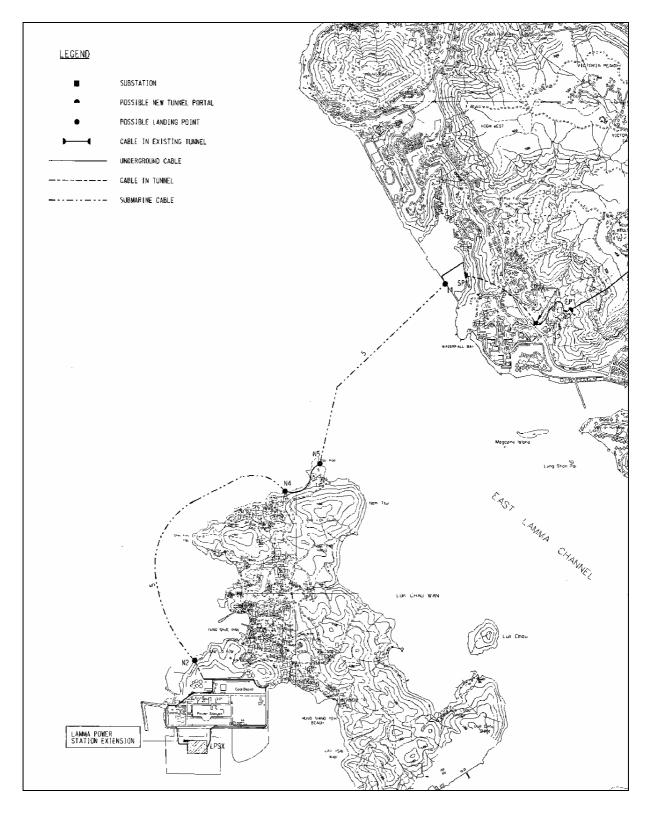


Figure 1.2 Cable Route of Transmission System

2. AIR QUALITY

2.1 Monitoring Requirements

1-hour and 24-hour TSP monitoring at agreed frequencies were conducted to monitor air quality. The impact monitoring data were checked against the Action/Limit Levels as determined in the Baseline Monitoring Report (Construction Phase). Appendix B shows the established Action/Limit Levels for Air Quality.

2.2 Monitoring Locations

Three dust monitoring locations were selected for 1-hour TSP sampling (AM1, AM2 & AM3) while four monitoring locations were selected for 24-hour TSP sampling (AM1, AM2, AM3 and AM4). Table 2.1 tabulates the monitoring stations. The locations of the monitoring stations are shown in Figure 2.1.

Table 2.1 Air Quality Monitoring Locations

Location I.D.	Description
AM1	Reservoir
AM2	East Gate
AM3	Ash Lagoon
AM4	Tai Yuen Village

2.3 Monitoring Equipment

Continuous 24-hour TSP air quality monitoring was performed using the GS2310 High Volume Air Samplers (HVAS), Partisol Model 2000 Sampler and the MINIVOL Portable Sampler at AM1&2, AM3 and AM4 respectively. TEOM Model 1400a continuous dust monitors were used to carry out 1-hour TSP monitoring at AM1, AM2 and AM3. Table 2.2 summarises the equipment used in dust monitoring.

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make
24-hour sampling:	
HVAS Sampler	Model GS2310
	Anderson Instruments Inc.
Partisol Air Sampler	Partisol Model 2000
_	Rupprecht & Patashnick
MINIVOL Portable Sampler	AIRMETRICS
1-hour sampling:	
Continuous TSP Dust Meter	TEOM Model 1400a
	Rupprecht & Patashnick

2.4 Monitoring Parameters, Frequency and Duration

Table 2.3 summarises the monitoring parameters, duration and frequency of air quality monitoring. The monitoring schedule for the reporting month is shown in Appendix C.

Table 2.3 Air Quality Monitoring Parameter, Duration and Frequency

Monitoring Stations	Parameter	Duration	Frequency
AM1	1-hour TSP	1	3 hourly samples every 6 days
AWII	24-hour TSP	24	Once every 6 days
AM2	1-hour TSP	1	3 hourly samples every 6 days
Alviz	24-hour TSP	24	Once every 6 days
AM3	1-hour TSP	1	3 hourly samples every 6 days
AIVIS	24-hour TSP	24	Once every 6 days
AM4	24-hour TSP	24	Once every 6 days

2.5 Monitoring Procedures and Calibration Details

24- hour TSP Monitor:

Preparation of Filter Papers

- Visual inspection of filter papers was carried out to ensure that there were no pinholes, tears and creases;
- The filter papers were then labeled before sampling.
- The filter papers were equilibrated at room temperature and relative humidity < 50% for at least 24 hours before weighing.

Field Monitoring

- During collection of the sampled filter paper, the information on the elapse timer was logged. Site observations around the monitoring stations, which might have affected the monitoring results, were also recorded. Major pollution sources, if any, would be identified and reported. The flow record chart for the previous sampling was checked to see if there was any abnormality.
- The post-sampling filter papers were removed carefully from the filter holder and folded to avoid loss of fibres or dust particles from the filter papers;
- The filter holder and its surrounding were cleaned;
- A pre-weighed blank filter paper for the next sampling was put in place and aligned carefully. The filter holder was then tightened firmly to avoid leakage;
- A new flow record chart was loaded into the flow recorder;
- The programmable timer was set for the next 24 hrs sampling period, $\pm 1/2$ hr;
- The post-sampling filter papers were equilibrated at room temperature and relative humidity < 50% for at least 24 hours before weighing.

1- hour TSP Monitor:

- The following parameters of the TEOM model dust meters are regularly checked to ensure proper functionality:
 - o Mass concentration;
 - o Total mass:
 - o Frequency of the tapered element;
 - o Electrical noise;
 - o Main flow;
 - o Auxiliary flow.

Maintenance & Calibration

- The monitoring equipment and their accessories are maintained in good working conditions.
- Monitoring equipment is calibrated at monthly intervals. Calibration details are shown in Appendix F.

2.6 Results and Observations

All dust monitoring works were conducted on schedule. All monitoring data and graphical presentation of the monitoring results are provided in Appendix D. Key findings and observations are provided below:

1-hour TSP

No exceedance of 1-hour TSP Action/Limit Level was recorded in the month.

24-hour TSP

No exceedance of 24-hour TSP Action/Limit Level was recorded in the month.

17

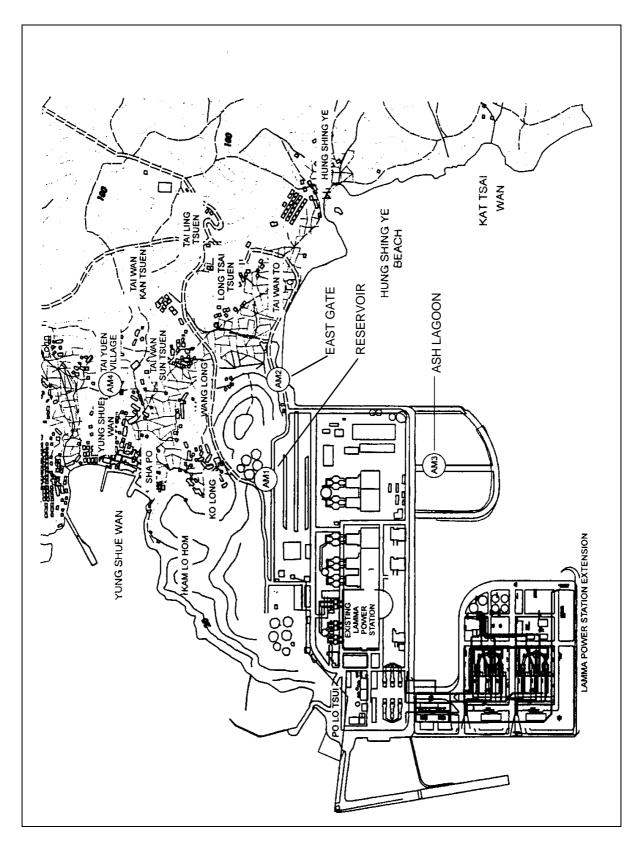


Figure 2.1 Location of Air Quality Monitoring Stations

3. NOISE

3.1 Monitoring Requirements

Continuous noise alarm monitoring at Ash Lagoon/Ching Lam were carried out to calculate the noise contributed by the construction activities at the two critical NSR's, viz. Long Tsai Tsuen/Hung Shing Ye and the school within the village of Tai Wan San Tsuen. The impact monitoring data for construction noise were checked against the limit levels specified in the EM&A Manual. With the availability of the construction noise permits, impact monitoring for the construction work during the restricted hours was also carried out. Section 4 presents the details of the construction noise permits.

Manual noise measurements at Pak Kok Tsui residences were carried out for the construction work of Transmission System in this reporting month. The impact noise monitoring data were checked against the limit levels specified in the EM&A Manual. Appendix B shows the established Action/Limit Levels for noise.

3.2 Monitoring Locations

In accordance with the EM&A manual, the identified noise monitoring locations are listed in Table 3.1 and shown in Figure 3.1 and Figure 3.2.

Table 3.1 Noise Monitoring Locations

Purpose of noise monitoring	Monitoring Location	
Lamma Extension	Ash Lagoon	
Lamma Extension	Ching Lam	
Transmission System	Pak Kok Tsui residences (No.2 and No.8)	

3.3 Monitoring Equipment

The sound level meters used for noise monitoring complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). The noise monitoring equipment used is shown in Table 3.2.

Table 3.2 Noise Monitoring Equipment

Equipment	Model			
Equipment	Lamma Extension	Transmission System		
Sound level meter	Rion NA-27/ B&K 2238F	Rion NL-31		
Sound level calibrator	Rion NC-74	Rion NC-74		

3.4 Monitoring Parameters, Frequency and Duration

Continuous alarm monitoring of A-weighted Leq levels was carried out at Ash Lagoon and Ching Lam while manual noise monitoring was conducted at Pak Kok Tsui residences. The measurement duration and parameter of noise monitoring were presented in Table 3.3 as follows:

 Table 3.3
 Noise Monitoring Duration and Parameter

Location	Time Period	Frequency	Parameter
	Daytime: 0700-1900 hrs on normal weekdays	Daytime: 30 minutes	30-min L _{Aeq}
Ash Lagoon Ching Lam	Evening-time & holidays: 0700-2300 hrs on holidays; and 1900-2300 hrs on all other days	Evening-time & holidays: 5 minutes	5-min L _{Aeq}
	Night-time: 2300-0700 hrs of next day	Night-time: 5 minutes	5-min L _{Aeq}
Pak Kok Tsui residences	0700-1900 hrs on normal weekdays	Twice per week	30-min L _{Aeq}

3.5 Monitoring Procedures and Calibration Details

Monitoring Procedures

Continuous Noise Monitoring for Lamma Extension Construction

The measured noise levels (MNL's) were collected at the noise alarm monitoring stations at Ash Lagoon and Ching Lam. The notional background noise levels (viz. baseline noise data at Ash Lagoon and Ching Lam) were applied to correct the corresponding MNL's in 30-min/5-min L_{Aeq} .

A wind speed sensor was installed at Station Building Rooftop. The wind speed signal was used to determine whether the data from Ash Lagoon and Ching Lam noise alarm monitoring stations were affected. The instantaneous data was discarded in case the instantaneous wind speed exceeded 10 m/s. The 30-min/5-min L_{Aeq} was considered valid only if the amount of valid data was equal to or above 70%.

When calibrating the noise measuring equipment, all observations around the monitoring stations, which might have affected the monitoring results, were recorded.

Manual Noise Monitoring for Transmission System Construction

Manual noise measurements were carried out at the Pak Kok Tsui residences in accordance with standard acoustical principles and practices for checking the impact of noise related to construction of the Transmission System.

Hand-held anemometer was used to measure the wind speed while taking noise measurements. If the wind speed is excessive, noise data will be discarded and remeasured.

Equipment Calibration

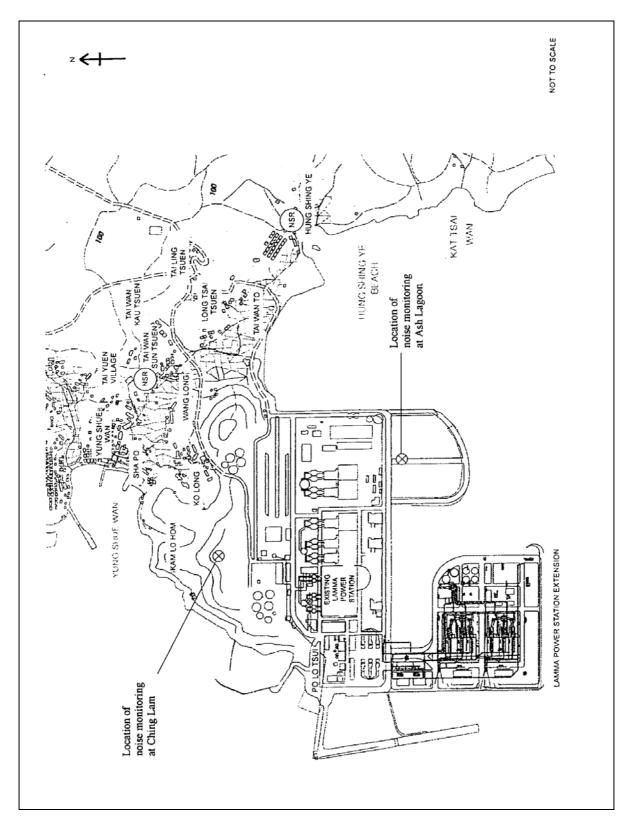
The sound level meters and calibrators have been verified by the manufacturer or accredited laboratory. Equipment for continuous noise monitoring was calibrated at site on a monthly basis.

The sound level meters used for manual noise measurement were calibrated with a sound level calibrator immediately before and after noise measurement in accordance with the relevant Technical Memoranda under the Noise Control Ordinance. Calibration details are shown in Appendix F.

3.6 Results and Observations

Continuous noise monitoring was conducted at the two monitoring stations at Ash Lagoon and Ching Lam while manual noise monitoring was carried out at the Pak Kok Tsui residences.

All monitoring results and their graphical presentations are provided in Appendix E. No exceedance of noise Action/Limit Level was recorded in the month.



22

Figure 3.1 Location of Noise Monitoring Stations

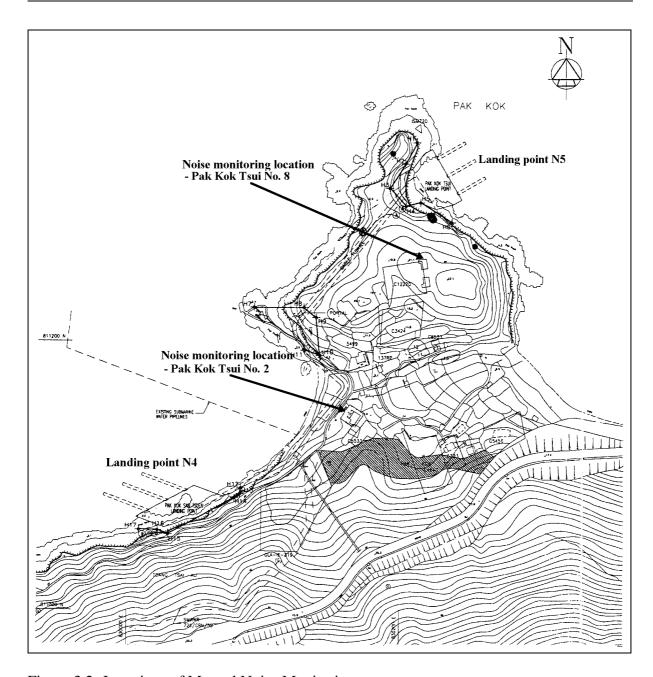


Figure 3.2 Locations of Manual Noise Monitoring

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 Noise

The environmental monitoring results for Air Quality and Noise in the reporting month presented in sections 2, 3 and 4 respectively are summarized in Table 4.1.

Table 4.1 Summary of AL Level Exceedances on Monitoring Parameters

Item	Parameter Monitored	Monitoring Period	No. of Exceedances In		Event/Action Plan Implementation Status
			Action Level	Limit Level	and Results
Air					
1	Ambient TSP (24-hour)	01/07/06- 31/07/06	0	0	
2	Ambient TSP (1-hour)	01/07/06- 31/07/06	0	0	
Noise					
1	Noise level at the critical NSR's predicted by the noise alarm monitoring system	01/07/06- 31/07/06	0	0	
2	Manual noise monitoring at the Pak Kok Tsui residences	01/07/06- 31/07/06	0	0	

Waste Management Records

The estimated amounts of different types of waste generated in July 2006 are shown in Table 4.2.

Table 4.2 Estimated Amounts of Waste Generated in July 2006

Waste Type	Examples	Estimated Amount
Construction Waste	Concrete Waste, Used	0.2 Tonne
	formwork, reinforcement	3
	and wooden waste	138 m ³
General Refuse	Domestic wastes collected	25 m^3
	on site	

4.3 Site Environmental Audit

IEC conducted a site inspection on 19/07/2006. The inspection result is attached in Appendix H.

Site audits were carried out by ET on a weekly basis to monitor environmental issues at the construction sites to ensure that all mitigation measures were implemented timely and properly. The site conditions were generally satisfactory. All required mitigation measures were implemented. The weekly site inspection results are attached in Appendix H.

4.4 Status of Environmental Licensing and Permitting

All permits/licenses obtained for the project are summarised in Table 4.3.

Table 4.3 Summary of Environmental Licensing and Permit Status

Description	Permit No.	Valid Period		Highlights	Status
		From	To		
Varied Environmental Permit	EP-071/2000/C	18/05/05	-	The whole construction work site	Valid
Construction Noise Permit	GW-RS0032-06	11/02/06	10/08/06	Operation of PME's allowed during the restricted hours (general holidays including Sundays between 0700-0700 hrs on next day and any day not being a general holiday between 1900-0700 hrs on next day).	Valid

Description	Description Permit No. Valid Period		Highlights	Status	
•		From	To	0 0	
Construction Noise Permit	GW-RS0138-06	24/03/06	21/09/06	Operation of PME's allowed during the restricted hours (general holidays including Sundays between 0700-0700 hrs on next day and any day not being a general holiday between 1900-0700 hrs on next day).	Valid
Construction Noise Permit	GW-RS0278-06	24/05/06	19/11/06	Operation of PME's allowed during the restricted hours (general holiday including Sundays between 0700-1900 hrs and any day not being a general holiday between 1900-2100 hrs).	Valid
Registration of Chemical Waste Producer	WPN5213-912-P2781-07	11/06/04	-	Major Chemical Waste Type: Spent lubrication oil, waste car battery, paint or thinner contaminated container	Valid
Registration of Chemical Waste Producer	WPN5213-912-K2801-03	15/09/04	-	Major Chemical Waste Type: Spent lubricating oil, spent battery, contaminated soil with spent flammable liquid	Valid
Registration of Chemical Waste Producer	WPN5517-912-T2007-02	17/03/05	-	Major Chemical Waste Type for the construction work: asbestos waste, spent lubricating lubrication oil	Valid

Description	Permit No.	Valid Period		Highlights	Status
		From	To		
Registration of Chemical Waste Producer	WPN5213-912-W2852-09	25/01/05	-	Major Chemical Waste Type: spent mineral oil/ lubricating oil, spent solvents, spent batteries and surplus paint	Valid
Registration of Chemical Waste Producer	WPN4111-912-M2534-09	20/06/05	-	Major Chemical Waste Type: spent insulation oil for transformer	Valid
WPCO Discharge Licence	EP890/W2/XD020	22/11/04	30/11/09	Toilet for LMX construction site	Valid
WPCO Discharge Licence	EP890/W2/XD021	03/02/05	28/02/10	Toilet for LMX construction site	Valid
WPCO Discharge Licence	EP890/W2/XD008 (V.1)	29/06/06	30/11/09	Lamma Power Station and Extension	Valid
APCO Specified Process Licence	L-7-028	22/06/06	31/12/08	Lamma Power Station Extension	Valid

4.5 Implementation Status of Environmental Mitigation Measures

Mitigation measures detailed in the permits and the EM&A Manual (Construction Phase) are required to be implemented. An updated summary of the Environmental Mitigation Implementation Schedule (EMIS) is presented in Appendix I.

4.6 Implementation Status of Event/Action Plans

The Event/Action Plans extracted from the EM&A Manual (Construction Phase) are presented in Appendix G.

4.7 Implementation Status of Environmental Complaint Handling Procedures

In July 2006, no complaint against the construction activities was received.

Table 4.4 Environmental Complaints / Enquiries Received in July 2006

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

Table 4.5 Outstanding Environmental Complaints / Enquiries Carried Over

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

28

5. FUTURE KEY ISSUES

5.1 Status of Natural Gas supply

Natural gas supply has been delivered to Lamma Power Station Extension.

5.2 Key Issues for the Coming Month

Key issues to be considered in the coming month include:

Unit L9 Civil and Building Works

Noise Impact

- To continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained.
- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

• To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L9 Mechanical Erection

Noise Impact

- To continue monitoring the noise level during construction.
- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

• To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L9 Electrical, Instrumentation & Control Erection

Noise Impact

- To continue monitoring the noise level during construction.
- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

• To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Transmission System

Noise Impact

- To continue monitoring the noise level during construction.
- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance.

Air Impact

• To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Terrestrial Ecology Impact

- To closely monitor the construction activities in order to avoid disturbance to the rare plants.
- To provide temporary fire fighting equipment for prevention of fire within the work sites.

5.3 Monitoring Schedules for the Next 3 Months

With the completion of post-project monitoring, no further marine water quality monitoring for the reclamation works is required.

The tentative environmental monitoring schedules for the next 3 months are shown in Appendix C.

5.4 Construction Program for the Next 3 Months

The period of construction activity of slurry ash piping & filling is tentatively from August 2006 to October 2006. The tentative construction programs for the next 3 months are shown in Appendix J.

6. CONCLUSION

All monitoring work at designated stations was performed as scheduled satisfactorily. The environmental monitoring works and site inspection were performed as scheduled in the reporting month. All monitoring results were checked and reviewed.

No Action/Limit level exceedance on 1-hour and 24-hour TSP level was recorded in the reporting month.

No Action/Limit level exceedance on noise was recorded in the reporting month.

Environmental mitigation measures recommended in the EM&A manual for the construction activities were implemented in the reporting month. No complaint against the construction activities was received in the reporting month. No prosecution was received for this Project in the reporting period.

The environmental performance of the Project was generally satisfactory.

Appendix A Organization Chart

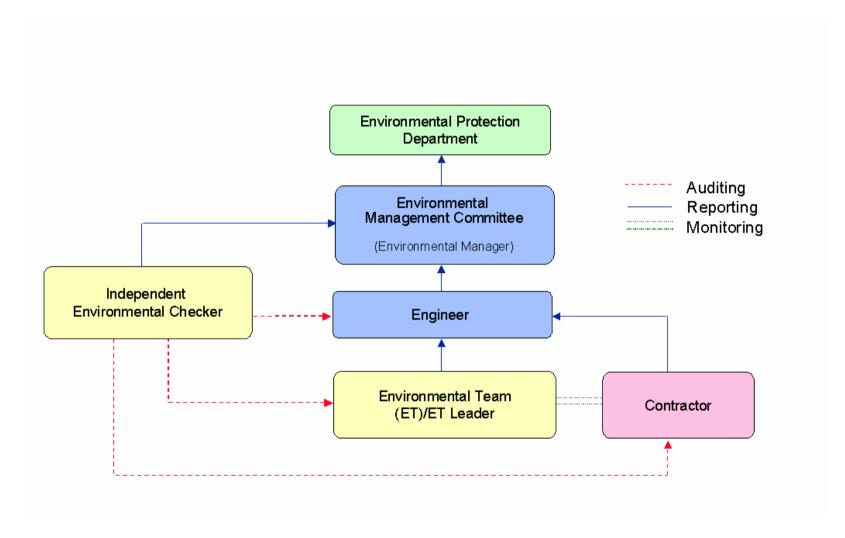


Figure A.1 Organisation of EM&A Programme at Construction Phase

Appendix B Action and Limit Levels for Air Quality and Noise Monitoring

B.1. Air

Table B.1 Action and Limit Levels for 1-hour and 24-hour TSP

	Action Level, μg/m ³	Limit Level, μg/m ³
1-hour TSP*	340	500
24-hour TSP	190	260

T No Action/Limit Level for 1-hour TSP is applied to AM4 where no real time dust monitor is installed.

B.2. Noise

Table B.2 presents the Action and Limit (AL) levels for construction noise other than percussive piling.

Table B.2 AL Levels for Construction Noise (Other than Percussive Piling)

Parameters	Action	Limit	
Noise Levels at the NSR's at Long Tsai Tsuen/Hung Shing Ye and school within the village of Tai Wan San Tsuen predicted by the noise alarm monitoring system Manual noise monitoring at the nearest Pak Kok Tsui residences to cable landing points N4 and N5	When one or more documented complaints are received	a. 75 19 we b. sul un Or ho on dB c. sul un Or	dB(A) in L _{Aeq,30 min} (07:00-:00 hrs on normal eekdays) (Note 1) bject to statutory control der the Noise Control dinance (07:00-23:00 hrs on lidays and 19:00-23:00 hrs all other days). Set to 60 B(A) in L _{Aeq,5 min} bject to statutory control der the Noise Contr

Note:

1. For educational institution, the limit level shall be 70 dB(A), reduced to 65 dB(A) during examination periods.

Appendix C Environmental Monitoring Schedule

Table C.1 Monitoring schedule for 24hr and 1hr TSP monitoring for Lamma Extension Construction (July 2006 to October 2006)

24hr TSP Monitoring	1hr TSP Monitoring
01/Jul/2006	01/Jul/2006 1500hr to 1800hr
07/Jul/2006	07/Jul/2006 1500hr to 1800hr
13/Jul/2006	13/Jul/2006 1500hr to 1800hr
19/Jul/2006	19/Jul/2006 1500hr to 1800hr
25/Jul/2006	25/Jul/2006 1500hr to 1800hr
31/Jul/2006	31/Jul/2006 1500hr to 1800hr
06/Aug/2006	06/Aug/2006 1500hr to 1800hr
12/Aug/2006	12/Aug/2006 1500hr to 1800hr
18/Aug/2006	18/Aug/2006 1500hr to 1800hr
24/Aug/2006	24/Aug/2006 1500hr to 1800hr
30/Aug/2006	30/Aug/2006 1500hr to 1800hr
05/Sep/2006	05/Sep/2006 1500hr to 1800hr
11/Sep/2006	11/Sep/2006 1500hr to 1800hr
17/Sep/2006	17/Sep/2006 1500hr to 1800hr
23/Sep/2006	23/Sep/2006 1500hr to 1800hr
29/Sep/2006	29/Sep/2006 1500hr to 1800hr
05/Oct/2006	05/Oct/2006 1500hr to 1800hr
11/Oct/2006	11/Oct/2006 1500hr to 1800hr
17/Oct/2006	17/Oct/2006 1500hr to 1800hr
23/Oct/2006	23/Oct/2006 1500hr to 1800hr
29/Oct/2006	29/Oct/2006 1500hr to 1800hr
1	

Table C.2 Manual Noise Monitoring Schedule for Transmission System Construction (July 2006 to October 2006)

Date	Monitoring Start Time
04/Jul/2006	10:00
07/Jul/2006	14:00
11/Jul/2006	10:00
14/Jul/2006	14:00
18/Jul/2006	10:00
21/Jul/2006	14:00
25/Jul/2006	10:00
28/Jul/2006	14:00
01/Aug/2006	10:00
04/Aug/2006	14:00
08/Aug/2006	10:00
11/Aug/2006	14:00
15/Aug/2006	10:00
18/Aug/2006	14:00
22/Aug/2006	10:00
25/Aug/2006	14:00
29/Aug/2006	10:00
01/Sep/2006	14:00
05/Sep/2006	10:00
08/Sep/2006	14:00
12/Sep/2006	10:00
15/Sep/2006	14:00
19/Sep2006	10:00
22/Sep/2006	14:00
26/Sep/2006	10:00
29/Sep/2006	14:00
03/Oct/2006	10:00
06/Oct/2006	14:00
10/Oct/2006	10:00
13/Oct/2006	14:00
17/Oct/2006	10:00
20/Oct/2006	14:00
24/Oct/2006	10:00
27/Oct/2006	14:00
31/Oct/2006	10:00

APPENDIX D AIR QUALITY MONITORING RESULTS

Site: Lamma Power Station Extension

Month: July 2006

24 hour TSP Measurement:-

		TSP concentr	ation (µg/m ³)	Weather Information (From Hong Kong Observatory)			
Date	Reservoir	East Gate	Ash Lagoon	Tai Yuen Village	Mean Wind Speed	Prevailing Wind Dir.	Mean R.H.
	(AM1)	(AM2)	(AM3)	(AM4)	(km/hr)	()	(%)
01/07/2006	21	23	27	36	19.4	110	87
07/07/2006	32	41	30	33	29.1	230	78
13/07/2006	68	73	59	67	24.8	280	77
19/07/2006	37	33	41	38	6.5	170	78
25/07/2006	111	128	100	107	28.5	280	73
31/07/2006	30	27	38	44	24.5	060	80

1 hour TSP Measurement:-

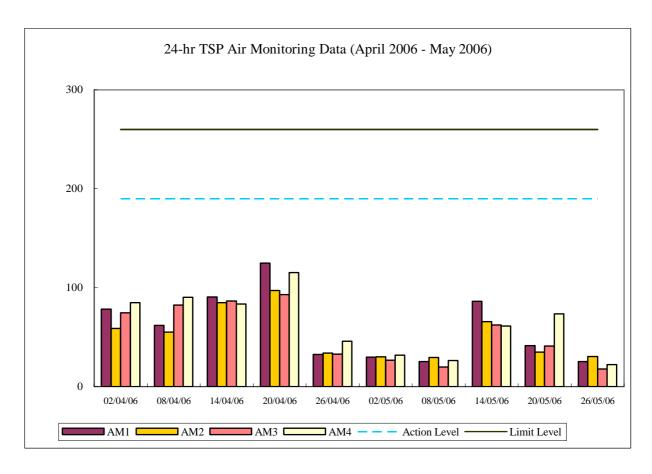
		TS	TSP concentration (μg/m ³)					
Date	Time	Reservoir (AM1)	East Gate (AM2)	Ash Lagoon (AM3)				
	15:00-15:59	19	22	13				
01/07/2006	16:00-16:59	11	21	15				
	17:00-17:59	29	31	29				
	15:00-15:59	12	26	14				
07/07/2006	16:00-16:59	20	41	20				
	17:00-17:59	20	36	21				
	15:00-15:59	67	68	51				
13/07/2006	16:00-16:59	58	88	58				
	17:00-17:59	55	77	49				
	15:00-15:59	35	34	37				
19/07/2006	16:00-16:59	35	40	29				
	17:00-17:59	34	38	30				
	15:00-15:59	102	202	98				
25/07/2006	16:00-16:59	76	90	55				
	17:00-17:59	79	93	80				
	15:00-15:59	25	15	12				
31/07/2006	16:00-16:59	23	30	26				
	17:00-17:59	14	26	27				

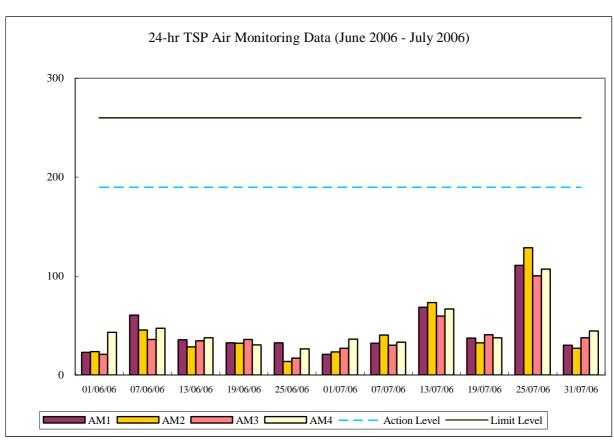
	1-hr TSP	24-hr TSP
	$(\mu g/m^3)$	$(\mu g/m^3)$
Action Level	340	190
Limit Level	500	260

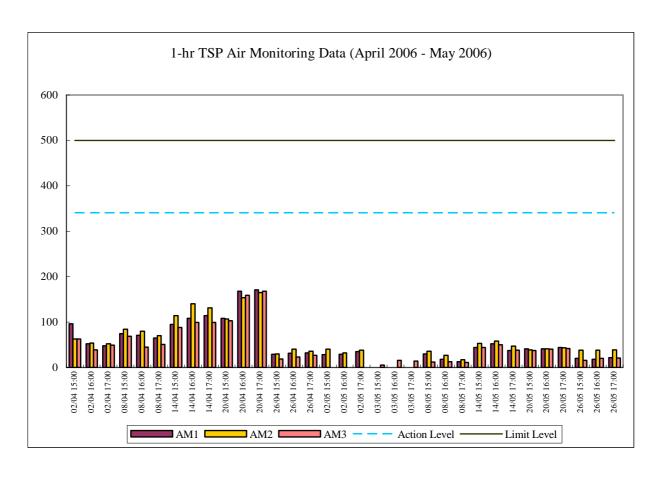
Calibration: Calibration details are shown in appendix F.

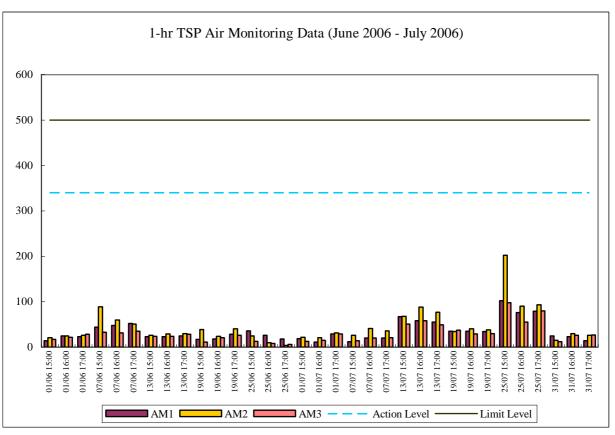
Equipment used:

Location	1-hr TSP	24-hr TSP
Reservoir and East Gate	TEOM 1400a	High Volume Air Sampler
Ash Lagoon	TEOM 1400a	Partisol Model 2000 Sampler
Tai Yuen Village	-	MINIVOL Portable Sampler









Appendix E.1 Continuous Noise Monitoring Results for July 2006

Site: Lamma Power Station Extension - Superstructure

and E&M Works

Measurement Location: Ash Lagoon and Ching Lam

Measurement Parameter: 30-min Leq (07:00-19:00 hrs on normal weekdays)

5-min Leq (07:00-23:00 hrs on holidays and 19:00-23:00 hrs on all other days, and 23:00-

07:00 hrs of next day)

Noise Equipment Used: Rion NA-27 (Ash Lagoon) and B&K 2238F (Ching

Lam) sound level meters and Rion NC-74 sound

level calibrator

Last Calibration Date: Rion NA-27 sound level meter - 17/02/2005

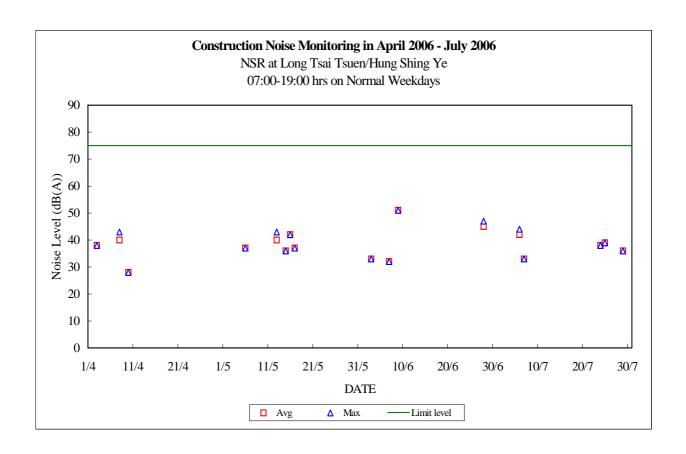
B&K 2238F sound level meter - 03/02/2006 Rion NC-74 calibrator - 13/03/2006

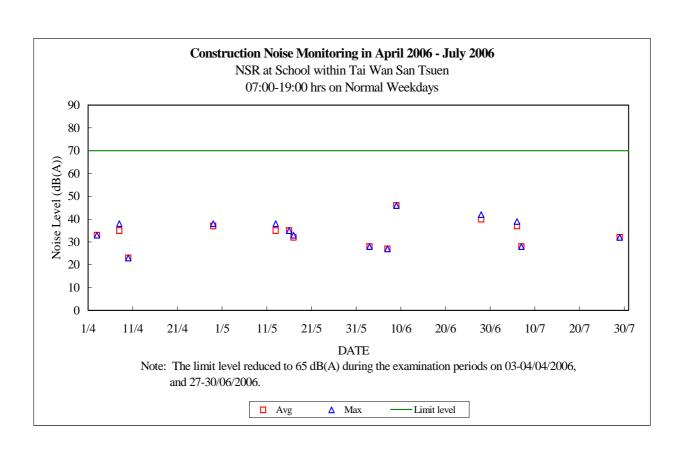
Date	Time	Calculated Noise Level at NSR at Long Tsai Tsuen/Hung Shing Ye (dB(A))		Noise Level at NSR at Long Tsai Tsuen/Hung Shing Ye		Noise Level at NSR at Long Time Tsai Tsuen/Hung Shing Ye Limit Noise Level (dB(A	Limit Noise Level (dB(A))	Calculated Noise Level at NSR at the school within Tai Wan San Tsuen (dB(A))		Limit Noise Level (dB(A))
01 /05 /0006	07:00 02:00	Max	Avg	50	Max	Avg	60			
01/07/2006	07:00-23:00	39	34	60	35	29	60			
01/07/2006	23:00-07:00	33	30	45	28	25	45			
02/07/2006	07:00-23:00	33	31	60	28	26	60			
02/07/2006	23:00-07:00	36	32	45	32	27	45			
03/07/2006	07:00-19:00			75			70			
03/07/2006	19:00-23:00	36	33	60	31	28	60			
03/07/2006	23:00-07:00	37	33	45	32	28	45			
04/07/2006	07:00-19:00			75			70			
04/07/2006	19:00-23:00			60			60			
04/07/2006	23:00-07:00	36	33	45	31	28	45			
05/07/2006	07:00-19:00			75			70			
05/07/2006	19:00-23:00			60			60			
05/07/2006	23:00-07:00	37	30	45	32	25	45			
06/07/2006	07:00-19:00	44	42	75	39	37	70			
06/07/2006	19:00-23:00	44	40	60	39	35	60			
06/07/2006	23:00-07:00			45			45			
07/07/2006	07:00-19:00	33	33	75	28	28	70			
07/07/2006	19:00-23:00	38	35	60	33	31	60			
07/07/2006	23:00-07:00	38	33	45	33	28	45			
08/07/2006	07:00-19:00			75			70			
08/07/2006	19:00-23:00	32	30	60	27	26	60			
08/07/2006	23:00-07:00	38	34	45	33	29	45			

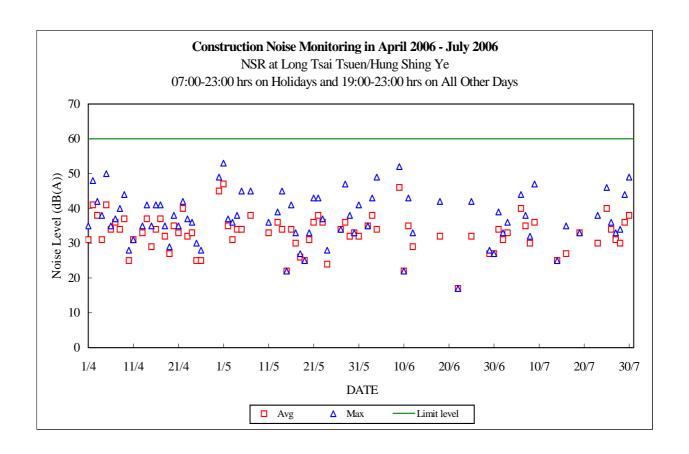
Date	Time	Calculated Noise Level at NSR at Long Tsai Tsuen/Hung Shing Ye (dB(A))		Limit Noise Level (dB(A))	Calculated Noise Level at NSR at the school within Tai Wan San Tsuen (dB(A))		Limit Noise Level (dB(A))
		Max	Avg		Max	Avg	
09/07/2006	07:00-23:00	47	36	60	42	35	60
09/07/2006	23:00-07:00	35	31	45	31	26	45
10/07/2006	07:00-19:00			75			70
10/07/2006	19:00-23:00			60			60
10/07/2006	23:00-07:00	35	35	45	31	31	45
11/07/2006	07:00-19:00			75			70
11/07/2006	19:00-23:00			60			60
11/07/2006	23:00-07:00	34	31	45			45
12/07/2006	07:00-19:00			75			70
12/07/2006	19:00-23:00			60			60
12/07/2006	23:00-07:00	44	36	45			45
13/07/2006	07:00-19:00			75			70
13/07/2006	19:00-23:00			60			60
13/07/2006	23:00-07:00	38	31	45			45
14/07/2006	07:00-19:00			75			70
14/07/2006	19:00-23:00	25	25	60			60
14/07/2006	23:00-07:00	38	34	45			45
15/07/2006	07:00-19:00			75			70
15/07/2006	19:00-23:00			60			60
15/07/2006	23:00-07:00	42	38	45	33	32	45
16/07/2006	07:00-23:00	35	27	60			60
16/07/2006	23:00-07:00	30	30	45			45
17/07/2006	07:00-19:00			75			70
17/07/2006	19:00-23:00			60			60
17/07/2006	23:00-07:00	28	28	45			45
18/07/2006	07:00-19:00			75			70
18/07/2006	19:00-23:00			60			60
18/07/2006	23:00-07:00	38	31	45			45
19/07/2006	07:00-19:00			75			70
19/07/2006	19:00-23:00	33	33	60			60
19/07/2006	23:00-07:00	35	32	45			45
20/07/2006	07:00-19:00			75			70
20/07/2006	19:00-23:00			60			60
20/07/2006	23:00-07:00	40	36	45			45
21/07/2006	07:00-19:00			75			70

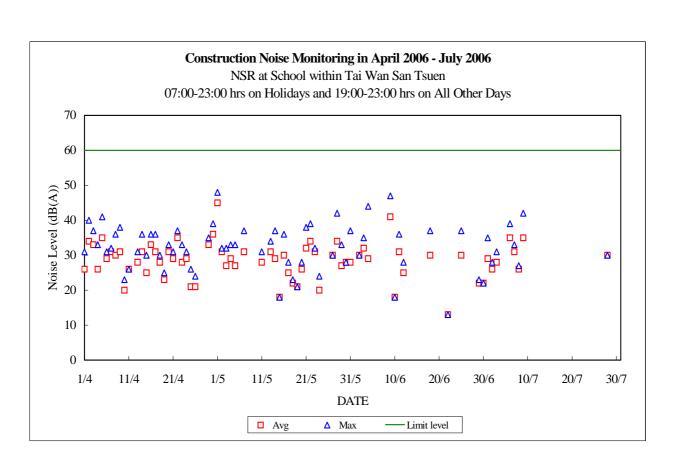
Date	Time	Calcula Noise Level a NSR at Tsai Tsuen/H Shing N (dB(A))	at Long Hung Ke	Limit Noise Level (dB(A))	Calcula Noise Level a NSR at school within Wan Sar Tsuen (dB(A))	at the Tai 1	Limit Noise Level (dB(A))
21/07/2006	19:00-23:00			60			60
21/07/2006	23:00-07:00	32	27	45			45
22/07/2006	07:00-19:00			75			70
22/07/2006	19:00-23:00			60			60
22/07/2006	23:00-07:00	32	28	45			45
23/07/2006	07:00-23:00	38	30	60			60
23/07/2006	23:00-07:00	45	40	45			45
24/07/2006	07:00-19:00	38	38	75			70
24/07/2006	19:00-23:00			60			60
24/07/2006	23:00-07:00	37	35	45			45
25/07/2006	07:00-19:00	39	39	75			70
25/07/2006	19:00-23:00	46	40	60			60
25/07/2006	23:00-07:00	40	34	45			45
26/07/2006	07:00-19:00		-	75			70
26/07/2006	19:00-23:00	36	34	60			60
26/07/2006	23:00-07:00	45	40	45	41	38	45
27/07/2006	07:00-19:00		-	75			70
27/07/2006	19:00-23:00	33	31	60			60
27/07/2006	23:00-07:00	43	34	45	38	33	45
28/07/2006	07:00-19:00		-	75			70
28/07/2006	19:00-23:00	34	30	60	30	30	60
28/07/2006	23:00-07:00	41	35	45	36	32	45
29/07/2006	07:00-19:00	36	36	75	32	32	70
29/07/2006	19:00-23:00	44	36	60			60
29/07/2006	23:00-07:00	39	34	45	34	30	45
30/07/2006	07:00-23:00	49	38	60			60
30/07/2006	23:00-07:00	44	40	45			45
31/07/2006	07:00-19:00			75			70
31/07/2006	19:00-23:00			60			60
31/07/2006	23:00-07:00	41	33	45			45

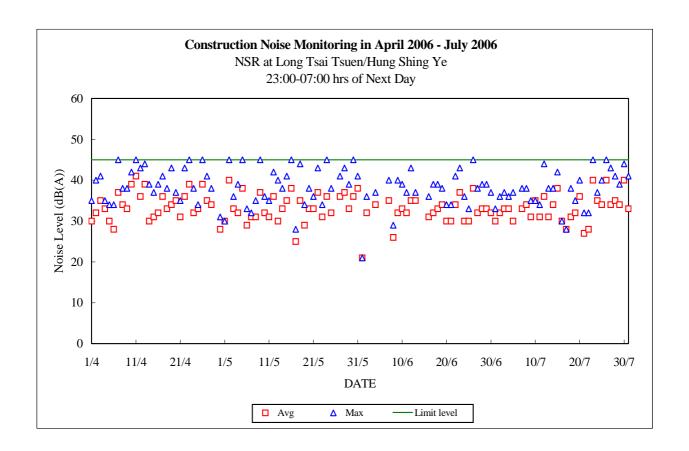
Note: "--" represents the measured noise monitoring data lower than the established notional background level/discarded under strong wind.

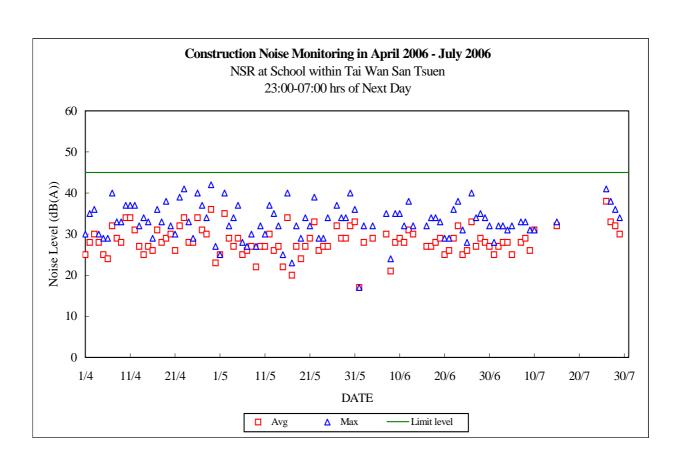












Appendix E.2 Manual Noise Monitoring Results for July 2006

Site: Lamma Power Station Extension - Transmission System

Measurement Parameter: 30-min Leq (07:00-19:00 hrs on normal weekdays)
Noise Equipment Used: Rion NL-31 sound level meter and Rion NC-74 sound

level calibrator

Wind Speed Equipment: Extech Instruments 45118

Last Calibration Date: Rion NL-31 sound level meter - 08/08/2005

Rion NC-74 sound level calibrator - 04/10/2005

Measurement Location: N4 - Pak Kok Tsui No.2

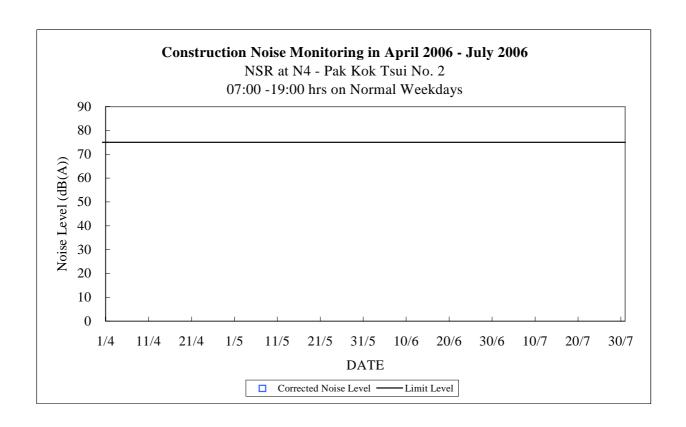
Date	Time	Measured Noise Level (dB(A))	Notional Background Noise Level (dB(A))	Corrected Noise Level (dB(A))	Limit Noise Level (dB(A))	Wind Speed (m/s)
04/07/2006	10:00-10:30	53.0	54.9		75	<5
07/07/2006	14:00-14:30	52.1	54.9		75	<5
11/07/2006	10:00-10:30	52.9	54.9		75	<5
14/07/2006	14:00-14:30	52.5	54.9		75	<5
18/07/2006	10:00-10:30	52.9	54.9		75	<5
21/07/2006	14:00-14:30	53.1	54.9		75	<5
25/07/2006	10:00-10:30	52.5	54.9		75	<5
28/07/2006	14:00-14:30	52.4	54.9		75	<5

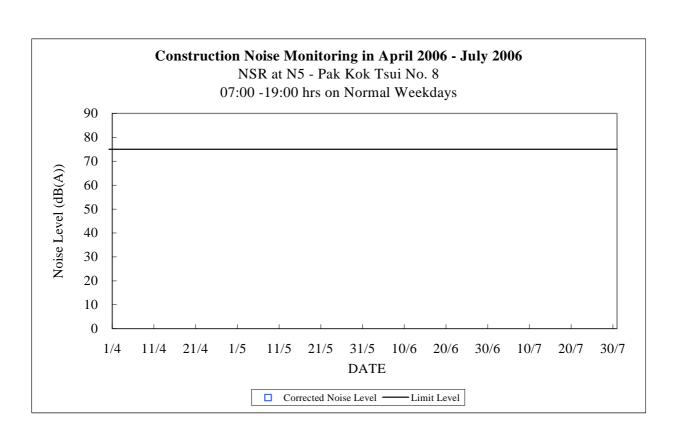
Measurement Location: N5 - Pak Kok Tsui No.8

Date	Time	Measured Noise Level (dB(A))	Notional Background Noise Level (dB(A))	Corrected Noise Level (dB(A))	Limit Noise Level (dB(A))	Wind Speed (m/s)
04/07/2006	10:00-10:30	51.2	54.9		75	<5
07/07/2006	14:00-14:30	51.9	54.9		75	<5
11/07/2006	10:00-10:30	51.8	54.9		75	<5
14/07/2006	14:00-14:30	51.7	54.9		75	<5
18/07/2006	10:00-10:30	51.3	54.9		75	<5
21/07/2006	14:00-14:30	51.7	54.9		75	<5
25/07/2006	10:00-10:30	51.4	54.9		75	<5
28/07/2006	14:00-14:30	51.8	54.9		75	<5

Note:

- The noise generated from local noisy events (e.g. dog barking, passingby pedestrians, motor vehicle, aeroplane, helicopter, etc.) was manually removed during measurement as far as practicable.
- 2. "--" represents the measured noise monitoring data lower than the established notional background level.





Appendix F

The QA/QC Procedures and Results

HIGH VOLUME AIR SAMPLER SITE VISIT LOG SHEET

Site Na	ame:	R	E,	Site No.:	AMI .
Date of	f visit:	14-	1-06	Hour of Visit:	10:30
Staff n	ame:	H. k	TSANG	HVAS S/N:	218
Used fi	ilter paper no.:		T 68	New filter paper no.:	LT 70
Туре о	f filter:	Glass-fib	re		,
I.		31.4 +	,	essure, P _a =	985- <u>m</u> b
Π.	Correction of mano	meter rea	ding		
	Calibration orifice	No.		Manometer reading at a corresponds to Q _{SID} : (inch H ₂ O	= 40 ft ³ /min.
	1535(09/200	5)		$\triangle H_a = 19.29(T_a/P_a)$	= 5.6
	Manometer reading Adjustment of flow Manometer reading Note: Tolerance Limit o	controlle after cal	er (Y/N):	<u>y</u>	r manometer: ± 0.2 inch H ₂ O
III.	General Conditions	of HVA	S		
IV.	Remarks				

File Name: C:\monitor\ambient\hvprical\HVASCAL05.doc

HIGH VOLUME AIR SAMPLER SITE VISIT LOG SHEET

Site Na	ame:	E G		Site No.:		ı	AM2
Date of	f visit:	14-7	.06	Hour of Visit	:		14:00
Staff n	ame:	H.K.	TSANG	HVAS S/N:			2188
Used fi	ilter paper no.:	LT (P	New filter par	per no.:		<u>L</u> T71
Туре о	f filter:	Glass-fibre	•				
I. II.	Ambient Conditions Temperature, T _a = Correction of manor	326 12	K Pr	essure,	P _a =	<u> 898 . </u>	_mb
	Calibration orifice	No.			r reading at si nds to Q _{STD} = (inch H ₂ O)		
	1535(09/200	5)		$\triangle H_a = 19$.29(T _a /P _a) =	اخ=	1
	Manometer reading Adjustment of flow Manometer reading Note: Tolerance Limit of	controller (after calibra	Y/N): _ ation: _	7.6	ling limits for r	nanomete	r: ± 0.2 inch H ₂ O
III.	General Conditions	of HVAS					
IV.	Remarks						

File Name: C:\monitor\ambient\hvprical\HVASCAL05.doc

PARTISOL TSP SAMPLER SITE VISIT LOG SHEET

Site Nam	e:	A.L.		Site N	lumber:		AH3	
Date of V	'isit: _	14-7-06)	Hour	of Visit:		12:00	_
Staff Nan	ne:	H. K. TSANG		Partis	ol S/N: _	140 B	127505	2410
Used Filt	er No	: P031		New I	Filter No	.:	PD32	_
Ambient	tempe	erature: <u>33, </u> \$\frac{1}{2}	°C	Ambi	ent press	sure:	1001	nbur
I.	<u>Ger</u>	neral Services						
	1.	Replace control	unit Larg	ge In-lii	ne Filter			_
	2.	Clean the samp	le inlet he	ad				_
	3.	Clean sample to	ıbe			· · · · · · · · · · · · · · · · · · ·		_
	4.	Clean / Replace	pump hea	ad	<u> </u>			
	5.	Clean / Replace	piston		*			_
2.		Temperature Check °C Before Pressure Check (Am	Calibra	ation:	<u>Y / N</u>	After 0.000987)	°C	
		mbar	Calibra	ation:	<u>Y / N</u>		mbar	
3.		Before Flow Check (16.7± 1.	G 17	ation:	<u>Y / N</u>	After After	l/min	
III. <u>R</u>	<u>Remarl</u>	<u>KS</u>						
								_

MINI VOLUME AIR SAMPLER SITE VISIT LOG SHEET

Site Name:	TYV	Site No.:	AM4
Date of visit:	<u>#-7-06.</u>	Hour of Visit:	11:40
Staff name:	H.K.TSAN	MINIVOL S/N:	3383
Used filter paper no.:	MILY	New filter paper no.:	MI16
Type of filter:	Cellulose / Glas (Delete as appro		
I. Calibration is perfe	ormed by using Dry	ycal DC-2 Flow Calibrator	
5 Sl/min set point	s recommended	•	
co.£	Before	<u> </u>	r
II. General Service of M1. Clean Rota	ini Vol Air Sample		
2. Clean / rep	lace Pump Valves:		
3. Clean / rep	lace Pump Diaphra	ngms: X	
4. Clean Impa	action Inlet:	J	
5. Replace Ti	mer Battery Every	6 months: X	
6. Replace In	let Filter:		
III. Remarks			

THE HONGKONG ELECTRIC CO., LTD. LAMMA POWER STATION EXTENSION TEOM 1400A CONTINUOUS DUST MONITOR DATA QUALITY ASSURANCE LOG SHEET

Month: July Year: 2006

	Reservoir (AM1)							
Date	Frequency (Hz) (230 – 260)	Noise (< 0.1)	Operation Mode (Mode 4)	Main Flow (1/min) (0.94 – 1.06)	Aux. Flow (1/min) (14.67 – 16.67)			
1/7/2006	Z40·13	0 -32	¥	1.00	15.67			
7/7/2006	240.06	0.036	¥	1.00	(5-67			
13/7/2006	239 - 95	0.037	4	1.00	15-67			
19/7/2006	7.39.75	0-39	4	1.00	15-67			
25/7/2006	239.63	0.027	4	1.00	15-67			

	East Gate (AM2)								
Date	Frequency (Hz) (230 – 250)	Noise (< 0.1)	Operation Mode (Mode 4)	Main Flow (1/min) (0.94 – 1.06)	Aux. Flow (l/min) (14.67 – 16.67)				
1/7/2006	246-35	0.433	4	1.00	15.61				
7/7/2006	246.21	0.030	Ġ.	0-99	15.63				
13/7/2006	246.05	0.073	4	1.00	15-62				
19/7/2006	245.74	0.084	4	0.99	15.62				
25/7/2006	245-39	8.045	4	0.99	15.64				

	Ash Lagoon (AM3)							
Date	Frequency (Hz) (240 – 270)	Noise (< 0.1)	Operation Mode (Mode 4)	Main Flow (1/min) (0.94 – 1.06)	Aux. Flow (1/min) (14.67 – 16.67)			
1/7/2006	248:73	0.03.	4	1.00	15.67			
7/7/2006	248.65	0.038	4	1.20	15.66			
13/7/2006	248.53	0.039	4	1.00	13-66			
19/7/2006	248.31	0.032	4	1-01	15-66			
25/7/2006	248.08	0.046	4	1.00	15.66			

	Maintenance	e Record	
	Reservoir	East Gate	Ash Lagoon
TEOM Filter Exchange	V	✓	V
Clean TSP Inlet		✓	V
Replace flow in-line filter			
Pump Repair			
Leak Check			1917
Flow Audit			
Flow Controller Calibration			
A/C filter cleaning		✓	<u> </u>

Remarks:				
Prepared by :	Alam.			

Checked by:

THE HONGKONG ELECTRIC CO., LTD. LAMMA POWER STATION EXTENSION NOISE MONITORING STATION SITE VISIT LOG SHEET

Loc	ation	Ash-L	agoo n/Chir	ng Lam*	
Dat	e	11-7-06	Time		14:15
Equ	ipment	Rion NA-27/B&	K 2238F* S	Sound Leve	el Meter
Ser	ial Number _	00111465/0011	241- 1466/00111	467/ 23438	338/2356907*
Sta	ff Attended	w.1			
			,		1
1.	Calibration				
	Acoustic cal	librator used			Rion NC-74
	Calibration	level before a	djustment	(dB(A))	94.0
	Calibration	level after ad	justment (dB(A))	94
2.	Weather Cond	ditions			
	a. Sunny /fi	ine/ cloudy/show	ery/heavy	rain*	
	b. Strong w	vind/breeze/ cal	n*		
3.	Remark/Obser	<u>cvation</u>			
				CH. de	

Note: * - Please delete where inappropriate

THE HONGKONG ELECTRIC CO., LTD. LAMMA POWER STATION EXTENSION NOISE MONITORING STATION SITE VISIT LOG SHEET

Loca	ation		Ash La	agoon/ Ch:	ing Lam*	
Date	e	(1-	7-06	_ Time		16:10
Equ:	ipment	Rion	NA-27/ B&I	(2238 ∓*	Sound Lev	vel Meter
Ser	ial Number	0011	1465/0011 1	L466 /0011	11467/ 2343	838/2356907*
Sta	ff Attende	ed		W. L.MA	K ; H. I	c.Tsang
					·	
1.	Calibrati	.on				
	Acoustic	calibrate	or used			Rion NC-74
	Calibrati	on level	before ad	djustment	(dB(A))	94.0
	Calibrati	on level	after ad	justment	(dB(A))	94
2.	Weather C	Conditions	<u> </u>			
	a. Sunny	/fine/ cl	oudy/showe	ery/heavy	/ rain*	
	b. Stron	g wind/b	<u>reeze</u> /calm	n*		
3.	Remark/Ob	servation	<u>n</u>			
				· · · · · · · · · · · · · · · · · · ·		

						· · · · · · · · · · · · · · · · · · ·

Note: * - Please delete where inappropriate

Equipment Calibration Record for July 2006

Site: Civil works for 275kV Cable Route from Lamma Island to Cyberport

Noise Equipment Used: RION NL – 31

Calibrator Used: RION NC - 74

Measurement Location: N4 - Pak Kok Tsui No. 2

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
04/07/2006	94.0	94.0	C K Law
07/07/2006	94.0	94.0	C K Law
11/07/2006	94.0	94.0	C K Law
14/07/2006	94.0	94.0	C K Law
18/07/2006	94.0	94.0	C K Law
21/07/2006	94.0	94.0	C K Law
25/07/2006	94.0	94.0	C K Law
28/07/2006	94.0	94.0	C K Law

Measurement Location: N5 - Pak Kok Tsui No. 8

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
04/07/2006	94.0	94.0	C K Law
07/07/2006	94.0	94.0	C K Law
11/07/2006	94.0	94.0	C K Law
14/07/2006	94.0	94.0	C K Law
18/07/2006	94.0	94.0	C K Law
21/07/2006	94.0	94.0	C K Law
25/07/2006	94.0	94.0	C K Law
28/07/2006	94.0	94.0	C K Law

Note: Measurement accepted as valid only if the calibration levels from before and after the noise measurement agreed to within 1.0 dB.

Appendix G Event/Action Plans

Table G.1 Event and Action Plans for Air Quality

Event	Monitoring		Action			
	ET Leader	IEC	Engineer	Contractor		
Action Level						
Exceedance of one sample	Identify source Inform Engineer and IEC verbally Repeat measurement to confirm finding	Check monitoring data submitted by ET and advise Engineer.	Notify Contractor Checking monitoring data and contractor's working methods	Rectify any unacceptable practice amend any working methods if appropriate		
Exceedance of two or more consecutive samples	Identify source Inform Engineer and IEC verbally Repeat measurement to confirm finding Increase monitoring frequency Discuss with Engineer and Contractor on remedial actions required If exceedance continues, arrange meeting with Engineer If exceedance stops, discontinue additional monitoring	Check monitoring data submitted by ET and advise Engineer. Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures	Confirm receipt of notification of failure in writing Notify contractor Checking monitoring data and contractor's working methods Discuss proposed remedial actions with the ET and Contractor Ensure remedial actions properly implemented	Submit proposals for remedial actions to Engineer within 3 working days of notifications Implement the agreed proposals Amend proposal if appropriate		
Limit level						
Exceedance of one sample	Repeat measurement to confirm finding. Identify the source(s) of the impact. If the exceedance is found to be valid and due to the Construction works, verbally advise the Contractor, Engineer and IEC, and inform the EPD of the exceedance, as soon as practicable. Increase monitoring frequency to daily Assess the effectiveness of the contractor's remedial actions and keep Engineer, IEC and EPD informed of the results	Check monitoring data submitted by ET and advise Engineer Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures	Confirm receipt of notification of failure in writing Notify Contractor Checking monitoring data and Contractor's working method Discuss with ET and Contractor on remedial actions to be provided Ensure remedial measures properly implemented	Take immediate action to avoid further exceedance Submit proposals for remedial actions to Engineer within 3 working days of notifications Implement the agreed proposals Amend proposal if appropriate		

Event	Monitoring		Action			
	ET Leader	IEC	Engineer	Contractor		
Exceedance of two or more	Identify source If the exceedance is found to be valid	Provide feedback to the Engineer on the remedial actions proposed by the	Confirm receipt of notification of failure in writing	Take immediate action to avoid further exceedance		
consecutive samples	and due to the construction works, verbally advise the Contractor, Engineer and IEC, and inform the EPD of the	ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures	Checking monitoring data and Contractor's working methods Notify Contractor	Submit proposals for remedial actions to Engineer within 3 working days of notifications		
	exceedance as soon as practicable. Repeat measurement to confirm finding	Verify the implementation of the	Discuss proposed remedial actions with ET and Contractor	Implement the agreed proposals		
	Increase monitoring frequency to daily Carry out analysis of Contractor's		Ensure remedial measures properly implemented	Resubmit proposals if problem still not under control		
	working procedures to determine If e		If exceedance continues, consider what portion of the work is	Stop the relevant portion of works as determined by the		
	Arrange meeting with Engineer and Contractor to discuss the remedial actions to be taken		responsible and instruct the Contractor to stop the portion of work until the exceedance is abated	Engineer until the exceedance is abated		
	If exceedance stops, discontinue additional monitoring			_		

Table G.2 Event and Action Plans for Construction Noise

Exceedance	ET Leader	IEC	Engineer	Contractor
Action Level	Undertake noise measurement/check monitoring data to establish validity of complaint.	Review the analysed results submitted by the ET.	Notify Contractor of the complaint if proven.	Submit proposals for remedial actions to Engineer.
	If the complaint is valid, inform Engineer and IEC verbally.	Review the remedial measures proposed by the Contractor and advise the Engineer and ET accordingly.	Check Contractor's working methods and advise IEC and ET accordingly.	Amend proposals if required by the Engineer.
	Identify the source(s) of the noise.	Verify the implementation of the remedial measures.	Remind the Contractor of his contractual obligations and discuss remedial actions.	Implement the remedial actions immediately upon instruction from the Engineer.
	Discuss remedial actions required with Contractor and Engineer.		Keep the Contractor informed of the efficacy of remedial actions.	Liaise with the Engineer to optimise the effectiveness of the agreed mitigation.
	Increase manual monitoring frequency to assess efficacy of remedial measures.			
	If exceedance continues, review implementation of appropriate mitigation measures.			
Limit Level	Repeat manual measurement/check monitoring data to confirm findings.	Agree potential remedial actions with Engineer, ET and Contractor.	Notify Contractor of exceedance.	Take immediate action to avoid further exceedance.
	Identify the source(s) of the impact. If the exceedance is found to be valid and due to	Review Contractor's remedial actions / measures to ensure their effectiveness	Check Contractor's working methods and advise IEC and ET accordingly.	Submit proposals for remedial actions to Engineer.
	the Construction works, verbally advise the Contractor, Engineer and IEC, and inform the EPD of the exceedance, as soon as practicable.	and advise the Engineer and ET accordingly.	Discuss with Contractor the remedial actions to be implemented.	Amend proposals if required by the Engineer.
	•	Verify the implementation of the remedial measures	Keep the Contractor informed of the efficacy of remedial actions.	Implement remedial actions immediately
	Discuss remedial actions required with Engineer.		If the exceedance continues, consider what portion of the work is	upon instruction from the Engineer. If the exceedance continues, consider
	Increase manual monitoring frequency to assess efficacy of remedial measures.		responsible and instruct the Contractor to stop the portion of work until the exceedance is abated	what portion of the work is responsible and, as instructed by the Engineer, stop the portion of work until the exceedance is abated

Table G.3 Event and Action Plans for Water Quality

Exceedance	ET Leader	IEC	Engineer	Contractor
Action level exceeded on one sampling day	Verbally inform the Contractor, and IEC. Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with Engineer and Contractor; Repeat measurement on next day of exceedance.	Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures	Discuss with Contractor the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures.	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Propose and discuss mitigation measures with Engineer; Implement the agreed mitigation measures.
Action level exceeded on more than one consecutive sampling day	Repeat in-situ measurements to confirm findings; Identify source(s) of impact; Inform Contractor and IEC; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measure with Engineer and Contractor; Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; Repeat measurement on next day of exceedance.	Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures	Discuss with ET and Contractor on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures.	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Propose mitigation measures to Engineer within 3 working days and discuss with ET and Engineer; Implement the agreed mitigation measures.

Exceedance	ET Leader	IEC	Engineer	Contractor
Limit level exceeded on one sampling day	Verbally inform the Contractor, IEC and the EPD of the exceedance; Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measure with Engineer and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level.	Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures	Discuss with Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures.	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Propose mitigation measures to Engineer within 3 working days and discuss with Engineer; Implement the agreed mitigation measures.
Limit level exceeded by more than one consecutive sampling day	Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform Contractor, IEC and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measure with Engineer and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.	Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures	Discuss with Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures; Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine works until no exceedance of the Limit Level.	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Propose mitigation measures to Engineer within 3 working days and discuss with Engineer; Implement the agreed mitigation measures As directed by the Engineer, to slow down or to stop all or part of the marine work

Appendix H

Site Audit Summary

(In order to save paper, the weekly inspection checklists are provided only in electronic format in the CD-ROM enclosed.)

C/N:04/90₂ The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

	Weekly Site Inspection Checkli	st				
Inspection	date 5 July Time 6 7:30 Inspected	· }-	ET:	J-	<u>Ç</u> zn	
~ :		L	Contra	ctor:	W. F.	Kwok (TDK)
Site	LMX-Mich. Freetlen Amer LS					
Weather						
Condition	Sunny Fine Overcast Hazy	V	Driz	zle [Ra	ain Storm
Temperatu	rre3 ℃ Humidity High Moderat	te	Lov	v		
Wind	Calm Light Breeze Strong					
GENERAL						
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		✓			
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		/			
					,	
AIR QUALI	TY	-				
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
-	General Requirements					
Cap311R: 3	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?	/				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	General Requirements					
Cap311R: 3	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?					
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		/	-		
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	/				
	Construction Sites					
EM&A : A1	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?	/				
	Stockpiling of dusty materials					
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	/				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Cement and dry pulverized fuel ash (PFA)		•			
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?					
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	/				
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	1				-
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	1		-		
	Loading, unloading or transfer of dusty materials			· · · · · · · ·		
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	/				
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	1				
	Use of vehicles					
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	/				
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		/			Cleanly Arrived Nu DY.
	Transfer of dusty materials using a belt conveyor system					1
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	1				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?					
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	/				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	1				
	Concrete batching plant	•				
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?					
EM&A: A2	Are dusty materials, except cement and dry PFA, wetted by water spray system?				·	
EM&A: A2	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?					
EM&A: A2	Are all the conveyor transfer points totally enclosed?					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous					
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	/				
Cap3110	Is open burning prohibited?		/			
Cap311	Is black smoke emission from plant/equipment avoided?		/			

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials					
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	/				
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	1				
EM&A: E3	Are wastes disposed of at licensed sites?	~				
	Construction Waste and Excavated Materials					
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	/				
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?	/				3 / 10
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	/				
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?	/				
WMP	Are the remaining unsuitable excavated materials disposed of at the public filling areas?	/				
EM&A: E3	Are wastes disposed of at licensed sites?	/				
	General refuse					
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?		~			
WMP	Is general refuse stored within receptacles and separated from chemical wastes?		✓ ·			,,
WMP	Is the refuse disposed of regularly and properly?		1			
WMP	Are burning of refuse at site and dumping at sea prohibited?		✓			
	Chemical Waste					
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?		1			

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?		/			
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?		/			
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?		V			
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?		· /			
	Storage, collection and transportation of waste			ا بــــــا		
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?		/			
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?					
	(1) public fill materials for on-site reuse, or disposal at public filling area;	~				
	(2) reusable / recyclable materials;	/				***************************************
	(3) un-reusable / non-recyclable waste for landfill disposal.		/		-	
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?		/			

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off				·	
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	V				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	/				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	V				
PN1/94	Are open stockpiles of construction materials (e,g, aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	~				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	V				
PN1/94	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?					

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water					
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	/				
	Wheel Washing Water					-
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?	V				

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	V				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	1		-		
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	V				-

NOISE

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: C1	Are working programmes sched	uled to minimize noise nuisance?		-			
EM&A: C1	Are construction works or equip nuisance?	ment sited to minimize noise					
EM&A: C1	Are all plant and equipment mai conditions?	ntained in good operating		1			
EM&A: C1/GP	Is idle equipment turned off or the	hrottled down?		1			
EM&A: C1	Are methods of working devised nuisance?	and arranged to minimize noise		/			
EM&A: C1)	Are construction works carried on nuisance?	out in a manner to minimize noise		~			
EM&A: C2	To mitigate construction noise di holidays, is either one of the folla a) Mitigation by portable noise b) Rescheduling of some power sensitive time periods?	owing measures adopted?		~			
EM&A: C3	To mitigate night time constructi equipped with silencers or muffle		~				
NCO	Are valid construction noise perminspection?	nits, if required, available for	~				
NCO	Are conditions of construction no relevant part(s) of the works imp		~				
NCO	Are valid noise emission labels finded percussive breakers?	ixed at air compressors and hand		/			
	Major raise connected	13 / C	Constru site	iction	activit	ies inside the	
	Major noise source(s)	☐ Construction activities outside the site		Others			

Abbreviation

EM&A: EM&A Manual (Construction Phase)
NCO: Noise Control Ordinance

VEP: WMP: Cap311R: Cap311O: Cap311: PN1/94: Unk:

Varied Environmental Permit
Waste Management Plan
APC (Construction Dust) Regulation
APC (Open Burning) Regulation
Air Pollution Control Ordinance

WDO:

Waste Disposal Ordinance

Practice Note for Professional Persons (Construction Site Drainage)

Remark		****			
				`	
			,		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				 	

Signatures

ET Member

Contractor's Representative

(Name in Block letters:

(Name in Block letters:

C/N:04/90 | 2 The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

Site	date 13 July Job Time 07:30 Inspected	_)ر (Sīn	
Cito	9		Contra	ctor:	W.F.	Kwok (TDK)
Site	LMX-Mech. Exection Area L9	·				
Weather						
Condition	Sunny Fine Overcast Hazy		Driz	zzle [Ra	ain Storm
Temperatu	re 33 °C Humidity ✓ High Modera	te _	Lov	N		
Wind	Calm Light Breeze Strong					
GENERAL						
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		/			·
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		✓			

AIR QUALITY

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	General Requirements					
Cap311R: 3	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?	V				
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		1	-		
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	1				
	Construction Sites	1				
EM&A: A1	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?	✓				
	Stockpiling of dusty materials					
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	V				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Cement and dry pulverized fuel ash (PFA)					
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	1				
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	~				
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	V				
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	✓				
	Loading, unloading or transfer of dusty materials					
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	V				
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	✓				
	Use of vehicles				-	
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?		·			
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		✓			Cleaning Provided By P-Y-
	Transfer of dusty materials using a belt conveyor system	··				.
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?					
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?	✓				
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	✓				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	1				-
	Concrete batching plant					
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	v				
EM&A: A2	Are dusty materials, except cement and dry PFA, wetted by water spray system?	V				
EM&A: A2	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?	~				
EM&A: A2	Are all the conveyor transfer points totally enclosed?	V				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous					
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	✓				
Cap3110	Is open burning prohibited?		✓			
Cap311	Is black smoke emission from plant/equipment avoided?		/			

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials					
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	~				
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	/				
EM&A: E3	Are wastes disposed of at licensed sites?	/				
	Construction Waste and Excavated Materials					
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	✓				
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?	✓				
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	1				
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?	✓				
WMP	Are the remaining unsuitable excavated materials disposed of at the public filling areas?	/				
EM&A: E3	Are wastes disposed of at licensed sites?	✓				
	General refuse					
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?		~			
WMP	Is general refuse stored within receptacles and separated from chemical wastes?		✓			
WMP	Is the refuse disposed of regularly and properly?		_			
WMP	Are burning of refuse at site and dumping at sea prohibited?		_/			
	Chemical Waste					
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?		/			4.00

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?		V			
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?		~			
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?		1			
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?		· _/			
	Storage, collection and transportation of waste			البجد الما		
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?		/			•
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?		-			
	(1) public fill materials for on-site reuse, or disposal at public filling area;	1				
	(2) reusable / recyclable materials;	1				
	(3) un-reusable / non-recyclable waste for landfill disposal.		V			
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?		✓			

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off		L		1	
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	/				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	✓				-
PN1/94	Are open stockpiles of construction materials (e,g, aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	✓				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	V				
	Groundwater					
PN1/94	Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	✓				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water					
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	V				
	Wheel Washing Water					
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?	/				

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	~				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	\rightarrow				
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	1				

NOISE

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: C1	Are working programmes sched	luled to minimize noise nuisance?		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
EM&A: C1	Are construction works or equip nuisance?	oment sited to minimize noise		/			
EM&A: C1	Are all plant and equipment man conditions?	ntained in good operating					
EM&A: C1/GP	Is idle equipment turned off or t	hrottled down?		~			
EM&A: C1	Are methods of working devised nuisance?	l and arranged to minimize noise		~			
EM&A: C1)	Are construction works carried on nuisance?	out in a manner to minimize noise		V			
EM&A: C2	To mitigate construction noise d holidays, is either one of the foll a) Mitigation by portable nois b) Rescheduling of some power sensitive time periods?	uring Sunday's and public owing measures adopted? e barriers at noise sources or ered mechanical equipment to less		✓			
EM&A: C3	To mitigate night time construct equipped with silencers or muffl		/				
NCO	Are valid construction noise per inspection?	nits, if required, available for	V				
NCO	Are conditions of construction no relevant part(s) of the works imp		~				
NCO	Are valid noise emission labels f held percussive breakers?	ixed at air compressors and hand		~			
	Major noise source(s)	☐ Traffic		site	ction	activit	ies inside the
	Construction activities Others outside the site						

Abbreviation

Varied Environmental Permit

Waste Management Plan

APC (Construction Dust) Regulation

APC (Open Burning) Regulation

Air Pollution Control Ordinance

Practice Note for Professional Persons (Construction Site Drainage) VEP: WMP: Cap311R: Cap311O: Cap311: PN1/94:

EM&A: EM&A Manual (Construction Phase)
NCO: Noise Control Ordinance
WDO: Waste Disposal Ordinance

Unk:

Unknown

 		· · · · · · · · · · · · · · · · · · ·	
	-		
,			

Signatures

ET Member

Contractor's Representative

(Name in Blockletters:

W-5/U

(Name in Block letters:

C/N:04/9012 The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

Inspection	date $19 = 07 - 2006$ Time $10 = 26$ Inspected	` ⊢	ET:	7-	MU	
Site	LMX – Mech. Erection Area		Contra	ctor:	<u> </u>	D.C. CT
Veather						
Condition	Sunny Fine Overcast Hazy		Driz	zle [R	ain Storm
Temperat	ure 30 °C Humidity High Modera	te	Lov	V		
Wind	Calm Light Breeze Strong					
ENERAL						
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		/			
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?					
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	General Requirements	I,		<u></u>	<u> </u>	
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?					·
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		V			
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?					
	Construction Sites	403041				-
EM&A :	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?					Spray by
	Stockpiling of dusty materials	•				-
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?		, =			

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Cement and dry pulverized fuel ash (PFA)					
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	0				
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	1				
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	1				
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	/				
	Loading, unloading or transfer of dusty materials					
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	V				
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?					
	Use of vehicles					
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	V	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		/			Chaning by py
	Transfer of dusty materials using a belt conveyor system	1				<u>. </u>
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	/				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?					
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	/				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?					
	Concrete batching plant					
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	0				
EM&A: A2	Are dusty materials, except cement and dry PFA, wetted by water spray system?	1				
EM&A: A2	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?	1				
EM&A: A2	Are all the conveyor transfer points totally enclosed?	1				

Page 2 of 7
C:\Documents and Settings\English\My Documents\U9 Safety Management\S-05 Inspection programme\Weekly Site Inspection Checklist.doc

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous					
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?					,
Cap3110	Is open burning prohibited?		/			
Cap311	Is black smoke emission from plant/equipment avoided?		1			

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks					
	Dredged Materials			4							
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	/									
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	/									
EM&A: E3	Are wastes disposed of at licensed sites?										
	Construction Waste and Excavated Materials										
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?										
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?		,								
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	1	,			-					
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?										
WMP =	Are the remaining unsuitable excavated materials disposed of at the public filling areas?	1									
EM&A: E3	Are wastes disposed of at licensed sites?		,								
	General refuse										
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?			•							
WMP	Is general refuse stored within receptacles and separated from chemical wastes?		1								
WMP	Is the refuse disposed of regularly and properly?		7								
WMP	Are burning of refuse at site and dumping at sea prohibited?		1/								
	Chemical Waste		,								
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?		·								

Page 3 of 7
C:\Documents and Settings\English\My Documents\U9 Safety Management\S-05 Inspection programme\Weekly Site Inspection Checklist.doc

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?		/			
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?		1			
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?		1			
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?					
	Storage, collection and transportation of waste					L
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?					
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?					
	(1) public fill materials for on-site reuse, or disposal at public filling area;	V				
	(2) reusable / recyclable materials;					
	(3) un-reusable / non-recyclable waste for landfill disposal.		U			
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?					

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off					
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	1				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	1				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	1				-
PN1/94	Are open stockpiles of construction materials (e,g, aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	1				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	/				
	Groundwater					
PN1/94	Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	0	1			

Page 4 of 7
C:\Documents and Settings\English\My Documents\U9 Safety Management\S-05 Inspection programme\Weekly Site Inspection Checklist.doc

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water					
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	V				
	Wheel Washing Water		,			
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?					

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?		•			
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?		,			
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	/				

NOISE

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: C1	Are working programmes schedu	led to minimize noise nuisance?					
EM&A: C1	Are construction works or equipmousance?	nent sited to minimize noise					
EM&A: C1	Are all plant and equipment main conditions?	tained in good operating		~			
EM&A: C1/GP	Is idle equipment turned off or the	rottled down?					
EM&A: C1	Are methods of working devised nuisance?	and arranged to minimize noise		0			
EM&A: C1)	Are construction works carried or nuisance?	ut in a manner to minimize noise		1			
EM&A: C2	To mitigate construction noise du holidays, is either one of the follo a) Mitigation by portable noise b) Rescheduling of some powe sensitive time periods?	wing measures adopted?		0			
EM&A: C3	To mitigate night time construction equipped with silencers or muffle		V				
NCO	Are valid construction noise perminspection?	nits, if required, available for		1			
NCO	Are conditions of construction no relevant part(s) of the works impl			V	,		
NCO	Are valid noise emission labels fi held percussive breakers?	xed at air compressors and hand					
	Maior rain course(a)	☐ Traffic	5	Constr site	uction	activi	ties inside the
=	- Major noise source(s)	☐ Construction activities outside the site	os 🗆 Others				

				•
VEP: WMP: Cap311R: Cap311O: Cap311: PN1/94:		nt Plan n Dust) Regulation ng) Regulation	NCO: WDO:	EM&A Manual (Construction Phase) Noise Control Ordinance Waste Disposal Ordinance Orainage)
Unk:	Unknown			
Remark				
				100000000000000000000000000000000000000
Signatures				
ET Member		Contractor's Represe	entative	TECIa Danasastativa
		-		IEC's Representative This site inspection was carried out in the presence of IEC's representative
				in the presence of IEC's representative
		Λ		TOUR
		B	_	(* * * * * * * * * * * * * * * * * * *
Gull	<u>.</u>			Name in Block Letters:
Name in-Block lo		(Name in Block lette		Chan In Mo
yn Chi	<u>m</u>)	(Chin chin TB	KYRS6	\sim \sim

Abbreviation

Page 7 of 7

C:\Documents and Settings\English\My Documents\U9 Safety Management\S-05 Inspection programme\Weekly Site Inspection Checklist.doc

C/N:04/90 | 2 The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

Inspection	date 27 July of Time 69:50 Inspected	i By [ET:	W.	SIN	
		_[Contra	ictor:	W. F.	Kwok (TDK)
Site	LMX - Med Zortin her	-				
Weather						
Condition	Sunny Fine Overcast Hazy		Driz	zzle	R	ain Storm
Temperat	ure To Humidity High Modera	te	Lov	W		
Wind	Calm Light Breeze Strong					
GENERAL				· ·		
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		1			
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		/			

AIR QUALITY

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remark			
	General Requirements								
Cap311R: 3	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?	-							
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		V						
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	V							
	Construction Sites								
EM&A: Al	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?	v							
	Stockpiling of dusty materials								
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	1							

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Cement and dry pulverized fuel ash (PFA)					
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	V				
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	/				
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	V.				
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	/				
	Loading, unloading or transfer of dusty materials					
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?					
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?					
	Use of vehicles					
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	V				
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		1			Cleaning Provided Ry Piz
	Transfer of dusty materials using a belt conveyor system					2
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	7				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?	/				
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	- /				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	V				
	Concrete batching plant					
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	V				
EM&A: A2	Are dusty materials, except cement and dry PFA, wetted by water spray system?	v				
EM&A: A2	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?	1				
EM&A: A2	Are all the conveyor transfer points totally enclosed?	✓				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous					
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	~				
Cap3110	Is open burning prohibited?		~			
Cap311	Is black smoke emission from plant/equipment avoided?		✓			

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks				
	Dredged Materials									
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	~								
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	/								
EM&A: E3	Are wastes disposed of at licensed sites?	~								
	Construction Waste and Excavated Materials									
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	1								
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?	✓				-				
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	√ .								
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?	~								
WMP	Are the remaining unsuitable excavated materials disposed of at the public filling areas?	V				-				
EM&A: E3	Are wastes disposed of at licensed sites?	/								
	General refuse									
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?		✓							
WMP	Is general refuse stored within receptacles and separated from chemical wastes?		V							
WMP	Is the refuse disposed of regularly and properly?		1							
WMP	Are burning of refuse at site and dumping at sea prohibited?		V							
	Chemical Waste									
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?		/							

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks		
WDO	Has the Contractor been registered as a chemical waste producer?		/					
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?		/					
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?		V .					
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?					<u> </u>		
	Storage, collection and transportation of waste							
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?		/					
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?							
	(1) public fill materials for on-site reuse, or disposal at public filling area;	~						
	(2) reusable / recyclable materials;	/						
	(3) un-reusable / non-recyclable waste for landfill disposal.		/					
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?		/					

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off					
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	~				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	7				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	~				
PN1/94	Are open stockpiles of construction materials (e.g., aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	1				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	~				
	Groundwater					
PN1/94	Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	1				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water	1.				
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	~				
	Wheel Washing Water					
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?	/				

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	/				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	/	-			
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	/				

NOISE

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks	
EM&A:	Are working programmes sche	duled to minimize noise nuisance?		~				
EM&A: C1	Are construction works or equi nuisance?	pment sited to minimize noise		V			,	
EM&A: C1	Are all plant and equipment maconditions?	aintained in good operating		V				
EM&A: C1/GP	Is idle equipment turned off or	throttled down?		V				
EM&A: C1	Are methods of working devise nuisance?	d and arranged to minimize noise		1				
EM&A: C1)	Are construction works carried nuisance?		1					
EM&A: C2				1	-			
EM&A: C3	To mitigate night time construct equipped with silencers or muff	ion noise, is dredging equipment lers?	V					
NCO	Are valid construction noise per inspection?	oise permits, if required, available for						
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?		1					
VCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?			~				
	Major noise source(s)	☐ Traffic		site	ction a	ctiviti	es inside the	
		☐ Construction activities outside the site	Others					

Abbreviation

VEP: WMP: Cap311R: Cap311O: Cap311: PN1/94: Unk:	Varied Environmental Waste Management Pl APC (Construction Du APC (Open Burning) I Air Pollution Control (Practice Note for Profe Unknown	an st) Regulation Regulation	NCO: WDO:	EM&A Manual (Construction P Noise Control Ordinance Waste Disposal Ordinance rainage)	hase)
Remark					
					1 7 7111 7
-					, `
			2.00		
Signatures					
ET Member		Contractor's Representa	ative		
(Name in Block	`\	(Name in Block letters:		•	

The Hongkong Electric Co. Ltd. Lamma Power Station Extension - Site Formation, Piling Works and Superstructure Works Weekly Site Inspection Checklist

Site	the thirty of					
Weather Condition Sunny Fine Overcast Hazy Drizzle Rain S Temperature 2°C Humidity High Moderate Low Wind Calm Light Breeze Strong SENERAL Ref. Checklist Condition VEP 1.5 Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information? VEP 1.6 Is a copy of ElA report kept in Engineer's 14.6 Is	[2] 100 Inc [4-40]	nspected By	ET:	la.	<u>'01/1</u>	mac Do
Condition Sunny Fine Overcast Hazy Drizzle Rain S Temperature 2°C Humidity High Moderate Low Wind Calm Light Breeze Strong ENERAL Ref. Checklist Condition N/A Yes No Unk Remarks /EP 1.5 Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?	Lux-Superstructure					igo wong
Temperature 2°C Humidity High Woderate Low Wind Calm Light Breeze Strong ENERAL Ref. Checklist Condition N/A Yes No Unk Remarks /EP 1.5 Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?						0 0
Ref. Checklist Condition N/A Yes No Unk Remarks /EP 1.5 Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information? /EP 1.6 Is a copy of EIA report kept in Engineers' and G	ure 2°C Humidity High W M Calm Light Breeze St	loderate	Dri:	zzle w	R	ain Stom
Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information? EP 1.6 Is a copy of EIA report kept in Engineers' and G			Γ	1		<u> </u>
EP 1.6 Is a copy of EIA report kept in Engineers' and Co.	Has a copy of the most update Environmental Permit been	N/A	Yes	No	Unk	Remarks
	information?		3/			
	Is a copy of EIA report kept in Engineers' and Contractors' offi on site?	ices				
			<u>*</u>	1	ſ	1
		Checklist Condition Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information? Is a copy of ElA report kept in Engineer's at Condition	Checklist Condition N/A Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information? Is a copy of ElA report kept in Engineeral and Contact the Co	Sunny Fine Overcast Hazy Drizer 2°C Humidity High Moderate Low Calm Light Breeze Strong Checklist Condition N/A Yes displayed at all vehicular site entrances/exits for public information?	Sunny Finc Overcast Hazy Drizzle ure 2 °C Humidity High Moderate Low Calm Light Breeze Strong Checklist Condition N/A Yes No Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information? Is a copy of ElA report kept in Engineeral and Green and Control of the contro	Sunny Finc Overcast Hazy Drizzle R ure 2 °C Humidity High Moderate Low Calm Light Breeze Strong Checklist Condition N/A Yes No Unk Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	General Requirements	Ļ	<u> </u>			
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?		V			
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		/			
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	<u> </u>				
	Construction Sites					
EM&A:	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?					
_	Stockpiling of dusty materials	l_	<u> </u>	L		
Гар311R: ch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the current professional states of the state of the stat					

Ref.	Checklist Candition	N/A	Yes	No	Unk	Remarks
	Cement and dry pulverized fuel ash (PFA)					
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	V				
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	V				
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	\checkmark				
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	V				
	Loading, unloading or transfer of dusty materials					
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	V				
EM&A: Al	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	V				
	Use of vehicles	-				
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	V				
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		/			
	Transfer of dusty materials using a belt conveyor system					
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	V				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?	V				
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	V				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	V				
	Concrete batching plant		•			
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	V				
EM&Λ: Λ2	Are dusty materials, except cement and dry PFA, wetted by water spray system?	V				
EM&A: A2	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?	V				
ENI&A:	Are all the conveyor transfer points totally enclosed?	V		-		

))

	N/A Yes No Unk Remarks
Ret.	Checklist Condition
	Miscellaneous Are completed earthworks sealed and hydroseeded and planted as
Cap311R: Sch 16	soon as possible
Cap3110	Is open burning prohibited?
Cap311	Is black smoke emission from plant/equipment avoided?

);

TE/CH	MICAL WA	STE MANAGE			N/A	Yes	No	Unk	Remarks
	Checklist Con	dition						τ	
	Dredged Mat	erials	possess valid dumpi nem available for in	ng permits for	V				
1P 1&A: E3	dredged man	IC Has			 	-	+-	 	-
11P 1&A: E3	i records/ticke	Ting alana	ete set of dumping ade them available f	for inspection?	1	-	+	-	
И&A: ЕЗ	Are wastes	lisposed of at licen	sed sites?		1				
/MP M&A: E	Does the Construction	ontractor possess and excavi	avated Materials valid Public Dump ated materials and m		V	1			
VMP	Has the Co	ontractor maintaine	ed disposal records i vated materials, and	for the made them					
	available	concrete waste/ex	ccavated material us	ed for on-site			/		
WMP			used as far as possib				V		
WMP	Are the t	ised formworks to l of in a landfill site	e? ble excavated mater	ials disposed of	at			+-+	
WMP	l the pub	lic titling mo-				V			
EM&/	1	stes disposed of at				·			T
WMP	Gener Has th	al refuse le Contractor main ade it available for	tained a disposal rec inspection?	cord for general	refuse	\ 	1		
WAI	1 1	ical Wasius.	within receptacles a				1		
IVAI	P Is the	refuse disposed o	f regularly and prop	at sea prohibited	1?				lh
AVV.		:-at Waste		i	e from	V	7		
EA E.	1&A: Has	relevant authority.	ained the necessary if required, according eneral Regulation!?	ing with se					\

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?	V				
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?	V		!		
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging. Handling and Storage of Chemical Waster?	V				
EM&Λ: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?	/	-			
	Slorage, collection and transportation of waste	<u> </u>	l		l	
EM&Λ: E3	Are wastes transported by enclosed containers or covered trucks?	V				
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?					
	(1) public fill materials for on-site reuse, or disposal at public filling area;	V				
	(2) reusable / recyclable materials;	V				
	(3) un-reusable / non-recyclable waste for landfill disposal.	V				
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?					

WATER QUALITY

):

Reſ	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off					
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	/				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	V				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	/	ļ			
PN 1/94	Are open stockpiles of construction materials (e.g., aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	~				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	V				
PN1/94	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	V				

Ref	Checklist Condition	N/A	Yes	Νo	Unk	Remarks
- · _ - · · -	Boring and Drilling Water					-
P.V.1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via sitt removal facilities?	V				
· .	Wheel Washing Water					
PN 1794	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?		/			

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	V				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	~				
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	V				

NOISE

)4

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks	
EM&A: CI	Are working programmes schedu	aled to minimize noise nuisance?		V				
EM&A: CI	Are construction works or equiponuisance?	ment sited to minimize noise		V				
EM&A: CI	Are all plant and equipment mail conditions?	ntained in good operating		V				
EM&A: CI/GP	Is idle equipment turned off or the	nrottled down?		V				
EM&A: C1	Are methods of working devised nuisance?							
EM&A: CI)	Are construction works carried on nuisance?		V					
EM&A: C2				V				
EM&A: C3	To mitigate night time construct equipped with silencers or muffl	V						
NCO	Are valid construction noise per inspection?	Are valid construction noise permits, if required, available for inspection?						
NCO	Are conditions of construction in relevant part(s) of the works imp		V					
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?			V				
	Major noise source(s)	☐ Traffic	ŪZ∕	Construction activities inside site				
		Construction activities outside the site		Others				

Abbreviation

VEP:

Varied Environmental Permit

AMP Cap3T1R: Waste Minnagement Plan

APC (Construction Dust) Regulation APC (Open Burning) Regulation

NCO: WDO:

EM&A: EM&A Manual (Construction Phase)

Noise Control Ordinance Waste Disposal Ordinance

Cap311O, Cap311:

PN1794; Unk:

Air Poliution Control Ordinance

Practice Note for Professional Persons (Construction Site Drainage)

Remark

Unknown

Signatures

ET Member

Contractor's Representative

(Name in Block Jetters:

11th November 2002

The Hongkong Electric Co. Ltd. Lamma Power Station Extension - Site Formation, Piling Works and Superstructure Works Weekly Site Inspection Checklist

	Weekly Site Inspection Check	dist				
Inspectio	in date 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	cied B	y ET	12	KUV	store for
Sile	Unx Super Structure		Co	ntrac	IOF.	ingo way
Weather						0 (
Condition Tempera	Overcast Hazy	[Dri	zzle		Rain Ston
Wind	ture 2 °C Humidity High Moder Calm Light Breeze Strong	ate] Lo	w		
GENERAL		<u> </u>	<u>.</u>			
Ref.	Checklist Condition	NA	Yes	No	Unk	
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		1.3	110	Unk	Remarks
VEP 1.6			V			
	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		/			
	•		1			<u> </u>
	Try					
IR QUALI						

Ref.	Checklist Condition	NA	Yes	No	Unk	Remarks
	General Requirements	<u> </u>			O II K	Remarks
Cap311R: 3	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?		V			
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		V			
Сар311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	V				
	Construction Sites		L	L		
EM&A:	Are haul roads paved with concrete or sprayed with water to keep the entire road we!?		V	7		
	Stockpiling of dusty materials			<u>l</u> _		-
20p311R; ich 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface well to prevent dust emission?					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
<u> </u>	Cement and dry pulverized fuel ash (PFA)					
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	V				
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	V				
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	\checkmark				
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	V				
	Loading, unloading or transfer of dusty materials					
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	V				
EM&A: Al	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	V				
	Use of vehicles					
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	V				
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		/	,		
	Transfer of dusty materials using a belt conveyor system		•			
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	V				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?	V				
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	V				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	V				
	Concrete batching plant		•		•	
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	V				
	Are dusty materials, except cement and dry PFA, wetted by water spray system?	V				
EM&л: Л2] ' ' ' '			•		
	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point.	V				

	N/A Yes No Unk Remarks
	Checklist Condition
	Miscellaneous Are completed earthworks sealed and hydrosceded and planted as soon as possible?
Sch 16 Cap3110	Is open burning prohibited? Is black smoke emission from plant/equipment avoided?
Cap311	Is black smoke emission from press.

STE/CHI	MICAL WASTE MANAGEMENT	NA	Yes	No	Uak	Remarks
:(Checklist Condition	h _				
	Dredged Materials Does the appropriate contractor possess valid dumping permits mud and have them available for inspection?	for				
/MP M&A: E3	dredged marine mass		1	-	1	
VN1P CM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspecti	on:	+	-	-	1
EM&A: EJ	Are wastes disposed of at licensed sites?					
VMP EM&A: E		e for lable	V			
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made there construction impection?	n	V			
WMP	Is suitable concrete waste/excavated material used for on-			V	-	
IVMP	Are the used formworks reused as far as possible below	eing		V		
	Are the used to invented disposed of in a landfill site? Are the remaining unsuitable excavated materials disposed to the control of the con	ed of at				
TYMP	the public fitting and		V			
EMA		- entrefus	e T			
WMF	General refuse Has the Contractor maintained a disposal record for generated and made it available for inspection?	ed from	_	1	1	
WAI	Is general refuse stored within receptacles and separat chemical wastes? Is the refuse disposed of regularly and properly?					
WN!	the burning of refuse at site and dumping at sea just	ibited?			<u></u>	
1/0	Chemical Waste Has the contractor obtained the necessary disposal for the necessary disposal	amus frot	11			
E.	the relevant announced to annuarional?]		!

);

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?	V				
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?	V		!	-	
ЕМ&Л: Е4	Is chemical waste handled according to the Code of Practice on the Packaging. Handling and Storage of Chemical Waste'?	V				
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?	/				
<u></u>	Storage, collection and transportation of waste	<u></u>				
EM&Λ: E3	Are wastes transported by enclosed containers or covered trucks?	V				
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?					
	(1) public fill materials for on-site reuse, or disposal at public filling area;	V				
	(2) reusable / recyclable materials;	V				
	(3) un-reusable / non-recyclable waste for landfill disposal.	V				
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?	/				

WATER QUALITY

)

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off					
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	/				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	~				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation exeavations discharged into storm drains via silt removal facilities?	/				
PN 1794	Are open stockpiles of construction materials (e.g., aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	~				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily scaled so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	V				_
PN 1794	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	V				

Ref	Checklist Condition	N/A	Yes	Νn	Unk	Remarks
	Boring and Drilling Water					
1.2/1/a1	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via sitt removal facilities?	V				
	Wheel Washing Water				1 · · ·	
PN 1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?		~			

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: GI	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	V				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	~		<u> </u>		
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	V				

NOISE

);

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A:	Are working programmes schedu	led to minimize noise nuisance?		V			
EM&A: CI	Are construction works or equipm nuisance?	nent sited to minimize noise		V			
EM&A: C1	Are all plant and equipment main conditions?	tained in good operating		V	-		
EM&A: CI/GP	Is idle equipment turned off or the	rottled down?		V			
EM&A: CI	Are methods of working devised nuisance?		V				
EM&A: CI)	Are construction works carried or nuisance?		V				
EM&A: C2	holidays, is either one of the follo a) Mitigation by portable noise	b) Rescheduling of some powered mechanical equipment to less		V			
EM&A: C3	To mitigate night time construction equipped with silencers or muffle		V				
NCO	Are valid construction noise perminspection?	nits, if required, available for		√			
NCO	Are conditions of construction no relevant part(s) of the works imp			V	,		
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?			V	1		
		☐ Traffic	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Const site	ructio	on acti	vities inside the
	Major noise source(s) Construction activities outside the site				rs		

Page 6 of 7

Abbreviation

VEP:

Varied Environmental Permit

 $\Delta {\rm MP}$

Waste Management Plan

APC (Construction Dust) Regulation

EM&A: EM&A Manual (Construction Phase)

Cap3TIR: Cap3 11O.

APC (Open Burning) Regulation

NCO: Noise Control Ordinance WDO: Waste Disposal Ordinance

Cap311:

Air Pollution Control Ordinance

PN1/94:

Practice Note for Professional Persons (Construction Site Drainage)

Unk:

Unknown

Remark

Signatures

ET Member

Contractor's Representative

(Name in Block Jetters:

(Name in Block letters:

World Ho Haria

11th November 2002

The Hongkong Electric Co. Ltd. Lamma Power Station Extension - Site Formation, Piling Works and Superstructure Works

Weekly Site Inspection Checklist

Inspecti Site	ion date 197500 Time (0:30 Inspe	cted (J	· —	ntrac	ury	long, P
Weathe.	ſ					
Conditio	on Sunny Fine Overcast Hazy	[D	izzle		Rain .
Temper	ature C Humidity High Moden	ate [ow		•
Wind	Calm Light Breeze Strong	••• L		ow		
GENERA	L					
Reſ.	Checklist Condition	Τ				
VEP 1.5	Has a copy of the most undate Environmental Province	N/A	Yes	No	Unk	Remarks
	displayed at all vehicular site entrances/exits for public information?					
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices	!		1_	1	
R OHAT] <u> </u>		
-		Nu				
	LITY Checklist Condition	N/A	Yes	No	Unk	Remarks
ef.	LITY	N/A	Yes	No	Unk	Remarks
ap311R:	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form 2.15th	N/A	Yes	No	Unk	Remarks
ap311R:	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or merce. In this	N/A	Yes	No	Unk	Remarks
ap311R: ap311R: h 12(3)	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed? Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant where	N/A	Yes	No	Unk	Remarks
ap311R: ap311R: h 12(3)	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed? Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	N/A	Yes	No	Unk	Remarks
IR QUAI Ref. Cap311R: ap311R: ap311R: t&A:	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed? Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection? Construction Sites Are haul roads paved with concrete or sprayed with processes.	N/A	Yes V	No	Unk	Remarks

Page 1 of 7

Ref.	Checklist Condition	NW	Yes	No	Unk	Remarks
	Coment and dry pulverized fuel ash (PFA)					
Cap311R; Seli 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	V		i i		
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	V				
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	\checkmark				
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	V				
	Loading, unloading or transfer of dusty materials					
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	V				
EM&A: Al	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	V				
	Use of vehicles	-				
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	V				
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		V	, [
	Transfer of dusty materials using a belt conveyor system					
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	V				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?	V				
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	\checkmark				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within I in?	V				
	Concrete batching plant					
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	V				
EM&A: A2	Are dusty materials, except cement and dry PFA, wetted by water spray system?	V				
EM&A: A2	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?	V				
	1	.1				

,	N/A Yes No Unk Remarks
net.	Checklist Condition
	Miscellaneous Are completed earthworks sealed and hydroseeded and planted as
Cap311R: Sch 16	Are completed earning.
Cap3110	hypping prohibited?
Cap311	Is black smoke emission from plant/equipment avoided?
Сары	

);

STE/CHI	MICAL WASTE MANAGEMENT		N/A	Yes	No	Unk	Remarks	Į
ef	Checklist Condition					Υ		
	Dredged Materials Does the appropriate contractor possess valid du and have them available for	mping permits for						1
/MP M&A: E3	dredged marine mud and		V	-	1	1		
VNIP EM&A: E3	Has the contractor kept a complete set of dumpi records/ticketing system and made them available	ole for inspection:	tv	+	+	+		
EM&A: E3	Are wastes disposed of at licensed sites?		10			h		\dashv
WMP EM&A: E3		id make it available	V			_		
WMP	Has the Contractor maintained disposal recorconstruction waste and excavated materials, available for inspection? Is suitable concrete waste/excavated materials.			/ - - -				
IVMP	Is suitable concrete waste/excavated material reclamation/filling works? Are the used formworks reused as far as po				· /	-		
WMP	Are the used formworks read disposed of in a landfill site? Are the remaining unsuitable excavated management of the control of the site of the control of the site of the si			 _/		+-1		
WMP	the public filling at all				\ \ \	-		
EM&A								
	General refuse Has the Contractor maintained a disposal	record for general	refuse		1			
NMP	Has the Contractor maintained and made it available for inspection? Is general refuse stored within receptact	es and separated fro	m	-	1	1		
WNIE	Is general refuse stores chemical wastes? Is the refuse disposed of regularly and page 1.2.					1	_	
IVM	Is the refuse disposed of regions Are burning of refuse at site and dump	ing at sea prohibited	1'?					
WM	Chemical Waste Has the contractor obtained the necess	ary disposal permit ording to Waste Dis	s from	1	1			
E3	the relevant authority. If required the relevant authority. (General Regulation (Chemical Waste))	n1?		\	\		}	

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks		
WDO	Has the Contractor been registered as a chemical waste producer?	V						
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?	V		! !				
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging. Handling and Storage of Chemical Waste*?	V						
EM&Λ: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?	/						
<u></u>	Storage, collection and transportation of waste							
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?	V						
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?							
-	(1) public fill materials for on-site reuse, or disposal at public filling area;	V						
	(2) reusable / recyclable materials;	1/				-		
	(3) un-reusable / non-recyclable waste for landfill disposal.	1	ļ					
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?	1						

WATER QUALITY

):

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off					
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	V				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent crosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	V				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?					·
PN 1794	Are open stockpiles of construction materials (e.g., aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	1				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	V				
PN 1794	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	V				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water	 	 			
₽ <u>₩</u> 1794	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	/				
	Wheel Washing Water					
PN 1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?		~			

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: GI	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	V				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	~	,			
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	V				

NOISE

) }

) :

Ref	Checklist Condition		N/A	Yes	Nο	Unk	Remarks
EM&A:	Are working programmes schedu	led to minimize noise nuisance?		V			
EM&A: C1	Are construction works or equipm nuisance?	nent sited to minimize noise		V			
EM&A: Cl	Are all plant and equipment main conditions?	tained in good operating		V			
EM&A: CI/GP	Is idle equipment turned off or the	rottled down?		V			
EM&A: CI	Are methods of working devised nuisance?		V				
EM&A: CI)	Are construction works carried or nuisance?		V				
EM&A: C2	holidays, is either one of the follo a) Mitigation by portable noise	b) Rescheduling of some powered mechanical equipment to less					
EM&A: C3	To mitigate night time construction equipped with silencers or muffle		V				
NCO	Are valid construction noise perminspection?	nits, if required, available for		√			
NCO	Are conditions of construction no relevant part(s) of the works impl			V			
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?			V			
	Major noise source(s)	Construction activities	<u>□</u>	Const site Other		on activ	rities inside the

Abbreviation

	4	
·	1 - 1	•

Varied Environmental Permit

MAR

Waste Management Plan

FM&A: EM&A Manual (Construction Phase)

Cap311R: Cap311O

APC (Construction Dust) Regulation APC (Open Burning) Regulation

NCO: WDO: Noise Control Ordinance Waste Disposal Ordinance

Cap311:

Air Pollution Control Ordinance

I'N1794;

Practice Note for Professional Persons (Construction Site Drainage)

Unk:

Unknown

Remark

Signatures

ET Member

Contractor's Representative

IEC's Representative

This site inspection was carried out in the presence of IEC's representative

)

(Name in Block letters:

Name in Block I

11th November 2002

The Hongkong Electric Co. Ltd. Lamma Power Station Extension - Site Formation, Piling Works and Superstructure Works

Weekly Site Inspection Checklist

Inspection Site	Inspection of the Superstructure	cted By	<u> </u>		India lor:	long Poc ingo Won	1
Weather	·				·	· · · · · · · · · · · · · · · · · · ·	_
Condition Tempera Wind GENERAL	ture Calm Light Breeze Strong	sie [Dri:	zzie w	R	ain Stor	ın
Ref.	Checklist Condition	N/A	Yes	Ī.,			l
VEP 1.5	Has a copy of the most update Environmental Permit been		1 63	No	Unk	Remarks	
Von	information?		<u>/</u>				
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		V				

AIR QUALITY

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	General Requirements	<u> </u>	<u> </u>	لــــــــــــــــــــــــــــــــــــــ		
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?		V			
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		V-			
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	V				
-	Construction Sites					
EMBA:	Are haul roads paved with concrete or sprayed with water to keep the entire road we!?		V	_		
	Stockpiling of dusty materials					
ap311R: , ch 18	Are stockpries of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wel to prevent dust emission?					<u>. </u>

Ref.	Checklist Condition	NIV	Yes	No	Unk	Remarks
	Cement and dry pulverized foel ash (PFA)					
Cap311R; Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	V		 ! !		
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	V				
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	\checkmark				
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	V				
	Loading, unloading or transfer of dusty materials					
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	V				
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	V				
	Use of vehicles					
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	√				
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		/			
	Transfer of dusty materials using a belt conveyor system				-	
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	V				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?	V				
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	V				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	V				
	Concrete batching plant					
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	V				
EM&A: A2	Are dusty materials, except cement and dry PFA, wetted by water spray system?	V				
EM&A:	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?	V				

•	N/A Yes No Unk Remarks
Ref.	Checklist Condition
	Miscellaneous Are completed earthworks sealed and hydroseeded and planted as
CapALIR: Seh 16	soon as possible.
Cap31 10	
Cap311	Is black smoke emission from plant/equipment avoided?

),

STE/CH	MICAL WASTE MANAGEMENT	N/A	Yes	No	Unk	Remarks
·f	Checklist Condition	_ 				
	Dredged Materials Does the appropriate contractor possess valid dumping permits for Does the appropriate contractor possess valid dumping permits for inspection?	TV				
MP M&A: E3	dredged marine mad	T ,	-	+-	+-	
VNIP :M&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	IV	+	+	-	-
M&A: E3	Are wastes disposed of at licensed sites?	V		l_	L 	
	Construction Waste and Excavated Materials Construction Waste and Excavated Materials	r	1	T		
WMP EM&A: E	Does the Contractor possess a valid 1 construction waste and excavated materials and make it availab	le V				
	for inspection?		1			
WMP	construction waste and					
WMP	Is suitable concrete waste/excavated material used for on-site			✓ 	1	
	formworks reused as far as possible before being	g	1	V		
WMP					+-1	
WMP	Are the remaining unsuitable excavated materials disposed of the public filling areas?		<u>v</u>	-		
EMEA				<u> </u>		T
WMP	General refuse Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained a disposal record for general Has the Contractor maintained and the Contractor maintained a disposal record for general Has the Contractor maintained and the Contractor maintained a disposal record for general Has the Contractor maintained and the Contractor m	l refuse		1		
With	Has the Contractor maintained and made it available for inspection? Is general refuse stored within receptacles and separated f		 	l		
WMI	l -banical wastes:			1	1	-
WM	Is the refuse disposed of regularly and properly? Are burning of refuse at site and dumping at sea prohibit	cd.;				
WM	Chamical Waste	its from		7		
EN E3	&A: Has the contractor obtained the necessary disposal period the relevant authority, if required, according to Waste D (Chemical Waste) (General Regulation)!	•2 •••••				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?		-			
EMI&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?	V				
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste ¹⁷ ?	V				
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?	/				
	Storage, collection and transportation of waste			1		<u> </u>
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?					
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?	1				
	(I) public fill materials for on-site reuse, or disposal at public filling area;	V				
	(2) reusable / recyclable materials;	1/				
	(3) un-reusable / non-recyclable waste for landfill disposal.	1				
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?					

WATER QUALITY

);

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off					
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	V				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	~				
PN 1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	/				
PN 1/94	Are open stockpiles of construction materials (e.g., aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?					
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	V				
PN 1794	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	V				

Ref	Checklist Condition	NIA	Yes	Nο	Unk	Remarks
	Boring and Drilling Water	 -				
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	~				
	Wheel Washing Water	1				
PN 1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?		/			

MARINE ECOLOGY

Ref	Checktist Condition	N/A	Yes	No	Unk	Remarks
EM&A: GI	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	V				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	V		!		
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	V				

NOISE

)4

) ;

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A:	Are working programmes schedul	ed to minimize noise nuisance?		V			
EM&A: CI	Are construction works or equipm nuisance?	nent sited to minimize noise		V			
EM&A: CI	Are all plant and equipment main conditions?	tained in good operating		V			
EM&A: CI/GP	Is idle equipment turned off or the	rottled down?		V			
EM&A: CI	Are methods of working devised and arranged to minimize noise nuisance?			V			
EM&A: CI)	Are construction works carried or nuisance?		V				
EM&A: C2	To mitigate construction noise during Sunday's and public holidays, is either one of the following measures adopted? a) Mitigation by portable noise barriers at noise sources or b) Rescheduling of some powered mechanical equipment to less sensitive time periods?			V	·		
EM&A: C3	To mitigate night time construction equipped with silencers or muffle		V				
NCO	Are valid construction noise perm inspection?	nits, if required, available for		√			
NCO		Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?					
NCO	Are valid noise emission labels fi held percussive breakers?	xed at air compressors and hand		V			
	Major noise source(s) Construction activities outside the site			Const site Other		on activ	rities inside the

Abbreviation

VEP:

Varied Environmental Permit

VMP

Waste Management Plan

Cap311R: Cap311O.

APC (Construction Dust) Regulation

APC (Open Burning) Regulation

Cap311: PN1/94; Unk:

Air Pollution Control Ordinance

Practice Note for Professional Persons (Construction Site Drainage)

EM&A: EM&A Manual (Construction Phase)

Noise Control Ordinance

Waste Disposal Ordinance

NCO:

WDO:

Unknown

Remark

Signatures

ET Member

Contractor's Representative

(Name in Block Joners:

(Name in Block letters:

11th November 2002

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

Inspection	Inspect of the of the Inspect	ted By			F CH	u /PDE:	
Site	LMX-19 ELETRICAL EXECTION AREA.		Con	tract	or: P	ETER CHENG	YSmuko)
Weather		•	· · · · · · · · · · · · · · · · · · ·			* 4	-
Condition	Sunny Fine Overcast Hazy		Driz	zzle	R	ain Stor	m
Temperat	ure 30 °C Humidity 1 High Modera	ite	Lo	w			
Wind	Calm Light Breeze Strong						
GENERAL							
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		V				
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		/				
AIR QUAL ———— Ref.	Checklist Condition	NI/A	Vos	N/o	WT_t_	DI	
	General Requirements	N/A	Yes	No	Unk	Remarks	
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?	V				·	
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		/			,	
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?						
	Construction Sites			<u>I</u>			
EM&A : A1	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?		V			Water Spray Provided By	ing Faul Y
	Stockpiling of dusty materials					O	
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	V					
	· · · · · · · · · · · · · · · · · · ·						

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Cement and dry pulverized fuel ash (PFA)			<u>.l</u>	<u></u>	L
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	· V				
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	V				27
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	V			,	
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	1				· <u>f</u>
	Loading, unloading or transfer of dusty materials	<u> </u>		L		
Cap311R:	Are dusty materials, except cement and dry PRA enroyed with					
Sch 19	water immediately prior to any loading, unloading or transfer operation?	V				
EM&A: Aİ	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	~				
	Use of vehicles					· -
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	V				
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?	,	/	•	Ja.	hal Vaction
	Transfer of dusty materials using a belt conveyor system				1/2	y rank Y.
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	/		_		
Cap311R: ch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?					
Cap311R: ch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	1				
ap311R: ch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?			 		
	Concrete batching plant					
M&A: 2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?					
M&A:	Are dusty materials, except cement and dry PFA, wetted by water spray system?					
/1&A:	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?	/		-		
1&A: /	Are all the conveyor transfer points totally enclosed?		-		-	
	· · · · · · · · · · · · · · · · · · ·					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous					
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	V				
Cap311O	Is open burning prohibited?		V			*
Cap311	Is black smoke emission from plant/equipment avoided?		/			

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials					<u></u>
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	1/				
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?					
EM&A: E3	Are wastes disposed of at licensed sites?	1				
	Construction Waste and Excavated Materials					
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	V				
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?	√			•	
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	V				
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?	/				
WMP	Are the remaining unsuitable excavated materials disposed of at the public filling areas?	/				
EM&A: E3	Are wastes disposed of at licensed sites?	1				
	General refuse					-
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?		1			
WMP	Is general refuse stored within receptacles and separated from chemical wastes?		>			
WMP	Is the refuse disposed of regularly and properly?		/			
WMP	Are burning of refuse at site and dumping at sea prohibited?		V			
	Chemical Waste					
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?	V				
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?	V				
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	V				***
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?	1	,			,
	Storage, collection and transportation of waste					
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?		V			
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?	1				
	(1) public fill materials for on-site reuse, or disposal at public filling area;					
	(2) reusable / recyclable materials;					
	(3) un-reusable / non-recyclable waste for landfill disposal.					
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?	V				

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off					
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	1				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	1				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	1				
PN1/94	Are open stockpiles of construction materials (e,g, aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	v				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	v				
PN1/94	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	V				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water					
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	✓	÷			
	Wheel Washing Water					4
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?	V				

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	V				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	y				
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	1				

NOISE

Q.,

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks	
EM&A: Cl	Are working programmes schede	uled to minimize noise nuisance?		V				
EM&A: C1	Are construction works or equip nuisance?	ment sited to minimize noise		U				
EM&A: C1	Are all plant and equipment mail conditions?	ntained in good operating		J			** . *	
EM&A: C1/GP	Is idle equipment turned off or th	nrottled down?		/				
EM&A: C1	Are methods of working devised nuisance?	thods of working devised and arranged to minimize noise e? struction works carried out in a manner to minimize noise		J				
EM&A: C1)	Are construction works carried o nuisance?	ut in a manner to minimize noise		1				
EM&A: C2	To mitigate construction noise de holidays, is either one of the follow. a) Mitigation by portable noise b) Rescheduling of some power sensitive time periods?	owing measures adopted?	J					
EM&A: C3	To mitigate night time constructi equipped with silencers or muffle		J					
NCO	Are valid construction noise perr inspection?	nits, if required, available for	ailable for					
NCO	Are conditions of construction no relevant part(s) of the works imp		J					
NCO	Are valid noise emission labels fi held percussive breakers?	ixed at air compressors and hand	1	_	;			
		☐ Traffic	1	Constr site	uction	activi	ties inside the	
	Major noise source(s)	Construction activities outside the site	Others					

Abbreviation

VEP:

Varied Environmental Permit

WMP:

Waste Management Plan

Cap311R: Cap311O:

APC (Construction Dust) Regulation

APC (Open Burning) Regulation Air Pollution Control Ordinance

Unknown

Cap311: PN1/94: Unk:

Practice Note for Professional Persons (Construction Site Drainage)

NCO:

WDO:

EM&A: EM&A Manual (Construction Phase)

Noise Control Ordinance

Waste Disposal Ordinance

Remark

Signatures

ET Member

Contractor's Representative

(Name in Block letters:

TF CHIU

PDE

12th January 2005

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

Inspection	date RJuly 3006 Time 09:10 hrs Inspec	ted By	—	7.	F. CHI	u/19E	7
Site	LMX- 19 Electron Fren.		Con	dacu	<u>σι. γ</u>	TER CHEN EN	ISANKO,
Weather						4	
Condition	Sunny Fine Overcast Hazy		Driz	zie	R	ain Sto	rm
Temperat	ure 30 °C Humidity High Modera	ite	Lov	v			
Wind	Calm Light . Breeze Strong						
GENERAL					-		
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	7
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		/				
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		V				-
AIR QUALI							ד
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
	General Requirements						
Cap311R: 3	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?	/					
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		V			· ·	
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	/					
	Construction Sites	,					
EM&A: A1	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?		V			Uder Spray, Provided By	Y Pauly
	Stockpiling of dusty materials					U	1.
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	/					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Cement and dry pulverized fuel ash (PFA)			1	l	1
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	V				
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	V				**************************************
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fifted with a high-level alarm?	1				
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	1				
	Loading, unloading or transfer of dusty materials	J	<u> </u>	<u> </u>		
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	V				
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	1				
	Use of vehicles					·
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	/				·
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		J	4	,	Wheel Wash Services Pro
	Transfer of dusty materials using a belt conveyor system	 \.	<u></u>		I	the source
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	V				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?					
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	U		-		· ·
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	7				
	Concrete batching plant					
EM&A: \2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	v				
ŀ	Are dusty materials, except cement and dry PFA, wetted by water			+	_	
EM&A: A2	spray system?	v				
		V .				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous	<u> </u>				L
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	1				
Cap3110	Is open burning prohibited?					
Cap311	Is black smoke emission from plant/equipment avoided?		-4/			· .

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials .	- 1			1	·
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	V				
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	V				
EM&A: E3	Are wastes disposed of at licensed sites?	1				<u> </u>
	Construction Waste and Excavated Materials					
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	1				
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?	1			•	
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	V				;
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?	~				
WMP	Are the remaining unsuitable excavated materials disposed of at the public filling areas?	S				
EM&A: E3	Are wastes disposed of at licensed sites?					
	General refuse			•		
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?		J			•
WMP	Is general refuse stored within receptacles and separated from chemical wastes?		V			
WMP	Is the refuse disposed of regularly and properly?					
WMP	Are burning of refuse at site and dumping at sea prohibited?		1			
-	Chemical Waste					
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks		
WDO	Has the Contractor been registered as a chemical waste producer?	J						
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?	✓ :						
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	1						
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?	J.						
	Storage, collection and transportation of waste							
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?		V					
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?	1						
	(1) public fill materials for on-site reuse, or disposal at public filling area;							
	(2) reusable / recyclable materials;							
*	(3) un-reusable / non-recyclable waste for landfill disposal.					11-18-12-1		
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?	1						

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off		l	<u>I</u>		
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	U				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	V				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	V				
PN1/94	Are open stockpiles of construction materials (e,g, aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	/				****
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	1				
PN1/94	Groundwater					
F1X1/94	Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?					

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water			ļ —	†	
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	~	:			
	Wheel Washing Water					,
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?	1				

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	1				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	V				
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	1				

NOISE

 $\mathbb{Q}_{i,j}$

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: C1	Are working programmes sched	uled to minimize noise nuisance?		V			
EM&A: Cl	Are construction works or equip nuisance?	ment sited to minimize noise	,	V .			
EM&A: C1	Are all plant and equipment mai conditions?	ntained in good operating		1			**
EM&A: C1/GP	Is idle equipment turned off or the	hrottled down?		V			
EM&A: Ci	Are methods of working devised nuisance?	and arranged to minimize noise		S			
EM&A: C1)	Are construction works carried on nuisance?	out in a manner to minimize noise		/			
EM&A: C2	To mitigate construction noise d holidays, is either one of the foll a) Mitigation by portable noise b) Rescheduling of some power sensitive time periods?	V					
EM&A: C3	To mitigate night time construction equipped with silencers or muffle		1				
NCO	Are valid construction noise perminspection?	nits, if required, available for	V				
NCO	Are conditions of construction no relevant part(s) of the works imp	oise permits, if any, for the lemented accordingly?	V				
NCO	Are valid noise emission labels f held percussive breakers?	ixed at air compressors and hand	0				
	Major noise source(s)	☐ Traffic	1	Constr site	uction	activi	ties inside the
	iviajoi noise source(s)	Construction activities		Others			

Abbreviation

VEP:

Varied Environmental Permit

WMP:

Waste Management Plan

APC (Construction Dust) Regulation

NCO:

EM&A: EM&A Manual (Construction Phase) Noise Control Ordinance

Cap311R: Cap311O:

APC (Open Burning) Regulation Air Pollution Control Ordinance

Cap311: PN1/94:

WDO:

Waste Disposal Ordinance

Unk:

Practice Note for Professional Persons (Construction Site Drainage) Unknown

Remark			4-	.*		
		•		•		***
	 		<u> </u>			
		•			•	
·						

Signatures

ET Member

Contractor's Representative

12th January 2005

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

Inspection	date 19676 Jon & Time 10:38/15 Inspec	eted By	-	T.	F. C.Fii	u/poe	
Site	LMX- LP Electrical Exectionstrea		Con	uacu	or. PZ	TER CHERAS	_ Mkd
Weather		·					-
Condition	Sunny Fine Overcast Hazy		Driz	zzle	R	ain Stor	m
Temperat	ure [3]] °C Humidity √ High Moders	ate	Lo	w			
Wind	Calm Light . Breeze Strong						
GENERAL							
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		V				
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?				-		
AIR QUAL	Checklist Condition	N/A	Yes	No	Unk	Remarks	}
	General Requirements	l					į
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?	/					
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		/				
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?						
	Construction Sites	<u></u> [1				
EM&A: A1	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?		J		,	Water Toray? Provided by ?) NY
	Stockpiling of dusty materials		L		1	- 1 m	~ (.
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	1		i			

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Cement and dry pulverized fuel ash (PFA)	•	<u> </u>			·•
Cap311R: Seh 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	V:				
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	V				\$7 \$7
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	V				•••
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	1				
	Loading, unloading or transfer of dusty materials	. <u>!</u>				
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	V	:			
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	1				
	Use of vehicles	<u> </u>	I			
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	1				
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?					Chal Wat
	Transfer of dusty materials using a belt conveyor system					9 11
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	1/				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?	V				
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	V				
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	/				71.6
	Concrete batching plant	,L	1			
EM&A:	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	1			:	
A2	,	_			J	
A2 EM&A:	Are dusty materials, except cement and dry PFA, wetted by water spray system?	v				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous	·				
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	V :				
Cap3110	Is open burning prohibited?		1			• .
Cap311	Is black smoke emission from plant/equipment avoided?					

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials				<u> </u>	<u> </u>
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	V				
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	V				
EM&A: E3	Are wastes disposed of at licensed sites?	1				
	Construction Waste and Excavated Materials					
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	V				
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?	✓			4	
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	r	••			
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?	/				
WMP	Are the remaining unsuitable excavated materials disposed of at the public filling areas?	1				
EM&A: E3	Are wastes disposed of at licensed sites?					<u></u>
 -	General refuse					
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?		/			,
WMP	Is general refuse stored within receptacles and separated from chemical wastes?		1			
WMP	Is the refuse disposed of regularly and properly?		1			
WMP	Are burning of refuse at site and dumping at sea prohibited?		ΔZ			
	Chemical Waste		· V			
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?	V				
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?	1,				
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	V			į	
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?	1				,
	Storage, collection and transportation of waste	.1				
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?		/			
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?	/				
	(1) public fill materials for on-site reuse, or disposal at public filling area;					
	(2) reusable / recyclable materials;					
,	(3) un-reusable / non-recyclable waste for landfill disposal.					
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?	1				

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Surface Run-off	1				
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	V				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	1				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	~				
PN1/94	Are open stockpiles of construction materials (e.g., aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	V				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	./				
PN1/94	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	J		····		

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water					
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	V	2 .			
	Wheel Washing Water					1
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?	1				

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	~				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	V				
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	V	·			

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks			
EM&A: C1	Are working programmes sched	luled to minimize noise nuisance?		J			7 471			
EM&A: C1	Are construction works or equip nuisance?	oment sited to minimize noise		<i>J</i>			,			
EM&A: C1	Are all plant and equipment mai conditions?	intained in good operating		U			** - #			
EM&A: CI/GP	Is idle equipment turned off or t	hrottled down?		√						
EM&A: C1	Are methods of working devised nuisance?	and arranged to minimize noise		1						
EM&A: C1)	Are construction works carried on nuisance?	out in a manner to minimize noise		U						
EM&A: C2	To mitigate construction noise d holidays, is either one of the foll a) Mitigation by portable nois b) Rescheduling of some power sensitive time periods?	owing measures adopted?	1							
EM&A: C3	To mitigate night time construct equipped with silencers or muffl	ion noise, is dredging equipment ers?	J							
NCO	Are valid construction noise pen inspection?	mits, if required, available for	1			•				
NCO	Are conditions of construction no relevant part(s) of the works imp		/				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?			,						
		☐ Traffic	Construction activities inside the							
	Major noise source(s)	Construction activities outside the site		Others						

Abbievianon			
VEP: WMP: Cap311R: Cap311O: Cap311: PN1/94: Unk:	Varied Environmental Permit Waste Management Plan APC (Construction Dust) Regulation APC (Open Burning) Regulation Air Pollution Control Ordinance Practice Note for Professional Persons (Cor Unknown	NCO: WDO:	EM&A Manual (Construction Phase Noise Control Ordinance Waste Disposal Ordinance Orainage)
Remark			
		····	

		· · · · · · · · · · · · · · · · · · ·	
- N			
····			
Signatures		······································	
ET Member	Contractor's Represen	ntative	IEC's Representative This site inspection was car in the presence of IEC's rep
	<i>i</i> 0		Torch

12th January 2005

(Name in Block letters:

PDE

T. F. CHIU

)

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

Inspection	date ILJuly 2006 Time Of: 15 has Inspec	ted By	-		7. F. C	HIU /PDE.
Site	LMX-L9 Electron/ Frection Area		Con	tract	or: p _ê	TER CHENGY SINK
Weather		···········			<u></u>	···
Condition	Sunny Fine Overcast Hazy		Driz	zzle	R	ain Storm
Temperat	ure 30 °C Humidity High Moder	ate	Lo	w	···	
Wind	Calm Light Breeze Strong	_				
GENERAL						
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?		1			
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		/	-		
AIR QUAL		<u> </u>				
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	General Requirements					
Cap311R: 3	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?	V				
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?		/			
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?	/				
	Construction Sites	,			L	
EM&A: A1	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?		/		F	Water Spraying Trovided By Fauly.
	Stockpiling of dusty materials		L	L		mull.
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Rem	arks
	Cement and dry pulverized fuel ash (PFA)	· · · · · · · · · · · · · · · · · · ·	·	<u> </u>		_1	
Cap311R: Sch 15(3)	Are the storage silos for cement or dry PFA prevented from overfilling?	V:					
Cap311R: Sch 15(4)	Are the handlings of cement or dry PFA through a totally enclosed system equipped with air pollution control equipment at the vent of the system?	/					
Cap311R: Sch 15(2)	Is bulk cement or dry PFA stored in a closed silo fitted with a high-level alarm?	1					•
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	V					4
	Loading, unloading or transfer of dusty materials	<u>1</u>				<u> </u>	
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	/					<u></u>
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	1					,, ,
	Use of vehicles	<u> </u>		I.			
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?						
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		V	,		Whee Service	Week
	Transfer of dusty materials using a belt conveyor system	<u></u>			1	Hy Ya	- Y
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?						
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?	<i>V</i>					
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?	5				· .	
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting	- / 	_	-	_		
	mechanism to maintain the dropping height within 1 m?						
	mechanism to maintain the dropping height within 1 m? Concrete batching plant						<u> </u>
Sch 20(4)	mechanism to maintain the dropping height within 1 m?	v					
EM&A: 12 EM&A:	Concrete batching plant Are the loading, unloading, handling, transfer or storage of any						
	Concrete batching plant Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system? Are dusty materials, except cement and dry PFA, wetted by water	<i>y</i>					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous	<u></u>		L		
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	V:				
Cap3110	Is open burning prohibited?		V.			
Cap311	Is black smoke emission from plant/equipment avoided?					22

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials	· • · · · · · · · · · · · · · · · · · ·			<u>. </u>	
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	~				
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	1				
EM&A: E3	Are wastes disposed of at licensed sites?	/				
	Construction Waste and Excavated Materials					
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	V				
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?	1			,	
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	J				
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?	1				
WMP	Are the remaining unsuitable excavated materials disposed of at the public filling areas?	1				
EM&A: E3	Are wastes disposed of at licensed sites?					
	General refuse			•		
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?		/			
WMP	Is general refuse stored within receptacles and separated from chemical wastes?		1			
WMP	Is the refuse disposed of regularly and properly?		/			
WMP	Are burning of refuse at site and dumping at sea prohibited?		1			
	Chemical Waste					
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks				
WDO	Has the Contractor been registered as a chemical waste producer?	V								
EM&A: E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?	1								
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	U								
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?	1				,				
	Storage, collection and transportation of waste	d transportation of waste								
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?		/							
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?	1								
	(1) public fill materials for on-site reuse, or disposal at public filling area;									
	(2) reusable / recyclable materials;									
	(3) un-reusable / non-recyclable waste for landfill disposal.									
EM&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?									

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
-	Surface Run-off					
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	V				
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?	V				
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	1				
PN1/94	Are open stockpiles of construction materials (e,g, aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	J				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?	J				
PN1/94	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	1				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
``	Boring and Drilling Water	\vdash			1	
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?	V	:			
	Wheel Washing Water					¢
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?	V				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?	V				
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?	V				
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?	V				

Checklist Condition		N/A	Yes	No	Unk	Remarks	
Are working programmes sched	uled to minimize noise nuisance?		V			4.	
Are construction works or equip nuisance?	ment sited to minimize noise		√				
Are all plant and equipment main conditions?	ntained in good operating		1			-" . #	
Is idle equipment turned off or the	nrottled down?		V				
Are methods of working devised nuisance?	and arranged to minimize noise		1				
Are construction works carried o nuisance?	out in a manner to minimize noise		J				
holidays, is either one of the folk a) Mitigation by portable noise	days, is either one of the following measures adopted? Mitigation by portable noise barriers at noise sources or Rescheduling of some powered mechanical equipment to less						
		V				,,,,,	
Are valid construction noise permisspection?	nits, if required, available for	V					
		V					
Are valid noise emission labels for held percussive breakers?	ixed at air compressors and hand	1					
	☐ Traffic	Construction activities inside the					
Major noise source(s) Construction activities							
	Are construction works or equip nuisance? Are all plant and equipment mai conditions? Is idle equipment turned off or the construction works carried on nuisance? Are construction works carried on nuisance? To mitigate construction noise definition of the followard of the construction works carried on nuisance? To mitigate construction noise definition of the followard of the followard of the construction of the followard of the construction of the construction of the construction of the construction of the conditions of construction noise perminspection? Are conditions of construction noise perminspection? Are valid noise emission labels of held percussive breakers?	Are all plant and equipment maintained in good operating conditions? Is idle equipment turned off or throttled down? Are methods of working devised and arranged to minimize noise nuisance? Are construction works carried out in a manner to minimize noise nuisance? To mitigate construction noise during Sunday's and public holidays, is either one of the following measures adopted? a) Mitigation by portable noise barriers at noise sources or b) Rescheduling of some powered mechanical equipment to less sensitive time periods? To mitigate night time construction noise, is dredging equipment equipped with silencers or mufflers? Are valid construction noise permits, if required, available for inspection? Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly? Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	Are construction works or equipment sited to minimize noise nuisance? Are all plant and equipment maintained in good operating conditions? Is idle equipment turned off or throttled down? Are methods of working devised and arranged to minimize noise nuisance? Are construction works carried out in a manner to minimize noise nuisance? To mitigate construction noise during Sunday's and public holidays, is either one of the following measures adopted? a) Mitigation by portable noise barriers at noise sources or b) Rescheduling of some powered mechanical equipment to less sensitive time periods? To mitigate night time construction noise, is dredging equipment equipped with silencers or mufflers? Are valid construction noise permits, if required, available for inspection? Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly? Are valid noise emission labels fixed at air compressors and hand held percussive breakers? Traffic Major noise source(s)	Are construction works or equipment sited to minimize noise nuisance? Are all plant and equipment maintained in good operating conditions? Is idle equipment turned off or throttled down? Are methods of working devised and arranged to minimize noise nuisance? Are construction works carried out in a manner to minimize noise nuisance? To mitigate construction noise during Sunday's and public holidays, is either one of the following measures adopted? a) Mitigation by portable noise barriers at noise sources or b) Rescheduling of some powered mechanical equipment to less sensitive time periods? To mitigate night time construction noise, is dredging equipment equipped with silencers or mufflers? Are valid construction noise permits, if required, available for inspection? Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly? Are valid noise emission labels fixed at air compressors and hand held percussive breakers? Traffic Construction noise source(s)	Are construction works or equipment sited to minimize noise nuisance? Are all plant and equipment maintained in good operating conditions? Is idle equipment turned off or throttled down? Are methods of working devised and arranged to minimize noise nuisance? Are construction works carried out in a manner to minimize noise nuisance? To mitigate construction noise during Sunday's and public holidays, is either one of the following measures adopted? a) Mitigation by portable noise barriers at noise sources or b) Rescheduling of some powered mechanical equipment to less sensitive time periods? To mitigate night time construction noise, is dredging equipment equipped with silencers or mufflers? Are valid construction noise permits, if required, available for inspection? Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly? Are valid noise emission labels fixed at air compressors and hand held percussive breakers? Traffic Construction site	Are construction works or equipment sited to minimize noise nuisance? Are all plant and equipment maintained in good operating conditions? Is idle equipment turned off or throttled down? Are methods of working devised and arranged to minimize noise nuisance? Are construction works carried out in a manner to minimize noise nuisance? To mitigate construction noise during Sunday's and public holidays, is either one of the following measures adopted? a) Mitigation by portable noise barriers at noise sources or b) Rescheduling of some powered mechanical equipment to less sensitive time periods? To mitigate night time construction noise, is dredging equipment equipped with silencers or mufflers? Are valid construction noise permits, if required, available for inspection? Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly? Are valid noise emission labels fixed at air compressors and hand held percussive breakers? Traffic Construction activisite	

VEP:

Varied Environmental Permit

WMP:

Waste Management Plan

APC (Construction Dust) Regulation

NCO:

EM&A: EM&A Manual (Construction Phase) Noise Control Ordinance

Cap311R: Cap311O: Cap311: PN1/94:

APC (Open Burning) Regulation

WDO:

Waste Disposal Ordinance

Air Pollution Control Ordinance

Practice Note for Professional Persons (Construction Site Drainage)

Unk:

Unknown

Remark			 	
		٠		4
	•			
,				
Signatures			 	

ET Member

Contractor's Representative

(Name in Block letters:

12th January 2005

C/N:04/90/8 The Hongkong Electric Co. Ltd. Lamma Power Station Extension – E&M Works Weekly Site Inspection Checklist

Inspect	ion date 7 Jul 2006 Time 0 3 30 Inspecto	ed By	ET:		. W.	Chu.
Site	LMX - Gas Rocenzay Stedien		Contr	actor	:: W. F.	. Kwok (TDK
Weathe	r	,			····	****
Condition	on Sunny Fine Overcast Hazy		Dri	zzle	R	ain Stor
Temper	ature ☐ °C Humidity ☐ High ☐ Moder	ate [Lo	w		
Wind	Calm Light Breeze Strong					
GENERA	L	· · · · · · · · · · · · · · · · · · ·		-		······ <u>·</u>
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
VEP 1.5	Has a copy of the most update Environmental Permit been displayed at all vehicular site entrances/exits for public information?					
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?			 		
Ref.	Checklist Condition	N/A	Yes	No	Unk	Pamarka
	General Requirements	N/A	Yes	N ₀	Unk	Remarks
Cap311R: 3	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice, do the contractors notify EPD of the change?	V				
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Is this observed?					
Cap311	Do the contractors possess valid Air Pollution Control Specified Processes Licenses for the concrete batching plant wherever applicable and have it available for inspection?					
	Construction Sites					
EM&A : A1	Are haul roads paved with concrete or sprayed with water to keep the entire road wet?					
	Stockpiling of dusty materials					
Cap311R: Sch 18	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
ļ	Cement and dry pulverized fuel ash (PFA)	 .		<u> </u>	l	
Cap311R Sch 15(3)						
Cap311R Sch 15(4)		/				
Cap311R Sch 15(2)						
Cap311R: Sch 17	Are the cement, dry PFA or other dusty materials collected by the air pollution control equipment disposed of in totally enclosed containers?	/				
	Loading, unloading or transfer of dusty materials		 		!	
Cap311R: Sch 19	Are dusty materials, except cement and dry PFA, sprayed with water immediately prior to any loading, unloading or transfer operation?	/				-
EM&A: A1	Are the dropping heights of the fill materials controlled to a practical level to minimize fugitive dust emission?	V				
	Use of vehicles					
Cap311R: Sch 21(2) EM&A: A1	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?					
Cap311R: Sch 21(1)	Is every vehicle wheel-washed by the wheel washing facilities to remove any dusty materials from its body and wheels before leaving the construction site?		v/		10	Cleany Austot
	Transfer of dusty materials using a belt conveyor system					7 60
Cap311R: Sch 20(1)	Are belt conveyors used for transfer of dusty materials covered on the top and 2 sides?	<i>'</i>				
Cap311R: Sch 20(2)	Is every transfer point between any two-belt conveyors totally enclosed?					
Cap311R: Sch 20(3)	Is a belt scraper or equivalent device installed at the head pulley of every conveyor? Is the belt scraper equipped with bottom plates or similar means to prevent falling of materials from the return belts?					
Cap311R: Sch 20(4)	Are stockpiling conveyors equipped with level adjusting mechanism to maintain the dropping height within 1 m?	<u> </u>				
	Concrete batching plant					
EM&A: A2	Are the loading, unloading, handling, transfer or storage of any dusty materials carried out in a totally enclosed system?	/				
EM&A: 12	Are dusty materials, except cement and dry PFA, wetted by water spray system?			 		
M&A:	Are all the receiving hoppers enclosed on three (3)sides up to 3m above unloading point?					
M&A:	Are all the conveyor transfer points totally enclosed?			+	_	

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Miscellaneous		l			<u> </u>
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	/				
Cap3110	Is open burning prohibited?					
Cap311	Is black smoke emission from plant/equipment avoided?		/		<u>-</u>	

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials			•		
WMP EM&A: E3	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	1				
WMP EM&A: E3	Has the contractor kept a complete set of dumping records/ticketing system and made them available for inspection?	/				
EM&A: E3	Are wastes disposed of at licensed sites?					
	Construction Waste and Excavated Materials					
WMP EM&A: E3	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?					
WMP	Has the Contractor maintained disposal records for the construction waste and excavated materials, and made them available for inspection?	/				<u></u> -
WMP	Is suitable concrete waste/excavated material used for on-site reclamation/filling works?	/				
WMP	Are the used formworks reused as far as possible before being disposed of in a landfill site?					
WMP	Are the remaining unsuitable excavated materials disposed of at the public filling areas?					
EM&A: E3	Are wastes disposed of at licensed sites?					
	General refuse					
WMP	Has the Contractor maintained a disposal record for general refuse and made it available for inspection?	/				
WMP	Is general refuse stored within receptacles and separated from chemical wastes?					
WMP	Is the refuse disposed of regularly and properly?	7		+		
WMP	Are burning of refuse at site and dumping at sea prohibited?			工		
· · · · · · · · · · · · · · · · · · ·	Chemical Waste					
EM&A: E3	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?					

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
WDO	Has the Contractor been registered as a chemical waste producer?		/			
EM&A E3	Has the Contractor kept all the trip tickets for the disposal of chemical waste and made them available for inspection?		1			
EM&A: E4	Is chemical waste handled according to the Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?					
EM&A: E4	Is the chemical waste storage, if any, well maintained, kept closed and locked?					
<u> </u>	Storage, collection and transportation of waste	·	I			w
EM&A: E3	Are wastes transported by enclosed containers or covered trucks?		7	T		
EM&A: E3	Are waste materials segregated and sorted into 3 categories as follows?					
	(1) public fill materials for on-site reuse, or disposal at public filling area;			1		
	(2) reusable / recyclable materials;	7		<u> </u>		- · · · · ·
	(3) un-reusable / non-recyclable waste for landfill disposal.		7	\dashv	-	
E M&A: E3	Are the records of the quantities of wastes generated and disposed off-site for the 3 categories of waste properly maintained?					

WATER QUALITY

Ref	Checklist Condition	N/A	Yes	Νo	Unk	Remarks
	Surface Run-off				-1 /	· · · · · · · · · · · · · · · · · · ·
PN1/94	Are the silt removal facilities, channels and manholes maintained and the deposited silt and grit removed regularly?	/	_			* " 1
PN1/94	Are earthworks final surfaces well compacted and the subsequent permanent work or surface protection carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms? Is appropriate drainage like intercepting channels provided where necessary?					
PN1/94	Are measures taken to minimize the ingress of rainwater into trenches? Is rainwater pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?	7				
PN1/94	Are open stockpiles of construction materials (e,g, aggregates, sand and fill material) on site covered with tarpaulin or similar fabric during rainstorms? Are measures taken to prevent the washing away of construction materials, soil, silt or debris into the drainage system?	/				
PN1/94	Are manholes (including newly constructed ones) adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers?					
PN1/94	Groundwater Is groundwater that pumped out of wells discharged into storm drains after the removal of silt in silt removal facilities?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Boring and Drilling Water	 	<u> </u>	 -		
PN1/94	Is water that used in ground boring and drilling for site investigation or rock/soil anchoring recirculated as far as possible after sedimentation? If there is a need for final disposal, is the wastewater discharged into storm drains via silt removal facilities?					-
	Wheel Washing Water	1				
PN1/94	Is a wheel-washing bay provided at every exit if practicable and is the silt removed from wash-water before discharging into storm drains?	1				<u> </u>

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: G1	Are all percussive piling works conducted on reclaimed land to avoid noise impact to marine mammals?			<u></u>		
EM&A: G2	Do the marine vessels moving to and from the construction site strictly follow the routes stated in the "Plan for Dredging & Reclamation, Routing of Construction Related Marine Vessels, and Installation of Silt Curtain"?					
EM&A: G3	Is rubble mound seawall constructed to the south and west edges of the reclamation to enhance recolonisation of marine organisms?					

Ref	Checklist Condition	•	N/A	Yes	No	Unk	Remarks
EM&A: C1	Are working programmes sche	duled to minimize noise nuisance?	-	1			
EM&A: C1	Are construction works or equi nuisance?	pment sited to minimize noise		1			
EM&A: C1	Are all plant and equipment maconditions?	aintained in good operating		/			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
EM&A: C1/GP	Is idle equipment turned off or	throttled down?		7			
EM&A: C1	Are methods of working devise nuisance?	d and arranged to minimize noise		/			
EM&A C1)	Are construction works carried nuisance?	out in a manner to minimize noise		/			
EM&A: C2							
EM&A: C3	To mitigate night time construct equipped with silencers or muff	ion noise, is dredging equipment lers?	/				
NCO	Are valid construction noise per inspection?	mits, if required, available for	1				
NCO	Are conditions of construction n relevant part(s) of the works imp	oise permits, if any, for the olemented accordingly?					
NCO	Are valid noise emission labels f held percussive breakers?	ixed at air compressors and hand					·
	Major noise source(s)	☐ Traffic ☐ Construction activities outside the site		Construe site Others	ction a	ctivitio	es inside the

VEP:

Varied Environmental Permit

WMP:

Cap311R: Cap311O: Cap311: PN1/94: Unk:

Waste Management Plan

APC (Construction Dust) Regulation

APC (Open Burning) Regulation

Air Pollution Control Ordinance

Practice Note for Professional Persons (Construction Site Drainage)

Unknown

Remark							
	 					<u>.</u>	
				, ,,,		N= 11-1	
						,	<u>.</u>
							 -
					- · · · · · · · · · · · · · · · · · · ·		
Signatures	 						

EM&A: EM&A Manual (Construction Phase)

Noise Control Ordinance Waste Disposal Ordinance

ET Member

Contractor's Representative

(Name in Block letters:

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – Construction of Transmission System Weekly Site Inspection Checklist

spection dat	e 05/07/06 Time 09:30 Inspected		ET: E		Kade	n
te	Transmission Route (Civil Work)					
eather		· ·	*			
ondition	Sunny Fine Overcast Hazy		Drizz	le [Rai	n Sto
emperatur	e 30 °C Humidity High Moderate	-	Low			
Vind	Calm Light Breeze Strong					
ENERAL				,		. <u>-</u> <u>-</u>
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
/EP 1.5	Has a copy of the most updated Environmental Permit been displayed at all vehicular site entrances/exits for public information?		✓			
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices		,			ļ
	on site?					
IR QUALI	on site?	N/A	Yes	No	Unk	Remarks
IR QUALI	TY Checklist Condition General Requirements	N/A		No	Unk	Remarks
IR QUALI	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		No	Unk	Remarks
IR QUALI	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is the iffed as a notified EPD of the construction of the image.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		No	Unk	Remarks
IR QUALI Ref. Cap311R:	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?	<i>\</i>		No	Unk	Remarks
IR QUALI Ref. Cap311R:	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?	<i>\</i>		No	Unk	Remarks
IR QUALI Ref. Cap311R: Cap311R: Sch 12(3) Cap311R: Sch 18	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed? Stockpiling of dusty materials Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission? Lise of vehicles	<i>\</i>	Yes	No	Unk	Remarks
IR QUALI Ref. Cap311R: Cap311R: Sch 12(3) Cap311R: Sch 18	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed? Stockpiling of dusty materials Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	<i>\</i>	Yes	No	Unk	Remarks
IR QUALI Ref. Cap311R: Cap311R: Sch 12(3) Cap311R: Sch 18 EM&A:J1	Checklist Condition General Requirements Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change? A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed? Stockpiling of dusty materials Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission? Use of vehicles	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Yes	No	Unk	Remarks

_		_	
/			
	/		

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials					,
Cap466	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	1				
Cap466	Are wastes disposed of at licensed sites?	✓	<u> </u>			
	Construction Waste and Excavated Materials		<u>, — </u>	, -		
Сар354	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	~	:			
Cap354	Are wastes disposed of at licensed sited?	*				
	Chemical Waste		., -			
Cap354C	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	*				
Cap354C	Has the Contractor registered as a chemical waste producer?		/			<u> </u>
Cap354C	Is chemical waste handled according to the "Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	/				

		N/A	Yes	No	Unk	Remarks
Ref	Checklist Condition	<u> </u>				
EM&A: M1	Are rubble mound seawalls constructed for the landing and launching points at Lamma Island?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: L1	Are quiet PMEs or standard PMEs with modest source noise controls used at the cable route from N4 to N5?	*				
EM&A: L2 ~ L5	Are quiet PMEs (particularly the barge-mounted crane) or PMEs with comparably effective source noise controls used at landing point N5?	/				
NCO	Are valid construction noise permits, if required, available for inspection?	/				
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?	*				
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	V				

TERRESTRIAL ECOLOGY

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: O1	Are the construction activities at land monitored to avoid impact on the un species Celtis biondii, Pteris dispar restricted plants Vitis balansaeana, i and Rhapis excellsa?	common and rare plant and <i>Ardicia pusilla</i> , and the		*			
EM&A: O2	Are fences erected in accordance wi in good condition along the boundar prevent tipping, vehicle movements personnel into adjacent wooded are uncommon and restricted plant spec	and encroachment of as, particularly where the rare,		V			
EM&A: Q3	Has regular checking been performed boundaries are not exceeded and the surrounding areas?	ed to ensure that the work site at no damage occurs to		\			
EM&A: Q4	Is open fire prohibited and prevente boundary during construction? Is to equipment provided in the work are	mporary fire fighting		~	/		
		Traffic	T		nstruc site	ction a	ctivities inside
	Major noise source(s)	Major noise source(s) Construction activities outside the site			hers:		

VEP: Cap311R:

Cap3110: Cap311:

Varied Environmental Permit APC (Construction Dust) Regulation APC (Open Burning) Regulation Air Pollution Control Ordinance Dumping at Sea Ordinance

EM&A: EM&A Manual (Construction Phase)

Noise Control Ordinance NCO: Cap354: Waste Disposal Ordinance

Cap354c: WDO (Chemical Waste) (General) Regulation

Unknown Unk:

Remark

Cap466:

Signatures

ET Men

(Name in Block le

Assistant Resident Engineer

Contractor's Representative

Orame in Block letters:

C.K.LAW Engineer

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – Construction of Transmission System Weekly Site Inspection Checklist

Inspection of							
Site	Transmission Route (Civil Work)		Cont	racto	r: Kad	en	
Veather							
Condition	Sunny Fine Overcast Hazy		Driz	zle [Ra	nin Sto	
Temperatu	re 30 °C Humidity High ✓ Moderat	e	Low	/			
Wind	Calm Light Breeze Strong						
GENERAL							
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
VEP 1.5	Has a copy of the most updated Environmental Permit been displayed at all vehicular site entrances/exits for public information?		√				
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		✓				
AIR QUAL	Checklist Condition	N/A	Yes	No	Unk	Remarks	
	General Requirements	<u> </u>	<u> </u>	J			
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change?	✓					
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?	/					
	Stockpiling of dusty materials						
Cap311R: Sch 18 EM&A:J1	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?		✓				
	Use of vehicles						
Cap311R:	Is every load of dusty material on the vehicles leaving the			1			

construction site covered entircly by clean impervious sheeting?

Are completed earthworks sealed and hydroseeded and planted as

Sch 21(2)

Cap311R:

Sch 16

Miscellaneous

soon as possible?

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
Сар311О	Is open burning prohibited?		1			
Cap311	Is black smoke emission from plant/equipment avoided?		1			

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials		•			·
Сар466	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	1				
Cap466	Are wastes disposed of at licensed sites?	1				
	Construction Waste and Excavated Materials					
Сар354	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	1			·	
Сар354	Are wastes disposed of at licensed sited?	1				
	Chemical Waste		•	•		
Cap354C	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	~				
Cap354C	Has the Contractor registered as a chemical waste producer?		1			
Cap354C	Is chemical waste handled according to the "Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: M1	Are rubble mound seawalls constructed for the landing and launching points at Lamma Island?	~				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: L1	Are quiet PMEs or standard PMEs with modest source noise controls used at the cable route from N4 to N5?	√				
EM&A: L2 ~ L5	Are quiet PMEs (particularly the barge-mounted crane) or PMEs with comparably effective source noise controls used at landing point N5?	1				
NCO	Are valid construction noise permits, if required, available for inspection?	1				
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?	/				
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	~				

TERRESTRIAL ECOLOGY

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: O1	Are the construction activities at la monitored to avoid impact on the u species Celtis biondii, Pteris disparestricted plants Vitis balansaeana, and Rhapis excellsa?	ncommon and rare plant r and Ardicia pusilla, and the		*			
EM&A: O2	Are fences erected in accordance win good condition along the bounds prevent tipping, vehicle movement personnel into adjacent wooded are uncommon and restricted plant spe	ary of construction sites to s, and encroachment of eas, particularly where the rare,		*			
EM&A: Q3	Has regular checking been perform boundaries are not exceeded and the surrounding areas?			1			
EM&A: Q4	ls open fire prohibited and prevent boundary during construction? Is to equipment provided in the work ar	emporary fire fighting		1	/		
		Traffic	✓	Con the		tion act	tivities inside
	Major noise source(s)	Construction activities outside the site		Oth	ers:		

VEP:

Varied Environmental Permit

Cap311R: Cap311O: Cap311: Cap466:

APC (Construction Dust) Regulation APC (Open Burning) Regulation Air Pollution Control Ordinance

Dumping at Sea Ordinance

EM&A: EM&A Manual (Construction Phase)

NCO: Noise Control Ordinance

Cap354: Waste Disposal Ordinance Cap354c: WDO (Chemical Waste) (General) Regulation

Unk: Unknown

nark			
		_	
			
	 , ,		
on "			

Signatures

ET Member

Contractor's Representative

(Name in Block letters:

Eric, K Y Dai

Assistant Resident Engineer

Name in Block letters:

20th December 2001

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – Construction of Transmission System Weekly Site Inspection Checklist

Inspection of	date 19/07/06 Time 09:30 Inspect	ed by				
			Cont	racto	r: Kad	en
Site	Transmission Route (Civil Work)					
Veather						
Condition	Sunny Fine Overcast Hazy		Driz:	zle [Ra	in Storr
Temperatu	re 32 °C Humidity High Moderat	e	Lov	V		
Wind	Calm Light Breeze Strong					
GENERAL						
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
VEP 1.5	Has a copy of the most updated Environmental Permit been displayed at all vehicular site entrances/exits for public information?		~			
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		1			
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	General Requirements	1				<u> </u>
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change?	/	!			
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?	✓				
	Stockpiling of dusty materials	<u> </u>		Ţ		· · · · · · · · · · · · · · · · · · ·
Cap311R: Sch 18 EM&A:J1	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?		/			
	Use of vehicles					
Cap311R: Sch 21(2)						
Sen 21(2)	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	~				
Sen 21(2)	Is every load of dusty material on the vehicles leaving the	*				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
Cap3110	Is open burning prohibited?		\			
Сар311	Is black smoke emission from plant/equipment avoided?		1			

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks			
	Dredged Materials	<u> </u>		•					
Cap466	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	/							
Cap466	Are wastes disposed of at licensed sites?	1							
	Construction Waste and Excavated Materials	•							
Сар354	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	✓							
Cap354	Are wastes disposed of at licensed sited?	1							
	Chemical Waste								
Cap354C	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/							
Cap354C	Has the Contractor registered as a chemical waste producer?	-	1						
Cap354C	Is chemical waste handled according to the "Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	/	-						

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: M1	Are rubble mound seawalls constructed for the landing and launching points at Lamma Island?	✓				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: L1	Are quiet PMEs or standard PMEs with modest source noise controls used at the cable route from N4 to N5?	1				
EM&A: L2 ~ L5	Are quiet PMEs (particularly the barge-mounted crane) or PMEs with comparably effective source noise controls used at landing point N5?	V				
NCO	Are valid construction noise permits, if required, available for inspection?	~				***
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?	/				
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	~				

TERRESTRIAL ECOLOGY

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: Ot	Are the construction activities at la monitored to avoid impact on the u species Celtis biondii, Pteris disparestricted plants Vitis balansaeana, and Rhapis excellsa?		1				
EM&A: O2	Are fences erected in accordance with the Hoarding Plan and kept in good condition along the boundary of construction sites to prevent tipping, vehicle movements, and encroachment of personnel into adjacent wooded areas, particularly where the rare, uncommon and restricted plant species are located?			√			
EM&A: Q3	Has regular checking been perform boundaries are not exceeded and the surrounding areas?	Has regular checking been performed to ensure that the work site boundaries are not exceeded and that no damage occurs to surrounding areas?					
EM&A: Q4	Is open fire prohibited and prevented within the work site boundary during construction? Is temporary fire fighting equipment provided in the work area during construction?			/			
		Traffic	1	Construction active		tivities inside	
· · ·	- Major noise source(s)	Construction activities outside the site		Oth	ers:	<u></u>	

VEP:

Varied Environmental Permit

Cap311R: Cap311O: Cap311: Cap466:

APC (Construction Dust) Regulation APC (Open Burning) Regulation Air Pollution Control Ordinance Dumping at Sea Ordinance

EM&A: EM&A Manual (Construction Phase)

NCO: Noise Control Ordinance
Cap354: Waste Disposal Ordinance
Cap354c: WDO (Chemical Waste) (General) Regulation

Unk: Unknown

Remark		
Signatures		
ET Member	Contractor's Representative	
	Jan	
(Name in Block letters: Eric, K. Y. Dai	(Name in Block letters:	
Assistant Resident Engineer	(Name in Block letters: C.K. LAN Engineer.	

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – Construction of Transmission System Weekly Site Inspection Checklist

Inspection of	date 26/07/06 Time 09:30 Inspected by ET: Eric Dai Contractor: Kaden								
Site	Transmission Route (Civil Work)								
/eather									
Condition	Sunny Fine Overcast Hazy		Driz	zle [Ra	ain St			
Гетрегаtu	re 33 °C Humidity High Modera	te _	Lov	V					
Wind	Calm Light Breeze Strong								
ENERAL									
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks			
VEP 1.5	Has a copy of the most updated Environmental Permit been displayed at all vehicular site entrances/exits for public information?		1						
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		1						
AIR QUAL Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks			
	General Requirements		<u> </u>	.l	1				
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change?	✓							
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?	1							
	Stockpiling of dusty materials			, .					
Cap3f1R: Sch 18 EM&A:J1	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?		/						
	Use of vehicles								
Cap311R: Sch 21(2)	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	V							
	Miscellaneous								
Cap311R: Sch 16	Are completed earthworks sealed and hydrosceded and planted as soon as possible?	1							

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
Cap3110	Is open burning prohibited?		✓			
Cap311	Is black smoke emission from plant/equipment avoided?		✓			

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks			
	Dredged Materials	••••							
Сар466	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?	1							
Cap466	Are wastes disposed of at licensed sites?	~							
	Construction Waste and Excavated Materials	•	•						
Cap354	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	✓							
Cap354	Are wastes disposed of at licensed sited?	√							
	Chemical Waste								
Сар354С	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	✓							
Cap354C	Has the Contractor registered as a chemical waste producer?		1						
Cap354C	Is chemical waste handled according to the "Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	1							

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: M1	Are rubble mound seawalls constructed for the landing and launching points at Lamma Island?	'				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: Ll	Are quiet PMEs or standard PMEs with modest source noise controls used at the cable route from N4 to N5?	1				,
EM&A: L2 ~ L5	Are quiet PMEs (particularly the barge-mounted crane) or PMEs with comparably effective source noise controls used at landing point N5?	1				
NCO	Are valid construction noise permits, if required, available for inspection?	~				•
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?	/				
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	/				in the second

TERRESTRIAL ECOLOGY

Ref	Checklist Condition		N/A	Yes No Unk Rem			Remarks
EM&A: O1	monitored to avoid impact on the uspecies Celtis biondii, Pteris dispar	ies at landing points N4 & N5 closely on the uncommon and rare plant is dispar and Ardicia pusilla, and the saeana, Pterospermum heterophyllum					
EM&A: O2	Are fences erected in accordance with the Hoarding Plan and kept in good condition along the boundary of construction sites to prevent tipping, vehicle movements, and encroachment of personnel into adjacent wooded areas, particularly where the rare, uncommon and restricted plant species are located?			√			
EM&A: Q3		Has regular checking been performed to ensure that the work site boundaries are not exceeded and that no damage occurs to surrounding areas?		~			
EM&A: Q4	boundary during construction? Is to	bited and prevented within the work site construction? Is temporary fire fighting led in the work area during construction?		1			
		Traffic	✓	Con the		ion act	tivities inside
	Major noise source(s)	Construction activities outside the site		Oth	ers:		

VEP:

Varied Environmental Permit

Cap311R: Cap311O:

APC (Construction Dust) Regulation APC (Open Burning) Regulation Air Pollution Control Ordinance

Cap311: Cap466:

Dumping at Sea Ordinance

EM&A: EM&A Manual (Construction Phase)

NCO: Noise Control Ordinance

Cap354: Waste Disposal Ordinance Cap354c: WDO (Chemical Waste) (General) Regulation

Unk: Unknown

Remark

Signatures

ET Member

Contractor's Representative

(Name in Block letters:

Eric, K Y Dai

Assistant Resident Engineer

(Name in Block letters:

The Hongkong Electric Co. Ltd. Lamma Power Station Extension -- Construction of Transmission System Weekly Site Inspection Checklist

Inspection d	late 7/7/06 Time 0:30 Inspect	ted by	ET:		< (l]
Site	OUTSER LOWOND POINT I, No 2N4	•	Cont	racto	r:	-POWERS	ys10vis.
Weather							•
Condition	Sunny Fine Overcast Hazy	Z	Driz	zie [Ra	nin Stor	m
Temperatu	re Zo °C Humidity High Moderat	te	Lov	V			
Wind	Calm Light Breeze Strong						
GENERAL					· · ·		_
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
VEP 1.5	Has a copy of the most updated Environmental Permit been displayed at all vehicular site entrances/exits for public information?						1
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		/				1
AIR QUALI Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks]
	General Requirements	<u> </u>	<u> </u>		<u> </u>		1
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change?						
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?						
	Stockpiling of dusty materials]
Cap311R: Sch 18 EM&A:J1	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	/					
	Use of vehicles						
Cap311R: Sch 21(2)	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	/					
	Miscellaneous]
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	/					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
Сар311О	Is open burning prohibited?	/				
Cap311	Is black smoke emission from plant/equipment avoided?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials	•	· · · · · · · ·		<u></u>	
Cap466	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?					
Cap466	Are wastes disposed of at licensed sites?		/			
	Construction Waste and Excavated Materials					
Cap354	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?					
Cap354	Are wastes disposed of at licensed sited?	/				
	Chemical Waste		•			
Cap354C	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/				
Cap354C	Has the Contractor registered as a chemical waste producer?	1	-			
Cap354C	Is chemical waste handled according to the "Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?					

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: M1	Are rubble mound seawalls constructed for the landing and launching points at Lamma Island?	/				

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: L1	Are quiet PMEs or standard PMEs with modest source noise controls used at the cable route from N4 to N5?	/				
EM&A: L2 ~ L5	Are quiet PMEs (particularly the barge-mounted crane) or PMEs with comparably effective source noise controls used at landing point N5?	/				•
NCO	Are valid construction noise permits, if required, available for inspection?	/				
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?	/				
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	1				

TERRESTRIAL ECOLOGY

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks	
EM&A: O1	Are the construction activities a monitored to avoid impact on the species Celtis biondii, Pteris disrestricted plants Vitis balansaea and Rhapis excellsa?	/						
EM&A: O2	Are fences erected in accordance in good condition along the bour prevent tipping, vehicle movem personnel into adjacent wooded uncommon and restricted plant.	1						
EM&A: Q3	Has regular checking been performed to ensure that the work site boundaries are not exceeded and that no damage occurs to surrounding areas?		1				15 5 5 5	
EM&A: Q4	Is open fire prohibited and preve boundary during construction? I equipment provided in the work	s temporary fire fighting	/					
		☐ Traffic	Þ	Construction activities inside the				
	- Major noise source(s)	Construction activities outside the site		Other	s		_	

VEP: Varied Environmental Permit EM&A: EM&A Manual (Construction Phase) APC (Construction Dust) Regulation NCO: Noise Control Ordinance Cap311R: Cap3110: APC (Open Burning) Regulation Cap354: Waste Disposal Ordinance Air Pollution Control Ordinance Cap311: Cap354c: WDO (Chemical Waste) (General) Regulation Cap466: Dumping at Sea Ordinance Unk: Unknown Remark N/A Signatures ET Member Contractor's Representative (Name in Block letters:

RCLAN,

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – Construction of Transmission System Weekly Site Inspection Checklist

Inspection	date $\frac{14}{706}$ Time $\frac{1.40}{1.40}$ Inspec	ted by	ET:		- 77	-pours System
Site	OURIDE LANDING PT. I, No 2N4		Com	1440	"-]	-paurespi de
Weather						
Condition	Sunny Fine Overcast Hazy		Driz	zle [/R	nin Storm
Temperate	re	te	Lov	v		
Wind	Calm Light Breeze Strong					
GENERAL						
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
VEP 1.5	Has a copy of the most updated Environmental Permit been displayed at all vehicular site entrances/exits for public information?		/			
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		/			
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
	General Requirements					
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change?	/				
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?	/			,	
	Stockpiling of dusty materials					
Cap311R: Sch 18 EM&A:JI	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	/				
. <u>.</u>	Use of vehicles					
Cap311R: Sch 21(2)	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	/				
	Miscellaneous					
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	/				

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
Cap3110	Is open burning prohibited?	/				
Cap311	Is black smoke emission from plant/equipment avoided?	/				

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks			
	Dredged Materials	•							
Cap466	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?		/						
Cap466	Are wastes disposed of at licensed sites?		/						
	Construction Waste and Excavated Materials								
Cap354	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	/							
Cap354	Are wastes disposed of at licensed sited?	1							
	Chemical Waste								
Cap354C	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/							
Cap354C	Has the Contractor registered as a chemical waste producer?	/							
Cap354C	Is chemical waste handled according to the "Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	/							

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: M1	Are rubble mound seawalls constructed for the landing and launching points at Lamma Island?	1				

N	^	T	C	Ľ	١
13				г	١,

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: L1	Are quiet PMEs or standard PMEs with modest source noise controls used at the cable route from N4 to N5?	1				1907
EM&A: L2~L5	Are quiet PMEs (particularly the barge-mounted crane) or PMEs with comparably effective source noise controls used at landing point N5?	/				
NCO	Are valid construction noise permits, if required, available for inspection?	/				
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?	/				
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	/				

TERRESTRIAL ECOLOGY

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: O1	Are the construction activities a monitored to avoid impact on the species Celtis biondii, Pteris directicted plants Vitis balansaed and Rhapis excellsa?	/					
EM&A: O2	Are fences erected in accordance with the Hoarding Plan and kept in good condition along the boundary of construction sites to prevent tipping, vehicle movements, and encroachment of personnel into adjacent wooded areas, particularly where the rare, uncommon and restricted plant species are located?						
EM&A: Q3	Has regular checking been performed to ensure that the work site boundaries are not exceeded and that no damage occurs to surrounding areas?						
EM&A: Q4	Is open fire prohibited and prev boundary during construction? equipment provided in the work	Is temporary fire fighting	/				
· <u>········</u>		☐ Traffic	Construction activities inside the				ties inside the
	Major noise source(s)	Construction activities outside the site		Others			

Abbreviation

VEP: Varied Environmental Permit EM&A: EM&A Manual (Construction Phase) Cap311R: Cap3110: NCO: Noise Control Ordinance Cap354: Waste Disposal Ordinance APC (Construction Dust) Regulation APC (Open Burning) Regulation Cap311: Air Pollution Control Ordinance Cap354c: WDO (Chemical Waste) (General) Regulation Cap466: Dumping at Sea Ordinance Unk: Unknown Remark Signatures ET Member Contractor's Representative

(Name in Block letters:

KILLAU ,

(Name in Block letters:

BERRY YUZA

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – Construction of Transmission System Weekly Site Inspection Checklist

Inspection	date $21/7/06$ Time $0:30$ Inspec	ted by	ET:	K	LU	pristre sy	_
Site	OUTSIDE LANDING PT. I, MIPNY		Cont	racto	<u>- ر ۱۳:</u>	PEROK J V	J 784
Weather		, "					•
Condition	Sunny Fine Overcast Hazy		Driz	zle [Ra	in Storm	n
Temperatu	re Zo°C Humidity High Modera	te	Lov	v			
Wind	Calm Light Breeze Strong						
GENERAL							_
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
VEP 1.5	Has a copy of the most updated Environmental Permit been displayed at all vehicular site entrances/exits for public information?		/				
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?		/				
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
	General Requirements	J		i. '		l 	
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change?	/					
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?	/					
	Stockpiling of dusty materials						
Cap311R: Sch 18 EM&A:J1	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	/	l				
	Use of vehicles						
Cap311R: Sch 21(2)	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?	/					
	Miscellaneous						
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	/	_			- 1	

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
Cap3110	Is open burning prohibited?	/				
Cap311	Is black smoke emission from plant/equipment avoided?	/				

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials		•			-
Cap466	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?		/			
Cap466	Are wastes disposed of at licensed sites?		/			
	Construction Waste and Excavated Materials					
Cap354	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	1				
Cap354	Are wastes disposed of at licensed sited?	/				
	Chemical Waste	- 	•			· · · · · · · · · · · · · · · · · · ·
Cap354C	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/				
Cap354C	Has the Contractor registered as a chemical waste producer?	/				
Cap354C	Is chemical waste handled according to the "Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	1				<u> </u>

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: M1	Are rubble mound seawalls constructed for the landing and launching points at Lamma Island?	1				

N	^	ì	c	t
14	v		a	r

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: L1	Are quiet PMEs or standard PMEs with modest source noise controls used at the cable route from N4 to N5?	1				
EM&A: L2 ~ L5	Are quiet PMEs (particularly the barge-mounted crane) or PMEs with comparably effective source noise controls used at landing point N5?	/				
NCO	Are valid construction noise permits, if required, available for inspection?	/				
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?	/				
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	/	:			

TERRESTRIAL ECOLOGY

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: OI	monitored to avoid impact on the species Celtis biondii, Pteris dia	nt landing points N4 & N5 closely the uncommon and rare plant spar and Ardicia pusilla, and the ana, Pterospermum heterophyllum	1				
EM&A: O2	in good condition along the bou prevent tipping, vehicle movem	ents, and encroachment of areas, particularly where the rare,	/				
EM&A: Q3	Has regular checking been performed boundaries are not exceeded and surrounding areas?	ormed to ensure that the work site d that no damage occurs to	/				
EM&A: Q4	Is open fire prohibited and previous during construction? I equipment provided in the work	Is temporary fire fighting	/				
		☐ Traffic	Construction activities inside the site Others			n activi	ities inside the
	Major noise source(s)	Construction activities outside the site					

Abbreviation

VEP: Varied Environmental Permit EM&A: EM&A Manual (Construction Phase) Cap311R: Cap311O: NCO: Noise Control Ordinance Cap354: Waste Disposal Ordinance APC (Construction Dust) Regulation APC (Open Burning) Regulation Cap311: Air Pollution Control Ordinance Cap354c: WDO (Chemical Waste) (General) Regulation Cap466: Unknown Dumping at Sea Ordinance Remark Signatures ET Member Contractor's Representative

Page 4 of 4

(Name in Block letters:

(Name in Block letters:

The Hongkong Electric Co. Ltd. Lamma Power Station Extension – Construction of Transmission System Weekly Site Inspection Checklist

Inspection	date $28/7/6$ Time $((:32)$ Inspec	ted by	ET:		و ل	Pare ST	~- <i>(</i>
Site	OUTSITE LAWOMS P1. In, No 2N4		Com	Iacio	1	Parde 3D	irms .
Weather						V	
Condition	Sunny Fine Overcast Hazy		Driz	zle [Z R	nin Storm	
Temperatu	re 28°C Humidity High Moderat	te	Lov	v			
Wind	Calm Light Breeze Strong						_
GENERAL							-
Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
VEP 1.5	Has a copy of the most updated Environmental Permit been displayed at all vehicular site entrances/exits for public information?		/			-	
VEP 1.6	Is a copy of EIA report kept in Engineers' and Contractors' offices on site?	<u> </u>	/				
AIR QUALI Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks	
	General Requirements				-		
Cap311R:	Has the contractors notified EPD of the construction site which is classified as a notifiable work in a specified form? If there is any change in the notice? If yes, did the contractors notify EPD of the change?	/					
Cap311R: Sch 12(3)	A compressed air jet shall not be used for cleaning or clearing dust from any vehicle, equipment, other materials or person. Has this been observed?	/					
	Stockpiling of dusty materials				,		
Cap311R: Sch 18 EM&A:J1	Are stockpiles of dusty materials entirely covered with impervious sheets or sheltered on the top and 3 sides or sprayed with water to maintain the entire surface wet to prevent dust emission?	/					
	Use of vehicles						
Cap311R: Sch 21(2)	Is every load of dusty material on the vehicles leaving the construction site covered entirely by clean impervious sheeting?						
	Miscellaneous						
Cap311R: Sch 16	Are completed earthworks sealed and hydroseeded and planted as soon as possible?	/					

Ref.	Checklist Condition	N/A	Yes	No	Unk	Remarks
Cap311O	Is open burning prohibited?	/				
Cap311	Is black smoke emission from plant/equipment avoided?	/				

WASTE/CHEMICAL WASTE MANAGEMENT

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
	Dredged Materials		•			
Cap466	Does the appropriate contractor possess valid dumping permits for dredged marine mud and have them available for inspection?		/			
Cap466	Are wastes disposed of at licensed sites?		/			
	Construction Waste and Excavated Materials					
Cap354	Does the Contractor possess a valid Public Dumping License for construction waste and excavated materials and make it available for inspection?	/				
Cap354	Are wastes disposed of at licensed sited?	1				
	Chemical Waste	•				
Cap354C	Has the contractor obtained the necessary disposal permits from the relevant authority, if required, according to Waste Disposal (Chemical Waste) (General Regulation)?	/				
Cap354C	Has the Contractor registered as a chemical waste producer?	/				
Cap354C	Is chemical waste handled according to the "Code of Practice on the Packaging, Handling and Storage of Chemical Waste"?	1				

MARINE ECOLOGY

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: M1	Are rubble mound seawalls constructed for the landing and launching points at Lamma Island?	1				

ъ.		TC.	E.
N	v.	13.	D.

Ref	Checklist Condition	N/A	Yes	No	Unk	Remarks
EM&A: L1	Are quiet PMEs or standard PMEs with modest source noise controls used at the cable route from N4 to N5?	1				
EM&A: L2~L5	Are quiet PMEs (particularly the barge-mounted crane) or PMEs with comparably effective source noise controls used at landing point N5?	/				
NCO	Are valid construction noise permits, if required, available for inspection?	/				
NCO	Are conditions of construction noise permits, if any, for the relevant part(s) of the works implemented accordingly?					,
NCO	Are valid noise emission labels fixed at air compressors and hand held percussive breakers?	/				1472 ±

TERRESTRIAL ECOLOGY

Ref	Checklist Condition		N/A	Yes	No	Unk	Remarks
EM&A: O1	monitored to avoid impact on the species Celtis biondii, Pteris dis	t landing points N4 & N5 closely the uncommon and rare plant the par and Ardicia pusilla, and the the parameter of the pusilla and the parameter of the pusilla and the parameter of the paramete	/				
EM&A: O2	in good condition along the bou prevent tipping, vehicle moveme	ents, and encroachment of areas, particularly where the rare,					
EM&A: Q3	Has regular checking been performed boundaries are not exceeded and surrounding areas?	rmed to ensure that the work site I that no damage occurs to	/				
EM&A: Q4	Is open fire prohibited and preve boundary during construction? I equipment provided in the work	s temporary fire fighting	/				
		☐ Traffic	a		uctio	a activ	ities inside the
	- Major noise source(s)	Construction activities	site Others				

Abbreviation

VEP: Varied Environmental Permit EM&A: EM&A Manual (Construction Phase) Cap311R: APC (Construction Dust) Regulation APC (Open Burning) Regulation Noise Control Ordinance Cap3110: Cap354: Waste Disposal Ordinance Cap311: Air Pollution Control Ordinance Cap354c: WDO (Chemical Waste) (General) Regulation Cap466: Dumping at Sea Ordinance Unk: Unknown Remark Signatures ET Member Contractor's Representative

(Name in Block letters:

KLLAU.

(Name in Block letters:

BERRY YUZA

Appendix I: Summary of EMIS

I.1. Power Station – Unit L9 Civil and Building Works (Part B of EIA Report)

Table I.1 Construction Phase Mitigation Measures and their Implementation

EM&A Log Ref.	Mitigation Measures	Implementation Status
	AIR QUALITY	
A1	For general construction works, the dust control measures stipulated under the Air Pollution Control (Construction Dust) Regulation shall be complied with, such as:	
	the haul roads shall be sprayed with water to keep the entire road surface wet.	С
	• the load carried by vehicle shall be covered by impervious sheeting to ensure no leakage of dusty materials from the vehicle.	С
	the heights from which fill materials are dropped shall be controlled to a practical level to minimise the fugitive dust arising from unloading.	С
A2	For the concrete batching plant, the following control measures are recommended:	
	• loading, unloading, handling, transfer or storage or any dusty materials shall be carried out in a totally enclosed system.	N/A
	The materials which may generate airborne dust emissions shall be wetted by water spray system.	N/A
	All receiving hoppers shall be enclosed on three sides up to 3m above unloading point.	N/A
	All conveyor transfer points shall be totally enclosed.	N/A
	WATER QUALITY	
B1	The following configurations and maximum rates of dredging shall be allowed:	
	3 large grab dredgers and 1 small grab dredger operating concurrently, each with rates of working of 12,000 m³ day⁻¹ and 8,000 m³ day⁻¹ respectively. During the flood phase of the tidal cycle the total number of large dredgers working shall be reduced by one, while during the ebb phase of the tidal cycle no reductions in the total number of dredgers shall be required.	N/A
	• 1 trailer dredger with a rate of working of 8,000 m ³ day ⁻¹ , and 2 large grab dredgers, each with rates of working of 12,000 m ³ day ⁻¹	N/A
B2	Silt curtains shall be installed on the eastern, southern and north western sides of the reclamation site during dredging for the reclamation construction. This is a required mitigation measure for the construction works and shall be implemented prior to the commencement of bulk dredging.	N/A
В3	As a necessary operational constraint combined bulk dredging and sand filling for site formation shall not be permitted at any time. In addition, sand filling for site platform shall take place behind constructed sea walls which pierce the water surface.	N/A
B4	HEC shall ensure design to divert all storm drains away from Hung Shing Ye Bay.	С

EM&A Log Ref.	Mitigation Measures	Implementation Status				
B5	Sand fill for the rubble mound seawalls shall be placed by controlled pumping down the trailer arm.	N/A				
B6	EM&A shall confirm the acceptability of any impacts during construction and should any unacceptable impacts be found then one or more of the following mitigation measures shall be implemented:	N/A				
	 reducing the number of dredgers working at any one time; reducing the rate of working of the dredgers; temporary suspension of operations; phasing of the works so that dredging / filling is only undertaken at certain stages of the tidal cycle. 					
В7	In addition to the above specific measures the following general working procedures shall be adopted.					
	fully-enclosed or watertight grabs shall be used to minimise loss of sediment during the raising of loaded grabs through the water column;	N/A				
	the descent speed of grabs shall be controlled to minimise the seabed impact speed and to reduce the volume of over dredging;					
 bottom seals in order to prevent leakage of material during loading and transport; all barges shall be filled to a level which ensures that material does not spill over during loading and transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave 	N/A					
	bottom seals in order to prevent leakage of material during loading and	N/A				
	over during loading and transport to the disposal site and that adequate	N/A				
	• the speed of trailer dredgers shall be controlled to prevent propeller wash from stirring up the sea bed sediments;	N/A				
	"rainbowing" sand fill from trailer dredgers shall not be permitted; and	N/A				
	the works shall cause no visible foam, oil, grease or litter or other objectionable matter to be present in the water within and adjacent to the dredging site and along the route to the disposal site.	N/A				
B8	Cumulative impacts shall be assessed through EM&A. Co-ordination with the EM&A consultants for other projects to determine if any exceedances are caused by the other projects or by HEC's activities. Should monitoring results indicate exceedances at sensitive receivers due to HEC's activities, then the above described mitigation measures shall be implemented until impacts reduce to acceptable levels.	N/A				
	NOISE					
C1	General noise mitigation measures shall be employed at all work sites throughout the construction phase.	С				
C2	Mitigate against general construction noise during Sunday's and public holidays, either at source with portable noise barriers, or by rescheduling of some PMEs to less sensitive time periods.	С				
C3	Mitigate against night time noise from dredging equipment, with silencers or mufflers.	N/A				

EM&A Log Ref.	Mitigation Measures	Implementation Status			
	LANDSCAPE & VISUAL IMPACTS				
D1	The following mitigation measures shall be allowed for landscape and visual improvement:				
	Use rubble mound seawall along south and west edges of the reclamation to provide a more natural look.	С			
	Break the mass of main buildings by varying the height/division into smaller units.	С			
	Plant trees and vegetation for screening.	С			
	Adopt colour scheme to blend the buildings into the scenery.	С			
	VVA GENERAL AND GENERAL GENERA				
	WASTE MANAGEMENT				
E1	HEC to submit a Waste Management Plan for the construction phase to EPD. The Plan shall be verified by the IEC and shall describe the arrangements for avoidance, reuse, recovery and recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities and shall take into account the recommendations of the EIA report.				
	Dredging Waste				
E2	All vessels for marine transportation of dredged sediment shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials. In addition, loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water, and barges or hoppers should under no circumstances be filled to a level which shall cause the overflowing of materials or polluted water during loading or transportation				
	Storage, Collection and Transport of Waste				
E3	Minimise windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers.	С			
	Obtain the necessary waste disposal permits from the appropriate authorities, if they are required, in accordance with the Waste Disposal Ordinance (Cap.354), Waste Disposal (Chemical Waste) (General) Regulation (Cap.354), the Crown Land Ordinance (Cap 28), Dumping at Sea Ordinance (Cap 466) and Work Branch Technical Circular No. 22/92, Marine Disposal of Dredged Mud.	С			
	Disposal of waste at Licensed sites;	С			
	Develop procedures such as a ticketing system to facilitate tracking of marine mud and chemical waste, and to ensure that illegal disposal does not occur;	N/A			
	 Segregate and sort the waste materials into 3 categories: public fill (e.g. concrete and rubble) for re-use on-site or disposal at a public filling area; re-use and/or recycling waste (e.g. steel and other metals); waste which cannot be re-used and/or recycled (e.g. wood, glass and plastic) for landfill disposal. The sorting process shall be carefully monitored to avoid missing of the 3 categories. Different types of wastes shall be stockpiled and stored in different containers or skips to enhance re-use or recycling of materials and their proper disposal. 	N/A			
	Maintain records of the quantities of wastes generated and disposed off-site for each category of waste.	С			

EM&A Log Ref.	Mitigation Measures	Implementation Status
E4	Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes	N/A
	LAND CONTAMINATION	
F1	No land Contamination mitigation measures are required during the construction phase.	N/A
	MARINE ECOLOGY	
G1	All percussive piling works shall be conducted on reclaimed land to avoid noise impact to marine mammals	N/A
G2	All construction related vessels shall approach the extension site from the north and via the East Lamma Channel to avoid disturbance to the finless porpoise	С
G3	Rubble mound seawall to the south and west edges of the reclamation to enhance recolonisation of marine organisms	С
G4	Artificial Reefs of a volume not less than 400 m ³ shall be deployed in a location to be decided upon consultation with the Director of Agriculture and Fisheries to serve the purpose of an Additional Habitat Enhancement Measure.	С
	FISHERIES	
H1	No Fisheries-specific mitigation measures are required during the construction phase.	N/A
	RISK ASSESSMENT	
I1	No risk mitigation measures are required during the construction phase.	N/A

I.2. Power Station – Unit L9 Mechanical Erection (Part B of EIA Report)

 Table I.2
 Construction Phase Mitigation Measures and their Implementation

EM&A Log Ref.	Mitigation Measures	Implementation Status
	AIR QUALITY	
A1	For general construction works, the dust control measures stipulated under the Air Pollution Control (Construction Dust) Regulation shall be complied with, such as:	
	• the haul roads shall be sprayed with water to keep the entire road surface wet.	С
	the load carried by vehicle shall be covered by impervious sheeting to ensure no leakage of dusty materials from the vehicle.	N/A
	the heights from which fill materials are dropped shall be controlled to a practical level to minimise the fugitive dust arising from unloading.	N/A
A2	For the concrete batching plant, the following control measures are recommended:	
	• loading, unloading, handling, transfer or storage or any dusty materials shall be carried out in a totally enclosed system.	N/A
	The materials which may generate airborne dust emissions shall be wetted by water spray system.	N/A
	All receiving hoppers shall be enclosed on three sides up to 3m above unloading point.	N/A
	All conveyor transfer points shall be totally enclosed.	N/A
	WATER QUALITY	
B1	The following configurations and maximum rates of dredging shall be allowed:	
	3 large grab dredgers and 1 small grab dredger operating concurrently, each with rates of working of 12,000 m³ day⁻¹ and 8,000 m³ day⁻¹ respectively. During the flood phase of the tidal cycle the total number of large dredgers working shall be reduced by one, while during the ebb phase of the tidal cycle no reductions in the total number of dredgers shall be required.	N/A
	• 1 trailer dredger with a rate of working of 8,000 m ³ day ⁻¹ , and 2 large grab dredgers, each with rates of working of 12,000 m ³ day ⁻¹	N/A
B2	Silt curtains shall be installed on the eastern, southern and north western sides of the reclamation site during dredging for the reclamation construction. This is a required mitigation measure for the construction works and shall be implemented prior to the commencement of bulk dredging.	N/A
В3	As a necessary operational constraint combined bulk dredging and sand filling for site formation shall not be permitted at any time. In addition, sand filling for site platform shall take place behind constructed sea walls which pierce the water surface.	N/A
B4	HEC shall ensure design to divert all storm drains away from Hung Shing Ye Bay.	N/A

EM&A Log Ref.	Mitigation Measures	Implementation Status
В5	Sand fill for the rubble mound seawalls shall be placed by controlled pumping down the trailer arm.	N/A
В6	EM&A shall confirm the acceptability of any impacts during construction and should any unacceptable impacts be found then one or more of the following mitigation measures shall be implemented:	N/A
	 reducing the number of dredgers working at any one time; reducing the rate of working of the dredgers; temporary suspension of operations; phasing of the works so that dredging / filling is only undertaken at certain stages of the tidal cycle. 	
В7	In addition to the above specific measures the following general working procedures shall be adopted.	
	fully-enclosed or watertight grabs shall be used to minimise loss of sediment during the raising of loaded grabs through the water column;	N/A
	the descent speed of grabs shall be controlled to minimise the seabed impact speed and to reduce the volume of over dredging;	N/A
	barges shall be loaded carefully to avoid splashing of material;	N/A
	all barges used for the transport of dredged materials shall be fitted with tight bottom seals in order to prevent leakage of material during loading and transport;	N/A
	all barges shall be filled to a level which ensures that material does not spill over during loading and transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action;	N/A
	• the speed of trailer dredgers shall be controlled to prevent propeller wash from stirring up the sea bed sediments;	N/A
	"rainbowing" sand fill from trailer dredgers shall not be permitted; and	N/A
	the works shall cause no visible foam, oil, grease or litter or other objectionable matter to be present in the water within and adjacent to the dredging site and along the route to the disposal site.	С
B8	Cumulative impacts shall be assessed through EM&A. Co-ordination with the EM&A consultants for other projects to determine if any exceedances are caused by the other projects or by HEC's activities. Should monitoring results indicate exceedances at sensitive receivers due to HEC's activities, then the above described mitigation measures shall be implemented until impacts reduce to acceptable levels.	N/A
		T
	NOISE	
C1	General noise mitigation measures shall be employed at all work sites throughout the construction phase.	С
C2	Mitigate against general construction noise during Sunday's and public holidays, either at source with portable noise barriers, or by rescheduling of some PMEs to less sensitive time periods.	С
C3	Mitigate against night time noise from dredging equipment, with silencers or mufflers.	N/A

EM&A Log Ref.	Mitigation Measures	Implementation Status
	LANDSCAPE & VISUAL IMPACTS	
D1	The following mitigation measures shall be allowed for landscape and visual improvement:	
	Use rubble mound seawall along south and west edges of the reclamation to provide a more natural look.	N/A
	Break the mass of main buildings by varying the height/division into smaller units.	N/A
	Plant trees and vegetation for screening.	N/A
	Adopt colour scheme to blend the buildings into the scenery.	N/A
	WASTE MANAGEMENT	
E1	HEC to submit a Waste Management Plan for the construction phase to EPD. The Plan shall be verified by the IEC and shall describe the arrangements for avoidance, reuse, recovery and recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities and shall take into account the recommendations of the EIA report.	С
	Dredging Waste	
E2	All vessels for marine transportation of dredged sediment shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials. In addition, loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water, and barges or hoppers should under no circumstances be filled to a level which shall cause the overflowing of materials or polluted water during loading or transportation	N/A
	Storage, Collection and Transport of Waste	
E3	Minimise windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers.	С
	Obtain the necessary waste disposal permits from the appropriate authorities, if they are required, in accordance with the Waste Disposal Ordinance (Cap.354), Waste Disposal (Chemical Waste) (General) Regulation (Cap.354), the Crown Land Ordinance (Cap 28), Dumping at Sea Ordinance (Cap 466) and Work Branch Technical Circular No. 22/92, Marine Disposal of Dredged Mud.	С
	Disposal of waste at Licensed sites;	С
	Develop procedures such as a ticketing system to facilitate tracking of marine mud and chemical waste, and to ensure that illegal disposal does not occur;	С
	 Segregate and sort the waste materials into 3 categories: public fill (e.g. concrete and rubble) for re-use on-site or disposal at a public filling area; re-use and/or recycling waste (e.g. steel and other metals); waste which cannot be re-used and/or recycled (e.g. wood, glass and plastic) for landfill disposal. The sorting process shall be carefully monitored to avoid missing of the 3 categories. Different types of wastes shall be stockpiled and stored in different containers or skips to enhance re-use or recycling of materials and their proper disposal. 	С
	Maintain records of the quantities of wastes generated and disposed off-site for each category of waste.	С

EM&A Log Ref.	Mitigation Measures	Implementation Status
E4	Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes	С
	LAND CONTAMINATION	
F1	No land Contamination mitigation measures are required during the construction phase.	N/A
	MARINE ECOLOGY	
G1	All percussive piling works shall be conducted on reclaimed land to avoid noise impact to marine mammals	N/A
G2	All construction related vessels shall approach the extension site from the north and via the East Lamma Channel to avoid disturbance to the finless porpoise	N/A
G3	Rubble mound seawall to the south and west edges of the reclamation to enhance recolonisation of marine organisms	N/A
G4	Artificial Reefs of a volume not less than 400 m ³ shall be deployed in a location to be decided upon consultation with the Director of Agriculture and Fisheries to serve the purpose of an Additional Habitat Enhancement Measure.	N/A
	FISHERIES	
H1	No Fisheries-specific mitigation measures are required during the construction phase.	N/A
	RISK ASSESSMENT	
I1	No risk mitigation measures are required during the construction phase.	N/A

I.3. Power Station – Unit L9 Electrical Erection (Part B of EIA Report)

Table I.3 Construction Phase Mitigation Measures and their Implementation

EM&A Log Ref.	Mitigation Measures	Implementation Status
	AIR QUALITY	
A1	For general construction works, the dust control measures stipulated under the Air Pollution Control (Construction Dust) Regulation shall be complied with, such as:	
	• the haul roads shall be sprayed with water to keep the entire road surface wet.	С
	the load carried by vehicle shall be covered by impervious sheeting to ensure no leakage of dusty materials from the vehicle.	N/A
	the heights from which fill materials are dropped shall be controlled to a practical level to minimise the fugitive dust arising from unloading.	N/A
A2	For the concrete batching plant, the following control measures are recommended:	
	• loading, unloading, handling, transfer or storage or any dusty materials shall be carried out in a totally enclosed system.	N/A
	The materials which may generate airborne dust emissions shall be wetted by water spray system.	N/A
	All receiving hoppers shall be enclosed on three sides up to 3m above unloading point.	N/A
	All conveyor transfer points shall be totally enclosed.	N/A
	WATER QUALITY	
B1	The following configurations and maximum rates of dredging shall be allowed:	
	3 large grab dredgers and 1 small grab dredger operating concurrently, each with rates of working of 12,000 m³ day⁻¹ and 8,000 m³ day⁻¹ respectively. During the flood phase of the tidal cycle the total number of large dredgers working shall be reduced by one, while during the ebb phase of the tidal cycle no reductions in the total number of dredgers shall be required.	N/A
	• 1 trailer dredger with a rate of working of 8,000 m ³ day ⁻¹ , and 2 large grab dredgers, each with rates of working of 12,000 m ³ day ⁻¹	N/A
B2	Silt curtains shall be installed on the eastern, southern and north western sides of the reclamation site during dredging for the reclamation construction. This is a required mitigation measure for the construction works and shall be implemented prior to the commencement of bulk dredging.	N/A
В3	As a necessary operational constraint combined bulk dredging and sand filling for site formation shall not be permitted at any time. In addition, sand filling for site platform shall take place behind constructed sea walls which pierce the water surface.	N/A
B4	HEC shall ensure design to divert all storm drains away from Hung Shing Ye Bay.	N/A

EM&A Log Ref.	Mitigation Measures	Implementation Status
B5	Sand fill for the rubble mound seawalls shall be placed by controlled pumping down the trailer arm.	N/A
B6	EM&A shall confirm the acceptability of any impacts during construction and should any unacceptable impacts be found then one or more of the following mitigation measures shall be implemented:	N/A
	 reducing the number of dredgers working at any one time; reducing the rate of working of the dredgers; temporary suspension of operations; phasing of the works so that dredging / filling is only undertaken at certain stages of the tidal cycle. 	
В7	In addition to the above specific measures the following general working procedures shall be adopted.	
	fully-enclosed or watertight grabs shall be used to minimise loss of sediment during the raising of loaded grabs through the water column;	N/A
	the descent speed of grabs shall be controlled to minimise the seabed impact speed and to reduce the volume of over dredging;	N/A
	barges shall be loaded carefully to avoid splashing of material;	N/A
	all barges used for the transport of dredged materials shall be fitted with tight bottom seals in order to prevent leakage of material during loading and transport;	N/A
	all barges shall be filled to a level which ensures that material does not spill over during loading and transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action;	N/A
	• the speed of trailer dredgers shall be controlled to prevent propeller wash from stirring up the sea bed sediments;	N/A
	"rainbowing" sand fill from trailer dredgers shall not be permitted; and	N/A
	the works shall cause no visible foam, oil, grease or litter or other objectionable matter to be present in the water within and adjacent to the dredging site and along the route to the disposal site.	N/A
B8	Cumulative impacts shall be assessed through EM&A. Co-ordination with the EM&A consultants for other projects to determine if any exceedances are caused by the other projects or by HEC's activities. Should monitoring results indicate exceedances at sensitive receivers due to HEC's activities, then the above described mitigation measures shall be implemented until impacts reduce to acceptable levels.	N/A
	NOISE	
C1	General noise mitigation measures shall be employed at all work sites throughout the construction phase.	С
C2	Mitigate against general construction noise during Sunday's and public holidays, either at source with portable noise barriers, or by rescheduling of some PMEs to less sensitive time periods.	С
C3	Mitigate against night time noise from dredging equipment, with silencers or mufflers.	N/A

EM&A Log Ref.	Mitigation Measures	Implementation Status
	LANDSCAPE & VISUAL IMPACTS	
D1	The following mitigation measures shall be allowed for landscape and visual improvement:	
	Use rubble mound seawall along south and west edges of the reclamation to provide a more natural look.	N/A
	Break the mass of main buildings by varying the height/division into smaller units.	N/A
	Plant trees and vegetation for screening.	N/A
	Adopt colour scheme to blend the buildings into the scenery.	N/A
	WASTE MANAGEMENT	
E1	HEC to submit a Waste Management Plan for the construction phase to EPD. The Plan shall be verified by the IEC and shall describe the arrangements for avoidance, reuse, recovery and recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities and shall take into account the recommendations of the EIA report.	С
	Dredging Waste	
E2	All vessels for marine transportation of dredged sediment shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials. In addition, loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water, and barges or hoppers should under no circumstances be filled to a level which shall cause the overflowing of materials or polluted water during loading or transportation	N/A
	Storage, Collection and Transport of Waste	
E3	Minimise windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers.	С
	Obtain the necessary waste disposal permits from the appropriate authorities, if they are required, in accordance with the Waste Disposal Ordinance (Cap.354), Waste Disposal (Chemical Waste) (General) Regulation (Cap.354), the Crown Land Ordinance (Cap 28), Dumping at Sea Ordinance (Cap 466) and Work Branch Technical Circular No. 22/92, Marine Disposal of Dredged Mud.	С
	Disposal of waste at Licensed sites;	С
	Develop procedures such as a ticketing system to facilitate tracking of marine mud and chemical waste, and to ensure that illegal disposal does not occur;	С
	 Segregate and sort the waste materials into 3 categories: public fill (e.g. concrete and rubble) for re-use on-site or disposal at a public filling area; re-use and/or recycling waste (e.g. steel and other metals); waste which cannot be re-used and/or recycled (e.g. wood, glass and plastic) for landfill disposal. The sorting process shall be carefully monitored to avoid missing of the 3 categories. Different types of wastes shall be stockpiled and stored in different containers or skips to enhance re-use or recycling of materials and their proper disposal. 	С
	Maintain records of the quantities of wastes generated and disposed off-site for each category of waste.	С

EM&A Log Ref.	Mitigation Measures	Implementation Status
E4	Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes	С
	LAND CONTAMINATION	
F1	No land Contamination mitigation measures are required during the construction phase.	N/A
	MARINE ECOLOGY	
G1	All percussive piling works shall be conducted on reclaimed land to avoid noise impact to marine mammals	N/A
G2	All construction related vessels shall approach the extension site from the north and via the East Lamma Channel to avoid disturbance to the finless porpoise	N/A
G3	Rubble mound seawall to the south and west edges of the reclamation to enhance recolonisation of marine organisms	N/A
G4	Artificial Reefs of a volume not less than 400 m ³ shall be deployed in a location to be decided upon consultation with the Director of Agriculture and Fisheries to serve the purpose of an Additional Habitat Enhancement Measure.	N/A
	FISHERIES	
H1	No Fisheries-specific mitigation measures are required during the construction phase.	N/A
	RISK ASSESSMENT	
I1	No risk mitigation measures are required during the construction phase.	N/A

I.4. Transmission System – Civil Works (Part C of EIA Report)

Table I.4 Construction Phase Mitigation Measures and their Implementation

EM&A Log Ref.	Mitigation Measures	Implementation Status
	AIR QUALITY	
J1	To mitigate potential construction related dust impacts, the dust control measures stipulated under the Air Pollution Control (Construction Dust) Regulation shall be complied with, such as:	
	all debris or materials shall be either covered or stored in a debris sheltered collection area;	С
	• prior to any material handling, all dusty material shall be sprayed with water.	С
	I	
	WATER QUALITY	
K1	No mitigation measures are considered necessary.	N/A
	NOISE	
L1	N4-N5 Cable Route Selection and use of quiet PMEs, or use of modest source noise controls with standard PMEs	С
L2	N5 Landing Point Selection and use of quiet PMEs (particularly the barge-mounted crane), or use of comparably effective source noise controls with the PMEs;	С
L3	For non-percussive piling – use of equipment with a SWL of 113 dB(A) or less if there is no programme overlap of the piling with the site formation works, otherwise offsetting source noise controls shall be required.	N/A
L4	For percussive piling – use of equipment with a SWL of 115 dB(A) or less, otherwise, offsetting source noise controls shall be required.	N/A
L5	If non-percussive piling and site formation activities are to be carried out simultaneously then careful equipment selection and source controls shall be required for both activities to reduce each by approximately 3 dB(A).	N/A
	MARINE ECOLOGY	
M1	Construction of rubble mound seawalls for the landing and launching points at Lamma Island.	С
	FISHERIES	
N1	No fisheries-specific mitigation measures are required during the construction phase	N/A

EM&A Log Ref.	Mitigation Measures	Implementation Status
	TERRESTRIAL ECOLOGY	
	The following mitigation measures shall be implemented to protect the important plant species and minimizing disturbance to the surrounding environment through good construction practice, as recommended below:	
O1	Avoidance of impact on the uncommon and rare plant species <i>Celtis biondii</i> , <i>Pteris dispar</i> and <i>Ardicia pusilla</i> , and the restricted plants <i>Vitis balansaeana</i> , <i>Pterospermum heterophyllum</i> and <i>Rhapis excelsa</i> , by locating the landing points N4 & N5 and the connecting cable trough in areas outside where these plant species are located (Figures 9.4b & 9.4c, Part C, Volume 2), as well as close monitoring of the construction activity.	С
O2	The erection of fences along the boundary of construction sites before the commencement of works to prevent tipping, vehicle movements, and encroachment of personnel into adjacent wooded areas, particularly where the rare, uncommon and restricted plant species are located.	С
О3	Regular checking to ensue that the work site boundaries are not exceeded and that no damage occurs to surrounding areas.	С
O4	The prohibition and prevention of open fires within the work site boundary during construction and provision of temporary fire fighting equipment in the work area during construction.	С
	LANDSCAPE AND VISUAL IMPACT	
P1	The visual impact of the Cable Landing Point I1 is considered negligible as it would have similar appearance as the existing sea wall and therefore no mitigation is required.	N/A
P2	The proposed landing points N2, N4 and N5, the following landscaping mitigation measures are recommended to minimize the potential impacts:	
	• Although the size of the landing points varies (N2 is 26x70m, N4 is 27x65m and N5 is 33x56m), each has a finished platform level at +6.00mPD. With the Low Water Level at +1.00mPD, the platforms shall be a maximum of some 5m above the water level at low tide. In order to minimize the visual impact of the landing points, the exposed sides of the platforms and the cable slipways shall be screened with irregularly arranged boulders of varying sizes to mimic the natural coastline features. The horizontal platform surface shall be finished with natural materials such as stone pavings or tiles.	С
	• The cable trough in between Landing Points N4 and N5 is 5.5m wide and 260m long. The walkway that is formed above the cable trough shall be shielded by boulders (or, where practicable, shrub planting) from potential viewers from the sea and horizontal surfaces be finished with natural materials such as stone paving.	N/A
	Appropriate compensatory landscaping shall be provided for any disruption to existing vegetation to blend in with the surrounding setting.	N/A

EM&A Log Ref.	Mitigation Measures	Implementation Status
	 As a planning gain, parts of the landing points N4 and N5 and the cable trough between the landing points can be used for amenity and recreational purposes. Some low maintenance fixtures, matching with the natural environment, shall be built or placed on the landing points for public use. HEC shall resolve any management and maintenance requirements of the proposed mitigation measures during the processing stage of wayleave agreements. If required by Government, HEC commit to bear the management and maintenance responsibilities of these facilities. 	N/A

Remarks:

Compliance with mitigation measure Non-compliance with mitigation measure Not Applicable C -NC -N/A -C

I.5. Transmission System – Cable Laying (Part C of EIA Report)

 Table I.5
 Construction Phase Mitigation Measures and their Implementation

	AID OUALITY	
J1	AIR QUALITY	
	To mitigate potential construction related dust impacts, the dust control measures stipulated under the Air Pollution Control (Construction Dust) Regulation shall be complied with, such as:	
	• all debris or materials shall be either covered or stored in a debris sheltered collection area;	N/A
	• prior to any material handling, all dusty material shall be sprayed with water.	N/A
	WATER OUALITY	1
+	WATER QUALITY	NT/A
K1	No mitigation measures are considered necessary.	N/A
		T
	NOISE	
	N4-N5 Cable Route Selection and use of quiet PMEs, or use of modest source noise controls with standard PMEs	N/A
	N5 Landing Point Selection and use of quiet PMEs (particularly the barge-mounted crane), or use of comparably effective source noise controls with the PMEs;	N/A
	For non-percussive piling – use of equipment with a SWL of 113 dB(A) or less if there is no programme overlap of the piling with the site formation works, otherwise offsetting source noise controls shall be required.	N/A
	For percussive piling – use of equipment with a SWL of 115 dB(A) or less, otherwise, offsetting source noise controls shall be required.	N/A
	If non-percussive piling and site formation activities are to be carried out simultaneously then careful equipment selection and source controls shall be required for both activities to reduce each by approximately 3 dB(A).	N/A
	MARINE ECOLOGY	
	Construction of rubble mound seawalls for the landing and launching points at Lamma Island.	N/A
	FISHERIES	
	No fisheries-specific mitigation measures are required during the construction phase	N/A

EM&A Log Ref.	Mitigation Measures	Implementation Status
	TERRESTRIAL ECOLOGY	
	The following mitigation measures shall be implemented to protect the important plant species and minimizing disturbance to the surrounding environment through good construction practice, as recommended below:	
O1	Avoidance of impact on the uncommon and rare plant species <i>Celtis biondii</i> , <i>Pteris dispar</i> and <i>Ardicia pusilla</i> , and the restricted plants <i>Vitis balansaeana</i> , <i>Pterospermum heterophyllum</i> and <i>Rhapis excelsa</i> , by locating the landing points N4 & N5 and the connecting cable trough in areas outside where these plant species are located (Figures 9.4b & 9.4c, Part C, Volume 2), as well as close monitoring of the construction activity.	N/A
O2	The erection of fences along the boundary of construction sites before the commencement of works to prevent tipping, vehicle movements, and encroachment of personnel into adjacent wooded areas, particularly where the rare, uncommon and restricted plant species are located.	N/A
О3	Regular checking to ensue that the work site boundaries are not exceeded and that no damage occurs to surrounding areas.	N/A
O4	The prohibition and prevention of open fires within the work site boundary during construction and provision of temporary fire fighting equipment in the work area during construction.	N/A
	LANDSCAPE AND VISUAL IMPACT	
P1	The visual impact of the Cable Landing Point I1 is considered negligible as it would have similar appearance as the existing sea wall and therefore no mitigation is required.	N/A
P2	The proposed landing points N2, N4 and N5, the following landscaping mitigation measures are recommended to minimize the potential impacts:	
	• Although the size of the landing points varies (N2 is 26x70m, N4 is 27x65m and N5 is 33x56m), each has a finished platform level at +6.00mPD. With the Low Water Level at +1.00mPD, the platforms shall be a maximum of some 5m above the water level at low tide. In order to minimize the visual impact of the landing points, the exposed sides of the platforms and the cable slipways shall be screened with irregularly arranged boulders of varying sizes to mimic the natural coastline features. The horizontal platform surface shall be finished with natural materials such as stone pavings or tiles.	N/A
	• The cable trough in between Landing Points N4 and N5 is 5.5m wide and 260m long. The walkway that is formed above the cable trough shall be shielded by boulders (or, where practicable, shrub planting) from potential viewers from the sea and horizontal surfaces be finished with natural materials such as stone paving.	N/A
	 Appropriate compensatory landscaping shall be provided for any disruption to existing vegetation to blend in with the surrounding setting. 	N/A

EM&A Log Ref.	Mitigation Measures	Implementation Status
	 As a planning gain, parts of the landing points N4 and N5 and the cable trough between the landing points can be used for amenity and recreational purposes. Some low maintenance fixtures, matching with the natural environment, shall be built or placed on the landing points for public use. HEC shall resolve any management and maintenance requirements of the proposed mitigation measures during the processing stage of wayleave agreements. If required by Government, HEC commit to bear the management and maintenance responsibilities of these facilities. 	N/A

Remarks:

Compliance with mitigation measure Non-compliance with mitigation measure Not Applicable C -NC -N/A -C

Appendix J

Tentative Construction Programme

D	Activities	Duration	Start	Finish
	Main Station Bldg. and HRSG	914 days	02 Apr '04	02 Oct '06
2	Pile head treatment	29 days	02 Apr '04	30 Apr '04
3	Earthing system	30 days	11 May '04	09 Jun '04
4	Pile cap and tie beam	110 days	16 May '04	02 Sep '04
5	1/F construction	60 days	26 Dec '04	23 Feb '05
6	2/F Construction	90 days	01 Dec '04	28 Feb '05
7	3/F Construction	45 days	15 Jan '05	28 Feb '05
8	4/F Construction	45 days	01 Feb '05	17 Mar '05
9	5/F Construction	45 days	02 Mar '05	15 Apr '05
10	R/F Construction	45 days	17 Mar '05	30 Apr '05
11	Deferred works - East	50 days	21 Apr '05	09 Jun '05
12	Deferred works - West	76 days	17 May '05	31 Jul '05
13	Deferred works - South	45 days	15 Oct '05	28 Nov '05
14	Deferred works - Air Inlet	50 days	01 Jan '06	19 Feb '06
15	Deferred works - North	25 days	10 Feb '06	06 Mar '06
16	Deferred works - Tiling at +16.15	60 days	04 Aug '06	02 Oct '06
17	Deferred works - Firewall at Transformer Bay	46 days	20 Jul '05	03 Sep '05
18	Deferred works - Metal Fence at Transformer Bay	45 days	01 Mar '06	14 Apr '06
19				

3-Month Programme

					Aug '06		Sep '06		Oct '0		
ID	Activities	Duration	Start	Finish	30 06 1	3 20 27	03 10	17 24	01	08 15	
20	275kV Bldg.	651 days	03 May '04	12 Feb '06							
21	Pile head treatment	22 days	03 May '04	24 May '04							
22	Earthing system	30 days	11 May '04	09 Jun '04							
23	Pile cap and tie beam	45 days	16 May '04	29 Jun '04							
24	1/F construction	90 days	01 Jun '04	29 Aug '04							
25	2/f construction	90 days	30 Aug '04	27 Nov '04							
26	3/f construction	45 days	28 Nov '04	11 Jan '05							
27	Roof construction	45 days	12 Jan '05	25 Feb '05							
28	Surrounding Cable Trench	120 days	15 Apr '05	12 Aug '05							
29	Surrounding External works	60 days	15 Dec '05	12 Feb '06							
30	No. 4 Chimney	664 days	30 Jun '04	24 Apr '06							
32	Pile head treatment	30 days	30 Jun '04	29 Jul '04							
33	Pile cap construction	63 days	30 Aug '04	31 Oct '04							
34	Superstructure construction	300 days	01 Nov '04	27 Aug '05							
35	Steel and Internal Works	180 days	28 Aug '05	23 Feb '06							
36	Remaining Works	60 days	24 Feb '06	24 Apr '06							
37											
38	Road & Drainage Works	794 days	05 Jul '04	06 Sep '06							

Lamma Power Station Extension - Unit 9 Civil and Building Work 3-Month Programme

			_			ug '0	6			Sep '0)6			Oct '0			
ID	Activities	Duration	Start	Finish	30	0	6 1	3 20) 27	03	10	17	24	01	80	15	22
39	Along Loading and Unloading Area	88 days	05 Jul '04	30 Sep '04													
14	North Seafront Road	630 days	09 Jul '04	30 Mar '06													
50	East Bridge Road	579 days	28 Oct '04	29 May '06													
56	Chimney Road	513 days	08 Nov '04	04 Apr '06													
62	Other Areas	100 days	30 May '06	06 Sep '06													
63																	
64	C W Culvert System	1113 days	15 Aug '04	01 Sep '07													
65	Outlet Section	392 days	15 Aug '04	10 Sep '05													
78	Inlet Section	152 days	13 Oct '04	13 Mar '05													
85																	
86	C W Pump Equipment Room	115 days	15 Jul '05	06 Nov '05													
91																	
92	Pipe & Cable Rack	296 days	23 May '05	14 Mar '06													
97																	
98	Gas Receiving Station	236 days	15 Jul '05	07 Mar '06													
103																	
104	Work in DLP including rectification work	360 days	07 Sep '06	01 Sep '07													

Lamma Power Station Extension - Unit 9 Civil and Building Work
3-Month Programme
Scheduled Activity

3 month work schedule for Lamma power station extension Unit-9

Item	Description	Start	Finish	Aug			Sep			Oct	
	-			0 2	0 3	1 1	0 2	0 3	0 1	0 2	0 31
1	HRSG erection	28 Mar,05	15 Aug,06								
		1									
2	Steam turbine erection	01 Mar,05	15 Aug,06								
	Control on a continu	45 Mar 05	45 Aug 00								
	Gas turbine erection	15 Mar,05	15 Aug,06								
4	Generator erection	15 Mar,05	15 Aug,06								
	Constant or contain	10 11101,00	107149,00								
5	Condenser erection	15 Feb,05	15 Aug,06								
6	Aux equipment erection	01 Apr,05	15 Aug,06								
7	Air duct / Inlet filter	25 Apr,05	15 Aug,06								
0	HRSG inlet duct	24 May 05	15 Aug 06								
0	HRSG Inlet duct	Z i May, 05	15 Aug,06								
9	Piping support / Piping erection	01 Jun,05	15 Aug,06								
	i iping cappoint, i iping creation	010011,00	107149,00								
10	Insulation work	23 Feb,05	15 Aug,06								
11	Platform installation	11 Apr, 05	15 Aug,06								
12	Pipe rack installation	26 Aug, 05	15 Aug,06								
40	Intoka avy a guinmant in stallatian	00 4 05	45 Aug 00				-				
13	Intake aux equipment installation	U8 Aug, 05	15 Aug,06								
11	Bop piping installation	08 Aug 05	15 Aug,06								
14	Dop piping installation	Job Aug, 03	13 Aug,00								
				1	1					1	

CONTRACT NO. 04/9013 LAMMA POWER STATION EXTENSION UNIT 9 COMPLETE ERECTION, INSPECTION, TESTING & COMMISSIONING OF POWER BLOCK ELECTRICAL, INSTRUMENTATION AND CONTROL FACITILITIES

3 MONTH PROGRAMME (AUGUST 2006 TO OCTOBER 2006)

						Augus	st			Se	eptembei	•		Oct	tober	
ID	Task Name	Start	Finish	1/8	8/8	15/8	22/8	28/8	5/9	12/9	19/9	26/9	3/10	10/10	17/10	24/10
1																
2	L9 Electrical Erection	Tue 1/8/06	Thur 31/8/06													
3	Cable Tray Cover Installation	Tue 1/8/06	Thur 31/8/06													
4	Instrument Piping Installation	Tue 1/8/06	Thur 31/8/06													
5	Cable Termination	Tue 1/8/06	Thur 31/8/06													

SANKO SETSUBI CO., LTD.

-0000	Number of the County of the Co	STORMAN	VBCOCCASS NICES	Aug					Septer				Octob	-	-	-	N
ID	Task Name	Start	Finish	30/7	6/8	13/8	20/8	27/8	3/9	10/9	17/9	24/9	1/10	8/10	15/10	22/10	29/1
1	Civil Works																
2																	
3	Site Procession & Preparation Work	Tue 25/5/04	Man 12/7/04														
4																	
5	Within Lamma Power Station																
6	Construction of Cable Duct	Mon 4/10/04	Thu 29/9/05														
7	Construction of Cable Duct North Portal	Mon 12/7/04	Tue 31/1/06														
8	Backfilling Work inside Cable Duct after Cable Laying	Mon 1/5/06	Wed 31/5/06														
9																	
10	Yung Shue Wan South (N2)																
11	Construction of Cable Landing Point	Mon 12/7/04	Sat 31/12/05														
12	Construction of Cable Duct South Portal	Mon 12/7/04	Sat 31/12/05														
13	Backfilling Work at Landing Point after Cable Laying	Thu 1/6/06	Wed 15/11/06	ZZZ	77.7.	TTTT	ZZZ	777	ZZZ	777	7777	ZZZZ	777	777	7777	7777	SZZ
14		1000.000000															
15	Pak Kok San Tsuen (N4)																
16	Construction of Cable Landing Point	Tue 24/8/04	Fri 14/10/05														
17	Construction of Cable Trenches	Sat 30/7/05	Sat 31/12/05														
18	Construction of Cable Duct	Thu 25/11/04	Fri 30/9/05														
19	Construction of Cable Duct South Portal	Wed 25/8/04	Mon 16/1/06														
20	Backfilling Work inside Cable Duct after Cable Laying	Sat 1/4/06	Sun 30/4/06														
21	Backfilling Work at Cable Trenches after Cable Laying	Thu 1/6/06	Sat 30/9/06	7777	ZZZ	11111	ZZZ	777	TTT	ZZZ	TTT	1777					
22	Backfilling Work at Landing Point after Cable Laying	Thu 1/6/06	Thu 30/11/06	1777	ZZZ	1111	1777	222	1111	LLL	111	7777	III	ZZZ	1111	111	777
23	gggg																
24	Pak Kok Tsui (N5)			-													
25	Construction of Cable Landing Point	Mon 12/7/04	Wed 14/9/05														
26	Construction of Cable Duct North Portal	Mon 12/7/04	Sat 31/12/05	-													
27	Backfilling Work at Landing Point after Cable Laying	Mon 15/5/06	Sun 31/12/06	7777	1111	1777	1777	111	m	777	111	TTT.	1111	777	1117	iii	177

Additional Transmission System for Lamma Power Station	Task		Milestone	*	External Tasks
275kV Cable Route from Lamma Island to Cyberport	Split		Summary	-	External Milestone
3-Month Programme (Rev. N)	Progress		Project Summary		Deadline
		Page 1			

J-Power Systems Corp.

Contract No.: 01/9046

Project: Installation of 275kV/Communication Submarine and Land Cables with Accessories for Lamma - Cyberport Circuits

CONSTRUCTION SCHEDULE (FORECAST FOR 3 MONTHS)

Issue: 26 Date: 31-Jul-06

Date	Τ							Α	ugus	st, 20	06															Se	ptem	ber,	200)6														0	ctob	er, i	2006	3						_
Item	1	2 3	4 5	6 7	8	9 10	11 12	13 1	4 15	16 17	18 19	20 2°	1 22 2	23 24	25 2	26 27	28 2	9 30	31 1	2	3 4	5 6	7	8 9	10 11	12 13	3 14 1	5 16 1	17 18	19 20	21 2	22 23	24 25	26 27	7 28 2	9 30	1 2	3 4	5	6 7	8 9	10	11 12	13 1	14 15	16 1	7 18	19 20	21 2	2 23 2	25	26 27	28 29	30 :
Dredging/Excavation of Submarine 1 Cable Trench outside N2 Landing Point (Completed)																																																						
Dredging/Excavation of Submarine Cable Trench outside N4 Landing Point (Completed)																																																						
Dredging/Excavation of Submarine Cable Trench outside N5 Landing Point (Completed)																																																						
Dredging/Excavation of Submarine 4 Cable Trench outside I1 Landing Point (Completed)																																																						
Removing Seabed Obstructions and subsequently backfilling between N2 & N4 Landing Points (Completed)																																																						
Sweeping on the seabed between N5 & I1 Landing Points (Completed)																									T																													
Sweeping on the seabed between N2 & 7 N4 Landing Points (Completed)																																																						
Preparation & Installation of Submarine 8 Cables between N5 & I1 (Completed)																																																						
Preparation & Installation of Submarine Cables between N2 & N4 (Completed)																																																						
Backfilling & Cable Protection outside N2 Landing Point (Completed)	2																																																					
Backfilling & Cable Protection outside N4 Landing Point (Completed)	1																																																					
Backfilling & Cable Protection outside N5 Landing Point (Completed)	5																																																					
Backfilling & Cable Protection outside I1 Landing Point (Completed)																																																						
<note></note>																																																						