Issue No. : Issue Date : Project No. :

September 2010

944

**CONSTRUCTION OF A** SECONDARY BOUNDARY FENCE AND NEW SECTION OF PRIMARY **BOUNDARY FENCE AND BOUNDARY PATROL ROAD** (SECTION 2 LOK MA CHAU CONTROL POINT TO NG TUNG RIVER)

**ENVIRONMENTAL MONITORING & AUDIT REPORT (AUGUST 2010)** 

Prepared By:

ALLIED ENVIRONMENTAL CONSULTANTS LTD.

**COMMERCIAL-IN-CONFIDENCE** 



Ref.: ASDBFBPREM00\_0\_0132L 10

14 September 2010

Mott MacDonald Hong Kong Limited 20/F Two Landmark East, 100 How Ming Street, Kwun Tong, Hong Kong

By Fax (2827 1823) and Post

Attention: Mr. James Kam / Mr. Y. K. Or

Dear Sirs.

Re: Environmental Permit No. EP-347/2009/A and FEP-02/347/2009/A Contract No. SSW306 - Section 2 Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road from Lok Ma Chau Control Point to Ng Tung River Monthly EM&A Report for August 2010

Reference is made to the Environmental Team's submission of the draft Monthly EM&A Report for August 2010 (Issue No. 1) by E-mail on 14 September 2010.

We are pleased to inform you that we have no further comments on the captioned report. We write to verify that the captioned submission in accordance with Condition 4.5 of EP-347/2009/A and FEP-02/347/2009/A.

Thank you for your attention and please feel free to contact the undersigned should you have any queries.

Yours faithfully,

David Yeung

Independent Environmental Checker

Attn: Mr. W. K. Yiu (CPM203) / Mr. Carl Lam (SPM225) Fax: 2810 5372 ArchSD C.C MMHK(site) Attn: Mr. Danny Wong Fax: 2683 1195 AEC (ETL) Attn: Ms. Grace Kwok Fax: 2815 5399

Fax: 2796 0519 Able Attn: Mr. Gavin Lee

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Issue No.

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Issue Date :

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ENVIRONMENTAL MONITORING & AUDIT REPORT (AUGUST 2010)

Prepared By:

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Certified by:

Grace M. H. Kwok Environmental Team Leader

Issue No. : 1

Issue Date : September 2010

Project No. : 944

CONSTRUCTION OF A SECONDARY
BOUNDARY FENCE AND NEW
SECTION OF PRIMARY BOUNDARY
FENCE AND BOUNDARY PATROL
ROAD (SECTION 2 LOK MA CHAU
CONTROL POINT TO NG TUNG
RIVER)

ENVIRONMENTAL MONITORING & AUDIT REPORT (AUGUST 2010)

Prepared By:

ALLIED ENVIRONMENTAL CONSULTANTS LTD.

**COMMERCIAL-IN-CONFIDENCE** 

Author:

H. Y. Tang H.Dip

Checked:

Winnie M.W. Ma BEnvMgmt(Hons) Approved:

Grace M/H. Kwok Beng(Hois) MHKIEL MHKIOA MISWA MIALA MRAPA LEED AP

This report has been prepared by Allied Environmental Consultants Limited with all reasonable skill, care and diligence within the terms of the Agreement with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

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Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road (Section 2 Lok Ma Chau Control Point to Ng Tung River)

Environmental Monitoring & Audit Report (Aug 2010)

#### EXECUTIVE SUMMARY

Architectural Services Department (ArchSD) has awarded the contract for the Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road - Section 2 Lok Ma Chau Control Point to Ng Tung River. (hereafter referred to as the "Project") to Able Engineering Co. Ltd. ("the Contractor"). The contractor has appointed Allied Environmental Consultants Limited (AEC) as the Environmental Team (ET) to undertake Environmental Monitoring and Audit (EM&A) programme in accordance with the EM&A Manual, the Environmental Permit (EP-347/2009/A) and Further Environmental Permit (FEP-02/347/2009/A) for the Project. The site preparation works and EM&A programme commenced on 25<sup>th</sup> March 2010 and the construction works were commenced on 12<sup>th</sup> April 2010. This report is the sixth monthly EM&A report, which details the EM&A results recorded during the period from 1<sup>st</sup> August 2010 to 31<sup>st</sup> August 2010.

According to the EM&A Manual, there are total 10 designated noise monitoring locations for the entire Construction of a Secondary Boundary Fence and New Sections of Primary Boundary Fence and Boundary Patrol Road project, where only MTL01 is within 300m from the construction area for Section 2 (Lok Ma Chau Contorl Point to Ng Tung River), thus only MTL01 is covered in this EM&A report for Section 2. Impact noise monitoring for the Project was carried out on 3<sup>rd</sup>, 10<sup>th</sup>, 19<sup>th</sup>, 25<sup>th</sup> and 31<sup>st</sup> August 2010. Noise monitoring was conducted within the period of 0700-1900, non-restricted hours.

Noise monitoring results at the monitoring location MTL01, based on the monitoring results, the noise levels comply with the environmental requirements in EM&A Manual. There were no exceedances of the action and limit levels during the reporting month.

Four environmental site inspections were conducted by the Contractor and the ET on 2<sup>nd</sup>, 10<sup>th</sup>, 18<sup>th</sup> and 23<sup>rd</sup> August 2010. Major findings and deficiency were summarized at *Table 7* of this report. No non-compliance was observed in the reporting month.

There were no environmental complaints received in the reporting month.

No notification of summons or prosecution was received in the reporting month.

A total nos. of 26m³ of general refuse were disposed to NENT Landfill and 2,392m³ inert C&D waste were disposed to Tuen Mun Area 38 Fill Bank in this reporting period.

Construction activities to be undertaken in September 2010 will include excavation for footing, pouring blinding layer, and concreting for footing of SBF, PBF & Wave wall and laying granular for wave wall. Potential environmental impacts include dust generation from the backfilling works; noise from operation of the equipments, C&D materials drop in ponds due to backfilling works, damage to tree branch by power mechanical equipments and the storage of various C&D and chemical wastes. The Contractor should properly implement environmental mitigation measures as per the implementation schedule in the EM&A manual to ensure no adverse environmental impacts to be arisen from the construction works. The Contractor was reminded to maintain good housekeeping at the site.

#### 1. PROJECT BACKGROUND

The Frontier Closed Area (FCA) is an integral part of the package of measures for maintaining the integrity of the Hong Kong SAR's boundary with the Mainland and for combating illegal immigration and other cross-boundary criminal activities. Following a recent review, the Government has concluded that with the erection of a secondary boundary fence (SBF) along the boundary patrol road (BPR) and construction of new sections of the BPR and primary boundary fence (PBF) at certain sections along the boundary, the FCA coverage can be substantially reduced without affecting the objective of maintaining the integrity of the boundary. The PBF and SBF will be erected along the northern and southern curbs of the realigned BPR respectively to facilitate the Police in combating cross-boundary criminal activities. The reduced FCA will comprise a narrow strip of land covering the realigned BPR and areas to its north, together with the points of crossing the boundary (i.e. the Boundary Control Points and Sha Tau Kok town). Areas south of the SBF will generally be excised from the FCA. The site location plan is shown in *Figure 1*.

The proposed Secondary Boundary Fence is categorized as a Designated Project (DP) under the Environmental Impact Assessment Ordinance (EIAO) and therefore a detailed Environmental Impact Assessment (EIA- 161/2008) was conducted in year 2009.

An Environmental Permit (EP-347/2009) and a Variation of Environmental Permit (EP-347/2009/A) for the construction of whole project was issued by Environmental Protection Department in June 2009 and June 2010 respectively. A Further Environmental Permit (FEP-02/347/2009) and a Variation of Further Environmental Permit (FEP-02/347/2009/A) for the construction of the subject project was issued in February 2010 and July 2010 respectively.

Architectural Services Department (ArchSD) as the works agent has awarded the construction contract of the Project to Able Engineering Co. Ltd. ("the Contractor"). The Contractor has appointed Allied Environmental Consultants Limited (AEC) as the Environmental Team (ET) to undertake Environmental Monitoring and Audit (EM&A) programme in accordance with the EM&A Manual under the approved EIA report, which details the EM&A requirements for the construction of the Project, the EP-347/2009/A and FEP-02/347/2009/A.

The Construction Programme of the Project is shown in *Appendix A*. The site preparation works and EM&A programme commenced on 25<sup>th</sup> March 2010 and the construction works commenced on 12<sup>th</sup> April 2010. This report is the sixth monthly EM&A report, which details the EM&A results recorded during the period from 1<sup>st</sup> August 2010 to 31<sup>st</sup> August 2010.

#### 1.1 Project Organization and Contact Personnel

Key personnel and contact particulars are summarized in *Table 1*.

Role	Department /	Names	Contact	Fax Number
	Company		Number	
Engineer	Mott McDonald Hong	Mr. YK Or	2828 5740	2827 1823
Representative	Kong Limited	17117 111 01	2020 07.10	2027 1020
		Mr. Danny Wong	2828 5921	2827 1823
Main Contractor	Able Engineering Co.,	Mr. Gavin Lee	9282 8158	2676 7966
	Limited			
Environmental	Allied Environmental	Ms. Grace Kwok	2815 7028	2815 5399
Team Leader	Consultants Limited			
Independent	ENVIRON Hong Kong	Mr. David Yeung	3743 0788	3548 6988
Environmental	Limited			
Checker				

Table 1 Contact Details of Key Personnel

The organizational structure and lines of communication during the construction work with respect to environmental management is given in *Appendix B*.

#### 2. CONSTRUCTION WORKS & PROGRAMME

The major works undertaken and/or completed during the monitoring period were:

- SBF footing structural works was in progress at CH 560~610, 640~680, 710~730, 1560~1650, 2590~1650, 3710~3850, 4010~4190, 4260~4280, 4400~4420, 4470~4500, 4540~4580, 4740~5200 & 5500~5700;
- SBF footing structural works was in progress at CH810~1130, 1710~1800, 1840~2100, 2140~2400 and 2450~2680; and
- new wave wall was in progress at CH4270~4300, 4430~4500 & 5360~5420.

Construction activities including the following works items:

- excavation;
- pouring blinding layer;
- concreting for footing of SBF, PBF and wave wall;
- laying granular for wave wall; and
- tree transplantation.

The interrelationship between construction activities and environmental mitigation measures in the reporting month are shown in *Table 2*.

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<b>Construction Works</b>	Major Environmental Impact	Mitigation Measures
Excavation	Air quality, noise impacts and waste management.	Water spraying provided, well-maintained and quiet plants were used. Quantities and record of waste transfer should be well-maintained.
Pouring blinding layer.	Wastewater, air quality and noise quality impacts	Proper treatment should be made prior to discharge of wastewater. Provide 3-sides plus top shelter for cement mixing works. Well-maintained or quiet plants were used.
Concreting for footing of SBF, PBF and wave wall.	Wastewater, air quality, noise quality impacts and waste management.	Proper treatment should be made prior to discharge of wastewater. Water spraying provided when necessary. Well-maintained or quiet plants were used. Quantities and record of waste transfer should be well-maintained.
Laying granular for wave wall.	Wastewater, air quality and noise quality impacts.	Proper treatment should be made prior to discharge of wastewater. Provide 3-sides plus top shelter for cement mixing works. Well-maintained or quiet plants were used.
Tree transplantation.	Ecology.	Transplantation should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect.

Table 2 Interrelationship between Construction Activities and Mitigation Measures

#### 3. SUMMARY OF EM&A REQUIREMENT

Weekly site inspection is required for air quality, noise quality, water quality, waste management, ecology, cultural heritage and landscape and visual. The inspection is to ensure mitigation measures recommended in EIA and EM&A manual implemented during construction phase. Mitigation measures implementation schedule and their status are given in *Appendix F* 

For regular impact noise monitoring, the sampling frequency of at least once a week for a  $L_{eq(30mins)}$ . The Action and Limit Levels for Impact noise are summarized in *Table 3*.

Time Period	Action Level	Limit Level
Daytime (0700-1900) except general holidays and Sunday	When one documented complaint is received.	75 dB(A)
Measurements in Leq (30min)	-	

Table 3 Action and Limit Level for Noise Impact Monitoring

Should non-compliance of the above Action and Limit levels occurs, actions in accordance with the Event and Action Plan in *Table 4*.

Event	Act	tion						
	ET	Leader	IEC	1	ER		Cor	ntractor
Action Level	1. 2.	Notify IEC and the Contractor. Carry out	1.	Review with analyzed results submitted by ET	1.	Confirm receipt of notification of exceedance in	1.	Submit noise mitigation proposals to
	3.	investigation. Report the results of investigation to IEC and the Contractor.	2.	Review the proposed remedial measures by the Contractor and advise ER	2. 3.	writing, Notify the Contractor. Require the Contractor to	2.	IEC. Implement noise mitigation proposals.
	4.	Discuss with the Contractor and formulate remedial measures.	3.	accordingly. Supervise the implement of remedial measures.	4.	propose remedial measures for the analyzed noise problem. Ensure remedial		
	5.	Increase monitoring frequency to check mitigation measures.		measures.	4.	measures are properly implemented.		
Limit Level	1. 2.	Identify the source. Notify IEC, ER,	1.	Discuss amongst ER, ET Leader and the	1.	Confirm receipt of notification of exceedance in	1.	Take immediate action to avoid further
	3.	EPD and the Contractor. Repeat measurement to		Contractor on the potential remedial actions.	2. 3.	writing. Notify the Contractor. Require the	2.	exceedance. Submit proposals for remedial actions
		confirm	2.	Review the		Contractor to		to IEC within 3

Issue 1 AEC

ET L	1						
	eader	IEC		ER		Cor	ntractor
4.         5.         6.         7.	findings. Increase monitoring frequency. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. Inform IEC, ER and EPD to causes & actions taken for the exceedances. Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results.	3.	Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly. Supervise the implementation of remedial measures.	4. 5.	propose remedial measures for the analyzed noise problem. Ensure remedial measures are properly implemented. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abate.	3. 4. 5.	working days of notification. Implement the agreed proposals. Resubmit proposals if problem still not under control. Stop the relevant activity of works as determined by the ER until the exceedance is abated.

Table 4 Event and Action Plan

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#### 4. NOISE MONITORING METHODOLOGY

#### 4.1 Noise Monitoring Procedure

Noise monitoring was conducted at the designated noise monitoring location between 0700-1900 hours using a sound level meter which complies with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). Noise instrumentation details are given in *Table 5*.

Manufacturer	Type/Model No.	Equipment
RION	Model NL 31	Precision Sound Level
		Analyser with windshield
RION	Model NC 73	Calibrator

Table 5 Noise Monitoring Equipment

Noise levels measurements were recorded in terms of thirty minutes A-weighted equivalent continuous sound pressure level (Leq(30mins)) on a weekly basis. The sound level meter was calibrated immediately prior to and following each noise measurement. The meter was mounted on a tripod at a height of 1.2m and the microphone was positioned at 1m away the building façade of the noise monitoring station facing the construction site. The sound level meters, including the calibrators, are verified by the manufacturer every one year to ensure they perform to the same level of accuracy as stated in the manufacturer's specifications. The calibration certificates for the sound level meter and calibrator are given in *Appendix C*.

Noise measurements were not made in the presence of fog, rain, and wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s. The wind speed was checked with a portable anemometer capable of measuring the wind speed in m/s.

#### 4.2 Noise Monitoring Programme

Noise monitoring was conducted at designated noise monitoring locations during construction phase: a village house at Village House at Ma Tso Lung (MTL01) as shown in *Figure 2* on 3<sup>rd</sup>, 10<sup>th</sup>, 19<sup>th</sup>, 25<sup>th</sup> and 31<sup>st</sup> August 2010. Details of the noise monitoring stations are shown in *Table 6. Appendix D* shows detailed schedule of the monitoring programme in the reporting month and upcoming month.

ID	<b>Monitoring Location</b>	Description of Monitoring Location
MTL01	Village House at Ma Tso	G/F boundary wall of Village House at Ma Tso
WIILUI	Lung	Lung

Table 6 Descriptions of Noise Monitoring Locations

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#### 5. RESULTS

Noise monitoring results are summarized in *Table 7*. Weather condition during the monitoring period was mainly fine with occasional cloudy. Detailed results and graphical plots of noise monitoring are given in *Appendices E*. There were no exceedances of the action and limit levels during the reporting month.

Location	Date	Weather Condition	Wind Speed (m/s)	Time	L <sub>eq</sub> (30mins)	L <sub>10</sub> (30mins)	L <sub>90</sub> (30mins)	Remarks
	03 Aug 10	Sunny	0.5	10:00 - 10:30	49.6	51.8	46.9	Noise from excavations works by adjacent site, noise from bird.
	10 Aug 10	Sunny	0.3	09:00 - 09:30	48.0	49.6	40.1	Noise from excavations works by adjacent site, noise from road traffic.
MTL01	19 Aug 10	Cloudy	0.2	11:10 – 11:40	48.3	51.1	41.1	Noise from excavations works by adjacent site, noise from road traffic.
	25 Aug 10	Fine	0.2	09:00 - 09:30	47.1	49.4	43.7	Noise from excavations works by adjacent site, noise from bird.
	31 Aug 10	Sunny	0.2	16:02 – 16:32	46.3	48.8	43.0	Noise from excavations works by adjacent site, noise from bird.

Table 7 Noise Monitoring Results

#### 6. SITE INSPECTION & AUDIT

A total of four site inspections were conducted by the Environmental Team (ET) in this reporting month. Observations by the ET, actions by the Contractor and outcome are summarized in the *Table 8*.

Date	Observations	Action taken by	Outcome
		Contractor	
02 Aug 10	No major environmental	-	-
	deficiency.		
10 Aug 10	No major environmental	-	-
	deficiency.		
18 Aug 10	No major environmental	-	-
	deficiency.		
23 Aug 10	Hual road was observed	Provide water spraying	The situation was
	dry in condition.	more frequently.	rectified as observed on
	-	- ,	1 September 2010
			(Closed).

Table 8 Summary of Site Inspections

During site inspections in the reporting month, no non-conformance of implementation of environmental mitigation measures was identified. All environmental mitigation measures for construction stages as stated in approved EIA Report, EM&A Manual and EP-347/2009/A were carried out properly in the reporting month. The mitigation measures implementation schedule is shown in *Appendix F*.

## 7. NON-COMPLIANCE, COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

In this reporting period, no complaint, notification of summons or prosecution was received. No non-compliance for general works and no non-compliance against EP condition was recorded. The complaint log is appended in *Appendix G*.

#### 8. WASTE MANAGEMENT

There are a total of 2,392m³ inert C&D waste was disposed to Tuen Mun Area 38 Fill Bank, 0m³ of metal wastes, 0m³ of paper and cardboard packing and 26m³ of general refuse were disposed to North East New Territories Landfill. There are a total of 0m³ of chemical waste was transported off site to Chemical Waste Treatment Centre at Tsing Yi in this reporting period. The monthly Waste Flow Table is given in *Appendix H*.

Good site practice shall be maintained and specific procedures in dealing with different kind of wastes shall be followed during construction. The Contractor shall maintain and record all triptickets as stipulated in the Waste Management Plan (WMP) and project EM&A Manual and make a thorough reference from the relevant Legislations and guidelines by the EPD.

#### 9. STATUS OF LICENSE AND PERMIT

A summary of relevant permits, licences, and notifications on environmental protection for the Project is given in Appendix I.

Issue 1 AEC

#### 10. CONCLUSIONS AND FUTURE KEY ISSUES

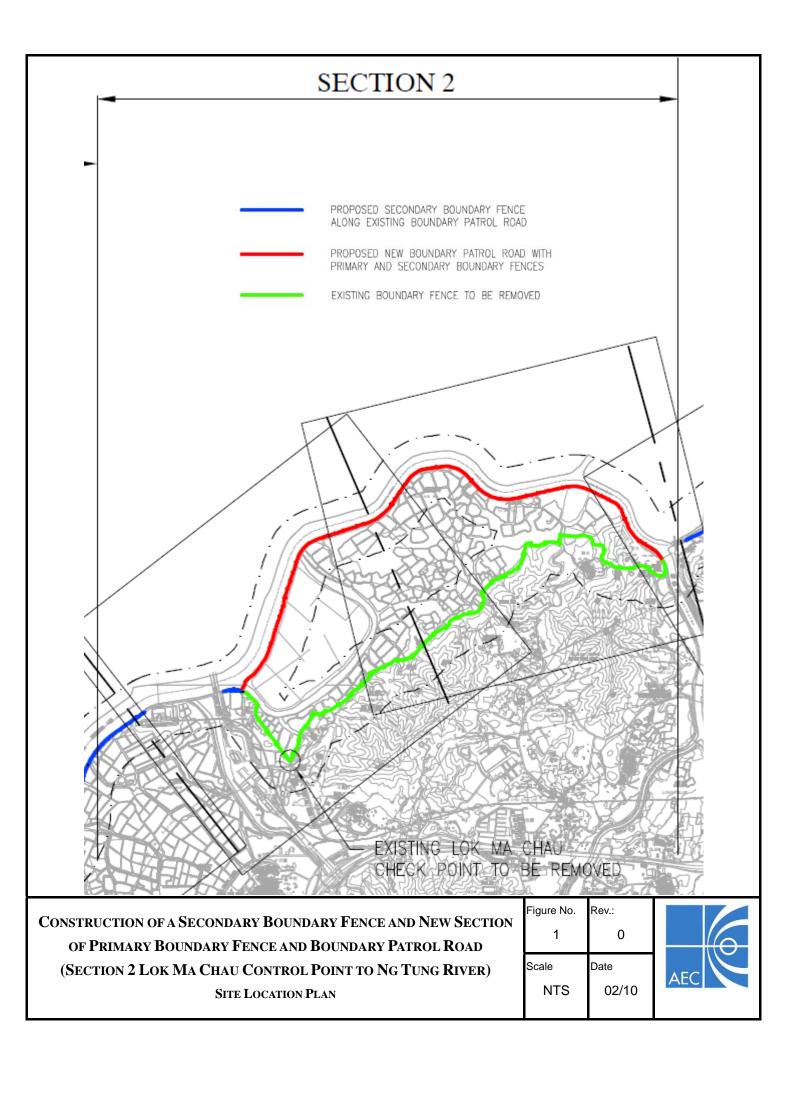
Environmental monitoring was carried out for the Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road (Section 2 Lok Ma Chau Control Point to Ng Tung River) in the reporting month. Noise monitoring was conducted at a village house at Ma Tso Lung (MTL01) during the period from 1<sup>st</sup> August 2010 to 31<sup>st</sup> August 2010.

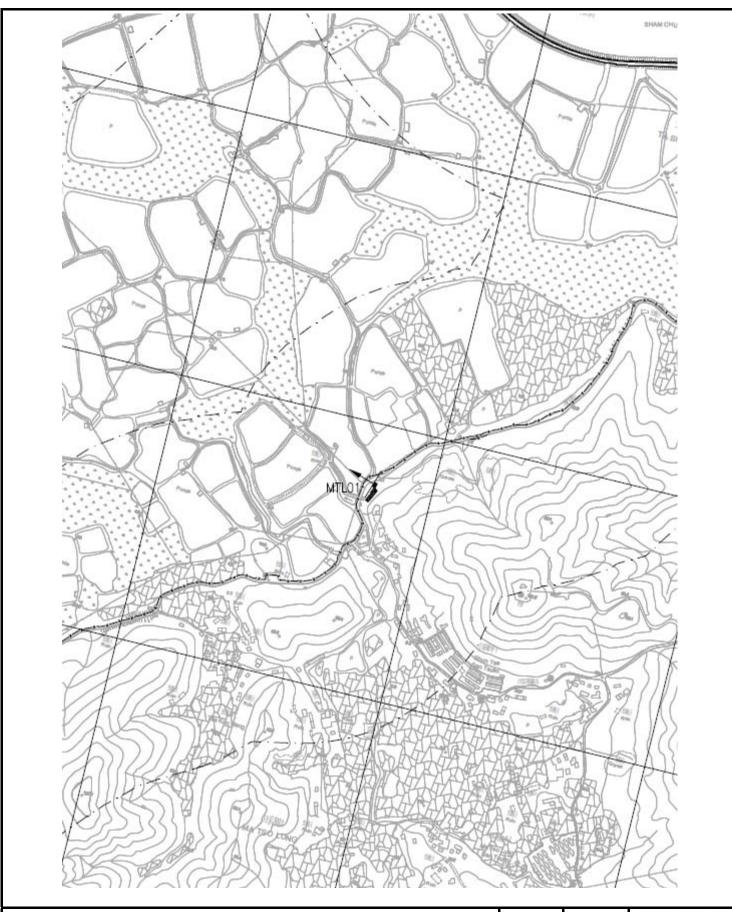
Noise monitoring was conducted at the monitoring location MTL01. All monitoring results complied with the relevant action and limit levels.

A total nos. of 26m<sup>3</sup> of general refuse were disposed to NENT Landfill and 2,392m<sup>3</sup> inert C&D waste were disposed to Tuen Mun Area 38 Fill Bank in this reporting period.

Construction activities to be undertaken in September 2010 will include excavation for footing, pouring blinding layer, and concreting for footing of SBF, PBF & Wave wall and laying granular for wave wall. Potential environmental impacts include dust generation from the backfilling works; noise from operation of the equipments, C&D materials drop in ponds due to backfilling works, damage to tree branch by power mechanical equipments and the storage of various C&D and chemical wastes. The Contractor should properly implement environmental mitigation measures as per the implementation schedule in the EM&A manual to ensure no adverse environmental impacts to be arisen from the construction works. The Contractor was reminded to maintain good housekeeping at the site.

Issue 1 AEC





CONSTRUCTION OF A SECONDARY BOUNDARY FENCE AND NEW SECTION
OF PRIMARY BOUNDARY FENCE AND BOUNDARY PATROL ROAD
(SECTION 2 LOK MA CHAU CONTROL POINT TO NG TUNG RIVER)
LOCATION OF NOISE MONITORING STATION

Figure No. Rev.:
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Scale Date

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# Master Programme Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road from Lok Ma Chau Control Point to Ng Tung River (Contract No.: SSW306)

Rev 0 Date: 19-3-2010

識別碼 任務名稱 工期 開始時間 2010年 2011年 2012年 |11月||12月||1月||2月||3月||4月||5月||6月||7月||8月||9月||10月||11月||12月||1月||2月||3月||4月||5月||6月||7月||8月||9月||10月||11月||12月||1月||2月||3月||4月||5月||6月 2009/12/30 Section A 870 days 2012/5/17 2 Site Possession 2009/12/30 2009/12/30 0 days Application entrance permit 2009/12/30 3 14 days 2010/1/12 4 Site Office Erection 2010/1/13 9 days 2010/1/21 5 Site Condition / Tree Survey 50 days 2010/1/17 2010/3/7 6 Preparation works 28 days 2010/3/16 2010/4/12 Mobilization for preparation works 14 days 2010/3/16 2010/3/29 8 Set up wheel wish equipment 14 days 2010/3/30 2010/4/12 9 Tree transplanting 776 days 2010/3/20 2012/5/3 10 Tree Protection 21 days 2010/3/20 2010/4/9 11 Pruning 90 days 2010/4/10 2010/7/8 12 Transplanting 2010/8/22 45 days 2010/7/9 13 Planting & Hydroseeding 45 days 2012/3/20 2012/5/3 14 15 Zone 1 SBF CH3000 to CH 150 432 days 2010/4/20 2011/6/25 16 CH3000 -2920 2010/4/20 2010/6/4 46 days 17 CH2920-2840 2010/4/26 2010/6/10 46 days 18 CH2840-2760 46 days 2010/5/2 2010/6/16 19 CH2760-2680 46 days 2010/5/8 2010/6/22 20 CH2680-2600 2010/5/14 46 days 2010/6/28 21 CH2600-2520 2010/5/20 2010/7/4 46 days 22 CH2520-2440 2010/7/10 46 days 2010/5/26 23 CH2440-2360 46 days 2010/6/1 2010/7/16 24 CH2360-2280 2010/7/22 46 days 2010/6/7 25 CH2280-2200 46 days 2010/6/13 2010/7/28 26 CH2200-2120 46 days 2010/6/19 2010/8/3 27 CH2120-2040 46 days 2010/6/25 2010/8/9 28 CH2040-1960 46 days 2010/7/1 2010/8/15 29 CH1960-1880 2010/7/7 2010/8/21 46 days 30 CH1880-1800 46 days 2010/7/13 2010/8/27 31 CH1800-1720 46 days 2010/7/19 2010/9/2 32 CH1720-1640 46 days 2010/7/25 2010/9/8 33 CH1640-1560 2010/7/31 2010/9/14 46 days 34 CH1560-1480 46 days 2010/8/6 2010/9/20 35 CH1480-1400 46 days 2010/8/12 2010/9/26 36 CH1400-1320 46 days 2010/8/18 2010/10/2 37 CH1320-1240 2010/8/24 2010/10/8 46 days 38 CH1240-1160 2010/8/30 2010/10/14 46 days 39 CH1160-1080 2010/9/5 2010/10/20 46 days 40 CH1080-1000 46 days 2010/9/11 2010/10/26 41 CH1000-920 2010/9/17 2010/11/1 46 days 42 CH920-840 2010/9/23 2010/11/7 46 days 43 CH840-760 2010/9/29 2010/11/13 46 days 44 CH760-680 46 days 2011/3/30 2011/5/14 45 CH680-600 46 days 2011/4/5 2011/5/20 46 CH600-520 46 days 2011/4/11 2011/5/26 47 CH520-440 2011/4/17 2011/6/1 46 days 48 CH440-360 2011/4/23 46 days 2011/6/7 49 CH360-280 2011/4/29 2011/6/13 46 days 50 CH280-200 46 days 2011/5/5 2011/6/19 CH200-150 51 46 days 2011/5/11 2011/6/25 52 T 任務 摘要 進度 外部任務 期限 專案: Master Programme Rev 0 19-3-2 • 分割 里程碑 專案摘要報告 外部里程碑 1 of 5

Rev 0 Date: 19-3-2010

Master Programme

Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road from Lok Ma Chau Control Point to Ng Tung River (Contract No.: SSW306)

成力りに可	任務名稱	工期	開始時間	完成時間	2010年 2011年 2012年
53	Zone 1 PBF CH3000 to CH 150	210 days	2011/4/1	2011/10/27	11月   12月   1月   2月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   1月   2月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   1月   2月   3月   4月   5月   6月
54	CH3000-2920	35 days	2011/4/1	2011/5/5	
55	CH2920-2840	35 days		2011/5/10	
56	CH2840-2760	35 days		2011/5/15	
57	CH2760-2680	35 days		2011/5/20	
58	CH2680-2600	35 days		2011/5/25	
59	CH2600-2500 CH2600-2520	35 days	2011/4/26	2011/5/30	
60	CH2520-2440	35 days	2011/5/1	2011/6/4	
61	CH2440-2360	35 days	2011/5/6	2011/6/9	
62	CH2360-2280	35 days	2011/5/11	2011/6/14	
63	CH2280-2200	35 days	2011/5/16	2011/6/19	
64	CH2200-2200 CH2200-2120	35 days	2011/5/21	2011/6/24	
65	CH2120-2040	35 days	2011/5/26	2011/6/29	
66	CH2040-1960	35 days	2011/5/31	2011/0/29	
67	CH1960-1880	35 days	2011/6/5	2011/7/9	
68	CH1880-1800	35 days	2011/6/10	2011/7/14	
69	CH1800-1720	35 days	2011/6/15	2011/7/19	
70	CH1720-1640	35 days	2011/6/20	2011/7/19	
71	CH1720-1040 CH1640-1560	35 days	2011/6/25	2011/7/24	
72	CH1540-1560 CH1560-1480		2011/6/30	2011/7/29	
73	CH1300-1400 CH1480-1400	35 days 35 days	2011/0/30	2011/8/8	
74	CH1400-1320		2011/7/10	2011/8/13	
75	CH1320-1240	35 days	2011/7/15	2011/8/13	
76	CH1320-1240 CH1240-1160	35 days		2011/8/23	
77	CH1240-1160 CH1160-1080	35 days	2011/7/20	2011/8/28	
78	CH100-1000 CH1080-1000	35 days	2011/7/25	2011/8/28	
79	CH1000-1000 CH1000-920	35 days	2011/7/30	2011/9/2	
80	CH1000-920 CH920-840	35 days	2011/8/4 2011/8/9	2011/9/12	
	CH920-840 CH840-760	35 days		2011/9/12	
81 82	CH760-680	35 days	2011/8/14	2011/9/17	
		35 days	2011/8/19		
83	CH680-600	35 days	2011/8/24	2011/9/27	
84	CH600-520	35 days	2011/8/29	2011/10/2	
85	CH520-440	35 days	2011/9/3	2011/10/7	
86	CH440-360	35 days	2011/9/8	2011/10/12	
87	CH360-280	35 days	2011/9/13	2011/10/17	
88	CH280-200	35 days	2011/9/18	2011/10/22	
89	CH200-150	35 days	2011/9/23	2011/10/27	Trainmental .
90	7 1 Detrol and CH2000 to CH 150	016 Jane	2011/0/15	2012/4/17	
91	Zone 1 Patrol road CH3000 to CH 150	216 days	2011/9/15	2012/4/17	
92	Road surface CH3000-1880	62 days	2011/9/15	2011/11/15	
93	Road surface CH1880-150	30 days	2012/3/19	2012/4/17	
94	7 2 SDE CH 5000 +- CH2000	100 1	0010/5/10	2010/11/15	
95	Zone 2 SBF CH 5000 to CH3000	190 days	2010/5/10	2010/11/15	
96	CH5000-4920	46 days	2010/5/10	2010/6/24	
97	CH4920-4840	46 days	2010/5/16	2010/6/30	
98	CH4840-4760	46 days	2010/5/22	2010/7/6	
99	CH4760-4680	46 days	2010/5/28	2010/7/12	
100	CH4680-4600	46 days	2010/6/3	2010/7/18	
101	CH4600-4520	46 days	2010/6/9	2010/7/24	
102	CH4520-4440	46 days	2010/6/15	2010/7/30	
103	CH4440-4360	46 days	2010/6/21	2010/8/5	
104	CH4360-4280	46 days	2010/6/27	2010/8/11	7
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Master Programme

Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road from Lok Ma Chau Control Point to Ng Tung River (Contract No.: SSW306)

Rev 0 Date: 19-3-2010

識別碼 任	務名稱		工期	開始時間	完成時間	2010年 2011年 2012年
TTI AMELYAM	371-FLII4		上州	阿拉拉拉拉		2011年   2012年   2012年   11月   12月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   1月   2月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   1月   2月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   1月   2月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   1月   2月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   1月   2月   3月   4月   5月   6月   7月   8月   9月   10月   11月   12月   1月   12月   1月   12月   1月   1
105	CH4280-4200		46 days	2010/7/3	2010/8/17	
106	CH4200-4120		46 days	2010/7/9	2010/8/23	
107	CH4120-4040		46 days		2010/8/29	
108	CH4040-3960		46 days		2010/9/4	
109	CH3960-3880		46 days		2010/9/10	
110	CH3980-3800		46 days		2010/9/16	
111	CH3800-3720		46 days		2010/9/22	
112	CH3720-3640		46 days		2010/9/28	
113	CH3640-3560		46 days		2010/10/4	
114	CH3560-3480					
			46 days		2010/10/10	
115	CH3480-3400		46 days		2010/10/16	
116	CH3400-3320		46 days		2010/10/22	
117	CH3320-3240		46 days		2010/10/28	
118	CH3240-3160		46 days	2010/9/19	2010/11/3	
119	CH3160-3080		46 days	2010/9/25	2010/11/9	
120	CH3080-3000		46 days	2010/10/1	2010/11/15	<b>→</b>
121						
122	Zone 2 PBF CH 5000-300	00	155 days	2011/4/4	2011/9/5	
123	CH5000-4920		35 days	2011/4/4	2011/5/8	
124	CH4920-4840		35 days	2011/4/9	2011/5/13	
125	CH4840-4760		35 days	2011/4/14	2011/5/18	
126	CH4760-4680		35 days	2011/4/19	2011/5/23	·
127	CH4680-4600		35 days	2011/4/19	2011/5/28	
128	CH4600-4520		35 days	2011/4/29	2011/5/28	
	CH4520-4440					
129			35 days	2011/5/4	2011/6/7	
130	CH4440-4360		35 days	2011/5/9	2011/6/12	
131	CH4360-4280		35 days	2011/5/14	2011/6/17	
132	CH4280-4200		35 days	2011/5/19	2011/6/22	
133	CH4200-4120		35 days	2011/5/24	2011/6/27	
134	CH4120-4040		35 days	2011/5/29	2011/7/2	
135	CH4040-3960		35 days	2011/6/3	2011/7/7	
136	CH3960-3880		35 days	2011/6/8	2011/7/12	<b>├</b>
137	CH3880-3800		35 days	2011/6/13	2011/7/17	<b>Y</b>
138	CH3800-3720		35 days	2011/6/18	2011/7/22	<b>→</b>
139	CH3720-3640		35 days	2011/6/23	2011/7/27	
140	CH3640-3560		35 days	2011/6/28	2011/8/1	
141	CH3560-3480		35 days	2011/7/3	2011/8/6	
142	CH3480-3400		35 days	2011/7/8	2011/8/11	
143	CH3400-3320		35 days	2011/7/13	2011/8/16	
144	CH3320-3240		35 days	2011/7/18	2011/8/21	
145	CH3240-3160		35 days	2011/7/18	2011/8/21	
146	CH3160-3080		35 days	2011/7/28	2011/8/31	
147	CH3080-3000		35 days	2011/8/2	2011/9/5	
148	7 AP	200 2000		2011 1011	2011	
	Zone 2 Patrol road CH 50	000-3000	92 days	2011/8/15	2011/11/14	
150						
	Zone 3 SBF CH5700 to C	H5000	94 days	2011/5/31	2011/9/1	
152	CH5700-5640		46 days	2011/5/31	2011/7/15	
153	CH5640-5560		46 days	2011/6/6	2011/7/21	
154	CH5560-5480		46 days	2011/6/12	2011/7/27	The state of the s
155	CH5480-5400		46 days	2011/6/18	2011/8/2	
156	CH5400-5320		46 days	2011/6/24	2011/8/8	
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Master Programme

Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road from Lok Ma Chau Control Point to Ng Tung River (Contract No.: SSW306)

Rev 0 Date: 19-3-2010

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識別碼 1	任務名稱		工期	開始時間	完成時間	11 11 10 1	2010年		H 0H 0H 10H 11H 12	2011年		9012年 日 2日 3日 4日 5日 6
157	CH5320-5240		16 days	2011/6/30	2011/8/14	11月   12月	1月  2月  3月  4月	5月 6月 7	月   8月   9月   10月   11月   12,	月 1月 2月 3月 4月 5月 6月 7月 8月	1   9月   10月   11月   12月   1	月 2月 3月 4月 3月 1
157 158	CH5240-5160		46 days			ł.				Santon automatical of the Control of	ì	
			46 days	2011/7/6	2011/8/20					Annual Contraction of		
159	CH5160-5080		46 days	2011/7/12	2011/8/26						2	
160	CH5080-5000		46 days	2011/7/18	2011/9/1					<b>7</b>		
161	G A PPR GYFFON	7***5000		2011/0/2	2011/11/15							
162	Zone 3 PBF CH5700 to 0	CH5000	75 days	2011/9/2	2011/11/15	1						
163	CH5700-5640		35 days	2011/9/2	2011/10/6	i .						
164	CH5640-5560		35 days	2011/9/7	2011/10/11							
165	CH5560-5480		35 days	2011/9/12	2011/10/16	1					9	
166	CH5480-5400		35 days	2011/9/17	2011/10/21	1						
167	CH5400-5320		35 days	2011/9/22	2011/10/26							
168	CH5320-5240		35 days	2011/9/27	2011/10/31							
169	CH5240-5160		35 days	2011/10/2	2011/11/5						4	
170	CH5160-5080		35 days	2011/10/7	2011/11/10						4	
171	CH5080-5000		35 days	2011/10/12	2011/11/15							
172												
173	Zone 3 Patrol road CH57	00 to CH5000	176 days	2011/10/25	2012/4/17							
174	CH5700-5400		20 days	2011/10/25	2011/11/13							
175	CH5400-5000		30 days	2012/3/19	2012/4/17	i .						
176	C115-400-5000		30 days	2012/3/17	2012/4/17							-
177	Zone 4 SBF CH150 to C	H000	38 days	2012/3/19	2012/4/25							
178	CH5700-5640	11000		2012/3/19	2012/4/25	i .						(3.32)
	CH3700-3040		38 days	2012/3/19	2012/4/23							San
179	7 1 D-11 1 OH15	0.4. 011000	00.1	2012/4/10	0010/5/0							
180	Zone 4 Patrol road CH15	0 to CH000	22 days	2012/4/18	2012/5/9							المستنف
181					2010/11/10							
182	1st Backfilling From CH		50 days	2010/9/20	2010/11/8				CONTRACTOR OF THE PARTY OF THE			
183	2nd Backfilling From Cl		50 days	2011/9/20	2011/11/8	į.						
184	Modification works for the	ne U-channel & Catch Pit	50 days	2010/9/20	2010/11/8	ŧ						
185	New Catch Pit		50 days	2011/9/15	2011/11/3							
186	Road mark		55 days	2012/3/19	2012/5/12							
187	RC meter Kiosk		80 days	2011/8/15	2011/11/2					(		
188	Bollard		120 days	2011/9/14	2012/1/11						-	<b>—</b>
189	Steel bollard installat	ion	60 days	2011/9/14	2011/11/12							
190	Painting		60 days	2011/11/13	2012/1/11							
191	PBF & SBF & Lamp Pos	t	684 days	2010/6/30	2012/5/13			-				~
192	BF Sample erection		50 days	2010/6/30	2010/8/18							
193	Steel work testing		60 days	2010/8/19	2010/10/17							
194	Fabrication		90 days	2010/10/18	2011/1/15	1			( Caracana and Car			
195	Site installation		347 days	2011/6/2	2012/5/13	1	İ			-		•
196	PBF / SBF / Lar	np Post erection	166 days	2011/6/2	2011/11/14	1					<u> </u>	
197	XPM mesk fixi		150 days	2011/11/1	2012/3/29	1				and the second of the second o	9	
198	Painting		45 days	2012/3/16	2012/4/29	į.						9
199	Razor Barbed v	vire fixing	45 days	2012/3/10	2012/5/13							
200	E&M works	no mang	194 days	2011/11/3	2012/5/14	i						
		_				i					*	<b>~</b>
201	Flood light installation	11	39 days	2012/3/16	2012/4/23	i .					<u>+</u>	- Commence of
202	Wiring works		90 days	2011/11/3	2012/1/31	1						_
203	T&C inspection		21 days	2012/4/24	2012/5/14		İ					
204	Section B	4 000	270 days	2011/3/21	2011/12/15							
205		4+200 to ~CH 5+400	270 days	2011/3/21	2011/12/15	1						
206	Section D		570 days	2010/10/20	2012/5/11	1						
207	Strengthen the wave		363 days	2010/10/20	2011/10/17	1						
208	Preparation work	CS	24 days	2010/10/20	2010/11/12							
i de 1.1	D 01000	1134	) \H- uh:		क ध्यंत्रम	44	f <sub>4</sub>	如几个.3女	Halfe	₹ ♦		
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Master Programme

Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road from Lok Ma Chau Control Point to Ng Tung River (Contract No.: SSW306)

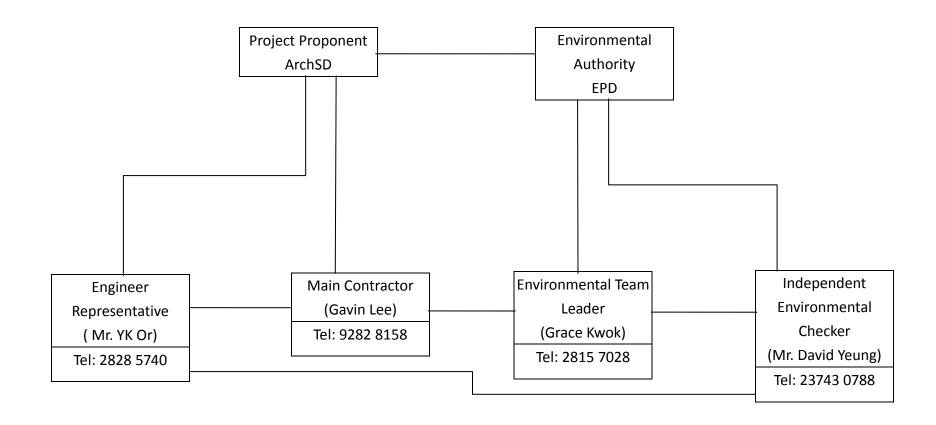
Rev 0 Date: 19-3-2010

	Hom Lok Mile Chief of Teng Mile (Contract No. 1 55 77500)											
識別碼	任務名稱	工期	開始時間	完成時間	2010年	2011年	2012年					
			A POLICE AND A POL		11月 12月 1月 2月 3月 4月 5月 6月 1	7月 8月 9月 10月 11月 12月 1月 2月 3月 4月 5月 6月 7月 8月 9月	1 10月 11月 12月 1月 2月 3月 4月 5月 6月 📗					
209	Zone 1	196 days	2011/4/5	2011/10/17			7,1,1,2,2,2,1,2,1					
210	Zone 2	150 days	2011/4/20	2011/9/16								
211	Modification works for existing wave wall	178 days	2011/11/16	2012/5/11								
212	Zone 1	70 days	2011/11/16	2012/1/24								
213	Zone 2	56 days	2012/3/17	2012/5/11								
214	Genal Cleaning	2 days	2012/5/15	2012/5/16								
215	Handover	1 day	2012/5/17	2012/5/17			I					

專案: Master Programme Rev 0 19-3-2	任務	(antarantamente managemente antique management)	進度		摘要	<b>*</b>	外部任務		期限	<b>♦</b>	***************************************
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						5 of 5					

Appendix B
Organization Chart

#### — Line of communication





Sun Creation Engineering Limited Calibration and Testing Laboratory

Certificate No.: C095683

# Certificate of Calibration

## This is to certify that the equipment

Description: Sound Level Meter

Manufacturer: Rion

Model No.: NL-31

Serial No.: 00983400

has been calibrated for the specific items and ranges. The results are shown in the Calibration Report No. C095683.

## The equipment is supplied by

Co. Name: Envirotech Services Co.

Address: Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road, Hong Kong

Date of Issue: 23 October 2009

Certified by:

K C Lee

Certificate No.: C103766

## Certificate of Calibration

## This is to certify that the equipment

Description: Sound Level Calibrator

Manufacturer: Rion

Model No.: NC-73

Serial No.: 10786708

has been calibrated for the specific items and ranges. The results are shown in the Calibration Report No. C103766.

The equipment is supplied by

Co. Name: Envirotech Services Co.

Address: Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road, Hong Kong

Date of Issue: 13 July 2010

Certified by:

KC Lee



Schedule for noise monitoring programme of Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road (Section 2 Lok Ma Chau Control Point to Ng Tung River)

### Monitoring schedule for the reporting month

Date	Start Time
3 <sup>rd</sup> August 2010	10:00
10 <sup>th</sup> August 2010	09:00
19 <sup>th</sup> August 2010	11:10
25 <sup>th</sup> August 2010	09:00
31 <sup>st</sup> August 2010	16:02

### Monitoring schedule of the coming month

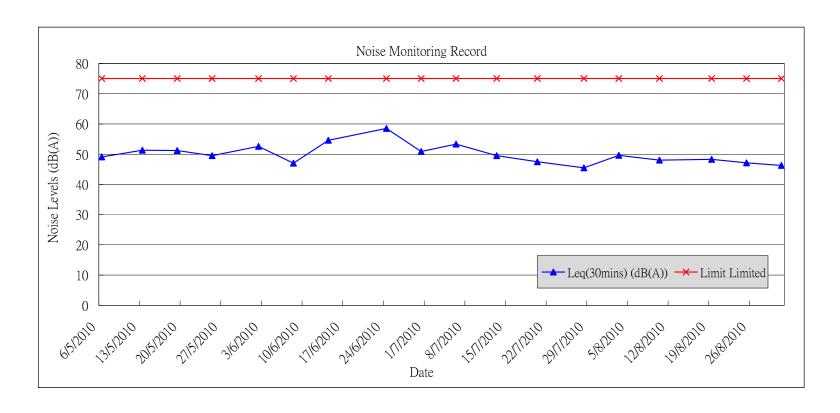
Date	Time
7 <sup>th</sup> September 2010	To be confirmed
14 <sup>th</sup> September 2010	To be confirmed
24 <sup>th</sup> September 2010	To be confirmed
28 <sup>th</sup> September 2010	To be confirmed

	Appendix E

Summary and Graphical Plot of Noise Monitoring Record Noise Monitoring Result for Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road (Section 2 Lok Ma Chau Control Point to Ng Tung River)

#### Month: August 2010

Date	Time	Leq(30mins) (dB(A))	L10(30mins) (dB(A))	L90(30mins) (dB(A))	Limit Level
3-Aug-10	10:00 - 10:30	49.6	51.8	46.9	75
10-Aug-10	09:00 - 09:30	48.0	49.6	40.1	75
19-Aug-10	11:10 – 11:40	48.3	51.1	41.1	75
25-Aug-10	09:00 - 09:30	47.1	49.4	43.7	75
31-Aug-10	16:02 – 16:32	46.3	48.8	43.0	75





Mitigation Measures Implementation Schedule for Construction Stage

## Appendix F Environmental Mitigation Implementation Schedule

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Air Q	<u>uality</u>							
Durin	g Constr	uction						
2.5.2	3.2.2	The following good site practice should be implemented:	To minimize	Contractor	Constructi	During	EIAO-TM, Air Pollution	^
		any excavated dusty materials or stockpile of dusty materials should be covered	construction dust		on Work	Construction	Control	
		entirely by impervious sheeting or sprayed with water so as to maintain the	impact		Sites		(Construction Dust)	
		entire surface wet, and recovered or backfilled or reinstated within 24 hours of					Regulation	
		the excavation or unloading;						
		• the working area of excavation should be sprayed with water immediately						^
		before, during and immediately after the operations so as to maintain the entire						
		surface wet;						
		• dusty materials carried by vehicle leaving a construction site should be covered						^
		entirely by clean impervious sheeting;						
		• the area where vehicle washing takes place and the section of the road between						^
		the washing facilities and the exit point should paved with concrete, bituminous						
		materials or hardcores;						
		• the portion of road leading only to a construction site that is within 30m of						^
		designated vehicle entrance or exit should be kept clear of dusty materials;						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

\* Not satisfactory but rectified by the contractor.

## Appendix F Environmental Mitigation Implementation Schedule

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		all dusty materials should be sprayed with water prior to any loading, unloading						٨
		or transfer;						
		• vehicle speed should be limited to 10kph except on completed access roads;						^
		• every vehicle should be washed to remove any dusty materials from its body						٨
		and wheels before leaving the construction sites.						
Noise								
Durin	g Constru	uction						
3.8.14	4.8.1	The following good site practical should be implemented:	To mitigate	Contractor	Constructi	During	EIAO-TM, NCO	
			construction noise		on Work	Construction		
		The Contractor shall adopt the Code of Practice on Good Management Practice	impact		Sites			
		to Prevent Violation of the Noise Control Ordinance (Chapter 400) (for						٨
		Construction Industry) published by EPD;						
		The Contractor shall observe and comply with the statutory and non-statutory						٨
		requirements and guidelines;						
		Before commencing any work, the Contractor shall submit to the Engineer						٨
		Representative for approval the method of working, equipment and noise						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

\* Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		The Contractor shall devise and execute working methods to minimise the noise						٨
		impact on the surrounding sensitive uses, and provide experienced personnel						
		with suitable training to ensure that those methods are implemented;						
		Noisy equipment and noisy activities should be located as far away from the						٨
		NSRs as is practical;						
		Unused equipment should be turned off. PME should be kept to a minimum						^
		and the parallel use of noisy equipment / machinery should be avoided;						
		Regular maintenance of all plant and equipment;						^
		Material stockpiles and other structures should be effectively utilised as noise						N/A
		barriers, where practicable.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

 $X \qquad \text{Non-compliance of mitigation measure;} \\$ 

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
3.8.1	4.8.2	Other than good site practice, the Contractor is required to adopt Levels 1 and 2	To mitigate	Contractor	Constructi	During	EIAO-TM, NCO	N/A
-3.8.3	-4.8.3	site-specific direct mitigation measures as specified below during the construction	construction noise		on work	construction		
		phase.	impact		sites,			
					Figure 4.9			
		With construction / demolition work undertaken at a distance of 60m or less to the			shows the			
		NSRs, below mitigation measures should be included:			typical			
					section			
		Level 1 – Use of Quiet Plant and Movable Noise Barrier			of movable			
		The Contractor shall obtain particular models of plant that are quieter than			noise			
		standards given in GW-TM.			barrier			
		Purpose-built movable noise barriers should be used to mitigate construction						
		noise directly at sources that are not usually mobile provide that the direct line						
		of sight to the source is blocked.						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
3.8.9	4.8.4	In addition to the use of quiet plant and movable noise barrier, alternative	To mitigate	Contractor	Constructi	Before the	EIAO-TM, NCO	٨
		demolition method of existing boundary fence at Section 2-3 shall be used where	construction noise		on work	commenceme		
		demolition works would be undertaken at a distance of 12m or less to the NSRs.	impact for demolition		sites	nt of		
		These particular mitigation measures should be included:	of existing boundary		(Section 2	demolition		
			fence		- 3)	works		
		Level 2 – Alternative Demolition Method of Existing Boundary Fence						
		The use of welder is recommended to replace the use of hand-held driller;						
		The use of hand-held breaker with movable noise barrier is recommended to						
		replace the use of mini-robot mounted breaker; and the duration for the use of						
		hand-held breaker is minimal as only the surface level of the footing to be						
		broken; and						
		The removal of the footing of the existing boundary fence should be carried by						
		concrete crusher mini-robot mounted after the surface level broken by						
		hand-held breaker.						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Water	r Quality							
Durin	g Constr	uction						
4.7.1	5.3.1	Good site practices in addition to the implementation of mitigation measures would	To avoid site runoff	Contractor	Constructi	During	Practice Note for	٨
		minimize the impact to the surrounding environment.	and chemical leakage		on work	construction	Professional Persons with	
					sites		regard to site drainage	
		General Prevention and Precaution Measures					(ProPECC PN 1/94) and	
		The site should be confined to avoid silt runoff to the site.					TM standard	٨
		No discharge of silty water into the storm drain and drainage channel					under the WPCO	^
		within and the vicinity of the site.						
		Any soil contaminated with chemicals/oils shall be removed from site and						٨
		the void created shall be filled with suitable materials.						
		Stockpiles to be covered by tarpaulin to avoid spreading of materials during						٨
		rainstorms;						
		Suitable containers shall be used to hold the chemical wastes to avoid leakage						٨
		or spillage during storage, handling and transport;						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		Chemical waste containers shall be labelled with appropriate warning signs in						٨
		English and Chinese to avoid accidents. there shall also be clear instructions						
		showing what action to take in the event of an accidental;						
		Storage areas shall be selected at safe locations on site and adequate space shall						٨
		be allocated to the storage area;						
		Any construction plant which causes pollution to the water system due to						N/A
		leakage of oil or fuel shall be removed off-site immediately;						
		Spillage or leakage of chemical waste to be controlled by using suitable						٨
		absorbent materials;						
		Chemicals will always be stored on drip trays or in bunded areas where the						٨
		volume is 110% of the stored volume;						
		Regular clearance of domestic waste generated in the temporary sanitary						٨
		facilities to avoid waste water spillage.						
		Temporary sanitary facilities to be provided for on-site workers during						^
		construction.						

Remarks: ^ Implement mitigation measure in the reporting month;

Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
4.7.2 –	5.3.2-5.	Concreting Work	To collect runoff	Contractor	Constructi	During	Practice Note for	N/A
4.7.3	3.3	A temporary drainage channel and associated facilities should be provided to collect	generated and prevent		on work	construction	Professional Persons with	
		the runoff generated and prevent concrete-contaminated water from entering	concrete-contaminated		sites		regard to site drainage	
		watercourses. Adjustment of pH can be achieved by adding a suitable neutralising	water from entering				(ProPECC PN 1/94) and	
		reagent to wastewater prior to discharge.	watercourses				TM standard under the	
							WPCO	
		The concreting works should be temporarily isolated with proper methods, such as					CEDD General	
		by placing of sandbags or silt curtains with lead edge at bottom and properly	To prevent adverse				Specification- Protection	
		supported props.	impacts on the water		Work sites		of natural streams/rivers-	
			quality of Lin Ma		of Section		Clause 25.09	
			Hang Stream SSSI		3 in the			
					proximity			
					of Lin Ma			
					Hang			
					Stream			
					SSSI			

Remarks:

^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
4.7.4	5.3.4	Soil Excavation and Stockpiling	To avoid site runoff	Contractor	Constructi	During	Practice Note for	^
		Excavated soil which needs to be temporarily stockpiled should be stored in a			on work	construction	Professional Persons with	
		specially designated area and provided with a tarpaulin cover to avoid runoff into			Sites		regard to site drainage	
		the drainage channels.					(ProPECC PN 1/94) and	
							TM standard under the	
							WPCO	

Remarks: ^ Implement mitigation measure in the reporting month;

Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
4.7.5 -	5.3.5-5.	Site Depot	To avoid wash-out of	Contractor	Constructi	During	Practice Note for	N/A
4.7.6	3.6	All compounds in works areas should be located on areas of hard standing with	oil during storm		on work	construction	Professional Persons with	
		provision of drainage channels and settlement ponds where necessary to allow	conditions		Sites		regard to site drainage	
		interception and controlled release of settled/treated water. Hard standing					(ProPECC PN 1/94) and	
		compounds should drain via an oil interceptor. The oil interceptor should be					TM standard under the	
		regularly inspected and cleaned to avoid wash-out of oil during storm conditions. A					WPCO	
		bypass should be provided to avoid overload of the interceptor's capacity. Any						
		contractor generating waste oil or other chemicals as a result of his activities should						
		register as a chemical waste producer. Disposal of the waste oil should be done by a						
		licensed collector.						
		Good housekeeping practices should be implemented to minimise careless spillage						
		and to keep the storage and the work space in a tidy and clean condition.						
		Appropriate training including safety codes and relevant manuals should be given to						
		the personnel who regularly handle the chemicals on site.						

Remarks:

Implement mitigation measure in the reporting month;

I/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
4.7.7	5.3.7	Construction of Checkpoint	To avoid disposal of	Contractor	Constructi	During	N/A	N/A
		Sewage system should be constructed to divert domestic sewage, which will be	domestic sewage into		on work	construction		
		generated from the sanitary facilities provided in the new checkpoint at Shek Chung	watercourses.		Site at			
		Au, to public sewer connected to government sewage treatment facilities.			Checkpoin			
					t			
Waste	Manage	<u>ment</u>						
Durin	g Constru	action						
5.6.7	6.3.6	Site Clearance	Prevent the generation	Contractor	Constructi	During	Waste Disposal	٨
		The topsoil and vegetation removed and excavated material may have to be	of dust and pollution		on work	construction	Ordinance (Cap.354);	
		temporarily stockpiled on-site. Control measures should be taken at the stockpiling	of storm water		sites		ETWBTC No. 15/2003,	
		area to prevent the generation of dust and pollution of stormwater channels, fish	channels				Waste Management on	
		ponds or river channels. However, to eliminate the risk of blocking drains in the wet					Construction Site	
		season, it is recommended that stockpiling of excavated materials during the wet						
		season should be avoided as far as practicable.						

Remarks: ^ Implement mitigation measure in the reporting month;

Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
5.6.10	6.3.8	Construction and Demolition Materials	Minimize	Contractor	Constructi	During	Waste Disposal	^
_		Careful design, planning and good site management can minimize over-ordering	over-ordering and		on work	construction	Ordinance (Cap.354);	
5.6.12		and generation of waste materials such as concrete mortars and cement grouts. The	generation of waste		sites		ETWBTC No. 15/2003,	
		design of formwork should maximize the use of standard wooden panels so to	materials				Waste Management on	
		achieve high reuse levels. Alternatives such as steel formwork or plastic facing					Construction Site	
		should be considered to increase the potential for reuse.						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		The Contractor should recycle as much of the C&D materials as possible on-site.						^
		Proper segregation of waste on-site will increase the feasibility of certain						
		components of the waste stream by the recycling contractors. Different areas of						
		the worksite shall be designated for such segregation and storage wherever site						
		conditions permit.						
		Trip-ticket system should be employed to monitor the disposal of C&D material						
		and solid at public filling facilities and landfills, and to control fly-tipping.						
		Government has established a differentiated charging scheme for the disposal of						
		waste to landfill, construction waste sorting facilities and public fill facilities. This						
		will provide additional incentives to reduce the volume of waste generated and to						
		ensure proper segregation of wastes.						
5.6.13-	6.3.9 –	Chemical Waste	To avoid chemical	Contractor	Constructi	During	Code of Practice on the	^
5.6.14	6.3.13	For those processes which generate chemical waste, it may be possible to find	leakage		on work	construction	Packaging, Labelling and	
		alternatives which generate reduced quantities or even no chemical waste, or less			sites	planning	Storage of Chemical	
		dangerous types of chemical waste.					Wastes, Waste Disposal	

Remarks:

Implement mitigation measure in the reporting month;

Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

<sup>\*</sup> Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal					(Chemical Waste)	٨
		(Chemical Waste) (General) Regulation, should be handed in accordance with the					(General) Regulation	
		Code of Practice on the Packaging, Handling and Storage of Chemical Waste as						
		follows:						
		Containers used for the storage of chemical wastes should:						٨
		be suitable for the substance they are holding, resistant to corrosion, maintained						٨
		in a good condition, and securely closed:						
		• have a capacity of less than 450 litres unless the specification have been						^
		approved by the EPD; and						
		display a label in English and Chinese in accordance with instructions						^
		prescribed in Schedule 2 of the Regulations,						
		The storage area for chemical wastes should:						^
		be clearly labelled and used solely for the storage of chemical waste;						^
		• be enclosed on at least 3 sides;						^
		• have an impermeable floor and bunding, of capacity to accommodate 110% of						^
		the volume of the largest container or 20% by volume of the chemical waste						
		stored in that area whichever is the greatest;						

Remarks:

Implement mitigation measure in the reporting month;

Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		have adequate ventilation;						^
		• be covered to prevent rainfall entering (water collected within the bund must be						٨
		tested and disposed as chemical waste if necessary); and						
		be arranged so that incompatible materials are adequately separated.						٨
		Disposal of chemical waste should:						^
		be via a licensed waste collector; and						^
		• be to a facility licensed to receive chemical waste, such as the Chemical Waste						^
		Treatment Facility which also offers a chemical waste collection service and						
		can supply the necessary storage containers, or						
		• to be re-user of the waste, under approval from the EPD.						N/A
5.6.16	6.3.15	General Refuse	Minimise odour, pest	Contractor	Constructi	During	Public Health and	۸
		Should be stored in enclosed bins or compaction units separate from C&D and	and litter impacts		on work	construction	Municipal Services	
		chemical wastes. The Contractor should employ a reputable waste collector to			sites		Ordinance (Cap. 132)	
		remove general refuse from the site, separate from C&D and chemical wastes, on a						
		regular basis to minimise odour, pest and litter impacts. Burning of refuse on						
		construction sites is prohibited by law.						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
5.6.18	6.3.16	Construction Waste Management Plan	Waste management	Contractor	Constructi	During	ETWB TCW No.	٨
		A construction waste management plan (CWMP) should be prepared and developed	during construction		on work	construction	19/2005, Waste	
		by the contractor to ensure proper collection, treatment and disposal of waste on			sites		Management on	
		site. This CWMP will also take into account the requirement to handle chemical					Construction Sites	
		wastes on site which will need to be managed by a licensed waste collection						
		contractor.						
Ecolo	<u>ogy</u>							
Table	7.2	<b>Ecological Impacts on Floral Species of Conservation Concern</b>	Protect the plant	Contractor	Constructi	During	EIAO	٨
6.38		Erection of protective fencing to protect the plant during construction period	during construction		on work	construction		
			period		sites			
Table	7.2	Potential Ecological Impacts on Offsite Habitats	To avoid site runoff	Contractor	Constructi	During	EIAO / Air Pollution	٨
6.40		Good site practices for controlling the dust and water quality (avoid stockpiles	and dust impact		on work	construction	Control	
		adjacent to wetlands, covering the stockpiles with impervious sheeting, control of			sites		(Construction Dust)	
		vehicle speed, no discharge of silty water to the rivers, streams and drainage					Regulation / WPCO	
		channels);						
		Clear definition of works limit to avoid impact on adjacent habitats						

Remarks:

Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	7.2	Disturbance to Wetland-Dependent Birds, Raptors, Terrestrial Birds and	To minimize	Contractor	Constructi	During	EIAO / Air Pollution	٨
6.39-T		Egretry	disturbance to wildlife		on work	construction	Control	
able		Good working practices include switching off unused equipment, keep minimum			sites		(Construction Dust)	
6.45		number of powered mechanical equipment in operation at the same period, the use					Regulation / WPCO	
		of stockpiles and other structures to form noise barriers where practicable,						
		avoidance of feeding the wildlife to cause disturbance, site confinement and proper						
		cover of stockpiles with impervious sheeting to minimize construction noise,						
		uncontrolled surface runoff and discharge of silts;						
		Avoidance of construction works using Power Mechanical Equipments within the						
		Wetland Conservation Area during bird migratory season (15th November – 15th						
		March); and						
		Restriction of excavation works within a 150m buffer zone from the egretry						
		to ardeid non-breeding season (from August to February).						
Cultur	ral Herita	nge_						

Remarks:

Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
8.7.1 –	8.1.1 -	An archaeological survey should be undertaken at the study areas of Pak Fu Shan	Assess the	Contractor	The study	After land	Antiquities and	N/A
8.7.4	8.1.4	and Lin Ma Hang of Section 3 after land resumption and before commencement of	archaeological impact	(through	areas of	resumption	Monuments Ordinance /	
		construction works	on the two identified	professional	Pak Fu	and before	EIAO	
			sites of archaeological	archaeologist)	Shan and	commenceme		
			potential.		Lin Ma	nt of		
					Hang of	construction		
					Section 3	works		

Remarks: ^ Implement mitigation measure in the reporting month;

Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Status
8.7.6		Built Heritage Resources  Mitigation in the form of buffer zones and safe public access have been proposed for one shrine (BF-HB1) and two graves (BF-G1 and G2)  BF-HB1  A buffer zone of a minimum distance of 1 metres should be established between the shrine and any construction works in close proximity. The buffer zone should be marked out by temporary fencing. Safe public access should be provided to the shrine during any construction works in close proximity.  BF-G1 and BF-G2  A buffer zone of a minimum distance of 1 metres should be established between the graves and any construction works in close proximity. The buffer zone should be marked out by temporary fencing. Safe public access should be provided to the graves during any construction works in close proximity.		Contractor	The works that are located in the vicinity of built heritage resources (BF-HB1 and BF-G1 and G2)	During Construction	EIAO	N/A
Lands	cape and	Visual_						

Remarks:

Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

<sup>\*</sup> Not satisfactory but rectified by the contractor.

EIA Ref.	EM&A Log Ref.		Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Status
Table 7-13 CP1	Table 9-1	To retain trees that have high amenity or ecology value and contribute most to the landscape and visual amenity of the site and its immediate environs.	Preservation of Existing Vegetation	Project Landscape Architect / Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	^
Table 7-13 CP1	Table 9-1	<ul> <li>Creation of precautionary area around trees to be retained equal to half of the trees canopy diameter. Precautionary area to be fenced.</li> </ul>	To ensure the success of the tree preservation proposals.	Project Landscape Architect / Contractor	Site	Before construction phase commences	TM-EIA	^
Table 7-13 CP1	Table 9-1	<ul> <li>Prohibition of the storage of materials including fuel, the movement of construction vehicles, and the refuelling and washing of equipment including concrete mixers within the precautionary area.</li> </ul>	To ensure the success of the tree preservation proposals.	Project Landscape Architect / Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	^
Table 7-13 CP1	Table 9-1	<ul> <li>Phased segmental root pruning for trees to be retained and transplanted over a suitable period (determined by species and size) prior to lifting or site formation works which affect the existing rootball of trees identified for retention. The extent of the pruning will be based on the size and the species of the tree in each case.</li> </ul>	success of the tree preservation proposals.	Project Landscape Architect / Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	٨

Remarks:

Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	• Pruning of the branches of existing trees identified for transplantation and	To ensure the success of the tree	Project	Site	Throughout construction	TM-EIA Annex 18,	٨
7-13	9-1	retention to be based on the principle of crown thinning maintaining their form	preservation	Landscape		phase	ETWB TCW No. 2/2004	
		and amenity value.	proposals.	Architect /			& ETWB TCW No.	
CP1				Contractor			3/2006	
Table	Table	The watering of existing vegetation particularly during periods of excavation	To ensure the success of the tree	Project	Site	Throughout construction	TM-EIA Annex 18,	٨
7-13	9-1	when the water table beneath the existing vegetation is lowered.	preservation	Landscape		phase	ETWB TCW No. 2/2004	
			proposals.	Architect /			& ETWB TCW No.	
CP1				Contractor			3/2006	
Table	Table	• The rectification and repair of damaged vegetation following the construction phase to it's original condition prior to the commencement of the works or		Project	Site	Throughout construction	Annex 18, ETWB TCW	N/A
7-13	9-1	replacement using specimens of the same species, size and form where	preservation	Landscape		phase	No. 2/2004 & ETWB	
		appropriate to the design intention of the area affected	proposals.	Architect /			TCW No. 3/2006	
CP1				Contractor				
Table	Table	• All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the	To ensure the	Project	Site	Throughout construction	TM-EIA Annex 18,	٨
7-13	9-1	trees, the implementation of protection measures and health monitoring through	preservation	Landscape		phase	ETWB TCW No. 2/2004	
		out the construction period	proposals.	Architect /			& ETWB TCW No.	
CP1				Contractor			3/2006	

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table 7-13 CP1	Table 9-1	Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval under the lease conditions and in accordance with ETWB TCW No. 2/2004 and WBTC No. 3/2006.	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that the landscape resources	Project Landscape Architect / Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	٨
			are preserved where appropriate.					
Table 7-13 CP1	Table 9-1	The tree preservation works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree protection specification would be included within the contract documents.		Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	^
		Preservation of Existing Topsoil						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	• Topsoil disturbed during the construction phase should be tested using a standard soil testing methodology and where it is found to be worthy of	To provide a viable	Contractor	Site	Throughout	TM-EIA	^
7-13	9-1		growing medium			construction	Annex 18	
			suited to the existing			phase		
CP2			conditions and reduce					
			the need for the					
			importation of top					
			soil.					
Table	Table	<ul> <li>The soil will be stockpiled to a maximum height of 2m and will be either temporarily vegetated with hydroseeded grass during construction or covered</li> </ul>	To provide a viable	Contractor	Site	Throughout	TM-EIA Annex 18	^
7-13	9-1		growing medium			construction	Amica 10	
			suited to the existing			phase		
CP2			conditions and reduce					
			the need for the					
			importation of top					
			soil.					

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	• The stockpile should be turned over on a regular basis to avoid acidification and the degradation of the organic material, and reused after completion.	To provide a viable	Contractor	Site	Throughout	TM-EIA	^
7-13	9-1	Alternatively, if this is not practicable, it should be considered for use	growing medium			construction	Annex 18	
		elsewhere, including other projects.	suited to the existing			phase		
CP2			conditions and reduce					
			the need for the					
			importation of top					
			soil.					
		Permanent and Temporary Works Areas						
Table	Table	<ul> <li>Where appropriate to the final design the landscape of these works areas should be restored following the completion of the construction phase.</li> </ul>	To minimise the disturbance to existing	Contractor	Site	Through out construction	TM-EIA	N/A
7-13	9-1	be restored ronowing the completion of the construction phase.	landscape resources and change of visual amenity.			phase	Annex 18	
СР3								
Table	Table	<ul> <li>Construction site controls should be enforced including the storage of materials, the location and appearance of site accommodation and the careful design of</li> </ul>	To minimise the disturbance to existing	Contractor	Site	Through out construction	TM-EIA	^
7-13	9-1	site lighting to prevent light spillage.	landscape resources and change of visual amenity.			phase	Annex 18	
CP3								
		Mitigation Planting						

Remarks: ^ Imp

Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	<ul> <li>Replanting of disturbed vegetation should be undertaken at the earliest possible stage of the construction phase</li> </ul>	To minimise the disturbance to existing	Contractor	Site	Through out construction	TM-EIA	N/A
7-13	9-1		landscape resources and change of visual amenity.			phase	Annex 18	
CP4								
Table 7-13	Table 9-1	<ul> <li>Use of native plant species predominantly in the planting design for the buffer areas.</li> </ul>	To minimise the disturbance to existing landscape resources and change of visual	Contractor	Site	Through out construction phase	TM-EIA Annex 18	N/A
CP4			amenity.					
Table	Table	The tree planting works should be implemented by approved Landscape	To minimise the	Contractor	Site	Through out	TM-EIA	٨
7-13	9-1	Contractors and inspected and approved on site by a qualified Landscape Architect. A tree planting specification would be included within the contract documents.	landscape resources and change of visual amenity.			construction phase	Annex 18	
CP4								
		Transplantation of Existing Trees						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	<ul> <li>The tree transplanting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape</li> </ul>		Contractor	Site	Prior to the	TM-EIA	٨
7-13	9-1	Architect. A tree protection / transplanting specification would be included	landscape resources			commencem	Annex 18, ETWB TCW	
		within the contract documents.	and minimize the impacts on the visual			ent of the	No. 2/2004 & ETWB	
CP5			amenity of the area.			proposed	TCW No. 3/2006	
						works		
		Design of the Fence and associated Structures						
Table	Table	<ul> <li>Design of Boundary Fence, Boundary Patrol Road and Police Check Point –</li> <li>These structural elements will be designed in accordance with security</li> </ul>	Responsive design to	ArchSD	Site	Throughout	TM-EIA	^
7-14	9-2	requirement from Police Force and incorporate design features as part of				design phase	Annex 18 and BD	
		design mitigation measures including:	into their landscape					
OP1			and visual context.					

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		Integrated design approach – the boundary fence should integrated, as						^
		far as technically feasible, with existing built structures such as existing						
		road, footpath and track and embankment of fishponds, river and						
		drainage channel as part of design mitigation measures to reduce the						
		potential cumulative impact of the proposed works. The location and						
		orientation of the police check points should be away from landscape						
		and visually sensitive areas such wetland, fishpond and agricultural						
		field.						
		Building massing - the proposed use of simple responsive design for the						N/A
		built structures with a low building height profile to reduce the potential						
		visual mass of the structure within a rural context.						
		3. Treatment of built structures - the architectural design should seek to						N/A
		reduce the apparent visual mass of the facilities further through the use						
		of natural materials such as wooden frame, vertical greening or other						
		sustainable materials such as recycled plastic.						
		sustamable materials such as recycled plastic.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		4. Responsive building and fence finishes - In terms of the proposed						N/A
		finishes natural tones should be considered for the colour palette with						
		non-reflective finishes are recommended to reduce glare effect. The use						
		of colour blocking on the proposed fence could be used to break up the						
		visual mass of the structure.						
		5. Responsive lighting design – Aesthetic design of architectural and track						N/A
		lighting with following glare design measures:						
		■ Directional and full cut off lighting is recommended particularly for						
		areas adjacent to existing village to minimise light spillage.						
		■ Minimise geographical spread of lighting, only applied for safety and						
		security reasons;						
		Limited lighting intensity to meet the minimum safety and operation						
		requirement; and						
		■ High-pressure sodium road lighting is recommended for more stringent						
		light control reducing spillage and thus visual impacts.						

Remarks:

Implement mitigation measure in the reporting month;

Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

	EM&A Log Ref.		Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Status
		Compensatory Planting Proposals						
Table 7-14	Table 9-2		Planting will serve to visually integrate the proposals within the existing landscape framework.	Contractor	Site	Throughout design phase	TM-EIA Annex 18, HKPSG and BD	N/A
OP2								
Table 7-14 OP 2 / 3	Table 9-2		the existing wooded	Contractor	Site	Throughout design phase	TM-EIA Annex 18, HKPSG and BD	۸
Table 7-14 OP 2	Table 9-2	• Tree and Shrub Planting – Given the rural nature of the proposed alignment it is recommended that the where possible tree and shrub species which are native to Hong Kong be used. In addition where possible the planting of new trees and shrubs will aim to link together existing woodland areas and small tree groups to improve the connectivity between habitats and create more coherent landscape framework. The planting of small groups of trees along the alignment of the proposed fence will serve to de-emphasise the horizontality of the fence structure and provide for better sense of visual integration with the landscape context. Where practicable vertical greening measures should also be considered on engineering structures.	seeks to compensate for the predicted tree loss.	Contractor	Site	Throughout design phase	TM-EIA Annex 18, HKPSG and BD	N/A

Remarks: ^

Implement mitigation measure in the reporting month;

I/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	Compensatory Planting Proposals – Given the works extent is largely limited	The planting proposal seeks to compensate	Contractor	Site	Throughout design phase	TM-EIA Annex 18, HKPSG and BD	N/A
7-14	9-2	along existing roadside embankment to minimise impact to existing village settlements and valuable landscape resources such as wetland, fishpond,	for the predicted tree			design phase	Allilex 16, TIKI SO allu DD	
		stream course and existing trees, and considered the importance of tree retention within the works area, new tree planting will concentrate in selected	loss.					
OP 3		new amenity areas along the alignment, infilling between retained and						
		transplanted trees. The preliminary planting proposals for the proposed works include the planting of some 357 new trees utilising a combination of mature						
		to light standard sized stock (i.e. approximately 15% of mature trees, 75%						
		of standard trees, and 10% light standard trees). These trees will be planted in woodland clumps and small tree groups at strategic locations to de-emphasise						
		the horizontality of the fence alignment. Based on preliminary findings the						
		proposed planting will result in a compensatory planting ratio of 1:1 (new						
		planting: trees recommended for felling). This compares favourably with the report's assertion that some 357 trees would be felled due to the proposed						
		works. With the proposed preservation of existing trees, transplantation of						
		trees in conflict with the proposals and the planting of new trees the project						
		area will contain approximately 2000 trees. Trees forming part of the new						
		planting will provide screening to neighbourhood villagers and will utilise						
		species native to Hong Kong. These proposals will be subject to review at detailed design stage of the project.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

_	Appendix G
	Complaint Log

#### Appendix G – Complaint Logs

# Complaints

Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
	Location	Location Received Date	Location Received Date Details of Complaint  Details of Complaint	Location Received Date Details of Complaint Investigation/Mitigation Action



Name of Department : Architectural Services Department

Contract No.: SSW306 Programme No.: 15 GB

#### Monthly Summary Waste Flow Table for 2010 (year) [to be submitted not later than the 15th day of each month following reporting month]

(All quantities shall be rounded off to 3 decimal places)

(All qualiti	(All quantities shall be rounded off to 3 decimal places.)											
	Actı	ual Quantities of In	nert C&D Materia	als Generated Mon	thly	Actual Quantities of C&D Wastes Generated Monthly						
Month	(a)=(b)+(c)+(d)+(e) Total Quantity Generated	(b) Broken Concrete (see Note 4)	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed as Public Fill	(f) Metals	(g) Paper/ cardboard packaging	(h) Plastics (see Note 3)	(i) Chemical Waste	(j) Others, e.g. general refuse disposed at Landfill		
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )		
Jan	0	0	0	0	0	0	0	0	0	0		
Feb	0	0	0	0	0	0	0	0	0	0		
Mar	0	0	0	0	0	0	0	0	0	0.085		
Apr	1.905	0	0	0	1.905	0	0	0	0	1.125		
May	4.160	0	0	0	4.160	0	0	0	0	1.463		
June	4.258	0	0	0	4.258	0	0	0	0	0.631		
Sub-total	10.323	0	0	0	10.323	0	0	0	0	3.304		
July	3.361	0	0	0	3.361	0	0	0	0	0.020		
Aug	2.392	0	0	0	2.392	0	0	0	0	0.026		
Sept												
Oct												
Nov												
Dec												
Total	16.076	0	0	0	16.076	0	0	0	0	3.35		

- The performance targets are given in the Particular Specification on Waste Management Plan, Sub-clause 2(5)(c). Notes: (1)
  - The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site. (2)
  - (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
  - Broken concrete for recycling into aggregates. (4)
  - If necessary, use the conversion factor: 1 full load of dumping truck being equivalent to 6.5 m<sup>3</sup> by volume. (5)



#### Appendix I-Status of License and Permit

Item	Permit/License /Ref.	Vali	Remarks	
nem	No.	From	То	Remarks
Variation of Further Environmental Permit	FEP-02/347/2009/A	13 <sup>th</sup> Jul 2010	N.A.	
Variation of Environmental Permit	EP-347/2009/A	9 <sup>th</sup> Jun 2010	N.A.	
Notification Pursuant to Section 3(1) of The Air Pollution Control	313192	8 <sup>th</sup> Jan 2010	N.A.	
(Construction Dust) Regulation	313192	8 Jan 2010	N.A.	
Registration of Chemical Waste Producer	5213-542-A2587-02	4 <sup>th</sup> Mar 2010	N.A.	