



China State Construction Engineering (Hong Kong) Ltd.

Contract No. CV/2007/03

**Development at Anderson Road –
Site Formation and Associated
Infrastructure Works**

**Quarterly EM&A Summary Report for
September – November 2013**

January 2014

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17 January 2014

By Fax (3656 3100 / 2407 8382) and Post

Engineer's Representative
Ove Arup & Partners
Level 5, Festival Walk
80 Tat Chee Avenue
Kowloon Tong, Kowloon
Hong Kong

Attention: Mr. Dennis Leung

Dear Sir,

**Re: Contract No. CV/2007/03 (Environmental Permit No. EP -140/2002)
Development at Anderson Road
Site Formation and Associated Infrastructure Works
Quarterly EM&A Report for September 2013 to November 2013**

Reference is made to the Environmental Team's submission of the draft Quarterly EM&A Report for September 2013 to November 2013 received by e-mail on 17 January 2014.

Please be informed that we have no adverse comment on the captioned submission.

Thank you very much for your kind attention and please do not hesitate to contact the undersigned should you have any queries.

Yours sincerely,



David Yeung
Independent Environmental Checker

c.c. AECOM Attn.: Mr. YW Fung
CSCEC Attn.: Mr. Wilson Lau

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EXECUTIVE SUMMARY

The Project “Development at Anderson Road – Site Formation and Associated Infrastructure Works” (hereafter called “the Project”) is proposed to form platforms for housing development and associated uses in area of about 20 hectares, and to carry out necessary infrastructural upgrading or improvement works to cater for the proposed development.

China State Construction Engineering (Hong Kong) Limited (CSCE) was commissioned as the Contractor of the Project. AECOM Asia Co. Ltd. (AECOM) was employed by CSCE as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) works for the Project.

The impact EM&A for the Project includes air quality and noise monitoring. The EM&A programme for Sau Ming Primary School (ID 4) and Sau Mau Ping Catholic Primary School (ID 5) commenced on 1 May 2008, while for Kwun Tong Government Secondary School (ID 1A), On Yat House (ID 2) and Sau Nga House (ID 3) commenced on 1 June 2008.

The monitoring stations ID 4 & ID 5 will serve both the entire Development of Anderson Road (Schedule 3 Designated Project (DP)) project as well as the Widening of Po Lam Road (Schedule 2 DP) project.

The construction for the Widening of Po Lam Road (Schedule 2 DP) project was commenced in this reporting period, i.e. on 21 September 2011.

This report documents the findings of EM&A works for ID 1A, ID 2, ID 3, ID 4 and ID 5 conducted in the period from 1 September 2013 to 30 November 2013. As informed by the Contractor, construction activities in the reporting quarter were:

- Blasting;
- Drainage works;
- Slope upgrading works;
- Excavation work at Portions A, B, C, D, E, H, J4, S1a, S2a, S2b;
- Temporary traffic arrangement at J/O Po Lam Road & Sau Mau Ping Road, Portion J2, J3 and J4;
- Site clearance;
- Erection of hoardings and chain link fence;
- Establishment of temporary access and temporary drainage;
- Slope stabilization;
- Tree transplanting and protection;
- Maintenance works;
- Bridge structural works;
- Retaining structures structural works;
- RE wall panel installation;
- Slope drainage and maintenance access;
- Erection and maintenance of blasting cages and fencing;
- Pre-stressing works of bridge;
- Toe / Beam planter construction;
- Permanent backfilling at RW22;
- Bored pile(column method), capping beam & panel wall construction at R15;
- Lowering down of bored pile at R15;
- Construction of Bridge A, B and D;
- U-channel and box-culvert works at Portion D and E; and
- Preparation works for area J1a and J1b (R15b)

Environmental Monitoring Works

EM&A Programme

A summary of monitoring and audit activities conducted in the reporting quarter is listed below:

24-hour TSP monitoring	16 sessions
1-hour TSP monitoring	48 sessions
Daytime Noise monitoring	13 sessions
Environmental Site Inspection	13 sessions

Breaches of Action and Limit Levels

No exceedance of Action and Limit Level was recorded for 1-hour TSP and 24-hour TSP monitoring in the reporting quarter.

According to the information provided by the Contractor, one (1) Action Level exceedance was recorded since one (1) noise related complaint was received in September 2013 during the reporting quarter.

No exceedance Limit Level of noise was recorded in the reporting quarter.

Complaint, Notification of Summons and Successful Prosecution

As informed by the Contractor on 11 December 2013, five complaints were recorded in previous months. Three (3) noise related complaints were received in May, August and September 2013 respectively. One (1) air related complaint and one (1) water related complaint was received in July and August 2013 respectively.

- CEDD(ICC) referred complaints about noise nuisance along the Shun On Road on 27 May 2013 and 17 September 2013 respectively.

According to the Contractor, emergency maintenance work for the slope outside Shun On Estate was in progress after the typhoon visited on 22 May 2013. No night works were involved in the concerned area during the maintenance period; emergency maintenance work for rectification of the scaffolding was conducted outside Shun On Estate on 15 September 2013. No Powered Mechanical Equipment (PME) was in operation.

According to the noise monitoring data recorded on 22 and 28 May 2013, 10 and 19 September 2013 at the nearest monitoring station ID2 (On Yat House Shun On Estate), the measured noise level in Leq (30-min) were 64.2dB(A) and 65.7dB(A), 63.0dB(A) and 65.4dB(A) respectively, which were below the Limit Level.

Construction noise was potentially contributed by the emergency maintenance work outside Shun On.

The Contractor agreed to strictly implement the noise mitigation measures and ensure the effectiveness of noise mitigation measures deployed within works area should be reviewed onsite regularly in order to provide sufficient noise screening effect properly for the NSRs.

No further complaint was received and the complaint was closed

- CEDD(ICC) referred complaints about noise nuisance outside Sau Ming Primary School on 23 August 2013.

According to the noise monitoring data recorded on 6 and 12 August 2013 at the nearest monitoring station ID4 (Sau Ming Primary School), the measured noise level in Leq (30-min) were 67.3dB (A) and 67.4dB (A) respectively, which were below the Limit Level.

Noise mitigation measures have been provided at the concerned works area to mitigate the noise impacts which included the provision of acoustic wrappings to the breaking tips of hydraulic breakers worked at the works area for the sides facing the noise sensitive receivers.

Construction noise was potentially contributed by rock breaking activities at the concerned works area of the Project.

The Contractor agreed to start the works after 9 a.m., strictly implement the noise mitigation measures and ensure the effectiveness of noise mitigation measures deployed within works area should be reviewed onsite regularly in order to provide sufficient noise screening effect properly for the NSRs.

No further complaint was received and the complaint was closed

- A complaint was referred by CEDD (ICC) regarding the discharging of silty water in the vicinity of KTTS on 7 August 2013.

The silty water was caused by the sudden surge of rain water under typhoon signal No. 3 and potentially by the discharging water from other construction sites into the site drainage system on 1 August 2013. The surge water then caused overflowing and bypassing the effluent treatment facilities and entered public stormwater drainage system.

Apart from the cleaning works which have been undertaken by the Contractor in the vicinity of KTTS, Tsui Ping Nullah and sandtrap at Sau Mau Ping Road, the Contractor was recommended to provide sufficient effluent treatment facility on site to avoid any non-complied wastewater discharge.

No further complaint was received and the complaint was closed.

- CEDD(ICC) referred a complaint about air quality nuisance at Hiu Kwong Street works area on 9 July 2013.

Emission was potentially generated by the diesel generator placing at the junction of Hiu Kwong Street and Sau Mau Ping Road.

According to the routine 1-hour TSP and 24-hour TSP monitoring data recorded at the nearest monitoring station ID5 (roof of Sau Mau Ping Catholic Primary School) on 8 and 13 July 2013, the measured 24-hour TSP level was found to be $6.4\mu\text{g}/\text{m}^3$ and $22.5\mu\text{g}/\text{m}^3$ respectively. The measured 1-hour TSP levels on 8 and 13 July 2013 were found to be $75.0\mu\text{g}/\text{m}^3$; $76.3\mu\text{g}/\text{m}^3$; $75.4\mu\text{g}/\text{m}^3$ and $70.9\mu\text{g}/\text{m}^3$; $73.8\mu\text{g}/\text{m}^3$; $71.1\mu\text{g}/\text{m}^3$ respectively. All measured 1-hour TSP and 24-hour TSP level were below the Action and Limit Level.

Despite that the 1-hour and 24-hour TSP levels were below the Action and Limit level. The Contractor was recommended to provide regular maintenance to the captioned generator operating at the works area, closely monitor the captioned generator to ensure that emission of dark smoke should be avoided.

No further complaint was received and the complaint was closed.

One summon was received regarding the suspected violation case of Water Pollution Control Ordinance (Cap. 358) for water discharging at Portion F of the project on 4 May 2013. The charge had been convicted and the written report on successful prosecution was received by the Contractor on 5 December 2013. The cumulative statistics on complaints has been updated in Appendix F.

Please refer to the monthly EM&A reports (November 2013 Version 0) accordingly for the details of the captioned changes in summon and complaint record.

1 INTRODUCTION

1.1 Scope of Report

1.1.1 This is the quarterly Environmental Monitoring and Audit (EM&A) Report for the reporting period from 1 September 2013 to 30 November 2013 under the Project “Contract CV/2007/03 - Development at Anderson Road – Site Formation and Associated Infrastructure Works” (hereafter called “the Project”), which serving for both the entire Development of Anderson Road (Schedule 3 Designated Project (DP)) project as well as the Widening of Po Lam Road (Schedule 2 DP) project (which was commenced on 21 September 2011).

1.1.2 This report presents a summary of the EM&A works, list of activities and mitigation measures proposed by the Environmental Team (ET) for the Project during the reporting period.

1.2 Project Organization

1.2.1 The project organization structure is shown in Appendix A. The key personnel contact names and numbers are summarized in Table 1.1.

Table 1.1 Contact Information of Key Personnel

Party	Position	Name	Telephone	Fax
ER (Ove Arup)	Chief Resident Engineer	Dennis Leung	3656 3000	3656 3100
	Senior Resident Engineer	Michael Wright	3656 3000	3656 3100
	Resident Engineer (Safety and Environmental)	Kenneth Lee	3656 3000	3656 3100
IEC (ENVIRON)	Independent Environmental Checker	David Yeung	3465 2888	3465 2899
Contractor (CSCE)	Site Agent	Wilson Lau	2704 2095	2702 6553
	Environmental Manager	Leo Chung	2704 2095	2702 6553
ET (AECOM)	ET Leader	Yiu Wah Fung	3922 9366	3922 9797

1.3 Summary of Construction Works

1.3.1 The Contactor has carried out major activities in the reporting quarter. Details of the works undertaken in this reporting period are listed below:

- Site clearance
- Establishment of temporary access road and temporary drainage
- Condition survey
- Slope stabilization and upgrading works
- Tree transplanting and protection
- Excavation work at portions A, B, C, J4, S1a, S1b, S2a, S2b, J1a
- Ground investigation and instrumentation
- Trial pit excavation
- Temporary traffic arrangement and road work at J/O Po Lam Road & Sau Mau Ping Road, Sau Fung Street, J2
- Bridge prestressing work
- Toe / Berm planter and platform drainage construction
- Maintenance Work
- Bridge structural works at Bridge A, B and D
- Retaining wall structural works
- Blasting
- Trench excavation and pipe laying
- Erection and maintenance of Blasting Cages & Fencing
- RE wall panel installation and backfilling
- Permanent backfilling at portion S1c and S1a (former temple area)
- Erection and maintenance of hoarding
- Box culvert construction
- Construction of pedestrian subway
- Erection of panel wall at R15
- Stormwater tank construction
- Box culvert construction
- Excavation of footbridge A, B,C
- Mini-pile construction of footbridge
- Structural works at Footbridge A, B and C
- Pipe Jacking at Hiu Kwong Street

1.3.2 The general layout plan of the Project site showing the contract area is shown in Figure 1.1.

1.3.3 The environmental mitigation measures implementation schedule (EMIS) are presented in Appendix B.

2 SUMMARY OF EM&A PROGRAMME REQUIREMENTS

2.1 Monitoring Parameters

- 2.1.1 The EM&A Manual designated five monitoring stations to monitor environmental impacts on air quality and noise due to the Project. The monitoring locations are depicted in Figure 2.1.
- 2.1.2 The monitoring stations ID 4 & ID 5 will serve both the entire Development of Anderson Road (Schedule 3 Designated Project (DP)) project as well as the Widening of Po Lam Road (Schedule 2 DP) project.

2.2 Environmental Quality Performance Limits (Action/Limit Levels)

- 2.2.1 The environmental quality performance limits (i.e. Action/Limit Levels) were derived from the baseline air quality and noise monitoring results of Kwun Tong Government Secondary School (ID 1A), On Yat House (ID 2), Sau Nga House (ID 3), Sau Ming Primary School (ID 4) and Sau Mau Ping Catholic Primary School (ID 5) and / or as defined in the EM&A Manual for air quality and noise impacts.
- 2.2.2 The baseline condition of air quality (for ID 1A, ID 2 & ID 3) in the Project site was reviewed in August 2008 upon agreed by ER and IEC. Reviewed Action Levels for air quality at ID 1A, ID 2 and ID 3 were established in September 2008. The latest Action and Limit Levels (established in September 2008) for all monitoring parameters are summarized in Appendix C.

2.3 Environmental Mitigation Measures

- 2.3.1 Relevant environmental mitigation measures were stipulated in the Particular Specification and EP (No.: EP-140/2002) for the Contractor to adopt. A list of environmental mitigation measures and their implementation statuses are given in Appendix B.

3 MONITORING RESULTS

3.1 Air Quality

- 3.1.1 Air quality monitoring, including 1-hr and 24-hr TSP, was conducted for at least three times every 6 days and for at least once every 6 days respectively at the 5 monitoring stations (ID 1A, ID 2, ID 3, ID 4 and ID 5), in accordance with the EM&A Manual.
- 3.1.2 Forty-eight (48) sessions of 1-hr TSP monitoring and sixteen (16) sessions of 24-hr TSP monitoring were conducted for the 5 monitoring stations (ID 1A, ID 2, ID 3, ID4 & ID5) in the reporting quarter.
- 3.1.3 The weather was mostly cloudy and sunny, with occasionally rainy days in the reporting quarter. The trend of impact air quality monitoring results for the reporting quarter is given in Appendix D. Major dust source included construction activities of the Project, concurrent construction activities of another project carried out in the vicinity and nearby traffic emissions.
- 3.1.4 No exceedance of Action and Limit Level was recorded for 1-hour TSP and 24-hour TSP monitoring in the reporting quarter.
- 3.1.5 Table 3.1 presents the number of exceedances recorded in each month of the reporting quarter. The number of monitoring events included regular impact monitoring events and additional ones, if any.

Table 3.1 Summary of Number of Exceedances for 1-hr and 24-hr TSP Concentration

Monitoring Parameter	Location	Level of Exceedance	Month		
			Sep13	Oct 13	Nov 13
1-hr TSP	ID 1A	No. of monitoring events	18	15	15
		Action	0	0	0
		Limit	0	0	0
	ID 2	No. of monitoring events	18	15	15
		Action	0	0	0
		Limit	0	0	0
	ID 3	No. of monitoring events	18	15	15
		Action	0	0	0
		Limit	0	0	0
	ID 4	No. of monitoring events	18	15	15
		Action	0	0	0
		Limit	0	0	0
	ID 5	No. of monitoring events	15	18	15
		Action	0	0	0
		Limit	0	0	0
	Total		0	0	0
24-hr TSP	ID 1A	No. of monitoring events	6	5	5
		Action	0	0	0
		Limit	0	0	0
	ID 2	No. of monitoring events	6	5	5
		Action	0	0	0
		Limit	0	0	0
	ID 3	No. of monitoring events	6	5	5
		Action	0	0	0
		Limit	0	0	0
	ID 4	No. of monitoring events	6	5	5
		Action	0	0	0
		Limit	0	0	0
	ID 5	No. of monitoring events	6	5	5
		Action	0	0	0
		Limit	0	0	0
	Total		0	0	0

3.2 Construction Noise

- 3.2.1 Noise was conducted at the 5 monitoring stations (ID 1A, ID 2, ID 3, ID 4 and ID 5) for at least once per week during the construction phase (0700 – 1900) of the Project.
- 3.2.2 Thirteen (13) noise monitoring events were carried out for all monitoring stations in the reporting quarter.
- 3.2.3 According to the information provided by the Contractor, one (1) Action Level exceedance was recorded since one (1) noise related complaint was received in September 2013 during the reporting quarter.
- 3.2.4 No Limit Level exceedance of noise was recorded in the reporting quarter.
- 3.2.5 The graphical plots of trends of the noise monitoring results in the reporting quarter are provided in Appendix E. Major noise source included construction activities of the Project, concurrent construction activities of another project carried out in the vicinity, nearby traffic emissions and noise from school activities and community noise.
- 3.2.6 Table 3.2 presents the number of exceedances recorded in each month of the reporting quarter. The number of monitoring events included regular monitoring events and additional ones, if any.

Table 3.2 Summary of Number of Exceedances for Construction Noise

Monitoring Parameter	Location	Level of Exceedance	Month		
			Sep 13	Oct 13	Nov 13
Construction Noise	ID 1A	No. of monitoring events	4	5	4
		Limit	0	0	0
	ID 2	No. of monitoring events	4	5	4
		Limit	0	0	0
	ID 3	No. of monitoring events	4	5	4
		Limit	0	0	0
	ID 4	No. of monitoring events	4	5	4
		Limit	0	0	0
	ID 5	No. of monitoring events	4	5	4
		Limit	0	0	0
	Total Action Level*		1	0	0
	Total Limit Level		0	0	0

Remarks: * Number of Action Level exceedance for construction noise is the number of documented noise related complaint received in the reporting period from any one of the sensitive receivers.

3.3 Environmental Site Inspection

3.3.1 There were 13 site inspections conducted in the reporting quarter to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. The major concerns for the Project are air quality, noise, water quality and chemical and waste management. Particular observations and non-compliance and their statuses are described below.

3.3.2 The Contractor has rectified most of the observations as identified during environmental site inspection in the reporting period within agreed time frame. Rectifications of remaining identified items are undergoing by the Contractor. Follow-up inspections on the status on provision of mitigation measures will be conducted to ensure all identified items are mitigated properly.

3.3.3 Air Quality Impact

- Fugitive dust arising from the rock breaking area in Portion C2, haul road in Portion E and temporary haul road next to Portion A. The Contractor should provide regular spraying of water to the above mentioned areas as dust suppression measure.
- Fugitive dust was observed to be raised from the drilling, excavating activities and haul road in Portion C2, R15, Branch M, Road L5, Portion J2, Footbridge C and Footbridge A. The Contractor should provide regular spraying of water to the above mentioned areas as dust suppression measure. For Portion J2, wheel washing facilities should be enhanced to ensure that vehicles are clear of dusty materials before leaving the site.
- No spraying of water was provided to the operating excavator at Portion C. The Contractor should provide spraying of water as dust suppression measure.
- Dark smoke was observed generating from the excavator at Gate 6. The Contractor should ensure that all plants/equipment are in good condition as to avoid dark smoke generation.
- Fugitive dust was observed along the haul road in Portion J2. The Contractor should provide frequent spraying of water as dust suppression measure. Moreover, the effectiveness of wheel washing facility at Portion J2 should be reviewed and enhanced.
- Exposed slope was observed underneath Footbridge C. The Contractor should cover the slope entirely with impervious sheeting to prevent the arising of dust and/or effluent nuisance.

3.3.4 Construction Noise Impact

- Insufficient noise abatement measures were observed to be provided at works area in Footbridge A. The Contractor should enhance the mitigation measures to lessen noise nuisance to NSR.

3.3.5 Water Quality Impact

- Nil

3.3.6 Chemical and Waste Management

- Chemical containers were found on bare ground in works area of Bridge A, Portion A and R16. The Contractor should provide drip tray or equivalent measures to retain leakage, if any.
- Accumulation of refuse was observed on bare ground in works area of Footbridge C, Portion C2 and Portion E. The Contractor should provide receptacle for the storage of refuse and clear the receptacle in timely manner.
- Generator and chemical container were observed on bare ground without the provision of drip tray in Portion C2, Portion A, Footbridge C, Footbridge A and New RE Office respectively. The Contractor should provide drip tray or equivalent measures to retain leakage, if any.
- Accumulation of oil was observed in a drip tray placed in works area at Footbridge C. The Contractor should clear the drip tray in timely manner to prevent any leakage of oil.
- Accumulation of refuse was observed at New RE Office. The Contractor should clear the accumulated refuse in timely manner. Moreover, waste receptacle should be provided for proper waste storage.
- Chemical containers and oil drum were found on bare ground without the provision of drip tray at Bridge B and Portion C. The Contractor should provide drip trays or equivalent measures to retain leakage, if any.

3.3.7 Landscape and Visual Impact

- Nil

ADVICE ON SOLID AND LIQUID WASTE MANAGEMENT STATUS

3.4 Summary of Solid and Liquid Waste Management

- 3.4.1 The Contractor is registered as a chemical waste producer for this Project. C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.
- 3.4.2 As advised by the Contractor, quantity of waste for disposal in the reporting quarter is summarized in the Table 4.1.

Table 4.1 Summary of Quantity of Waste for Disposal*

Type of waste	Month		
	Sep13	Oct 13	Nov 13
Total C&D material (m ³)	45,049m ³	61,717m ³	21,497m ³
Hard Rock and Large Broken Concrete	5,973m ³	8,158m ³	9,510m ³
Reuse in the Project	0m ³	0m ³	0m ³
Reuse in other Projects	697m ³	93m ³	0m ³
Disposed to barging point	38379m ³	53466m ³	11987m ³
Metals	151,290kg	0kg	26,140kg
Paper cardboard packing	0kg	30kg	20kg
Plastics	0kg	0kg	10kg
Chemical waste	0L	0L	0L
General refuse	57.03 tonnes	35.88 tonnes	160.99 tonnes

***Remarks: The quantity of waste for September, October and November 2013 were updated by the Contractor in November 2013.**

- 3.4.3 The Contractor is advised to properly maintain on site C&D materials and wastes collection, sorting and recording system and maximize reuse / recycle of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.
- 3.4.4 The Contractor is reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practise on the Packaging, Labelling and Storage of Chemical Wastes.

4 SUMMARY OF NON-COMPLIANCE (EXCEEDANCES) OF ENVIRONMENTAL QUALITY

4.1 Summary of Exceedances and Review of the Reasons for Non-compliance

- 4.1.1 There was no Action and Limit Level exceedance recorded for 1-hr TSP and 24-hr TSP in the reporting quarter.
- 4.1.2 According to the information provided by the Contractor, one (1) Action Level exceedance was recorded since one (1) noise related complaint was received in September 2013 during the reporting quarter.
- 4.1.3 No Limit Level exceedance for noise was recorded at all monitoring stations in the reporting quarter.

6 COMPLAINT, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTION

6.1 Summary of Environmental complaints, notification of summons and successful prosecutions

6.1.1 As informed by the Contractor on 11 December 2013, five complaints were recorded in previous months. Three (3) noise related complaints were received in May, August and September 2013 respectively. One (1) air related complaint and one (1) water related complaint was received in July and August 2013 respectively.

- CEDD(ICC) referred complaints about noise nuisance along the Shun On Road on 27 May 2013 and 17 September 2013 respectively.

According to the Contractor, emergency maintenance work for the slope outside Shun On Estate was in progress after the typhoon visited on 22 May 2013. No night works were involved in the concerned area during the maintenance period; emergency maintenance work for rectification of the scaffolding was conducted outside Shun On Estate on 15 September 2013. No Powered Mechanical Equipment (PME) was in operation.

According to the noise monitoring data recorded on 22 and 28 May 2013, 10 and 19 September 2013 at the nearest monitoring station ID2 (On Yat House Shun On Estate), the measured noise level in Leq (30-min) were 64.2dB(A) and 65.7dB(A), 63.0dB(A) and 65.4dB(A) respectively, which were below the Limit Level.

Construction noise was potentially contributed by the emergency maintenance work outside Shun On.

The Contractor agreed to strictly implement the noise mitigation measures and ensure the effectiveness of noise mitigation measures deployed within works area should be reviewed onsite regularly in order to provide sufficient noise screening effect properly for the NSRs.

No further complaint was received and the complaint was closed

- CEDD(ICC) referred complaints about noise nuisance outside Sau Ming Primary School on 23 August 2013.

According to the noise monitoring data recorded on 6 and 12 August 2013 at the nearest monitoring station ID4 (Sau Ming Primary School), the measured noise level in Leq (30-min) were 67.3dB (A) and 67.4dB (A) respectively, which were below the Limit Level.

Noise mitigation measures have been provided at the concerned works area to mitigate the noise impacts which included the provision of acoustic wrappings to the breaking tips of hydraulic breakers worked at the works area for the sides facing the noise sensitive receivers. Construction noise was potentially contributed by rock breaking activities at the concerned works area of the Project.

The Contractor agreed to start the works after 9 a.m., strictly implement the noise mitigation measures and ensure the effectiveness of noise mitigation measures deployed within works area should be reviewed onsite regularly in order to provide sufficient noise screening effect properly for the NSRs.

No further complaint was received and the complaint was closed

- A complaint was referred by CEDD (ICC) regarding the discharging of silty water in the vicinity of KTTS on 7 August 2013.

The silty water was caused by the sudden surge of rain water under typhoon signal No. 3 and potentially by the discharging water from other construction sites into the site drainage system on 1 August 2013. The surge water then caused overflowing and bypassing the effluent treatment facilities and entered public stormwater drainage system.

Apart from the cleaning works which have been undertaken by the Contractor in the vicinity of KTTS, Tsui Ping Nullah and sandtrap at Sau Mau Ping Road, the Contractor was recommended to provide sufficient effluent treatment facility on site to avoid any non-complied wastewater discharge.

No further complaint was received and the complaint was closed.

- CEDD(ICC) referred a complaint about air quality nuisance at Hiu Kwong Street works area on 9 July 2013.

Emission was potentially generated by the diesel generator placing at the junction of Hiu Kwong Street and Sau Mau Ping Road.

According to the routine 1-hour TSP and 24-hour TSP monitoring data recorded at the nearest monitoring station ID5 (roof of Sau Mau Ping Catholic Primary School) on 8 and 13 July 2013, the measured 24-hour TSP level was found to be $6.4\mu\text{g}/\text{m}^3$ and $22.5\mu\text{g}/\text{m}^3$ respectively. The measured 1-hour TSP levels on 8 and 13 July 2013 were found to be $75.0\mu\text{g}/\text{m}^3$; $76.3\mu\text{g}/\text{m}^3$; $75.4\mu\text{g}/\text{m}^3$ and $70.9\mu\text{g}/\text{m}^3$; $73.8\mu\text{g}/\text{m}^3$; $71.1\mu\text{g}/\text{m}^3$ respectively. All measured 1-hour TSP and 24-hour TSP level were below the Action and Limit Level.

Despite that the 1-hour and 24-hour TSP levels were below the Action and Limit level. The Contractor was recommended to provide regular maintenance to the captioned generator operating at the works area, closely monitor the captioned generator to ensure that emission of dark smoke should be avoided.

No further complaint was received and the complaint was closed.

One summon was received regarding the suspected violation case of Water Pollution Control Ordinance (Cap. 358) for water discharging at Portion F of the project on 4 May 2013. The charge had been convicted and the written report on successful prosecution was received by the Contractor on 5 December 2013.

Please refer to the monthly EM&A reports (November 2013 Version 0) accordingly for the details of the captioned changes in summon and complaint record.

- 6.1.2 Table 6.1 summarized the complaint, summons and successful prosecution received in the reporting period.

Table 6.1 Summary of Environmental Complaints, Summons and Prosecutions

	Sep 13	Oct 13	Nov 13	Total
Complaint Logged	1	0	0	1
Summons Served	0	0	0	5*
Successful Prosecution	0	0	0	2

*One summon was received regarding the suspected violation case of Water Pollution Control Ordinance (Cap. 358) for water discharging at Portion F of the project on 4 May 2013. The charge had been convicted and the written report on successful prosecution was received by the Contractor on 5 December 2013.

- 6.1.3 Cumulative Statistics on Exceedances, Complaints, Notification of Summons and Successful Prosecutions recorded since the commencement of the Project are given in Appendix F.

7 COMMENTS, RECOMMENDATIONS AND CONCLUSIONS

7.1 Comments on Mitigation Measures

7.1.1 According to the environmental site inspections performed in the reporting quarter, the following comments are provided:

7.1.2 Air Quality Impact

- Control the dust generation by screens or by water-spraying
- Regular inspection of the working machineries worked in site areas to avoid any dark smoke emission.
- Review the effectiveness of wheel washing facilities to ensure no dusty materials were carried out to public haul road by vehicles.

7.1.3 Construction Noise Impact

- Proper and effective noise mitigation measures (e.g. provision of noise barriers, absorptive material coverage on scaffolding and absorptive material wrappings to the breaking tips of the breakers) should be implemented at the breaking and drilling works areas to minimize the noise impacts to sensitive receivers nearby. The Contractor should conduct regular review on and maintain the noise screening measures provided within works area.

7.1.4 Water Quality Impact

- Temporary drainage channels/systems provided in the Project site should be reviewed regularly. Surface run-off from works area should be properly treated with desilting facilities prior to discharge.

7.1.5 Chemical and Waste Management

- Sufficient drip tray should be provided to the equipment and chemical containers in order to retain any oil or chemical leakage. Moreover, regular inspection should be conducted to maintain the status of the equipment to prevent any oil leakage and to ensure that maintenance works are carried out in roofed, paved and confined works area only.
- On-site waste sorting should be provided properly and dispose containers and cleared oil stain as chemical waste accordingly

7.1.6 Landscape and Visual Impact

- No specific observation was identified in the reporting quarter.

7.2 Recommendations on EM&A Programme

7.2.1 The impact air quality and noise monitoring programme ensured that any environmental impact to the receivers would be readily detected and timely actions could be taken to rectify any non-compliance. Assessment and analysis of monitoring results collected demonstrated the environmental acceptability of the Project. The weekly site inspection ensured that all the environmental mitigation measures recommended in the EIA report were effectively implemented.

7.2.2 The EM&A programme effectively monitored the environmental impacts from the construction activities and no particular recommendation was advised for the improvement of the programme.

7.3 Conclusions

- 7.3.1 Air quality and noise monitoring and weekly site inspection were carried out from September to November 2013, in accordance with the EM&A Manual.
- 7.3.2 All 1-hour and 24-hour TSP monitoring results complied with the Action and Limit level at all monitoring locations in the reporting quarter.
- 7.3.3 According to the information provided by the Contractor, one (1) Action Level exceedance was recorded since one (1) noise related complaint was received in September 2013 during the reporting quarter.
- 7.3.4 No Limit Level exceedance of noise was recorded in the reporting quarter.
- 7.3.5 One summon was received regarding the suspected violation case of Water Pollution Control Ordinance (Cap. 358) for water discharging at Portion F of the project on 4 May 2013. The charge had been convicted and the written report on successful prosecution was received by the Contractor on 5 December 2013.
- 7.3.6 As informed by the Contractor on 11 December 2013, five complaints were recorded in previous months. Three (3) noise related complaints were received in May, August and September 2013 respectively. One (1) air related complaint and one (1) water related complaint was received in July and August 2013 respectively.
- CEDD(ICC) referred complaints about noise nuisance along the Shun On Road on 27 May 2013 and 17 September 2013 respectively.

According to the Contractor, emergency maintenance work for the slope outside Shun On Estate was in progress after the typhoon visited on 22 May 2013. No night works were involved in the concerned area during the maintenance period; emergency maintenance work for rectification of the scaffolding was conducted outside Shun On Estate on 15 September 2013. No Powered Mechanical Equipment (PME) was in operation.

According to the noise monitoring data recorded on 22 and 28 May 2013, 10 and 19 September 2013 at the nearest monitoring station ID2 (On Yat House Shun On Estate), the measured noise level in Leq (30-min) were 64.2dB(A) and 65.7dB(A), 63.0dB(A) and 65.4dB(A) respectively, which were below the Limit Level.

Construction noise was potentially contributed by the emergency maintenance work outside Shun On.

The Contractor agreed to strictly implement the noise mitigation measures and ensure the effectiveness of noise mitigation measures deployed within works area should be reviewed onsite regularly in order to provide sufficient noise screening effect properly for the NSRs.

No further complaint was received and the complaint was closed

- CEDD(ICC) referred complaints about noise nuisance outside Sau Ming Primary School on 23 August 2013.

According to the noise monitoring data recorded on 6 and 12 August 2013 at the nearest monitoring station ID4 (Sau Ming Primary School), the measured noise level in Leq (30-min) were 67.3dB (A) and 67.4dB (A) respectively, which were below the Limit Level.

Noise mitigation measures have been provided at the concerned works area to mitigate the noise impacts which included the provision of acoustic wrappings to the breaking tips of hydraulic breakers worked at the works area for the sides facing the noise sensitive receivers.

Construction noise was potentially contributed by rock breaking activities at the concerned works area of the Project.

The Contractor agreed to start the works after 9 a.m., strictly implement the noise mitigation measures and ensure the effectiveness of noise mitigation measures deployed within works area should be reviewed onsite regularly in order to provide sufficient noise screening effect properly for the NSRs.

No further complaint was received and the complaint was closed

- A complaint was referred by CEDD (ICC) regarding the discharging of silty water in the vicinity of KTTS on 7 August 2013.

The silty water was caused by the sudden surge of rain water under typhoon signal No. 3 and potentially by the discharging water from other construction sites into the site drainage system on 1 August 2013. The surge water then caused overflowing and bypassing the effluent treatment facilities and entered public stormwater drainage system.

Apart from the cleaning works which have been undertaken by the Contractor in the vicinity of KTTS, Tsui Ping Nullah and sandtrap at Sau Mau Ping Road, the Contractor was recommended to provide sufficient effluent treatment facility on site to avoid any non-complied wastewater discharge.

No further complaint was received and the complaint was closed.

- CEDD(ICC) referred a complaint about air quality nuisance at Hiu Kwong Street works area on 9 July 2013.

Emission was potentially generated by the diesel generator placing at the junction of Hiu Kwong Street and Sau Mau Ping Road.

According to the routine 1-hour TSP and 24-hour TSP monitoring data recorded at the nearest monitoring station ID5 (roof of Sau Mau Ping Catholic Primary School) on 8 and 13 July 2013, the measured 24-hour TSP level was found to be $6.4\mu\text{g}/\text{m}^3$ and $22.5\mu\text{g}/\text{m}^3$ respectively. The measured 1-hour TSP levels on 8 and 13 July 2013 were found to be $75.0\mu\text{g}/\text{m}^3$; $76.3\mu\text{g}/\text{m}^3$; $75.4\mu\text{g}/\text{m}^3$ and $70.9\mu\text{g}/\text{m}^3$; $73.8\mu\text{g}/\text{m}^3$; $71.1\mu\text{g}/\text{m}^3$ respectively. All measured 1-hour TSP and 24-hour TSP level were below the Action and Limit Level.

Despite that the 1-hour and 24-hour TSP levels were below the Action and Limit level. The Contractor was recommended to provide regular maintenance to the captioned generator operating at the works area, closely monitor the captioned generator to ensure that emission of dark smoke should be avoided.

No further complaint was received and the complaint was closed.

- 7.3.7 Environmental site inspections were carried out 13 times in the reporting period. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audit.