

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 June – August 2013

September 2013

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Version: 0 Date: 30 September 2013				
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16 October 2013

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 June 2013 to August 2013

Reference is made to the Environmental Team's submission of the draft Quarterly EM&A Report for June 2013 to August 2013 received by E-mail on 27 September 2013.

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 CSCEC Attn: Mr. YW Fung Attn: Mr. Wilson Lau Fax: 3922 9797 Fax: 2702 6553

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China State Construction Engineering (Hong Kong) Ltd.

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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 June 2013 to 31 August 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, no Action Level exceedance was recorded since no noise related complaint was received in 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 30 July 2013, four summons were received regarding the suspected violation case of Air Pollution Control Ordinance (Cap. 311) within site working area of the project on 17 July 2012. Of the four summons, two charges had been convicted and the written reports on successful prosecution were received by the Contractor on 12 July 2013.

According to the information provided by the Contractor on 15 August 2013, water related complaints EC-055 and EC-056 which dated on 4 March 2013 and 5 April 2013 respectively were confirmed to be recorded as enquiries. The cumulative statistics on complaints has been updated in Appendix F.

Please refer to the monthly EM&A reports (July 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 June 2013 to 31 August 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.

Party	Position	Name	Telephone	Fax
	Chief Resident Engineer	Dennis Leung	3656 3000	3656 3100
ER (Ove Arup)	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	Site Agent	Wilson Lau	2704 2095	2702 6553
(CSCE)	Environmental Manager	Leo Chung	2704 2095	2702 6553
ET (AECOM)	ET Leader	Yiu Wah Fung	3922 9366	3922 9797

Table 1.1 Contact Information of Key Personnel

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 period 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.

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

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

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, no noise complaint was received in the reporting quarter; hence, no Action Level exceedance was received in 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.

China State Construction Engineering (Hong Kong) Ltd.

Monitoring	Location Level of Exceedance		Month		
Parameter			Jun 13	Jul 13	Aug 13
Construction	ID 1A	No. of monitoring events	4	5	4
Noise		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*		0	0	0
	Total Limit Level		0	0	0

Table 3.2 Summary of Number of Exceedances for Construction Noise

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
 - Breaking activities and drilling works were observed in Portion B, Footbridge B & C. The Contractor should provide dust suppressive measure (like provision of regular water spraying or sprinklers) at the breaking/ excavation/ earth movement/ drilling works area to minimize the dust impact.
 - The Contractor should provide shelter with 3-sided enclosure to the cement grouting work at Bridge A to suppress dust impact.
 - Fugitive dust emission was observed during the rock breaking work was carrying out in Portion C2 works area and along the haul road in Portion J2. Dust suppressive measures provided in the concerned works area was not sufficient or was not operating. The Contractor should ensure that water spraying facility or equivalent dust suppressive measures was provided and operating in rock breaking works areas and haul road.
 - Dark smoke emission was observed from excavators worked in Portion C2. The Contractor should repair the excavators and conduct regular inspection of the working machineries worked in site areas to avoid any dark smoke emission.
 - Dust suppression measures should be provided for rock breaking and excavation of dusty materials at Portion C2 to minimum the dust impact.
- 3.3.4 Construction Noise Impact
 - Noise mitigation measures provided at rock breaking works area in Portion C2 were insufficient. The Contractor was advised that noise barriers should be provided at rock breaking works areas to minimize the noise impacts to the sensitive receivers nearby. Proper absorptive material wrapping should be provided to the breaking tip of the breaker worked in Project site.
- 3.3.5 Water Quality Impact
 - Soil stockpiled in Portion C2 was covered up with tarpaulin sheet incompletely. The Contractor should cover up the soil stockpiled in works area completely with tarpaulin sheet to avoid any soil relocation/erosion during rainstorm.
 - Although clear effluent was observed discharging to the box culvert which located below Portion F during the inspection, small amount of deposited silt was found in storm drain at lower level of the box culvert. The Contractor should clear debris and grit in the box culvert and review the temporary drainage channels/systems provided in the Project site regularly. Surface run-off from works area should be properly treated with desilting facilities prior to discharge.

- Muddy run off was observed in the trench along R22. Inadequate and ineffective treatment measures were provided within the works area R22, which leading to discharge of muddy effluent to the public drainage channels. The Contractor should reinforce the onsite wastewater collection and desilting measures.
- Stockpiles of temporary construction material were found on Bridge A. The Contractor should cover the stockpile entirely with impervious sheeting to prevent any grit or muddy materials from entering the drainage system.
- 3.3.6 Chemical and Waste Management
 - Oil drum, generators and chemical containers were found on bare ground without the provision of drip tray at works area in R22, Bridge A, Portion B, Portion R15, Footbridge C and Branch M. The Contractor should provide drip trays or other equivalent measures to retain the leakage, if any.
 - Stagnant water was observed in drip tray near the gate at works area of Footbridge A. The Contractor should clear the stagnant water in timely manner.
 - Drip tray in Hiu Kwong Street works area was found unplugged. The Contractor should plug the drip tray properly to prevent any chemical leakage occur.
 - Oil stain was found under the excavator in Branch M, near the drip tray in Portion R15 and near the generator in Footbridge B and Portion B. The Contractor should clear the oil stain and dispose of as chemical waste. Moreover, drip tray or equivalent measures should be provided to retain any leakage, regular maintenance and checking should be conducted for the machineries worked on site.
 - Accumulated C&D waste and general waste were observed near the entrance of gate No.6 and below Bridge B respectively. The Contractor was reminded to clear the accumulated C&D waste regularly.
 - Generators, oil drums and chemical containers were placed on the bare ground at Portion C2, underneath Bridge B, Portion A, Branch M and R15. Drip tray or equivalent measures should be provided to prevent leakage, if any.
 - Oil stain was observed on bare ground under the excavator in Tung Lee's workshop and from an excavator on Bridge C. The Contractor should be cleared them and disposed of as chemical waste. Moreover, the Contractor should conduct regular maintenance and checking of the machineries worked on site.
 - Scattered waste was observed floating on stagnant water surface in works area in Portion C2. The Contractor was reminded to clear the waste and stagnant water in timely manner.
 - Slurry and oil stain was observed in the drip tray placed at Branch M and near the unplugged drip tray on Bridge A respectively. The Contractor should clear the drip tray regularly and plug it properly.
 - Accumulation of waste was observed on bare ground at works area of Footbridge C. The Contractor should clear the waste in timely manner.
 - Chemical containers were observed on bare ground at works area in Portion B. The Contractor should provide drip tray or equivalent measures to retain leakage, if any.

- Oil drums and chemical containers were placed on bare ground at work area in Portion A. The Contractor should provide drip tray or equivalent measures to retain leakage, if any.
- Stagnant water was observed in the drip tray at works area in Portion A. The Contractor should clear the stagnant water in timely manner.
- 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.

		Month	Month		
Type of waste	Jun 13	Jul 13	Aug 13		
Total C&D material (m ³)	17,185m ³	15,216m ³	20,890m ³		
Hard Rock and Large Broken Concrete	13,734m ³	11,534m ³	9,294m ³		
Reuse in the Project	0m ³	0m ³	0m ³		
Reuse in other Projects	0m ³	0m ³	861m ³		
Disposed to barging point	3451m ³	3682m ³	10735m ³		
Metals	132,050kg	34,440kg	153,820kg		
Paper cardboard packing	10kg	10kg	20kg		
Plastics	20kg	20kg	20kg		
Chemical waste	0L	0L	0L		
General refuse	194.70 tonnes	27.91 tonnes	292.21 tonnes		

 Table 4.1
 Summary of Quantity of Waste for Disposal*

*Remarks: The quantity of waste for June, July and august 2013 were updated by the Contractor in august 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, no noise complaint was received in the reporting quarter. Hence, no Action Level exceedance was received in the reporting quarter.
- 4.1.3 No Limit Level exceedance for noise was recorded at all monitoring stations in the reporting quarter.

5 COMPLAINT, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTION

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

As informed by the Contractor on 30 July 2013, four summons were received regarding the suspected violation case of Air Pollution Control Ordinance (Cap. 311) within site working area of the project on 17 July 2012. Of the four summons, two charges had been convicted and the written reports on successful prosecution were received by the Contractor on 12 July 2013.

According to the information provided by the Contractor on 15 August 2013, water related complaints EC-055 and EC-056 which dated on 4 March 2013 and 5 April 2013 respectively were confirmed to be recorded as enquiries. The cumulative statistics on complaints has been updated in Appendix F.

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

5.1.1 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

	Jun 13	Jul 13	Aug 13	Total
Complaint Logged	0	0	0	0
Summons Served	0	4	0	4
Successful Prosecution	0	2	0	2

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

6 COMMENTS, RECOMMENDATIONS AND CONCLUSIONS

6.1 Comments on Mitigation Measures

- 6.1.1 According to the environmental site inspections performed in the reporting quarter, the following comments are provided:
- 6.1.2 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.
- 6.1.3 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.
- 6.1.4 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.
- 6.1.5 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
- 6.1.6 Landscape and Visual Impact
 - No specific observation was identified in the reporting quarter.

6.2 Recommendations on EM&A Programme

- 6.2.1 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.
- 6.2.2 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.

6.3 Conclusions

- 6.3.1 Air quality and noise monitoring and weekly site inspection were carried out from June to August 2013, in accordance with the EM&A Manual.
- 6.3.2 All 1-hour and 24-hour TSP monitoring results complied with the Action and Limit level at all monitoring locations in the reporting quarter.
- 6.3.3 As per Contractor's information, no noise complaint was received in the reporting quarter. Hence, no Action Level exceedance was noted in the reporting period and no Limit Level exceedance of noise were recorded in the reporting quarter.
- 6.3.4 As informed by the Contractor on 30 July 2013, four summons were received regarding the suspected violation case of Air Pollution Control Ordinance (Cap. 311) within site working area of the project on 17 July 2012. Of the four summons, two charges had been convicted and the written reports on successful prosecution were received by the Contractor on 12 July 2013.
- 6.3.5 According to the information provided by the Contractor on 15 August 2013, water related complaints EC-055 and EC-056 which dated on 4 March 2013 and 5 April 2013 respectively were confirmed to be recorded as enquiries.
- 6.3.6 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.