Civil Engineering and Development Department

Contract No. KL/2010/03
Kai Tak Development - Stage 2
infrastructure works at north apron area of Kai Tak Airport for residential development and government, institution or community facilities

Quarterly EM&A Report

August to October 2014

(version 1.0)

Approved By	(Environmental Team Leader)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties

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TABLE OF CONTENTS

LIST OF TABLE

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ANNEXES

EXECUTIVE SUMMARY

Introduction

1. This is the 12th Quarterly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the "Contract No. KL/2010/03 - Kai Tak Development - Stage 2 infrastructure works at north apron area of Kai Tak Airport for residential development and government, institution or community facilities" (hereinafter called "the Project"). This summary report presents the EM&A works performed in the period between August and October 2014.

2. With reference to the same principle of EIA report of the Project, air quality monitoring stations within 500m and noise monitoring stations within 300m from the boundary of this Project are considered as relevant monitoring locations. In such regard, the relevant air quality and noise monitoring locations are tabulated in **Table I** (see **Figure 2** and **3** for their locations).

Table I Air Quality and Noise Monitoring Stations for this Project

Locations	Monitoring Stations In accordance with EM&A Manual	Alternative Monitoring Stations
Air Quality Monitoring Stations		
AM1 - Rhythm Garden	No	AM1(A) - Kai Tak Operational Base AM1(B) - Contractor Site Office (KL/2008/09) / (KL/2012/02)*
AM2 - Lee Kau Yan Memorial School	Yes	N/A
AM6 – Site 1B4 (Planned)	N/A	
Noise Monitoring Stations		
M1 - Buddhist Chi King Primary School	Yes	N/A
M2 - S.K.H. Kowloon Bay Kei Lok Primary School	Yes	N/A
M3 - Cognitio College	Yes	N/A
M4 - Lee Kau Yan Memorial School	Yes	N/A
M9 – Tak Long Estate	Yes	N/A
M10 – Site 1B4 (Planned)	N/A	

Remark:* The Contractor Site Office of KL/2012/02 occupied the same location of previous KL/2008/09 site office and therefore the location of monitoring station AM1(B) is remain unchanged.

3. According to the Environmental Monitoring and Audit Manual (EM&A Manual) of the Kai Tak Development (KTD) Schedule 3 Environmental Impact Assessment (EIA) Report, the impact monitoring at the designated monitoring stations as required in KTD EM&A Manual under two

EPs, have been conducted in Contract No. KLN/2013/16– Environmental Monitoring Works for Kai Tak Development under Schedule 3 of KTD, which is on-going starting from December 2010. The impact monitoring data under Contract No. KLN/2013/16 will be adopted for the Project. Therefore, this report presents the air quality and noise monitoring works extracted from Contract No. KLN/2013/16.

4. The construction activities undertaken in the reporting quarter were:
    - Builder's works and E&M works of pumping station PS1A;
    - Drainage works at pedestrian streets;
    - Ducting, irrigation pipe laying and kerb laying along pedestrian streets, and footpath of Roads L4 and L5;
    - Kerb laying along Roads L4 and L5;
    - Laying sub-base and placing bituminous pavement along amenity area, Road D2, Road L4, Road L5 an pedestrian streets;
    - Paving concrete blocks along pedestrian streets;
    - Construction of Box Culvert at Portions A;
    - Pre-planting works at pedestrian streets and Sewage Pumping Station PS1A;
    - Remedial works to the damaged works as arisen from Tysan at pedestrian streets;
    - Carry out trial pits for construction of Box Culvert at Concorde Road; and
    - Paving granite along footpath of Roads L4 & L5.

Environmental Monitoring Works

5. Environmental monitoring for the Project was performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Site Inspections/Audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

6. Summary of the non-compliance in the reporting quarter for the Project is tabulated in **Table II**.

Table II Non-compliance Record for the Project in the Reporting Quarter

Parameter	No. of Project Related Exceedance		Action Taken
	Action Level	Limit Level	
August 2014			
1-hr TSP	0	0	N/A
24-hr TSP	0	0	N/A
Noise	0	0	N/A
September 2014			
1-hr TSP	0	0	N/A
24-hr TSP	0	0	N/A
Noise	0	0	N/A
October 2014			
1-hr TSP	0	0	N/A
24-hr TSP	0	0	N/A
Noise	0	0	N/A

1-hour TSP Monitoring

7. All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/Limit Level exceedance was recorded.

24-hour TSP Monitoring

8. All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/Limit Level exceedance was recorded

Construction Noise Monitoring

9. All construction noise monitoring was conducted as scheduled in the reporting quarter. No exceedances of Noise Limit level were recorded in the reporting period.

Key Information in the Reporting Quarter

10. Summary of key information in the reporting quarter is tabulated in **Table III**.

Table III Summary Table for Key Information in the Reporting Quarter

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	0	---	N/A	N/A	---
Reporting Changes	0	---	N/A	N/A	---
Notifications of any summons & prosecutions received	0	---	N/A	N/A	---

11. Environmental monitoring works for the Project are considered effective and is generating data

to categorically identify the environmental impacts from the works and influencing factors in the vicinity of monitoring stations.

1. INTRODUCTION

Background

1.1 The Kai Tak Development (KTD) is located in the south-eastern part of Kowloon Peninsula, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling. It covers a land area of about 328 hectares. Stage 2 infrastructure works at North Apron Area of Kai Tak Airport for Public Housing and Government Office Developments is one of the construction stages of KTD. It contains various Schedule 2 DPs including new distributor roads serving the planned KTD and new sewage pumping stations serving the planned KTD. The general layout of the Project is shown in **Figure 1.**

1.2 Two Environmental Permits (EPs) No. EP-344/2009 and EP-337/2009 were also issued on 23 April 2009 for new sewage pumping stations serving the planned KTD and new distributor roads serving the planned KTD respectively to Civil Engineering and Development Department as the Permit Holder.

1.3 A study of environmental impact assessment (EIA) was undertaken to consider the key issues of air quality, noise, water quality, waste, land contamination, cultural heritage and landscape and visual impact, and identify possible mitigation measures associated with the works. An EIA Report (Register No. AEIAR-130/2009) was approved by the Environmental Protection Department (EPD) on 4 April 2009.

1.4 Cinotech Consultants Limited (Cinotech) was commissioned by Peako Engineering Co., Ltd. (the Contractor) to undertake the role of the Environmental Team (ET) for the Contract No. KL/2010/03 - Kai Tak Development – Stage 2 Infrastructure Works at North Apron Area of Kai Tak Airport for Residential Development and Government Facilities. The construction work under KL/2010/03 comprises the construction of Road D2 & Sewage Pumping Station PS1A which forms a part of the works under two EPs (EP-337/2009 and EP-344/2009).

1.5 Cinotech Consultants Limited was commissioned by Peako Engineering Co., Ltd. to undertake the Environmental Monitoring and Audit (EM&A) works for the Project. The construction commencement of this Contract was on 24th October 2011 for Sewage Pumping Station PS1A. This summary report presents the EM&A works performed in the period between August and October 2014.

Project Organizations

1.6 The key contacts of the Project are shown in **Table 1.1**.

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Position	Phone No.	Fax No.
CEDD	Project Proponent	Mr. Alfred Lee	Engineer	2301 1449	2301 1277
ARUP	Engineer's Representative	Mr. Keith Cheung	SRE	2756 8132	2756 8236
		Ms. Gloria Kwok	RE		
Cinotech	Environmental Team	Dr. Priscilla Choy	Environmental Team Leader	2151 2089	3107 1388
		Ms. Ivy Tam	Project Coordinator and Audit Team Leader	2151 2090	
ANewR	Independent Environmental Checker	Mr. Adi Lee	Independent Environmental Checker	2230 7165	3007 8556
Peako	Contractor	Mr. C.P. Lam	Project Manager	2773 0511	/

2. ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

Monitoring Parameters and Monitoring Locations

2.1 The EM&A Manual designates locations for the ET to monitor environmental impacts in terms of air quality, noise, landscape and visual due to the Project. The Project area and monitoring locations are depicted in **Figures 2 and 3**. **Appendix A** gives details of monitoring requirements.

Monitoring Methodology and Calibration Details

2.2 Monitoring works/equipments were conducted/calibrated regularly in accordance with the EM&A Manual. Copies of calibration certificates are attached in the appendices of the Monthly EM&A Reports.

Environmental Quality Performance Limits (Action and Limit Levels)

2.3 The environmental quality performance limits, i.e. Action and Limit Levels were derived from the baseline monitoring results. Should the measured environmental quality parameters exceed the Action/Limit Levels, the respective action plans would be implemented. The Action/Limit Levels for each environmental parameter are given in **Appendix B**.

Implementation Status of Environmental Mitigation Measures

2.4 Relevant mitigation measures as recommended in the project EIA report have been stipulated in the EM&A Manual for the Contractor to implement. The implementation status of environmental mitigation measures (EMIS) is given in **Appendix E**.

Site Audit Summary

2.5 During site inspections in the reporting period, no non-conformance was identified. The observations and recommendations made during the reporting period are summarized in **Appendix F**.

Status of Waste Management

2.6 The amount of wastes generated by the major site activities of this Project during the reporting period is shown in **Appendix G**.

3. Monitoring Results

Weather Conditions

3.1 The weather during monitoring sessions was summarized in Table 3.1.

Table 3.1 Summary of Weather Conditions in the Reporting Period

Reporting Month	General Weather Conditions
August 2014	Sunny and Cloudy
September 2014	Sunny, Cloudy, Rainy and Fine
October 2014	Sunny and Cloudy

3.2 The detail of weather conditions for each individual monitoring session was presented in Monthly EM&A report.

Air Quality

1-hour TSP Monitoring

3.3 1-hour TSP monitoring at 2 monitoring stations, AM1(B) - Contractor Site Office (KL/2008/09)/(KL/2012/02) and AM2 - Lee Kau Yan Memorial School.

3.4 All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/Limit Level exceedance was recorded.

24-hour TSP Monitoring

3.5 24-hour TSP monitoring at 2 monitoring stations, AM1(B) - Contractor Site Office (KL/2008/09)/(KL/2012/02) and AM2 - Lee Kau Yan Memorial School.

3.6 All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/Limit Level exceedance was recorded.

3.7 The graphical presentations of the air quality monitoring results are shown in **Appendix C**.

Construction Noise

3.8 Noise monitoring at 5 designated monitoring stations, M1 - Buddhist Chi King Primary School, M2 - S.K.H. Kowloon Bay Kei Lok Primary School, M3 - Cognitio College, M4 - Lee Kau Yan Memorial School and M9 - Tak Long Estate.

3.9 Construction noise monitoring at Station M3 – Cognitio College on 13 August 2014 was cancelled due to heavy rain. The monitoring works were rescheduled to 14 August 2014. Other construction noise monitoring was conducted as scheduled in the reporting quarter. No exceedance of Noise Limit Level was recorded.

3.10 The graphical presentations of the noise monitoring results are shown in **Appendix D**.

Landscape and Visual

3.11 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of landscape and visual mitigation measures within KTD. No non-compliance of the landscape and visual impact was recorded in the reporting quarter.

Influencing Factors on the Monitoring Results

3.12 During the reporting period, the major dust and noise source identified at the designated monitoring stations are as follows:

Table 3.2 Major Dust Sources during the Monitoring in the Reporting Period

Station	Major Dust Source
AM1(B) – Contractor Site Office of KL/2008/09 / KL/2012/02	Road Traffic Dust Exposed site area and open stockpiles Site vehicle movement
AM2 – Lee Kau Yan Memorial School	Road Traffic Dust Exposed site area and open stockpiles Excavation works Site vehicle movement

Table 3.3 Major Noise Sources during the Monitoring in the Reporting Period

Monitoring Stations	Locations	Major Noise Source
M1	Buddhist Chi King Primary School	Traffic Noise Site vehicle movement
M2	S.K.H. Kowloon Bay Kei Lok Primary School	
M3	Cognitio College	Traffic Noise Daily school activities Construction Noise from nearby Construction Sites
M4	Lee Kau Yan Memorial School	Traffic Noise Site vehicle movement Excavation works Piling works Daily school activities
M9	Tak Long Estate	Traffic Noise Construction works

Comparison of EM&A results with EIA predictions

3.13 The 1-hour TSP concentrations in the reporting quarter were below to the prediction in the approved Environmental Impact Assessment (EIA) Report.

3.14 The 24-hour TSP concentrations in the reporting quarter were below to the prediction in the approved Environmental Impact Assessment (EIA) Report.

3.15 Mitigated construction noise levels at M9 were not predicted in EIA Report.

3.16 In August and September 2014, the noise monitoring results at monitoring stations M3 and M4 were higher than the predicted mitigated construction noise levels in the EIA report and lower than the referencing background level. This was due to the major noise source during monitoring, i.e. background road traffic noise at the monitoring stations.

3.17 In October 2014, the noise monitoring results at monitoring stations M4 was higher than the predicted mitigated construction noise levels in the EIA report and lower than the referencing baseline level. This was due to the major noise source during monitoring, i.e. background road traffic noise at the monitoring stations.

4. Non-compliance (exceedances) of the Environmental Quality Performance Limits (Action and Limit Levels)

Summary of Exceedances

4.1 Environmental monitoring works were performed in the reporting period and all monitoring results were checked and reviewed. A summary of exceedances is attached in **Appendix H**. The details of each exceedance were attached in the Monthly EM&A Reports.

Air Quality

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

Construction Noise

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

Landscape and Visual

4.4 No non-compliance of the landscape and visual impact was recorded in the reporting quarter.

Review of the Reasons for and the Implications of Non-compliance

4.5 There was no non-compliance from the site audits in the reporting quarter. The observations and recommendations made in each individual site audit session were attached in the **Appendix F**.

Summary of Environmental Complaints and Prosecutions

4.6 No environmental complaint was received during the reporting quarter.

4.7 No warning, summon and notification of successful prosecution was received in the reporting period.

4.8 There were no environmental complaints, warnings, summons and successful prosecutions received since the commencement of the Project.

5. COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

Effectiveness of Mitigation Measures

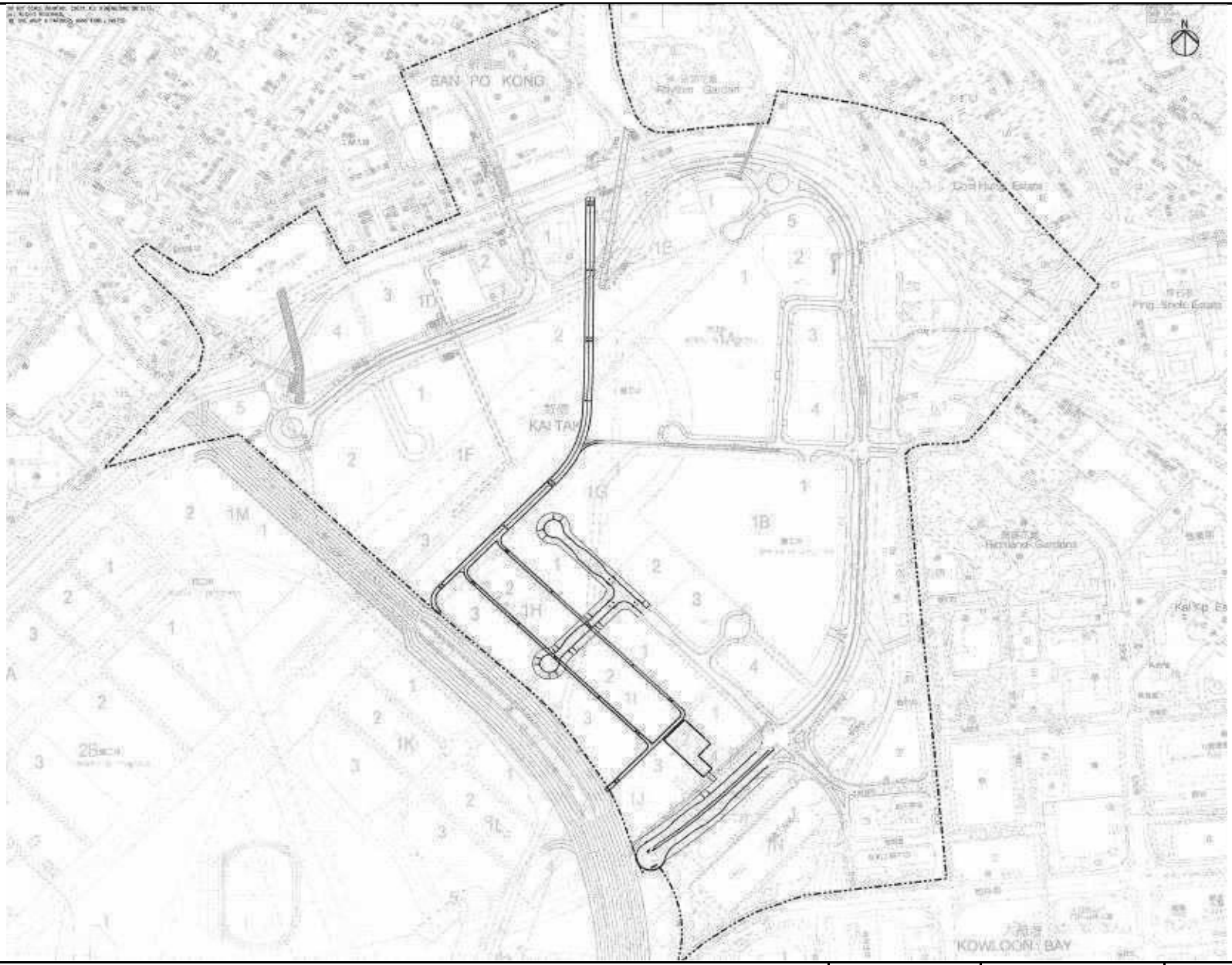
5.1 The mitigation measures recommended in the EIA report are considered effective in minimizing environmental impacts.

5.2 The Contractor has implemented the recommended mitigation measures except those mitigation measures not applicable at this stage.

5.3 Environmental monitoring works were performed in the reporting quarter and all monitoring results were checked and reviewed. No non-compliance (exceedances) of Action/Limit Level was recorded.

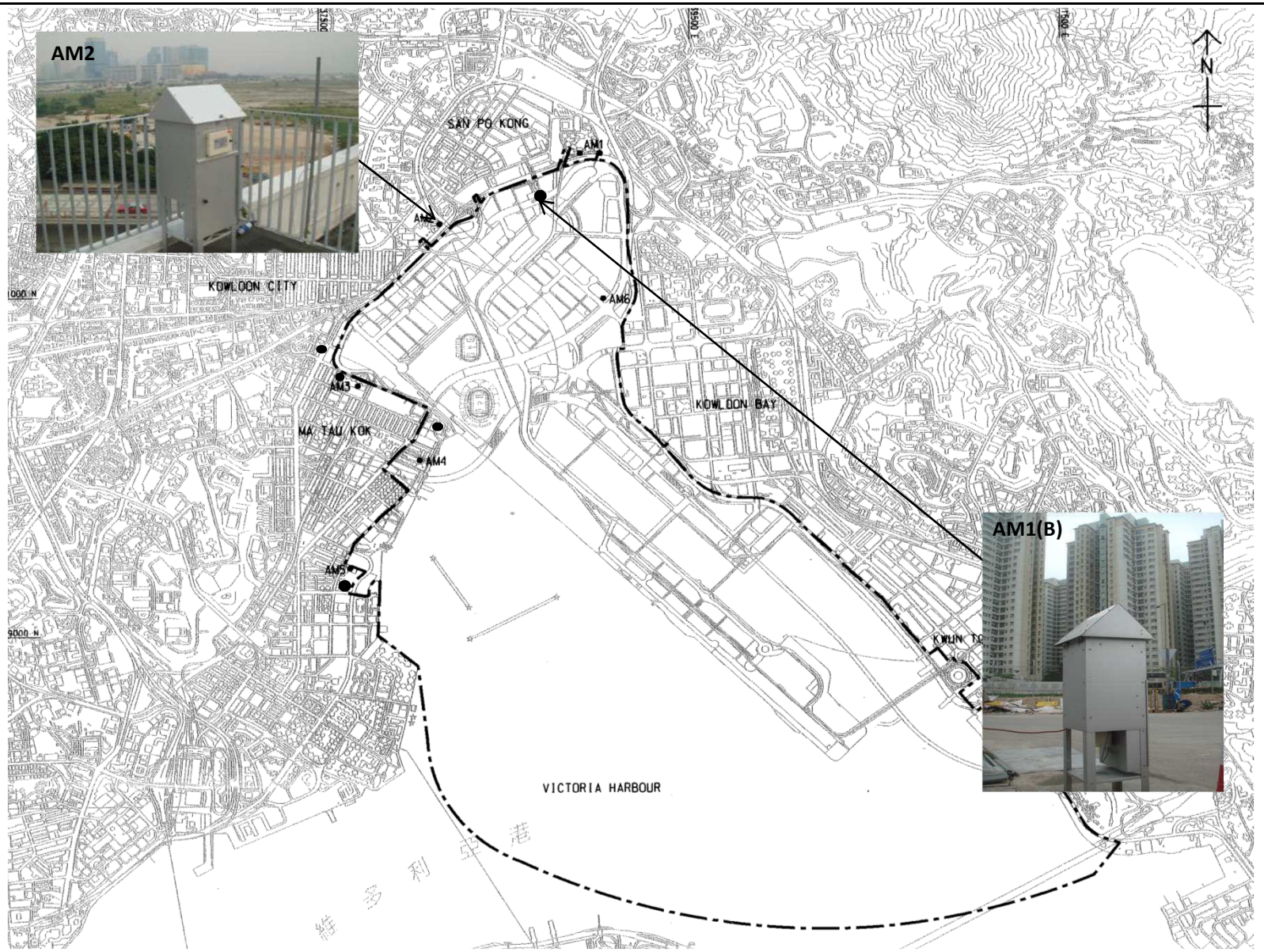
5.4 No environmental complaints and environmental prosecution were received in the reporting quarter.

FIGURES



Title: EP-344/2009 – New Sewage Pumping Stations Serving KTD and EP-337/2009 – New Distributor Roads Serving the Planned KTD	Scale: N.T.S	Project No.: MA11038	CINOTECH
	Date: Sep-11	Figure: 1	

Site Layout Plan



Title	Contract No. KL/2010/03 Environmental Monitoring Works for Kai Tak Development – Stage 2 Infrastructure Works at North Apron Area of Kai Tak Airport for Residential Development and Government Facilities Location of Air Quality Monitoring Stations	Scale: N.T.S Date: Jul 13	Project No.: MA11038 Figure: 2

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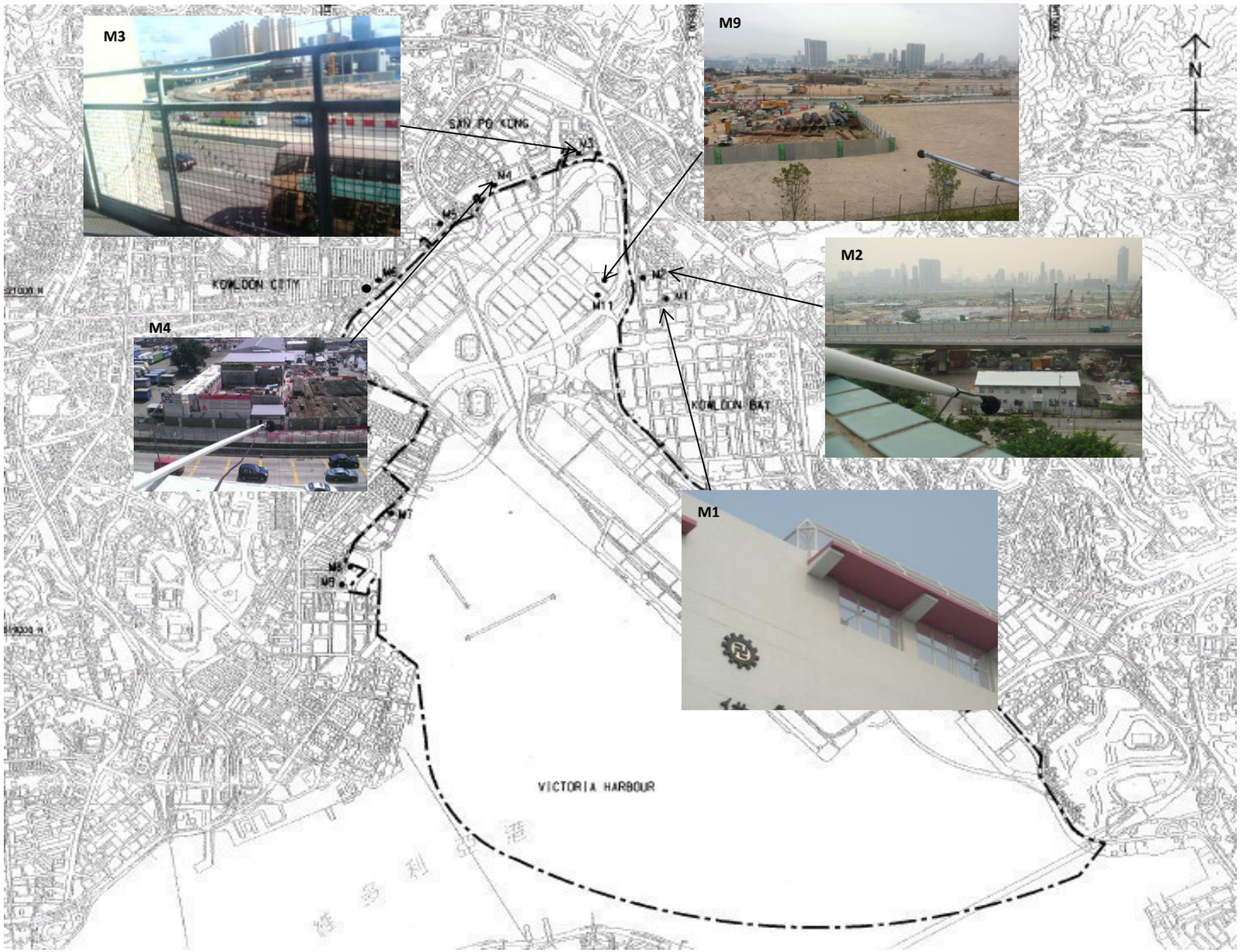

Title	Contract No. KL/2010/03 Kai Tak Development - Stage 2 infrastructure works at north apron area of Kai Tak Airport for residential development and government, institution or community facilities Noise Monitoring Stations under Contract No.: KL/2010/03	Scale: N.T.S Date: Apr-14	Project No.: MA11038 Figure: 3

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APPENDIX A
MONITORING REQUIREMENTS

Appendix A - Environmental Impact Monitoring Requirements

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
Air Quality	1 hour TSP	Three times / 6 days	• AM1(B) – Contractor site office (KL/2008/09)/ (KL/2012/02) • AM2 – Lee Kau Yan Memorial School • #AM6 – PA 15	• AM1(A) – Rooftop (about 9/F) Area • Temporary Alternative Monitoring Location to replace AM1(A) – Ground Floor (For 1-hr TSP monitoring in May 2013 and 24-hr TSP monitoring on 2, 8, 14 and 31 May 2013) • Temporary Alternative Monitoring Location (During the failure of electricity supply in the 4th week of May 2013) – Ground Floor Area (For 24-hr TSP monitoring on 24th and 25th May 2013) • AM1(B) – Ground Floor Area(From 26 June 2013 onward for 1-hr TSP monitoring and from 1 July 2013 onward for 24-hr TSP monitoring) • AM2 – Rooftop (about 8/F) Area • #AM6 – Site 1B4 (Planned)
	24 hour TSP	Once / 6 days		

Remarks: # The impact monitoring at these locations will only be carried out until existence of the sensitive receiver at the building.

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
Construction Noise	L_{eq}, L_{90} & L_{10} at 30 minute intervals during (0700 to 1900 on normal weekdays)	Once per week	• M1 (Buddhist Chi King Primary School) • M2 (S.K.H. Kowloon Bay Kei Lok Primary School) • M3 (Cognitio College) • M4 (Lee Kau Yan Memorial School) • M9 (Tak Long Estate) • #M10 (Site 1B4 (Planned))	• M1 - Facade measurement • M2 - Facade measurement • M3 - Facade measurement • M4 – Facade measurement • M9 – Facade measurement

Remarks: # The impact monitoring at these locations will only be carried out until existence of the sensitive receiver at the building.

APPENDIX B
ACTION AND LIMIT LEVELS FOR AIR QUALITY AND NOISE

Appendix B - Action and Limit Levels

Table B-1 Action and Limit Levels for 1-Hour TSP

Location	Action Level, µg/m^3	Limit Level, µg/m^3
AM1(B)	342	500
AM2	346	

Table B-2 Action and Limit Levels for 24-Hour TSP

Location	Action Level, µg/m^3	Limit Level, µg/m^3
AM1(B)	159	260
AM2	157	

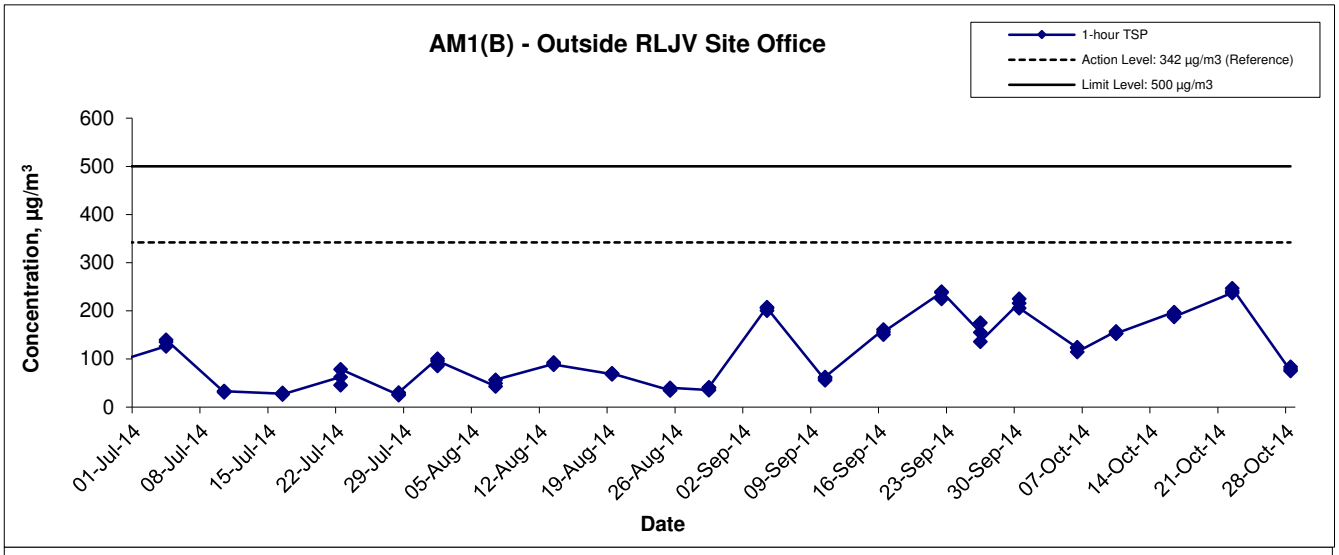
Table B-3 Action and Limit Levels for Construction Noise

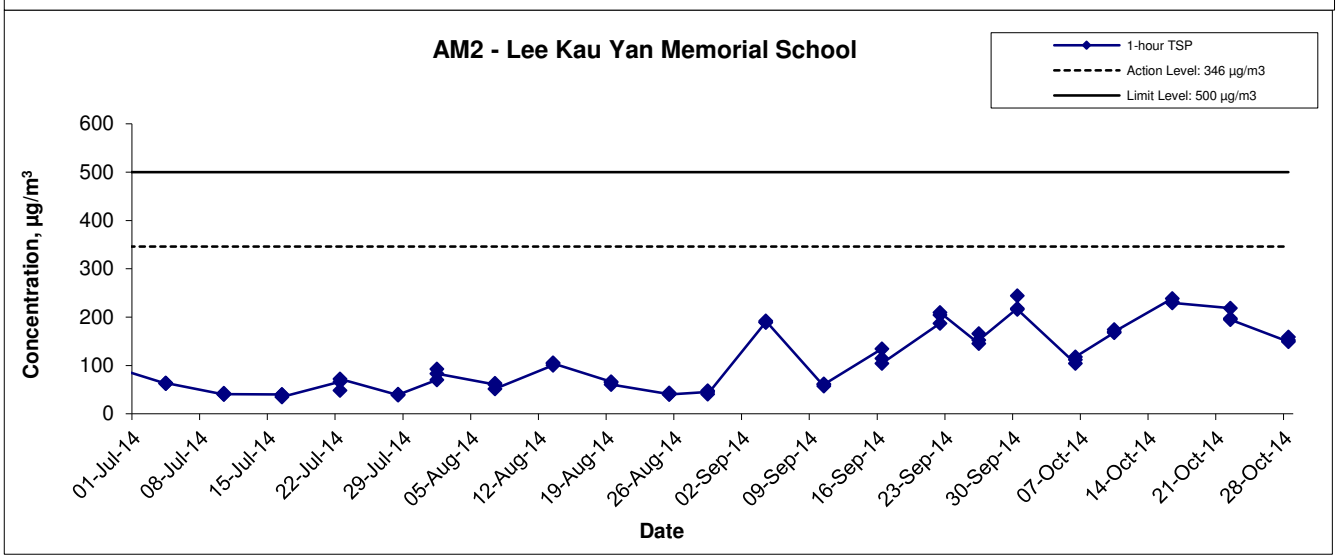
Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A) 70dB(A)/65dB(A)*

Remarks: If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed. *70dB(A) and 65dB(A) for schools during normal teaching periods and school examination periods, respectively.

APPENDIX C
GRAPHICAL PRESENTATION OF AIR QUALITY MONITORING RESULTS

1-hr TSP Concentration Levels





Title	Scale	Project No.
Contract No. KL/2010/03 Kai Tak Development - Stage 2 infrastructure works at north apron area of Kai Tak Airport for residential development and government, institution or community facilities Graphical Presentation of 1-hour TSP Monitoring Results	N.T.S	MA11038
	Date: Oct 14	Appendix: E

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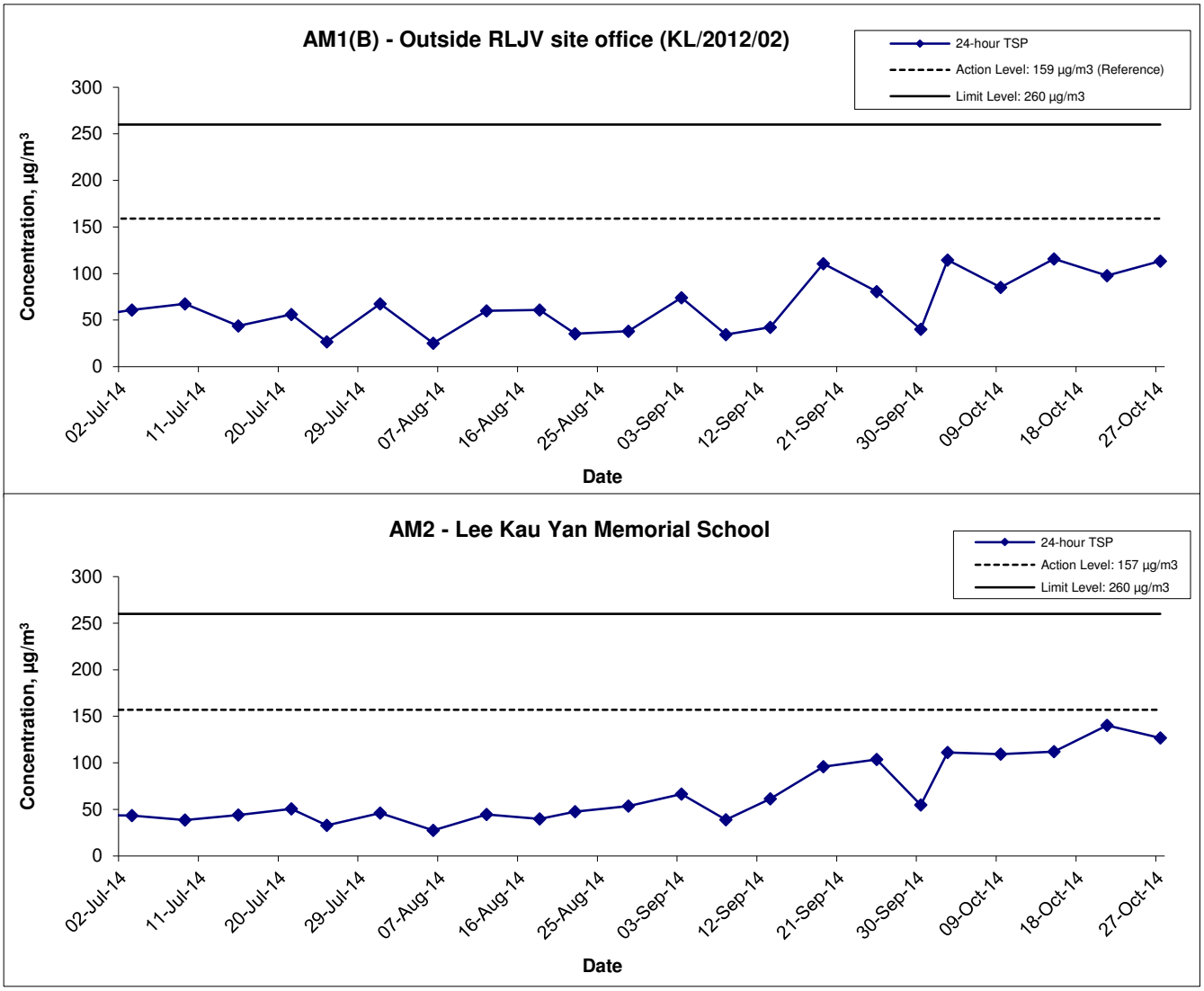
24-hr TSP Concentration Levels



Title: Graphical Presentation of 24-hour TSP Monitoring Results	Contract No. KL/2010/03 Kai Tak Development - Stage 2 infrastructure works at north apron area of Kai Tak Airport for residential development and government, institution or community facilities	Scale: N.T.S Date: Oct 14	Project No.: MA11038 Appendix: F

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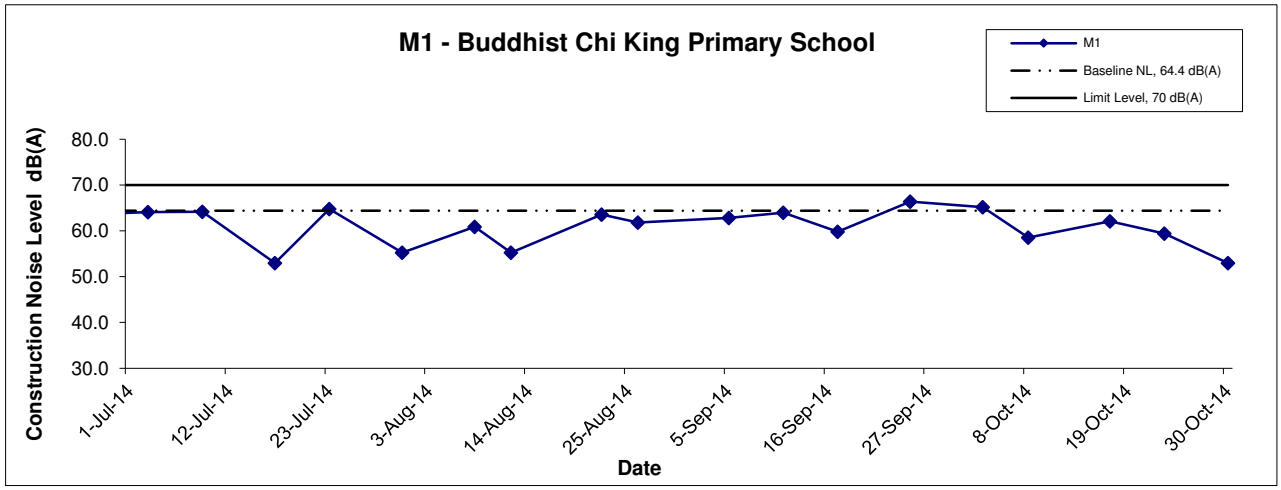
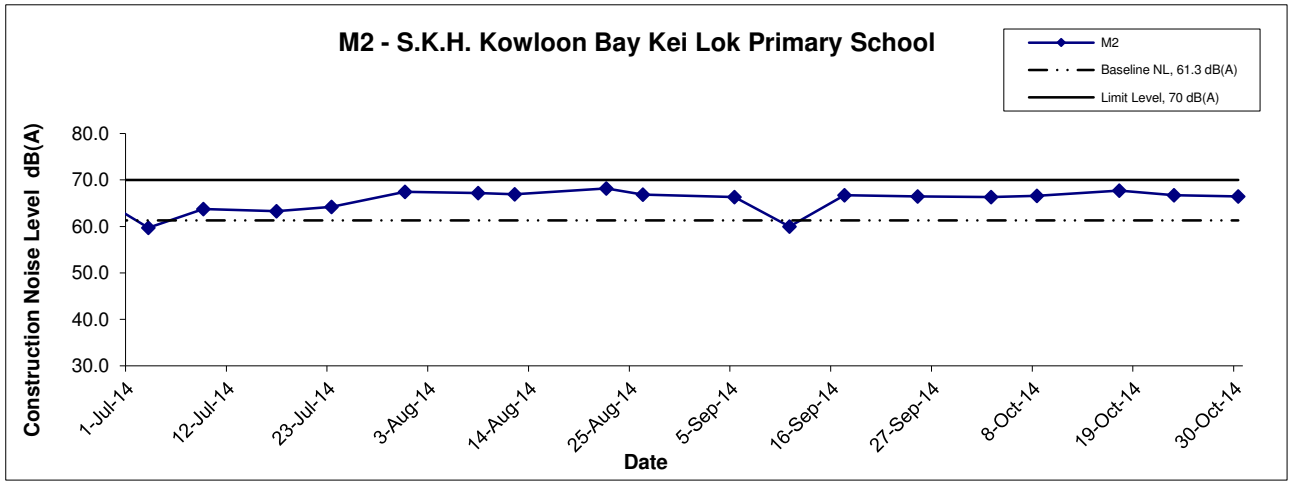
APPENDIX D
GRAPHICAL PRESENTATION OF NOISE MONITORING RESULTS

Noise Levels





Remarks: The construction noise levels in the Tables in Appendix G were adopted for plotting the graphs

Title: Graphical Presentation of Construction Noise Monitoring Results	Contract No. KL/2010/03 Kai Tak Development - Stage 2 infrastructure works at north apron area of Kai Tak Airport for residential development and government, institution or community facilities	Scale: N.T.S Date: Oct 14	Project No.: MA11038 Appendix: G

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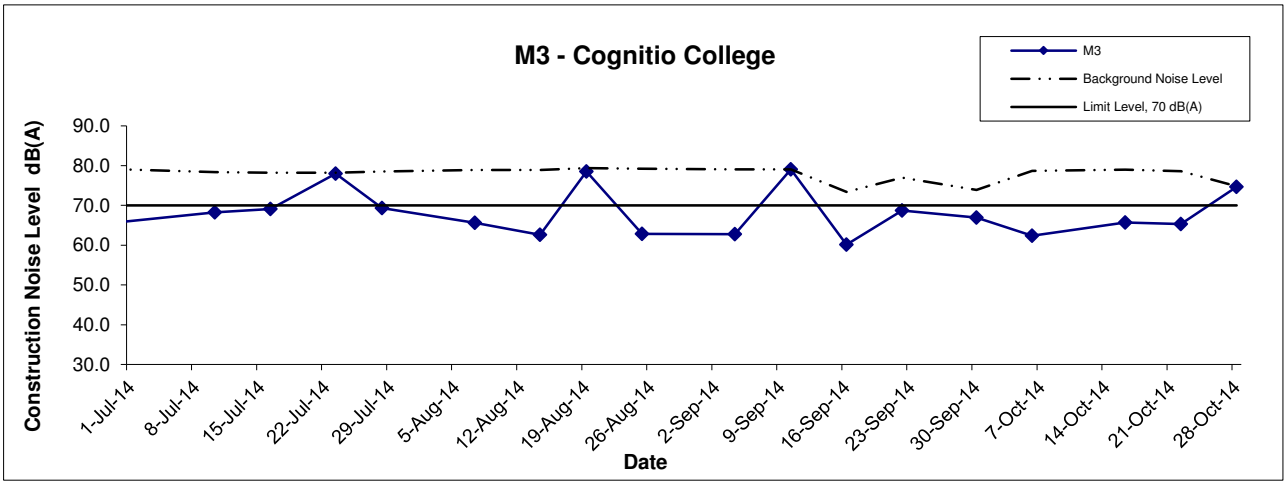
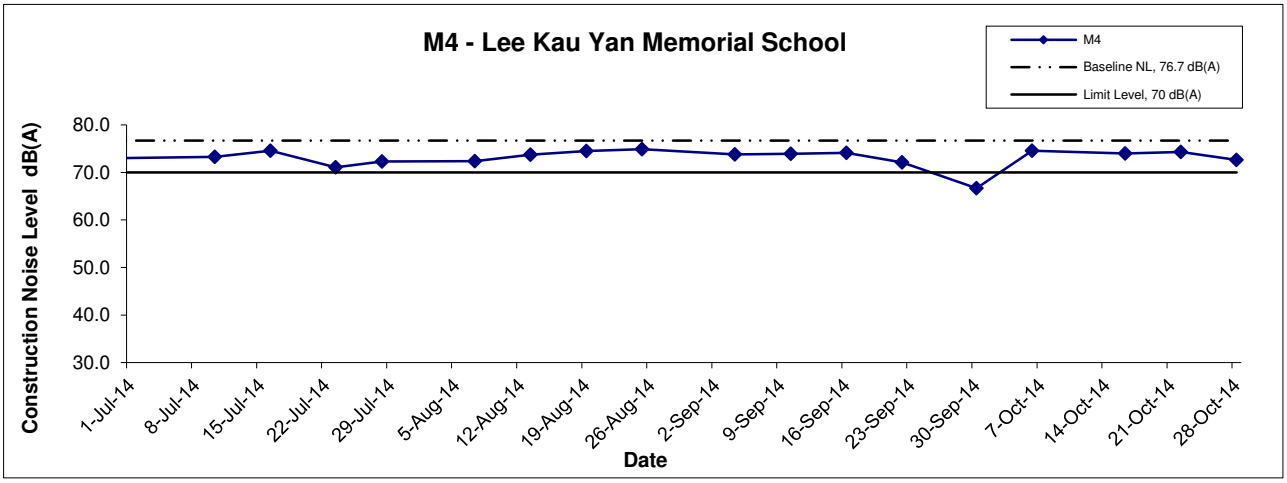
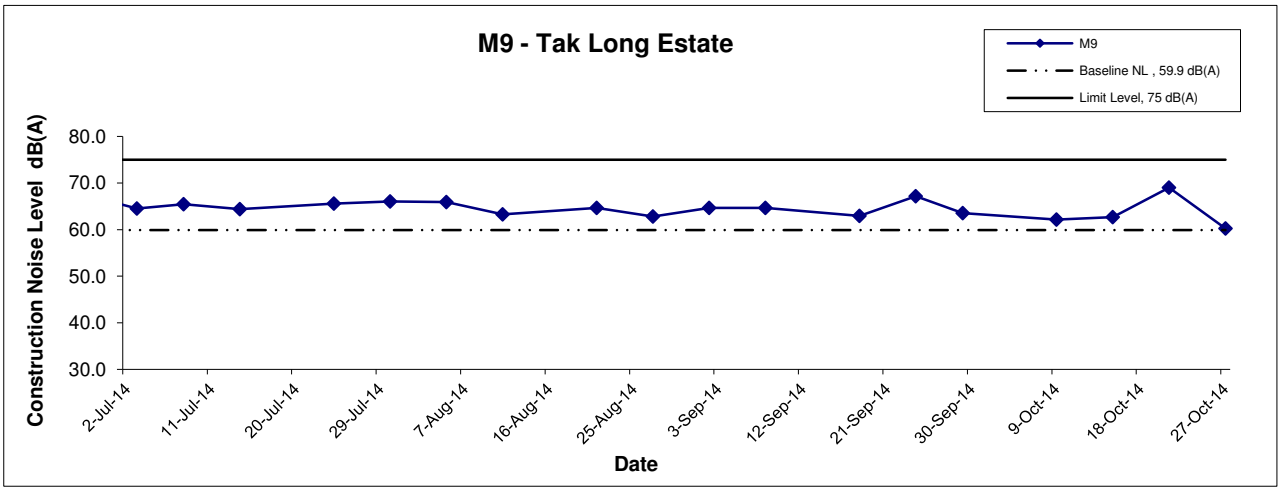
Noise Levels







Remarks: The construction noise levels in the Tables in Appendix G were adopted for plotting the graphs

Title: Graphical Presentation of Construction Noise Monitoring Results	Contract No. KL/2010/03 Kai Tak Development - Stage 2 infrastructure works at north apron area of Kai Tak Airport for residential development and government, institution or community facilities	Scale: N.T.S Date: Oct 14	Project No.: MA11038 Appendix: G

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APPENDIX E
ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

Appendix E - Summary of Implementation Schedule of Mitigation Measures for Construction Phase

Types of Impacts	Mitigation Measures	Status
Construction Dust	8 times daily watering of the work site with active dust emitting activities.	*
	Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimize cumulative dust impacts.	
	• Stockpiling site(s) should be lined with impermeable sheeting and bunded. Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.	*
	• Misting for the dusty material should be carried out before being loaded into the vehicle.	^
	• Any vehicle with an open load carrying area should have properly fitted side and tail boards.	^
	• Material having the potential to create dust should not be loaded from a level higher than the side and tail boards and should be dampened and covered by a clean tarpaulin.	^
	• The tarpaulin should be properly secured and should extent at least 300 mm over the edges of the sides and tailboards. The material should also be dampened if necessary before transportation.	^
	• The vehicles should be restricted to maximum speed of 10 km per hour and confined haulage and delivery vehicle to designated roadways insider the site. On-site unpaved roads should be compacted and kept free of lose materials.	^
	• Vehicle washing facilities should be provided at every	^

	vehicle exit point. • The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores. • Every main haul road should be scaled with concrete and kept clear of dusty materials or sprayed with water so as to maintain the entire road surface wet. • Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the three sides. • Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites. • DWFI compound for JVBC: a DWFI compound is proposed at the downstream of JVC to contain pollution in drainage systems entering the KTAC and KTTS by interception facilities until the ultimate removal of the pollution sources. Tidal barriers and desiliting facilities will form part of the compounds to prevent any accumulation of sediment within the downstream section of JVBC and hence fully mitigate the potential odour emissions from the headspace of JVBC near the existing discharge locations. The odour generating operations within the proposed desilting compound will be fully enclosed and the odorous air will be collected and treated by high	^ ^ ^ ^ N/A

	efficiency deodorizers before discharge to the atmosphere. • Desilting compound for KTN: Two desilting compounds are proposed for KTN (at Site 1D6 and Site 1P1) to contain pollution in drainage systems entering the KTAC and KTTS by interception facilities until the ultimate removal of the pollution sources. Tidal barriers and desiliting facilities will form part of the compounds to prevent any accumulation of sediment within the downstream section of KTN and hence fully mitigate the potential odour emissions from the headspace of KTN near the existing discharge locations. The odour generating operations within the proposed desilting compound will be fully enclosed and the odorous air will be collected and treated by high efficiency deodorizers before discharge to the atmosphere. • Decking or reconstruction of KTN within apron area: it is proposed to deck the KTN or reconstruct the KTN within the former Apron area into Kai Tak River from the south of Road D1 to the north of Road D2 along the existing alignment of KTN. The Kai Tak River will compose of a number of channels flowing with non-odorous fresh water and THEES effluent. The channel flowing with THEES effluent will be designed with the width of water surface of not more than 16m.	N/A N/A

	• Localised maintenance dredging: Localised maintenance dredging should be conducted to provide water depth of not less than 3.5m over the whole of KTAC and KTTS. With reference to the water depth data recorded during the odour survey, only some of the areas in the northern part of KTAC (i.e. to the north of taxiway bridge) including the area near the northern edge of KTAC, the area near western bank of KTAC, and the area near the JVC discharge have water depths shallower than 3.5m. The area involved would be about 40% of the northern KTAC and the dredging depth required would be from about 2.7m to less than 1m. The maintenance dredging to be carried out prior to the occupation of any new development in the immediate vicinity of KTAC to avoid potential localized odour impacts at the future ASRs during the maintenance dredging operation. • Improvement of water circulation in KTAC and KTTS: 600m gap opening at the northern part of the former Kai Tak runway, the water circulation in KTAC and KTTS would be substantially improved. Together with the improvement in water circulation, the DO level in KTAC and KTTS would also be increased. • In-situ sediment treatment by bioremediation: Bioremediation would be applied to the entire KTAC and KTTS.	^ N/A N/A

Construction Noise	Use of quiet PME, movable barriers barrier for Asphalt Paver, Breaker, Excavator and Hand-held breaker and full enclosure for Air Compressor, Bar Bender, Concrete Pump, Generator and Water Pump	^
	Good Site Practice: • Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program. • Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program. • Mobile plant, if any, should be sited as far away from NSRs as possible. • Machines and plant (such as trucks) that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum. • Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. • Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	^ N/A(1) ^ ^ ^ ^
	Scheduling of Construction Works during School Examination Period	^
	(i) Provision of low noise surfacing in a section of Road L2; and	N/A
	(ii) Provision of structural fins	N/A

	(i) Avoid the sensitive façade of class room facing Road L2 and L4; and	N/A
	(ii) Provision of low noise surfacing in a section of Road L2 & L4	N/A
	(i) Provision of low noise surfacing in a section of Road L4 before occupation of Site 1I1; and	N/A
	(ii) Setback of building about 5m from site boundary.	N/A
	Setback of building about 35m to the northwest direction at 1L3 and 5m at Site 1L2.	N/A
	(i) avoid any sensitive façades with openable window facing the existing Kowloon City Road network; and	N/A
	(ii) for the sensitive facades facing the To Kwa Wan direction, either setback the facades by about 5m to the northeast direction or do not provide the facades with openable window.	N/A
	(i) avoid any sensitive facades with openable window facing the existing To Kwa Wan Road or	N/A
	(ii) provision of 17.5m high noise tolerant building fronting To Kwa Wan Road and restrict the height of the residential block(s) located at less than 55m away from To Kwa Wan Road to no more than 25m above ground.	N/A
	(i) avoid any sensitive facades with openable window facing the slip road connecting Prince Edward Road East and San Po Kong or other alternative mitigation measures and at-source mitigation measures for the surrounding new local roads to minimise the potential traffic noise impacts from the slip road	N/A

	All the ventilation fans installed in the below will be provided with silencers or acoustics treatment. (i) SPS (ii) ESS (iii) Tunnel Ventilation Shaft (iv) EFTS depot Installation of retractable roof or other equivalent measures	N/A N/A N/A N/A N/A

Construction Water Quality	The following mitigation measures are proposed to be incorporated in the design of the SPS at KTD, including: • Dual power supply or emergency generator should be provided at all the SPSs to secure electrical power supply; • Standby pumps should be provided at all SPSs to ensure smooth operation of the SPS during maintenance of the duty pumps; • An alarm should be installed to signal emergency high water level in the wet well at all SPSs; and • For all unmanned SPSs, a remote monitor system connecting SPSs with the control station through telemetry system should be provided so that swift actions could be taken in case of malfunction of unmanned facilities. **Construction Phase** Marine-based Construction *Capital and Maintenance Dredging for Cruise Terminal* Mitigation measures for construction of the proposed cruise terminal should follow those recommended in the approved EIA for CT Dredging.	N/A N/A N/A N/A ^

	Fireboat Berth, Runway Opening and Road T2 Silt curtains should be deployed around the close grab dredger to minimize release of sediment and other contaminants for any dredging and filling activities in open water. Dredging at and near the seawall area for construction of the public landing steps cum fireboat berth should be carried out at a maximum production rate of 1,000m^3 per day using one grab dredger. The proposed construction method for runway opening should adopt an approach where the existing seawall at the runway will not be removed until completion of all excavation and dredging works for demolition of the runway. Thus, excavation of bulk fill and majority of the dredging works will be carried out behind the existing seawall, and the sediment plume can be effectively contained within the works area. As there is likely some accumulation of sediments alongside the runway, there will be a need to dredge the existing seabed after completion of all the demolition works. Dredging alongside the 600m opening should be carried out at a maximum production rate of 2,000m^3 per day using one grab dredger. Dredging for Road T2 should be conducted at a maximum rate of 8,000m^3 per day (using four grab dredgers) whereas the sand filling should be conducted at a maximum rate of 2,000m^3 per day (using two grab dredgers). Silt screens shall be applied to seawater intakes at WSD seawater intake.	^ ^ ^ N/A (1) ^

	Land-based Construction *Construction Runoff* Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. Construction runoff related impacts associated with the above ground construction activities can be readily controlled through the use of appropriate mitigation measures which include: • use of sediment traps • adequate maintenance of drainage systems to prevent flooding and overflow Construction site should be provided with adequately designed perimeter channel and pre-treatment facilities and proper maintenance. The boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94.	^ ^ ^ ^

	Ideally, construction works should be programmed to minimise surface excavation works during the rainy season (April to September). All exposed earth areas should be completed as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.	^
	Sediment tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m^3 capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.	*
	Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50 m^3 should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.	^
	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.	*

	Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events.		*
	Oil interceptors should be provided in the drainage system and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor should have a bypass to prevent flushing during periods of heavy rain.		^
	All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and located wheel washing bay should be provided at every site exit, and wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.		^
	Drainage It is recommended that on-site drainage system should be installed prior to the commencement of other construction activities. Sediment traps should be installed in order to minimise the sediment loading of the effluent prior to discharge into foul sewers. There should be no direct discharge of effluent from the site into the sea.		^

	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage should be reinstated to its original condition when the construction work has finished or the temporary diversion is no longer required.	^
	All fuel tanks and storage areas should be provided with locks and be located on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank, to prevent spilled fuel oils from reaching the coastal waters of the Victoria Harbour WCZ.	*
	Sewage Effluent Construction work force sewage discharges on site are expected to be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage may need to be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets should be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor should also be responsible for waste disposal and maintenance practices.	^
	Stormwater Discharges Minimum distances of 100 m should be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes	^

	Debris and Litter In order to maintain water quality in acceptable conditions with regard to aesthetic quality, contractors should be required, under conditions of contract, to ensure that site management is optimised and that disposal of any solid materials. litter or wastes to marine waters does not occur	^
	Construction Works at or in Close Proximity of Storm Culvert or Seafront The proposed works should preferably be carried out within the dry season where the flow in the drainage channel /storm culvert/ nullah is low.	^
	The use of less or smaller construction plants may be specified to reduce the disturbance to the bottom sediment at the drainage channel /storm culvert / nullah.	^
	Temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from any water courses during carrying out of the construction works.	^
	Stockpiling of construction materials and dusty materials should be covered and located away from any water courses.	*
	Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers.	*
	Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the waterfront, where practicable.	^

		Mitigation measures to control site runoff from entering the nearby water environment should be implemented to minimize water quality impacts. Surface channels should be provided along the edge of the waterfront within the work sites to intercept the runoff.	^
		Construction effluent, site run-off and sewage should be properly collected and/or treated.	*
		Any works site inside the storm water courses should be temporarily isolated, such as by placing of sandbags or silt curtains with lead edge at bottom and properly supported props to prevent adverse impact on the storm water quality.	^
		Silt curtain may be installed around the construction activities at the seafront to minimize the potential impacts due to accidental spillage of construction materials.	^
		Proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert/drainage channel/sea.	^
		Supervisory staff should be assigned to station on site to closely supervise and monitor the works	^
		Marine water quality monitoring and audit programme shall be implemented for the proposed sediment treatment operation.	^

		Good Site Practices It is not anticipated that adverse waste management related impacts would arise, provided that good site practices are adhered to. Recommendations for good site practices during construction activities include: • Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site • Training of site personnel in proper waste management and chemical waste handling procedures • Provision of sufficient waste disposal points and regular collection for disposal • Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers • A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites)	^ ^ * ^ ^

	Waste Reduction Measures Good management and control can prevent the generation of a significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: • Sort C&D waste from demolition of the remaining structures to recover recyclable portions such as metals • Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal • Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force • Any unused chemicals or those with remaining functional capacity should be recycled • Proper storage and site practices to minimise the potential for damage or contamination of construction materials Dredged Marine Sediment The basic requirements and procedures for dredged mud disposal are specified under the ETWB TCW No. 34/2002. The management of the dredging, use and disposal of marine mud is monitored by the MFC, while the licensing of marine dumping is required under the Dumping at Sea Ordinance and is the responsibility of the Director of Environmental Protection (DEP)	^ ^ ^ ^ ^ ^

	The dredged marine sediments would be loaded onto barges and transported to the designated disposal sites allocated by the MFC depending on their level of contamination. Sediment classified as Category L would be suitable for Type 1 - Open Sea Disposal. Contaminated sediment would require either Type 1 – Open Sea Disposal (Dedicated Sites), Type 2 - Confined Marine Disposal, or Type 3 – Special Treatment / Disposal and must be dredged and transported with great care in accordance with ETWB TCW No. 34/2002. Subject to the final allocation of the disposal sites by MFC, the dredged contaminated sediment must be effectively isolated from the environment and disposed properly at the designated disposal site	^

	It will be the responsibility of the contractor to satisfy the appropriate authorities that the contamination levels of the marine sediment to be dredged have been analysed and recorded. According to the ETWB TCW No. 34/2002, this will involve the submission of a formal Sediment Quality Report to the DEP, prior to the dredging contract being tendered. The contractor for the dredging works should apply for allocation of marine disposal sites and all necessary permits from relevant authorities for the disposal of dredged sediment. During transportation and disposal of the dredged marine sediments requiring Type 1, Type 2, or Type 3 disposal, the following measures should be taken to minimise potential impacts on water quality: • Bottom opening of barges should be fitted with tight fitting seals to prevent leakage of material. Excess material should be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved • Monitoring of the barge loading should be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels should be equipped with automatic self-monitoring devices as required under the Dumping at Sea Ordinance and as specified by the DEP • Barges or hopper barges should not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation	^ ^ ^

	Construction and Demolition Material Mitigation measures and good site practices should be incorporated into contract document to control potential environmental impact from handling and transportation of C&D material. The mitigation measures include: • Where it is unavoidable to have transient stockpiles of C&D material within the Project work site pending collection for disposal, the transient stockpiles should be located away from waterfront or storm drains as far as possible • Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric • Skip hoist for material transport should be totally enclosed by impervious sheeting • Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site • The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores • The load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle • All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet • The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading	^ * ^ ^ ^ ^ ^ ^

	When delivering inert C&D material to public fill reception facilities, the material should consist entirely of inert construction waste and of size less than 250mm or other sizes as agreed with the Secretary of the Public Fill Committee. In order to monitor the disposal of the surplus C&D material at the designed public fill reception facility and to control fly tipping, a trip-ticket system as stipulated in the ETWB TCW No. 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Materials" should be included as one of the contractual requirements and implemented by an Environmental Team undertaking the Environmental Monitoring and Audit work. An Independent Environmental Checker should be responsible for auditing the results of the system. Chemical Waste After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals should be collected by a licensed collector for disposal at the CWTF or other licensed facility, in accordance with the *Waste Disposal (Chemical Waste) (General) Regulation* General Refuse General refuse should be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Effective collection and storage methods (including enclosed and covered area) of site wastes would be required to prevent waste materials from being blown around by wind, wastewater discharge by flushing or leaching into the marine environment, or creating odour nuisance or pest and vermin problem	^ ^ *

Landscape and Visual	CM1 All existing trees should be carefully protected during construction.	^
	CM2 Trees unavoidably affected by the works should be transplanted where practical. Detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBC 2/2004 and 3/2006. Final locations of transplanted trees should be agreed prior to commencement of the work.	^
	CM3 Control of night-time lighting.	N/A(1)
	CM4 Erection of decorative screen hoarding.	^

Remarks:	^ Compliance of mitigation measure;	X Non-compliance of mitigation measure;
	N/A Not Applicable at this stage; N/A(1) Not observed;	•Non-compliance but rectified by the contractor;
	* Recommendation was made during site audit but improved/rectified by the contractor.	

APPENDIX F
SITE AUDIT SUMMARY

Appendix F Summary of Observation and Recommendation Made during Site Inspection

Summary of Observation and Recommendation Made during Site Inspection in August 2014

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	6/8/14	Gullies should be sealed by sand bag bunds to prevent muddy water discharge through the gullies. (Road D2)	Item was found outstanding and remarked on 13/8/14.
	6/8/14	Large quantity of muddy water was being discharged to the nullah at the site opposite to KTOB. Muddy water should be treated before discharging.	Rectification/improvement was observed during the follow-up audit session.
	13/8/14	Silty runoff entering gullies during rainstorm was observed. The Contractor should provide proper sand bag bund to gullies to prevent silty water entering public drain. (Road D2)	Rectification/improvement was observed during the follow-up audit session.
	13/8/14	Hole on sheet pile should be covered to prevent runoff leakage. (site opposite to KTOB)	Rectification/improvement was observed during the follow-up audit session.
	20/8/14	Ponding of water should be cleared after rain. (Road D2)	Rectification/improvement was observed during the follow-up audit session.
Air Quality	27/8/14	Water spraying should be provided more frequently to exposed area to suppress dust emission.	Rectification/improvement was observed during the follow-up audit session.
Noise	--	--	--
Waste/Chemical Management	20/8/14	Construction waste along new pedestrian street should be removed.	Rectification/improvement was observed during the follow-up audit session.
Landscape and Visual	--	--	--
Permits /Licences	--	--	--

Summary of Observation and Recommendation Made during Site Inspection in September 2014

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	3/9/14	Stagnant water should be removed to avoid accumulation. (PS1A)	Rectification/improvement was observed during the follow-up audit session.
	10/9/14	Sand bag bund for gullies should be maintained. (Road D2)	Rectification/improvement was observed during the follow-up audit session.
	18/9/14	General refuse and stagnant water in receptacle should be removed. (near pumping station PS1A)	Rectification/improvement was observed during the follow-up audit session.
	24/9/14	Sedimentation tank should be properly maintained. (Portion N)	Rectification/improvement was observed during the follow-up audit session.
Air Quality	3/9/14	Dusty stockpile should be covered properly with impervious sheet. (Road L5)	Rectification/improvement was observed during the follow-up audit session.
	10/9/14	Stockpiles of dusty materials should be properly covered to suppress dust emission. (Road D2 and pedestrian street)	Rectification/improvement was observed during the follow-up audit session.
	24/9/14	Dusty stockpile should be properly covered to suppress dust emission. (Road L5)	Rectification/improvement was observed during the follow-up audit session.
	24/9/14	Water spraying should be provided more frequently for exposed area. (next to PS1A)	Rectification/improvement was observed during the follow-up audit session.
Noise	--	--	--
Waste/Chemical Management	18/9/14	General refuse and stagnant water in receptacle should be removed. (near pumping station PS1A)	Rectification/improvement was observed during the follow-up audit session.
	18/9/14	Accumulated water in drip tray for oil container should be properly removed as chemical waste. (opposite to KTOB)	Rectification/improvement was observed during the follow-up audit session.
Landscape and Visual	--	--	--
Permits /Licences	--	--	--

Summary of Observation and Recommendation Made during Site Inspection in October 2014

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	8/10/14	Sand near gully should be cleared to prevent silty runoff entering drain during rain. (Road D2)	Rectification/improvement was observed during the follow-up audit session.
Air Quality	8/10/14	Opened cement bags should be temporarily covered and empty package should be regularly removed to suppress dust emission. (Road L5)	Rectification/improvement was observed during the follow-up audit session.
	16/10/14	Water spraying should be provided more frequently to unpaved area to suppress dust emission. (near KTOB)	Rectification/improvement was observed during the follow-up audit session.
	22/10/14	Cement bag should be covered to avoid dust generation.	Rectification/improvement was observed during the follow-up audit session.
	22/10/14	Coverage should be provided for all dusty materials to avoid dust generation.	Rectification/improvement was observed during the follow-up audit session.
	29/10/14	Stockpile of dusty materials should be covered. (PS1A)	Rectification/improvement was observed during the follow-up audit session.
	29/10/14	Haul Road should be sprayed with water to avoid dust generation. (PS1A & near KTOB)	Rectification/improvement was observed during the follow-up audit session.
Noise	--	--	--
Waste/Chemical Management	3/10/14	Construction waste in receptacle should be regularly removed to provide enough capacity for waste collection. (near PS1A)	Rectification/improvement was observed during the follow-up audit session.
	8/10/14	Opened cement bags should be temporarily covered and empty package should be regularly removed to suppress dust emission. (Road L5)	Rectification/improvement was observed during the follow-up audit session.
	22/10/14	Drip tray should be provided for oil/chemical container.	Rectification/improvement was observed during the follow-up audit session.
	29/10/14	Construction waste and materials should be cleared. (PS1A & Road L5)	Rectification/improvement was observed during the follow-up audit session.
Landscape and Visual	--	--	--
Permits /Licences	--	--	--

APPENDIX G
WASTE GENERATED QUANTITY

Department: CEDD
Contract No.: KL/2010/03
Project : KAI TAK DEVELOPMENT – STAGE 2 Infrastructure Works at North Apron Area of Kai Tak Airport for Residential Development and Government Facilities

Peako 必高工程

Monthly Summary Waste Flow Table for 2014

As at 10 November 2014

Month	Total Quantity Generated	Actual Quantities Inert C & D Materials Generated Monthly					Actual Quantities of C & D Wastes Generated Monthly					
		Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ Cardboard packaging	Plastics (see Note 3)	Chemical Waste		Others, e.g. general refuse
										Battery(No.)	Oil(in L)	
	(in m³)	(in m³)	(in m³)	(in m³)	(in m³)	(in m³)	(in kg)	(in kg)	(in kg)			(in m³)
Accumulated (Jul 11-Dec 13)	4985.82	7510	3280	0	601.99	0	0	0	0	0	0	153.83
Jan'2014	35.07	150	120	0	0	0	0	0	0	0	0	5.07
Feb'2014	-26.27	50	80	0	0	0	0	0	0	0	0	3.73
Mar'2014	-14.48	0	20	0	0	0	0	0	0	0	0	5.52
Apr'2014	7.05	0	0	0	0	0	0	0	0	0	0	7.05
May'2014	7.68	5	0	0	0	0	0	0	0	0	0	2.68
Jun'2014	5.9	0	0	0	0	0	0	0	0	0	0	5.9
Sub-total (Jan 14-Jun	14.95	205	220	0	0	0	0	0	0	0	0	29.95
Jul'2014	3.39	0	0	0	0	0	0	0	0	0	0	3.39
Aug'2014	17.13	10	0	0	0	0	0	0	0	0	0	7.13
Sep'2014	59.81	3	0	0	51.71	0	0	0	0	0	0	5.1
Oct'2014	133.35	10	0	0	118.96	0	0	0	0	0	0	4.39
Nov'2014												
Dec'2014												
Total												

Forecast of Total Quantities of C&D Materials to be Generated from the Contract*											
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ Cardboard packaging	Plastics (see Note 3)	Chemical Waste		Others, e.g. general refuse
									Battery(No.)	Oil(in L)	
(in m³)	(in m³)	(in m³)	(in m³)	(in m³)	(in m³)	(in kg)	(in kg)	(in kg)			(in m³)
4650	7000	3300	0	700	0	0	0	0	0	0	250

Notes:
1 The performance targets are given in PS clause 25.20A(4)
2 The waste flow table shall also include C & D materials that are specified in the Contract to be imported for use at the Site.
3 Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging material.
4 The summary table shall be submitted to the Engineer's Representative monthly together with the Waste Flow Table for review and monitoring in accordance with the PS Clause 25.20A(4)

APPENDIX H
SUMMARY OF EXCEEDANCES

Contract No. KL/2010/03
Kai Tak Development – Stage 2 Infrastructure Works at North Apron Area of Kai Tak Airport for Residential Development and Government Facilities

Appendix H – Summary of Exceedance

Exceedance Report for Contract No. KL/2010/03

(A) Exceedance Report for Air Quality
(NIL in the reporting period)

(B) Exceedance Report for Construction Noise
(NIL in the reporting period)

(C) Exceedance Report for Landscape and Visual
(NIL in the reporting period)

ANNEX I
COMPARISON OF EM&A DATA AND EIA PREDICTIONS

Annex I – Comparison of EM&A Data and EIA Predictions

Comparison of 1-hr TSP data with EIA predictions

Station	Predicted 1-hr TSP conc.				
	Scenario1 (Mid 2009 to Mid 2013), µg/m³	**Scenario2 (Mid 2013 to Late 2016), µg/m³**	**Reporting Month (Aug 14), µg/m³**	**Reporting Month (Sep 14), µg/m³**	**Reporting Month (Oct 14), µg/m³**
AM1(B) – Contractor Site Office of KL/2008/09 / KL/2010/02	192	298	63	171	158
AM2 – Lee Kau Yan Memorial School	290	312	66	158	174

Comparison of 24-hr TSP data with EIA predictions

Station	Predicted 24-hr TSP conc.				
	Scenario1 (Mid 2009 to Mid 2013), µg/m³	**Scenario2 (Mid 2013 to Late 2016), µg/m³**	**Reporting Month (Aug 14), µg/m³**	**Reporting Month (Sep 14), µg/m³**	**Reporting Month (Oct 14), µg/m³**
AM1(B) – Contractor Site Office of KL/2008/09	192	298	44	64	105
AM2 – Lee Kau Yan Memorial School	145	169	43	70	120

Comparison of Noise Monitoring Data with EIA predictions

Stations	Predicted Mitigated Construction Noise Levels during Normal Working Hour ($L_{eq\ (30min)}$ dB(A))	Reporting Month (Aug 14), $L_{eq\ (30min)}$ dB(A)	Reporting Month (Sep 14), $L_{eq\ (30min)}$ dB(A)	Reporting Month (Oct 14), $L_{eq\ (30min)}$ dB(A)
M1 - Buddhist Chi King Primary School	51 – 68	55.3-63.5	59.8-66.4	52.9-65.1
M2 - S.K.H. Kowloon Bay Kei Lok Primary School	51 – 70	66.8-68.2	60.0-66.7	66.3-67.7
M3 - Cognitio College	47 – 75	62.6-78.5*	60.1-79.1*	62.4-74.7
M4 - Lee Kau Yan Memorial School	47 – 74	72.4-74.9(1)	66.7-74.1(1)	72.6-74.6(1)
M9 - Tak Long Estate	N/A	62.8-65.9	63.0-67.2	60.3-69.0

Remark*: Since the background noise level recorded during 12:00 to 13:00 was higher than those recorded during the construction period, the recorded noise levels were considered non-valid exceedance of Noise Limit Level.

Note 1: Baseline level at noise monitoring M4 was 76.7 dB(A) and the recorded noise levels were considered non-valid exceedance of Noise Limit Level.