

**Central Reclamation, Phase III
Quarterly EM&A Report No. 42
(November 2013 through January 2014)**

<i>Client</i>	Civil Engineering Development Department, Hong Kong Hong Kong Island and Islands Development Office		
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Abbreviations & Acronyms

ACL	Atkins China Limited
AL	Action Level
CEDD	Civil Engineering and Development Department
CRIII	Central Reclamation Phase III
DO	Dissolved Oxygen
EIA	Environmental Impact Assessment
EIAO	Environmental Impact Assessment Ordinance
EM&A	Environmental Monitoring and Audit
EPD	Environmental Protection Department
ER	Engineer's Representatives
ET	Environmental Team
IEC	Independent Environmental Checker
LCSD	Leisure and Cultural Services Department
LCSVO-JV	Leighton China State Van Oord Joint Venture
LL	Limit Level
PLA	People's Liberation Army Forces Hong Kong
TDD	Territory Development Department
TSP	Total Suspended Particulates
SS	Suspended Solids
WMP	Waste Management Plan

Executive Summary

The Central Reclamation Phase III (CRIII) Works, Contract No. HK 12/02, was awarded to Leighton China State Van Oord Joint Venture (LCSVO-JV) by the Civil Engineering and Development Department (CEDD). (Previously called the Territory Development Department before merger with the Civil Engineering Department on 1st July 2004.)

The works under the Contract HK 12/02 commenced on 28th February 2003. Contract HK 16/03 for the CRIII Hinterland Drainage Improvement Works was awarded to Wang Kee Construction Co. Ltd., and works for this contract commenced on 17th December 2003.

Atkins China Limited (ACL) has been commissioned by CEDD as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme described in the approved EM&A Manual for the CRIII Project. The noise and air monitoring works have been handed over to the ET of the Contract No. HK/2011/07. "Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and Testing Works (Stage 2)" since May 2013. Therefore, noise and air monitoring data was obtained from the "Wan Chai Development Phase II and Central – Wan Chai Bypass and Island Eastern Corridor Link" project website.

This is the 42nd quarterly EM&A Report for the works specified in Section 1.3 of the CRIII EIA Report. This report summarises the monitoring results and audit findings of the EM&A program during the reporting period from 1st November 2013 to 31st January 2014.

Environmental Monitoring and Audit Progress

Air quality and noise quality monitoring were conducted during this quarter. The post project water quality monitoring was completed on October 2011. Weekly environmental site inspections were also conducted during this reporting quarter.

Additional water quality monitoring for the "the water quality of embayment area between the eastern seawall and the Hong Kong Convention and Exhibition Centre (HKCEC) upon completion of eastern seawall", in accordance with the Environmental Permit No. EP-01/122/2003/D Condition 3.9, was completed on October 2011.

Exceedance of Action and Limit Levels

No exceedances in TSP level were recorded at the monitoring stations during this reporting quarter.

1 exceedance in noise level was recorded at City Hall during the reporting quarter.

Complaint Log

There was no complaint received in relation to the environmental impact during the reporting period.

Notifications of Summons and Prosecutions

There were no notifications of summons and prosecutions received during this reporting quarter.

Site Inspection and Audit

Weekly environmental site inspections were carried out during this quarter. Minor deficiencies noted during the site inspections were rectified by the Contractor upon receipt of notification. The observations and findings are outlined below:

8th November 2013

Without Environmental Permit due to the changes of site conditions.

16th November 2013

Environmental Permit was not observed posted due to site clearance work during the site inspection.

20th November 2013

Nil.

27th November 2013

Nil.

7th December 2013

Nil.

11th December 2013

Nil.

20th December 2013

Nil.

27th December 2013

Nil.

3rd January 2014

Nil.

10th January 2014

Nil.

17th January 2014

Nil.

24th January 2014

Nil.

29th January 2014

Nil.

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1. INTRODUCTION

1.1 Basic Project Information

Civil Engineering and Development Department (CEDD) is the Project Proponent of the Central Reclamation Phase III Project (CRIII).

The Main Works Contract HK 12/02 for CRIII commenced on 28th February 2003 and was awarded to Leighton-China State-Van Oord Joint Venture (LCSVO-JV) for the construction of the CRIII Engineering Works. The main construction works that were identified in the EIA Report for the Project, requiring environmental monitoring and audit, have commenced.

This is the 42nd quarterly EM&A Report for the works specified in Section 1.3 of the CRIII EIA Report. This report summarises the monitoring results and audit findings of the EM&A program during the reporting period from 1st November 2013 to 31st January 2014.

1.2 Project Organisation and Management Structure

Atkins China Limited (ACL) has been commissioned by CEDD as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme described in the approved EM&A Manual and required under Clause 4 of the Variation of Further Environmental Permit (No. EP-01/122/2003/A) issued to Leighton-China State-Van Oord Joint Venture in December 2007 for the CRIII Project. A variation of the Further Environmental Permit for the Project (EP-01/122/2003/B) and (EP-01/122/2003/C) were granted on 26 May 2008 and 17 July 2009. This was then superseded by another variation of the Further Environmental Permit for the Project (EP-01/122/2003/D) granted on 1 September 2009. The noise and air monitoring works have been handed over to the ET of the Contract No. HK/2011/07. "Wanchai Development Phase II and Central-Wanchai Bypass Sampling, Field Measurement and Testing Works (Stage 2)" since May 2013. Therefore, noise and air monitoring data was obtained from the "Wan Chai Development Phase II and Central – Wan Chai Bypass and Island Eastern Corridor Link" project website. The CRIII Project Organisation is shown in **Annex A**.

1.3 Works Undertaken

The works undertaken in the project area requiring environmental monitoring and audit as identified in the EIA Report (not including Chai Wan Basin) during this reporting quarter include:

- Remaining Landscaping work behind GPO boundary wall – completed
- Replacement of 7 nos. KP trees – completed
- Additional surface drainage work behind ACL site office - completed
- Remaining soft landscaping work behind GPO boundary - completed
- Installation of street lights behind GPO boundary wall - completed

Introduction

- Remaining footpath construction adjacent to GPO – completed
- Installation of directional signs at Road P2 - completed
- Remove two existing E&M drawpits at East Bound Road P2 near Road D8 - completed
- Additional surface drain at ACL CER office compound – completed
- The Contractor's works programme for the quarter is provided in **Annex E**.

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2. EM&A REQUIREMENTS

2.1 Summary of Impact EM&A Requirements

The EM&A programme requires environmental monitoring for air quality, noise, waster quality, waste management and landscape and visual aspects as specified in the CRIII Project EIA. The EM&A requirements for each issue area are described in subsequent sections including:

- All required monitoring parameters;
- Action and Limit Levels; and
- Event-Action Plans.

A summary of impact EM&A requirements is presented in **Table 2-1**.

Table 2.1 - Summary of Impact EM&A Requirements

Parameters	Descriptions	Locations	Frequencies	Duration
TSP	24-Hour TSP	2 Locations*	Once every 6 days	During dust generating construction works
	1-Hour TSP	2 Locations*	Three times in every 6 days	During dust generating construction works
Noise	L_{eq} (30 mins), L_{eq} (15 mins), L_{10} , L_{90} ,	1 Location	Continuous measurements	Two weeks before Construction and During Construction
Water Quality	The post project monitoring was completed in October 2011			
Waste	On-Site Waste Audit	Active Work Sites	Periodically	During Construction
	On-Site Waste Inspection			
Landscape and Visual	Audits to ensure effective implementation of mitigation measures			During Construction
General Site Conditions	Environmental Site Inspection	Works areas and areas affected by works	Periodically	During Construction

Remark: * Air quality monitoring events at relocated monitoring station ACL2a (Contractor HK/2012/08 Site Office) were commenced since 7th December 2013.

2.2 Environmental Quality Performance Limits

Environmental Quality Performance Limits for air quality and noise quality have been established as part of the Baseline Monitoring Report and are provided in **Annex B**.

2.3 Event Action Plan

Event Action Plans for air quality and noise quality have been developed as part of the Baseline Monitoring Report and are provided in **Annex C**.

Not Used

3. ENVIRONMENTAL STATUS

3.1 Implementation of Environmental Measures

The Contractor has implemented relevant mitigation measures listed in the EIA Report, EM&A Manual and Further Environmental Permit.

3.2 Environmental Monitoring Locations

Drawings showing the project area and locations of the monitoring stations are provided in **Annex D**.

3.3 Air Quality Monitoring Results

The graphical plot of air quality monitoring results for this reporting quarter is provided in **Annex F**.

3.4 Noise Quality Monitoring Results

The graphical plot of noise monitoring results for this reporting quarter is provided in **Annex G**.

3.5 Water Quality Monitoring Results

The post project water quality monitoring was completed in October 2011.

Additional water quality monitoring for the “the water quality of embayment area between the eastern seawall and the Hong Kong Convention and Exhibition Centre (HKCEC) upon completion of eastern seawall”, in accordance with the Environmental Permit No. EP-01/122/2003/D Condition 3.9, was completed in October 2011.

3.6 Solid and Liquid Waste Management Status

Solid and liquid waste management was implemented according to the Waste Management Plan during this reporting quarter.

3.7 Landscape and Visual Audit

As the works undertaken during this reporting quarter were mainly related to reclamation, buildings and infrastructure works, the landscape and visual impacts are considered to be minimal.

Not Used

4. ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

4.1 Environmental Exceedances

No exceedances in TSP level were recorded at the monitoring stations during this reporting quarter.

One exceedance in noise level was recorded at City Hall during the reporting quarter. During the monitoring period (19th December 2013 to 27th December 2013), 1 noise exceedance was recorded on 23rd December 2013. According to Contractor's record, there was no construction activity from the CR3 sites. It was noted that the repairing works of the air conditioning system on the roof of lower block of City Hall was undertaken during the monitoring period. As such, the noise exceedances are considered to be attributed to the external factors and unlikely to be related to project works.

4.2 Non-Compliance

No non-compliance with regard to site environmental audit was recorded during the reporting period.

4.3 Summary of Actions Taken by the Contractor

The Contractor has implemented the following measures to prevent air and water quality impacts:

- Contractor has implemented their Drainage Management Plan to Control Site Run-off for the wet season – actions completed and underway include: repair and improvement of existing bunds/sandbags on the edge of the reclamation; installation of additional bunds; compaction of soil surface and paths where possible to prevent erosion, creation of drainage channels and soak pits;
- Provision of additional settlement tanks to remove suspended solids from discharge waters;
- Provision of catch pits to collect spill over from wheel washing facilities and increased frequency of cleaning of catch-pits; and
- Water browsing of haul roads and other areas of the site and covering of stockpiles.

4.4 Environmental Enquiries

No environmental enquiries were received during this reporting quarter.

4.5 Environmental Complaints and Prosecutions

No environmental complaints were received during this reporting quarter.

4.6 Record of Environmental Complaints and Summons & Prosecutions

There was no record of environmental complaints during this reporting quarter.

There were no notifications of summons and prosecutions during this reporting quarter.

Not Used

5. CONCLUSION

During the environmental site inspections conducted within this reporting quarter, no non-compliances were noted and no notifications of summons and prosecutions were received during this reporting quarter.

There was no complaint received in relation to the environmental impact during the reporting period.

No exceedances in TSP level were recorded at the monitoring stations during this reporting quarter.

1 exceedance in noise level was recorded at City Hall during the reporting quarter.

The post project water quality monitoring was completed on October 2011.

Additional water quality monitoring for the “the water quality of embayment area between the eastern seawall and the Hong Kong Convention and Exhibition Centre (HKCEC) upon completion of eastern seawall”, in accordance with the Environmental Permit No. EP-01/122/2003/D Condition 3.9, was completed on October 2011.

Not Used

Annex A

***Project Organisation/
Contact Information***

Annex B

***Quality Performance Limits for
Air and Noise Quality***

Annex C

***Event Action Plans for
Air and Noise Quality***

Annex D

Monitoring Stations Locations

Annex E

Contractor's Work Programme

Annex F

***Graphical Representation of
Air Quality Monitoring Results***

Annex G

***Graphical Representation of
Noise Monitoring Results***