

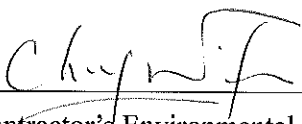
Civil Engineering and Development Department

**Contract No.KLN/2013/16
Environmental Monitoring Works for
Kai Tak Development
Variation Order No.2
Demolition of ex-GFS Building**

Monthly EM&A Report

October 2014

(Version 1.1)

Certified By 
(Contractor's 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.

CINOTECH CONSULTANTS LTD

Room 1710, Technology Park,
18 On Lai Street,

Shatin, NT, Hong Kong

Tel: (852) 2151 2083 Fax: (852) 3107 1388

Email: info@cinotech.com.hk

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	1
Introduction.....	1
Environmental Monitoring and Audit Works.....	1
Environmental Licenses and Permits	1
Key Information in the Reporting Month.....	1
Future Key Issues	2
1. INTRODUCTION.....	3
Background	3
Project Organizations.....	4
Construction Programme	4
Summary of EM&A Requirements.....	5
2. ENVIRONMENTAL AUDIT	6
Site Audits.....	6
Status of Environmental Licensing and Permitting.....	6
Status of Waste Management.....	6
Implementation Status of Environmental Mitigation Measures	7
Non-compliance Recorded during Site Inspections.....	7
Summary of Mitigation Measures Implemented.....	7
Implementation Status of Event Action Plans	7
Summary of Complaints and Prosecutions.....	7
3. FUTURE KEY ISSUES	8
Key Issues for the Coming Month.....	8
Construction Program for the Next Month.....	8
4. CONCLUSIONS AND RECOMMENDATIONS.....	8
Conclusions	8
Recommendations.....	8

LIST OF TABLES

Table I	Summary Table for Key Information in the Reporting Month
Table 1.1	Key Project Contacts
Table 2.1	Summary of Environmental Licensing and Permit Status
Table 2.2	Observations and Recommendations of Site Inspections

LIST OF FIGURES

Figure 1	Layout Plan of the Project Site for demolition of ex-GFS Building
----------	---

LIST OF APPENDICES

A	Site Audit Summary
B	Environmental Mitigation Implementation Schedule (EMIS)
C	Waste Flow Table
D	Event and Action Plan
E	Complaint Logs
F	Construction Program

EXECUTIVE SUMMARY

Introduction

1. This is the 2nd Environmental Monitoring and Audit (EM&A) Report for the month of October 2014, prepared by Cinotech Consultants Limited under Variation Order No. 2 of Contract No. KLN/2013/16 – Environmental Monitoring Works for Demolition of ex-GFS Building. This report documents the findings of EM&A Works conducted in October 2014.
2. The site activities undertaken in the reporting month included:
 - Hoarding erection; and
 - Removal of loose furniture.

Environmental Monitoring and Audit Works

3. Environmental monitoring and audit works for the Project were performed regularly as stipulated in the EM&A Manual. The implementation of the environmental mitigation measures and environmental complaint handling procedures were also checked.
4. Site audits were conducted on 7th, 15th, 21st and 28th October 2014 for the Project. A monthly joint environmental site inspection was carried out by the representatives of the Contractor, the IEC and the ET on 28th October 2014. Details of the audit findings and implementation status are presented in Section 2.

Environmental Licenses and Permits

5. Licenses/Permits granted to the Project include the Environmental Permit (Environmental Permit No. EP-339/2009/A). No new license/permit was issued to the Project by EPD in the reporting month.

Key Information in the Reporting Month

6. Summary of key information in the reporting month is tabulated in Table I.

Table I Summary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	0	---	N/A	N/A	---

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

Future Key Issues

7. Major site activities for the coming reporting month will include:

- Hoarding erection; and
- Removal of loose furniture.

1. INTRODUCTION

Background

- 1.1 The former Kai Tak Airport is located in the south-eastern part of Kowloon Peninsula, comprising the north and south aprons and runway areas extending into the Kowloon Bay. The entire airport site covers a total land area of about 260 hectares, of which the land area other than the north apron is about 96 hectares.
- 1.2 In 2002, the Chief Executive in Council approved the Kai Tak Outline Zoning Plans (No. S/K19/3 and S/K21/3) to provide the statutory framework to proceed with the South East Kowloon Development at the former Kai Tak Airport. However, following the judgment of the Court of Final Appeal in January 2004 regarding the Harbour reclamation, the originally proposed development which involved reclamation has to be reviewed.
- 1.3 In order to make available the remaining former Kai Tak Airport site for the Kai Tak Development (KTD), the Decommissioning of the Former Kai Tak Airport Other than the North Apron is proposed to demolish remaining existing structures / buildings and remove abandoned facilities of the former Kai Tak Airport within the Project boundary; identify and clean up contaminated areas associated with the previous airport operation within the Project boundary; and implement appropriate mitigation measures to ensure the site would be safe and free of hazards for the planned future use.
- 1.4 An Environmental Impact Assessment (EIA) Study for the Project has been undertaken in accordance with the EIA Study Brief (No. ESB-152/2006) and the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM). An EIA Report was approved by the Environmental Protection Department (EPD) on 4 March 2009. Environmental Permit (EP) No. EP-339/2009/A was issued on 18 June 2009 for the decommissioning designated project to Civil Engineering and Development Department (CEDD) as the Permit Holder. The decontamination works under the project was substantially completed in February 2010 as certified by the Resident Engineer of the Project (AECOM).
- 1.5 The demolition works for the ex-GFS building were awarded to Able Engineering Co., Ltd (The Contractor) in August 2014. Cinotech Consultants Limited (Cinotech) was commissioned by Civil Engineering and Development Department (CEDD) under Variation Order No. 2 of Contract No. KLN/2013/16 as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit works for demolition of the ex-Government Flying Services (GFS) building at Kai Tak (hereafter referred as “the Project”).
- 1.6 This is the 2nd Monthly EM&A report summarizing the EM&A works for the Project in October 2014.

Project Organizations

- 1.7 Different parties with different levels of involvement in the project organization include:
- Project Proponent – Civil Engineering and Development Department (CEDD)
 - Environmental Team (ET) – Cinotech Consultants Limited.
 - Independent Environmental Checker (IEC) – Mott MacDonald Hong Kong Limited
 - Contractor – Able Engineering Co., Ltd
- 1.8 The responsibilities of respective parties are detailed in Sections 1.4.1 to 1.4.9 of the approved EM&A Manual of the Project.
- 1.9 The key contacts of the Project are shown in Table 1.1.

Table 1.1 Key Project Contacts

Party	Role	Name	Phone No.	Fax No.
CEDD	Project Proponent	Ms. Hannah Chiu	23011453	23694980
Cinotech	Environmental Team	Dr. Priscilla Choy	21512089	31071388
		Mr. Kevin Lam	21512099	
Mott MacDonald	Independent Environmental Checker	Mr. Terence Kong	28285919	28271823
Able Engineering	Contractor	Mr. Daniel Lau	2796 0960	27960519
		Mr. Yu Cheuk Hang		

Construction Programme

- 1.10 The site activities undertaken in the reporting month included:
- Hoarding erection; and
 - Removal of loose furniture.

Summary of EM&A Requirements

- 1.11 The EM&A programme requires environmental site audit for decommissioning activities. The EM&A requirements for each parameter are described in the following sections, including:
- Event Action Plans;
 - Environmental mitigation measures, as recommended in the project EIA study final report; and
 - Environmental requirements in contract documents.
- 1.12 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in **Appendix B** of this report.

2. ENVIRONMENTAL AUDIT**Site Audits**

- 2.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix A**.
- 2.2 Site audits were conducted on 7th, 15th, 21st and 28th October 2014 for the Project. No non-compliance was observed during the site audits. A monthly joint environmental site inspection was carried out by the representatives of the Contractor, the IEC and the ET on 28th October 2014.

Status of Environmental Licensing and Permitting

- 2.3 All permits/licenses obtained for the Projects are summarized in Table 2.1.

Status of Waste Management

- 2.4 389.64 tons of inert C&D waste and 203.48 tons of non-inert construction waste were generated by the Project in the reporting month.
- 2.5 The details of the waste flow information are shown in **Appendix C**.

Table 2.1 Summary of Environmental Licensing and Permit Status

Permit No.	Valid Period		Details	Status
	From	To		
Environmental Permit (EP)				
EP-339/2009/A	18/06/09	N/A	Decommissioning of the remaining parts (ex-GFS Building, Radar Station and Hong Kong Aviation Club) of the former Kai Tak Airport	Valid
Billing Account for Disposal of Construction Waste				
7014068	10/11/11	--	Disposal of construction waste.	Valid

Implementation Status of Environmental Mitigation Measures

- 2.6 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations are summarized in **Table 2.2**.

Table 2.2 Observations and Recommendations of Site Inspections

Parameters	Date	Observations and Recommendations	Follow-up
<i>Water Quality</i>	N/A	N/A	N/A
<i>Air Quality</i>	N/A	N/A	N/A
<i>Noise</i>	N/A	N/A	N/A
<i>Waste / Chemical Management</i>	28/10/2014	To provide drip tray for chemical containers and properly label it.	The observation was observed to be improved/rectified by the Contractor during the audit session on 4 November 2014.
<i>Permits/Licenses</i>	28/10/2014	To display the environmental permit at the site entrance.	The observation was observed to be improved/rectified by the Contractor during the audit session on 4 November 2014.

Non-compliance Recorded during Site Inspections

- 2.7 No non-compliance was recorded in the reporting month.

Summary of Mitigation Measures Implemented

- 2.8 The Contractor has implemented the mitigation measures as recommended in the EIA and the updated EM&A Manual in the reporting month except those mitigation measures not applicable at this stage.
- 2.9 According to the Approved EM&A Manual, mitigation measures are required to be implemented. An updated summary of the EMIS for waste management is provided in **Appendix B**.

Implementation Status of Event Action Plans

- 2.10 The Event Action Plans is presented in **Appendix D**.

Summary of Complaints and Prosecutions

- 2.11 No environmental prosecution and complaint was received in the reporting month.
- 2.12 There was no environmental complaint and no prosecution received since the commencement of the Project. The Complaint Log is attached in **Appendix E**.

3. FUTURE KEY ISSUES

Key Issues for the Coming Month

3.1 Key environmental issues in the coming month include:

- Storage of chemicals/fuel and chemical waste/waste oil on site; and
- Accumulation of general and construction waste on site;

Construction Program for the Next Month

3.2 The site activities would undertake in the next reporting month included:

- Hoarding erection; and
- Removal of loose furniture.

4. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

4.1 Environmental audit works were conducted in the reporting month. Site inspections were conducted on a weekly basis. The audit results of the reporting month were reviewed and checked.

4.2 No environmental prosecution and complaint was received in the reporting month.

Recommendations

4.3 According to the environmental audit performed in the reporting month, the following recommendations were made:

Dust Impact

- To implement dust suppression measures on all haul roads, stockpiles, dry surfaces and excavation works.
- To implement dust control measures for the dust generation work such as cement mixing and excavation works.
- To ensure water spray being applied for the dust emissive works, such as loading and unloading of soil materials and excavation works.
- To cover soil stockpiles and exposed slope surface by impervious tarpaulin sheets or other means.
- To ensure that all vehicles carrying dusty material are properly covered before leaving the site.
- To maintain the machinery and vehicles in a good working condition on site.
- To ensure that all vehicles use wheel washing facility or equivalent measures before leaving the site.

Noise Impact

- To inspect the noise sources inside the site.
- To space out noisy equipment and position the equipment as far away as possible from sensitive receivers.
- To review the works sequence of site activities so as to reduce the number of noisy equipment in concurrent operation.
- To employ quiet powered mechanical equipment if possible.

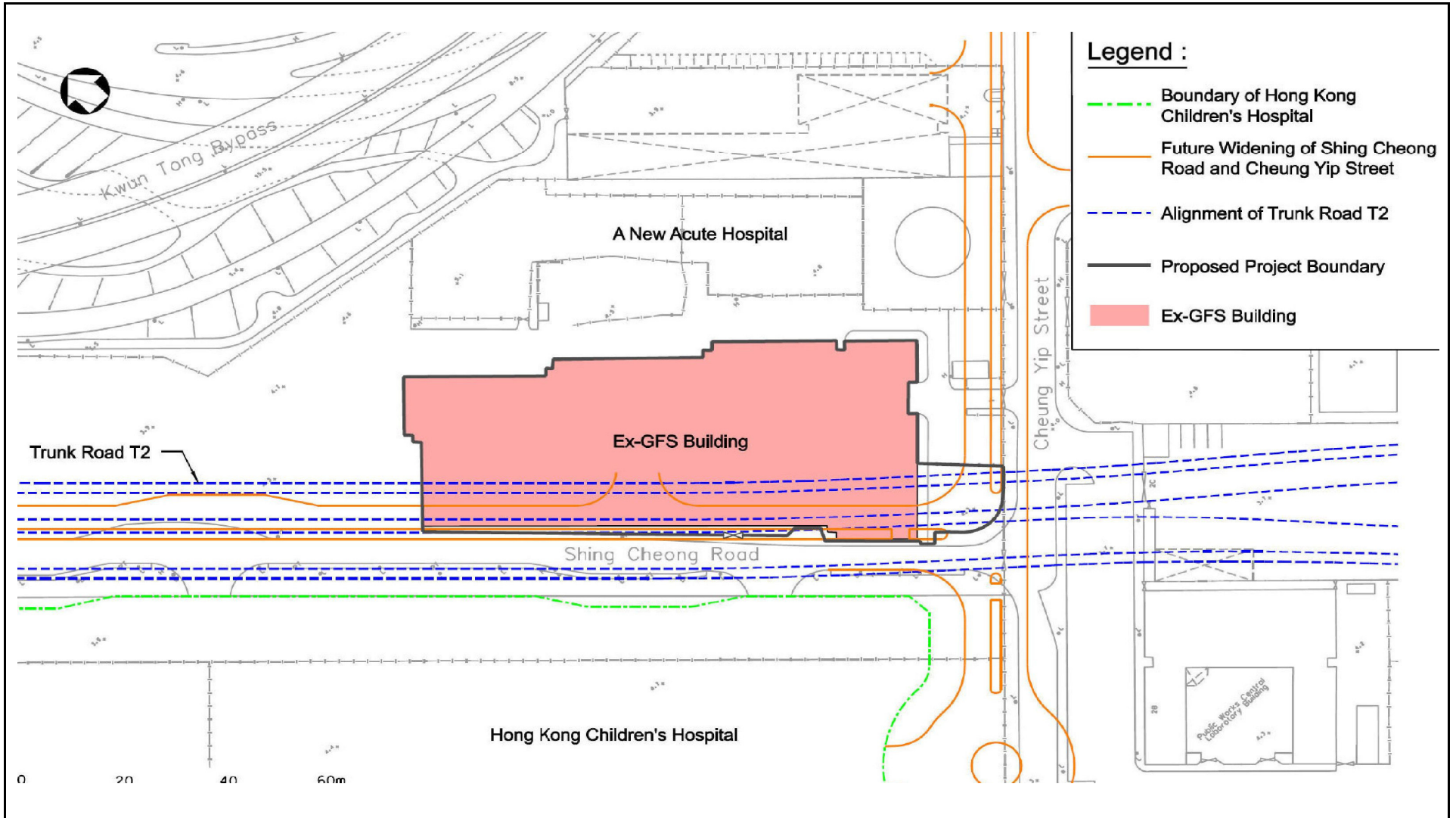
Water Impact

- To prevent contaminated surface runoff discharge into drainage system.
- To ensure properly maintenance for de-silting facilities
- To review the capacity of de-silting facilities for discharge.
- To identify any wastewater discharges from site.
- To avoid accumulation of stagnant and ponding water on site.

Waste/Chemical Management

- To check for any accumulation of waste materials or rubbish on site.
- To avoid any discharge or accidental spillage of chemical waste or oil directly from the site.
- To avoid improper handling or storage of oil drum on site.

FIGURES



Title	Contract No. KLN/2013/16		Scale	Propose No.	MA14037	CINOTECH
	Environmental Monitoring Works for Kai Tak Development VO No.2 – EM&A works for Demolition of Ex-GFS Building					
	Site Layout Plan		Date	Figure	1	
			Sep-14			

**APPENDIX A
SITE AUDIT SUMMARY**

Demolition of ex-Government Flying Service (GFS) building

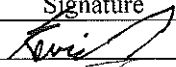
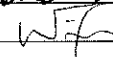
Record Summary of Environmental Site Inspection

Inspection Information

Checklist Reference Number	141007
Date	7 October 2014
Time	16:00 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>B. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>C. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>D. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>E. Waste/Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>F. Permits/Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>G. Others</p> <ul style="list-style-type: none"> Follow-up on previous audit section (Ref. No.:141007), all environmental deficiencies were observed to be improved/rectified by the Contractor. 	

	Name	Signature	Date
Recorded by	Kevin Lam		7 October 2014
Checked by	Dr. Priscilla Choy		7 October 2014

Demolition of ex-Government Flying Service (GFS) building

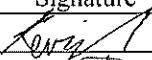

Record Summary of Environmental Site Inspection

Inspection Information

Checklist Reference Number	141015
Date	15 October 2014
Time	16:00 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>B. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>C. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>D. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>E. Waste/Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>F. Permits/Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>G. Others</p> <ul style="list-style-type: none"> Follow-up on previous audit section (Ref. No.:141007), all environmental deficiencies were observed to be improved/rectified by the Contractor. 	

	Name	Signature	Date
Recorded by	Kevin Lam		15 October 2014
Checked by	Dr. Priscilla Choy		15 October 2014

Demolition of ex-Government Flying Service (GFS) building

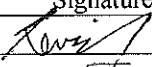

Record Summary of Environmental Site Inspection

Inspection Information

Checklist Reference Number	141021
Date	21 October 2014
Time	16:00 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>B. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>C. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>D. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>E. Waste/Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>F. Permits/Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>G. Others</p> <ul style="list-style-type: none"> Follow-up on previous audit section (Ref. No.:141015), all environmental deficiencies were observed to be improved/rectified by the Contractor. 	

	Name	Signature	Date
Recorded by	Kevin Lam		21 October 2014
Checked by	Dr. Priscilla Choy		21 October 2014

Demolition of ex-Government Flying Service (GFS) building

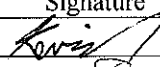

Record Summary of Environmental Site Inspection

Inspection Information

Checklist Reference Number	141028
Date	28 October 2014
Time	16:00 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
141028-R02	<p>B. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>C. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>D. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>E. Waste/Chemical Management</p> <ul style="list-style-type: none"> To provide drip tray for chemical containers and properly label it. 	E 10
141028-R01	<p>F. Permits/Licenses</p> <ul style="list-style-type: none"> To display the environmental permit at the site entrance. <p>G. Others</p> <ul style="list-style-type: none"> Follow-up on previous audit section (Ref. No.:141021), all environmental deficiencies were observed to be improved/rectified by the Contractor. 	F 1

	Name	Signature	Date
Recorded by	Kevin Lam		28 October 2014
Checked by	Dr. Priscilla Choy		28 October 2014

**APPENDIX B
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)**

Appendix B Environmental Mitigation Implementation Schedule (EMIS)**Implementation Schedule for Air Quality Measures**

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.2.19	<p><u>Good site practices to minimise dust and other air pollutants impacts during soil excavation, transportation, loading and unloading the excavated contaminated soils</u></p> <ul style="list-style-type: none"> The excavation area should be limited to as small in size as possible and backfilled with clean and/or treated soil shortly after excavation work. The exposed excavated area shall be covered by the tarpaulin during night time. The top layer soils shall be sprayed with fine misting of water immediately before the excavation. Stockpiling site(s) shall be lined with impermeable sheeting and banded. Stockpiles shall be properly covered by impermeable sheeting to reduce dust and other air pollutants emission. Misting for the dusty material shall be carried out before being loaded into the vehicle. Any vehicle with an open load carrying area shall have properly fitted side and tail boards. Material having the potential to create dust shall not be loaded from a level higher than the side and tail boards and shall be dampened and covered by a clean tarpaulin. 	Work sites / during decommissioning	Contractor				√	N/A
								N/A
								N/A
								N/A
								N/A
								N/A
								N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.2.19	<ul style="list-style-type: none"> The tarpaulin shall be properly secured and shall extend at least 300 mm over the edges of the sides and tailboards. The material shall also be dampened if necessary before transportation. The vehicles shall be restricted to maximum speed of 10 km per hour and confined haulage and delivery vehicle to designated roadways inside the site. On-site unpaved roads shall be compacted and kept free of loose 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 hardcore. Every main haul road should be sealed 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. 	Work sites / during decommissioning	Contractor				√	N/A
								N/A
								N/A
								N/A
								N/A
								N/A
								^

* Des - Design, C – Construction, O – Operation, and Dec - Decommission

Implementation Schedule for Noise Measures

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.3.10	<p><u>Good site practices to be implemented:</u></p> <ul style="list-style-type: none"> • Only well-maintained plant should be operated on-site and plant shall be serviced regularly during the decommissioning program. • Silencers or mufflers on construction equipment should be utilized and shall be properly maintained during the decommissioning 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 utilised, wherever practicable, in screening noise from on-site construction activities. 	Work sites / during decommissioning	Contractor				√	^ N/A N/A N/A N/A N/A

* Des - Design, C – Construction, O – Operation, and Dec - Decommission

Implementation Schedule for Water Quality Measures

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.4	<p><u>TPH Removal</u></p> <ul style="list-style-type: none"> Petrol interceptor should be adopted, where appropriate, as the first tier of treatment to removal TPH contaminant from contaminated runoff and effluent discharge from the decontamination works area. 	Work sites / During the decommissioning, excavation and soil treatment	Contractor		√	√	√	N/A
S5.4	<p><u>Failure of Centralized Wastewater Treatment Unit</u></p> <ul style="list-style-type: none"> In the event of wastewater treatment unit failure, all decontamination activities should be ceased to avoid emergency discharge. 	Work sites / During the decommissioning, excavation and soil treatment	Contractor		√	√	√	N/A
S5.4	<p><u>Building Demolition</u></p> <ul style="list-style-type: none"> The site practices outlined in ProPECC PN 1/94 "Construction Site Drainage" should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. 	Work sites / During decommissioning	Contractor				√	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.4	<ul style="list-style-type: none"> There is a need to apply to EPD for a discharge licence under the WPCO for discharging effluent from the construction site. The discharge quality is required to meet the requirements specified in the discharge licence. All the runoff, wastewater or extracted groundwater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. Regular monitoring of the treated effluent quality from the centralized wastewater treatment unit and stormwater discharges from major storm outfalls within the works areas will be conducted. Monitoring parameters should constantly include SS, turbidity, oil and grease, COD and less frequently include TPH, BTEX and selected metals. Parameters included in the WPCO licence, will also be included in the monitoring programme. The chemical testing of water samples collected in the monitoring programme should be undertaken by a Hong Kong Laboratory Accreditation Scheme (HOKLAS) accredited laboratory. Detail monitoring programme / plan will be submitted at later stage for EPD's agreement. 	Work sites / During decommissioning	Contractor				√	N/A
S5.4	<p><u>Sewage from Workforce</u></p> <ul style="list-style-type: none"> Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor would be responsible for appropriate disposal of waste matter and maintenance of these facilities. 	Work sites / During decommissioning	Contractor				√	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.4	<p><u>Solid Waste and Accidental Spillage</u></p> <ul style="list-style-type: none"> Debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering into the adjacent harbour waters. Stockpiles of cement and other construction materials should be kept covered when not being used. 	Work sites / During decommissioning	Contractor				√	^
S5.4	<ul style="list-style-type: none"> Oils and fuels should only be used and stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to the nearby harbour waters, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. 	Work sites / During decommissioning	Contractor				√	^

* Des - Design, C – Construction, O – Operation, and Dec - Decommission

Implementation Schedule for Waste Management Measures

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.5	<p><u>Good Site Practices</u></p> <p>Recommendations for good site practices during the decommissioning works include:</p> <ul style="list-style-type: none"> • 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). 	Work sites / During decommissioning	Contractor				√	<p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.5	<p><u>Waste Reduction Measures</u></p> <p>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:</p> <ul style="list-style-type: none"> • 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; • To 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 shall be recycled; • Proper storage and site practices to minimise the potential for damage or contamination of construction materials; 	Work sites / During design stage, decommissioning, excavation and soil treatment	Contractor				√	^ ^ ^ ^ ^

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.5	<p><u>Construction and Demolition Material</u></p> <p>Mitigation measures and good site practices should be incorporated into the contract document to control potential environmental impact from handling and transportation of C&D material. The mitigation measures include:</p> <ul style="list-style-type: none"> • Where it is unavoidable to have transient stockpiles of C&D material within the work site pending collection for disposal, the transient stockpiles shall 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. 	Work sites / During decommissioning	Contractor				√	N/A N/A ^ ^ ^ ^

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.5	<ul style="list-style-type: none"> 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. The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading. 	Work sites / During decommissioning	Contractor				√	^
S5.5	<ul style="list-style-type: none"> 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. 	Work sites / During decommissioning	Contractor and Independent Environmental Checker				√	^

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Status
				Des	C	O	Dec	
S5.5	<p><u>Chemical Wastes</u></p> <ul style="list-style-type: none"> 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. 	Work sites / During decommissioning	Contractor				√	*
S5.5	<p><u>General Refuse</u></p> <ul style="list-style-type: none"> 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. 	Work sites / During decommissioning	Contractor				√	^

* Des – Design, C – Construction, O – Operation, and Dec – Decommission

Remarks: ^ Compliance of mitigation measure; X Non-compliance of mitigation measure;
N/A Not Applicable; • Non-compliance but rectified by the contractor;
* Recommendation was made during site audit but improved/rectified by the contractor;
Non-compliance but rectified/improved by the contractor and awaiting IEC's further comment.

**APPENDIX C
WASTE FLOW TABLE**

Monthly Summary Waste Flow Table

Month	Accumulated Quantities of Inert C&D Materials Generated Monthly						Accumulated Quantities of Non-inert C&D Wastes Generated Monthly							Calculated Waste Recycling Rate		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(n) / (o)
	Hard Rocks or Broken Concrete Recycled (in '000kg)	Hard Rocks or Broken Concrete Disposed as Public Fill (in '000kg)	Excavated Materials Reused in this Project (in '000kg)	Excavated Materials Reused in other Projects (in '000kg)	Excavated Materials Disposed as Public Fill (in '000kg)	Imported Fill (in '000kg)	Mixed Wastes Disposed at Sorting Facility (in '000kg)	Metals Recycled (in '000kg)	Paper/ Cardboard Packaging Recycled (in '000kg)	Timber Recycled (in '000kg)	Plastics Recycled (in '000kg)	Chemical Waste Collected (in '000kg)	Others, e.g. General Refuse Disposed at Landfill (in '000kg)	Total Recycled or Reused Wastes (in '000kg)	Total Amount of Wastes (in '000kg)	Waste Recycling Rate (in %)
Sep-14	0	303.62	0	0	0	0	0	160.03	0	0	0	0	62.5	160.03	526.15	30.4%
Oct-14	0	389.64	0	0	0	0	0	54.5	0	0	0	0	148.98	54.5	593.12	9.2%
Nov-14																
Dec-14																
Jan-15																
Feb-15																
Mar-15																
Apr-15																
May-15																
Jun-15																
Total	0	693.26	0	0	0	0	0	214.53	0	0	0	0	211.48	214.53	1119.27	19.2%

Note:

For BEAM Plus certification scheme, excavated materials are excluded from the calculation of the waste recycling rate.

Recycled or Reused Wastes = (a) + (h) + (i) + (j) + (k)

Total Amount of Wastes = (a) + (b) + (g) + (h) + (i) + (j) + (k) + (m)

APPENDIX D
EVENT AND ACTION PLAN

APPENDIX D - Event and Action Plan

Table D- 1 Event / Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1.Action Level being exceeded by one sampling	1. Identify source and investigate the causes of exceedance; 2. Inform Contractor, IEC and ER; 3. Repeat measurement to confirm finding.	1. Check monitoring data submitted by ET; and 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice; and 2. Amend working methods if appropriate.
2. Action Level being exceeded by two or more consecutive sampling	1. Identify source and investigate the causes of exceedance; 2. Inform Contractor, IEC and ER; 3. Increase monitoring frequency to daily; 4. Discuss with IEC and Contractor on remedial actions required; 5. Assess the effectiveness of Contractor's remedial actions; 6. If exceedance continues, arrange meeting with IEC and ER; and 7. If exceedance stops, cease additional monitoring	1. Checking monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; and 4. Advise the ER on the effectiveness of the proposed remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise implementation of remedial measures; and 5. Conduct meeting with ET and IEC if exceedance continues.	1. Discuss with ET and IEC on proper remedial actions; 2. Submit proposals for remedial actions to ER and IEC within 3 working days of notification; 3. Implement the agreed proposals; and 4. Amend proposal if appropriate
LIMIT LEVEL				
1.Limit Level being exceeded by one sampling	1. Identify source and investigate the causes of exceedance; 2. Inform Contractor, IEC, ER and EPD; 3. Repeat measurement to confirm finding; and 4. Assess effectiveness of Contractor's remedial actions and keep EPD, IEC and ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; and 4. Advise the ER on the effectiveness of the proposed remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise implementation of remedial measures; and 5. Conduct meeting with ET and IEC if exceedance continues.	1. Take immediate action to avoid further exceedance; 2. Discuss with ET and IEC on proper remedial actions; 3. Submit proposals for remedial actions to ER and IEC within 3 working days of notification; and 4. Implement the agreed proposals.
2. .Limit Level being	1. Notify IEC, ER, Contractor and EPD; 2. Repeat measurement to confirm findings;	1. Check monitoring data submitted by ET;	1. Confirm receipt of notification of exceedance in writing;	1. Take immediate action to avoid further exceedance;

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
exceeded by two or more consecutive sampling	<ul style="list-style-type: none"> 3. Carry out analysis of Contractor's working procedures to investigate the causes of exceedance; 4. Increase monitoring frequency to daily; 5. Arrange meeting with IEC, ER and Contractor to discuss the remedial actions to be taken; 6. Assess effectiveness of Contractor's remedial actions and keep EPD, IEC and ER informed of the results; and 7. If exceedance stops, cease additional monitoring 	<ul style="list-style-type: none"> 2. Check Contractor's working method; 3. Discuss with ER, ET and Contractor on possible remedial measures; and 4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. 	<ul style="list-style-type: none"> 2. Notify Contractor; 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise implementation of remedial measures; and 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated. 	<ul style="list-style-type: none"> 2. Discuss with ET, ER and IEC on proper remedial actions; 3. Submit proposals for remedial actions to ER and IEC within 3 working days of notification; 4. Implement the agreed proposals; 5. Submit further proposals for remedial actions if problem still not under control; and 6. Stop the relevant portion of works as instructed by the ER until the exceedance is abated.

**APPENDIX E
COMPLAINT LOG**

Appendix E - Complaint Log

Log Ref.	Date/Location	Complainant/ Date of Contact	Details of Complaint	Investigation/ Mitigation Action	File Closed
--	--	--	--	--	--

**APPENDIX F
CONSTRUCTION PROGRAM**

Term Contract No.: TCY305

Contract Title: Minor Works Term Contract to Buildings and Lands and Other Properties for which the Architectural Services Department is Responsible in Hong Kong

Works Order No.:

Master Programme for Demolition of Ex-GFS Building

識別碼	任務名稱	工期	開始時間	完成時間	2015年											
					8月	9月	10月	11月	12月	1月	2月	3月	4月	5月	6月	7月
1	Demolition of Ex-GFS Building at Shing Cheong Road, Kowloon Bay	272 days	2014/9/2	2015/5/31												
2	Design Submission & Approval of Method Statement for Demolition	60 days	2014/9/2	2014/10/31												
3	Submission & Approval of Method Statement	60 days	2014/9/2	2014/10/31												
4	Approval of Method Statement	0 days	2014/10/31	2014/10/31												
5	Construction Works	272 days	2014/9/2	2015/5/31												
6	Commencement of Works	0 days	2014/9/2	2014/9/2												
7	Site Establishment	14 days	2014/9/2	2014/9/15												
8	Hoarding Erection	80 days	2014/9/2	2014/11/20												
9	Materials Procurement	10 days	2014/9/2	2014/9/11												
10	Hoarding Erection	70 days	2014/9/12	2014/11/20												
11	Demolition Works	272 days	2014/9/2	2015/5/31												
12	Removal Internal Fixtures, Loose Furniture & Building Services	80 days	2014/9/2	2014/11/20												
13	Removal of Steel Truss & Decking	30 days	2014/11/21	2014/12/20												
14	Demolition of Long Span Beam and Steel Decking	60 days	2014/12/6	2015/2/3												
15	Demolition of Cantilever Structure at RF	60 days	2014/12/6	2015/2/3												
16	Demolition of R.C. Structure	90 days	2015/2/4	2015/5/4												
17	Clearance of Site	30 days	2015/5/2	2015/5/31												
18	Completion of Works (Hoardings Remained at Site)	0 days	2015/5/31	2015/5/31												

日期: 2014/10/8

任務		里程碑		上顯型要徑任務		分割		摘要群組	
要徑任務		摘要		上顯型里程碑		外部任務		期限	
進度		上顯型任務		上顯型進度		專案摘要			