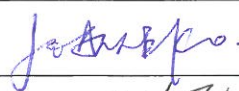
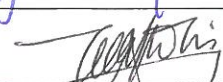


**Main Wealth Development Ltd.****Yau Tong Bay – Decommissioning of  
Shipyards Sites****Quarterly EM&A Summary Report  
for October 2013 to December 2013  
(5<sup>th</sup> Quarterly EM&A Summary Report)**

[01/2014]

	Name	Signature
Prepared & Checked:	Joanne Ko	
Reviewed, Approved & Certified:	Y T Tang (ETL)	

Version:	Rev. 0	Date: 21 January 2014
<b>Disclaimer</b>		
<p>This report is prepared for Main Wealth Development Ltd. and is given for its sole benefit in relation to and pursuant to Yau Tong Bay – Decommissioning of Shipyards Sites and may not be disclosed to, quoted to or relied upon by any person other than Main Wealth Development Ltd. without our prior written consent. No person (other than Main Wealth Development Ltd.) into whose possession a copy of this report comes may rely on this report without our express written consent and Main Wealth Development Ltd. may not rely on it for any purpose other than as described above.</p>		

AECOM Asia Co. Ltd.  
15/F, Grand Central Plaza, Tower 1, 138 Shatin Rural Committee Road, Shatin, NT, Hong Kong  
Tel: (852) 3922 9000 Fax: (852) 2317 7609 www.aecom.com



Our ref AFK/EC/TK/jn/bw/T329531/22.01/0008  
T 2828 5919  
E [terence.kong@mottmac.com.hk](mailto:terence.kong@mottmac.com.hk)  
Your ref

Main Wealth Development Limited  
71/F Two International Finance Centre  
8 Finance Street  
Central  
Hong Kong

20 January 2014

**Attn : Ms. Amy Chan / Mr. Gregory Chan**

Dear Madam,

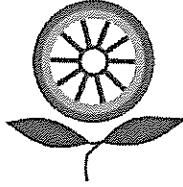
**Yau Tong Bay – Decommissioning of Shipyard Sites  
Environmental Permit No. EP-409/2010  
Quarterly EM&A Summary Report for October 2013 to December 2013 (version: Rev. 0)**

Further to the receipt from Environmental Team (ET) of the captioned Monthly EM&A Report on 17 January 2014 via email, pursuant to Updated EM&A Manual (v.4), we have no comment on the captioned report (Rev.0) for Yau Tong Bay.

Yours faithfully  
for MOTT MACDONALD HONG KONG LIMITED

A handwritten signature in black ink, appearing to read "Terence Kong".

Terence Kong  
Independent Environmental Checker (IEC)



## NATURE & TECHNOLOGIES (HK) LIMITED

科技環保(香港)有限公司

Unit B, 11/F, Grandion Plaza, 932 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon  
九龍長沙灣道932號興迅廣場11樓B室 Tel 電話: (852) 2877 3122 Fax 傳真: (852) 25110922

Email 電郵: [enquiry@nt.com.hk](mailto:enquiry@nt.com.hk)

Website 網址: <http://www.nt.com.hk>

Our Ref: 3.14/018/2009/at

20 January 2014

Main Wealth Development Ltd.  
71/F, Two International Finance Centre  
8 Finance Street  
Central  
Hong Kong

Attn: Ms. Amy Chan

Dear Ms. Chan,

**Yau Tong Bay – Decommissioning of Shipyard Sites**  
**Environmental Permit No. EP-409/2010**  
**Quarterly EM&A Summary Report for October 2013 to December 2013 (Version: Rev.0)**

With reference to the captioned document verified by IEC on 20 January 2014, we are pleased to provide our confirmation for the document on sections that is specific to soil remediation work pursuant to Condition 5.4 of the Environmental Permit No. EP-409/2010.

Yours faithfully,  
Nature & Technologies (HK) Limited

Ir Dr Gabriel C K Lam  
Independent Environmental Auditor

## TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
行政摘要	2
1 INTRODUCTION	3
1.1 Background	3
1.2 Scope of Report	4
1.3 Project Organization	4
1.4 Summary of Construction Works	5
2 SUMMARY OF EM&A PROGRAMME REQUIREMENTS	6
2.1 Monitoring Parameters and Locations	6
2.2 Environmental Quality Performance Limits (Action/Limit Levels)	6
2.3 Environmental Mitigation Measures	6
3 NOISE MONITORING	7
4 WATER QUALITY MONITORING	8
5 LAND CONTAMINATION MONITORING	8
5.1 Monitoring Status	8
5.2 Excavation Progress	8
5.3 Landfill Disposal of Contaminated Soil at Zones T32D and T32E	8
5.4 Monitoring Results	8
5.5 Underground Oil Tank at YTML 6-11	8
6 ENVIRONMENTAL SITE INSPECTION AND AUDIT	9
7 ADVICE ON SOLID AND LIQUID WASTE MANAGEMENT STATUS	10
8 SUMMARY OF NON-COMPLIANCE (EXCEEDANCES) OF ENVIRONMENTAL QUALITY PERFORMANCE LIMITS (ACTION AND LIMIT LEVELS)	10
9 COMPLAINT, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTION	10
10 COMMENTS, RECOMMENDATIONS AND CONCLUSIONS	11
10.1 Comments on Mitigation Measures	11
10.2 Recommendations on EM&A Programme	11
10.3 Conclusions	12

### List of Tables

Table 1.1 Contact Information of Key Personnel

Table 2.1 Locations of Impact Noise Monitoring Stations

Table 2.2 Noise Monitoring Parameters, Frequency and Duration

Table 3.1 Summary of Number of Exceedances for Construction Impact Noise Monitoring

### List of Figures

Figure 1 Site Location Plan

Figure 2 Noise Monitoring Locations

Figure 3 Locations of Contamination Zones

### List of Appendices

Appendix A Project Organization Structure

Appendix B Construction Programme

Appendix C Implementation Schedule of Environmental Mitigation Measures (EMIS)

Appendix D Summary of Action and Limit Levels

Appendix E Graphical Presentation of Impact Daytime Construction Noise Monitoring Results over past four months

Appendix F Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

## EXECUTIVE SUMMARY

The proposed “Yau Tong Bay – Decommissioning of Shipyard Sites” (hereinafter referred to as “the Project”) is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) Schedule 2 and is governed by the Environmental Permit No. EP-409/2010. The Project aims to demolish the past and existing shipyards and their building structures and marine structures and decontaminate identified contaminated spots.

The demolition works of the Project commenced on 21 November 2011 and was completed in September 2012. The impact Environmental Monitoring and Audit (hereinafter referred to as “EM&A”) programme for the Project commenced on 21 November 2011. The EM&A works was suspended from November 2012 for the captioned Project and the EM&A works has been resumed on 28 October 2013. The impact EM&A programme includes daytime construction noise and water quality monitoring, soil remediation works monitoring and auditing and site auditing. The remediation method statement was approved by the EPD on 20 December 2013. The soil remediation works commenced on 23 December 2013.

This report documents the findings of EM&A works conducted in the period between 28 October 2013 and 31 December 2013.

As informed by the Contractor, the major construction activities carried out in the reporting period were setting up biopile base liner and cement solidification mixing pit, decommissioning of the underground oil tank at YTML 6-11, excavation of contaminated soil in Zones R1, R2, R4 and A1, and formation of biopiles.

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

Daytime noise monitoring	6 sessions
Water quality monitoring	0 session
Environmental site inspection	9 sessions

### Breaches of Action and Limit Levels for Daytime Construction Noise

No Action Level exceedance was recorded since no construction noise related complaint was received in the reporting period.

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

### Breaches of Action and Limit Levels for Water Quality

Water quality monitoring was not conducted in the reporting period as demolition of marine structures was not commenced.

### Environmental Complaint, Notification of Summons and Successful Prosecution

No environmental complaint, notification of summons and successful prosecution was received in the reporting quarter.

### Reporting Change

There was no reporting change required in the reporting quarter.

### Future Key Issues

Excavation of contaminated soil will continue to take place in January 2014.

## 行政摘要

「油塘灣—船廠拆卸工程」(以下簡稱「本工程項目」)是一項被臚列於環境影響評估條例(第 499 章)附表 2 中的指定工程項目並受到環境許可證編號 EP-409/2010 所管制。本工程項目的主要目的是要拆除位於油塘灣的舊有和現有的船廠及其建築物和海事結構，以及處理指定的已受污染點。

本工程項目已於二零一一年十一月二十一日竣工並於二零一二年九月完工。本工程項目的施工期間環境監察及審核計劃亦由二零一一年十一月二十一日開始。由二零一二年十一月起，本工程項目之施工期間環境監察與審核工作暫停，並於二零一三年十月二十八日恢復。施工期間環境監察與審核計劃包括：日間建築噪音監測，水質監測，已受污染泥復育工作的監察與審核及工地審核巡查。環保署在二零一三年十二月二十日批准了土地整治方法聲明。土壤修復工程於二零一三年十二月二十三日開始。

本報告記錄了於二零一三年十月二十八日至二零一三年十二月三十一日期間所進行的環境監察與審核工作。

根據承建商提供的資料，在上述的季度的主要建築活動為設立生物堆積底座內膽及水泥凝固混合坑、清拆在 YTML 6-11 的地下油缸、在區域 R1、R2、R4 和 A1 污染土壤的挖掘，以及生物堆的形成。

在上述的季度有下列次數的監察及審核活動進行：

日間建築噪音監測	6 次
水質監測	0 次
環境巡查	9 次

## 違反監測標準

### 日間建築噪音

在上述的期間沒有收到有關建築噪音的投訴，所以噪音監測結果皆符合行動水平。

在上述的季度的所有日間建築噪音監測結果皆符合極限水平。

### 水質

因為相關的海事結構拆除工程仍未開始，故沒有水質監測在上述的季度進行。因此，沒有違反水質行動水平和極限水平的記錄。

## 有關收到的環境的投訴，傳票及檢控

在上述的季度沒有收到有關環境的投訴、傳票或檢控。

## 報告修訂

本報告季度並沒有修訂報告。

## 預計要注意的事項

污染土壤的挖掘將在 2014 年 1 月繼續。

## 1 INTRODUCTION

### 1.1 Background

- 1.1.1. The Project Site of “Yau Tong Bay-Decommissioning of Shipyard Sites” (hereinafter referred to as “the Project”) is located along the shore of Yau Tong Bay (which is also known as Kwun Tong Tsai Wan) in East Kowloon within the Kwun Tong District and the Project Site together with its adjacent land is zoned Comprehensive Development area (“CDA”) on the Approved Cha Kwo Ling, Yau Tong, Lei Yue Mun Outline Zoning Plan (OZP) No. S/K15/19. It faces Victoria Harbour to the southwest and is bounded by the Eastern Harbour Crossing Ventilation Building to the west, Cha Kwo Ling Road to the north and east, and Ko Fai Road to the south. The site is also adjacent to the former Yau Tong Industrial Area, which is at present mainly occupied by obsolete industrial buildings.
- 1.1.2. The Project is a designated project and is governed by the Environmental Permit No. EP-409/2010 (hereinafter referred to as “the EP”).
- 1.1.3. Major works to be undertaken in the Project include:-
- Demolition of past and existing shipyard and building structures;
  - Demolition of marine structure of shipyards; and
  - Decontamination of identified contaminated spots.
- 1.1.4. For the decommissioning of past and existing shipyard lots, there is a total of 39 Marine Lots along the shore of Yau Tong Bay are under the control of the Project Proponent (Main Wealth Development Limited) and covered in this Project. These 39 lots (or the ‘concerned lots’) ,with a total area of over 1 hectare (ha), as listed below and highlighted in **Figure 1**, are hereinafter referred to as the ‘Project Site’. The land uses for the Project Site had been industrial and various land uses including shipyards, timber yards, sawmills and concrete batching plant.
- YTML No. 1
  - YTMLs No. 5-14
  - YTML No. 15
  - YTMLs No. 19-24
  - YTMLs No. 27-38
  - YTMLs No. 41-46
  - YTML No. 54
- 1.1.5. Main Wealth Development Limited (the Project Proponent) has commissioned AECOM Asia Company Limited as the Engineer of the Project and Kin Wing Construction Co., Ltd was commissioned as the Decontamination Contractor of the Project (hereafter referred to as “the Contractor”).
- 1.1.6. AECOM Asia Company Limited was appointed to undertake the Environmental Team (hereafter referred to as “ET”) services for implementation of all the Environmental Monitoring and Audit (hereafter referred to as “EM&A”) works under the Project. Mott MacDonald Hong Kong Limited and Nature & Technologies (HK) Limited act as the Independent Environmental Checker (hereafter referred to as “IEC”) and Independent Environmental Auditor (hereafter referred to as “IEA”) for the Project respectively.
- 1.1.7. According to the updated programme, the demolition works of the Project commenced on 21 November 2011. Hoarding and demolition works for the Project was completed in September 2012. The remediation method statement was approved by the EPD on 20 December 2013. The soil remediation works commenced on 23 December 2013.
- 1.1.8. In accordance with the updated Environmental Monitoring and Audit Manual (hereinafter referred to as “the EM&A Manual”) of the Project, there is a need of an impact EM&A programme includes daytime construction noise and water quality monitoring, soil remediation works monitoring and auditing and site auditing. The impact EM&A Programme for the Project commenced on 21 November 2011. The EM&A works was suspended from November 2012 for the captioned Project and the EM&A works has been resumed on 28 October 2013.



## 1.2 Scope of Report

- 1.2.1 This is the fifth Quarterly EM&A Summary Report for the Project “Yau Tong Bay – Decommissioning of Shipyard Sites”. This report presents a summary of the environmental monitoring and audit works, list of activities and mitigation measures proposed by the ET for the Project in the period between 28 October 2013 and 31 December 2013.

## 1.3 Project Organization

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

**Table 1.1 Contact Information of Key Personnel**

Party	Name	Telephone	Fax
<b>Project Proponent</b>  (Main Wealth Development Limited)	Gregory Chan	2908 8679	2562 0029
<b>Engineer</b>  (AECOM Asia Co. Ltd.)	Jeremy Yuen	3922 9000	3922 9797
<b>Decontamination Contractor (Contractor)</b>  (Kin Wing Construction Co., Ltd)	Lee Kam Hung	2717 9139	2725 9316
<b>Independent Environmental Checker (IEC)</b>  (Mott MacDonald Hong Kong Limited)	Terence Kong	2828 5919	2827 1823
<b>Independent Environmental Auditor (IEA)</b>  (Nature & Technologies (HK) Limited)	Gabriel Lam	2877 3122	2511 0922
<b>Environmental Team Leader (ETL)</b>  (AECOM Asia Co. Ltd.)	Y T Tang	3922 9393	3922 9797

#### **1.4 Summary of Construction Works**

- 1.4.1 The demolition works of the Project commenced on 21 November 2011 and was completed in September 2012.
- 1.4.2 As informed by the Contractor, the major construction activities carried out in the reporting period were setting up biopile base liner and cement solidification mixing pit, decommissioning of the underground oil tank at YTML 6-11, excavation of contaminated soil in Zones R1, R2, R4 and A1, and formation of biopiles.
- 1.4.3 The general layout plan of the Project site is shown in **Figure 1**.
- 1.4.4 The latest Construction Programme is shown in **Appendix B**.
- 1.4.5 The environmental mitigation measures implementation schedule are presented in **Appendix C**.

## 2 SUMMARY OF EM&A PROGRAMME REQUIREMENTS

### 2.1 Monitoring Parameters and Locations

- 2.1.1 The EM&A Manual designated locations for the monitoring of environmental impacts in terms of construction noise, water quality and land contamination due to the Project.
- 2.1.2 Water quality monitoring will be conducted when demolition of marine structures commences.
- 2.1.3 The EM&A Manual also requires environmental site inspections for air quality, noise, water quality, waste management, land contamination, and landscape and visual impacts.
- 2.1.4 The description of monitoring parameters, frequencies and durations, and detailed locations of monitoring stations for impact noise are listed below. The monitoring stations for impact noise are depicted in **Figure 2**.

**Table 2.1 Locations of Impact Noise Monitoring Stations**

Monitoring Station	Location	Description
NM1	Yau Lai Estate Hong Lai House	1m from the exterior of the roof top façade of the building
NM2	S.K.H. Yau Tong Kei Hin Primary School	1m from the exterior of the roof top façade of the building
NM3	C.C.C. Kei Faat Primary School (Yau Tong)	1m from the exterior of the roof top façade of the building

**Table 2.2 Noise Monitoring Parameters, Frequency and Duration**

Parameter	Frequency and Duration
30-mins measurement at each monitoring station between 0700 and 1900 on normal weekdays. $L_{eq}$ , $L_{10}$ and $L_{90}$ would be recorded.	At least once per two weeks

### 2.2 Environmental Quality Performance Limits (Action/Limit Levels)

- 2.2.1 The environmental quality performance limits, i.e. Action and Limit Levels for construction noise monitoring works were derived from the baseline monitoring results as detailed in the EM&A Manual. **Appendix D** shows the established Action and Limit Levels for noise monitoring.

### 2.3 Environmental Mitigation Measures

- 2.3.1 Relevant environmental mitigation measures as recommended in the Project EIA final report were stipulated in the EM&A Manual and environmental requirement in contract documents for the Contractor to adopt. A list of mitigation measures and their implementation statuses, i.e. Implementation Schedule of Environmental Mitigation Measures (EMIS), are given in **Appendix C**.

### 3 NOISE MONITORING

- 3.1.1 Noise monitoring was conducted at 3 designated monitoring stations (NM1 to NM3), for at least once per two weeks during daytime 0700 – 1900 of reporting quarter. The graphical plots of trends of the monitoring results are provided in **Appendix E**.
- 3.1.2 Six (6) daytime noise monitoring events were carried out at each of the designated monitoring stations (NM1 to NM3) respectively in the reporting quarter.
- 3.1.3 The weather was mostly sunny, with occasional fine and cloudy events in the reporting quarter. Major noise sources during the noise monitoring included construction activities of the Project, construction activities by other contracts and nearby traffic noise.
- 3.1.4 No Action Level exceedance was recorded since no construction noise related complaint was received in the reporting quarter.
- 3.1.5 No Limit Level exceedance was recorded at all monitoring stations in the reporting quarter.
- 3.1.6 **Table 3.1** presents the number of exceedances recorded in each month of the reporting quarter. The number of monitoring events included regular impact monitoring events and additional ones, if any.

**Table 3.1 Summary of Number of Exceedances for Construction Impact Noise Monitoring**

Monitoring Parameter	Level of Exceedance	Month								
		Oct 13			Nov 13			Dec 13		
		NM1	NM2	NM3	NM1	NM2	NM3	NM1	NM2	NM3
Daytime Construction Noise	No. of monitoring events	1	1	1	2	2	2	3	3	3
	Action	0	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0	0
	<i>Total no. of Action and Limit Level Exceedances</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

Remarks: Exceedances which are not project-related are not presented in this table.

## 4 WATER QUALITY MONITORING

- 4.1.1 Water quality monitoring was not conducted in the reporting period as demolition of marine structures was not commenced.

## 5 LAND CONTAMINATION MONITORING

### 5.1 Monitoring Status

- 5.1.1 The remediation method statement was approved by the EPD on 20 December 2013. The soil remediation works commenced on 23 December 2013.
- 5.1.2 No soil remediation works monitoring and auditing has been conducted in the reporting period.

### 5.2 Excavation Progress

- 5.2.1 Excavation has been carried out in zones R1, R4 and A1 in the reporting period. The excavation at zones R1, R4 and A1 was completed and the excavated soil has been transported to the biopile and cement mixing facilities. The locations of the contamination zones are shown in **Figure 3**.

### 5.3 Landfill Disposal of Contaminated Soil at Zones T32D and T32E

- 5.3.1 The laboratory testing results of Toxicity Characteristic Leaching Procedure (TCLP) test for the samples from zones T32D and T32E were received. The results showed that the soil in T32D and T32E passed the “Landfill Disposal Criteria for Contaminated Soil” of the *Practice Guide for Investigation and Remediation of Contaminated Land* issued by the EPD.

### 5.4 Monitoring Results

- 5.4.1 51 verification samples were collected in 18 contamination zones (T19A, T22BA, T22BB, T32C, T32D, T32E, T36A, A1, A2, A4, A5, R1, R2, R3, R4, R5, R6 and R8) in December 2013. 104 results of verification samples, including those collected in November, have been received as of 31 December 2013.

### 5.5 Underground Oil Tank at YTML 6-11

- 5.5.1 The oil tank was removed on 26 November 2013 and five confirmatory samples have been collected at the sidewalls and underneath the oil tank. No exceedance of RBRGs is found among all verification samples. The excavation zone was backfilled on 27 December 2013.

## **6 ENVIRONMENTAL SITE INSPECTION AND AUDIT**

6.1.1 There were nine (9) site inspections conducted in the reporting quarter to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. The major concerns for the Project are air quality, noise, water quality, and chemical and waste management. Observations recorded are described below.

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

### **Air Quality Impact**

6.1.4 Wheel washing facilities with high pressure jets were not provided at two entrance points of the site.

6.1.5 Stockpiles of wastes and construction materials were not sprayed with water; or covered entirely by impervious sheeting or placed in sheltered areas. The Contractor should cover stockpiles of wastes and construction materials; and regularly spray water to stockpile materials or dusty site surfaces should be maintained.

6.1.6 Some site areas are not installed with water sprinklers. Regular spraying of water by other methods (e.g. water vehicles) at those areas should be maintained.

### **Construction Noise Impact**

6.1.8 A small opening was found at the hoarding at the roadside near YTML 6-11. The opening should be covered.

### **Water Quality Impact**

6.1.10 Open stockpiles of construction materials and stockpiles of cement placed on site were not covered with tarpaulin or similar fabric.

6.1.11 Construction debris and spoil be were not covered up or disposed of as soon as possible to avoid being washed into the nearby receiving waters.

### **Chemical and Waste Management**

6.1.13 No adverse observation was identified in the reporting quarter.

### **Landscape and Visual Impact**

6.1.15 No adverse observation was identified in the reporting quarter.

### **Miscellaneous**

6.1.17 The Contractor should provide recycling bins at the site office area and site exits.

6.1.18 Relevant Environmental Permits are not posted at two vehicle site entrances

## 7 ADVICE ON SOLID AND LIQUID WASTE MANAGEMENT STATUS

- 7.1.1 The Contractor submitted the application form for registration as a chemical waste producer for the Project.
- 7.1.2 As advised by the Contractor, no inert C&D wastes was generated on site and disposed of at Public Fill (Tseung Kwan O Area 137 Fill Bank). No general refuse was generated on site and disposed of at the South East New Territories (SENT) Landfill. No inert C&D materials were reused on site or reused in SENT for backfilling purpose respectively. No metals, paper/cardboard packaging or plastics were generated and collected by the registered recycling collectors. No chemical waste was collected by the licensed contractor in the reporting period.
- 7.1.3 The Contractor is advised to properly maintain on site C&D material and waste sorting, and collection and recording system, and maximize the reuse / recycling of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of wastes accumulated on site regularly and properly.

## 8 SUMMARY OF NON-COMPLIANCE (EXCEEDANCES) OF ENVIRONMENTAL QUALITY PERFORMANCE LIMITS (ACTION AND LIMIT LEVELS)

- 8.1.1 No Action Level exceedance was recorded since no construction noise related complaint was received in the reporting quarter.
- 8.1.2 No Limit Level exceedance of construction noise was recorded in the reporting quarter.
- 8.1.3 Water quality monitoring was not conducted in the reporting period as demolition of marine structures was not commenced.

## 9 COMPLAINT, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTION

- 9.1.1 No environmental complaint, notification of summons and successful prosecution was received in the reporting quarter.
- 9.1.2 Table 6.1 summarizes the numbers of complaints, summons and successful prosecutions received in the reporting period.

**Table 6.1 Summary of Environmental Complaints, Summons and Successful Prosecutions**

	Oct 13	Nov 13	Dec 13	Total
Complaints Logged	0	0	0	0
Summons Served	0	0	0	0
Successful Prosecutions	0	0	0	0

- 9.1.3 Statistics on complaints, notifications of summons and successful prosecutions recorded in the reporting quarter and since the commencement of the Project are given in Appendix F.

## **10 COMMENTS, RECOMMENDATIONS AND CONCLUSIONS**

### **10.1 Comments on Mitigation Measures**

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

#### **10.1.2 Air Quality Impact**

10.1.3 The Contractor should provide wheel washing facilities with high pressure jets at entrance points of the site.

10.1.4 The Contractor should cover stockpiles of wastes and construction materials; and regularly spray water to stockpile materials or dusty site surfaces should be maintained.

#### **10.1.5 Construction Noise Impact**

10.1.6 The Contractor should cover the opening at the hoarding at the roadside near YTML 6-11.

#### **10.1.7 Water Quality Impact**

10.1.8 The Contractor should regularly spray water to stockpile materials or dusty site surfaces should be maintained.

10.1.9 The Contractor should cover stockpiles of wastes and construction materials.

#### **10.1.10 Chemical and Waste Management**

10.1.11 No adverse observation was identified in the reporting quarter.

#### **10.1.12 Landscape and Visual Impact**

10.1.13 No adverse observation was identified in the reporting quarter.

#### **10.1.14 Miscellaneous**

10.1.15 The Contractor should provide recycling bins at the site office area and site exits.

10.1.16 The Contractor should post relevant Environmental Permits at two vehicle site entrances.

### **10.2 Recommendations on EM&A Programme**

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

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



### **10.3 Conclusions**

- 10.3.1 The demolition works of the Project commenced on 21 November 2011 and was completed in September 2012.
- 10.3.2 The impact EM&A programme for the Project commenced on 21 November 2011.
- 10.3.3 Noise monitoring and weekly site inspections were carried out from 28 October 2013 to 31 October 2013, in accordance with the EM&A Manual.
- 10.3.4 No Action Level exceedance was recorded since no construction noise related complaint was received in the reporting period.
- 10.3.5 No Limit Level exceedance of construction noise was recorded in the reporting quarter.
- 10.3.6 Water quality monitoring was not conducted in the reporting period as the demolition of marine structures has not yet commenced.
- 10.3.7 As informed by the Contractor, the major construction activities carried out in the reporting period were setting up biopile base liner and cement solidification mixing pit, decommissioning of the underground oil tank at YTML 6-11, excavation of contaminated soil in Zones R1, R2, R4 and A1, and formation of biopiles.
- 10.3.8 Environmental site inspection was carried out 9 times in the reporting quarter. Recommendations on remedial actions were given to the Contractors for the deficiencies identified during the site audits.
- 10.3.9 No environmental complaint, notification of summons and successful prosecution was received in the reporting quarter.
- 10.3.10 According to the updated programme, the demolition works of the Project commenced on 21 November 2011. Hoarding and demolition works for the Project was completed in September 2012. The remediation method statement was approved by the EPD on 20 December 2013. The soil remediation works commenced on 23 December 2013.

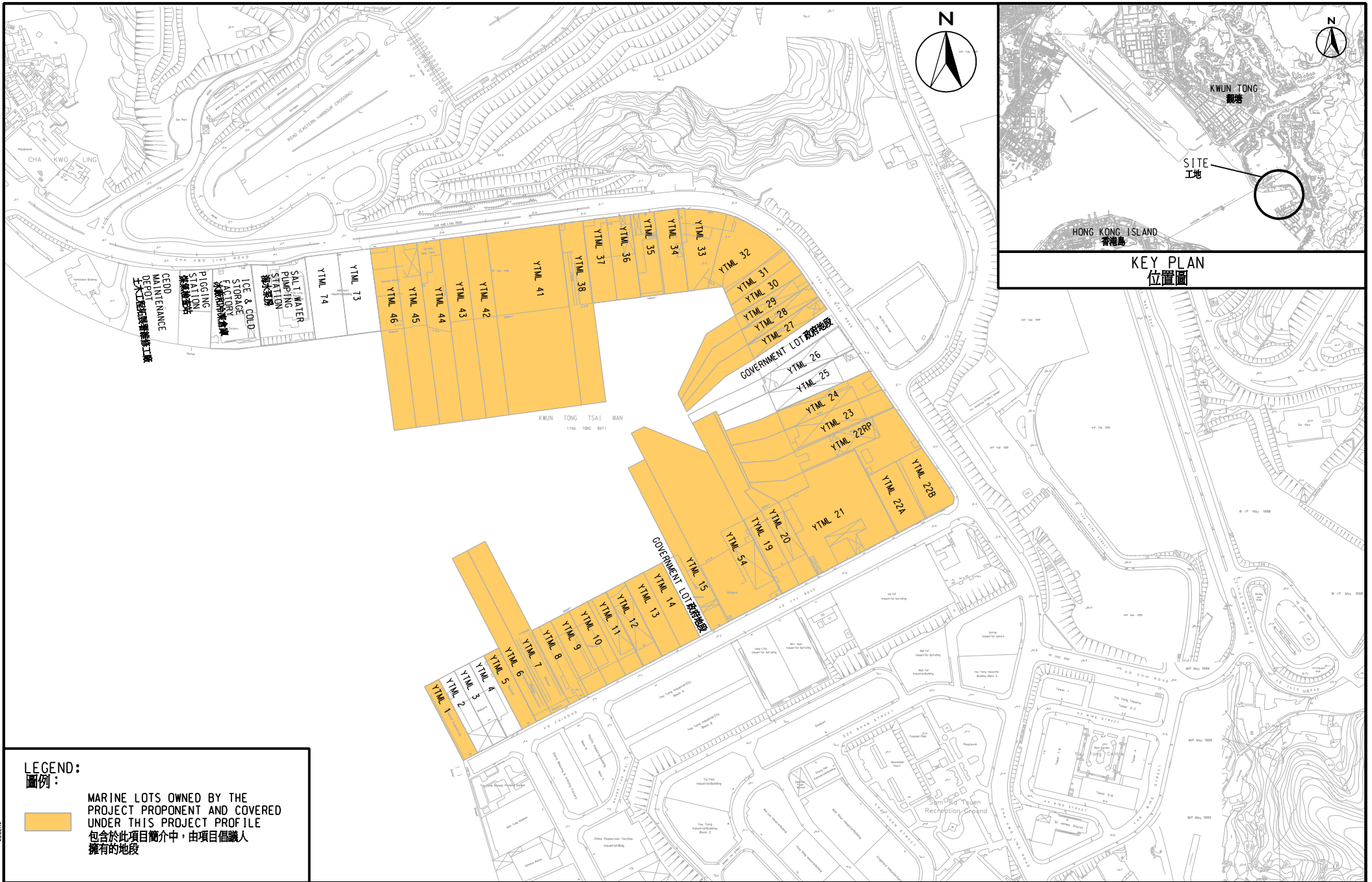
---

---

## FIGURES

---

---



**LEGEND:**  
圖例:



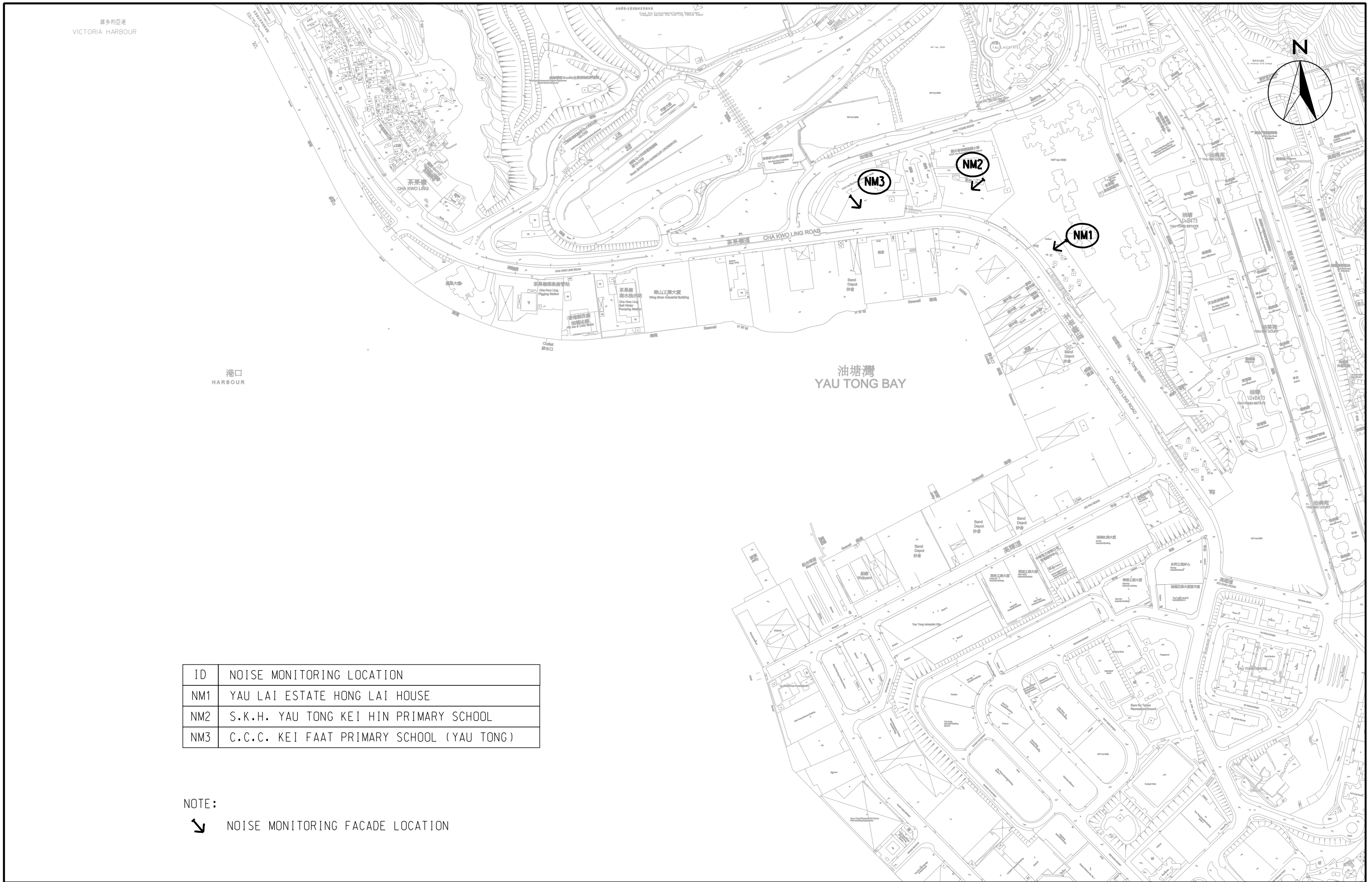
MARINE LOTS OWNED BY THE PROJECT PROPONENT AND COVERED UNDER THIS PROJECT PROFILE  
包含於此項目簡介中，由項目倡議人擁有的地段

YAU TONG BAY - DECOMMISSIONING OF SHIPYARD SITES PROJECT PROFILE

油塘灣 - 船廠拆卸工程

**SITE LOCATION PLAN**  
工地位置圖

SCALE 比例	A4 1 : 4500	DATE 日期	NOV 2010	
CHECK 校對	--	DRAWN 繪圖	--	
JOB No.	60048283	FIGURE NO.	1	REV A



ID	NOISE MONITORING LOCATION
NM1	YAU LAI ESTATE HONG LAI HOUSE
NM2	S.K.H. YAU TONG KEI HIN PRIMARY SCHOOL
NM3	C.C.C. KEI FAAT PRIMARY SCHOOL (YAU TONG)

NOTE:

↘ NOISE MONITORING FACADE LOCATION

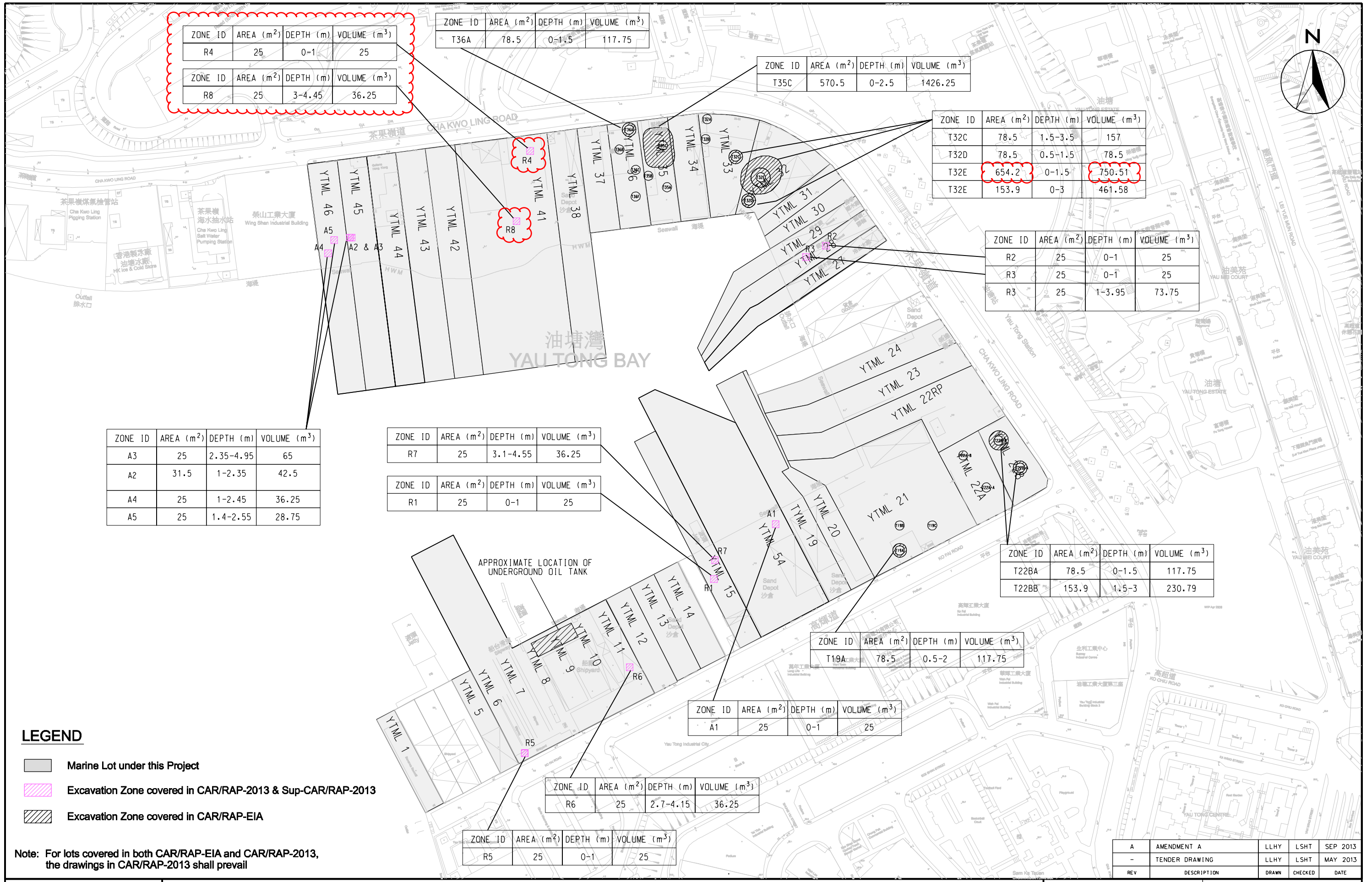
YAU TONG BAY - DECOMMISSIONING OF SHIPYARD SITES

NOISE MONITORING LOCATIONS

**AECOM**

SCALE	A3 1 : 3000	DATE	AUG. 2011	
CHECK	LSHT	DRAWN	LLHY	
PROJECT NO.	60048283	FIGURE NO.	2	REV --





ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
R4	25	0-1	25
R8	25	3-4.45	36.25

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
T36A	78.5	0-1.5	117.75

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
T35C	570.5	0-2.5	1426.25

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
T32C	78.5	1.5-3.5	157
T32D	78.5	0.5-1.5	78.5
T32E	654.2	0-1.5	750.51
T32E	153.9	0-3	461.58

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
R2	25	0-1	25
R3	25	0-1	25
R3	25	1-3.95	73.75

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
A3	25	2.35-4.95	65
A2	31.5	1-2.35	42.5
A4	25	1-2.45	36.25
A5	25	1.4-2.55	28.75

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
R7	25	3.1-4.55	36.25

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
R1	25	0-1	25

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
T22BA	78.5	0-1.5	117.75
T22BB	153.9	1.5-3	230.79

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
T19A	78.5	0.5-2	117.75

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
A1	25	0-1	25

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
R6	25	2.7-4.15	36.25

ZONE ID	AREA (m <sup>2</sup> )	DEPTH (m)	VOLUME (m <sup>3</sup> )
R5	25	0-1	25

**LEGEND**

- Marine Lot under this Project
- Excavation Zone covered in CAR/RAP-2013 & Sup-CAR/RAP-2013
- Excavation Zone covered in CAR/RAP-EIA

Note: For lots covered in both CAR/RAP-EIA and CAR/RAP-2013, the drawings in CAR/RAP-2013 shall prevail

REV	DESCRIPTION	DRAWN	CHECKED	DATE
A	AMENDMENT A	LLHY	LSHT	SEP 2013
-	TENDER DRAWING	LLHY	LSHT	MAY 2013

SCALE	A3 1:2500	DATE	MAY 2013
CHECK	LSHT	DRAWN	LLHY
PROJECT NO.	60048208	FIGURE NO.	3



YAU TONG BAY REDEVELOPMENT  
LAND DECONTAMINATION WORKS  
**LOCATIONS OF CONTAMINATED ZONES**

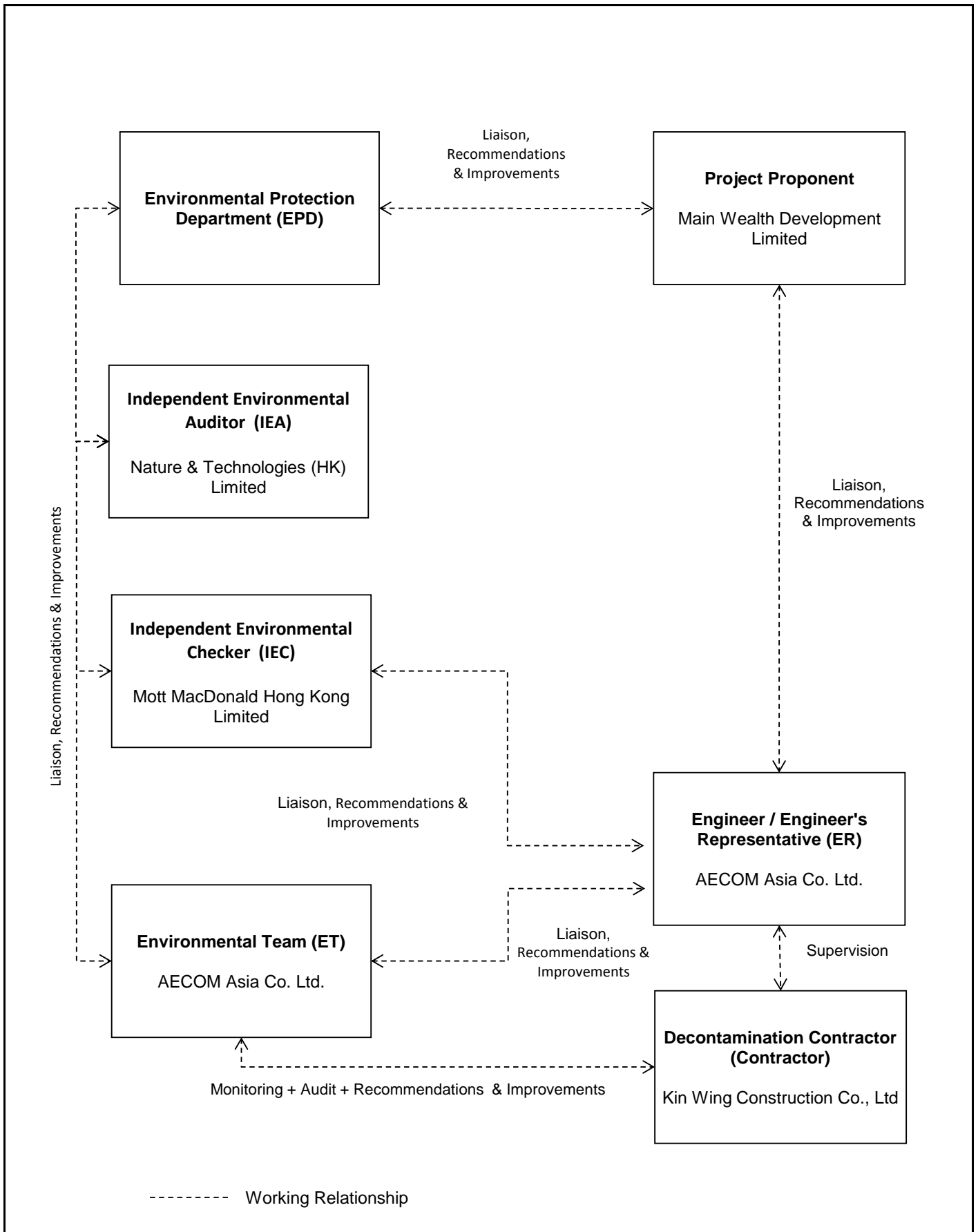
---

---

**APPENDIX A  
PROJECT ORGANIZATION STRUCTURE**

---

---



<b>AECOM</b>	<b>Yau Tong Bay - Decommissioning of Shipyard Sites</b>	SCALE	N.T.S.	DATE	Dec-13
		CHECK	ENFL	DRAWN	JCYK
	Project Organization Structure	JOB NO.	60048283	APPENDIX	A

---

---

**APPENDIX B  
CONSTRUCTION PROGRAMME**

---



---



# Yau Tong Bay Redevelopment Land Decontamination Works

## Construction Programme (Rev. 2)

I.D No.	Start	Finish	2013				2014												2015
			Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan
10	13-Sep-13	27-Nov-13	█	█	█														
20	30-Sep-13	16-Dec-13		█	█	█	█												
30	13-Sep-13	23-Oct-13	█	█															
40	24-Oct-13	23-Jan-14			█	█	█	█											
42	28-Oct-13	5-Jan-15			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
45	11-Nov-13	16-Dec-13			█	█	█												
50	28-Oct-13	23-Nov-13			█	█													
60	17-Dec-13	23-Jan-14					█	█											
70	24-Jan-14	23-Mar-14						█	█	█									
80	17-Dec-13	31-Dec-13					█												
90	17-Dec-13	23-Jan-14					█	█											
100	24-Jan-14	23-Mar-14						█	█	█									
110	17-Dec-13	7-Apr-14					█	█	█	█								█	
120	24-Mar-14	2-Nov-14									█	█	█	█	█	█	█	█	
130	11-Nov-13	29-Nov-13			█														
132	30-Nov-13	2-Dec-13				█													
134	3-Dec-13	2-Jan-14					█	█											
136	3-Jan-14	9-Mar-14						█	█	█									
140	30-Sep-13	2-Nov-13		█	█														
143	4-Nov-13	9-Nov-13			█														
147	25-Oct-13	9-Nov-13			█														
148	11-Nov-13	23-Nov-13			█														
150	25-Nov-13	10-Dec-13				█	█												
160	11-Dec-13	10-Jan-14					█	█											
170	18-Nov-14	21-Dec-14																█	█
180	23-Dec-14	5-Jan-15																	█

 Non-critical Activity  
 Critical Activity

---

---

**APPENDIX C  
IMPLEMENTATION SCHEDULE OF  
ENVIRONMENTAL MITIGATION MEASURES  
(EMIS)**

---

---

**Appendix C - Implementation Schedule of Environmental Mitigation Measures (EMIS)**

Air Quality - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
Air Quality during Construction	<ul style="list-style-type: none"> <li>Careful siting of construction activities which generate substantial amount of dust can effectively reduce the overall impact.</li> </ul>	During construction	V	V	V
	<ul style="list-style-type: none"> <li>Use of regular watering, with complete coverage if possible, to reduce dust emissions from exposed site surfaces and unpaved roads and for dusty construction areas and areas close to ASRs, particularly during dry weather.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Open stockpiles shall be avoided. Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where possible, prevent placing dusty material storage piles near ASRs. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.</li> </ul>		@	@	@
	<ul style="list-style-type: none"> <li>No free falling construction debris should be allowed; debris should be let down by hoist or enclosed tunnel to the ground.</li> </ul>		N/A	N/A	N/A
	<ul style="list-style-type: none"> <li>All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading points, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods.</li> </ul>		N/A	@	@
	<ul style="list-style-type: none"> <li>Height from which dusty materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.</li> </ul>		N/A	N/A	N/A
	<ul style="list-style-type: none"> <li>Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Skip hoist for material transport should be totally enclosed by impervious sheeting.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Establishment and use of vehicle wheel and body washing facilities at the exit points of the site and public roads, combined with cleaning of public roads wherever necessary and practical.</li> </ul>		@	@	@
	<ul style="list-style-type: none"> <li>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.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Provision of not less than 2.4m high hoarding from ground level along site boundary where adjoins a road, streets or other accessible to the public except for a site entrance or exit.</li> </ul>		V	V	V

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
Air Quality during Construction	<ul style="list-style-type: none"> <li>Imposition of speed controls for vehicles on site haul roads. Where feasible, routing of vehicles and positioning of construction plants should be at a maximum possible distances from sensitive receivers.</li> </ul>	During construction	V	V	V
	<ul style="list-style-type: none"> <li>Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides.</li> </ul>		N/A	N/A	N/A
	<ul style="list-style-type: none"> <li>Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.</li> </ul>		V	V	V

Noise - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
Construction Noise during Construction	<ul style="list-style-type: none"> <li>In order to reduce the excessive noise impacts at the affected NSRs during normal daytime working hours, the following mitigation measures shall be implemented:-               <ul style="list-style-type: none"> <li>adopting quiet powered mechanical equipment;</li> <li>scheduling of works;</li> <li>erect a 3m tall moveable noise barriers along the site boundary; and</li> <li>noise enclosure.</li> </ul> </li> </ul>	During construction	V	V	V
	<ul style="list-style-type: none"> <li>Only well-maintained plant should be operated on-site and plant should be serviced regularly.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Silencers or mufflers on construction equipment should be utilized and should be properly maintained.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Mobile plant, if any, should be sited as far away from NSRs as possible.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>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.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>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.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Use of acoustic barriers as close to the source as possible. Equipment to be shielded: air compressor, water pump, concrete pump, dumper, dump truck, generator, various hand tools, saw, excavator, loader, truck mixer, mobile crane, vibrator and breaker.</li> </ul>	During examination periods of the school nearby	V	V	V

Water Quality - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
Water Quality during Construction	<b>Construction works at or close to the seafront</b>				
	<ul style="list-style-type: none"> <li>Temporary storage of construction materials (e.g. equipment, filling materials, chemicals and fuel), chemical waste storage area and temporary stockpile of construction and demolition materials should be located well away from the seawater front and storm drainage during carrying out of the works.</li> </ul>	During construction	V	V	V
	<ul style="list-style-type: none"> <li>Stockpiling of construction and demolition materials and dusty materials should be covered and located away from the seawater front and storm drainage.</li> </ul>		@	V	V
	<ul style="list-style-type: none"> <li>Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby receiving waters.</li> </ul>		@	V	V
	<b>Construction run-off and Drainage</b>				
	<p>The site practices outlined in ProPECC PN 1/94 "Construction Site Drainage" shall be followed as far as practicable in order to minimise surface runoff and the chance of erosion, and also to retain and reduce any suspended solids prior to discharge. These practices include, inter alia, the following items:-</p> <ul style="list-style-type: none"> <li>Provision of perimeter channels to intercept storm-runoff from outside the site. These shall be constructed in advance of site formation works and earthworks.</li> </ul>	During construction	V	V	V
	<ul style="list-style-type: none"> <li>Vehicle and plant servicing areas, vehicle wash bays and lubrication bays should as far as possible be located within roofed areas. The drainage in these covered areas should be connected to foul sewers via a petrol interceptor and/or oil/grease separator. Oil leakage or spillage should be contained and cleaned up immediately. Waste oil should be collected and stored for recycling or disposal in accordance with the Waste Disposal Ordinance.</li> </ul>		N/A	V	V
	<ul style="list-style-type: none"> <li>Sand/silt removal facilities such as sand traps, silt traps and sediment basins shall be provided to remove sand/silt particles from runoff to meet the requirements of the Technical Memorandum standard under the Water Pollution Control Ordinance. The design of silt removal facilities should be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures should be inspected monthly, regularly cleaned and maintained to ensure proper and efficient operation at all times and particularly during rainstorms.</li> </ul>		V	V	V

Impact	Mitigation Measures	Timing	Implementation Status			
			Oct 13	Nov 13	Dec 13	
Water Quality during Construction	<ul style="list-style-type: none"> <li>Careful programming of the works to minimise the potential of soil erosion during the rainy season. Other measures that need to be implemented before, during, and after rainstorms are summarized in ProPECC PN 1/94.</li> </ul>	During construction	V	V	V	
	<ul style="list-style-type: none"> <li>Exposed soil surface shall be protected by paving as soon as possible to reduce the potential of soil erosion.</li> </ul>		V	V	V	
	<ul style="list-style-type: none"> <li>Open stockpiles of construction materials on site shall be covered with tarpaulin or similar fabric during rainstorm.</li> </ul>		@	@	@	
	<b>General Construction Activities</b>					
	<ul style="list-style-type: none"> <li>Debris and rubbish generated on-site shall be collected, handled and disposed of properly to avoid entering the nearby nullah and stormwater drains. Stockpiles of cement and other construction material should be kept covered when not being used.</li> </ul>	During construction	V	V	V	
	<ul style="list-style-type: none"> <li>Oils and fuels should only be used and stored in designated areas which have pollution prevention facilities. All fuel tanks and storage areas shall 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.</li> </ul>		V	V	V	
	<b>Sewage Effluent</b>					
	<ul style="list-style-type: none"> <li>Temporary sanitary facilities, such as portable chemical toilets, shall be employed on-site. A licensed contractor would be responsible for appropriate disposal and maintenance of these facilities.</li> </ul>	During construction	V	V	V	
	<ul style="list-style-type: none"> <li>Effluent discharged from the construction site should comply with the standards stipulated in the TM-DSS.</li> </ul>		N/A	V	V	
	<ul style="list-style-type: none"> <li>Subject to the sampling results of Contamination Assessment Plan of the site, any contaminated land treatments are subjected to EPD's requirements on handling, treatment and disposal. Should effluent stream and/or extracted ground water be discharged from the site, the discharge shall comply with the WPCO and any EPD special requirements.</li> </ul>		N/A	N/A	N/A	
<ul style="list-style-type: none"> <li>Establishment of baseline and impact monitoring program to establish the baseline water quality condition and monitor the construction process in order to enforce controls and modify method of work if any adverse impacts on the water sensitive receivers are detected.</li> </ul>	V		V	V		

Waste Management- Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
Waste Management during Construction	<b>Good Site Practice</b>	During construction			
	<ul style="list-style-type: none"> <li>Nominate an approved personnel, such as a site manager, to be responsible for good site practices and effective arrangements for collection and disposal to an appropriate facility of all wastes generated at the works area. Training of site personnel in proper waste management and handling procedures shall be undertaken.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Construction materials should be planned and stocked carefully to minimise and avoid unnecessary generation of waste.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>General refuse shall be stored and collected separately from other construction and chemical wastes. Provide on-site refuse collection facilities and enclosed transfer facility for storage and containment.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Waste points should be provided sufficiently and waste should be collected regularly.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Separate chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Centre located at Tsing Yi. Chemical waste shall be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>Develop procedures such as a trip-ticket system to monitor the disposal of C&amp;D material and solid wastes at public filling areas and landfills, and to control fly-tipping.</li> </ul>		V	V	V
	<ul style="list-style-type: none"> <li>A recording system for the amount of wastes generated, recycled and disposed should be proposed.</li> </ul>		V	V	V
	<b>Waste Reduction Measures</b>	During construction			
	<p>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:-</p> <ul style="list-style-type: none"> <li>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.</li> </ul>		V	V	V

Impact	Mitigation Measures	Timing	Implementation Status			
			Oct 13	Nov 13	Dec 13	
Waste Management during Construction	<ul style="list-style-type: none"> <li>Encourage collection of aluminum 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.</li> </ul>	During construction	V	V	V	
	<ul style="list-style-type: none"> <li>Any unused chemicals or those with remaining functional capacity shall be recycled.</li> </ul>		V	V	V	
	<ul style="list-style-type: none"> <li>Use of reusable non-timber formwork to reduce the amount of C&amp;D material.</li> </ul>		V	V	V	
	<ul style="list-style-type: none"> <li>Prior to disposal of C&amp;D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill.</li> </ul>		V	V	V	
	<ul style="list-style-type: none"> <li>Proper storage and site practices to minimise the potential for damage or contamination of construction materials.</li> </ul>		V	V	V	
	<ul style="list-style-type: none"> <li>Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.</li> </ul>		V	V	V	
	<b>General Site Wastes</b>					
	<ul style="list-style-type: none"> <li>Collection area for construction site waste should be provided where waste can be stored prior to removal from site.</li> </ul>	During construction	V	V	V	
	<ul style="list-style-type: none"> <li>An enclosed and covered area for the collection of the waste is recommended to reduce 'wind blow' of light material.</li> </ul>		V	V	V	
	<ul style="list-style-type: none"> <li>An open area used for storage or loading/unloading of wastes should be bunded and all the polluted surface run-off collected within this area should be diverted into sewers.</li> </ul>		V	V	V	
	<ul style="list-style-type: none"> <li>General refuse should be stored in enclosed bins or compaction units separate from C&amp;D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&amp;D material.</li> </ul>		V	V	V	
	<b>Workforce Wastes</b>					
	<ul style="list-style-type: none"> <li>Suitable collection sites around site offices and canteen should be required.</li> </ul>	During construction	V	V	V	
	<ul style="list-style-type: none"> <li>Waste should be removed daily or as often as required.</li> </ul>		V	V	V	
	<b>Chemical Waste</b>					
	<ul style="list-style-type: none"> <li>After use, chemical waste (for example, cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Package, Labelling and Storage of Chemical Wastes.</li> </ul>	During construction	V	V	V	
	<ul style="list-style-type: none"> <li>Waste should be properly stored on site within suitably designed containers and should be collected by approved licensed waste collectors for disposal at the Chemical Waste Treatment Centre (CWTC) or other licensed facility in accordance with the Waste Disposal Chemical Waste (General) Regulation.</li> </ul>		V	V	V	



Impact	Mitigation Measures	Timing	Implementation Status			
			Oct 13	Nov 13	Dec 13	
Waste Management during Construction	<ul style="list-style-type: none"> <li>Any service shop and minor maintenance facilities should be located on hard standing within a bunded area, and sumps and oil interceptors should be provided.</li> </ul>	During construction	N/A	N/A	N/A	
	<ul style="list-style-type: none"> <li>Provision of appropriate on-site temporary storage facility for any asbestos containing materials (ACM) where necessary. Storage facilities shall be designed in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.</li> </ul>		V	V	V	
	<ul style="list-style-type: none"> <li>Employ registered contractors for removal of ACM off-site and disposal at a designated landfill site.</li> </ul>		V	V	V	
	<b>Construction and Demolition Material</b>					
	<ul style="list-style-type: none"> <li>The selective demolition method is recommended to be employed to minimize the effort of sorting mixed C&amp;D materials.</li> </ul>	During construction	V	V	V	
	<ul style="list-style-type: none"> <li>In order to minimise the impact resulting from collection and transportation of C&amp;D material for off-site disposal, it is recommended that the public fill material generated from demolition works shall be re-used on-site as far as possible.</li> </ul>		V	V	V	
<ul style="list-style-type: none"> <li>A suitable area should be designated to facilitate the sorting process and a temporary stockpiling area will be required for the separated materials. Separate construction and demolition material into C&amp;D waste (non-inert material) and public fill (inert material) for appropriate disposal. Public fill disposed at a public filling area shall only consist of earth, building debris, broken rock and concrete. The material shall be free from marine mud, household refuse, plastic, metals, industrial and chemical waste, animal and vegetable matter, and other material considered to be unsuitable by the Filling Supervisor. Small quantities of timber mixed with otherwise suitable material would be permitted. C&amp;D waste, such as wood, glass, plastic, steel and other metals, shall be reused or recycled and, as a last resort, disposed to landfill.</li> </ul>	V		V	V		

Land Contamination - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
Land Contamination (For inaccessible lots and lots which the Permit Holder opt to re-assess in accordance with the Risk-Based Remediation Goals (RBRGs) approach)	<ul style="list-style-type: none"> <li>Further land contamination assessments to be carried out for inaccessible lots, lots which the Permit Holder opt to re-assess in accordance with the RBRGs approach, as well as areas that required further sampling to ascertain contamination extent. Supplementary CAP, CAR and RAPs to be submitted to EPD for endorsement before commencement of remediation work. These reports shall detail the further sampling &amp; remediation works required. The development construction work shall only commence after all the remediation work has been completed.</li> </ul>	<p>Inaccessible lots as described under para. 3.5 of Appendix 7A of YTB-EIA as well as areas that required further sampling to ascertain contamination extent/ Upon availability of site access</p> <p>Supplementary CAP, CAR and RAPs to be submitted to EPD for endorsement before commencement of the remediation work.</p> <p>Development construction work should only commence after all the remediation work has been completed.</p>	<p>@</p> <p>(Two CAPs (Yau Tong Bay - Decommissioning of Shipyard Sites Supplementary CAP for Previous Inaccessible Lots (YTML 27, 44, 45-46, 54 and Underground Oil Tank at YTML 6-11) &amp; Yau Tong Bay - Decommissioning of Shipyard Sites (CAP for YTML 1, 6-11, 15, 28, 29, 38 and 41-</p>	<p>V</p> <p>(Two CAPs (Yau Tong Bay - Decommissioning of Shipyard Sites Supplementary CAP for Previous Inaccessible Lots (YTML 27, 44, 45-46, 54 and Underground Oil Tank at YTML 6-11) &amp; Yau Tong Bay - Decommissioning of Shipyard Sites (CAP</p>	<p>V</p> <p>(Two CAPs (Yau Tong Bay - Decommissioning of Shipyard Sites Supplementary CAP for Previous Inaccessible Lots (YTML 27, 44, 45-46, 54 and Underground Oil Tank at YTML 6-11) &amp; Yau Tong Bay - Decommissioning of Shipyard Sites (CAP for YTML 1, 6-11, 15, 28, 29, 38</p>

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
			43)) have been submitted to EPD and approved on 6 Jul 2011 and 30 Aug 2011 respectively. CARs and RAPs will be submitted after the completion of site investigation according to the CAPs.)	for YTML 1, 6-11, 15, 28, 29, 38 and 41-43)) have been submitted to EPD and approved on 6 Jul 2011 and 30 Aug 2011 respectively. The corresponding CARs and RAPs were submitted to EPD in June 2012 and were subsequently approved in June 2013 after two rounds of comment.)	and 41-43)) have been submitted to EPD and approved on 6 Jul 2011 and 30 Aug 2011 respectively. The corresponding CARs and RAPs were submitted to EPD in June 2012 and were subsequently approved in June 2013 after two rounds of comment.)

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
				2013 after two rounds of comment.)	
Land Contamination (For inaccessible lots and lots which the Permit Holder opt to re-assess in accordance with the Risk-Based Remediation Goals (RBRGs) approach)	<ul style="list-style-type: none"> <li>• A method statement detailing the following shall be submitted to EPD for endorsement:- <ul style="list-style-type: none"> <li>- Methodology, monitoring and verification procedures for biopiling and solidification;</li> <li>- Pilot test procedures for solidification process to ascertain the concrete mix recipe and leachability of the product;</li> <li>- The sample size for the verification soil test to be conducted by IEA for spot check purpose;</li> <li>- The notification system for notifying the Director the satisfactory completion of the excavation and treatment of contaminated soil; and</li> <li>- Provision and operation requirements of equipment and personnel decontamination facilities.</li> </ul> </li> </ul>	<p>All areas identified to require solidification of soil as land remediation / The pilot test results and method statement shall be submitted and endorsed at least one month prior to the full scale solidification works.</p> <p>All soil identified and to be identified as contaminated with TPH / The method statement shall be submitted and endorsed at least one month prior to the commencement of the biopiling works.</p>	N/A	V  (A method statement for biopiling and solidification has been submitted to EPD on 2 Oct 2013. The method statement is still pending for EPD's endorsement.)	V  (A method statement for biopiling and solidification has been submitted to EPD on 2 Oct 2013. The method statement is endorsed by EPD on 20 Dec 2013.)
Land Contamination (For inaccessible lots and lots which the Permit	<ul style="list-style-type: none"> <li>• A Soil Remediation Report should be submitted to EPD to demonstrate that the remediation work has been properly carried out.</li> </ul>	All areas identified to require soil and groundwater remediation / The Remediation Report shall be submitted and endorsed prior to the commencement of the development	N/A	N/A	N/A

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
Holder opt to re-assess in accordance with the Risk-Based Remediation Goals (RBRGs) approach)		construction works.			
	<ul style="list-style-type: none"> <li>Inspections for dioxin. Should there be signs of incineration facilities, burn pits or facilities that utilises high temperature burning, soil sampling for dioxin will be carried out. Details regarding such sampling shall be approved by EPD. A detailed proposal for dealing with dioxin contaminated material, if found, shall also be submitted to EPD for approval.</li> </ul>	All the Yau Tong Bay marine lots inspection and testing shall commence upon availability of site.	V	V	V
Land Contamination (For lots and facilities assessed under EIA with approved CAP, CAR and RAP based on Dutch B levels referenced to ProPECC PN3/94 – Contaminated Land Assessment and Remediation)	<ul style="list-style-type: none"> <li>A pilot test shall be conducted to ascertain the concrete mix recipe and leachability of the product prior to a full scale solidification and a method statement detailing the solidification procedure (including the sampling proposal for process monitoring) shall be submitted to EPD for endorsement.</li> </ul>	All areas identified to require solidification of soil as land remediation / The pilot test results and method statement shall be submitted and endorsed prior to the full scale solidification works.	N/A	N/A	V  (A pilot test to ascertain the concrete mix recipe was conducted on 30 Dec 2013. The method statement for solidification has been submitted to EPD on 2 Oct 2013 and subsequently endorsed by EPD

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
					on 20 Dec 2013.)
Land Contamination (For lots and facilities assessed under EIA with approved CAP, CAR and RAP based on Dutch B levels referenced to ProPECC PN3/94 – Contaminated Land Assessment and Remediation)	<ul style="list-style-type: none"> <li>A method statement detailing the biopiling methodology, monitoring and verification procedures shall be submitted to EPD for endorsement.</li> </ul>	All soil identified and to be identified as contaminated with TPH / The method statement shall be submitted and endorsed prior to the commencement of the biopiling works.	N/A	V  (A method statement for biopiling and solidification has been submitted to EPD on 2 Oct 2013. The method statement is still pending for EPD's endorsement.)	V  (The method statement for biopiling has been submitted to EPD on 2 Oct 2013 and subsequently endorsed by EPD on 20 Dec 2013.)
	<ul style="list-style-type: none"> <li>A Soil Remediation Report should be submitted to EPD to demonstrate that the remediation work has been properly carried out.</li> </ul>	All areas identified to require soil and groundwater remediation / The Remediation Report shall be submitted and endorsed prior to the commencement of the development construction works.	N/A	N/A	N/A

Landscape and Visual Impact - Schedule of Recommended Mitigation Measures

Impact	Mitigation Measures	Timing	Implementation Status		
			Oct 13	Nov 13	Dec 13
Landscape and Visual Impact during Construction	<ul style="list-style-type: none"> <li>On-site mature trees within the Project boundary shall be retained. Any mature tree shall not be transplanted or fell unless permission has been given by EPD.</li> </ul>	During construction	V	V	V
	<ul style="list-style-type: none"> <li>During the biopiling process, the biopiles shall be limited to a height of less than 3m.</li> </ul>		N/A	N/A	N/A
	<ul style="list-style-type: none"> <li>Erection and maintenance of decorative screen/colour hoarding around the site.</li> </ul>		V	V	V

Legend: V = implemented;  
 X = not implemented;  
 @ = partially implemented;  
 N/A = not applicable - No such work was undertaken or no such material was used on site.

---

---

**APPENDIX D  
SUMMARY OF ACTION AND LIMIT LEVELS**

---

---



## Appendix D - Summary of Action and Limit Levels

Table 1 – Action and Limit Levels for Construction Noise (0700-1900 hrs of normal weekdays)

<b>Location</b>	<b>Action Level</b>	<b>Limit Level</b>
NM1	When one documented complaint, related to 0700 – 1900 hours on normal weekdays, is received from any one of the sensitive receivers.	75 dB(A)
NM2		65/70 dB(A)*
NM3		65/70 dB(A)*

\*Daytime noise Limit Level of 70 dB(A) applies to education institutions, while 65dB(A) applies during school examination period.

---

**APPENDIX E  
GRAPHICAL PRESENTATION OF IMPACT  
DAYTIME CONSTRUCTION NOISE  
MONITORING RESULTS OVER PAST FOUR  
MONTHS**

---

**Appendix E Impact Daytime Construction Noise Monitoring Results**

Location : NM1 (Yau Lai Estate Hong Lai House Rooftop - Façade)  
 Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

Date	Start Time	End Time	Weather	Measured Noise Level for 30-min, dB(A)			Baseline Noise Level, dB(A)	Corrected Construction Noise Level, dB(A) **	Limit Level, dB(A)	Major Noise Source(s) Observed	Remarks	Mean Temp. (°C)	Mean Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90									
6-Dec-13	13:05	13:35	Fine	63.9	65.5	60.5	65.4	63.9	75.0	Construction activities of other contracts; Traffic Noise	-	18.3	<5 m/s	Rion NL-31 (00320528)	Rion NC-73 (10307223)
12-Dec-13	14:01	14:31	Fine	67.0	68.3	65.1	65.4	61.9	75.0	Construction activities of other contracts; Traffic Noise	-	18	<5 m/s	Rion NL-31 (00320528)	Rion NC-73 (10186482)
23-Dec-13	9:56	10:26	Sunny	62.2	64.5	60.3	65.4	62.2	75.0	Construction activities of other contracts; Traffic Noise	-	14.6	<5 m/s	B&K 2238 (2285692)	Rion NC-73 (10307223)
								<b>Average</b>	<b>63.0</b>						
								<b>Min.</b>	<b>61.9</b>						
								<b>Max.</b>	<b>63.9</b>						

Location : NM2 (S.K.H. Yau Tong Kei Hin Primary School Rooftop - Façade)  
 Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

Date	Start Time	End Time	Weather	Measured Noise Level for 30-min, dB(A)			Baseline Noise Level, dB(A)	Corrected Construction Noise Level, dB(A) **	Limit Level, dB(A) #	Major Noise Source(s) Observed	Remarks	Mean Temp. (°C)	Mean Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90									
6-Dec-13	13:20	13:50	Fine	63.0	64.5	60.5	65.4	63.0	75.0	Construction activities of other contracts; Traffic Noise	-	18.3	<5 m/s	B&K 2270 (2644597)	Rion NC-73 (10186482)
12-Dec-13	13:10	13:40	Fine	65.3	67.0	63.0	65.4	65.3	75.0	Construction activities of other contracts; Traffic Noise	-	18	<5 m/s	B&K 2238 (2285692)	Rion NC-73 (10186482)
23-Dec-13	10:38	11:08	Sunny	63.7	64.0	60.5	65.4	63.7	75.0	Construction activities of other contracts; Traffic Noise	-	14.6	<5 m/s	B&K 2238 (2285692)	Rion NC-73 (10307223)
								<b>Average</b>	<b>64.3</b>						
								<b>Min.</b>	<b>63.0</b>						
								<b>Max.</b>	<b>65.3</b>						

**Remarks:**

# - Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.

\*\* Construction noise level is only calculated when Measured noise level (Leq) > Baseline noise level.

If Measured noise level < Baseline noise level, Corrected noise level = Measured noise level

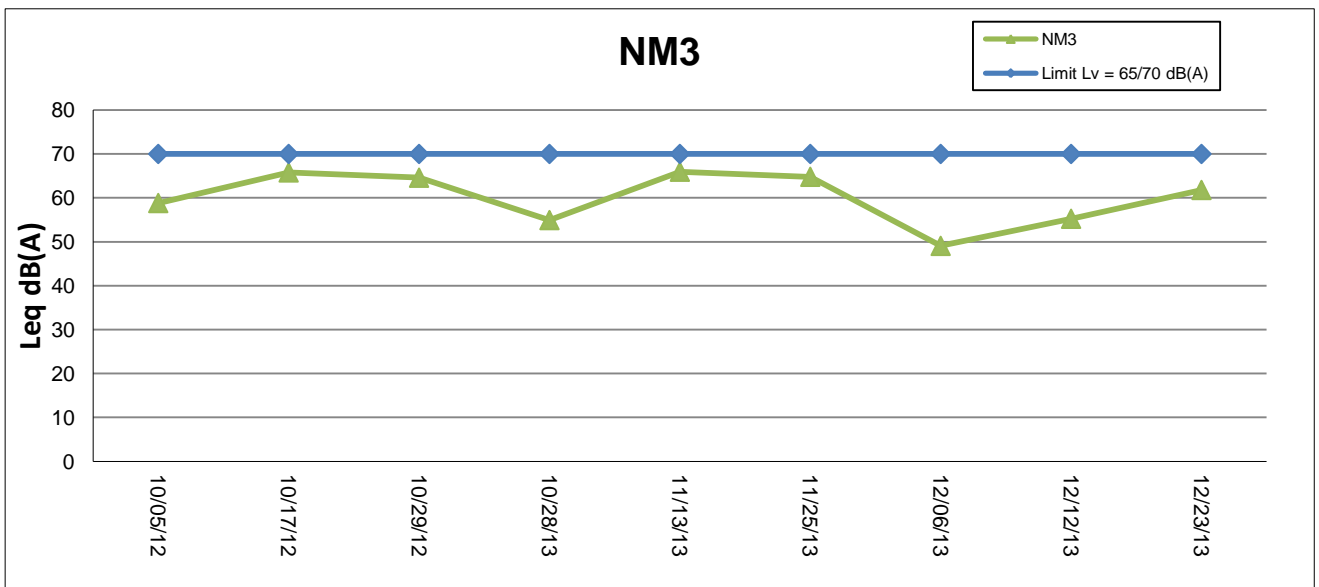
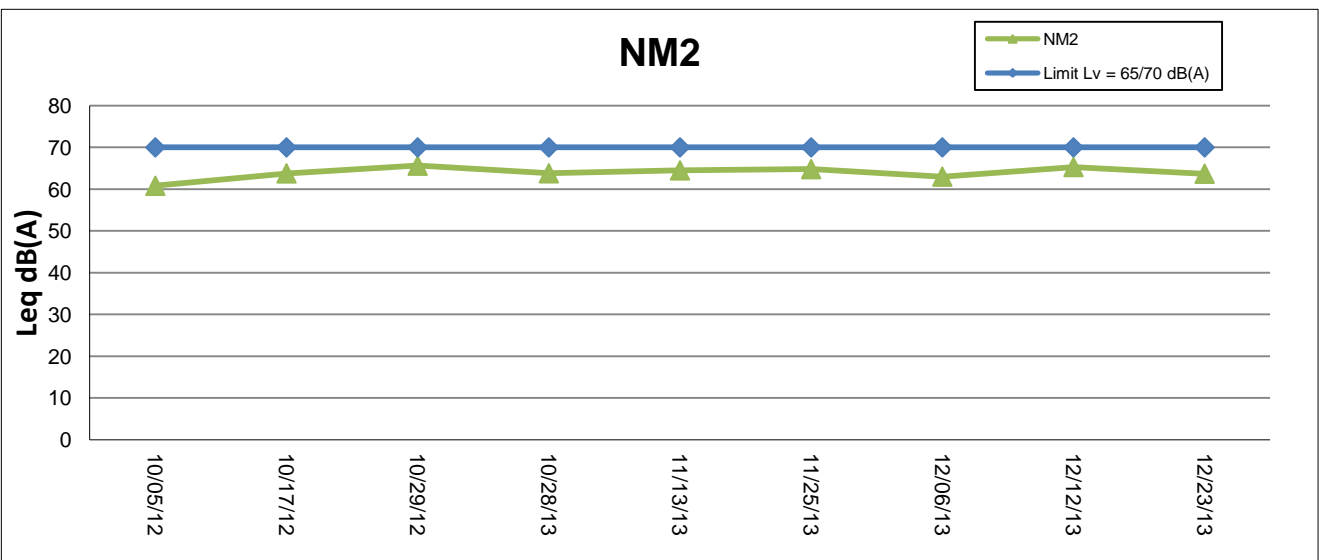
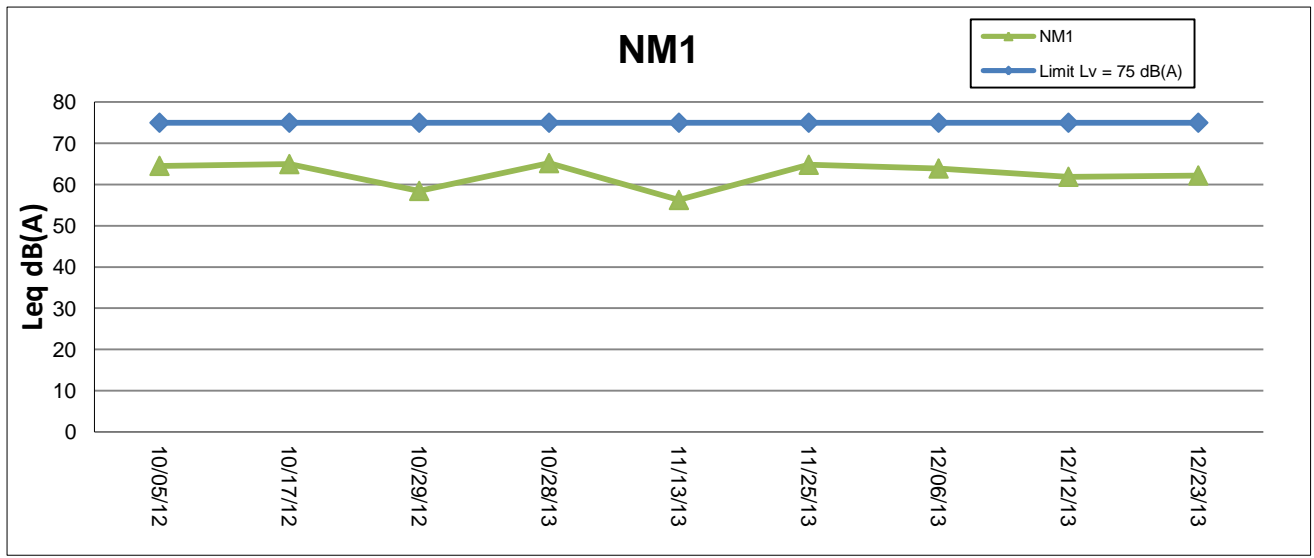
**Appendix E Impact Daytime Construction Noise Monitoring Results**

Location : NM3 (C.C.C. Kei Faat Primary School (Yau Tong) Rooftop - Façade)  
 Day time 07:00-19:00 hrs Normal Weekdays Impact Noise Monitoring Results

Date	Start Time	End Time	Weather	Measured Noise Level for 30-min, dB(A)			Baseline Noise Level, dB(A)	Corrected Construction Noise Level, dB(A) **	Limit Level, dB(A) #	Major Noise Source(s) Observed	Remarks	Mean Temp. (°C)	Mean Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90									
6-Dec-13	14:05	14:35	Fine	65.5	68.3	60.0	65.4	49.1	75.0	Construction activities of other contracts; Traffic Noise	-	18.3	<5 m/s	Rion NL-31 (00320528)	Rion NC-73 (10186482)
12-Dec-13	13:11	13:41	Fine	65.8	67.3	63.1	65.4	55.2	75.0	Construction activities of other contracts; Traffic Noise	-	18	<5 m/s	B&K 2238 (2285692)	Rion NC-73 (10186482)
23-Dec-13	11:16	11:46	Sunny	61.8	63.0	59.5	65.4	61.8	75.0	Construction activities of other contracts; Traffic Noise	-	14.6	<5 m/s	B&K 2238 (2285692)	Rion NC-73 (10307223)
							<b>Average</b>	<b>53.2</b>							
							<b>Min.</b>	<b>49.1</b>							
							<b>Max.</b>	<b>55.2</b>							

**Remarks:**

# - Limit Level of 70dB(A) applies to education institutes while 65dB(A) applies during school examination period.  
 \*\* Construction noise level is only calculated when Measured noise level (Leq) > Baseline noise level.  
 If Measured noise level < Baseline noise level, Corrected noise level = Measured noise level



**Remark:** Measured noise level would be shown if Measured noise level (Leq) <= Baseline noise level

<b>AECOM</b>	<b>Yau Tong Bay – Decommissioning of Shipyard Sites</b>	SCALE	N.T.S.	DATE	Jan-14
	<b>Graphical Presentation of Impact Daytime Construction Noise Monitoring Results</b>	CHECK	ENFL	DRAWN	JCYK
		JOB NO.	60048283	APPENDIX No.	E
					-

---

---

**APPENDIX F  
STATISTICS ON COMPLAINTS,  
NOTIFICATION OF SUMMONS AND  
SUCCESSFUL PROSECUTIONS**

---

---

## Appendix F

### Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

	Date Received	Subject	Status	Total no. in this reporting quarter	Total no. since project commencement
<b>Environmental complaints</b>	3 August 2012 (Referred from EPD)	Concern of air emission from the spraying activities carried out at the construction site near the junction of Ko Fai Road and Cha Kwo Ling Road on 3 August 2012 that would stain the bodies of vehicles nearby and cause air nuisance to the public.	Closed	1	4
<b>Notification of summons</b>	-	-	-	0	0
<b>Successful Prosecutions</b>	-	-	-	0	0