

# Main Wealth Development Ltd.

# Yau Tong Bay – Decommissioning of Shipyard Sites

## Monthly EM&A Report for July 2012

[08/2012]

	Name	Signature
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Reviewed, Approved & Certified:	Y T Tang (ETL)	Contration

Version:	Rev. 0	Date:	13 August 2012	
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Our Ref: 3.14/018/2009/at

12 March 2012

Main Wealth Development Ltd. 72 – 76/F, Two International Finance Centre 8 Finance Street Central Hong Kong

Attn: Ms. Virginia Ng

Dear Ms. Ng,

Yau Tong Bay – Decommissioning of Shipyard Sites Environmental Permit No. EP-409/2010 Monthly EM&A Report for February 2012 (Version: V.0)

With reference to the captioned document verified by IEC on 12 March 2012, 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



Our ref AFK/EC/TK/bw/T255271/22.01/0035

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Your ref

Main Wealth Development Limited 72-76/F Two International Finance Centre 8 Finance Street Central Hong Kong

8 August 2012

## Attn : Ms. Iris Cheng

Dear Madam,

# Yau Tong Bay – Decommissioning of Shipyard Sites Environmental Permit No. EP-409/2010 Condition 5.4 – Monthly EM&A Report for July 2012 (version: Rev. 0)

Further to the receipt from Environmental Team (ET) of the captioned Monthly EM&A Report on 7 and 8 August 2012 via email, pursuant to Condition 5.4 of Environmental Permit I hereby verify the captioned report (Rev. 0) for Yau Tong Bay.

Yours faithfully for MOTT MACDONALD HONG KONG LIMITED

IN Kong

Terence Kong Independent Environmental Checker (IEC)

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# 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 construction works of the Project was commenced on 21 November 2011 and anticipated to be substantially completed in 2013. The impact Environmental Monitoring and Audit (hereinafter referred to as "EM&A") programme for the Project commenced on 21 November 2011. The impact EM&A programme includes daytime construction noise and water quality monitoring, soil remediation works monitoring and auditing and site auditing.

This report documents the findings of EM&A works conducted in the period between 1 and 31 July 2012.

As informed by the Contractor, major construction activity carried out in the reporting period was building demolition of YTML 27-41 (Phase 3) and general site clearance (Phase 2).

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

Daytime noise monitoring	2 sessions
Water quality monitoring	0 session
Environmental site inspection	4 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 period.

#### 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 yet commenced. No Action/Limit Level exceedance of water quality was recorded in the reporting period.

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

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

### **Reporting Change**

There was no reporting change required in the reporting period.

#### Future Key Issues

Key issues to be considered in the coming month include:-

- Generation of dust from activities on-site;
- Noise impact from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Storage, sorting and disposal of general refuse and construction waste from activities on-site;
- Management of chemicals and chemical wastes and avoidance of oil spillage; and
- Tree protection for all retained trees on-site.



## 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峻工並預期於二零一三年完成。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。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。

本報告記錄了於二零一二年七月一日至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,在上述的期間的主要建築活動為 YTML 27-41 的拆卸工程(第三期工程) 及清理地盤 (第二期工程)。

在上述的期間有下列次數的監察及審核活動進行:

日間建築噪音監測	2 次
水質監測	0次
環境巡查	4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。

在上述的期間的所有日間建築噪音監測結果皆符合極限水平。

水質

因爲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期間進行。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

在上述的期間沒有收到有關環境的投訴,傳票及檢控。

## 報告修訂

本報告期間並沒有修訂報告。

### 預計要注意的事項

下月要注意事項包括:

- 建築活動所產生的塵埃;
- 操作中儀器及機器所產生的噪音影響;
- 建築活動所產生的地面流放水及其他工地污水;
- 普通廢物與建築廢物的暫貯,分類及棄置;
- 化學品及化學廢物的管理及防止意外漏油;及
- 工地內被保留樹木的保護措施。



# **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 Stephen Cheng Consulting Engineers as the Engineer of the Project and Riseship Construction Company Limited was commissioned as the Demolition Contractor for building structures 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. The construction works of the Project was commenced on 21 November 2011 and anticipated to be substantially completed in 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.



## 1.2 Scope of Report

1.2.1 This is the ninth monthly EM&A Report for the Project "Yau Tong Bay – Decommissioning of Shipyard Sties". 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 July 2012 (from 1 July 2012 to 31 July 2012).

# 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**.

Party	Name	Telephone	Fax
Project Proponent (Main Wealth Development Limited)	Colin Wan	2908 8574	2530 1402
Engineer (Stephen Cheng Consulting Engineers)	Andy Kwok	2908 2516	2845 9964
Demolition Contractor – Building Structures (Contractor) (Riseship Construction Company Limited)	Edward Lo	2578 9542	2578 1892
Independent Environmental Checker (IEC) (Mott MacDonald Hong Kong Limited)	Terence Kong	2828 5919	2827 1823
Independent Environmental Auditor (IEA) (Nature & Technologies (HK) Limited)	Gabriel Lam	2877 3122	2511 0922
Environmental Team Leader (ETL) (AECOM Asia Company Limited)	Y T Tang	3922 9393	2371 7609

 Table 1.1
 Contact Information of Key Personnel



#### 1.4 Summary of Construction Works

- 1.4.1 The construction phase of the Project under the EP commenced on 21 November 2011.
- 1.4.2 As informed by the Contractor, major construction activity carried out in the reporting period was building demolition of YTML 27-41 (Phase 3) and general site clearance (Phase 2).
- 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** and the phasing of works area for demolition works is detailed in **Figure 2**.
- 1.4.5 The environmental mitigation measures implementation schedule are presented in **Appendix C**.

#### 1.5 Summary of EM&A Programme Requirements

- 1.5.1 The EM&A programme required environmental monitoring for daytime construction noise and water quality, soil remediation works monitoring and auditing and environmental site inspections for air quality, water quality, noise, waste management and landscape and visual impact. The EM&A requirements for each parameter described in the following sections include:-
  - All monitoring parameters;
  - Monitoring schedules for the reporting month and forthcoming months;
  - Action and Limit levels for all environmental parameters;
  - Event / Action Plan;
  - Environmental mitigation measures, as recommended in the Project EIA study final report; and
  - Environmental requirement in contract documents.



# 2 NOISE MONITORING

## 2.1 Monitoring Requirements

2.1.1 In accordance with the EM&A Manual, impact noise monitoring was conducted for at least once per two weeks at designated noise monitoring stations during the construction phase of the Project. The Action and Limit level of the noise monitoring is provided in **Appendix D**.

### 2.2 Monitoring Equipment

2.2.1 Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications (IEC) 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment is given in **Table 2.1**.

 Table 2.1
 Noise Monitoring Equipment

Equipment	Brand and Model
Integrated Sound Level Meter	Rion NL-31; B&K 2250L
Acoustic Calibrator	Rion NC-73

### 2.3 Monitoring Locations

- 2.3.1 Monitoring stations NM1 to NM3 were set up at the proposed locations in accordance with the EM&A Manual.
- 2.3.2 **Figure 3** shows the locations of the monitoring stations. **Table 2.2** describes the details of the monitoring stations.

Table 2.2 Locations of impa			ise monitoring stations
	Monitoring Station	Location	Description
	NM1	Yau Lai Estate Hong Lai House	1m from the exterior of the roof top façade of
		S.K.H. Yau Tong	

 Table 2.2
 Locations of Impact Noise Monitoring Stations

C.C.C. Kei Faat	
	the exterior of the roof top façade of the building

### 2.4 Monitoring Parameters, Frequency and Duration

2.4.1 **Table 2.3** summarizes the monitoring parameters, frequency and duration of impact noise monitoring.

### Table 2.3 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

## 2.5 Monitoring Methodology

- 2.5.1 Monitoring Procedure
  - (a) Façade measurements were made at all monitoring locations.



the building

- (b) The battery condition was checked to ensure the correct functioning of the meter.
- (c) Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:-
  - (i) frequency weighting: A
  - (ii) time weighting: Fast
  - (iii) time measurement: L<sub>eq(30-minutes)</sub> during non-restricted hours i.e. 07:00 1900 on normal weekdays; L<sub>eq(5-minutes)</sub> during restricted hours i.e. 19:00 – 23:00 and 23:00 – 07:00 of normal weekdays, whole day of Sundays and Public Holidays
- (d) Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator for 94dB(A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- (e) During the monitoring period, the  $L_{eq}$ ,  $L_{10}$  and  $L_{90}$  were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- (f) Noise measurement was paused during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible. Observations were recorded when intrusive noise was unavoidable.
- (g) Noise monitoring was cancelled in the presence of fog, rain, wind with a steady speed exceeding 5m/s, or wind with gusts exceeding 10m/s.
- 2.5.2 Maintenance and Calibration
  - (a) The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
  - (b) The meter and calibrator were sent to the supplier or HOKLAS laboratory to check and calibrate at yearly intervals.
  - (c) Calibration certificates of the sound level meters and acoustic calibrators are provided in Appendix E.

### 2.6 Monitoring Schedule for the Reporting Period

2.6.1 The schedule for environmental monitoring in July 2012 is provided in **Appendix F**.

### 2.7 Monitoring Results

2.7.1 The monitoring results for construction noise are summarized in **Table 2.4** and the monitoring data is provided in **Appendix G**.

Tabl	le 2.4	Summary of Constructior	Noise Monitoring Result	s in the Reporting Period

	Average, dB(A),	Range, dB(A),	Limit Level, dB(A),
	L <sub>eq (30 mins)</sub>	L <sub>eq (30 mins)</sub>	L <sub>eq (30 mins)</sub>
NM1	61.8	61.6 – 62.0	75
NM2	63.6	62.6 - 64.4	70 <sup>#</sup>
NM3	61.0	56.2 – 63.2	70 <sup>#</sup>

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

- 2.7.2 No Action Level exceedance was recorded since no construction noise related complaint was received in the reporting period.
- 2.7.3 No Limit Level exceedance was recorded at all monitoring stations in the reporting month.
- 2.7.4 Major noise sources during the noise monitoring included construction activities of the Project, construction activities by other contracts and nearby traffic noise.
- 2.7.5 The event action plan is annexed in **Appendix H**.



# 3 WATER QUALITY MONITORING

## 3.1 Monitoring Status

3.1.1 Water quality monitoring was not conducted in the reporting period as demolition of marine structures was not commenced. No Action/Limit Level exceedance of water quality was recorded in the reporting period.

# 4 LAND CONTAMINATION

#### 4.1 Monitoring Status

- 4.1.1 In the reporting month, excavation of inspection pits and borehole drilling for structural and environmental sampling were not observed in the site. No significant environmental issue was identified in the reporting period.
- 4.1.2 No soil remediation works monitoring and auditing was commenced in the reporting period as soil remediation works had not yet been commenced.

# 5 ENVIRONMENTAL SITE INSPECTION AND AUDIT

#### 5.1 Site Inspection

- 5.1.1 Site Inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. In the reporting period, 4 site inspections were carried out on 4, 11, 17 and 23 July 2012.
- 5.1.2 The environmental site inspections summaries are provided in **Appendix I**.
- 5.1.3 Particular observations during the site inspections are described below:-

### Air Quality

5.1.4 Site haul roads at Phase 3 (near Cha Kwo Ling Road) were observed in dry condition. The Contractor was reminded to dampen the site haul roads more frequently to prevent any fugitive dust generation occurred. (Closed on 17 July 2012)

#### Noise

- 5.1.5 The Contractor was reminded to provide proper noise mitigation measure (such as noise barrier) for demolition work of the Phase 3 site work area to reduce noise impact to sensitive receivers effectively. (Follow-up)
- 5.1.6 The Contractor was reminded that the types and numbers of Powered Mechanical Equipments (PMEs) operated on site (especially in Phase 3 site work area) for demolition works during the weekday normal working hours should strictly comply with the Construction Noise Mitigation Plan (CNMP) (Follow-up)

### Water Quality

5.1.7 Improvement of temporary drainage systems in works area was still outstanding. Proper bundings should be provided along the site boundaries (especially the sides facing Yau Tong Bay), in together with proper treatment and pumping facilities, to handle the surface run-off from works area, especially during rainy seasons. The Contractor was reminded that any untreated surface run-off should be avoided from overflowing outside the Project site areas. (Follow-up)



#### Chemical and Waste Management

5.1.8 The Contractor was reminded to provide sufficient receptacles in Phase 3 work area (near Cha Kwo Ling Road) for general refuse collection. (Follow-up)

#### Landscape and Visual Impact

5.1.9 No adverse observation was identified in the reporting period.

#### Miscellaneous

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

#### 5.2 Advice on the Solid and Liquid Waste Management Status

- 5.2.1 The Contractor had submitted application form for registration as a chemical waste producer for the Project.
- 5.2.2 As advised by the Contractor, 1698.56 tonnes of Inert C&D wastes were generated on site and disposed of at Public Fill (Tseung Kwan O Area 137 Fill Bank). 142.23 tonnes of general refuse was generated on site and disposed of at North East New Territories (NENT) Landfill. 63 tonnes of metals were generated and collected by registered recycling collector and no chemical waste was collected by licensed contractor in the reporting period.
- 5.2.3 The Contractor is advised to properly maintain on site C&D materials and wastes collection, sorting and recording system and maximize reuse / recycle of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.
- 5.2.4 The Contractor is reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practise on the Packaging, Labelling and Storage of Chemical Wastes.

### 5.3 Environmental Licenses and Permits

5.3.1 The environmental licenses and permits for Stage 1 of the Project and valid in the reporting month is summarized in **Table 5.1**.



Statutory Reference	License/ Permit	License or Permit No.	Valid Period		Remarks
			From	То	
EIAO	Environmental Permit	EP-409/2010	10/01/2011	N/A	Yau Tong Bay – Decommissioning of Shipyard Sites
WPCO	Discharge License	WT00012580- 2012	26/04/2012	N/A	Discharge of Construction Runoff
WDO	Chemical Waste Producer Registration	5292-298-R2321- 01	20/12/2011	N/A	Whole Construction Site
WDO	Billing Account for Disposal of Construction Waste	7012814	N/A	N/A	Whole Construction Site

## Table 5.1 Summary of Environmental Licensing and Permit Status

## 5.4 Implementation Status of Environmental Mitigation Measures

- 5.4.1 In response to the site audit findings, the Contractor carried out corrective actions.
- 5.4.2 A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in **Appendix C**. Many recommended mitigation measures were implemented properly.

### 5.5 Summary of Exceedances of the Environmental Quality Performance Limit

- 5.5.1 No Action Level exceedance was recorded since no construction noise related complaint was received in the reporting period.
- 5.5.2 No Limit Level exceedance of construction noise was recorded in the reporting period.
- 5.5.3 Water quality monitoring was not conducted in the reporting period as demolition of marine structures was not yet commenced. No Action/Limit Level exceedance of water quality was recorded in the reporting period.

#### 5.6 Summary of Complaints, Notification of Summons and Successful Prosecutions

- 5.6.1 The Environmental Complaint Handling Procedure is annexed in **Figure 4**.
- 5.6.2 No environmental complaint, notification of summons and prosecution was received in the reporting period.
- 5.6.3 Cumulative statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix J**.



# 6 FUTURE KEY ISSUES

#### 6.1 Construction Programme for the Coming Months

6.1.1 The major construction works for the Project in August 2012 will be building demolition of YTML 27-41 (Phase 3), tree removal works and general site clearance (Phase 2 & Phase 3).

#### 6.2 Key Issues for the Coming Month

- 6.2.1 Key issues to be considered in August 2012 include:-
  - Generation of dust from activities on-site;
  - Noise impact from operating equipment and machinery on-site;
  - Generation of site surface runoffs and wastewater from activities on-site;
  - Storage, sorting and disposal of general refuse and construction waste from activities on-site;
  - Management of chemicals and chemical wastes and avoidance of oil spillage; and
  - Tree protection for all retained trees on-site.

#### 6.3 Monitoring Schedule for the Coming Month

6.3.1 The tentative schedule for environmental monitoring in August 2012 is provided in **Appendix F**.

# 7 COMMENTS, RECOMMENDATIONS AND CONCLUSIONS

#### 7.1 Comments on Mitigation Measures

7.1.1 According to the environmental site inspections performed in the reporting month, the following comments were provided:-

#### Air Quality Impact

• The Contractor was reminded to dampen the site haul roads more frequently to prevent any fugitive dust generation occurred .

### **Construction Noise Impact**

- The Contractor was reminded to provide proper noise mitigation measure (such as noise barrier) for demolition work of the Phase 3 site work area to reduce noise impact to sensitive receivers effectively.
- The Contractor was reminded that the types and numbers of Powered Mechanical Equipments (PMEs) operated on site (especially in Phase 3 site work area) for demolition works during the weekday normal working hours should strictly comply with the Construction Noise Mitigation Plan (CNMP).

### Water Quality Impact

Proper bundings should be provided along the site boundaries (especially the sides facing Yau Tong Bay) and in site entrances / exits to prevent any surface / construction runoff flowing from work areas to public drain, in together with proper treatment and pumping facilities, to handle the surface run-off from works area, especially during rainy seasons. The Contractor was reminded that any untreated surface run-off should be avoided from overflowing outside the Project site areas.

#### Chemical and Waste Management

• The Contractor was reminded to provide sufficient receptacles in Phase 3 work area (near Cha Kwo Ling Road) for general refuse collection.



#### Landscape and Visual Impact

• Nil.

#### Miscellaneous

• Nil.

#### 7.2 Recommendations on EM&A Programme

- 7.2.1 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.
- 7.2.2 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.

#### 7.3 Conclusions

- 7.3.1 The construction phase and EM&A programme of the project commenced on 21 November 2011.
- 7.3.2 Noise monitoring was carried out in the reporting period.
- 7.3.3 No Action Level exceedance was recorded since no construction noise related complaint was received in the reporting period.
- 7.3.4 No Limit Level exceedance of construction noise was recorded in the reporting period.
- 7.3.5 Water quality monitoring was not conducted in the reporting period as demolition of marine structures was not yet commenced. No Action/Limit Level exceedance of water quality was recorded in the reporting period.
- 7.3.6 No significant environmental issue was identified from the drilling works. No soil remediation works monitoring and auditing was commenced in the reporting period as soil remediation works was yet commenced.
- 7.3.7 Environmental site inspection was carried out 4 times in July 2012. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audits.
- 7.3.8 No environmental complaint, notification of summons and prosecution was received in the reporting period.

