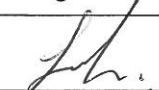



Main Wealth Development Ltd.

**Yau Tong Bay – Decommissioning of
Shipyard Sites**

**Annual EM&A Review Report
for November 2011 to October 2012
(1st Annual EM&A Review Report)**

[06/2013]

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

Version:	Rev. 0	Date: 5 June 2013
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Disclaimer

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 Shipyard 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.

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

5 June 2013

Attn : Ms. Iris Cheng

Dear Madam,

**Yau Tong Bay – Decommissioning of Shipyard Sites
Environmental Permit No. EP-409/2010
Annual EM&A Review Report for November 2011 to October 2012 (version: Rev. 0)**

Further to the receipt from ET of the captioned Annual EM&A Review Report on 16 May and 4 June 2013 via email, pursuant to the 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', written over a white background.

Terence Kong
Independent Environmental Checker (IEC)



NATURE & TECHNOLOGIES (HK) LIMITED

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Our Ref: 3.14/018/2009/at

20 June 2013

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

Attn: Ms. Iris Cheng

Dear Ms. Cheng,

**Yau Tong Bay – Decommissioning of Shipyard Sites
Environmental Permit No. EP-409/2010
Annual EM&A Review Report for November 2011 to October 2012 (version: Rev. 0)**

With reference to the verification letter of IEC on 5 June 2013, we are pleased to confirm that we have no comment on the captioned report (Rev. 0) for Yau Tong Bay on sections that are specific to soil remediation work.

Yours faithfully,
Nature & Technologies (HK) Limited

Ir Dr Gabriel C K Lam
Independent Environmental Auditor

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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 November 2011 and 31 October 2012.

As informed by the Contractor, construction activities were carried out in the reporting period as listed below:

- building demolition of YTML 15, 19-24 & YTML54 (Phase 1) and general site clearance (Phase 1);
- building demolition of YTML 21 (Phase 1) and building demolition of YTML 1, YTML 42-46 (Phase 2);
- building demolition of YTML 5-14 (Phase 2), building demolition of YTML 27-41 (Phase 3) and general site clearance (Phase 2); and
- site clearance (Phase 3)

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

Daytime noise monitoring	27 sessions
Water quality monitoring	0 session
Environmental site inspection	50 sessions

Breaches of Action and Limit Levels for Daytime Construction Noise

One Action Level exceedance of construction noise was recorded in the reporting period, since a noise complaint (referred from EPD) was received on 18 June 2012 and the noise source was likely contributed from the demolition work of the project at Ko Fai Road during the weekdays. The complaint was considered as project-related.

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

Four complaints, including two (2) air complaints and two (2) noise complaints were received in the reporting period.

An air pollution complaint, was received by EPD on 9 December 2011, and referred from EPD on 15 December 2011. The complaint was about dust emission from demolition works near Ko Fai Road and inefficient dust mitigation measures in works area on 9 December 2011. The dust emission was likely contributed from the breaking works and exposed works area of the Project without sufficient dust suppression measure. The complaint was considered as project-related.

A noise complaint was received by and referred from EPD on 28 December 2011. The complaint was about hammering noise from the Project site near Cha Kwo Ling Road from 24 December 2011 to 26 December 2011 and the construction works (i.e. hammering and weldig) conducted until 2300. The complaint was suspected to be caused by the trespassers of the Project works area and was considered not project related.

A noise complaint (referred from EPD) was received on 18 June 2012. The complaint was about the noise from the operation of Powered Mechanical Equipment (PME) from 8:00 to 19:00 from a construction site near

Yau Lai Estate during weekdays and general holidays. The noise source was likely contributed from the demolition work of the project at Ko Fai Road during the weekdays. The complaint was considered as project-related.

An air complaint (referred from EPD) was received on 3 August 2012. The complaint was about the 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. The complaint was considered as project-related.

No 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

According to the updated programme, hoarding and demolition works for the Project was completed in September 2012 and commencement of soil remediation works is tentatively scheduled in July 2013. No construction activity will be carried out in the site areas (Phase 1, 2 and 3) from October 2012 until commencement of soil remediation works. The Environmental Monitoring and Audit (EM&A) works will be suspended from November 2012 for the captioned Project and the EM&A works will be resumed upon commencement of soil remediation works.

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。

本報告記錄了於二零一一年十一月一日至二零一二年十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

- YTML15, 19-24 及 YTML54 的拆卸工程(第一期工程)及清理地盤(第一期工程)
- YTML 5-14, YTML 42-46 的拆卸工程(第二期工程)
- YTML1 的拆卸工程(第二期工程), YTML 27-41 的拆卸工程(第三期工程)及清理地盤(第二期工程);以及
- 清理地盤(第三期工程)

在上述的年度有下列次數的監察及審核活動進行：

日間建築噪音監測	27 次
水質監測	0 次
環境巡查	50 次

違反監測標準

日間建築噪音

在二零一二年六月十八日收到一個(由環保署轉介)有關建築噪音的投訴，噪音懷疑是由在高輝道地盤在平日的拆卸工程所產生，推斷此噪音投訴個案與本工程項目有關，所以在上述的年度有一個超出行動水平的日間建築噪音監測結果。

在上述的年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年度進行。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

在上述的年度收到共四宗投訴，包括兩宗空氣以及兩宗噪音投訴。

於二零一一年十二月十五日，由環保署轉介一宗在二零一一年十二月九日接到之空氣污染投訴個案。這宗投訴是關於在二零一一年十二月九日，於高輝道附近的拆卸工程所排出之塵埃及在工程項目範圍之內的低效能塵埃消滅措施。經調查後，塵埃看似由斷裂工程和空曠工程項目範圍內的塵埃抑制措施不足所造成。此宗投訴個案考慮成與工程項目有關並向承建商提出塵埃消滅措施之建議。

於二零一一年十二月二十八日，環保署轉介一宗在同日接到之噪音投訴個案。這宗投訴是關於在二零一一年十二月二十四日至二十六日期間，在茶果嶺道附近的工程項目範圍所發出之敲擊噪音，另外敲擊和燒焊工程一直持續至晚上十一時。噪音懷疑是由非法佔地盤者所產生，推斷此噪音投訴個案與本工程項目無關。

於二零一二年六月十八日，環保署轉介一宗噪音投訴個案。這宗投訴是關於在平日及公眾假期於早上八時至下午七時期間，在油麗邨附近的工程地盤所發出之機械設備的噪音。噪音懷疑是由在高輝道地盤平日的拆卸工程所產生，推斷此噪音投訴個案與本工程項目有關。

於二零一二年八月三日，環保署轉介一宗空氣投訴個案。這宗投訴是關於在二零一二年八月三日，在靠近高輝道和茶果嶺道的接合處之噴漆活動所引起的空氣散發憂慮，導致弄髒停泊在附近車輛的車身及對公眾造成空氣滋擾，推斷此空氣投訴個案與本工程項目有關。

在上述的年度沒有收到有關環境的傳票及檢控。

報告修訂

本報告年度並沒有修訂報告。

預計要注意的事項

根據最新的程序表，本工程項目之地盤圍板和拆除工程已於二零一二年九月完成，同時土壤修復工程暫時預定於二零一三年七月開始。由二零一二年十月直至土壤修復工程開始，在地盤範圍(第一、二及三期)內將沒有建築活動進行。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將會暫時停止直至土壤修復工程開始才會重新進行。

1 INTRODUCTION

Background

- 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.
- 1.2. The Project is a designated project and is governed by the Environmental Permit No. EP-409/2010 (hereinafter referred to as “the EP”).
- 1.3. 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.
- 1.4. 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
- 1.5. 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”).
- 1.6. 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.
- 1.7. The construction works of the Project was commenced on 21 November 2011 and anticipated to be substantially completed in 2013.
- 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.

Scope of Report

- 1.9. This is the first Annual Environmental Monitoring and Audit (EM&A) Review 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 21 November 2011 and 31 October 2012.

Project Organization

- 1.10. 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
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

Summary of Construction Works

- 1.11. The construction phase of the Project under the EP commenced on 21 November 2011. Details of the construction works carried out in this reporting period are listed below:
- building demolition of YTML 15, 19-24 & YTML54 (Phase 1) and general site clearance (Phase 1);
 - building demolition of YTML 21 (Phase 1) and building demolition of YTML 1, YTML 42-46 (Phase 2);
 - building demolition of YTML 5-14 (Phase 2), building demolition of YTML 27-41 (Phase 3) and general site clearance (Phase 2); and
 - site clearance (Phase 3)
- 1.12. The general layout plan of the Project site is shown in **Figure 1** and the phasing of works area for demolition works is shown in **Figure 2**.
- 1.13. The environmental mitigation measures implementation schedule (EMIS) are presented in Appendix B.

2 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

Monitoring Parameters and Locations

- 2.1. The EM&A Manual designated locations for the monitoring of environmental impacts in terms of construction noise, water quality and land contamination impact due to the Project.
- 2.2. Water quality monitoring will be conducted as demolition of marine structures has been commenced. Soil remediation works monitoring and auditing will be commenced as soil remediation works have been commenced.
- 2.3. The EM&A Manual also required environmental site inspections for air quality, noise, water quality, waste management, land contamination and landscape and visual.
- 2.4. 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 3**.

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

Environmental Quality Performance Limits (Action/Limit Levels)

- 2.5. 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 C** shows the established Action and Limit Levels for noise monitoring.

Environmental Mitigation Measures

- 2.6. 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 B**.

3 NOISE MONITORING

- 3.1. 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 period. The graphical plots of trends of the monitoring results are provided in **Appendix D**.
- 3.2. Twenty-seven (27) daytime noise monitoring events were carried out at each of the designated monitoring stations (NM1 to NM3) respectively in the reporting period.
- 3.3. One Action Level exceedance of construction noise was recorded in the reporting period, since a noise complaint (referred from EPD) was received on 18 June 2012 and the noise source was likely contributed from the demolition work of the project at Ko Fai Road during the weekdays. The complaint was considered as project-related.
- 3.4. No Limit Level exceedance of construction noise was recorded in the reporting period.
- 3.5. **Table 3.1** presents the number of exceedances recorded in the reporting period. 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	November 2011 to October 2012		
		NM1	NM2	NM3
Daytime Construction Noise	No. of monitoring events	27	27	27
	Action	0	0	0
	Limit	0	0	0
	<i>Total no. of Action and Limit Level Exceedances</i>	<i>0</i>	<i>0</i>	<i>0</i>

Remarks: Exceedances which are not project-related or not within the monitoring station areas are not presented in this table.

4 WATER QUALITY MONITORING

- 4.1. Water quality monitoring was not conducted in the reporting period as demolition of marine structures was not commenced. Therefore, no Action/Limit Level exceedance of water quality was recorded in the reporting period.

5 LAND CONTAMINATION MONITORING

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

6 ENVIRONMENTAL SITE INSPECTION AND AUDIT

- 6.1. There were fifty (50) site inspections conducted in the reporting period 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.
- 6.2. The Contractor has rectified observations as identified during environmental site inspection in the reporting period within agreed time frame.
- 6.3. Particular observations during the site inspections are described below:

Air Quality

- 6.3.1. Although water spraying was provided during building demolition process, fugitive dust emission was observed. The Contractor should improve the dust suppression measures (e.g. provision of additional sprinklers or water spraying facility) to minimize the dust impacts.
- 6.3.2. Exposed soil stockpile was observed at works area YTML 21 and 54. The Contractor should cover up the exposed soil stockpile with tarpaulin sheet to minimize the dust impacts.
- 6.3.3. Exposed works areas (at YTML19, YTML20-21, YTML22RP, YTML23-24 and YTML54) and access roads (at YTML20, YTML21 and YTML22RP) and within work areas were found dusty and dry. Although manual water spraying by water hose was observed at few works area and sprinklers were provided in works areas, the dust suppression measures provided in works area and on access roads should be further improved. The Contractor should ensure that water spraying facilities or sprinklers should be provided to exposed works areas and access roads and they should be operating effectively to minimize fugitive dust emission.
- 6.3.4. Mud trails were observed at the site entrance/exit facing Cha Kwo Ling Road, outside, at site entrance/exit facing to Ko Fai Road (Phase 2) and outside the site exit / entrance of Phase 3 work area (opposite to the elevator of MTRC station). The Contractor was reminded to provide proper wheel washing facilities at every vehicle exit point of the site. The Contractor should also ensure that the wheel washing facilities were operating at all vehicular site entrances/exits to wash off the deposited silt on vehicles' wheels and bodies and combine with cleaning of public roads. The Contractor should remind the vehicle's drivers to remove any dusty materials from their vehicle's bodies and wheels before leaving construction sites.
- 6.3.5. Site access road and site haul roads at Phase 3 (near Cha Kwo Ling Road) were observed in dry condition. The Contractor was reminded to dampen the site access road and site haul roads more frequently to prevent any fugitive dust generation occurred.

Noise

- 6.3.6. No noise barrier provided for breaking activity at Phase 2 (near Ko Fai Road) was observed. The Contractor was reminded to provide proper movable noise barrier for all breaking activities.
- 6.3.7. The Contractor was reminded to provide valid noise emission label for air compressor placed in work area at Phase 2 (facing to Ko Fai Road).
- 6.3.8. 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.
- 6.3.9. 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)The absorptive material wrapping to the breaking tip of the breakers working in works area

were found improper at Gate 44. The Contractor should provide proper absorptive material wrapping to the breaking tips of the breakers working in works area to minimize the noise impact.

Water Quality

- 6.3.10. Proper drainage channels/bunds/wheel washing bay should be provided to collect the run-off from wheel washing facilities at the site entrance/exit facing Cha Kwo Ling Road.
- 6.3.11. Temporary drainage systems in works area should be improved. U-channels and 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 runoff 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.
- 6.3.12. Excavated materials and silt was accumulated outside the site entrances / exits at Phase 2 (facing to Ko Fai Road). The Contractor was reminded to remove the silt as soon as possible and combined with cleaning of public roads. Proper bundings should be provided 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 in rainy seasons. The Contractor was reminded that any untreated surface run-off should be avoided from overflowing outside the Project site areas. The Contractor was also recommended to maintain the drainage system properly and regularly.
- 6.3.13. Silt accumulated near the exit / entrance of Phase 3 work area (near Cha Kwo Ling Road). The Contractor was reminded to remove the silt to prevent any silty water runoff from the site to public drain due to rainfall.

Chemical and Waste Management

- 6.3.14. Debris were accumulated near a locked site security gate (facing to Cha Kwo Ling Road) and along the site boundaries (especially the sides facing to Yau Tong Bay). The Contractor was reminded to remove the debris regularly and maintain the site cleanness.
- 6.3.15. In order to handle the chemical wastes which may generate from works area, the Contractor was reminded to provide a proper chemical wastes storage area within works area in accordance to the "Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes", to store any chemical wastes generated from works area temporarily. Chemical wastes should be stored in proper containers and collected by registered chemical waste collector regularly.
- 6.3.16. Designated chemical waste storage area was provided in works area. The condition of the storage area had been improved with enclosing properly on four sides by a wall. Drip tray had been provided for oil drum inside the chemical wastes storage area. However, the storage area should be kept secured / locked the door at all times. A panel with red English words and Chinese characters "CHEMICAL WASTE" "化學廢物" not less than 60mm high on a white background, which is durable, weather resistance and rigid, should be provided. Every chemical waste container should be securely closed or sealed and properly labeled.
- 6.3.17. Waste stockpile mixing with recyclable paper cardboards and plastic and stockpiles mixing with C&D wastes and materials were found around the works area. The Contractor should ensure that proper waste sorting was implemented and recyclable wastes should be recycled whenever possible. Waste skip should be provided for temporary waste storage within works area and they should be kept away from seawater front. Wastes should be cleared regularly in order to maintain proper housekeeping.
- 6.3.18. Debris was accumulated near a locked site security gate (facing to Cha Kwo Ling Road), along the site boundaries (especially the sides facing to Yau Tong Bay) and the Chemical Waste Storage Area. The Contractor was reminded to remove the debris and maintain the site cleanness.
- 6.3.19. Paints were observed spread on bare ground. The Contractor was reminded to provide proper measures (like tarpaulin sheet coverage) when oil painting works were carrying out to avoid any paint spread to bare ground. Any paint on ground should be cleared and disposed of as chemical wastes.

- 6.3.20. Oil stains were observed on ground. Oil stains on ground should be cleared and dispose of as chemical waste. Any kinds of maintenance works should be carried out in paved and roofed works area with proper mitigation measures to handle any oil leakage.
- 6.3.21. C&D wastes were accumulated near the site entrance. The Contractor was reminded to remove the C&D wastes regularly and provide more receptacles on site for general refuse collection. The Contractor was also reminded to maintain the site cleanness and tidiness.
- 6.3.22. No lid was provided for recycle bins (paper, plastic bottles and aluminium cans) near the site entrance. Label for recycle bin of plastic bottles were also observed missing. The Contractor was reminded to provide lids for all recycle bins and label the recycle bins properly.
- 6.3.23. The Contractor was reminded to sort the general refuse on site properly.
- 6.3.24. The Contractor was reminded to provide sufficient receptacles in Phase 3 work area (near Cha Kwo Ling Road) for general refuse collection.
- 6.3.25. Chemical containers were observed placed on ground without drip tray at Phase 3 work area. The Contractor was reminded to provide the drip trays for all oil drums / chemical containers to prevent any oil / chemical leakage.
- 6.3.26. Oil drum was observed placed on ground without drip tray at Phase 1 work area. The Contractor was reminded to provide drip tray for all oil drums to prevent oil leakage.

Landscape and Visual Impact

- 6.3.27. The retained trees within works area were not well tagged and protected. Protective net/barrier should be provided along the tree protection zone to avoid any damage to the retained trees. All retained trees on site should be properly tagged. Any construction materials and wastes should be kept away from the tree protection zone
- 6.3.28. Protective nets/barriers for retain trees were observed damaged due to adverse weather. The Contractor was reminded to replace the damaged protective nets/barriers and maintain the tree protection zone regularly and properly.

Miscellaneous

- 6.3.29. The Contractor should ensure that copies of Environmental Permit were provided at all vehicular site entrance/exit or at a convenient location for public information at all times.

7 SUMMARY AND REVIEW OF NON-COMPLIANCE (EXCEEDANCES) OF THE ENVIRONMENTAL QUALITY

- 7.1. One Action Level exceedance of construction noise was recorded in the reporting period, since a noise complaint (referred from EPD) was received on 18 June 2012 and the noise source was likely contributed from the demolition work of the project at Ko Fai Road during the weekdays. The complaint was considered as project-related.
- 7.2. No Limit Level exceedance of construction noise was recorded in the reporting period.
- 7.3. 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.

8 ENVIRONMENTAL COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

- 8.1. Four (4) environmental complaints were followed up by Environmental Team in the reporting period. Details of the complaints are shown below:
- 8.1.1. An air complaint, was received by EPD on 9 December 2011, and referred from EPD on 15 December 2011. The complaint was about dust emission from demolition works near Ko Fai Road and inefficient dust mitigation measures in works area on 9 December 2011. As informed by the Demolition Contractor for building structures (Riseship Construction Co. Ltd.) of the Project, concrete breaking works and general clearance of construction wastes and debris were being carried out on that day within the Project site area. Water spraying by sprinklers was implemented along access roads in Project site. Regular water spraying was provided at exposed works area, breaking and construction wastes and debris clearance works area. Exposed soil stockpiles were covered up with tarpaulin sheet to minimize dust impacts. Potential dust emission source, like operating factories near the Project site and construction works carrying by other contractors and heavy traffic at Cha Kwo Ling Road and Ko Fai Road were observed. Nonetheless, the dust emission was likely contributed from the breaking works and exposed works area of the Project without sufficient dust suppression measure. The complaint was considered as project-related. In order to closely monitor the dust impact from the Project site, the Project proponent initiated to set up 4 air quality monitoring stations at air sensitive receivers nearby. The 24-hour TSP monitoring results at the nearest monitoring stations (Yau Lai Estate Hong Lai House and Yau Tong Centre Tower 1) on 10 December 2011 were 73.9 ug/m^3 and 90.7 ug/m^3 respectively, which was below the Action Level of 156.3 ug/m^3 and 175.1 ug/m^3 respectively. The Contractor was recommended to regular review dust mitigation measures and ensures effective operation of water spraying facilities implemented in works area. The contractor was also recommended to nominate a direct labour for carrying out water spraying and frequently watering the access roads, exposed works area, breaking, construction waste and debris clearance works area. During the follow-up site inspection conducted on 29 December 2011, access roads and exposed works area were kept wet, moreover, water spraying by water hoses and sprinklers were provided in the work area.
- 8.1.2. A noise complaint was received by and referred from EPD on 28 December 2011. The complaint was about hammering noise from the Project site near Cha Kwo Ling Road from 24 December 2011 to 26 December 2011 and the construction works (i.e. hammering and welding) conducted until 2300. As informed by the Demolition Contractor for building structures (Riseship Construction Co. Ltd.) of the Project, no construction works were conducted during the restricted hours for the concerned period, i.e. from 24 December 2011 at 1900 to 26 December 2011 at 2400. The hammering noise was suspected to be caused by the trespassers of the Project works area. Trespassers were noticed by the Contractor before. The Contractor had reported the trespassing incident to the Police on 29 December 2011 (Case No. KGRN11038374). The complaint was considered not project related. However, the Contractor was reminded that Construction Noise Permit (CNP) should be applied if general construction works using powered mechanical equipments (PMEs) are required to be carried out during restricted hours. Moreover, the types and number of PMEs deployed on site during the restricted hours should strictly comply with the granted CNPs. Also the Contractor should strengthen the security measures by locking up all unused gates and designate a single gate for site entrance/exit and conducting regular patrol within the works area to avoid any trespassing, especially during restricted hours. During the follow-up site inspection conducted on 12 January 2012, the Contractor had locked up all unused gates and designated a single gate for site entrance/exit.
- 8.1.3. A noise complaint was received by and referred from EPD on 18 June 2012. The complaint was about the noise from the operation of Powered Mechanical Equipment (PME) from 8:00 to 19:00 from a construction site near Yau Lai Estate during weekdays and general holidays. As informed by the Demolition Contractor for building structures (Riseship Construction Co. Ltd.) of the Project, demolition works were conducted in weekdays (Monday to Saturday) during the normal daytime working hours (from 8:30 to 18:30) at project site near Ko Fai Road and no construction activities were conducted during general holidays. As reported by the Contractor, excavators were observed operated in Sand Depots near Cha Kwo Ling Road and Ko Fai Road. Road paving bitumen works (for traffic roads at Ko Fai Road) were also observed outside the site entrance (Phase 1) in Ko Fai Road. Since site inspection in December 2011, the 3m high hoarding had been installed along the site boundary of Ko Fai road and Cha Kwo Ling road for different phases of work sites. In addition, the noise monitoring result at the nearest monitoring station (Yau Lai Estate Hong Lai House) on 6 June 2012 and 12 June 2012 were 65.1 dB(A) and 67.4 dB(A) respectively, which were below the limit level of 75 dB(A), while excavators were observed operating at Phase 2 (near Ko Fai Road) site

works area during the course of monitoring. Nevertheless, the noise source was likely contributed from the demolition work of the project at Ko Fai Road during the weekdays. The complaint was considered as project-related. The Contractor was reminded that the types and numbers of Powered Mechanical Equipments (PMEs) operated on site for demolition works during the weekday normal working hours should strictly comply with the Environmental Permit (EP) and Construction Noise Mitigation Plan (CNMP). The Contractor should properly fulfil the requirements of EP and CNMP. The Contractor is recommended to provide proper noise mitigation measures (even if is not required in CNMP) for demolition work of the project site. Moreover, the Contractor was reminded that Construction Noise Permit (CNP) should be applied if general construction works using PMEs / Prescribed Construction Work (PCW) are required to be carried out during the restricted hours.

- 8.1.4. An air complaint (referred from EPD) was received on 3 August 2012. The complaint was about the 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. As informed by the Demolition Contractor for building structures (Riseship Construction Co. Ltd.) of the Project, paint spraying activities for hoarding was carried out at Phase 1 work areas from 9:00 to 16:00 on 3 August 2012 and the 3 sides (including the side facing the pedestrian roads and traffic roads of Ko Fai Road and Cha Kwo Ling Road) of painting work area (at Phase 1) was covered by impervious tarpaulin during the painting activities. Painting works for hoarding at Phase 1 work areas (near the junction of Ko Fai Road and Cha Kwo Ling Road) was completed on 3 August 2012 and no painting work at Phase 1 work areas is currently planned for the near future. Nevertheless, the complaint was considered as project-related. Therefore, the Contractor was reminded to keep the proper mitigation measures in place for the same activities to be carried out, such as proper covering of paint spraying areas by impervious tarpaulin which prevents any air emission from painting activities to passer-by and parked / passing vehicles. The Contractor should consider using other painting method - brushing painting to reduce the air emission during the activities. For future renovation works, the notice and warning sign should be placed at a prominent location outside the hoarding.
- 8.2. No notification of summons and prosecutions was received in the reporting period.
- 8.3. Cumulative statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix E.

9 REVIEW OF THE VALIDITY OF THE EIA/ERR PREDICTION

- 9.1. One Action Level exceedance of construction noise was recorded in the reporting period, since a noise complaint (referred from EPD) was received on 18 June 2012 and the noise source was likely contributed from the demolition work of the project at Ko Fai Road during the weekdays. The complaint was considered as project-related. Recommended mitigation measures were submitted to all relevant parties. On the other hand, no Limit Level exceedance of construction noise was recorded in the reporting period. The overall result was in line with the Environmental Impact Assessment (EIA) and Environmental Review Report (ERR) prediction that with the implementation of noise mitigation measures, the construction noise from the Project works will meet the stipulated criterion at the NSRs.

10 REVIEW OF ENVIRONMENTAL IMPLEMENTATION STATUS

- 10.1. 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. Despite the minor deficiencies found during site audits, the relevant contractor had taken appropriate actions to rectify deficiencies within reasonable timeframe. Therefore, the effectiveness and efficiency of the mitigation measures were considered high in most of the time.

11 REVIEW OF EM&A PROGRAMME

- 11.1. The environmental monitoring methodology was considered well established as the monitoring results were found in line with the EIA predictions.
- 11.2. 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.

12 CONCLUSIONS

- 12.1. The construction phase and EM&A programme of the project commenced on 21 November 2011.
- 12.2. Noise monitoring and weekly site inspection were carried out from November 2011 to October 2012, in accordance with the EM&A Manual.
- 12.3. One Action Level exceedance of construction noise was recorded in the reporting period, since a noise complaint (referred from EPD) was received on 18 June 2012 and the noise source was likely contributed from the demolition work of the project at Ko Fai Road during the weekdays. The complaint was considered as project-related.
- 12.4. No Limit Level exceedance of construction noise was recorded in the reporting period.
- 12.5. 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.
- 12.6. Four (4) environmental complaints were followed up by Environmental Team in the reporting period.
- 12.7. No notification of summons and prosecution was received in the reporting period.
- 12.8. Mitigation measures had been implemented by the Contractors to minimize the environmental impacts due to construction activities. Site inspections carried out by ET and IEC showed that the Contractors rectified the problems observed promptly and no major environmental deficiency was induced. The EM&A programme was considered successfully and adequately conducted during the course of the reporting period.