



Main Wealth Development Ltd.

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

**Quarterly EM&A Summary Report
for November 2011 to January 2012
(1st Quarterly EM&A Summary Report)**

[02/2012]

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

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Disclaimer

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Our Ref: 3.14/018/2009/at

7 March 2012

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

Attn: Ms. Virginia Ng

Dear Ms. Ng,

Yau Tong Bay – Decommissioning of Shipyard Sites
Environmental Permit No. EP-409/2010
Quarterly EM&A Summary Report for November 2011 to January 2012 (Version: V.0)

With reference to the captioned document verified by IEC on 1 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

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

1 March 2012

Attn : Ms. Virginia Ng

Dear Madam,

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

Further to the receipt from ET of the captioned Quarterly EM&A Summary Report on 28 February and 1 March 2012 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



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 21 November 2011 and 31 January 2012.

As informed by the Contractor, major construction activities carried out in the reporting quarter were building demolition of YTML 15, 19-24 & YTML54 (Phase 1) and general site clearance (Phase 1).

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

Daytime noise monitoring	7 sessions
Water quality monitoring	0 session
Environmental site inspection	10 sessions

Breaches of Action and Limit Levels for Daytime Construction Noise

No Action Level exceedance of construction noise was recorded in the reporting quarter, since a received noise complaint on 28 December 2011 was suspected to be caused by the trespassers of the Project works area and was considered not project related.

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 quarter as demolition of marine structures was not yet commenced. No Action/Limit Level exceedance of water quality was recorded in the reporting quarter.

Environmental Complaint, Notification of Summons and Successful Prosecution

Two environmental complaints (included an air pollution complaint on 9 December 2011 and a noise complaint on 28 December 2011) referred from EPD were received in the reporting quarter.

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 and recommended mitigation measures were provided to the Contractor.

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. The complaint was suspected to be caused by the trespassers of the Project works area and was considered not project related.

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

Reporting Change

There was no reporting change required in the reporting quarter.

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二十一日至二零一二年一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)。

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	7次
水質監測	0次
環境巡查	10次

違反監測標準

日間建築噪音

在二零一一年十二月二十八日收到之噪音投訴，噪音懷疑是由非法侵佔地盤者所產生，推斷此噪音投訴個案與本工程項目無關，所以在上述的季度的所有日間建築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

在上述的季度收到兩宗由環保署轉介之環境投訴(包括在二零一一年十二月九日之空氣污染投訴個案及在二零一一年十二月二十八日之噪音投訴個案)。

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減措施。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減措施之建議。

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。噪音懷疑是由非法侵佔地盤者所產生，推斷此噪音投訴個案與本工程項目無關。

在上述的季度沒有收到有關環境的傳票及檢控。

報告修訂

本報告季度並沒有修訂報告。

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 first 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 21 November 2011 and 31 January 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**.

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

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 activities carried out in the reporting period were building demolition of YTML 15, 19-24 and YTML54 (Phase 1) and general site clearance (Phase 1).
- 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**.

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 impact due to the Project.
- 2.1.2 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.
- 2.1.3 The EM&A Manual also required environmental site inspections for air quality, noise, water quality, waste management, land contamination and landscape and visual.
- 2.1.4 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 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

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 MONITORING RESULTS

3.1 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 Seven (7) daytime noise monitoring events were carried out at the designated monitoring stations (NM1 to NM3) respectively in the reporting quarter.
- 3.1.3 The weather was mostly fine, with occasional sunny 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 of construction noise was recorded in the reporting quarter, since a received noise complaint on 28 December 2011 was suspected to be caused by the trespassers of the Project works area and was considered not project related.
- 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								
		Nov 11			Dec 11			Jan 12		
		NM1	NM2	NM3	NM1	NM2	NM3	NM1	NM2	NM3
Daytime Construction Noise	No. of monitoring events	1	1	1	2	2	2	4	4	4
	Action	0	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0	0
	<i>Total</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.

3.2 Water Quality Monitoring

- 3.2.1 No water quality monitoring was not conducted in the reporting quarter as demolition of marine structures was not commenced. No Action/Limit Level exceedance of water quality was recorded in the reporting quarter.

3.3 Land Contamination Monitoring

- 3.3.1 In the reporting quarter, 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.
- 3.3.2 No soil remediation works monitoring and auditing was commenced in the reporting quarter as soil remediation works had not yet commenced.

3.4 Environmental Site Inspection

3.4.1 There were ten (10) 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.

3.4.2 The Contractor has partially rectified observations as identified during environmental site inspection in the reporting quarter 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

3.4.3 Air Quality Impact

- 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.
- 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.
- 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.
- Mud trails were observed at the site entrance/exit facing Cha Kwo Ling Road, outside and at site entrance/exit facing to Ko Fai Road (Phase 2) respectively. 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.

3.4.4 Construction Noise Impact

- Noise mitigation measures should be provided in breaking works area. Noise barriers or equivalent measures should be provided to the breakers and breaking works area to minimize the noise impact to the sensitive receivers nearby.

3.4.5 Water Quality Impact

- 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.
- 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.

3.4.6 Chemical and Waste Management

- 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.
- 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.
- 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.
- Oil drums were found placed on bare ground within the works area. The Contractor should provide drip trays to oil drums stored in works area to retain any leaked oil.
- Oil painting was found carried out 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.
- 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.

3.4.7 Landscape and Visual Impact

- 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.

3.4.8 Miscellaneous

- 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.

4 ADVICE ON SOLID AND LIQUID WASTE MANAGEMENT STATUS

4.1 Solid and Liquid Waste Management Status and Recommendations

- 4.1.1 The Contractor was registered as a chemical waste producer for this Project. C & D material and waste sorting was carried out on site. Receptacles were available for general refuse and C&D wastes collection.
- 4.1.2 As advised by the Contractor, quantity of waste for disposal in the reporting quarter is summarized in the Table 4.1

Table 4.1 Summary of Quantity of Waste for Disposal

Type of waste	Month			Total
	Nov 11	Dec 11	Jan 12	
C&D materials generated				
C&D waste generated	0 kg	2,475,930 kg	0 kg	2,475,930 kg
Metals	0 kg	116,930 kg	0 kg	116,930 kg
Paper cardboard packing	0 kg	0 kg	0 kg	0 kg
Plastics	0 kg	0 kg	0 kg	0 kg
Chemical waste	0 L	0 L	0 L	0 L
General refuse	0 tonnes	26.8 tonnes	0 tonnes	26.8 tonnes

- 4.1.3 The Contractor is advised to properly maintain on site C&D material and waste sorting, collection and recording system and maximize reuse / recycle of C&D material and waste. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

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

5.1 Summary of Exceedances of the Environmental Quality Performance Limit

- 5.1.1 No Action Level exceedance of construction noise was recorded in the reporting quarter, since a received noise complaint on 28 December 2011 was suspected to be caused by the trespassers of the Project works area and was considered not project related.
- 5.1.2 No Limit Level exceedance of construction noise was recorded in the reporting quarter.
- 5.1.3 Water quality monitoring was not conducted in the reporting quarter as demolition of marine structures was not yet commenced. No Action/Limit Level exceedance of water quality was recorded in the reporting quarter.

6 COMPLAINT, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTION

6.1 Summary of Complaints, Notification of Summons and Successful Prosecutions

- 6.1.1 Two environmental complaints (included an air pollution complaint on 9 December 2011 and a noise complaint on 28 December 2011) referred from EPD were received in the reporting quarter.
- 6.1.2 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. 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/m³ and 90.7 ug/m³ respectively, which was below the Action Level of 156.3 ug/m³ and 175.1 ug/m³ 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.
- 6.1.3 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 is 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 the 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.
- 6.1.4 No environmental notification of summons and prosecution was received in the reporting quarter.

6.1.5 Table 6.1 summarized the complaint, summons and successful prosecution received in the reporting period.

Table 6.1 Summary of Environmental Complaints, Summons and Successful Prosecutions

	Nov 11	Dec 11	Jan 12	Total
Complaint Logged	0	2	0	2
Summons Served	0	0	0	0
Successful Prosecution	0	0	0	0

6.1.6 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**.

7 COMMENTS, RECOMMENDATIONS AND CONCLUSIONS

7.1 Comments on Mitigation Measures

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

7.1.2 Air Quality Impact

- To provide additional sprinklers or water spraying facility to exposed works area and access roads;
- To cover up the exposed soil stockpile by tarpaulin sheet;
- To provide adequate water spraying on access roads, work / site areas and exposed works areas;
- To operate and maintain automatic wheel washing facilities properly;
- To operate sprinklers or water spraying facility effectively on site;
- To provide road sweeping on all paved haul roads and the public roads outside site egress; and
- To remove any dusty materials from the vehicle's bodies and wheels before leaving construction sites.

7.1.3 Construction Noise Impact

- To provide noise barriers or equivalent measure to breakers and breaking works area.

7.1.4 Water Quality Impact

- To provide proper drainage channels/bunds/wheel washing bay at all site entrance/exit;
- To provide u-channel and proper bundings along the site boundaries in together with proper treatment and pumping facilities;
- To avoid any untreated surface run-off from overflowing outside the project site areas.

7.1.5 Chemical and Waste Management

- To provide waste skips for temporary waste storage within works area and keep away from seawater front;
- To remove the debris regularly and maintain the site cleanness;
- To sort the wastes properly and recycle all recyclable wastes whenever possible;

- To provide a proper chemical wastes storage area within works area;
- To store the chemical wastes in proper containers and be collected by registered chemical waste collector regularly;
- To kept secured / locked the door of chemical waste storage area at all times;
- To provide a panel with red English words and Chinese characters for chemical waste storage area;
- To securely closed / sealed all chemical wastes containers;
- To label all chemical waste container properly;
- To provide drip trays to oil drums stored in works area;
- To provide proper measures (like tarpaulin sheet coverage) for oil painting works; and
- To remove the paints on ground and handle all the materials using for this cleaning works as chemical waste.

7.1.6 Landscape and Visual Impact

- To provide protective net/barrier along the tree protection zone;
- To tag all retained trees on site; and
- To remove construction materials / wastes in the tree protection zone area.

7.1.7 Miscellaneous

- To provide copies of Environmental Permit at all vehicular site entrance/exit or at a convenient location for public information at all times.

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 and weekly site inspection were carried out from November 2011 to January 2012, in accordance with the EM&A Manual.
- 7.3.3 No Action Level exceedance of construction noise was recorded in the reporting quarter, since a received noise complaint on 28 December 2011 was suspected to be caused by the trespassers of the Project works area and was considered not project related.
- 7.3.4 No Limit Level exceedance of construction noise was recorded in the reporting quarter.
- 7.3.5 Water quality monitoring was not conducted in the reporting quarter as demolition of marine structures was not yet commenced. No Action/Limit Level exceedance of water quality was recorded in the reporting quarter.
- 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 quarter as soil remediation works was yet commenced.
- 7.3.7 Environmental site inspection was carried out 10 times in the reporting quarter. Recommendations on remedial actions were given to the Contractors for the deficiencies identified during the site audits.
- 7.3.8 Two environmental complaints (included an air pollution complaint on 9 December 2011 and a noise complaint on 28 December 2011) referred from EPD were received in the reporting quarter.
- 7.3.9 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 and recommended mitigation measures were provided to the Contractor.
- 7.3.10 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. The complaint was suspected to be caused by the trespassers of the Project works area and was considered not project related.
- 7.3.11 No notification of summons and successful prosecution was received in the reporting quarter.