



**Main Wealth Development Ltd.**

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

**Monthly EM&A Report  
for December 2011**

[01/2012]

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

Version:	Rev. 0	Date: 13 January 2012
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13 January 2012

**Attn : Ms. Virginia Ng**

Dear Madam,

**Yau Tong Bay – Decommissioning of Shipyard Sites  
Environmental Permit No. EP-409/2010  
Condition 5.4 – Monthly EM&A Report for December 2011 (version: Rev. 0)**

Further to the receipt of ET the captioned Monthly EM&A Report on 12 and 13 January 2012 via email, pursuant to Condition 5.4 of Environmental Permit, I hereby verified 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)



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13 January 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**  
**Monthly EM&A Report for December 2011 (Version: V.0)**

With reference to the captioned document verified by IEC on 13 January 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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## 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 December 2011.

As informed by the Contractor, major construction activities carried out in the reporting period were building demolition of YTML 15, 18-24 & YTML54 (Phase 1) and general site clearance (Phase 1).

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 of construction noise was recorded in the reporting period, 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 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

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 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 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 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 included:-

- 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十二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 15, 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，所以在上述的期間的所有日間建築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。

在上述的期間沒有收到有關環境的傳票及檢控。

## 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 second monthly EM&A 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 December 2011 (from 1 December 2011 to 31 December 2011).

## 1.3 Project Organization

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

**Table 1.1 Contact Information of Key Personnel**

Party	Name	Telephone	Fax
<b>Project Proponent</b>  (Main Wealth Development Limited)	Colin Wan	2908 8574	2530 1402
<b>Engineer</b>  (Stephen Cheng Consulting Engineers)	Andy Kwok	2908 2516	2845 9964
<b>Demolition Contractor – Building Structures (Contractor)</b>  (Riseship Construction Company Limited)	Edward Lo	2578 9542	2578 1892
<b>Independent Environmental Checker (IEC)</b>  (Mott MacDonald Hong Kong Limited)	Terence Kong	2828 5919	2827 1823
<b>Independent Environmental Auditor (IEA)</b>  (Nature & Technologies (HK) Limited)	Gabriel Lam	2877 3122	2511 0922
<b>Environmental Team Leader (ETL)</b>  (AECOM Asia 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 was building demolition of YTML 15, 19-24 and YTML54 (Phase 1) and general site clearance.
- 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	B&K 2238
	Rion NL-31
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 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

### 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.
- (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:  $L_{eq(30\text{-minutes})}$  during non-restricted hours i.e. 07:00 – 1900 on normal weekdays;  $L_{eq(5\text{-minutes})}$  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 December 2011 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**.

**Table 2.4 Summary of Construction Noise Monitoring Results in the Reporting Period**

	Average, dB(A), $L_{eq}$ (30 mins)	Range, dB(A), $L_{eq}$ (30 mins)	Limit Level, dB(A), $L_{eq}$ (30 mins)
NM1	64.5	63.1 – 65.6	75
NM2	60.4	53.8 – 62.9	70 <sup>#</sup>
NM3	63.3	60.0 – 65.1	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 of construction noise was recorded in the reporting period, 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.
- 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 No 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 observed in the site. No significant environmental issue was identified from the drilling works.
- 4.1.2 No soil remediation works monitoring and auditing was commenced in the reporting period as soil remediation works had not yet 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 6, 12, 19 and 29 December 2011.
- 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 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. (Closed on 12 December 2011)
- 5.1.5 Exposed works areas at YTML19, YTML54 and YTML23-24 were found dusty and dry. The Contractor should provide regular water spraying or sprinklers to minimize fugitive dust emission. (Closed on 29 December 2011)
- 5.1.6 Exposed soil stockpile was observed at works area YTML 54. The Contractor should cover up the exposed soil stockpile with tarpaulin sheet to minimize the dust impacts. (Closed on 19 December 2011)
- 5.1.7 Most of the exposed works areas and access roads at YTML20, YTML21 and YTML22RP 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. (Closed on 29 December 2011)
- 5.1.8 Exposed soil stockpiles were observed at works area YTML21. The Contractor was reminded to cover up the exposed soil stockpile with tarpaulin sheet to avoid fugitive dust emission. (Closed on 29 December 2011)



### **Noise**

- 5.1.9 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. (Closed on 19 December 2011)

### **Water Quality**

- 5.1.10 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. (Follow-up)
- 5.1.11 Improvement of temporary drainage systems in works area was undergoing. 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. (Follow-up)

### **Chemical and Waste Management**

- 5.1.12 Recycle bins and waste skip for collection of wastes were observed within the works area. However, waste stockpile mixing with recyclable paper cardboards and plastic stockpiles mixing with C&D wastes and materials were still 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 stockpiles of C&D materials and wastes should be kept away from seawater front. Wastes should be cleared regularly in order to maintain proper housekeeping. (Closed on 12 December 2011)
- 5.1.13 Designated chemical waste storage area was provided in works area. However, the condition of the storage area should be further improved in order to comply with the “Code of Practice on Packaging, Labelling and Storage of Chemical Wastes”. The storage area should be enclosed properly on at least three sides by a wall or partition fence and kept secured with an appropriate door/gate with be locked at all times. Proper bundings/drip tray should be provided in the storage area to provide sufficient retention capacity to retain any leakage. 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. (Follow-up)

### **Landscape and Visual Impact**

- 5.1.14 Provision of protective net along the tree protection zone of retained trees within works area was undergoing. The Contractor should remove any construction materials and wastes placed near the retained trees and kept them away from the tree protection zone. (Closed on 12 December 2011)

### **Miscellaneous**

- 5.1.15 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. Sufficient numbers of receptacles were available for general refuse collection.
- 5.2.2 As advised by the Contractor, 2475930kg C&D material and waste was disposed of off-site. 116930kg metals was generated and collected by registered recycling collector. 26.8 tonnes general refuse were transferred from the Project site to landfill 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**.

**Table 5.1 Summary of Environmental Licensing and Permit Status**

Statutory Reference	License/ Permit	License or Permit No.	Valid Period		Remarks
			From	To	
EIAO	Environmental Permit	EP-409/2010	10/01/2011	N/A	Yau Tong Bay – Decommissioning of Shipyard Sites
WPCO	Discharge License	N/A	Application in process	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

## 5.4 Implementation Status of Environmental Mitigation Measures

- 5.4.1 In response to the site audit findings, the Contractors 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 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 period.
- 5.6.3 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  $\mu\text{g}/\text{m}^3$  and 90.7  $\mu\text{g}/\text{m}^3$  respectively, which was below the Action Level of 156.3  $\mu\text{g}/\text{m}^3$  and 175.1  $\mu\text{g}/\text{m}^3$  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.
- 5.6.4 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.

- 5.6.5 No environmental notification of summons and prosecution was received in the reporting period.
- 5.6.6 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 January 2012 will be building demolition of YTML 21 (Phase 1).

### **6.2 Key Issues for the Coming Month**

- 6.2.1 Key issues to be considered in January 2012:-
- 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 January 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 and complaint investigations performed in the reporting month, the following comments were provided:-

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

- Dust suppression measures (e.g. provision of additional sprinklers or water spraying facility) should be provided during demolition process to minimize the dust impacts.
- Exposed work areas and access roads should be sufficiently dampened to minimize fugitive dust generation.
- Exposed soil stockpile should be properly covered with tarpaulin sheet to avoid fugitive dust emission.
- Access roads and exposed works area should be dampened frequently.
- Breaking and construction waste and debris clearance works area should be sprayed with water frequently.
- Dust mitigation measures should be reviewed regularly and operation of water spraying facilities implemented in works area should be ensured effectively.

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

- 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.

- 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.
- The types and number of PMEs deployed on site during the restricted hours should strictly comply with the granted CNPs.

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

- Silty effluent/surface run-off should be treated/desilted before discharged. Untreated effluent should be prevented from entering public drain channel/sea nearby.
- Proper drainage channels/bunds should be provided at the site boundaries to collect/intercept the surface run-off from works areas and wheel washing facilities.

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

- C&D materials and wastes, general refuse should be sorted and stored properly and removed timely.
- Designated chemical waste storage area should be enclosed properly on at least three sides by a wall or partition fence and kept secured with an appropriate door/gate with be locked at all times.
- Proper bundings/drip tray should be provided in chemical waste storage area to provide sufficient retention capacity to retain any leakage.
- 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 for chemical waste storage area .
- Every chemical waste container should be securely closed or sealed and properly labeled.

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

- All retained trees should be properly tagged and protected at the works area.

#### ***Miscellaneous***

- All unused gates and designate a single gate for site entrance/exit should be locked up.
- Regular patrol within the works area should be conducted to avoid any trespassing, especially during restricted hours.

## **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 of construction noise was recorded in the reporting period, 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 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 December 2011. 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 period.
- 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 period.