

Table I1 *Cumulative Statistics on Exceedances*

Monitoring Parameters	Action/Limit Level	Total No. recorded in this reporting quarter	Total No. recorded since project commencement
1-Hr TSP	Action	0	30
	Limit	0	2
24-Hr TSP	Action	0	5
	Limit	0	1
Water Quality	Action	0	6
	Limit	0	1
Impact Dolphin Monitoring	Action	0	9
	Limit	1	6

Table I2 *Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions*

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Period (June 2016 to August 2016)	2	0	0
Total No. received since project commencement	7	0	0

ENVIRONMENTAL COMPLAINT INVESTIGATION REPORT

Our Reference: 0212330_Complaint LOG_20160607_05

Basic Information of Complaints

Reference Number:	EP/RW/0000349002
Date of Complaints Received	7 June 2016
Location of Complaints	Pier at 33 Ho Yeung Street, Tuen Mun
Nature of Complaints	Muddy water discharge
Complaints Received by	Environmental Protection Department (EPD)
Via	Not disclosed
Complainants	Not disclosed

Details of Complaints

On 7 June 2016, a complaint case was received by EPD regarding muddy water discharge near the pier at 33 Ho Yeung Street, Tuen Mun. The Contractor and the Environmental Team (ET) received the complaint notification on 28 June 2016. The ET was informed that the case is categorized as complaint in nature upon the investigation, discussion and agreement between different parties (i.e. the Contractor (DBJV), SOR and ENPO).

Investigation Report

Upon receiving the case notification from EPD on 28 June 2016, the Contractor had promptly checked the works summary of June 2016.

Based on the record of the Contractor's works summary, no wastewater generated from construction activities was recorded near the pier at 33 Ho Yeung Street, Tuen Mun on 6 June 2016. According to the construction programme provided by the Contractor, there is no construction work scheduled at 81-91 Ho Yeung Street area (See Figure 1). Only surface runoff within the site boundary will be collected and treated by the Wetsep before discharge. Routine inspections and maintenance have been carried out in weekly basis (See Annex A). Water sample had been tested and the result complied with the water discharge license.

After receiving the complaint, the contractor has checked the current drainage system near the incident area. Silt in the storm drain was removed and the drainage system was cleaned. An inspection was carried out with the Contractor and SOR to investigate the complaint case on 28 June 2016. No muddy water discharge was discovered (See Annex A).

Based on the above, the complaint case is considered to be not related to this Contract's work and is thus invalid.

Mitigation Measures and Follow-Up Actions Recommended to/Undertaken by Contractor

During construction, the Contractor is in accordance with the requirements of the relevant environmental regulations and the implementation of mitigation measures which included deploying wastewater treatment facilities on site treating wastewater to meet the conditions of WPCO license prior to discharging.

The Contractor has been reminded to adhere strictly to implement all relevant mitigation measures of water quality impact recommended or specified in the EP (EP-354/2009/D), the approved EIA and the Updated EM&A Manual of this Project to avoid causing water pollution.

The Contractor shall identify work activities on the Site with large water consumption and provide an effective drainage system for collection of wastewater generated.

The Contractor shall designate staff for the operation of the wastewater treatment facilities. The designated staff shall maintain a proper daily record of plant performance for inspection by the SO or his representative. No other additional action is required.

Date of File Closed : 6 July 2016

Approved and Filed by:



(Jovy Tam, ET Leader)

Date: 6 July 2016



Annex A Photo Records taken during Site Investigation

*Note: Photos taken on 23/6/2016



Built-up sludge was removed regularly (81-91 Ho Yeung Street area)

*Note: Photos taken on 28/6/2016



No muddy water discharge was discovered at the discharge point. (81-91 Ho Yeung Street area)

WETSEP Location 污水處理機位置: <u>N6</u>								
Date 日期: <u>6月6日</u> to <u>6月12日</u> (2016年)								
		Monday 星期一	Tuesday 星期二	Wednesday 星期三	Thursday 星期四	Friday 星期五	Saturday 星期六	Sunday 星期日
1.	WETSEP In Normal Operation? 處理機是否正常運作?	✓	✓	✓	✓	✓	✓	✓
2.	pH Value 酸鹼度 (6.0 - 9.0)	8.3	8.6	8.1	8.7	8.2	7.9	8.5
3.	Electrical Supply OK? 電力供應正常?	✓	✓	✓	✓	✓	✓	✓
4.	Outlet Abnormal? (Any Sludge? Any Colour Change? Flowrate?) 出水口有否異常? (污泥有否積聚? 顏色有否改變? 流量有否異常?)	✓	✓	✓	✓	✓	✓	✓
5.	Potion Enough? 藥水是否足夠?	✓	✓	✓	✓	✓	✓	✓
6.	Clean the Sedimentation Tank? 有否清理隔沙缸?			✓			✓	
7.	Clean the De-silt Basin? 有否清理蓄泥池?			✓			✓	
8.	Are the Cleansing Records of Sedimentation Tank/ De-silt Basin Stored Properly? 清理蓄泥池記錄是否妥善儲存?			✓			✓	
9.	Refill of Flocculants? pH Neutralization agent? 補充凝絮劑/酸鹼調節劑?			✓			✓	
10.	Others 其他情況							
Verified by Site Foreman/Supervisor 地盤管工/監督簽署確認		✍	✍	✍	✍	✍	✍	✍

*Please - tick (✓) in the box if the condition is normal. *若情況正常, 請於方格內加上剔號(✓).
cross (X) in the box if the condition is abnormal, and write down the non-conformance.
*若情況不尋常, 請於方格內加上交叉(X), 並寫下不尋常狀況。

Remarks:

- (1) Please keep the record and send to environmental department in monthly basis.
備註:
(1) 請將記錄妥善保存, 並每月將記錄交回環保部。

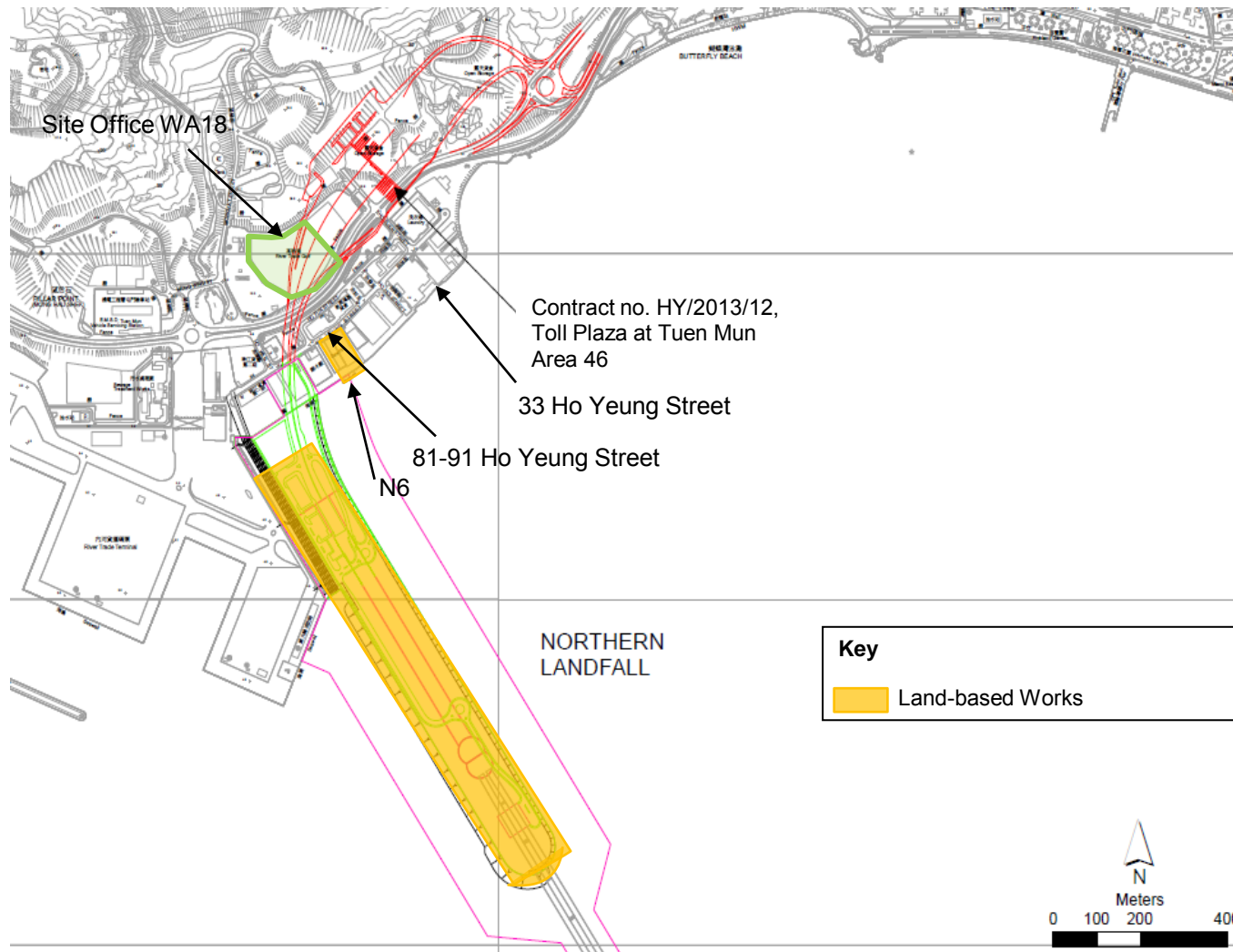


Figure 1

ENVIRONMENTAL COMPLAINT INVESTIGATION REPORT

Our Reference: 0212330_Complaint LOG_20160716_06

Basic Information of Complaints

Reference Number:	Not disclosed
Date of Complaints Received	16 July 2016
Location of Complaints	Tuen Mun Ferry Pier
Nature of Complaints	Marine litter disposal
Complaints Received by	Not disclosed
Via	Not disclosed
Complainants	Not disclosed

Details of Complaints

On 16 July 2016, an complaint case was received regarding marine litter disposal near Tuen Mun Ferry Pier. The Contractor and the Environmental Team (ET) received the complaint notification on 22 July 2016.

Investigation Report

Upon receiving the case notification from ENPO on 22 July 2016, the Contractor had promptly checked the works summary of July 2016.

According to the construction programme provided by the Contractor, there is no construction work scheduled near Tuen Mun Ferry Pier. In addition, since the location of Tuen Mun Ferry Pier is relatively far away from the project site, the complaint is not related to this Contract's work.

Based on the above, the complaint case is considered to be not related to this Contract.

Mitigation Measures and Follow-Up Actions Recommended to/Undertaken by Contractor

The Contractor has been reminded to adhere strictly to implement all relevant mitigation measures of water quality impact recommended or specified in the EP (EP-354/2009/D), the approved EIA and the Updated EM&A Manual of this Project to avoid causing water pollution. No other additional action is required.

Date of File Closed : 12 August 2016

Approved and Filed by:



(Jovy Tam, ET Leader)

Date: 12 August 2016

Email
message

Environmental
Resources
Management

To Ramboll Environ - Hong Kong, Limited (ENPO)

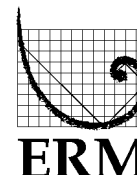
From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2012/08 Tuen Mun-Chek Lap
Kok Link-Northern Connection Sub-sea Tunnel
Section

Subject Notification of Exceedance for Impact Dolphin
Monitoring

Date 27 February 2017

16/F Berkshire House,
25 Westlands Road
Quarry Bay, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jovy.tam@erm.com



Dear Sir or Madam,

Please find attached the Notification of Exceedance (NOE) of the following
Log no.:

0212330_Jun2016/Aug2016_dolphin_STG&ANI_NEL&NWL

A total of one limit level exceedance was recorded in the quarterly impact
dolphin monitoring data between June 2016 and August 2016.

Regards,

Mr Jovy Tam
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/08

**TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION SUB-SEA TUNNEL SECTION**

**Impact Dolphin Monitoring
Notification of Exceedance**

Log No.	0212330_Jun2016/Aug2016_dolphin_STG&ANI_NEL&NWL [Total No. of Exceedances = 1 Limit Level Exceedance]	
Date	June to August 2016 (monitored) 25 November 2016 (results received by ERM)	
Monitoring Area	Northeast Lantau (NEL) and Northwest Lantau (NWL)	
Parameter(s) with Exceedance(s)	Quarterly encounter rate of dolphin sightings (STG) Quarterly encounter rate of total number of dolphins (ANI)	
Action Levels	North Lantau Social cluster	NEL: STG < 4.2 & ANI < 15.5 or NWL: STG < 6.9 & ANI < 31.3
Limit Levels		NEL: STG < 2.4 & ANI < 8.9 and NWL: STG < 3.9 & ANI < 17.9
Recorded Levels	NEL	STG = 0.0 & ANI = 0.0
	NWL	STG = 1.72 & ANI = 7.48
	One Limit Level Exceedance was recorded in the quarterly impact dolphin monitoring at NEL and NWL between June and August 2016. The exceedance was reported in the approved <i>Thirty-fourth Monthly EM&A Report</i> dated 12 September 2016.	
Statistical Analyses	<p>Further to the review of the available and relevant dolphin monitoring data in the EM&A programme by this Contract, statistical analyses were conducted as follows:</p> <ul style="list-style-type: none"> A two-way ANOVA with repeated measures and unequal sample size was conducted using Period (2 levels: baseline vs impact – present quarter, June to August 2016) and Location (2 levels: NEL and NWL) as fixed factors to examine whether there were any significant differences in the average encounter rates between the baseline and present impact monitoring quarter. By setting $\alpha = 0.05$ as the significance level in the statistical tests, significant differences in STG ($p = 0.0031$) and ANI ($p = 0.0227$) were detected between Periods. A two-way ANOVA with repeated measures and unequal sample size was conducted using Cumulative Period (2 levels: baseline vs impact – cumulative quarters*, December 2012 to May 2016) and Location (2 levels: NEL and NWL) as fixed factors to examine whether there were any significant differences in the average encounter rates between the baseline and cumulative impact monitoring quarters. By setting $\alpha = 0.00005$ as the significance level in the statistical tests, significant difference in STG ($p = 0.000009$) and in ANI ($p = 0.000001$) between Cumulative Period and Location were detected. <p>*Note: The commencement date under <i>Contract No. HY/2012/08</i> is 1 November 2013.</p>	
Works Undertaken (in the monitoring quarter)	In the quarter between June 2016 and August 2016, no marine works was carried out in this Contract.	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The potential factors that may have contributed to the observed exceedance are reviewed below:</p> <ul style="list-style-type: none"> • Blocking of CWD travelling corridor: The <i>Monitoring of Marine Mammals in Hong Kong Waters (2015 – 16)</i> ⁽¹⁾ reported that dolphin usage and traveling activities to the northern side of the airport (dolphin traveling corridor) are affected by frequent high-speed ferry traffic from Sky Pier (not related to this Contract), which is likely a major factor resulting in the decrease in dolphin abundances in North Lantau. • Marine works of the Contract: As per the findings from the EIA report (<i>Section 8.11.9</i>), the major influences on the Chinese White Dolphin (CWD) <i>Sousa chinensis</i> under this Contract are marine traffics, reclamation and dredging works. The Contractor implemented the marine traffic control in the reporting period as per the requirements in the <i>EP-354/2009/D</i> and the updated <i>EM&A Manual</i>. The reclamation and dredging works of this Contract (Phase 1) was completed in December 2014. Thus, underwater noise emission from this Contract had been relatively low in the reporting period when comparing to the previous quarters (Nov 2013 to Feb 2015). During dolphin monitoring in this quarter, no unacceptable impact on CWD due to the activities under this Contract was observed. <p>In view of the above, marine ecological mitigation measures were considered properly implemented, and thus no unacceptable impact on CWD or its habitat was associated with this Contract in this quarter from June 2016 and August 2016.</p>
Actions Taken/ To Be Taken	<p>A joint team meeting was held on 14 October 2016 for discussion on CWD trend, with attendance of ENPO, HyD, Representatives of Resident Site Staff (RSS), Representatives of Environmental Team (ET) for Contract No. HY/2010/02, HY2011/03, HY/2012/07 and HY/2012/08. The discussion/recommendation as recorded in the minutes of the meeting, which might be relevant to this Contract are summarized below. It was concluded that the HZMB works is one of the contributing factors affecting the dolphins. It was also concluded the contribution of impacts due to the HZMB works as a whole (or individual marine contracts) cannot be quantified or separate from the other stress factors. ENPO presented the CWD survey results in mainland waters obtained from Hong Kong-Zhuhai-Macao Bridge Authority that some CWDs that were previously more often sighted in Hong Kong waters have expanded their ranges into mainland waters, and some with reduced usage in Hong Kong waters, while they are partially accounted for the local decline. It was reminded that the ETs shall keep reviewing the implementation status of the dolphin related mitigation measures and remind the contractor to ensure the relevant measures are fully implemented. The ETs were also reminded to update the BMP boundary in the Regular Marine Travel Route Plan. The participants were requested by ENPO to collect and report the marine traffic statistics. It was recommended that the marine works of HZMB projects should be completed as soon as possible so as to reduce the overall duration of impacts and allow the dolphins population to recover as early as possible. It was also suggested that the protection measures (e.g., speed limit control) for the proposed Brothers Marine Park (BMP) shall be brought forward as soon as possible before its establishment so as to provide a better habitat for dolphin recovery.</p>
Remarks	<p>The results of impact dolphin monitoring, the status of implemented marine ecological mitigation measures are documented in the approved <i>Thirty Second to Thirty-Fourth Monthly EM&A Reports</i>.</p>

(1) Hung SKY (2016). Prepared for AFCD. Available at:
https://www.afcd.gov.hk/english/conservation/con_mar_chi/con_mar_chi_chi/files/Final_Report_2015_16.pdf