

Table J1 *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	2	28
	Limit	0	2
24-Hr TSP	Action	0	5
	Limit	0	1
Water Quality	Action	0	6
	Limit	0	1
Impact Dolphin Monitoring	Action	2	7
	Limit	0	0

Table J2 *Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions*

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Period (Sep 2014 to Nov 2014)	3	0	0
Total No. received since project commencement	4	0	0

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To ENVIRON - Hong Kong, Limited (ENPO)

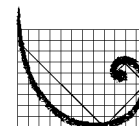
From ERM- Hong Kong, Limited

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 Air Quality
Impact Monitoring

Date 27 November 2014

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



ERM

Dear Sir or Madam,

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

0212330_14November2014_1hrTSP_Station ASR1
0212330_14November2014_1hrTSP_Station ASR1

A total of two Action Level Exceedances were recorded on 14 November
2014.

Regards,

A handwritten signature in black ink, appearing to read 'Jovy Tam', is positioned above the printed name.

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

Air Quality Impact Monitoring
 Notification of Exceedance

Log No.	0212330_14November2014_1hrTSP_Station ASR1 0212330_14November2014_1hrTSP_Station ASR1 [Total No. of Exceedances = 2]	
Date	14 November 2014 (Measured) 27 November 2014 (Laboratory results received by ERM)	
Monitoring Station	ASR1, ASR5, ASR6, ASR10 and AQMS1	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213
Limit Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	500
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	260
Measured Levels	Action Level Exceedance for 1-hr TSP is observed at ASR1 ($404 \mu\text{g}/\text{m}^3$) during 0915 - 1015 hrs. Action Level Exceedance for 1-hr TSP is observed at ASR1 ($396 \mu\text{g}/\text{m}^3$) during 1017 - 1117 hrs.	
Works Undertaken (at the time of monitoring event)	On 14 November 2014, Excavation Works for launching shaft were carried out at Reclamation Works Area Portion N-A; Land Bored Piling Works at Reclamation Works Area Portion N-A and Surcharge Set Up at Reclamation Works Area Portions N-B and N-C.	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance(s) are unlikely to be due to the Project, in view of the following:</p> <ul style="list-style-type: none"> • Considering the relatively higher levels of 1-hour TSP between 0900 and 1130 hrs at most monitoring stations, it is probably unlikely that the level of land-based construction works under this Contract can cause increase in 1-hour TSP of this magnitude and scale. It is considered that the observed exceedances for 1-hour TSP at ASR1 may represent sporadic event associated with traffic emissions and anthropogenic activities during morning rush hour at River Trade Terminal. • According to the construction information provided by the Contractor, the majority of construction works on 14 November 2014 were Excavation Works for launching shaft at Reclamation Works Area Portion N-A; Land Bored Piling Works at Reclamation Works Area Portion N-A and Surcharge Set Up at Reclamation Works Area Portions N-B and N-C. During the period of the land-based construction works, the Contractor has implemented the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual (e.g. water spraying by water trucks on exposed soil within the Project site and associated work areas; covering the idle stockpiles properly with tarpaulin; use of wheel washing facilities; hydro-seeding of area where works have been completed). • Whilst exceedances of Action Level were observed at ASR1, the 24-hr TSP level at the monitoring station (ASR1 = 115 µg/m³) on 14 November 2014 were in compliance with the Action and Limit Levels. The 1-hr TSP at ASR1 returned to level below the Action/Limit Levels on the same day. • Same level and extent of construction works were carried out at the same works area on 17th, 20th, 23rd and 26th November whilst no exceedance was recorded. • As stated in the EIA report (Section 4.2.3), the background TSP level of Tuen Mun is higher than the other region of Hong Kong, thus the exceedances may be also contributed cumulatively by the other construction works / traffic within the Tuen Mun Area rather than causing by the construction works of the Project.
Actions Taken / To Be Taken	<p>Based on the record of subsequent weekly site inspection on 19 November 2014, no dust nuisance was recorded at the Reclamation Works Area and activities conducted in this Contract's work has strictly followed the requirements stated in the EP (EP-354/2009/B) (see photo records on <i>Annex A</i>). In addition, the Contractor has implemented the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual (e.g. watering at least 12 times per day on all exposed soil within the Project site and associated work areas; covering the idle stockpiles properly with tarpaulin; use of wheel washing facilities; hydro-seeding of area where works have been completed) throughout the construction period, no additional mitigation is deemed necessary. The Enhanced TSP Monitoring has commenced on 24 October 2014, the ET will monitor for future trends in exceedances.</p>
Remarks	<p>The monitoring results and the locations of air quality monitoring stations are attached.</p>

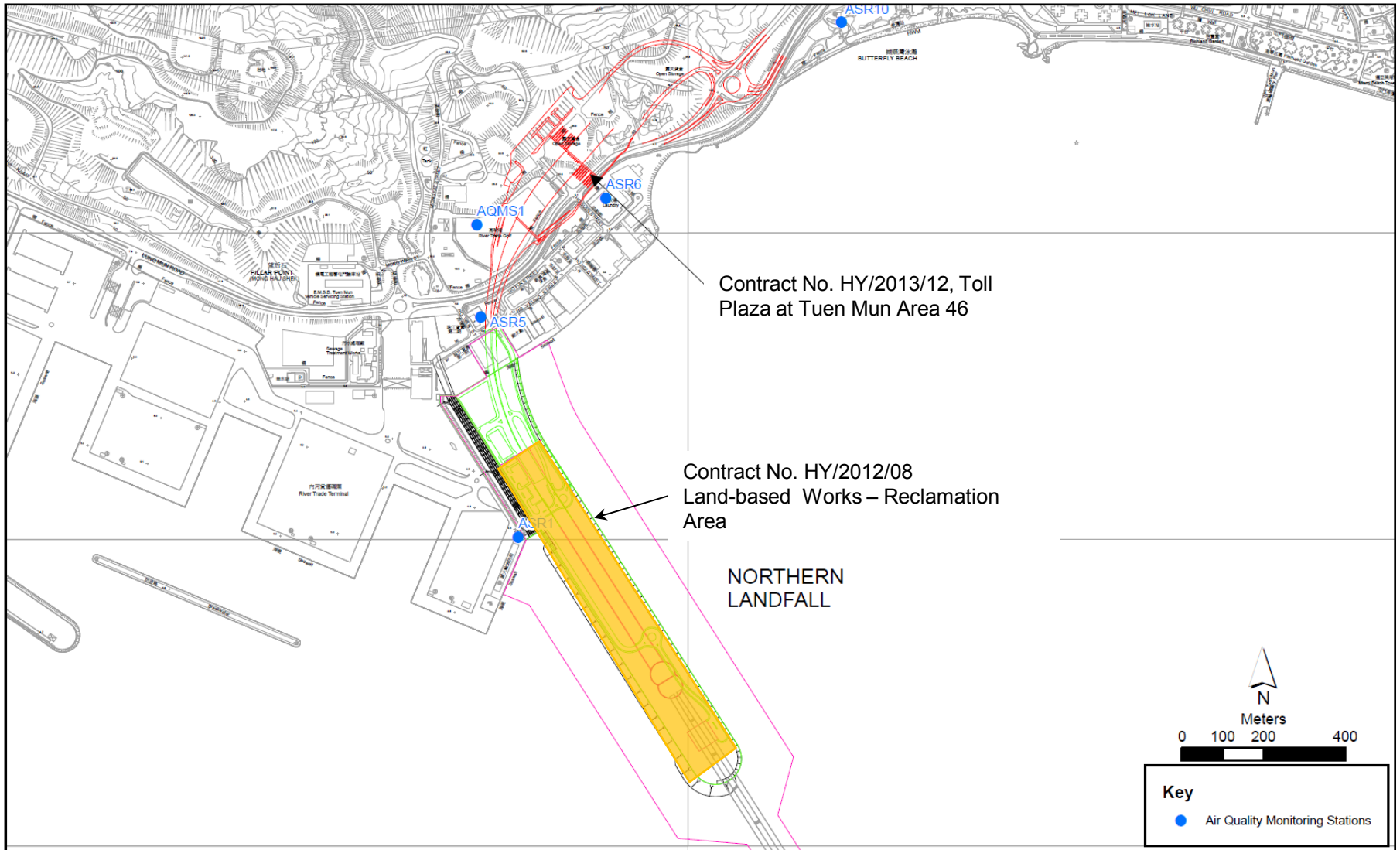


Figure 1

Indicative Construction Works Area on 14 November 2014



Annex A Photo Records taken during Weekly Site Inspection

*Note: Photos taken on 19/11/2014



Water truck was observed in used during site investigation. (Reclamation Works Area)



Water truck was observed in used during site investigation. (Haul road at River Trade Terminal)



Annex A Photo Records taken during Weekly Site Inspection

*Note: Photos taken on 19/11/2014



Wheel washing facilities is adequately maintained. (Site entrance at Reclamation Works Area)



Hydroseeding and access roads paved as soon as practicable after works have been completed on soil exposed area.
(Reclamation Works Area)

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To 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 22 June 2015

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



ERM

Dear Sir or Madam,

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

0212330_Sep2014/Nov2014_dolphin_STG&ANI_NEL
0212330_Sep2014/Nov2014_dolphin_STG&ANI_NWL

A total of two action level exceedances were recorded in the quarterly impact
dolphin monitoring data between September 2014 and November 2014.

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_Sep2014/Nov2014_dolphin_STG&ANI_NEL 0212330_Sep2014/Nov2014_dolphin_STG&ANI_NWL [Total No. of Exceedances = 2]	
Date	September 2014 to November 2014 (monitored) 8 January 2015 (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 & ANI = 0
	NWL	STG = 5.1 & ANI = 20.5
	Two Action Level Exceedances are recorded in the quarterly impact dolphin monitoring at NEL and NWL between September 2014 and November 2014. The exceedances were reported in the approved <i>Thirteenth Monthly EM&A Report</i> dated 12 December 2014.	
Statistical Analyses	<p>Further to the review of the available and relevant dolphin monitoring data in the EM&A programme under 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, September to November 2014) and Location (2 levels: NEL and NWL) as fixed factors to examine whether there were any significant differences in the averages encounter rates between the baseline and present impact monitoring quarter. By setting $\alpha = 0.1$ as the significance level in the statistical tests, significant difference in STG ($p = 0.0222$) and in ANI ($p = 0.0662$) between Period were detected. 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 November 2014) and Location (2 levels: NEL and NWL) as fixed factors to examine whether there were any significant differences in the averages encounter rates between the baseline and cumulative impact monitoring quarters. By setting $\alpha = 0.1$ as the significance level in the statistical tests, significant difference in STG ($p = 0.0019$) and in ANI ($p = 0.0006$) 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)	<p>In the quarter between September 2014 and November 2014, the major marine works under <i>Contract No. HY/2012/08</i> included:</p> <ul style="list-style-type: none"> Vertical seawall and sloping seawall constructions at Portion N-C Reclamation Filling at Portion N-C Marine sheet piling for box culvert extension at Portion N-A 	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedances are considered not caused by the Project, in view of the following:</p> <ul style="list-style-type: none"> • The <i>Monitoring of Marine Mammals in Hong Kong Waters (2013 – 14)</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 project), which is likely a contributing factor for the decrease in dolphin abundances in NEL. • As per the findings from the EIA report (Section 8.11.9), the major influences on the Chinese White Dolphin (CWD) are marine traffics, dredging works and reclamation/filling works. The Contractor has implemented the marine traffic control as per the requirements in the EP-354/2009/C and the updated EM&A Manual. Filling works were undertaken within 200m leading seawall throughout the filling period and the working rate described in the EP and the approved EIA Report were strictly followed. On 20 November 2014, seawall (+2.5mPD) at Northern Landfall has been fully enclosed and marine sheet pile has also been completed. There will be no dredging, reclamation or marine sheet piling works in open waters. During this quarter of dolphin monitoring, no unacceptable impact on CWD due to the activities under this Contract was observed. • According to the findings of the approved EIA report (Section 8.11.9), filling works are expected to increase the level of suspended solids (SS) in the vicinity waters of the project, which would lead to indirect loss of prey availability and increase in level of bioaccumulative contaminants in CWD. According to the findings in the quarterly water monitoring results between September and November 2014, the impact mean level of SS (Mid-ebb: 7.9 mg/L; Mid-flood: 7.8 mg/L) in this quarter is below of the baseline mean level of SS (Mid-ebb: 10.0 mg/L; Mid-flood: 10.3 mg/L). This would imply that no unacceptable impact on SS levels was associated with the marine works under this Contract, and thus no indirect impacts on marine habitat quality due to change in water quality is observed in this Contract.
Actions Taken/ To Be Taken	<p>With reference to the site inspection records in this quarter, the respective marine ecological mitigation measures (including 250 m dolphin exclusion zone, passive acoustic monitoring, underwater acoustic decoupling plan and marine traffic control) have been implemented properly by the Contractor throughout the marine works period. No immediate additional action is considered necessary. The ET will monitor for future trends in exceedance(s).</p> <p>A meeting was held on 9 December 2014 with attendance of ENPO, Resident Site Staff (RSS), Environmental Team (ET) and dolphin specialist for Contract No. HY/2010/02, RSS, ET, dolphin specialist and main Contractor for Contract No. HY/2011/03. 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 nor separate from the other stress factors. 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 were fully implemented. 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.</p>
Remarks	<p>The results of impact water quality and impact dolphin monitoring, the status of implemented marine ecological mitigation measures are documented in the approved <i>Eleventh to Thirteenth EM&A Monthly Reports</i>.</p>

(1) Hung SKY (2014). Prepared for AFCD. Available from: http://www.afcd.gov.hk/english/conservation/con_mar/con_mar_chi/con_mar_chi_chi/con_mar_chi_chi.html

ENVIRONMENTAL COMPLAINT INVESTIGATION REPORT

Our Reference: 0212330_29October2014_Complaint LOG_02_20141107

Basic Information of Complaint

Reference Number	N04/RW/00026784-14
Date of Complaint Received	27 October 2014
Location of Complaint	Block 7, Melody Garden
Nature of Complaint	Noise nuisance
Complaint Received by	Environmental Protection Department (EPD)
Via	Email
Complainant	A resident of Melody Garden

Details of Complaint

On 27 October 2014, an environmental case was received by EPD regarding to the noise nuisance generated at 01:00-02:00 on 23 October 2014 and 23:15 on 24 October 2014 from derrick lighter near Melody Garden. The Contractor received the complaint notification on 29 October 2014. Subsequently, the ET was informed that the case is categorized as a public concern upon the investigation, discussion and agreement between different parties (i.e. the Contractor (DBJV) and SOR).

Investigation Report

Upon receiving the case notification from EPD on 29 October 2014, the Contractor had promptly checked the works summary.

Based on the works summary from the Contractor on 23 October 2014 and 24 October 2014, no derrick lighter activities near Melody Garden was recorded from this Contract. According to the information provided by the Contractor, during the complaint period only two derrick lighters from this Contract were working within the project site area and site activities conducted under this Contract strictly followed the conditions stated in the approved Construction Noise Permits (CNPs). In addition, the project site area is distant (> 1.5km) from the concerned location the complaint referred to (see Figure 1). Therefore, any noise generated from this Contract's work should be insignificant after distance attenuation.

In addition, the record of subsequent joint weekly site audit on 5 November 2014 further confirmed that all derrick lighters for this Contract were within the project site area.

Based on the above, this 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

The Contractor was reminded to adhere strictly to the conditions of Construction Noise Permit and to implement all relevant noise mitigation measures recommended or specified in the EIA Report, EM&A Manual, EMP, Method Statements, General and Particular Specifications of this Contract to avoid causing noise nuisance.

The Contractor is also reminded to ensure that the construction plant deployed for the works during restricted hours is in strict compliance with the relevant CNP granted.

Date of File Closed : 7 November 2014

Approved and Filed by:

A handwritten signature in black ink, appearing to be 'Jovy Tam', written in a cursive style.

(Jovy Tam, ET Leader)
Date: 14 November 2014

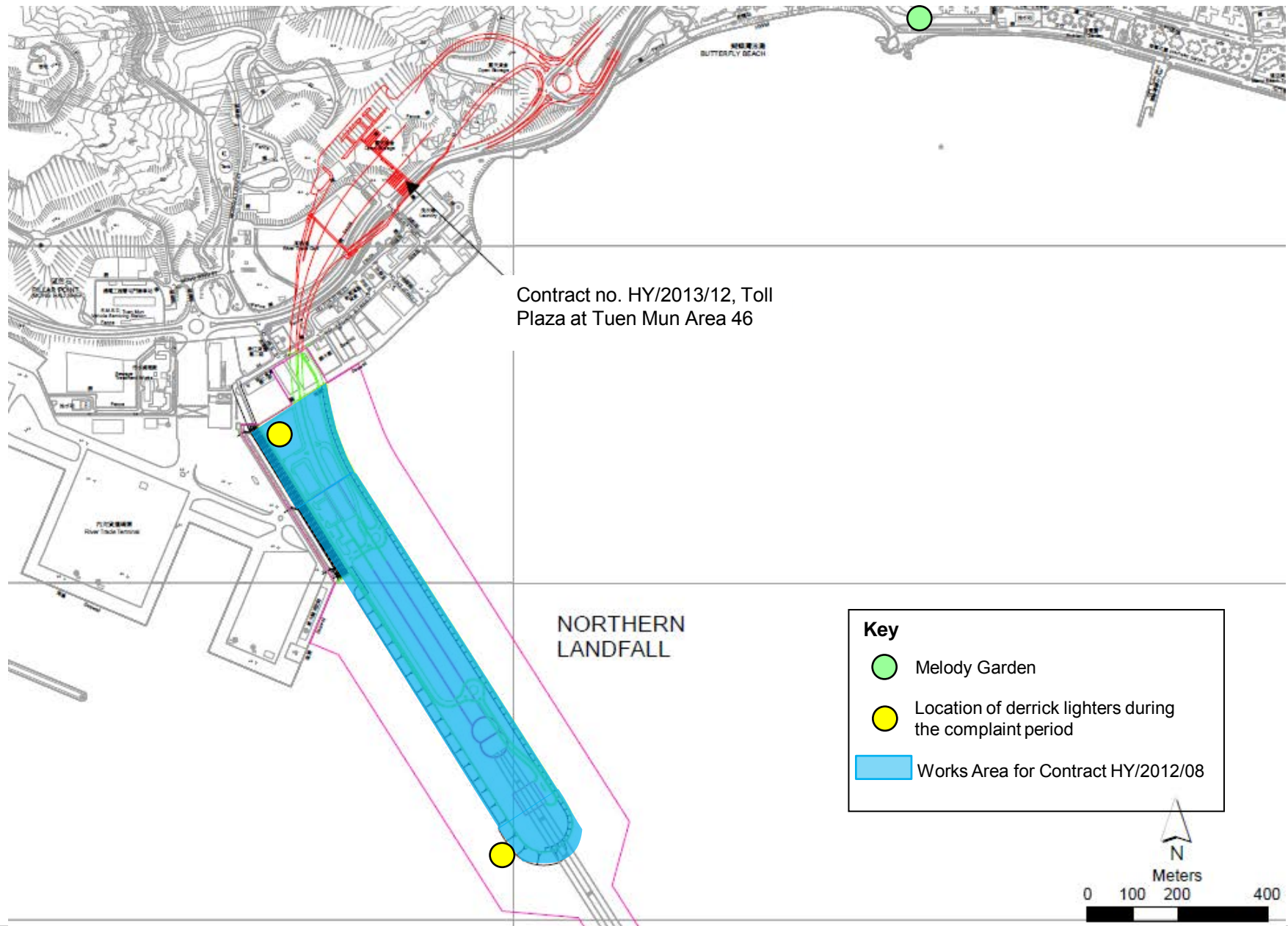
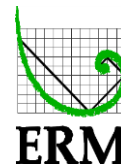


Figure 1

HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
Noise Complaint Investigation – Project Site Layout

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ENVIRONMENTAL COMPLAINT INVESTIGATION REPORT

Our Reference: 0212330_11November2014_CompLog_03

Basic Information of Complaints

Reference Numbers:	N04/RW/00028104-14 N04/RW/00028199-14
Date of Complaints Received	11 November 2014
Location of Complaints	Tuen Mun River Trade Terminal
Nature of Complaints	Dust emission
Complaints Received by	Environmental Protection Department (EPD)
Via	Email
Complainants	Worker at River Trade Terminal

Details of Complaints

On 11 November 2014, two potential complaint cases were received by EPD regarding to the dust emission by works area nearby the River Trade Terminal. The Contractor received the complaint notification on 12 November 2014. On 12 November 2014, The ET was informed that the two cases are categorized as complaints in nature upon the investigation, discussion and agreement between different parties (i.e. the Contractor (DBJV) and SOR).

Investigation Report

Upon receiving the case notification from EPD on 11 November 2014, the Contractor had promptly checked the works summary.

Based on the record of subsequent joint site investigation with the Contractor and EPD on 19 November 2014, no dust nuisance was recorded at the entrance of works area and activities conducted in this Contract's work has strictly followed the requirements stated in the EP (EP-354/2009/B) (see photo records on *Annex A*). According to the construction information provided by the Contractor, the majority of construction works during the complaint period were Excavation Works for launching shaft at Reclamation Works Area Portion N-A; Land Bored Piling Works at Reclamation Works Area Portion N-A and Surcharge Set Up at Reclamation Works Area Portions N-B and N-C. The major construction activities undertaken during the complaint period are considered to have minor effect on dust emission. In addition, the Contractor has implemented the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual (e.g. watering at least 12 times per day on all exposed soil within the Project site and associated work areas; use of wheel washing facilities; hydro-seeding of area where works have been completed) throughout the construction period.

According to the impact air quality monitoring results during the complaint period in November 2014 at the close vicinity of Reclamation Works Area (ASR1 & ASR5), no exceedance was recorded. This implies that no unacceptable adverse impact on air quality was resulting from the land-based works under this Contract during the period of complaint, and the implemented mitigation measures are considered sufficient.

It is considered that the observed dust emission may represent sporadic event associated with traffic emissions and anthropogenic activities during rush hour at River Trade Terminal.

Based on the above, the two complaint cases are considered to be not related to this Contract's work and are 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 regular water spraying within the construction site area; use of wheel washing facilities; covering of idle stockpiles.

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

Date of File Closed : 5 December 2014

Approved and Filed by:



(Jovy Tam, ET Leader)

Date: 5 December 2014



Annex A Photo Records taken during Site Investigation

*Note: Photos taken on 19/11/2014



Water truck was observed in used during site investigation. (Reclamation Works Area)



Water truck was observed in used during site investigation. (Haul road at River Trade Terminal)



Annex A Photo Records taken during Site Investigation

*Note: Photos taken on 19/11/2014



Wheel washing facilities is adequately maintained. (Site entrance at Reclamation Works Area)



Hydroseeding and access roads paved as soon as practicable after works have been completed on soil exposed area.
(Reclamation Works Area)



Annex A Photo Records taken during Site Investigation

*Note: Photos taken on 19/11/2014



Stockpile was observed wet. (Reclamation Works Area - Portion N-C)