

Appendix M1 Cumulative Statistics on Exceedances

		Total No. recorded in this quarter	Total No. recorded since project commencement
1-Hr TSP	Action	0	0
	Limit	0	0
24-Hr TSP	Action	2	2
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water Quality	Action	1	1
	Limit	0	0
Impact Dolphin Monitoring	Action	1	1
	Limit	0	0

Appendix M2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
November 2013	1	0	0
December 2013	0	0	0
January 2014	0	0	0
February 2014	0	0	0
Total No. received since project commencement	1	0	0

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To ENVIRON - Hong Kong, Limited (ENPO)

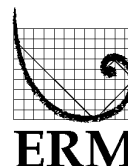
From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2012/07 Tuen Mun–Chek Lap
Kok Link–Southern Connection Viaduct Section

Subject Notification of Exceedance for Impact Dolphin
Monitoring

Date 8 April 2014

16/F DCH Commercial Centre,
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.:

0215660_Dec2013/Feb2014_dolphin_STG&ANI_NEL

A total of one action exceedance was recorded in the quarterly impact
dolphin monitoring data between December 2013 and February 2014.

Regards,

A handwritten signature in black ink, appearing to be "Jovy Tam", written over a light blue horizontal line.

Mr Jovy Tam
Environmental Team Leader

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ERM-Hong Kong, Limited
CONTRACT NO. HY/2012/07
TUEN MUN – CHEK LAP KOK LINK –
SOUTHERN CONNECTION VIADUCT SECTION

Impact Dolphin Monitoring
Notification of Exceedance

Log No.	0215660_Dec2013/Feb2014_dolphin_STG&ANI_NEL [Total No. of Exceedances = 1]	
Date	December 2013 to February 2014 (monitored) 03 April 2014 (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 < 2.34 & ANI < 8.9 and NWL: STG < 3.9 & ANI < 17.9
Recorded Levels	NEL	STG = 0.4 & ANI = 1.3
	NWL	STG = 8.2 & ANI = 32.6
	Action Level Exceedance is recorded in the quarterly impact dolphin monitoring between December 2013 and February 2014.	
Statistical Analyses	A two-way ANOVA with repeated measures and unequal sample size was conducted using Period (2 levels: baseline vs impact) 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 impact monitoring periods. By setting $\alpha = 0.1$ as the significance level in the statistical tests, a significant difference in STG ($p = 0.0774$) between baseline and present quarter was detected but not in ANI ($p = 0.1671$).	

Works Undertaken (in the monitoring quarter)	<p>In the quarter between December 2013 and February 2014, the major marine works under <i>Contract No. HY/2012/07</i> included:</p> <ul style="list-style-type: none"> • Survey tower erection; • Marine piling platform installation; • Preparation works for marine piling at Viaduct B; and • Construction of rockfill platform at Viaduct D landing.
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is considered to be the natural variation of Chinese white dolphin (CWD) <i>Sousa chinensis</i> ranging pattern and unlikely to be due to the Project, in view of the following:</p> <ul style="list-style-type: none"> • According to the long-term monitoring results of marine mammals collected by AFCD, the CWD in winter months (December to February) are usually ranging in waters around Sha Chau, Lung Kwu Chau and north Lantau, with some of them in the east and south of Lantau waters and outer Deep Bay, but less frequently at NEL • As per the findings from the EIA report (Section 8.11.9), the major influences on the CWD are marine traffics and bored piling. The Contractor has implemented the marine bored piling monitoring and marine traffic control as per the requirements in the EP-354/2009/B and the updated EM&A Manual. Likewise, bored piling works were undertaken within a metal casing as described in the EP and the approved EIA Report. • Seasonal variation in individual ranging pattern has been well documented in the long-term monitoring of marine mammals conducted by AFCD and in the literatures ⁽¹⁾ ⁽²⁾. • According to the findings of EIA report (Section 8.9) and Baseline Dolphin Monitoring, dolphin sightings at the northeast Lantau are not particularly high, which is commensurate with the quarterly findings that dolphin sightings at NEL is relatively lower than that at NWL.
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, marine bored piling monitoring, underwater acoustic decoupling plan and marine traffic control) have been implemented properly by the Contractor throughout the marine works period. No formation of underwater sockets into rock shall be carried out for the marine bored piles construction in May and June which is the peak calving season of Chinese White Dolphins. No immediate additional action is considered necessary. The ET will monitor for future trends in exceedance(s).</p>
Remarks	<p>The quarterly monitoring results and the transact location of impact dolphin monitoring are attached.</p>

(1) Jefferson & Hung (2010) A review of the status of the Indo-Pacific Humpback Dolphin (*Sousa chinensis*) in Chinese Waters. *Aquatic Mammals* (30): 149 – 158.

(2) Chen et al., (2010) Distribution, abundance, and individual movements of Indo-Pacific humpback dolphins (*Sousa chinensis*) in the Pearl River Estuary, China. *Mammalia* (74): 117 – 125.

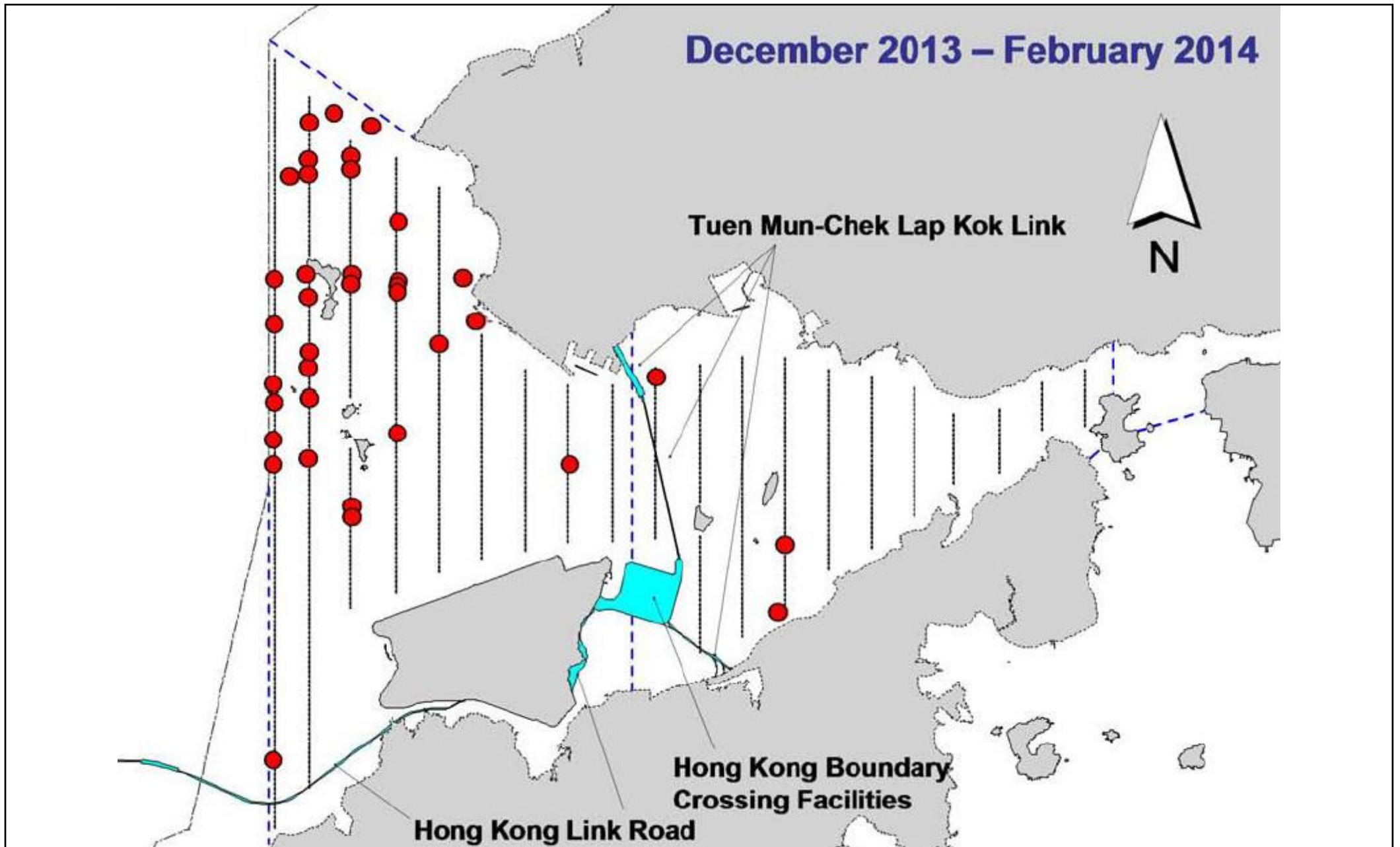


Figure 1.

Distribution of Chinese white dolphin (*Sousa chinensis*) in Northwest and Northeast Lantau during impact phase monitoring from December 2013 to February 2014

DATE: 06/03/2013

(Source: Contract No. HY/2011/03 - HZMB HKLR - Section between Scenic Hill and HKBCF)

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Appendix II. HKLR03 Chinese White Dolphin Sighting Database (November 2013 - February 2014)

(Abbreviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Association; P/S: Sighting Made on Primary/Secondary Line\$)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
1-Nov-13	1	1049	4	NW LANTAU	2	74	ON	HKLR	823145	809509	AUTUMN	NONE	P
1-Nov-13	2	1152	3	NW LANTAU	3	214	ON	HKLR	826947	807517	AUTUMN	NONE	P
1-Nov-13	3	1203	7	NW LANTAU	3	159	ON	HKLR	827235	807539	AUTUMN	NONE	P
1-Nov-13	4	1225	1	NW LANTAU	2	137	ON	HKLR	827490	807539	AUTUMN	NONE	P
1-Nov-13	5	1236	3	NW LANTAU	2	358	ON	HKLR	828232	807530	AUTUMN	NONE	P
1-Nov-13	6	1252	7	NW LANTAU	2	ND	OFF	HKLR	828941	807583	AUTUMN	NONE	
1-Nov-13	7	1312	4	NW LANTAU	2	72	ON	HKLR	830018	805999	AUTUMN	NONE	S
1-Nov-13	8	1458	11	NW LANTAU	3	60	ON	HKLR	821228	804642	AUTUMN	NONE	P
5-Nov-13	1	1421	5	NW LANTAU	2	378	ON	HKLR	828097	808508	AUTUMN	NONE	P
8-Nov-13	1	1041	4	NW LANTAU	1	302	ON	HKLR	824489	807678	AUTUMN	NONE	P
8-Nov-13	2	1103	8	NW LANTAU	2	694	ON	HKLR	827091	807858	AUTUMN	NONE	P
8-Nov-13	3	1152	7	NW LANTAU	3	299	ON	HKLR	827660	805459	AUTUMN	NONE	P
8-Nov-13	4	1215	9	NW LANTAU	2	756	ON	HKLR	825357	805465	AUTUMN	NONE	P
8-Nov-13	5	1232	5	NW LANTAU	2	ND	OFF	HKLR	825025	805464	AUTUMN	NONE	
8-Nov-13	6	1249	4	NW LANTAU	2	7	ON	HKLR	823806	805462	AUTUMN	NONE	P
8-Nov-13	7	1400	2	NW LANTAU	2	155	ON	HKLR	818382	804657	AUTUMN	NONE	P
8-Nov-13	8	1426	8	NW LANTAU	2	149	ON	HKLR	823675	804648	AUTUMN	NONE	P
8-Nov-13	9	1526	1	NW LANTAU	2	45	ON	HKLR	826872	806446	AUTUMN	NONE	P
8-Nov-13	10	1536	4	NW LANTAU	1	225	ON	HKLR	825643	806454	AUTUMN	NONE	P
8-Nov-13	11	1606	4	NW LANTAU	2	223	ON	HKLR	821988	806457	AUTUMN	NONE	P
13-Nov-13	1	1451	1	NW LANTAU	3	343	ON	HKLR	825118	808482	AUTUMN	NONE	P
5-Dec-13	1	1127	3	NE LANTAU	1	275	ON	HKLR	820787	816500	WINTER	NONE	P
9-Dec-13	1	1119	1	NW LANTAU	3	77	ON	HKLR	822544	811516	WINTER	NONE	P
9-Dec-13	2	1238	4	NW LANTAU	2	132	ON	HKLR	826515	807547	WINTER	NONE	P
9-Dec-13	3	1256	12	NW LANTAU	2	103	ON	HKLR	827833	807540	WINTER	NONE	P
9-Dec-13	4	1518	4	NW LANTAU	3	177	ON	HKLR	823088	804646	WINTER	NONE	P
9-Dec-13	5	1539	1	NW LANTAU	2	866	ON	HKLR	826577	804664	WINTER	NONE	P
19-Dec-13	1	1203	2	NW LANTAU	3	73	ON	HKLR	824648	805453	WINTER	NONE	P
19-Dec-13	2	1216	6	NW LANTAU	3	150	ON	HKLR	823972	805483	WINTER	NONE	P
7-Jan-14	1	1258	2	NW LANTAU	3	87	ON	HKLR	825659	809348	WINTER	NONE	S
7-Jan-14	2	1337	1	NW LANTAU	3	125	ON	HKLR	825152	808472	WINTER	NONE	P
7-Jan-14	3	1452	3	NW LANTAU	2	1171	ON	HKLR	826673	806456	WINTER	NONE	P

Appendix II. (cont'd)

(Abbreviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Association; P/S: Sighting Made on Primary/Secondary Line)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
7-Jan-14	4	1515	6	NW LANTAU	2	5	ON	HKLR	829275	806451	WINTER	NONE	P
9-Jan-14	1	1336	6	NW LANTAU	3	24	ON	HKLR	823238	807510	WINTER	NONE	P
9-Jan-14	2	1407	10	NW LANTAU	2	62	ON	HKLR	826405	807506	WINTER	NONE	P
9-Jan-14	3	1435	1	NW LANTAU	3	56	ON	HKLR	826272	807526	WINTER	NONE	P
9-Jan-14	4	1534	3	NW LANTAU	2	131	ON	HKLR	826675	805395	WINTER	NONE	S
9-Jan-14	5	1546	1	NW LANTAU	2	113	ON	HKLR	826176	805446	WINTER	NONE	P
21-Jan-14	1	1407	2	NW LANTAU	2	99	ON	HKLR	829916	806916	WINTER	NONE	S
21-Jan-14	2	1426	7	NW LANTAU	2	260	ON	HKLR	830008	805474	WINTER	NONE	P
21-Jan-14	3	1444	2	NW LANTAU	2	84	ON	HKLR	829188	805452	WINTER	NONE	P
21-Jan-14	4	1521	9	NW LANTAU	2	434	ON	HKLR	824969	805464	WINTER	NONE	P
23-Jan-14	1	1015	2	NW LANTAU	2	977	ON	HKLR	816090	804642	WINTER	NONE	P
23-Jan-14	2	1101	4	NW LANTAU	2	329	ON	HKLR	826576	804674	WINTER	NONE	P
23-Jan-14	3	1133	3	NW LANTAU	1	957	ON	HKLR	830195	806061	WINTER	NONE	P
23-Jan-14	4	1202	5	NW LANTAU	1	199	ON	HKLR	828976	806450	WINTER	NONE	P
23-Jan-14	5	1250	2	NW LANTAU	2	372	ON	HKLR	821623	806467	WINTER	NONE	P
23-Jan-14	6	1538	9	NE LANTAU	2	365	ON	HKLR	819337	816344	WINTER	NONE	S
6-Feb-14	1	1040	2	NW LANTAU	2	895	ON	HKLR	822535	804645	WINTER	HANG	P
6-Feb-14	2	1049	4	NW LANTAU	2	515	ON	HKLR	823908	804658	WINTER	NONE	P
6-Feb-14	3	1109	2	NW LANTAU	2	422	ON	HKLR	825591	804672	WINTER	NONE	P
6-Feb-14	4	1204	3	NW LANTAU	1	888	ON	HKLR	826473	806445	WINTER	NONE	P
6-Feb-14	5	1428	4	NE LANTAU	2	ND	OFF	HKLR	824423	813528	WINTER	NONE	
12-Feb-14	1	1449	1	NW LANTAU	2	290	ON	HKLR	828878	805462	WINTER	NONE	P
14-Feb-14	1	1237	1	NW LANTAU	2	ND	OFF	HKLR	826601	809051	WINTER	NONE	
14-Feb-14	2	1348	4	NW LANTAU	3	133	ON	HKLR	821401	806466	WINTER	NONE	P
14-Feb-14	3	1525	1	NW LANTAU	3	112	ON	HKLR	824262	804649	WINTER	NONE	P
20-Feb-14	1	1046	7	NW LANTAU	3	72	ON	HKLR	822688	805449	WINTER	NONE	P
20-Feb-14	2	1135	7	NW LANTAU	3	648	ON	HKLR	828813	805029	WINTER	NONE	P