

Appendix L Cumulative Statistics on Exceedances

		Total No. recorded in this reporting month	Total No. recorded since project commencement
1-Hr TSP	Action	4	4
	Limit	1	1
24-Hr TSP	Action	0	0
	Limit	0	0
Water Quality	Action	0	0
	Limit	0	0
Impact Dolphin Monitoring	Action	0	0
	Limit	0	0

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

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (Nov 2013)	0	0	0
Total No. received since project commencement	0	0	0

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To ENVIRON - Hong Kong, Limited (ENPO)

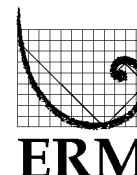
From ERM- Hong Kong, Limited

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 3 December 2013

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



Page 1 of 8

Dear Sir or Madam,

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

0212330_07November2013_1hrTSP_Station ASR5
0212330_07November2013_1hrTSP_Station ASR10
0212330_07November2013_1hrTSP_Station AQMS1

recorded on 07 November 2013.

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

Air Quality Impact Monitoring **Notification of Exceedance**

Log No.	0212330_07November2013_1hrTSP_Station ASR5 0212330_07November2013_1hrTSP_Station ASR10 0212330_07November2013_1hrTSP_Station AQMS1 [Total No. of Exceedances = 3]	
Date	7 November 2013 (Measured) 16 November 2013 (Laboratory results received by ERM)	
Monitoring Station	ASR5, ASR10, AQMS1	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR5 = 340 ASR10 = 337 AQMS1 = 335
Limit Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	500
Measured Levels	Action Level Exceedance is observed at ASR5 ($413 \mu\text{g}/\text{m}^3$) during 08:20-09:20 hrs. Limit Level Exceedance is observed at ASR10 ($645 \mu\text{g}/\text{m}^3$) during 09:02-10:02 hrs. Action Level Exceedance is observed at AQMS1 ($431 \mu\text{g}/\text{m}^3$) during 08:40-09:40 hrs.	
Works Undertaken (at the time of monitoring event)	On 7 November 2013, marine dredging works were carried out by one dredger GD-1. At the time of monitoring during 08:20-10:02, dredging was undertaken by one dredger. At Site WA 18, excavation and foundation for site formation were undertaken. Erection of chain link fence and site hoarding were also being carried out.	
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedances are unlikely to be due to the Project, in view of the following:</p> <ul style="list-style-type: none"> Whilst exceedance of Limit Level was observed at ASR10, the average 1-hr TSP levels ($181 \mu\text{g}/\text{m}^3$) at the monitoring station were in compliance with the Action and Limit Levels on the same day. Likewise, average 1-hr TSP levels at ASR5 ($253 \mu\text{g}/\text{m}^3$) and AQMS1 ($115 \mu\text{g}/\text{m}^3$) were also in compliance with the Action and Limit Levels on the same day. The 1-hr TSP at ASR10, ASR5 and AQMS1 returned to level below the Action/Limit Levels on the same day. Monitoring station ASR10 is located distant ($>1\text{km}$) from the major construction works area, and the construction works is thus considered not directly associated with the observed Action/Limit Levels of Exceedances. Same level and extent of construction works were carried out at the same locations on 2nd November and 13th November 2013 while no exceedance was recorded on these two days. According to the Contractor's work activity schedule, marine dredging works at Portion N-a was the major ongoing construction works area. At Site WA 18, the level of construction works is considered to be minor and is thus not considered to induce the observed exceedance directly. With reference to the recorded wind direction (ranged from 124° to 162°, blowing to a southeasterly direction) and wind speed (ranged from 1.07 to 1.83), Stations ASR5, ASR10, AQMS1 are located upstream of the major construction activities at dredging barge GD-1 at Portion N-a and should thus not be affected by the dust, if any, generated by the concerned construction activities. As stated in the EIA report (Section 4.2.3), the background value of Tuen Mun is higher than the other region of Hong Kong, thus the exceedance may be also contributed 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	The Contractor was reminded to ensure all dust mitigating measures are provided at WA 18. The ET will monitor for future trends in exceedances.
Remarks	The monitoring results, the locations of air quality monitoring stations, wind data and construction works schedule are attached.

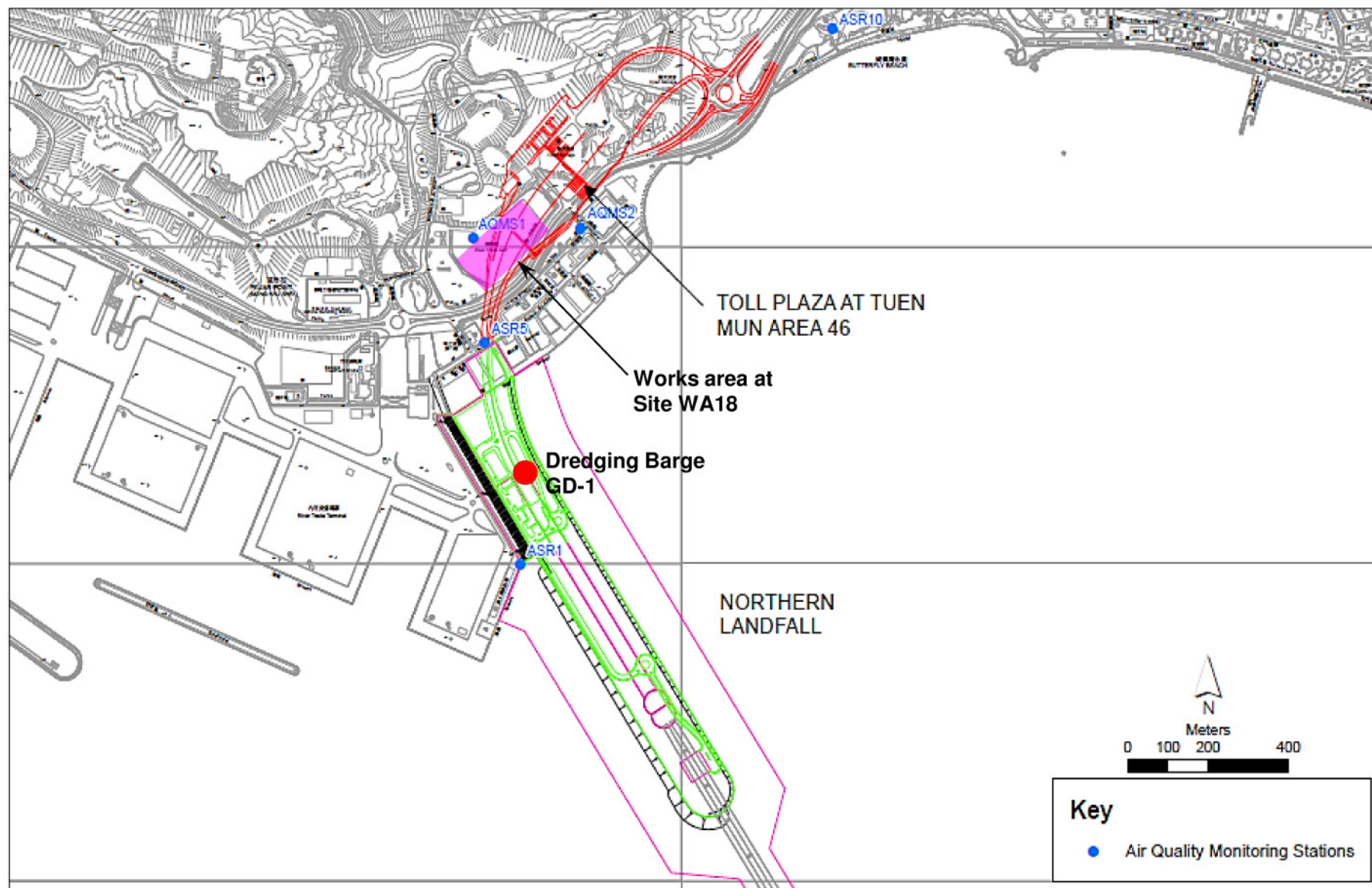


Figure 1

Indicative Construction Works Area on 7 November 2013

DATE: 06/03/2013

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Project	Works	Date	Station	Weather	Start time	End Time (hh:mm, 24	Parameters	Results	units
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	08:08	09:08	1-hour TSP	213	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	09:10	10:10	1-hour TSP	267	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	10:12	11:12	1-hour TSP	220	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	08:40	09:40	1-hour TSP	145	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	09:40	10:40	1-hour TSP	266	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	10:40	11:40	1-hour TSP	159	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	08:00	09:00	1-hour TSP	173	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	09:02	10:02	1-hour TSP	248	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	10:04	11:04	1-hour TSP	116	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	08:30	09:30	1-hour TSP	164	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	09:32	10:32	1-hour TSP	184	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	10:34	11:34	1-hour TSP	147	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	08:20	09:20	1-hour TSP	192	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	09:22	10:22	1-hour TSP	268	µg/m ³
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	10:24	11:24	1-hour TSP	252	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	08:30	09:30	1-hour TSP	257	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	09:32	10:32	1-hour TSP	119	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	10:34	11:34	1-hour TSP	123	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	08:20	09:20	1-hour TSP	413	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	09:22	10:22	1-hour TSP	247	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	10:24	11:24	1-hour TSP	259	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	08:08	09:08	1-hour TSP	332	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	09:10	10:10	1-hour TSP	203	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	10:12	11:12	1-hour TSP	196	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	ASR10	S	08:00	09:00	1-hour TSP	195	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	ASR10	S	09:02	10:02	1-hour TSP	645	µg/m ³

TMCLKL	HY/2012/08	2013/11/07	ASR10	S	10:04	11:04	1-hour TSP	167	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	08:40	09:40	1-hour TSP	431	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	09:42	10:42	1-hour TSP	112	µg/m ³
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	10:44	11:44	1-hour TSP	118	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	AQMS1	S	10:47	11:47	1-hour TSP	46	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	AQMS1	S	09:45	10:45	1-hour TSP	38	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	AQMS1	S	08:43	09:43	1-hour TSP	81	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR10	S	10:04	11:04	1-hour TSP	60	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR10	S	09:02	10:02	1-hour TSP	87	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR10	S	08:00	09:00	1-hour TSP	184	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	AQMS2	S	08:10	09:10	1-hour TSP	167	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	AQMS2	S	10:14	11:14	1-hour TSP	81	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	AQMS2	S	09:12	10:12	1-hour TSP	69	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR5	S	10:24	11:24	1-hour TSP	85	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR5	S	09:22	10:22	1-hour TSP	122	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR5	S	08:20	09:20	1-hour TSP	88	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR1	S	09:34	10:34	1-hour TSP	69	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR1	S	08:32	09:32	1-hour TSP	79	µg/m ³
TMCLKL	HY/2012/08	2013/11/13	ASR1	S	10:36	11:36	1-hour TSP	73	µg/m ³

Row Labels	Average of Wind direction	Average of Wind speed
0:00	179	0.38
1:00	231	0.35
2:00	161	0.44
3:00	198	0.51
4:00	271	0.49
5:00	176	0.37
6:00	110	0.95
7:00	104	1.60
8:00	124	1.60
9:00	130	1.83
10:00	162	1.07
11:00	167	1.22
12:00	142	1.48
13:00	158	1.43
14:00	166	1.38
15:00	161	1.38
Grand Total	167	0.99

Cont. No. : HY/2012/08 - Tuen Mun - Chek Lap Kok Link Northern Connection Sub-Sea Tunnel Section

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To ENVIRON - Hong Kong, Limited (ENPO)

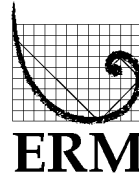
From ERM- Hong Kong, Limited

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 9 December 2013

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.:

0212330_19November2013_1hrTSP_Station ASR1
0212330_19November2013_1hrTSP_Station ASR5

recorded on 19 November 2013.

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

Air Quality Impact Monitoring **Notification of Exceedance**

Log No.	0212330_19November2013_1hrTSP_Station ASR1 0212330_19November2013_1hrTSP_Station ASR5 [Total No. of Exceedances = 2]	
Date	19 November 2013 (Measured) 26 November 2013 (Laboratory results received by ERM)	
Monitoring Station	ASR1, ASR5	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340
Limit Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	500
Measured Levels	Action Level Exceedance is observed at ASR1 ($363 \mu\text{g}/\text{m}^3$) during 09:33-10:33 hrs. Action Level Exceedance is observed at ASR5 ($400 \mu\text{g}/\text{m}^3$) during 08:20-09:20 hrs.	
Works Undertaken (at the time of monitoring event)	On 19 November 2013, marine dredging works were carried out by one dredger Crown Asia 1 at Portion N-a. At the time of monitoring during 08:20-10:33, dredging was undertaken by one dredger. At Site WA 18, excavation and foundation for site formation were undertaken. Erection of chain link fence and site hoarding were also being carried out.	
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedances are unlikely to be due to the Project, in view of the following:</p> <ul style="list-style-type: none"> Whilst exceedance of Action Level was observed at ASR1, the average 1-hr TSP level ($328 \mu\text{g}/\text{m}^3$) at the monitoring station on 19 November 2013 was in compliance with the Action and Limit Levels. Likewise, average 1-hr TSP level at ASR5 ($319 \mu\text{g}/\text{m}^3$) was also in compliance with the Action and Limit Levels on 19 November 2013. The 1-hr TSP at ASR1 and ASR5 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 locations on 13th November and 25th November 2013 while no exceedance was recorded on these two days. According to the Contractor's work activity schedule, marine dredging works at Portion N-a was the major ongoing construction works area. At Site WA 18, the level of construction works is considered to be minor and is thus not considered to induce the observed exceedance directly. With reference to the recorded wind direction (ranged between 104° and 134°, blowing to a southeasterly direction) and wind speed (ranged from 1.18 to 1.68 m/s) during the period of observed 1-hr TSP exceedances, Stations ASR1 and ASR5 are located upstream of the major construction activities at dredging barge Crown Asia 1 at Portion N-a, thus should not be affected by the dust, if any, generated by the concerned construction activities. As stated in the EIA report (Section 4.2.3), the background value of Tuen Mun is higher than the other region of Hong Kong, thus the exceedance 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	The Contractor was reminded to ensure all dust mitigating measures are provided at WA 18. The ET will monitor for future trends in exceedances.	
Remarks	The monitoring results, the locations of air quality monitoring stations, wind data and construction works schedule are attached.	

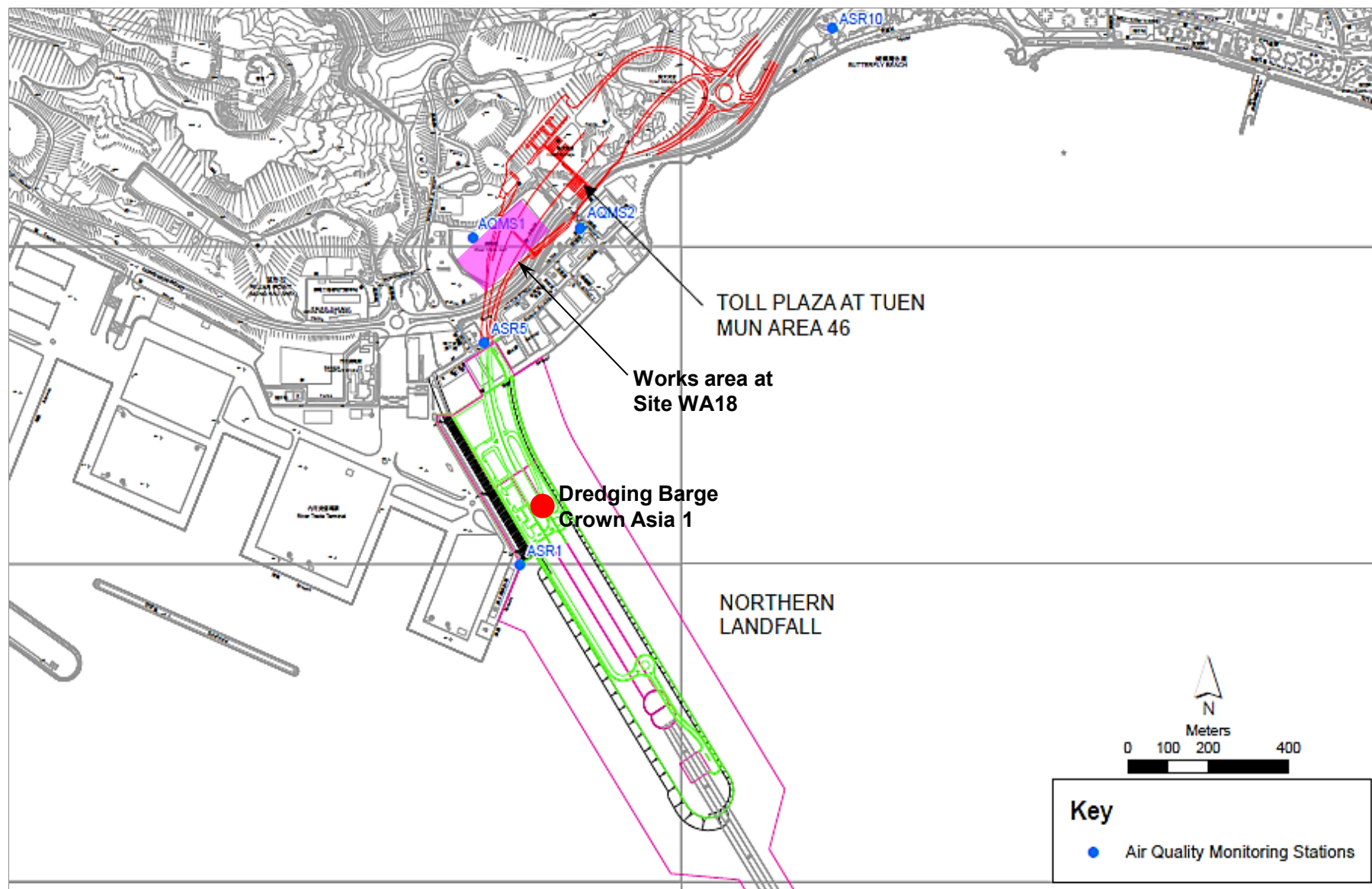


Figure 1

Indicative Construction Works Area on 19 November 2013

DATE: 06/03/2013

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Project	Works	Date	Station	Weather	Start time (hh:mm, 24hour)	End Time (hh:mm, 24hour)	Parameters	Results	units
TMCLKL	HY/2012/08	2013-11-13	AQMS1	S	10:47	11:47	1-hour TSP	46	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	AQMS1	S	09:45	10:45	1-hour TSP	38	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	AQMS1	S	08:43	09:43	1-hour TSP	81	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR10	S	10:04	11:04	1-hour TSP	60	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR10	S	09:02	10:02	1-hour TSP	87	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR10	S	08:00	09:00	1-hour TSP	184	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	AQMS2	S	08:10	09:10	1-hour TSP	167	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	AQMS2	S	10:14	11:14	1-hour TSP	81	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	AQMS2	S	09:12	10:12	1-hour TSP	69	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR5	S	10:24	11:24	1-hour TSP	85	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR5	S	09:22	10:22	1-hour TSP	122	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR5	S	08:20	09:20	1-hour TSP	88	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR1	S	09:34	10:34	1-hour TSP	69	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR1	S	08:32	09:32	1-hour TSP	79	µg/m ³
TMCLKL	HY/2012/08	2013-11-13	ASR1	S	10:36	11:36	1-hour TSP	73	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	AQMS1	S	08:42	09:42	1-hour TSP	203	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	AQMS1	S	09:44	10:44	1-hour TSP	204	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	AQMS1	S	10:46	11:46	1-hour TSP	159	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR1	S	08:31	09:31	1-hour TSP	322	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR1	S	09:33	10:33	1-hour TSP	363	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR1	S	10:25	11:25	1-hour TSP	298	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR5	S	08:20	09:20	1-hour TSP	400	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR5	S	09:22	10:22	1-hour TSP	297	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR5	S	10:24	11:24	1-hour TSP	261	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR6	S	08:10	09:10	1-hour TSP	270	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR6	S	09:12	10:12	1-hour TSP	274	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR6	S	10:14	11:14	1-hour TSP	271	µg/m ³

TMCLKL	HY/2012/08	2013-11-19	ASR10	S	08:00	09:00	1-hour TSP	173	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR10	S	09:02	10:02	1-hour TSP	119	µg/m ³
TMCLKL	HY/2012/08	2013-11-19	ASR10	S	10:04	11:04	1-hour TSP	143	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	AQMS1	S	08:49	09:49	1-hour TSP	142	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	AQMS1	S	09:51	10:51	1-hour TSP	163	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	AQMS1	S	10:53	11:53	1-hour TSP	147	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR1	S	08:37	09:37	1-hour TSP	142	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR1	S	09:39	10:39	1-hour TSP	182	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR1	S	10:41	11:41	1-hour TSP	182	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR5	S	08:25	09:25	1-hour TSP	214	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR5	S	09:27	10:27	1-hour TSP	268	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR5	S	10:29	11:29	1-hour TSP	299	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	AQMS2	S	08:16	09:16	1-hour TSP	137	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	AQMS2	S	09:18	10:18	1-hour TSP	127	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	AQMS2	S	10:20	11:20	1-hour TSP	168	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR10	S	08:05	09:05	1-hour TSP	96	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR10	S	09:07	10:07	1-hour TSP	107	µg/m ³
TMCLKL	HY/2012/08	2013-11-25	ASR10	S	10:09	11:09	1-hour TSP	93	µg/m ³

Date: 19-Nov-2013

		Data	
Time		Average of Wind direction	Average of Wind speed
0:00		227	0.47
1:00		174	0.83
2:00		226	0.83
3:00		152	1.41
4:00		129	1.67
5:00		131	1.68
6:00		94	1.62
7:00		109	1.90
8:00		106	1.68
9:00		133	1.25
10:00		104	1.24
11:00		134	1.18
12:00		150	1.22
13:00		97	1.47
14:00		99	1.52
15:00		107	1.84
16:00		104	1.98
17:00		95	1.59
18:00		86	1.94
19:00		97	1.42
20:00		108	0.98
21:00		100	1.62
22:00		132	1.17
23:00		88	1.45
Grand Total		124	1.41

Cont. No. : HY/2012/08 - Tuen Mum - Chek Lap Kok Link Northern Connection Sub-Sea Tunnel Section

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