

Appendix K

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

Table K1 *Cumulative Statistics on Exceedances*

Parameters	Level of Exceedance	Total No. recorded in this reporting month	Total No. recorded since Contract commencement
1-hr TSP	Action	2	89
	Limit	0	6
24-hr TSP	Action	0	9
	Limit	0	4
Water Quality	Action	0	20
	Limit	0	1
Impact Dolphin Monitoring	Action	0	11
	Limit	0	14

Table K2 *Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions*

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (March 2019)	0	0	0
Total No. received since Contract commencement	16	1	0

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message

**Environmental
Resources
Management**

To Ramboll Hong Kong, Limited (ENPO)

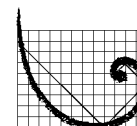
From ERM- Hong Kong, Limited

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 April 2019

2507, 25/F One Harbourfront
18 Tak Fung Street
Hung Hom, Kowloon
Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660



ERM

Dear Sir or Madam,

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

0212330_27March2019_1hrTSP_Station ASR1

One Action Level Exceedance was recorded on 27 March 2019.

Regards,

A handwritten signature in cursive script that reads "Jasmine".

Dr Jasmine Ng
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_27March2019_1hrTSP_Station ASR1 [Total No. of Exceedances = 1]	
Date	27 March 2019 (Measured) 3 April 2019 (Laboratory results received by ERM)	
Monitoring Station	ASR1, ASR5, ASR6, ASR10 and AQMS1	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 AQMS1 = 213 ASR6 = 238 ASR10 = 214
	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 AQMS1 = 335 ASR6 = 338 ASR10 = 337
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 ($412 \mu\text{g}/\text{m}^3$) during 1333 – 1433 hrs.	
Works Undertaken (at the time of monitoring event)	On 27 March 2019, TBM tunnel works was carried out at tunnel portion and RC structure construction was carried out at Portion N-A.	
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to this Contract, in view of the following:</p> <ul style="list-style-type: none"> • According to the construction information provided by the Contractor, the majority of construction works on 27 March 2019 was TBM tunnel works and RC structure construction at Portion N-A. 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 on exposed soil within the Project site and associated works areas; exposed soil covered by tarpaulin sheets). • The exceedance is unlikely to be due to this Contract as dust suppression measures were implemented properly on site. Water spraying was applied on site to prevent dust. • Recorded wind speed during the works period was zero. Dust generated from the construction works, if any, will be localized within the site area and was not likely to be dispersed to station ASR1. <p>Based on the above, the exceedance is unlikely to be due to this Contract.</p>	

Actions Taken/ To Be Taken	<p>Site inspection was carried out on 27 March 2019. Dust suppression measures were properly implemented. Water spraying was applied to prevent dust. Exposed soil was covered by tarpaulin sheets to prevent dust. Photos are provided in Annex A.</p> <p>The Contractor has been reminded to implement the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual including watering to maintain all exposed road surfaces and dust sources wet, use of sprinklers for water spraying, covering the materials having the potential to create dust by clean tarpaulin, use of water truck and watering on all exposed soil within the Project site throughout the construction period.</p>
Remarks	<p>The monitoring results, wind data and the locations of air quality monitoring stations are attached.</p>



Annex A Photos taken during site inspection

*Note: Photos taken on 27/3/2019



Exposed soil was covered by tarpaulin sheet to prevent dust. (Works Area Portion N-C)



Water spraying was applied at the main haul road to prevent dust. (Works Area Portion N-A)

Air quality monitoring results on 27/3/2019

Project	Works	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	27/3/2019	AQMS1	Sunny	13:44	1-hour TSP	136	ug/m3
TMCLKL	HY/2012/08	27/3/2019	AQMS1	Sunny	14:46	1-hour TSP	165	ug/m3
TMCLKL	HY/2012/08	27/3/2019	AQMS1	Sunny	15:48	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR1	Sunny	13:33	1-hour TSP	412	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR1	Sunny	14:35	1-hour TSP	213	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR1	Sunny	15:37	1-hour TSP	274	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR10	Sunny	13:01	1-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR10	Sunny	14:03	1-hour TSP	43	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR10	Sunny	15:05	1-hour TSP	51	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR5	Sunny	13:22	1-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR5	Sunny	14:24	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR5	Sunny	15:26	1-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR6	Sunny	13:11	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR6	Sunny	14:13	1-hour TSP	88	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR6	Sunny	15:15	1-hour TSP	76	ug/m3
TMCLKL	HY/2012/08	27/3/2019	AQMS1	Sunny	16:50	24-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR1	Sunny	16:39	24-hour TSP	129	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR10	Sunny	16:07	24-hour TSP	48	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR5	Sunny	16:28	24-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	27/3/2019	ASR6	Sunny	16:17	24-hour TSP	73	ug/m3

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)
19/03/27	0:00	0.4	95
19/03/27	1:00	0	-
19/03/27	2:00	0.4	68
19/03/27	3:00	0	-
19/03/27	4:00	0	-
19/03/27	5:00	0	-
19/03/27	6:00	0	-
19/03/27	7:00	1.3	96
19/03/27	8:00	1.3	101
19/03/27	9:00	0	-
19/03/27	10:00	0.4	109
19/03/27	11:00	0	-
19/03/27	12:00	0	-
19/03/27	13:00	0	-
19/03/27	14:00	0	-
19/03/27	15:00	0	-
19/03/27	16:00	0	-
19/03/27	17:00	0	-
19/03/27	18:00	0	-
19/03/27	19:00	0	-
19/03/27	20:00	0	-
19/03/27	21:00	0	-
19/03/27	22:00	0	-
19/03/27	23:00	0	-

Site Location 地盤位置: <u>Northern Landfall</u>								
Date 日期: <u>28 Mar 2019</u> to 至 <u>31 Mar 2019</u>								
	Time 時間	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	8:00 - 8:45	/	/	/	/	/	/	/
2	8:45 - 9:30	/	/	/	/	/	/	/
3	9:30 - 10:15	/	/	/	/	/	/	/
4	10:15 - 11:00	/	/	/	/	/	/	/
5	11:00 - 11:45	/	/	/	/	/	/	/
6	11:45 - 12:30	/	/	/	/	/	/	/
7	12:30 - 13:15	/	/	/	/	/	/	/
8	13:15 - 14:00	/	/	/	/	/	/	/
9	14:00 - 14:45	/	/	/	/	/	/	/
10	14:45 - 15:30	/	/	/	/	/	/	/
11	15:30 - 16:45	/	/	/	/	/	/	/
12	16:45 - 17:30	/	/	/	/	/	/	/
Verified by Site Foreman 地盤科文簽署確認		7	7	7	7	7	7	7

Night shift 夜間工作 (if necessary 如需要)								
	17:30 - 19:00							
	19:00 - 20:30							
	20:30 - 22:00							
	22:00 - 23:00							

*Please - tick (✓) in the box if complete the spraying of water. *如果 - 已經完成灑水, 請於方格內加上剔號(✓).
circle (O) in the box if it is raining. 是下雨天, 請於方格內加上圓圈(O).

- Remarks:
- Pursuant to EP Clause 3.15, the Permit Holder shall undertake watering at least 12 times per day on all exposed soil within the Project site and associated work areas in Tuen Mun area throughout the construction phase.
 - Spraying position includes the main haul road, open area, slopes, stockpiles and any other dusty materials.
 - If it is raining, no water spraying is needed.
 - The no of spraying will be increased due to site condition.

- 備註:
- 根據環境許可證 3.15 條例, 在整個施工階段內, 許可證持有人須每天至少 12 次在屯門區項目工地和相關的工作區域內的所有暴露土壤灑水。
 - 灑水位置包括主要運輸道路, 空曠地帶, 斜坡, 存料堆, 以及任何其他產生塵埃物料。
 - 當下雨時, 地盤將不需要灑水。
 - 如果地盤情況更改或有需要時, 灑水次數會相應增加。

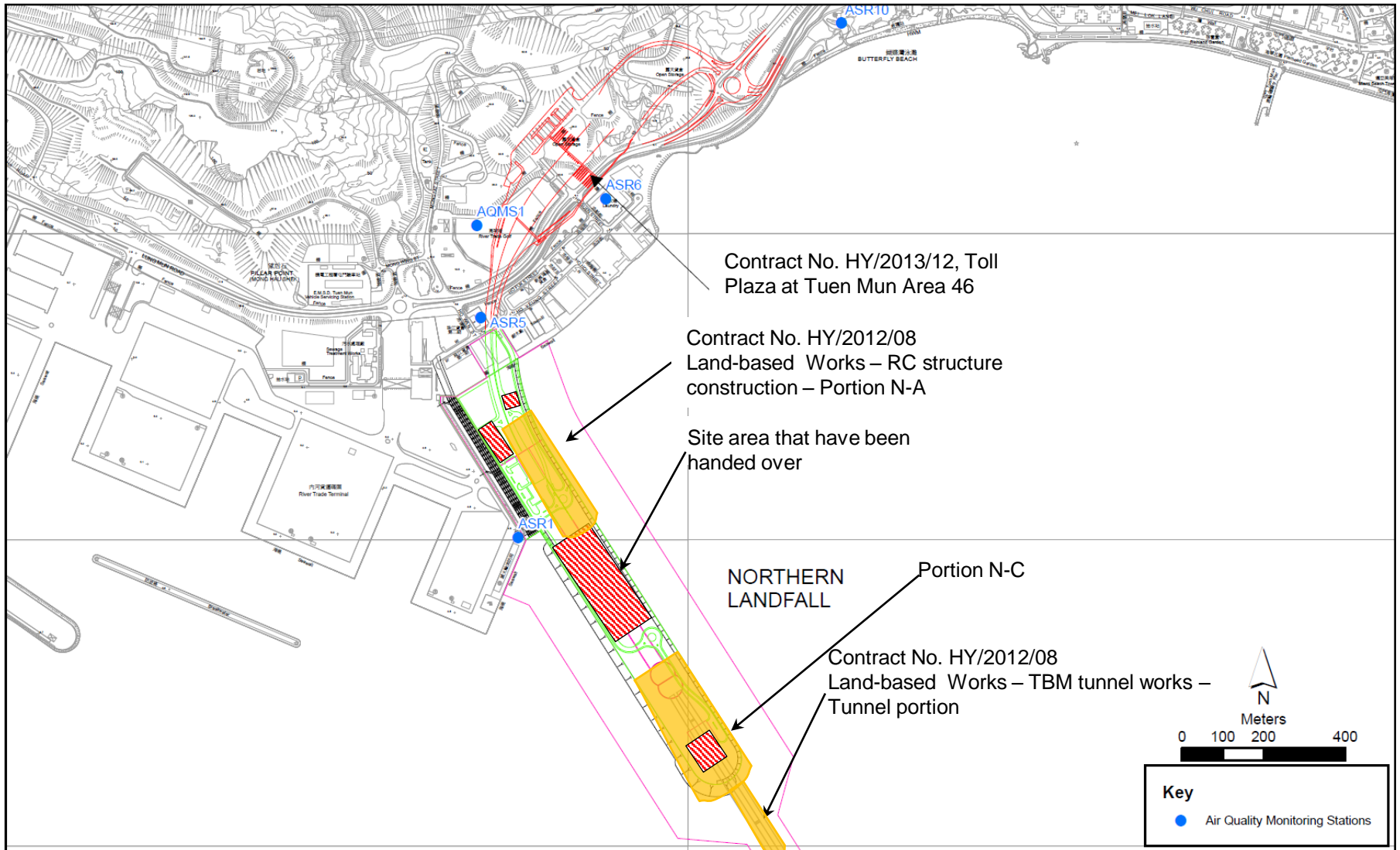


Figure 1

Indicative Construction Works Area on 27 March 2019

Email
message

**Environmental
Resources
Management**

To Ramboll Hong Kong, Limited (ENPO)

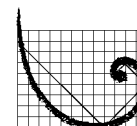
From ERM- Hong Kong, Limited

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 April 2019

2507, 25/F One Harbourfront
18 Tak Fung Street
Hung Hom, Kowloon
Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660



ERM

Dear Sir or Madam,

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

0212330_30March2019_1hrTSP_Station ASR1

One Action Level Exceedance was recorded on 30 March 2019.

Regards,



Dr Jasmine Ng
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_30March2019_1hrTSP_Station ASR1 [Total No. of Exceedances = 1]	
Date	30 March 2019 (Measured) 9 April 2019 (Laboratory results received by ERM)	
Monitoring Station	ASR1, ASR5, ASR6, ASR10 and AQMS1	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 AQMS1 = 213 ASR6 = 238 ASR10 = 214
	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 AQMS1 = 335 ASR6 = 338 ASR10 = 337
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 (374 $\mu\text{g}/\text{m}^3$) during 1048 - 1148 hrs.	
Works Undertaken (at the time of monitoring event)	On 30 March 2019, TBM tunnel works was carried out at tunnel portion and RC structure construction was carried out at Portion N-A.	
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to this Contract, in view of the following:</p> <ul style="list-style-type: none"> According to the construction information provided by the Contractor, the majority of construction works on 30 March 2019 was TBM tunnel works and RC structure construction at Portion N-A. 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 on exposed soil within the Project site and associated works areas; exposed soil covered by tarpaulin sheets). The exceedance is unlikely to be due to this Contract as dust suppression measures were implemented properly on site. Water spraying was applied on site to prevent dust. With reference to the recorded wind direction (ranged between 110° and 114°, blowing from an easterly direction) and wind speed (1.8 m/s) during the works period, Stations ASR1 are located downstream to the construction works at Portion N-A. <p>Based on the above, the exceedance is unlikely to be due to this Contract.</p>	

Actions Taken/ To Be Taken	<p>According to the photo record provided by the Contractor, dust suppression measures were properly implemented. Water spraying was applied to prevent dust. Exposed soil was covered by tarpaulin sheets to prevent dust. Photos are provided in Annex A.</p> <p>The Contractor has been reminded to implement the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual including watering to maintain all exposed road surfaces and dust sources wet, use of sprinklers for water spraying, covering the materials having the potential to create dust by clean tarpaulin, use of water truck and watering on all exposed soil within the Project site throughout the construction period.</p>
Remarks	<p>The monitoring results, wind data and the locations of air quality monitoring stations are attached.</p>



Annex A Photos taken during site inspection

*Note: Photos taken on 30/3/2019



Exposed soil was covered by tarpaulin sheet to prevent dust. (Works Area Portion N-C)



Water spraying was applied at the main haul road to prevent dust. (Works Area Portion N-A)

Air quality monitoring results on 30/3/2019

Project	Works	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	30/3/2019	AQMS1	Cloudy	8:55	1-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	30/3/2019	AQMS1	Cloudy	9:57	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	30/3/2019	AQMS1	Cloudy	10:59	1-hour TSP	165	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR1	Cloudy	8:44	1-hour TSP	34	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR1	Cloudy	9:46	1-hour TSP	122	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR1	Cloudy	10:48	1-hour TSP	374	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR10	Cloudy	8:10	1-hour TSP	51	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR10	Cloudy	9:12	1-hour TSP	32	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR10	Cloudy	10:14	1-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR5	Cloudy	8:32	1-hour TSP	142	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR5	Cloudy	9:34	1-hour TSP	192	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR5	Cloudy	10:36	1-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR6	Cloudy	8:20	1-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR6	Cloudy	9:22	1-hour TSP	124	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR6	Cloudy	10:24	1-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	30/3/2019	AQMS1	Cloudy	12:01	24-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR1	Cloudy	11:50	24-hour TSP	186	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR10	Cloudy	11:16	24-hour TSP	52	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR5	Cloudy	11:38	24-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	30/3/2019	ASR6	Cloudy	11:26	24-hour TSP	66	ug/m3

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)
19/03/30	0:00	0	-
19/03/30	1:00	0	-
19/03/30	2:00	0	-
19/03/30	3:00	0	-
19/03/30	4:00	0	-
19/03/30	5:00	0	-
19/03/30	6:00	0	-
19/03/30	7:00	0	-
19/03/30	8:00	0	-
19/03/30	9:00	0	-
19/03/30	10:00	1.8	110
19/03/30	11:00	1.8	114
19/03/30	12:00	0.9	119
19/03/30	13:00	2.2	105
19/03/30	14:00	0.9	113
19/03/30	15:00	2.7	108
19/03/30	16:00	2.7	109
19/03/30	17:00	2.2	103
19/03/30	18:00	1.8	121
19/03/30	19:00	1.3	120
19/03/30	20:00	0	-
19/03/30	21:00	0.4	101
19/03/30	22:00	0.4	83
19/03/30	23:00	0.4	81

Site Location 地盤位置: Northern Landfall
Date 日期: 28 Mar 2019 to 至 31 Mar 2019

	Time 時間	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	8:00 - 8:45	/	/	/	/	/	/	/
2	8:45 - 9:30	/	/	/	/	/	/	/
3	9:30 - 10:15	/	/	/	/	/	/	/
4	10:15 - 11:00	/	/	/	/	/	/	/
5	11:00 - 11:45	/	/	/	/	/	/	/
6	11:45 - 12:30	/	/	/	/	/	/	/
7	12:30 - 13:15	/	/	/	/	/	/	/
8	13:15 - 14:00	/	/	/	/	/	/	/
9	14:00 - 14:45	/	/	/	/	/	/	/
10	14:45 - 15:30	/	/	/	/	/	/	/
11	15:30 - 16:45	/	/	/	/	/	/	/
12	16:45 - 17:30	/	/	/	/	/	/	/
	Verified by Site Foreman 地盤科文簽署確認	7	7	7	7	7	7	7

Night shift 夜間工作 (if necessary 如需要)

	17:30 - 19:00							
	19:00 - 20:30							
	20:30 - 22:00							
	22:00 - 23:00							

*Please - tick (✓) in the box if complete the spraying of water.
circle (O) in the box if it is raining.
*如果 - 已經完成灑水, 請於方格內加上剔號(✓)。
是下雨天, 請於方格內加上圓圈(O)。

- Remarks:
- Pursuant to EP Clause 3.15, the Permit Holder shall undertake watering at least 12 times per day on all exposed soil within the Project site and associated work areas in Tuen Mun area throughout the construction phase.
 - Spraying position includes the main haul road, open area, slopes, stockpiles and any other dusty materials.
 - If it is raining, no water spraying is needed.
 - The no of spraying will be increased due to site condition.

- 備註:
- 根據環境許可證 3.15 條例, 在整個施工階段內, 許可證持有人須每天至少 12 次在屯門區項目工地和相關的工作區域內的所有暴露土壤灑水。
 - 灑水位置包括主要運輸道路, 空曠地帶, 斜坡, 存料堆, 以及任何其他產生塵埃物料。
 - 當下雨時, 地盤將不需要灑水。
 - 如果地盤情況更改或有需要時, 灑水次數會相應增加。

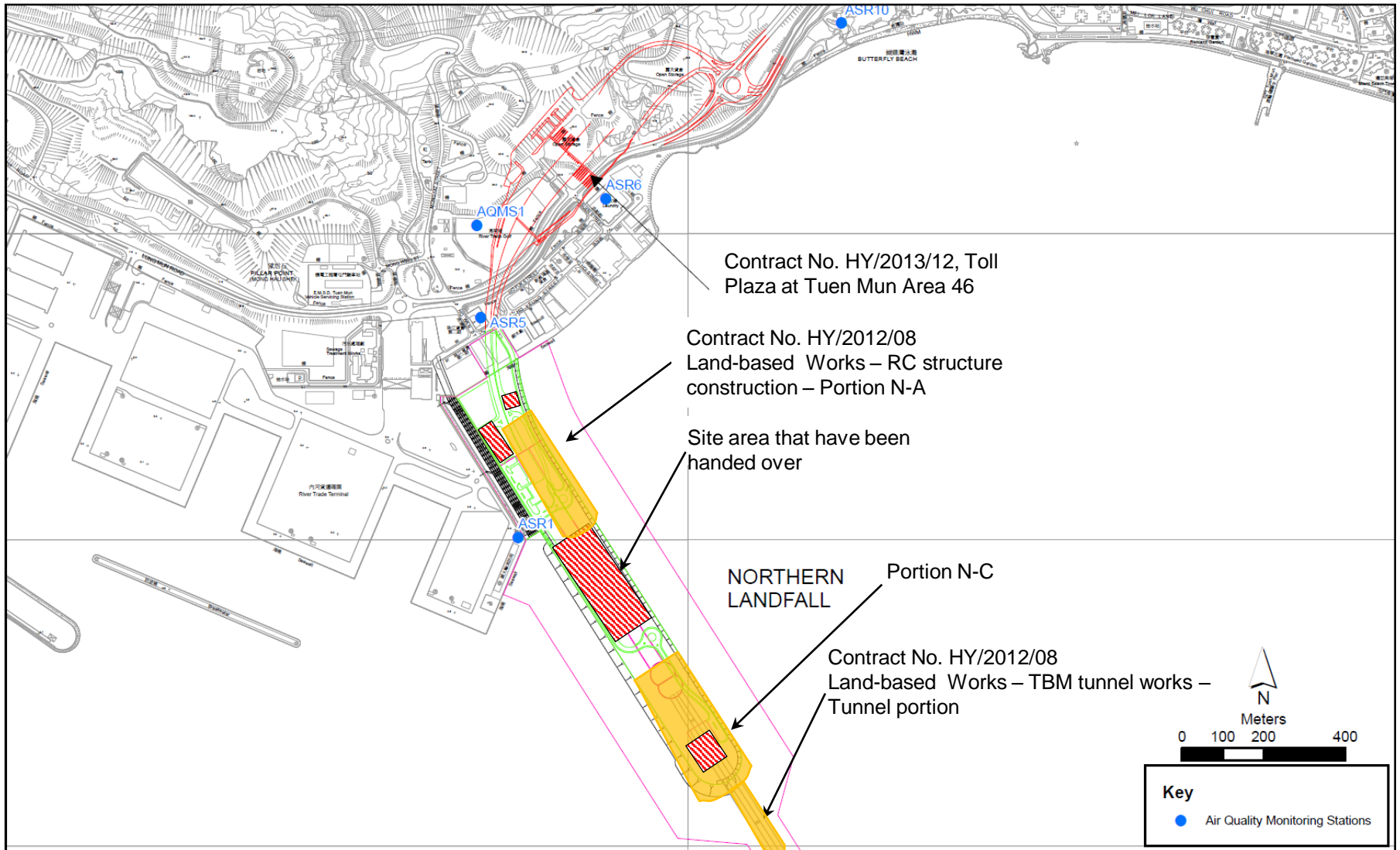


Figure 1

Indicative Construction Works Area on 30 March 2019