

Appendix I

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

Appendix I1 Cumulative Statistics on Exceedances

		Total No. recorded in this reporting quarter	Total No. recorded since contract commencement
1-Hr TSP	Action	8	35
	Limit	4	7
24-Hr TSP	Action	0	2
	Limit	0	0
Landfill gas hazard monitoring			
• Methane	Action	0	0
	Limit	0	0
• Oxygen	Action	0	0
	Limit	0	0
• Carbon Dioxide	Action	0	0
	Limit	0	0

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

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This reporting quarter	0	0	0
Total No. received since contract commencement	1	0	0

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To Ramboll Hong Kong Limited (ENPO)

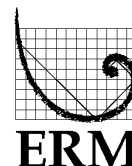
From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern
Connection Tunnel Buildings, Electrical and
Mechanical Works

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 09 October 2019

2507,
25/F One Harbourfront,
18 Tak Fung Street,
Hung Hom, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jasmine.ng@erm.com



Dear Sir/ Madam,

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

Limit Level Exceedance
0463091_20September2019_1hrTSP_Station ASR1

One (1) exceedances were recorded on 20 September 2019.

Regards,

Dr Jasmine Ng
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10

TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION TUNNEL BUILDINGS,
ELECTRICAL AND MECHANICAL WORKS

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	<p align="center"><u>Limit Level Exceedance</u> 0463091_20September2019_1hrTSP_Station ASR1</p> <p align="center">[Total No. of Exceedances = 1]</p>	
Date	<p align="center">20 September 2019 (Measured) 9 October 2019 (Results obtained from ENPO Website)</p>	
Monitoring Station	ASR1	
Parameter(s) with Exceedance(s)	1- hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 ASR6 = 238 ASR10 = 214 AQMS1 = 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	Refer to the attached data sheet (Data are source from Contract No. HY/2012/08).	
Works Undertaken (at the time of monitoring event)	Works undertaken under this Contract on 20 September 2019. <ul style="list-style-type: none"> Electrical and Mechanical Works and Architectural Builders Work and Finishes at Maintenance Depot and Administration Building; Building Structure at Fire Services Department Building and Customs and Excise Department Building 	
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to the Contract, in view of the following:</p> <ul style="list-style-type: none"> Apart from exceedance of 1-hr TSP at ASR1 during 10:49-11:49 on 20 September 2019, all 1-hr TSP levels at all monitoring stations were in compliance with the Action and Limit Levels on the same day. With reference to the recorded wind direction (ranged between 2° and 5°, blowing from a northerly direction) and wind speed (ranged between 0.5 and 0.7 m/s) when exceedance recorded, ASR1 is located downstream to the construction works at Maintenance Depot and in vicinity of Administration Building. However, the construction works at Maintenance Depot and Administration Building were Electrical and Mechanical Works and Architectural Builders Work and Finishes which are considered not major dust generating works (refer to attached photos). In addition, other construction activities which located further away included Building Structure at Fire Services Department Building and Customs and Excise Department Building. These construction works are also considered not major dust generating works. <p>Based on the above, the exceedance is unlikely to be due to the Contract.</p>	
Actions Taken / To Be Taken	The Contractor has been reminded to ensure all dust suppression measures are implemented at the site area. The ET will monitor for future trends in exceedances.	

Remarks	The monitoring results on 20 September and locations of air quality monitoring stations are attached.
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Project	Contract	Date (yyyy-mm-dd)	Station	Time (hh:mm, 24 hour)	Parameter	Results	Unit
TMCLKL	HY/2012/08	2019-09-20	AQMS1	08:56	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2019-09-20	AQMS1	09:58	1-hour TSP	116	ug/m3
TMCLKL	HY/2012/08	2019-09-20	AQMS1	11:00	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR1	08:45	1-hour TSP	220	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR1	09:47	1-hour TSP	214	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR1	10:49	1-hour TSP	539	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR10	08:11	1-hour TSP	107	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR10	09:13	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR10	10:15	1-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR5	08:33	1-hour TSP	141	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR5	09:35	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR5	10:37	1-hour TSP	144	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR6	08:23	1-hour TSP	152	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR6	09:25	1-hour TSP	163	ug/m3
TMCLKL	HY/2012/08	2019-09-20	ASR6	10:27	1-hour TSP	131	ug/m3

Note: Indicates Exceedance of Action Level
Indicates Exceedance of Limit Level

Meteorological Data for Impact Monitoring in the reporting period			
Date (dd-mm-yyyy)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)
20-09-2019	0:00	0.5	274
20-09-2019	1:00	0.6	285
20-09-2019	2:00	1.2	291
20-09-2019	3:00	1	288
20-09-2019	4:00	1.1	251
20-09-2019	5:00	0.5	322
20-09-2019	6:00	0.4	288
20-09-2019	7:00	0.3	351
20-09-2019	8:00	0.5	350
20-09-2019	9:00	0.6	347
20-09-2019	10:00	0.7	5
20-09-2019	11:00	0.5	2
20-09-2019	12:00	0.5	347
20-09-2019	13:00	0.3	322
20-09-2019	14:00	0.8	21
20-09-2019	15:00	0.2	24
20-09-2019	16:00	0.1	3
20-09-2019	17:00	0.1	357
20-09-2019	18:00	0.2	344
20-09-2019	19:00	0.3	351
20-09-2019	20:00	0.5	352
20-09-2019	21:00	0.6	287
20-09-2019	22:00	1.1	295
20-09-2019	23:00	0.4	354
20-09-2019	0:00	0.3	305

Legend

Site Boundary

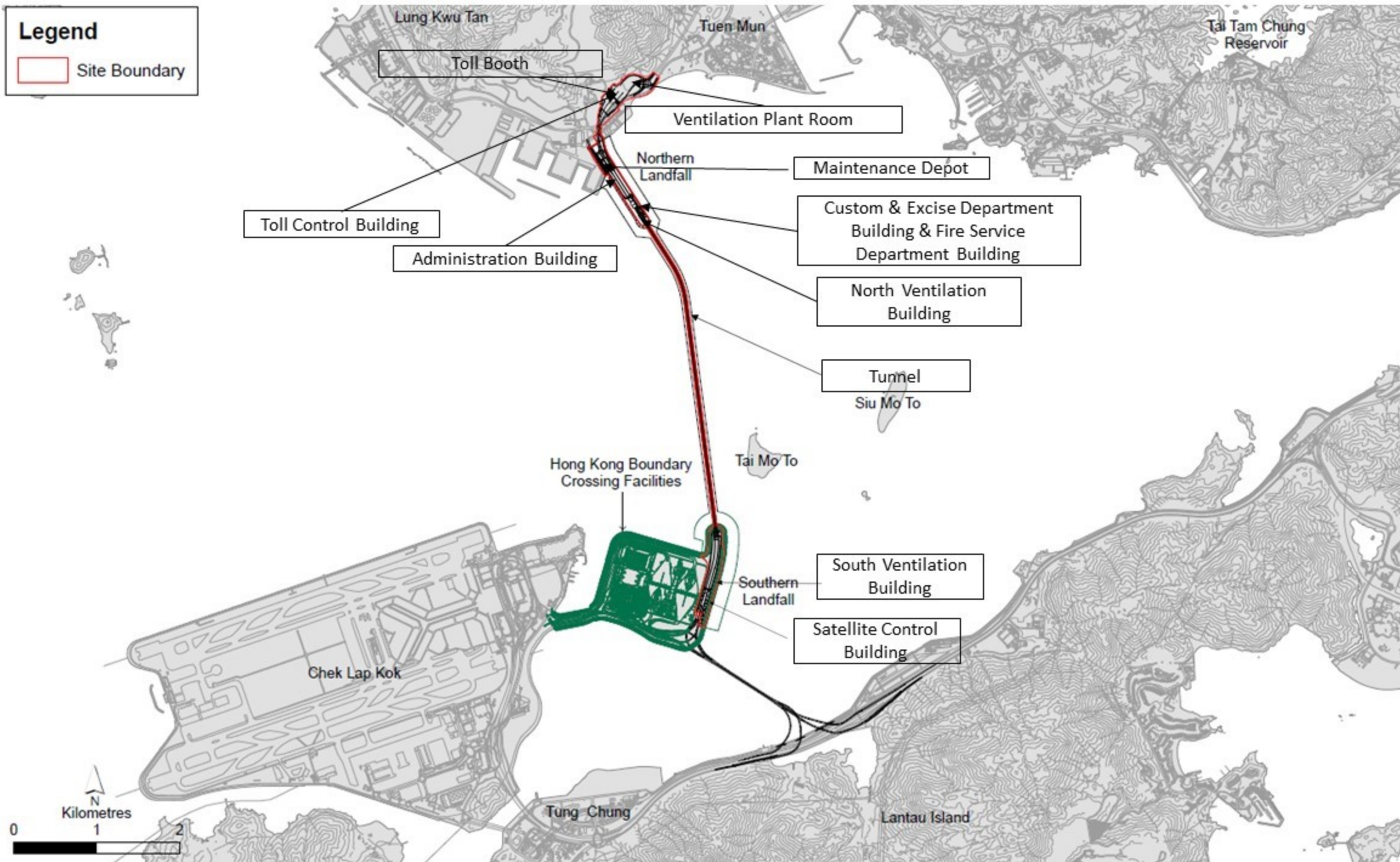




Photo 1 - Construction works at Administration Building



Photo 2 - Construction works at Maintenance Depot

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To Ramboll Hong Kong Limited (ENPO)

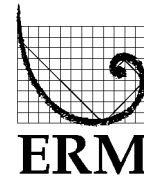
From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern
Connection Tunnel Buildings, Electrical and
Mechanical Works

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 7 November 2019

2507,
25/F One Harbourfront,
18 Tak Fung Street,
Hung Hom, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jasmine.ng@erm.com



Dear Sir/ Madam,

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

Action Level Exceedance
0463091_14October2019_1hrTSP_Station ASR1

One (1) exceedance was recorded on 14 October 2019.

Regards,

Dr Jasmine Ng
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10

TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION TUNNEL BUILDINGS,
ELECTRICAL AND MECHANICAL WORKS

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	<p align="center"><u>Action Level Exceedance</u> 0463091_14October2019_1hrTSP_Station ASR1</p> <p align="center">[Total No. of Exceedances = 1]</p>	
Date	<p align="center">14 October 2019 (Measured) 7 November 2019 (Results obtained from ENPO Website)</p>	
Monitoring Station	ASR1	
Parameter(s) with Exceedance(s)	1- hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 ASR6 = 238 ASR10 = 214 AQMS1 = 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	Refer to the attached data sheet (Data are source from Contract No. HY/2012/08).	
Works Undertaken (at the time of monitoring event)	<p>Works undertaken under this Contract on 14 October 2019 included</p> <ul style="list-style-type: none"> • Electrical and Mechanical Works and Architectural Builders Work and Finishes at Maintenance Depot • Electrical and Mechanical Works and Architectural Builders Work and Finishes at Administration Building • Architectural Builders Work and Finishes at Fire Services Department Building • Building Structure at Customs and Excise Department Building • Electrical and Mechanical Works at North Ventilation Building • Architectural Builders Work and Finishes at Toll Control Building 	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to the Contract, in view of the following:</p> <ul style="list-style-type: none"> • Apart from exceedance of 1-hr TSP at ASR1 during 9:50-10:50 on 14 October 2019, all 1-hr TSP levels at all monitoring stations were in compliance with the Action and Limit Levels on the same day. • With reference to the recorded wind direction (ranged between 65° and 335°, blowing from a north-easterly and north-westerly direction) and wind speed (0.4 m/s) when exceedance recorded, ASR1 is located downstream to the construction works at Maintenance Depot and in vicinity of Administration Building. However, the construction works at Maintenance Depot and Administration Building were Electrical and Mechanical Works and Architectural Builders Work and Finishes which are considered not major dust generating works. • Dust suppression measures i.e. watering were applied on site nearby Maintenance Depot and Administration Building to prevent dust generation (refer to <i>watering record</i>). • In addition, other construction activities which located upstream of ASR1 and further away included Architectural Builders Work and Finishes at Toll Control Building. These construction works are also considered not major dust generating works. <p>Based on the above, the exceedance is unlikely to be due to the Contract.</p>
Actions Taken / To Be Taken	<p>The Contractor has been reminded to ensure all dust suppression measures are implemented at the site area. The ET will monitor for future trends in exceedances.</p>
Remarks	<p>The monitoring results on 14 October and locations of air quality monitoring stations are attached.</p>

Results of Air Quality Monitoring

Project	Contract	Date (yyyy-mm-dd)	Station	Time	Parameter	Results	Unit
TMCLKL	HY/2012/08	2019-10-14	AQMS1	9:00:00	1-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	2019-10-14	AQMS1	10:02:00	1-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2019-10-14	AQMS1	11:04:00	1-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR1	8:48:00	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR1	9:50:00	1-hour TSP	363	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR1	10:52:00	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR10	8:15:00	1-hour TSP	36	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR10	9:17:00	1-hour TSP	35	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR10	10:19:00	1-hour TSP	48	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR5	8:37:00	1-hour TSP	278	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR5	9:39:00	1-hour TSP	135	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR5	10:41:00	1-hour TSP	154	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR6	8:25:00	1-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR6	9:27:00	1-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR6	10:29:00	1-hour TSP	84	ug/m3
TMCLKL	HY/2012/08	2019-10-14	AQMS1	12:06:00	24-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR1	11:54:00	24-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR10	11:21:00	24-hour TSP	41	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR5	11:43:00	24-hour TSP	116	ug/m3
TMCLKL	HY/2012/08	2019-10-14	ASR6	11:31:00	24-hour TSP	65	ug/m3

Note: Indicates Exceedance of Action Level
Indicates Exceedance of Limit Level

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)
19/10/14	0:00	0.4	165
19/10/14	1:00	0.4	336
19/10/14	2:00	0.9	77
19/10/14	3:00	0.9	66
19/10/14	4:00	1.3	65
19/10/14	5:00	0.9	80
19/10/14	6:00	0.4	178
19/10/14	7:00	0.4	187
19/10/14	8:00	0	-
19/10/14	9:00	0.4	65
19/10/14	10:00	0.4	335
19/10/14	11:00	0.9	60
19/10/14	12:00	1.3	64
19/10/14	13:00	0.9	83
19/10/14	14:00	0.9	3
19/10/14	15:00	1.3	30
19/10/14	16:00	1.3	344
19/10/14	17:00	1.3	114
19/10/14	18:00	0.4	123
19/10/14	19:00	0.4	81
19/10/14	20:00	0.9	65
19/10/14	21:00	0.9	86
19/10/14	22:00	1.3	83
19/10/14	23:00	2.7	62

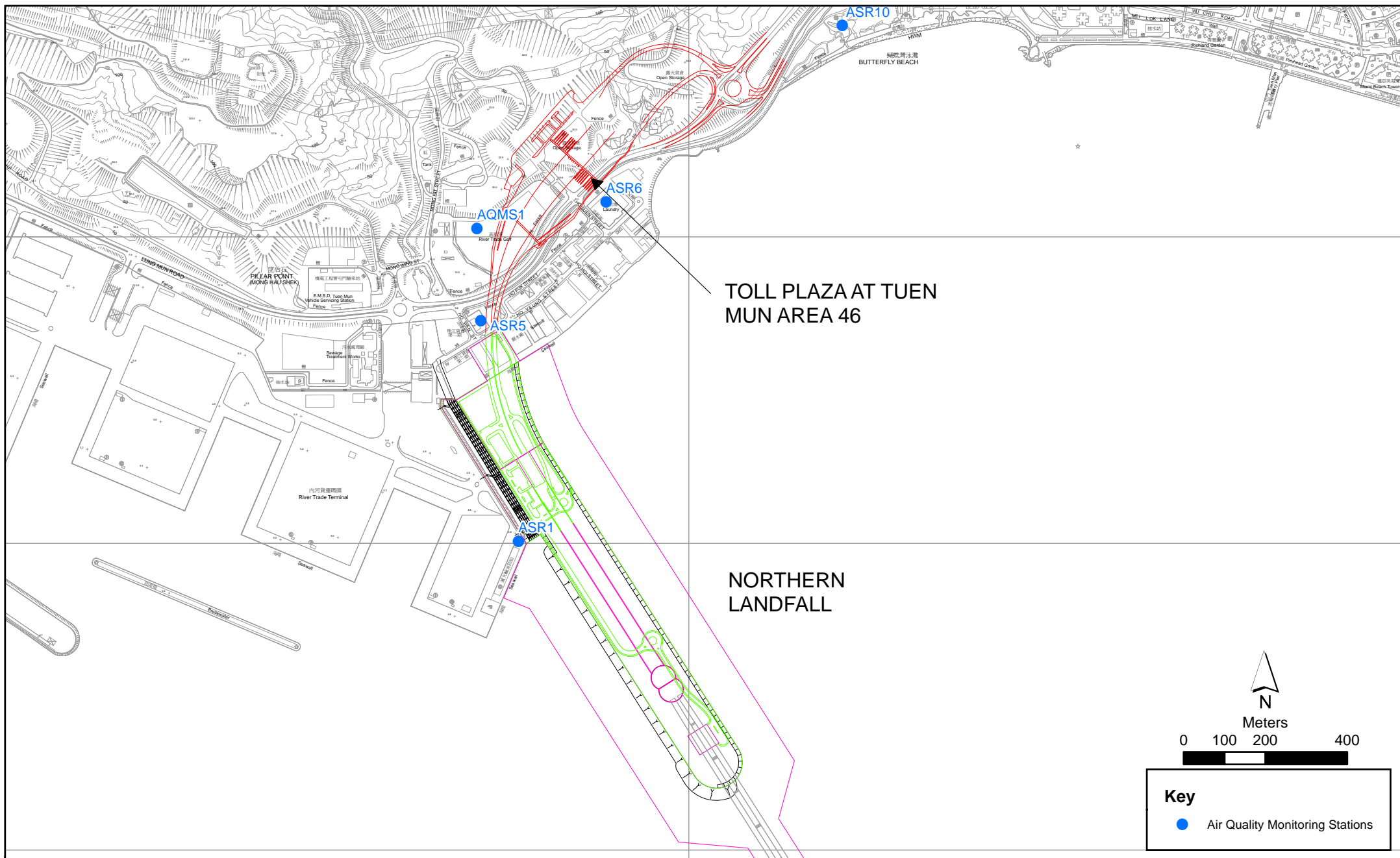


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring
(Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
Northern Connection Sub-sea Tunnel Section)

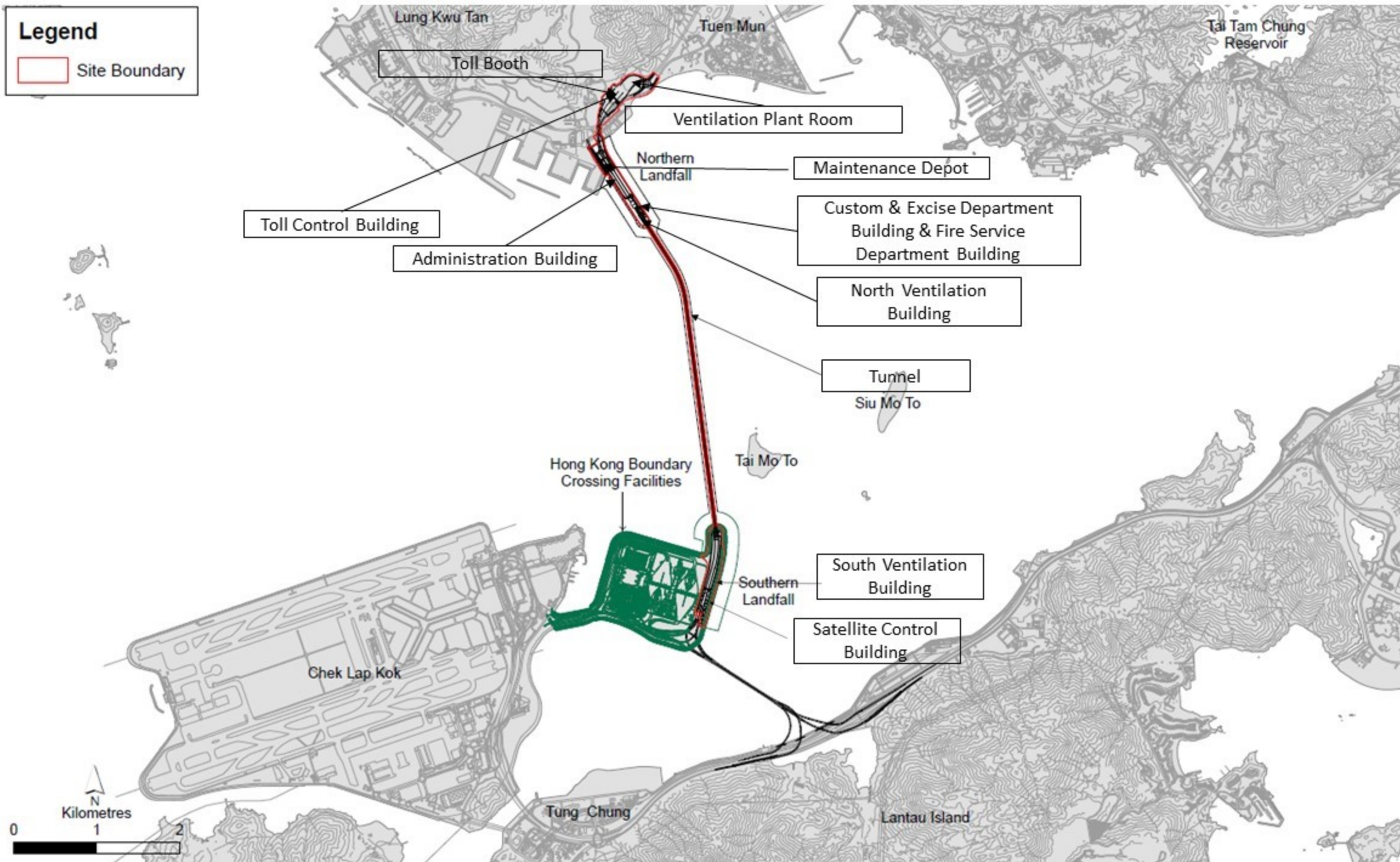
File: T:\GIS\CONTRACT\0212330\Mxd\0212330_ASR_for_Enhanced_TSP_monitoring.mxd
Date: 21/2/2014

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Legend

Site Boundary



Appendix A

Watering Record on 14
October 2019

Location

14th Oct

MD & AdB

Period		Time	Sign.
7-8			
8-9	/	8:30	AC
9-10	/	9:30	AC
10-11	/	10:15	AC
11-12	/ /	11:15 11:45	AC
12-13	/	12:55	AC
13-14	/	13:40	AC
14-15	/	14:30	AC
15-16	/ /	15:15 15:55	AC
16-17	/	16:35	AC
17-18	/	17:35	AC
18-19			

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To Ramboll Hong Kong Limited (ENPO)

From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern
Connection Tunnel Buildings, Electrical and
Mechanical Works

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 7 November 2019

2507,
25/F One Harbourfront,
18 Tak Fung Street,
Hung Hom, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jasmine.ng@erm.com



Dear Sir/ Madam,

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

Action Level Exceedance

0463091_17October2019_1hrTSP_Station ASR1
0463091_17October2019_1hrTSP_Station ASR1

Two (2) exceedances were recorded on 17 October 2019.

Regards,

A handwritten signature in blue ink, appearing to read 'Jasmine', with a small mark above the first letter.

Dr Jasmine Ng
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10

TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION TUNNEL BUILDINGS,
ELECTRICAL AND MECHANICAL WORKS

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	<p align="center"><u>Action Level Exceedance</u></p> <p align="center">0463091_17October2019_1hrTSP_Station ASR1 0463091_17October2019_1hrTSP_Station ASR1</p> <p align="center">[Total No. of Exceedances = 2]</p>	
Date	<p align="center">17 October 2019 (Measured) 7 November 2019 (Results obtained from ENPO Website)</p>	
Monitoring Station	ASR1	
Parameter(s) with Exceedance(s)	1- hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 ASR6 = 238 ASR10 = 214 AQMS1 = 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	Refer to the attached data sheet (Data are source from Contract No. HY/2012/08).	
Works Undertaken (at the time of monitoring event)	<p>Works undertaken under this Contract on 17 October 2019 included</p> <ul style="list-style-type: none"> • Electrical and Mechanical Works and Architectural Builders Work and Finishes at Maintenance Depot • Electrical and Mechanical Works and Architectural Builders Work and Finishes at Administration Building • Architectural Builders Work and Finishes at Fire Services Department Building • Building Structure at Customs and Excise Department Building • Electrical and Mechanical Works at North Ventilation Building • Architectural Builders Work and Finishes at Toll Control Building 	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to the Contract, in view of the following:</p> <ul style="list-style-type: none"> • Apart from exceedances of 1-hr TSP at ASR1 during 9:41-10:41 and 10:43-11:43 on 17 October 2019, all 1-hr TSP levels at all monitoring stations were in compliance with the Action and Limit Levels on the same day. • With reference to the recorded wind direction (ranged between 67° and 98°, blowing from a north-easterly direction) and wind speed (ranged between 1.3 and 1.8 m/s) when exceedances recorded, ASR1 is located downstream to the construction works at Maintenance Depot and in vicinity of Administration Building. However, the construction works at Maintenance Depot and Administration Building were Electrical and Mechanical Works and Architectural Builders Work and Finishes which are considered not major dust generating works. • Dust suppression measures i.e. watering were applied on site nearby Maintenance Depot and Administration Building to prevent dust generation (refer to <i>watering record</i>). • In addition, other construction activities which located upstream of ASR1 and further away included Architectural Builders Work and Finishes at Toll Control Building. These construction works are also considered not major dust generating works. <p>Based on the above, the exceedance is unlikely to be due to the Contract.</p>
Actions Taken / To Be Taken	The Contractor has been reminded to ensure all dust suppression measures are implemented at the site area. The ET will monitor for future trends in exceedances.
Remarks	The monitoring results on 17 October and locations of air quality monitoring stations are attached.

Results of Air Quality Monitoring

Project	Contract	Date (yyyy-mm-dd)	Station	Time	Parameter	Results	Unit
TMCLKL	HY/2012/08	2019-10-17	AQMS1	8:50:00	1-hour TSP	103	ug/m3
TMCLKL	HY/2012/08	2019-10-17	AQMS1	9:52:00	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2019-10-17	AQMS1	10:54:00	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR1	8:39:00	1-hour TSP	331	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR1	9:41:00	1-hour TSP	354	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR1	10:43:00	1-hour TSP	385	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR10	8:04:00	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR10	9:06:00	1-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR10	10:08:00	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR5	8:27:00	1-hour TSP	288	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR5	9:29:00	1-hour TSP	230	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR5	10:31:00	1-hour TSP	165	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR6	8:15:00	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR6	9:17:00	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR6	10:19:00	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2019-10-17	AQMS1	11:56:00	24-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR1	11:45:00	24-hour TSP	144	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR10	11:10:00	24-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR5	11:33:00	24-hour TSP	100	ug/m3
TMCLKL	HY/2012/08	2019-10-17	ASR6	11:21:00	24-hour TSP	81	ug/m3

Note: Indicates Exceedance of Action Level
Indicates Exceedance of Limit Level

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)
19/10/17	0:00	0.4	153
19/10/17	1:00	0.4	108
19/10/17	2:00	0.4	7
19/10/17	3:00	0.4	69
19/10/17	4:00	0.4	183
19/10/17	5:00	0	-
19/10/17	6:00	0.4	111
19/10/17	7:00	1.3	101
19/10/17	8:00	2.2	67
19/10/17	9:00	1.8	84
19/10/17	10:00	1.3	98
19/10/17	11:00	1.8	67
19/10/17	12:00	1.3	98
19/10/17	13:00	1.8	44
19/10/17	14:00	1.3	56
19/10/17	15:00	0.9	74
19/10/17	16:00	0.9	27
19/10/17	17:00	0.9	329
19/10/17	18:00	0.9	345
19/10/17	19:00	0.9	356
19/10/17	20:00	0.9	337
19/10/17	21:00	0.9	351
19/10/17	22:00	1.3	335
19/10/17	23:00	1.3	339

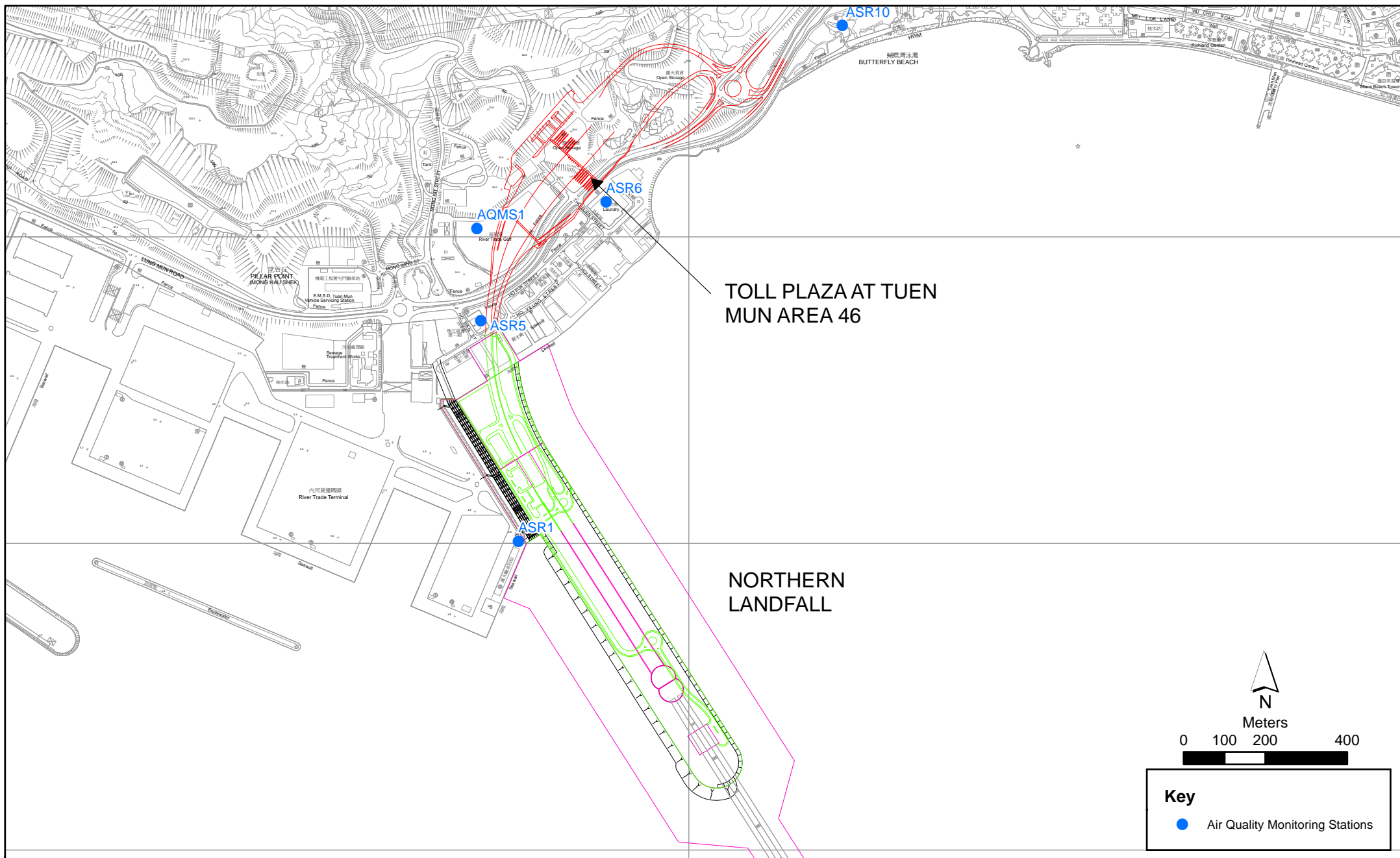


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring
(Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
Northern Connection Sub-sea Tunnel Section)

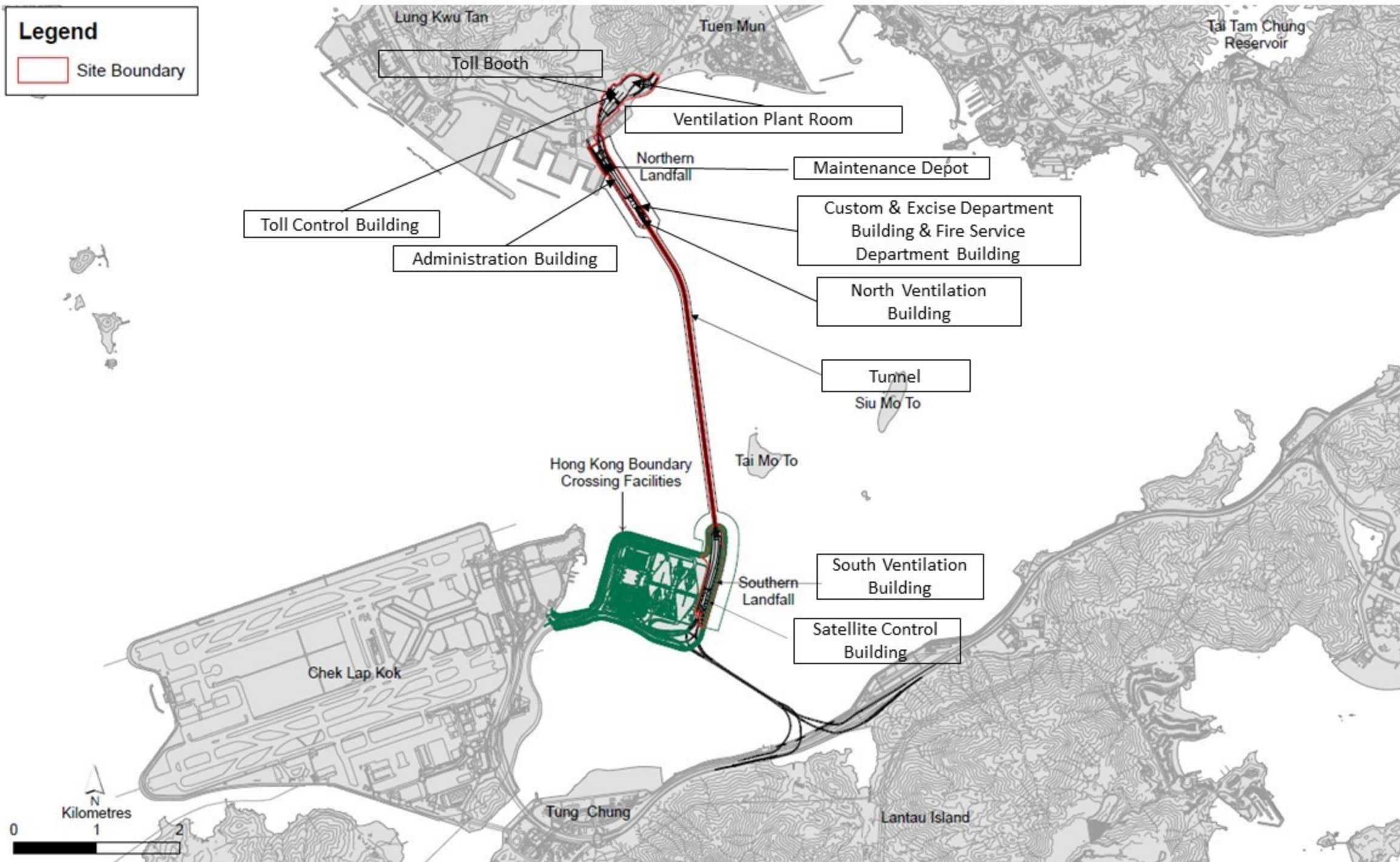
File: T:\GIS\CONTRACT\0212330\Mxd\0212330_ASR_for_Enhanced_TSP_monitoring.mxd
Date: 21/2/2014

Environmental
Resources
Management



Legend

Site Boundary



Appendix A

Watering Record on 17
October 2019

17th Oct

Location

MD & AdB.

Period		Time	Sign
7-8	/	7:58	成
8-9	/	8:35	成
9-10	/	9:30	成
10-11	/	10:30	成
11-12	/	11:30	成
12-13	/	12:50	成
13-14	/ /	13:15 13:50	成
14-15	/	14:50	成
15-16	/	15:45	成
16-17	/	16:45	成
17-18	/	17:35	成
18-19			

Email
message

Environmental
Resources
Management

To Ramboll Hong Kong Limited (ENPO)

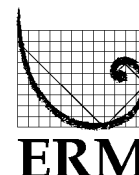
From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern
Connection Tunnel Buildings, Electrical and
Mechanical Works

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 3 December 2019

2507,
25/F One Harbourfront,
18 Tak Fung Street,
Hung Hom, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jasmine.ng@erm.com



Dear Sir/ Madam,

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

Action Level Exceedance

0463091_4November2019_1hrTSP_Station ASR5

Limit Level Exceedance

0463091_4November2019_1hrTSP_Station ASR1

Two (2) exceedances were recorded on 4 November 2019.

Regards,

A handwritten signature in blue ink, appearing to read "Jasmine", is written over a light blue grid background.

Dr Jasmine Ng
Environmental Team Leader

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ERM-Hong Kong, Limited

**CONTRACT NO. HY/2017/10
TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION TUNNEL BUILDINGS,
ELECTRICAL AND MECHANICAL WORKS**

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	<u>Action Level Exceedance</u> 0463091_4November2019_1hrTSP_Station ASR5 <u>Limit Level Exceedance</u> 0463091_4November2019_1hrTSP_Station ASR1 [Total No. of Exceedances = 2]	
Date	4 November 2019 (Measured) 3 December 2019 (Results obtained from ENPO Website)	
Monitoring Station	ASR1 and ASR5	
Parameter(s) with Exceedance(s)	1- hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 ASR6 = 238 ASR10 = 214 AQMS1 = 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	Refer to the attached data sheet (Data are source from Contract No. HY/2012/08).	
Works Undertaken (at the time of monitoring event)	Works undertaken under this Contract on 4 November 2019 included <ul style="list-style-type: none"> • Electrical and Mechanical Works and Architectural Builders Work and Finishes at Toll Control Building; • Electrical and Mechanical Works at Ventilation Plant Room; • Electrical and Mechanical Works at North Ventilation Building; • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Administration Building; • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Maintenance Depot; • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Fire Services Department Building; • Electrical and Mechanical Works and Architectural Builder's Work at Customs and Excise Department Building; • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at the Tunnel; • Electrical and Mechanical Works and Architectural Builders Work and Finishes at Satellite Control Building; and • Electrical and Mechanical Works at South Ventilation Building. 	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to the Contract, in view of the following:</p> <ul style="list-style-type: none"> • Apart from exceedances of 1-hr TSP at ASR1 during 8:39-9:39 and ASR5 during 8:26-9:26 on 4 November 2019, all 1-hr TSP levels at all monitoring stations were in compliance with the Action and Limit Levels on the same day. • With reference to the recorded wind direction (ranged between 14° and 16°, blowing from a north-easterly direction) and wind speed (2.2 m/s) when exceedances recorded, ASR5 is located downstream to the construction works at Toll Control Building, while ASR1 is located downstream to the construction works at Maintenance Depot and Administration Building. However, the construction works at Toll Control Building, Maintenance Depot and Administration Building were mainly Electrical and Mechanical Works and Architectural Builders Work and Finishes which are considered not major dust generating works. • No major dust generating activities i.e. excavation works was conducted on 4 November 2019. • Dust suppression measures i.e. watering were applied on site nearby Maintenance Depot and Administration Building to prevent dust generation (refer to <i>watering record</i>). • Dust mitigation measures were implemented at Toll Control Building, for example, roads were paved and no debris/ materials were burnt at the works areas. <p>Based on the above, the exceedances are unlikely to be due to the Contract.</p>
Actions Taken / To Be Taken	The Contractor has been reminded to ensure all dust suppression measures are implemented at the site area. The ET will monitor for future trends in exceedances.
Remarks	The monitoring results on 4 November 2019 and locations of air quality monitoring stations are attached.

Results of Air Quality Monitoring

Project	Contract	Date (yyyy-mm-dd)	Station	Time	Parameter	Results	Unit
TMCLKL	HY/2012/08	2019-11-04	AQMS1	8:50:00	1-hour TSP	154	ug/m3
TMCLKL	HY/2012/08	2019-11-04	AQMS1	9:52:00	1-hour TSP	147	ug/m3
TMCLKL	HY/2012/08	2019-11-04	AQMS1	10:54:00	1-hour TSP	143	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR1	8:39:00	1-hour TSP	626	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR1	9:41:00	1-hour TSP	264	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR1	10:43:00	1-hour TSP	251	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR10	8:02:00	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR10	9:04:00	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR10	10:06:00	1-hour TSP	105	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR5	8:26:00	1-hour TSP	398	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR5	9:28:00	1-hour TSP	251	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR5	10:30:00	1-hour TSP	242	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR6	8:14:00	1-hour TSP	202	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR6	9:16:00	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR6	10:18:00	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2019-11-04	AQMS1	11:56:00	24-hour TSP	80	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR1	11:45:00	24-hour TSP	141	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR10	11:08:00	24-hour TSP	70	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR5	11:32:00	24-hour TSP	146	ug/m3
TMCLKL	HY/2012/08	2019-11-04	ASR6	11:20:00	24-hour TSP	106	ug/m3

Note:

Indicates Exceedance of Action Level

Indicates Exceedance of Limit Level

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)
19/11/04	0:00	1.3	342
19/11/04	1:00	1.8	17
19/11/04	2:00	2.7	341
19/11/04	3:00	3.1	359
19/11/04	4:00	3.6	3
19/11/04	5:00	3.6	4
19/11/04	6:00	1.8	14
19/11/04	7:00	1.3	342
19/11/04	8:00	2.2	16
19/11/04	9:00	2.2	14
19/11/04	10:00	1.8	12
19/11/04	11:00	2.2	30
19/11/04	12:00	1.8	23
19/11/04	13:00	1.8	16
19/11/04	14:00	1.3	18
19/11/04	15:00	1.3	25
19/11/04	16:00	1.8	347
19/11/04	17:00	1.8	332
19/11/04	18:00	1.8	313
19/11/04	19:00	0.9	326
19/11/04	20:00	0.4	324
19/11/04	21:00	0.4	320
19/11/04	22:00	0.9	328
19/11/04	23:00	1.8	343

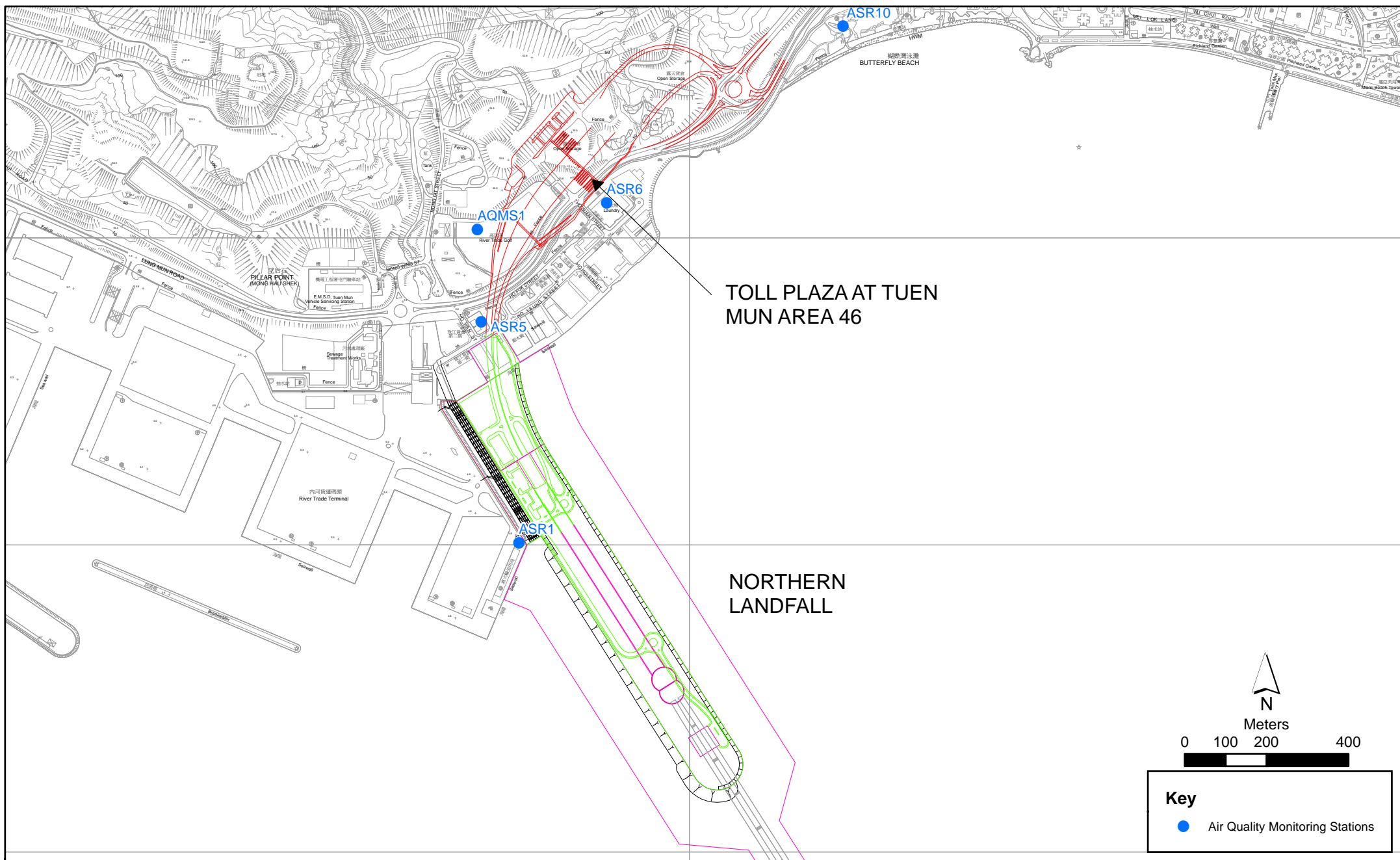


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring
(Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
Northern Connection Sub-sea Tunnel Section)

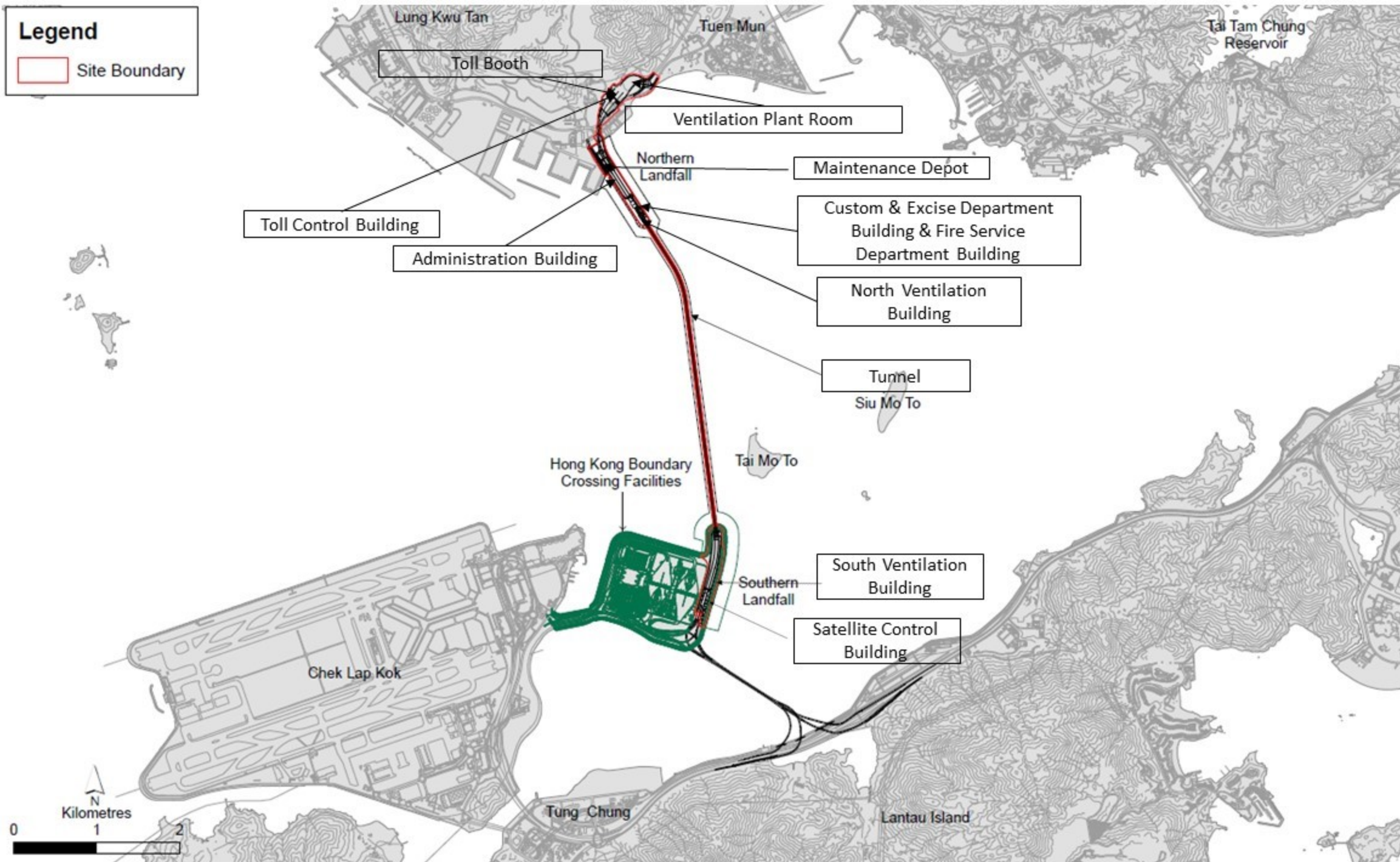
File: T:\GIS\CONTRACT\0212330\Mxd\0212330_ASR_for_Enhanced_TSP_monitoring.mxd
Date: 21/2/2014

Environmental
Resources
Management



Legend

Site Boundary



Appendix A

Watering Record on 4
November 2019

4 th Nov		MD & A/B	
Period			Sign
7-8			
8-9	/	8:05	Terry
9-10	/	9:00	Terry
10-11	//	10:00 10:40	Terry
11-12	/	11:30	Terry
12-13	/	12:50	Terry
13-14	/	13:20	Terry
14-15	/	14:20	Terry
15-16	//	15:00 15:40	Terry
16-17	/	16:20	Terry
17-18	/	17:20	Terry
18-19			

Appendix B

Site Photo



Photo 1 - Construction works at Toll Control Building



Photo 2 - Construction works at Maintenance Depot



Photo 3 - Construction works at Administration Building

Email
message

Environmental
Resources
Management

To Ramboll Hong Kong Limited (ENPO)

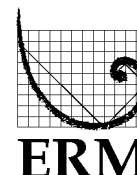
From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern
Connection Tunnel Buildings, Electrical and
Mechanical Works

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 26 November 2019

2507,
25/F One Harbourfront,
18 Tak Fung Street,
Hung Hom, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jasmine.ng@erm.com



Dear Sir/ Madam,

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

Action Level Exceedance
0463091_7November2019_1hrTSP_Station ASR5

One (1) exceedance was recorded on 7 November 2019.

Regards,

Dr Jasmine Ng
Environmental Team Leader

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ERM-Hong Kong, Limited

**CONTRACT NO. HY/2017/10
TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION TUNNEL BUILDINGS,
ELECTRICAL AND MECHANICAL WORKS**

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	<u>Action Level Exceedance</u> 0463091_7November2019_1hrTSP_Station ASR5 [Total No. of Exceedances = 1]	
Date	7 November 2019 (Measured) 26 December 2019 (Results obtained from ENPO Website)	
Monitoring Station	ASR5	
Parameter(s) with Exceedance(s)	1- hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 ASR6 = 238 ASR10 = 214 AQMS1 = 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	Refer to the attached data sheet (Data are source from Contract No. HY/2012/08).	
Works Undertaken (at the time of monitoring event)	Works undertaken under this Contract on 7 November 2019 included <ul style="list-style-type: none"> • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Maintenance Depot; • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Administration Building; • Architectural Builder's Work and Finishes at Fire Services Department Building; • Building Structure at Customs and Excise Department Building; • Electrical and Mechanical Works at North Ventilation Building; • Architectural Builders Work and Finishes at Toll Control Building 	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to the Contract, in view of the following:</p> <ul style="list-style-type: none"> • Apart from exceedance of 1-hr TSP at ASR5 during 13:24-14:24 on 7 November 2019, all 1-hr TSP levels at all monitoring stations were in compliance with the Action and Limit Levels on the same day. • With reference to the recorded wind direction (ranged between 16° and 304°, blowing from a north-easterly and north-westerly direction) and wind speed (ranged between 1.8 and 2.2 m/s) when exceedances recorded, ASR5 is located downstream to the construction works at Toll Control Building, while ASR1 is located downstream to the construction works at Toll Control Building. However, the construction works at Toll Control Building were Architectural Builders Work and Finishes which are considered not major dust generating works. • No major dust generating activities i.e. excavation works was conducted on 7 November 2019. • Dust suppression measures were implemented at the site area, for example, road at Toll Control Building were paved, no debris/materials were burnt at the works areas and watering was applied on dry area (refer to <i>Appendices A and B</i>). <p>Based on the above, the exceedance is unlikely to be due to the Contract.</p>
Actions Taken / To Be Taken	<p>The Contractor has been reminded to ensure all dust suppression measures are implemented at the site area. The ET will monitor for future trends in exceedances.</p>
Remarks	<p>The monitoring results on 7 November 2019 and locations of air quality monitoring stations are attached.</p>

Results of Air Quality Monitoring

Project	Contract	Date (yyyy-mm-dd)	Station	Time	Parameter	Results	Unit
TMCLKL	HY/2012/08	2019-11-07	AQMS1	13:46:00	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2019-11-07	AQMS1	14:48:00	1-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2019-11-07	AQMS1	15:50:00	1-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR1	13:35:00	1-hour TSP	239	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR1	14:37:00	1-hour TSP	180	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR1	15:39:00	1-hour TSP	160	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR10	13:01:00	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR10	14:03:00	1-hour TSP	55	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR10	15:05:00	1-hour TSP	53	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR5	13:24:00	1-hour TSP	479	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR5	14:26:00	1-hour TSP	161	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR5	15:28:00	1-hour TSP	147	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR6	13:13:00	1-hour TSP	212	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR6	14:15:00	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR6	15:17:00	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2019-11-07	AQMS1	16:52:00	24-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR1	16:41:00	24-hour TSP	158	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR10	16:07:00	24-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR5	16:30:00	24-hour TSP	196	ug/m3
TMCLKL	HY/2012/08	2019-11-07	ASR6	16:19:00	24-hour TSP	105	ug/m3

Note:

Indicates Exceedance of Action Level

Indicates Exceedance of Limit Level

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)
19/11/07	0:00	0	-
19/11/07	1:00	0	-
19/11/07	2:00	0.4	22
19/11/07	3:00	0.9	25
19/11/07	4:00	1.8	32
19/11/07	5:00	1.8	21
19/11/07	6:00	1.3	22
19/11/07	7:00	1.8	31
19/11/07	8:00	1.8	15
19/11/07	9:00	1.8	4
19/11/07	10:00	2.2	33
19/11/07	11:00	2.2	33
19/11/07	12:00	2.2	16
19/11/07	13:00	1.8	16
19/11/07	14:00	2.2	304
19/11/07	15:00	2.7	316
19/11/07	16:00	1.3	341
19/11/07	17:00	1.8	316
19/11/07	18:00	1.8	327
19/11/07	19:00	0.4	318
19/11/07	20:00	0	-
19/11/07	21:00	0.4	336
19/11/07	22:00	1.3	313
19/11/07	23:00	1.8	357

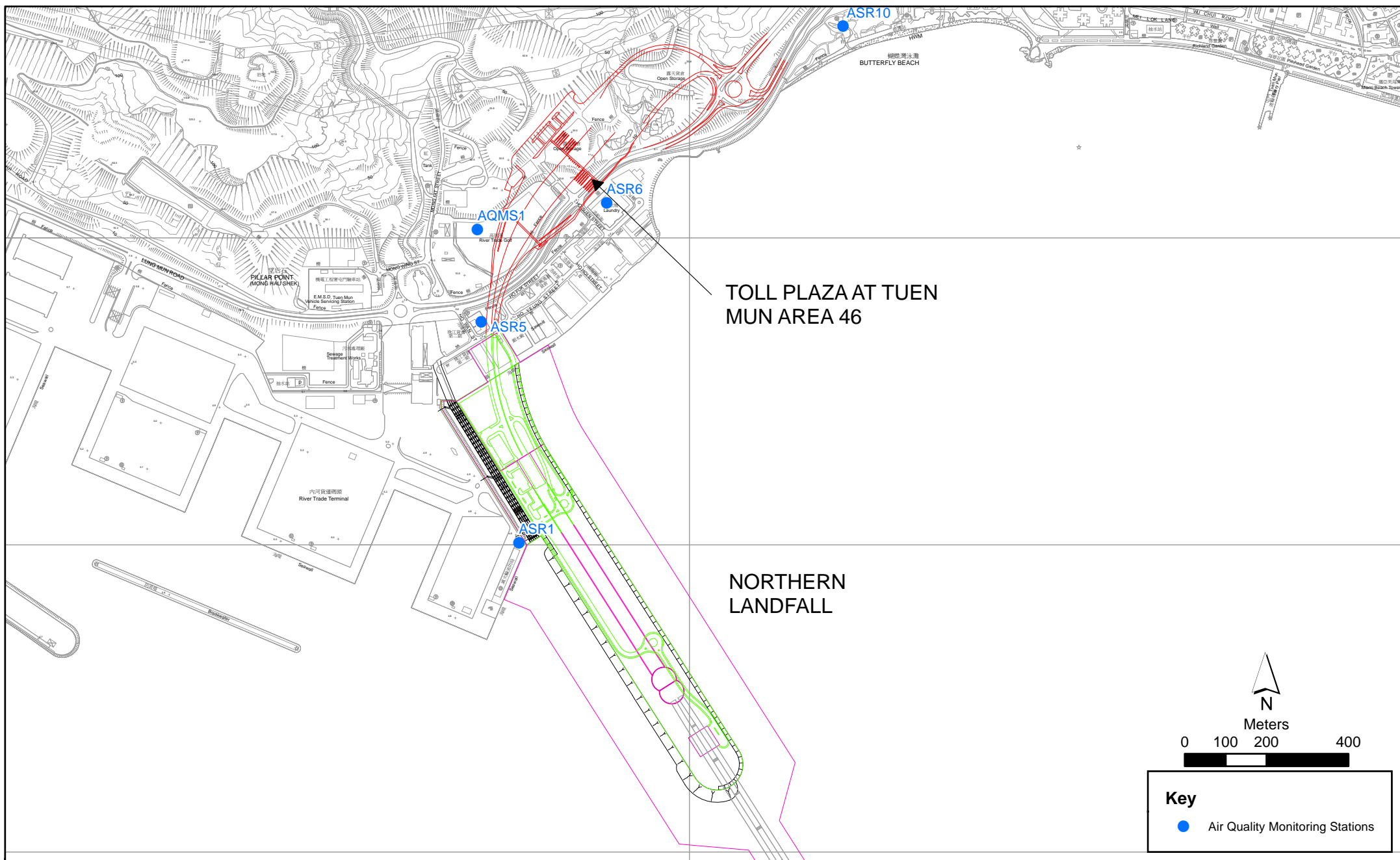


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring
(Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
Northern Connection Sub-sea Tunnel Section)

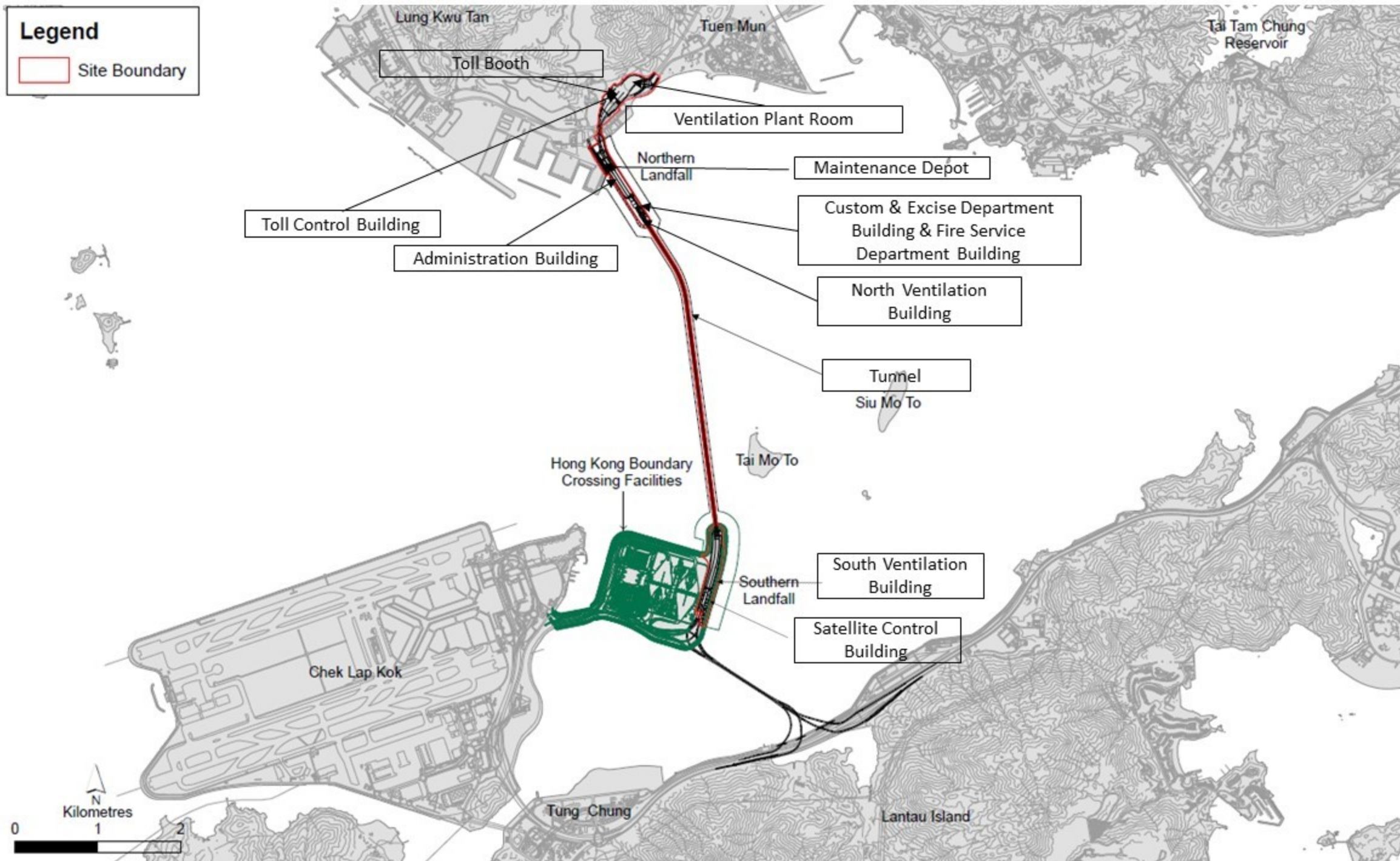
File: T:\GIS\CONTRACT\0212330\Mxd\0212330_ASR_for_Enhanced_TSP_monitoring.mxd
Date: 21/2/2014

Environmental
Resources
Management



Legend

Site Boundary



Appendix A

Watering Record on 7
November 2019

7 th Nov		Location	
Period		MD & AdB	
		Time	Sign
7-8			
8-9	/	8:03	Terry
9-10	/	9:05	Terry
10-11	//	10:05 10:40	Terry
11-12	/	11:40	Terry
12-13	/	12:55	Terry
13-14	/	13:30	Terry
14-15	/	14:30	Terry
15-16	/	15:15	Terry
16-17	//	16:15 16:50	Terry
17-18	/	17:35	Terry
18-19			

Appendix B

Site Photo



Photo 1 - Construction works at Toll Control Building

Email
message

Environmental
Resources
Management

To Ramboll Hong Kong Limited (ENPO)

From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern
Connection Tunnel Buildings, Electrical and
Mechanical Works

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 6 December 2019

2507,
25/F One Harbourfront,
18 Tak Fung Street,
Hung Hom, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jasmine.ng@erm.com



Dear Sir/ Madam,

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

Action Level Exceedance

0463091_28November2019_1hrTSP_Station ASR1
0463091_28November2019_1hrTSP_Station ASR1
0463091_28November2019_1hrTSP_Station ASR5

Limit Level Exceedance

0463091_28November2019_1hrTSP_Station ASR1
0463091_28November2019_1hrTSP_Station ASR5

Five (5) exceedances were recorded on 28 November 2019.

Regards,

Dr Jasmine Ng
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10

TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION TUNNEL BUILDINGS,
ELECTRICAL AND MECHANICAL WORKS

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	<p align="center"><u>Action Level Exceedance</u></p> <p align="center">0463091_28November2019_1hrTSP_Station ASR1 0463091_28November2019_1hrTSP_Station ASR1 0463091_28November2019_1hrTSP_Station ASR5</p> <p align="center"><u>Limit Level Exceedance</u></p> <p align="center">0463091_28November2019_1hrTSP_Station ASR1 0463091_28November2019_1hrTSP_Station ASR5</p> <p align="center">[Total No. of Exceedances = 5]</p>	
Date	<p align="center">28 November 2019 (Measured) 10 December 2019 (Results obtained from ENPO Website)</p>	
Monitoring Station	ASR1 and ASR5	
Parameter(s) with Exceedance(s)	1- hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 ASR6 = 238 ASR10 = 214 AQMS1 = 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	Refer to the attached data sheet (Data are source from Contract No. HY/2012/08).	
Works Undertaken (at the time of monitoring event)	<p>Works undertaken under this Contract on 28 November 2019 included</p> <ul style="list-style-type: none"> • Electrical and Mechanical Works and Architectural Builders Work and Finishes at Toll Control Building; • Electrical and Mechanical Works at Ventilation Plant Room; • Electrical and Mechanical Works at North Ventilation Building; • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Administration Building; • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at Maintenance Depot; • Falsework dismantling at Fire Services Department Building; • Falsework dismantling at Customs and Excise Department Building; • Electrical and Mechanical Works and Architectural Builder's Work and Finishes at the Tunnel. 	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to the Contract, in view of the following:</p> <ul style="list-style-type: none"> • With reference to the recorded wind direction (ranged between 14° and 34°, blowing from a north-easterly direction) and wind speed (ranged between 2.2 and 2.7 m/s) when exceedances recorded, ASR1 is located downstream to the construction works at Maintenance Depot and Administration Building, while ASR5 is located downstream to the construction works at Ventilation Plant Room and Toll Control Building. However, the construction works at Toll Control Building, Ventilation Plant Room, Maintenance Depot and Administration Building were mainly Electrical and Mechanical Works and Architectural Builders Work and Finishes which are considered not major dust generating works (refer to <i>Appendix A</i>). • No major dust generating activities i.e. excavation works was conducted on 28 November 2019. • Dust suppression measures i.e. watering were applied on site nearby Administration Building to prevent dust generation (refer to <i>Appendix B</i>). • During ET's site inspection on 29 November 2019, the work area at Maintenance Depot and Administration Building were mainly paved. No dust generating activities/dust emission was observed (refer to <i>Appendix C</i>) <p>Based on the above, the exceedances are unlikely to be due to the Contract.</p>
Actions Taken / To Be Taken	<p>The Contractor has been reminded to review the watering frequency and apply additional watering on the dry area during the dry season in particular. The Contractor has been reminded to ensure all dust suppression measures are implemented at the site area. The ET will monitor for future trends in exceedances.</p>
Remarks	<p>The monitoring results on 28 November 2019 and locations of air quality monitoring stations are attached.</p>

Results of Air Quality Monitoring

Project	Contract	Date (yyyy-mm-dd)	Station	Time	Parameter	Results	Unit
TMCLKL	HY/2012/08	2019-11-28	AQMS1	8:49:00	1-hour TSP	187	ug/m3
TMCLKL	HY/2012/08	2019-11-28	AQMS1	9:51:00	1-hour TSP	161	ug/m3
TMCLKL	HY/2012/08	2019-11-28	AQMS1	10:53:00	1-hour TSP	143	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR1	8:38:00	1-hour TSP	577	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR1	9:40:00	1-hour TSP	452	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR1	10:42:00	1-hour TSP	385	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR10	8:00:00	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR10	9:02:00	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR10	10:04:00	1-hour TSP	143	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR5	8:02:00	1-hour TSP	534	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR5	9:27:00	1-hour TSP	500	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR5	10:29:00	1-hour TSP	299	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR6	8:13:00	1-hour TSP	216	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR6	9:15:00	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR6	10:17:00	1-hour TSP	175	ug/m3
TMCLKL	HY/2012/08	2019-11-28	AQMS1	11:55:00	24-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR1	11:44:00	24-hour TSP	207	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR10	11:06:00	24-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR5	11:31:00	24-hour TSP	131	ug/m3
TMCLKL	HY/2012/08	2019-11-28	ASR6	11:19:00	24-hour TSP	109	ug/m3

Note:

Indicates Exceedance of Action Level

Indicates Exceedance of Limit Level

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)
19/11/28	0:00	0	-
19/11/28	1:00	0.4	346
19/11/28	2:00	1.8	2
19/11/28	3:00	2.2	331
19/11/28	4:00	0.9	20
19/11/28	5:00	1.3	341
19/11/28	6:00	1.3	339
19/11/28	7:00	1.3	357
19/11/28	8:00	2.2	24
19/11/28	9:00	2.7	14
19/11/28	10:00	2.2	34
19/11/28	11:00	1.8	344
19/11/28	12:00	1.8	311
19/11/28	13:00	1.8	310
19/11/28	14:00	1.8	336
19/11/28	15:00	1.3	341
19/11/28	16:00	1.8	337
19/11/28	17:00	1.3	340
19/11/28	18:00	1.8	338
19/11/28	19:00	1.8	335
19/11/28	20:00	2.2	3
19/11/28	21:00	2.2	20
19/11/28	22:00	2.7	24
19/11/28	23:00	2.2	30

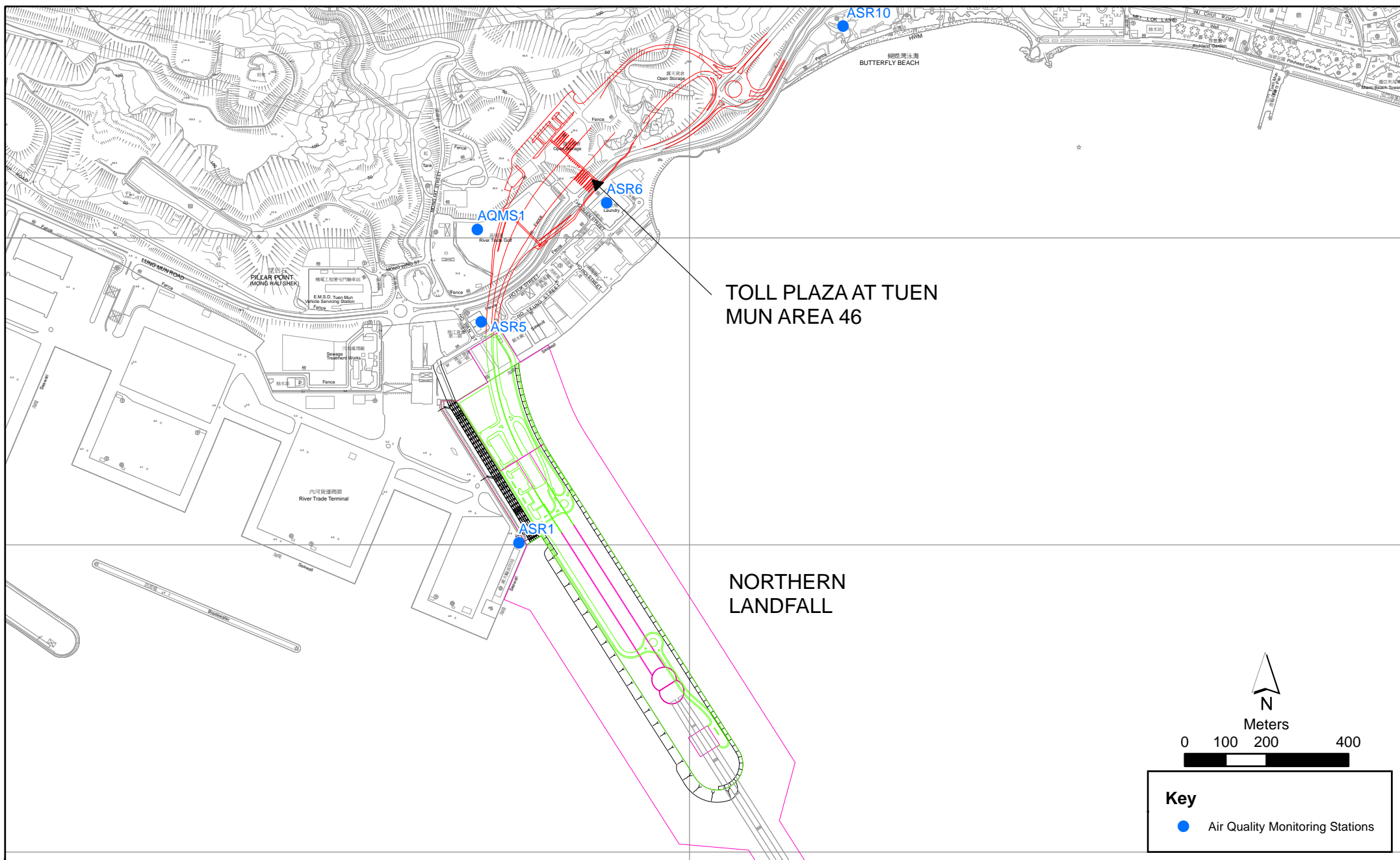


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring
(Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
Northern Connection Sub-sea Tunnel Section)

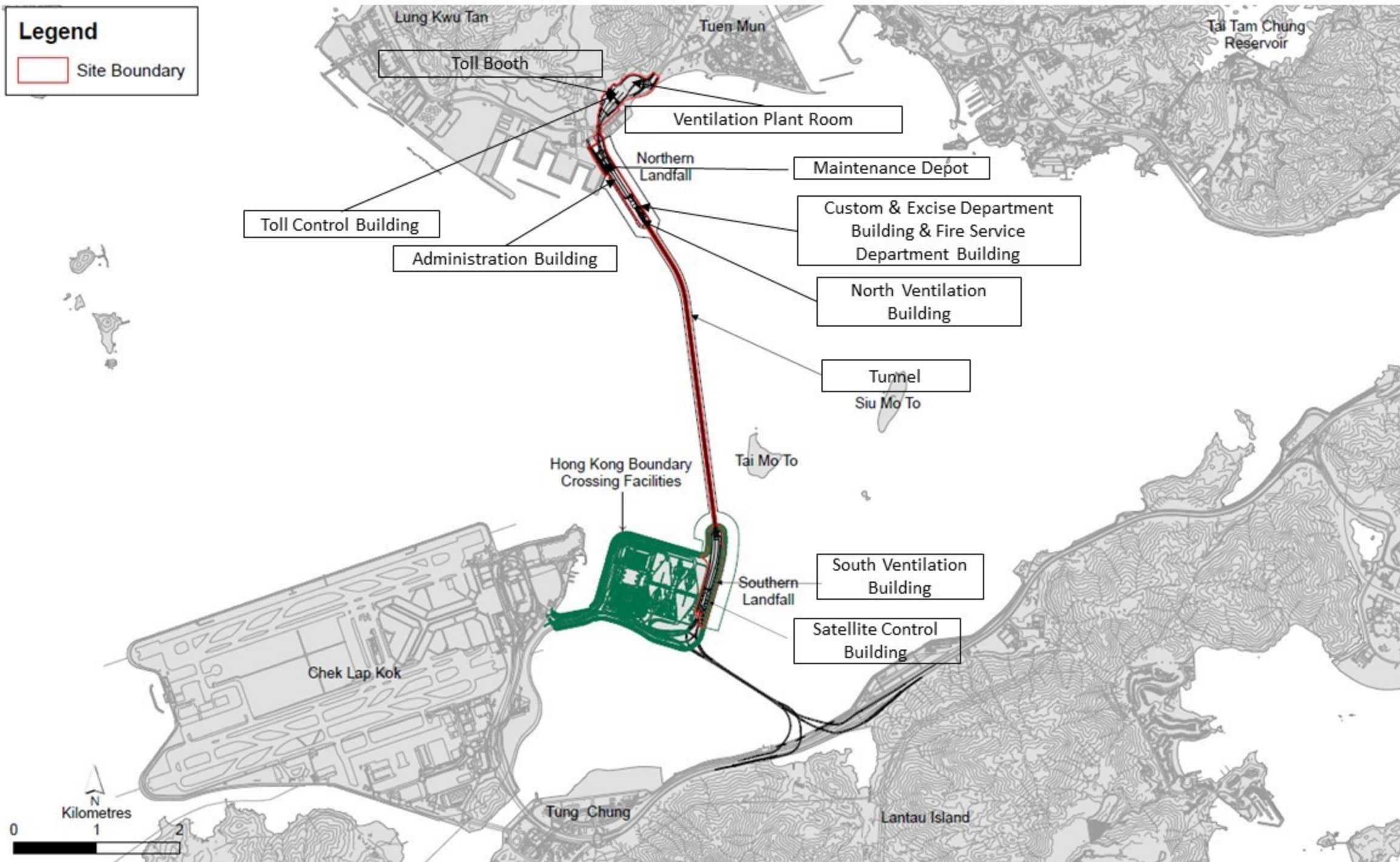
File: T:\GIS\CONTRACT\0212330\Mxd\0212330_ASR_for_Enhanced_TSP_monitoring.mxd
Date: 21/2/2014

Environmental
Resources
Management



Legend

Site Boundary



Appendix A

Site Photo



Photo 1 - Construction works at Administration Building



Photo 2 - Construction works at Maintenance Depot



Photo 3 - Construction works at Toll Control Building



Photo 4 - Watering was applied at Administration Building

Appendix B

Watering Record on 28
November 2019

28 th Nov		Location AdB	
Period		Time	Sign
7-8			
8-9	/	8:02	Jerry
9-10	/	9:00	Jerry
10-11	/	10:00	Jerry
11-12	//	10 11:04 11:50	Jerry
12-13	/	12:55	Jerry
13-14	/	13:40	Jerry
14-15	/	14:30	Jerry
15-16	//	15:10 15:50	Jerry
16-17	/	16:30	Jerry
17-18	/	17:30	Jerry
18-19			

Appendix C

ET site inspection on 29
November 2019



Photo 1 – Site condition at Maintenance Depot



Photo 2 – Site condition at Administration Building