

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 | 2 | 45 |
| | Limit | 0 | 9 |
| 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)

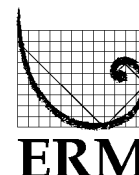
From ERM- Hong Kong, Limited

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 26 June 2020

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_13June2020_1hrTSP_Station ASR6

One (1) exceedance was recorded on 13 June 2020.

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_13June2020_1hrTSP_Station ASR6 [Total No. of Exceedances = 1] | |
| Date | 13 June 2020 (Measured) 26 June 2020 (Results obtained from ENPO Website) | |
| Monitoring Station | ASR6 | |
| 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 <i>Appendix A</i> (Data are source from Contract No. HY/2012/08). | |
| Works Undertaken (at the time of monitoring event) | Works undertaken under this Contract on 13 June 2020 included <ul style="list-style-type: none"> Defect rectification at Main 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"> With reference to the recorded wind direction (ranged between 32° and 95°, blowing from a north-easterly/easterly direction) and wind speed (ranged between 0.9 m/s and 1.8 m/s) when exceedance recorded, ASR6 is located downstream to the construction works at Main Control Building. However, works undertaken at Main Control Building were mainly minor defect rectification works which are considered not major dust generating works (refer to <i>Appendix B</i> and <i>C</i>). The construction area under this Contract were mainly paved. The remaining unpaved area are seated by machines such as crane machines and generators or used as material storage area with proper cover of tarpaulin sheet. The exposed area are suppressed/covered. Dust are not anticipated. <p>Based on the above, the exceedance is unlikely to be due to the Contract.</p> | |
| Actions Taken / To Be Taken | No immediate action is considered necessary. The ET will monitor for future trends in exceedances. | |
| Remarks | The monitoring results on 13 June 2020, locations of air quality monitoring stations and wind data are attached (refer to <i>Appendix A</i>). | |

Appendix A

Results of Air Quality
Monitoring, Meteorological
Data and Locations of Air
Quality Monitoring Stations

| Air quality monitoring results on 13/6/2020 | | | | | | | | |
|---|------------|------------|---------|---------|------------|-------------|---------|-------|
| Project | Contract | Date | Station | Weather | Start time | Parameters | Results | Unit |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR10 | Sunny | 8:15:00 | 1-hour TSP | 46 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR10 | Sunny | 9:17:00 | 1-hour TSP | 33 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR10 | Sunny | 10:19:00 | 1-hour TSP | 40 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR6 | Sunny | 8:26:00 | 1-hour TSP | 101 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR6 | Sunny | 9:28:00 | 1-hour TSP | 52 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR6 | Sunny | 10:30:00 | 1-hour TSP | 357 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR5 | Sunny | 8:38:00 | 1-hour TSP | 195 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR5 | Sunny | 9:40:00 | 1-hour TSP | 66 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR5 | Sunny | 10:42:00 | 1-hour TSP | 135 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR1 | Sunny | 8:50:00 | 1-hour TSP | 102 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR1 | Sunny | 9:52:00 | 1-hour TSP | 56 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR1 | Sunny | 10:54:00 | 1-hour TSP | 44 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | AQMS1 | Sunny | 9:01:00 | 1-hour TSP | 69 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | AQMS1 | Sunny | 10:03:00 | 1-hour TSP | 40 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | AQMS1 | Sunny | 11:05:00 | 1-hour TSP | 51 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR10 | Sunny | 11:21:00 | 24-hour TSP | 20 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR6 | Sunny | 11:32:00 | 24-hour TSP | 27 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR5 | Sunny | 11:44:00 | 24-hour TSP | 40 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | ASR1 | Sunny | 11:56:00 | 24-hour TSP | 33 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-06-13 | AQMS1 | Sunny | 12:07:00 | 24-hour TSP | 27 | ug/m3 |

Action level exceedance

Limit level exceedance

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) |
|------------------------|---------------------|------------------------------------|--|
| 20/06/13 | 0:00 | 0.9 | 57 |
| 20/06/13 | 1:00 | 0 | 64 |
| 20/06/13 | 2:00 | 0 | 79 |
| 20/06/13 | 3:00 | 0 | 311 |
| 20/06/13 | 4:00 | 0.9 | 355 |
| 20/06/13 | 5:00 | 0 | 271 |
| 20/06/13 | 6:00 | 0 | 303 |
| 20/06/13 | 7:00 | 0 | 145 |
| 20/06/13 | 8:00 | 0.9 | 132 |
| 20/06/13 | 9:00 | 0.9 | 138 |
| 20/06/13 | 10:00 | 1.8 | 32 |
| 20/06/13 | 11:00 | 0.9 | 95 |
| 20/06/13 | 12:00 | 0.4 | 3 |
| 20/06/13 | 13:00 | 0.9 | 159 |
| 20/06/13 | 14:00 | 0.9 | 125 |
| 20/06/13 | 15:00 | 1.3 | 118 |
| 20/06/13 | 16:00 | 2.2 | 101 |
| 20/06/13 | 17:00 | 2.7 | 63 |
| 20/06/13 | 18:00 | 2.2 | 45 |
| 20/06/13 | 19:00 | 2.2 | 19 |
| 20/06/13 | 20:00 | 2.2 | 12 |
| 20/06/13 | 21:00 | 1.8 | 50 |
| 20/06/13 | 22:00 | 1.8 | 41 |
| 20/06/13 | 23:00 | 2.2 | 54 |

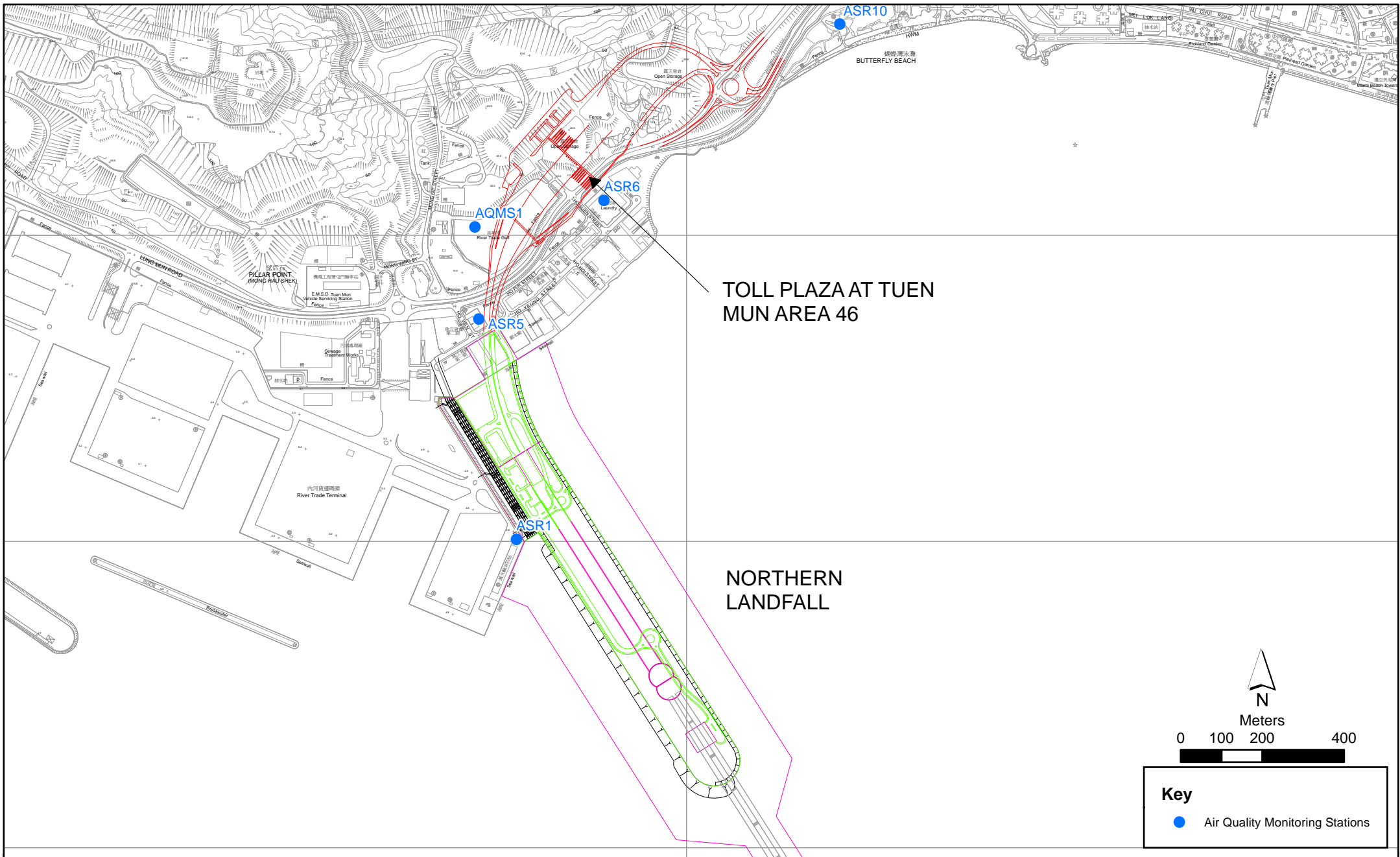


Figure 2.1

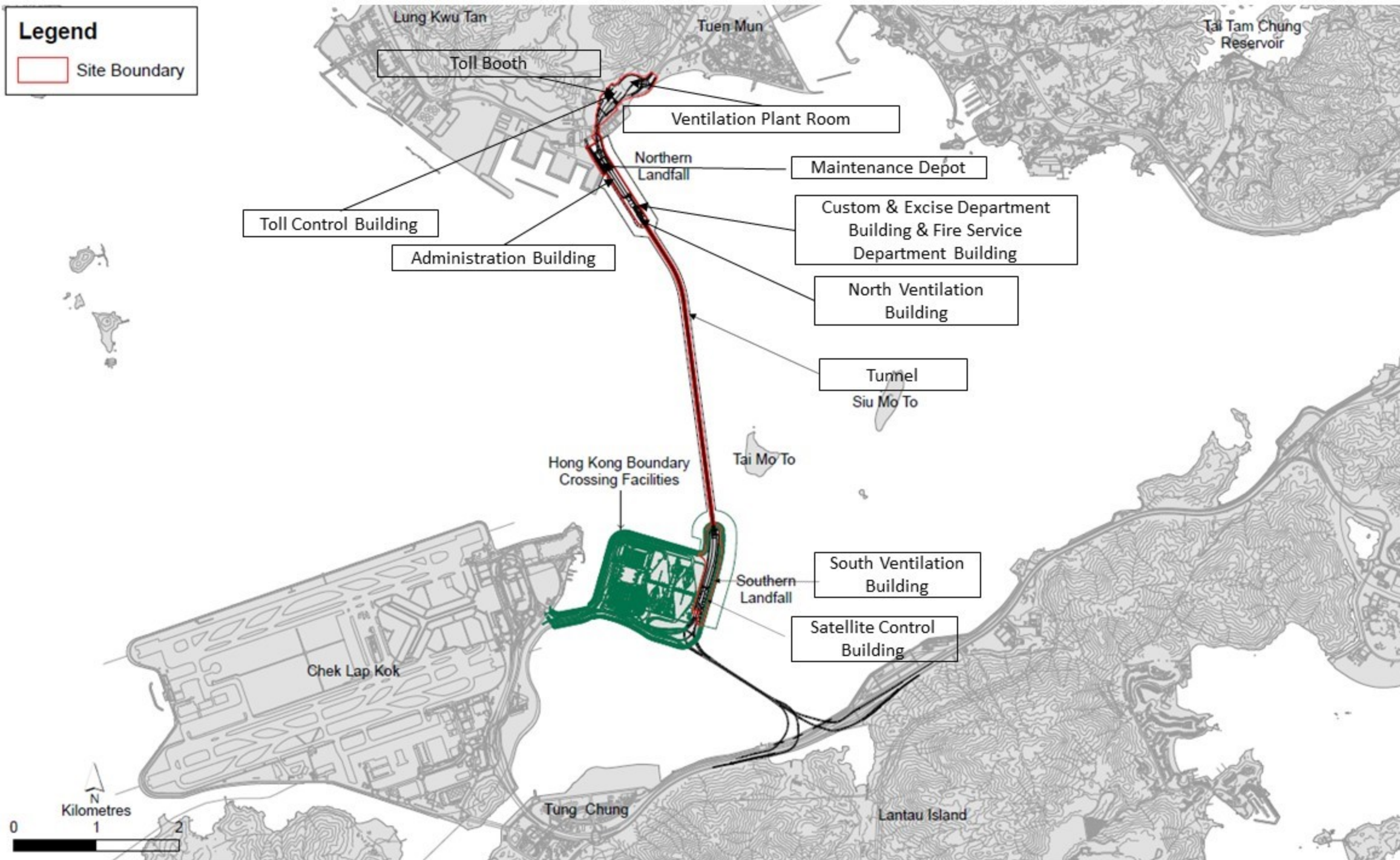
Air Quality Monitoring Stations for the Enhanced TSP Monitoring
 (Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
 Northern Connection Sub-sea Tunnel Section)

Appendix B

Works Locations

Legend

Site Boundary



Appendix C

Site Photo



Photo 1 - Construction works at Main Control Building



Photo 2 - Work Area nearby Main Control Building

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To Ramboll Hong Kong Limited (ENPO)

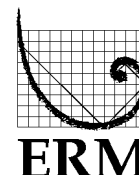
From ERM- Hong Kong, Limited

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 19 August 2020

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_12August2020_1hrTSP_Station ASR1

One (1) exceedance was recorded on 12 August 2020.

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. | Action Level Exceedance 0463091_12August2020_1hrTSP_Station ASR1 [Total No. of Exceedances = 1] | |
| Date | 12 August 2020 (Measured) 19 August 2020 (Results obtained from ENPO Website) | |
| 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 <i>Appendix A</i> (Data are source from Contract No. HY/2012/08). | |
| Works Undertaken (at the time of monitoring event) | <p>Works undertaken under this Contract on 12 August 2020 included</p> <ul style="list-style-type: none"> • 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 and Finishes at Customs and Excise Department Building; and • Handover Inspection at North 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"> • With reference to the recorded wind direction (ranged between 44° and 322°), blowing from a north-easterly/north-westerly direction) and wind speed (ranged between 0 and 0.9 m/s) when exceedance recorded, ASR1 is located downstream to Fire Services Department Building, Customs and Excise Department Building and North Ventilation Building. However, only inspection works, electrical and mechanical works and architectural builder's work and finishes were conducted which are considered not major dust generating works (refer to <i>Appendix B</i> and <i>C</i>). • The construction area under this Contract were mainly paved. The remaining unpaved area are seated by machines such as crane machines and generators or used as material storage area with proper cover of tarpaulin sheet. The exposed area are suppressed/covered. Dust are not anticipated. <p>Based on the above, the exceedance is unlikely to be due to the Contract.</p> | |
| Actions Taken / To Be Taken | No immediate action is considered necessary. The ET will monitor for future trends in exceedances. | |
| Remarks | The monitoring results on 12 August 2020, locations of air quality monitoring stations and wind data are attached (refer to <i>Appendix A</i>). | |

Appendix A

Results of Air Quality
Monitoring, Meteorological
Data and Locations of Air
Quality Monitoring Stations

| Air quality monitoring results on 12/8/2020 | | | | | | | | |
|---|------------|------------|---------|---------|------------|-------------|---------|-------|
| Project | Contract | Date | Station | Weather | Start time | Parameters | Results | Unit |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR10 | Sunny | 8:00:00 | 1-hour TSP | 31 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR10 | Sunny | 9:02:00 | 1-hour TSP | 33 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR10 | Sunny | 10:04:00 | 1-hour TSP | 18 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR6 | Sunny | 8:15:00 | 1-hour TSP | 113 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR6 | Sunny | 9:17:00 | 1-hour TSP | 46 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR6 | Sunny | 10:19:00 | 1-hour TSP | 35 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR5 | Sunny | 8:30:00 | 1-hour TSP | 200 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR5 | Sunny | 9:32:00 | 1-hour TSP | 126 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR5 | Sunny | 10:34:00 | 1-hour TSP | 71 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR1 | Sunny | 8:40:00 | 1-hour TSP | 352 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR1 | Sunny | 9:42:00 | 1-hour TSP | 97 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR1 | Sunny | 10:44:00 | 1-hour TSP | 38 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | AQMS1 | Sunny | 8:50:00 | 1-hour TSP | 106 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | AQMS1 | Sunny | 9:52:00 | 1-hour TSP | 37 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | AQMS1 | Sunny | 10:54:00 | 1-hour TSP | 57 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR10 | Sunny | 11:06:00 | 24-hour TSP | 22 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR6 | Sunny | 11:21:00 | 24-hour TSP | 27 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR5 | Sunny | 11:36:00 | 24-hour TSP | 43 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | ASR1 | Sunny | 11:46:00 | 24-hour TSP | 40 | ug/m3 |
| TMCLKL | HY/2012/08 | 2020-08-12 | AQMS1 | Sunny | 11:56:00 | 24-hour TSP | 41 | ug/m3 |

Action level exceedance

Limit level exceedance

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) |
|------------------------|---------------------|------------------------------------|--|
| 20/08/12 | 0:00 | 2.7 | 81 |
| 20/08/12 | 1:00 | 2.2 | 90 |
| 20/08/12 | 2:00 | 2.7 | 138 |
| 20/08/12 | 3:00 | 1.8 | 132 |
| 20/08/12 | 4:00 | 0.9 | 49 |
| 20/08/12 | 5:00 | 0.9 | 65 |
| 20/08/12 | 6:00 | 1.8 | 358 |
| 20/08/12 | 7:00 | 0 | 324 |
| 20/08/12 | 8:00 | 0 | 322 |
| 20/08/12 | 9:00 | 0.9 | 44 |
| 20/08/12 | 10:00 | 0.9 | 36 |
| 20/08/12 | 11:00 | 1.3 | 65 |
| 20/08/12 | 12:00 | 1.8 | 271 |
| 20/08/12 | 13:00 | 1.3 | 36 |
| 20/08/12 | 14:00 | 2.2 | 87 |
| 20/08/12 | 15:00 | 2.7 | 95 |
| 20/08/12 | 16:00 | 3.1 | 88 |
| 20/08/12 | 17:00 | 1.8 | 93 |
| 20/08/12 | 18:00 | 2.2 | 101 |
| 20/08/12 | 19:00 | 1.8 | 101 |
| 20/08/12 | 20:00 | 2.2 | 92 |
| 20/08/12 | 21:00 | 2.2 | 96 |
| 20/08/12 | 22:00 | 1.8 | 93 |
| 20/08/12 | 23:00 | 1.3 | 100 |

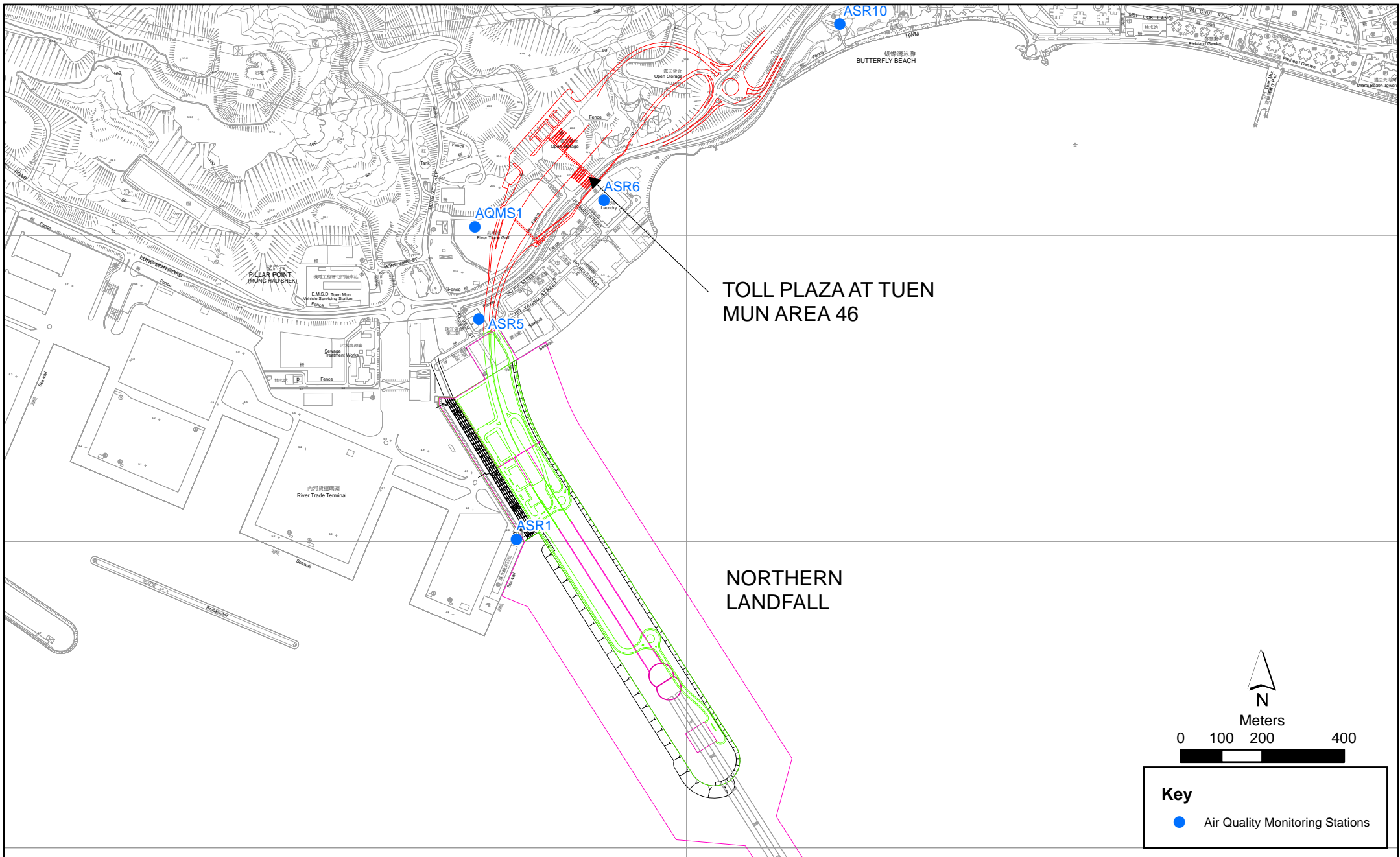


Figure 2.1

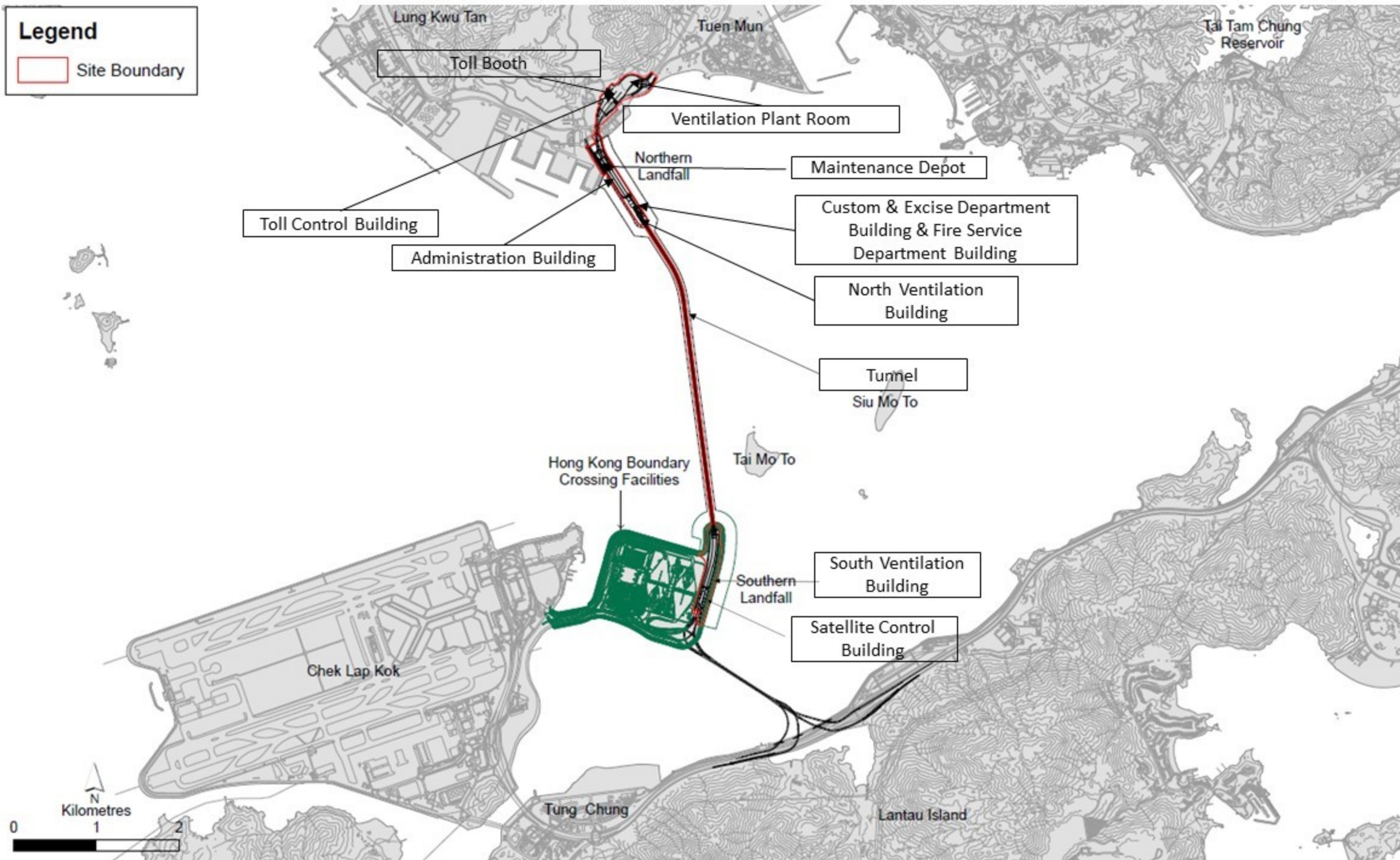
Air Quality Monitoring Stations for the Enhanced TSP Monitoring
 (Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
 Northern Connection Sub-sea Tunnel Section)

Appendix B

Works Locations

Legend

Site Boundary



Appendix C

Site Photo



Photo 1 - Fire Services Department Building & Customs and Excise Department Building



Photo 2 -North Ventilation Building