

The EIAO Register Office,  
Environmental Protection Department  
27th floor, Southorn Centre,  
130 Hennessy Road, Wan Chai,  
Hong Kong

Your ref :

Our ref.: C10009-COR-ENVM-ENV-013162

Attention: Miss Queenie Ng

13 March, 2015

**BY HAND**

Dear Miss Ng,

**Kwun Tong Line Extension**  
**Environmental Permit No. EP-399/2010/C**  
**Environmental Permit Condition 5.4 – Monthly EM&A Report (February 2015)**

In compliance with Condition 5.4 of the captioned EP, please find attached 5 hard copies and 1 electronic copy of the monthly EM&A Report (February 2015) for your perusal. The report has been certified by the ET Leader and verified by the IEC.

Should you have any queries regarding the above, please feel free to contact our Edmond Wu (Tel: 39757607 or 3441 3148).

Yours sincerely,



Richard Kwan  
Environment Manager

Encl.

c.c. Arup - Attn: Mr. Jacky Chan (w/o encl.) - by fax: 2268-3950

RK/FW/EW/AS/bl

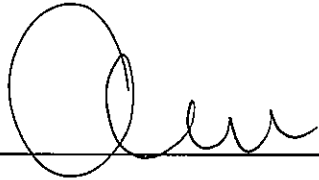
Letter to EPD, Attn: Miss Queenie Ng  
Ref. No.: C10009-COR-ENVM-ENV-013162  
Page 2

|        |            |   |              |            |
|--------|------------|---|--------------|------------|
| b.c.c. | CM-Tunnels | - | Kenny Kong   | (w/ encl.) |
|        | CM-Civil   | - | Nelson Yeung | (w/ encl.) |
|        | SDME-KTE   | - | Bosco Yu     | (w/ encl.) |
|        | SLE-KTE    | - | Richard Chui | (w/ encl.) |

MTR Corporation Limited

Kwun Tong Line Extension (KTE)

Monthly EM&A Report (February 2015)

Verified by:  \_\_\_\_\_


Position: Independent Environmental Checker

Date: 13 Mar 2015

MTR Corporation Limited

Kwun Tong Line Extension (KTE)

Monthly EM&A Report (February 2015)

Certified by:  \_\_\_\_\_

Position: Environmental Team Leader

Date: 13 MAR 2015

# Table of Contents

|   |    |
|---|----|
| <b>EXECUTIVE SUMMARY</b> .....  | 3  |
| <b>1 INTRODUCTION</b> .....   | 5  |
| 1.1 <i>Project Background</i> .....   | 5  |
| 1.2 <i>Project Programme</i> .....  | 5  |
| 1.3 <i>Coverage of the EM&amp;A Report</i> .....                                      | 5  |
| <b>2 PROJECT INFORMATION</b> .....  | 5  |
| 2.1 <i>Project Management Organization and Contact Details</i> .....                  | 5  |
| 2.2 <i>Project Works Sites and Areas and Environmental Monitoring Locations</i> ..... | 7  |
| 2.3 <i>Summary of EM&amp;A Requirements</i> .....                                     | 8  |
| 2.4 <i>Implementation of Environmental Mitigation Measures</i> .....                  | 9  |
| 2.5 <i>Construction Activities in the Reporting Month</i> .....                       | 9  |
| 2.6 <i>Construction Activities for the Coming Month</i> .....                         | 10 |
| <b>3 IMPACT MONITORING</b> .....  | 12 |
| 3.1 <i>Air Quality</i> .....  | 12 |
| 3.2 <i>Noise</i> .....  | 14 |
| 3.3 <i>Action taken in Event of Exceedance</i> .....                                  | 16 |
| <b>4 LANDSCAPE AND VISUAL</b> .....   | 16 |
| 4.1 <i>Monitoring Requirements</i> .....  | 16 |
| 4.2 <i>Audit Results</i> .....  | 16 |
| 4.3 <i>Action Taken in Event of Non-Conformance</i> .....                             | 17 |
| <b>5 WASTE MANAGEMENT</b> .....   | 17 |
| <b>6 WATER QUALITY</b> .....  | 18 |
| <b>7 RECORD OF ENVIRONMENTAL COMPLAINTS</b> .....                                     | 18 |
| <b>8 RECORD OF NON-COMPLIANCES</b> .....  | 20 |
| <b>9 NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS</b> .....                    | 21 |
| <b>10 STATUS OF STATUTORY SUBMISSIONS</b> .....                                       | 21 |
| 10.1 <i>Submissions required under Environmental Permit</i> .....                     | 21 |
| 10.2 <i>Statutory Permits and Licenses</i> .....                                      | 24 |
| <b>11 SITE INSPECTIONS</b> .....  | 25 |
| 11.1 <i>Observations</i> .....  | 25 |
| 11.2 <i>Other Notable Events</i> .....  | 26 |
| <b>12 FUTURE KEY ISSUES</b> .....   | 26 |
| 12.1 <i>Key Issues for the Coming Month</i> .....                                     | 26 |
| 12.2 <i>Effectiveness and Efficiency of Mitigation Measures</i> .....                 | 26 |
| <b>13 CONCLUSIONS</b> .....   | 27 |

## Figures and Tables

|                 |  |
|-----------------|--|
| <i>Figure 1</i> | <i>Project Organization</i>  |
| <i>Table 1a</i> | <i>Contact List of Key Personnel for Project Management</i>        |
| <i>Table 1b</i> | <i>Contact List of Environmental Authority</i>                     |
| <i>Table 2</i>  | <i>Summary of KTE Project Work Sites and Areas</i>                 |
| <i>Table 3</i>  | <i>Summary of Impact Air Quality and Noise Monitoring Stations</i> |
| <i>Table 4</i>  | <i>Summary of Impact EM&amp;A Requirements</i>                     |
| <i>Table 5</i>  | <i>Summary of 24-hour TSP Levels Monitoring Results</i>            |
| <i>Table 6</i>  | <i>Summary of Construction Noise Monitoring Results</i>            |
| <i>Table 7</i>  | <i>Statistics of Waste Disposal from KTE</i>                       |
| <i>Table 8</i>  | <i>Summary of Complaint Received</i>                               |
| <i>Table 9</i>  | <i>Summary of Summons and Successful Prosecution</i>               |
| <i>Table 10</i> | <i>Summary of Submission in accordance with EP Conditions</i>      |
| <i>Table 11</i> | <i>Summary of Environmental Permits and Licenses</i>               |
| <i>Table 12</i> | <i>Summary of Environmental Findings from Site Inspections</i>     |

## List of Appendices

[Appendix A - Figures](#)

[Appendix B - Environmental Quality Performance Limits](#)

[Appendix C - Event Action Plans](#)

[Appendix D - Implementation of Environmental Mitigation Measures](#)

[Appendix E - Calibration Details](#)

[Appendix F - Impact Monitoring Graphical Plots \(Air Quality Monitoring Results\)](#)

[Appendix F - Impact Monitoring Graphical Plots \(Impact Noise Monitoring Results\)](#)

[Appendix G - Monitoring Schedule for the Present and Next Reporting Period](#)

[Appendix H – Complaint Report](#)

## ***EXECUTIVE SUMMARY***

The Kwun Tong Line Extension (KTE) Project was awarded to the respective contractors in late May 2011. The EM&A programme for the Kwun Tong Line Extension (KTE) Project commenced on 20 June 2011, the commencement date of construction of the Project. This is the 44<sup>th</sup> monthly Environmental Monitoring and Audit (EM&A) Report for Kwun Tong Line Extension (KTE) Project. The Report presents the results of EM&A works and the impact monitoring for the construction works undertaken during the period of 1 February 2015 to 28 February 2015. The major construction activities in the reporting period included bulk excavation, adit and tunnel excavation, concreting works, superstructure works and track related installation works.

No exceedance was recorded for TSP and noise monitoring in this reporting month.

One complaint incident regarding the light nuisance at WAB was referred by EPD on 2 February 2015. Details of the complaint case refer to Section 7 of this report.

Regular joint site inspections, led by the ER with the presence of representatives from the Contractors and Environmental Team, were conducted on a weekly basis to monitor Contractors' performance on environmental management and implementation of environmental pollution control and mitigation measures for the Project. No non-conformance was identified in the reporting period. Environmental concerned items raised during site inspections have been followed up by the respective contractors in a responsible manner.

Future key issues envisaged in the coming month include noise and dust emission, and site water control issues at work sites. ET will continue the implementation of EM&A programme in accordance to the EM&A manual. Details of future key issues produced by construction activities are given in Section 12 of the report.

A new Environmental Permit (EP-399/2010/C), which is being used for the KTE Project, was granted by EPD dated 26 January 2015.

# 1 INTRODUCTION

## 1.1 Project Background

MTR Corporation Limited (MTRCL) proposes to build a new railway line, the Kwun Tong Line Extension (KTE), otherwise referred to as ‘the Project’, which is an extension of the existing Kwun Tong Line from Yau Ma Tei Station to Whampoa area. The route length of the fully underground KTE is approximately 2.6 km with two new stations namely Ho Man Tin Station (HOM) and Whampoa Station (WHA), and a new ancillary ventilation building at Wylie Road.

## 1.2 Project Programme

The Kwun Tong Line Extension (KTE) Project was awarded to the respective Contractors Nishimatsu Construction Co. Ltd (NCC) and Chun Wo-Hip Hing Joint Venture (CHJV) for construction in late May 2011. The commencement of construction was on 20 June 2011. The construction of the KTE is expected to complete in 2015.

NCC, as the Contractor of Contract 1001, is responsible for the construction of alignment link from the existing Yau Ma Tei Station to Wuhu Street at Whampoa and the new Ho Man Tin Station as well as the ancillary ventilation building at Wylie Road. CHJV, as the Contractor of Contract 1002, is responsible for the construction of the underground Whampoa Station and a platform & overrun tunnel.

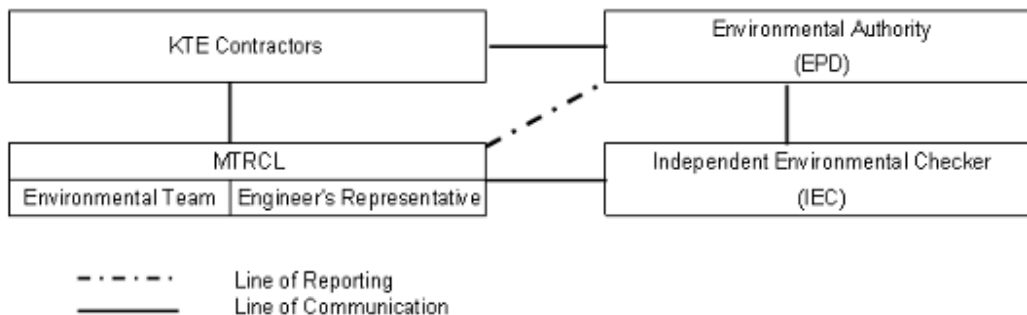
## 1.3 Coverage of the EM&A Report

The EM&A programme for the Kwun Tong Line Extension (KTE) Project commenced on 20 June 2011. This is the 44<sup>th</sup> Monthly Environmental Monitoring and Audit (EM&A) Report for the Project. The Report presents the results of EM&A works and the impact monitoring for the construction works undertaken by respective Contractors during the period of 1 February 2015 to 28 February 2015.

# 2 PROJECT INFORMATION

## 2.1 Project Management Organization and Contact Details

The KTE Project organization chart is presented in Figure 1. Contacts of key environmental personnel of the Project are shown in Tables 1a and 1b respectively.



**Figure 1.** Project Organization



**Table 1a Contact List of Key Personnel for Project Management**

| <b>Organization</b>                      | <b>Name</b>  | <b>Telephone</b> |
|--|--------------|------------------|
| <b>Engineer's Representative</b>         |              |                  |
| Project Manager                          | James Chow   | 2163 6283        |
| Construction Manager                     | Kenny Kong   | 3441 3101        |
| Construction Manager                     | Nelson Yeung | 3940 3398        |
| <b>Independent Environmental Checker</b> |              |                  |
| Consultant – Arup                        | Jacky Chan   | 3447 6292        |
| <b>Environmental Team</b>                |              |                  |
| Environmental Team Leader                | Richard Kwan | 2688 1179        |
| <b>Contact 1001 Contractor</b>           |              |                  |
| Project Manager                          | Satoshi Endo | 6907 8277        |
| Environmental Officer                    | Ricky Tse    | 9221 0368        |
| <b>Contact 1002 Contractor</b>           |              |                  |
| Project Manager                          | Eric Wu      | 2743 3711        |
| Environmental Officer                    | Leo Cheng    | 35094109         |
| Environmental Officer                    | Andy Choy    | 35094104         |

**Table 1b Contact List of Environmental Authority**

| <b>Organization</b>                        | <b>Name</b> | <b>Telephone</b> |
|--|-------------|------------------|
| <b>Environmental Protection Department</b> |             |                  |
| Sr Env Protection Offr(Metro Assessment) 2 | Colin Keung | 2835 1125        |
| Sr Env Protection Offr(Regional E) 6       | PS Ng       | 2150 8002        |
| Sr Env Protection Offr(Regional E) 5       | Alfred Ng   | 2117 7538        |
| Sr Env Protection Offr(Regional E) 4       | Aaron Lui   | 2117 7502        |

## 2.2 Project Works Sites and Areas and Environmental Monitoring Locations

The KTE Project works sites and areas are summarized in Table 2 below and shown in [Appendix A](#) Figures 1 to 8. The locations of environmental monitoring stations are indicated in [Appendix A](#) Figures 2 to 8. Table 3 shows the details of the active monitoring stations as reported in Sections 3.1 and 3.2.

**Table 2 Summary of KTE Project Works Sites and Areas**

| <i>Contract 1001 Works Sites and Areas</i> |   |
|--|---|
| Works Site A                               | Gascoigne Road Rest Garden  |
| Works Site B                               | Underground Tunnel between Yau Ma Tei Station and Wylie Road Ancillary Building |
| Works Site C                               | Wylie Road Ancillary Building   |
| Works Site D                               | Underground Tunnel between Wylie Road Ancillary Building and Ho Man Tin Station |
| Works Site E                               | Ho Man Tin Station  |
| Works Site F                               | Fat Kwong Street Playground   |
| Works Site G                               | Underground Tunnel between Ho Man Tin Station and Whampoa Station               |
| Works Area J#3                             | Finger Pier Barging Point   |
| Works Area K#4                             | Tseung Kwan O Area 137 Magazine Site  |

| <i>Contract 1002 Works Sites and Areas</i> |                                |
|--|--------------------------------|
| Works Site H                               | Whampoa Station West Concourse |
| Works Site I                               | Whampoa Station East Concourse |
| Works Area L                               | Hung Lok Road Site Office      |

**Table 3 Summary of Impact Air Quality and Noise Monitoring Stations**

| <b>ID</b>    | <b>Monitoring Station</b>                                     |
|--------------|---|
| <b>Air</b>   |   |
| CD1a##       | Methodist School  |
| CD2a #       | PolyU Homantin Student Halls of Residence                     |
| CD3a         | No. 238 Chatham Road North                                    |
| CD4a         | Ka Fu Building, Whampoa Estate                                |
| CD5          | Fung Kei Millennium Primary School                            |
| CD6a#3       | Site boundary of Finger Pier adjacent to Harbourfront Horizon |
| <b>Noise</b> |   |
| CN1          | Alhambra Building   |
| CN2          | Methodist College   |
| CN3a#2       | Methodist School  |
| CN4a #1      | PolyU Homantin Student Halls of Residence                     |
| CN5*         | Caritas Bianchi College of Careers                            |
| CN6          | Lok Do Building   |

| <b>ID</b> | <b>Monitoring Station</b>                           |
|-----------|---|
| CN7       | Block Y, Ki Fu Building, Whampoa Estate             |
| CN8       | Block I, Lok Wah Building, Whampoa Estate           |
| CN9       | Block 13, Bauhinia Mansions, Whampoa Garden Site 11 |
| CN10      | Block 1, Oak Mansions, Whampoa Garden Site 5        |
| CN11      | Fung Kei Millennium Primary School                  |
| CN12      | GCEPSA Whampoa Primary School                       |

Notes:

\*: Alternative monitoring locations were proposed in the Alternative Proposal which was submitted on 14 Apr 2011 and agreed by the Environmental Protection Department on 29 Apr 2011. The noise monitoring location at Caritas Bianchi College of Careers, which has been relocated to Tiu Keng Leng with the original premise unoccupied and inaccessible, is suspended until the premises are occupied by similar educational use. No noise monitoring will be conducted for CN5.

#1: Access to the original monitoring stations CD2 and CN4 (Yee Fu Building) has been denied by the management office since December 2012 and MTRCL proposed PolyU Homantin Student Halls of Residence as alternative monitoring stations with no objection from EPD on 28 February 2013.

#2: Access to the original monitoring stations CD1 and CN3 (Queen Elizabeth Hospital – Specialist Clinic) has been denied for demolition since end of July 2013 and MTRC proposed Methodist School at Wylie Road as alternative monitoring stations with no objection from EPD on 4 September 2013.

#3: As all KTE related construction works at Finger Pier was completed by end of December 2013 and the site will be handed over to other project under MTR, the CD6a has been terminated starting from January 2014. EPD has no objection on the termination proposal on 29 January 2014.

#4: All KTE related construction works at TKO Magazine site was completed at the end of December 2014 and the site had been handed over to other project under MTR.

### 2.3 Summary of EM&A Requirements

The EM&A programme mainly requires environmental monitoring for air quality, noise, landscape and visual, water quality and waste management as specified in the EM&A Manual.

A summary of impact EM&A requirements as applicable to this EM&A Report is presented in Table 4 below.

**Table 4 Summary of Impact EM&A Requirements**

| <b>Parameters</b> | <b>Descriptions</b> | <b>Locations</b> | <b>Monitoring Frequencies</b> | <b>Duration</b>    |
|-------------------|---------------------|------------------|-------------------------------|--------------------|
| Air Quality       | 24-hr TSP           | Shown in Table 3 | Once per 6 days               | Construction stage |
| Noise             | $L_{eq(30min)}$     | Shown in Table 3 | Once a week                   | Construction stage |

| Parameters              | Descriptions                  | Locations          | Monitoring Frequencies                             | Duration           |
|-------------------------|-------------------------------|--------------------|--|--------------------|
| Landscape and visual    | On-Site Audit                 | Active Works Sites | Bi-weekly  | Construction stage |
| Waste                   | On-Site Audit                 | Active Works Sites | Weekly   | Construction stage |
| Wastewater              | On-Site Audit                 | Active Works Sites | Weekly and in accordance to the discharge licences | Construction stage |
| General Site Conditions | Environmental Site Inspection | Active Works Sites | Weekly   | Construction stage |

Environmental Quality Performance Limits for air quality and noise are shown in [Appendix B](#). The Event Action Plan for air quality and noise are shown in [Appendix C](#).

#### 2.4 *Implementation of Environmental Mitigation Measures*

The KTE Civil Works Contractors are required to implement the mitigation measures as specified in the EP, EIA Report and EM&A Manual. During the regular environmental site inspections, the Contractors' implementation of mitigation measures were inspected and reviewed. A schedule of the implementation of mitigation measures identified in the KTE EIA is given in [Appendix D](#).

#### 2.5 *Construction Activities in the Reporting Month*

Major construction activities carried out by the respective KTE Civil Works Contractors during the reporting period include:

##### **Contract 1001 - Works Sites and Areas**

###### Works Site A (Gascoigne Road Rest Garden)

- Track related installation works

###### Works Site B (Underground Tunnel between Yau Ma Tei Station and Wylie Road Ancillary Building)

- Track related installation works

###### Works Site C (Wylie Road Ancillary Building)

- Tunnel lining
- Center wall installation

###### Works Site D (Underground Tunnel between Wylie Road Ancillary Building and Ho Man Tin Station)

- General works

###### Works Site E (Ho Man Tin Station)

- Concreting
- Superstructure of HOM station
- Backfilling of slope

Works Site F (Fat Kwong Street Playground)

- Rails track installation
- Superstructure works at cavern

Works Site G (Underground Tunnel between Ho Man Tin Station and Whampoa Station)

- Rails track installation
- Superstructure works at cavern

Works Area J (Hung Hom Barging Point)

- All works related to KTE project completed

Works Area K (Tseung Kwan O Area 137 Magazine Site)

- All works related to KTE project completed
- 

**Contract 1002 - Works Sites and Areas**

Works Site H (Whampoa Station West Concourse)

- Excavation and shotcreting
- ELS construction
- Concreting
- Form work and False work
- Re-bar Fixing
- Tunnel Drilling
- Noise enclosure fabrication for platform tunnel construction

Works Site I (Whampoa Station East Concourse)

- Excavation and shotcreting
- Bulk excavation under traffic deck
- ELS construction
- Concreting
- False work
- Re-bar fixing
- Tunnel Drilling
- Noise enclosure fabrication for platform tunnel construction

Works Area L (Hung Lok Road Site Office)

- Re-bar fixing

**2.6 Construction Activities for the Coming Month**

According to the construction programme for the Civil Works Contracts, the scheduled major construction activities in the next reporting month are as follows:

**Contract 1001 - Works Sites and Areas**

Works Site A (Gascoigne Road Rest Garden)

- Track related installation works

Works Site B (Underground Tunnel between Yau Ma Tei Station and Wylie Road)

Ancillary Building)

- Track related installation works

Works Site C (Wylie Road Ancillary Building)

- Tunnel lining
- Center wall installation

Works Site D (Underground Tunnel between Wylie Road Ancillary Building and Ho Man Tin Station)

- General works

Works Site E (Ho Man Tin Station)

- Concreting
- Superstructure of HOM station
- Backfilling of slope

Works Site F (Fat Kwong Street Playground)

- Rails track installation
- Superstructure works at cavern

Works Site G (Underground Tunnel between Ho Man Tin Station and Whampoa Station)

- Rails track installation
- Superstructure works at cavern

Works Area J (Hung Hom Barging Point)

- All works related to KTE project completed

Works Area K (Tseung Kwan O Area 137 Magazine Site)

- All works related to KTE project completed

**Contract 1002 - Works Sites and Area**

Works Site H (Whampoa Station West Concourse)

- Excavation and shotcreting
- ELS construction
- Concreting
- Form Work and False work
- Re bar fixing
- Tunnel Drilling
- Noise enclosure fabrication for platform tunnel construction

Works Site I (Whampoa Station East Concourse)

- Excavation and shotcreting
- Bulk excavation under traffic deck
- ELS construction
- Rebar fixing
- Concreting
- Form work and False Work
- Noise enclosure fabrication for platform tunnel construction

- Tunnel Drilling

Works Area L (Hung Lok Road Site Office)

- Re bar fixing

### 3 IMPACT MONITORING

#### 3.1 Air Quality

##### 24-Hour TSP Levels Monitoring

The sampling procedure follows that described in the App. B of Pt 50 in 40CFR Ch.1 (U.S. Environmental Protection Agency). TSP is sampled by drawing air through a conditioned, pre-weighed filter paper inside the high volume sampler at a controlled rate. After 24-hour sampling the filter paper with retained particles is collected and returned to the laboratory for drying in a desiccator followed by weighing. TSP levels are calculated from the ratio of the mass of particulate retained on the filter paper to the total volume of air sampled.

The samplers should be properly maintained. Prior to dust monitoring commencing, appropriate checks should be made to ensure that all equipment and necessary power supply are in good working condition.

##### Calibration Requirements

The flow rate of the high volume sampler with mass flow controller will be calibrated using an orifice calibrator. Initial calibration (five points) will be conducted upon installation and prior to commissioning. Calibration will be carried out every six months. Calibration certificates are attached in [Appendix E](#).

To examine the construction dust levels, 24-hour TSP monitoring was undertaken according to the EM&A Manual. The dust monitoring locations are shown in the Section 2.2 above.

Monitoring results are presented in the following table and [Appendix F](#) for graphical plot. The 24-hour TSP monitoring results in the range from 52.3 to 156.6 µg/m<sup>3</sup> recorded in the monitoring period shows that the dust levels generated by the active construction activities were within the Action Levels. Mal-function of high volume samplers were occurred at CD2a and CD4a on 17 and 12 Feb respectively. Operation has been resumed normal in the following week after repairing.

**Table 5 Summary of 24-Hour TSP Levels Monitoring Results**

| CD1a Methodist School |                          |                                   |                                  |                      |                   |
|-----------------------|--------------------------|-----------------------------------|----------------------------------|----------------------|-------------------|
| Date                  | TSP (µg/m <sup>3</sup> ) | Action Level (µg/m <sup>3</sup> ) | Limit Level (µg/m <sup>3</sup> ) | Compliance (Yes /No) | Weather Condition |
| 03/02/2015            | 116.1                    | 171                               | 260                              | Yes                  | Sunny             |
| 09/02/2015            | 109.6                    | 171                               | 260                              | Yes                  | Sunny             |

| 17/02/2015  | 112.3                               | 171  | 260   | Yes                     | Sunny                |
|---|-------------------------------------|--|---|-------------------------|----------------------|
| 25/02/2015  | 68.6                                | 171  | 260   | Yes                     | Rainy                |
| <b>CD2a PolyU Homantin Student Halls of Residence</b> |                                     |  |   |                         |                      |
| Date  | TSP<br>( $\mu\text{g}/\text{m}^3$ ) | Action Level<br>( $\mu\text{g}/\text{m}^3$ ) | Limit Level<br>( $\mu\text{g}/\text{m}^3$ ) | Compliance<br>(Yes /No) | Weather<br>Condition |
|   |                                     |  |   |                         |                      |
| 03/02/2015  | 93.3                                | 183  | 260   | Yes                     | Sunny                |
| 09/02/2015  | 111.6                               | 183  | 260   | Yes                     | Sunny                |
| 25/02/2015  | 87.1                                | 183  | 260   | Yes                     | Rainy                |
| <b>CD3a No.238 Chatham Road North</b>                 |                                     |  |   |                         |                      |
| Date  | TSP<br>( $\mu\text{g}/\text{m}^3$ ) | Action Level<br>( $\mu\text{g}/\text{m}^3$ ) | Limit Level<br>( $\mu\text{g}/\text{m}^3$ ) | Compliance<br>(Yes /No) | Weather<br>Condition |
|   |                                     |  |   |                         |                      |
| 03/02/2015  | 54.4                                | 192  | 260   | Yes                     | Sunny                |
| 09/02/2015  | 117.3                               | 192  | 260   | Yes                     | Sunny                |
| 14/02/2015  | 52.3                                | 192  | 260   | Yes                     | Sunny                |
| 18/02/2015  | 101.9                               | 192  | 260   | Yes                     | Sunny                |
| 24/02/2015  | 67.7                                | 192  | 260   | Yes                     | Cloudy               |
| <b>CD4a Ka Fu Building, Whampoa Estate</b>            |                                     |  |   |                         |                      |
| Date  | TSP<br>( $\mu\text{g}/\text{m}^3$ ) | Action Level<br>( $\mu\text{g}/\text{m}^3$ ) | Limit Level<br>( $\mu\text{g}/\text{m}^3$ ) | Compliance<br>(Yes /No) | Weather<br>Condition |
|   |                                     |  |   |                         |                      |
| 04/02/2015  | 124.9                               | 187  | 260   | Yes                     | Cloudy               |
| 10/02/2015  | 123.9                               | 187  | 260   | Yes                     | Cloudy               |
| 26/02/2015  | 61.0                                | 187  | 260   | Yes                     | Cloudy               |
| <b>CD5 Fung Kei Millennium Primary School</b>         |                                     |  |   |                         |                      |
| Date  | TSP<br>( $\mu\text{g}/\text{m}^3$ ) | Action Level<br>( $\mu\text{g}/\text{m}^3$ ) | Limit Level<br>( $\mu\text{g}/\text{m}^3$ ) | Compliance<br>(Yes /No) | Weather<br>Condition |
|   |                                     |  |   |                         |                      |
| 04/02/2015  | 103.3                               | 168  | 260   | Yes                     | Cloudy               |
| 10/02/2015  | 114.6                               | 168  | 260   | Yes                     | Cloudy               |
| 16/02/2015  | 90.3                                | 168  | 260   | Yes                     | Cloudy               |
| 26/02/2015  | 156.6                               | 168  | 260   | Yes                     | Cloudy               |



### 3.2 Noise

B&K 2250 sound level meters which complied with the International Electrotechnical Commission Publication 651:1979 (Type 1) and 804:1985 (Type 1), specification as referred to in the Technical Memoranda to the NCO were used for the construction noise impact monitoring. The B&K sound level meter and B&K 4231 calibrator are verified by the certified laboratory or manufacturer in biennial basis and annual basis respectively to ensure they perform to the same level of accuracy as stated in the manufacturer's specifications. In this reporting period, sound level meters with serial number 2551244 and 2704791 were used while calibrator with serial number 2725557 was used for checking the sound level meters. All relevant calibration certificates are attached in [Appendix E](#) for reference.

Immediately prior to and following each set of measurements at any NSR, the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. If the calibration levels before and after the measurement differs by more than 1.0dB the measurement shall be repeated to obtain a reliable result. Periods of prolonged or repeated overloading of the sound level meter detector were avoided by setting the meter with adequate headroom prior to commencing measurements. Measurements were recorded to the nearest whole dB, with values of 0.5 or more being rounded up.

Impact noise monitoring of  $L_{Aeq(30min)}$  was undertaken to measure construction noise levels in accordance with the EM&A Manual. The noise monitoring locations are shown in Section 2.2 above.

The monitoring results corrected to the baselines in the range from 54 to 75 dB(A) are presented in the following table and [Appendix F](#) for graphical plot.

**Table 6 Summary of Construction Noise Monitoring Results**

| <b>CN1- Alhambra building</b>  |       |                   |                    |                     |                   |                           |                        |                              |
|--------------------------------|-------|-------------------|--------------------|---------------------|-------------------|---------------------------|------------------------|------------------------------|
| Date                           | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 09/02/2015                     | 17:30 | 68                | 71                 | ***                 | 75                | No                        | -                      | -                            |
| 13/02/2015                     | 16:30 | 70                | 71                 | ***                 | 75                | No                        | -                      | -                            |
| 17/02/2015                     | 17:30 | 72                | 71                 | 65                  | 75                | No                        | -                      | -                            |
| 25/02/2015                     | 17:00 | 71                | 71                 | ***                 | 75                | No                        | -                      | -                            |
| <b>CN2- Methodist College</b>  |       |                   |                    |                     |                   |                           |                        |                              |
| Date                           | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 09/02/2015                     | 17:00 | 75                | 75                 | ***                 | 70                | No                        | 75                     | No                           |
| 13/02/2015                     | 15:30 | 75                | 75                 | ***                 | 70                | No                        | 75                     | No                           |
| 17/02/2015                     | 17:00 | 74                | 75                 | ***                 | 70                | No                        | 75                     | No                           |
| 25/02/2015                     | 16:00 | 75                | 76                 | ***                 | 70                | No                        | 75                     | No                           |
| <b>CN3a - Methodist School</b> |       |                   |                    |                     |                   |                           |                        |                              |
| Date                           | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |

| 09/02/2015  | 16:00 | 67                | 64                 | 65                  | 70                | No                        | -                      | -                            |
|---|-------|-------------------|--------------------|---------------------|-------------------|---------------------------|------------------------|------------------------------|
| 13/02/2015  | 14:30 | 68                | 63                 | 67                  | 70                | No                        | -                      | -                            |
| 17/02/2015  | 16:00 | 67                | 64                 | 64                  | 70                | No                        | -                      | -                            |
| 25/02/2015  | 14:30 | 66                | 63                 | 63                  | 70                | No                        | -                      | -                            |
| <b>CN4a - PolyU Homantin Student Halls of Residence</b>         |       |                   |                    |                     |                   |                           |                        |                              |
| Date  | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 09/02/2015  | 14:00 | 68                | -                  | -                   | 75                | No                        | 77                     | No                           |
| 13/02/2015  | 11:00 | 67                | -                  | -                   | 75                | No                        | 77                     | No                           |
| 17/02/2015  | 14:30 | 70                | -                  | -                   | 75                | No                        | 77                     | No                           |
| 25/02/2015  | 11:00 | 71                | -                  | -                   | 75                | No                        | 77                     | No                           |
| <b>CN6- Lok Do Building</b>                                     |       |                   |                    |                     |                   |                           |                        |                              |
| Date  | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 09/02/2015  | 9:00  | 70                | 71                 | ***                 | 75                | No                        | -                      | -                            |
| 13/02/2015  | 10:00 | 69                | 71                 | ***                 | 75                | No                        | -                      | -                            |
| 17/02/2015  | 11:30 | 71                | 71                 | 61                  | 75                | No                        | -                      | -                            |
| 25/02/2015  | 9:30  | 70                | 71                 | ***                 | 75                | No                        | -                      | -                            |
| <b>CN7- Block Y, Ki Fu Building, Whampoa Estate</b>             |       |                   |                    |                     |                   |                           |                        |                              |
| Date  | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 04/02/2015  | 10:00 | 72                | 71                 | 66                  | 75                | No                        | 83                     | No                           |
| 09/02/2015  | 10:00 | 71                | 71                 | 54                  | 75                | No                        | 83                     | No                           |
| 16/02/2015  | 9:00  | 71                | 72                 | ***                 | 75                | No                        | 83                     | No                           |
| 25/02/2015  | 9:00  | 72                | 72                 | 64                  | 75                | No                        | 83                     | No                           |
| <b>CN8- Block I, Lok Wah Building, Whampoa Garden</b>           |       |                   |                    |                     |                   |                           |                        |                              |
| Date  | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 04/02/2015  | 9:00  | 73                | 70                 | 70                  | 75                | No                        | 81                     | No                           |
| 09/02/2015  | 13:00 | 74                | 70                 | 72                  | 75                | No                        | 81                     | No                           |
| 16/02/2015  | 10:00 | 73                | 70                 | 70                  | 75                | No                        | 81                     | No                           |
| 25/02/2015  | 10:00 | 72                | 70                 | 68                  | 75                | No                        | 81                     | No                           |
| <b>CN9- Block 13, Bauhinia Mansions, Whampoa Garden Site 11</b> |       |                   |                    |                     |                   |                           |                        |                              |
| Date  | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 04/02/2015  | 15:30 | 73                | 70                 | 71                  | 75                | No                        | 79                     | No                           |
| 09/02/2015  | 14:00 | 74                | 71                 | 71                  | 75                | No                        | 79                     | No                           |
| 16/02/2015  | 11:00 | 72                | 69                 | 70                  | 75                | No                        | 79                     | No                           |
| 25/02/2015  | 16:00 | 74                | 70                 | 73                  | 75                | No                        | 79                     | No                           |
| <b>CN10- Block 1, Oak Mansions, Whampoa Garden Site 5</b>       |       |                   |                    |                     |                   |                           |                        |                              |
| Date  | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 04/02/2015  | 13:30 | 75                | 67                 | 74                  | 75                | No                        | 82                     | No                           |
| 09/02/2015  | 15:00 | 75                | 67                 | 75                  | 75                | No                        | 82                     | No                           |
| 16/02/2015  | 11:00 | 74                | 67                 | 73                  | 75                | No                        | 82                     | No                           |
| 25/02/2015  | 15:00 | 73                | 67                 | 72                  | 75                | No                        | 82                     | No                           |
| <b>CN11- Fung Kei Millennium Primary School</b>                 |       |                   |                    |                     |                   |                           |                        |                              |
| Date  | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |

| 04/02/2015                                 | 11:00 | 70                | 64                 | 69                  | 70                | No                        | 78                     | No                           |
|--|-------|-------------------|--------------------|---------------------|-------------------|---------------------------|------------------------|------------------------------|
| 09/02/2015                                 | 9:00  | 68                | 63                 | 67                  | 70                | No                        | 78                     | No                           |
| 16/02/2015                                 | 13:00 | 70                | 65                 | 68                  | 70                | No                        | 78                     | No                           |
| 25/02/2015                                 | 13:00 | 69                | 65                 | 67                  | 70                | No                        | 78                     | No                           |
| <b>CN12- GCEPSA Whampoa Primary School</b> |       |                   |                    |                     |                   |                           |                        |                              |
| Date                                       | Time  | Measured Leq(dBA) | Baseline Leq (dBA) | Corrected Leq(dBA)# | Limit Level (dBA) | Exceedance of Limit Level | Residual Level (dBA)## | Exceedance of Residual Level |
| 04/02/2015                                 | 14:30 | 67                | 64                 | 65                  | 70                | No                        | 76                     | No                           |
| 09/02/2015                                 | 16:00 | 66                | 64                 | 62                  | 70                | No                        | 76                     | No                           |
| 16/02/2015                                 | 14:00 | 68                | 64                 | 66                  | 70                | No                        | 76                     | No                           |
| 25/02/2015                                 | 14:00 | 66                | 64                 | 62                  | 70                | No                        | 76                     | No                           |

Notes:

It is noted that all noise monitoring were not undergone in the raining period. The weather condition is fine and with wind speed < 2m/s.

Decimal point of measured and baseline monitoring data is used to calculate the corrected noise level.

# The Measured Leq is corrected against the corresponding Baseline Level.

\*\*\* Refers to the Measured Leq is lower than the Baseline Level.

## Residual Level refers to the maximum predicted construction noise levels in the EIA report when residual impact is anticipated.

### **3.3 Action taken in Event of Exceedance**

No exceedance was recorded for both TSP and noise in this reporting period.

## **4 LANDSCAPE AND VISUAL**

### **4.1 Monitoring Requirements**

Monitoring of the implementation of the landscape and visual mitigation measures during construction phase was conducted in accordance with the requirements as stipulated in the EM&A Manual.

The landscape and visual monitoring and audit will be conducted once every two weeks throughout the construction stage.

### **4.2 Audit Results**

Monitoring and audit was undertaken in accordance with the EM&A Manual.

#### Tree Felling at Contract 1001 Works Sites / Areas

No tree related to KTE project was felled during the reporting month.

#### Tree Felling at Contract 1002 Works Sites / Areas

No tree related to KTE project was felled during the reporting month.

#### Tree Transplantation in this reporting period for Contract 1001

No tree related to KTE project was transplanted during the reporting month.

Tree Transplantation in this reporting period for Contract 1002

No tree related to KTE project was transplanted during the reporting month.

Bi-weekly inspection

The Registered Landscape Architect of Environmental Team or his representatives conducted inspections and audits and the tree protection works being planned and implemented by the respective contractors of Contract 1001 and 1002 were in progress. No non-conformance was identified in the reporting period.

**4.3 Action Taken in Event of Non-Conformance**

No actions on landscape and visual were required to be taken in this reporting period.

**5 WASTE MANAGEMENT**

Mitigation measures on waste management have been implemented in accordance with the requirements of the EM&A Manual. Suitable C&D materials were reused on-site or at other projects such as Andersen Road Quarry while the remaining C&D materials and non-inert wastes were disposed at the public filling reception facilities and the landfills respectively. The quantities disposed in the reporting period are summarized in the following table:

**Table 7 Statistics of Wastes Disposal from KTE**

| Amount of Construction Wastes Disposed |  |  |   |   |
|--|--|--|---|---|
| Reporting Period                       | Inert C&D Materials to Public Fill (m <sup>3</sup> ) | Inert C&D Materials Reused (m <sup>3</sup> ) | Non-inert Waste to Landfill (m <sup>3</sup> ) | Chemical Waste to designated treatment facility (trips) |
| <b>Contract 1001</b>                   |  |  |   |   |
| Jun -Dec 2011                          | 28690  | 24768  | 714   | 0   |
| Jan-Dec 2012                           | 40393  | 415640                                       | 1614  | 2   |
| Jan – Dec 2013                         | 75176  | 317190                                       | 2544  | 7   |
| January 2014                           | 4414   | 20419  | 420   | 1   |
| February 2014                          | 6100   | 15246  | 306   | 0   |
| March 2014                             | 6193   | 24697  | 438   | 1   |
| April 2014                             | 3907   | 19826  | 432   | 0   |
| May 2014                               | 4083   | 17242  | 606   | 0   |
| June 2014                              | 5948   | 8568   | 630   | 1   |
| July 2014                              | 4615   | 7918   | 708   | 0   |
| August 2014                            | 2368   | 5378   | 738   | 1   |
| September 2014                         | 1064   | 5127   | 738   | 0   |
| October 2014                           | 2072   | 4201   | 840   | 0   |

|                      |        |        |       |    |
|----------------------|--------|--------|-------|----|
| November 2014        | 1383   | 9756   | 918   | 0  |
| December 2014        | 1678   | 4096   | 918   | 1  |
| January 2015         | 3240   | 561    | 1002  | 0  |
| February 2015        | 4326   | 907    | 594   | 0  |
| Subtotal             | 195650 | 901540 | 14160 | 14 |
| <b>Contract 1002</b> |        |        |       |    |
| June-December 2011   | 3037   | 0      | 9     | 0  |
| Jan – Dec 2012       | 14484  | 68     | 252   | 5  |
| Jan – Dec 2013       | 45017  | 60     | 127   | 0  |
| January 2014         | 6741   | 5      | 12    | 0  |
| February 2014        | 12956  | 5      | 7     | 0  |
| March 2014           | 5238   | 290    | 6     | 1  |
| April 2014           | 8329   | 873    | 3     | 0  |
| May 2014             | 15311  | 1152   | 7     | 0  |
| June 2014            | 20680  | 431    | 31    | 0  |
| July 2014            | 25041  | 542    | 33    | 0  |
| August 2014          | 23785  | 1308   | 15    | 0  |
| September 2014       | 16008  | 573    | 23    | 0  |
| October 2014         | 22407  | 1242   | 13    | 0  |
| November 2014        | 26911  | 363    | 23    | 0  |
| December 2014        | 21240  | 42     | 38    | 0  |
| January 2015         | 13122  | 132.5  | 67    | 0  |
| February 2015        | 11402  | 0      | 36    | 0  |
| Subtotal             | 291709 | 7087   | 702   | 6  |
| Overall Total        | 487359 | 908627 | 14862 | 20 |

## 6 WATER QUALITY

Monitoring of the implementation of the water quality mitigation measures during construction phase was conducted in accordance with the requirements as stipulated in the EM&A Manual.

Weekly site inspection will be conducted throughout the construction stage covering the entire project site areas to ensure the recommended mitigation measures are properly implemented.

In the reporting period, the water quality mitigation measures were implemented in accordance with the requirements as stipulated in the EM&A Manual and found in an acceptable manner.

Water sample test were conducted for Works Sites A, C, E, and F, in February 2015. Analytical results will be reported in accordance to WPCO licenses.

## 7 RECORD OF ENVIRONMENTAL COMPLAINTS

One complaint incident was referred by EPD on 2 February 2015 regarding a light nuisance at WAB (Works Area C). The complainant expressed that the spotlight at WAB construction site was distributing. The case was referred to ET and Contractor for investigation in accordance with the requirements from Section 10.3 of EM&A manual.

An investigation has been conducted by contractor on 2 Feb 2015. During the investigation it was found that one of the spotlights at WAB caused light nuisance to the complainant. To address the problem, the contractor adjusted the angle of spotlights to minimize the glare to nearby residents and the contractor will consider to replace the spotlights with light tubes as far as practical. Details of the complaint could be referred to [Appendix H](#) Complaint Report.

A summary of complaint received since commencement of the project is shown below.

**Table 8 Summary of Complaint Received**

| Reporting Period | Invalid Complaint |                        |        | Valid Complaint |        |        |
|------------------|-------------------|------------------------|--------|-----------------|--------|--------|
|                  | Frequency         | Nature                 | Status | Frequency       | Nature | Status |
| June 2011        | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| July 2011        | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| August 2011      | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| September 2011   | 1                 | Noise                  | Closed | 0               | N/A    | N/A    |
| October 2011     | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| November 2011    | 0                 | N/A                    | N/A    | 1               | Dust   | Closed |
| December 2011    | 1                 | Water                  | Closed | 0               | N/A    | N/A    |
| January 2012     | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| February 2012    | 1                 | Noise                  | Closed | 1               | Noise  | Closed |
| March 2012       | 2                 | Noise & Dust           | Closed | 2               | Noise  | Closed |
| April 2012       | 1                 | N/A                    | N/A    | 1               | Noise  | Closed |
| May 2012         | 1                 | Water                  | Closed | 0               | N/A    | N/A    |
| June 2012        | 3                 | Noise & Dust           | Closed | 3               | Noise  | Closed |
| July 2012        | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| August 2012      | 2                 | Noise & Odor           | Closed | 0               | N/A    | N/A    |
| September 2012   | 1                 | Air                    | Closed | 0               | N/A    | N/A    |
| October 2012     | 2                 | Noise                  | Closed | 0               | N/A    | N/A    |
| November 2012    | 2                 | Noise & Odor           | Closed | 1               | Noise  | Closed |
| December 2012    | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| January 2013     | 0                 | N/A                    | N/A    | 1               | Visual | Closed |
| February 2013    | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| March 2013       | 1                 | Noise                  | Closed | 0               | N/A    | N/A    |
| April 2013       | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| May 2013         | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| June 2013        | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| July 2013        | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| August 2013      | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| September 2013   | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| October 2013     | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| November 2013    | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| December 2013    | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| January 2014     | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| February 2014    | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| March 2014       | 1                 | Noise                  | Closed | 0               | N/A    | N/A    |
| April 2014       | 1                 | Noise                  | Closed | 0               | N/A    | N/A    |
| May 2014         | 1                 | Noise                  | Closed | 1               | Fume   | Closed |
| June 2014        | 0                 | N/A                    | N/A    | 1               | Fume   | Closed |
| July 2014        | 0                 | N/A                    | N/A    | 1               | Fume   | Closed |
| August 2014      | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| September 2014   | 1                 | Dust                   | Closed | 0               | N/A    | N/A    |
| October 2014     | 0                 | N/A                    | N/A    | 0               | N/A    | N/A    |
| November 2014    | 1                 | Air                    | Closed | 0               | N/A    | N/A    |
| December 2014    | 1                 | Odor, Noise, and Water | Closed | 0               | N/A    | N/A    |
| January 2015     | 1                 | Air                    | Closed | 0               | N/A    | N/A    |
| February 2015    | 0                 | N/A                    | N/A    | 1               | Visual | Closed |
| Cumulative       | 25                | N/A                    | N/A    | 14              | N/A    | N/A    |

**8 RECORD OF NON-COMPLIANCES**

There was no non-compliance identified in the reporting period.

## **9 NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS**

No summon or prosecution related to environmental issue was recorded in the reporting period. A summary of environmental prosecution since commencement of construction is shown below:

**Table 9 Summary of Summons and Successful Prosecution**

| <b>Reporting Period</b> | <b>Frequency</b> | <b>Cumulative</b> | <b>Nature</b> | <b>Status</b> |
|-------------------------|------------------|-------------------|---------------|---------------|
| June – December 2011    | 0                | 0                 | N/A           | N/A           |
| January – June 2012     | 0                | 0                 | N/A           | N/A           |
| July – December 2012    | 0                | 0                 | N/A           | N/A           |
| January - June 2013     | 0                | 0                 | N/A           | N/A           |
| July – December 2013    | 0                | 0                 | N/A           | N/A           |
| January – June 2014     | 0                | 0                 | N/A           | N/A           |
| July – December 2014    | 0                | 0                 | N/A           | N/A           |
| January 2015            | 0                | 0                 | N/A           | N/A           |
| February 2015           | 0                | 0                 | N/A           | N/A           |
| Cumulative              | 0                | 0                 | N/A           | N/A           |

## **10 STATUS OF STATUTORY SUBMISSIONS**

### **10.1 Submissions required under Environmental Permit**

A summary of the status of submissions required under the KTE Environmental Permit as of 28 February 2015 is shown below:



**Table 10 Summary of Submissions in accordance with EP Conditions**

| EP-399/2010/C Part C Clause No. | Description  | Status                                   |
|---------------------------------|--|--|
| 1.12                            | 1 Notification of commencement of construction   | Submitted on 17 May 2011                 |
| 2.1                             | 2 Establishment of ET with ET Leader   | Submitted on 1 Apr 2011                  |
| 2.1                             | 3 Establishment of Registered Landscape Architect  | Submitted on 14 Apr 2011                 |
| 2.2                             | 4 Employment of IEC  | Submitted on 1 Apr 2011 and 7 Jul 2011   |
| 2.3                             | 5 Notification of the management organization of main construction companies and/or any form of JV   | Submitted on 19 May 2011                 |
| 2.4                             | 6 Layout drawings with explanatory statement, showing Project boundary, alignment and associated work areas and works sites locations            | Submitted on 10 Jun 2011 and 13 Jul 2011 |
| 2.5                             | 7 Notification of setting up hotline to service complaints, comments, suggestions or requests for information                                    | Submitted on 12 May 2011                 |
| 3.7                             | 8 Report any contamination hotspot(s) identified from the reconnaissance site visit to the kerosene store at Chung Hau Street                    | Submitted on 25 Jul 2011                 |
| 5.3                             | 9 Submission of Baseline Monitoring Report   | Submitted on 4 May 2011 and 8 Jul 2011   |
| 6.2                             | 10 Notification of Internet address to place EM&A data   | Submitted on 1 Aug 2011                  |
| 5.4                             | 11 Monitoring Report for July 2011   | Submitted on 12 Aug 2011                 |
| 5.4                             | 12 Monitoring Report for August 2011   | Submitted on 15 Sep 2011                 |
| 5.4                             | 13 Monitoring Report for September 2011  | Submitted on 17 Oct 2011                 |
| 4.1                             | 14 Review Plan for Operational Groundborne Noise   | Submitted on 28 Oct 2011                 |
| 5.4                             | 15 Monitoring Report for October 2011  | Submitted on 14 Nov 2011                 |
| 5.4                             | 16 Monitoring Report for November 2011   | Submitted on 14 Dec 2011                 |
| 5.4                             | 17 Monitoring Report for December 2011   | Submitted on 16 Jan 2012                 |
| 5.4                             | 18 Monitoring Report for January 2012  | Submitted on 14 Feb 2012                 |
| 4.1                             | 19 Review Plan for Operational Groundborne Noise   | Submitted on 29 Feb 2012                 |
| 5.4                             | 20 Monitoring Report for February 2012   | Submitted on 14 Mar 2012                 |
| 5.4                             | 21 Monitoring Report for March 2012  | Submitted on 17 Apr 2012                 |
| 4.1                             | 22 Review Plan for Operational Groundborne Noise   | Submitted on 27 Apr 2012                 |
| 5.4                             | 23 Monitoring Report for April 2012  | Submitted on 15 May 2012                 |
| 3.7                             | 24 Further Inspection to the Kerosene Store  | Submitted on 8 Jun 2012                  |
| 5.4                             | 25 Monitoring Report for May 2012  | Submitted on 14 Jun 2012                 |
| 2.4                             | 26 Update of Layout drawings with explanatory statement, showing Project boundary, alignment and associated work areas and works sites locations | Submitted on 13 Jul 2012                 |
| 5.4                             | 27 Monitoring Report for Jun 2012  | Submitted on 16 Jul 2012                 |
| 5.4                             | 28 Monitoring Report for Jul 2012  | Submitted on 14 Aug 2012                 |
| 4.9                             | 29 Landscape and Visual Plan Part 1: Tseung Kwan O Area 137 Magazine Site  | Submitted on 27 Aug 2012                 |
| 5.4                             | 30 Monitoring Report for Aug 2012  | Submitted on 14 Sep 2012                 |
| 5.4                             | 31 Monitoring Report for Sep 2012  | Submitted on 16 Oct 2012                 |

|     |    |  |                          |
|-----|----|--|--------------------------|
| 4.9 | 32 | Landscape and Visual Plan Part 1: Tseung Kwan O Area 137 Magazine Site Rev. A    | Submitted on 24 Oct 2012 |
| 5.4 | 33 | Monitoring Report for Oct 2012   | Submitted on 14 Nov 2012 |
| 5.4 | 34 | Monitoring Report for Nov 2012   | Submitted on 14 Dec 2012 |
| 5.4 | 35 | Monitoring Report for Dec 2012   | Submitted on 14 Jan 2013 |
| 5.4 | 36 | Monitoring Report for Jan 2013   | Submitted on 19 Feb 2013 |
| 5.1 | 37 | Proposal of Alternative Monitoring Locations from MTRCL                          | Submitted on 26 Feb 2013 |
| 5.4 | 38 | Monitoring Report for Feb 2013   | Submitted on 14 Mar 2013 |
| 5.4 | 39 | Monitoring Report for Mar 2013   | Submitted on 16 Apr 2013 |
| 5.4 | 40 | Monitoring Report for April 2013   | Submitted on 15 May 2013 |
| 5.4 | 41 | Monitoring Report for May 2013   | Submitted on 17 Jun 2013 |
| 2.1 | 42 | Replacement of Registered Landscape Architect                                    | Submitted on 3 Jul 2013  |
| 5.4 | 43 | Monitoring Report for June 2013  | Submitted on 15 Jul 2013 |
| 5.4 | 44 | Monitoring Report for July 2013  | Submitted on 14 Aug 2013 |
| 5.1 | 45 | Proposal of Alternative Monitoring Locations from MTRCL                          | Submitted on 16 Aug 2013 |
| 5.4 | 46 | Monitoring Report for August 2013  | Submitted on 13 Sep 2013 |
| 5.4 | 47 | Monitoring Report for September 2013   | Submitted on 16 Oct 2013 |
| 5.4 | 48 | Monitoring Report for October 2013   | Submitted on 14 Nov 2013 |
| 5.4 | 49 | Monitoring Report for November 2013  | Submitted on 13 Dec 2013 |
| 5.4 | 50 | Monitoring Report for December 2013  | Submitted on 15 Jan 2014 |
| 5.1 | 51 | Proposal for Termination of TSP Monitoring at CD6a Harbourfront Horizon          | Submitted on 15 Jan 2014 |
| 5.4 | 52 | Monitoring Report for January 2014   | Submitted on 17 Feb 2014 |
| 5.4 | 53 | Monitoring Report for February 2014  | Submitted on 14 Mar 2014 |
| 4.1 | 54 | Operational Groundborne Noise Review Plan  | Submitted on 20 Mar 2014 |
| 4.2 | 55 | Operational Groundborne Noise Review Report – Phase 1                            | Submitted on 20 Mar 2014 |
| 5.4 | 56 | Monitoring Report for March 2014   | Submitted on 14 Apr 2014 |
| 5.4 | 57 | Monitoring Report for April 2014   | Submitted on 19 May 2014 |
| 5.4 | 58 | Monitoring Report for May 2014   | Submitted on 16 Jun 2014 |
| 5.4 | 59 | Monitoring Report for June 2014  | Submitted on 15 Jul 2014 |
| 5.4 | 60 | Monitoring Report for July 2014  | Submitted on 14 Aug 2014 |
| 2.1 | 61 | Replacement of Registered Landscape Architect                                    | Submitted on 28 Aug 2014 |
| 5.4 | 62 | Monitoring Report for August 2014  | Submitted on 16 Sep 2014 |
| 5.4 | 63 | Monitoring Report for September 2014   | Submitted on 16 Oct 2014 |
| 4.2 | 64 | Operational Groundborne Noise Review Report – Phase 1 and Phase 2                | Submitted on 6 Nov 2014  |
| 5.4 | 65 | Monitoring Report for October 2014   | Submitted on 14 Nov 2014 |
| 5.4 | 66 | Monitoring Report for November 2014  | Submitted on 12 Dec 2014 |
| 4.2 | 67 | Operational Groundborne Noise Review Report – Phase 1 and Phase 2 – Resubmission | Submitted on 7 Jan 2015  |
| 5.4 | 68 | Monitoring Report for December 2014  | Submitted on 15 Jan 2015 |
| 5.4 | 69 | Monitoring Report for January 2015   | Submitted on 13 Feb 2015 |

## 10.2 Statutory Permits and Licenses

A summary of the status of all relevant environmental permits and licenses as of 28 February 2015 is shown below:

**Table 11 Summary of Environmental Permits and Licenses**

| Description   | License/ Permit Reference                     | Issue Date  | Expired Date               |
|---|---|-------------|----------------------------|
| <b>Environmental Permit</b>   |   |             |                            |
| Environmental Permit for Kwun Tong Line Extension Project (EP-399/2010) | (EP-399/2010) (superseded by EP-399/2010/A)   | 27 Sep 2010 | NA                         |
| Variation of Environmental Permit for Kwun Tong Line Extension Project  | (EP-399/2010/A) (superseded by EP-399/2010/B) | 1 Dec 2010  | NA                         |
| Variation of Environmental Permit for Kwun Tong Line Extension Project  | (EP-399/2010/B) (superseded by EP-399/2010/C) | 7 Jun 2012  | NA                         |
| Variation of Environmental Permit for Kwun Tong Line Extension Project  | EP-399/2010/C                                 | 26 Jan 2015 | NA                         |
| <b>Contract 1001</b>  |   |             |                            |
| Wastewater Discharge License  | WT00009504-2011 (Works Site C),               | 14 Jul 2011 | 31 Jul 2016                |
|   | WT00009582-2011 (Works Site F),               | 27 Jul 2011 | 31 Jul 2016                |
|   | WT00009608-2011 (Works Site A),               | 1 Aug 2011  | 31 Aug 2016                |
|   | WT00012298-2012 (Works Site E)                | 19 Apr 2012 | 31 Jul 2016                |
| Registration as a Chemical Waste Producer                               | 5213-226-N2206-22 (Works Site A)              | 1 Aug 2011  | NA                         |
|   | 5213-226-N2206-23 (Works Site C)              | 1 Aug 2011  | NA                         |
|   | 5213-237-N2454-04 (Works Site E)              | 11 Aug 2011 | NA                         |
|   | 5213-243-N2454-03 (Works Site F)              | 11 Aug 2011 | NA                         |
| Disposal of Construction Waste  | Billing Account no. 7012910 activated         | 26 May 2011 | NA                         |
| Construction Noise Permit   | GW-RE0121-15 (GAR)                            | 09 Feb 2015 | 28 Feb 2015 to 27 Aug 2015 |
|   | GW-RE1418-14 (HOM)                            | 22 Dec 2014 | 24 Dec 2014 to 15 Jun 2015 |
|   | GW-RE1469-14 (WAB)                            | 18 Dec 2014 | 29 Dec 2014 to 28 Jun 2015 |

|   |                                       |             |                            |
|---|---------------------------------------|-------------|----------------------------|
|   | GW-RE1415-14 (FKS)                    | 19 Dec 2014 | 23 Dec 2014 to 21 Jun 2015 |
|   | GW-RE0102-15 (West Cavern)            | 30 Jan 2015 | 30 Jan 2015 to 29 Jul 2015 |
| <b>Contract 1002</b>                      |                                       |             |                            |
| Wastewater Discharge License              | WT00009415-2011 (Site office)         | 11 Jul 2011 | 30 Sep 2016                |
|   | WT00010827-2011                       | 8 Dec 2011  | 31 Oct 2016                |
| Registration as a Chemical Waste Producer | Waste Producer No. 5213-245-C3672-01  | 16 Jun 2011 | NA                         |
| Disposal of Construction Waste            | Billing Account No. 7012934 activated | 31 May 2011 | NA                         |
| Construction Noise Permit                 | GW-RE0053-14                          | 16 Jan 2015 | 26 Jan 2015 to 26 Apr 2015 |
|   | GW-RE0100-15                          | 2 Feb 2015  | 11 Feb 2015 to 11 Mar 2015 |
|   | GW-RE0175-15                          | 24 Dec 2014 | 04 Mar 2015 to 03 Apr 2015 |

## ***11 SITE INSPECTIONS***

### ***11.1 Observations***

Regular site inspections led by the Engineer's Representative and anticipated by ET and respective Contractors were undertaken in accordance with the EM&A Manual in the reporting period. The contractors' performance on environmental matters were assessed and found in an acceptable manner. The inspection findings and the associated recommendations on improvement to the environmental protection and pollution control works were raised to the contractors for reference and/ or action.

Observations against the implementation of the mitigation measures recommended in the EP/EIA are summarized as follows:

**Table 12 Summary of Environmental Findings from Site Inspections**

| <b>Item</b> | <b>Description</b>   | <b>Follow-up Status</b> |
|-------------|--|-------------------------|
|             | <b>Contract 1001</b>   |                         |
| 1           | Noise labels shall be provided for hand-held breakers.   | Completed               |
|             | <b>Contract 1002</b>   |                         |
| 1           | The contractor shall provide drip tray for chemical /oil containers.   | Completed               |
| 2           | Oil leakage from a pump vehicle was observed. The contractor shall clear the oil residuals on the ground and treat it as chemical waste. | Completed               |
| 3           | The chemical pump and pH sensor of the waste water treatment facility was out of order. The contractor to arrange repairing.             | Completed               |

The respective contractors have followed most of concerned items raised during the inspections for rectification in a responsible manner.

## **11.2 Other Notable Events**

### IEC Site Inspections

The IEC conducted site inspections for Works Areas on 10 Feb 2015 for Contract 1001. For Contract 1002, IEC conducted inspection on 12 Feb2015. Some observations listed in section 11.1 were noted during the site inspections and the respective Contractors had followed up the issues as identified in the site inspections in a responsible manner.

### EPD Inspection

No EPD inspection during reporting month. Recommendations given by EPD were included in the environmental inspection records and have been addressed by contractor.

## **12 FUTURE KEY ISSUES**

### **12.1 Key Issues for the Coming Month**

Future key issues envisaged in the coming month include the followings:

- Noise impact from operating equipment from site construction activities, e.g. rock breaking and drilling works;
- Fugitive dust impact from rock breaking works;
- Effluent discharge generated from various construction works;

### **12.2 Effectiveness and Efficiency of Mitigation Measures**

Based on the environmental monitoring results of the reporting period, the effectiveness and efficiency of most of the mitigation measures implemented were found to be satisfactory.

### **13 CONCLUSIONS**

The Report presents the results of EM&A works and the impact monitoring for the construction works undertaken during the period of February 2015.

The major construction activities in the reporting period included bulk excavation, adit and tunnel excavation, concreting works, superstructure works and track related installation works.

No exceedance was recorded for TSP and construction noise monitoring in this reporting month.

One complaint related to light nuisance was referred by Environmental Protection Department on 2 February 2015.

Regular site inspections led by the Engineer's Representative and anticipated by the representatives from ET and the respective Contractors' Team were conducted on a weekly basis to monitor the implementation of environmental pollution control and mitigation measures for the Project.

No non-conformance was identified in the reporting period.

It is concluded from the environmental monitoring and audit works for the Kwun Tong Line Extension Project were undertaken in a responsible manner. The environmental protection and pollution control measures provided by respective contractors of Contract 1001 and 1002 were generally acceptable apart from some minor irregularities which were rectified timely by the respective civil works contractor

