

EXECUTIVE SUMMARY

Introduction

1. This is the 6th Environmental Monitoring and Audit (EM&A) Report prepared by Castco Testing Center Limited (CTCL) for the “Contract No. KLN/2016/09 - Environmental Monitoring Works for Kai Tak Development” (hereinafter called “the Project”). This report documents the findings of EM&A Works conducted in August 2017.

2. During the reporting month, the following works contracts were undertaken within Kai Tak Site:
 - 1020EM12A - District Cooling System (DCS) at Kai Tak Development (KTD) Phase III (Package A)-Chilled Water Pipe Laying Works
 - 2477EM14A - District Cooling System (DCS) at Kai Tak Development (KTD) Phase III (Package B)-Water Pipe Laying Works
 - 2487EM14W - District Cooling System (DCS) at Kai Tak Development (KTD) Phase III (Package B)-Electrical and Mechanical Installation
 - 1107 - MTR Shatin to Central Link: Diamond Hill to Kai Tak Tunnels
 - 1108 - MTR Shatin to Central Link: Kai Tak Station and Associated Tunnels
 - 1109 - MTR Shatin to Central Link: Ma Tau Wai and To Kwa Wan Stations and Tunnels
 - 1114 - MTR Shatin to Central Link: Pedestrian Links at Tsz Wan Shan
 - 1123 - MTR Shatin to Central Link: Exhibition Station and Western Approach Tunnel
 - 20150362 - Construction of Home Ownership Scheme at Kai Tak Site 1G1(B)
 - 3/WSD/08, 6/WSD/08, 7/WSD/08 & 8/WSD/08 - Replacement and Rehabilitation of Water Mains Stages 2 & 3
 - KL/2011/01 - Kai Tak Development –Reconstruction and Upgrading of Kai Tak Nullah
 - KL/2012/02 - Kai Tak Development – Stage 3A Infrastructure at Former North Apron Area
 - KL/2012/03 - Kai Tak Development – Stage 4 Infrastructure at Former North Apron Area
 - KL/2014/01 - Kai Tak Development - Stage 2 Infrastructure Works for Developments at the Southern Part of the Former Runway
 - KL/2014/03 - Kai Tak Development - Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway
 - KL/2015/02 - Kai Tak Development – Stage 5A Infrastructure at Former North Apron Area
 - KL/2015/03 – Kai Tak Development – Stage 3B Infrastructure at Former North Apron Area
 - New Kowloon Inland Lot No. 6516 & 6517 - Proposed Residential Development
 - New Kowloon Inland Lot No. 6525 - Residential Development at Kai Tak Area 1I Site 1
 - New Kowloon Inland Lot No. 6526 - Residential Development at Kai Tak Area 1I Site 2
 - New Kowloon Inland Lot No. 6527 - Residential Development at Kai Tak Area 1I Site 3

- New Kowloon Inland Lot No. 6541 - Residential Development at Kai Tak Area 1H Site 3
 - SS A501 - Design and Construction of Centre of Excellence in Paediatrics
 - SS E517 – Construction of a 30-classroom Secondary School at Kai Tak Development, Kowloon (Site 1A-2)
 - SS C503 – Design and Construction of Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station at 105 Concorde Road, Kai Tak
 - HY/2014/18 – Provision of Barrier-Free Access Facilities for Highway Structures – Phase 3 Contract 7
3. Stockpiling of excavated & construction materials, storage of equipment, business in the recovery and recycling and car parks, etc. are the major activities for short term tenancy (STT) / temporary government land allocation (TGLA).

Environmental Monitoring Works

4. Environmental monitoring for the Project was performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Site Inspections/Audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
5. Summary of the non-compliance in the reporting month for the Project is tabulated in Table 1.

Table 1 Non-compliance Record for the Project in the Reporting Month

| Parameter | No. of Exceedance | | Action Taken |
|-----------|-------------------|-------------|--------------|
| | Action Level | Limit Level | |
| 1-hr TSP | 0 | 0 | N/A |
| 24-hr TSP | 0 | 0 | N/A |
| Noise | 0 | 0 | N/A |

Remark: No complaint concerning construction noise was received in the time period of 0700 – 1900 hrs on normal weekdays.

1-hour & 24-hour TSP Monitoring

6. All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
7. All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
8. The air quality monitoring results in August 2017 are presented in Table 2.

Table 2 Air Quality Monitoring Results in August 2017 Monitoring Station

| Monitoring Station | Description | 1-hour TSP ($\mu\text{g}/\text{m}^3$) | 24-hour TSP ($\mu\text{g}/\text{m}^3$) |
|---------------------|---------------------------------------|-----------------------------------------|------------------------------------------|
| AM1(C) ¹ | Contractor's site office (KL/2015/03) | 94 (76 – 116) | 71 (63 – 86) |
| AM2 | Lee Kau Yan Memorial School | 65 (51 – 101) | 46 (28 – 90) |
| AM3(A) | Holy Trinity Bradbury Centre | 50 (42 – 62) | 34 (30 – 45) |
| AM4(C) ² | NFS Pump Room | 79 (61 – 112) | 50 (27 – 69) |
| AM5(B) ³ | CCC Kei To Secondary School | 107 (72 – 154) | 61 (37 – 111) |
| AA1 | Ching Long Shopping Centre | 47 (38 – 72) | 43 (26 – 85) |
| AA2 | Tak Long Estate | 55 (49 – 75) | 63 (29 – 96) |

¹ Due to the relocation of the Contractor's Site Office of Contract No. KL/2012/02, AM1(B), there had been no electric supply for High Volume Sampler. 24-hr TSP and 1-hr TSP sampling was conducted temporarily at AM1(C) - Contractor's site office of Contract KL/2015/03 since early July 2017.

² Air monitoring was carried out temporarily at AM4(C) – NFS Pump Room after demolition of AM4(A) - EMSD Workshops in December 2016 and temporary monitoring at AM4(B) - Ma Tau Kok Road (next to EMSD workshops).

³ Air monitoring was conducted temporarily at AM5(B) CCC Kei To Secondary School after the owner of AM5(A) - Po Leung Kuk Ngan Po Ling College rejected the installation of HVS inside the premises in early April.

Construction Noise

9. All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
10. The noise monitoring results in August 2017 are presented in Table 3.

Table 3 Noise Monitoring Results in August 2017 Monitoring Station

| Monitoring Station | Description | Allowable Noise Level Leq (30min) dB (A) | Noise Level Leq (30min) dB (A) |
|--------------------|----------------------------------------|------------------------------------------|--------------------------------|
| M1 | Buddhist Chi King Primary School | 70 | 63 - 64 |
| M2 | SKH Kowloon Bay Kei Lok Primary School | 70 | 64 – 67 |
| M3 | Rhythm Garden | 76.3 | 73 – 76 |
| M4 | Cognitio College | 78.6 | 63– 78 |
| M5 | Lee Kau Yan Memorial School | 76.7 | 74 – 76.5 |
| M6(C) ³ | Mercy Grace's Home | 75.7 | 57 – 75 |

| Monitoring Station | Description | Allowable Noise Level Leq (30min) dB (A) | Noise Level Leq (30min) dB (A) |
|--------------------|-----------------------------------|------------------------------------------|--------------------------------|
| M7(A) | Oblate Primary School | 70 | 56 – 63 |
| M8 | CCC Kei To Secondary School | 70 | 55 – 69 |
| M9 | Po Leung Kuk Ngan Po Ling College | 70 | 46 – 62 |
| M10 | Tak Long Estate | 75 | 61 – 64 |
| MA1 | Ching Long Shopping Centre | 75 | 62 – 64 |

³ Noise monitoring was temporarily conducted at M6(C) - Mercy Grace's Home after rejected access to M6(A) - Kowloon City District Kai-Fong Welfare Association in October 2016 and temporary monitoring at M6(B) - HK Deaf People Christian Church.

Key Information in the Reporting Month

11. Summary of key information in the reporting month is tabulated in Table 4.

Table 4 Summary Table for Key Information in the Reporting Month

| Event | Event Details | | Action Taken | Status | Remark |
|------------------------------------------------------|---------------|---------------------------------------------|-----------------------------------------------|--------|--------|
| | Number | Nature | | | |
| Complaint received | 2 | Construction dust and muddy water discharge | Investigation was conducted by the Contractor | Closed | --- |
| Reporting Changes | 0 | --- | N/A | N/A | --- |
| Notifications of any summons & prosecutions received | 0 | --- | N/A | N/A | --- |

Future Key Issues

12. The future key environmental issues in the coming month include:
- Dust generation from stockpiles of dusty materials, exposed site area, excavation works and rock breaking activities;
 - Watering for dust generating activity and on haul road;
 - Proper storage of construction materials on site;
 - Storage of chemicals/fuel and chemical waste/waste oil on site;
 - Accumulation of general and construction waste on site;
 - Noise from operation of the equipment, especially for rock-breaking activities, piling works and machinery on-site;

- Runoff from exposed slope;
- Wastewater and runoff discharge from site;
- Regular removal of silt, mud and sand along u-channels and sedimentation tanks;
and
- Review and implementation of temporary drainage system for the surface runoff.

THE FULL VERSION EM&A REPORT FOR AUGUST 2017 CAN BE VIEWED FROM THE ARCHIVED REPORT