

EXECUTIVE SUMMARY

Introduction

1. This is the 34th Environmental Monitoring and Audit (EM&A) Report prepared by Castco Testing Centre Limited (CTCL) “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 December 2019.
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
 - 1389EM18A - District Cooling System (DCS) at Kai Tak Development (KTD) - Chilled Water Pipe Laying and Associated Works In North Apron
 - 2852EM17A - District Cooling System (DCS) at Kai Tak Development (KTD) Phase III (Package D) – Water Pipe Laying Works
 - 2853EM17W - District Cooling System (DCS) at Kai Tak Development (KTD) Phase III (Package D) – Electrical and Mechanical Installation
 - SCL 1108 – MTR Shatin to Central Link: Kai Tak Station and Associated Tunnels
 - SCL 1109 – MTR Shatin to Central Link: Ma Tau Wai and To Kwa Wan Stations and Tunnels
 - SCL 1123 – MTR Shatin to Central Link: Exhibition Station and Western Approach Tunnel
 - 6/WSD/08, 7/WSD/08 – Replacement and Rehabilitation of Water Mains Stages 2 & 3
 - 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. 6562 – Residential Development at Kai Tak Area 1K Site 3
 - New Kowloon Inland Lot No. 6563 – Residential Development at Kai Tak Area 1L Site 1
 - New Kowloon Inland Lot No. 6564 – Residential Development at Kai Tak Area 1L Site 2
 - New Kowloon Inland Lot No. 6565 – Residential Development at Kai Tak Area 1L Site 3
 - New Kowloon Inland Lot No. 6566 – Residential Development at Kai Tak Area 1K Site 2
 - New Kowloon Inland Lot No. 6567 – Residential Development at Kai Tak Area 1K Site 1
 - New Kowloon Inland Lot No. 6557 – Commercial Development at Kai Tak Area 1E Site 2

- SS C503 – Design and Construction of Kowloon East Regional Headquarters and Operational Base cum Ngan Tau Kok Divisional Police Station at 105 Concorde Road, Kai Tak
- New Acute Hospital at Kai Tak Development Area - foundation, excavation and lateral support, and basement excavation works Site A – 8110059224
- New Acute Hospital at Kai Tak Development Area - foundation, excavation and lateral support, and basement excavation works Site B - 8110059225
- HY/2014/18 – Provision of Barrier-Free Access Facilities for Highway Structures – Phase 3 Contract 7
- HY/2014/07 – Central Kowloon Route - Kai Tak West
- HAB/KTSP/01 – Design, Construction and Operation of the Kai Tak Sports Park at Kai Tak, Kowloon City District, Hong Kong
- SS G506 – Station Square at Kai Tak

Environmental Monitoring Works

3. 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.
4. Summary of the non-compliance in the reporting month for the Project is tabulated in Table I.

Table I 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

1- hour & 24-hour TSP Monitoring

5. All 1- hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
6. All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
7. The air quality monitoring results in December 2019 are presented in Table2.

Table 2 Air Quality Monitoring Results in December 2019 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)	Contractor's Site Office of KL/2015/03	90 – 138	109 – 155
AM2	Lee Kau Yan Memorial School	73 – 165	70 – 133

M3(A)	Holy Trinity Bradbury Centre	78 – 150	73 – 145
AM4(C)	NFS Pump Room	70 – 155	66 – 148
AM5(B)	CCC Kei To Secondary School	81 – 129	95 – 106
AA1	Ching Long Shopping Centre	60 - 131	30 - 132
AA2	Tak Long Estate	60 – 126	45 – 125
AA4	Hong Kong Children’s Hospital	78 - 133	64 - 126

Construction Noise

8. Noise monitoring of M9 and M4 were inaccessible since 23 October 2018 and 4 September 2019 due to owner rejected our staff from entering the site and noise monitoring were conduct at temporary monitoring site near both M9 and M4 (Figure 3). All other construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
9. The noise monitoring results in December 2019 are presented in Table3.

Table 3 Noise Monitoring Results in December 2019 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	59.4 – 64.4
M2	SKH Kowloon Bay Kei Lok Primary School	70	62.4 – 66
M3	Rhythm Garden	76.3	60 – 74
M4 (Temporary)	Cognitio College	80	61.9 – 77.3
M5	Lee Kau Yan Memorial School	76.7	60.4 – 69.1
M6(C)	Mercy Grace’s Home	78	60.5 – 63.2
M7(A)	Oblate Primary School	70	64.3 – 67.7
M8	CCC Kei To Secondary School	70	64.4 – 66.8

M9 (Temporary)	Near Chi Yun School	70	70.1 – 71.7
M10	Tak Long Estate	75	65.2 – 66.9
MA1	Ching Long Shopping Centre	75	69 – 72.7
MA3	Hong Kong Children's Hospital	75	65.9 – 68.5

Key Information in the Reporting Month

10. Summary of key information in the reporting month is tabulated in Table II.

Table II Summary Table for Key Information in the Reporting Month

Event	Event Details		Action taken	Status	Remark
	Number	Nature			
Complaint received	4	Construction Noise and Marine Pollution	Investigation was conducted by Contractor	N/A	---
Reporting Changes	0	---	N/A	N/A	---
Notifications of any summons & Prosecutions received	0	---	N/A	N/A	---

Future Key Issues

11. 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 DECEMBER 2019 CAN BE VIEWED FROM THE ARCHIVED REPORT