EXECUTIVE SUMMARY

Introduction

- 1. This is the 3rd 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 May 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 11 Site 3

June 2017 1 Black & Veatch

- 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

1 4 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				
Parameter	No. of Ex	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 May 2017 are presented in Table 2.

June 2017 2 Black & Veatch

Table 2 Air Quality Monitoring Results in May 2017 Monitoring Station

Tuble 21th Quality Monitoring Results in May 2017 Monitoring Station				
Monitoring Station	Description	1-hour TSP (μg/ m³)	24-hour TSP (μg/m³)	
AM1(B)	Outside Arup site office (KL/2012/02)	69	74	
		(38 - 88)	(56 – 98)	
AM2	Lee Kau Yan Memorial School	71	84	
		(36 – 120)	(63 – 112)	
AM3(A)	Holy Trinity Bradbury Centre	53	84	
		(32-80)	(54 – 97)	
AM4(C) ¹	NFS Pump Room	93	74	
		(64 – 119)	(46 – 97)	
AM5(B) ²	CCC Kei To Secondary School	80	83	
		(64 – 95)	(56 – 110)	
AA1	Ching Long Shopping Centre	69	53	
		(57 - 81)	(44 – 61)	
AA2	Tak Long Estate	78	77	
		(65 – 99)	(40 - 88)	

¹ Air monitoring was carried out temporarily at AM4(C) – NFS Pump Room after demolition of AM4(A) - EMSD Workshops in December 2016and temporary monitoring at AM4(B) - Ma Tau Kok Road (next to EMSD workshops).

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 May 2017 are presented in Table 3.

Table 3 Noise Monitoring Results in May 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	61 - 64
M2	SKH Kowloon Bay Kei Lok Primary School	70	65 – 67
М3	Rhythm Garden	76.3	68 – 74
M4	Cognitio College	79.8	69– 78
M5	Lee Kau Yan Memorial School	76.7	76 – 76.6
M6(C) ³	Mercy Grace's Home	77.1	70 - 76
M7(A)	Oblate Primary School	70	62 - 64

June 2017 3 Black & Veatch

² 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.

Monitoring Station	Description	Allowable Noise Level Leq (30min) dB (A)	Noise Level Leq (30min) dB (A)	
M8	CCC Kei To Secondary School	70	63 - 65	
М9	Po Leung Kuk Ngan Po Ling College	70	61 - 65	
M10	Tak Long Estate	75	50 - 65	
MA1	Ching Long Shopping Centre	75	54 - 68	

 $^{^3}$ 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			
			Investigation was		
Complaint received	2	Construction Noise and lightings	conducted by the	Closed	
			Contractor		
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 MAY 2017 CAN BE VIEWED FROM THE ARCHIVED REPORT