CONTRACT NO: HY/2019/18

WANCHAI DEVELOPMENT PHASE II AND CENTRAL WANCHAI BYPASS SAMPLING, FIELD MEASUREMENT AND TESTING WORK (STAGE 4)

ENVIRONMENTAL PERMIT NO. EP-122/2002/E

QUARTERLY ENVIRONMENTAL MONITORING AND AUDIT REPORT

- AUGUST TO OCTOBER 2021 -

CLIENTS:

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November 2021

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EXECUTIVE SUMMARY

i. This is the Quarterly Environmental Monitoring and Audit (EM&A) Report – August 2021 to October 2021 specific for Environmental Permit no. EP-122/2002/E. The EM&A report is prepared by the Environmental Team (ET) employed under Contract No. HY/2019/18 – Wan Chai Development Phase II and Central Wanchai Bypass – Sampling, Field Measurement and Testing Works (Stage 4). This report presents the environmental monitoring and audit findings and information during the period from 1st August 2021 to 20th October 2021.

ii. The implementation of the Environmental Monitoring and Audit Programme for the Wan Chai Development phase II and Central-Wan Chai Bypass Project has been taken over by the Lam Geotechnics Limited (LGL) under Contract HY/2019/18 – Wan Chai Development Phase II and Central Wanchai Bypass – Sampling, Field Measurement and Testing Works (Stage 4) from 10 December 2019 in continuation of the previous Environmental Team employed under Contact HK/2015/01 – Wan Chai Development Phase II and Central Wanchai Bypass – Sampling, Field Measurement and Testing Works (Stage 3).

iii. According to Engineer's Representative information, the major construction work of Contractor under Contract no. HK/2012/08 associated with Designated Project 1 (DP1) and Designated Project 2 (DP2) was completed on 21 October 2019. No remaining outstanding works will be conducted under Contract no. HK/2012/08 at CRIII area. The work area within CRIII area (Zone A) was handed over to Architectural Services Department (ArchSD).

Noise Monitoring

iv. Continuous noise monitoring was conducted at ACL3 – City Hall.

v. Due to safety concerned, the location of the continuous noise monitoring station at City Hall was finely adjusted to the roof of the City Hall, Low Block on 1 May 2013.

vi. As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the continuous noise monitoring at ACL3 – City Hall for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

Air Quality Monitoring

vii. Due to the defective electricity supply found at monitoring station ACL1 and the advice from City Hall Building Management, the air monitoring station ACL1 – City Hall was finely adjusted on 28 Feb 2014 to an alternate electricity supply.

viii. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were conducted at ACL1 – City Hall and ACL2 – PLA Barracks (ACL2a Contractor HK/2012/08 Site Office since 7 December 2013) on every six days basis.

ix. Due to the large scale renovation works at People's Liberation Army Headquarter, a Proposal for Relocation of Air Quality Monitoring Station at People's Liberation Army Headquarter (ACL2) was formally submitted to EPD on 4th November, 2013.

x. Air Quality Monitoring at ACL2 was temporarily suspended during the period from 14th November, 2013 to 3rd December, 2013.

xi. The Proposal for Relocation of Air Quality Monitoring Station at People's Liberation Army Headquarter (ACL2) was approved by EPD on 27 November 2013.

xii. According to the approved proposal for relocation of Air Quality Monitoring station, the action and limit levels of ACL2a shall adopt the reference monitoring result from the baseline air quality monitoring report for EP/364/2009 in 22 April 2010 in which approved by EPD.

xiii. The air quality monitoring at ACL2a – Contractor HK/2012/08 Site Office was commenced on 7 December 2013.

xiv. As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the air quality monitoring at ACL1 – City Hall and ACL2a – Contractor HK/2012/08 Site Office for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

Water Quality Monitoring

xv. As confirmed by WDII RSS, the dredging works, seawall modification works and other associated works undertaken at Central Reclamation Phase III by Contractor HK/2012/08 was commenced in late September 2014. According to the approved EM&A manual under EP-122/2002/E, water quality monitoring shall be implemented at the Central Reclamation Phase III works area accordingly to assess any potential water quality impact during the construction period.

xvi. Water quality monitoring at M5B and Culvert J were conducted three days per weeks during the reporting period starting from 26 September 2014.

xvii. With respect to the confirmation of completion of marine work by WDII RSS, the water quality monitoring at M5B and Culvert J was temporary suspended from 23 August 2019 onward after completion of 4 weeks post-construction monitoring and with agreement from IEC.

Complaints, Notifications of Summons and Successful Prosecutions

xviii. No environmental complaint was received in this reporting quarter.

1. INTRODUCTION

1.1 Scope of the Report

1.1.1. Lam Geotechnics Limited (LGL) has been appointed to work as the Environmental Team (ET) under Environmental Permit no. EP-122/2002/E to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report Central Reclamation Phase III - Studies, Site Investigation, Design and Construction (Register No.: AEIAR-040/2001) since 1 May 2013.

1.1.2. This report documents the finding of EM&A works for Environmental Permit (EP) no. EP-122/2002/E, during the period from 1st August 2021 to 20th October 2021.

1.2 Structure of the Report

Section 1 ***Introduction*** – details the scope and structure of the report.

Section 2 ***Project Background*** – summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.

Section 3 ***Monitoring Requirements*** – summarizes all monitoring parameters, monitoring locations, monitoring frequency, duration and action plan.

Section 4 ***Monitoring Results*** – summarizes the monitoring results obtained in the reporting period.

Section 5 ***Compliance Audit*** – summarizes the auditing of monitoring results, all exceedances environmental parameters.

Section 6 ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution

Section 7 ***Cumulative Construction Impact due to the Concurrent Projects*** – summarizes the relevant cumulative construction impact due to the concurrent activities of the concurrent Projects.

Section 8 ***Conclusion***

2. PROJECT BACKGROUND

2.1 Background

2.1.1 Central Reclamation Phase III - Studies, Site Investigation, Design and Construction (hereafter called "the Project") are Designated Project (DP) under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). The Environmental Impact Assessment (EIA) Reports for Central Reclamation Phase III - Studies, Site Investigation, Design and Construction (Register No. AEIAR-040/2001) has been approved on 31 August 2001.

2.2 Scope of the Project and Site Description

2.2.1. The design and construction of Central Reclamation Phase III involves the permanent reclamation and construction and operation of a trunk road and its road tunnel that is shown at ***Figure 2.1***.

2.2.2. The key purpose of the study area encompasses the area of Victoria Harbour to the southeast of the new Outlying Islands Ferry Piers and north of Edinburgh Place and Lung Wui Road. The area extends eastward to Fenwick Pier Street and the Fleet Arcade, and includes the existing GPO, Star Ferry Piers, Queens Pier, City Hall, PLA Headquarters, Hong Kong Red Cross Headquarters building and the Tamar Site. The scope of the Central Reclamation, Phase III includes:

- Reclamation and seawalls, roads and associated services, North Island Line Protection Works and Advance Trunk Road Tunnel (ATRT) for the CWB;
- Reprovisioning of Star Ferry Pier, public landing steps, wallah wallah moorings, and motor boat/launch operators' kiosks;
- External cooling water systems which consist of the cooling water pumping shells for future developments, and the reprovisioning of existing cooling water pumping stations and associated pipework systems and E&M works;
- Reprovisioning of existing Leisure and Cultural Services Department (LCSD)'s facilities;
- Provision of a flood relief path, stormwater culvert extensions, upgrading of hinterland stormwater drainage resulting from the reclamation, demolition of the existing waterfront structures and necessary landscaping;
- The Hong Kong Station Extended Overrun Tunnel (EOT) and associated ventilation structures entrusted for construction within the CRIII works;
- Reprovisioning of the Government Heliport at the Wan Chai PCWA and reprovisioning of the Wan Chai PCWA at Chai Wan Basin.

2.2.3. The project also contains various Schedule 2 DPs that, under the EIAO, require Environmental Permits (EPs) to be granted by the DEP before they may be either constructed

or operated. ***Table 2.1*** summarises the four individual DPs under this Project. ***Figure 2.1*** shows the locations of these Schedule 2 DPs.

Table 2.1 Schedule 2 Designated Projects under this Project

Item	Designated Project	EIAO Reference
DP1	Reclamation works	Schedule 2, Part I, A.7
DP2	Road P2 and other roads which are classified as primary/district distributor roads	Schedule 2, Part I, A.1
DP3	Central-Wanchai bypass (CWB)	Schedule 2, Part I, C.1
DP4	The North Island Line (NIL) Protection Works within CRIII	Schedule 2, Part I, A.7

2.2.4. Contract HK/2012/08 – Wan Chai Development Phase II – Central-Wan Chai Bypass at Wan Chai West as part of the Project works by Civil Engineering and Development Department (CEDD) is associated with Designated Project 1 (DP1) and Designated Project 2 (DP2).

2.2.5. Contract HY/2010/08 – Central Wanchai Bypass – Tunnel as part of the Project works by the Highways Department (HyD) is associated with Designated Project 2 (DP2).

2.3 Project Organization and Contact Personnel

2.3.1 Civil Engineering and Development Department is the overall project controllers for the Central Reclamation Phase III Project. For the construction phase of the Project, Project Engineer, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.

2.3.2 The proposed project organization and lines of communication with respect to environmental protection works are shown in ***Figure 2.2***. Key personnel and contact particulars are summarized in ***Table 2.2***:

Table 2.2 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.	Contact Fax
AECOM	Engineer's Representative for WDII	Senior Resident Engineer	Mr. S.K. Lo	3519 9033	2587 1877
Ramboll Hong Kong Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	3465 2888	3465 2899
Lam Geotechnics Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939	2882 3331

3. MONITORING REQUIREMENTS

3.1. Noise Monitoring

NOISE MONITORING STATIONS

3.1.1. The continuous noise monitoring station for the Project is listed and shown in ***Table 3.1*** and ***Figure 3.1***. ***Appendix 3.1*** shows the established Action/Limit Levels for the monitoring works.

Table 3.1 Continuous Noise Monitoring Stations

District	Station	Description
Central	ACL3	City Hall

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

3.1.2. Continuous 24-hour noise monitoring shall be carried out at the designated monitoring stations. The following is an initial guide on the regular monitoring frequency for each station on a 24 hours daily basis when noise generating activities are underway:

- One set of measurements between 0700 and 1900 hours on normal weekdays.
- One set of measurements between 1900 and 2300 hours on normal weekdays and 0700 and 2300 hours on public holidays.
- One set of measurements between 2300 and 0700 hours on next day on everyday.

3.1.3. If construction works are extended to include works during the hours of 1900 – 0700 as well as public holidays and Sundays, additional weekly impact monitoring shall be carried out during respective restricted hours periods. Applicable permits under NCO shall be obtained by the Contractor.

MONITORING EQUIPMENT

3.1.4. As referred to in the Technical Memorandum ™ issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level from before and after the noise measurement agrees to within 1.0 dB.

3.1.5. Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

3.1.6. The sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency before deployment to the site and during each site visit. Measurements will be accepted as valid only if the calibration level from before and after the noise measurement agrees to within 1.0 dB.

3.2. Air Quality Monitoring

AIR QUALITY MONITORING STATIONS

3.2.1. The air quality monitoring stations for the Project are listed and shown in ***Table 3.2*** and ***Figure 3.1***. ***Appendix 3.1*** shows the established Action/Limit Levels for the monitoring works.

Table 3.2 Air Quality Monitoring Stations

Station ID	Monitoring Location
ACL1	City Hall
ACL2a	Contractor HK/2012/08 Site Office

AIR QUALITY MONITORING PARAMETERS, FREQUENCY AND DURATION

3.2.2. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality. The 24-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), Appendix B.

3.2.3. All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any other local atmospheric factors affecting or affected by site conditions, etc., shall be recorded down in detail.

3.2.4. For regular impact monitoring, the sampling frequency of at least once in every six-days, shall be strictly observed at all the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

3.2.5. High volume samplers (HVSs) in compliance with the following specifications shall be used for carrying out the 1-hour and 24-hour TSP monitoring:

- 0.6 – 1.7 m^3 per minute adjustable flow range;
- Equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;

- Installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
- Capable of providing a minimum exposed area of 406 cm2;
- Flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
- Equipped with a shelter to protect the filter and sampler;
- Incorporated with an electronic mass flow rate controller or other equivalent devices;
- Equipped with a flow recorder for continuous monitoring;
- Provided with a peaked roof inlet;
- Incorporated with a manometer;
- Able to hold and seal the filter paper to the sampler housing at horizontal position;
- Easily changeable filter; and
- Capable of operating continuously for a 24-hour period.

3.2.6. Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. The concern parties such as IEC shall properly document the calibration data for future reference. All the data should be converted into standard temperature and pressure condition.

LABORATORY MEASUREMENT / ANALYSIS

3.2.7. A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.

3.2.8. Filter paper of size 8” x 10” shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24-hours and be pre-weighed before use for the sampling.

3.2.9. After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.

3.2.10. All the collected samples shall be kept in a good condition for 6 months before disposal.

3.3. Water Quality Monitoring

WATER QUALITY MONITORING STATIONS

3.3.1 The water quality monitoring stations for the Project are listed and shown in ***Table 3.3*** and ***Figure 3.1***. ***Appendix 3.1*** shows the established Action/Limit Levels for the monitoring works.

Table 3.3 Water Quality Monitoring Stations

Station ID	Description	Easting	Northing
Cooling Water Intakes			
M5B	Swire / Government Headquarters/ Tamar Development/ MTRCL and HSBC Headquarters	835169	816052
Culverts (Reference Station)			
Culvert J	Culvert J Outfall Location	835082	816071

WATER QUALITY PARAMETERS

3.3.2 Monitoring of dissolved oxygen (DO), turbidity and suspended solids (SS) shall be carried out at WSD flushing water intakes and cooling water intakes. DO and Turbidity are measured in-situ while SS is determined in laboratory.

3.3.3 In association with the water quality parameters, other relevant data shall also be measured, such as monitoring location/position, time, sampling depth, water temperature, pH, salinity, dissolved oxygen (DO) saturation, weather conditions, sea conditions, tidal stage, and any special phenomena and work underway at the construction site etc.

SAMPLING PROCEDURES AND MONITORING EQUIPMENT

3.3.4 The interval between two sets of monitoring should not be less than 36 hours except where there are exceedances of Action and/or Limit Levels, in which case the monitoring frequency will be increased. ***Table 3.4*** shows the proposed monitoring frequency and water quality parameters. Duplicate in-situ measurements and water sampling should be carried out in each sampling event. For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.

Table 3.4 Marine Water Quality Monitoring Frequency and Parameters

Activities	Monitoring Frequency[1]	Parameters[2]
During the 4-week baseline monitoring period	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity
During marine construction works	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity

Activities	Monitoring Frequency[1]	Parameters[2]
After completion of marine construction works	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity

Notes:
1. For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.
2. Turbidity should be measured in situ whereas SS should be determined by laboratory.

DISSOLVED OXYGEN AND TEMPERATURE MEASURING EQUIPMENT

3.3.5 The instrument should be a portable, weatherproof dissolved oxygen measuring instrument complete with cable, sensor, comprehensive operation manuals, and use a DC power source. It should be capable of measuring:

- a dissolved oxygen level in the range of 0-20 mg/l and 0-200% saturation
- a temperature of 0-45 degree Celsius

3.3.6 It should have a membrane electrode with automatic temperature compensation complete with a cable. Sufficient stocks of spare electrodes and cables should be available for replacement where necessary. (e.g. YSI model 59 meter, YSI 5739 probe, YSI 5795A submersible stirrer with reel and cable or an approved similar instrument).

3.3.7 Should salinity compensation not be build-in in the DO equipment, in-situ salinity shall be measured to calibrate the DO equipment prior to each DO measurement.

TURBIDITY MEASUREMENT INSTRUMENT

3.3.8 The instrument should be a portable, weatherproof turbidity-measuring instrument complete with comprehensive operation manual. The equipment should use a DC power source. It should have a photoelectric sensor capable of measuring turbidity between 0-1000 NTU (e.g. Hach model 2100P or an approved similar instrument).

SAMPLER

3.3.9 A water sampler comprises a transparent PVC cylinder, with a capacity of not less than 2 litres, and can be effectively sealed with latex cups at both ends. The sampler should have a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth (e.g. Kahlsico Water Sampler or an approved similar instrument).

SAMPLE CONTAINER AND STORAGE

3.3.10 Water samples for suspended solids measurement should be collected in high-density polythene bottles, packed in ice (cooled to 4°C without being frozen), and delivered to ALS Technichem (HK) Pty Ltd. as soon as possible after collection for analysis.

WATER DEPTH DETECTOR

3.3.11 A portable, battery-operated echo sounder shall be used for the determination of water depth at each designated monitoring station. This unit can either be handheld or affixed to the bottom of the workboat, if the same vessel is to be used throughout the monitoring programme.

SALINITY

3.3.12 A portable salinometer capable of measuring salinity in the range of 0-40 ppt shall be provided for measuring salinity of the water at each of monitoring location.

MONITORING POSITION EQUIPMENT

3.3.13 A hand-held or boat-fixed type digital Global Positioning System (GPS) with waypoint bearing indication or other equivalent instrument of similar accuracy shall be provided and used during monitoring to ensure the monitoring vessel is at the correct location before taking measurements.

CALIBRATION OF IN-SITU INSTRUMENTS

3.3.14 All in-situ monitoring instrument shall be checked, calibrated and certified by a laboratory accredited under HOKLAS or equivalent before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring. Responses of sensors and electrodes should be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring location.

3.3.15 For the on site calibration of field equipment by the ET, the BS 127:1993, "Guide to Field and on-site test methods for the analysis of waters" should be observed.

3.3.16 Sufficient stocks of spare parts should be maintained for replacements when necessary. Backup monitoring equipment shall also be made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, etc.

LABORATORY MEASUREMENT / ANALYSIS

3.3.17 Analysis of suspended solids has been carried out in a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd. Water samples of about 1L shall be collected at the monitoring stations for carrying out the laboratory SS determination. The SS determination work shall start within 24 hours after collection of the water samples. The SS determination shall follow APHA 19ed or equivalent methods subject to the approval of IEC and EPD.

4. MONITORING RESULTS

4.0.1. The environmental monitoring will be implemented based on the division of works areas of each designed project managed under different contracts with separate FEP applied by individual contractors. Overall layout showing work areas of various contracts, latest status of work commencement and monitoring stations is shown in ***Figure 2.1*** and ***Figure 3.1***. The monitoring results are presented in according to the Individual Contract(s).

4.0.2. In the reporting period, the concurrent contracts are:

- Contract no. HK/2012/08 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai West.

4.1. Noise Monitoring Results

4.1.1 Due to safety concerned, the location of the continuous noise monitoring station at City Hall was finely adjusted to the roof of the City Hall, Low Block on 1 May 2013.

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai West

The proposed division of noise monitoring station is summarized in ***Table 4.1*** below.

Table 4.1 Continuous Noise Monitoring Station for Contract no. HK/2012/08

Location ID	District	Description
ACL3	Central	City Hall

Remarks: Continuous noise monitoring results and graphical presentation for ACL3 during

4.1.2 As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the continuous noise monitoring at ACL3 – City Hall for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

4.2. Air Quality Monitoring Results

4.2.1 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were conducted at ACL1 – City Hall and ACL2 – PLA Barracks (ACL2a Contractor HK/2012/08 Site Office since 7 December 2013) on every six days basis.

4.2.2 Due to the large scale renovation works at People's Liberation Army Headquarter, a Proposal for Relocation of Air Quality Monitoring Station at People's Liberation Army Headquarter (ACL2) was formally submitted to EPD on 4th November, 2013.

4.2.3 Air Quality Monitoring at ACL2 was temporarily suspended during the period from 14th November, 2013 to 3rd December, 2013.

4.2.4 The Proposal for Relocation of Air Quality Monitoring Station at People's Liberation Army Headquarter (ACL2) was approved by EPD on 27 November 2013.

4.2.5 According to the approved proposal for relocation of Air Quality Monitoring station, the action and limit levels of ACL2a shall adopt the reference monitoring result from the baseline air monitoring report for EP/364/2009 in 22 April 2010 in which approved by EPD.

4.2.6 The air quality monitoring at ACL2a – Contractor HK/2012/08 Site Office was commenced on 7 December 2013.

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai West

4.2.7 The proposed division of air quality monitoring stations are summarized in ***Table 4.3*** below.

Table 4.3 Air Quality Monitoring Stations for Contract no. HK/2012/08

Station	Description
ACL1	City Hall
ACL2a	Contractor HK/2012/08 Site Office

4.2.8 As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the air quality monitoring at ACL1 – City Hall and ACL2a – Contractor HK/2012/08 Site Office for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

4.3. Water Quality Monitoring Results

4.3.1 The proposed division of water quality monitoring stations are summarized in ***Table 4.5*** below.

Table 4.5 Water Quality Monitoring Station for Contract no. HK/2012/08

Station ID	Description
Cooling Water Intakes	
M5B	Swire / Government Headquarters/ Tamar Development/ MTRCL and HSBC Headquarters
Culverts (Reference Station)	
Culvert J	Culvert J Outfall Location

4.3.2 Water quality monitoring at M5B and Culvert J were conducted three days per week during reporting period starting form 26 September 2014.

4.3.3 With respect to the confirmation of completion of marine work by WDII RSS, the water quality monitoring at M5B and Culvert J was temporary suspended from 23 August 2019 onward after completion of 4 weeks post-construction monitoring and with agreement from IEC.

5. COMPLIANCE AUDIT

5.0.1. The Event Action Plan for construction noise and air quality are presented in ***Appendix 5.1***.

5.1. Noise Monitoring

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai West

5.1.1 As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the continuous noise monitoring at ACL3 – City Hall for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

5.2. Air Quality Monitoring

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai West

5.2.1 As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the air quality monitoring at ACL1 – City Hall and ACL2a – Contractor HK/2012/08 Site Office for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

5.3. Water Quality Monitoring

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai West

5.3.1 With respect to the confirmation of completion of marine work by WDII RSS, the water quality monitoring at M5B and Culvert J was temporary suspended from 23 August 2019 onward after completion of 4 weeks post-construction monitoring and with agreement from IEC.

5.4. Site Audit

5.4.1 As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the weekly environmental site inspection for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

5.5. Review of the Reasons for and the Implications of Non-compliance

5.5.1 As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the weekly environmental site inspection for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

5.6. Summary of action taken in the event of and follow-up on non-compliance

5.6.1 As WDII RSS confirmation of construction works completion at CRIII area on 21 October 2019 and agreed with IEC on 1 November 2019, the weekly environmental site inspection for Contract no. HK/2012/08 under EP-122/2002/E was suspended from 1 November 2019 onward.

6. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION

6.0.1. No environmental complaint was received in this reporting quarter.

6.0.2. The details of cumulative complaint log and summary of complaints are presented in ***Appendix 6.1***.

6.0.3. No notification of summons or prosecution was received in the reporting period. Cumulative statistic on complaints and successful prosecutions are summarized in ***Table 6.1*** and ***Table 6.2*** respectively.

Table 6.1 Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
Commencement works to last reporting quarter	5
August 2021 – October 2021	0
Project-to-Date	**5**

Table 6.2 Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this quarter (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Water	-	0	0
Waste	-	0	0
Total	**-**	**0**	**0**

7. CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS

7.0.1. This section addresses the relevant cumulative construction impact due to the concurrent activities of the current projects including the Central Reclamation Phase III (CRIII), Wan Chai Development Phase II (WDII), Central-WanChai Bypass (CWB), Island Eastern Corridor Link projects (IECL) and Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel).

7.0.2. According to the Final EM&A report of Central Reclamation Phase III (CRIII) for Contract HK 12/02, the major construction activities were completed by end of January 2014 and no construction activities were undertaken thereafter and the water quality monitoring was completed in October 2011. As such, it is considered that there were no cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) undertaken by contractor HK12/02 in the reporting period.

7.0.3. According to the construction programme of Central-Wanchai Bypass at Wanchai West at the Central Reclamation Phase III area, no construction works was conducted in the reporting period. In view of the above, the cumulative construction impact due to the Central Reclamation Phase III (CRIII) was not anticipated.

7.0.4. According to the construction programme of Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects, no construction works under Wan Chai Development Phase II was conducted at Wan Chai. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were modification work of noise enclosure, open area hard paving, drainage works, soft landscape works and road resurfacing activities at North Point area in the reporting period. In addition, other non-Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects were observed undertaken at Wan Chai North and North Point area.

7.0.5. As relevant site mitigation measures for air quality and construction noise were implemented, no significant air quality impact and noise impact from construction activities was concluded in the reporting period. Besides, no construction work was conducted at EP-122 area in the reporting period. Thus, it is evaluated that the cumulative construction impact from the concurrent projects including Wan Chai Development Phase II (WDII), Central- WanChai Bypass (CWB), Island Eastern Corridor Link projects (IECL) was insignificant.

8. CONCLUSION

8.0.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.

8.0.2. No non-compliances were noted and no prosecutions were received during the reporting period.

8.0.3. Termination of EM&A programme (Construction Period) under EM&A Manual section 8.5.1 & 8.5.2 was approved by the EPD on 20 October 2021.