



**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-364/2009/H,  
FURTHER ENVIRONMENTAL PERMIT NOS. FEP-07/364/2009/H**

**MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT**

**- MARCH 2022 -**

**CLIENTS:**

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**and**

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13 April 2022

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**EXECUTIVE SUMMARY**

- i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – [March 2022](#) specific for Environmental Permit no. EP-364/2009/H, Further Environmental Permit nos. FEP-07/364/2009/H. 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 findings and information recorded during the period of [27 February 2022 to 26 March 2022](#).
- 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 11 December 2019 in continuation of the previous Environmental Team employed under Contract HK/2011/07 – Wan Chai Development Phase II and Central Wanchai Bypass – Sampling, Field Measurement and Testing Works (Stage 2) and Contract HK/2015/01 – Wan Chai Development Phase II and Central Wanchai Bypass – Sampling, Field Measurement and Testing Works (Stage 3).
- iii. In the reporting period, the principal work activities of individual contracts are included as follows:

Contract no. HY/2009/19 - Central - Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

- [Modification work of noise enclosure](#)
- [Open area hard paving](#)
- [D12 & Open Area fire main laying works](#)
- [D9 to D12 and P22 to P25 drainage works](#)
- [Road studs installation at IEC](#)
- [Remedial work at bridge F Soffit between pier 36-43](#)

Noise Monitoring

- iv. Noise monitoring during daytime was conducted at M4b - Victoria Centre; M5b - City Garden and M6 - HK Baptist Church Henrietta Secondary School on weekly basis in the reporting period.
- v. With respect to the shift in major construction site portions at Wan Chai North, the noise monitoring station M1a – Harbour Road Sports Centre was finely adjusted from East of Harbour Road Sports Centre to West of Harbour Road Sports Centre on 21 June 2016.
- vi. With respect to the demolition of Ex-Harbour Road Sports Centre, the respective noise monitoring station M1a – Harbour Road Sports Centre were finely adjusted on 16 and 25 May 2017 and thereafter to the Footbridge for Harbour Road Sports for noise monitoring.
- vii. With respect to the demolition of the temporary Footbridge for Harbour Road Sports Centre, the monitoring station M1a - Footbridge at EX-Wanchai Harbour Road Sports Centre was relocated as M1b – Rooftop of Wan Chai Ferry Pier on 2 November 2020.
- viii. With respect to the non-CWB Project building construction at Oil Street, the real-time noise monitoring station RTN2a- Hong Kong Electric Centre was finely adjusted from Northeast Side to Northwestern side at Roof Top location on 03 March 2017.
- ix. Noise monitoring at M7e - International Finance Centre (Eastern End of Podium), M7w - International Finance Centre (Western End of Podium) and M8 - City Hall were temporarily suspended on 16 June 2020 with respect to work completion confirmed by CWB RSS since 16 June 2020.
- x. Noise monitoring at M1b - Rooftop of Wan Chai Ferry Pier was temporarily suspended on 23 December 2020 with respect to work completion confirmed by WDII RSS.
- xi. As confirmed with CWB RSS, major construction activities of HY/2011/08 under FEP-11/364/2009/E have been completed, only minor defects rectification works remains while no PME will be used for the remaining minor defects rectification works. As such, the noise monitoring station M4b, real-time noise monitoring stations RTN1, RTN2a and RTN4 were no longer associated with Contract HY/2011/08 from 9 February 2021 onward.
- xii. As confirmed with CWB RSS, major construction activities of HY/2009/15 under FEP-06/364/2009/A and HY/2010/08 under FEP-10/364/2009/B have been completed, only minor defects rectification works remains while no PME will be used for the remaining minor defects rectification works. As such, the noise monitoring stations M2b – Noon-day gun area and M3a – Tung Lo Wan Fire Station have been temporarily suspended from 22 March 2021 onward.
- xiii. As confirmed with CWB RSS, the major construction works of HY/2009/19 at Rumsey Street Flyover and Planter under FEP-07/364/2009/H have been completed and no PME will be used for the remaining minor defects rectification works. As such, the noise monitoring station M7a – Harbour Building has been temporarily suspended from 24 May 2021 onward.
- xiv. With respect to work completion and no PME would be operated at the open area near Victoria Centre and Causeway Bay Community Centre near Victoria Centre and Causeway Bay Community Centre confirmed by CWB RSS, the noise monitoring station M4b – Victoria Centre has been temporarily suspended from 11 February 2022 onward.
- xv. [No action or limit level exceedance was recorded in the reporting period.](#)
- xvi. [24-hour real time noise monitoring was conducted at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot. No action or limit level exceedance was recorded at in the reporting period.](#)

- xvii. 24-hour real time noise monitoring was conducted at RTN2a - Hong Kong Electric Centre. No action or limit level exceedance was recorded at in the reporting period.
- xviii. 24-hour real time noise monitoring was conducted at RTN3 - Yu Lee Mo Fan Memorial School. Limit level exceedance was recorded at RTN3 - Yu Lee Mo Fan Memorial School on 22 and 23 March 2022. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 22 and 23 March 2022. As such, the exceedance was considered as non-Project related.
- xix. 24-hour real time noise monitoring was conducted at RTN4 – Causeway Bay Community Centre. No action or limit level exceedance was recorded at in the reporting period.

#### Air Quality Monitoring

- xx. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were conducted at CMA2a - Causeway Bay Community Center on every six days basis.
- xxi. With respect to the proposed demolition of eastern podium of Oil Street Site Office, the respective air quality monitoring station CMA1b – Oil Street Site Office was finely adjusted from East podium of the Oil Street Site Office to the West podium of the Oil Street Site Office on 21 December 2016.
- xxii. With respect to the proposed demolition of the Oil Street Site Office, the respective air quality monitoring station CMA1b – Harbour Grand Hotel Boundary Wall was finely adjusted from the Oil Street Site Office to Harbor Grand Hotel Boundary Wall from 05 June 2017 onwards.
- xxiii. With respect to work completion confirmed by CWB RSS, air quality monitoring at MA1e - International Finance Centre (Eastern End of Podium) and MA1w - International Finance Centre (Western End of Podium) were temporarily suspended from 16 June 2020 onwards and CMA5b - Pedestrian Plaza was temporarily suspended from 20 July 2020 onwards.
- xxiv. With respect to work completion confirmed by WDII RSS, air quality monitoring at CMA4a – Society for the Prevention of Cruelty to Animals was temporarily suspended and CMA3a-CWB PRE Site Office Area would no longer associated with Contract HK/2009/02 from 23 December 2020 onwards.
- xxv. As confirmed with CWB RSS, major construction activities of HY/2011/08 under FEP-11/364/2009/E have been completed, only minor defects rectification works remains while no PME will be used for the remaining minor defects rectification works. As such, the air quality monitoring stations CMA1b - Harbour Grand Hotel Boundary Wall and CMA2a - Causeway Bay Community Centre were no longer associated with Contract HY/2011/08 from 9 February 2021 onward.
- xxvi. As demolition of concrete slab work will be conducted at CMA1b - Harbour Grand Hotel Boundary Wall and there is no other appropriate locations for installation of sampler, air quality monitoring station CMA1b - Harbour Grand Hotel Boundary Wall will be represented by CMA2a-Causeway Bay Community Centre from 12 March 2021 onward due to short separation distance between two stations.
- xxvii. As confirmed with CWB RSS, major construction activities of HY/2009/15 under FEP-06/364/2009/A and HY/2010/08 under FEP-10/364/2009/B have been completed, only minor defects rectification works remains while no PME will be used for the remaining minor defects

- rectification works. As such, the air quality monitoring station CMA3a – CWB PRE site office has been temporarily suspended from 22 March 2021 onward.
- xxviii. As confirmed with CWB RSS, the major construction works of HY/2009/19 at Rumsey Street Flyover and Planter under FEP-07/364/2009/H have been completed and no PME will be used for the remaining minor defects rectification works. As such, the air quality monitoring station MA1b – Harbour Building has been temporarily suspended from 24 May 2021 onward.
- xxix. With respect to work completion and no PME would be operated at the open area near Victoria Centre and Causeway Bay Community Centre near Victoria Centre and Causeway Bay Community Centre confirmed by CWB RSS, the air quality monitoring station CMA2a – Causeway Bay Community Centre has been temporarily suspended from 11 February 2022 onward.

Complaints, Notifications of Summons and Successful Prosecutions

- xxx. [No environmental complaints, summons and prosecutions were received during the reporting period.](#)

Site Inspections and Audit

- xxxi. The Environmental Team (ET) conducted weekly site inspections for Contract no. HY/2009/19 in this reporting period.
- xxxii. Construction of bored pile E3B under HY/2009/17 was confirmed completed and the respective work area under FEP-03/364/2009 was handover and inspected under HY/2009/19 from 19 Dec 2012 onwards.
- xxxiii. Construction works under HK/2010/06 was confirmed completed and the respective work area under FEP-08/364/2009/A was handover and inspected under HK/2012/08 from 22 Sep 2014 onwards.
- xxxiv. As confirmed with CWB RSS, the construction works under Contract HY/2009/15 was completed from 27 October 2017 onwards. The respective weekly site audit inspection for HY/2009/15 was therefore suspended from 27 October 2017 onwards.
- xxxv. The Contractors rectified major observations and recommendations made during the audit sessions. No non-conformance was identified during the site inspections.
- xxxvi. As confirmed with CWB RSS, the construction works under Contract HY/2009/18 was completed from 25 April 2018 onward. The respective weekly site audit inspection for HY/2009/18 was therefore temporary suspended from 27 April 2018 onwards.
- xxxvii. As confirmed with WDII RSS and with respect to the joint inspection conducted with IEC on 25 May 2018, RSS, ET and IEC share the view that there is no adverse environmental impact of remaining works under Contract HK/2009/01 and the respective environmental site inspection was temporary suspended from 26 May 2018 onwards.
- xxxviii. As confirmed by CWB RSS, the seabed reinstatement works was resumed under Contract HY/2009/15 at EX-PCWA area on 26 June 2019 and the respective weekly site audit inspection for HY/2009/15 was resume from 26 June 2019 onwards and report under FEP-04/356/2009 in EP-356/2009 Monthly EM&A Report.

- xxxix. As confirmed by CWB RSS, the seabed reinstatement works was resumed under Contract HY/2010/08 at CBTS area on 7 August 2019 and the respective environmental monitoring for HY/2010/08 was resume from 7 August 2019 onwards and report under FEP-07/356/2009 in EP-356/2009 Monthly EM&A Report.
- xl. As WDII RSS confirmation of construction works completion 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-364/2009/G was suspended from 1 November 2019 onward.
- xli. As confirmed with CWB RSS, major construction works and landscape works associated with WVB and nearby roads under HY/2011/08 are completed and only minor defects rectification works within WVB and tunnel area remain, in view of the defects rectification works are minor and are carried out in indoor area, the weekly environmental site inspection for Contract no. HY/2011/08 under EP-364/2009/H was temporarily suspended from 20 July 2020 until the resumption of remaining construction works.
- xlii. As confirmed with WDII RSS, there is no more remaining works for HK/2009/02 under EP-364/2009 on 22 December 2020 and agreed with IEC on 23 December 2020, the weekly environmental site inspection for Contract no. for HK/2009/02 under EP-364/2009/H was suspended from 23 December 2020 onward. FEP-01/364/2009 was surrendered by the Contractor on 27 Jul 2021.
- xliii. As confirmed with CWB RSS, major construction activities of HY/2011/08 under FEP-11/364/2009/E have been completed, only minor defects rectification works remains while no PME will be used for the remaining minor defects rectification works. As such, the weekly environmental site inspection for Contract no. HY/2011/08 has been temporarily suspended from 20 July 2020 onward.
- xliv. As confirmed with CWB RSS, major construction activities of HY/2009/15 under FEP-06/364/2009/A and HY/2010/08 under FEP-10/364/2009/B have been completed, only minor defects rectification works remains while no PME will be used for the remaining minor defects rectification works. As such, the weekly environmental site inspection for Contract no. HY/2009/15 and HY/2010/08 have been temporarily suspended from 22 March 2021 onward.

#### Future Key Issues

- xlv. In the coming reporting period, the principal work activities of individual contracts are anticipated as follows:

#### Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

- Modification work of noise enclosure
- Open area hard paving
- D12 & Open Area fire main laying works
- D9 to D12 and P22 to P25 drainage works
- Road studs installation at IEC
- Remedial work at bridge F Soffit between pier 25-35



## 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-364/2009/H and Further Environmental permit nos. FEP-07/364/2009/H 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 for Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) and in the EM&A Manual of the approved EIA Report for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001).
- 1.1.2. This report presents the environmental monitoring and auditing work carried out in accordance to the Section 10.3 of EM&A Manual and “*Environmental Monitoring and Audit Requirements*” under Particular Specification Section 27.
- 1.1.3. This report documents the finding of EM&A works for Environmental Permit (EP) no. EP-364/2009/H, Further Environmental Permit (FEP) nos. FEP-07/364/2009/H during the period [27 February 2022 to 26 March 2022](#).

### 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** *Status of Regulatory Compliance* – summarizes the status of valid Environmental Permits / Licenses during the reporting period.
- Section 4** *Monitoring Requirements* – summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.
- Section 5** *Monitoring Results* – summarizes the monitoring results obtained in the reporting period.
- Section 6** *Compliance Audit* – summarizes the auditing of monitoring results, all exceedances environmental parameters.
- 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** *Environmental Site Audit* – summarizes the findings of weekly site



inspections undertaken within the reporting period, with a review of any relevant follow-up actions within the reporting period.

**Section 9**     ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution

**Section 10**    ***Conclusion***

## 2 PROJECT BACKGROUND

### 2.1 Background

2.1.1. “Wan Chai Development phase II and Central-Wan Chai Bypass” and “Central-Wan Chai Bypass and Island Eastern Corridor Link” (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-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001) and Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) have been approved on 31 August 2001 and 11 December 2008 respectively.

2.1.2. The key purpose of Wan Chai Development Phase II (WDII) is to provide land at Wan Chai North and North Point for construction of the Central-Wan Chai Bypass and Island Eastern Corridor Link (CWB). Land formed under the project will be developed as a world-class waterfront promenade joining that at the new Central waterfront for public enjoyment.

2.1.3. There is a compelling and present need for the CWB to provide relief to the very congested east-west Connaught Road Central/Harcourt Road / Gloucester Road Corridor (the Corridor) which is currently operating beyond its capacity. The CWB will provide relief to the existing congestion along the Corridor and cater for the anticipated growth of traffic on Hong Kong Island. Without the CWB and its access roads, there will not be sufficient capacity to serve the heavy traffic demands at both strategic and local levels.

### 2.2 Scope of the Project and Site Description

2.2.1. Design and Construction of Central – Wan Chai Bypass and Island Eastern Corridor Link under the Project involves the construction and operation of a trunk road and its road tunnel more than 800m in length between portals that is shown at Figure 2.1.

2.2.2. The study area encompasses existing developments from Central to North Point. The scope of the Central-Wanchai Bypass (CWB) and Island Eastern Corridor Link (IECL) includes:

- A dual three-lane trunk road, approximately 4.5 km in length, and tunnel approximately 3.7 km in length defined from the connection with the existing Rumsey Street Flyover in Central, through to a connection with the existing Island Eastern Corridor to the east of the Causeway Bay Typhoon Shelter (CBTS);
- The Central Interchange near the Rumsey Street Flyover to provide road connections to the Central area;
- Tunnel control buildings and ventilation buildings;
- Slip roads to connect the CWB to the local road system in the Wan Chai North and Causeway Bay area;
- Associated road lighting, road signing, traffic control and surveillance system; and
- Other associated works.

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 five 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	Reason for inclusion
DP1	Central-Wanchai Bypass (CWB) including its road tunnel and slip roads	Schedule 2, Part I, A.1 and A.7	Trunk road and road tunnel more than 800 m in length
DP2	Road P2 and other roads which are classified as primary/district distributor roads	Schedule 2, Part I, A.1	Primary / district distributor roads
DP3	Reclamation works including associated dredging works	Schedule 2, Part I, C.1 and C.12	Reclamation more than 5 ha in size and a dredging operation less than 100 m from a seawater intake point
DP5	Wan Chai East Sewage Outfall	Schedule 2, Part I, F.5 and F.6	Submarine sewage pipelines with a total diameter more than 1,200 mm and include a submarine sewage outfall
DP6	Dredging for the Cross-harbour Water Mains from Wan Chai to Tsim Sha Tsui	Schedule 2, Part I, C.12	A dredging operation less than 100 m from a seawater intake point

### 2.3 Division of the Project Responsibility

2.3.1. Due to the multi-contract nature of the Project, there are a number of contracts sub-dividing the whole works area into different work areas to be commenced. Contractors of individual contracts will be required by the EP holder to apply Further Environmental Permits such that the impact monitoring stations are sub-divided accordingly to facilitate the implementation of EM&A programme and to streamline the EM&A reporting for individual FEP holders correspondingly.

2.3.2. The details of individual contracts are summarized in **Table 2.2**.

**Table 2.2 Details of Individual Contracts under the Project**

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
HY/2009/17	Central – Wan Chai Bypass (CWB) at FEHD Whitfield Depot – Advanced piling works.	DP1	5 October 2010 (Completed)
HY/2009/18	Central – Wan Chai Bypass (CWB) – Central Interchange	DP1	21 April 2011 (Completed)
04/HY/2006	Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street	DP1	September 2010 (Completed)
HK/2009/01	Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works	DP1, DP2	25 August 2011 (Completed)

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
HK/2009/02	Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East(CWB Tunnel)	DP1	26 April 2011 (Completed)
HY/2009/15	Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)	DP1,DP3	13 July 2011 (Completed)
HY/2009/19	Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link	DP1	24 March 2011
HK/2010/06	Wan Chai Development Phase II- Central-Wan Chai Bypass over MTR Tsuen Wan Line	DP3	22 March 2011 (Completed)
HK/2012/08	Wan Chai Development Phase II- Central-Wan Chai Bypass at Wan Chai West	DP1,DP2, DP3	10 March 2014 (Completed)
HY/2010/08	Central- Wanchai Bypass Tunnel – Tunnel (Slip Road 8)	DP1, DP2, DP3	21 March 2013 (Completed)
HY/2011/08	Central - Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning	DP1	8 October 2014 (Completed)

## 2.4 Project Organization and Contact Personnel

2.4.1. Civil Engineering and Development Department and Highways Department are the overall project controllers for the Wan Chai Development Phase II and Central-Wan Chai Bypass respectively. 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.

2.4.2. 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 2.3**:

**Table 2.3 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
	Engineer's Representative for CWB	Chief Resident Engineer	Ms. Lydia Lee	3762 2760	2142 5577
Chun Wo - CRGL - MBEC_Joint Venture	Contractor under Contract no. HY/2009/19	Project Manager	Mr. William Leung	3758 8879	3757 8901
		Site Agent	Mr. William Luk	3758 6868	
		Deputy Site Agent	Mr. Andrew Cheng	9161 9446	
		Environmental Officer	Mr. Kenneth Chan	6387 3939	



Party	Role	Post	Name	Contact No.	Contact Fax
		Construction Manager (Marine)	Mr. Wingo Wong	9300 2625	
		Construction Manager (Noise Barrier)	Mr. Jerry Siu	9493 3664	
		Construction Manager (Land)	Mr. Yung Kwok Wah	9834 1010	
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

2.4.3. In this reporting period, the principal work activities of individual contracts are included as follows:

Contract no. HY/2009/19 - Central - Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

- Modification work of noise enclosure
- Open area hard paving
- D12 & Open Area fire main laying works
- D9 to D12 and P22 to P25 drainage works
- Road studs installation at IEC
- Remedial work at bridge F Soffit between pier 36-43

2.4.4. In coming reporting period, the principal work activities of individual contracts are anticipated as follows:

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

- Modification work of noise enclosure
- Open area hard paving
- D12 & Open Area fire main laying works
- D9 to D12 and P22 to P25 drainage works
- Road studs installation at IEC
- Remedial work at bridge F Soffit between pier 25-35

### 3 STATUS OF REGULATORY COMPLIANCE

#### 3.1 Status of Environmental Licensing and Permitting under the Project

3.1.1. A summary of the current status on licences and/or permits on environmental protection pertinent to the Project is shown in **Table 3.1**.

**Table 3.1 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project**

Permits and/or Licenses	Reference No.	Issued Date	Status
Environmental Permit	EP-356/2009	30 Jul 2009	Valid
Further Environmental Permit	FEP-01/356/2009	18 Feb 2010	Surrendered
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	Surrendered
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	Surrendered
Further Environmental Permit	FEP-04/356/2009	22 Nov 2010	Surrendered
Further Environmental Permit	FEP-05/356/2009	24 Mar 2011	Surrendered
Further Environmental Permit	FEP-06/356/2009	5 Mar 2013	Surrendered
Further Environmental Permit	FEP-07/356/2009	26 July 2013	Surrendered
Further Environmental Permit	FEP-08/356/2009	1 Aug 2016	Surrendered
Environmental Permit	EP-364/2009/H	22 Apr 2020	Valid
Further Environmental Permit	FEP-01/364/2009	24 Mar 2010	Surrendered
Further Environmental Permit	FEP-02/364/2009	21 Apr 2010	Surrendered
Further Environmental Permit	FEP-03/364/2009	12 Jul 2010	Surrendered
Further Environmental Permit	FEP-04/364/2009/A	14 Oct 2010	Surrendered
Further Environmental Permit	FEP-05/364/2009/A	15 Nov 2010	Surrendered
Further Environmental Permit	FEP-06/364/2009/A	22 Nov 2010	Surrendered
Further Environmental Permit	FEP-07/364/2009/H	22 Apr 2020	Valid
Further Environmental Permit	FEP-08/364/2009/A	15 Jun 2012	Surrendered
Further Environmental Permit	FEP-09/364/2009/B	5 Mar 2013	Surrendered
Further Environmental Permit	FEP-10/364/2009/B	26 July 2013	Surrendered
Further Environmental Permit	FEP-11/364/2009/E	22 Dec 2016	Surrendered
Further Environmental Permit	FEP-12/364/2009/D	01 Aug 2016	Surrendered
Environmental Permit	EP-376/2009	13 Nov 2009	Valid



Permits and/or Licenses	Reference No.	Issued Date	Status
Further Environmental Permit	FEP-01/376/2009	31 Mar 2015	Surrendered
Further Environmental Permit	FEP-02/376/2009	1 Aug 2016	Surrendered

- 3.1.2. Due to the multi-contract nature of the Project, the status of permits and/or licences under the individual contract(s) are presented as below:

Contract no. HY/2009/17 – Central – Wan Chai Bypass (CWB) at FEHD Whitfield Depot – Advanced piling works under FEP-03/364/2009

- 3.1.3. The construction works was completed and the FEP-03/364/2009 was surrendered by the Contractor on 28 March 2013.

Contract no. 04/HY/2006 – Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street under FEP-04/364/2009/A

- 3.1.4. The construction works was completed, and the FEP-04/HY/2006 was surrendered by the Contractor on 11 February 2011.

Contract no. HK/2010/06 - Wan Chai Development Phase II - Central - Wan Chai Bypass over MTR Tsuen Wan Line under FEP-08/364/2009/A

- 3.1.5. The construction works was completed, and the FEP-08/364/2009/A was surrendered by the Contractor on 3 October 2014.

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works under FEP-02/364/2009

- 3.1.6. As confirmed with WDII RSS and with respect to the joint inspection conducted with IEC on 25 May 2018, RSS, ET and IEC share the view that there is no adverse environmental impact of remaining works under Contract HK/2009/01 and the respective environmental site inspection and associated monitoring station were temporary suspended from 26 May 2018 onwards. FEP-02/364/2009 was surrendered by the Contractor on 3 September 2018.

Contract no. HY/2011/08 – Central - Wan Chai Bypass - Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009/E

- 3.1.7. As confirmed with CWB RSS, major construction activities of HY/2011/08 under FEP-11/364/2009/E have been completed, only minor defects rectification works remains while no PME will be used for the remaining minor defects rectification works. As such, the weekly environmental site inspection and associated monitoring station for Contract no. HY/2011/08 has been temporarily suspended from 20 July 2020 onward. FEP-11/364/2009/E was surrendered by the Contractor on 27 January 2021.

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

3.1.8. The Construction works under HY/2009/15 was confirm completed by the RSS from 27 October 2017 onwards. The weekly site audit inspection and environmental monitoring station were temporary suspended and no longer associated with HY/2009/15 from 27 October 2017 onwards. FEP-06/364/2009/A was surrendered by the Contractor on 07 June 2021.

Contract no. HY/2010/08 –Central – Wanchai Bypass Tunnel – Tunnel (Slip Road 8) under FEP-10/364/2009/B

3.1.9. The construction works was completed and the FEP-10/364/2009/B was surrendered by the Contractor on 07 June 2021.

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

3.1.10. As confirmed with WDII RSS, there is no more remaining works for HK/2009/02 under EP-364/2009 on 22 December 2020 and agreed with IEC on 23 December 2020. FEP-01/364/2009 was surrendered by the Contractor on 27 Jul 2021.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

3.1.11. The current status on licences and/or permits on environmental protection pertinent and submission under FEP-07/364/2009/H for contract no. HY/2009/19 are shown in **Table 3.10** and **Table 3.11**.

**Table 3.2 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/19**

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-07/364/2009/H	22 Apr 2020	N/A	Valid
Notification of Works Under APCO	326160	24 Jan 2011	N/A	Valid
Notification of Works (further proposed change to the particulars) Under APCO	415587	11 Apr 2017	N/A	Valid
Registration as a Waste Producer	7012306	10 Feb 2011	N/A	Valid
Registration as Chemical Waste Producer	5213-151-C3654-01	24 Mar 2011	N/A	Valid
Application for Vessel	7013285	21 Jul 2011	N/A	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Disposal				
	GW-RS0006-22	10 Jan 2022	12 Jan 2022 to 9 Jul 2022	Valid
	GW-RS0007-22	7 Jan 2022	10 Jan 2022 to 30 Jun 2022	Valid
	GW-RS0147-2	8 Mar 2022	10 Mar 2022 to 9 Sep 2022	Valid
Water Discharge License	WT00035697-2020	19 Jun 2020	30 Jun 2025	Valid
	WT00039182-2021	15 Nov 2021	30 Sep 2026	Valid

**Table 3.3 Summary of submission status under FEP-07/364/2009/H**

EP Condition	Submission	Date of Submission
Condition 2.13	Landscape Plan (Rev.11)	31 December 2021
Condition 2.9	Noise Management Plan (Rev.5)	29 May 2019

## 4 MONITORING REQUIREMENTS

### 4.1 Noise Monitoring

#### NOISE MONITORING STATIONS

4.1.1. The noise monitoring stations for the Project are listed and shown in **Table 4.1** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 4.1 Noise Monitoring Stations**

Station	Description
M1b***	Rooftop of Wan Chai Ferry Pier
M2b	Noon-day Gun Area
M3a	Tung Lo Wan Fire Station
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School
M7a	Harbour Building
M7e*	International Finance Centre (Eastern End of Podium)
M7w	International Finance Centre (Western End of Podium)
M8**	City Hall

Remark \*: Location ID has been updated from M7 to M8 for City Hall

Remark \*\*: M7e has become a reference station starting from 7 Aug 2012

Remarks\*\*\*: The monitoring station M1a was relocated as M1b – Rooftop of Wan Chai Ferry Pier on 2 November 2020.

#### REAL TIME NOISE MONITORING STATIONS

4.1.2. The noise monitoring stations for the Project are listed and shown in **Table 4.2** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 4.2 Real Time Noise Monitoring Stations**

District	Station	Description
Tin Hau	RTN1	FEHD Hong Kong Transport Section Whitfield Depot
North Point	RTN2a	Hong Kong Electric Centre
North Point	RTN3	Po Leung Kuk Yu Lee Mo Fan Memorial School
Tin Hau	RTN4	Causeway Bay Community Centre

### NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 4.1.3. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{eq}$ ).  $L_{eq}$  (30 minutes) shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays. For all other time periods,  $L_{eq}$  (5 minutes) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. Supplementary information for data auditing, statistical results such as  $L_{10}$  and  $L_{90}$  shall also be obtained for reference.
- 4.1.4. Noise monitoring shall be carried out at all the designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:
- One set of measurements between 0700 and 1900 hours on normal weekdays.
- 4.1.5. Real time noise 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 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.
- 4.1.6. 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

- 4.1.7. As referred to in the Technical Memorandum <sup>TM</sup> 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 agree to within 1.0 dB.
- 4.1.8. 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.
- 4.1.9. 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 agree to within 1.0 dB.

**4.2 Air Quality Monitoring**

AIR QUALITY MONITORING STATIONS

4.2.1. The air quality monitoring stations for the Project are listed and shown in **Table 4.3 and Figure 4.1. Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 4.3 Air Quality Monitoring Stations**

Station ID	Monitoring Location	Description
CMA1b	Harbour Grand Hotel Boundary Wall**	North Point (Re-commenced on 14 November 2011)
CMA2a	Causeway Bay Community Centre	Causeway Bay
CMA3a	CWB PRE Site Office *	Causeway Bay
CMA4a	Society for the Prevention of Cruelty to Animals	Wan Chai
CMA5b	Pedestrian Plaza***	Wan Chai
MA1e	International Finance Centre (Eastern End of Podium)	Central
MA1w	International Finance Centre (Western End of Podium)	Central
MA1b	Harbour Building	Central

Remarks\*: As per the ENPC meeting in March 2011, the monitoring stations CMA3a – Future CWB site office at Wanchai Waterfront Promenade was renamed as remark.

Remarks\*\*: The location ID of monitoring station CMA1b was updated as “Oil Street Site Office” in April 2013. The location ID of monitoring station CMA1b was updated as “Harbour Grand Hotel Boundary Wall” with respect to the fine adjustment of monitoring station from the Oil Street Site Office to Harbour Grand Hotel Boundary Wall from 05 June 2017 onwards due to demolition of Oil Street Site Office.

Remarks\*\*\*: The station ID and monitoring location was updated in December 2014 with respect to monitoring station relocation.

AIR QUALITY MONITORING PARAMETERS, FREQUENCY AND DURATION

4.2.2. 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.

4.2.3. 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.

4.2.4. 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

4.2.5. 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<sup>3</sup> 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 cm<sup>2</sup>;
- 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.

4.2.6. 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

4.2.7. 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.

4.2.8. 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.

4.2.9. 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.

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

4.2.11. Current calibration certificates of equipments are presented in **Appendix 4.2.**

## 5 MONITORING RESULTS

- 5.0.1. The environmental monitoring will be implemented based on the division of works areas of each designated 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 4.1**. The monitoring results are presented in according to the Individual Contract(s).
- 5.0.2. In the reporting period, the concurrent contracts are as follows:
- Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link
- 5.0.3. The environment monitoring schedules for reporting period and coming month are presented in **Appendix 5.1**.



## 5.1 Noise Monitoring Results

5.1.1 Monitoring for report of review baseline noise level was performed from 11 April 2011 to 8 June 2011. Then the report was submitted on the 20 June 2011, verified by IEC on 18 July 2011 and was approved by ER by January 2012. The new baseline is used for the noise calculation starting from January 2012.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

5.1.2 Noise monitoring for the tunnel works under contract no. HY/2009/19 was commenced on 24 April 2011. The proposed division of noise monitoring stations are summarized in **Table 5.4** below.

**Table 5.1 Noise Monitoring Stations for Contract no. HY/2009/19**

Station	Description
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

5.1.3 As confirmed with CWB RSS, the major construction works of HY/2009/19 at Rumsey Street Flyover and Planter under FEP-07/364/2009/H have been completed and no PME will be used for the remaining minor defects rectification works. As such, the noise monitoring station M7a – Harbour Building has been temporarily suspended from 24 May 2021 onward.

5.1.4 With respect to work completion and no PME would be operated at the open area near Victoria Centre and Causeway Bay Community Centre near Victoria Centre and Causeway Bay Community Centre confirmed by CWB RSS, the noise monitoring station M4b – Victoria Centre has been temporarily suspended from 11 February 2022 onward.

5.1.5 Noise monitoring at M6 was temporarily suspended as access to the monitoring location was not available from 08 Mar 2022 to 20 Mar 2022 due to the impact of COVID-19.

5.1.6 No action or limit level exceedance was recorded in the reporting period.

5.1.7 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in **Appendix 5.2**.

## 5.2 Real Time Noise Monitoring Results

- 5.2.1. Real time noise monitoring at RTN4-Causeway Bay Community Centre was commenced on 13 Jan 2013. The baseline noise level of RTN4- Causeway Bay Community Centre has adopted the results from the baseline noise monitoring report for EP/364/2009 in 22 April 2010 in which approved by EPD.
- 5.2.2. Po Leung Kuk Yu Lee Mo Fan Memorial School granted permission for set up on 4 Sep 2012 and real time noise monitoring station RTN3 set up was performed on 14 Sep 2012. Real time noise baseline capturing was conducted during time period without construction work from 21 Sep 2012 to 04 Oct 2012. Real time noise monitoring at RTN3 – Po Leung Kuk Yu Lee Mo Fan Memorial School was commenced since 06 Oct 2012.
- 5.2.3. Real-time noise monitoring station RTN2 previously located at oil Street Community Liaison Centre was relocated to Hong Kong Electric Centre on 5 Oct 2012, which is a representative of the noise sensitive receiver City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted at Hong Kong Electric Centre from 4 December 2009 to 17 December 2009.
- 5.2.4. Real-time noise monitoring station RTN1-FEHD Whitfield Depot was finely adjusted from 2/F to roof-top at FEHD Whitfield Depot on 24 June 2013 with respect to the commencement of advance works for IEC parapet demolition.
- 5.2.5. With respect to the non-CWB Project building construction at Oil Street, the real-time noise monitoring station RTN2a- Hong Kong Electric Centre was finely adjusted from Northeast Side to Northwestern side at Roof Top location on 03 March 2017.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

- 5.2.6. The proposed division of noise monitoring stations are summarized in **Table 5.7** below. Real time noise monitoring for major construction works under contract no. HY/2009/19 was commenced on 24 April 2011.

**Table 5.2 Real Time Noise Monitoring Stations for Contract no. HY/2009/19**

Location ID	District	Description
RTN1	Tin Hau	FEHD Hong Kong Transport Section Whitfield Depot
RTN2a	North Point	Hong Kong Electric Centre
RTN3	North Point	Po Leung Kuk Yu Lee Mo Fan Memorial School
RTN4	Tin Hau	Causeway Bay Community Centre

*\* Real time noise monitoring results and graphical presentation during restrict hours and night time period are for information only and noise during CNP period shall be controlled under NCO.*

- 5.2.7. No action or limit level exceedance was recorded at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot in the reporting period.
- 5.2.8. No action or limit level exceedance was recorded at RTN2a - Hong Kong Electric Centre in the reporting period.
- 5.2.9. Limit level exceedance was recorded at RTN3 - Yu Lee Mo Fan Memorial School on 22 and 23 March 2022. After investigation, no construction activities were conducted under Contractor HY/2009/19 around the monitoring station on 22 and 23 March 2022. As such, the exceedance was considered as non-Project related.
- 5.2.10. No action or limit level exceedance was recorded at RTN4 – Causeway Bay Community Centre in the reporting period.
- 5.2.11. Real time noise monitoring results measured in this reporting period are reviewed and summarized. Details of real time noise monitoring results and graphical presentation can be referred to [Appendix 5.3.](#)

### 5.3 Air Quality Monitoring Results

#### Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

- 5.3.1 No air quality monitoring was undertaken in the reporting period under Contract no. HY/2009/19 as the major construction works were completed and the associated air quality monitoring was suspended temporarily in succession.
- 5.3.2 As demolition of concrete slab work will be conducted at CMA1b - Harbour Grand Hotel Boundary Wall and there is no other appropriate locations for installation of sampler, air quality monitoring station CMA1b - Harbour Grand Hotel Boundary Wall was suspended and represented by CMA2a-Causeway Bay Community Centre from 12 March 2021 onward due to short separation distance between two stations.
- 5.3.3 As confirmed with CWB RSS, the major construction works of HY/2009/19 at Rumsey Street Flyover and Planter under FEP-07/364/2009/H have been completed and no PME will be used for the remaining minor defects rectification works. As such, the air quality monitoring station MA1b – Harbour Building has been temporarily suspended from 24 May 2021 onward.
- 5.3.4 With respect to work completion and no PME would be operated at the open area near Victoria Centre and Causeway Bay Community Centre near Victoria Centre and Causeway Bay Community Centre confirmed by CWB RSS, the air quality monitoring station CMA2a – Causeway Bay Community Centre has been temporarily suspended from 11 February 2022 onward.

**5.4 Waste Monitoring Results**

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

5.4.1. Inert and Non-inert C&D wastes were disposed of in this reporting period. Details of the waste flow table are summarized in **Table 5.21**.

**Table 5.3 Details of Waste Disposal for Contract no. HY/2009/19**

Waste Type	Quantity this month	Cumulative-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, <b>ton</b>	30.34	844833.72	TKO137
Inert C&D materials recycled, <b>ton</b>	Nil	82349.7	N/A
Non-inert C&D materials disposed, <b>ton</b>	39.36	10376.14	SENT Landfill
Non-inert C&D materials recycled, <b>ton</b>	Nil	565.63	N/A
Chemical waste disposed, <b>ton</b>	Nil	16.53	N/A
Marine Sediment (Tunnel) (Type-1 Open Sea Disposal), <b>m<sup>3</sup></b>	Nil	20737.96	South of Cheung Chau
Marine Sediment (Tunnel) (Type 1- Open Sea Disposal (Dedicated Sites) & Type 2 – Confined Marine Disposal), <b>m<sup>3</sup></b>	Nil	30751	East of Sha Chau
Marine Sediment (Approach Ramp) (Type 2 – Confined Marine Disposal), <b>m3</b>	Nil	6491	East of Sha Chau

## 6 COMPLIANCE AUDIT

6.0.1. The Event Action Plan for construction noise, air qualities are presented in Appendix 6.1.

### 6.1 Noise Monitoring

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

6.0.2. No action or limit level exceedance was recorded in the reporting period.

### 6.2 Real Time Noise Monitoring

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

6.2.1. 24-hour real time noise monitoring was conducted at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot. No action or limit level exceedance was recorded in the reporting period.

6.2.2. 24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No action or limit level exceedance was recorded in the reporting period.

6.2.3. 24-hour real time noise monitoring was conducted at RTN3 - Yu Lee Mo Fan Memorial School. Limit level exceedance was recorded at RTN3 - Yu Lee Mo Fan Memorial School on 22 and 23 March 2022. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 22 and 23 March 2022. As such, the exceedances were considered as non-Project related.

6.2.4. 24-hour real time noise monitoring was conducted at RTN4 – Causeway Bay Community Centre. No action or limit level exceedance was recorded in the reporting period.

### 6.3 Review of the Reasons for and the Implications of Non-compliance

6.3.1 There was no non-compliance from the site audits in the reporting period. The observations and recommendation made in each individual site audit session were presented in Section 8.

### 6.4 Summary of action taken in the event of and follow-up on non-compliance

6.4.1 No particular action was taken for site audits since no non-compliance was recorded in the reporting period.

## 7 CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS

- 7.0.1. According to Condition 3.4 of the EP-364/2009/H, 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 Final EM&A Report of EP-122/2002/E, the construction works at the area of EP-122/2002/E were completed. 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 and remedial works 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 project related exceedance was recorded 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 ENVIRONMENTAL SITE AUDIT**

8.0.1. During this reporting period, weekly environmental site audits were conducted for Contracts HY/2009/19. No non-conformance was identified during the site audits. The Contractors rectified major observations and recommendations made during the audit sessions.

8.0.2. Site inspections for Contract no. HY/2009/19 were carried out during this reporting period. No observation was found in the reporting period.

Mitigation measures implemented to prevent muddy discharge and surface runoff

8.0.3. With a view to ensure the adequacy and effectiveness of measures to prevent the discharge of muddy water, including surface run-off, from construction works, the following mitigation measures were implemented by Contractor(s) in the reporting period:

Contract No.	Mitigation Measures implemented
HY/2009/19	<ul style="list-style-type: none"> <li>• Deployment of embankment along seawall</li> <li>• Hard paved the area along seafront</li> <li>• Cover the stockpile material to avoid excessive surface runoff</li> <li>• Avoid storage of stockpile material along seafront</li> <li>• Regular review and maintenance of the site drainage system</li> <li>• Regular review dosage of wastewater treatment unit to ensure the discharge compliance</li> </ul>



**9 COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION**

- 9.0.1. No environmental complaints, summons and prosecutions were received in the reporting period.
- 9.0.2. The details of cumulative complaint log and updated summary of complaints are presented in **Appendix 9.1**
- 9.0.3. Cumulative statistic on complaints and successful prosecutions are summarized in **Table 9.1** and **Table 9.2** respectively.

**Table 9.1 Cumulative Statistics on Complaints**

Reporting Period	No. of Complaints
March 2022	0
September 2010 – February 2022	119
<b>Total</b>	<b>119</b>

**Table 9.2 Cumulative Statistics on Successful Prosecutions**

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this month (Offence Date)	Cumulative No. Project-to-Date
Air	1	0	1
Noise	10	0	10
Water	2	0	2
Waste	0	0	0
<b>Total</b>	<b>13</b>	<b>0</b>	<b>13</b>

**10 CONCLUSION**

10.0.1. 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.

10.0.2. The scheduled construction activities and the recommended mitigation measures for the coming month are listed in **Table 10.1**. The construction programmes of individual contracts are provided in [Appendix 10.1](#).

**Table 10.1 Summary of Key Construction Activities of Individual Contract(s) to be commenced in Coming Reporting period**

Contract No.	Key Construction Works	Recommended Mitigation Measures
HY/2009/19	<ul style="list-style-type: none"> <li>• Modification work of noise enclosure</li> <li>• Open area hard paving</li> <li>• D12 &amp; Open Area fire main laying works</li> <li>• D9 to D12 and P22 to P25 drainage works</li> <li>• Resurfacing activities at IEC Eastbound</li> <li>• Remedial work at bridge F Soffit between pier 25-35</li> </ul>	<ul style="list-style-type: none"> <li>• Noise level shall be controlled by reducing the breaking operation rate.</li> <li>• Noise barrier shall be implemented</li> <li>• Dust control during dust generating works</li> <li>• Ensure proper deployment of silt curtain around marine construction works area</li> <li>• Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system or the sea.</li> </ul>

10.0.3. The construction works of Contract no. 04/HY/2006 – Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street under FEP-04/364/2009/A was completed, and the FEP was surrendered by the Contractor on 11 February 2011.

10.0.4. The construction works of Contract no. HY/2009/17 - Advance piling works at Whitfield Depot under FEP-03/264/2009 was completed, and the FEP was surrendered by the Contractor and found in order by EPD on 25 April 2013.

10.0.5. The construction works of Contract HK/2010/06 was completed, and the FEP-08/364/2009/A was surrendered by the Contractor on 3 October 2014.

10.0.6. The Construction works under HY/2009/18 was confirm completed by the RSS from 25 April 2018 onwards, and the FEP-05/364/2009/A under HY/2009/18 was surrendered on 06 January 2020.

10.0.7. As confirmed with WDII RSS and with respect to the joint inspection conducted with IEC on 25 May 2018, RSS, ET and IEC share the view that there is no adverse environmental impact of remaining works under Contract HK/2009/01 and the respective environmental site

- inspection was temporary suspended from 26 May 2018 onwards. FEP-02/364/2009 was surrendered by the Contractor on 3 September 2018.
- 10.0.8. As confirmed with WDII RSS, there is no more remaining works for HK/2009/02 under EP-364/2009 on 22 December 2020 and agreed with IEC on 23 December 2020, the weekly environmental site inspection for Contract no. for HK/2009/02 under EP-364/2009/H was suspended from 23 December 2020 onward. FEP-01/364/2009 was surrendered by the Contractor on 27 July 2021.
- 10.0.9. As confirmed with CWB RSS, major construction activities of HY/2011/08 under FEP-11/364/2009/E have been completed, only minor defects rectification works remains while no PME will be used for the remaining minor defects rectification works. As such, the weekly environmental site inspection for Contract no. HY/2011/08 has been temporarily suspended from 20 July 2020 onward. FEP-11/364/2009/E was surrendered by the Contractor on 27 January 2021.
- 10.0.10. As confirmed with CWB RSS, major construction activities of HY/2009/15 under FEP-06/364/2009/A and HY/2010/08 under FEP-10/364/2009/B have been completed, the weekly environmental site inspection for Contract no. HY/2009/15 and HY/2010/08 have been temporarily suspended from 22 March 2021 onward. FEP-06/364/2009/A and FEP-10/364/2009/B were surrendered by the Contractor on 07 June 2021.