



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-01/364/2009
AND FEP-07/364/2009/H**

**QUARTERLY ENVIRONMENTAL MONITORING
AND AUDIT REPORT**

- SEPTEMBER 2021 TO NOVEMBER 2021 -

CLIENTS:

**Civil Engineering and Development
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and

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TABLE OF CONTENTS

1. INTRODUCTION	11
1.1 Scope of the Report	11
1.2 Structure of the Report	11
2. PROJECT BACKGROUND	12
2.1 Background	12
2.2 Scope of the Project and Site Description.....	12
2.3 Division of the Project Responsibility	13
2.4 Project Organization and Contact Personnel.....	16
2.5 Principal Work and Activities	16
3. MONITORING REQUIREMENTS	18
3.1. Noise Monitoring.....	18
3.2. Air quality monitoring	19
4. MONITORING RESULTS	22
4.1. Noise Monitoring Results	22
4.2. Real Time Noise Monitoring Results.....	24
4.3. Air quality monitoring Results.....	26
4.4. Waste Monitoring Results	27
5. COMPLIANCE AUDIT	29
5.1. Noise Monitoring.....	29
5.2. Real Time Noise Monitoring	29
5.3. Air quality monitoring	30
5.4. Site Audit.....	30
5.5. Review of the Reasons for and the Implications of Non-compliance.....	30
5.6. Summary of action taken in the event of and follow-up on non-compliance	30
6. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION	31
7. CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS	34
8. CONCLUSION	35



LIST OF TABLES

Table I	<i>Principal Work Activities for Contract no. HK/2009/02</i>
Table II	<i>Principal Work Activities for Contract no. HY/2009/19</i>
Table 2.1	<i>Schedule 2 Designated Projects under this Project</i>
Table 2.2	<i>Details of Individual Contracts under the Project</i>
Table 2.3	<i>Contact Details of Key Personnel</i>
Table 2.4	<i>Principal Work Activities for Contract no. HK/2009/02</i>
Table 2.5	<i>Principal Work Activities for Contract no. HY/2009/19</i>
Table 3.1	<i>Noise Monitoring Stations</i>
Table 3.2	<i>Real Time Noise Monitoring Stations</i>
Table 3.3	<i>Air quality monitoring Stations</i>
Table 4.1	<i>Noise Monitoring Stations for Contract no. HY/2009/19</i>
Table 4.2	<i>Real Time Noise Monitoring Stations for Contract no. HY/2009/19</i>
Table 4.3	<i>Air quality monitoring Stations for Contract no. HY/2009/19</i>
Table 4.4	<i>Details of Waste Disposal for Contract no. HK/2009/02</i>
Table 4.5	<i>Details of Waste Disposal for Contract no. HY/2009/19</i>
Table 6.1	<i>Cumulative Statistics on Complaints</i>
Table 6.2	<i>Cumulative Statistics on Successful Prosecutions</i>

LIST OF FIGURES

Figure 2.1	Project Layout
Figure 2.2	Project Organization Chart
Figure 3.1	Locations of Environmental Monitoring Stations

LIST OF APPENDICES

Appendix 2.1	Environmental Mitigation Implementation Schedule
Appendix 3.1	Action and Limit Level
Appendix 4.1	Noise Monitoring Results and Graphical Presentations
Appendix 4.2	Real-time Noise Monitoring Results and Graphical Presentations
Appendix 4.3	Air Quality Monitoring Results and Graphical Presentations
Appendix 5.1	Event Action Plans
Appendix 6.1	Complaint Log
Appendix 6.2	Notification of Exceedance
Appendix 7.1	Construction Programme of Individual Contracts

EXECUTIVE SUMMARY

- i. This is the Environmental Monitoring and Audit (EM&A) Quarterly Report – [September 2021 to November 2021](#) specific for Environmental Permit no. EP-364/2009/H, Further Environmental Permit nos. FEP-01/364/2009 and 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 from [27 August 2021 to 26 November 2021](#). The cut-off date of reporting is at 26th of each reporting quarter.

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

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

Major construction activities for Contract no. HK/2009/02 have been commenced on 26 April 2011. During this reporting period, the principal work activities are summarized as below:

Table I Principal Work Activities for Contract no. HK/2009/02

September 2021	October 2021	November 2021
• Nil	• Nil	• Nil

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

Major construction activities for Contract no. HY/2009/19 have been commenced on March 2011. During this reporting period, the principal work activities are summarized as below:

Table II Principal Work Activities for Contract no. HY/2009/19

September 2021	October 2021	November 2021
<ul style="list-style-type: none"> • 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. • Resurfacing activities at IEC Eastbound and Westbound • Landscape deck irrigation system • Soffit lighting installation work at Rumsey Street • Removal of Contractor Site 	<ul style="list-style-type: none"> • 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. • Resurfacing activities at IEC Eastbound and Westbound • Landscape deck irrigation system • Soffit lighting installation work at Rumsey Street 	<ul style="list-style-type: none"> • 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. • Resurfacing activities at IEC Eastbound and Westbound • Landscape deck irrigation system • Removal of Contractor Site Office and re-instate • Scaffold remove along IECL • Pile cap repairing works



September 2021	October 2021	November 2021
Office		

Noise Monitoring

- iii. Noise monitoring was conducted at M4b - Victoria Center; M5b - City Garden and M6 - HK Baptist Church Henrietta Secondary School on a weekly basis in the reporting period.
- iv. 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.
- v. Noise monitoring at M4b - Victoria Centre was temporarily relocated to the G/F of Victoria Centre due to the access difficulty on 23 March 2020. The temporary noise monitoring point for M4b has been proposed and agreed by the IEC at the G/F of Victoria Centre. Noise monitoring for M4b resumed to original location on 7 September 2020.
- vi. 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.
- vii. 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 since 22 December 2020.
- viii. 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.
- ix. 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.
- x. [No action or limit level exceedance was recorded in September 2021, October 2021 and November 2021 reporting period.](#)

Real time Noise Monitoring

- xi. 24-hour real time noise monitoring was conducted at RTN1 - FEHD Hong Kong Transport Section Whitefield Depot for the pilling works in FEHD Whitfield Depot and RTN2 – Tunnel (North Point Section) and Island Eastern Corridor Link during the period from 28 September 2012 til 10am on 5 October 2012 in the reporting period.
- xii. Real time noise monitoring station at Oil Street Community Liaison Centre (RTN2- Oil Street Community Centre) was relocated from Oil Street Community Liaison Centre to Hong Kong Electric (RTN2a- Electric Centre) on 5 Oct 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 in Electric Centre from 4 December 2009 to 17 December 2009.
- xiii. As confirmed by CWB RSS, the IECL parapet removal operations will commence in March 2013. Liaison was conducted with HK Baptist Church Henrietta Secondary School and Po Leung Kuk Yu Lee Mo Fan Memorial School regarding the set up of RTN3 real time noise

- monitoring station. Po Leung Kuk Yu Lee Mo Fan Memorial School grant permission for set up on 4 Sep 2012 and station set up was performed on 14 Sep 2012.
- xiv. Real Time Noise Monitoring at RTN3- Po Leung Kuk Yu Lee Mo Fan Memorial School was commenced since 06 Oct 2012.
- xv. Causeway Bay Community Centre has granted permission for set up of real time noise monitoring station on 21 Dec 2012 and station set up was performed on 27 Dec 2012. The Baseline noise level of RTN4- Causeway Bay Community Centre will adopt the results from the baseline noise monitoring report for EP/364/2009 in 22 April 2010 in which approved by EPD.
- xvi. According to clause 3.1 stated in EP-364/2009B, “the real-time monitoring system shall be in place no later than two weeks before the commencement date of demolition works of the existing Island Eastern Corridor”. IEC demolition associated construction works was commenced on 3 Feb 2013 and Real time noise monitoring at RTN4-Causeway Bay Community Centre was commenced on 13 Jan 2013.
- xvii. 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.
- xviii. 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.
- xix. 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.
- xx. 24-hour real time noise monitoring was conducted at RTN1- FEHD Hong Kong Transport Section Whitfield Depot.
- No limit level exceedance was recorded in the September 2021 reporting period.
 - Limit level exceedances were recorded at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot on 29 September, 16 and 21 October 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 29 September, 16 and 21 October 2021. As such, the exceedances were considered as non-Project related.
 - No limit level exceedance was recorded in the November 2021 reporting period.
- xxi. 24-hour real time noise monitoring was conducted at RTN2a-Hong Kong Electric Centre. No limit level exceedance was recorded in the reporting period.
- xxii. 24-hour real time noise monitoring was conducted at RTN3 - Yu Lee Mo Fan Memorial School.
- Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 14 September 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 14 September 2021. As such, the exceedances were considered as non-Project related.

- Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 8, 12, 15, 16 and 23 October 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 8, 12, 15, 16 and 23 October 2021. As such, the exceedances were considered as non-Project related.
 - Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 17 and 18 November 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 17 and 18 November 2021. As such, the exceedances were considered as non-Project related.
- xxiii. 24-hour real time noise monitoring was conducted at RTN4-Causeway Bay Community Centre.
- No limit level exceedance was recorded in the September 2021 reporting period.
 - No limit level exceedance was recorded in the October 2021 reporting period.
 - Limit level exceedances were recorded at RTN4 – Causeway Bay Community Centre on 24, 25 and 26 November 2021. After checking with the Contractors, concrete slab breaking works were conducted on 24, 25 and 26 November 2021 under Contractor HY/2009/19 at the area opposite to the monitoring location. According to the Contractor HY/2009/19 information, noise barrier construction with porous sheet metal with absorptive material inside as hoarding in front of the Causeway Bay Community Centre, noise absorption material covered the excavator mounted breaker head and mobile noise barrier erected between excavators mounted breaker and Causeway Bay Community Centre. The breaking work at the concerned location was completed on 29 November 2021 after the recorded exceedances. In view of the recorded noise impact, the Contractor of HY/2009/19 was advised to implement the further noise mitigation such as minimising the breaking time to avoid any further potential noise impact if any breaking works need to be conduct at the concerned location.

Air Quality Monitoring

- xxiv. Due to extension of site boundary by contractor of HY/2009/19, location of air quality monitoring station CMA1b – Oil Street Community Liaison Centre has been finely adjusted on 21 April 2012.
- xxv. 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.
- xxvi. With respect to the proposed demolition of the Oil Street Site Office, the respective air quality monitoring station CMA1b – Oil Street Site Office was finely adjusted from the Oil Street Site Office to Harbor Grand Hotel Boundary Wall from 05 June 2017 onwards.
- xxvii. 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.



- xxviii. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were conducted at CMA2a - Causeway Bay Community Center on every six days basis in the reporting period.
- xxix. 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.
- xxx. 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.
- xxxi. 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.
- xxxii. 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.
- xxxiii. 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.
- xxxiv. [No action or limit level exceedance was recorded in September, October and November 2021 reporting period.](#)

Complaints, Notifications of Summons and Successful Prosecutions

- xxxv. [No environmental complaints, summons and prosecutions were received in the September 2021 reporting period.](#)
- xxxvi. [A public complaint \(File Ref.: H08/RS/00022993-21\) made to EPD was referred to the ET on 4 October 2021 concerning nighttime construction noise at Island Eastern Corridor near Wharf Road and EPD's clarification of the complaint date of issued memo. According to the complainant, the noise from drilling and construction works at Island Eastern Corridor near Wharf Road, North Point at about 00:00 hrs on 27.9.2021 was unacceptably loud and caused great disturbance to the nearby residents.](#)

The ET confirmed with the Resident Site Staff that:

1. [The construction activities undertaken by HY/2009/19 from 26 September 2021 22:00 to 27 September 2021 06:00 were road milling and resurfacing works at IEC Eastbound.](#)

2. PMEs in Group E of GW-RS0637-21 were operated for milling works and PMEs in Group F of GW-RS0637-21 were operated for resurfacing works. Only one group of PMEs were operating at one time.
3. Portable generator and hand-held breaker were operated inside acoustic enclosure.
4. The road miller (CNP184) adopted the noise control measures under condition 3.d.8 of GW-RS0637-21.
5. CNP GW-RS0637-21 was granted for the abovementioned works, notifications to EPD and nearby residents were made.

In view of the above, the complaint was considered as related to noise nuisance from the road milling and resurfacing works at IEC Eastbound in restricted hours. Such works had been granted with CNP no. GW-RS0637-21 and the checked restricted works is operated as per the CNP GW-RS0637-21.

Despite such night works were granted with Construction Noise Permit, the Contractor of HY/2009/19 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs and the noise mitigation measures deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2009/19 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

xxxvii. A public complaint made to EPD was referred to the ET via email on 20 October 2021 concerning the noise from road resurfacing works at Island Eastern Corridor near Wharf Road, North Point at night recently had caused great disturbance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. The construction activities undertaken by HY/2009/19 between 15/10/2021 to 18/10/2021, relevant CNPs granted for the works, number and type of PME(s) deployed for the works were tabulated as below:

Date & Time	15/10/21 21:30 – 16/10/21 06:00	16/10/21 22:00 – 17/10/21 06:00 17/10/21 22:00 – 18/10/21 06:00
Construction activities	Road resurfacing works on IECL Westbound	Road resurfacing works on IECL Eastbound
CNPs granted for the works	CNP GW-RS0553-21	CNP GW-RS0637-21
Number and Type of PME(s) deployed	Group E, Group F of GW-RS0553-21, only one group was operating at a time	Group E, Group F of GW-RS0637-21, only one group was operating at a time

2. Portable generator and hand-held breaker were operated inside acoustic enclosure.
3. The road miller (CNP184) adopted the noise control measures under condition 3.d.8 of GW-RS0637-21 and condition 3.d.9 of GW-RS0553-21.
4. Notifications to EPD and nearby residents were made for the works.
5. Only GW-RS0553-21 was used for the road resurfacing works on IECL Westbound between 15/10/21 21:30 and 16/10/21 06:00. CNPs GW-RS0361-21 and GW-RS0469-21 were not used in the abovementioned period.

6. Only GW-RS0637-21 was used for the road resurfacing works on IECL Eastbound between 16/10/21 22:00 – 17/10/21 06:00 and 17/10/21 22:00 – 18/10/21 06:00. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 or GW-RS0628-21 were not used in the abovementioned periods.

The complaint was considered as related to noise nuisance from road resurfacing works at IEC Westbound and Eastbound in restricted hours. Such works had been granted with CNPs no. GW-RS0553-21 and GW-RS0637-21. The checked restricted works were operated as per the CNPs.

Despite such night works were granted with Construction Noise Permit, the Contractor of HY/2009/19 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs and the noise mitigation measures deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2009/19 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

xxxviii. A public complaint made to EPD was referred to the ET via email on 9 November 2021 concerning the construction noise causing nuisance to the residents at City Garden Block 6.

The ET confirmed with the Resident Site Staff that:

1. The construction activities undertaken by HY/2009/19 from 8 November 2021 22:00 to 9 November 2021 06:00 were road milling and resurfacing works at IEC Westbound.
2. PMEs in Group E of GW-RS0553-21 were operated for milling works and PMEs in Group F of GW-RS0553-21 were operated for resurfacing works. Only one group of PMEs were operating at one time.
3. Portable generator and hand-held breaker were operated inside acoustic enclosure.
4. The road miller (CNP184) adopted the noise control measures under condition 3.d.9 of GW-RS0553-21.
5. CNP GW-RS0553-21 was granted for the abovementioned works and notifications to EPD and nearby residents were made.
6. Only PMEs in Group E or Group F under CNP GW-RS0553-21 were operated. CNPs GW-RS0361-21 and GW-RS0469-21 were not used

The complaint was considered as related to noise nuisance from road milling and resurfacing works at IEC Westbound in restricted hours. Such works had been granted with CNPs no. GW-RS0553-21. The checked restricted works were operated as per the CNPs.

Despite such night works were granted with Construction Noise Permit, the Contractor of HY/2009/19 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs and the noise mitigation measures deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2009/19 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

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-01/364/2009, FEP-06/364/2009/A, FEP-07/364/2009/H and FEP-10/364/2009/B 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 during the period from [27 August 2021 to 26 November 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. “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 Designed 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. In the reporting period, the following construction Contracts were on-going and Contract HY/2009/01, HY/2009/17, 04/HY/2006, HY/2009/15, HY/2009/18 and HK/2010/06 had been completed. 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)
HK/2009/02	Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan	DP1	26 April 2011

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
	Chai East (CWB Tunnel)		
HY/2009/15	Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)	DP1	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)

- 2.3.3. 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.
- 2.3.4. 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. Subsequently, the FEP-03/364/2009 was surrendered by the Contractor on 28 March 2013.
- 2.3.5. 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. Subsequently, the FEP-08/364/2009/A was surrendered by the Contractor on 3 October 2014.
- 2.3.6. The Construction works under HY/2009/15 was confirm completed by the RSS from 27 October 2017 onwards. The weekly site audit inspection and the associated monitoring station for HY/2009/15 were temporary suspended from 27 October 2017 onwards.
- 2.3.7. The Construction works under HY/2009/18 was confirm completed by the RSS from 25 April 2018 onwards. The weekly site audit inspection and the associated monitoring station for HY/2009/18 were temporary suspended from 27 April 2018 onwards.
- 2.3.8. 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.



- 2.3.9. 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.
- 2.3.10. 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, 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.
- 2.3.11. 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. FEP-06/364/2009/A and FEP-10/364/2009/B were surrendered by the Contractor on 07 June 2021.

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 Joint Venture	Contractor under Contract no. HK/2009/02	Site Agent	Mr. David Yan	9106 3890	2827 9996
		Environmental Engineer	Ms. Tara Lau	6972 5357	3758 8551
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	9456 9819	
		Deputy Site Agent	Mr. Andrew Cheng	9161 9446	
		Environmental Officer	Mr. Kenneth Chan	6387 3939	
		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	
Lam Geotechnics Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939	2882 3331
RAMBOLL Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	3465 2888	3465 2899

2.5 Principal Work and Activities

2.5.1. Major construction activities for Contract no. HK/2009/02 have been commenced on 26 April 2011. During this reporting period, the principal work activities are summarized in [Table 2.4](#):

Table 2.4 Principal Work Activities for Contract no. HK/2009/02

September 2021	October 2021	November 2021
• Nil	• Nil	• Nil



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2.5.2. Major construction activities for Contract no. HY/2009/19 have been commenced on March 2011. During this reporting period, the principal work activities are summarized in **Table 2.5:**

Table 2.5 Principal Work Activities for Contract no. HY/2009/19

September 2021	October 2021	November 2021
<ul style="list-style-type: none"> • 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. • Resurfacing activities at IEC Eastbound and Westbound • Landscape deck irrigation system • Soffit lighting installation work at Rumsey Street • Removal of Contractor Site Office 	<ul style="list-style-type: none"> • 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. • Resurfacing activities at IEC Eastbound and Westbound • Landscape deck irrigation system • Soffit lighting installation work at Rumsey Street 	<ul style="list-style-type: none"> • 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. • Resurfacing activities at IEC Eastbound and Westbound • Landscape deck irrigation system • Removal of Contractor Site Office and re-instate • Scaffold remove along IECL • Pile cap repairing works

2.5.3. Implementation status of the recommended mitigation measures during this reporting period is presented in **Appendix 2.1.**

3. MONITORING REQUIREMENTS

3.1. Noise Monitoring

NOISE MONITORING STATIONS

- 3.1.1. The noise monitoring stations for the Project are 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 Noise Monitoring Station

Station	Description
M1b***	Rooftop of Wan Chai Ferry Pier
M2b	Noon 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

- 3.1.2. The noise 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 Real Time Noise Monitoring Station

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

Remarks*: RTN2 was relocated from Oil Street Community Liaison Centre to Electric Centre on 05 Oct 2012 and re-designated as RTN2a.

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 3.1.3. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). $L_{eq(30 \text{ minutes})}$ shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays. For all other time periods, $L_{eq(5 \text{ minutes})}$ 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.
- 3.1.4. 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.
- 3.1.5. 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 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.
- 3.1.6. 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

- 3.1.7. As referred to in the Technical Memorandum TM 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.
- 3.1.8. 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.
- 3.1.9. 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 may be accepted as valid only if the calibration level from before and after the noise measurement agree 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 3.3** and **Figure 3.1. Appendix 3.1** shows the established Action/Limit Levels for the monitoring works.

Table 3.3 Air quality monitoring Stations

Station ID	Monitoring Location	Description
CMA1b	Harbour Grand Hotel Boundary Wall	North Point
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*: The location ID of monitoring station CMA1b was updated as "Oil Street Site Office" in April 2013. With respect to the removal of Oil Street Site Office, the respective air quality monitoring station CMA1b was finely adjusted on 11 September 2015. 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**: With respect to the area handover, the air quality monitoring station CMA5a at Children Playgrounds opposite to the Pedestrian Plaza was relocated to the Pedestrian Plaza on 3 December 2014. The station reference and location ID of the air quality monitoring station CMA5a was updated as CMA5b and Pedestrian Plaza respectively.

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 m³ 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.

3.2.7. Laboratory Measurement / Analysis

3.2.8. 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.

3.2.9. 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.

3.2.10. 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.

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

4. MONITORING RESULTS

- 4.0.1. Per EPD's letter dated 3 Aug 2012 (received by ET on 6 Aug 2012 through HyD), noise monitoring at M8 – City Hall commenced on 7 Aug 2012, and the monitoring station M7e – International Finance Centre (Eastern Podium) has become a reference station starting from 7 Aug 2012.
- 4.0.2. Due to safety concerns, the monitoring location for M4b – Victoria Centre has been finely adjusted from 7 June 2012.
- 4.0.3. 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 the January 2012 reporting period.
- 4.0.4. 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).
- 4.0.5. The Construction works under HY/2009/18 was confirm completed by the RSS from 25 April 2018 onwards. The associated monitoring station for HY/2009/18 were temporary suspended from 27 April 2018 onwards.
- 4.0.6. The Construction works under HY/2009/15 was confirm completed by the RSS from 27 October 2017 onwards. The associated monitoring station for HY/2009/15 were temporally suspended from 27 October 2017 onwards.
- 4.0.7. 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 associated monitoring station were temporary suspended from 26 May 2018 onwards.
- 4.0.8. 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 under FEP-07/364/2009/H
 - Contract no. HK/2009/02 Wanchai Development Phase II – Central- Wanchai Bypass at Wanchai East under FEP-01/364/2009
 - Contract no. HY/2010/08 – Central and WanChai Bypass – Slip road 8 Section under FEP-10/364/2009/B

4.1. Noise 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

- 4.1.1. 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 4.1** below.



Table 4.1 Noise Monitoring Stations for Contract no. HY/2009/19

Station	Description
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

4.1.2. 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.

Reporting period of September 2021

4.1.3. No action or limit level exceedance was recorded in this reporting period.

Reporting period of October 2021

4.1.4. No action or limit level exceedance was recorded in this reporting period.

Reporting period of November 2021

4.1.5. No action or limit level exceedance was recorded in this reporting period.

4.1.6. 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 4.1](#) and the Notification of Exceedance can be referred in [Appendix 6.2](#).

4.2. Real Time Noise 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

- 4.2.1. 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 4.2](#)
- 4.2.2. The proposed division of noise monitoring stations are summarized in **Table 4.2** below. Real time noise monitoring for major construction works under contract no. HY/2009/19 was commenced on 24 April 2011.

Table 4.2 Real Time Noise Monitoring Stations for Contract no. HY/2009/19

Location ID	District	Description
RTN1	Tin Hau	FEHD Hong Kong Transport Section Whitefield Depot
RTN2a	North Point	Electric Centre (Replacement of RTN2)
RTN3	North Point	Pok Leung Kuk Yu Lee Mo Fun Memorial School
RTN4	Tin Hau	Causeway Bay Community Centre

** Real time noise monitoring results and graphical presentation during night time period are for information only.*

**Real-time noise monitoring results and graphical presentation for RTN3 during restricted hours are for information only as no night classes were conducted at the educational institute.*

Reporting period of September 2021

- 4.2.3. No action or limit level exceedance was recorded at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot in the reporting period.
- 4.2.4. No action or limit level exceedance was recorded at RTN2a - Hong Kong Electric Centre in the reporting period.
- 4.2.5. Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 14 September 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 14 September 2021. As such, the exceedances were considered as non-Project related.
- 4.2.6. No action or limit level exceedance was recorded at RTN4 – Causeway Bay Community Centre in the reporting period.

Reporting period of October 2021

- 4.2.7. Limit level exceedances were recorded at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot on 29 September, 16 and 21 October 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 29 September, 16 and 21 October 2021. As such, the exceedances were considered as non-Project related.
- 4.2.8. No action or limit level exceedance was recorded at RTN2a - Hong Kong Electric Centre in the reporting period.

- 4.2.9. Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 8, 12, 15, 16 and 23 October 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 8, 12, 15, 16 and 23 October 2021. As such, the exceedances were considered as non-Project related.
- 4.2.10. No action or limit level exceedance was recorded at RTN4 – Causeway Bay Community Centre in the reporting period.
- Reporting period of November 2021
- 4.2.11. No action or limit level exceedance was recorded at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot in the reporting period.
- 4.2.12. No action or limit level exceedance was recorded at RTN2a - Hong Kong Electric Centre in the reporting period.
- 4.2.13. Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 17 and 18 November 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 17 and 18 November 2021. As such, the exceedances were considered as non-Project related.
- 4.2.14. Limit level exceedances were recorded at RTN4 – Causeway Bay Community Centre on 24, 25 and 26 November 2021. After checking with the Contractors, concrete slab breaking works were conducted on 24, 25 and 26 November 2021 under Contractor HY/2009/19 at the area opposite to the monitoring location. According to the Contractor HY/2009/19 information, noise barrier construction with porous sheet metal with absorptive material inside as hoarding in front of the Causeway Bay Community Centre, noise absorption material covered the excavator mounted breaker head and mobile noise barrier erected between excavators mounted breaker and Causeway Bay Community Centre. The breaking work at the concerned location was completed on 29 November 2021 after the recorded exceedances. In view of the recorded noise impact, the Contractor of HY/2009/19 was advised to implement the further noise mitigation such as minimising the breaking time to avoid any further potential noise impact if any breaking works need to be conduct at the concerned location.
- 4.2.1. 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 4.2**

4.3. Air quality monitoring Results

4.3.1 Due to extension of site boundary by contractor of HY/2009/19, location of air quality monitoring station CMA1b – Oil Street Community Liaison Centre has been finely adjusted on 21 April 2012.

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

4.3.2 Air quality monitoring for the tunnel works was commenced on 26 April 2011 for Contract no. HY/2009/19 under FEP-07/364/2009/H. 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. HY/2009/19

Station	Description
CMA1b	Harbour Grand Hotel Boundary Wall
CMA2a	Causeway Bay Community Centre
MA1b	Harbour Building

4.3.3 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.

4.3.4 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.

Reporting period of September 2021

4.3.5 [No action or limit level exceedance was recorded in the reporting period.](#)

Reporting period of October 2021

4.3.6 [No action or limit level exceedance was recorded in the reporting period.](#)

Reporting period of November 2021

4.3.7 [No action or limit level exceedance was recorded in the reporting period.](#)

4.3.8 Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air quality monitoring results and graphical presentation can be referred in [Appendix 4.3](#).

4.4. Waste Monitoring Results

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

- 4.4.1. Inert and non-inert C&D waste were disposed of in this reporting period. Details of the waste flow table are summarized in **Table 4.4**.

Table 4.4 Details of Waste Disposal for Contract no. HK/2009/02

Waste Type*	Quantity this quarter, m ³	Cumulative-to-Date. m ³	Disposal / Dumping Grounds
Inert C&D materials disposed	Nil	552,321.83	TKO137, TM 38
Inert C&D materials recycled	Nil	46,520	WCR2
Non-inert C&D materials disposed	Nil	6,524.60	SENT Landfill
Non-inert C&D materials recycled	Nil	N/A	N/A
Chemical waste disposed	Nil	17,718	N/A
Marine Sediment (Type 1 – Open Sea Disposal) , m ³	Nil	65,663	South Cheung Chau

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

- 4.4.2. Inert C&D materials was recycled non-inert C&D waste was disposed of in this reporting period. Details of the waste flow table are summarized in **Table 4.5**.

Table 4.5 Details of Waste Disposal for Contract no. HY/2009/19

Waste Type*	Quantity this quarter, m ³	Cumulative-to-Date. m ³	Disposal / Dumping Grounds
Inert C&D materials disposed	4,363.63	842,025.71	TKO137 TM38
Inert C&D materials recycled	Nil	82,349.7	N/A
Non-inert C&D materials disposed	256.92	10,159.77	SENT Landfill
Non-inert C&D materials recycled	Nil	565.63	N/A
Chemical waste disposed	Nil	16.53	N/A
Marine Sediment (Tunnel) (Type 1- Open Sea Disposal), m ³	Nil	20,737.96	South of Cheung Chau
Marine Sediment (Tunnel) (Type 1- Open Sea Disposal (Dedicated Sites) & Type 2 – Confined Marine	Nil	30,751	East of Sha Chau



Waste Type*	Quantity this quarter, m³	Cumulative-to-Date. m³	Disposal / Dumping Grounds
Disposal), m ³			
Marine Sediment (Approach Ramp) (Type 2 – Confined Marine Disposal), m ³	Nil	6,491	East of Sha Chau

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. HY/2009/19 - Central - Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/H

5.1.1. No action or limit level exceedance was recorded in the September 2021 reporting period.

5.1.2. No action or limit level exceedance was recorded in the October 2021 reporting period.

5.1.3. No action or limit level exceedance was recorded in the November 2021 reporting period.

5.2. 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

5.2.1 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 September 2021 reporting period.

24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No action or limit level exceedance was recorded in September 2021 reporting period.

24-hour real time noise monitoring was conducted at RTN3 - Yu Lee Mo Fan Memorial School. Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 14 September 2021. After investigation, the exceedances were considered as non-Project related.

24-hour real time noise monitoring was conducted at RTN4 – Causeway Bay Community Centre. No action or limit level exceedance was recorded in September 2021 reporting period.

5.2.2 24-hour real time noise monitoring was conducted at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot. Limit level exceedances were recorded at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot on 29 September, 16 and 21 October 2021. After investigation, the exceedances were considered as non-Project related.

24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No action or limit level exceedance was recorded in July 2021 reporting period.

24-hour real time noise monitoring was conducted at RTN3 - Yu Lee Mo Fan Memorial School. Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 8, 12, 15, 16 and 23 October 2021. After investigation, the exceedances were considered as non-Project related.

24-hour real time noise monitoring was conducted at RTN4 – Causeway Bay Community Centre. No action or limit level exceedance was recorded in October 2021 reporting period.

5.2.3 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 November 2021 reporting period.

24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No action or limit level exceedance was recorded in November 2021 reporting period.

24-hour real time noise monitoring was conducted at RTN3 - Yu Lee Mo Fan Memorial School. Limit level exceedances were recorded at RTN3 - Yu Lee Mo Fan Memorial School on 17 and 18 November 2021. After investigation, the exceedances were considered as non-Project related.

24-hour real time noise monitoring was conducted at RTN4 – Causeway Bay Community Centre. Limit level exceedances were recorded at RTN4 – Causeway Bay Community Centre on 24, 25 and 26 November 2021. After investigation, the exceedances were considered as Project related.

5.3. Air quality monitoring

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

- 5.2.4 No action or limit level exceedance was recorded in the September 2021 reporting period.
- 5.2.5 No action or limit level exceedance was recorded in the October 2021 reporting period.
- 5.2.6 No action or limit level exceedance was recorded in the November 2021 reporting period.

5.4. Site Audit

- 5.4.1 There was no non-compliance from the site audits in the reporting period. During environmental site inspections conducted during the reporting period, minor deficiencies were noted. However, the Contractor rectified all deficiencies after receipt of notification.

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

- 5.5.1 There was no non-compliance from the site audits in the reporting quarter.

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

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



6. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION

6.0.1 No environmental complaints, summons and prosecutions were received in the September 2021 reporting period.

6.0.2 A public complaint (File Ref.: H08/RS/00022993-21) made to EPD was referred to the ET on 4 October 2021 concerning nighttime construction noise at Island Eastern Corridor near Wharf Road and EPD’s clarification of the complaint date of issued memo. According to the complainant, the noise from drilling and construction works at Island Eastern Corridor near Wharf Road, North Point at about 00:00 hrs on 27.9.2021 was unacceptably loud and caused great disturbance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. The construction activities undertaken by HY/2009/19 from 26 September 2021 22:00 to 27 September 2021 06:00 were road milling and resurfacing works at IEC Eastbound.
2. PMEs in Group E of GW-RS0637-21 were operated for milling works and PMEs in Group F of GW-RS0637-21 were operated for resurfacing works. Only one group of PMEs were operating at one time.
3. Portable generator and hand-held breaker were operated inside acoustic enclosure.
4. The road miller (CNP184) adopted the noise control measures under condition 3.d.8 of GW-RS0637-21.
5. CNP GW-RS0637-21 was granted for the abovementioned works, notifications to EPD and nearby residents were made.

In view of the above, the complaint was considered as related to noise nuisance from the road milling and resurfacing works at IEC Eastbound in restricted hours. Such works had been granted with CNP no. GW-RS0637-21 and the checked restricted works is operated as per the CNP GW-RS0637-21.

Despite such night works were granted with Construction Noise Permit, the Contractor of HY/2009/19 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs and the noise mitigation measures deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2009/19 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

6.0.3 A public complaint made to EPD was referred to the ET via email on 20 October 2021 concerning the noise from road resurfacing works at Island Eastern Corridor near Wharf Road, North Point at night recently had caused great disturbance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. The construction activities undertaken by HY/2009/19 between 15/10/2021 to 18/10/2021, relevant CNPs granted for the works, number and type of PME(s) deployed for the works were tabulated as below:

Date & Time	15/10/21 21:30 – 16/10/21 06:00	16/10/21 22:00 – 17/10/21 06:00 17/10/21 22:00 – 18/10/21 06:00
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Construction activities	Road resurfacing works on IECL Westbound	Road resurfacing works on IECL Eastbound
CNPs granted for the works	CNP GW-RS0553-21	CNP GW-RS0637-21
Number and Type of PME(s) deployed	Group E, Group F of GW-RS0553-21, only one group was operating at a time	Group E, Group F of GW-RS0637-21, only one group was operating at a time

2. Portable generator and hand-held breaker were operated inside acoustic enclosure.
3. The road miller (CNP184) adopted the noise control measures under condition 3.d.8 of GW-RS0637-21 and condition 3.d.9 of GW-RS0553-21.
4. Notifications to EPD and nearby residents were made for the works.
5. Only GW-RS0553-21 was used for the road resurfacing works on IECL Westbound between 15/10/21 21:30 and 16/10/21 06:00. CNPs GW-RS0361-21 and GW-RS0469-21 were not used in the abovementioned period.
6. Only GW-RS0637-21 was used for the road resurfacing works on IECL Eastbound between 16/10/21 22:00 – 17/10/21 06:00 and 17/10/21 22:00 – 18/10/21 06:00. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 or GW-RS0628-21 were not used in the abovementioned periods.

The complaint was considered as related to noise nuisance from road resurfacing works at IEC Westbound and Eastbound in restricted hours. Such works had been granted with CNPs no. GW-RS0553-21 and GW-RS0637-21. The checked restricted works were operated as per the CNPs.

Despite such night works were granted with Construction Noise Permit, the Contractor of HY/2009/19 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs and the noise mitigation measures deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2009/19 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

- 6.0.4 A public complaint made to EPD was referred to the ET via email on 9 November 2021 concerning the construction noise causing nuisance to the residents at City Garden Block 6.

The ET confirmed with the Resident Site Staff that:

1. The construction activities undertaken by HY/2009/19 from 8 November 2021 22:00 to 9 November 2021 06:00 were road milling and resurfacing works at IEC Westbound.
2. PMEs in Group E of GW-RS0553-21 were operated for milling works and PMEs in Group F of GW-RS0553-21 were operated for resurfacing works. Only one group of PMEs were operating at one time.
3. Portable generator and hand-held breaker were operated inside acoustic enclosure.
4. The road miller (CNP184) adopted the noise control measures under condition 3.d.9 of GW-RS0553-21.

5. CNP GW-RS0553-21 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

6. Only PMEs in Group E or Group F under CNP GW-RS0553-21 were operated. CNPs GW-RS0361-21 and GW-RS0469-21 were not used

The complaint was considered as related to noise nuisance from road milling and resurfacing works at IEC Westbound in restricted hours. Such works had been granted with CNPs no. GW-RS0553-21. The checked restricted works were operated as per the CNPs.

Despite such night works were granted with Construction Noise Permit, the Contractor of HY/2009/19 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs and the noise mitigation measures deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2009/19 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

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

6.0.6 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 of Works up to last reporting period	111
September 2021 to November 2021	3
Project-to-Date	114

Table 6.2 Cumulative Statistics on Successful Prosecutions

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

7. CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS

- 7.0.1. According to Condition 3.4 of the EP-364/2009/G, 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 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 bridge noise enclosure installation works, road works, drainage works, soft landscape works and ventilation building ABWF work 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. Although project related exceedances were recorded during the noise monitoring events in the November 2021 reporting period, the relevant construction works were completed and no noise exceedance was recorded in that monitoring station since after. 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. There was no non-compliance from the site audits in the [September, October and November 2021](#) reporting period.
- 8.0.3. [Three](#) environmental complaints [were](#) received in this reporting quarter.
- 8.0.4. The construction programmes of individual contracts are provided in **Appendix 7.1.**