

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 AND FURTHER EVIRONMENTAL PERMIT NO. FEP-07/364/2009/H

> QUARTERLY ENVIRONMENTAL MONITORING AND AUDIT REPORT

- DECEMBER 2021 TO FEBRUARY 2022 -

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EXECUTIVE SUMMARY

- i. This is the Environmental Monitoring and Audit (EM&A) Quarterly Report December 2021 to February 2022 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 November 2021 to 26 February 2022. The cutoff date of reporting is at 26th of each reporting quarter.
- ii. In the reporting period, the principal work activities of Contract no. HY/2009/19 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

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:

	December 2021		January 2022		February 2022
•	Modification work of noise	•	Modification work of noise	•	Modification work of noise
	enclosure		enclosure		enclosure
•	Open area hard paving.	•	Open area hard paving.	•	Open area hard paving.
•	D12 & Open Area fire main	•	D12 & Open Area fire main	•	D12 & Open Area fire main
	laying works.		laying works.		laying works.
•	D9 to D12 and P22 to P25	•	D9 to D12 and P22 to P25	•	D9 to D12 and P22 to P25
	drainage works.		drainage works.		drainage works.
•	Resurfacing activities at	•	Resurfacing activities at	•	Road studs installation at
	IEC Eastbound and		IEC Eastbound		IEC
	Westbound	•	Marine pile cap repairing	•	Remedial work at bridge F
•	Landscape deck irrigation		works		Soffit between pier 36-43
	system	•	Remedial work at bridge F		
•	Removal of Contractor Site		Soffit between pier 36-43		
	Office and re-instate				
•	Scaffold remove along				
	IECL				
•	Marine pile cap repairing				
	works				

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



Noise Monitoring

- 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.
- 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. 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.
- xi. No action or limit level exceedance was recorded in December 2021, January 2022 and February 2022 reporting period.

Real time Noise Monitoring

- xii. 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.
- xiii. 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

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the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.

- xiv. 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.
- xv. Real Time Noise Monitoring at RTN3- Po Leung Kuk Yu Lee Mo Fan Memorial School was commenced since 06 Oct 2012.
- xvi. 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.
- xvii. 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.
- xviii. 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.
- xix. 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.
- xx. 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.
- xxi. 24-hour real time noise monitoring was conducted at RTN1- FEHD Hong Kong Transport Section Whitfield Depot.
 - Limit level exceedance was recorded at RTN1 FEHD Hong Kong Transport Section Whitfield Depot on 3 December 2021. After investigation, no construction activities were conducted under Contractor HY/2009/19 around the monitoring station on 3 December 2021. As such, the exceedance was considered as non-Project related.
 - Limit level exceedance was recorded at RTN1 FEHD Hong Kong Transport Section Whitfield Depot on 21 January 2022. After investigation, no construction activities were conducted under Contractor HY/2009/19 around the monitoring station on 21 January 2022. As such, the exceedance was considered as non-Project related.
 - No limit level exceedance was recorded in the February 2022 reporting period.
- xxii. 24-hour real time noise monitoring was conducted at RTN2a-Hong Kong Electric Centre. No limit level exceedance was recorded in the reporting period.

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- xxiii. 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 3, 6, 7, 8 and 9 December 2021. After investigation, no construction activities were conducted under Contractor HY/2009/19 around the monitoring station on 3, 6, 7, 8 and 9 December 2021. As such, the exceedances were considered as non-Project related.
 - Limit level exceedance was recorded at RTN3 Yu Lee Mo Fan Memorial School on 21 January 2022. After investigation, no construction activities were conducted under Contractor HY/2009/19 around the monitoring station on 21 January 2022. As such, the exceedance was considered as non-Project related.
 - No limit level exceedance was recorded in the February 2022 reporting period.
- xxiv. 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 27 November 2021. After checking with the Contractors, concrete breaking works of ex-contractor site office area were conducted on 27 November 2021 under Contractor HY/2009/19 at the area opposite to the monitoring location. As such, the exceedance recorded during the time of monitoring was considered as Project related under Contractor HY/2009/19. According to the Contractor HY/2009/19 information, mobile noise barrier was erected between noise source and noise monitoring station, i.e. Causeway Bay Community Centre, the breaker head was wrapped with noise absorption material, and fixed barrier was erected as hoarding between noise source and the noise monitoring station. 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 conducted at the concerned location.
 - No limit level exceedance was recorded in the January 2022 reporting period.
 - No limit level exceedance was recorded in the February 2022 reporting period.

Air Quality Monitoring

- xxv. 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.
- xxvi. 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.
- xxvii. 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.
- xxviii. 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.

- xxix. 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.
- xxx. 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.
- xxxi. 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.
- xxxii. 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.
- xxxiii. 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.
- xxxiv. 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.
- xxxv. 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.
- xxxvi. No action or limit level exceedance was recorded in December 2021, January 2022 and February 2022 reporting period.

Complaints, Notifications of Summons and Successful Prosecutions

xxxvii. An ICC complaint was referred to the ET on 14 December 2021 (CASE Ref: CASE# 3-7015461467). The complainant reported that construction works carried out at Eastbound near City Garden during mid-night had caused noise nuisance and nearby residents were seriously disturbed by the beeping sound emit from the construction activities.

The ET confirmed with the Resident Site Staff that:



1. Road resurfacing works on IECL Eastbound were conducted during the following time period: a) 20/11/21 22:00 to 21/11/21 06:00; b) 27/11/21 22:00 to 28/11/21 06:00; and c) 04/12/21 22:00 to 05/12/21 06:00.

2. Corresponding noise control measures implemented during the construction periods including operation of portable generator and hand-held breaker inside acoustic enclosure. Adoption of noise control measures under condition 3.d.8 of GW-RS0637-21 for the use of road miller (CNP184).

3. CNP GW-RS0637-21 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

4. Dump trucks and lorries would emit beeping sound when the vehicles are backing up.

5. Only PMEs in Group E or F under CNP GW-RS0637-21 were operated. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 and GW-RS0628-21 were not used.

According to RSS confirmed information, road surfacing works were conducted at the concerned location and beeping sound was emitted by the dump truck and lorries when moved in reverse. Noise mitigation measures including i) operation of portable generator and hand-held breaker inside acoustic enclosure and ii) Noise control measures for road miller (CNP 184) was adopted in accordance with condition 3.d.8 of GW-RS0637-21. Relevant Construction Noise Permit GW-RS0637-21 for the above construction works was in place.

In view of the public concern, the Contractor of HY/2009/19 is recommended to adopt additional noise mitigation measure for road works at night time hours around the concerned location. In response to the public concern, the Contractor of HY/2009/19 would adopt the following additional measure including provision of temporary noise barrier or acoustic mat to fence off the line of sight between the noise emanating source and the NSR. The Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

xxxviii. An ICC complaint was referred to the ET on 4 January 2022 (CASE Ref: CASE#3-6963952612). The complainant reported that construction works carried out at IECL Eastbound during night-time at around 11:00PM had caused noise nuisance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. Road resurfacing works on IECL Eastbound was carried out by Contract HY/2009/19 from 30 December 2021 22:00 to 31 December 2021 06:00.

2. Only one group of PMEs in Group E or F under CNP GW-RS0637-21 was operated at one time. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 and GW-RS0628-21 were not used.

3. Noise control measures were implemented during the construction periods including operation of portable generator and hand-held breaker inside acoustic enclosure. Adoption of



noise control measures under condition 3.d.8 of GW-RS0637-21 for the use of road miller (CNP184).

4. CNP GW-RS0637-21 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

The complaint was considered as related to the road resurfacing works on IECL Eastbound. Despite the RSS advised that noise control measures including operation of portable generator and hand-held breaker inside acoustic enclosure and adoption of noise control measures for the use of road miller (CNP184) in accordance with condition 3.d.8 of GW-RS0637-21, the Contractor of HY/2009/19 is recommended to adopt additional noise mitigation measure for road works at night time hours around the concerned location.

- xxxix. In response to the public concern, the Contractor of HY/2009/19 should implement the following additional measure including erection of temporary noise barriers to reduce the lineof-sight noise transmission to nearby NSRs. The Contractor was recommended to complete the noisy work as soon as possible in order to minimize disturbance to nearby sensitive receivers. The Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public
 - xl. An ICC complaint was referred to the ET on 06 January 2022 (CASE Ref: CASE#3-7051781753). The complainant reported that construction works carried out at IECL near Provident Centre during night-time from 2200 to 2400 had caused noise nuisance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. Road resurfacing works on IECL Eastbound was carried out by Contract HY/2009/19 from 4 January 2022 22:00 to 5 January 2022 06:00.

2. Only one group of PMEs in Group E or F under CNP GW-RS0637-21 was operated at one time. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 and GW-RS0628-21 were not used.

3. Noise control measures were implemented during the construction periods including operation of portable generator and hand-held breaker inside acoustic enclosure. Adoption of noise control measures under condition 3.d.8 of GW-RS0637-21 for the use of road miller (CNP184).

4. CNP GW-RS0637-21 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

The complaint was considered as related to the road resurfacing works on IECL near Provident Centre. Despite the RSS advised that noise control measures including operation of portable generator and hand-held breaker inside acoustic enclosure and adoption of noise



control measures for the use of road miller (CNP184) in accordance with condition 3.d.8 of GW-RS0637-21, the Contractor of HY/2009/19 is recommended to adopt additional noise mitigation measure for road works at night time hours around the concerned location.

In response to the public concern, the Contractor of HY/2009/19 should implement the following additional measure including erection of temporary noise barriers to reduce the lineof-sight noise transmission to nearby NSRs. The Contractor was recommended to complete the noisy work as soon as possible in order to minimize disturbance to nearby sensitive receivers. The Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

xli. A public complaint made to EPD was referred to the ET via email on 17 January 2022 concerning the intermittent loud construction noise generated from the Island Eastern Corridor during 00:00 to 01:30 hrs starting from Jan 2022 has caused great nuisance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. The construction activities undertaken by HY/2009/19 from 2 January 2022 22:00 to 16 January 2022 06:00 were road resurfacing works at IECL Eastbound.

2. PMEs in Group E/Group F were operated. Only one group of PMEs were operating at one time. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 and GW-RS0628-21 were not used when using GW-RS0637-21 (from 2 January 2022 to 15 January 2022). CNPs GW-RS0628-21 and GW-RS0007-22 were not used when using GW-RS0006-22 (on 16 January 2022).

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 and condition 3.d.14 of GW-RS0006-22.

5. CNPs GW-RS0637-21 (from 2 January 2022 to 15 January 2022) and GW-RS0006-22 (on 16 January 2022) were granted for the abovementioned works and notifications to EPD and nearby residents were made.

The complaint was considered as related to noise nuisance from road resurfacing works at IECL Eastbound in restricted hours. Such works had been granted with CNPs nos. GW-RS0637-21 (from 2 January 2022 to 15 January 2022) and GW-RS0006-22 (on 16 January 2022). The checked restricted works were operated as per the conditions stated in CNPs. Noise control measures including operation of portable generator and hand-held breaker inside acoustic enclosure and adoption of noise control measures for the use of road miller (CNP184) in accordance with condition 3.d.8 of GW-RS0637-21 and condition 3.d.14 of GW-RS0006-22 were in place.



- xlii. Despite such night works were granted with Construction Noise Permits, 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 PMEs deployed to avoid potential nuisance to the nearby public.
- xliii. An ICC complaint was referred to the ET on 19 January 2022 (CASE Ref: CASE#3-7071544935). The complainant reported that construction works carried out at IECL Eastbound close to Harbour Heights during night-time at around 0100hrs had caused noise nuisance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. Road resurfacing works on IECL Eastbound was carried out by Contract HY/2009/19 from 16 January 2022 22:00 to 17 January 2022 06:00.

2. Only one group of PMEs in Group E or F was operated at one time. CNPs GW-RS0628-21 and GW-RS0007-22 were not used when using GW-RS0006-22.

3. Noise control measures were implemented during the construction periods including operation of portable generator and hand-held breaker inside acoustic enclosure. Adoption of noise control measures under condition 3.d.14 of GW-RS0006-22 for the use of road miller (CNP184).

4. CNP GW-RS0006-22 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

The complaint was considered as related to the road resurfacing works on IECL Eastbound close to Harbour Heights. Despite the RSS advised that noise control measures including operation of portable generator and hand-held breaker inside acoustic enclosure and adoption of noise control measures for the use of road miller (CNP184) in accordance with condition 3.d.14 of GW-RS0006-22, the Contractor of HY/2009/19 is recommended to adopt additional noise mitigation measure for road works at night time hours around the concerned location.

In response to the public concern, the Contractor of HY/2009/19 should implement the following additional measure including erection of temporary noise barriers to reduce the lineof-sight noise transmission to nearby NSRs. The Contractor was recommended to complete the noisy work as soon as possible in order to minimize disturbance to nearby sensitive receivers. The Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

xliv. No environmental complaints, summons and prosecutions were received in the February 2022 reporting period.

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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 November 2021 to 26 February 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 *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 <u>Figure 2.1</u>.
- 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.



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

 Table 2.1
 Schedule 2 Designated Projects under this Project

2.3 Division of the Project Responsibility

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- 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*.

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 Chai East (CWB Tunnel)	DP1	26 April 2011 (Completed)
HY/2009/15	Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter	DP1	13 July 2011 (Completed)

Table 2.2 Details of Individual Contracts under the Project



Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
	Section)		
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*.

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	Contractor under Contract	Site Agent	Mr. David Yan	9106 3890	2827 9996	
Venture	no. HK/2009/02	Environmental Engineer	Ms. Tara Lau	6972 5357	3758 8551	
Chun Wo -	Contractor	Project Manager	Mr. William Leung	3758 8879	3757 8901	
CRGL - MBEC Joint Venture	under Contract no. HY/2009/19	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	

Table 2.3 Contact Details of Key Personnel

2.5 Principal Work and Activities

2.5.1. 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 2.4 Principal Work Activities for Contract no. HY/2009/19

December 2021	January 2022	February 2022
Modification work of noise	Modification work of noise	Modification work of noise



	December 2021		January 2022		February 2022
	enclosure		enclosure		enclosure
•	Open area hard paving.	•	Open area hard paving.	•	Open area hard paving.
•	D12 & Open Area fire main	•	D12 & Open Area fire main	•	D12 & Open Area fire main
	laying works.		laying works.		laying works.
•	D9 to D12 and P22 to P25	•	D9 to D12 and P22 to P25	•	D9 to D12 and P22 to P25
	drainage works.		drainage works.		drainage works.
•	Resurfacing activities at	•	Resurfacing activities at	•	Road studs installation at
	IEC Eastbound and		IEC Eastbound		IEC
	Westbound	•	Marine pile cap repairing	•	Remedial work at bridge F
•	Landscape deck irrigation		works		Soffit between pier 36-43
	system	•	Remedial work at bridge F		
•	Removal of Contractor Site		Soffit between pier 36-43		
	Office and re-instate				
•	Scaffold remove along				
	IECL				
•	Marine pile cap repairing				
	works				

2.5.2. 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* <u>3.1.</u> <u>Appendix 3.1</u> shows the established Action/Limit Levels for the monitoring works.

Description
Rooftop of Wan Chai Ferry Pier
Noon Gun Area
Tung Lo Wan Fire Station
Victoria Centre
City Garden
HK Baptist Church Henrietta Secondary School
Harbour Building
International Finance Centre (Eastern End of Podium)
International Finance Centre (Western End of Podium)
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* <u>3.1</u>. *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 redesignated as RTN2a.

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

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- 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 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 L₁₀ and L₉₀ 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 [™] 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.

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

Table 3.3 Air quality monitoring Stations

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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 <u>Figure 2.1</u> and <u>Figure 3.1</u>. 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.

4.1.3. 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.

Reporting period of December 2021

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

Reporting period of January 2022

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

Reporting period of February 2022

- 4.1.6. No action or limit level exceedance was recorded in this reporting period.
- 4.1.7. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in <u>Appendix</u> <u>4.1</u> and the Notification of Exceedance can be referred in <u>Appendix 6.2</u>.



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 <u>Appendix 4.2</u>
- 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.

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	

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

* 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 December 2021

- 4.2.1. Limit level exceedance was recorded at RTN1 FEHD Hong Kong Transport Section Whitfield Depot on 3 December 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 3 December 2021. As such, the exceedance was considered as non-Project related.
- **4.2.2.** No action or limit level exceedance was recorded at RTN2a Hong Kong Electric Centre in the reporting period.
- 4.2.3. Limit level exceedances were recorded at RTN3 Yu Lee Mo Fan Memorial School on 3, 6, 7, 8 and 9 December 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 3, 6, 7, 8 and 9 December 2021. As such, the exceedances were considered as non-Project related.
- 4.2.4. Limit level exceedances were recorded at RTN4 Causeway Bay Community Centre on 27 November 2021. After checking with the Contractors, concrete breaking works of excontractor site office area were conducted on 27 November 2021 under Contractor HY/2009/19 at the area opposite to the monitoring location. As such, the exceedance recorded during the time of monitoring was considered as Project related under Contractor HY/2009/19. According to the Contractor HY/2009/19 information, mobile noise barrier was erected between noise source and noise monitoring station, i.e. Causeway Bay Community Centre, the breaker head was wrapped with noise absorption material, and fixed barrier was erected as hoarding between noise source and the noise monitoring station. 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 conducted at the concerned location.

Reporting period of January 2022

- 4.2.5. Limit level exceedance was recorded at RTN1 FEHD Hong Kong Transport Section Whitfield Depot on 21 January 2022. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 21 January 2022. As such, the exceedance was considered as non-Project related.
- 4.2.6. No action or limit level exceedance was recorded at RTN2a Hong Kong Electric Centre in the reporting period.
- 4.2.7. Limit level exceedance was recorded at RTN3 Yu Lee Mo Fan Memorial School 21 January 2022. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 21 January 2022. As such, the exceedance was considered as non-Project related.
- **4.2.8.** No action or limit level exceedance was recorded at RTN4 Causeway Bay Community Centre in the reporting period.

Reporting period of February 2022

- 4.2.9. No action or limit level exceedance was recorded at RTN1 FEHD Hong Kong Transport Section Whitfield Depot in the reporting period.
- 4.2.10. No action or limit level exceedance was recorded at RTN2a Hong Kong Electric Centre in the reporting period.
- **4.2.11.** No action or limit level exceedance was recorded at RTN3 Yu Lee Mo Fan Memorial School in the reporting period.
- 4.2.12. No action or limit level exceedance was recorded at RTN4 Causeway Bay Community Centre in the reporting period.
- 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 <u>Appendix 4.2</u>



4.3. Air quality monitoring Results

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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.

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

Table 4.3 Air quality monitoring Stations for Contract no. HY/2009/19

- 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.
- 4.3.5 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.

Reporting period of December 2021

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

Reporting period of January 2022

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

Reporting period of February 2022

- 4.3.8 No action or limit level exceedance was recorded in the reporting period.
- 4.3.9 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 <u>Appendix 4.3.</u>



4.4. Waste Monitoring Results

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

4.4.1. 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 4.4*.

Waste Type*	Quantity this quarter, m ³	Cumulative-to- Date. m ³	Disposal / Dumping Grounds
Inert C&D materials disposed	2,777.67	844,803.38	TKO137 TM38
Inert C&D materials recycled	Nil	82,349.7	N/A
Non-inert C&D materials disposed	177.01	10,336.78	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 Disposal), m ³	Nil	30,751	East of Sha Chau
Marine Sediment (Approach Ramp) (Type 2 – Confined Marine Disposal), m3	Nil	6,491	East of Sha Chau

 Table 4.4
 Details of Waste Disposal for Contract no. HY/2009/19



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 December 2021 reporting period.
- 5.1.2. No action or limit level exceedance was recorded in the January 2022 reporting period.
- 5.1.3. No action or limit level exceedance was recorded in the February 2022 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. Limit level exceedance was recorded at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot on 3 December 2021. After investigation, no construction activities were conducted under Contractor HY/2009/19 around the monitoring station on 3 December 2021. As such, the exceedance was 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 December 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 3, 6, 7, 8 and 9 December 2021. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 3, 6, 7, 8 and 9 December 2021. As such, 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 27 November 2021. After checking with the Contractors, concrete breaking works of excontractor site office area were conducted on 27 November 2021 under Contractor HY/2009/19 at the area opposite to the monitoring location. As such, the exceedance recorded during the time of monitoring was considered as Project related under Contractor HY/2009/19. According to the Contractor HY/2009/19 information, mobile noise barrier was erected between noise source and noise monitoring station, i.e. Causeway Bay Community Centre, the breaker head was wrapped with noise absorption material, and fixed barrier was erected as hoarding between noise source and the noise monitoring station. 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 conducted at the concerned location.

5.2.2 24-hour real time noise monitoring was conducted at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot. Limit level exceedance was recorded at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot on 21 January 2022. After investigation, no construction activities were conducted under Contractor HY/2009/19 around the monitoring station on 21 January 2022. As such, the exceedance was 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 January 2022 reporting period.

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 21 January 2022. After investigation, no construction activities was conducted under Contractor HY/2009/19 around the monitoring station on 21 January 2022. As such, 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 January 2022 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 February 2022 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 February 2022 reporting period.

24-hour real time noise monitoring was conducted at RTN3 - Yu Lee Mo Fan Memorial School. No action or limit level exceedance was recorded in February 2022 reporting period.

24-hour real time noise monitoring was conducted at RTN4 – Causeway Bay Community Centre. No action or limit level exceedance was recorded in February 2022 reporting period.

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 December 2021 reporting period.
- 5.2.5 No action or limit level exceedance was recorded in the January 2022 reporting period.
- 5.2.6 No action or limit level exceedance was recorded in the February 2022 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.

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6. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION

6.0.1 An ICC complaint was referred to the ET on 14 December 2021 (CASE Ref: CASE# 3-7015461467). The complainant reported that construction works carried out at Eastbound near City Garden during mid-night had caused noise nuisance and nearby residents were seriously disturbed by the beeping sound emit from the construction activities.

The ET confirmed with the Resident Site Staff that:

1. Road resurfacing works on IECL Eastbound were conducted during the following time period: a) 20/11/21 22:00 to 21/11/21 06:00; b) 27/11/21 22:00 to 28/11/21 06:00; and c) 04/12/21 22:00 to 05/12/21 06:00.

2. Corresponding noise control measures implemented during the construction periods including operation of portable generator and hand-held breaker inside acoustic enclosure. Adoption of noise control measures under condition 3.d.8 of GW-RS0637-21 for the use of road miller (CNP184).

3. CNP GW-RS0637-21 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

4. Dump trucks and lorries would emit beeping sound when the vehicles are backing up.

5. Only PMEs in Group E or F under CNP GW-RS0637-21 were operated. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 and GW-RS0628-21 were not used.

According to RSS confirmed information, road surfacing works were conducted at the concerned location and beeping sound was emitted by the dump truck and lorries when moved in reverse. Noise mitigation measures including i) operation of portable generator and hand-held breaker inside acoustic enclosure and ii) Noise control measures for road miller (CNP 184) was adopted in accordance with condition 3.d.8 of GW-RS0637-21. Relevant Construction Noise Permit GW-RS0637-21 for the above construction works was in place.

In view of the public concern, the Contractor of HY/2009/19 is recommended to adopt additional noise mitigation measure for road works at night time hours around the concerned location. In response to the public concern, the Contractor of HY/2009/19 would adopt the following additional measure including provision of temporary noise barrier or acoustic mat to fence off the line of sight between the noise emanating source and the NSR. The Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public

6.0.2 An ICC complaint was referred to the ET on 4 January 2022 (CASE Ref: CASE#3-6963952612). The complainant reported that construction works carried out at IECL Eastbound during night-time at around 11:00PM had caused noise nuisance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. Road resurfacing works on IECL Eastbound was carried out by Contract HY/2009/19 from 30 December 2021 22:00 to 31 December 2021 06:00.



2. Only one group of PMEs in Group E or F under CNP GW-RS0637-21 was operated at one time. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 and GW-RS0628-21 were not used.

3. Noise control measures were implemented during the construction periods including operation of portable generator and hand-held breaker inside acoustic enclosure. Adoption of noise control measures under condition 3.d.8 of GW-RS0637-21 for the use of road miller (CNP184).

4. CNP GW-RS0637-21 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

The complaint was considered as related to the road resurfacing works on IECL Eastbound. Despite the RSS advised that noise control measures including operation of portable generator and hand-held breaker inside acoustic enclosure and adoption of noise control measures for the use of road miller (CNP184) in accordance with condition 3.d.8 of GW-RS0637-21, the Contractor of HY/2009/19 is recommended to adopt additional noise mitigation measure for road works at night time hours around the concerned location.

In response to the public concern, the Contractor of HY/2009/19 should implement the following additional measure including erection of temporary noise barriers to reduce the lineof-sight noise transmission to nearby NSRs. The Contractor was recommended to complete the noisy work as soon as possible in order to minimize disturbance to nearby sensitive receivers. The Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

6.0.3 An ICC complaint was referred to the ET on 06 January 2022 (CASE Ref: CASE#3-7051781753). The complainant reported that construction works carried out at IECL near Provident Centre during night-time from 2200 to 2400 had caused noise nuisance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. Road resurfacing works on IECL Eastbound was carried out by Contract HY/2009/19 from 4 January 2022 22:00 to 5 January 2022 06:00.

2. Only one group of PMEs in Group E or F under CNP GW-RS0637-21 was operated at one time. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 and GW-RS0628-21 were not used.

3. Noise control measures were implemented during the construction periods including operation of portable generator and hand-held breaker inside acoustic enclosure. Adoption of noise control measures under condition 3.d.8 of GW-RS0637-21 for the use of road miller (CNP184).



4. CNP GW-RS0637-21 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

The complaint was considered as related to the road resurfacing works on IECL near Provident Centre. Despite the RSS advised that noise control measures including operation of portable generator and hand-held breaker inside acoustic enclosure and adoption of noise control measures for the use of road miller (CNP184) in accordance with condition 3.d.8 of GW-RS0637-21, the Contractor of HY/2009/19 is recommended to adopt additional noise mitigation measure for road works at night time hours around the concerned location.

In response to the public concern, the Contractor of HY/2009/19 should implement the following additional measure including erection of temporary noise barriers to reduce the lineof-sight noise transmission to nearby NSRs. The Contractor was recommended to complete the noisy work as soon as possible in order to minimize disturbance to nearby sensitive receivers. The Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and 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 17 January 2022 concerning the intermittent loud construction noise generated from the Island Eastern Corridor during 00:00 to 01:30 hrs starting from Jan 2022 has caused great nuisance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. The construction activities undertaken by HY/2009/19 from 2 January 2022 22:00 to 16 January 2022 06:00 were road resurfacing works at IECL Eastbound.

2. PMEs in Group E/Group F were operated. Only one group of PMEs were operating at one time. CNPs GW-RS0361-21, GW-RS0469-21, GW-RS0553-21 and GW-RS0628-21 were not used when using GW-RS0637-21 (from 2 January 2022 to 15 January 2022). CNPs GW-RS0628-21 and GW-RS0007-22 were not used when using GW-RS0006-22 (on 16 January 2022).

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 and condition 3.d.14 of GW-RS0006-22.

5. CNPs GW-RS0637-21 (from 2 January 2022 to 15 January 2022) and GW-RS0006-22 (on 16 January 2022) were granted for the abovementioned works and notifications to EPD and nearby residents were made.



The complaint was considered as related to noise nuisance from road resurfacing works at IECL Eastbound in restricted hours. Such works had been granted with CNPs nos. GW-RS0637-21 (from 2 January 2022 to 15 January 2022) and GW-RS0006-22 (on 16 January 2022). The checked restricted works were operated as per the conditions stated in CNPs. Noise control measures including operation of portable generator and hand-held breaker inside acoustic enclosure and adoption of noise control measures for the use of road miller (CNP184) in accordance with condition 3.d.8 of GW-RS0637-21 and condition 3.d.14 of GW-RS0006-22 were in place.

Despite such night works were granted with Construction Noise Permits, 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 PMEs deployed to avoid potential nuisance to the nearby public.

6.0.5 An ICC complaint was referred to the ET on 19 January 2022 (CASE Ref: CASE#3-7071544935). The complainant reported that construction works carried out at IECL Eastbound close to Harbour Heights during night-time at around 0100hrs had caused noise nuisance to the nearby residents.

The ET confirmed with the Resident Site Staff that:

1. Road resurfacing works on IECL Eastbound was carried out by Contract HY/2009/19 from 16 January 2022 22:00 to 17 January 2022 06:00.

2. Only one group of PMEs in Group E or F was operated at one time. CNPs GW-RS0628-21 and GW-RS0007-22 were not used when using GW-RS0006-22.

3. Noise control measures were implemented during the construction periods including operation of portable generator and hand-held breaker inside acoustic enclosure. Adoption of noise control measures under condition 3.d.14 of GW-RS0006-22 for the use of road miller (CNP184).

4. CNP GW-RS0006-22 was granted for the abovementioned works and notifications to EPD and nearby residents were made.

The complaint was considered as related to the road resurfacing works on IECL Eastbound close to Harbour Heights. Despite the RSS advised that noise control measures including operation of portable generator and hand-held breaker inside acoustic enclosure and adoption of noise control measures for the use of road miller (CNP184) in accordance with condition 3.d.14 of GW-RS0006-22, the Contractor of HY/2009/19 is recommended to adopt additional noise mitigation measure for road works at night time hours around the concerned location.

In response to the public concern, the Contractor of HY/2009/19 should implement the following additional measure including erection of temporary noise barriers to reduce the line-of-sight noise transmission to nearby NSRs. The Contractor was recommended to complete



the noisy work as soon as possible in order to minimize disturbance to nearby sensitive receivers. The Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and maintain regular maintenance of the PMEs deployed to avoid potential nuisance to the nearby public.

- 6.0.6 The details of cumulative complaint log and summary of complaints are presented in *Appendix 6.1.*
- 6.0.7 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	114
December 2021 to February 2022	5
Project-to-Date	119

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

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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 modification work of noise enclosure, open area hard paving, drainage and remedial works, soft landscape works, and road resurfacing activities at North Point area in the reporting period. In addition, other non-Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects were modification works and road resurfacing activities at North Point area in the reporting period. In addition, other non-Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects were observed undertaken at Wan Chai North and North Point area.
- 7.0.5. As relevant site mitigation measures for air quality and construction noise were implemented, no significant air quality impact and noise impact from construction activities was concluded in the reporting period. Although project related exceedances were recorded during the noise monitoring events in the December 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 December 2021, January 2022 and February 2022 reporting period.
- 8.0.3. Five environmental complaints were received in this reporting quarter.
- 8.0.4. The construction programmes of individual contracts are provided in *Appendix 7.1*.