

# Leighton – China State J.V.

# Shatin to Central Link - Hung Hom to Admiralty Section

# Works Contract 1123 - CEDD Entrusted Work for Road P2 & other roads and Slip Road 3

# Monthly EM&A Report for March 2022

[April 2022]

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Version: 0	Date:	7 April 2022

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## **EXECUTIVE SUMMARY**

Shatin to Central Link Contract 1123 – CEDD Entrusted Work for Road P2 & other roads and Slip Road 3 (hereafter called "the Project") covers part of the construction of CEDD entrusted work under the granted Further Environmental Permit: FEP–03/376/2009 and FEP–13/364/2009 respectively.

The Project comprises the construction of Road P2 and other roads which are classified as primary/district distributor roads and Slip Road 3.

The EM&A programme commenced on 25 January 2021. The impact EM&A for the Project includes air quality and noise monitoring.

This report documents the findings of EM&A works conducted in the period between 1 and 31 March

2022. As informed by the Contractor, major activities in the reporting period were:

Location	Site Activities	
Road P2 – West (Slip Road 3)	<ul> <li>Drainage works at Lung King Street.</li> <li>Planter wall at west Roundabout area.</li> <li>Road re-pavement at Convention Avenue under Exhibition Centre completed and traffic diverted back.</li> <li>Coach park - Resumed the remaining drainage works.</li> </ul>	
Road P2 – East (Hung Hing Road)	<ul> <li>Fleming Road/ Convention Avenue - HEC cable installation/ Isolation islands construction.</li> <li>Hung Hing Road- UU works/ Road kerb and subbase backfill.</li> </ul>	
Road P2 – Permanent PTI (Public Transport Interchange)	<ul> <li>Road works outside PTI (convention avenue)</li> <li>Footpath - paving block</li> <li>Plinths for kiosks</li> </ul>	

#### **Breaches of Action and Limit Levels for Air Quality**

No exceedance of Action and Limit Level of air quality was recorded in the reporting month.

## **Breaches of Action and Limit Levels for Noise**

#### Regular Noise Monitoring

No Action Level exceedance was recorded since no noise related complaint was received in the reporting month.

No exceedance of Limit Level of noise was recorded in the reporting month.

## Complaint, Notification of Summons and Successful Prosecution

No complaint, notification of summons and successful prosecution were received in the reporting month.

## **Reporting Changes**

There was no reporting change in the reporting month.

# **Future Key Issues**

Key issues to be considered in the next three months included:

Location	Si	te Activities
Road P2 –	•	Lung King Street - Underground Drainage
West (Slip Road 3)	•	Roundabout- Complete drainage works.
	•	Complete remaining 2 isolation islands.
Road P2 –	•	Convention avenue/ Hung Hing Road - Completed Road works
East (Hung Hing Road &		and divert the traffic to final alignment.
Convention Avenue)	•	Reinstatement of north part.
Road P2 – PTI	•	Complete PTI and handover- target on 15 May 22.
(Public Transport		
Interchange)		

Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, construction noise, water quality and waste management.

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# 1 INTRODUCTION

Leighton – China State Joint Venture (JV) was commissioned by MTR as the Civil Contractor for CEDD Entrusted Works under Contract 1123. AECOM Asia Company Limited (AECOM) was appointed by JV as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme during construction phase of the Project.

## 1.1 Purpose of the Report

1.1.1 This is the fifteenth monthly EM&A Report which summaries the impact monitoring results and audit findings for the Project during the reporting period between 1 and 31 March 2022.

#### 1.2 Report Structure

- 1.2.1 This monthly EM&A Report is organized as follows:
  - Section 1: Introduction
  - Section 2: Project Information
  - Section 3: Environmental Monitoring Requirement
  - Section 4: Implementation Status of Environmental Mitigation Measures
  - Section 5: Monitoring Results
  - Section 6: Environmental Site Inspection and Audit
  - Section 7: Environmental Non-conformance
  - Section 8: Future Key Issues
  - Section 9: Conclusions and Recommendations

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# 2 PROJECT INFORMATION

#### 2.1 Background

- 2.1.1 Road P2 and other roads which are classified as primary/district distributor roads identified as DP2 which covered in the Environmental Permit No. EP-376/2009 in the approved Wan Chai Development Phase II (WDII) and Central Wan Chai Bypass (CWB) comprising (i) a dual 2-lane primary distributor road, Road P2; and (ii) other new primary and district distributor roads connecting to the slip roads of the Central-Wan Chai Bypass.
- 2.1.2 Slip road 3 identified as part of DP1 which covered in the Environmental Permit No. EP-364/2009/H in the approved Wan Chai Development Phase II (WDII) and Central Wan Chai Bypass (CWB) comprising (i) slip roads to connect the CWB to the local road system in the Wan Chai North and Causeway Bay area; and (ii) associated road lighting, road signing, traffic control and surveillance system (iii) other associated works.
- 2.1.3 The Environmental Impact Assessment Report for Central - Wan Chai Bypass and Island Eastern Corridor Link (CWB&IECL) EIA Report (Register No. AEIAR-041/2001) and the Wan Chai Development Phase II and Central-Wan Chai Bypass (WDII&CWB) EIA Report (Register No. AEIAR-125/2008) which were approved on 31 August 2001 and 11 December 2008 under the Environmental Impact Assessment Ordinance (EIAO). Following the approval of the EIA Report, an Environmental Permits (EPs) were granted on 13 November 2009 and 22 April 2020 respectively, which covers Road P2 and other roads which are classified as primary/district distributor roads [DP2] and Central - Wan Chai Bypass (CWB) including its Road Tunnel and Slip Roads [DP1] (EP No.: EP-376/2009 and EP-364/2009/H), for the construction and operation. Further Environmental Permits (FEP No. FEP-03/376/2009 FEP-13/364/2009/H) were both subsequently granted from the Director of Environmental Protection (DEP) on 2 June 2020, which cover the construction works for DP2 and a part of DP1 respectively.
- 2.1.4 The site layout plan of the Project is shown in **Figure 1.1**.

## 2.2 Site Description

- 2.2.1 The major construction activities under CEDD Entrusted Works of Contract 1123 include:
  - a) Site preparation;
  - b) Construct for dual 2-lane primary distributor road, Road P2;
  - c) Construct for other new primary and district distributor roads connecting to the slip roads of the Central-Wan Chai Bypass;
  - d) Construct for slip roads to connect the CWB to the local road system in the Wan Chai North and Causeway Bay area;
  - e) Construct for associated road lighting, road signing, traffic control and surveillance system; and
  - f) Construct for other associated works:

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# 2.3 Construction Programme and Activities

2.3.1 The major construction activities undertaken in the reporting month are summarised below:

Location	Site Activities
Road P2 – West (Slip Road 3)	<ul> <li>Drainage works at Lung King Street.</li> <li>Planter wall at west Roundabout area.</li> <li>Road re-pavement at Convention Avenue under Exhibition Centre completed and traffic diverted back.</li> <li>Coach park - Resumed the remaining drainage works.</li> </ul>
Road P2 – East (Hung Hing Road)	<ul> <li>Fleming Road/ Convention Avenue - HEC cable installation/ Isolation islands construction.</li> <li>Hung Hing Road- UU works/ Road kerb and subbase backfill.</li> </ul>
Road P2 – Permanent PTI (Public Transport Interchange)	<ul> <li>Road works outside PTI (convention avenue)</li> <li>Footpath - paving block</li> <li>Plinths for kiosks</li> </ul>

2.3.2 The construction programme is presented in **Appendix A**.

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# 2.4 Project Organisation

2.4.1 The project organization structure is shown in **Appendix B**. The key personnel contact names and numbers for the Project are summarised in **Table 2.1.** 

Table 2.1 Contact Information of Key Personnel

Party	Role	Position	Name	Telephone	Fax
MTR	Residential	Senior Construction Manager – SCL Civil	Mr. Mike Bezzano	3959 2128	3959 2200
	Engineer (ER)	SCL Project Environmental Team Leader	Ms. Lisa Poon	3127 6295	3127 6422
Meinhardt	Independent Environmental Checker	Independent Environmental Checker	Ms. Claudine Lee	2859 5409	2540 1580
JV	Contractor	Project Director	Mr. Brian Shepstone	3973 0838	31051126
JV	Contractor	Environmental Engineer	Mr. Andy Leung	3973 1498	31031120
AECOM	Contractor's Environmental Team (ET)	ET Leader	Mr. Y W Fung	3922 9366	2317 7609

# 2.5 Status of Environmental Licences, Notification and Permits

2.5.1 Relevant environmental licenses, permits and/or notifications on environmental protection for this Project and valid in the reporting month are summarized in **Table 2.2**.

Table 2.2 Status of Environmental Licenses, Notifications and Permits

Permit / License No.	Valid Period		_		
/ Notification/ Reference No.	From	То	Status	Remarks	
Environmental Permit					
FEP-03/376/2009	2 Jun 2020	End of Contract	Valid		
FEP-13/364/2009/H	2 Jun 2020	End of Contract	Valid		
Construction Noise Pe	ermit				
-	-	-	-	-	
Wastewater Discharge	Wastewater Discharge License <sup>1</sup>				
-	-	-	-	-	
Chemical Waste Produ	Chemical Waste Producer Registration				
5213-135-L2881-01	02 Apr 2015	End of Contract	Valid	For whole site at Wan Chai Area	
Marine Dumping Perm	Marine Dumping Permit				
-	-	-	-	-	
Billing Account for Construction Waste Disposal					
7021736	16 Feb 2015	End of Contract	Valid	For Disposal of C&D Waste	
Notification Under Air Pollution Control (Construction Dust) Regulation					
385128	1 Mar 2015	End of Contract	Valid	For whole site at Wan Chai Area	

#### Remark:

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The Contractor was reminded to keep tracking on the site conditions and review its application for wastewater discharge license.

#### 3 ENVIRONMENTAL MONITORING REQUIREMENT

#### 3.1 Construction Dust Monitoring

#### Monitoring Requirements

3.1.1 In accordance with the approved EM&A Manuals, 24-hour and 1-hour Total Suspended Particulates (TSP) levels at the designated air quality monitoring station is required. Impact 24-hour monitoring should be carried out for at least once every 6 days and 1-hour TSP monitoring should be done at least 3 times every 6 days while the highest dust impact is expected. The Action and Limit level of the air quality monitoring is provided in **Appendix D**.

#### Monitoring Equipment

- 3.1.2 24-hour TSP air quality monitoring was performed using High Volume Sampler (HVS) located at the designated monitoring stations. The HVS meets all the requirements of the EM&A Manual.
- 3.1.3 A portable direct reading dust meter was used to carry out the 1-hour TSP monitoring.
- 3.1.4 Brand and model of the equipment is given in **Table 3.1**.

Table 3.1 Air Quality Monitoring Equipment

Equipment	Brand and Model
High Volume Sampler (24-hour TSP)	Andersen Total Suspended Particulate Mass Flow Controlled High Volume Air Sampler (Model No. GS 2310 (S/N:10273)) (Model No. GS 2310 (S/N:3384))
Calibration Kit (24-hour TSP)	TISCH Environmental Orifice (Model TE-5025A (S/N: 843))
Portable direct reading dust meter (1-hour TSP)	Sibata Digital Dust Monitor (Model No. LD-3)

# **Monitoring Locations**

3.1.5 The monitoring station for construction dust monitoring pertinent to the Project has been identified based on the approved EM&A Manual for SCL (HUH-ADM) of the Project. The location of the construction dust monitoring stations are summarised in **Table 3.2** and shown in **Figure 3.1**.

Table 3.2 Locations of Construction Dust Monitoring Station

Station ID	Dust Monitoring Station
CMA5b <sup>1</sup>	Pedestrian Plaza
CMA6a <sup>1</sup>	WDII PRE Site Office

Remark:

#### Monitoring Methodology

- 3.1.6 24-hour TSP Monitoring
  - (a) The HVS was installed in the vicinity of the air sensitive receivers. The following criteria were considered in the installation of the HVS as far as practicable: -
    - (i) A horizontal platform with appropriate support to secure the sampler against gusty wind was provided.
    - (ii) Two samplers should not be placed less than 2m apart from each others;

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According to the updated site layout of CEDD Entrusted Works and Updated EM&A Manual for EP-376/2009 and EP-364/2009, Pedestrian Plaza (CMA5b) and WDII PRE Site Office (CMA6A) were selected as the most affected sensitive receiver during the construction phase.

- (iii) The distance between the HVS and any obstacles, such as buildings, was at least twice the height that the obstacle protrudes above the HVS.
- (iv) A minimum of 2 meters separation from walls, parapets and penthouse for rooftop sampler.
- (v) A minimum of 2 meters separation from any supporting structure, measured horizontally is required.
- (vi) No furnace or incinerator flues nearby.
- (vii) Airflow around the sampler was unrestricted.
- (viii) The sampler was located more than 20 meters from any dripline.
- (ix) Any wire fence and gate, required to protect the sampler, did not obstruct the monitoring process.
- (x) Permission was obtained to set up the samplers and access to the monitoring station.
- (xi) A secured supply of electricity was obtained to operate the sampler.

## (b) Preparation of Filter Papers

- (i) Glass fibre filters, G810 were labelled and sufficient filters that were clean and without pinholes were selected.
- (ii) All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ±3 °C; the relative humidity (RH) was < 50% and not variable by more than ±5%. A convenient working RH was 40%.
- (iii) All filter papers were prepared and analysed by ALS Technichem (HK) Pty Ltd., which is a HOKLAS accredited laboratory and has comprehensive quality assurance and quality control programmes.

## (c) Field Monitoring

- (i) The power supply was checked to ensure the HVS works properly.
- (ii) The filter holder and the area surrounding the filter were cleaned.
- (iii) The filter holder was removed by loosening the four bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully.
- (iv) The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter.
- (v) The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied was sufficient to avoid air leakage at the edges.
- (vi) Then the shelter lid was closed and was secured with the aluminium strip.
- (vii) The HVS was warmed-up for about 5 minutes to establish run-temperature conditions.
- (viii) A new flow rate record sheet was set into the flow recorder.
- (ix) On site temperature and atmospheric pressure readings were taken and the flow rate of the HVS was checked and adjusted at around 1.3 m<sup>3</sup>/min, and complied with the range specified in the EM&A Manual (i.e. 0.6-1.7 m<sup>3</sup>/min).
- (x) The programmable digital timer was set for a sampling period of 24 hrs, and the starting time, weather condition and the filter number were recorded.
- (xi) The initial elapsed time was recorded.
- (xii) At the end of sampling, on site temperature and atmospheric pressure readings were taken and the final flow rate of the HVS was checked and recorded.
- (xiii) The final elapsed time was recorded.
- (xiv) The sampled filter was removed carefully and folded in half length so that only surfaces with collected particulate matter were in contact.
- (xv) It was then placed in a clean envelope and sealed.
- (xvi) All monitoring information was recorded on a standard data sheet.
- (xvii) Filters were then sent to ALS Technichem (HK) Pty Ltd. for analysis.

#### (d) Maintenance and Calibration

(i) The HVS and its accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.

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- (ii) HVSs were calibrated using TE-5025A Calibration Kit upon installation and thereafter at bi-monthly intervals.
- (iii) Calibration certificate of the TE-5025A Calibration Kit and the HVSs are provided in **Appendix E**.

## 3.1.7 1-hour TSP Monitoring

#### (a) Measuring Procedures

The measuring procedures of the 1-hour dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

- (i) Turn the power on.
- (ii) Close the air collecting opening cover.
- (iii) Push the "TIME SETTING" switch to [BG]
- (iv) Push "START/STOP" switch to perform background measurement for 6 seconds.
- (v) Turn the knob at SENSI ADJ position to insert the light scattering plate.
- (vi) Leave the equipment for 1 minute upon "SPAN CHECK" is indicated in the display.
- (vii) Push "START/STOP" switch to perform automatic sensitivity adjustment. This measurement takes 1 minute.
- (viii) Pull out the knob and return it to MEASURE position.
- (ix) Push the "TIME SETTING" switch the time set in the display to 3 hours.
- (x) Lower down the air collection opening cover.
- (xi) Push "START/STOP" switch to start measurement.

#### (b) Maintenance and Calibration

(i) The 1-hour TSP meter was calibrated at 1-year intervals against a continuous particulate TEOM Monitor, Series 1400ab. Calibration certificates of the Laser Dust Monitors are provided in **Appendix E**.

## Monitoring Schedule for the Reporting Month

3.1.8 The schedule for environmental monitoring in March 2022 is provided in Appendix F.

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## 3.2 Construction Noise Monitoring

#### Monitoring Requirements

3.2.1 In accordance with the EM&A Manual, impact noise monitoring should be conducted for at least once a week during the construction phase of the Project. **Table 3.3** summarises the monitoring parameters, frequency and duration of impact noise monitoring. The Action and Limit level of the noise monitoring is provided in **Appendix D**.

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Parameter and Duration	Frequency	
30-mins measurement at each monitoring station between 0700 and 1900 on normal weekdays.  Leq, L <sub>10</sub> and L <sub>90</sub> would be recorded.	At least once per week	

#### Monitoring Equipment

3.2.2 Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications (IEC) 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment is given in **Table 3.4**.

Table 3.4 Noise Monitoring Equipment for Regular Noise Monitoring

Equipment	Brand and Model
Integrated Sound Level Meter	Model No. B&K 2250 (S/N: 3001291) Model No. B&K 2270 (S/N: 3007965)
Acoustic Calibrator	Model No. B&K 4231 (S/N: 3014024 / N.004.04) Model No. Rion NC-74 (S/N:34246490 / N.004.10)

## **Monitoring Locations**

3.2.3 The monitoring station for construction noise monitoring pertinent to the Project has been identified based on the approved EM&A Manual for SCL (HUH-ADM) of the Project. Location of the noise monitoring station is summarised in **Table 3.5** and shown in **Figure 3.1**.

Table 3.5 Noise Monitoring Station during Construction Phase

Identification No.	District	Alternative Noise Monitoring Location
M1a <sup>1</sup>	Wan Chai	Footbridge for Ex-Harbour Road Sports Centre

Remark:

#### Monitoring Methodology

- 3.2.4 Monitoring Procedure
  - (a) Façade measurements were made at M1a.
  - (b) The battery condition was checked to ensure the correct functioning of the meter.
  - (c) Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
    - (i) frequency weighting: A
    - (ii) time weighting: Fast

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According to the updated site layout of CEDD Entrusted Works and Updated EM&A Manual for EP-376/2009 and EP-364/2009, Footbridge for Ex-Harbour Road Sports Centre (M1a) was selected as the most affected sensitive receiver during the construction phase.

- (iii) time measurement: L<sub>eq(30-minutes)</sub> during non-restricted hours i.e. 0700 1900 on normal weekdays.
- (d) Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator for 94 dB(A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- (e) During the monitoring period, the L<sub>eq</sub>, L<sub>10</sub> and L<sub>90</sub> were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- (f) Noise measurement was paused during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible. Observations were recorded when intrusive noise was unavoidable.
- (g) Noise monitoring was cancelled in the presence of fog, rain, wind with a steady speed exceeding 5m/s, or wind with gusts exceeding 10m/s.

#### 3.2.5 Maintenance and Calibration

- (a) The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
- (b) The meter and calibrator were sent to the supplier or HOKLAS laboratory to check and calibrate at yearly intervals.
- (c) Calibration certificates of the sound level meters and acoustic calibrators are provided in **Appendix E**.

# Monitoring Schedule for the Reporting Month

3.2.6 The schedule for environmental monitoring in March 2022 is provided in **Appendix F**.

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## 4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

4.1.1 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Reports, the EP and EM&A Manuals. The implementation status of the environmental mitigation measures during the reporting period is summarized in **Appendix C.** Status of required submissions under the EP during the reporting period is summarised in **Table 4.1**.

Table 4.1 Status of Required Submission under Further Environmental Permit

EP Condition	Submission	Submission Date
Condition 3.3 (FEP-13//364/2009/H & FEP-03/376/2009)	Monthly EM&A Report for February 2022	14 March 2022

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#### 5 MONITORING RESULTS

#### 5.1 Construction Dust Monitoring

5.1.1 The monitoring results for 24-hour TSP and 1-hour TSP are summarised in **Table 5.1** and **Table 5.2** respectively. Detailed air quality monitoring results and wind monitoring data extracted from the nearest Automatic Weather Station are presented in **Appendix G**.

Table 5.1 Summary of 24-hour TSP Monitoring Result in the Reporting Period

ID	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
CMA5b	44.3	16.3 – 76.9	209.9	260
CMA6a	30.2	9.1 – 68.7	207.1	260

Table 5.2 Summary of 1-hour TSP Monitoring Result in the Reporting Period

ID	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
CMA5b	65.0	62.9 – 67.4	339.7	500
CMA6a	62.5	61.3 – 63.6	333	500

- 5.1.2 No Action and Limit Level exceedance were recorded for 1-hour TSP monitoring at the monitoring locations in the reporting month.
- 5.1.3 No Action and Limit Level exceedance were recorded for 24-hour TSP monitoring at the monitoring locations in the reporting month.
- 5.1.4 The event and action plan is annexed in **Appendix I**.
- 5.1.5 Major dust sources during the monitoring included construction dust, nearby traffic emission and other nearby construction sites.

## 5.2 Regular Construction Noise Monitoring

5.2.1 The monitoring results for noise are summarized in **Table 5.3** and the monitoring data is provided in **Appendix H**.

Table 5.3 Summary of Construction Noise Monitoring Results in the Reporting Period

ID	Range, dB(A), L <sub>eq (30 mins)</sub>	Limit Level, dB(A), L <sub>eg (30 mins)</sub>
M1a <sup>(*)</sup>	<baseline< th=""><th>75</th></baseline<>	75

<sup>(\*)</sup> Baseline correction will be made to the measured Leq when the measured noise level exceeded the corresponding baseline noise level and presented in the table.

- 5.2.2 No Action Level exceedance was recorded since no noise related complaint was received in the reporting month.
- 5.2.3 No Limit Level exceedance of noise was recorded at the monitoring station in the reporting month.
- 5.2.4 The event and action plan is annexed in **Appendix I**.
- 5.2.5 Major noise sources during the monitoring included construction noise from the Project site, nearby traffic noise and the community.

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#### 5.3 Waste Management

- 5.3.1 C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.
- 5.3.2 As advised by the Contractor, 1,190 m³ of inert C&D material was generated and disposed of as public fill in the reporting month. No inert C&D materials were reused in other projects or in the Contract in the reporting month. No fill material was imported in the reporting month. No general refuse was generated in the reporting month. No metal, paper/cardboard packaging material, plastic was collected by recycling contractor in the reporting month. No chemical waste was collected by licensed contractor in the reporting period. No Type 1 and Type 2 of Marine sediment were disposed of at Confined Marine Disposal Facility to the East of Sha Chau. The waste flow table is annexed in **Appendix K**.
- 5.3.3 The Contractor is advised to properly maintain on site C&D materials and wastes collection, sorting and recording system and maximize reuse / recycle of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.
- 5.3.4 The Contractor is reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

## 5.4 Landscape and Visual

5.4.1 Weekly inspection of the implementation of landscape and visual mitigation measures was conducted. A summary of the site inspection is provided in **Appendix C**. The observations and recommendations made during the site inspections are presented in **Table 6.1**.

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## 6 ENVIRONMENTAL SITE INSPECTION AND AUDIT

- 6.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. A summary of the mitigation measures implementation schedule is provided in **Appendix C**.
- 6.1.2 In the reporting month, 5 site inspections were carried out on 2, 9, 16, 23 and 30 March 2022. Joint inspections with the IEC, ER, the Contractor and the ET were conducted on 16 March 2022. No non-compliance was recorded during the site inspection. Details of observations recorded during the site inspections are presented in **Table 6.1**.

Table 6.1 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	Nil	Nil	Nil
Noise	Nil	Nil	Nil
Water Quality	9 March 2022	Reminder The Contractor was reminded to set a wastewater treatment facility for W21 and W22.	The setup of wastewater treatment facility for W21 and W22 was in progress. Follow up inspection is required.
Waste/ Chemical Management	Nil	Nil	Nil
Landscape & Visual	Nil	Nil	Nil
Permits/ Licenses	Nil	Nil	Nil

6.1.3 No follow up action was requested by Contractor's ET during the site inspection on 2, 16, 23 and 30 March 2022.

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#### 7 ENVIRONMENTAL NON-CONFORMANCE

# 7.1 Summary of Monitoring Exceedances

- 7.1.1 All 24-hour TSP result was below the Action and Limit level at all monitoring locations in the reporting month.
- 7.1.2 All 1-hour TSP result was below the Action and Limit level at all monitoring locations in the reporting month
- 7.1.3 No Action Level exceedance was recorded since no noise related complaint was received in the reporting month.
- 7.1.4 No Limit Level exceedance for noise was recorded at all monitoring stations in the reporting month.

# 7.2 Summary of Environmental Non-Compliance

7.2.1 No environmental non-compliance was recorded in the reporting month.

## 7.3 Summary of Environmental Complaints

7.3.1 No environmental related complaint was received in the reporting month. Cumulative statistics on environmental complaints is provided in **Appendix J**.

# 7.4 Summary of Environmental Summon and Successful Prosecutions

7.4.1 No environmental related prosecution or notification of summons was received in the reporting month. Cumulative statistics on notification of summons and successful prosecutions is provided in **Appendix J**.

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# 8 FUTURE KEY ISSUES

# 8.1 Construction Programme for the Next Three Month

8.1.1 The major construction works between April to June 2022 will be:

Location	Site Activities	
Road P2 –	Lung King Street - Underground Drainage	
West (Slip Road 3)	Roundabout- Complete drainage works.	
	Complete remaining 2 isolation islands.	
Road P2 –	Convention avenue/ Hung Hing Road - Completed Road works	
East (Hung Hing Road &	and divert the traffic to final alignment.	
Convention Avenue)	Reinstatement of north part.	
Road P2 – PTI	Complete PTI and handover- target on 15 May 22.	
(Public Transport	•	
Interchange)		

# 8.2 Key Issues for the Coming Month

8.2.1 Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, construction noise, water quality and waste management.

# 8.3 Monitoring Schedule for the Next Three Month

8.3.1 The tentative schedules for environmental monitoring in between April to June 2022 are provided in **Appendix F**.

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## 9 CONCLUSIONS AND RECOMMENDATIONS

#### 9.1 Conclusions

- 9.1.1 24-hour TSP, 1-hour TSP and noise monitoring were carried out in the reporting month.
- 9.1.2 No Action and Limit Level exceedance was recorded for 24-hour TSP monitoring at the monitoring locations in the reporting month.
- 9.1.3 No Action and Limit Level exceedance was recorded for 1-hour TSP monitoring at the monitoring locations in the reporting month
- 9.1.4 No Action Level exceedance was recorded since no noise related complaint was received in the reporting month.
- 9.1.5 No Limit Level exceedance for noise was recorded at all monitoring stations in the reporting month.
- 9.1.6 5 nos. of environmental site inspections were carried out in March 2022. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audit
- 9.1.7 No environmental complaint was received in the reporting month.
- 9.1.8 No notification of summons and successful prosecution were received in the reporting month.
- 9.1.9 Referring to the Contractor's information, no notification of summons and successful prosecution was received in the reporting month.

#### 9.2 Recommendations

9.2.1 According to the environmental site inspections performed in the reporting month, the following recommendations were provided: -

#### Air Quality Impact

• No specific observation was identified in the reporting month.

#### Construction Noise Impact

• No specific observation was identified in the reporting month.

#### Water Quality Impact

The Contractor was reminded to set a wastewater treatment facility for W21 and W22.

## Chemical and Waste Management

• No specific observation was identified in the reporting month.

## Landscape & Visual Impact

No specific observation was identified in the reporting month.

## Permits/licenses

No specific observation was identified in the reporting month.

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