

Environmental Permit No. EP-608/2022

Hung Shui Kiu Effluent Polishing Plant Phase 1

Independent Environmental Checker Verification


Reference Document/Plan

Document/ Plan to be Certified/ Verified:	Monthly Environmental Monitoring & Audit Report (December 2024)
Date of Report:	14 January 2025
Date received by IEC:	10 January 2025

Reference EP Condition / EM&A Manual

Environmental Permit Condition:	3.4
<p>The Permit Holder shall submit 1 hard copy and 1 electronic copy of Monthly EM&A Reports for the construction stage of the Project to the Director, within 10 working days after the end of the reporting month. The monthly EM&A Reports shall include an executive summary of all environmental audit results, together with actions taken in the event of non-compliance (exceedances) of the environmental quality performance limits (Action and Limit Levels), complaints received and emergency events relating to violation of environmental legislation. The submissions shall be certified by the ET Leader and verified by the IEC as having complied with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the Monthly EM&A Reports shall be provided upon request by the Director.</p>	

IEC Verification

I hereby verify that the above referenced document/ plan complies with the above referenced condition of EP-608/2022.	
	
Ms Mandy To Independent Environmental Checker	Date: 10 January 2025

DRAINAGE SERVICES DEPARTMENT

CONTRACT NO. HATS 07/2023
ENVIRONMENTAL TEAM FOR HUNG SHUI KIU
EFFLUENT POLISHING PLANT PHASE 1
MONTHLY ENVIRONMENTAL MONITORING AND
AUDIT REPORT (DECEMBER 2024)

JANUARY 14, 2025



CONTRACT NO. HATS
07/2023

ENVIRONMENTAL
TEAM FOR HUNG
SHUI KIU EFFLUENT
POLISHING PLANT
PHASE 1

MONTHLY
ENVIRONMENTAL
MONITORING AND AUDIT
REPORT (DECEMBER
2024)

DRAINAGE SERVICES DEPARTMENT




DATE: JANUARY 14, 2025

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Remarks				
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EXECUTIVE SUMMARY

The Hung Shui Kiu Effluent Polishing Plant (HSKEPP) (hereinafter referred to as “the Project”) is to provide sewage treatment to the sewage collected from the Hung Shiu Kiu / Ha Tsuen New Development Area (HSK/HT NDA) and other developments in the North West New Territories (NWNT), and to subsequently dispose the treated effluent.

The Environmental Impact Assessment (EIA) Report and its Environmental Monitoring and Audit (EM&A) Manual (Register No. AEIAR-240/2022) for HSKEPP was approved on 19 October 2022, with an Environmental Permit (EP) granted on 19 October 2022 (EP No. EP-608/2022) under the Environmental Impact Assessment Ordinance (EIAO).

The construction was commenced on 6 September 2024. This is the 4th EM&A report documents the findings of EM&A works conducted during the period from 1 to 31 December 2024.

EM&A Activities Summary

A summary of the EM&A activities in this reporting month is listed below:

EM&A Activities	Date
Air Quality Monitoring	5*, 11*, 16*, 21* and 27* December 2024
Water Quality Monitoring	2, 5, 7, 9, 11, 13, 16, 18, 21, 23, 25, 27 and 30 December 2024
Environmental Site Inspection	6, 12, 19 and 23 December 2024

Notes(*): The Air Quality Impact Monitoring at AM3 is suspended from 7 Nov 2024 due to the construction works of other project at AM3.

Breaches of Action and Limit Levels for Air Quality

No exceedance of the Action / Limit Level of 1-hour Total Suspended Particulates (TSP) was recorded in the reporting month. Details are provided in **Appendix F**.

Breaches of Action and Limit Levels for Water Quality

No exceedance of the Action / Limit Level of water quality monitoring was recorded in the reporting month. Details are provided in **Appendix I**.

Complaint, Notification of Summons and Successful Prosecution

No environmental 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 the following.

Site	Construction Activities
Contract No. DC/2023/15 Site Formation Works for Hung Shui Kiu Effluent Polishing Plant Phase 1	- Construction of Hoarding - Demolition Works

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

1 INTRODUCTION

WSP (Asia) Limited (WSP) was appointed by Drainage Services Department (DSD) as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme during construction phase of the Hung Shui Kiu Effluent Polishing Plant (HSKEPP) (hereinafter referred to as “the Project”).

1.1 PURPOSE OF THE REPORT

1.1.1 The Environmental Monitoring and Audit (EM&A) programme for the Project commenced on 6 September 2024. This is the 4th EM&A Report for the Project which summarises the impact monitoring results and audit findings for the Project during the period from 1 to 31 December 2024.

1.2 REPORT STRUCTURE

1.2.1 This monthly EM&A Report is organized as follows:

- (a) Section 1: Introduction
- (b) Section 2: Project Information
- (c) Section 3: Environmental Monitoring Requirement
- (d) Section 4: Implementation Status of Environmental Mitigation Measures
- (e) Section 5: Monitoring Results
- (f) Section 6: Environmental Site Inspection and Audit
- (g) Section 7: Environmental Non-conformance
- (h) Section 8: Future Key Issues
- (i) Section 9: Conclusions and Recommendations

2 PROJECT INFORMATION

2.1 BACKGROUND

- 2.1.1 The Hung Shui Kiu Effluent Polishing Plant (HSKEPP) (the Project) which is located in the north-western side of the Hung Shiu Kiu / Ha Tsuen New Development Area (HSK/HT NDA). It is designed to provide reliable, adequate and quality sewage treatment and sewage effluent disposal for the sewage collected from the new developments within the HSK/HT NDA and other developments on the North West New Territories (NWNT).
- 2.1.2 An Environmental Impact Assessment (EIA) study for the Project was conducted in accordance with EIA Study Brief No. ESB- 312/2019. The EIA Report and Environmental Monitoring and Audit (EM&A) Manual (Register No. AEIAR – 240/2022) were approved on 19 October 2022 under the Environmental Impact Assessment Ordinance (EIAO), with an Environmental Permit (EP) granted on 19 October 2022 (EP No. EP-608/2022).
- 2.1.3 According to the approved EM&A Manual of HSKEPP, the EM&A monitoring for the Project includes air quality monitoring and water quality monitoring. Baseline dust and water quality monitoring for HSKEPP was carried out within 24 June 2024 and 20 July 2024.

2.2 GENERAL DESCRIPTION OF THE PROJECT

- 2.2.1 The key elements of this Project comprise below:
- (a) Demolition of existing structures and buildings within San Wai Preliminary Treatment Works (SWPTW) for construction of HSKEPP facilities;
 - (b) Construction of a sewage treatment plant with a maximum capacity of Average Dry Weather Flow (ADWF) up to 90,000 m³/day;
 - (c) Construction of sludge treatment facilities for treating sludge generated from Hung Shui Kiu (HSK) Effluent Polishing Plant (EPP) and additional sludge generated from the San Wai Sewage Treatment Works (STW) and other nearby STWs;
 - (d) Construction of facilities for receiving and co-digesting pre-treated food or organic wastes;
 - (e) Construction of effluent discharge pipe connecting to the existing discharge tunnel of San Wai STW; and
 - (f) Associated ancillary works.
- 2.2.2 The layout plan of the Project is shown in **Figure 2.1**.

2.3 CONSTRUCTION PROGRAMME AND ACTIVITIES

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

Table 2.1 Summary of Major Construction Activities in the Reporting Period

Site	Construction Activities
Contract No. DC/2023/15 Site Formation Works for Hung Shui Kiu Effluent Polishing Plant Phase 1	- Site Clearance - Construction of Hoarding - Environmental SI Works

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

2.4 PROJECT ORGANIZATION

2.4.1 The project organization structure is shown in **Appendix B**. The key personnel contact names and numbers for the Project are summarized in **Table 2.2**.

Table 2.2 Contact Information of Key Personnel

Party	Role	Position	Name	Telephone
DSD	Project Proponent	Engr/6 (Harbour Area Treatment Scheme)	Mr. Gabriel Lau	2159 3410
AECOM	Engineer's Representative	Associate	Ms. Yanning Zhang	5315 1068
ERM	Independent Environmental Checker (IEC)	Independent Environmental Checker	Ms. Mandy To	2271 3313
Adrian Construction Limited	Contractor	Environmental Officer	Mr. Tak-chi Tsoi	9226 6337
WSP	Environmental Team (ET)	ET Leader	Mr. Squall Lam	2579 8841

2.5 STATUS OF ENVIRONMENTAL LICENCES, NOTIFICATION AND PERMITS

2.5.1 Relevant environmental licenses, permits and/or notifications on environmental protection for the Project and valid in the reporting month are summarized in **Table 2.3**.

Table 2.3 Status of Environmental Licenses, Notification and Permits

Permit / License No. / Notification/ Reference No.	Valid Period		Status	Remarks
	From	To		
<i>Environmental Permit</i>				
EP-608/2022	19 Oct 2022	-	Valid	EP-608/2022
<i>Wastewater Discharge License</i>				
10009181 (Reference No.) WT00045594-2024	21 Nov 2024	30 Nov 2029	Valid	Date of Inspection by EPD: 4th October 2024
<i>Chemical Waste Producer Registration</i>				
5213-511-A3217-01	25 Jul 2024	-	Valid	-
<i>Billing Account for Construction Waste Disposal</i>				
7051624	29 Jul 2024	-	Valid	-
<i>Notification Under Air Pollution Control (Construction Dust) Regulation</i>				
-	-	-	-	Notification has been submitted to EPD on 5 July 2024

3 ENVIRONMENTAL MONITORING REQUIREMENT

3.1 CONSTRUCTION DUST MONITORING

MONITORING REQUIREMENTS

- 3.1.1 In accordance with the approved EM&A Manual, 1-hour Total Suspended Particulates (TSP) level at the designated air quality monitoring station is required. Impact 1-hour TSP monitoring should be carried out for at least three times in every six-days at the designated monitoring stations. The Action and Limit Level of the air quality monitoring is provided in **Table 3.1**.

Table 3.1 Action and Limit Levels for 1-hour TSP

ID	Location	Action Level	Limit Level
AM1	Tseung Kong Wai	263.0 $\mu\text{g}/\text{m}^3$	500 $\mu\text{g}/\text{m}^3$
AM2	Farm House	260.6 $\mu\text{g}/\text{m}^3$	500 $\mu\text{g}/\text{m}^3$
AM3	Planned Port Back-up, Storage and Workshop	263.4 $\mu\text{g}/\text{m}^3$	500 $\mu\text{g}/\text{m}^3$

MONITORING EQUIPMENT

- 3.1.2 1-hour TSP air quality monitoring was performed using portable direct reading dust meter located at the designated monitoring stations. Portable direct reading dust meters used for the monitoring were proven to IEC to be capable of achieving comparable result as that of the dust meter and thus were used for sampling. The portable direct reading dust meters meet all the requirements of the EM&A Manual. Brand and model of the equipment is given in **Table 3.2**. Their latest calibration certificates of the portable direct reading dust meter are provided in **Appendix D**.

Table 3.2 Air Quality Monitoring Equipment

Equipment	Brand and Model
Portable direct reading dust meter (1-hour TSP)	TSI Handheld TSP Meter (Model No. AM520; S/N: 5201735004)
	TSI Handheld TSP Meter (Model No. AM520; S/N: 5201735006)
	TSI Handheld TSP Meter (Model No. AM520; S/N: 5202345003)

MONITORING LOCATIONS

- 3.1.3 The monitoring station for construction dust monitoring pertinent to the Project has been identified based on the approved EM&A Manual for HSKEPP of the Project. The

location of the construction dust monitoring stations is summarised in **Table 3.3** and shown in **Figure 3.1**.

Table 3.3 Locations of Construction Dust Monitoring Station

Monitoring Location ID ⁽¹⁾	Dust Monitoring Location
AM1	Tseung Kong Wai
AM2	Farm House
AM3 ⁽²⁾	Planned Port Back-up, Storage and Workshop

Note:

- (1) 1-hour TSP impact monitoring should be conducted at the monitoring stations when there are Project-related major construction activities including site formation and piling works being undertaken within a radius of 500m from the monitoring stations.
- (2) According to ET's monitoring team, AM3 was blocked on 1 November 2024 for construction works. Based on the communications among ET, DSD, IEC and EPD, all parties have no comment on the suspension of air quality impact monitoring at AM3 until the construction works at AM3 is completed. Details can be referred to Appendix L of the Monthly EM&A Report (November 2024).

3.1.4 Air Quality Impact Monitoring at AM3 was temporarily suspended starting from 7 Nov 2024 and would be resumed after the completion of construction of the planned Port Back-up, Storage and Workshop use. Details of the suspension is presented in Appendix L of the Monthly EM&A Report (November 2024).

MONITORING METHODOLOGY

3.1.5 The 1-hour TSP was sampled by drawing air into the portable dust monitor where particular concentrations were measured instantaneously with an in-built silicon detector sensing light scattered by the particulates in the sampled air. Continuous TSP levels were indicated and logged by a built-in data logger compatible with Windows based program to facilitate data collection, analysis and reporting.

Field Monitoring

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

- (a) Power on the meter
- (b) Check the data and time
- (c) Check the battery and make sure it is good enough to complete the sampling
- (d) Select the "Calibration" from the menu
- (e) Plug in the zero calibration filter to the meter
- (f) Select the "Zero Cal" and run it
- (g) Back to main menu and select the "Run Mode/Manual Mode"
- (h) Press "Enter" to start the sampling
- (i) When sampling is completed, press the "Enter" to stop the sampling

- (j) Back to the main menu and select the "Data"
- (k) Select the "Statistic" and read back the last memory record

3.1.7 Adoption of the wind data from the existing automatic wind station, i.e. Lau Fau Shan, operated by Hong Kong Observatory (HKO) rather than setting up wind data monitoring equipment is based on the following justifications:

- Lau Fan Shan automatic wind station is located in the vicinity of the designated monitoring locations. This Automatic wind station (22°28'08", 113°59'01") is located at the north of the Project and the anemometer is set up at 31m above mean sea level. It is clear of obstructions or turbulence caused by the buildings;
- This automatic wind station was considered as the closest wind station to the Project that could provide representative wind data in Hung Shui Kiu areas; and
- Wind data collected by HKO was considered as a reliable data source for the wind data, it is widely used in many EM&A Projects (e.g. Expansion of Hong Kong International Airport into a Three-runway System, Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works – Advance Construction Works). The dataset is more accurate and reliable that could be downloaded periodically with real-timed data logger.

3.1.8 The data collected from Lau Fau Shan was used to check the wind speed and wind direction. Details of the collected wind data were presented in **Appendix G**.

Maintenance and Calibration

3.1.9 The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method.

DATA MANAGEMENT AND DATA QA/QC CONTROL

3.1.10 All monitoring data will be handled by the ET's in-house data recording and management system. The monitoring data recorded in the equipment will be downloaded directly from the equipment at the end of each monitoring day. The downloaded monitoring data will input into a computerized database maintained by the ET. The laboratory results will be input directly into the computerized database and checked by personnel other than those who input the data.

3.1.11 For monitoring parameters that require laboratory analysis, the local laboratory shall follow the QA/QC requirements as set out under the HOKLAS scheme for the relevant laboratory tests.

MONITORING SCHEDULE FOR THE REPORTING MONTH

3.1.12 The schedule for dust monitoring conducted in December 2024 is provided in **Appendix E**.

3.2 WATER QUALITY MONITORING

MONITORING REQUIREMENTS

- 3.2.1 In accordance with the approved EM&A Manual and EP, baseline water quality monitoring was undertaken to establish the baseline water quality levels at the designated monitoring stations. The stream water quality monitoring was conducted 3 days per week, with sampling/measurement at all designated monitoring stations including control station as specified in **Table 3.7**.
- 3.2.2 Measurements at the C1 and M1 stations for construction stage at were taken. Water depths, namely, 1m below water surface, mid-depth and 1m above sea/river bed, except where the water depth less that 6m, in which case the mid-depth station may be omitted. Should the water depth be less than 3m, only the mid-depth station will be monitored. The Action and Limit Level of the water monitoring is provided in **Table 3.4**.

Table 3.4 Action and Limit Levels for Water Quality

Parameter	Station M1	
	Action Level	Limit Level
DO in mg/L	3.8	3.7
Turbidity in NTU	17.2 OR	17.7 OR
	120% of upstream control station(s) at the same tide of the same day, whichever is higher	130% of upstream control station(s) at the same tide of the same day, whichever is higher
SS in mg/L	25 OR	26 OR
	120% of upstream control station(s) at the same tide of the same day, whichever is higher	130% of upstream control station(s) at the same tide of the same day, whichever is higher

MONITORING PARAMETERS

- 3.2.3 Dissolved Oxygen (DO), Salinity, Temperature, pH, and Turbidity should be monitored at designated water quality monitoring stations. All parameters should be measured in-situ whereas suspended solids (SS) should be determined by the laboratory. DO should be presented in mg/L and in % saturation.

- 3.2.4 Other relevant data should also be recorded, including monitoring location / position, time, weather conditions and any special phenomena or work underway at the construction site during the monitoring.

MONITORING EQUIPMENT

- 3.2.5 Based on the approved EM&A Manual, the monitoring equipment in **Table 3.5** were used for the in-situ measurement of water quality. A copy of the calibration certificates for the water quality monitoring equipment are provided in **Appendix D**.

Table 3.5 Water Quality Monitoring Equipment

Equipment	Model
DO and Temperature Meter, Salinity Meter, pH meter and Turbidimeter	YSI ProDSS Multi Parameters
Serial Number	1. 21K101468 2. 21K101469 3. 21G105356
Water Depth Sensor	Xyorca XY-453 (S/N: OA35000025)
Water Sampler	1120-1180 Vertical Alpha™ Bottles

MONITORING METHODOLOGY

Dissolved Oxygen and Temperature Measuring Instrument

- 3.2.6 The instrument is a portable and weatherproof DO measuring instrument complete with cable and sensor and use a DC power source. The equipment is capable of measuring:
- a DO-level in the range of 0 - 20 mg/L and 0 - 200% saturation; and
 - a temperature of 0 - 45 degree Celsius
- 3.2.7 It has a membrane electrode with automatic temperature compensation complete with a cable. Sufficient stocks of spare electrodes and cables should be available for replacement where necessary. (For example, YSI model 59 meter, YSI 5739 probe, YSI 5795A submersible stirrer with reel and cable or an approved similar instrument).
- 3.2.8 Salinity compensation was not built-in to the DO equipment, in-situ salinity measured to calibrate the DO equipment prior to each DO measurement.

Turbidity Measuring Instrument

- 3.2.9 Turbidity measured in-situ by the nephelometric method. The instrument is portable and weatherproof using a DC power source complete with cable, sensor and comprehensive operation manuals. It has a photoelectric sensor capable of measuring turbidity between 0 - 1000 NTU (for example, Hach model 2100P or an approved similar instrument). The cable is not less than 25m in length. The meter

calibrated in order to establish the relationship between NTU units and the levels of suspended solids. The turbidity measurement carried out on split water sample collected from the same depths of suspended solids samples.

Sampler

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

Water Depth Detector

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

Salinity Measuring Equipment

- 3.2.12 A portable salinometer capable of measuring salinity in the range of 0 - 40 parts per thousand (ppt) provided for measuring salinity of the water at each monitoring location.

pH Measuring Equipment

- 3.2.13 The instrument consists of a potentiometer, a glass electrode, a reference electrode and a temperature-compensating device. It is readable to 0.1 pH in a range of 0 to 14. Standard buffer solutions of at least pH 7 and pH 10 used for calibration of the instrument before and after use. Details of the method should comply with American Public Health Association (APHA), 19th Edition 4500-HTB.

Sample Containers and Storage

- 3.2.14 Water samples for SS determination stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°C without being frozen) and delivered to the laboratory and analysed as soon as possible after collection. Sufficient volume of samples collected to achieve the detection limit.

CALIBRATION OF IN-SITU INSTRUMENTS

- 3.2.15 All in-situ monitoring instruments checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring. Responses of sensors and electrodes checked with certified standard solutions before each use. Wet bulb calibration for a DO meter carried out before measurement at each monitoring location.

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

LABORATORY MEASUREMENT/ANALYSIS

- 3.2.17 Analysis of SS levels shall be carried out in a HOKLAS or another international accredited laboratory. Sufficient water samples (i.e. not less than 2 litres) collected at the monitoring stations for carrying out the laboratory determinations, with detection limit shown in **Table 3.6**. All samples assigned a unique code and accompanied by Chain of Custody (COC) sheets.
- 3.2.18 The SS determination work start within 24 hours after collection of the water samples. The analyses follow the standard methods according to **Table 3.6** and as described in “American Public Health Association (APHA) Standard Methods for the Examination of Water and Wastewater”, 19th edition, unless otherwise specified.

Table 3.6 Analytical Methods to be applied to Water Quality Samples

Determinant	Standard Method	Detection Limit
Suspended Solids (mg/L)	APHA 2540 D	2 mg/L

- 3.2.19 For the purpose of QA/QC, all QA/QC results including blank, spike recovery, number of duplicate samples per batch, etc. reported in accordance with the requirement of HOKLAS or international accredited scheme. detection limits and accuracy submitted to EPD for approval prior to the commencement of monitoring programme. EPD may also request the laboratory to carry out analysis of known standards provided by EPD for quality assurance.
- 3.2.20 Additional duplicate samples may require by EPD for inter laboratory calibration. Remaining samples after analysis kept by the laboratory for 3 months in case repeat analysis is required. If in-house or non-standard methods are proposed, details of the method verification may also require submitting to EPD. In any circumstance, the sample testing has comprehensive quality assurance and quality control programmes. The laboratory prepares to demonstrate the programmes to EPD or his representatives when requested.

MONITORING LOCATIONS

- 3.2.21 The monitoring station for water quality monitoring pertinent to the Project has been identified based on the approved EM&A Manual for HSKEPP of the Project. The location of the water quality monitoring stations is shown in **Table 3.7** and shown in **Figure 3.2**.

Table 3.7 **Locations of Water Quality Monitoring Stations**

Monitoring Station No.	Description	Coordinates	
		Easting	Northing
C1	Control Station at upstream location of construction site for stream water quality monitoring during construction phase	816278	834038
M1	Impact station at downstream location of construction site for stream water quality monitoring during construction phase	816571	833970

MONITORING SCHEDULE FOR THE REPORTING MONTH

3.2.22 The schedule for water quality monitoring conducted in December 2024 is provided in **Appendix E**.

4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

4.1.1 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA report, the EP and EM&A Manual. The implementation status of the environmental mitigation measures during the reporting period is summarized in **Appendix C**.

5 MONITORING RESULTS

5.1 CONSTRUCTION DUST MONITORING

- 5.1.1 According to the approved EM&A manual, 1-hour TSP impact monitoring should be conducted at the monitoring stations when Project-related major construction activities being undertaken within a radius of 500m from the monitoring stations.
- 5.1.2 The dust monitoring results for 1-hour TSP are summarised in **Table 5.1** and the monitoring data with the graphical plots are presented in **Appendix F**. The wind speed and wind direction data obtained from the Lau Fan Shan Automatic Wind Station operated by Hong Kong Observatory are presented in **Appendix G**.

Table 5.1 Summary of 1-hour TSP Monitoring Result in the Reporting Period

ID	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AM1	153.9	77 – 238	263.0	500
AM2	150.2	79 – 200	260.6	500
AM3 ⁽¹⁾	Not available	Not available	263.4	500

Note:

(1) Air Quality Impact Monitoring at AM3 was temporarily suspended starting from 7 Nov 2024 and would be resumed after the completion of construction of the planned Port Back-up, Storage and Workshop use.

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

5.2 WATER QUALITY MONITORING

- 5.2.1 According to the approved EM&A manual, water quality monitoring at designated locations are proposed to be carried out during the construction phase to monitor any sub-standard water discharge into the nearby water bodies from the HSKEPP.
- 5.2.2 The water quality monitoring results are summarized in **Table 5.2**. The monitoring data with graphical plots and their corresponding Action and Limit levels are provided in **Appendix I**.

Table 5.2 Summary of Water Quality Monitoring Results in the Reporting Period

Parameters	Monitoring Station ID
	M1
Dissolved Oxygen (mg/L)	6.3 – 8.2
Turbidity (NTU) (Depth-averaged)	1.7 – 7.6
Suspended Solid (mg/L) (Depth-averaged)	<2 – 8

- 5.2.3 No Action and Limit Level exceedance were recorded for water quality monitoring in the reporting month.
- 5.2.4 The event and action plan is annexed in **Appendix H**.

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, no inert C&D materials were generated in the reporting month. No inert C&D materials were reused in other projects or in the Contract in the reporting month. No general refuse and yard waste was disposed of in the reporting month. No paper / cardboard packaging, plastic wastes and metals were generated and disposed in the reporting period. The waste flow table for different wastes in this reporting month is presented in **Table 5.3** and the cumulative waste flow table is annexed in **Appendix J**.

Table 5.3 Quantities of Waste Generated and Disposal Location in the Reporting Period

Dec 2024	Quantities of Waste							
	Inert C&D Materials (in '000 kg)		Chemical Waste (in '000 L)	Others, e.g. General Refuse (in '000 kg)	Non-inert C&D Materials			
					Recycled Materials			
					Paper (in '000 kg)	Plastics (in '000 kg)	Metals (in '000 kg)	Yard Waste (in '000 kg)
0	0	0	0	0	0	0	0	0
Disposal Locations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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.

5.4 LANDSCAPE AND VISUAL

5.4.1 Site inspection was undertaken by the ET at least once every month during the construction period (i.e. 12 December 2024). Site inspection and implementation Schedule of Environmental Mitigation Measures is provided in **Appendix C**. The observations and recommendations made during the site inspections are presented in **Table 6.1**.

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, 4 site inspections were carried out on 6, 12, 19 and 23 December 2024. Joint inspections with the IEC, ER, the Contractor and the ET were conducted on 12 December 2024. 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 Observation and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	N. A.	Nil	Nil
Noise	N. A.	Nil	Nil
Water Quality	N. A.	Nil	Nil
Waste/ Chemical Management	12 Dec 2024	It is observed that missing drip tray for chemical containers. The contractor is advised to provide a drip tray for chemical containers. (Observation)	Chemical containers have been provided with drip tray.
Landscape & Visual	N. A.	Nil	Nil
Permits/ Licenses	N. A.	Nil	Nil

- 6.1.3 No follow-up actions were requested by Contractor's ET and IEC during the site inspection.

7 ENVIRONMENTAL NON-CONFORMANCE

7.1 SUMMARY OF MONITORING EXCEEDANCES

- 7.1.1 No Action and Limit Level exceedance was recorded for 1-hour TSP monitoring in reporting month.
- 7.1.2 No Action and Limit Level exceedance was recorded for water quality monitoring in reporting month.
- 7.1.3 Summary of Exceedance is provided in **Table 7.1**.

Table 7.1 Summary of Exceedance

Environmental Parameter		No. of Exceedance This Month		Exceedance due to Project Construction
		Action Level	Limit Level	
Air Quality (Construction Dust – 1-hour TSP)		0	0	0
Water Quality	Dissolved Oxygen	0	0	0
	Turbidity	0	0	0
	Suspended Solid	0	0	0
Total		0	0	0

7.2 SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE

- 7.2.1 No environmental non-compliance was recorded in the reporting month. Summary of Environmental Complaints, Summon and Successful Prosecution are provided in **Table 7.2** and **Appendix K** respectively.

Table 7.2 Summary of Environmental Complaints, Summon and Successful Prosecution

	Total No. Received in this Reporting Month	Cumulative No. Received since Project Commencement
Environmental Complaints	0	0
Notification of Summons	0	0

	Total No. Received in this Reporting Month	Cumulative No. Received since Project Commencement
Successful Prosecutions	0	0

8 FURTHER KEY ISSUES

8.1 CONSTRUCTION PROGRAMME FOR THE NEXT THREE MONTHS

8.1.1 The major construction works between January 2025 to March 2025 will be:

Table 8.1 Major Construction for the Next Three Month

Location	Site Activities
Contract No. DC/2023/15 Site Formation Works for Hung Shui Kiu Effluent Polishing Plant Phase 1	- Construction of Hoarding - Demolition Works

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, waste management and landscape.

8.3 MONITORING SCHEDULE FOR THE NEXT MONTH

8.3.1 The tentative schedules for dust and water quality monitoring in January 2025 are provided in **Appendix E**.

9 CONCLUSION AND RECOMMENDATION

9.1 CONCLUSIONS

- 9.1.1 No Action and Limit Level exceedance was recorded for 1-hour TSP monitoring in reporting month.
 - 9.1.2 No Action and Limit Level exceedance was recorded for water quality monitoring in reporting month.
 - 9.1.3 4 nos. of environmental site inspections were carried out in December 2024. Recommendations for environmental site improvement were given to the Contractor for the deficiencies identified during the site audit.
 - 9.1.4 No environmental complaint, notification of summon 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.

Noise Impact

- No specific observation was identified in the reporting month.

Water Quality Impact

- No specific observation was identified in the reporting month.

Chemical and Waste Management

- Provide sufficient no. of drip trays for equipment and chemical containers and ensure the drip trays are in good condition to prevent chemical spillage.

Landscape & Visual Impact

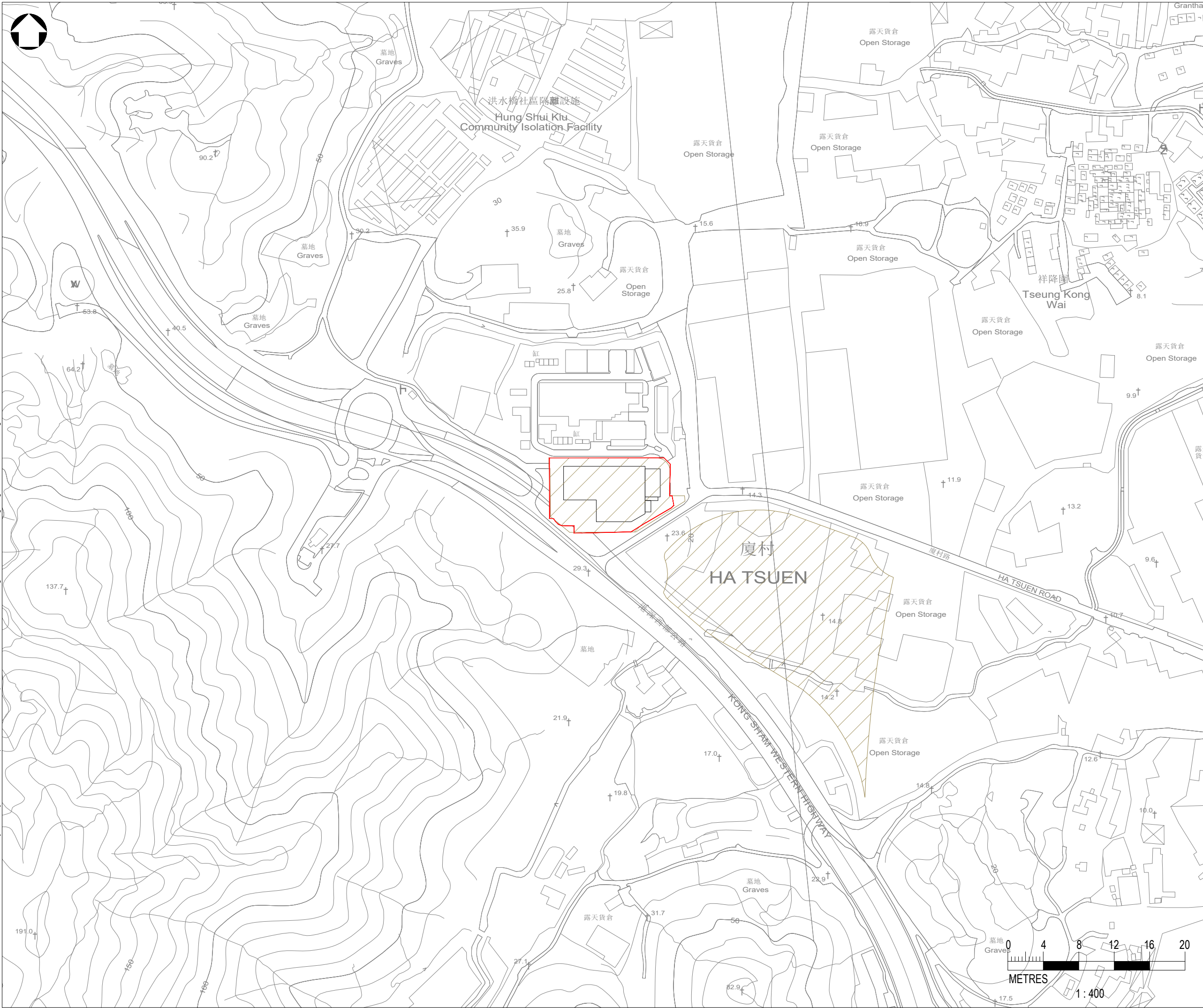
- No specific observation was identified in the reporting month.

Permits/licenses

- No specific observation was identified in the reporting month.


FIGURES

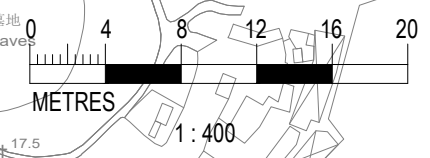




- LEGEND:**
- SITE BOUNDARY
 - PROPOSED HUNG SHUI KIU (HSK) EFFLUENT POLISHING PLANT

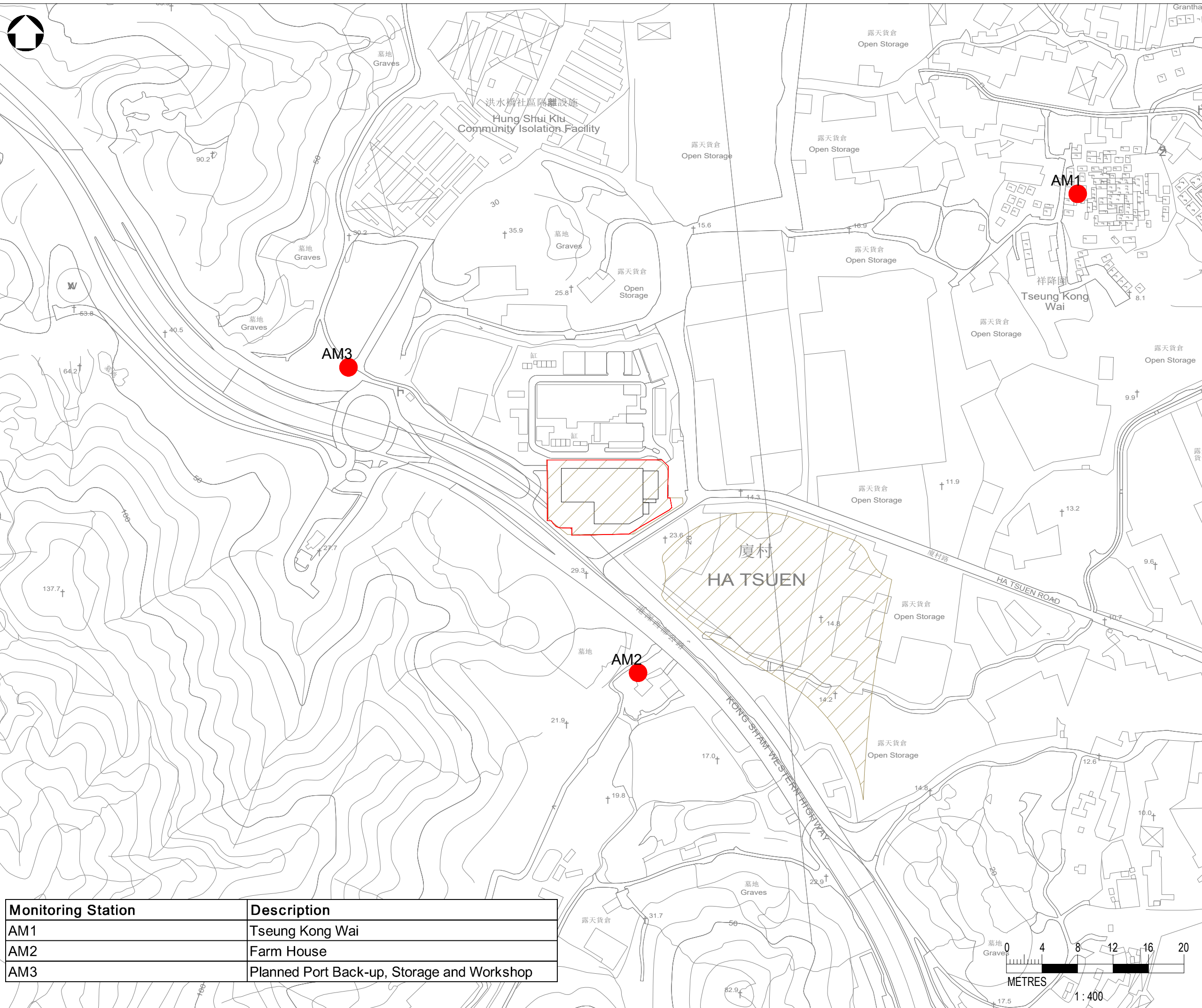
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Rev	Description	By	Date
			
Project title CONTRACT NO. HATS 07/2023 ENVIRONMENTAL TEAM FOR HUNG SHUI KIU EFFLUENT POLISHING PLANT PHASE 1			
Drawing title SITE LAYOUT			
Drawing no. FIGURE 2.1		Rev. 0	
Drawn YT	Date AUG2024	Checked VL	Approved AL
Scale 1:400@A3		Status -	

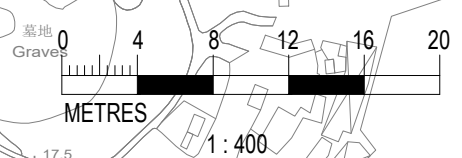




- LEGEND:**
- SITE BOUNDARY
 - PROPOSED HUNG SHUI KIU (HSK) EFFLUENT POLISHING PLANT
 - CONSTRUCTION DUST MONITORING STATION



Monitoring Station	Description
AM1	Tseung Kong Wai
AM2	Farm House
AM3	Planned Port Back-up, Storage and Workshop

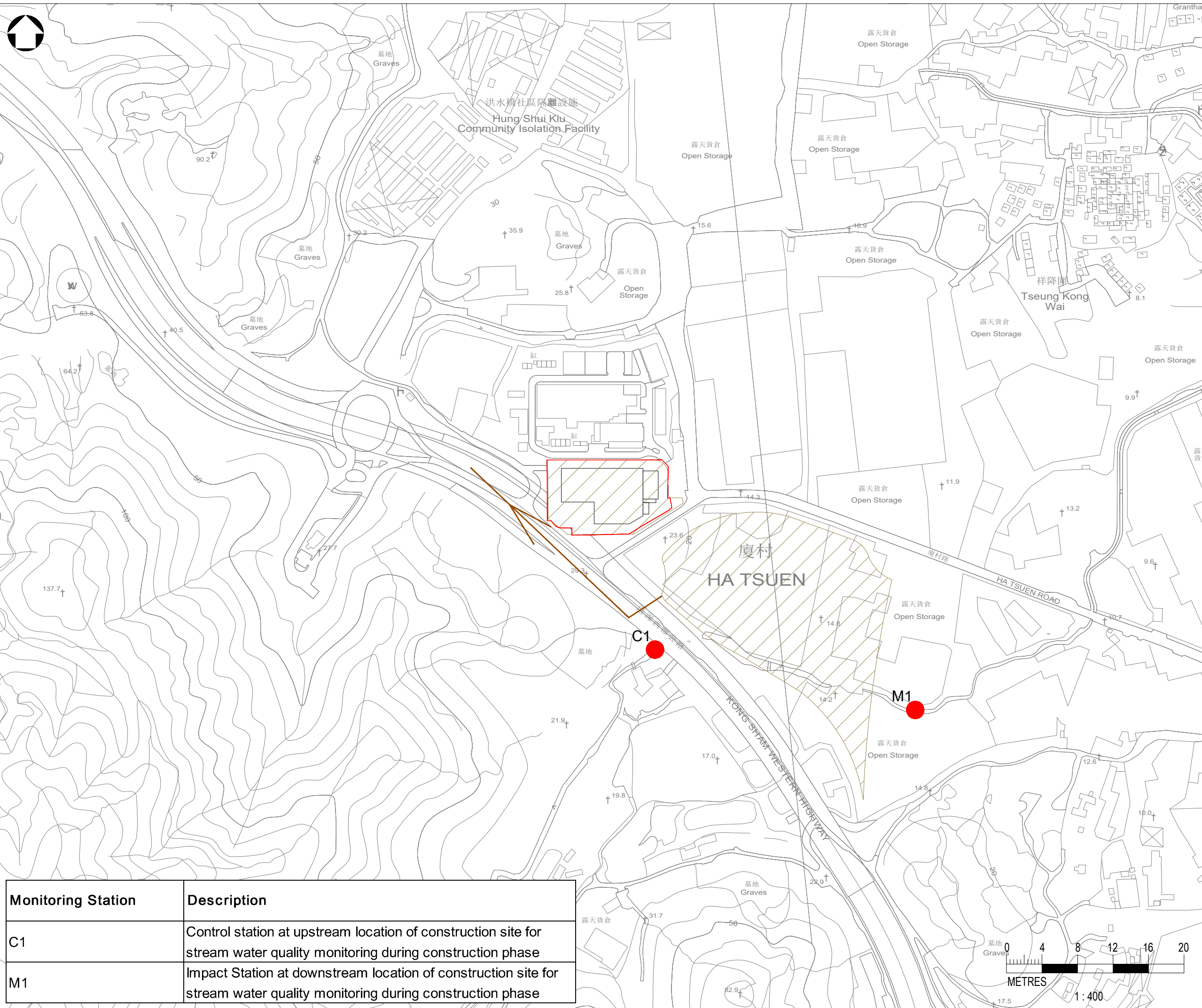


Rev	Description	By	Date
Project title CONTRACT NO. HATS 07/2023 ENVIRONMENTAL TEAM FOR HUNG SHUI KIU EFFLUENT POLISHING PLANT PHASE 1			
Drawing title LOCATIONS OF CONSTRUCTION DUST MONITORING STATIONS			
Drawing no. FIGURE 3.1		Rev. 0	
Drawn YT	Date JUL2024	Checked VL	Approved AL
Scale 1:400@A3		Status -	
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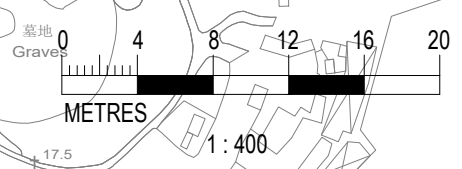
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- LEGEND:**
- SITE BOUNDARY
 - PROPOSED HUNG SHUI KIU (HSK) EFFLUENT POLISHING PLANT
 - WATER QUALITY MONITORING STATIONS UNDER CONSTRUCTION PHASE
 - RISING MAIN FOR EFFLUENT DISCHARGE



Monitoring Station	Description
C1	Control station at upstream location of construction site for stream water quality monitoring during construction phase
M1	Impact Station at downstream location of construction site for stream water quality monitoring during construction phase



Rev	Description	By	Date
Project title CONTRACT NO. HATS 07/2023 ENVIRONMENTAL TEAM FOR HUNG SHUI KIU EFFLUENT POLISHING PLANT PHASE 1			
Drawing title LOCATIONS OF WATER QUALITY MONITORING STATIONS FOR CONSTRUCTION PHASE			
Drawing no. FIGURE 3.2		Rev. 0	
Drawn YT	Date JUL2024	Checked VL	Approved AL
Scale 1:400@A3		Status -	
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Date : 2024/08/30
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APPENDIX A TENTATIVE CONSTRUCTION
PROGRAMME

DC/2023/15

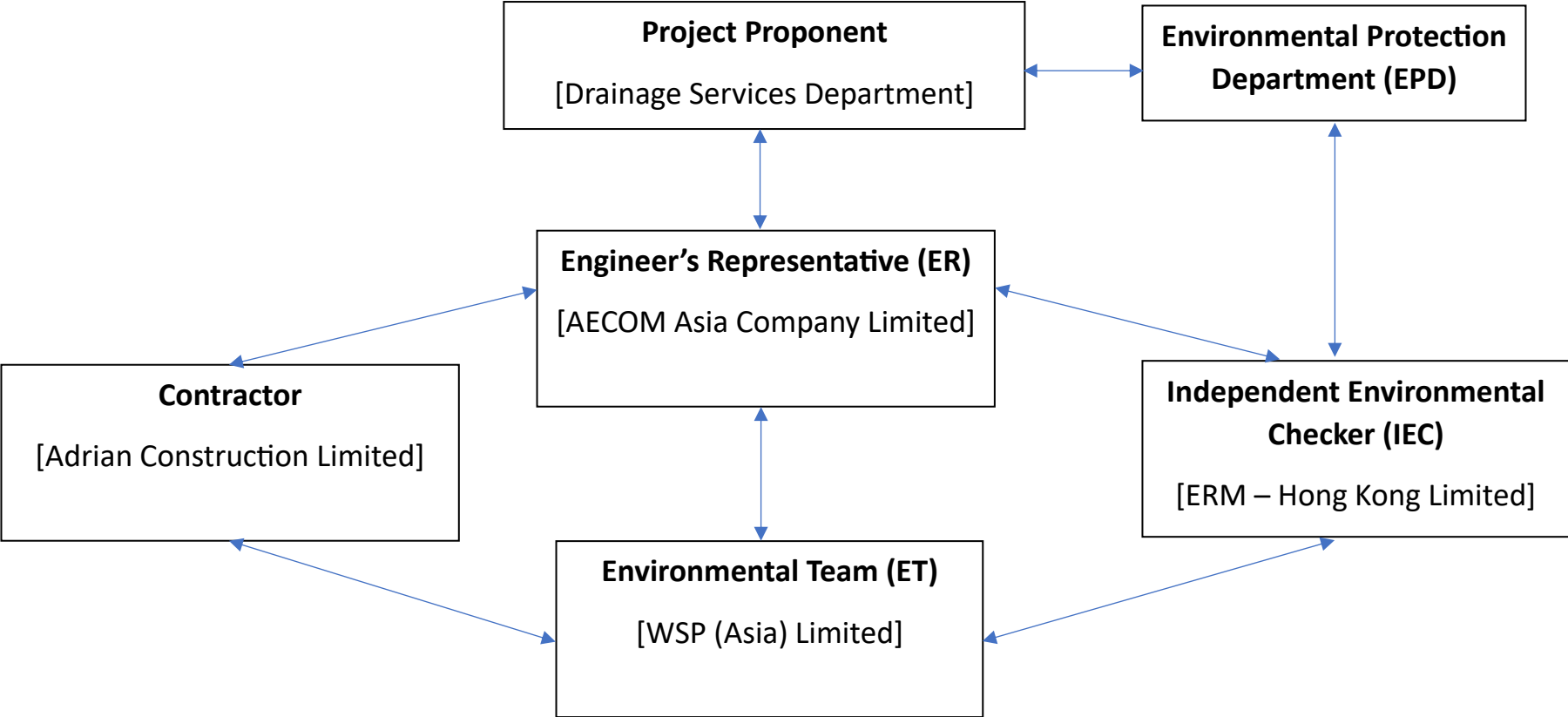
Site Formation Works for Hung Shui Kiu Effluent Polishing Plant Phase 1

Tentative Three Month Rolling Programme

<u>YEAR</u>	<u>2024</u>	<u>2025</u>		
<u>MONTH</u>	Dec	Jan	Feb	Mar
Site Clearance				
Construction of Hoarding				
Demolition works				
Environmental site investigation works				

APPENDIX B PROJECT ORGANIZATION
STRUCTURE

Appendix B Project Organization Structure



APPENDIX C PROJECT IMPLEMENTATION
SCHEDULE OF ENVIRONMENTAL
MITIGATION MEASURES

Implementation Schedule of Environmental Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
Air Quality Impact								
3.8.1, 3.9.1	2.4, 2.5	Watering once every 2 hours on construction works areas to reduce dust emission.	To minimize dust impacts	Contractor	Construction sites with active works, exposed surface and unpaved road	Construction Phase	Air Pollution Control Ordinance (APCO); Air pollution Control (Construction Dust) Regulation; HKAQO; Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM)	N/A
3.9.1	2.4, 2.5	Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices listed below shall be carried out to further minimize construction dust impact: <ul style="list-style-type: none"> • Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. • Use of frequent watering for particularly dusty construction areas and areas close to ASRs. • Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing 	To minimize dust impacts	Contractor	Contractor	Construction sites	Air Pollution Control Ordinance (APCO); Air Pollution Control (Construction Dust) Regulation; HKAQO; Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM)	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		<p>to frequent usage, watering shall be applied to aggregate fines.</p> <ul style="list-style-type: none"> • Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. • Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. • Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. • Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading area of barging point, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods. • Provision of not less than 2.4m high hoarding from ground level along site boundary where adjoins a road, streets or other accessible to the public except for a site entrance or exit. • Imposition of speed controls for vehicles on site haul roads. 						

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		<ul style="list-style-type: none"> Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs. Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise. 						
3.9.1	2.4, 2.5	Timely application of temporary electricity and water supply would be made and electric vehicles would be adopted in the Project	To minimize the exhaust emission from NRMMS	Contractor	Construction sites	Construction Phase	DEVB TC(W) No. 13/2020 – <i>Timely Application of Temporary Electricity and Water Supply for Public Works Contracts and Wider Use of Electric Vehicles in Public Works Contracts</i>	I
Noise Impact								
Nil								
Water Quality Impact								
5.7.1	4.6.7	The site practices outlined in ProPECC PN 1/94 “Construction Site Drainage” should be followed as far as practicable to minimise surface run-off and the chance of erosion. Surface run-off from construction sites should be discharged into storm drains via adequately designed sand / silt removal facilities such as sand traps, silt traps and	To minimize impact from construction site run-off and general construction activities	Contractor	Construction Sites / Construction Phase	Construction Phase	Water Pollution Control Ordinance (WPCO); EIAO-TM, Professional Persons Environmental Consultative Committee (ProPECC) Practice Note (PN) 1/94	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		sedimentation basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided as necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.						
5.7.1	4.6.7	Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly (as well as at the onset of and after each rainstorm) to prevent overflows and localised flooding. Before disposal at the public fill reception facilities, the deposited silt and grit should be solicited in such a way that it can be contained and delivered by dump truck instead of tanker truck. Any practical options for the diversion and realignment of drainage should comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains	To minimize impact from construction site run-off and general construction activities	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM, ProPECC PN 1/94	I
5.7.1	4.6.7	Construction works should be programmed to minimise soil excavation in the wet season (i.e. April to September). If soil excavation cannot be avoided in	To minimize impact from construction site run-off and general construction activities	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM, ProPECC PN 1/94	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		these months or at any time of year when rainstorms are likely, temporarily exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm run-off from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of rainstorm						
5.7.1	4.6.7	Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.	To minimize impact from construction site run-off and general construction activities	Constructor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM; ProPECC PN 1/94	N/A
5.7.1	4.6.7	Measures should be taken to minimise the ingress of rainwater into trenches. If excavation of trenches in the wet season is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be	To minimize impact from construction site run-off and general construction activities	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM; ProPECC PN 1/94	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		discharged into storm drains via silt removal facilities						
5.7.1	4.6.7	Construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms	To minimize impact from construction site run-off and general construction activities	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM; ProPECC PN 1/94	I
5.7.1	4.6.7	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	To minimize impact from construction site run-off and general construction activities	Constructor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM; ProPECC PN 1/94	I
5.7.1	4.6.7	Water used in ground boring and drilling for site investigation or rock / soil anchoring should as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities	To minimize impact from construction site run-off and general construction activities	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM; ProPECC PN 1/94	I
5.7.1	4.6.7	All vehicles and plants should be cleaned before they leave a construction site to minimise the deposition of earth, mud and debris on roads. A wheel washing bay should be provided at every site exit if practicable and washwater should have sand and silt settled out or	To minimize impact from construction site run-off and general construction activities	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM; ProPECC PN 1/94	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		removed before discharging into storm drains. The section of construction road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.						
5.7.1	4.6.7	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	To minimize impact from construction site	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM, Waste Disposal Ordinance (WDO)	I
5.7.1	4.6.7	There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the	To minimize impact from construction site	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM; Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS)	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		Project, the monitoring should be carried out in accordance with the relevant WPCO licence.						
5.7.1	4.6.7	The practices outlined in ETWB TC (Works) No. 5/2005 "Protection of natural streams / rivers from adverse impacts arising from construction works" should also be adopted where applicable to minimise the water quality impacts on natural streams or surface water systems.	To minimize impact from construction site	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM, ETWB TC (Works) No. 5/2005	I
5.7.1	4.6.7	Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	To minimize impact from accidental spillage	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM, WDO	I
5.7.1	4.6.7	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.	To minimize impact from accidental spillage	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
5.7.1	4.6.7	Disposal of chemical wastes should be carried out in compliance with the WDO. The "Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes" published under the Waste Disposal Ordinance should be followed to avoid leakage or spillage of chemicals.	To minimize impact from accidental spillage	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM, WDO	I
5.7.1	4.6.7	Sufficient chemical toilets should be provided in the works area, with a licensed waste collector employed to clean the chemical toilets on a regular basis.	To minimise impact from workforces sewage effluent	Constructor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM	I
5.7.1	4.6.7	Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment.	To minimise impact from workforces sewage effluent	Contractor	Construction Sites / Construction Phase	Construction Phase	WPCO; EIAO-TM	N/A
Waste Management Implication								
6.6.1	5.2.1	<p><u>Good Site Practices</u> Recommendations for good site practices during the construction phase include:</p> <ul style="list-style-type: none"> Nomination of an approved personnel, such as a site manager, to be responsible for good site practices, and making arrangements for collection of all wastes generated at the site and effective disposal to an appropriate facility; Training of site personnel in proper waste management and chemical waste handling procedures; 	To avoid and minimize impacts arising from waste management	Contractor	Construction Sites	Construction Phase	Waste Disposal Ordinance (WDO)	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		<ul style="list-style-type: none"> Provision of sufficient waste reception/ disposal points, of a suitable vermin-proof design that minimises windblown litter; Arrangement for regular collection of waste for transport off-site and final disposal; Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed; and <p>Preparation of a WMP in accordance with ETWB TCW No. 19/2005 and submit to the Engineer for approval.</p>						
6.6.1	5.2.1	<p><u>Waste Reduction Measures</u> Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> Segregate and store different types of construction related waste in different containers, skips or 	To minimize waste generation	Contractor	Construction Sites	Construction Phase	WDO	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		<p>stockpiles to enhance reuse or recycling of materials and their proper disposal;</p> <ul style="list-style-type: none"> • Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors; • Any unused chemicals or those with remaining functional capacity shall be recycled; • Maximising the use of reusable steel formwork to reduce the amount of C&D materials; • Prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re-use and/or recycling to minimise the quantity of waste to be disposed of at landfill; • Adopt proper storage and site practices to minimise the potential for damage to, or contamination of, construction materials; • Plan the delivery and stock of construction materials carefully to minimize the amount of surplus waste generated; • Adopt pre-cast construction method instead of cast-in- 						

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		<p>situ method for construction of concrete structures as much as possible;</p> <ul style="list-style-type: none"> Minimise over ordering of concrete, mortars and cement grout by doing careful check before ordering; and <p>Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.</p>						
6.6.1	5.2.1	<p><u>Storage of Waste</u> Recommendations to minimise the impacts include:</p> <ul style="list-style-type: none"> Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimizing the potential of pollution; Maintain and clean storage areas routinely; Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; and <p>Different locations should be designated to stockpile each material to enhance reuse.</p>	To avoid and minimize impacts arising from waste management	Contractor	Construction Sites	Construction Phase	-	I
6.6.1	5.2.1	<p><u>Collection of Waste</u> Licensed waste haulers should be employed for the collection</p>	To avoid and minimize impacts arising from waste management	Contractor	Construction Sites	Construction Phase	WDO; Waste Disposal (Charges for Disposal of Construction	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		<p>and transportation of waste generated. The following measures should be enforced to minimise the potential adverse impacts:</p> <ul style="list-style-type: none"> • Remove waste in a timely manner; • Waste collectors should only collect wastes prescribed by their permits; • Impacts during transportation, such as dust and odour, should be mitigated by the use of covered trucks or in enclosed containers; • Obtain relevant waste disposal permits from the appropriate authorities; • Dispose of waste at licensed waste disposal facilities; and • Maintain records of quantities of waste generated, recycled and disposed. 					Waste) Regulation; Land (Miscellaneous Provisions) Ordinance	
6.6.1	5.2.1	<p><u>Transportation of Waste</u> In order to monitor the disposal of C&D materials at PFRFs and landfills and to control fly-tipping, a trip-ticket system should be established in accordance with DEVB TCW No. 6/2010. A recording system for the amount of waste generated, recycled and disposed, including the disposal sites, should also be set up. Warning signs should be put up to remind the designated</p>	To avoid and minimize impacts arising from waste management	Contractor	Transportation Route of Waste / Construction Phase	Construction Phase	DEVB TC(W) No. 6/2010	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		disposal sites. CCTV should be installed at the vehicular entrance and exit of the site as additional measures to prevent fly-tipping.						
6.6.1	5.2.1	<p>The excavated material arising from site formation and foundation works should be reused on-site as backfilling material and for landscaping works as far as practicable. Other mitigation requirements are listed below:</p> <ul style="list-style-type: none"> • A WMP, which becomes part of the EMP, should be prepared in accordance with ETWB TCW No.19/2005; • A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be adopted for easy tracking; and <p>In order to monitor the disposal of C&D materials at public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be adopted (refer to DEVB TCW 06/2010).</p>	To avoid and minimize impacts arising from waste management	Contractor	Construction Sites	Construction Phase	WDO; ETWB TCW No.19/2005; ETWB TCW No. 6/2010	N/A
6.6.1	5.2.1	It is recommended that specific areas should be provided by the Contractors for sorting and to provide temporary storage areas (if required) for the sorted materials. Control measures for temporary stockpiles on-site	To avoid and minimize impacts arising from waste management	Contractor	Construction Sites	Construction Phase	ETWB TCW No.19/2005	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		<p>should be taken in order to minimize the noise, generation of dust and pollution of water. These measures include:</p> <ul style="list-style-type: none"> • Surface of stockpiled soil should be regularly wetted with water especially during dry season; • Disturbance of stockpile soil should be minimised; • Stockpiled soil should be properly covered with tarpaulin especially when heavy storms are predicted; and <p>Stockpiling areas should be enclosed where space is available.</p>						
6.6.1	5.2.1	<p>The Contactor should prepare and implement an EMP in accordance with ETWB TCW No. 19/2005, which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from construction activities. Such a management plan should incorporate site-specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval. The</p>	<p>To avoid and minimize impacts arising from waste management</p>	Contractor	Construction Sites	Construction Phase	ETWB TCW No.19/2005	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		Contractor should implement waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor, preferably on a monthly basis.						
6.6.1	5.2.1	The Contractor would be responsible for devising a system to work for on-site sorting of C&D materials and promptly removing all sorted and process materials arising from the construction activities to minimise temporary stockpiling on-site. The system should be included in the EMP identifying the source of generation, estimated quantity, arrangement for on-site sorting, collection, temporary storage areas and frequency of collection by recycling Contractors or frequency of removal off-site.	To avoid and minimize impacts arising from waste management	Contractor	Construction Sites	Construction Phase	-	N/A
6.6.1	5.2.1, 5.2.2	Suitable containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall employ a licensed collector to transport	To avoid and minimize impacts arising from waste management	Contractor / Operator	Construction Sites	Construction and Operation Phases	ETWB TC(W) 19/2005; TC(W) 6/2010; WDO; Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes	@

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		and dispose of the chemical wastes, to the licensed CWTC, or other licensed facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation						
6.6.1	5.2.1, 5.2.2	It is recommended to place clearly labelled recycling bins at designated locations with convenient access. Other general refuse should be separated from chemical and industrial waste by providing separated bins or skips for storage to maximise the recyclable volume. A reputable licensed waste collector should be employed to remove general refuse on a daily basis to minimise odour, pest and litter impacts.	To avoid and minimize impacts arising from waste management	Contractor / Operator	Construction Sites	Construction and Operation Phases	Public Health and Municipal Services Ordinance (Cap.132)	I
Land Contamination								
7.8.1	6.1	Site re-appraisal should be conducted for the identified concerned areas prior to development of the sites in order to update findings of the site appraisal (e.g. change in land use and additional hotspots) and the sampling and testing requirements for SI works. In addition, re-appraisal would be required for the other remaining areas of the proposed HSKEPP site to assess the latest land uses and site conditions. Supplementary CAP(s), incorporating findings of the site	To control land remediation work	Project Proponent / Consultant / Contractor under HSK/HT NDA project	Proposed HSKEPP site / Prior to construction / development works	Design and Construction Phases	Guidance Note for Contaminated Land Assessment and Remediation; Practice Guide for Investigation and Remediation of Contaminated Land; Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		re-appraisal for the entire proposed HSKEPP site and the updated sampling and testing strategy, should be prepared and submitted to EPD for approval prior to conducting any SI works. SI works should then be carried out according to the EPD approved supplementary CAP(s). After completion of the SI works, CAR(s) would be prepared to present findings of the SI works. If contamination has been identified, RAP(s) would be prepared to recommend specific remediation measures. Upon completion of the remediation works, if any, RR(s) would also be prepared to demonstrate that the clean-up works are adequate. The CAR, RAP and RR would be submitted to EPD for approval prior to commencement of any construction / development works.						
7.8.3	6.2	<p>The mitigation measures will be recommended in the RAP and would typically include the following:</p> <ul style="list-style-type: none"> Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; Excavation shall be carried out during dry season as far 	To control land remediation work	Contractor under the HSK/HT NDA project	Proposed HSKEPP site / During remediation works and prior to construction / development works	Construction Phase	Guidance Note for Contaminated Land Assessment and Remediation; Practice Guide for Investigation and Remediation of Contaminated Land; Guidance Manual for Use of Risk-based Remediation Goals for	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		<p>as possible to minimise contaminated runoff from contaminated soils;</p> <ul style="list-style-type: none"> • Supply of suitable clean backfill material (or treated soil) after excavation; • Stockpiling site(s) shall be lined with impermeable sheeting and bunded. Stockpiles shall be fully covered by impermeable sheeting to reduce dust emission. If this is not practicable due to frequent usage, regular watering shall be applied. However, watering shall be avoided on stockpiles of contaminated soil to minimise contaminated runoff. • Vehicles containing any excavated materials shall be suitably covered to limit potential dust emissions or contaminated wastewater run-off, and truck bodies and tailgates shall be sealed to prevent any discharge during transport or during wet conditions; • Speed control for the trucks carrying contaminated materials shall be enforced; • Vehicle wheel and body washing facilities at the site's exist points shall be established and used; and 					Contaminated Land Management	

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		Pollution control measures for air emissions (e.g. from biopile blower and handling of cement), noise emissions (e.g. from blower or earthmoving equipment), and water discharges (e.g. runoff control from treatment facility) shall be implemented and complied with relevant regulations and guidelines.						
Ecology (Construction Phase)								
Nil								
Landscape and Visual Impact (Construction Phase)								
Table 9.11	8.2	<u>Preservation of Existing Vegetation</u> All the existing vegetation and trees to be retained and not to be affected by the Project shall be carefully protected during construction accordance with DEVB TC(W) No. 4/2020 - Tree Preservation and the latest Guidelines on Tree Preservation during Development issued by GLTMS of DEVB. Any existing vegetation in landscaped areas and natural terrain not to be affected by the Project shall be carefully preserved.	To preserve existing Vegetation.	Project Proponent/ Contractor	Construction Sites	Design and Construction Phases	DEVB TC(W) No. 4/2020 - Tree Preservation and the latest Guidelines on Tree Preservation during Development issued by GLTMS of DEVB, Guidelines for Tree Risk Assessment and Management Arrangement issued by DEVB	I
Table 9.11	8.2	<u>Minimize Disturbance on Watercourses</u> The design shall minimize disturbance on watercourses, particularly for natural watercourse. Good site practices as described in ETWB TCW No. 5/2005 "Protection of natural streams/rivers from adverse	To minimize the disturbance to watercourses as far as practicable.	Project Proponent/ Contractor	Construction Sites	Design and Construction phase	ETWB TCW No. 5/2005 "Protection of natural streams/rivers from adverse impacts arising from construction works"	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		impacts arising from construction works" shall also be adopted to avoid any pollution entering the watercourses nearby where applicable. Should temporarily or indirect disturbance on watercourse is unavoidable, it shall be reinstated to the satisfaction of relevant Government Departments.						
Table 9.11	8.2	<u>Management of Construction Activities and Facilities</u> The facilities and activities at works sites and areas, which include site office, temporary storage areas, temporary works etc., shall be carefully managed and controlled on the height, deposition and arrangement to minimise any potential adverse landscape and visual impacts.	To minimise any potential adverse landscape and visual impacts.	Contractor	Construction Sites	Construction phase	-	I
Table 9.11	8.2	<u>Reinstatement of Temporarily Disturbed Landscape Areas</u> All hard and soft landscape areas disturbed temporarily during construction due to temporary excavations, temporary works sites and works areas shall be reinstated to equal or better quality, to the satisfaction of the relevant Government Departments.	To reinstate to equal or better quality of temporarily disturbed landscape areas.	Contractor	Construction Sites	Construction phase	-	N/A
Table 9.11	8.2	<u>Control of Night-time Lighting Glare</u> Any lighting provision of the construction works at night shall be carefully control to prevent light overspill to the nearby	To prevent light overspill to the nearby VSRs and into the sky.	Contractor	Construction Sites	Construction phase	"Guidelines on Industry Best Practices for External Lighting Installations"	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		VSRs and into the sky. Relevant best practices as suggested in the "Guidelines on Industry Best Practices for External Lighting Installations" promulgated by ENB shall be adopted.					promulgated by ENB	
Table 9.11	8.2	<u>Erection of Decorative Screen Hoarding</u> Decorative Hoarding, which is compatible with the surrounding natural settings, shall be erected during construction to minimise the potential landscape and visual impacts due to the construction works and activities.	To minimise the potential landscape and visual impacts due to the construction works and activities.	Contractor	Construction Sites	Construction phase	-	N/A
Table 9.12	8.2	<u>Compensatory Tree Planting for Loss of Existing Trees</u> Any trees to be removed under the Project shall be compensated in accordance with DEVB TC(W) No. 4/2020 - Tree Preservation. The compensatory plantings shall be realistic, practicable and sustainable with a holistic consideration to balance the quantity and quality of tree planting and follow the "right tree for the right place" principles. The proposed planting species shall be made reference to the Greening Master Plan issued by CEDD and the Street Tree Selection Guide issued by DEVB. Approximately 250 heavy standard trees are proposed within site under OM1, the exact number and location subject to	To enhance ecological value and improve overall value of landscape setting.	Project Proponent/ Contractor	Construction Sites	Design / Construction and Operation Phases	DEVB TC(W) No. 4/2020 - Tree Preservation, GEO Publication No. 1/2011, the Greening Master Plan issued by CEDD, the Street Tree Selection Guide issued by DEVB and DEVB TC(W) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features	I

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		the detailed design at design and construction stage of this Project.						
Table 9.12	8.2	<u>Roadside and Amenity Planting</u> Roadside amenity trees and understory planting to be planted along EVA and access road within HSKEPP, as green buffers for the new proposed structures. The proposed planting species shall be made reference to the Greening Master Plan issued by CEDD and the Street Tree Selection Guide issued by DEVB.	To maximize the greening effect by shade-tolerant tree or shrub species.	Project Proponent/ Contractor	Construction Sites	Design / Construction and Operation Phases	DEVB TC(W) No. 4/2020 - Tree Preservation, GEO Publication No. 1/2011, the Greening Master Plan issued by CEDD, the Street Tree Selection Guide issued by DEVB and DEVB TC(W) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features	N/A
Table 9.12	8.2	<u>Sensitive and Aesthetically Pleasing Design of Aboveground Structures</u> Sensitive and aesthetically pleasing design as regard to the form, material and finishes shall be incorporated to the proposed above-ground structures e.g. effluent polishing plant, etc. so as to minimise any potential adverse landscape and visual impacts, and to blend in the structures to the adjacent landscape and visual context.	To minimise any potential adverse landscape and visual impact.	Project Proponent/ Contractor	Construction Sites	Design / Construction and Operation Phases	-	N/A
Table 9.12	8.2	<u>Provision of Buffer Planting</u> Buffer Planting shall be provided at the perimeter of the plant to screen and soften the proposed Aboveground Structures. For	To maximize the greening effect by shade-tolerant tree or shrub species.	Project Proponent/ Contractor	Construction Sites	Design / Construction and Operation Phases	GEO Publication No. 1/2011, the Greening Master Plan issued by CEDD, the Street	N/A

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Who to implement the measure?	Location of the Measures	When to implement the measure?	Requirements	Implementation Status
		planting to be proposed on slopes, the guidelines for planting stipulated in GEO Publication No. 1/2011 will be followed.	And soften the hard structural elements.				Tree Selection Guide issued by DEVB and DEVB TC(W) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features	
Table 9.12	8.2	<u>Provision of Green Roof</u> Green Roof shall be proposed to enhance the landscape quality of the Aboveground Structures including Primary Sedimentation Tanks and mitigate any potential adverse visual impact on adjacent VSRs. The extent of roof greening shall be in accordance with DEVB TC(W) No. 3/2012 – Site Coverage of Greenery for Government Building Projects	To maximize the greening effect by roof top greening	Project Proponent/ Contractor	Construction Sites	Design / Construction and Operation Phases	DEVB TC(W) No. 3/2012 – Site Coverage of Greenery for Government Building Projects	N/A
Table 9.12	8.2	<u>Control of Night-time Lighting Glare</u> All the night time lighting shall be avoided except for safety purpose. No light glare shall illuminate directly outside HSKEPP. Relevant best practices as suggested in the “Guidelines on Industry Best Practices for External Lighting Installations” promulgated by ENB shall be adopted.	To prevent light overspill to the nearby VSRs and into the sky.	Project Proponent/ Contractor	Construction Sites	Design / Construction and Operation Phases	“Guidelines on Industry Best Practices for External Lighting Installations” promulgated by ENB	N/A

Legends:

I = implemented;

X= not implemented;

@ = partially implemented;

N/A = not applicable

APPENDIX D CALIBRATION CERTIFICATES OF
EQUIPMENT



Enovative Environmental Service Limited

REPORT OF EQUIPMENT CALIBRATION

INSTRUMENT DESCRIPTION

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler and the filter paper is weighted by HOKLAS laboratory.

Instrument: Handheld TSP meter
Brand Name: TSI
Model No.: AM520
Serial No.: 5201735004
Date of Calibration: 04 October, 2024
Date of Next Calibration : 04 October, 2025

ISSUING ORGANISATION

Address

Enovative Environmental Service Limited
Flat 23, 6/F, Block C, Goldfield Industrial Centre
1 Sui Wo Road
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Hong Kong

Phone: 852-2242 1020
Fax: 852-3691 9240
Email: info@eno.com.hk



Thomas

Mr Wong Siu Ho, Thomas
Manager



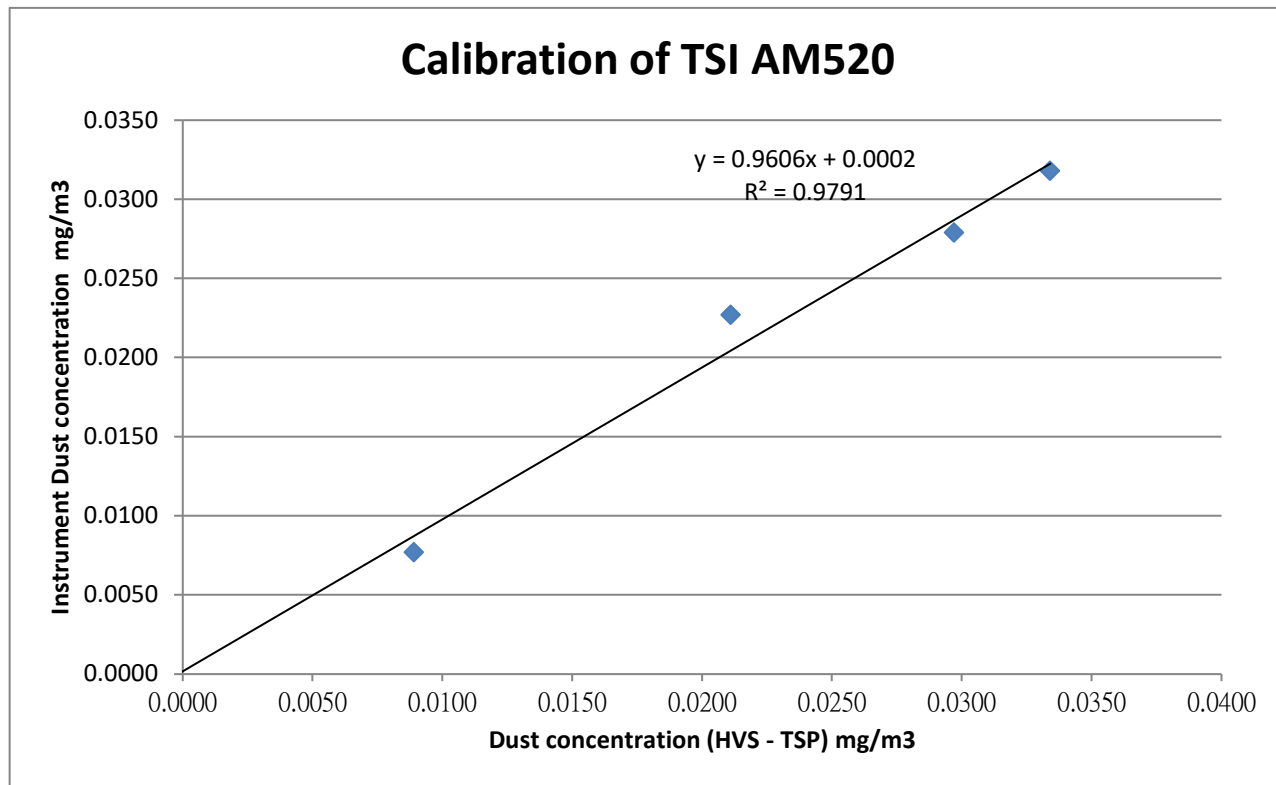
Enovative Environmental Service Limited

Brand Name: TSI
Model No.: AM520
Serial No.: 5201735004
HVS No.: A12-TSP-102
Date of Calibration: 04 October, 2024
Date of next Calibration: 04 October, 2025

Calibration Record

HVS - TSP (mg/m ³)	0.0334	0.0297	0.0089	0.0211
TSI AM520 (mg/m ³)	0.0318	0.0279	0.0077	0.0227

K Factor :	0.9606
Correlation Coefficient :	0.9791



*** Filter paper being used in the calibration : 209681, 209682, 209683, 209684
Those filter papers are weighted by HOKLAS laboratory (ALS Technichem (HK) Pty Ltd.)



Mr Wong Siu Ho, Thomas
Manager



Enovative Environmental Service Limited

REPORT OF EQUIPMENT CALIBRATION

INSTRUMENT DESCRIPTION

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler and the filter paper is weighted by HOKLAS laboratory.

Instrument: Handheld TSP meter
Brand Name: TSI
Model No.: AM520
Serial No.: 5201735006
Date of Calibration: 04 October, 2024
Date of Next Calibration : 04 October, 2025

ISSUING ORGANISATION

Address

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Phone: 852-2242 1020
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Mr Wong Siu Ho, Thomas
Manager



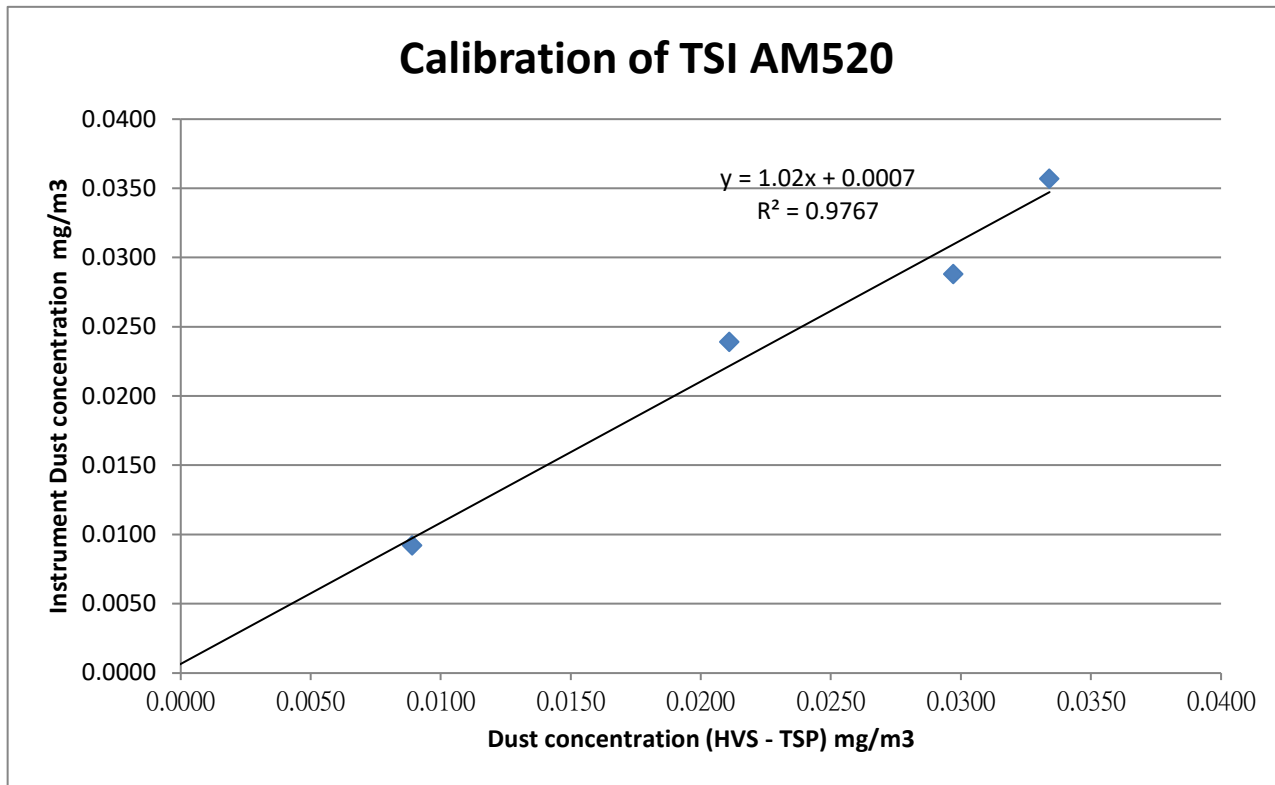
Enovative Environmental Service Limited

Brand Name: TSI
Model No.: AM520
Serial No.: 5201735006
HVS No.: A12-TSP-102
Date of Calibration: 04 October, 2024
Date of next Calibration: 04 October, 2025

Calibration Record

HVS - TSP (mg/m3)	0.0334	0.0297	0.0089	0.0211
TSI AM520 (mg/m3)	0.0357	0.0288	0.0092	0.0239

K Factor :	1.02
Correlation Coefficient :	0.9767



*** Filter paper being used in the calibration : 209681, 209682, 209683, 209684
Those filter papers are weighted by HOKLAS laboratory (ALS Technichem (HK) Pty Ltd.)



Mr Wong Siu Ho, Thomas
Manager



Enovative Environmental Service Limited

REPORT OF EQUIPMENT CALIBRATION

INSTRUMENT DESCRIPTION

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler and the filter paper is weighted by HOKLAS laboratory.

Instrument: Handheld TSP meter
Brand Name: TSI
Model No.: AM520
Serial No.: 5202345003
Date of Calibration: 04 October, 2024
Date of Next Calibration : 04 October, 2025

ISSUING ORGANISATION

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Thomas

Mr Wong Siu Ho, Thomas
Manager



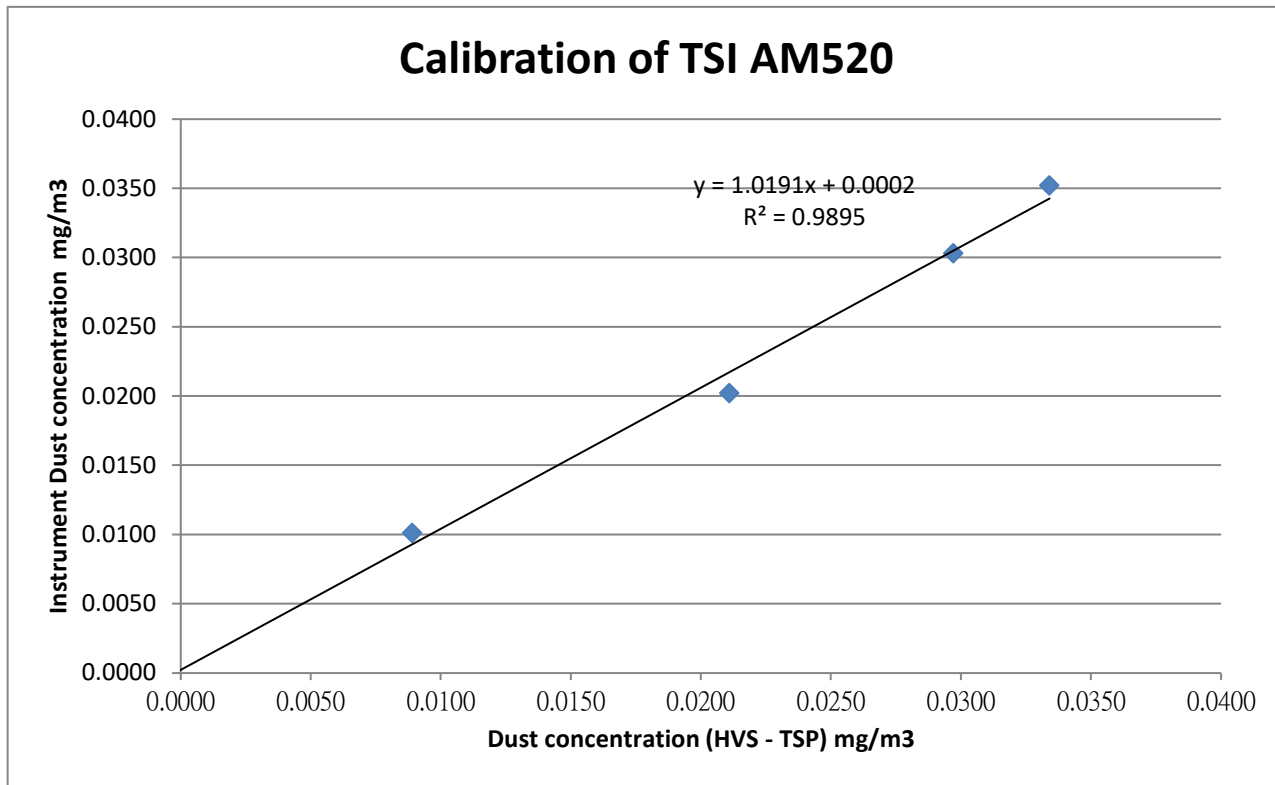
Enovative Environmental Service Limited

Brand Name: TSI
 Model No.: AM520
 Serial No.: 5202345003
 HVS No.: A12-TSP-102
 Date of Calibration: 04 October, 2024
 Date of next Calibration: 04 October, 2025

Calibration Record

HVS - TSP (mg/m3)	0.0334	0.0297	0.0089	0.0211
TSI AM520 (mg/m3)	0.0352	0.0303	0.0101	0.0202

K Factor :	1.0191
Correlation Coefficient :	0.9895



*** Filter paper being used in the calibration : 209681, 209682, 209683, 209684
 Those filter papers are weighted by HOKLAS laboratory (ALS Technichem (HK) Pty Ltd.)



Mr Wong Siu Ho, Thomas
 Manager



專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BD090055
Date of Issue : 20 September 2024
Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House Yu Chui Court, Shatin
New Territories (HK) Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment : YSI ProDSS Multi Parameters
Manufacturer : YSI
Serial Number : 21G105356
Date of Received : 17 September 2024
Date of Calibration : 17 September 2024
Date of Next Calibration : 16 December 2024
Request No. : D-BD090055

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500-H ⁺ B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 23e 4500-O G (Membrane Electrode Method)
Turbidity	APHA 21e 2130 B (Nephelometric Method)
Conductivity	APHA 21e 2510 B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.02	0.02	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	10.10	0.09	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
10.0	10.0	0.0	Satisfactory
25.0	25.0	0.0	Satisfactory
40.0	40.0	0.0	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.06	0.6	Satisfactory
20	20.05	0.3	Satisfactory
30	30.14	0.46	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED
SIGNATORY:


Lee Chun-ning
Assistant Manager



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BD090055
Date of Issue : 20 September 2024
Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.93	8.00	0.07	Satisfactory
6.02	6.12	0.10	Satisfactory
4.98	4.90	-0.08	Satisfactory
1.41	1.40	-0.01	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.10	--	Satisfactory
10	9.86	-1.4	Satisfactory
20	19.34	-3.3	Satisfactory
100	98.21	-1.8	Satisfactory
800	798.52	-0.2	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

(6) Conductivity

Expected Reading ($\mu\text{S}/\text{cm}$ at 25°C)	Display Reading	Tolerance (%)	Result
146.9	151.1	2.9	Satisfactory
1412	1496	5.9	Satisfactory
12890	13015	1.0	Satisfactory
58670	58390	-0.5	Satisfactory
111900	112816	0.8	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

Remark(s)

- The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.
- The results relate only to the calibrated equipment as received
- The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

--- END OF REPORT ---



專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BD110017
Date of Issue : 05 November 2024
Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House Yu Chui Court, Shatin
New Territories (HK) Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment : YSI ProDSS Multi Parameters
Manufacturer : YSI
Serial Number : 21K101468
Date of Received : 01 November 2024
Date of Calibration : 01 November 2024
Date of Next Calibration : 31 January 2025
Request No. : D-BD110017

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500-H ⁺ B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 23e 4500-O G (Membrane Electrode Method)
Conductivity	APHA 21e 2510 B
Turbidity	APHA 21e 2130 B (Nephelometric Method)

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.03	0.03	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	9.95	-0.06	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
10.0	10.0	0.0	Satisfactory
23.0	23.0	0.0	Satisfactory
40.0	40.0	0.0	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

(3) Salinity

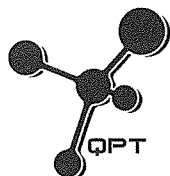
Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.92	-0.80	Satisfactory
20	20.26	1.30	Satisfactory
30	29.98	-0.07	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED
SIGNATORY:


LEE Chun-ning
Assistant Manager



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BD110017
Date of Issue : 05 November 2024
Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
8.06	7.80	-0.26	Satisfactory
7.55	7.30	-0.25	Satisfactory
5.91	5.70	-0.21	Satisfactory
1.26	1.20	-0.06	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Conductivity

Expected Reading ($\mu\text{S}/\text{cm}$ at 25°C)	Display Reading	Tolerance (%)	Result
146.9	151.1	2.9	Satisfactory
1412	1279	-9.4	Satisfactory
12890	12400	-3.8	Satisfactory
58670	59840	2.0	Satisfactory
111900	113628	1.5	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

(6) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance ^(a)	Result
0	0.08	--	Satisfactory
10	9.88	-1.2	Satisfactory
20	20.08	0.4	Satisfactory
100	97.78	-2.2	Satisfactory
800	810.40	1.3	Satisfactory

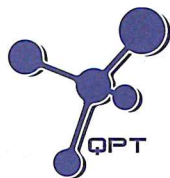
Tolerance of Turbidity should be less than ± 10.0 (%)

^(a) For 0 NTU, Display Reading should be less than 1 NTU

Remark(s)

- The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.
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- The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
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--- END OF REPORT ---



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BD110016
 Date of Issue : 05 November 2024
 Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
 Flat 2207, Yu Fun House Yu Chui Court, Shatin
 New Territories (HK) Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment : YSI ProDSS Multi Parameters
 Manufacturer : YSI
 Serial Number : 21K101469
 Date of Received : 01 November 2024
 Date of Calibration : 01 November 2024
 Date of Next Calibration : 31 January 2025
 Request No. : D-BD110016

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500-H ⁺ B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 23e 4500-O G (Membrane Electrode Method)
Conductivity	APHA 21e 2510 B
Turbidity	APHA 21e 2130 B (Nephelometric Method)

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.04	0.04	Satisfactory
7.42	7.48	0.06	Satisfactory
10.01	10.06	0.05	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
10.0	10.0	0.0	Satisfactory
23.0	23.0	0.0	Satisfactory
40.0	40.0	0.0	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

(3) Salinity

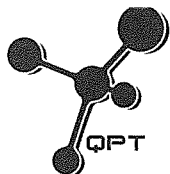
Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.96	-0.40	Satisfactory
20	20.24	1.20	Satisfactory
30	30.18	0.60	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

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AUTHORIZED
SIGNATORY:

LEE Chun-ning
 Assistant Manager



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BD110016
Date of Issue : 05 November 2024
Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
8.06	7.80	-0.26	Satisfactory
7.55	7.30	-0.25	Satisfactory
5.91	5.70	-0.21	Satisfactory
1.26	1.20	-0.06	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Conductivity

Expected Reading ($\mu\text{S}/\text{cm}$ at 25°C)	Display Reading	Tolerance (%)	Result
146.9	152	3.5	Satisfactory
1412	1488	5.4	Satisfactory
12890	13926	8.0	Satisfactory
58670	59762	1.9	Satisfactory
111900	113280	1.2	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

(6) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance ^(a)	Result
0	0.08	--	Satisfactory
10	9.84	-1.6	Satisfactory
20	20.10	0.5	Satisfactory
100	98.71	-1.3	Satisfactory
800	797.06	-0.4	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

^(a) For 0 NTU, Display Reading should be less than 1 NTU

Remark(s)

- The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.
- The results relate only to the calibrated equipment as received
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--- END OF REPORT ---



Hong Kong Accreditation Service
香港認可處

Certificate of Accreditation
認可證書

This is to certify that
特此證明

ALS TECHNICHEM (HK) PTY LIMITED

11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, New Territories, Hong Kong
香港新界葵涌永業街1-3號忠信針織中心11樓

*is accredited by the Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017
for performing specific laboratory activities as listed in the scope of accreditation within the test category of*
獲香港認可處根據ISO/IEC 17025:2017認可
進行載於認可範圍內下述測試類別中的指定實驗所活動

Environmental Testing
環境測試

*This accreditation to ISO/IEC 17025:2017 demonstrates technical competence for a defined scope and
the implementation of a management system relevant to laboratory operation
(see joint IAF-ILAC-ISO Communiqué).*
此項 ISO/IEC 17025:2017 的認可資格證明此實驗所具備指定範疇內所須的技術能力並
實施一套與實驗所運作相關的管理體系
(見國際認可論壇、國際實驗所認可合作組織及國際標準化組織的聯合公報)。

The common seal of HKAS is affixed hereto by the authority of the HKAS Executive
現經香港認可處執行機關授權在此蓋上香港認可處的印章

SHUM Wai-leung, Executive Administrator
執行幹事 沈偉良
Issue Date : 28 February 2020
簽發日期：二零二零年二月二十八日

Registration Number : **HOKLAS 066**
註冊號碼：



Date of First Registration : 15 September 1995
首次註冊日期：一九九五年九月十五日

APPENDIX E MONITORING SCHEDULES

**DSD Contract NO. HATS 07/2023, HSK Effluent Polishing Plant Phase 1
Environmental Impact Monitoring Schedule (December 2024)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
December 2024						
1	2	3	4	5	6	7
	Water Quality - Stream			Water Quality - Stream Air Quality		Water Quality - Stream
8	9	10	11	12	13	14
	Water Quality - Stream		Water Quality - Stream Air Quality		Water Quality - Stream	
15	16	17	18	19	20	21
	Water Quality - Stream Air Quality		Water Quality - Stream			Water Quality - Stream Air Quality
22	23	24	25	26	27	28
	Water Quality - Stream		Water Quality - Stream		Water Quality - Stream Air Quality	
29	30	31				
	Water Quality - Stream					

Remarks:

1) The Air Quality Impact Monitoring at AM3 is suspended from 7 Nov 2024 due to the construction works of other project at AM3.

**DSD Contract NO. HATS 07/2023, HSK Effluent Polishing Plant Phase 1
Tentative Environmental Impact Monitoring Schedule (January 2025)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
January 2025						
			1	2	3	4
				Water Quality - Stream Air Quality		Water Quality - Stream
5	6	7	8	9	10	11
	Water Quality - Stream		Water Quality - Stream Air Quality		Water Quality - Stream	
12	13	14	15	16	17	18
	Water Quality - Stream Air Quality		Water Quality - Stream			Water Quality - Stream Air Quality
19	20	21	22	23	24	25
	Water Quality - Stream		Water Quality - Stream		Water Quality - Stream Air Quality	
26	27	28	29	30	31	
	Water Quality - Stream Air Quality					

Remarks:

- 1) The Monitoring Schedule will be changed in the case of unforeseen circumstances (e.g. adverse weather etc).
- 2) Stream Water Quality Impact Monitoring will be conducted at C1 and M1.
- 3) Air Quality Impact Monitoring will be conducted at AM1 and AM2.
- 4) The Air Quality Impact Monitoring at AM3 is suspended from 7 Nov 2024 due to the construction works of other project at AM3.
- 5) There is no construction works that impact the river's water quality will be conducted from 29 Jan 2025 to 31 Jan 2025, so the monitoring will be stopped. And the water quality monitoring will be resumed on 1 Feb 2025.

APPENDIX F AIR QUALITY MONITORING RESULTS
AND THEIR GRAPHICAL
PRESENTATIONS

Air Quality Monitoring Results

1-hour TSP Monitoring Results for Hung Shui Kiu Effluent Polishing Plant Phase 1

AM1 - Tseung Kong Wai

1-hour TSP ($\mu\text{g}/\text{m}^3$)								
Date	Weather	Start Time	1st Hour	2nd Hour	3rd Hour	Action Level	Limit Level	Exceedance (Y/N)
05-Dec-24	Cloudy	8:00	129	135	156	263.0	500.0	N
11-Dec-24	Sunny	8:00	103	117	127			N
16-Dec-24	Fine	8:00	87	79	77			N
21-Dec-24	Sunny	8:00	205	209	193			N
27-Dec-24	Cloudy	8:00	224	238	229			N
Average			153.9					
Min			77.0					
Max			238.0					

AM2 - Farm House

1-hour TSP ($\mu\text{g}/\text{m}^3$)								
Date	Weather	Start Time	1st Hour	2nd Hour	3rd Hour	Action Level	Limit Level	Exceedance (Y/N)
05-Dec-24	Cloudy	8:00	147	152	150	260.6	500.0	N
11-Dec-24	Sunny	8:00	117	128	141			N
16-Dec-24	Fine	8:00	96	89	79			N
21-Dec-24	Sunny	8:00	178	181	198			N
27-Dec-24	Cloudy	8:00	198	200	199			N
Average			150.2					
Min			79.0					
Max			200.0					

AM3 - Planned Port Back-up, Storage and Workshop

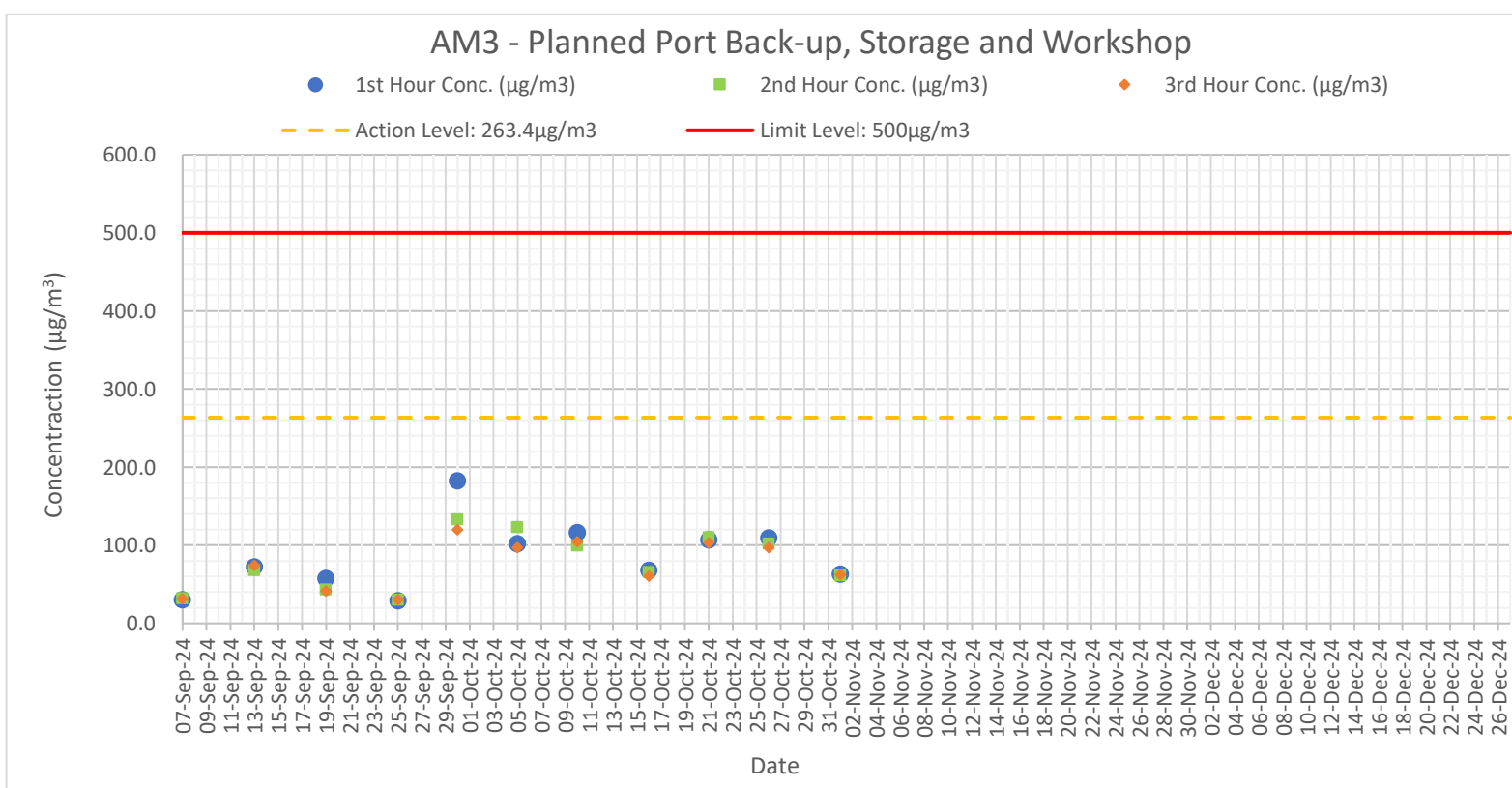
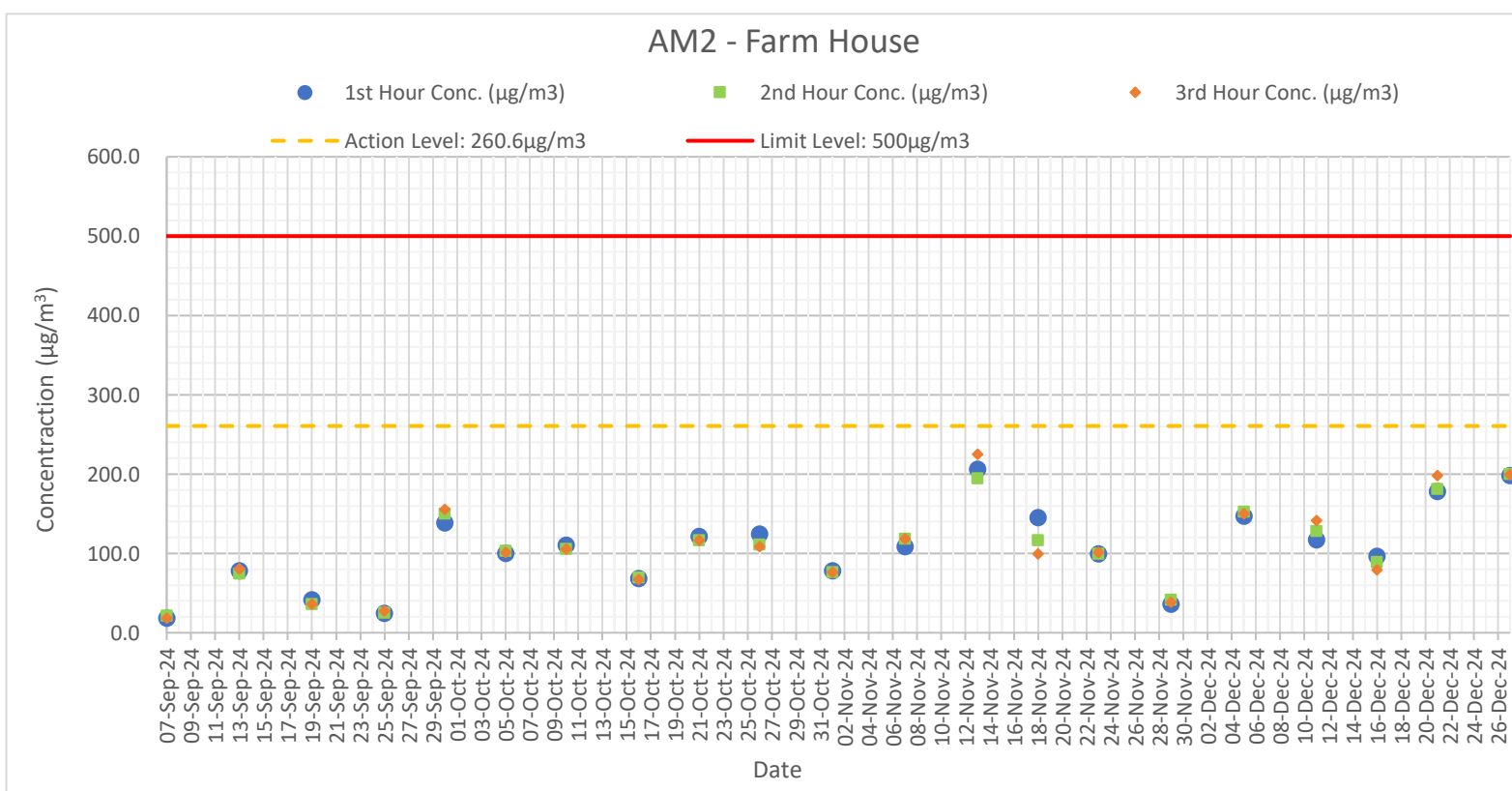
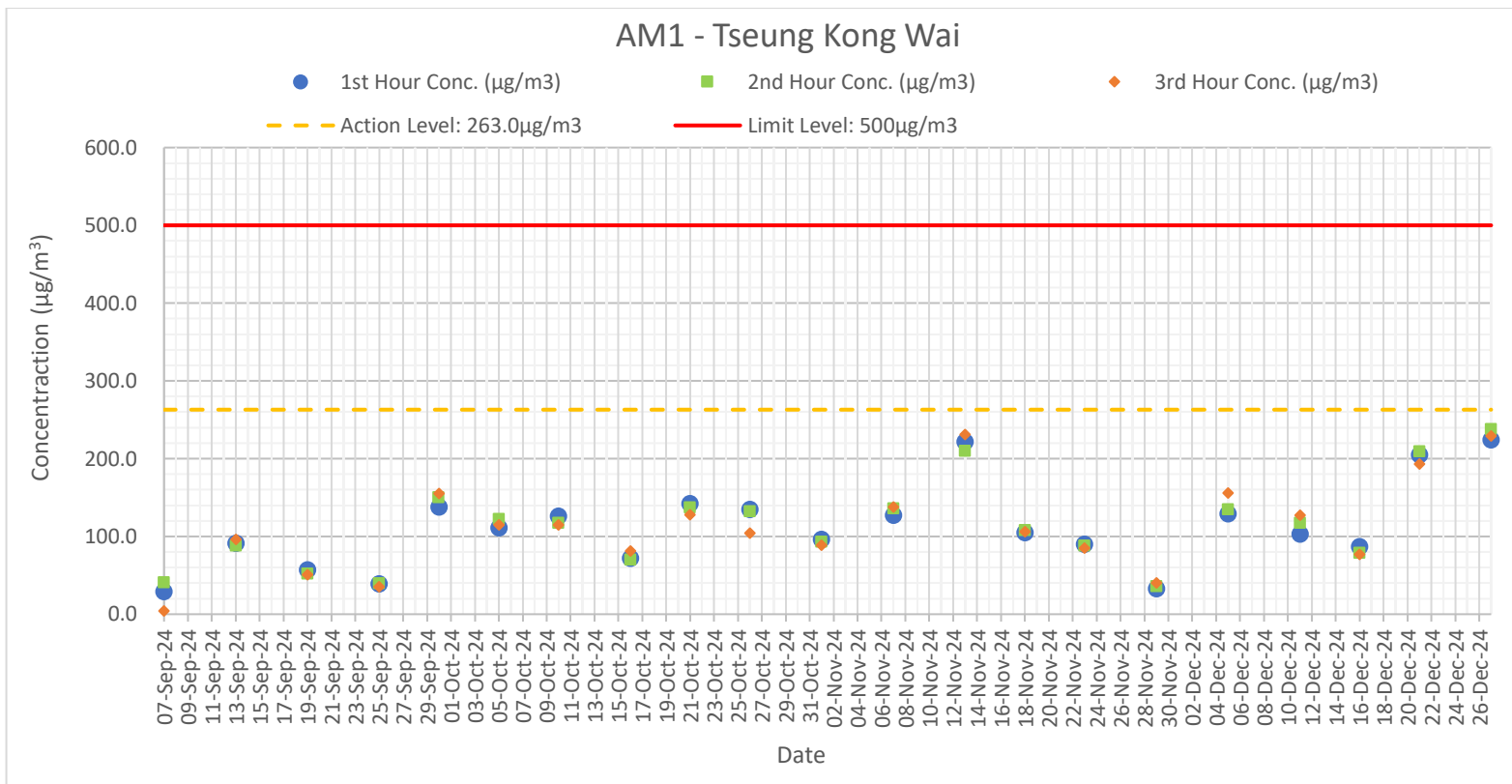
1-hour TSP ($\mu\text{g}/\text{m}^3$)								
Date	Weather	Start Time	1st Hour	2nd Hour	3rd Hour	Action Level	Limit Level	Exceedance (Y/N)
-	-	-	-	-	-	263.4	500.0	-

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

*** The air quality impact monitoring at AM3 has been suspended since 7 Nov 24 due to the construction works of other project at AM3.



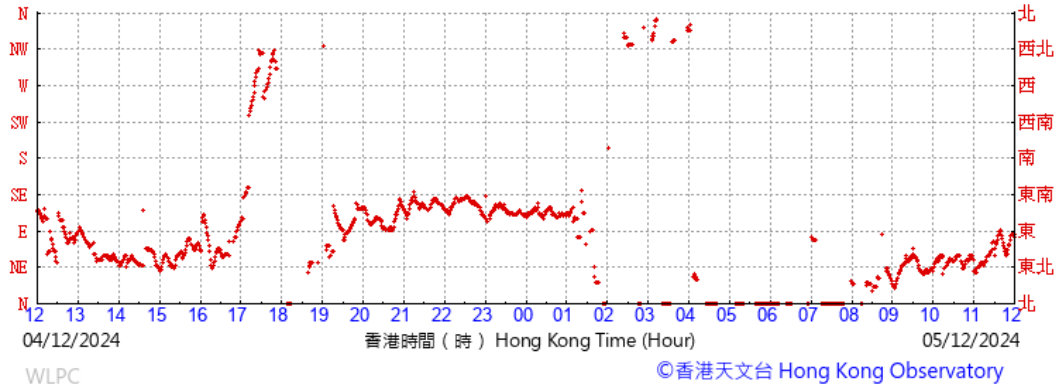
The air quality impact monitoring at AM3 has been suspended since 7 Nov 24 due to the construction works of other project at AM3.

APPENDIX G WIND SPEED AND DIRECTION FROM
HONG KONG OBSERVATORY

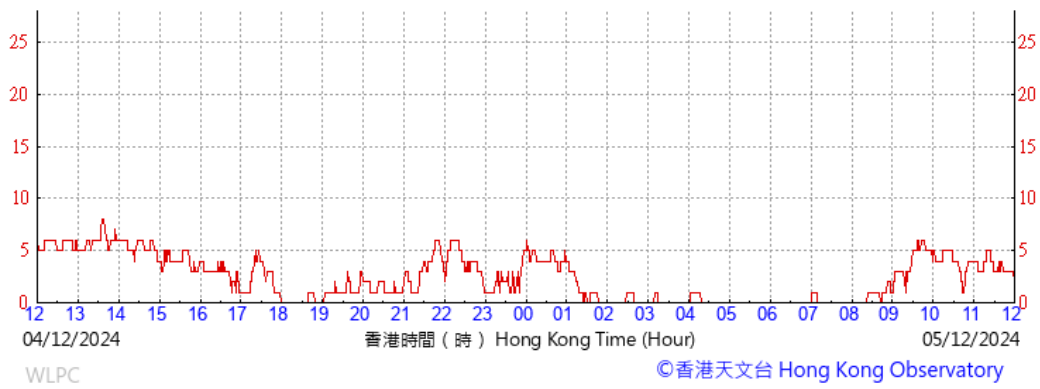
Wind Data Record from Hong Kong Observatory Weather Station

05-Dec-2024

(於香港時間05/12/2024 12時00分更新) (Updated at 12:00H on 05/12/2024)

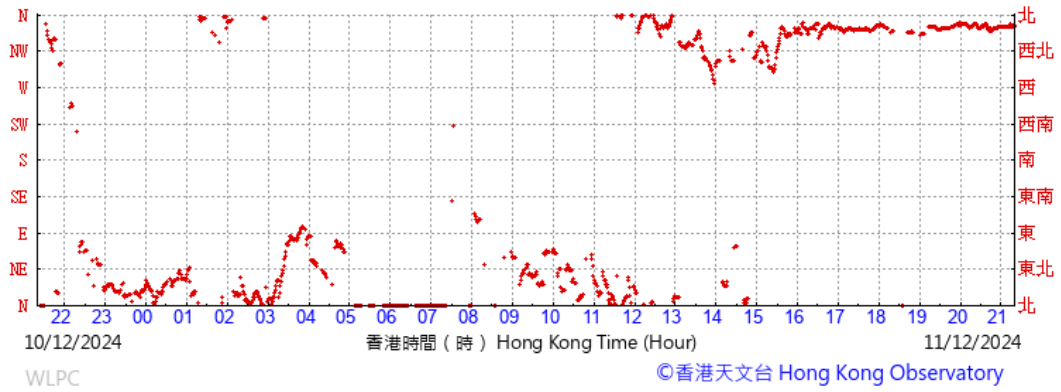


(公里/小時) (於香港時間05/12/2024 12時00分更新) (Updated at 12:00H on 05/12/2024) (km/h)

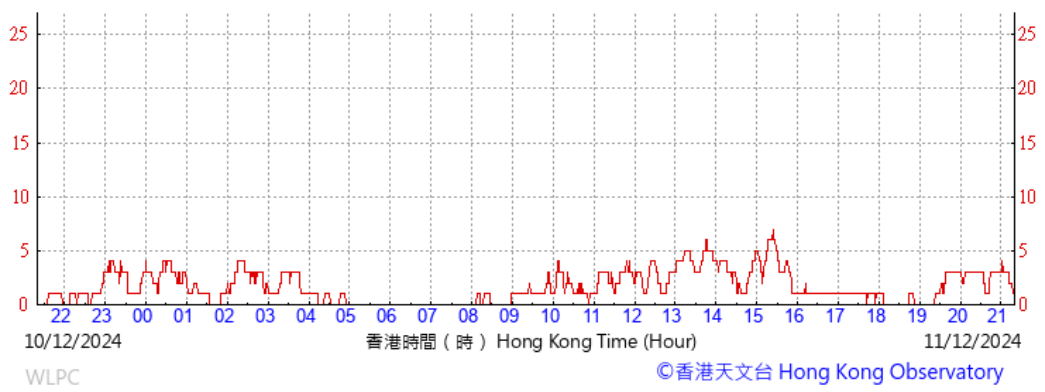


11-Dec-2024

(於香港時間11/12/2024 21 時 20 分更新) (Updated at 21:20H on 11/12/2024)

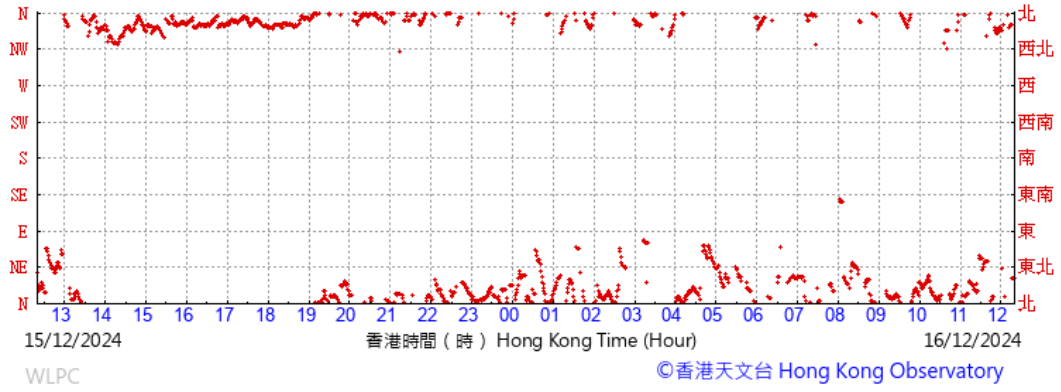


(公里/小時) (於香港時間11/12/2024 21 時 20 分更新) (Updated at 21:20H on 11/12/2024) (km/h)

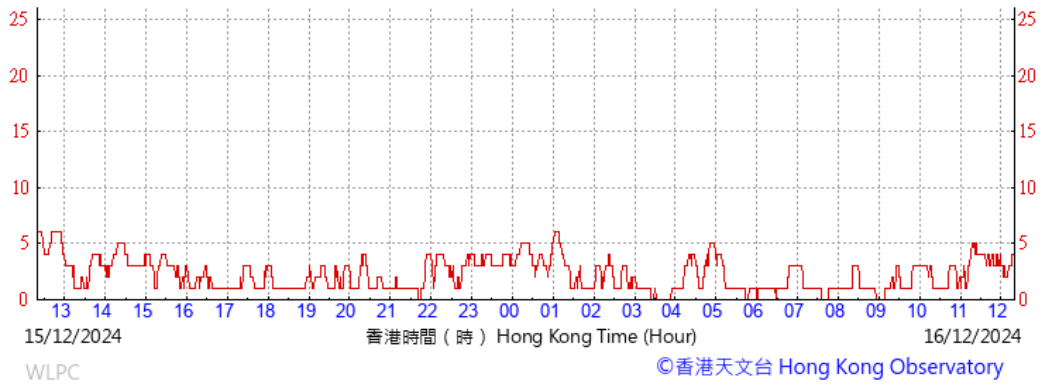


16- Dec-2024

(於香港時間16/12/2024 12 時 20 分更新) (Updated at 12:20H on 16/12/2024)

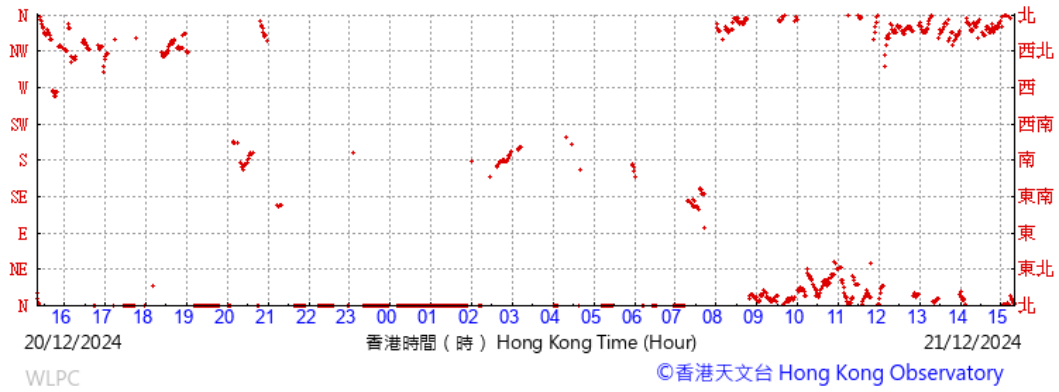


(公里/小時) (於香港時間16/12/2024 12 時 20 分更新) (Updated at 12:20H on 16/12/2024) (km/h)

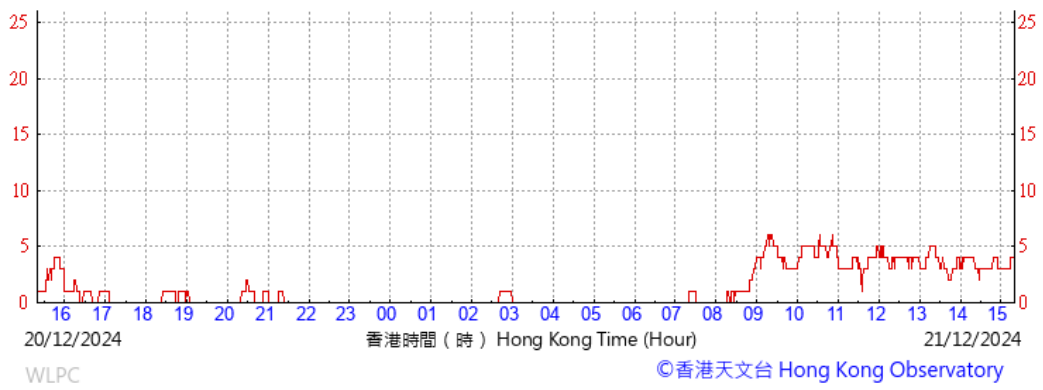


21-Dec-2024

(於香港時間21/12/2024 15 時 20 分更新) (Updated at 15:20H on 21/12/2024)

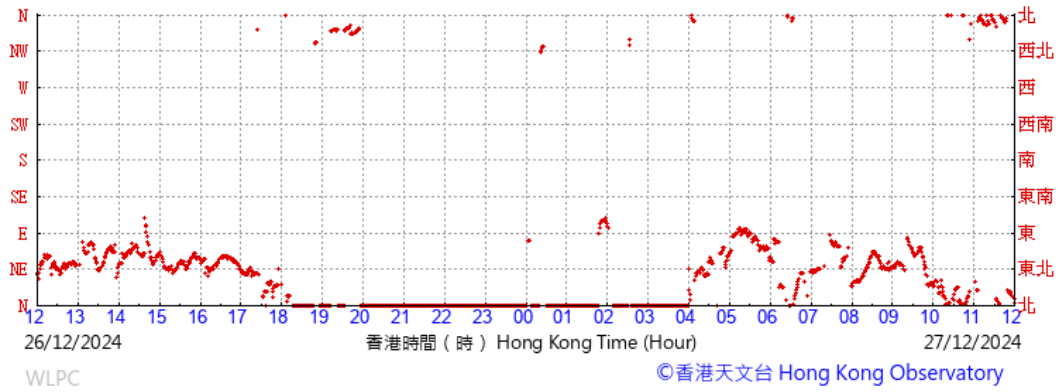


(公里/小時) (於香港時間21/12/2024 15 時 20 分更新) (Updated at 15:20H on 21/12/2024) (km/h)

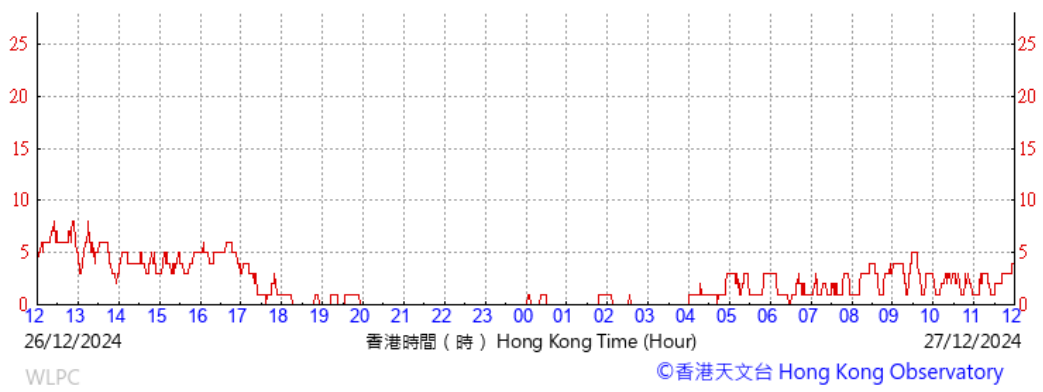


27-Dec-2024

(於香港時間27/12/2024 12時00分更新) (Updated at 12:00H on 27/12/2024)



(公里/小時) (於香港時間27/12/2024 12時00分更新) (Updated at 12:00H on 27/12/2024) (km/h)



APPENDIX H EVENT AND ACTION PLAN

Event and Action Plan for Air Quality (Construction Dust)

Event	Action			
	ET	IEC	ER	Contractor
Action level being exceeded by one sampling	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of complaint and propose remedial measures; 2. Inform Contractor, IEC and ER; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; and 3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures. 	<ol style="list-style-type: none"> 1. Notify Contractor. 	<ol style="list-style-type: none"> 1. Identify source(s), investigate the causes of exceedance and propose remedial measures; 2. Implement remedial measures; and 3. Amend working methods agreed with the ER as appropriate.
Action level being exceeded by two or more consecutive sampling	<ol style="list-style-type: none"> 1. Identify source; 2. Inform Contractor, IEC and ER; 3. Advise the Contractor and ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise Implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Identify source and investigate the causes of exceedance; 2. Submit proposals for remedial measures to the ER with a copy to ET and IEC within three working days of notification; 3. Implement the agreed proposals; and 4. Amend proposal as appropriate.

Event	Action			
	ET	IEC	ER	Contractor
	meeting with Contractor, IEC and ER; and 8. If exceedance stops, cease additional monitoring.			
Limit level being exceeded by one sampling	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform Contractor, IEC, ER, and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; and 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; and 5. Supervise implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Identify source(s) and investigate the causes of exceedance; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial measures to ER with a copy to ET and IEC within three working days of notification; 4. Implement the agreed proposals; and 5. Amend proposal if appropriate.
Limit level being exceeded by two or more consecutive	<ol style="list-style-type: none"> 1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET; 2. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing; 2. In consultation with the ET and IEC, agree with the Contractor on the remedial 	<ol style="list-style-type: none"> 1. Identify source(s) and investigate the causes of exceedance; 2. Take immediate action to avoid further exceedance;

Event	Action			
	ET	IEC	ER	Contractor
sampling	<p>daily;</p> <p>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</p> <p>6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</p> <p>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and</p> <p>8. If exceedance stops, cease additional monitoring.</p>	<p>3. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and</p> <p>4. Supervise the implementation of remedial measures.</p>	<p>measures to be implemented;</p> <p>3. Supervise the implementation of remedial measures; and</p> <p>4. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.</p>	<p>3. Submit proposals for remedial measures to the ER with a copy to the IEC and ET within three working days of notification;</p> <p>4. Implement the agreed proposals;</p> <p>5. Revise and resubmit proposals if problem still not under control; and</p> <p>6. Stop the relevant portion of works as determined by the ER until the exceedance is abated.</p>

Event and Action Plan for Water Quality Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action level being exceeded by one sampling day	<ul style="list-style-type: none"> o Repeat <i>in situ</i> measurement on the next day of exceedance to confirm findings; o Check monitoring data, plant, equipment and Contractor(s)'s working methods; o Identify source(s) of impact and record in notification of exceedance; o Inform IEC, Contractor(s) and ER 	<ul style="list-style-type: none"> o Check monitoring data submitted by ET and Contractor(s)'s working methods; o Inform EPD and AFCD. 	<ul style="list-style-type: none"> o Confirm receipt of notification of exceedance in writing 	<ul style="list-style-type: none"> o Confirm receipt of notification of exceedance in writing; o Check plant and equipment and rectify unacceptable practice
Action level being exceeded by two or more consecutive sampling days	<ul style="list-style-type: none"> o Repeat <i>in situ</i> measurement on the next day of exceedance to confirm findings; o Check monitoring data, plant, equipment and Contractor(s)'s working methods; o Identify source(s) of impact and record in notification of exceedance; o Inform IEC, Contractor(s) and ER 	<ul style="list-style-type: none"> o Check monitoring data submitted by ET and Contractor(s)'s working methods; o Inform EPD and AFCD; o Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly; o Assess the 	<ul style="list-style-type: none"> o Confirm receipt of notification of exceedance in writing; o Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented. o Ensure additional mitigation measures are 	<ul style="list-style-type: none"> o Confirm receipt of notification of exceedance in writing; o Check plant and equipment and rectify unacceptable practice; o Consider changes of working methods; o Discuss with ET and IEC on additional mitigation measures and propose them

Event	Action			
	ET	IEC	ER	Contractor
	<p>ER;</p> <ul style="list-style-type: none"> o Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented. 	<p>effectiveness of the implemented mitigation measures.</p>	<p>properly implemented.</p>	<p>to ER within 3 working days;</p> <ul style="list-style-type: none"> o Implement the agreed mitigation measures.
<p>Limit level being exceeded by one sampling day</p>	<ul style="list-style-type: none"> o Repeat <i>in situ</i> measurement on the next day of exceedance to confirm findings; o Check monitoring data, plant, equipment and Contractor(s)'s working methods; o Identify source(s) of impact and record in notification of exceedance; o Inform IEC, Contractor(s) and ER; o Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented. 	<ul style="list-style-type: none"> o Check monitoring data submitted by ET and Contractor(s)'s working methods; o Inform EPD and AFCD; o Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly; o Assess the effectiveness of the implemented mitigation measures. 	<ul style="list-style-type: none"> o Confirm receipt of notification of exceedance in writing; o Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented. o Ensure additional mitigation measures are properly implemented. o Request Contractor(s) to critically review the working methods. 	<ul style="list-style-type: none"> o Confirm receipt of notification of exceedance in writing; o Check plant and equipment and rectify unacceptable practice; o Critically review the need to change working methods; o Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days; o Implement the agreed mitigation measures.
<p>Limit level being exceeded by two or more consecutive</p>	<ul style="list-style-type: none"> o Repeat <i>in situ</i> measurement on the next day of exceedance to confirm findings; 	<ul style="list-style-type: none"> o Check monitoring data submitted by ET and Contractor(s)'s 	<ul style="list-style-type: none"> o Confirm receipt of notification of exceedance in writing; 	<ul style="list-style-type: none"> o Confirm receipt of notification of exceedance in writing;

Event	Action			
	ET	IEC	ER	Contractor
sampling days	<ul style="list-style-type: none"> o Check monitoring data, plant, equipment and Contractor(s)'s working methods; o Identify source(s) of impact and record in notification of exceedance; o Inform IEC, Contractor(s) and ER; o Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented. 	<ul style="list-style-type: none"> working methods; o Inform EPD and AFCD; o Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly; o Assess the effectiveness of the implemented mitigation measures. 	<ul style="list-style-type: none"> o Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented. o Ensure additional mitigation measures are properly implemented. o Request Contractor(s) to critically review the working methods. 	<ul style="list-style-type: none"> o Check plant and equipment and rectify unacceptable practice; o Critically review the need to change working methods; o Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days; o Implement the agreed mitigation measures.

APPENDIX I WATER QUALITY MONITORING
RESULTS AND THEIR GRAPHICAL
PRESENTATIONS

Water Quality Monitoring for Hung Shui Kiu Effluent Polishing Plant Phase 1

Water Quality Monitoring Results on 2-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Dec-24	C1	Sunny	11:47	<0.5	Surface	19.7	19.7	7.3	7.3	0.12	0.12	61.3	61.3	5.6	5.6	4.6	4.5	<2	<2
						19.7		7.3		0.12		61.2		5.6		4.5			
	M1	Sunny	12:01	<0.5	Surface	18.6	18.6	7.5	7.5	0.13	0.13	72.4	72.4	6.8	6.8	3.6	3.5	5	6
						18.6		7.5		0.13		72.3		6.8		3.5			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control	3.8
Limit Level	Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control	17.2
	Station	5.4 (120% of Control Station)
Limit Level	Control	17.7
	Station	5.9 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control	25.0
	Station	2.4 (120% of Control Station)
Limit Level	Control	26.0
	Station	2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring Results on 5-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
5-Dec-24	C1	Cloudy	8:04	<0.5	Surface	20.5	20.5	7.1	7.1	0.11	0.11	51.1	51.0	4.6	4.6	6.1	6.1	2	2
						20.5		7.1		0.11		50.8		4.6		6.1			
	M1	Cloudy	8:17	<0.5	Surface	20.1	20.1	7.4	7.4	0.13	0.13	69.9	69.9	6.3	6.3	2.9	3.0	5	5
						20.1		7.4		0.13		69.8		6.3		3.0			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control	3.8
Limit Level	Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control	17.2
	Station	7.3 (120% of Control Station)
Limit Level	Control	17.7
	Station	7.9 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control	25.0
	Station	2.4 (120% of Control Station)
Limit Level	Control	26.0
	Station	2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring for Hung Shui Kiu Effluent Polishing Plant Phase 1

Water Quality Monitoring Results on 7-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
7-Dec-24	C1	Sunny	10:23	<0.5	Surface	19.8	19.8	7.1	7.1	0.10	0.10	59.6	59.5	5.4	5.4	4.6	4.6	<2	<2
						19.8		7.1		0.10		59.4		5.4		4.7			
	M1	Sunny	10:41	<0.5	Surface	19.4	19.4	7.3	7.3	0.13	0.13	71.8	71.7	6.6	6.6	2.4	2.4	2	2
						19.4		7.3		0.13		71.6		6.6		2.4			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
		5.6 (120% of Control Station)
Limit Level	Control Station	17.7
		6.0 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0
		2.4 (120% of Control Station)
Limit Level	Control Station	26.0
		2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring Results on 9-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
9-Dec-24	C1	Cloudy	11:23	<0.5	Surface	18.6	18.6	7.1	7.1	0.11	0.11	59.9	59.9	5.6	5.6	6.2	6.2	2	2
						18.6		7.1		0.11		59.8		5.6		6.2			
	M1	Cloudy	11:38	<0.5	Surface	18.1	18.1	7.4	7.4	0.12	0.12	74.4	74.4	7.0	7.0	7.5	7.6	7	7
						18.1		7.4		0.12		74.3		7.0		7.8			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
		7.5 (120% of Control Station)
Limit Level	Control Station	17.7
		8.1 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0
		2.4 (120% of Control Station)
Limit Level	Control Station	26.0
		2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

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Water Quality Monitoring Results on 11-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
11-Dec-24	C1	Sunny	7:59	<0.5	Surface	19.9	19.9	7.0	7.0	0.11	0.11	48.9	48.9	4.5	4.5	6.0	6.0	2	2
						19.9		7.0		0.11		48.8		4.5		6.0			
	M1	Sunny	8:11	<0.5	Surface	19.4	19.4	7.4	7.4	0.12	0.12	71.8	71.8	6.6	6.6	3.3	3.3	3	3
						19.4		7.4		0.12		71.7		6.6		3.4			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2 7.2 (120% of Control Station)
Limit Level	Control Station	17.7 7.8 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0 2.4 (120% of Control Station)
Limit Level	Control Station	26.0 2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring Results on 13-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
13-Dec-24	C1	Fine	11:08	<0.5	Surface	19.2	19.2	7.1	7.1	0.12	0.12	54.2	54.1	5.0	5.0	4.8	4.7	2	2
						19.2		7.1		0.12		54.0		5.0		4.7			
	M1	Fine	11:25	<0.5	Surface	18.5	18.5	7.4	7.4	0.13	0.13	67.2	67.0	6.3	6.3	7.3	7.3	8	8
						18.5		7.4		0.13		66.8		6.3		7.3			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2 5.7 (120% of Control Station)
Limit Level	Control Station	17.7 6.2 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0 2.4 (120% of Control Station)
Limit Level	Control Station	26.0 2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring for Hung Shui Kiu Effluent Polishing Plant Phase 1

Water Quality Monitoring Results on 16-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
16-Dec-24	C1	Fine	8:13	<0.5	Surface	15.3	15.3	7.1	7.1	0.09	0.09	69.8	69.8	7.0	7.0	3.4	3.4	2	2
						15.3		7.1		0.09		69.8		7.0		3.4		<2	
	M1	Fine	8:29	<0.5	Surface	14.9	14.9	7.4	7.4	0.12	0.12	77.2	77.1	7.8	7.8	3.9	3.9	<2	<2
						14.9		7.4		0.12		77.0		7.8		3.9		<2	

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
		4.1 (120% of Control Station)
Limit Level	Control Station	17.7
		4.4 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0
		2.4 (120% of Control Station)
Limit Level	Control Station	26.0
		2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring Results on 18-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
18-Dec-24	C1	Sunny	10:37	<0.5	Surface	16.5	16.5	7.3	7.2	0.08	0.08	76.0	76.0	7.4	7.4	2.3	2.2	2	2
						16.5		7.2		0.08		75.9		7.4		2.1			
	M1	Sunny	10:58	<0.5	Surface	16.3	16.3	7.6	7.6	0.10	0.10	78.2	78.2	7.7	7.7	1.8	1.8	3	3
						16.3		7.6		0.10		78.1		7.7		1.9		2	

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
		2.6 (120% of Control Station)
Limit Level	Control Station	17.7
		2.9 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0
		2.4 (120% of Control Station)
Limit Level	Control Station	26.0
		2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring for Hung Shui Kiu Effluent Polishing Plant Phase 1

Water Quality Monitoring Results on 21-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
21-Dec-24	C1	Sunny	7:58	<0.5	Surface	13.9	13.9	7.3	7.2	0.08	0.08	71.3	71.3	7.4	7.4	1.7	1.7	<2	<2
						13.9		7.2		0.08		71.2		7.4		1.7			
	M1	Sunny	8:10	<0.5	Surface	13.7	13.7	7.4	7.4	0.10	0.10	79.4	79.4	8.2	8.2	2.0	2.0	3	3
						13.7		7.4		0.10		79.3		8.2		2.0			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
		2.0 (120% of Control Station)
Limit Level	Control Station	17.7
		2.2 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0
		2.4 (120% of Control Station)
Limit Level	Control Station	26.0
		2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring Results on 23-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
23-Dec-24	C1	Cloudy	11:10	<0.5	Surface	15.5	15.5	7.3	7.3	0.11	0.11	56.2	56.2	5.6	5.6	4.5	4.5	<2	<2
						15.5		7.3		0.11		56.2		5.6		4.5			
	M1	Cloudy	11:22	<0.5	Surface	14.8	14.8	7.5	7.5	0.11	0.11	68.8	68.8	7.0	7.0	1.9	1.9	2	2
						14.8		7.5		0.11		68.7		7.0		1.9			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
		5.4 (120% of Control Station)
Limit Level	Control Station	17.7
		5.9 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0
		2.4 (120% of Control Station)
Limit Level	Control Station	26.0
		2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring for Hung Shui Kiu Effluent Polishing Plant Phase 1

Water Quality Monitoring Results on 25-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
25-Dec-24	C1	Fine	9:47	<0.5	Surface	16.7	16.7	7.3	7.3	0.08	0.08	65.1	65.0	6.3	6.3	1.5	1.5	<2	<2
						16.7		7.3		0.08		64.9		6.3		1.5			
	M1	Fine	10:04	<0.5	Surface	16.2	16.2	7.5	7.5	0.10	0.10	79.0	79.0	7.8	7.8	1.8	1.8	<2	<2
						16.2		7.5		0.10		78.9		7.8		1.8			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
		1.8 (120% of Control Station)
Limit Level	Control Station	17.7
		2.0 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0
		2.4 (120% of Control Station)
Limit Level	Control Station	26.0
		2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring Results on 27-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
27-Dec-24	C1	Cloudy	8:06	<0.5	Surface	18.8	18.8	7.4	7.4	0.08	0.08	65.1	65.0	6.1	6.1	2.1	2.1	2	2
						18.8		7.4		0.08		64.9		6.0		2.2			
	M1	Cloudy	8:18	<0.5	Surface	18.1	18.1	7.5	7.5	0.10	0.10	75.9	75.9	7.2	7.2	1.7	1.7	2	2
						18.1		7.5		0.10		75.8		7.2		1.7			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
		2.5 (120% of Control Station)
Limit Level	Control Station	17.7
		2.8 (130% of Control Station)

Suspended Solid (mg/L)

SS (mg/L) (See Note 2&3)	C1	M1*
Action Level	Control Station	25.0
		2.4 (120% of Control Station)
Limit Level	Control Station	26.0
		2.6 (130% of Control Station)

Notes:

- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
- If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.

Water Quality Monitoring for Hung Shui Kiu Effluent Polishing Plant Phase 1

Water Quality Monitoring Results on 30-Dec-2024

Date	Station	Weather Condition	Sampling Time	Water Depth (m)	Level	Water Temperature (°C)		pH		Salinity (NTU)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		SS (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
30-Dec-24	C1	Fine	10:17	<0.5	Surface	15.5	15.5	7.2	7.2	0.09	0.09	59.8	59.8	6.0	6.0	2.9	2.8	<2	<2
						15.5		7.2		0.09		59.7		6.0		2.8			
	M1	Fine	10:34	<0.5	Surface	15.4	15.4	7.4	7.4	0.10	0.10	77.2	77.2	7.7	7.7	4.2	4.3	3	3
						15.4		7.4		0.10		77.1		7.7		4.4			

Remarks:

* ***Bold Italic*** means Action Level exceedance

** ***Bold Italic with underline*** means Limit Level exceedance

Dissolved Oxygen (mg/L)

DO (mg/L) (See Note 1)	C1	M1
Action Level	Control Station	3.8
Limit Level	Control Station	3.7

Turbidity (NTU)

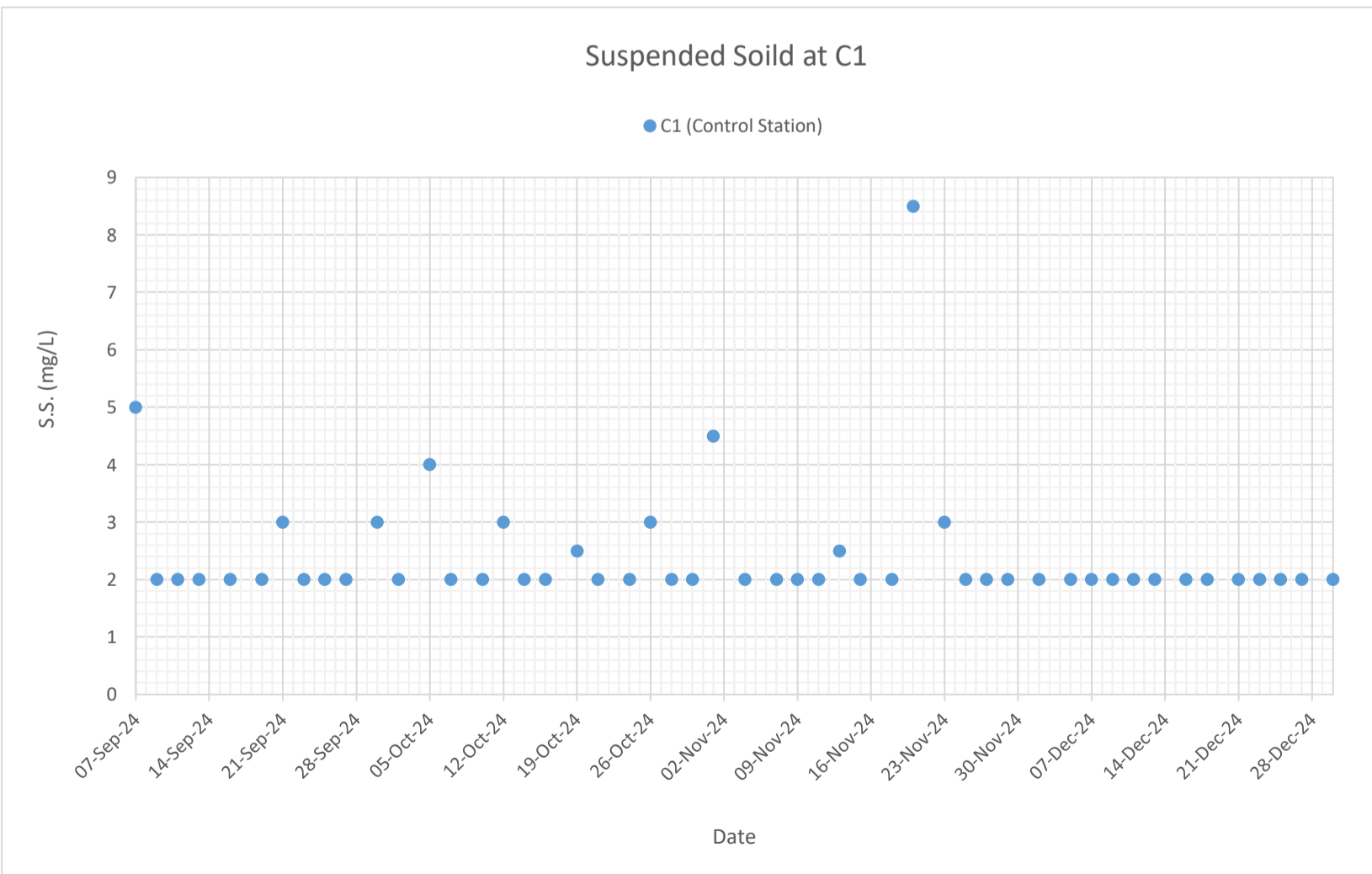
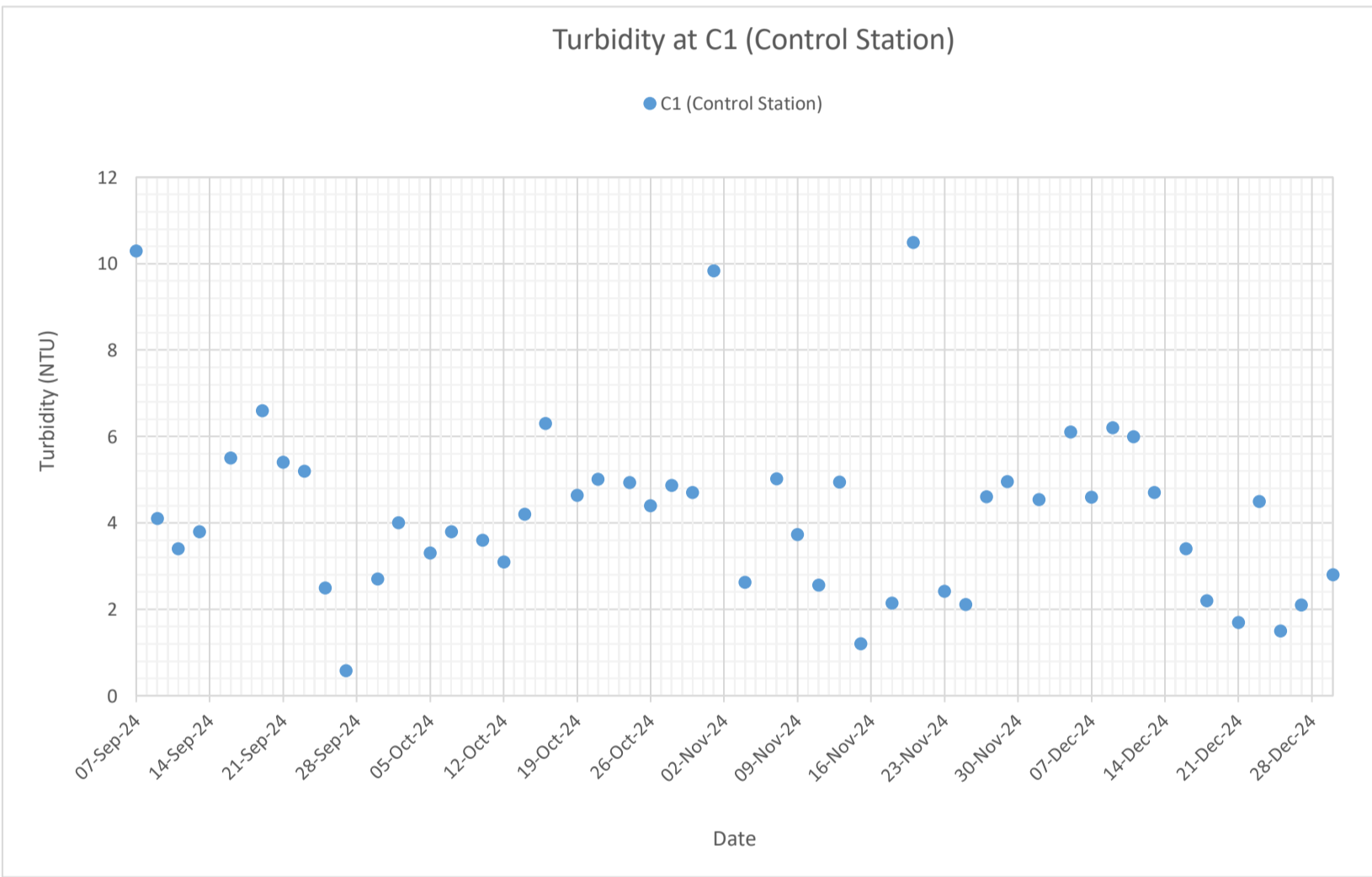
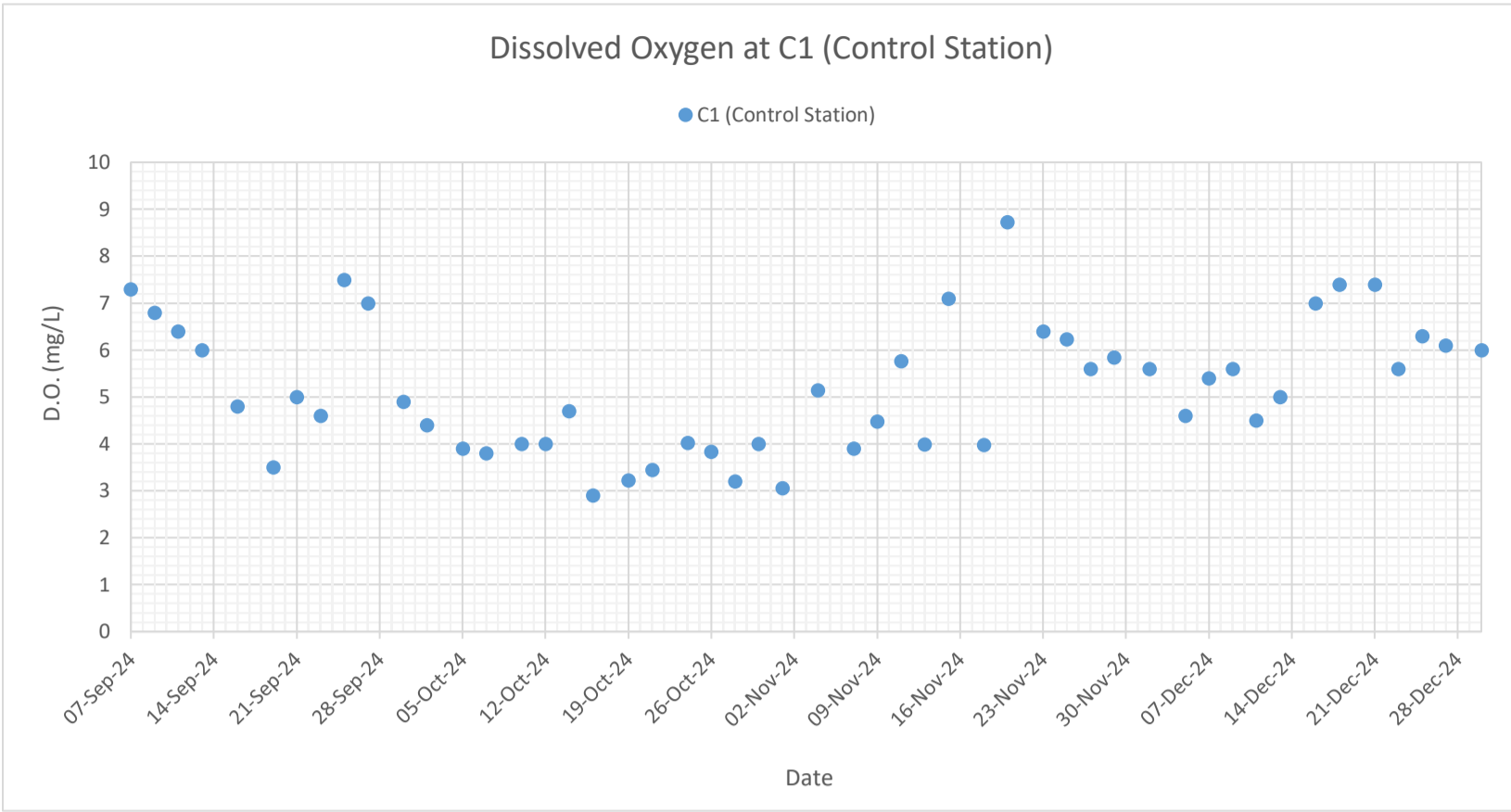
Turbidity (NTU) (See Note 2)	C1	M1
Action Level	Control Station	17.2
	Control Station	3.4 (120% of Control Station)
Limit Level	Control Station	17.7
	Control Station	3.7 (130% of Control Station)

Suspended Solid (mg/L)

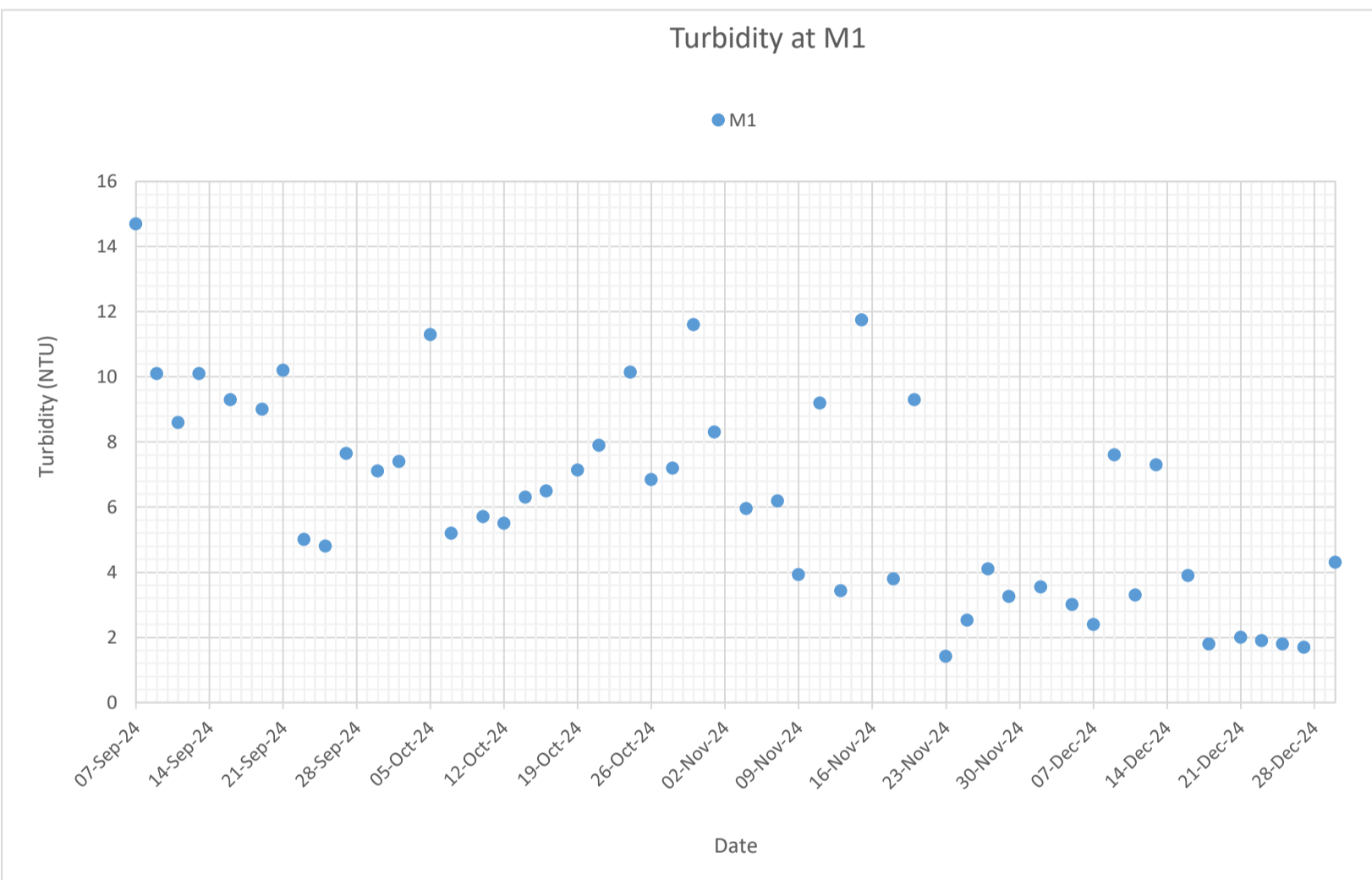
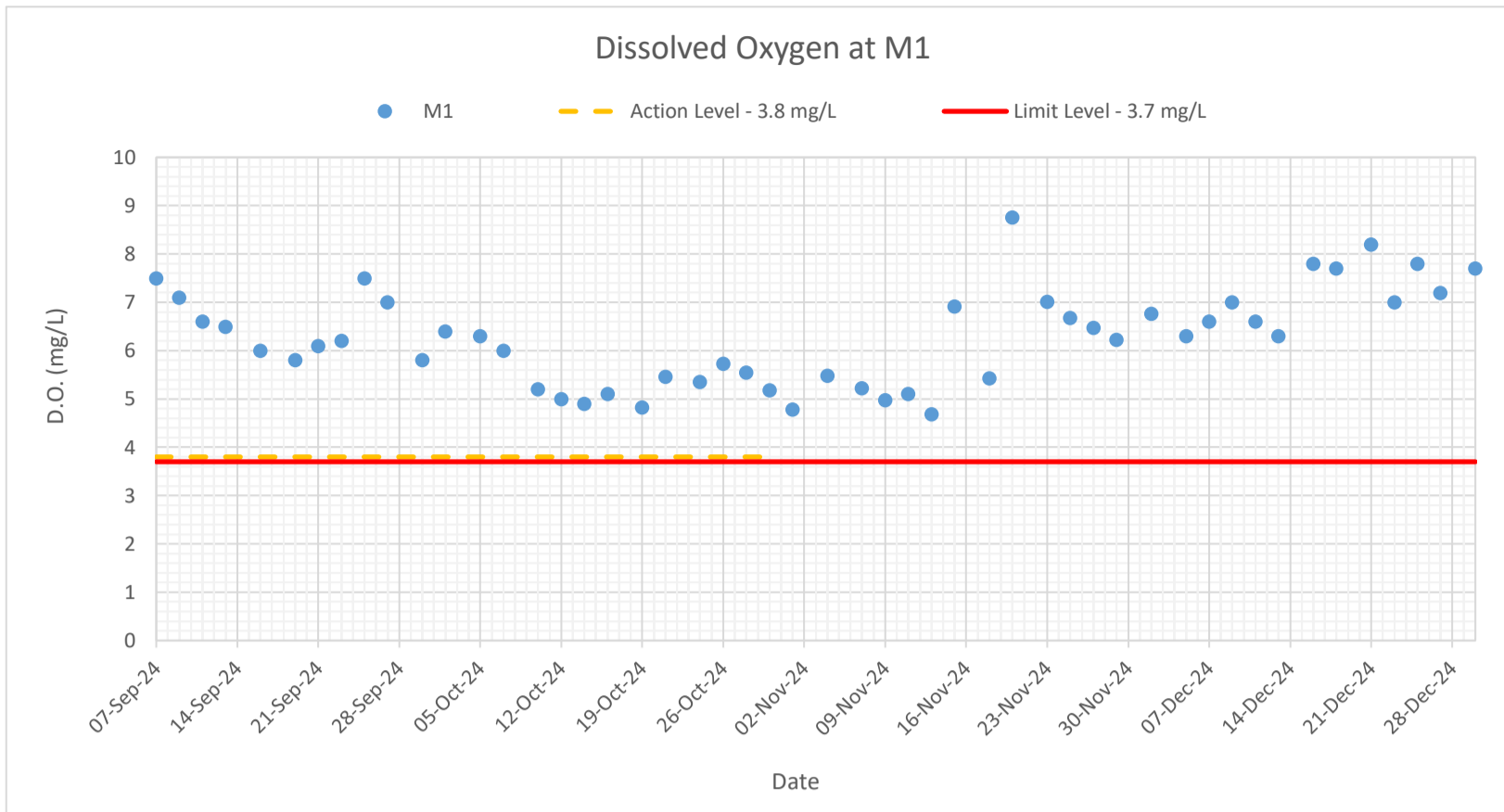
SS (mg/L) (See Note 2&3)	C1	M1
Action Level	Control Station	25.0
	Control Station	2.4 (120% of Control Station)
Limit Level	Control Station	26.0
	Control Station	2.6 (130% of Control Station)

Notes:

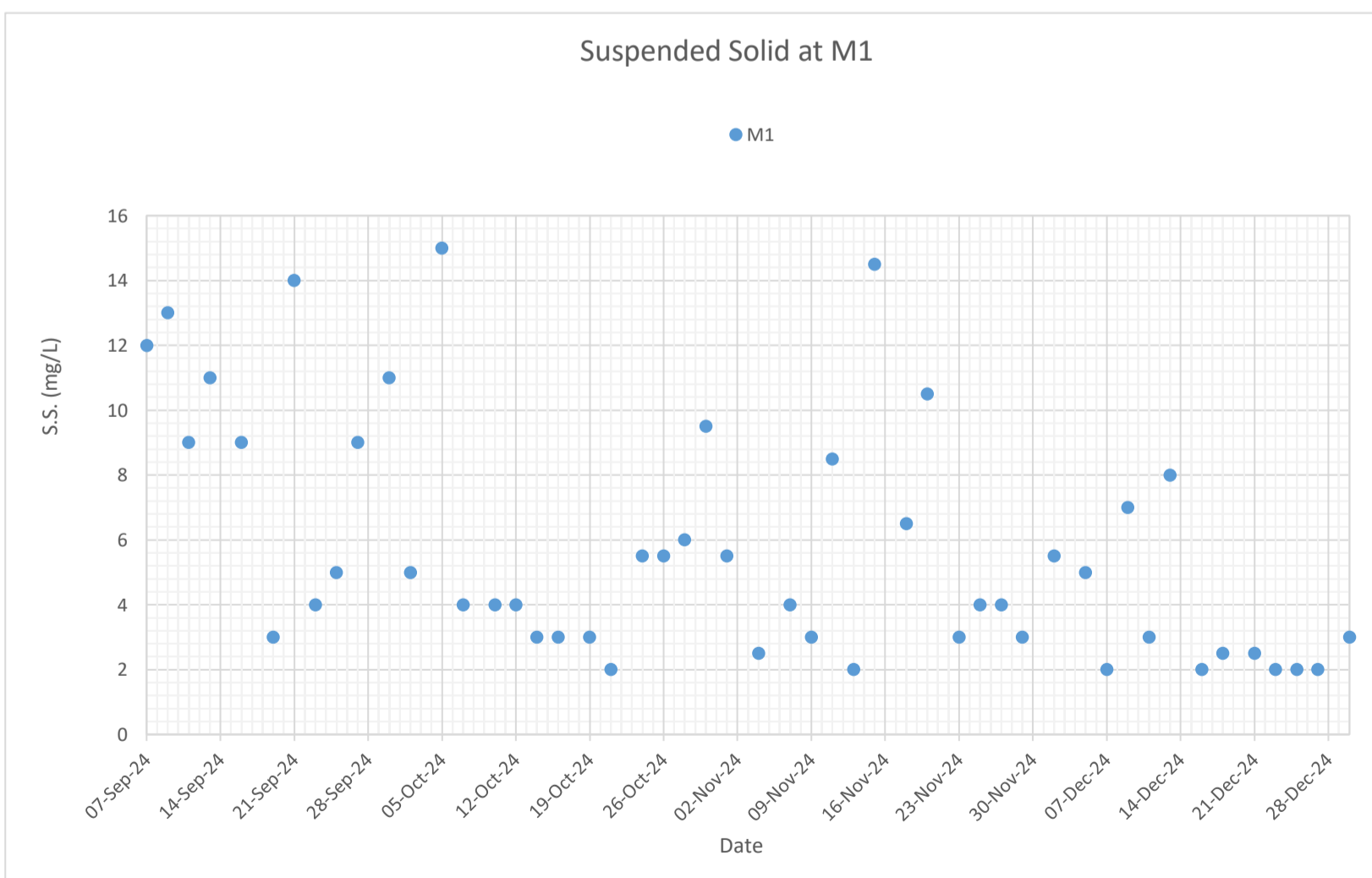
1. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
2. For turbidity and SS, non-compliance of the water quality occurs when monitoring results is higher than the limits.
3. If the lab result of SS concentration at control station was less than 2 mg/L, 2 mg/L would be assumed as the SS concentration for calculating the action and limit levels based on the control station as a conservative approach.



Note: The suspended solids measured on 9, 11, 13, 19, 23, and 27 Sep 2024 are less than 2 mg/L.
 The suspended solids measured on 2, 7, 14, 21 and 30 Oct 2024 are less than 2 mg/L.
 The suspended solids measured on 4, 9, 11, 18, 25, 27 and 29 Nov 2024 are less than 2 mg/L.
 The suspended solids measured on 2, 7, 16, 21, 23, 25 and 30 Dec 2024 are less than 2 mg/L.



Note: The Action and Limit Level of turbidity can be referred to Table 3.4 of the monthly EM&A report.



Note: The Action and Limit Level of Suspended Solid can be referred to Table 3.4 of the monthly EM&A report.
 The suspended solids measured on 21 Oct 2024 are less than 2 mg/L.
 The suspended solids measured on 16 and 25 Dec 2024 are less than 2 mg/L.

APPENDIX J MONTHLY SUMMARY WASTE FLOW
TABLE

Appendix H - Monthly Summary Waste Flow Table

Project: CONTRACT NO. HATS 07/2023 ENVIRONMENTAL TEAM FOR HUNG SHUI KIU EFFLUENT POLISHING PLANT PHASE 1

Reporting Month: December 2024

Month	Actual Quantities of Inert C&D Materials Generated							Actual Quantities of Non-inert C&D Materials Generated					
	(a) Total Quantity Generated	(b) Hard Rock and Large Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill	(f) Disposed in Sorting Facilities	(g) Imported Fill	(h) Metals	(i) Paper / cardboard packaging	(j) Plastics	(k) Chemical Waste	(l) Recyclable Yard Waste	(m) Others, i.e. General Refuse disposed of at Landfill
	(tonnes)	(m ³)	(m ³)	(m ³)	(tonnes)	(tonnes)	(m ³)	(tonnes)	(tonnes)	(tonnes)	(tonnes)	(tonnes)	(tonnes)
Yr 2024													
Sep-24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct-24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov-24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.43	0.00
Dec-24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.43	0.00

APPENDIX K CUMULATIVE STATISTICS ON
COMPLAINTS, NOTIFICATION OF
SUMMONS AND SUCCESSFUL
PROSECUTIONS

Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions

	Date Received	Subject	Status	Total no. received in this month	Total no. received since project commencement
Environmental Complaints	-	-	-	0	0
Notification of Summons	-	-	-	0	0
Successful Prosecutions	-	-	-	0	0