ANEWR

Environmental Protection Department
2nd floor, West Wing
Island West Transfer Station
88 Victoria Road
Kennedy Town
Hong Kong

Your reference:

Our reference: HKEPD259/50/110127

Date: 13 November 2024

Attention: Ms Kins Lo

BY EMAIL & POST
(email: wklo@epd.gov.hk)

Dear Sirs

Quotation Ref. 23-02230
Provision of Independent Environmental Checker Consultancy Services for
West New Territories Landfill Extension
Decommissioning of Remaining Portion of Middle Ash Lagoon in Tsang Tsui
Monthly Dust Monitoring Report No.8

We refer to email of 12 October 2024 from Hong Kong Resources Recovery Park attaching the Monthly Dust Monitoring Report No.8 of the captioned.

We have no comments and hereby verify the captioned report in accordance with Clause 2.2 of the Environmental Permit (EP No. EP-01/618/2022) and Further Environmental Permit (FEP No. FEP-01/618/2022).

Should you have any queries, please do not hesitate to contact the undersigned or our Mr Kieran Lau at 2618 2831.

Yours faithfully
ANEWR CONSULTING LIMITED

James Choi
Independent Environmental Checker

CPSJ/LCCR/LHYK/thy

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ISO 9001 : 2015
Certificate No.: CC 3988

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EXECUTIVE SUMMARY

Introduction

1. This is the 8th Monthly Dust Monitoring Report for Contract No. EP/SP/186/21 "West New Territories Landfill Extension (WENTX)" at Nim Wan, Tuen Mun. This report summarized the monitoring results and audit findings of the EM&A programme in accordance with the Dust Monitoring Plan under clause 2.2 of the EP (EP/618/2022) and clause 2.2 of the FEP (FEP-01/618/2022) during the 8th reporting month covering 1 October to 31 October 2024.

Summary of Main Works Undertaken and Key Measures Implemented

1. The main works undertaken during the reporting period are as follows:

   - Backfilling Works (Commenced from March)

2. Implementation of the key mitigation measures during the reporting period are as follows:

   Air Quality

   - Dust Suppression by watering of construction area at least 10 times per day.
   - Provide covering of 50% open area with impervious materials of concrete paving.
   - Provision of pavement to the construction access road with concrete paving and provide wheel washing facility at the entrance and exit.
   - Vehicle washing facilities provided at vehicle exit point.

Summary of Exceedances, Investigation and Follow-Up

1. Exceedance of Action/Limit levels during the reporting month (1 October to 31 October 2024) and the investigation results and/or follow-up actions:

Air Quality

No Action/Limit Level exceedance for 1-hour TSP was recorded.

Complaint Handing, Prosecution and Public Engagement

No complaint/summons/prosecution were received during the reporting period.

Reporting Changes

No reporting change was recorded in the reporting month.

Future Key Issues

The key works or activities that will be anticipated in the next reporting period are as follows:

- Backfilling Works

INTRODUCTION

1.1 Background

1.1.1 Work Scope

1.1.1.1 Decommissioning of Remaining Portion of the Middle TTAL mainly involves site clearance, removal of asbestos pipes, minor levelling of Pulverized Fuel Ash (PFA) surface, covering of the levelled PFA surface with general fill and installation of temporary surface drainage system.

1.1.2 Environmental Impact Assessment Ordinance Requirements

Decommissioning of Remaining Portion of Middle TTAL

1.1.2.1 A Project Profile (PP) for the Decommissioning of Remaining Portion of Middle Ash Lagoon in Tsang Tsui (Register No. PP-649/2022) was submitted under the EIAO on 5 September 2022 for application for permission to apply directly for EP (DIR). The DIR was permitted by EPD on 3 October 2022. The EP for the proposed decommissioning works (Permit No. EP-618/2022) was subsequently granted by EPD on 24 October 2022.

Further Environmental Permit

1.1.2.2 Application to the Director of Environmental Protection under Section 12 of the EIAO for the Further Environmental Permits (FEP) of the Decommissioning of Remaining Portion of Middle TTAL has been arranged and HKRRP should take up the responsibility of the EP Holder the Decommissioning of Remaining Portion of Middle TTAL upon obtaining of the FEPs.

1.1.3 Project Organizations

Different Parties with different levels of involvement in the project organization include:

- Service Manager – ARUP
- Independent Environmental Checker (IEC) – ANewR Consulting Limited (ANewR)
- Contractor – Hong Kong Resources Recovery Park (HKRRP)

1.1.4 The key contacts of the Project are shown in ***Table 1.1***.

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.	Email
ARUP	Services Manager	Mr. Thomas Wong	5932 6119	thomas-kh.wong@arup.com
ANEWR	Independent Environmental Checker	Mr. James Choi	2618 2831	jpschoi@anewr.com
HKRRP	Contractor	Mr. Kenneth Lau	9315 4944	chiwai.lau@cohl.com

2 AIR QUALITY

2.1 General

2.1.1 With the implementation of recommended mitigation measures, no adverse environmental impacts during the decommissioning phase would be anticipated. Due to the relatively close distance and public use nature of ASR3 to the Project site, dust monitoring during the decommissioning phase of the Project is proposed to ensure the recommended mitigation measures, from the project Environmental Management Plan are implemented properly.

2.2 Monitoring Location

2.2.1 The proposed dust monitoring location is shown in ***Table 2.1***. A site visit has been conducted on 28 December 2023 and after discussion with the management representative of the Tsang Tsui Columbarium, access authorization was rejected due to unsuitable conditions for equipment installation and lack of power supply.

Table 2.1 Description of Dust Monitoring Locations

Sensitive Receiver ID	Monitoring Parameters
ASR3	1-hr TSP

2.2.2 Alternative monitoring location is proposed, the following criteria, as far as practicable, have been considered and followed:

- At the site boundary or such location close to the major dust emission source;
- Close to the sensitive receptors; and
- Account for the prevailing meteorological conditions

2.2.3 An alternative location has been sought and proposed to the site boundary of the Middle Tsang Tsui Ash Lagoon and shown in ***Table 2.2***. It is proposed to relocate the monitoring location (north facing) to the site boundary of Middle Tsang Tsui Ash Lagoon and at location avoid the burner emission from the Columbarium (east facing). This proposed monitoring location is approximately 10 meters away from the Tsang Tsui Columbarium- Garden of Remembrance. Both locations are situated to the north-west of the site boundary and experiencing the same prevailing meteorological conditions. The original monitoring location and proposed alternative monitoring location was presented in ***Appendix A***.

Table 2.2 Description of Alternative Dust Monitoring Locations

Sensitive Receiver ID	**Monitoring Parameters**
ASR3 Alternative	1-hr TSP

2.2.4 When positioning the sampler, the following points shall be noted:

- horizontal platform with appropriate support to secure the samplers against gusty wind should be provided;
- no two samplers should be placed less than 2 meters apart;
- the distance between the sampler and an obstacle, such as buildings, must be at least twice the height that the obstacle protrudes above the sampler;
- a minimum of 2 metres separation from walls, parapets and penthouses is required for rooftop samplers;
- a minimum of 2 metres separation from any supporting structure, measured horizontally is required;
- no furnace or incinerator flue is nearby;
- airflow around the sampler is unrestricted;
- the sampler is more than 20 metres from the drip-line;

- any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring;
- permission must be obtained to set up the samplers and to obtain access to the monitoring stations; and
- secured supply of electricity is needed to operate the samplers.

2.3 Air Quality Parameters

2.3.1 Monitoring of the Total Suspended Particulate (TSP) levels shall be carried out to ensure that any deteriorating air quality could be readily detected and timely action be taken to rectify the situation. 1-hour TSP monitoring shall be conducted and the measurement is to indicate the impacts of construction dust on air quality. The TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, USA, Chapter 1 (Part 50), ***Appendix B***. Upon approval by the IEC, 1-hour TSP levels can be measured by direct reading methods which are capable of producing comparable results as that by the high-volume sampling method, to indicate short event impacts.

2.3.2 All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and other special phenomena and work progress of the concerned site etc. shall be recorded down in details.

2.4 Monitoring Equipment

2.4.1 High volume sampler (HVS) in compliance with the following specifications shall be used for carrying out the 1-hr monitoring:

- 0.6-1.7 m3/min (20-60 SCFM) adjustable flow range;
- Equipped with timing/control device with+/-5minutesaccuracyfor24hours operation;
- installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
- capable of providing a minimum exposed area of 406 cm2 (63 in2);
- flow control accuracy: +/- 2.5% deviation over 24-hr sampling period;
- equipped with a shelter to protect the filter and sampler;
- incorporated with an electronic mass flow rate controller or other equivalent devices;
- equipped with a flow recorder for continuous monitoring;
- provided with a peaked roof inlet;
- incorporated with a manometer;
- able to hold and seal the filter paper to the sampler housing at a horizontal position; ▪
- easy to change the filter.

2.4.2 Sufficient number of HVSs with an appropriate calibration kit are available for carrying out the baseline monitoring, regular impact monitoring and ad hoc monitoring when necessary. The HVSs shall be equipped with an electronic mass flow controller and be calibrated against a traceable standard at regular intervals. All the equipment, calibration kit, filter papers, etc. shall be clearly labeled.

2.4.3 Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognised primary standard and be calibrated annually. The calibration data shall be properly documented for future reference. All the data should be converted into standard temperature and pressure condition. The flow-rate of the sampler before and after the sampling exercise with the filter in position shall be verified to be constant and be recorded down in the data sheet.

2.4.4 If it is necessary to proposes to use a direct reading dust meter to measure 1-hr TSP levels, sufficient information to the Design Checker and IEC to prove that the instrument is capable of achieving a comparable result as that of the HVS and may be used for the 1-hr sampling. The instrument should also be calibrated regularly basis.

2.4.5 In consideration of the safety concerns of setting up wind sensor at 10m above ground, Contractor proposed alternative method to obtain representative wind data. Meteorological information as extracted from "the Hong Kong Observatory Lau Fau Shan Station" is alternative method to obtain representative wind data. Lau Fau Shan Station is located nearby the Project site. Moreover, Lau Fau Shan station is located at 31m above mean sea level which in compliance with the general setting up requirement. This station can also provide other meteorological information include air temperature, relative humidity, wind direction, wind speed and mean sea level pressure. Adoption of meteorological information from Hong Kong Observatory is a common alternative method for a lot of EM&A projects in Hong Kong.

2.5 Laboratory Measurement / Analysis

2.5.1 A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments, to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.

2.5.2 If a site laboratory is set up or a non-HOKLAS accredited laboratory is hired for carrying out the laboratory analysis, the laboratory equipment shall be approved by the Design Checker and IEC and the measurement procedures (first measurement) shall be witnessed by the Design Checker and IEC.

2.5.3 Filter paper of size 8"x10" shall be labelled before sampling. It shall be a clean filter paper with no pin holes, and shall be conditioned in a humidity-controlled chamber for over 24-hr and be pre-weighed before use for the sampling.

2.5.4 After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper is then returned to the laboratory for reconditioning in the humidity-controlled chamber followed by accurate weighing by an electronic balance with a readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard. All the collected samples shall be kept in a good condition for 6 months before disposal.

2.6 Baseline Monitoring

2.6.1 Baseline monitoring at the designated monitoring location for at least 14 consecutive days prior to the commencement of the construction works to obtain 1-hour sampling which shall be carried out 3 times per day for 1-hr TSP. During the baseline monitoring, there should not be any decommissioning construction or dust generation activities in the vicinity of the monitoring stations. Baseline air quality was conducted at the air quality monitoring station during the period of 26 January to 8 February 2024. The monitoring result for average 1-hr TSP concentration is 125 µg/m3 (while Min: 51µg/m3 and Max: 348µg/m3).

2.6.2 Impact monitoring was be carried out during the course of the Works. For regular impact monitoring for 1-hr TSP monitoring, the sampling frequency of at least three times in every six-days for 1-hr TSP during normal construction works period. The copies of certificates are shown in ***Appendix B*.**

2.6.3 In case of non-compliance with the dust criteria, more frequent monitoring exercise, as specified in the Action Plan in ***Section 2.8*,** shall be conducted within 24 hours after the result is obtained. The additional monitoring shall be continued until the excessive dust emission or the deterioration in air quality is rectified.

2.7 Event and Action

2.7.1 The baseline monitoring results form the basis for determining the air quality criteria for the impact monitoring and compare the impact monitoring results with air quality criteria set up for 1-hour TSP.

Table 2.3 shows the dust criteria, namely Action and Limit levels to be used. Should non-compliance of the air quality criteria occur, the Design Checker, IEC, and the Contractor shall undertake the relevant action in accordance with the Action Plan in ***Appendix C.***

Table 2.3 Action and Limit Levels for Dust Impact

Parameters	Action Level	Limit Level
1-hour TSP Level in µg/m3	331	500

2.8 Summary of Potential Environmental Impacts and Mitigation Measures

2.8.1 The potential environmental impacts and proposed mitigation measures to be incorporated during the decommissioning phase of the Project are summarized in ***Appendix D***, which would be included in the construction contract document. The IEC would supervise and monitor the implementation of these measures by the Contractor. Upon completion of the decommissioning phase, the Project Site will be an open area with no human activity or equipment in operation, adverse environmental impact is not expected, and mitigation measures not considered to be required.

2.9 Results and Observations

2.9.1 All 1-hour TSP monitoring was conducted as scheduled in the reporting month. The monitoring schedule is shown in ***Appendix E.***

2.9.2 The air temperature, precipitation and the relative humidity data was extracted from “the Hong Kong Observatory Lau Fau Shan Station”. The weather information for the reporting month is summarized in ***Appendix F.***

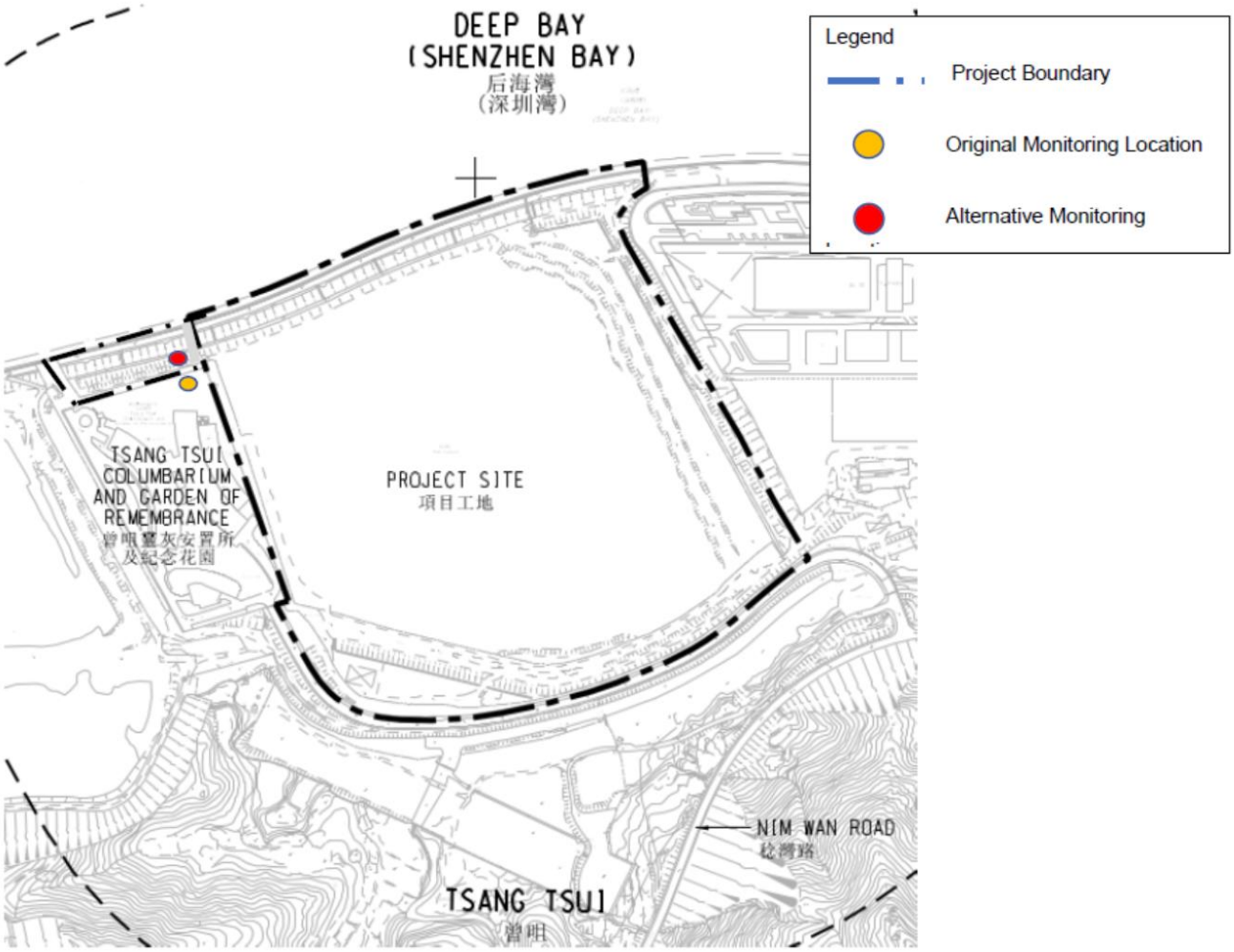
2.9.3 The monitoring data and graphical presentation of 1-hour TSP monitoring results are shown in ***Appendix G*** respectively.

2.9.4 No Action / Limit Level exceedance was recorded for all 1-hour TSP monitoring in the reporting month.

2.9.5 No Complaint / Enquiry was received in the reporting period.

Appendix A
THE ORIGINAL MONITORING LOCATION AND PROPOSED ALTERNATIVE MONITORING LOCATION

Appendix A - The Original Monitoring Location and Proposed Alternative Monitoring Location



Appendix B
THE CALIBRATION CERTIFIATES

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: MR BEN TAM	WORK ORDER	: HK2404344
CLIENT	: ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING		
ADDRESS	: RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T.	SUB-BATCH	: 1
		DATE RECEIVED	: 25-JAN-2024
		DATE OF ISSUE	: 5-FEB-2024
PROJECT	: ----	NO. OF SAMPLES	: 1
		CLIENT ORDER	----

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.
- Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories	*Position*
Richard Fung	Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

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Tel. +852 2610 1044 Fax. +852 2610 2021 www.alsglobal.com

WORK ORDER : HK2404344
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : ----

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2404344-001	S/N: 366418 (EQ108)	AIR	25-Jan-2024	S/N: 366418

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	366418
Equipment Ref:	EQ108

Standard Equipment:

Standard Equipment:	Higher Volume Sampler (TSP)
Location & Location ID:	Site boundary of Middle Tsang Tsui Ash Lagoon
Equipment Ref:	HVS 022
Last Calibration Date:	16 January 2024

Equipment Verification Results:

Verification Date: 16 January 2024

Date	Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in ug/m³ (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
16-Jan-24	1hr 14min	12:07 ~ 13:21	18.7	1022.1	2004.6	101333	1373.1
16-Jan-24	1hr 07min	13:40 ~ 14:47	18.7	1022.1	1604.7	78101	1162.2
16-Jan-24	1hr 07min	14:49 ~ 15:56	18.7	1022.1	464.8	21842	325.0

Sensitivity Adjustment Scale Setting (Before Calibration) 685 (CPM)

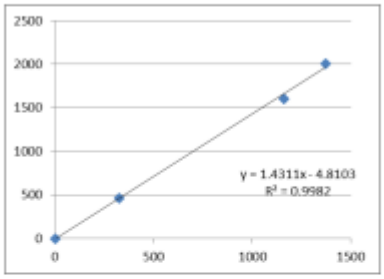
Sensitivity Adjustment Scale Setting (After Calibration) 685 (CPM)

Linear Regression of Y or X

Slope (K-factor): 1.4311 (μg/m³)/CPM

Correlation Coefficient (R) 0.9990

Date of Issue 25 January 2024



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 1.4311 (μg/m³)/CPM should be apply for TSP monitoring

*If R<0.5, repair or re-verification is required for the equipment

Operator : Gary Ng Signature : Date : 25 January 2024

QC Reviewer : Ben Tam Signature : Date : 25 January 2024

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location : Site Boundary of Middle Ash Lagoon — Date of Calibration: 12 Aug 24
Location ID : AM(D)7a — Next Calibration Date: 12 Nov 24
Model:TISCH High Volume Air Sampler TE-5170 — Technician: Gary Ng

CONDITIONS

Sea Level Pressure (hPa)	1004.1	Corrected Pressure (mm Hg)	753.075
Temperature (°C)	29.2	Temperature (K)	302

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.13163
Model->	5025A	Qstd Intercept ->	-0.03523
Serial # ->	1941		

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6.10	6.10	12.2	1.636	48	47.12	Slope = 21.7748
13	4.90	4.90	9.8	1.468	44	43.19	Intercept = 11.4494
10	3.80	3.80	7.6	1.295	40	39.26	Corr. coeff. = 0.9931
7	2.40	2.40	4.8	1.032	36	35.34	
5	1.50	1.50	3.0	0.820	29	28.47	

Calculations :

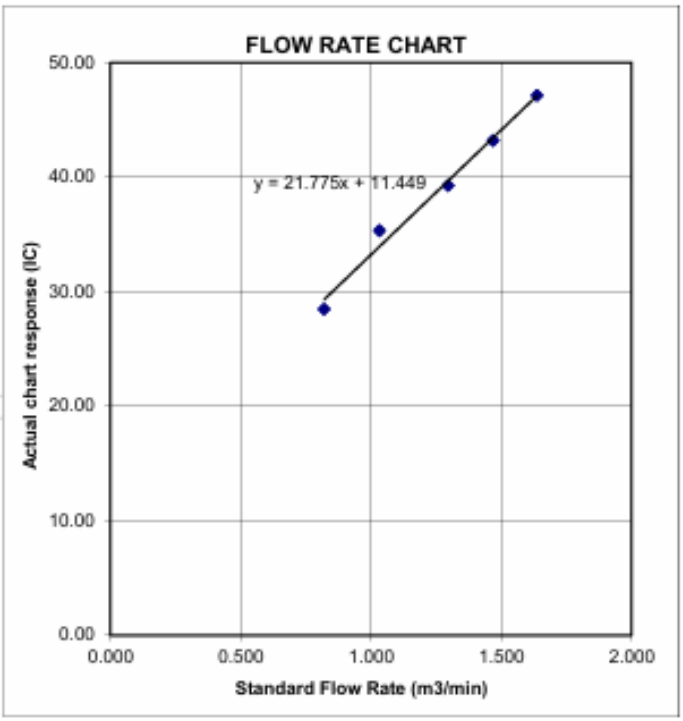
Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart respones
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K
Pstd = actual pressure during calibration (mm Hg

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure



TISCH Environmental

RECALIBRATION DUE DATE:
December 15, 2024

Certificate of Calibration

Calibration Certification Information

Cal. Date:	December 15, 2023	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 748.5	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **1941**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4590	3.2	2.00
2	3	4	1	1.0360	6.4	4.00
3	5	6	1	0.9260	8.0	5.00
4	7	8	1	0.8840	8.9	5.50
5	9	10	1	0.7290	12.9	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9907	0.6790	1.4106	0.9957	0.6825	0.8878
0.9864	0.9522	1.9949	0.9914	0.9570	1.2556
0.9843	1.0630	2.2304	0.9893	1.0684	1.4037
0.9831	1.1121	2.3393	0.9881	1.1178	1.4723
0.9778	1.3413	2.8213	0.9828	1.3481	1.7756
QSTD	**m=**	**2.13163**	**QA**	**m=**	**1.33479**
	b=	**-0.03523**		**b=**	**-0.02217**
	r=	**0.99999**		**r=**	**0.99999**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

For subsequent flow rate calculations:

Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

Standard Conditions

Tstd:	298.15 °K
Pstd:	760 mm Hg

Key

ΔH: calibrator manometer reading (in H2O)
ΔP: rootsmeter manometer reading (mm Hg)
Ta: actual absolute temperature (°K)
Pa: actual barometric pressure (mm Hg)
b: intercept
m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

www.tisch-env.com
TOLL FREE: (877)263-7610
FAX: (513)467-9009

Appendix C
EVENT / ACTION PLAN FOR DUST IMPACT

Event	Action		
	IEC	Services Manager	Contractor
Action level exceedance for one sample	• Check monitoring data and Contractor's working methods	• Notify Contractor for the identification of cause	• Rectify any unacceptable practice • Amend working methods if appropriate
Action Level exceedance for two or more consecutive samples	• Review monitoring data submitted by Contractor • Review the investigation finding submitted by Contractor and check the Contractor's working method • Review the proposed remedial measures by Contractor and advise SM accordingly • Supervise the implementation of remedial measures	• Confirm receipt of notification of exceedance in writing • Require Contractor to propose remedial measures for the analysed dust problem • Ensure remedial measures properly implemented	• Rectify any unacceptable practice • Amend working methods if appropriate • Submit proposals for remedial actions to IEC within 3 working days of notification • Implement the agreed proposals • Amend proposal if appropriate
Limit level exceedance for one sample	• Review monitoring data submitted by Contractor • Discuss amongs SM, Leader and Contractor on the potential remedial actions. • Supervise the implementation of remedial measure.	• Confirm receipt of notification of exceedance in writing • Require Contractor to propose remedial measures for the analysed dust problem • Ensure remedial measures properly implemented	• Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC within 3 working days of notification • Implement the agreed proposals • Amend proposal if appropriate
Limit level exceedance for two or more consecutive samples	• Review monitoring data submitted by Contractor • Discuss amongs SM, and Contractor on the potential remedial actions. • Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise SM accordingly • Supervise the implementation of remedial measures.	• Require Contractor to propose remedial measures for the analysed dust problem • Ensure remedial measures properly implemented; • If exceedance continues, consider what activity of the work is responsible and instruct Contractor to stop that activity of work until the exceedance is abated	• Take immediate action to avoid further exceedance; • Submit proposals for remedial actions to IEC within 3 working days of notification; • Implement the agreed proposals; • Resubmit proposals if problem still not under control; • Stop the relevant portion of works as determined by the Contractor until the exceedance is abated.

Appendix D
SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURE

Potential Environmental Impacts	Mitigation Measures	Implementation Agent
Decommissioning Phase		
Air Quality (Construction Dust)	Dust control and suppression measures stipulated in the *Air Pollution Control (Construction Dust) Regulation* should be implemented to control dust emissions from the Project Site. Relevant dust control and suppression measures are listed below: • Dust Suppression by watering of construction area at least 10 times per day; • Provide covering of 50% of open area with impervious materials or concrete paving; • Provision of pavement to construction access road with concrete paving and provide wheel washing facility at entrance and exit; • Skip hoist for material transport should be completely enclosed by impervious sheeting; • Vehicle washing facilities should be provided at every vehicle exit point; • The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcore surfaces; • Where a site boundary adjoining a road, streets or other areas accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length except for a site entrance or exit; • For site boundary near ASR3, hoarding of higher than 2.4m high from ground level should be provided; • Every main construction access road should be paved with concrete and kept clear of dusty materials or sprayed with water so as to maintain the entire road surface wet; • The portion of road leading only to a construction site that is within 30m of a designated vehicle entrance or exit should be kept clear of dusty materials; • Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the 3 sides; • All dusty materials should be sprayed with water prior to any loading,	Contractor
	unloading or transfer operation so as to maintain the dusty materials wet; • Open stockpiles should be avoided or covered. Where possible prevent placing dusty material storage piles near ASRs; • Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites; • The load of dusty materials carried by vehicles leaving a construction site should be covered entirely by clean impervious sheets to ensure dusty materials do not leak from the vehicle; • Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading points, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly during dry periods/seasons; • Imposition of speed limit for vehicles on unpaved site roads – the recommended limit is 10 km/hr; • Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs; and • Setting up of an environmental auditing program to monitor the construction activities in order to enforce controls and modify the method of works in the event that dusty conditions arise.	

APPENDIX E
THE MONITORING SCHEDULE

Impact Monitoring Schedule

Date		Air Quality Monitoring
		1-Hour TSP
Tue	1- Oct -24	
Wed	2- Oct -24	✓
Thu	3- Oct -24	
Fri	4- Oct -24	✓
Sat	5- Oct -24	
Sun	6- Oct -24	
Mon	7- Oct -24	✓
Tue	8- Oct -24	
Wed	9- Oct -24	
Thu	10- Oct -24	
Fri	11- Oct -24	
Sat	12- Oct -24	✓
Sun	13- Oct -24	
Mon	14- Oct -24	
Tue	15- Oct -24	✓
Wed	16- Oct -24	
Thu	17- Oct -24	
Fri	18- Oct -24	✓
Sat	19- Oct -24	
Sun	20- Oct -24	
Mon	21- Oct -24	✓
Tue	22- Oct -24	
Wed	23- Oct -24	
Thu	24- Oct -24	✓
Fri	25- Oct -24	
Sat	26- Oct -24	✓
Sun	27- Oct -24	
Mon	28- Oct -24	
Tue	29- Oct -24	
Wed	30- Oct -24	✓
Thu	31- Oct -24	

✓	Monitoring Day
	Sunday or Public Holiday

Appendix E
THE WEATHER INFORMATION FOR THE REPORTING MONTH

Date		Weather	Total Rainfall (mm)	Lau Fau Shan Station			
				Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction
1-Oct-24	Tue	Fine, very hot during the day	0	29.9	34	66.7	N
2-Oct-24	Wed	Dry with sunny periods.	0	26.7	30	62.5	N
3-Oct-24	Thu	Mainly fine and dry.	0	25.8	22	56.5	N
4-Oct-24	Fri	Dry with sunny periods.	0	26.8	13.7	53	NE
5-Oct-24	Sat	Moderate north to northeasterly winds.	0	28.3	11.5	61	NE
6-Oct-24	Sun	Mainly fine and dry.	0	29.1	8.7	67.5	E/NE
7-Oct-24	Mon	Very hot with sunny periods in the afternoon.	0	29.8	11.2	66.5	E/NE
8-Oct-24	Tue	Mainly fine, dry and hot in the afternoon.	0	29	13.7	59.5	NE
9-Oct-24	Wed	Sunny intervals during the day.	Trace	26.5	15	70.5	E
10-Oct-24	Thu	Dry with sunny periods.	Trace	27.2	11.2	66.0	E/NE
11-Oct-24	Fri	Mainly fine, dry and hot in the afternoon.	8.7	26.9	10.8	64.7	E/NE
12-Oct-24	Sat	Cloudy periods tonight.	0	28.7	12.7	69.1	E
13-Oct-24	Sun	Moderate easterly winds.	0	29.2	14.2	68.5	E
14-Oct-24	Mon	Mainly fine. Moderate easterly winds.	0	24.2	11.2	72	E
15-Oct-24	Tue	Mainly fine in the afternoon.	0	29.3	9.2	73.5	E
16-Oct-24	Wed	Sunny periods in the afternoon.	Trace	29.9	14	70	E
17-Oct-24	Thu	Mainly cloudy tonight.	Trace	28.9	16	71.2	E
18-Oct-24	Fri	Mainly cloudy tonight. Moderate easterly winds.	Trace	28.8	12	78.5	E
19-Oct-24	Sat	Mainly cloudy tonight.	0	29.5	8.7	74.2	W/SW
20-Oct-24	Sun	Sunny periods in the afternoon.	1.9	29.4	21.5	74.5	E
21-Oct-24	Mon	Mainly cloudy. Sunny intervals during the day.	Trace	Maintance	11	Maintance	W/NW
22-Oct-24	Tue	Moderate east to northeasterly winds.	0	Maintance	17	Maintance	N
23-Oct-24	Wed	Sunny periods in the afternoon.	0	25.1	22	64.5	N
24-Oct-24	Thu	Mainly cloudy tonight.	0	24	24	52	N
25-Oct-24	Fri	Mainly cloudy tonight. Moderate easterly winds.	0	25.5	25	50	N
26-Oct-24	Sat	Sunny periods in the afternoon.	0.7	27.3	17.8	67.5	N
27-Oct-24	Sun	Mainly cloudy tonight.	Trace	26.7	11	69.7	NE
28-Oct-24	Mon	Cloudy periods tonight.	Trace	25.7	16.5	69.2	NE
29-Oct-24	Tue	Moderate east to northeasterly winds	Trace	25.5	11.5	74.0	E/NE
30-Oct-24	Wed	Sunny periods.	0	26	11.2	66.5	N/NE
31-Oct-24	Thu	One or two light rain patches at night.	0	26.1	19.5	61.0	N/NW

Appendix F
THE MONITORING DATA AND GRAPHICAL PRESENTATION OF 1-HOUR TSP MONITORING RESULT

Impact Monitoring Results for 1-hour TSP at Location ASR3

Date	Start Time	1-hour TSP (μg/m³)			Action Level (μg/m³)	Limit Level(μg/m³)
		1st reading	2nd reading	3rd reading		
2 Oct 24	10:05	42	48	41	331	500
4 Oct 24	10:08	51	44	36	331	500
7 Oct 24	10:02	44	54	29	331	500
12 Oct 24	10:00	51	64	31	331	500
15 Oct 24	09:35	58	65	49	331	500
18 Oct 24	14:44	144	188	255	331	500
21 Oct 24	14:35	62	78	41	331	500
24 Oct 24	09:47	84	100	123	331	500
26 Oct 24	10:21	68	80	49	331	500
30 Oct 24	11:30	56	87	94	331	500

Graphical Plot for 1-hour TSP Monitoring Result at Location ASR3