

Water Supplies Department New Works Branch Construction Division 11 Tai Yip Lane Kowloon Bay Kowloon Hong Kong

Your reference:

Our reference:

HKWSD201/50/107630

Date:

29 October 2021

Attention: Mr Y M Chan

BY POST

Dear Sirs

Quotation No.: WQ/17/A071

Independent Environmental Checker for Water Supplies Department

- Proposed Desalination Plant in TKO Area 137 for Contract No. 13/WSD/16

Verification of Monthly EM&A Report No.38

We refer to emails of 25 and 28 October 2021 attaching Monthly EM&A Report No.38 for the captioned project prepared by the ET.

We have no further comment and hereby verify the captioned report in accordance with Clause 3.5 of the Environmental Permit no. EP-503/2015/A.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned or our Mr Louis Kwan 2618 2831.

Yours faithfully

ANEWR CONSULTING LIMITED

James Choi

Independent Environmental Checker

CPSJ/KSYL/Ismt





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## Contract No. 13/WSD/16

Mainlaying in Tseung Kwan O

# Monthly EM&A Report No. 38 (Period from 1 to 30 September 2021)

October 2021 (Rev. 0)

	Prepared by:	Certified by:
Name	Charlene Lai	Jacky Leung
Position	Environmental Team	Environmental Team Leader
Signature		K
Date:	14/10/2021	14/10/2021



# **Revision History**

0	1 <sup>st</sup> Submission	14 October 2021
Rev.	DESCRIPTION OF MODIFICATION	DATE

Appendix O

Academic Calendar(s)



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#### **EXECUTIVE SUMMARY**

#### Introduction

- A1. Penta-Ocean Concentric Joint Venture (POCJV) is contracted to carry out the Mainlaying in Tseung Kwan O under Contract No. 13/WSD/16 (hereinafter known as "the Project").
- A2. In accordance with the Environmental Monitoring and Audit (EM&A) Manual for the Project, EM&A works should be carried out by Environmental Team (ET), Acuity Sustainability Consulting Limited (ASCL), during the construction phase of the Project.
- A3. This is the 38<sup>th</sup> Monthly EM&A Report, prepared by ASCL, for the Project summarizing the monitoring results and audit findings of the EM&A programme at and around Tseung Kwan O (TKO) during the reporting period from 1 September 2021 to 30 September 2021.
- A4. The EM&A programme for this contract has covered environmental monitoring on construction noise level at selected NSRs and Contractor's environmental performance auditing in the aspects of construction dust, construction noise, water quality, waste management, Landscape and Visual and Ecology.

#### Summary of Main Works Undertaken & Key Mitigation Measures Implemented

A5. Key works carried out in this reporting period for the Project included the followings:

Location	Location	Works Conducted in the reporting month
Portion H of the Project Site	TKO 137 Pit B	TBM pipe jacking was conducted.
	Wan Po Rd – Workfront 1	Pipe trench excavation and pipe laying were in-progress.
	Wan Po Rd – Workfront 2	Pipe trench excavation and pipe laying were in-progress.
	Wan Po Rd – Workfront 3	Pipe trench excavation and pipe laying were in-progress.
	Wan Po Rd – Workfront 4	Pipe trench excavation and pipe laying were in-progress.
Portion J of the	Wan Po Rd – Pit A	Pit excavation and ELS works were in-progress.
Project Site	Wan Po Rd – Pit B	<ul> <li>Grouting works were in-progress</li> <li>Preparation works for TBM pipe jacking were conducted.</li> </ul>
	Wan Po Rd – Pit D	<ul> <li>Pit excavation and ELS works were in- progress.</li> </ul>
	Landfill Stage 1 – Area A	Construction works for 900HSV chamber were conducted.
	Landfill Stage 1 – Area B	Trench excavation and pipe laying were in-progress.



Location	Location	Works Conducted in the reporting month
	Cycle Track – Workfront 2	Trench excavation and pipe laying were in-progress.
	Roundabout – Pit G1A	Sheet piling works for trenchless working pit were conducted.
	Roundabout – Pit J1A	<ul> <li>Trenchless works by hand-shield were conducted.</li> </ul>
	Velodrome – Pit L-M	Trench excavation and pipe laying works were conducted.
	Velodrome – Pit M	Rescue pit construction works were conducted.
	Velodrome – Pit N-O	Trial trench for alternative method was conducted.
	Velodrome – Pit P	TBM pipe jacking works were conducted.
	Mau Wu Tsai – Workfront 1	<ul> <li>Trench excavation and pipe laying works were conducted.</li> <li>Construction works of Washout</li> </ul>
		Chamber were conducted.
	Mau Wu Tsai – Workfront 2	Laying of branch pipe was conducted.
	Ling Hong Road - Pit Y	Construction of trenchless pit was completed.
	Ling Hong Road - Pit R	Trenchless hand-shield pipe jacking was conducted.
	Po Lam Road South Stage-	Trench backfilling and reinstatement works were conducted.
	Po Lam Road (D1)	Trench backfilling and reinstatement works were conducted.
	Po Lam Road (B5)	Trench backfilling and reinstatement works were conducted.
	Po Lam Road (A1)	Trench excavation and pipe laying works were conducted.
	Tsui Lam Road	Trial pit works were conducted.
	TKO Primary Service Reservoir	Trench excavation and pipe laying works were conducted.
	110301 VOII	WOINS WEIE COHUUCIEU.

- A6. The major environmental impacts brought by the above construction works include:
  - Construction dust and noise generation from saw cutting of concrete surface, mainlaying of pipes, TBM break through, sheetpiling works, excavation and drilling works
  - Waste generation from the construction activities
  - Impact on water quality from construction activities
- A7. The key environmental mitigation measures implemented for the Project in this reporting period associated with the above construction works include:
  - Reduction of construction dust generation from saw cutting of concrete surface, mainlaying of pipes, TBM break through, sheetpiling works,



excavation and drilling works through regular water spraying and covering dusty materials with tarpaulin sheet

- Reduction of noise from equipment and machinery on-site
- Sorting and storage of general refuse and construction waste
- Treatment of wastewater through water treatment facilities before discharge

#### Summary of Exceedance & Investigation & Follow-up

- A8. Noise monitoring was conducted in the reporting month for NSR4 Creative Secondary School on 2, 10, 16, 23 and 30 September 2021 as construction works were conducted within 300m to the noise sensitive receiver. No project-related exceedance of the Action and Limit Level was recorded during the reporting period.
- A9. No examinations were scheduled in the reporting month for NSR4 Creative Secondary School. Academic School Calendar can be found in **Appendix O**.

#### **Complaint Handling and Prosecution**

- A10. No project-related environmental complaint was received in the reporting month.
- A11. Neither notifications of summons nor prosecution was received for the Project in the reporting month.

#### **Reporting Change**

A12. There were no changes reported that may affect the on-going EM&A programme.

#### **Summary of Upcoming Key Issues and Key Mitigation Measures**

A13. Key works in October 2021 (the next reporting month) for the Project will include the followings:

Location	Location	Forecast Works in Next Reporting  Month
Portion H of the Project Site	TKO 137 Pit B	TBM pipe jacking will be conducted.
	Wan Po Rd – Workfront 1	Trench excavation and pipe laying will be conducted.
	Wan Po Rd – Workfront 2	Trench excavation and pipe laying works will be conducted.
	Wan Po Rd – Workfront 3	Trench excavation and pipe laying works will be conducted.
Portion J of the Project Site	Wan Po Rd – Workfront 4	Trench excavation and pipe laying works will be conducted.
	Wan Po Rd – Pit A	Excavation and ELS works will be conducted.
	Wan Po Rd – Pit B	Preparation works for pipe jacking will be conducted.
	Wan Po Rd – Pit D	Excavation and ELS works will be conducted.



Location	Location	Forecast Works in Next Reporting  Month
	Landfill Stage 1 – Area A	900HSV Chamber construction works will be conducted.
	Landfill Stage 1 – Area B	Trench excavation and pipe laying works will be conducted.
	Cycle Track – Workfront 2	<ul> <li>Trench excavation and pipe laying works will be conducted.</li> </ul>
	Roundabout – Pit G1A	Pit excavation and ELS works will be conducted.
	Roundabout – Pit J1A	<ul> <li>Trenchless works by hand-shield will be continued.</li> </ul>
	Velodrome – Pit L-Pit M	Trench excavation and pipe laying works will be conducted.
	Velodrome – Pit M	Rescue pit construction works will be continued.
	Velodrome – Pit N- Pit O	Trench excavation and pipe laying works will be conducted.
	Velodrome – Pit P	TBM pipe jacking will be commenced.
	Ling Hong Road - Pit Y	Pipe laying in-between Pit R to Pit Y will be conducted.
	Ling Hong Road - Pit R	<ul> <li>Pipe laying in-between Pit R to Pit Y will be conducted.</li> </ul>
	Mau Wu Tsai – Workfront 1	Trench excavation and pipe mainlaying works will be conducted.
	Mau Wu Tsai – Workfront 2	Laying of branch pipe will be conducted.
	Po Lam Road South Stage-	Trench backfilling and reinstatement will be continued.
	Po Lam Road (D1)	Trench backfilling and reinstatement will be continued.
	Po Lam Road (B5)	Trench backfilling and reinstatement will be continued.
	Po Lam Road (A1)	<ul> <li>Trench excavation and pipe laying works will be conducted.</li> <li>Trench backfilling and reinstatement</li> </ul>
	TVO D	will be continued.
	TKO Primary Service Reservoir	Trench excavation and pipe laying works will be conducted.

- A14. The major environmental impacts brought by the above construction works will include:
  - Construction dust and noise generation of saw cutting of concrete surface, mainlaying of pipes, drilling activities, TBM break through and excavation works.
  - Waste generation from construction activities
  - Impact on water quality from construction activities
- A15. The key environmental mitigation measures for the Project in the coming reporting period associated with the above construction works will include:



- Reduction of construction dust generation of saw cutting of concrete surface, mainlaying of pipes, drilling activities and excavation works by regular water spraying and covering of dusty materials with screenings
- Reduction of noise from equipment and machinery on-site
- Sorting and storage of general refuse and construction waste
- Treatment of wastewater through water treatment facilities before discharge

#### 1. Basic Project Information

#### 1.1 Background

The proposed Desalination Plant at Tseung Kwan O (DPTKO) will produce potable water with an initial capacity of 135 million liters per day (MLD), expandable to an ultimate capacity of 270 MLD in the future to provide a secure and alternative fresh water resource complying with the World Health Organization (WHO) standards. The plant will adopt the Seawater Reverse Osmosis (SWRO) technology, which dominates the market due to its reliability and progressive reduction in cost as the technology advances.

Pursuant to the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection granted the Variation of Environmental Permit (No. EP-503/2015/A) to Water Supplies Department (WSD) for the Project on 26 January 2018.

The scope of the Contract may be considered in brief, to consist of the laying of about 10km long 1200mm diameter fresh water mains and the associated works along the alignment of the Project as shown with the overall view in **Appendix B.** 

#### 1.2 The Reporting Scope

This is the 38<sup>th</sup> Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 September 2021 to 30 September 2021.

#### 1.3 Project Organization

The Project Organization structure for Construction Phase is presented in **Figure 1.1**.



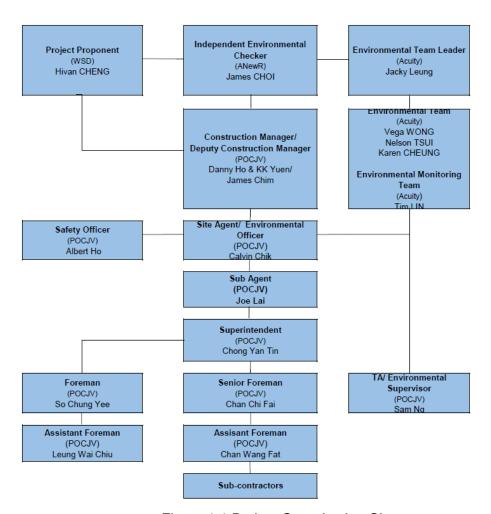


Figure 1.1 Project Organization Chart

Contact details of the key personnel are presented in Table 1.1 below:

Party	Position	Name	Telephone no.
Penta-Ocean - Concentric Joint Venture	Environmental Officer	Calvin Chik	9863 5630
Acuity Sustainability Consulting Limited	Environmental Team Leader	Jacky Leung	2698 6833
ANewR Consulting Limited	Independent Environmental Checker	James Choi	2618 2831



#### 1.4 Summary of Construction Works

Details of the major construction works undertaken in this reporting period are shown in **Table 1.2** and the construction works locations are shown **in Appendix B**. The construction programme is presented in **Appendix A**.

**Table 1.2 Summary of the Construction Works Undertaken during the Reporting Month** 

Location	Location	Works Conducted in the reporting month		
Portion H of the Project Site	TKO 137 Pit B	TBM pipe jacking was conducted.		
	Wan Po Rd – Workfront 1	Pipe trench excavation and pipe laying were in-progress.		
	Wan Po Rd – Workfront 2	Pipe trench excavation and pipe laying were in-progress.		
	Wan Po Rd – Workfront 3	Pipe trench excavation and pipe laying were in-progress.		
	Wan Po Rd – Workfront 4	Pipe trench excavation and pipe laying were in-progress.		
	Wan Po Rd – Pit A	Pit excavation and ELS works were in-progress.		
	Wan Po Rd – Pit B	<ul> <li>Grouting works were in-progress</li> <li>Preparation works for TBM pipe jacking were conducted.</li> </ul>		
	Wan Po Rd – Pit D	Pit excavation and ELS works were in- progress.		
	Landfill Stage 1 – Area A	Construction works for 900HSV chamber were conducted.		
Portion J of the Project Site	Landfill Stage 1 – Area B	Trench excavation and pipe laying were in-progress.		
	Cycle Track – Workfront 2	Trench excavation and pipe laying were in-progress.		
	Roundabout – Pit G1A	Sheet piling works for trenchless working pit were conducted.		
	Roundabout – Pit J1A	Trenchless works by hand-shield were conducted.		
	Velodrome – Pit L-M	Trench excavation and pipe laying works were conducted.		
	Velodrome – Pit M	Rescue pit construction works were conducted.		
	Velodrome – Pit N-O	Trial trench for alternative method was conducted.		
	Velodrome – Pit P	TBM pipe jacking works were conducted.		
	Mau Wu Tsai – Workfront 1	<ul> <li>Trench excavation and pipe laying works were conducted.</li> <li>Construction works of Washout Chamber were conducted.</li> </ul>		



Location	Location	Works Conducted in the reporting month
	Mau Wu Tsai – Workfront 2	Laying of branch pipe was conducted.
	Ling Hong Road - Pit Y	Construction of trenchless pit was completed.
	Ling Hong Road - Pit R	Trenchless hand-shield pipe jacking was conducted.
	Po Lam Road South Stage-	Trench backfilling and reinstatement works were conducted.
	Po Lam Road (D1)	Trench backfilling and reinstatement works were conducted.
	Po Lam Road (B5)	Trench backfilling and reinstatement works were conducted.
	Po Lam Road (A1)	Trench excavation and pipe laying works were conducted.
	Tsui Lam Road	Trial pit works were conducted.
	TKO Primary Service Reservoir	Trench excavation and pipe laying works were conducted.

A summary of the valid permits, licences, and or notifications on environmental protection for this Project is presented in **Table 1.3.** 

Table 1.3 Summary of the Status of Valid Environmental Licence, Notification, Permit and Documentations

Permit/ Licences/ Notification	Reference	Validity Period	Remarks
Variation of Environmental Permit	EP no.: EP-503/2015/A	Throughout the Contract	-
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation (Form NA)	Ref no.: 423775	Throughout the Contract	-
Chemical Waste Producer Registration	WPN: 5213-839-P3287-01	Throughout the Contract	-
Billing Account for Disposal of Construction Waste	A/C no.: 7029491	Throughout the Contract	-
Water Discharge Licence	WT00032336-2018	Until 31 Dec 2023	-
Construction Noise Permit (Wan Po Road, Wan O Road and Chun Yat Street)	GW-RE0277-21	Until 30 Sep 2021	-
Construction Noise Permit (Tseung Kwan O Area 137, N.T.)	GW-RE0383-21	Until 30 Sep 2021	-
Construction Noise Permit (Hong Kong Velodrome)	GW-RE0494-21	Until 16 Nov 2021	-

The status for all environmental aspects is presented **Table 1.4**.



Table 1.4 Summary of Status for Key Environmental Aspects under the EM&A Manual

Parameters	Status		
	Noise		
Baseline Monitoring  The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under VEP Condition 3.4.			
Impact Monitoring	On-going On-going		
	Waste Management		
Mitigation Measures in Waste Monitoring Plan On-going			
Landfill Gas			
Impact Monitoring On-going			
Environmental Audit			
Site Inspection	On-going On-going		

Other than the EM&A works by ET, regular environmental management meetings were conducted in order to enhance environmental awareness and closely monitor the environmental performance of the contractors.

The EM&A programme has been implemented in accordance with the recommendations presented in the approved EIA Report and the EM&A Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix C**.

#### 2. Noise Monitoring

#### 2.1 Monitoring Requirements

To ensure no adverse noise impact, noise monitoring is recommended to be carried out within 300m ravdius from the nearby noise sensitive receivers (NSRs), during construction phase. The NSRs selected as monitoring station are (i) NSR4 – Creative Secondary School, (ii) NSR24 – PLK Laws Foundation College, and (iii) NSR31 – School of Continuing and Professional Studies – CUHK respectively.

In accordance with the EM&A Manual, baseline noise level at the noise monitoring stations were established as presented in the Baseline Monitoring Report. Impact noise monitoring will be conducted once per week in the form of 30-minute measurements Leq, L10 and L90 levels recorded at each monitoring station between 0700 and 1900 on normal weekdays.

Referring to EM&A manual Section 4.1.2, the impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.

Impact monitoring for noise impact was conducted in the reporting month for NSR4 – Creative Secondary School on 2, 10, 16, 23 and 30 September 2021 as construction works were conducted within 300m to the noise sensitive receiver. Detailed monitoring results can be found in **Appendix G**.



No examinations were scheduled in the reporting month for NSR4 Creative Secondary School. Academic School Calendar can be found in **Appendix O**.

#### 2.2 Noise Monitoring Parameters, Time, Frequency

Impact noise monitoring was conducted weekly in the reporting period between 0700-1900 on normal weekdays. Construction works would follow the requirements as stipulated in the valid CNPs if works have to be conducted during 1900-0700 in all days or any time on Sundays or general holidays.

Construction noise level was measured in terms of the A-weighted equivalent continuous sound pressure level (LAeq). Leq 30min was used as the monitoring parameter for the time period between 0700 and 1900 on normal weekdays. **Table 2.1** summarizes the monitoring parameters, frequency and duration of the impact noise monitoring. The monitoring schedule is provided in **Appendix D**.

Table 2.1 Noise Monitoring Parameters, Time, Frequency and Duration

Time	Frequency Duration		Parameters
Daytime: 0700-1900	Once per week	Continuously in  Leq 5min/Leq 30min  (average of 6  consecutive Leq  5min)	L <sub>eq</sub> , L <sub>10</sub> & L <sub>90</sub>

#### 2.3 Noise Monitoring Locations

The monitoring locations should normally be made at a point 1m from the exterior of the NSRs building façade and be at a position 1.2m above the ground. A correction of +3dB(A) should be made to the free-field measurements.

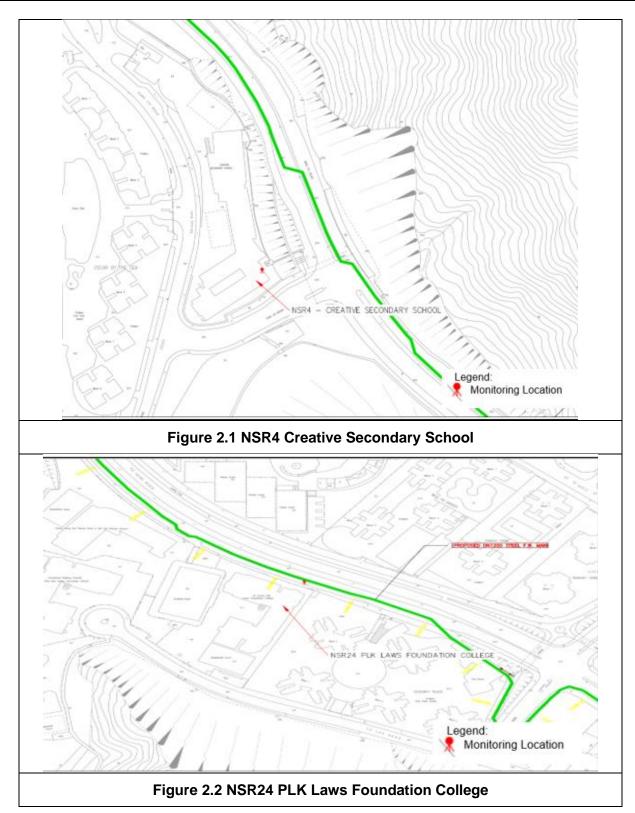
According to the environmental findings detailed in the EIA report and Baseline Monitoring Report, the designated locations for the construction noise monitoring are listed in **Table 2.2** below.

**Table 2.2 Noise Monitoring Location** 

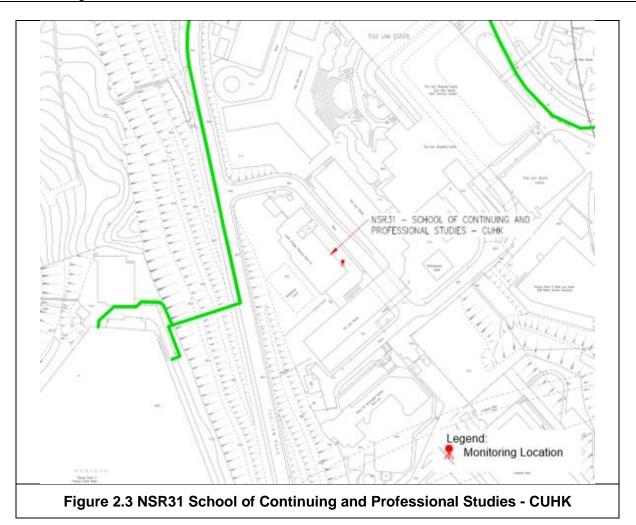
NSR ID	Noise Sensitive Receivers	Monitoring Location	Position
NSR 4	Creative Secondary School	Roof Floor	1 m from facade
NSR 24	PLK Laws Foundation College	Pedestrian Road on Ground Floor	Free-field
NSR 31	School of Continuing and Professional Studies - CUHK	Roof Floor	1 m from facade

Three noise monitoring locations for impact monitoring at the nearby sensitive receivers are shown in **Figure 2.1-2.3.** 









#### 2.4 Impact Monitoring Methodology

Integrated sound level meters were used for the noise monitoring. The meters were in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications. Immediately prior to and following each noise measurement the accuracy of the sound level meters were checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level before and after the noise measurements agree to within 1.0 dB(A). Calibration certificates of the instruments used are presented in **Appendix E**. Noise measurements were not made in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed would be checked with a portable wind speed meter capable of measuring the wind speed in m/s.



**Table 2.3 Impact Noise Monitoring Equipment** 

Equipment	Brand and Model	Serial Number	Date of Calibration	Calibration Certificate Expiry Date	Detection Limit
Sound Level Meter	Scarlet ST- 11D	820200	18/01/2021	17/01/2022	27-140 dB(A)
Sound Level Meter	NTi XL2	A2A- 13548-E0	12/12/2020	11/12/2021	30-130 dB(A)
Sound Level Meter	Lutron SL- 4033SD	I491835	07/12/2020	06/12/2021	30-130 dB(A)
Sound Level Meter Calibrator	Rion NC-74	34504770	17/11/2020	16/11/2021	Nil
Pocket Wind Meter Anemometer	Kestrel 1000 Wind Meter	Nil	Nil	Nil	Nil

#### 2.5 Action and Limit Levels

The Action/Limit Levels are in line with the criteria of Practice Note for Professional Persons (ProPECC PN 2/93) "Noise from Construction Activities – Non-statutory Controls" and Technical Memorandum on Environmental Impact Assessment Process issued by HKSAR Environmental Protection Department ["EPD"] under the Environmental Impact Assessment Ordinance, Cap 499, S.16 are presented in **Table 2.4.** 

Table 2.4 Action and Limit Levels for Noise

Time Period	Action Level	Limit Level (dB(A))		
0700-1900 on normal weekdays	When one documented complaint is received from any one of the noise sensitive receivers	<ul> <li>70 dB(A) for school and</li> <li>65 dB(A) during examination period</li> </ul>		
Notes:  (a) Limits specified in the GW-TM and IND-TM for construction and operation noise, respectively.				

If exceedances are found during noise monitoring, the actions in accordance with the Event and Action Plan will be carried out according to **Appendix F**.

#### 2.6 Monitoring Results and Observations

Referring to EM&A manual Section 4.1.2, impact monitoring for noise impact was conducted in the reporting month for NSR4 – Creative Secondary School on 2, 10, 16, 23 and 30 September 2021. Detailed monitoring results are presented in **Appendix G**.

No examinations were scheduled in the reporting month for NSR4 Creative Secondary School. Academic School Calendar can be found in **Appendix O**.

No construction works were conducted within 300m radius of NSR24 and NSR31. Thus, no monitoring works was carried at these two locations in the reporting month.



#### 3. WASTE MANAGEMENT

3.1 The waste generated from this Project includes inert construction and demolition (C&D) materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in Table 3.1. Details of cumulative waste management data are presented as a waste flow table in Appendix H.

Table 3.1 Quantities of waste generated from the Project

	Quantity					
			Non-inert C&D Materials			
Reporting period	Inert C&D Materials (in	Chemical Waste (in '000kg)	Others, e.g. General Refuse disposed at	fuse Recycled materials		6
	'000m3)	· • • • • • • • • • • • • • • • • • • •	Landfill (in '000m3)	Paper/card board (in '000kg)	Plastics (in '000kg)	Metals (in '000kg)
September-21	2.584	0.000	0.002	0.037	0.000	0.000



#### 4. LANDFILL GAS MONITORING

#### 4.1 Monitoring Requirement

In accordance with Section 11 of the EM&A Manual, monitoring of landfill gas is required for construction works within the 250m Consultation Zone. Part of the desalination plant and the indicative area of natural slope mitigation works fall within the SENT Landfill Extension Consultation Zone; and part of the 1,200 mm diameter fresh water mains along Wan Po Road falls within the SENT Landfill and SENT Landfill Extension Consultation Zones, TKO Stage II/III Restored Landfill and TKO Stage I Restored Landfill Consultation Zones.

#### 4.2 Monitoring Location

Monitoring of oxygen, methane, carbon dioxide and barometric pressure was performed for excavations at 1m depth or more within the consultation Zone. In this reporting period, 750 times of monitoring was recorded.

During construction of works within the consultation zones, excavations of 1m depth or more was monitored:

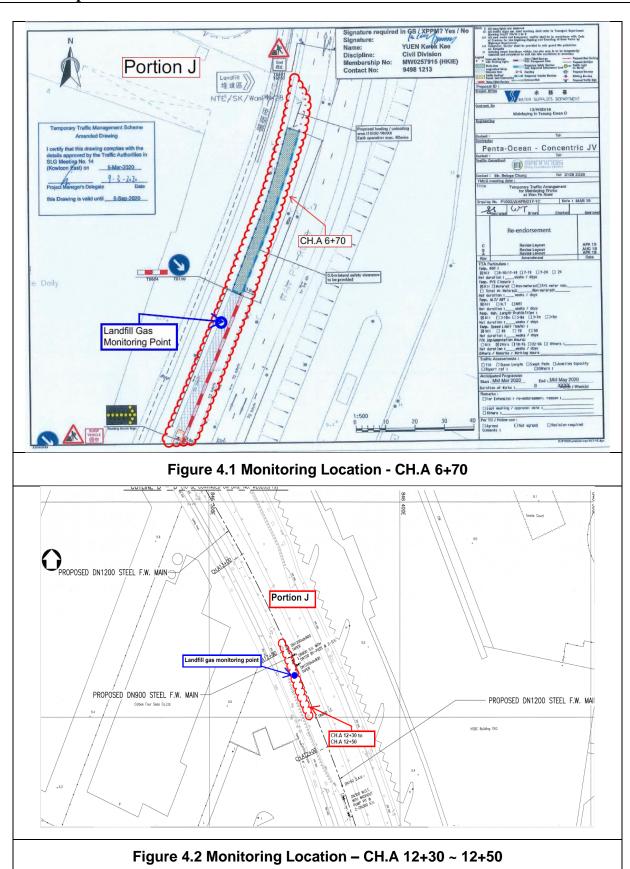
- At the ground surface before excavation commences;
- Immediately before any worker enters the excavation;
- At the beginning of each working day for the entire period when the excavation remains open; and
- Periodically through the working day whilst workers are in the excavation.

For excavations between 300mm and 1m deep, measurements should be carried out:

- Directly after the excavation has been completed; and
- Periodically whilst the excavation remains open.

The area required to be monitored for landfill gas in the reporting period are shown in **Figure 4.1** to **Figure 4.20**.







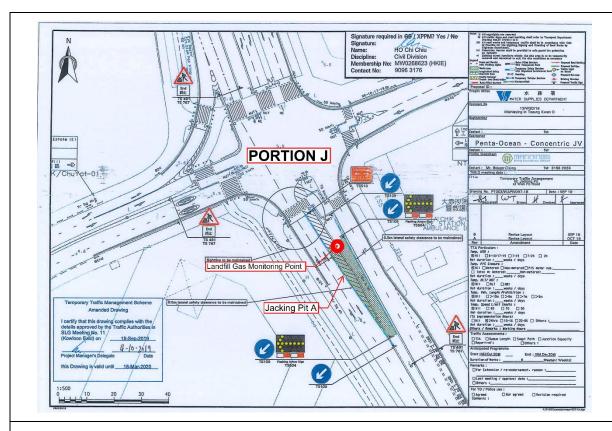


Figure 4.3 Monitoring Location – CH.A 13+50 ~ 14+00 (Pit A)

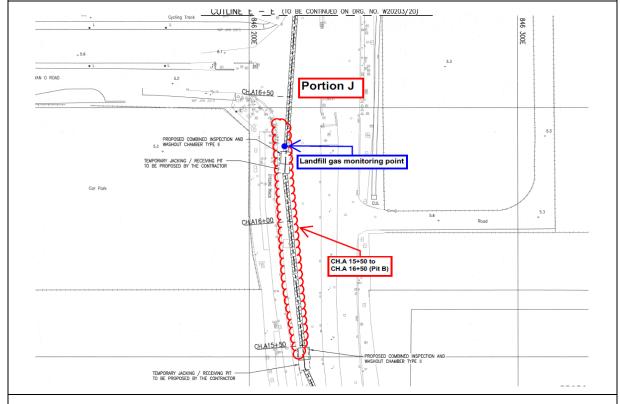
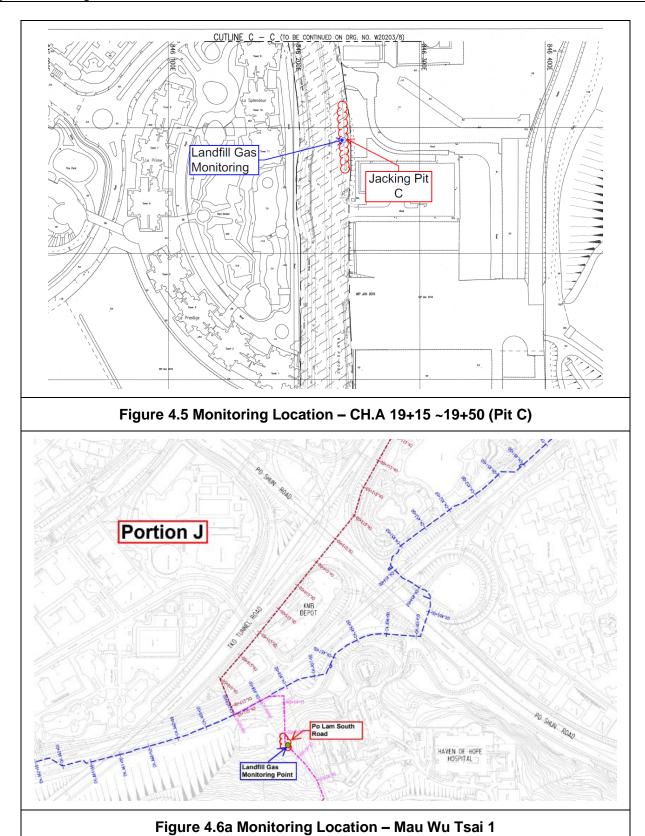


Figure 4.4 Monitoring Location – CH.A 15+50 ~16+50 (Jacking Pit B)







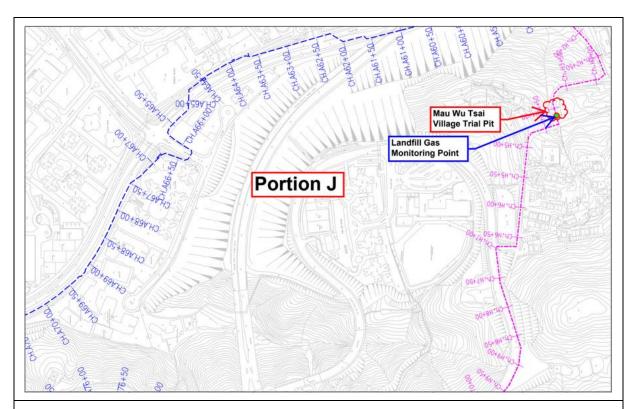


Figure 4.6b Monitoring Location - Mau Wu Tsai 2

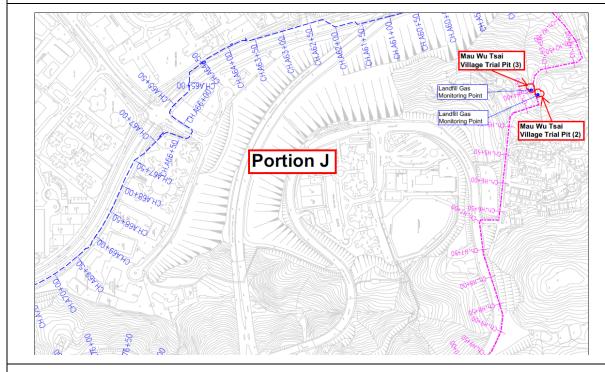


Figure 4.6c Monitoring Location - Mau Wu Tsai 3



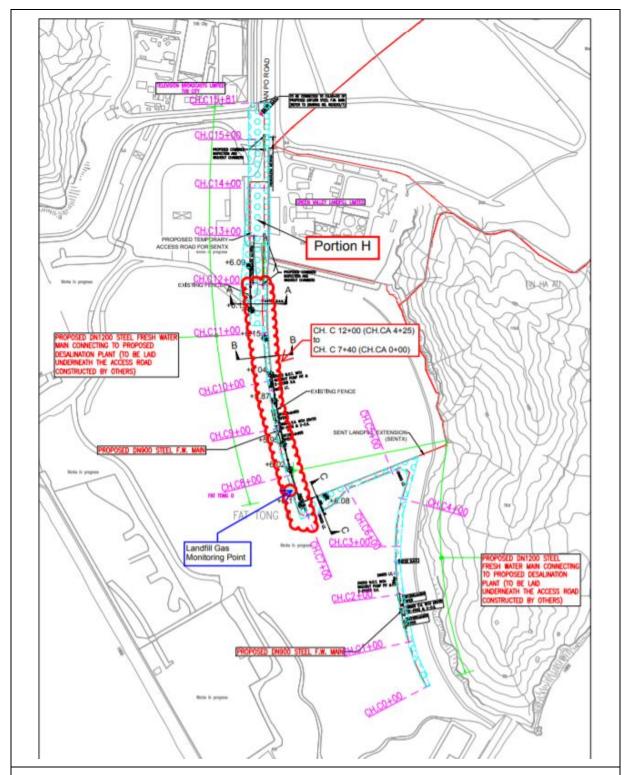
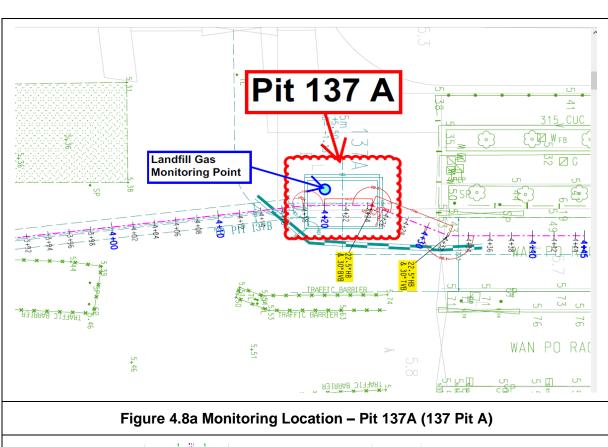


Figure 4.7 Monitoring Location -CH.CA 0+00 to CH.CA 04+25 (CH.C 7+40 ~ 12+00)





PIT 137A (137 Pit A)

PIT 137B

WORK ING PIT 10m X 7m

Ex. GL = +5.30

BASESLAB = -2.12

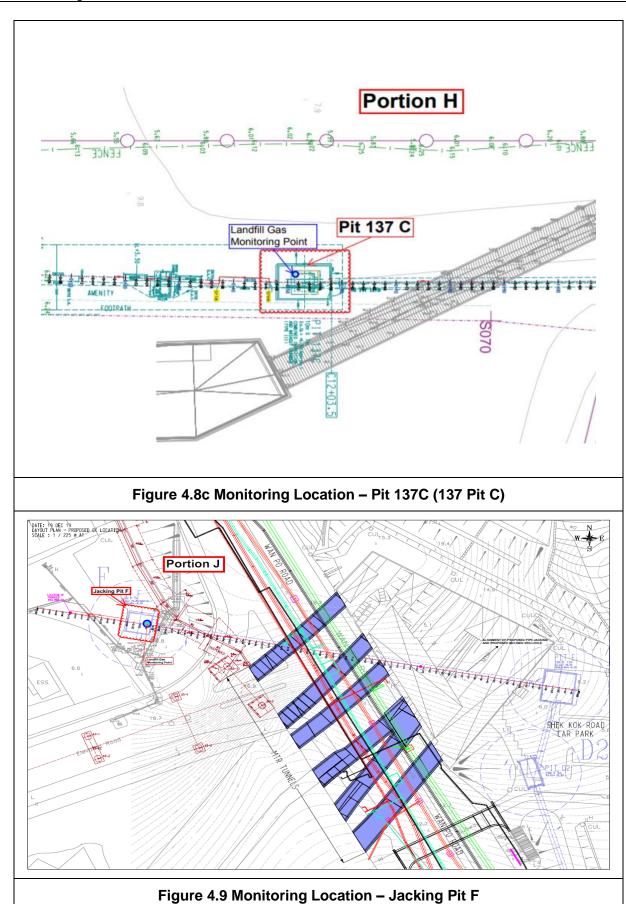
DEPTH = 7.42m

Landfill Gas Monitoring Point

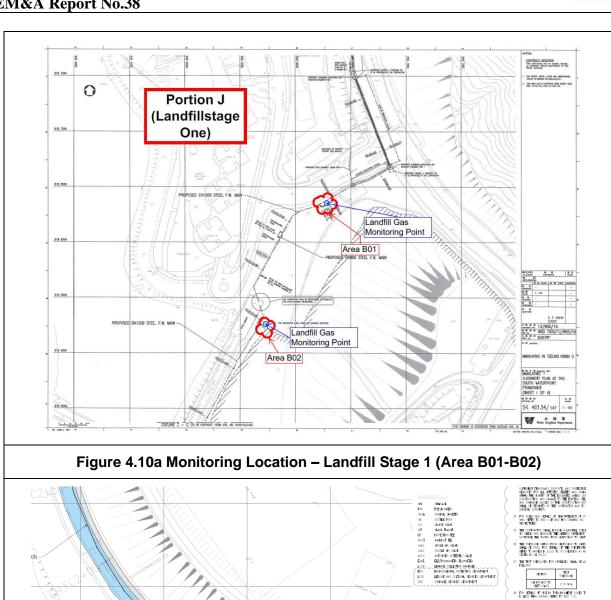
NS180 F.H.T. & 2-DN150 S.V.

Figure 4.8b Monitoring Location – Pit 137B (137 Pit B)









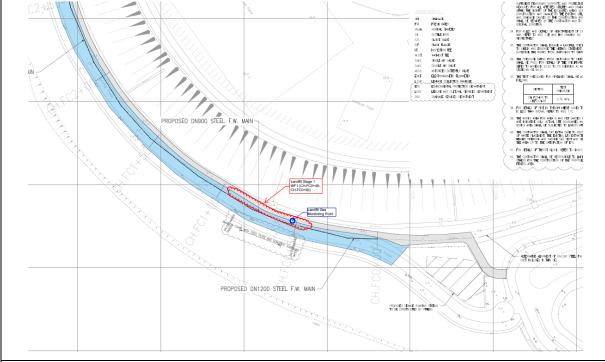


Figure 4.10b Monitoring Location – Landfill Stage 1 (FC0+64-FC0+92)



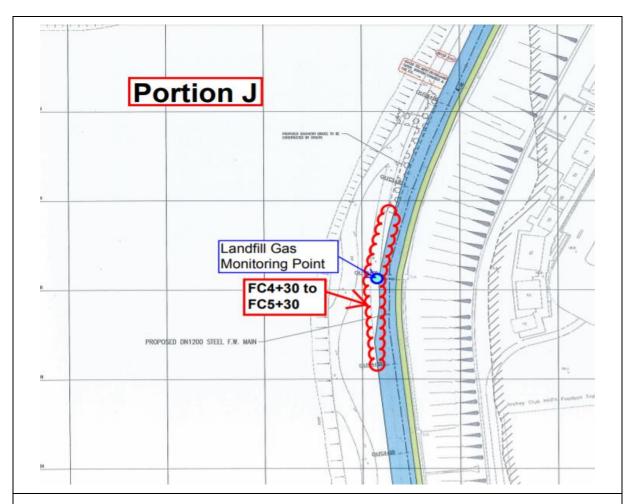


Figure 4.10c Monitoring Location – Landfill Stage 1 (FC4+30-FC5+30)

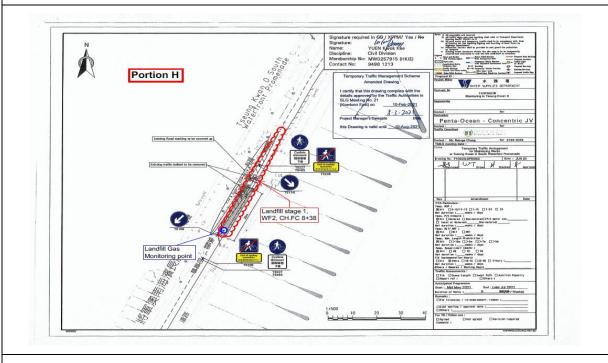


Figure 4.10d Monitoring Location – Landfill Stage 1 (FC8+38)



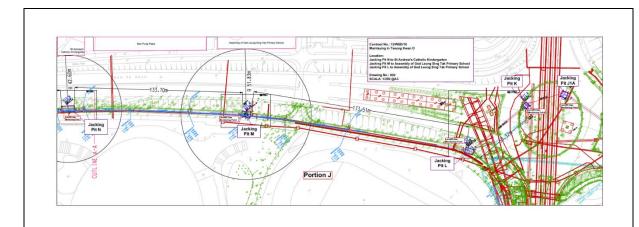


Figure 4.11a Monitoring Location – Pit L-M-N, J1A, K

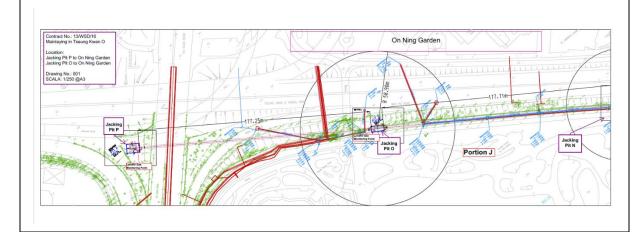
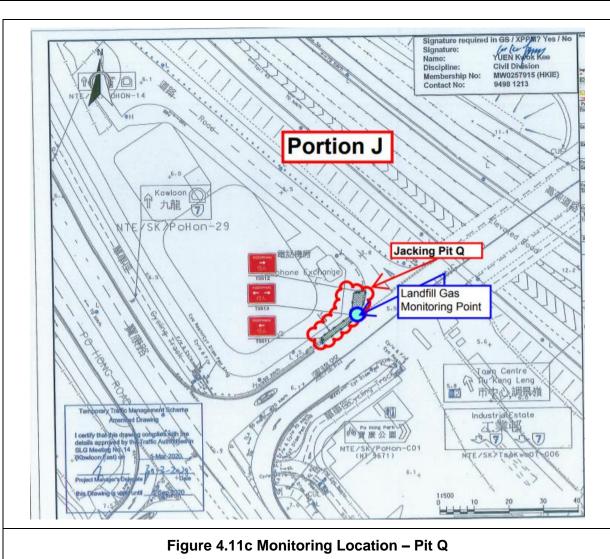


Figure 4.11b Monitoring Location - Pit N-O-P





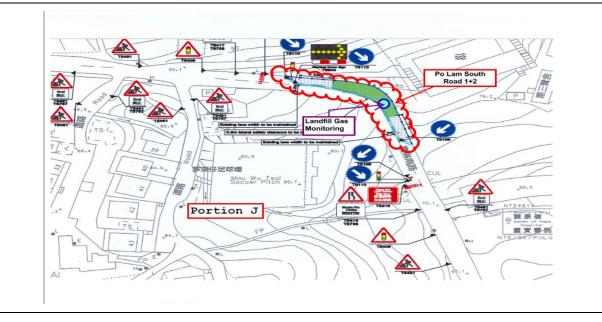


Figure 4.12 Po Lam South Road



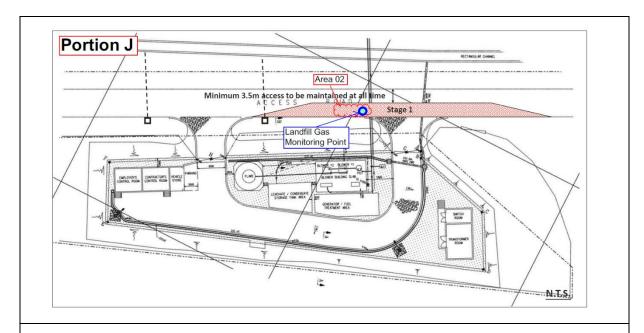


Figure 4.13 Monitoring Location – Area A02

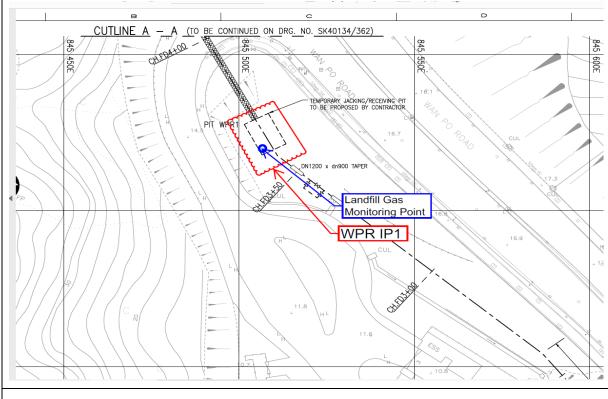


Figure 4.14 Monitoring Location – WPR IP1



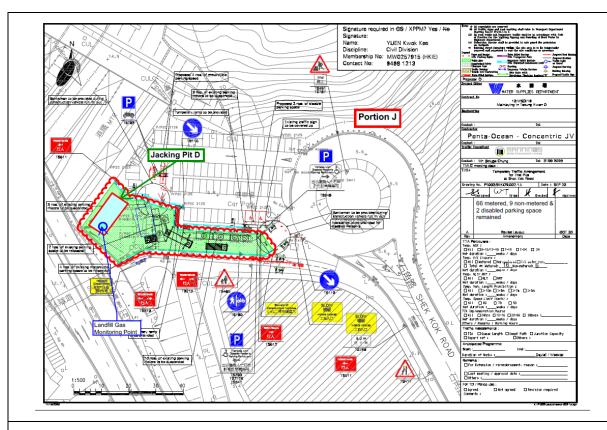


Figure 4.15 Monitoring Location – Jacking Pit D

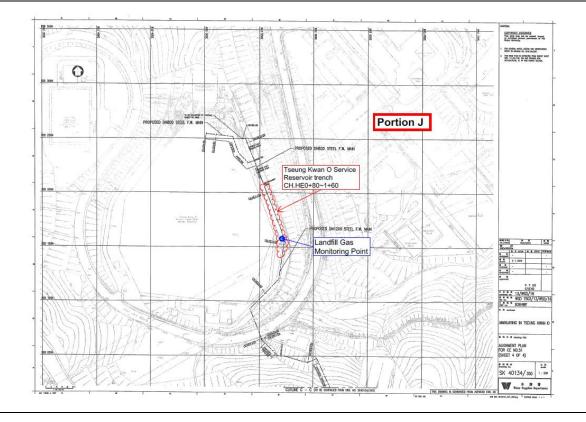


Figure 4.16 Monitoring Location – CH.HE0+80-1+60



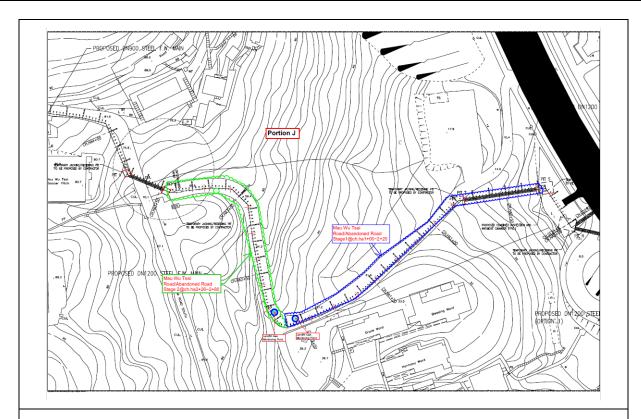


Figure 4.17 Monitoring Location – Mau Wu Tsai Abandoned Road

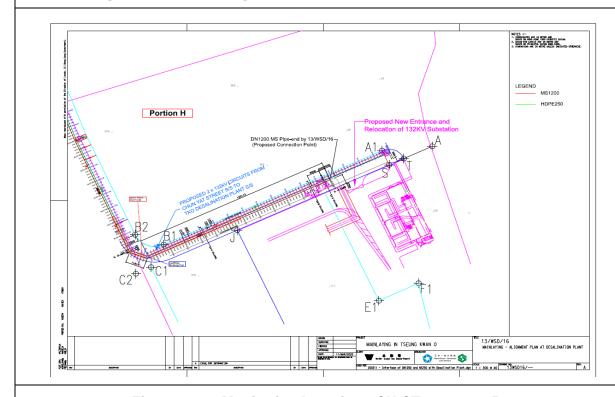


Figure 4.18a Monitoring Location - CH.CT 0+07 ~ 2+58



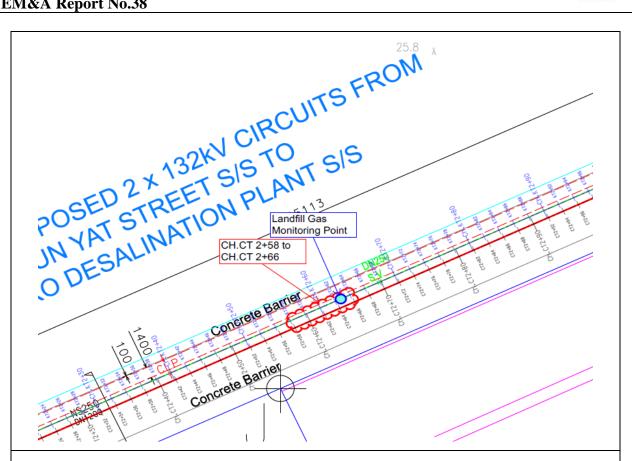


Figure 4.18b Monitoring Location - CH.CT 2+58 ~ 2+66

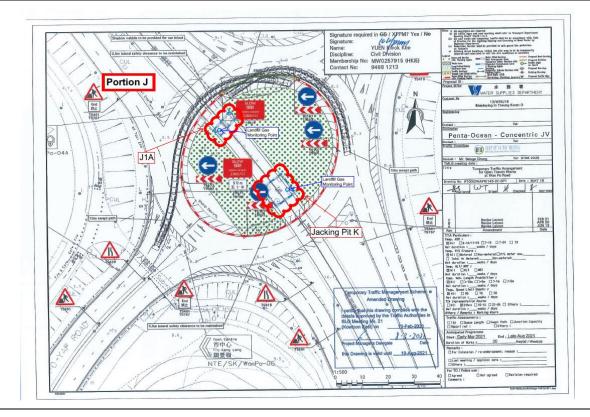


Figure 4.19 Monitoring Location – Pit K



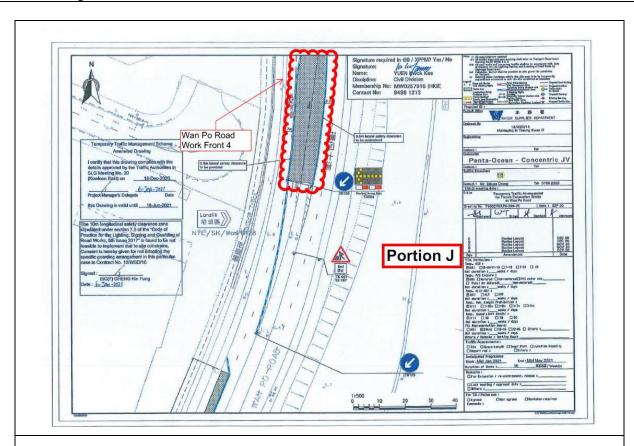


Figure 4.20a Monitoring Location – Wan Po Road 4

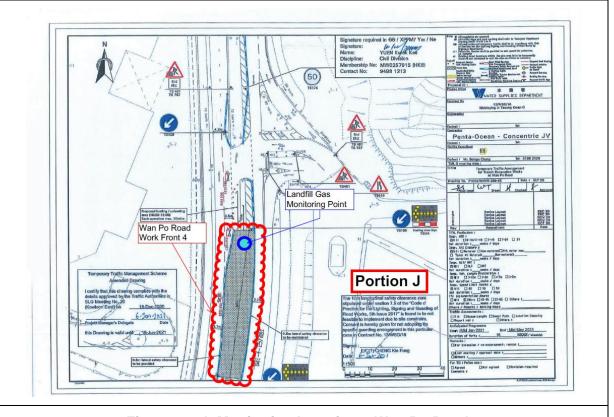


Figure 4.20b Monitoring Location - Wan Po Road 4



#### 4.3 Monitoring Parameters

LFG monitoring was carried out to identify any migration between the landfill and the Project and to ensure the safety of the construction, operation and maintenance personnel working on-site, visitors and any other person within the Project area.

The following parameters were monitored:

- Methane.
- Oxygen.
- Carbon Dioxide.
- Barometric Pressure.

#### 4.4 Action and Limit Level

Action and Limit Level are provided in Table 4.1.

Table 4.1 Action and Limit Level for Landfill Gas Monitoring Equipment

Parameters	Action Level	Limit Level
Oxygen (O2)	<19% O2	<19% O2
Methane (CH4)	>10% LEL	>80% LEL
Carbon Dioxide (CO2)	>0.5% CO2	>1.5% CO2

#### 4.5 Monitoring Equipment

Landfill Gas monitoring was carried out using intrinsically-safe, portable multi-gas monitoring instruments. The gas monitoring equipment is:

- Complying with the Landfill Gas Hazard Assessment Guidance Note as intrinsically safe;
- Capable of continuous barometric pressure and gas pressure measurements;
- Normally operated in diffusion mode unless required for spot sampling, when it should be capable of operating by means of an aspirator or pump;
- Having low battery, fault and over range indication incorporated;
- Capable of storing monitoring data, and shall be capable of being downloaded directly;
- Measure in the following ranges:



methane	0-100% Lower Explosion Limit (LEL) and 0-100% v/v;
oxygen	0-25% v/v;
carbon dioxide	0-5% v/v; and
barometric pressure	mBar (absolute)

 alarm (both audibly and visually) in the event that the concentrations of the following are exceeded:

methane	>10% LEL;
oxygen	<19% by volume; and
carbon dioxide	>0.5% by volume
barometric pressure	mBar (absolute)

Monitoring Equipment used in the reporting period are summarised in **Table 4.2.** The Landfill Gas monitoring equipment calibration certificate is presented in **Appendix I.** 

**Table 4.2 Landfill Gas Monitoring Equipment** 

Equipment	Brand and Model	Calibration Expiry Date
Portable Gas Detector	QRAE III	27 July 2022
MultiRAE Lite	PGM-6208	06 April 2022

### 4.6 Monitoring Results

In the reporting period, construction works within the consultation zones, excavations of 1m depth or more was monitored. Landfill gas monitoring was carried out by the Registered Safety Officer of the Contractor at the excavation locations for 750 times. All the measured results were presented in **Appendix J** and were within the Action and Limit Levels.



## 5. SUMMARY OF MONITORING EXCEEDANCE, COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

5.1 The Environmental Complaint Handling Procedure is shown in below **Figure 5.1**:

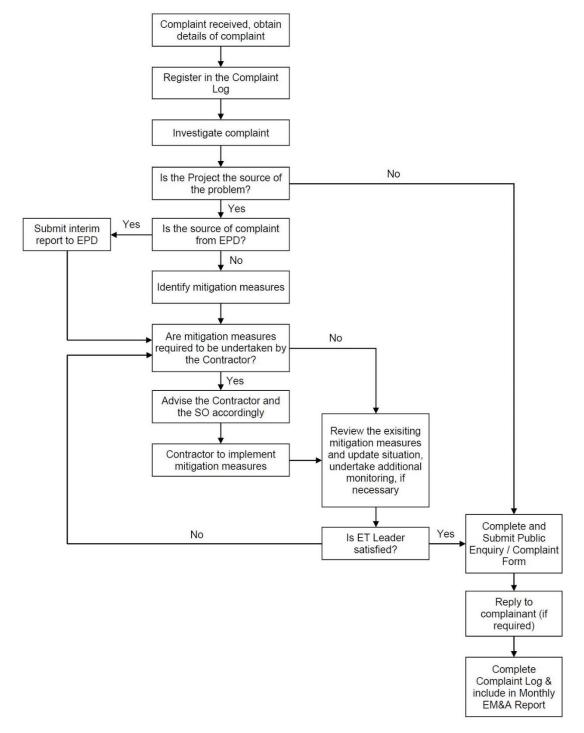


Figure 5.1 Environmental Complaint Handling Procedure



- 5.2 Impact monitoring for noise impact was conducted in the reporting month for NSR4 – Creative Secondary School on 2, 10, 16, 23 and 30 September 2021 as construction works were conducted within 300m to the noise sensitive receiver. Detailed monitoring results can be found in **Appendix G**.
- 5.3 No examinations were scheduled in the reporting month for NSR4 Creative Secondary School. Academic School Calendar can be found in **Appendix O**.
- 5.4 No project-related exceedance of the Action Level was recorded during the reporting period.
- 5.5 No project-related environmental complaint was received in the reporting month.
- 5.6 No notification of summons and prosecution was received in the reporting period.
- 5.7 Statistics on complaints and regulatory compliance are summarized in **Appendix K**.

#### 6. EM&A SITE INSPECTION

6.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, site inspections were carried out on 2, 10, 17, 24 and 30 September 2021 at the site portions list in **Table 6.1** below.

**Table 6.1 Site Inspection Record** 

Date	Inspected Site Portion	Time
02 September 2021	Portion J	9:30am – 11:30am
10 September 2021	Portion J	9:30am – 12:00pm
17 September 2021	Portion F and J	9:35am – 11:30am
24 September 2021	Portion J	9:30am – 12:00pm
30 September 2021	Portion J	9:23am – 10:45am

- 6.2 One joint site inspection with IEC was carried out on 24 September 2021.
- 6.3 Minor deficiencies were observed during weekly site inspections. Key observations during the site inspections are summarized in **Table 6.2**.



**Table 6.2 Site Observations** 

Date	<b>Environmental Observations</b>	Follow-up Status
02 September 2021	<ol> <li>Chemical was observed not placed in a drip tray at Wan Po Road 4.</li> <li>Dusty materials were observed placing next to the water barriers. These materials should be removed to prevent the escape of these materials from the construction site at Wan Po Road 4 and Mau Wu Tsai Abandoned Road.</li> <li>Dusty materials and trapped general wastes were observed in the drainage channel. These materials should be cleaned to allow efficient discharge at Mau Wu Tsai Abandoned Road.</li> </ol>	<ol> <li>Chemical was placed in a drip tray.</li> <li>These materials were removed.</li> <li>Dusty materials and trapped general wastes were cleaned.</li> </ol>
10 September 2021	<ol> <li>Gully was not protected by sandbags and goe-textile at Hong Kong Velodrome Pit P.</li> <li>Regular cleaning of drainage channel should be conducted at Hong Kong Velodrome Pit P.</li> <li>Chemical stain was observed at Hong Kong Velodrome Pit P.</li> <li>Chemical spill-out was observed at the planter at Hong Kong Velodrome Pit P.</li> </ol>	<ol> <li>Gully was protected by goetextile.</li> <li>Cleaning of drainage channel was conducted regularly.</li> <li>Chemical stain was cleaned.</li> <li>Chemical spill-out was cleaned.</li> </ol>
17 September 2021	1. Chemicals were observed not placing on a drip tray at Wan Po Road 1.  2. Muddy water was observed discharging from an improper sedimentation tank at Wan Po Road 1.  3. Construction materials were found placing on a planter rack at Wan Po Road 1.	<ol> <li>Chemicals were removed.</li> <li>No water was discharged from the working portion.</li> <li>Construction materials were removed.</li> </ol>
24 September 2021 30 September	No major observations were report.  1. Chemical spill out was	orted.  1. Chemical was removed and
2021	observed at G1A.	cleaned.



- 6.4 According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents should be implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in Appendix C.
- 6.5 Site inspection proforma of the reporting period is provided in **Appendix L.**

### 7. FUTURE KEY ISSUES

7.1 Key works that will be anticipated in the next reporting period for the Project are shown in **Table 7.1**.

Table 7.1. Key works for the next reporting month

Location	Location	Forecast Works in Next Reporting  Month
Portion H of the Project Site	TKO 137 Pit B	TBM pipe jacking will be conducted.
	Wan Po Rd – Workfront 1	Trench excavation and pipe laying will be conducted.
	Wan Po Rd – Workfront 2	<ul> <li>Trench excavation and pipe laying works will be conducted.</li> </ul>
	Wan Po Rd – Workfront 3	<ul> <li>Trench excavation and pipe laying works will be conducted.</li> </ul>
	Wan Po Rd – Workfront 4	<ul> <li>Trench excavation and pipe laying works will be conducted.</li> </ul>
	Wan Po Rd – Pit A	<ul> <li>Excavation and ELS works will be conducted.</li> </ul>
	Wan Po Rd – Pit B	<ul> <li>Preparation works for pipe jacking will be conducted.</li> </ul>
	Wan Po Rd – Pit D	<ul> <li>Excavation and ELS works will be conducted.</li> </ul>
Portion J of the	Landfill Stage 1 – Area A	900HSV Chamber construction works will be conducted.
Project Site	Landfill Stage 1 – Area B	Trench excavation and pipe laying works will be conducted.
	Cycle Track – Workfront 2	Trench excavation and pipe laying works will be conducted.
	Roundabout – Pit G1A	<ul> <li>Pit excavation and ELS works will be conducted.</li> </ul>
	Roundabout – Pit J1A	<ul> <li>Trenchless works by hand-shield will be continued.</li> </ul>
	Velodrome – Pit L-Pit M	Trench excavation and pipe laying works will be conducted.
	Velodrome – Pit M	Rescue pit construction works will be continued.
	Velodrome – Pit N- Pit O	Trench excavation and pipe laying works will be conducted.
	Velodrome – Pit P	TBM pipe jacking will be commenced.



Location	Location	Forecast Works in Next Reporting  Month
	Ling Hong Road - Pit Y	Pipe laying in-between Pit R to Pit Y will be conducted.
	Ling Hong Road - Pit R	Pipe laying in-between Pit R to Pit Y will be conducted.
	Mau Wu Tsai – Workfront 1	Trench excavation and pipe mainlaying works will be conducted.
	Mau Wu Tsai – Workfront 2	Laying of branch pipe will be conducted.
	Po Lam Road South Stage-	Trench backfilling and reinstatement will be continued.
	Po Lam Road (D1)	Trench backfilling and reinstatement will be continued.
	Po Lam Road (B5)	Trench backfilling and reinstatement will be continued.
	Po Lam Road (A1)	Trench excavation and pipe laying works will be conducted.
		Trench backfilling and reinstatement will be continued.
	TKO Primary Service Reservoir	Trench excavation and pipe laying works will be conducted.

- 7.2 The major environmental impacts brought by the above construction works will include:
  - Construction dust and noise generation of saw cutting of concrete surface, mainlaying of pipes, drilling activities, TBM break through and excavation works.
  - Waste generation from construction activities
  - Impact on water quality from construction activities
- 7.3 The key environmental mitigation measures for the Project in the coming reporting period associated with the above construction works will include:
  - Dust suppression by regular wetting and water spraying for saw cutting of concrete surface, mainlaying of pipes, drilling activities, TBM break through and excavation works
  - Reduction of noise from equipment and machinery on-site
  - Sorting and storage of general refuse and construction waste
  - Treatment of wastewater with water treatment facilities before discharge
- 7.4 The proactive environmental protection proforma for the next reporting month is listed in **Appendix M.**
- 7.5 Referring to EM&A Manual Section 4.1.2, the impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.



7.6 The tentative impact monitoring schedule for the next reporting month is attached in **Appendix N**.

#### 8. CONCLUSION AND RECOMMENDATIONS

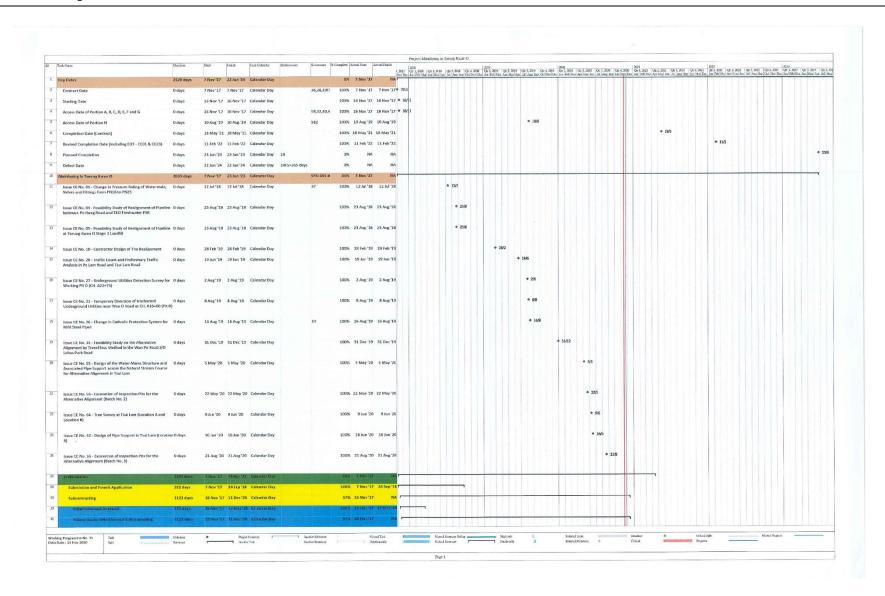
- 8.1 This is the 38<sup>th</sup> monthly Environmental Monitoring and Audit (EM&A) Report presenting the EM&A works undertaken during the period from 1 September 2021 to 30 September 2021, in accordance with the EM&A Manual and the requirement under EP-503/2015/A.
- 8.2 Impact monitoring for noise impact was conducted in the reporting month for NSR4 Creative Secondary School on 2, 10, 16, 23 and 30 September 2021 as construction works were conducted within 300m to the noise sensitive receiver. Detailed monitoring results can be found in **Appendix G**.
- 8.3 No examinations were scheduled in the reporting month for NSR4 Creative Secondary School. Academic School Calendar can be found in **Appendix O**.
- 8.4 No project-related exceedance of the Action Level was recorded during the reporting period.
- 8.5 Weekly environmental site inspection was conducted during the reporting period. Minor deficiencies were observed during site inspection and were rectified. The environmental performance of the project was therefore considered satisfactory.
- 8.6 According to the environmental site inspections performed in the reporting month, the contractor is reminded to pay attention on maintaining site tidiness, water treatment facilities, dust suppression mitigations and proper materials storage.
- 8.7 No project-related environmental complaint was received in the reporting month.
- 8.8 No notification of summons or prosecution was received since the commencement of the Contract.
- 8.9 The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.



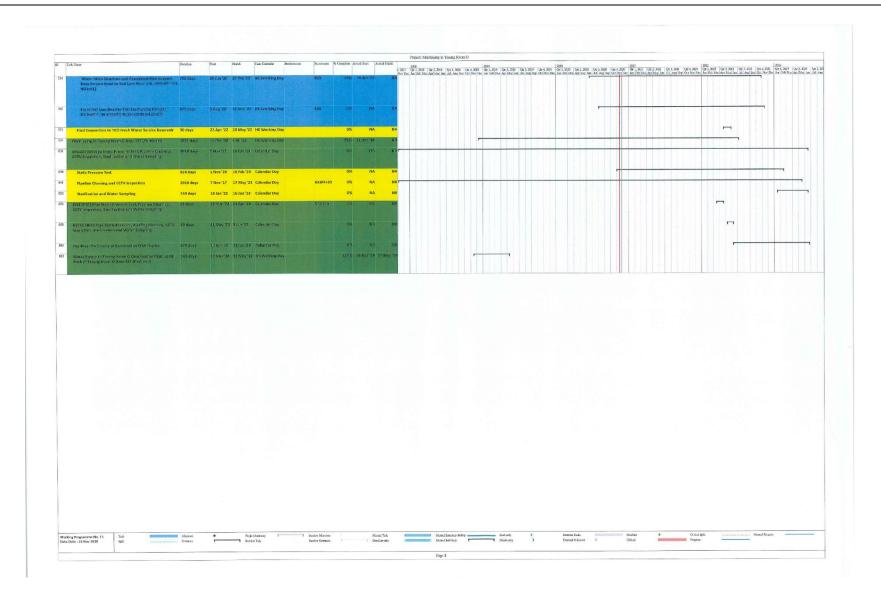
# Appendix A

# Construction Programme

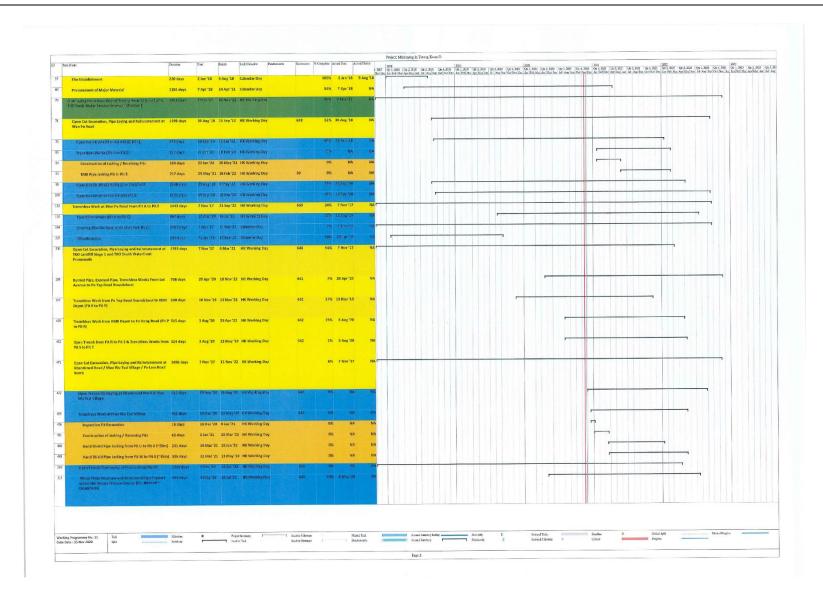




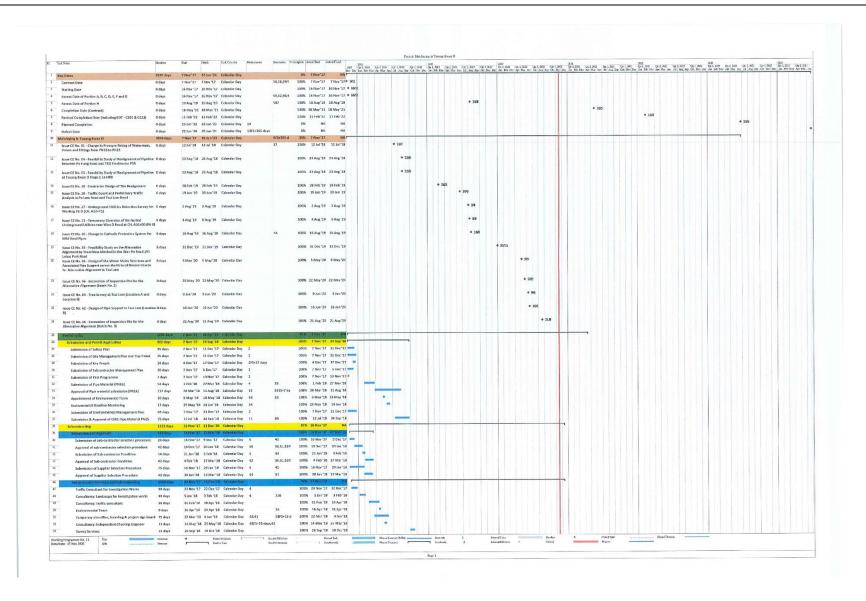




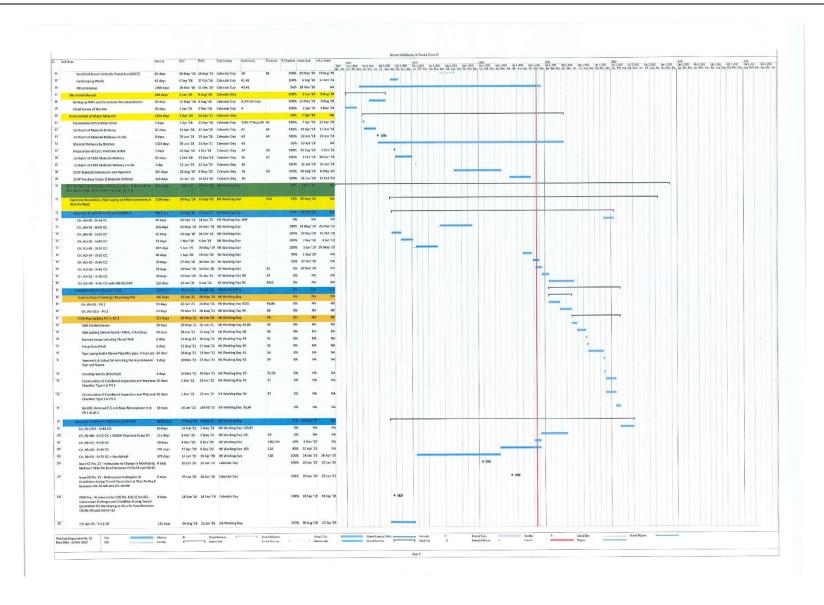




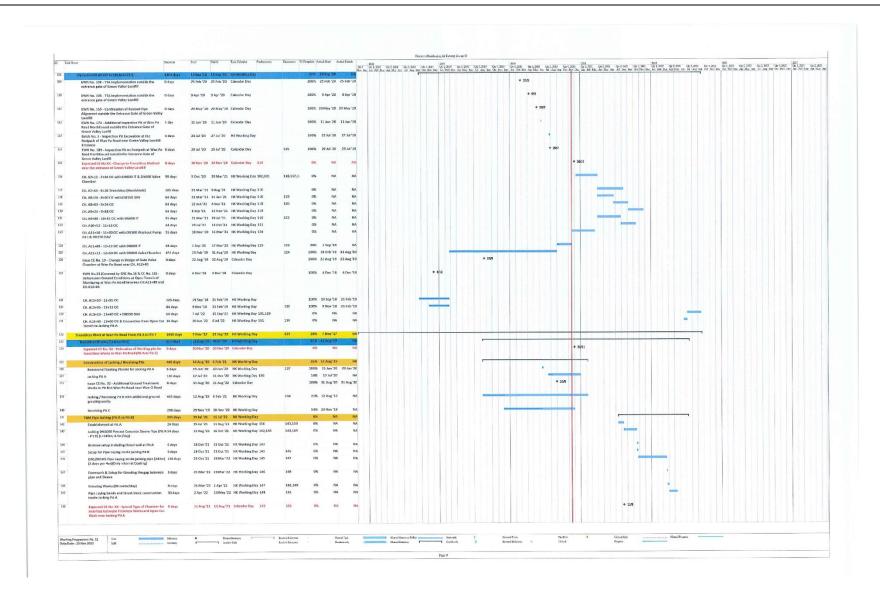




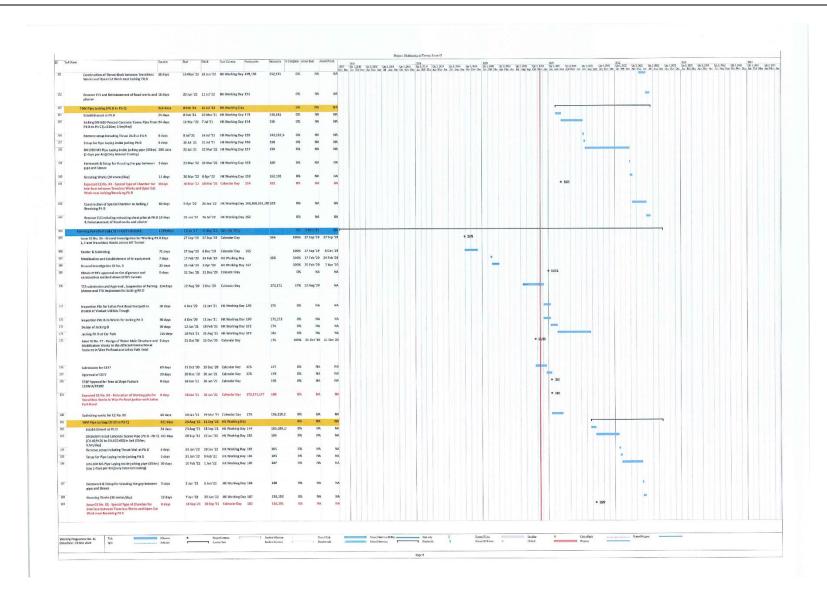




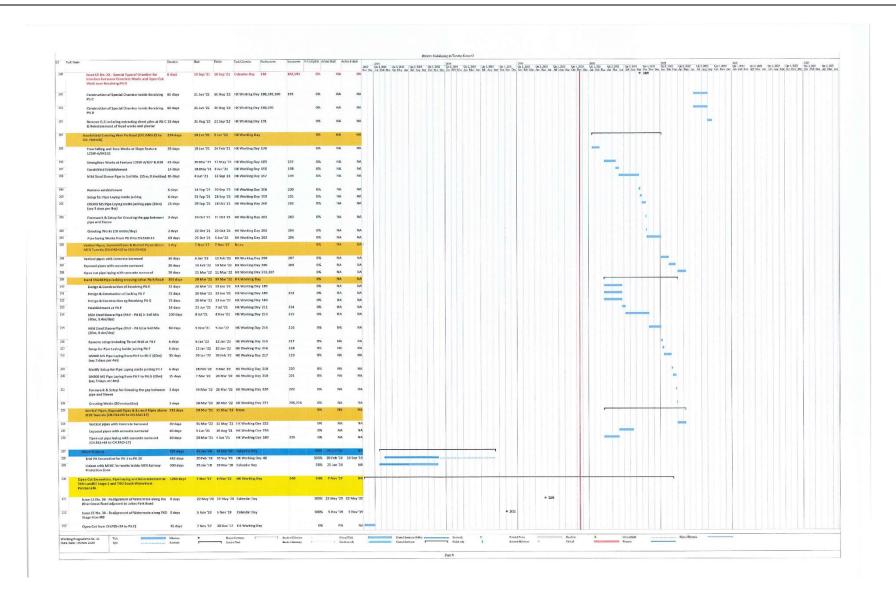




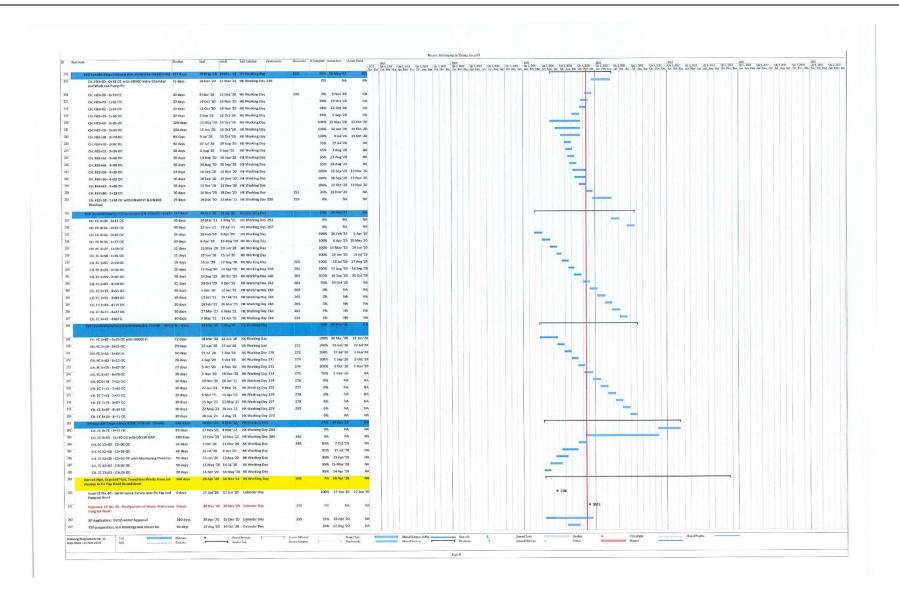




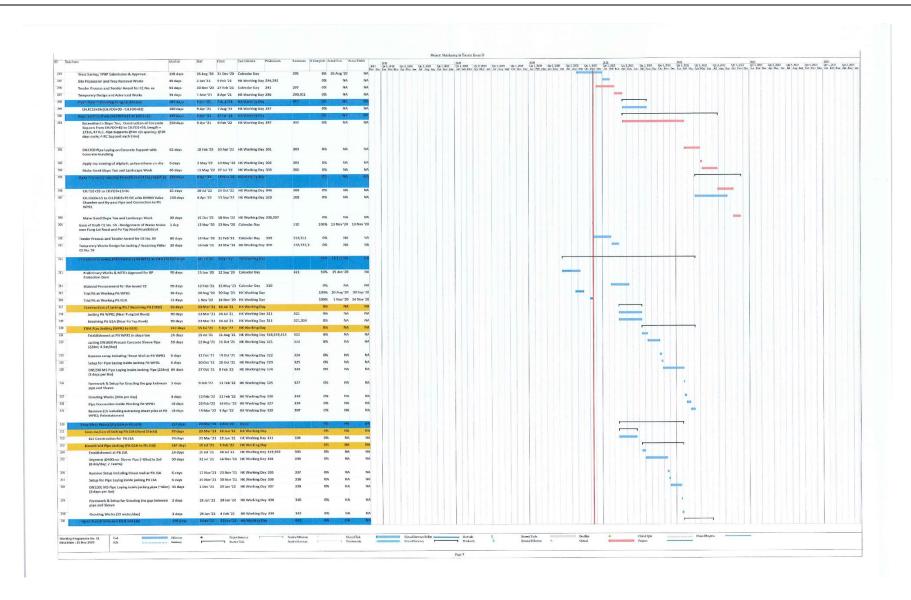




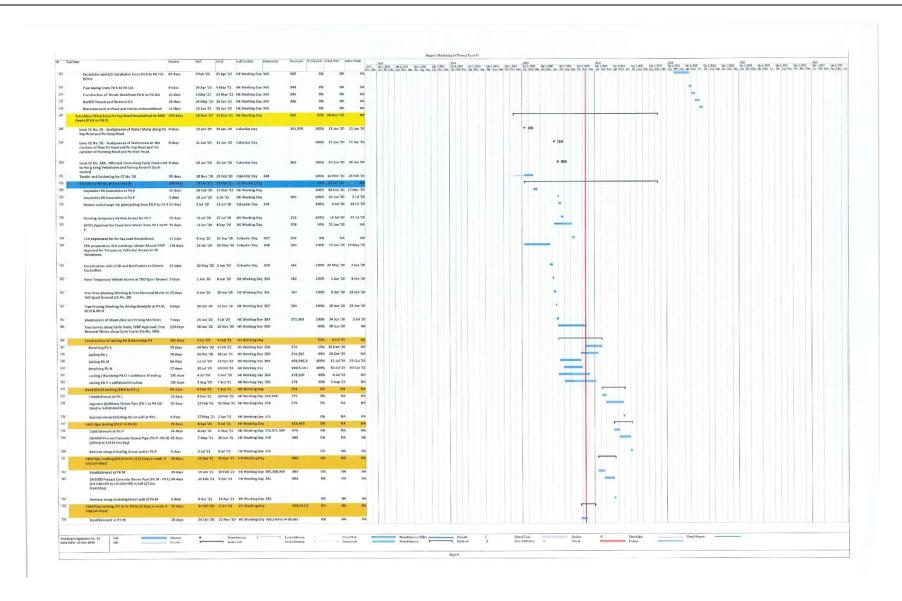




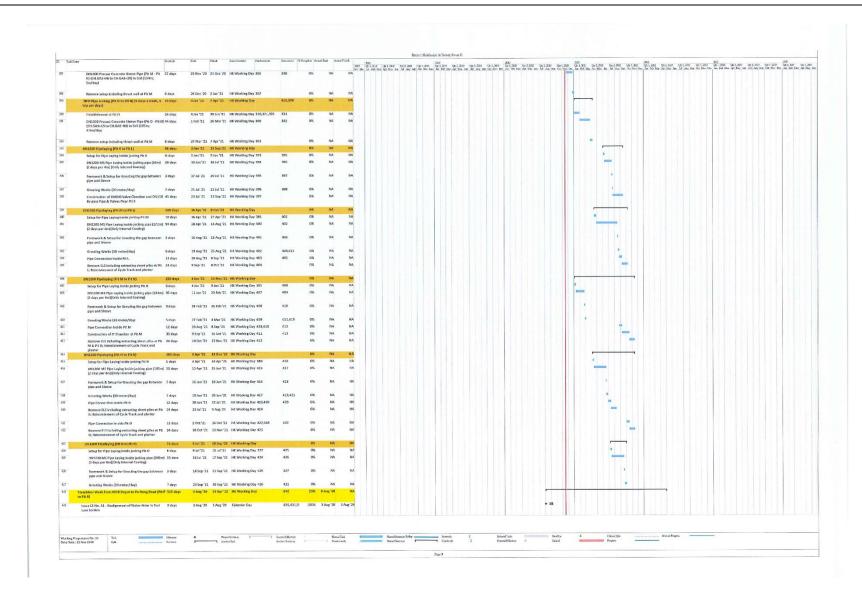




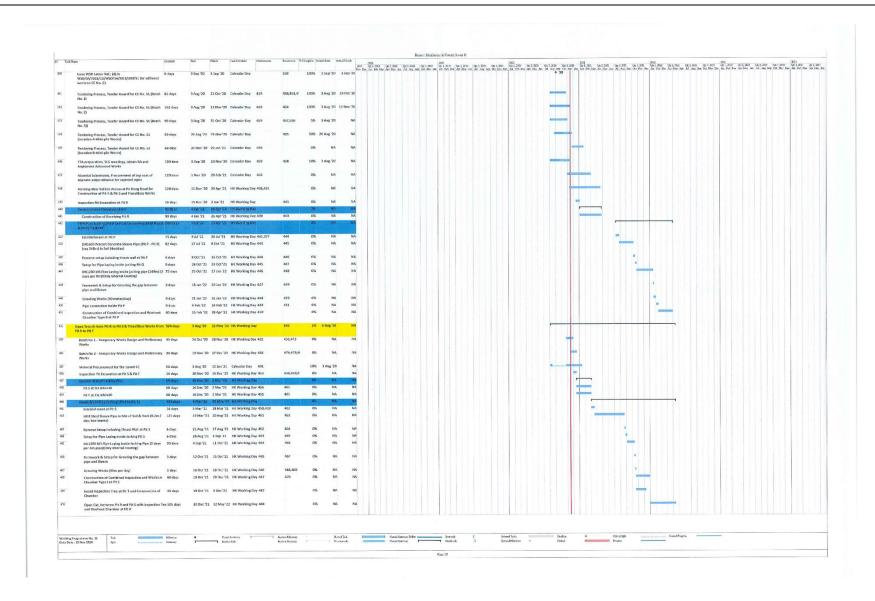




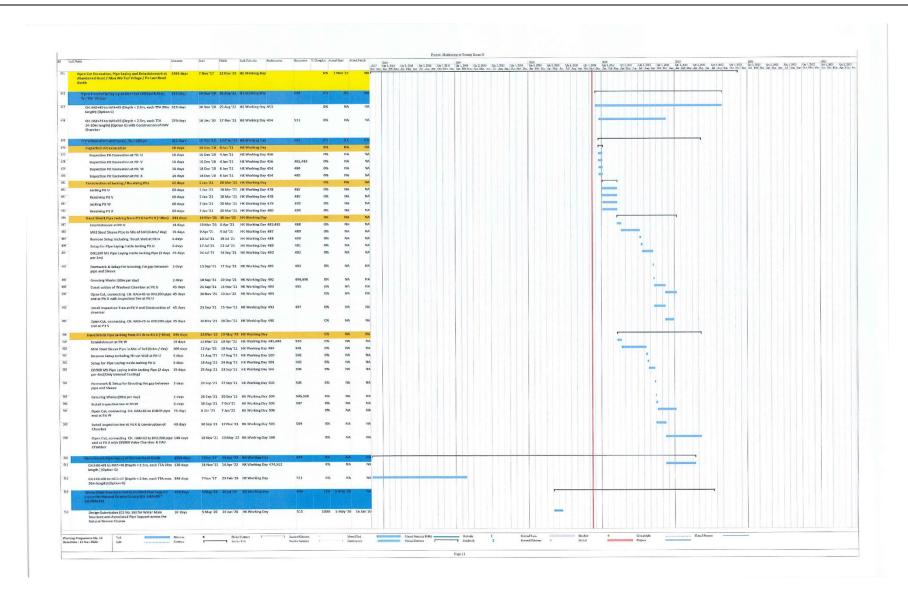




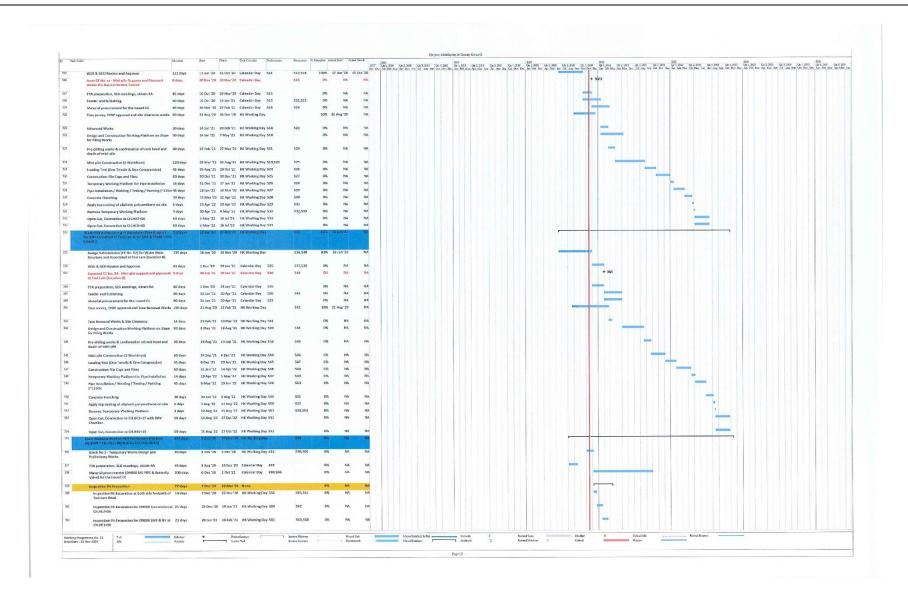




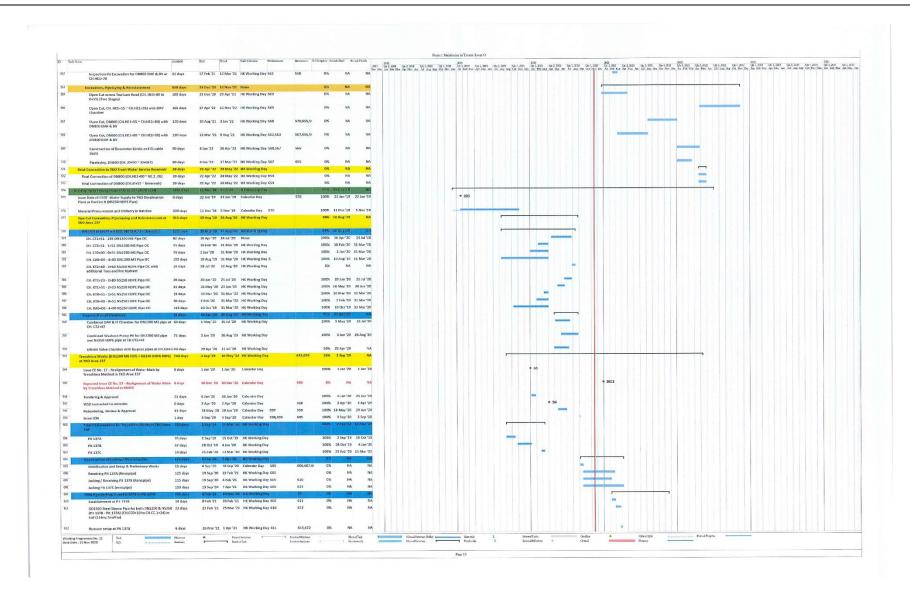




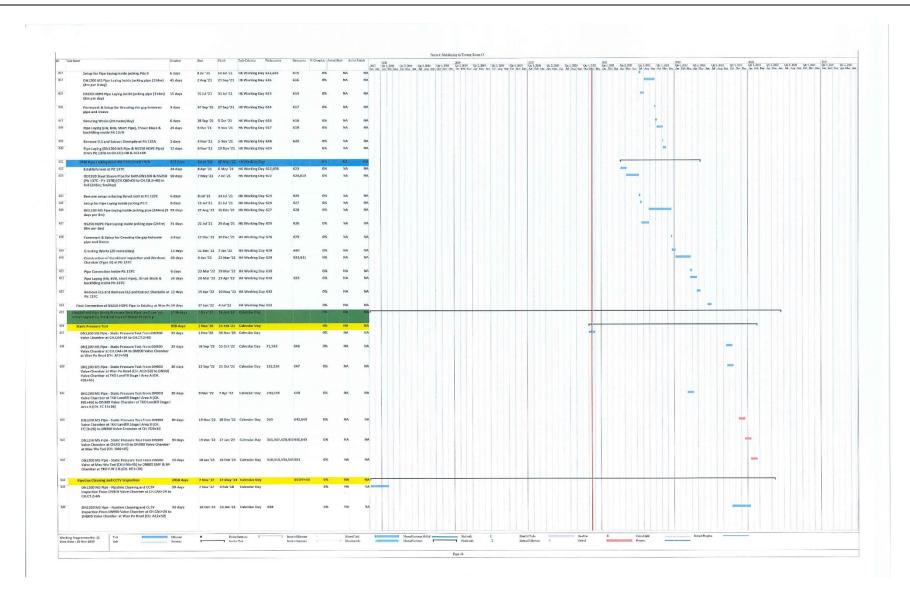




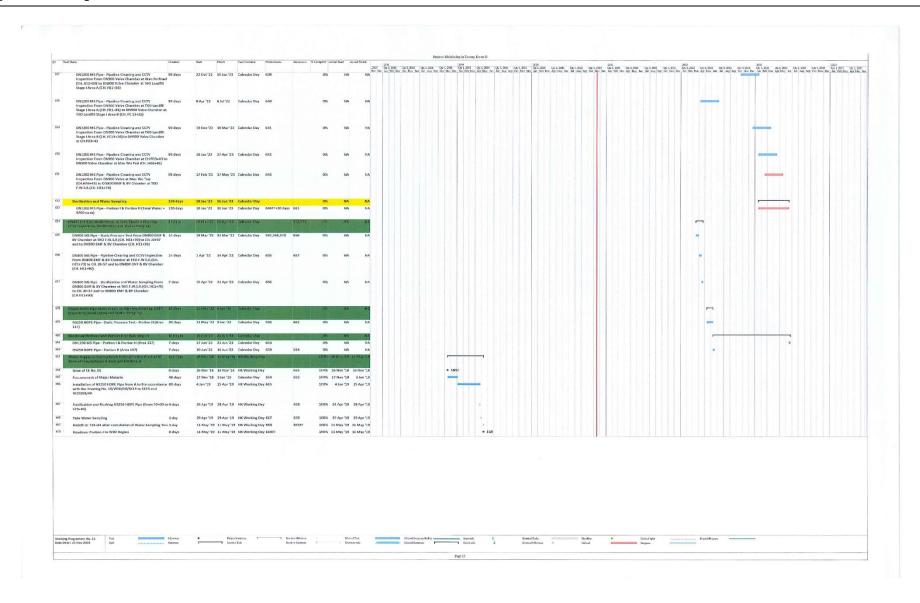














## Appendix B

Overview of Mainlaying in Tseung Kwan O



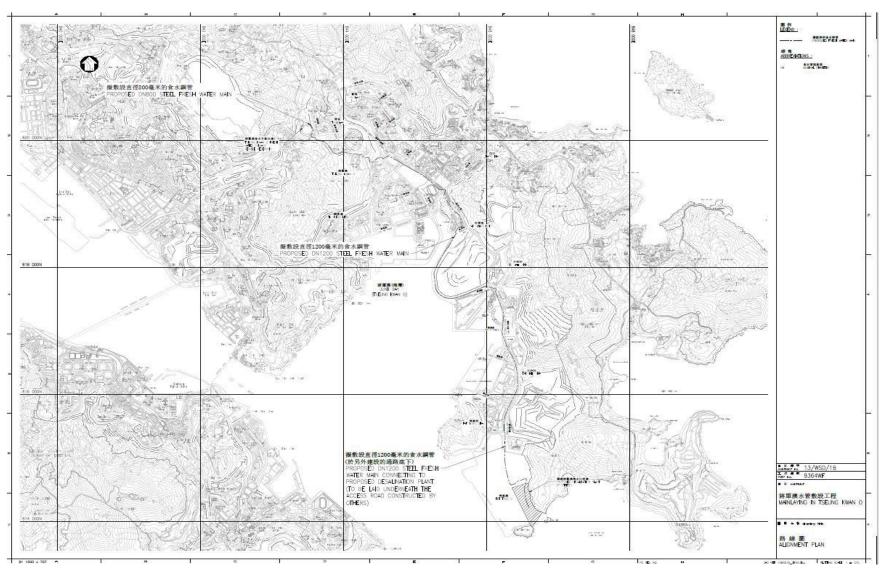


Figure B1. Overview of Mainlaying in TKO



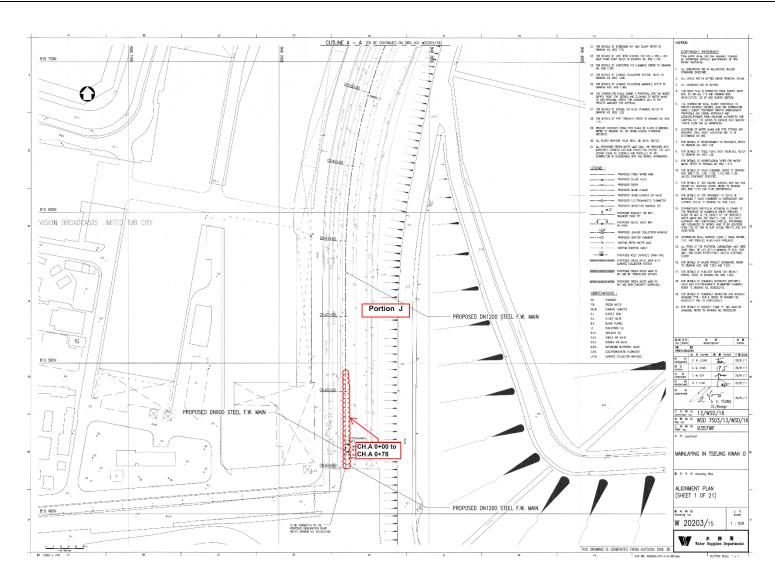


Figure B2. Location Plan for Portion J - CH.A 0+00 to CH.A 0+78



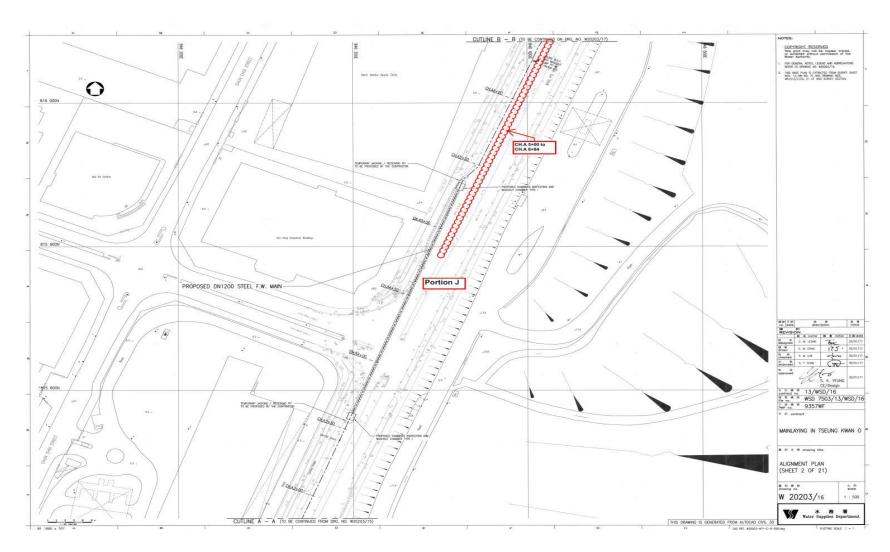


Figure B3a. Location Plan for Portion J - CH.A 5+00 to CH.A 6+64



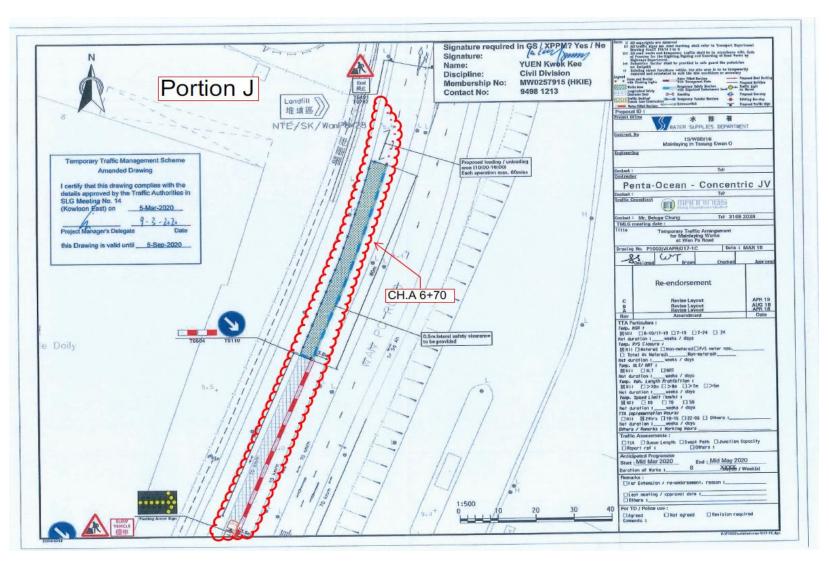


Figure B3b(i). Location Plan for Portion J - CH.A 6+70



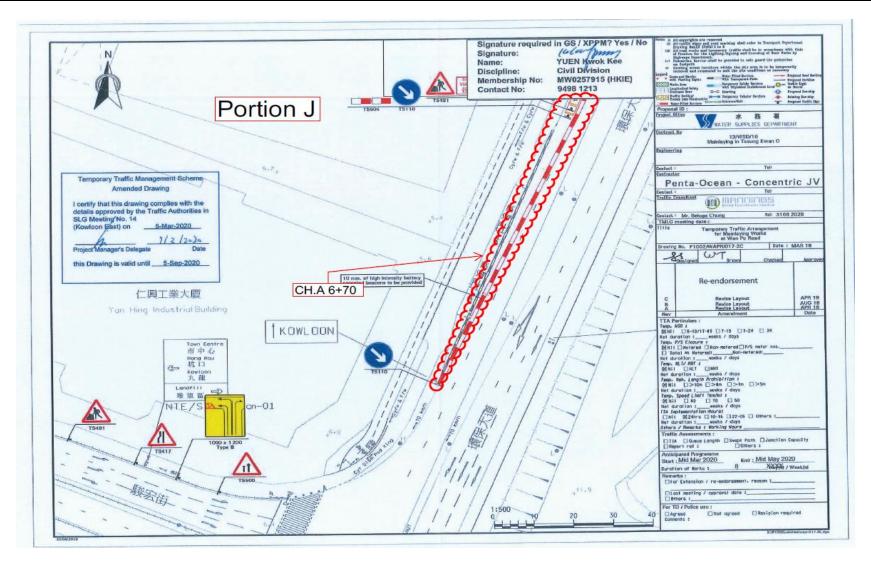


Figure B3b(ii). Location Plan for Portion J - CH.A 6+70



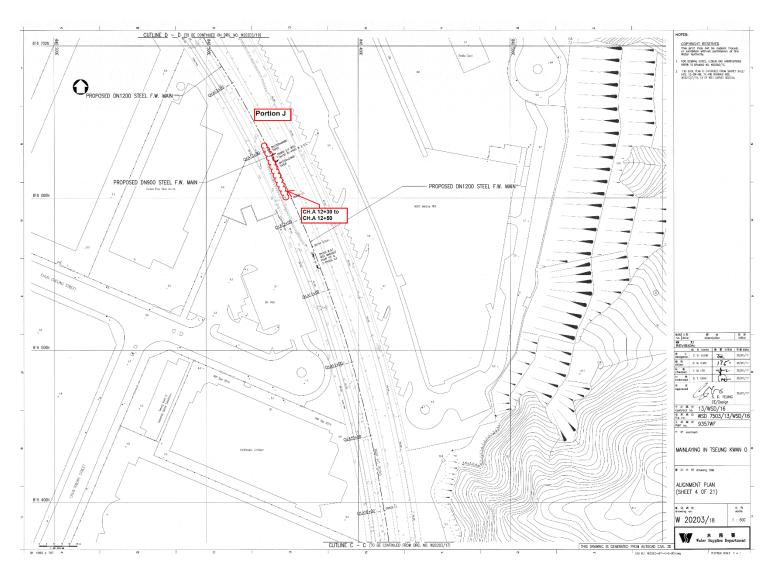


Figure B4. Location Plan for Portion J - CH.A 12+30 to CH.A 12+50



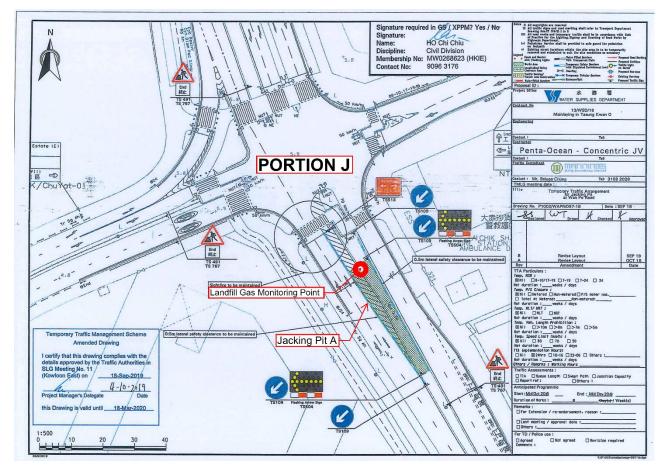


Figure B5. Location Plan for Portion J – CH. A13+50 to CH.A 14+00 (Pit A)



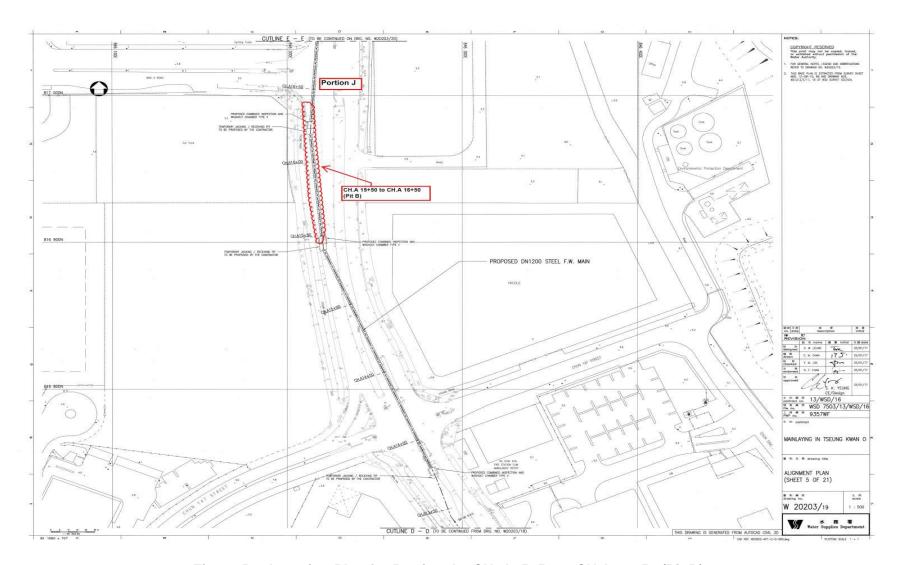


Figure B6. Location Plan for Portion J – CH. A15+50 to CH.A 16+50 (Pit B)



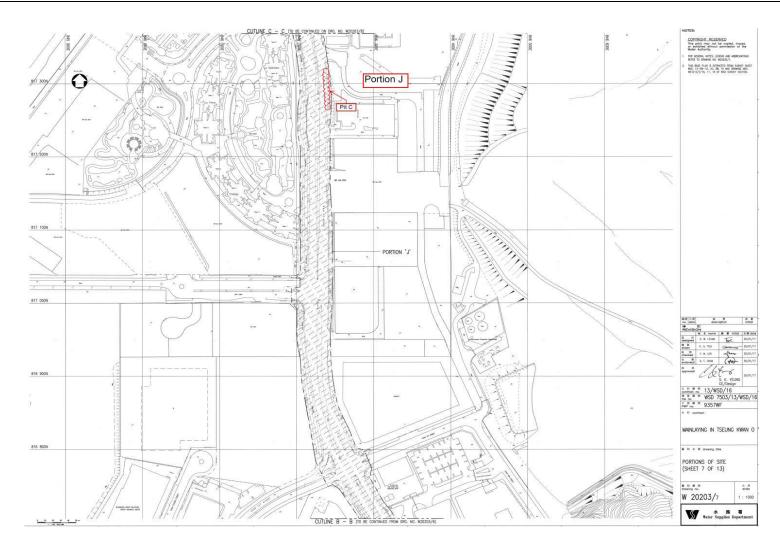


Figure B7. Location Plan for Portion J – CH.A 19+15 to CH.A 19+50 (Pit C)



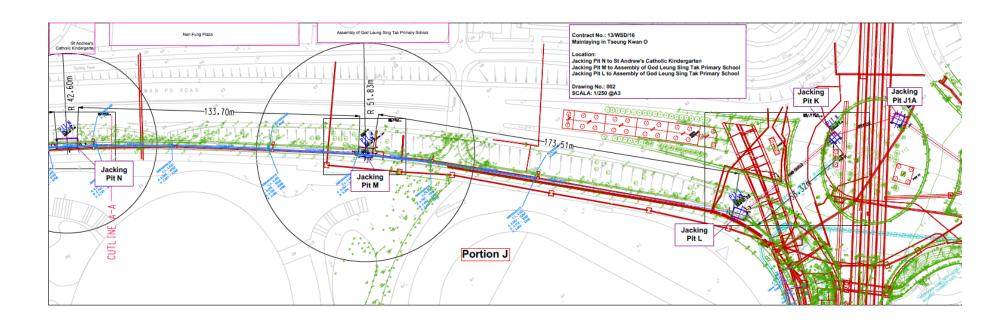


Figure B8a. Location Plan for Portion J – Pit L-M-N, K, J1A





Figure B8b. Location Plan for Portion J – Pit N-O-P



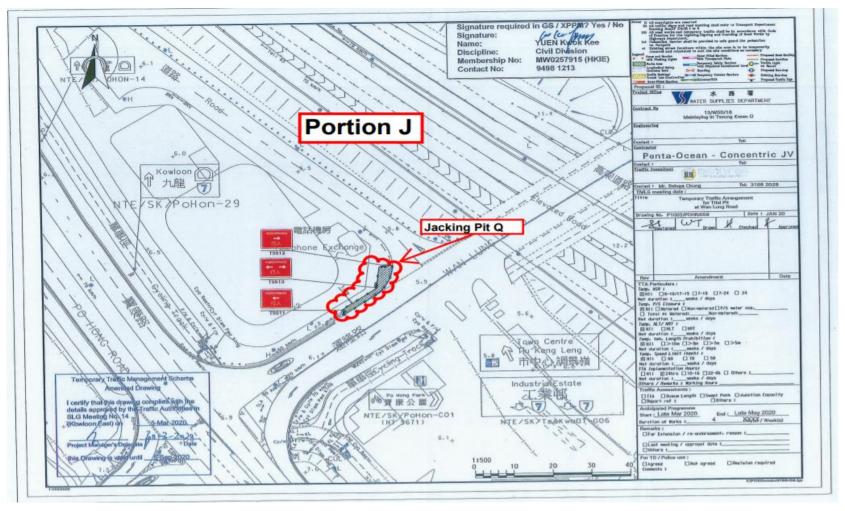


Figure B8c. Location Plan for Portion J - Pit Q



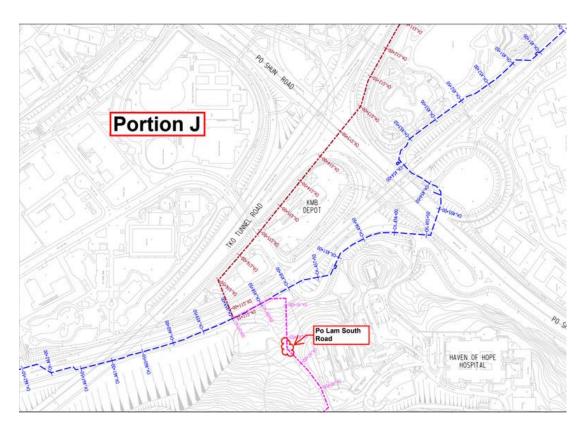


Figure B9a. Location Plan for Mau Wu Tsai 1

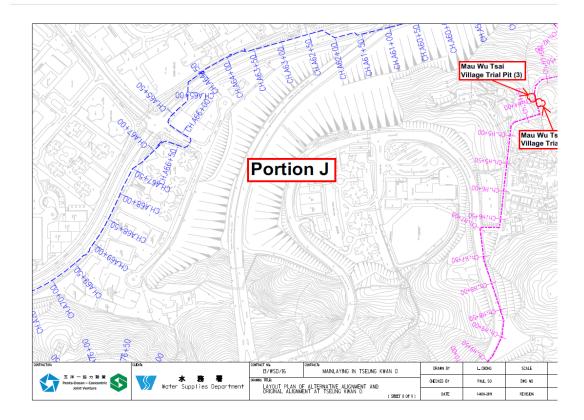


Figure B9b. Location Plan for Mau Wu Tsai 2 & 3



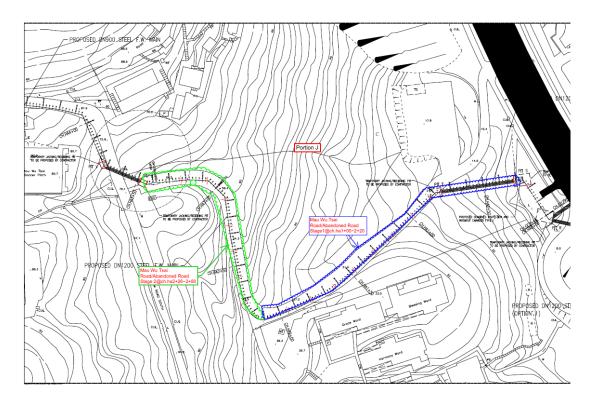


Figure B9c. Abandoned Mau Wu Tsai Road



Figure B10. Location Plan for Jacking Pit F



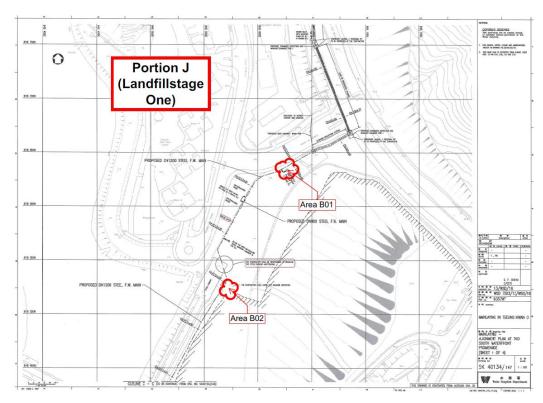


Figure B11a. Location Plan - Landfill Stage 1 (Area B01-B02)

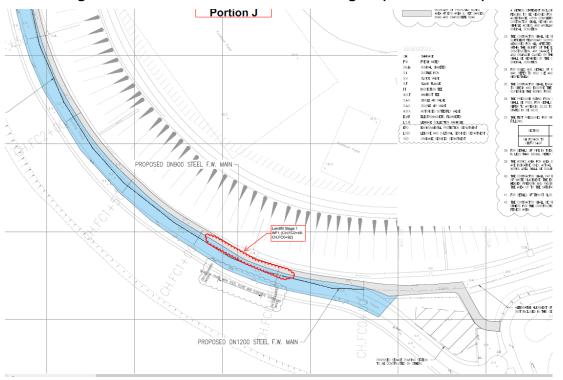


Figure B11b. Location Plan – Landfill Stage 1 (Area FC0+42 -FC0+92)



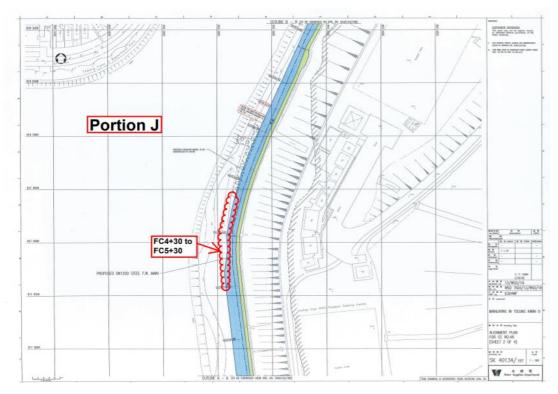


Figure B11c. Location Plan – Landfill Stage 1 (Area FC4+30 -FC5+30)

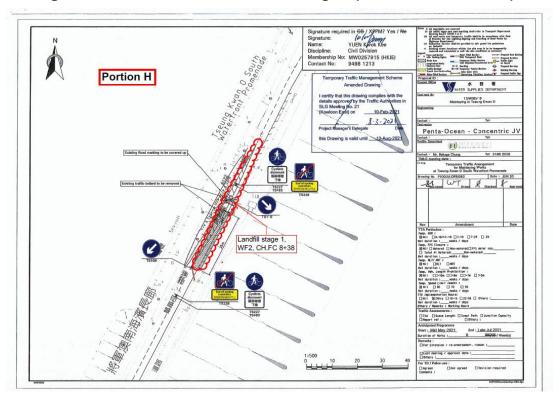


Figure B11d. Location Plan – Landfill Stage 1 (Area FC8+38)





Figure B12. Monitoring Location – Po Lam South Road

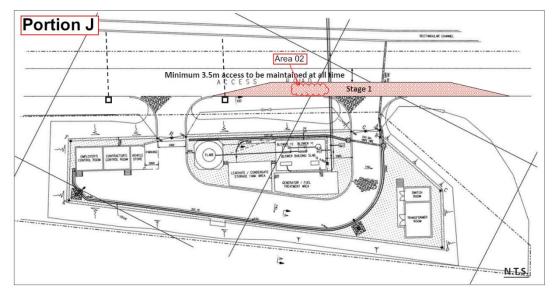


Figure B13. Monitoring Location – Area A02



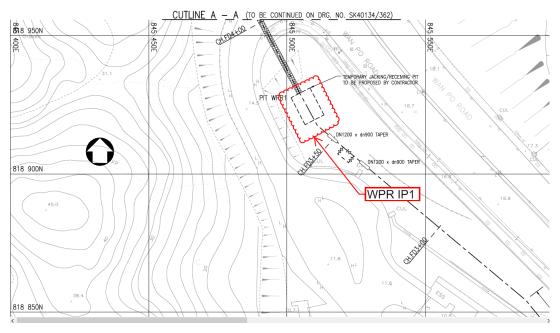


Figure B14. Location Plan for WPR IP1

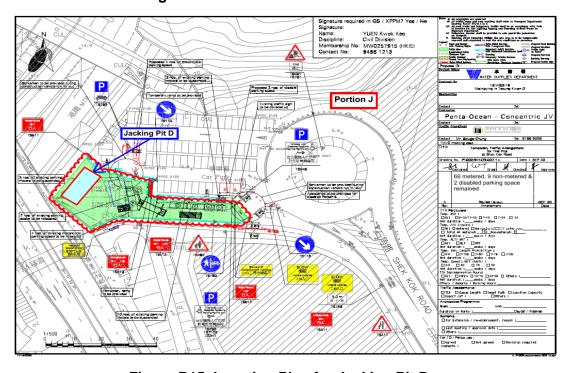


Figure B15. Location Plan for Jacking Pit D



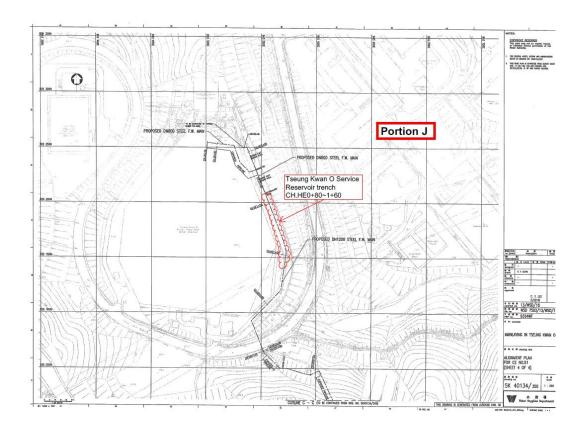


Figure B16. Location Plan for CH.HE0+80-1+60

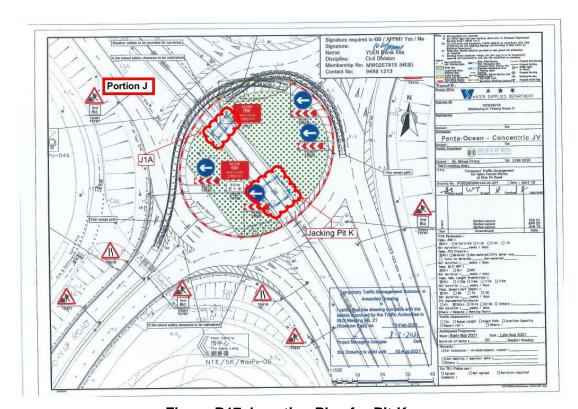


Figure B17. Location Plan for Pit K



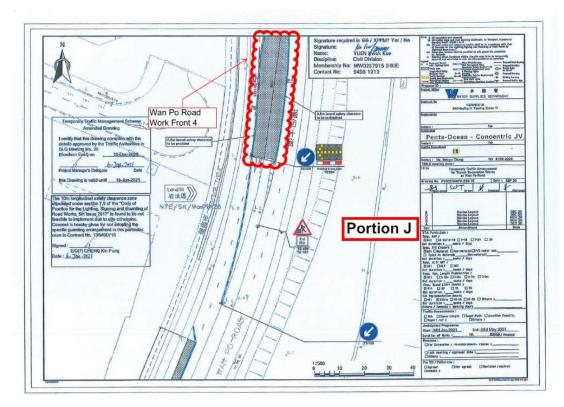


Figure B18a. Location Plan for Wan Po Road 4

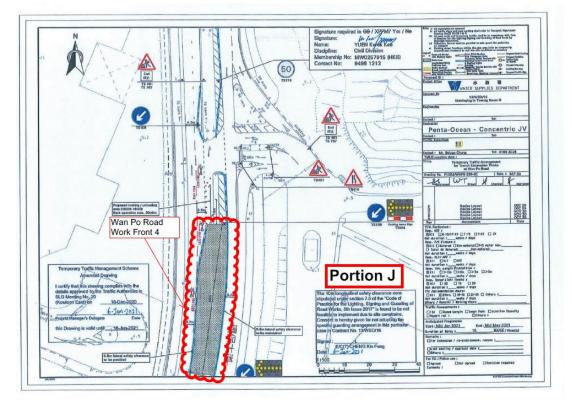


Figure B18b. Location Plan for Wan Po Road 4



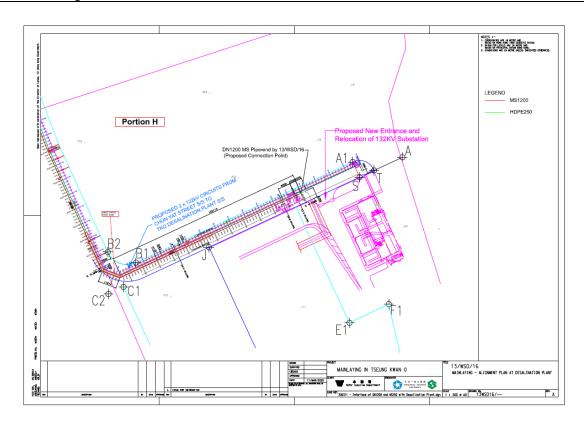


Figure B19a. Location Plan for CH.CT 0+07 - 2+58

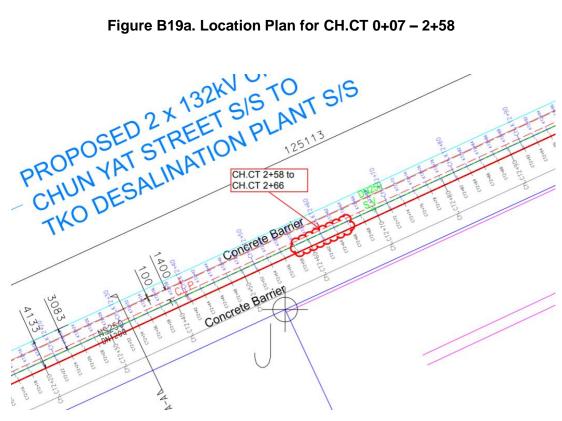


Figure B19b. Location Plan for CH.CT 2+58 - 2+66



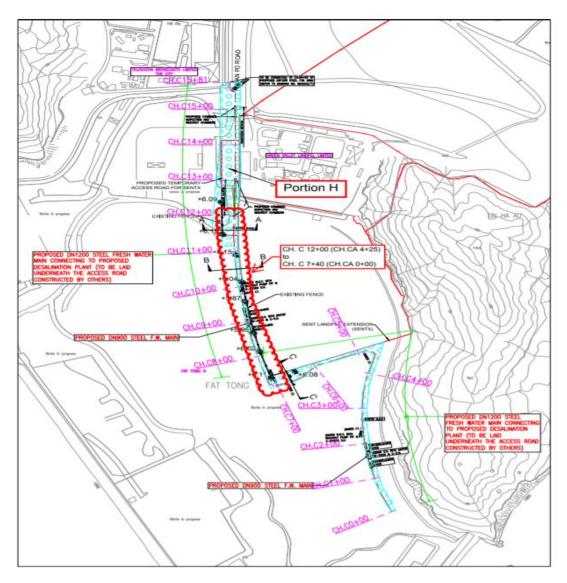


Figure B20. Location Plan for Portion H– CH.C 7+40~CH.C 12+00 (CH.CA 0+00 ~ CH.CA4+25)



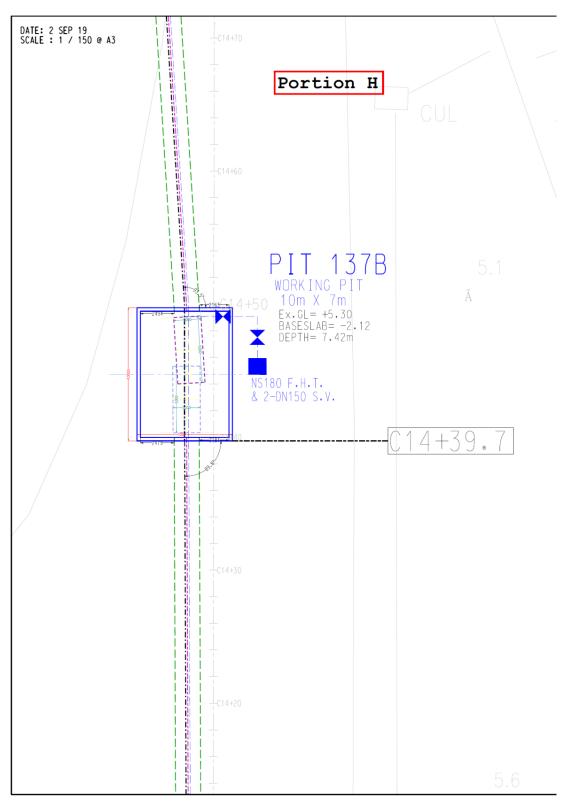


Figure B21a. Location Plan for Portion H- Pit 137B



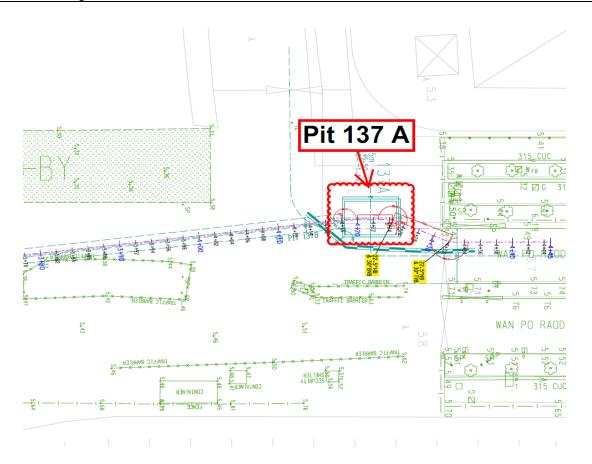


Figure B21b. Location Plan for Portion H- Pit 137A

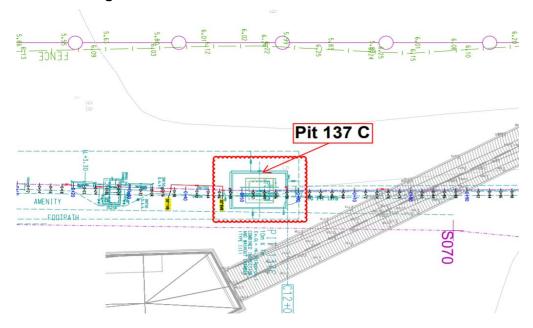


Figure B21c. Location Plan for Portion H- Pit 137C



# Appendix C

Summary of Implementation Status of Environmental Mitigation



EIA Reference	Recommended Environmental Protection	Objectives of the recommended measures	Implementation	Implen Stage	nentati	on	Implementation	Relevant Legislation & Guidelines
LIA Reference	Measures/ Mitigation Measures	& main concerns to address	Agent	D	O	0	status	
Air Quality								
S4.8.1	Impervious dust screen or sheeting will be provided to enclose scaffolding from the ground floor level of building for construction of superstructure of the new buildings.	Land site/ During Construction	Contractor(s)		<b>~</b>		N/A	Air Pollution Control (Construction Dust)
S4.8.1	Impervious sheet will be provided for skip hoist for material transport.	Land site/ During Construction, particularly dry season	Contractor(s)		<b>√</b>		NA	
S4.8.1	The area where dusty work takes place should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after dusty activities as far as practicable.	Land site/ During Construction	Contractor(s)		<b>✓</b>		Implemented.	
S4.8.1	All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation.	Land site/ During Construction	Contractor(s)		✓		Implemented	
S4.8.1	Dropping heights for excavated materials should be controlled to a practical height to minimize the fugitive dust arising from unloading.	Land site/ During Construction	Contractor(s)		✓		Implemented	
S4.8.1	During transportation by truck, materials should not be loaded to a level higher than the side and tail boards, and should be dampened or covered before transport.	Land site/ During Construction	Contractor(s)		<b>√</b>		Implemented	
S4.8.1	Wheel washing device should be provided at the exits of the work sites. Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty material from its body and wheels as far as practicable.	Land site/ During Construction	Contractor(s)		<b>√</b>		N/A	



EIA Reference	Recommended Environmental Protection	Objectives of the recommended measures	Implementation	Impler Stage	nentati	ion	Implementation	Relevant Legislation & Guidelines
LIA Reference	Measures/ Mitigation Measures	& main concerns to address	Agent	D	С	0	status	
S4.8.1	Road sections between vehicle-wash areas and vehicular entrance will be paved.	Land site/ During Construction	Contractor(s)		1		N/A	
S4.8.1	Hoarding of not less than 2.4m high from ground level will be provided along the length of the Project Site boundary.	Land site/ During construction	Contractor(s)	<b>*</b>	<b>√</b>		N/A	
S4.8.1	Haul roads will be kept clear of dusty materials and will be sprayed with water so as to maintain the entire road surface wet at all times.	Land site/ During construction	Contractor(s)		<b>✓</b>		Implemented	
S4.8.1	Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets or sprayed with water to maintain the entire surface wet all the time.	Land site/ During construction	Contractor(s)		<b>V</b>		Rectified after observed.	
S4.8.1	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Land site/ During construction	Contractor(s)		<b>√</b>		N/A	
S4.8.1	All exposed areas will be kept wet always to minimise dust emission.	Land site/ During construction	Contractor(s)		1		Implemented	
S4.8.1	Ultra-low-sulphur diesel (ULSD) will be used for all construction plant on-site, as defined as diesel fuel containing not more than 0.005% sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No 19/2005 on Environmental Management on Construction Sites.	Land site/ During construction/ During Operation	Contractor(s)		1	*	Implemented	Environment, Transport and Works Bureau Technical Circular (ETWB- TC(W)) No 19/2005 on Environmental Management on Construction Sites



EIA Reference	Recommended Environmental Protection	Objectives of the recommended measures	Implementation	Implen Stage	nentati	on	Implementation	Relevant Legislation & Guidelines
EIA Reference	Measures/ Mitigation Measures	& main concerns to address	Agent	D	С	0	status	
S4.8.1	The engine of the construction equipment during idling will be switched off.	Land site/ During construction	Contractor(s)		<b>✓</b>		Implemented	
S4.8.1	Concrete batching plant will be required on site. control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented. The control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented.		Contractor(s)		✓		N/A	Guidance Note on a Best
S4.8.1	Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	
S4.10	To ensure proper implementation of the recommended dust mitigation measures and good construction site practices during the construction phase, environmental site audits on weekly basis is recommended throughout the construction period.	Land site/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		~		Implemented	



EIA Reference	Recommended Environmental Protection	Objectives of the recommended measures &	Implementation	Implen Stage	nentati	on	Implementation status	Relevant Legislation &
	Measures/ Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
Noise		·						•
S5.7	Only well-maintained plant will be operated on- site and plant will be serviced regularly during the construction phase.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Mobile plant, if any, will be sited as far away from NSRs as possible.	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum.	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Plants known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Use of Quite Powered Mechanical Equipment (QPME).	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Movable noise barriers of 3m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m-2 and have no openings or gaps.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Construction activities (e.g. excavation/shoring,	Noise control/	Contractor(s)		✓		Implemented	A Practical Guide for the



EIA Reference	Recommended Environmental Protection	Objectives of the recommended measures &	Implementation		Relevant Legislation &			
	Measures/ Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
	reinstatement (asphalt), and pipe jacking) will be planned and carried out in sequence, such that items of PME proposed for these activities will not be operated simultaneously.	During construction						Reduction of Noise from Construction Works
S5.7	PMEs will not be used at the works areas near educational institutions with residual impact (ie the "influence area" within a radius of 40m) during school hours in order to reduce impact to the educational institutions.	Noise control / During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Noise enclosures or acoustic sheds would be used to cover stationary PME such as generators.  Portable/Movable noise enclosure made of material with superficial surface density of at least 7 kg m <sup>-2</sup> may be used for screening the noise from operation of the saw/groover, concrete.	Noise control/ Pre- construction/ During construction	Contractor(s)	•	•		N/A	
S5.9	Sawcutting pavement, breaking up of pavement, excavation /shoring, pipe laying, backfilling, reinstatement (concrete) and pipe jacking shall be scheduled outside the examination period.	Noise control/ Pre- construction/ During construction	Contractor(s)	<b>*</b>	<b>✓</b>		Implemented	
S5.9	In view the duration of noise exceedance at Creative Secondary School, PLK Laws Foundation College, TKO Kei Tak Primary School and School of Continuing and Professional Studies-CUHK is limited to 8 weeks, the construction work in the influence areas near the four schools shall be scheduled during long school holidays (eg summer holiday, Easter holiday or Christmas holiday, etc) as far as practicable. Scheduling the construction work for the four schools.	Noise control/ Pre- construction/ During construction	Contractor(s)	•	•		Implemented	
S5.10	A noise monitoring programme shall be implemented for the construction phase.	Designated monitoring stations as defined in EM&A Manual/During construction phase	Environmental Team (ET)		✓		Implemented	
S5.10	The effectiveness of on-site control measures could also be evaluated through the regular site audits.	All facilities/ During construction	Contractor(s)/ Environmental Team (ET) &		<b>√</b>		Implemented	-



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation	Implen Stage	nentati	on	Implementation status	Relevant Legislation & Guidelines
	weasures/ willigation weasures	main concerns to address	Agent	D	С	0		Guideillies
			Independent					
			Environmental					
			Checker (IEC)					



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementati on Agent	Implem Stage		on	Implementation status	Relevant Legislation & Guidelines  Dumping at Sea Ordinance (DASO)
	measures/ minganon measures	main concerns to address	on Agent	D	С	0		Guidelines
Water Quality								
S6.9	Dredged marine sediment will be disposed of in a gazetted marine disposal area in accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO).	Marine Dredging/ During construction	Contractor(s)		✓		N/A	
S6.9	Disposal vessels will be fitted with tight bottom seals in order to prevent leakage of material during transport.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	Barges will be filled to a level, which ensures that material does not spill over during transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	After dredging, any excess materials will be cleaned from decks and exposed fittings before the vessel is moved from the dredging area.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	All vessels should be well maintained and inspected before use to limit any potential discharges to the marine environment.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	All vessels must have a clean ballast system.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
\$6.9	No discharge of sewage/grey wastewater should be allowed. Waste water from potentially contaminated area on working vessels should be minimized and collected. These kinds of wastewater should be brought back to port and discharged at appropriate collection and treatment system.	Marine Dredging/ During construction	Contractor(s)		<b>✓</b>		N/A	-
S6.9	No soil waste is allowed to be disposed overboard.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-



EIA Reference	Recommended Environmental Protection	Objectives of the recommended measures &	Implementati	Implen Stage	nentati	on	Implementation status	Relevant Legislation & Guidelines
	Measures/ Mitigation Measures	main concerns to address	on Agent	D	С	0		Guidennes
S6.9	Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Land site & drainage/ During construction	Contractor(s)		<b>~</b>		Implemented, rectified after observation	ProPECC PN 1/94 TM Standard under the WPCO
S6.9	Earthworks to form the final surfaces will be followed up with surface protection and drainage works to prevent erosion caused by rainstorms.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S6.9	Appropriate surface drainage will be designed and provided where necessary.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S6.9	The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		Implemented	ProPECC PN 1/94
S6.9	Oil interceptors will be provided in the drainage system where necessary and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		N/A	-
S6.9	Temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge, if any, will be adequately designed for the controlled release of storm flows.	Land site & drainage/ During construction	Contractor(s)		✓		N/A	-



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementati on Agent	Imple: Stage	nentati	on	Implementation status	Relevant Legislation & Guidelines
	wieasures/ winganon weasures	main concerns to address	on Agent	D	С	0		Guidelines
S6.9	The temporary diverted drainage, if any, will be reinstated to the original condition when the construction work has finished or when the temporary diversion is no longer required.	Land site & drainage/ During construction	Contractor(s)		<b>✓</b>		N/A	-
S6.9	Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the construction workers over the construction site to prevent direct disposal of sewage into the water environment.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S6.9 and S6.12	The sterilization water should be dechlorinated with total residual chlorine (TRC) level below 1 mg/L before discharge to public sewer. In situ testing of TRC should also be conducted for the discharge of chlorinated water for pipeline disinfection to ensure sufficient dechlorination before discharge to public sewer.	Sterilization of water mains prior to commissioning	Contractor(s)		•	<b>√</b>	N/A	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems Inland and Coastal Waters
S6.9	The cleaning and flushing water should also be treated and desilted to the relevant discharge requirement stipulated in TM-DSS before discharging.	Sterilization of water mains prior to commissioning	Contractor(s)		1	<b>√</b>	N/A	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems Inland and Coastal Waters
S6.9	Site drainage should be well maintained and good construction practices should be observed to ensure that oil, fuels, solvents and other chemicals are managed, stored and handled properly and do not enter the nearby water streams.	Land site & drainage/ During construction/ During operation	Contractor(s)		<b>√</b>	<b>√</b>	Implemented, rectified after observation	-



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementati on Agent	Implen Stage	nentati	on	Implementation status	Relevant Legislation & Guidelines
	weasures/ witigation weasures	main concerns to address	on Agent	D	С	0		Guidennes
S6.12	Regular site inspections will be carried out in order to confirm that regulatory requirements are being met and that contractors are implementing the standard site practice and mitigation measures as proposed to reduce potential impacts to water quality.	During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		<b>~</b>		Implemented	-



EIA Reference	Recommended Environmental Protection	Objectives of the recommended measures &	Implementation	Implen Stage	nentati	ion	Implementation Status	Relevant Legislation &
	Measures/ Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
Waste Manage	ment							
S8.5	Nomination of approved personnel to be responsible for standard site practices, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site.	Contract mobilisation/ During construction	Contractor(s)		<b>~</b>		Implemented	
S8.5	Training of site personnel in proper waste management and chemical handling procedures.  Training will be provided to workers on the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling at the beginning of the construction works.	Contract mobilisation/ During construction	Contractor(s)		•		Implemented	-
S8.5	Provision of sufficient waste disposal points and regular collection for disposal.	All area/ During construction/ During operation	Contractor(s)		<b>&gt;</b>	<b>√</b>	Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	Appropriate measures to reduce windblown litter and dust transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	All area/ During construction	Contractor(s)		<b>&gt;</b>		Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	A waste management plan (WMP) as stated in the "ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites" for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established and implemented during the construction phase as part of the Environmental Management Plan (EMP). The Contractor will be required to prepare the EMP and submits it to the Architect/ Engineer under the Contract for approval prior to implementation.	All area/ During construction	Contractor(s)		<b>~</b>		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
S8.5	Separation of chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Centre at Tsing Yi.	All area/ During construction	Contractor(s)		<b>√</b>		N/A	Chapters 2 & 3 Code of Practice on the Packaging, Labelling & Storage of Chemical Wastes published under the Waste Disposal Ordinance (Cap 354),



EIA Reference	Recommended Environmental Protection	Objectives of the recommended measures &	Implementation	Implen Stage	nentat	ion	Implementation Status	Relevant Legislation &
	Measures/ Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
								Section 35
S8.5	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	Land site/ During construction	Contractor(s)		<b>\</b>		Implemented. Rectified after observation.	Waste Disposal Ordinance (Cap 354)
S8.5	A recording system for the amount of wastes generated/ recycled and disposal sites. The tripticket system will be included as one of the contractual requirements and implemented by the contractor(s).	Land site/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal.	Land site/ During construction, During operation	Contractor(s)		✓		Implemented	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Encourage collection of aluminium cans and waste paper by individual collectors during construction with separate labelled bins provided to segregate these wastes from other general refuse by the workforce.	Land site/ During construction	Contractor(s)		<b>✓</b>		Implemented	ETWB TCW No. 33/2002, Management of Construction and Demolition Material Including Rock
S8.5	Any unused chemicals and those with remaining functional capacity will be recycled as far as possible.	Land site/ During construction	Contractor(s)		<b>4</b>		N/A	-
S8.5	Use of reusable non-timber formwork to reduce the amount of C&D materials.	All areas/ During construction	Contractor(s)		✓		N/A	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Prior to disposal of construction waste, wood, steel and other metals will be separated to the extent practical, for re-use and/or recycling to reduce the quantity of waste to be disposed of to landfill.	All areas/ During construction	Contractor(s)		<b>√</b>		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Proper storage and site practices to reduce the potential for damage or contamination of construction materials.	All areas/ During construction	Contractor(s)		✓		Implemented, rectified after observation.	-
S8.5	Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste.	All areas/ During construction	Contractor(s)		✓		Implemented	-



EIA Reference	Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation	Implen Stage	nentat	ion	Implementation Status	Relevant Legislation &
		main concerns to address	Agent	D	С	0	7	Guidelines
S8.5	A Sediment Quality Report (SQR) for sampling and chemical testing of the sediment will be prepared and submitted to the EPD for approval. The approved detailed sampling and chemical testing will be carried out prior to the commencement of the dredging activities to confirm the sediment disposal method.	Marine works/ During construction	Contractor(s)		✓		N/A	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)
S8.5	The management of dredged/ excavated sediment management requirement from ETWB TC(W) No. 34/2002 will be incorporated in the Specification of the Contract Documents.	Marine works/ During construction	WSD/ Contractor(s)		✓		Implemented	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)
S8.5	The contractor will open a billing account with EPD in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation for the payment of disposal charges.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	Cap 354N Waste Disposal (Charges for Disposal of Construction Waste) Regulation
S8.5	A trip-ticket system will be established in accordance with DEVB TC(W) No. 6/2010 to monitor the reuse of surplus excavated materials off-site and disposal of construction waste and general refuse at transfer facilities/ landfills, and to control fly-tipping.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	The project proponent will also conduct regular inspection of the waste management measures implemented on site as described in the Waste Management Plan.	All area/ During construction	Contractor(s) / Environment al Team (ET) & Independent Environment al Checker (IEC)		✓		Implemented	ETWB TC(W) No. 19/2005 Environmental Management on Construction Sites
S8.5	A recording system (similar to summary table as shown in Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005) for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established during the construction phase.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation &
		main concerns to address		D	С	0		Guidelines
S8.5	Inert C&D materials (public fill) will be reused within the Project as far as practicable.	All area/ During construction	Contractor(s)		<b>1</b>		Implemented	-
S8.5	Public fill and construction waste shall be segregated and stored in different containers or skips to facilitate reuse or recycling of materials and their proper disposal.	All area/ During construction	Contractor(s)		✓		Implemented	-
S8.5	Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S8.5	To reduce the potential dust and water quality impacts of site formation works, C&D materials will be wetted as quickly as possible to the extent practice after filling.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R); WPCO (Cap 358)
S8.5	Open stockpiles of excavated/ fill materials or construction wastes on-site should be covered with tarpaulin or similar fabric.	Land site/ During Construction, particularly dry season	Contractor(s)		<b>√</b>		Rectified after observation.	Air Pollution Control (Construction Dust) Regulation (Cap 311R)
S8.5	Chemical waste container shall be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	*	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Chemical waste container shall have a capacity of less than 450 L unless the specifications have been approved by the EPD.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	<b>V</b>	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	A label in English and Chinese shall be displayed on the chemical container in accordance with instructions prescribed in Schedule 2 of the Regulations.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	<b>✓</b>	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation	Implen Stage	nentati	on	Implementation Status	Relevant Legislation & Guidelines
		main concerns to address	Agent	D	С	0		
S8.5	Storage areas for chemical waste shall be enclosed on at least 3 sides.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>~</b>	<b>✓</b>	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall have adequate ventilation.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>✓</b>	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary).	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>✓</b>	<b>√</b>	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall be arranged so that incompatible materials are appropriately separated.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	<b>√</b>	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	General refuse will be stored in enclosed bins or compaction units separately from construction and chemical wastes.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	<b>√</b>	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
			Agent	D	С	0		Guidelines
								Packaging, Handling and Storage of Chemical Wastes
S8.5	Adequate number of waste containers will be provided to avoid over-spillage of waste.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>&gt;</b>	<b>✓</b>	Implemented	DEVB TC(W) No. 8/2010 Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	A reputable waste collector will be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimise odour, pest and litter impacts.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>&gt;</b>	<b>*</b>	Implemented	-
S8.5	Recycling bins will be provided at strategic locations within the Site to facilitate recovery of recyclable materials (including aluminium can, waste paper, glass bottles and plastic bottles) from the Site.  Materials recovered will be sold for recycling.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	<b>√</b>	Implemented	-
S8.5	To avoid any odour and litter impact, accurate number of portable toilets will be provided for workers on-site.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S8.5	The burning of refuse on construction sites is prohibited by law.	All area/ During construction	Contractor(s)		✓		Implemented	Air Pollution Control Ordinance (Cap 311)
S8.7	To facilitate monitoring and control over the contractors' performance on waste management, a waste inspection and audit programme will be implemented throughout the construction phase.	All facilities/ During construction	ET/IEC		<b>*</b>		Implemented	-



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Impler Stage	nentati	on	Implementation Status	Relevant Legislation & Guidelines
		main concerns to address	Agent	D	С	0		Guidennes
	Ecology							
S9.7	For slope mitigation works within the Clear Water Bay Country Park, to avoid tree felling and damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and rock dowels can be adjusted during detailed design, and a setback distance from existing trees is recommended to be maintained as far as practical. A detailed specification describing the exact locations of the flexible barrier foundation plates, soil nails and rock dowels will be prepared to illustrate how the setback distance from existing trees would be implemented for tree avoidance.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)		<i>*</i>		Implemented	-
S9.7	Pruning of tree canopies along the alignment of the flexible barriers shall be limited to a minimum.	Slope mitigation works area/ During construction	Contractor(s)		<b>√</b>		Implemented	
S9.7	The alignment of flexible barriers shall be optimized to preserve all species of conservation interest and minimize the impact to the existing vegetation as far as practicable. All individuals of <i>Marsdenia lachnostoma</i> within the slope mitigation areas shall be retained <i>in- situ</i> , by positioning the alignment of flexible barrier at a minimum 1.5m in a radius away from these individuals.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	•	<b>✓</b>		N/A	-
S9.7 and 9.10	At the detailed design stage prior to the commencement of the slope mitigation works, a vegetation survey shall be carried out at the slope mitigation areas within the Clear Water Bay Country Park to assess the condition and identify the location of each individual of <i>Marsdenia lachnostoma</i> and other flora species of conservation interest that may be directly affected by the construction works.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	<b>*</b>	<b>√</b>		Implemented	-
S9.7	Temporary fencing will be installed to fence off the concerned species either in groups of individually within the works area and in the close proximity to prevent from being damaged and disturbed during construction. A sign identifying the site shall be attached to the fence and flagging tape shall be	Slope mitigation works area/ During construction	Contractor(s)		<b>✓</b>		N/A	-



EIA Reference	Measures/ Mitigation Measures		Implementation	Implementation Stage			Implementation Status	Relevant Legislation &
		main concerns to address	Agent	D	С	0		Guidelines
	attached to the individuals to visualize their locations.							
S9.7 and S9.10	A specification for fencing and demarcating individuals of <i>Marsdenai lachnostoma</i> (or other flora species of conservation interest, if found) adjacent to the proposed alignment of the flexible barriers will be prepared to protect the species.	Slope mitigation works area/ During construction	Contractor(s)		<b>✓</b>		N/A	-
S9.7	Induction training shall also be provided to all site personnel in order to brief them on this flora of conservation interest including the locations and their importance.	Slope mitigation works area/ During construction	Contractor(s)		<b>✓</b>		N/A	-
S9.7	The resident site supervisory staff will closely monitor the conditions of concerned individuals during construction of flexible barriers in the close proximity.	Slope mitigation works area/ During construction	Contractor(s)		<b>✓</b>		N/A	-
S9.7	Erect fences along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas.	All area/ During construction	Contractor(s)		<b>✓</b>		Implemented	-
S9.7	Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding areas.	All area/ During construction	Contractor(s)/ Environmental Team (ET)		<b>√</b>		Implemented	-
S9.7	Avoid any damage and disturbance, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal.	All area/ During construction	Contractor(s)		<b>✓</b>		Implemented	-
S9.7	Reinstate temporarily affected areas, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting. The tree/shrub species will be chosen with reference to those in the surrounding area.	All area/ During construction	Contractor(s)		<b>*</b>		N/A	-
S9.7	Affected habitats within the Clear Water Bay Country Bay shall be reinstated by hydro-seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works.	All area/ During construction	Contractor(s)		<b>✓</b>		N/A	-



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
		main concerns to address	Agent	D	С	0		Guidelines
	Landscape & Visual							
S11.10 & 11.11	The construction area and area allowed for temporary structures, such as the contractor's office, will be minimized to a practical minimum. (MM1)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	<b>✓</b>	<b>✓</b>	<b>*</b>	Implemented	-
S11.10 & 11.11	At the detailed design stage, the design team will seek to minimize the landscape footprint of the Project and above ground facilities, while satisfying all other requirements. (MM2)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	<b>✓</b>	<b>√</b>	<b>*</b>	Implemented	-
S11.10 & 11.11	Design principles will be adopted to take into account the surrounding area, particularly Clear Water Bay Country Park behind and the nearby waterfront, with due consideration given to: - green roofs where practical (ie without equipment on the roof); - roadside planting; - aesthetic treatment of all structures; - vertical greening; screen planting along application site; and - landscape enhancement with amenity planting where practical including planting along the edge (site boundary) fence with native shrubs where feasible, - to reduce their visual impact and blend them into the surrounding landscape. (MM3)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	•	<b>*</b>	•	Implemented	-
S11.10 & 11.11	All trees within the Project Site or the potential slope mitigation works area will be carefully protected during construction according to DEVB TCW No.  10/2013 – Tree Preservation (MM4)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	~	<b>√</b>	<b>*</b>	Implemented	ETWB TCW No. 3/2006 - Tree Preservation.
S11.10 & 11.11	No tree within the Country Park will be felled. Trees within the Site unavoidably affected by the works will be transplanted where necessary and practical. For trees that need to be felled, compensatory planting will be provided to the satisfaction of relevant Government departments. A compensatory tree planting proposal including locations of tree compensation will be submitted to	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	<b>✓</b>	<b>√</b>	<b>V</b>	Implemented	DEVB TC(W) No. 10/2013



EIA Reference	Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation	Implementation Stage			Implementation Status	Relevant Legislation &
		main concerns to address	Agent	D	С	0		Guidelines
	seek relevant government department's approval, in accordance with DEVB TC(W) No. 10/2013. (MM5)							
S11.10 & 11.11	Any slope mitigation works necessary to address natural terrain hazards, will be minimized to minimize any potential environmental impact to the Country Park e.g. soil nailing and rock stabilization will aim to avoid existing trees e.g. should any restoration of vegetation be necessary, the best planting matrix with native species will be established, with the aim of resembling the existing vegetation. (MM6)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)		•	•	N/A	
S11.10 & 11.11	Dredging works for the installation of intake structures and outfall diffusers should be minimized to avoid or reduce any potential environmental impacts to as low as reasonably practicable (ALARP). The intake and outfall structures (e.g. intake openings and diffuser heads) will be prefabricated and transferred to site for installation. (MM7)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	•	<b>✓</b>	<b>✓</b>	N/A	
S11.10 & 11.11	All night-time lighting will be reduced to a practical minimum both in terms of number of level and will be hooded and directional. (MM8)units and lux level and will be hooded and directional. (MM8)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	<b>✓</b>	<b>√</b>	Implemented	-



EIA Reference	Recommended Environmental Protection	recommended measures & implementation		Impler Stage	nentati	on	Implementation Status	Relevant Legislation &
	Measures/ Mitigation Measures	main concerns to address	Agent	D				Guidelines
	Landfill Gas Hazard							
S12.7	During all works, safety procedures should be implemented to minimise the risks of fires and explosions, asphyxiation of workers and toxicity effects resulting from contact with contaminated soil and groundwater.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>*</b>	<b>✓</b>	•	Implemented	-
S12.7	During trenching and excavation as well as creation of confined spaces at near to or below ground level, precautions should be clearly laid down and rigidly Gas detection equipment and appropriate breathing apparatus should be available and used when entering confined spaces or trenches deeper than 1 metre.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>*</b>	<b>√</b>	<b>√</b>	Implemented	
S12.7	The Contractor should make the workers are aware of potential hazards of working in confined spaces (any chamber, manhole or culvert which is large enough to permit access to personnel). Such work in confined spaces is controlled by the Factories and Industrial Undertakings (Confined Spaces) Regulations of the Factories and Industrial Undertakings Ordinance. Following the Safety Guide to Working in Confined Spaces ensures compliance with the above regulations.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>✓</b>	<b>√</b>	<b>✓</b>	Implemented	
S12.7	Safety officers, specifically trained with regard to landfill gas and leachate related hazards and the appropriate actions to take in adverse circumstances, should be present on the site throughout the works, in particular, when works are undertaken below grade.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>*</b>	<b>√</b>	<b>√</b>	Implemented	
S12.7	All personnel who work on site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of the works, the possible presence of contaminated water and the need to avoid physical contact with it.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>*</b>	<b>✓</b>		Implemented	
S12.7	Monitoring for landfill gas should be undertaken in all excavations, manholes, chambers (particularly during pipe jacking) and any confined spaces through the use of an intrinsically safe portable	All area/ Detailed design/ During construction/ During operation	Contractor(s)	~	✓	<b>√</b>	Implemented	



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation	Implementation Stage			Implementation Status	Relevant Legislation &
	Measures/ Mitigation Measures	main concerns to address	Agent	D	С	0		Guidelines
	instrument, appropriately calibrated and capable of measuring the concentrations of methane. carbon dioxide and oxygen.							
S12.7	Monitoring frequency and areas to be monitored should be specified prior to commencement of groundwork, either by the Safety Officer, or by an appropriately qualified person. All measurements should be recorded and documented.	All area/ Detailed design/ During construction/ During operation	Contractor(s)		•	<b>√</b>	Implemented	
S12.7	Proceed drilling with adequate care and precautions against the potential hazards which may be encountered.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	~	<b>✓</b>	<b>~</b>	Implemented	
S12.7	Prior to the commencement of the site works, the drilling contractor should devise a 'method-of-working' statement covering all normal and emergency procedures (including but not limited to number of operatives, experience and special skills of operatives, normal method of operations, emergency procedures, supervisors responsibilities, storage and use of safety equipment, safety procedures and signs, barriers and guarding). The site supervisor and all operatives must be familiar with this statement.	All area/ During construction/ During operation	Contractor(s)	<b>V</b>	<b>*</b>	<b>V</b>	Implemented	
S12.7	Where below ground service entries are necessary to the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II), the entry point should be sealed to prevent gas entry. In addition, any below grade cable trenches entering the Incoming Switchgear Room and 132 kV Substation can become the pathway for landfill gas and hence grilled metal covers should be used.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>✓</b>	<b>√</b>	<b>*</b>	N/A	
S12.7	It is recommended regular landfill gas monitoring should be carried out at the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II). The monitoring frequency will be monthly for the first year of operation. If the monitoring results show no sign of landfill gas migration, reduce the monitoring frequency to once every six months.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>V</b>	<b>√</b>	<b>*</b>	N/A	



EIA Reference	EIA Reference Recommended Environmental Protection Measures/ Mitigation Measures  Objectives of the recommended measures & main concerns to address		Implementation	Implen Stage	nentati	on	Implementation Status	Relevant Legislation & Guidelines
			Agent	D	D C O			Guidennes
S12.7	The manholes and utility pits within the Project Site and along the fresh water mains. Each manhole/ utility pit should be monitored with two measurements (at mid depth and base). Each measurement should be monitored for a minimum of 10 minutes. A steady reading and peak reading should be recorded at each manhole/ utility pit and for each measurement. The need for venting the manhole/ utility pit and further monitoring will be reviewed after the initial monitoring.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	•	•	•	Implemented	
S12.7	All construction, operation and maintenance personnel working on-site as well as visitors should be made aware of the hazards of landfill gas and its possible presence on-site. This should be achieved through a combination of posting warning signs in prominent places and also by access to detailed information on landfill gas hazards and the designs and procedural means by which these hazards are being minimized on-site.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	<b>✓</b>	•	✓	Implemented	

Note: D – Design stage C – Construction O – Operation



# Appendix D

Impact Monitoring Schedule of the Reporting Month



			Sep-21			
Sun	Mon	Tue	Wed	Thu	Fel	Set
			1	Noise Impact Monitoring	3	4
	6	7	s		Noise Impact Monitoring	11
12	13	14	15	Noise Impact Monitoring	17	18
				Noise Impact Monitoring	24	25
	27	28	29	Noise Impact Monitoring		

The schedule may be changed due to unforeseen dircumstances (adverse weather, etc)



Appendix E

Noise Monitoring Equipment Calibration Certificate





# CALIBRATION CERTIFICATE

	CALI	BRATION C	ERTIFICATE	
Certificate Informat	ion			
Date of Issue	17-Nov-2020		Certificate Nun	nber MLCN203081S
Customer Informati	on			
Company Name		ability Consulting Lin		
Address		. 301-305 Castle Peal	k Road,	
	Kwai Chung, N	·.l.		
Equipment-under-T	est (EUT)			A SECTION AND A SECTION ASSESSMENT
Description	Sound Level C	alibrator		
Manufacturer	Rion			
Model Number Serial Number	NC-74			
Equipment Number	34504770			
Maria and the second	-			
Calibration Particular	ar			
Date of Calibration	17-Nov-2020			
Calibration Equipment		8) / AV200063 / 23-Ji		
	1.357(MLTE190	0) / MLEC20/05/02 /	26-May-21	
Calibration Procedure	MLCG00, MLC	CG15		
Calibration Conditions	Laboratory	Temperature	23 °C ± 5 °C	
		Relative Humidity	55% ± 25%	
	EUT	Stabilizing Time	Over 3 hours	
		Warm-up Time	Not applicable	
Calibration Results	Calibardan data	Power Supply	Internal battery	
Cambration Results		were detailed in the It was within EUT sp		
	Cuntration resu	it was within ECT sp	eenication.	
Approved By & Date				
		/	7	
Statements			K.O. Lo	17-Nov-2020
Calibration equipment used	for this calibration a	re traceable to national /	nternational standards	Charles and the
<ul> <li>The results on this Calibratic</li> </ul>	on Certificate only re	elate to the values measur	ed at the time of the calibration and	the uncertainties quoted will
not include allowance for the overloading, mishandling, m	EUT long term dri	ft, variation with environi	nental changes, vibration and shock	during transportation,
MaxLab Calibration Centre	Limited shall not be	liable for any loss or dam	nage resulting from the use of the El	JT.
The copy of this Certificate i prior written approval of Ma	is owned by MaxLal	Calibration Centre Limi	ted. No part of this Certificate may	be reproduced without the
, as the cappional of Ma	and Cantration Co	ance Langed.		

Page 1 of 2

護債校正中心有限公司 MaxLab Calibration Centre Limited 香港新界裝滿華星街 16-18 號保盈工業大廈 9 樓 B 室 Unit B, 9/F., Boldwin Industrial Bidg., 16-18 Wah Sing Street, Kwa Chung, N.T., Hong Kong, Tel: (852) 2116 1330. Fex. (852) 2264 6480. Email: info@maxlab.com.lik





Certificate No.

MLCN203081S

Calibration Data	Car Street			
EUT Setting	Standard Reading	EUT Error from Setting	Calibration Uncertainty	EUT Specification
94 dB	94.0 dB	0.0 dB	0.20 dB	± 0.3 dB

- END -

Calibrated By: Date:

Dan 17-Nov-20

Checked By: Date:

K.O. Lo 17-Nov-20

Page 2 of 2





# CERTIFICATE OF CALIBRATION

NO. 20200519040

Name of Product: Sound Level Meter Model: ST-11D Serial Number: 820200 Specification: Class 1 Conclusion: Pass Date of calibration 2021-01-18 Due Date: 2022-0 -17



This report certifies that all calibration equipment used in the text is traceable with the internal ISO9001 procedures and neet all specification given in the Manual(s) or respectively surpass the land applies only to the unit identified above. This certificate is produced with advance unpulment & procedures which permit compress ensive quality assurance verification of all data supplied herein. This certificate of calibration shall not be reproduced except in full, without written permission of the scartest Ech Collect Taiwan. eet all specification given in the

III.

1. Preliminary inspection:

2. Type & serial No. of Micro ho'er AWA14425-27998

3. Adjustments to indicated soul d levels:

4. Measuring up limit: 140 dBA

c Fraguency weightings (Acoustic signal tests for Z weighting, other electric sign. 'tests.')

Type of Calibrator\_B&K 42 11

Sound Pressure Level 93.8 CB

Equivalent Free-field Sound Leve, 'reference environment conditions) 93.8 dB

Nominal	Fre	quency weight	ing/d8	Nominai	Fre	equency weightin	ng / dB
frequency /Hz	A	С	Z	frequency /Hz		С	z
10	-71.0	-14.4	-0.9	1000	0.0	-0.1	-0.3
20	-50.4	-6.1	-0.1	2000	1.2	-0.2	0.2
31.5	-39.а	-3.1	0.0	4000	1.0	-0.9	0.3
63	-26.2	-0.9	0.3	80.40	-1.0	-3.2	-0.5
12	-16.0	0.3	0.1	12500	-4.5	-6.4	-0.7
250	-8.6	-0.1	0.1	16000	-9.6	-11.5	-1.3
500	3.7	-0.1	0.1	20000	-23.9	-25.9	-0.8



#### 6. Self-generated noise

Microphone replaced by electrical input signal device

8.9 dB(A)	16.6 dB(C)	19.8 dB <sub>1</sub> ."
7. F&S Welghting	•	
Rate of the F weighting	decrease (dB/s)	35.2
Rate of the S weighting	decrease (dB/s)	4.4
Deviation o	of F&S	0.0

## 8. Level Linearity (A-weighting at frequency 1 kHz)

Reference sound level 90.0 dB

Max error at 10dB steps upper reference sound level \_-0.1 \_iB

Max error at 1dB steps within 5dB of the upper limit line  $\epsilon$  roperating range  $\underline{0.0}\,\text{dB}$ 

Max error at 10dB steps below reference sound level  $0.1\,$  1B

Max error at 1dB steps within 5dB upper the lower limit linear operating range  $0.2\,\mathrm{dB}$ 

### 9. Tone burst response(A Weighting):

Single Toneburst duration /ms		Toneb. rst	response /dB	
7/1/3	Larmax-La	Lasmex-La	LAE-LA	Aegr-LA
500	0.0	-4.0	-2.9	7.0
200	-1.0	-7.4	-6.9	-7.0
50	-18.0	-26.9	-26.9	-7.0
10	-27.2		-36.0	-7.0

### 10. Peak C sound level (500Hz)

Cycle	One cycle	nominal value	0111-15			
-,,,,,	One cycle	nominal value	Positive half	nominal value	Negative half	nominal value
LCpeak-LC(dB)	3.5	3.5	2.3	2.	2.3	2.4

11. Orerload indication: Pass

12 Statistical analysis function

Sween signal maximum indicated sound level: 112.0 40

Sweep amplitude: 40 dB

Scan cycle ime 60 S: Measuremant period: 180 S

Iteris	Measured value/dB	Theoretical calculated value/dB	Error/dB
LAeq,T	103.2	103.2	0.0



# **( 人 + 人 )** \* **L** Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

# Certificate of Calibration

for

escription:	Sound Level Met

Manufacturer: NTi Audio

 Type No.:
 XL2 (Se.ial No.: A2.1-13548-E0)

 Microphone:
 ACO 7052 (Serial No.: 73780)

Preamplifier: N7i Audio M2211 MA220 (Serial No.:5235)

Sul mitted by:

Customer: Acui'y Sustainability Consulting Limited

Address: Unit C, 11/F., Ford Glory Plaza, No. 37-39 Win; Hong Street,

Cheung Sha Wan, Kowloon

Certificate No.: APJ20-144 CC001

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Room 422,Leader Incus, rial Centre, 57-59 Au Pui Wan Street ,Fo Tan, Shatin, N.T., Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail: inquiry@aa-lab.com



# Acoustics and Air Testing Laboratory Co. Ltd. 整學及空氣測試實驗室有限公司

### 1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

### 2. Calibration Conditions:

Air Temperature: 23.7 °C
Air Pressure: 1006 hPa
Relative Humidity: 61.8 %

### 3. Calibration Equipment:

Type Serial No. Calibration Report Number Tracea bee to Multifunction Calibrator B&K 4226 2288467 AV200041 HOKLAS

### 4. Calibration Results

Sound Pressure Level

Reference Sound ! ressure Level

Set	ing of Uni	t-under-t	est (UUT)	App	lied value	UUT Reading,	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. W	eighting	Time Weighting	Level, aB	Frequency, Hz	dB	
30-130	αRA	SPL	Fast	94	1000	94.0	±0.4

### Linearity

Setting of Unit-under-test (UUT)			Apr	lied value	UUT Reading,	IEC 61672 Class 1	
Range, dB	Freq. V	Veighting	Time Weighting	Level, aB	Frequency, Hz	dB	Specification, dB
				94		94.0	Ref
30-130	dBA	SPL	Fast	104	1000	104.0	±0.3
				114		114.0	±0.3

Time Weighting

Sett	Setting of Unit-under-test (UUT)			Арр	lied value	UUT Reading,	IEC 61672 Class 1
Range, d'S	Freq.	Weighting	ome Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	SPL	Fast	94	1000	94.0	Ref
36-130	UDA	SFL	Slow	94	1000	94.0	±0.3

Certificate No.: APJ20-1/4 CC001

(A+A) \*L

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Frequency Response

Linear Response

9.11			ZVIV ITTO	·			
Setting of Unit-under-test (UUT)			Appl	i d value	UUT Reading,	IEC 61672 Class 1	
Range, dB	Freq. W	eighting	Time Weighting	Level, dP	Frequency, Hz	dB	Specification, dB
					31.5	94.1	±2.0
					63	94.1	±1.5
					125	24.1	±1.5
					250	94.1	1.4
30-130	dB	SPL	Fast	94	300	94.1	±1.4
					1000	94.0	Ref
					2000	93.8	≥ 1.6
			//		4000	93.4	=13
			//		8000	92.7	+( 1; -3.1

A-weighting

Sett	ing of Unit-under-t	est (UUT	Appl	lied value	UUT Read n ;	specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	
				31.5	54.7	-39.4 ±2.0
				63	08.0	-26.2 ±1.5
				125	75.0	-16.1 ±1.5
				250	85.4	-8.6 ±1.4
30-130	CBA SPL	Fast	94	500	90.8	-3.2 ±1.4
				1000	94.0	Ref
	/ /			2000	95.0	+1.2 ±1.6
				4000	94.4	+1.0 ±1.6
				8000	91.6	-1.1+2.1; -3.1

C-weighting

Sett	ing of Unit-under-t	est (UUT)	Arpl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. Weighting	Tin e Veighting	Level, dB	Frequency, Hz	dB	Specification, dB
				31.5	91.1	-3.0 ±2.0
				63	93.3	-0.8 ±1.5
				125	93.9	-0.2 ±1.5
				250	94.1	-0.0 ±1.4
20-130	dBC SPL	East	94	500	94.1	-0.0 ±1.4
	7 -			1000	94.0	Ref
		_ /		2000	93.7	-0.2 ±1.6
		)/		4000	92.6	-0.8 ±1.6
		1/		8000	89.7	-3.0 +2.1: -3.1

Certificate No.: 1.PJ20-1.4-CC001

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Homepage: http://www.aa-lab.com E-mail: inquiry@aa-lab.com



# Acoustics and Air Testing Laboratory Co. Ltd.

#### 5. Calibration Results Applied

The results apply to the particular unit-under-test only. all calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.10
	63 Hz	± 1.15
	125 Hz	+ 0.10
	250 Hz	0.10
	500 Hz	± 0.10
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
	8000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a \$5% confidence level.

#### Note:

The values given in this certification only related to the values measured at the time of the calibration and any an ertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)\*L shall not be liable for any loss or damage resulting from the use of the equipment.



Certificate No.: APJ20-1.4-CC001

Page 4 of 4

Room 422,Leader In: us trial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong Tel: (852) 2668 3423 Fax:(852) 2668 6946 E-mail:inquiry@aa-lab.com

Homepage: http://www.aa-lab.com





# Certificate of Calibration

for

Description:

Sound Level Meter

Manufacturer:

Lutron

Type No.:

SL-40335D (Seriai No.: 1491835)

Submitted by:

Customer:

Acuity Su tainability Consulting Limited

Address: Unit 1 08, Nos. 301-305 Castle Peak Road, Kwai Chung, N.T.
Upon receipt for calibration, the instrument was found to be:
✓ Within  ☐ Outside
the allowable tolerance.
The test equipment used for calibration the traceable to National Standards via:  - The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
Date of receipt: 02 December 2020
Date of calibration: 97 December 2320
Calibrated by: Calibration Technician Calibrated by: Mr. Ng Yan Wa
Date of issue: 07 December 2020
SALIT TESTING LARGING

Certificate No.: APJ20-143 CC001

(A+A) \*L sage 1 of 4

Room 422,Leader In Justicial Centre, 57-59 Au Pui Wan Street, Fo Tan, Shatin, N.T., Hong Kong
Tel: (852) 2668 3423 Fax: (852) 2668 6946
Homepage: http://www.aa-lab.com E-mail: inquiry@aa-lab.com



# (A+A)\* L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

### 1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

### 2. Calibration Conditions:

 Air Temperature:
 23.5 °C

 Air Pressure:
 1006 hPa

 Relative Humidity:
 62.5 %

### 3. Calibration Equipment:

Type Serial No. Calibration Report Number Tracea 312 to

Multifunction Calibrator B&K 4225 2288467 AV200041 HOKI AS

### 4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Sett	Setting of Unit-under-test (UUT)			App	lied value	d value UUT Reading, IEC 6		
Range, dB	F req. W	eighting	Tim: Weighting	Level, dB	Frequency, Hz	dB	Specification, dB	
40-140	аЗА	SPL	Fast	94	1000	94.0	±0.4	

### Linearity

Setting of Unit-under-test (UUT)			Apr	ied value	UUT Reading,	IEC 61672 Class 1	
Range, dB	Freq. W	eighting	Time Weighting	Level, /lB	Frequency, Hz	dB	Specification, dB
				94		94.0	Ref
40-140	dBA	SPL	Fasi	104	1000	104.0	±0.3
				114		114.0	±0.3

Time Weighting

Setting of Init-unger 'est (UU")			App	lied value	UUT Reading, I	IEC 61672 Class 1	
Range, dB	Freq.	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
	/ m.	op.	Fast	94	1000	94.0	Ref
40-146	dBA	SPL	Slow	94	1000	94.0	±0.3

Certificate No.: APJ20-140-CC001

(A+A) \*Lpage 2 of 4

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Frequency Response

A-weighting

Setting of Unit-under-test (UUT)				App	lied value	UUT Reading,	IEC 61672 Class
Range, dB	Freq. W	eighting	Time Weighting	Level, dP	requency, Hz	dB	Specification, dB
				-	31.5	55.1	-39.4 ±2.0
					63	67.9	-26.2 ±1.5
					125	78.0	-16.1 ±1.5
40-140	dBA	SPL	Fast	94	250	85.5	-8.6 \( \) 1.4
					200	91.1	-3.2 ±1.4
					1000	94.0	Ref
					2000	94.3	+1.2 ±1.6

### C-weighting

Sett	ing of Unit-under-t	est (UUT	Appl	ied value	UUT Read n;	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
				31.5	91/1	-3.0 ±2.0
				63	94.0	-0.8 ±1.5
				125	94.7	-0.2 ±1.5
40-140	dBC SPL	Fast	94	250	94.9	-0.0 ±1.4
		->		500	94.5	-0.0 ±1.4
				1000	94.0	Ref
				2000	92.3	-0.2 ±1.6

Certificate No.: APJ20-141 CC001

Room 422, Leader Incus trial Centre, 57-59 Au Pui Wan Street, Fo Tan, Shatin, N.T., Hong Kong Tel: (852) 2668 3423 Fax: (852) 2668 6946

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# (**A+A**) \* L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

### 5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.05
	63 Hz	± 13.10
	125 Hz	± 9.05
	250 Hz	+ 0.00
	500 Hz	± 0.10
	1000 Hz	± 0.05
	2000 Hz	± 0.05
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for 195% confidence level.

#### Note:

The values given in this cartification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vioration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (Alla)\*L shall not be liable for any loss or damage resulting from the use of the equipment.

Certificate No.: APJ 20-140 CC001

AT TESTING LABORATES (A+A) \*L

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Room 422,Leader In lustrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong Tel: (852) 2668 3423 Fax:(852) 2668 6946 Homepage: http://www.aa-lab.com E-mail:inquiry@aa-lab.com







This instrument was produced under rigorous factory production control and documented standard procedures. It was individually visually inspected, leak tested and function tested for display, backlight, button and software performance. The accuracy of each of its primary measurements was individually calibrated and/or tested against standards traceable to the National Institute of Standards and Technology ("NIST") or calibrated intermediary standards. This instrument is certified to have performed at the time of manufacture in compliance with the following specifications as they apply to this meter's specific model, measurements and features.

### Methods Used in Calibration and Testing

### Wind Speed:

The Kestrel Weather & Environmental Meter impeller installed in this unit was individually tested in a subsonic wind tunnel operating at approximately 300 fpm (1.5 m/s) and 1200 fpm (6.1 m/s) monitored by a Gill Instruments Model 1350 ultrasonic time-of-flight anamometer. The Standard's maximum combined uncertainty is +/-1.04% within the airspeed range 706.6 to 3023.9 fpm (3.59 to 19.93 m/s), and +/-1.66% within the airspeed range 166.6 to 706.6 fpm (0.86 to 3.59 m/s).

#### Temperature:

Temperature response is verified in comparison with a Eutochnico 4600 Precision Thermometer or a standard Kestrel 4000 Weather & Environmental Meter calibrated weekly against the Eutochnico 4600. The Eutochnico 4600 is calibrated annually and is traceable to NIST with a system accuracy of +/- 0.05 °C.

#### Direction / Heading

The sensitivity of the magnetic directional sensor is verified at the component level by applying a magnetic field to the sensor and measuring the signal output at 4 points, as well as after assembly by orienting the unit to the cardinal directions and measuring the magnetic field output. In both cases, the compass output must be accurate to within +/- 5 degrees.

#### Relative Humidity:

Relative humidity receives a two-point calibration in humidity and temperature controlled chambers at 75,3% RH and 32.8% RH at 25° C. The calibration tanks are monitored with an Edgetech Model 2002 DewPrime II Standard Chilled Mirror Hygrometer. Following calibration, performance is further verified at an RH of approximately 43.2% against the Edgetech Hygrometer. The Edgetech Hygrometer is calibrated annually and is traceable to NIST with a maximum relative expanded uncertainty of 4/– 0.2% RH.

### Barometric Pressure:

Pressure response is verified against a Valsala PTB210A Digital Barometer or a standard Kestrel 4000 Weather & Environmental Meter calibrated weekly against the Valsala Barometer. The Valsala Barometer is calibrated annually and is traceable to NIST with an accuracy of +/-0.15 hPa at +20°C defined as the root sum of the squares (RSS) of end point non-linearity, hysteresis error, repeatability error and calibration uncertainty at room temperature.

### Approved By:

Michael Naughton, Engineering Manager

The enclosed Kestral Weather & Environmental Meter was manufactured by Niessen-Kesterssen Co. at its facilities located at 21 Creek Circle, Boothwyn, PA 19061 USA



2000	2500	3000	3600	3500 OT	4000	4200	4260	4300	4500	B¢ll lettes	ACCURACY (41.)*	HESOLUTION	SPECIFICATION RANGE	RANGE	NOTES
											Larger of 3% of roading, least	C.1 m/s \$ Minuh 0.1 km/h	0,6 to 40,0 m/s 118 to 7,874 fb/min 2,2 to 144,0 km/h	0.6 to 60.0 mls 118 to 11,611 fV/min 2.2 to 216.0 km/h	mph   .5 kt after Impelier statup. Off-axis accuracy -1% Q 5° off-axis; -2% Q 10°; -3% Q.
•	•	۰	•	0	۰	۵	9	•	ø		significant digit or 20 Rimin	0.1 knots 1 B* 9 1 E/S*	1.3 to 39.5 mph 1.2 to 77.8 knots 9 to 12.8* 2-131.2*	1.2 to 116,6 knots 0 to 12 B	Califeration of it = 106 after 100 hours use at 18 MPH [7 mis. Replacement impolar (NK P 0801) field installs without book (US Pazent 8,783,783). What speed cauliferation and testing should be come with stangle on triplefal located at the lop front face of like Kestrel.
									:			9.1 F/G*	243121	2-198.9 F/S*	*FIS only in Ballistics units. Besufurt not available in Ballistics units.  Hermotically scaled, precision the mistor mounted externally and the unally isolated (US)
•	٠	,	•	•		•		•	•	•	0.9 °F 0.6 °G	0.1 °F 0.5 °C	-20.0 to 156.0 °F -29.9 to 70.0 °C	14.9.9 to 131.0 °F -10,0 to 55,0 °C	Patent (3,303,645) for rail of response. Afferow of 2.2 mph) if mis or greater provides farebut expense and reduction of inscission affect. Calibration or rit resignable. The misses may also be used to measure inegeneture of water or series by submissigning thermistor portion into material—service impeter prior to taking submission assurements and none insulfact entry misses.
															sübmersbin.  Polymer babodilive humidily sensor mounted in thin-walled chamber sciental to case for
		o	ø	ø	•	. •		٠		• .	3.0 %RH	0.1 %RH	5 to 95% non-conducting	@ to 100%	ragit, accurate response (US Patert 8,207.074). To achieve stated accuracy, unit must be permitted to equilibrate to extend to be captured to extend to extend to extend to the captured to th
													6.66 to 32.49 inhip 300.0 to 1100.0 hPaimbe	0.30 to 48.87 hHg 10.0 to 1654.7	More lithic sticon piezorosistive pressure sensor with second-order temperature connection. Pressure sensor may be recalizated at factory or in field. Adjustable reference at buildo all
	٠		•	٠	•	9		•	•	•	03 inHg 1.0 hPalmbar 0.01 PSI	0.01 lnHg 0.1 hPolymbar 0.01 PS	4.35 to 15.95 PS1 and 32.9 to 185.9 °F 0.0 to 85.0 °C	hPajmbar 0,64 to 24.00 PSt and 14.9 to 131.0 °F -10.6 to 55.0 °C	display of station pressure or barceretriz pressure connected to MSE. Keater (ACC display either presenter on a dedicate accent, Network 1000 and 35CC display cent accessive pressure are about the pressure of the pressure trend interest in the pressure trend through graphing function, PSI clause (Societ (ACC control of the PSI).
											. 5*	1" 1/16th Cordinal	0 to 360°	□ le 360°	2-axis solid-state magnetorasistive sensor mounted perpendicular to until plane. Accuracy sensor departions upon units vertical position. Self-calibration routine elimin sice magnetic error from battarios or tinit and must be true offer every (n) power-down (cottery remaind of
	enero-s		versoone	e es e se se	n none	uouo-	est principe	*******			· · · · · · · · · · · · · · · · · · ·	Scalo		person and the second s	change). Readout indicates direction to which the back of the unit is pointed when held in vertical orientation. De chalips/yoristion adjustable for Trus North readout.
2000	2590	3000	3600	3500	4000	4200	4250	4300	4500	ALCU	LATED MEA	SUREME RESOLUTION	N IS SPECIFICATION RANGE	SENSORS EMPLOYED	NOTES
				ы			,				0.0002 RAT <sup>2</sup> 0.0033 kg/m <sup>2</sup>	0.001 lbs/ft <sup>6</sup> 0.904 kg/m <sup>2</sup>	Refer to Flanges for Consort Employed	Temperature Relative Humoty	Moss of sit per unit volume
											-	Tichn Tichn	Notes to Rendes for	Pressure Air Flow	Volume of air flowing through an opening. Automatically colouisled from Air Volocity
						•					0,0671	1 m²/m 0.1 m²/s 1 L/s	Sensors Employed	User Input (Duet Shape & Size)	measurement and user-specified duct shape [circle or rectangle) and dimensions (units: it, orner m). Maximum duct dimension input: 288.0 in (21.8 %) 865.3 cm   6.55 m.
				•				۰			· typical: 23,6 ft 7.2 m max: 46,2 €	s it f m	typical; 750 ki 1100 mBar	Prossuro Usar i pput (Referenci Prossuro)	assurably, Both aboutesty apoets corresponds to a seturation pressura anywhere from each
					,						0.07 loHg 2.4 hPolmbar	0.01 kiHg 0.1 hPolysbar	max: 366 to 750 mBar Roler to Rangos for	Pressure	1100 mBBs. Air pressure that would be present in identical conditions at MBL. Station presource compensated for it call plevation provided by reference attitude. Requires accurate referen
									•		0.03 PSI	0.01 PSi temph 1 Effection 0.1 km/sh	Sensors Employed  Relea to Ranges for  Sensors Employed	Atthine) West Speed Compass	attiade to produce maximum ebsolute accuracy.  Effective wind relative to a larget or travel direction. Autorswitching headwindfelliveled helicative.
											32°F	0,1 m/s 0,1 knots 0,1 °F	Refer to Ranges for	Temporature	Difference between dry bulb temperature and wat bulb temperature. When spraying indi
				•							1.0 °C	0.1 °C	Sensors Employed Refer to Ranges for	Reistive Hurridity Prossure Temperature	exaposation rate and droplet thetma. Sate range for posticide spraying is 4 to 16 °F   2 to *C.  Local air density convenied to equivalent alevallor above sea toyol in a uniform type.
					٠	٠		•	۰		59 m	1 m 0.1 %	Sensors Employed 15 to 95 % RH	Relative Humidity Pressure Temperature	consisting of the International Standard Atmosphera.  Temperature that a volume of air must be cooled to at constant pressure for the water way.
		*	•	•		a		•		•	1.9 °C	0.1 %	Rofer to Range for Temperature Sensor	Relative Humidity Wind Space	present to sonderne into date and form on a solid surface. Can also be considered to be water-to-air outuration temperature.
								٠			0,01 state <sup>2</sup> /mr 0.05 kg/m2/mr	0.01 brit <sup>3</sup> ste 0.01 kg/m³/hr	Refer to Ranges for Geneuro Employed	Temporature Relative Hurridity Pressure User Input (Concrete Temporature)	The late of which michigal is high from the surface of curing concrete. Requires user necessarions of one-phy of concrete between the reshalf of this national file of proble their momental ("File" of "C", as I included]. Readings should be 1 kizer, 20 includes about pour surface with the their relate shielded, and laveraged for 6+10 seconds using build-in average function.
		8	•		9	•		2	9		7.0°F 4.0°O	0.1 °F 0.1 °C	Refer to Ranges for Sensors Employed	Temporaluió Reletive Humidity	Perceived temperature resulting from the combined effect of temperature and relative humpidity. Calculated based on NVS Heat Index (HS tables. Measurement range limited to extend of published tealers.
•							•				.3 gpp .04 g/kg	0.1 gpp 0.01 g/kg	Refer to Ranges for Sensors Employed	Temperature Relative Humidity Pressure	Mass of water vapor in a mass of sir.
	•										0.0026	0.904	Refer to Ranges for Sensors Employed	Temporature Reletive Humidity Prescure	The raile, expressed as a percentage, of measured air density to the air density of a step aircosphere as defined by the ICAO.
								•	•		3.2 °F 18 °C	0.1 TF 0.1 °C	Refer to Ranges for Sensors Employed	Temperature Relative Humidity	Temparature indicated by a siling psychrometer. Due to nature of the psychrometric rate if water-sit system, this approximates the thermodynamic well-culb temperature. The the emodynamic well-culb temperature is the foregranulure a parcel of air would have if one
														Prossura	adis batically to saturation temperature via water evaporating into £.
•	•	•	•		•	•	•	•	•	•	1.6.7F 0.9 °C	0.1 TF 0.1 TC	Refor to Ranges for Sensors Employed	Wand Speed Temperature	Parcained temperature resulting from combined effect of wind speed and temperature, Catastield tassed in the WYS WKN Chill Temperature (WXT) index, revised 2001, with in speed adjusted by a factor of 1.5 to yield equivalent results to wind speed measured at 16 slaver ground, (Measurement range limited by extent of published failed.
ation.										ADDIT	ONAL SPE	CIFICATIO	ONS	8405273	
• ;															cklight. Menual cotivation with auto-off. V modele only) electroluminescent beoklight, Manual activation with suite-off,
								•	•	•	Mutilfunction, multi-dig	i manachzome data	matrix display. Chaics of a	viaben green or visible	red (NV models only) electroluminescent backlight. Automatic or manual activation.
•		•			•			•	•						ond. Relative humidity and all enabetremente welch include RH in their ealeulation may requ Display applatas every 1 second.
•	•	٠											Gust and Average Wand m		
					•	•		•			headwind/tallwind, win	d chill, WBGT, TWL	avaperation reta,		ng of other values, along with all other wind-related functions: alreading, crosswind,
					4000		32DD		2900	2500 points	Minimum, maximum, a Minimawaya History m intervals feeds version	ray be reset indepor	idontly, Auto-stone interval	d for every measured : settable from 2 second	value. Large capacity cists logger with graphical display. Manuel and euto data Storage. Is to 12 hours, overwoite en or off. Loga even when display off except for 2 and 5 occand
					prenti	polats	poine	. points	ports	poiss	Recures optional PC i	nterface (USB or RE	3-232) or Bluetooth data to	ansfar option and prov of radio sange from up	rided zoftware. Go 38 tr j Simelens, Individual Unt ID and 4-digil PAN code prepregrammed for easy identific
,	,			•							and data security when Roal time hours; minute	paling and transm s dock.	litting, Employs Bluetooth	Berlai Port Protecti for	deta transmission.
	÷	٠			•		٠	•	•	•	After 45 minutes of no	ray prosses.	otondar, automotic loap-ye.	er adjustmont.	
A					•		9				English, French, Germ	an Italian Spanish.	key presses or disabled.	teriornalita elameta este Ar	without coefficients of toute would be a tout things of changes
::-		d d	•	•		•		•		•	Designed and manufact Orterior 8.	tured in the USA fro	m US and Imported comp	onorits. Compiles with	ntitan corificate of teats available at additional charge). Regional Value Content and Teriff Code Transformation recultements for NAFTA Professeo
4	•	8	. • .	. •							CR2032, ene, includes		ours. Bettery life reduced		
	_	_	٠.		•	•		٠	•		,		oluded Average life, 460 h 6.5 Procedure IV: walt only		y backlight or fluctooth radio transmission use.
•			9		:		•		9	•	Waterproof d P07 and	NEMA-S).			replaceable trapellar.  rational temperature range of the display and betteries by maintaining the unit within the
•		a	8	a	•	•	9	8	۰		14" F to 131" F   -10 "C operational range and -22.0 "F to 140.0 "F (-	exposing it to the m	mante maly be taken beyo ava exacme environment f	or the minimum time n	receive empty along range of the display with determining managering the unit within the occessory to take reading.
•		4	•	9		-	-	•	-	•		x 4,8 x 2.8 cm, 3,6	oz / 102 g (including slip-o	n covar .	

s uncertainty of the measurement derived from statistical analysis considering the combined effects from primary sensor specifications, circuit conversions,



Appendix F

Event/Action Plan for Noise Exceedance





# **Event and Action Plan for Construction Noise Monitoring**

Event	Action			
	ET	IEC	ER	Contractor
Action Level	<ol> <li>Carry out investigation to identify the source and cause of the complaint/ exceedance(s)</li> <li>Notify IEC, ER, and Contractor and report the results of investigation to the Contractor, ER and the IEC</li> <li>Discuss with the Contractor and IEC for remedial measures require</li> <li>If the complaint is related to the Project, conduct additional monitoring for checking mitigation effectiveness and report the findings and results to the IEC, ER and the Contractor</li> </ol>		<ol> <li>Confirm receipt of Notification of Exceedance in writing</li> <li>Require Contractor to propose remedial measures for the analysed noise problem</li> <li>Ensure remedial measures are properly implemented</li> </ol>	<ol> <li>Submit noise mitigation proposals, if required, to the IEC and ER</li> <li>Implement noise mitigation proposals.</li> </ol>
imit Level	1. Notify IEC, ER, EPD and Contract 2. Identify the source(s) of impact by reviewing all the relevant monitor data and the corresponding construction activities. Exceedanc should also be confirmed by immediate verification in the field far as practical. 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be impleme 6. inform IEC, ER and EPD the cause actions taken for the exceedances 7. Assess effectiveness of Contractor' remedial actions and keep IEC, EF ER informed of the results 8. If exceedance stops, cease addition monitoring.	Contractor on the potential remedial actions  2. Review Contractor's remedial actions to assure their effectiveness and advise the ER &ET accordingly  3. Supervise the implementation of the remedial measures  ated.  &	1. Confirm receipt of notification of exceedance in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analyzed noise problem 4. Ensure remedial measures are properly implemented 5. If exceedance continuous, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is aborted	Take immediate action to avoid further exceedance     Identify practicable measures to minimize the noise impact. Submit proposals for remedial actions to ER within three working days of notification     Implement the agreed proposals     Resubmit proposal if problem still not under control     Stop the relevant portion of works as determined by the ER until the exceedance is abated



# Appendix G

Noise Monitoring Data



					L <sub>eq-5min</sub>	, dB(A)			I	14030 -	L 0030 ·	Limit	
Date	Time	Weather	Reading (1)	Reading (2)	Reading (3)	Reading (4)	Reading (5)	Reading (6)	dB(A)	L <sub>10</sub> 30 <sub>mins</sub> , dB(A)	dB(A)	Level, dB(A)	Noise Meter
02/09/2021	11:45 - 12:15	sunny	68.3	66.7	69	67.9	66.3	67.5	67.7	71.0	60.0	70.0	NTi XL2 13548
10/09/2021	11:40 - 12:10	sunny	67.4	66.3	67.8	66.6	66.7	68.4	67.3	70.4	58.5	70.0	NTi XL2 13548
16/09/2021	11:44 - 12:14	sunny	67.8	67.7	69.1	68.8	64.4	68.4	67.9	70.8	61.4	70.0	NTi XL2 13548
23/09/2021	16:02 - 16:32	sunny	68.3	68.9	67.3	66.2	68.6	66.9	67.8	70.9	59.5	70.0	NTi XL2 13548
30/09/2021	11:39 - 12:09	sunny	69.2	68.2	69.2	69.9	68.4	67	68.7	71.9	62.2	70.0	NTi XL2 13548

Remarks:

<sup>\*</sup>No examinations were scheduled for NSR4 Creative Secondary School in the reporting month. Academic School Calendar can be found in Appendix O.



Appendix H

Waste Flow Table



**Monthly Summary Waste Flow Table** 

Name of Department: WSD Contract No. / Works Order No.: 13/WSD/16

**Monthly Summary Waste Flow Table for August 2021** 

		Actual Quantities o	f <u>Inert</u> Construction Wa	ste Generated Mo	onthly	
Month	Total Quantity Generated (see Note 4)	Hard Rock and Large Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed of as Public Fill	Imported Fill (see Note 1)
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )
2018	1.157	0.063	0.000	0.000	1.157	0.518
2019	5.178	0.043	2.211	0.000	2.520	3.200
2020	13.173	1.506	0.291	0.000	12.878	1.323
Jan 2021	2.438	0.120	0.000	0.000	2.438	0.127
Feb-2021	1.702	0.224	0.000	0.000	1.702	0.537
Mar-2021	2.780	0.163	0.000	0.000	2.780	1.361
Apr-2021	2.338	0.271	0.222	0.000	2.116	0.629
May-2021	2.265	0.125	0.360	0.000	1.906	0.340
Jun-2021	2.017	0.135	0.221	0.000	1.796	1.148
Jul-2021	2.003	0.059	0.109	0.000	1.894	1.352
Aug-2021	1.223	0.026	0.455	0.000	1.223	0.590
Sep-2021	2.584	0.097	0.911	0.000	1.673	0.746
Total for 2021	19.350	1.220	2.278	0.000	17.528	6.830



		Actual Quantities of	Non-inert Construction	on Waste Generated Mo	nthly
Month	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. General Refuse disposed at Landfill
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2018	0.000	0.417	0.000	0.000	0.139
2019	0.000	0.062	0.000	0.000	0.102
2020	0.000	0.606	0.000	0.000	0.043
Jan 2021	0.000	0.065	0.000	0.000	0.006
Feb-2021	0.000	0.058	0.000	0.000	0.012
Mar-2021	0.000	0.055	0.000	0.000	0.002
Apr-2021	0.000	0.045	0.000	0.000	0.008
May-2021	0.000	0.049	0.000	0.000	0.006
Jun-2021	0.000	0.051	0.000	0.000	0.000
Jul-2021	0.000	0.052	0.000	0.000	0.005
Aug-2021	0.000	0.048	0.000	0.000	0.000
Sep-2021	0.000	0.037	0.000	0.000	0.002
Total for 2021	0.000	0.460	0.000	0.000	0.041

### Notes:

- 1. The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- 2. Plastic refer to plastic bottles/containers, plastic sheets/foam from packaging materials.
- 3. Broken concrete for recycling into aggregate.



- 4. "Total Quantity Generated" only refers to the actual quantities of inert C&D materials generated monthly excluding those that will be recycled (Hard Rock and Large Broken Concrete, Reused in the Contract, Reused in other Projects). Imported fill will not be included in "Total Quantity Generated" as those C&D materials are not generated from this project.
- 5. C&D materials in tonnes are converted to meter cube (m³) on a scale of 0.5.
- 6. Source and types of Imported Fill in the reporting month
  - i. K. Wah Quarry Company Limited: (Soil) 551.93 m<sup>3</sup> (1103.86 tonnes/11 cars)
  - ii. K. Wah Quarry Company Limited: (Sub-base) 194.39 m<sup>3</sup> (3887.80 tonnes/6 cars)

7. Hard Rock and Large Broken Concrete are disposed to public fill, the breakdown of C&D materials disposed to public fill is shown as below:

Type of C&D Materials	Description of C&D Materials	C&D Waste Disposed (Volume) (m³)
	Bentonite	35.50
	Broken Concrete	50.50
	Broken Rock	46.15
	Mixed Construction Waste (>50% inert)	7.85
Inart	Building Debris	7.70
Inert	Mixed Rock and Soil	1000.75
	Reclaimed Asphalt Pavement	73.95
	Slurry	103.35
	Soil	347.50
	TOTAL =	1673.25
Non-inert	TOTAL =	1.95



# Appendix I

# Landfill Gas Monitoring Equipment Calibration Certificate





香港新界葵涌葵昌路58-70 號永祥工業大廈10樓B室 Unit B, 10/F., Wing Cheung Industrial Building, 58-70 Kwai Cheong Road, Kwai Chung, New Territories, HK Tel: (852) 2751 7770 Fax: (852) 2756 2051 B-mail: rotter@rotter.com.hk

# Calibration Report - Gas Detector

,	- Cambrat		20100101	6.		
1	PGM-2500	(QRAÊ III) LEL	/O2/CO/H2S	at .		
-						
LIMIT IMPODAÇA	10N -					
UNIT INFORMAT	ION:					
Customer: Penta Oce	an Construction Co Ltd	Serial #: M02A0		QRAE III		
		Firmware : V2.		LEL/O2/CO/H2S		
		Cal date : 28-Jul-	2021 Inspected:	Leddy		
SENSOR DATA :						
SENSOR DATA .	1 = 1	70	00	1100		
Calibration dates:	LEL sensor (ME) 28-Jul-2021	<u>O2 sensor</u> 28-Jul-2021	CO sensor (Tox1) 28-Jul-2021	H2S sensor (Tox2) 28-Jul-2021		
After Calibration levels		17,90%	50 ppm	10.1 ppm		
Alarm levels (Low):	10.00%	19.50%	35 ppm	10 ppm		
Alarm levels (High):	20.00%	23.50%	200 ppm	20 ppm		
TWA Level; STEL Level:			35 ppm 100 ppm	10 ppm 15 ppm		
OTEL Level.			100 ppin	то рын		
Status:				1		
Pump Speed Clock	Low Yès	Back Light Measure	Manual Average			
Clock	1,65	] Measure [	Average			
LEL Gas Selection			,			
LEL Calibration Gas	Methane	LEL measurement Gas	Methane			
LEL Custom Gas	LEL_custom_gas	LEL Custom Factor	1.0			
Gas types used : 4-G	as Mix: (18% O2, 50ppm C	CO, 10ppm H2S, 50% LE	L CH4, BAL N2)	Gas lot #1412983 Cyl# 15		
*** Fresh Air Calibrat	ion is highly recommended	to proceed prior for mea	surement each time.			
Replaced Parts:						
Notes:						
	and checked under good	working condition		•		
		•		. ,		
**Next calibration duev	or before 27 July 2022					
(14)	到到					
Serviced by Tedds	Wong					
	Rotter International Ltd					



# Honeywell Protection Through Detection 1349 Moffett Park Drive,

1349 Moffett Park Drive, Sunnyvale, CA 94089 USA Main: 408-952-8200

www.raesystems.com

### Calibration and Test Certificate

Product Name:

MultiRAE Lite

Model Number:

PGM-6208

Serial Number:

M01C031772

Calibration/Inspection Date:

6/4/2021

### Calibration Gases:

#	Gas	Concentration	Balance	Lot#
1	Hydrogen Sulfide(H <sub>2</sub> S)	10ppm		
2	Carbon Monoxide( CO )	50ppm	Nitrogen( N2)	20210508
3	Oxygen(O <sub>2</sub> )	18%		
4	Methane( CH, )	50%LEL		
5	Sulfur Dioxide(SO <sub>2</sub> )	5ppm	Nitrogen(N2)	20210114
6	Carbon Dioxide(CO2)	5000ppm	Nitrogen(N2)	20201203

### Test Results:

#	Sensor	Span	UOM
1	LEL	51	%LEL
2	SO,	5.2	ppm
3	COSH (H2S / CO)	10.1 / 51	ppm
4	Pb O,	17.8	. %
5	CO <sub>2</sub>	4900	ppm

This instrument has been calibrated using valid calibration gases and instrument manual operation procedures. Test and calibration data is on file with the manufacturer, RAE Systems.

Approved By:

86-05-51832593

ISO 9001 CERTIFIED



# Appendix J

Landfill Gas Monitoring Data



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission								
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)		
Area A	/ - 9 - 2021	0230	Rain / Fine	0	6	0	20.9	291 999	5.5		
	1 - 7 - 2021	1330	Rain / Fine	0	0	0	20.9	31 1997	65		
	- 9 - 2021	700	Rain (Fine)	0	0	. 0	20.9	311996	55		
Area B	7 - 9 - 2021	0845	Rain //Fine	0	8	6	20.9	29/899	> >-		
	( - 9 - 2021	1345	Rain / Fine	0	0	0	209	3/1795	26		
	/ - 9 - 2021	1605	Rain / Fine	0	0	0	20.9	311996	25		
								/			
								/			
								/			

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

19

Laboratory Staff:

Checked by:

AK WAS KUBO POCTO

1/9/2021

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated	
PGM-2500 (QRAE III)	28 Jul 2021	

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	1 - 9 - 2021	10:15	Rain / Fine	0	0	87	20-9	291999	27	
		CKICK		0	0	Ŏ	20.9	3/1997	2,2	
WPR 2	( - 7 - 2021	10172	Rain / Fine	0	0	0	209	291999	3.5	
L		18:25		0	0	0	209	3/1997	3.5	
WPR 3		10:45	Rain / Fine	0	0	0	209	29/749	3.8	
		15:65		L_0	0	U	2009	31/497	2,8	
Pit A	( - 7 - 2021	10:55	Rain //Fine	0	0	0	204	291999	5	
	1	12:27		0	0	U	20.9	341997		
Pit B	- 9 - 2021		Rain //Fine/	0	0	U	20.7	27/799	3.6	
		16:08		0	0	Ö	207	311996	3.6	
								1		
								<del>                                     </del>		
		<u> </u>								

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

1.9.

Laboratory Staff:

Checked by:

Checked by.

OURCES MANAGEMENT

1 7 200

ENVIRONMENTAL PROTECTION DEPARTMENT

13



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission								
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)		
CH.FC 8+38	1 - 9 - 2021	1316	Rain / Fine	0	8	8	20.9	37,799	3.5		
CH.FC 0+46	(-9-2021	1430	Rain / Fine	8	Ö	0	30.9	391,999	2:5		
Pit D	- 9 - 2021	The state of the s	Rain / Fine	8	8	9	309	291999	25		
Pit C	1 - 9 - 2021	700	Rain / Fine	8	0	Ś	209	39/949	3		
137 Pit C	/ - 9 - 2021	9145	Ratin / Fine		0	0	20.9	29/999	Places, or		
137 Pit B	( - 9 - 2021	9:55	Rain / Fine	8-	0		203	391999	8.6		
137 Pit A	/ - 9 - 202	1005	Rain / Fine	Ö	8	6	20.9	391999	33		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by: ENVIRONMENTAL RESOURCES MANAGEMENT

13



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission								
		Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)		
2 - 9 - 2021	0130	Rain / Fine	0	0	0	20.9	>91 999	55		
2 - 9 - 2021	1330	Rain / Fine	0	0	0	20.9	3/1995	4,5		
- 9 - 2021	1760	Rain /Fine	Ò	0	. 0	20.9	311996	5.5		
<u> </u>	des	Rain / Fine	8	0	0	20-9	29/999	> C		
2 - 9 - 2021	<u> </u>	Rain / Fine	0	0	0	20.9	311997	2.5		
2 - 9 - 2021	1646	Rain /Fine	0		0	20.9	311996	2		
							//			
							/			
	2 - 9 - 2021 2 - 9 - 2021 2 - 9 - 2021 2 - 9 - 2021 2 - 2021 3 - 2021	2-9-2021 830 2-9-2021 1330 2-9-2021 1360 2-9-2021 1365 2-9-2021 1365 2-9-2021 1365	Weather condition  - 7 - 2021 Rain / Fine 2021 Rain / Fine Rain / Fine - 7 - 2021 Rain / Fine - 7 - 2021 Rain / Fine - 7 - 2021 Rain / Fine Rain / Fine Rain / Fine Rain / Fine	Weather condition (%)  2 - 7 - 2021	Weather condition   Balance gas   Flammable gas (methane %)	Weather condition   Balance gas   Flammable gas (methane %)	Weather condition   Balance gas   Flammable   Carbon monoxide(%)	Weather condition   Balance gas   Flammable gas (%)   Carbon monoxide(%)   Temp (°C) / Pressure (mbar)		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

2:9

Laboratory Staff:

Checked by:

CAAK Was KARROO K

1/9/x02/

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	2- /- 2021	10:15	Rain / Fine	0	0	0	2009	591999	52
		15:05		0	0	<i>C</i>	20.9	3/1995	50
WPR 2	2-2021	2500	Rain / Fine	0	0	0	20.9	291999	2,2
	9 0004	(808		0	0	0	200	311999	3, 5
WPR 3	- 2021	10145	Rain / Fine	0	0	0	20.9	291999	2.2
Pit A	- à	(5/4/-		10	0	0	20.4	311999	3.2
PILA	7-2021	(0:55	Rain / Fine	-0	0	0	20.9	>91499	1
Pit B	> - 9 - 2021	11:05	Dala (Fin	<del></del>	<u> </u>	<u> </u>	2009	311997	
	2021	1650	Rain /Fine		- 0	<u></u>	209	291999	3.6
	,	(0 00 5					209	311997	36
								+ - /	
								<del> /,</del>	
								<del>                                     </del>	

Name & Designation Signature Date

Tam Hoi Keung [RenoPipe) CP -2

Laboratory Staff:

Field Operator:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

10



contract no. า3/พธม/าช Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time			vells / Surface G	ce Gas Emission				
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
CH.FC 8+38	2 - 7 - 2021	LIL	Rain / Fine	0	(5)	۵	50.9	191990	1 (0	
		13:45.		0	Ö	0	509	3/1995	21-12	
CH.FC 0+46	2 - 7 - 2021		Rain / Fine	- 0	0	3	20.4	591999	tend (man	
· ·		Choo.		0	0	. 0	20.9	3/1907		
Pit D	2- 7-2021	705	Rain / Fine	0	0	0	20.9	291999	25	
Pit C	2- 9-2021	9115		0	<u> </u>	0	209	3/1997	2.0	
111.0	(-2021	14:05	Rain / Fine	0	<del>- Q</del>	<u> </u>	209	291999	2	
137 Pit C	2-9-2021	9145	Rain /Fine	0	6	8	20.9	391999	3	
137 Pit B	2 - 9 - 2021	16145	Rain / Fine	0	- Ô	. 0	20.9	311997	2	
	-2021	laiss	IXaiii (pine	0-	0	8	20.7	311999	86	
137 Pit A	2 - 9 - 2021		Rain / Fine	0	Ó	Ŏ	2009	591900	D. 2	
		15:0x		0		0	200	3/1905	23	

	Name & Designation	Signature	<u>Date</u>	
Field Operator:	Tam Hoi Keung [RenoPipe) CP	Tau	2 - 9 - 2021	
Laboratory Staff:				
Checked by:  ENVIRONMENTAL RESOURCES MA	ek Wai Ge Pog	v/Mil	8 2-1-201	ENVIRONMENTAL PROTECTION DEPARTMENT
			13	MONATURE ROTECTION DEPARTMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	3 - 7 - 2021 3 - 9 - 2021 3 - 9 - 2021	1330	Rain / Fine Rain / Fine Rain / Fine	0	0 5	<i>O O O</i>	20.9	24199k 291997 281996	\$15 \$15 \$15	
Area B	3 - 9 -2021 3 - 9 -2021 3 - 9 -2021	0845 1345 1645	Rain (Fine Rain (Fine Rain (Fine	0	0	0	20.9	281998 281997 281996	2.5	
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	S- 7 - 2021	10:15	Rain / Fine	0	0	0	2009	221998	2,2
WPR 2	3 - 9 - 2021	15118	Rain / Fine	0	0	0	209	29/997	5.4
771 1 ( 2	- (-2021	(2:25	Raili / Fine	-6	8	0	2009	20/998	315
WPR 3	3 - 9 - 2021	10145	Rain / Fine	Ó	0	0	2009	22/392	3.4
Pit A	3- 7-2021	101/2	Rain //Fine	8	8	0	20.9	391 997 321 992	- S.S.
Pit B	3-9-2021	1/10/5	Rain / Fine	0	8	0	209	391997	3.6
		16:05	. 0	0	6	0	2029	291997	3.6
								/	

	Name & Designation	Signature	<u>Date</u>	
Field Operator:	Tam Hoi Keung [RenoPipe) CP	Cher	3-9-2021	
Laboratory Staff:				
~		1		

ENVIRONMENTAL RESOURCES MANAGEMENT

Environmental Protection Departm



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	3 - 7 - 2021	XIL	Rain / Fine		0	0	Ja 9	21990	1 500
CH.FC 0+46	3-9-2021	9:00	Rain / Fine	0	0	0	509	29/397	35
Pit D	3-9-2021	94100	Rain / Eine	0	0	0	209	59199	25
Pit C	5-9-2021	901	Rain / Eine	0	8	8	209	281990	2.0
137 Pit C	3-9-2021	9/45	Rain / Fine	0	0	0	209	591997	-
137 Pit B	3-9-2021	9155	Rain / Eine	8	0	0	209	391395	7
137 Pit A	3 - 9 - 2021	10:05	Rain / Fine	6.	0	0	209	9199	26
		1505			0	0	700	50/295	<del>- 23</del> -

Name & Designation

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
Area A	4 - 9 - 2021 4 - 9 - 2021 4 - 9 - 2021	1330	Rain / Fine Rain / Fine Rain / Fine	0	0	0 0	20.9	281998 291997 281996	5.5
Area B	4 - 9 - 2021 4 - 9 - 2021 4 - 9 - 2021	1345	Rain /Fine Rain /Fine Rain /Fine	0	0	0	30.9 20.9 20.9	31 997 391 997 31 996	2-5
								/ /	

		Name & 1	Designati	on S	Signature	<u>Date</u>		
Field Operator:	Tam H	oi Keung [Re	enoPipe) C	P	Zona (	(-9-2021		
Laboratory Sta	ff:				Put	<		
Checked by:	CHAK	WBI	K11	, 1256	ROCSV	4/9/2021		
ENVIRONMENTAL RESO	URCES MANAGEMENT			/	13	-	ENVIRONMENTAL PROT	ECTION DEPARTMENT



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture
Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission								
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)		
WPR 1	G- 9-2021		Rain / Fine	0		8	201	21 998	52		
WPR 2	4-9-2021	15:15 15:15 15:15	Rain / Fine	0	0	0	20%	391 797	3,5		
WPR 3	G-9-2021	10:45	Rain //Fine	0	0	0	209	32/997	3.5		
Pit A	4-9-2021	10.55	Rain / Fine		0	0	20,9	31,37	78		
Pit B	4-9-2021		Rain //Fine	8	0	8	209	28/997	316		
		16:05		0	0	0	209	>91,997	3.6		
								//			
								+ //			

(Control of the Control of the Contr	The state of the s							/		
		Name & Desig	gnation	Signature	Date				1	
Field Operator	: Tam H	loi Keung [RenoPi		Lacy	4-9-202	1				
Laboratory Sta	ff:									
Checked by:	01	lead les	na	/		/				
ENVIRONMENTAL RESC	URCES MANAGEMENT	e Wallett	1K40	Min	0 4/9	1/201/	Envir	ONMENTAL PRO	TECTION DEPART	MENT
				1	.3					



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
	1		Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
CH.FC 8+38	4-7-2021	Kith	Rain / Fine	0	P )	0	20.9	22/7012	7 1	
CH.FC 0+46	4-9-2021	9:55.	Rain / Fine	0	- Q	0	Sag	591997	3.5	
	- ( - 2021	14:00	Raili / Fine	0	0	- 0	20.7	241998	25	
Pit D	4-9-2021	PIL	Rain /Fine	Ó	0	8	309	37,337	52	
Pit C	4-9-2021	9125	Rain //Fine	8	- Q	0	20.9	59/995	25	
137 Pit C	4-9-2021	1405	4	0	Ó	Q	209	591995		
		14145	Rain / Fine	8	0	0	20,9	24/991		
137 Pit B	4-9-2021	7:85	Rain / Fine	Ž,	Ŏ	Ö	209	52/991	2-6	
137 Pit A	4-9-2021		Rain (Fine	6	0	8	209	39/99	8.6	
		15:05		0		Ö	300	53/06	22	

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Tan 18.9

Laboratory Staff:

Checked by:

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4/9/2011

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021
•	

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	6 - 9 - 2021	0830	Rain / Fine	0	0	0	2009	29/1007	5.5	
	6 - 9 - 2021	1330	Rain / Fine	b	0	0	20.9	22/1005	2.2	
	6 - 9 - 2021	120	Rain /Fine		8		20.9	1004		
Area B	6 - 9 - 2021 6 - 9 - 2021 6 - 9 - 2021	1345	Rain / Fine Rain / Fine Rain / Fine	0	0	0	20.9	28/1007	2.5	
			Rain / Fine		0	0	20.09	7		
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

6-9-20

Laboratory Staff:

Checked by:

CHAK WAI KIT 1850 POCTY

6/9/2011

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time		an energia de la materia d					
	1	-	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	O 2021	10:00	Rain / Fine	0	10	6)	20.9	29/1067	5.8
	1-9	17117		0	0	0	509	22/100	- 9
WPR 2	0 - 9 - 2021	10125	Rain / Fine	0		6	2019	29/100	3,0
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	169	12:22	4	0	0	0	2009	28/1000	3,5
WPR 3	0 - 7 - 2021	(p:45	Rain //Fine	1 0	0	0	209	29/1007	2,2
Pit A	6-9-2021	15/15	5. 18	0	0	0	209	28/1005	2.8
I ICA	- / - 2021	18/25	Rain / Fine	1 8	0	0	209	29/1007	1
Pit B	6-9-2021	1	Rain /Fine		0	0	2019	39/100	36
	-	16:05		. 0	0	0	209	24/1805	36
							(	/	
								/	
								/	

Contract to the contract of th							/ /	i
	Name & Design	gnation	Signature	Date				
Field Operator:	Tam Hoi Keung [RenoPi	pe) CP	tan	6-9-202	1			
Laboratory Staff:								
Checked by:	Chok War ku	190		d b	18/201			
ENVIRONMENTAL RESOURCES	Management		1	.3	111-51	Enviro	ONMENTAL PROTECTION	DEPARTMENT



Contract no. า3/พรบ/าช Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	0- 9-2021	4:RE	Rain / Fine	0	0	0	2009	SG11 100	7 6-
011 50 0 40	1-0-	(3:55.	ξ.		0	0	20.9	24/100 K	7
CH.FC 0+46	D- 7-2021	9100	Rain / Fine	0	0	Ò	20.9	29/100	7
Pit D	6-9-2021	(4100.	- 35	0	0	. 0	200.9	52/100 E	5.5
PIL D	0-9 -2021	91/6	Rain / Fine	-0	0	0	50009	29/1007	2.6
Pit C	6-9-2021	JANE -	D: 15.2	0	<u>Q</u>	Ŏ	20.9	22/1005	25
110	- [-202]	(4125	Rain / Fine	<del>- 2</del>	0	0	20.9	29/1007	-
137 Pit C	6-9-2021	GIAS.	Rain / Fine	0			20.9	3\$11005	&
	. 0	11465	Train / Train		6	0	20.7	29/1001	
137 Pit B	6-9-2021	ALK	Rain //Fine	1 6	0	0	20.9	24/1005	
		14(15)	7	0-	0	0	200	29/100]	-36-
137 Pit A	6-9-2021	10:05	Rain / Fine	0	0	8	20.7	25/1005	<del>- \$ 6</del>
		1 Klos	7	D	(")	*	200	29/ (00)	- 5-3

					20 1	61/005	_0:7
	Name & Designation	Signature	Date				
Field Operator:	Tam Hoi Keung [RenoPipe) CP	Can	6-9-2021				
Laboratory Staff:							
Checked by:	Thak Was Kis 100		2	1.1.1			
ENVIRONMENTAL RESOURCES	Thak Was Kell 1800	Pocty	13	5/8/2021	Enviro	ONMENTAL PROTECTION	Department



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021
·	

Sample location	Date of measurement	Sampling time		Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)		
Area A	7 - 9 - 2021	0230	Rain / Fine	0	0	0	2009	29/ 603	5.5		
	7 - 9 - 2021	1330	Rain / Fine	Đ.	0	0	2009	3/1/01	5.5		
	7 - 9 - 2021	000	Rain /(Fine	0	0	. 0	20.9	30/10/0	5-5-		
Area B	7-9-2021	Olle	Rain //Fine	0	0	(0)	20.9	29//013			
	7-9-2021	Carter C	Rain //Fine	1 0	Ŏ	0	509	3/1/00	2-5		
	7 - 9 - 2021	(6AL	Rain / Fine	0	0	0	20.9	30/10/0	225		
								/			
								/			
				-		-		<del>                                     </del>			
<u> </u>		<del> </del>		-	<del> </del>			+-/			

Name & Designation Signature Date

Field Operator: Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by: CHBK WBI VII KSO POCIV

ENVIRONMENTAL RESOURCES MANAGEMENT

Date

T = 9 - 2021

ENVIRONMENTAL RESOURCES MANAGEMENT

ENVIRONMENTAL PROTECTION DEPARTMENT



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture
Landfill Gas Monitoring —Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time			Monitoring w	vells / Surface C	as Emission	A CONTRACTOR OF THE PARTY OF TH	
	and the same of th		Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	- 2021	(0:15	Rain / Fine	-0	0	0	203	29/10/3	2.8
WPR 2	7-9-2021	1005	Rain / Fine	-8	<i>Q</i>	8	30.5	36/101	3.5
WPR 3	7-9-2021	10145	Rain / Fine		8	8	303	39/1011	3.5
Pit A	7 - 9 - 2021	10.35	Rain //Fine		8	0	2009 2009	3///01	2,8
Pit B	7-9-2021	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Rain Fine	0	8	8	20.9	3//1011	3.6
		16105		- 0		0	2009	3//01/	3.6
								1	
								<del>                                     </del>	

						1 /	
	Name & Designation	Signature	Date				
Field Operator:	Tam Hoi Keung [RenoPipe) CP	Cach	7-9	- 2021			
Laboratory Staff:							
Checked by:	0///////////		_/	<b>-</b> //			
ENVIRONMENTAL RESOURCES	Mak Waz GC RGO	////		1/8/2021			
	4		13		Envir	RONMENTAL PROTECTION	n Department



Contract no. า.3/พรม/าช Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021
	,

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	(-7-2021	8:72	Rain / Fine	0	0	0	20-9	2911102	2.6
011 50 0 10	7 0	(3:55.		0	0	0	20.09	3/1/019	-) (-
CH.FC 0+46	(- 7 - 2021	7:00	Rain / Fine	0	0	0	2009	29/10/3	2
Pit D	0 000	19100		0	0	0	209	3///01	2.5
PIL D	1 - 7 - 2021	16.11	Rain / Fine	0	0	0.	2009	29/10/3	7
Pit C	7 - 9 - 2021	aist.	B . 12	6	0	0	209	3/1/01/	2.5
110	- 2021	1/2/1	Rain / Fine	1-8	<u> </u>	0	209	29/10/3	2
137 Pit C	7 - 9 - 2021	9:45.	Rain / Fine	8		0	209	3///01	
		14:45		0	0		500	37/1013	
137 Pit B	7 - 9 - 2021	9:55	Rain / Fine	0	0	8	200	2/101	0/1
		1615		0 -	0	0	209	37/1013	<del>- \$ 6</del>
137 Pit A	(- 9 - 2021	10105	Rain / Eine	0	0	0	500	29/103	55
		1500		0	10	17	5-9	3//03	- 23

Name & Designation

re

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Can

7-9-2021

Laboratory Staff:

Checked by:

13



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021
,	

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						- pointed Essenthissee
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
Area A	2-9-2021 9-2021	(330)	Rain / Fine Rain / Fine Rain / Fine	0	0	0	20.9	391999 311997 311996	
Area B	- 7 - 2021 - 7 - 2021 - 2021	0845 1845	Rain / Fine Rain / Fine Rain / Fine	0	0	2 0 2	20.9 20.9 20.9	291709 311997 311996	25
A								/	

Name & Designation

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:

WAL FIT. ROD FOCTY/MEB \$/8/2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	· 28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	- 2021	10816	Rain / Fine	0		(**)	2009	391909	
WPR 2	9 - 2021	1000		0	0	0	509	3/13/	32
771112	- / - 2021	(H)	Rain / Fine				209	291999	3.5
WPR 3	9-2021	A	Rain / Fine	8	0		20,9	391999	3.5
Pit A	2-9-2021	18177	Rain / Fine		0	Ö	300	3/1999	3,5
Pit B	- 2021		Rain /Fine	0	0	0	20.9	3 1999	2
		16:08		- 0	0	0	500	3/1997	3.6
								<del>                                     </del>	
								//	
								<del> /,</del>	

	Name & Designation	Signature	Date
Field Operator:	Tam Hoi Keung [RenoPipe) CP	aun	8-9-2021
Laboratory Staff:			

Checked by:

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Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture
Landfill Gas Monitoring —Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	7 - 2021	V. L.	Rain / Fine		0	0	209	591990	2.5
CH.FC 0+46	8-9-2021	9100	Rain VFine	0	0	0	509	3/1995	252
	0 - / - 2021	14190	Rain 7-ine	6	<u> </u>	<u> </u>	2029	291999	205
Pit D	- 9 - 2021		Rain /Fine	0	8	0	309	311999	255
Pit C	0 - 5	BUS		0	ð		200	3/1995	3.5
PIL C	- 2021	755	Rain [Fine		0	0	D09	291999	3
137 Pit C	X - 9 - 2021	P.45.	Rain /Fipe	6	8	8	309	34/997	
137 Pit B	0 3 000	(4)45	( mi	_ 6	0	Ŏ	200	3/1997	
IJ/ FIL D	7 - 2021	7.6	Rain /Fine	07-	2	0	≥oĝ	291999	25
137 Pit A	- 9 - 2021	10:05	Rain /Fine	(7)	8	8	309	31/997	-86
		1505		1 8	Ŏ	0	200	5-11000	<del>- 512</del>

		Name & Desig	nation	Signature	<u>Date</u>	
Field Operator:	Tam Ho	oi Keung [RenoPip	e) CP	Cer	1-9	- 2021
Laboratory Staff:						
Checked by:	011	) (		1		2/21
ENVIRONMENTAL RESOURCE	Chall ES MANAGEMENT	WAT KE	RSD	/////	0_	48/2021

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	9-9-2021	0830	Rain / Fine	0	0	0	20.9	30/1009	Trans Zames	
	<u> </u>	1330	Rain / Fine	()	0		20.9	33/100X	from Comme	
	- 7 - 2021	(700	Rain /(Fine)	Ö	0	0	20-9	31/1007	<u> </u>	
Area B	9-9-2021	2245	Rain /(Fine	(3)	(**)	0	5.9	30/1009	manning ( norm.	
	9-9-2021		Rain //Fine	Ď	0	()	3007		The Course	
	9 - 9 - 2021	ible	Rain (Fine	8:	0	Ö	20.9	31/1806	2.5	
								/		

	Name & Designation	Signature	Date	
Field Operator:	Tam Hoi Keung [RenoPipe) CP	acc	9-9 -2021	
Laboratory Staff:				
Checked by:	HAK WAS KU BO	Pocy/	May 9/9/2021	
Environmental Resources	MANAGEMENT .		13	Environmental Protection Department



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	- 7 - 2021	10:10	Rain /Fine	0	0	0	59	30/1009	- · · ·
	99	(7)(5)		0	0	0	20.9	33/100	51
WPR 2	- ( - 2021	1005	Rain //Fine	0	0	0	209	30/1009	3.5
11/22 0	99	(7/2)		0	0	0	20.9	33/100t	3.5
WPR 3			Rain / Fine	0	0	0	DOT	30/1009	2.7
Pit A	9-9-2021	15145	D-1- 160	0	- 2	<u> </u>	209	33/ 100t	2JE
110 A	(- / - 2021	1 500 1	Rain / Fine		<u> </u>	0	207	36/1009	
Pit B	9 - 9 - 2021	(1:05	Rain / Fine	0	0		202	33/1005	
		1650	Italii (Tille	. 0	0	1 8	300	33/1009	36
							200	35/1005	3.6
								/	
								//	
								1	

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T.	anno	· cc	ı	COL	×	mation	

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

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9-9-2021

Laboratory Staff:

Checked by:

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CONTract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021
	,

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	9 - 9 - 2021	7:72	Rain Fine		0	0	209	2011009	* *
011500.40	a a	13: FZ.		0	0	0	2009	33/100	56
CH.FC 0+46	- 2021	1 / I	Rain / Fine	0	0	0	2009	3011009	265
Pit D	9 9 2004	9111-		0	0	0	209	33/100	7.5
TILD	- 7 - 2021	1/4:15	Rain / Fine	0	0	0	209	30/1009	25
Pit C	9-9-2021	9172	Rain /Fine	0	0		209	33/1007	25
		1650	Raili / Fille		2	0	200	30/1009	-8
137 Pit C	9 - 9 - 2021	9145.	Rain /Fine		<del>- 6</del>	0	300	33/1000	
	00	14:45	0	0	8	0	508	22/100	
137 Pit B	7 - 2021	9155	Rain / Fine	0	0	0	200	30/1000	0/
137 Pit A	90 000	1415		0.		0	200	33/1004	27
IST PILA	7 - 9 - 2021	0.04	Rain / Fine	0	0	0	2019	3011009	23
		1505		2	. 6	0	200	27/1000	23

Name & Designation

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Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

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Laboratory Staff:

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Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture
Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time			and the second s				
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
Area A	(0 - 9 - 2021 (0 - 9 - 2021 (0 - 9 - 2021	1330	Rain / Fine Rain / Fine Rain / Fine	0	6	0	20.9	30/ (009 30/ (006 31/ (006)	55
Area B	(0-9-2021 (0-9-2021 (0-9-2021	1 12	Rain / Fine Rain / Fine Rain / Fine	8	0	0	209	22/10/9 30/1001 31/1006	25
								/	

	Name & Designation	Signature	<u>Date</u>			
Field Operator:	Tam Hoi Keung [RenoPipe) CP	Can-	(O-9 -2021			
Laboratory Staff:						
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ENVIRONMENTAL RESOURCES N	hek was tel 200 pe	sesv/ //	10	-l-2021	•	
	THE PROPERTY OF THE PROPERTY O	1	13		ENVIRONMENTAL PROTECTION	DEPARTMENT



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	/ (- 2021	2010	Rain / Fine	0	0	0	20.9	5211009	50
WPR 2	CO- 9 - 2021	10125	Rain / Fine	9	0	0	20.3	30/1004 24/1009	3.3
WPR 3	[S- 9-2021	12/45	Rain / Fine	0	0	0	Sery	23/1009	3.3
Pit A	0-9-2021	22101	Rain /Fine	8	8	Q Q	309	30/ 1008	75
Pit B	10-9 -2021	1605	Rain / Fine	g =	0	8	2007 2007 2009	30/100f 30/1009	3.6
								/,	

	Name & Designation	Signature	Date			
Field Operator:	Tam Hoi Keung [RenoPipe) CP	Com	10-9	- 2021		
Laboratory Staff:			(			
Checked by:		120/ July	16	19/9/2021		
		2	13	L ·	ENVIRONMENT	TAL PROTECTION DEPARTMENT



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture
Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	10-9-2021	X:XI	Rain /Fine	(7)	(2)		209	101100	5 =
		13:55.		0	0	0	300	34 1007	-
CH.FC 0+46	(0- / -2021	9'.80	Rain / Fine		0	0	200	52/1009	
	100	14:00.		0		0	S.D.9	30/180	55
Pit D	0-9-2021	9115	Rain / Fine	0	_0	0	20.9	22//209	55
Pit C	10-9-2021	915	<del></del>		<u> </u>	0	20,9	37/ 100	2.5
110	/ ()- / - ZUZI	1455	Rain / Fine	-2-	2	. 0	25.9	22/1009	Z.
137 Pit C	10-9-2021	945	Rain / Fine	0	0	0	209	3011.008	
137 Pit B	10-9-2021	16145	G.	0	0	0	50.9	30/1007	-
107 1 10 15	( - 2021	1/255	Rain / Fine	<del>                                     </del>	0	. 0	209	24/1009	26
137 Pit A	10-9-2021	10105	Rain /Fine	2	8	0	209	30/100	25
		LYDS		6	ŏ	0	300	30/1009	- 3

	(200			0	20,9	375/1808	(2 3)
	Name & Designation	Signature	Date			1201 008	
Field Operator:	Tam Hoi Keung [RenoPipe) CP	Car	10-9-202	1			
Laboratory Staff:			,				
Checked by:	1		1	_			
ENVIRONMENTAL RESOURCES MA	Mak Word Gel PS	/ M	13 13	· l-2021	EN	VIRONMENTAL PROTECTION	DEPARTMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	( - 3 - 2021 ( - 9 - 2021 ( - 9 - 2021	1330	Rain / Fine Rain / Fine Rain / Fine	0	0 0	0	20.9	29/949 2//997 3//946	505	
Area B	( -     - 2021   ( -     - 2021   ( -     - 2021		Rain /Fine Rain /Fine Rain /Fine	0 0 0	0	0	28.9	291 999 31 1 991 3 1 1 996	2.5	
								/		

	Name & Designation	<u>Signature</u>	<u>Date</u>		
Field Operator:	Tam Hoi Keung [RenoPipe) CP	Com	(-9-2021		
Laboratory Staff:					
Checked by:		A Mu	8 11-9-	2021	
ENVIRONMENTAL RESOURCES MI	INAGEMENT		13		ENVIRONMENTAL PROTECTION DEPARTMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

ENVIRONMENTAL PROTECTION DEPARTMENT

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	(- /-2021	10:05	Rain / Fine	0	6	0	2009	501909	50
	-	2015		0	0	0	509	3/1795	10
WPR 2	- 7 - 2021	10:25	Rain //Fine	Ó	0	6	208	291994	3.5
	1110	( Cot ( C		0	0	0	20,9	3/1999	3.
WPR 3	- 7 - 2021	(0:41	Rain / Fine	0	0	0	200	291999	5.7
Pit A	1/ 9 2004	1511		0	0	0	209	3/1997	5.2
FIL A	(- ( - 2021	12191	Rain //Fine	1-6-		0	Day	291999	150
Pit B	1 - 9 - 2021	(High	Rain /Fine	- 0		0	200	2,710,00	
	1 ( 2021	16105	Rain /Fine	- 7	0	2	200	27/799	36
		10305				<del></del>	2009	3/1997	36
								/	
								//	
								<del>                                     </del>	

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	Name & Designation	Signature	<u>Date</u>
Field Operator:	Tam Hoi Keung [RenoPipe] CP	Tou !	-9 -2021
Laboratory Staff:			(
Checked by: Ouck	" Was Kil Reso	Mil	11/9/2021
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Acuity Sustainability Consulting Limited



Contract no. ำ3/พรบ/าช Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021
	-

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	1 - 9 - 2021	22.7	Rain Krine	0	(0)	(1)	508	191990	
CH.FC 0+46	11-9-2021	13:55.	Rain / Fine	0	0	0	20-1	3/1999	3
Pit D	- 9-2021	14100.	Rain / Fine	0	0	0	509	3/10/99	2
Pit C	/(- 9-2021	4116	Rain /Fine	6	8	8	200	3/1997	3,8
137 Pit C	[-9-2021	9145	Rain / Fine	0	0	0	200	3/1995	
137 Pit B	1 - 9 - 2021	9165	Rain //Fine	0	0	Š.	209	3/1995	4
137 Pit A	1 - 9 - 2021	10:05	Rain /Fine	0-	0	0	509	3/199	\$6
		1561		0	0	5	200	24 1000	83

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

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Laboratory Staff:

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission								
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)		
Area A	(3 - 9 - 2021 (3 - 9 - 2021 (3 - 9 - 2021	0820 1320 1700	Rain / Fine Rain / Fine Rain / Fine	0	0 0	0	20-9 20-9 20-9	31/1007 33/1006 32/1005			
Area B	/3- 9 - 2021 /3- 9 - 2021 /3- 9 - 2021	0945 1 <b>3</b> 45 1648	Rain / Fine Rain / Fine Rain / Fine	0	0	0	20.9 20.9 20.9	31/1007 33/1006 32/1006	2.5		
								/			

Name & Designation

Signature

Field Operator:

Tam Hoi Keung [RenoPipe) CP

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Laboratory Staff:

Checked by:

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ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	/3-9-2021	10:05	Rain / Fine	0	0	0	20.9	3/1/007	2.4	
		15:15		0	0	0	20.9	33/1006	2,8	
WPR 2	13-9-2021	10:25	Rain / Fine	0	0	0	20.9	33/1nob	3.5	
	(	(12:25		0	0	0	20-9	33/1086	3.5	
WPR 3	13-9-2021	10:45	Rain / Fine	0	0	0	20.9	31/1007	2-4	
	(	14.45		0	0	0	20.9	33/1006	2	
Pit A	13-9-2021	10155	Rain / Fine	0		0	209	31/1007	5	
		15:55		0	0	0	20.9	33/1006	5	
Pit B	13-9-2021	111.05	Rain / Fine	0	0	0	209	33/1006	3.6	
		16:05		٥	0	0	209	32/1005	3.6	
								/		
								/		
								/		
								1		

Name & Designation

Signature

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

CHAK WAI KIT, RSO. ROCTV/ MULL 13-9-2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
CH.FC 8+38	13- 9-2021	2:25	Rain / Fine	0	0	0	209	31/1007	25	
	(	13145		0	0	0	209	33/1006	2.5	
CH.FC 0+46	13-9-2021	9500	Rain / Fine	0	0	0	20.9	3//1007	25	
		(Clos		6	0	Ö	20.9	33/1006	25	
Pit D	13-9-2021		Rain / Fine	0	0	0	209	31/1007	2.5	
-		14.15		0	0	0	20.9	33/1006	2,5	
Pit C	13- 9-2021	9:25	Rain / Fine	0	0	0	20.9	31/1007	7	
		14:25		0	0	0	20.9	33/1006	1	
137 Pit C	13-4-2021	9145	Rain / Fine	0	0	0	20.9	31/1007	7	
		14:45		0	0	0	20.9	33/1006	7	
137 Pit B	13-9-2021	9155	Rain / Fine	0	0	0	20.9	3///2007	1.6	
		14:55		0	0	0	20.9	33/1006	26	
137 Pit A	13-9-2021	10:05	Rain / Fine	0	0	0	20.9	33/1006	2.3	
		15:05		0	0	O	20.9	32/1005	2.3	

Name & Designation

Field Operator:

Laboratory Staff:

Checked by:

Tam Hoi Keung [RenoPipe] CP Tam 13 - 9 - 2021

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ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	4-9-2021 4-9-2021 4-9-2021	0330 1330 100.	Rain / Fine Rain / Fine Rain / Fine	0	0	0	20.9	27/1001 30/1010 29/1009		
Area B	(4-9-2021 (4-9-2021 (4-9-2021	0845	Rain / Fine Rain / Fine Rain / Fine	0 0	0	8	20.9 20.9 20.9	27/(0(1 30/10(0 29//009	25	
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Can

4-9-2021

Laboratory Staff:

Checked by:

CHAK WAI HT, PSO POC

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ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	14-9-2021	10:15	Rain / Fine	0	0	0	20-7	27/1011	514	
		15:15		6	0	0	20.9	30/10/0	24	
WPR 2	10-9-2021	10:25	Rain / Fine	0	0	0	20.9	27/1011	3.5	
		15:25		0	0	0	2009	30/100	3.5	
WPR 3	14-9-2021	10145	Rain / Eine	0	0	0	20.9	21/1011	2 4	
		15145		0	0	0	2029	30/10/0	28	
Pit A	(4-9-2021	10155	Rain / Fine	O	0	0	205	27/1011	5	
		151.55		0	0	0		30/1010	\$	
Pit B	11-9-2021		Rain / Fine	0	0	0	20.9	27/1011	3.6	
		16:05		0	0	0	20.9	30/1010	3.6	
							(	/		
								/		
								/		

Name & Designation

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:

CHAK WAI 41, DEO POCJU/ SULT 6 14.9.2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	14-9-2021	LISE	Rain / Fine	0	0	0	20.9	271/01	2-5
		13172		0	0	0	20.9	30/100	2.5
CH.FC 0+46	1/4-9-2021	9:00	Rain / Fine	0	0	0	200	127/(011	2.5
	10	14100		0	0	0	20.9	30/1010	2.5
Pit D	14-9-2021	905	Rain / Fine	0	0	0	20.9	27/1011	2.5
		14115		0	0	0	20.9	30/100	2,5
Pit C	1/1- 9-2021	9:25	Rain / Fine	0	0	0	209	27/1011	X
		171155		0	0	0	20.9	30/1010	4
137 Pit C	1/6-9-2021	9165	Rain / Eine	0	0	0	20,9	27/104	7
		1/11/15		0	0	0	229	30/100	7
137 Pit B	1/8-9-2021	9:55	Rain / Fine	0	0	0	20.9	27/104	26
		16:55		0	0	0	203	30/100	26
137 Pit A	1/4-9-202	10:05	Rain / Fine	0	0	0	20.9	27/1011	2.3
		14105		0	0	0	20.9	29/1009	1 7.3

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

16-9

Laboratory Staff:

Checked by:

CHAK WAI KII, RSO, POCTY/

14.9.2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	ing Monitoring wells / Surface Gas Emission								
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)		
Area A	/5-9-2021 /X-9-2021	1330	Rain / Fine Rain / Fine Rain / Fine	0 0	0	0 6 0	20.9	32/1001	45		
Area B	15-9-2021 15-9-2021 15-9-2021	SU 1345 1645	Rain / Fine Rain / Fine Rain / Fine	0	0 0	0	20.9	30/1011	2.5		
. ,								/			

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

· 12-9 -2021

Laboratory Staff:

Checked by:

CHAK WAI KIT, 1850.

15.9.2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	15-9-2021	1015	Rain-/ Fine	6	0	0	20.9	301/001	2.2	
		1515		0	0	0	Sole P.	32/10/0	22	
WPR 2	15-9-2021	1025	Rain / Fine	0	0	0	20.9	30/1011	3,5	
		1525	7	0	0	0	2009	32/100	3,5	
WPR 3	5-9-2021	1045	Rain / Fine	0	0	0	2000	30/104	2.4	
		1545		0	0	0	209	32/10/0	2.1	
Pit A	15-9-2021	1055	Ratin / Fine	0	0	0	2,0.9	30/1001	5	
	(	1555		0	0	0	20.9	37/100	5	
Pit B	15-9-2021	1105	Rain / Fine	0	0	0	20.9	30/1001	3.6	
		1605		0	Ö	0	20,9	31/1009	3.6	
							l l	/		
								/		
								/		
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

an 15-9-20

Laboratory Staff:

ENVIRONMENTAL RESOURCES MANAGEMENT

Checked by:

SHAK WAI 14T 850 POCTV



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	15-9-2021	2155	Rain / Fine	0	0	0	2009	301/201	7 5
		13155	2	0	0	0	20.9	32/140	2.5
CH.FC 0+46	1 - 2021	9600	Rain / Fine	0	0	0	20.9	30/104	25
		16100	/	0	Ö	0	20,9	32/10/0	25
Pit D	1 - 9 - 2021	9:15	Rain / Fine		0	0	209	36/104	52
		14:15	200	0	0	0	209	32/1810	2.5
Pit C	15-9-2021	905	Rain / Fine	0	0	0	20,9	30/1811	X
		14:25	*	0	0	0	209	32/100	8
137 Pit C	15-9-2021	9:45	Rạin / Fine	0	Ö	0	208	3-1104.	7
		16:45		0	0	0	20.9	32/1010	7
137 Pit B	15-9-2021	915	Rain / Fine	0	0	0	209	30/1011	2.6
		(Cel. 45		0	0	0	20.9	32/10/0	2.6
137 Pit A	15-9-202	10:05	Ratn / Fine	0	0	0	20.9	32/1010	2.3
		1505		0	0		20.9	31/1009	2,3

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

, <-9 -202

Laboratory Staff:

Checked by:

CHAR WAI KM, RSO. POCTY MILL

15.9.2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
Area A	6-9-2021 6-9-2021 6-9-2021	0236	Rain / Fine Rain / Fine Rain / Fine	0 0	0 0	0	20.9	30/10/0 33/10/0 32/1009	5-
Area B	/6- 9 - 2021 /6- 9 - 2021 /6- 9 - 2021	0845 1365 1665	Rain / Fine Rain / Fine Rain / Fine	0 0	0 0	0 0	20.9	30/10/1 33/10/0 32/1/829	2-5 2.5 2.5
. ,								/ / /	

Name & Designation

Data

Field Operator:

Tam Hoi Keung [RenoPipe) CP

~ 16-9-2

Signature

Laboratory Staff:

Checked by:

CHAK WAI KM. RSO POCTY

16.9.2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	16-9-2021	1045	Rain / Fine	0	0	8	20.9	30/1011	2.8
WPR 2	16- 9-2021	(5(15)	Rain / Fine	0	0	0	20.9	30/10/1	3.5
		(505	D : 215	0	0	0	209	33/100	3.5
WPR 3	(0- 9-2021	15145	Rain / Fine	0	0	0	2009	33/101	5.3
Pit A	6- 9-2021	1015	Ratin / Fine	0	0	8	20.8	33/100	5
Pit B	16-9-2021	11105	Rain / Fine	Ő	8	0	503	30/1011	3,6
		16:08		0	0	0	20.7	32/1009	3,6
								/	
								//	

Name & Designation

Signature

**Date** 

Field Operator:

Tam Hoi Keung [RenoPipe) CP

16-9-202

Laboratory Staff:

Checked by:

CHAK WAI KU, RSO

16.9.202

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	159 -2021	2155	Rain / Fine	0	0	0	2009	301/011	2.5
		13:35	£	0	0	0	205	33/1010	25
CH.FC 0+46	16-9-2021	9:00	Rain / Fine	6	Ō	0	204	30/1011	2.5
		16100		0	0	0	20.9	33/100	シュケ
Pit D	16-9-2021	9:15	Rain / Fine	0		0	20.9	30/1011	25
		12:15		0	0	0	20.9	33/100	2,5
Pit C	16-9-2021	9:25	Rain / Fine	0	0	0	209	30/1011	4
	4	161.75		0	0	0	209	33/100	<u> </u>
137 Pit C	10-9-2021	9:45	Rain / Fine	0	0	0	20.9	30/1011	7
		14145		0	0	0	2019	33/10/0	7
137 Pit B	10-9 -2021	19155	Rain / Fine	0	0	0	20.9	30/1011	86
		1615		0	0		20.9	33/1do	2.6
137 Pit A	16-9-202	10:05	Rain / Fine	0	0	0	209	30/1011	2.3
	l l	15:05					20.9	132/1009	63

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

16-9-202

Laboratory Staff:

Checked by:

CHAK WAL KU RSO. POLJ

16-9-2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
Area A	7 - 9 - 2021 7 - 9 - 2021 7 - 9 - 2021	1330	Rain / Fine Rain / Fine Rain / Fine	0	0	0	20.9	31/1009	55
Area B	7 - 9 - 2021 7 - 9 - 2021 7 - 9 - 2021	0845 1345 1645	Rain / Fine Rain / Fine Rain / Fine	0 0	0	0	20.9	31/1009 35/100t 33/1007	25
								/	

Name &	Desig	nation
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Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

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Laboratory Staff:

Checked by

CHAK WAI KU . RSO,

17.8.202

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated		
PGM-2500 (QRAE III)	28 Jul 2021		

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	()-9 -2021	10:15	Rain / Fine	0	0	0	20,9	31/1009	2.2	
		15115	4	0	0	0	20.9	33/1007	2.2	
WPR 2	1 - 7 - 2021	10105	Rain / Fine	0	0	0	20.9	31/1009	3,5	
	-	15:25		0	0	0	20.9	33/1067	3.5	
WPR 3	( ) - 9 - 2021	10165	Ratin / Fine	0	0	0	20.9	31/1809	52	
		18.45		0	0	0	20.3	33/1007	5.2	
Pit A	1 - 7 - 2021	10145	Rain / Fine	0	0	0	229	31/1009	5	
		18:55		0	0	0	209	33/1867	5	
Pit B	( - 7 - 2021	11105	Rain / Fine	0	0	0	20,9	31/1009	3,6	
	l	16105		0	0	0	200	33//087	3.6	
							l	/		
								/		
								/		
								/		

Name & Designation

Signature

13

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

J-9 -20

Laboratory Staff:

Checked by:

PAAK WAI KY RSO

17-9.2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	17-9-2021	Orvi	Rain / Fine	03	(methane %)		5-0	311/00	-
5 5 6.00	(- ( - 2021	314	ryani / Fine		8	8	20.9	21/009	2-5
CH.FC 0+46	7-9-2021	9697	Rain / Fine	0	8	0	300	3//1829	3.5
		181.00		0	0	0	208	34/1200	26
Pit D	1 /- 9 -2021	9115	Rain / Fine	0	0	0	209	31/1009	2.5
		12:15		0	0	0	20.9	35/ (20)	25
Pit C	1 /- 9 - 2021	9:25	Rain / Fine	0	0	0	208	31/1809	Ž.
107.51		1605		0	0	Ð	2009	35/1802	Į.
137 Pit C	1 /- 9-2021	9:45	Rain / Fine	0	0	0	209	31/1009	7
	100	14145		0	0	0	20.9	35/100t	D)
137 Pit B	/ /- 7 - 2021	9155	Rain / Fine	0	0		229.	31/1009	2.6
	0	14155		0	0	0	20.9	35/100	26
137 Pit A	1 - 7 - 2021	10:05	Ratn / Fine	0	0	Ø.	20.9	31/1009	23
		(×105				$\cup$	209	33/1007	7.3

Name & Designation

Signature

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:

CHAK WAI KIT, RSO. POCJA MUID

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time		Control of	Monitoring v	vells / Surface C	as Emission		
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
Area A	/5- 9 -2021 /5- 9 -2021 /5- 9 -2021	1330	Rain / Fine Rain / Fine Rain / Fine	0	0 0	0	20.9	31/01/33/1009	5.5
Area B	2- 9-2021 2- 9-2021 2- 9-2021	0 JUS 1345 1645	Rain / Fine Rain / Fine Rain / Fine	0	0	0 0	20.9	31/01/ 33/009 32/1004	5.5
,								/	

Name & Designation

Field Operator:

Laboratory Staff:

Checked by:

Tam Hoi Keung [RenoPipe) CP (4-9-2021)

CHAK WH HT, RSO. POCTY / 18-9-2021

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	(f- 9 - 2021	10115	Ratin / Fine	0		0	20.9	31/1011	28
		15115		0	0	0	20.5	32/1002	24
WPR 2	(X-9-2021	10:05	Rain / Fine	0	0	0	20.9	31/104	3.5
		15:25		0	Ö	0	Das	32/1008	3.5
WPR 3	18-9-2021	10:45	Rain / Fine	0	0	0	209	31/1011	2.8
		15165	,	0	0	0	20.9	32/ 100t	7.8
Pit A	1/4-47-2021	10155	Rain / Fine	0	0	<u> </u>	20.5	3/1/84	- 5
		15.55		C	0	2	20.9	32/100f	5
Pit B	1 - 9 - 2021	16:05	Rain / Fine	0	0	0	20.9	31/1016	300
		16105		0	0		20.9	32/1008	26
								ļ/,	
		1	-					1,	
								1 /	

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

12-9-20

Laboratory Staff:

Checked by:

CHAK WAI KIT , RSO POCTY/ MILL

f. 9. 204

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021
1111	

Sample location	Date of measurement	Sampling time		Monitoring wells / Surface Gas Emission					
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	12-9-2021	8:55	Rain / Fine	0	0	0	209	311/01	20/2
		13:55	2	0	0	0	209	33/1009	25
CH.FC 0+46	( - 9 - 2021	9180	Ratin / Fine	0	0	0	2003	31/101	2.5
	100	14100		0	6	0	205	33/1009	21
Pit D	12-9 - 2021	9115	Rain / Fine	0	0	0	2009	31/1011	25
		14115		0	0	0	20,9	33/1009	25
Pit C	18-7 -2021	905	Rain / Fine	0	0	0	209	31/(0()	5
		14:05	6	0		0	208	33/1289	*
137 Pit C	12-9 - 2021	PIGE	Rain / Fine	0	0	0	20.9	31/101	
		16145		0	0	0	20.9	23/1809	
137 Pit B	1 -9 -2021	9:55	Rain / Fine	0		0	2009	31/101/	X.6
		16155		0			20.9	33/1009	\$6
137 Pit A	- 202	0 0 0	Ratin / Fine	0	0	0	2009	31/1611	23
		15:05		0	()		2019	32/ Coat	23

Name & Designation

Field Operator:

Laboratory Staff:

Tam Hoi Keung [RenoPipe] CP Com 18-9-2021

ff:

CHARK WAI LIT PSO POCTY MANAGEMENT

RCES MANAGEMENT

ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021
	-

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	20-9 - 2021	130	Rain / Fine	0	0	0	Son	3011010	15	
	20-9 - 2021	13:30	Rain / Fine	0	0	0	Sol	301100	6.5	
	20-9 -2021		Rain / Fine	0	0	0	2009	30/10/0	5.5	
Area B	20-9 -2021	8165	Rain / Fine	. 0	0	0	209	30//00	2.5	
	20 - 9 - 2021 20 - 9 - 2021	18145	Rain / Fine Rain / Fine	0	0	0	20.9	30/1010	2.5	
								/		
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Tan

- 9 - 2021

Laboratory Staff:

Checked by:

翟偉傑

20/9/2021

ENVIRONMENTAL RESOURCES MANAGEMENT

13

Environmental Protection Department



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	00- 7 - 2021	10:15	Rain / Fine	0	0	0	209	30/10/0	28	
		17:02	<i>C</i> /.	0	0	0	20,9	30/10/0	2,2	
WPR 2	20- 7-2021	10005	Rain / Fine	0	0	0	20,8	30/10/0	3,5	
		1652		0	0	0	209	30/10/0	3,5	
WPR 3	- 2021	1.0145	Rain //Fine	0	0	0	2009	30/10/0	212	
		(14145		0	0	0	28.5	20/10/0	24	
Pit A	20- 9-2021	1055	Rain / Fine	0	0	0	203	30/10/0	5	
		1515	0_	0	Ö	0	20-9	301/00	5	
Pit B	20 - 7 - 2021	11405	Rain / Fine	0	0	0	209	30/10/0	3.6	
		16:05		D	0	0	20,9	30/16/0	3.6	
•								/		
								/		
								/		
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Tan 20.9.

Laboratory Staff:

Checked by:

翟偉傑 Chak Wai Kit

ENVIRONMENTAL RESOURCES MANAGEMENT

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission					And Assessed Assessed	
		pag	Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	20 9 - 2021	4:72	Rain LFine	0	0	0	28-1	30/10/0	25
		13:35.		0	0	0	2007	30/ 10/0	2.5
CH.FC 0+46	Po- 7-2021	9100	Rain / Fine	(7)	0	0	20.4	30/100	>-5
	1	12100.		0	0		205	30/1010	25
Pit D	28- 7-2021	9115	Rain //Fine		0	0	209	30/10/0	25
		1615		0	0	0	209	30/1010	7.5
Pit C	20- 9-2021	9125	Rain / Fine	0	0	0	204	30/1000	1
		(AL)5		0	0		209	30/100	<u> </u>
137 Pit C	20 -9 -2021	9:45.	Rain / Fine			0	209	30/10/0	
		12145		0	0	0	20-9	30/10/0	2.
137 Pit B	2021	9155	Rain / Fine	Q	0		205	30/10/0	X.6
		14:55	7	0-	0	0	20.9	30/100	2.6
137 Pit A	20-7-2021	10105	Rain / Fine	0	0	0	202	30/16/0	2.3
		CHOS				0	209	30/10/0	2.3

Name & Designation

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	2\-9-2021 2\-9-2021 2\-9-2021	13130	Rain / Fine Rain / Fine Rain / Fine	0	0	0 0 0	209	30/ [01] 30/ [01] 30/ [01]	505	
Area B	- 7 - 2021 - 7 - 2021	13:45	Rain / Fine Rain / Fine Rain / Fine	0,	8	0	20.9	30/1011 30/011 30/1011	7.5	
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:

翟偉傑 Chek Wai Kit



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	- / - 2021	10115	Rain / Fine	0	0	0	203	30/1011	2.2
		21121		C	0	0.	200	30/ (01)	21
WPR 2	- /- 2021	10175	Rain / Fine	0	0	0	2000	30/10/1	3.5
		(トリア		0	0	0	700	30/1011	365
WPR 3	- 9 - 2021	10165	Rain //Fine	0	0	0	200	30/1011	2.8
		151.45		0	0	0	209	30/1011	2.4
Pit A	2 - 9 - 2021	10:55	Rain / Fine	L 0	0		20.3	30/1011	t
		12121		0		0	2009	30/1011	
Pit B	- 7 - 2021	( , L	Rain /(Fine/	0	0	0	20.9	30/1011	3-6
		18605		0	0	0	2009	30/1011	2.6
							- (	1	
								/	
								/	

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

21-9-202

Laboratory Staff:

Checked by:

翟偉傑 Chak Wai Kit

ENVIRONMENTAL RESOURCES MANAGEMENT

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2/9/20



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	- 2021	KIK	Rain //Fine	8	0	0	20.9	30/1011	20
		13155.		0	0	0	209	30/1011	2.9
CH.FC 0+46	2 - 9 - 2021	960	Rain / Fine	0	0	0	20.9	30/1011	25
		06100		0	0	0	20,9	30/10/1	7.5
Pit D	2 - 9 - 2021	91.15	Rain / Fine	0	0	0	209	30/1011	2.5
		16115		0	8	0	20.9	30/1011	2.5
Pit C	2 - 9 - 2021	9125	Rain / Fine	0	0	0	28.9	30//01/	Q
		14:25		0	0	0	209	30/1011	7
137 Pit C	2 - 9 - 2021	9:45	Rain / Fine	0	D	0	2009	30/10/	7
		1645	000		Ó	0	2009	30/10/1	-
137 Pit B	- 7 - 2021	9:55	Rain / Fine	0	0	0	209	30/1011	26
		14 ET		0-	0	0	20.9	30/1011	2-6
137 Pit A	7 - 9 - 202	1 10:05	Rain / Fine	0	0	O	209	30/1011	2,3
	, , ,	1565		0		0	28.9	30/1011	23

Name & Designation

Signature

<u>Date</u>

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	3-9-2021		Rain / Fine	0	0	0	20.9	29/ 101/	55	
	3 - 9 - 2021 3 - 9 - 2021	Manage A	Rain / Fine Rain / Fine	0	0	. 0	20.9	29/1011	7-6	
		-0						/		
Area B	23 - 9 - 2021 23 - 9 - 2021		Rain / Fine Rain / Fine	0	0	0	20.9	29/1611	205	
	25-9 -2021	16:45	Rain / Fine	0	0	0	20.9	29/1011	207	
								/		
								/		

Name & Designation

<u>Date</u>

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O
Penta-Ocean - Concentric Joint Venture
Landfill Gas Monitoring —Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	3- 7-2021	105	Rain / Fine	0	0	0	203	291/001	2-5	
		1515		0	0	0	208	29/1011	2.5	
WPR 2	23- 7-2021		Rain / Fine	0	0	0	203	29/1011	3.8	
		ユンエン		0	0	0	50.9	29/1011	3.5	
WPR 3	> - 9 - 2021	1.05.45	Rain / Fine		0	6	209	29/1011	24	
		"Kat		0	0	0	203	29/1011	->.Z	
Pit A	7-2021	10145	Rain / Fine	0-	2	0	204	29/101	V	
		17/7		0	0	0	2019	29/1011	7	
Pit B	7 - 2021		Rain / Fine		0	0	203	79/1011	3.6	
	`	16185		0	0		20.9	29/1011	36	
·										
								/		
								/		
								/		

Name & Designation

Signature

<u>Date</u>

Field Operator:

Tam Hoi Keung [RenoPipe) CP

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Laboratory Staff:

Checked by:

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23/8/2001

ENVIRONMENTAL RESOURCES MANAGEMENT

13



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	23-7-2021	215	Rain / Fine	0	0	0	209	29/1011	20
		13:55.		0	C'	0	2009	29/1011	2.5
CH.FC 0+46	Do- 7-2021	9400	Rain //Fine	0	0	0	2009	29/1011	7.5
		(6100		0	0	0	20,9	29/101	25
Pit D	23-9-2021	9115	Rain / Fine	0	0		2009	291/21	2.5
		1615		0	0	0	209	29/1011	2.5
Pit C	3-7-2021	905	Rain / Fine	0	0	0	20.9	29/1011	2
	1	(6)5	0	0	0	0	209	29/10/1	d
137 Pit C	7 - 2021	61.45	Rain / Fine	0	0	0	20.9	29//01/	7
		1465		0	0	0	2000	29/1011	7
137 Pit B	25-9-2021	994	Rain //Fine	0	0	0	20,9	29/1011	26
		14155		O-	0	0	203	29/1011	2.6
137 Pit A	23 - 7 - 202	16.05	Rain / Fine	0	0	0	2009.	29/101	2.3
	/	1565		0	0	0	79.9	29/1011	2.3

Name & Designation

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time		Monitoring wells / Surface Gas Emission						
			Weather	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	- 9 - 2021 0 - 9 - 2021	<del></del>	Rain / Fine Rain / Fine	0	0	0	20,9	31100	2.5	
	DC - 9 - 2021	1760	Rain / Fine	0	0.	0	2009	29/100+	7. 7	
Area B	2 - 9 - 2021 2 - 9 - 2021 2 - 9 - 2021		Rain / Fine Rain / Fine Rain / Fine	8	8	000000000000000000000000000000000000000	20.9	29/10/2 29/10/2 29/10/2	25	
							(	/		
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

n 24.9

Laboratory Staff:

Checked by:

翟偉傑 Chak Wai Kit

ENVIRONMENTAL RESOURCES MANAGEMENT

24/9/2024

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated	
PGM-2500 (QRAE III)	28 Jul 2021	

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	- 2021	1005	Rain / Fine	0		0	269	29/1001	2,6	
		LHILL		0	0	0	20.9	29/100h	2,2	
WPR 2	DU-9 - 2021	10,72	Rain / Fine	0	0		22	29/100%	3,2	
		175	4		0		Doct	29/100	3.5	
WPR 3	7 - 2021	10145	Rain / Fine		0		200	29/100/	218	
		17186		<u> </u>	0	02	209	29/1002	26	
Pit A	- 7 - 2021	10:45	Rain / Fine			0	20,9	29/100/	5	
		1515			0	0	509	2911002	. 5	
Pit B	- 2021	Mot	Rain / Fine		0		2009	29/100X	3.6	
		16:05		0		(5)	200	29/1008	36	
							(		0.30	
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Car 2/1-9-202

Laboratory Staff:

Checked by:

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ENVIRONMENTAL RESOURCES MANAGEMENT

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission					ng matakasakahakapin menahili kepitah melakupun penerpengan	
	A -2		Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	2021	2125	Rain / Fine	0	0	0	200	291 /col	70.5
		13155.		0	0	0	2001	29/1002	7.5
CH.FC 0+46	DG- 9 - 2021	9400	Rain / Fine	0	0	0	2087	29/1002	25
		14400		0	0	0	209	29/10ml	2.5
Pit D	24 - 9 - 2021	9515	Rain / Fine	0	0	0	209	2911000	2.5
	1	(61.15		0	0	0	20.9	29/1000	2.5
Pit C	24- 7-2021	905	Rain / Fine		0	0	2009	39/1008	Q
		CREEZE		0	0		209	29/1002	L.
137 Pit C	2 - 7 - 2021	PLAS.	Rain / Fine		0	0	509	29/18/	and a
		14/4		0	0	0.	209	29/100/	1000General
137 Pit B	7-2021	905	Rain / Fine		0	$C_{2}$	20.9	39/100/	Q.t.
		1445		()-	2	0	209	29/100f	22
137 Pit A	Def - 7 - 202	1 10:05	Rain / Fine	0		0	20,9	59/ 100t	18
		1505		0	0	0	20,9	29/1002	8

Name & Designation

Signature

**Date** 

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:

翟偉傑 Chak Wai Kit



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	- 2021 - 2021 - 2021	(3630	Rain / Fine Rain / Fine Rain / Fine	0	0	0	209	30/10/2	7.5	
Area B	- 2021 - 2021 - 2021		Rain / Fine Rain / Fine Rain / Fine	8	8	0	269 36 2019	30 1 1012 30 1 1012 30 1 1012	302	
								/		

Name & Designation

Sionature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

am 2/-9-20

Laboratory Staff:

Checked by:

程偉傑 Chak Wai Kit

ENVIRONMENTAL RESOURCES MANAGEMENT

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	- 2021	15-15	Rain / Fine	0	0	0	208	30/1012	2	
		( K) ( )-		0	0	0	2009	30/1012	5.2	
WPR 2	7 - 2021	10.25	Rain / Fine	0	0	0	209	30/100	3.5	
		15175		0	0	0	208	30/1012	3.5	
WPR 3	-7 -2021	10165	Rain //Fine	0	8	0	200	30/1012	200	
		(5-145	Comment	0	B	0	20.9	20/1012	2.4	
Pit A	- 2021	100 FF	Rain //Fine		8	0	2009	30/1012	1	
		(5:55		2	Q	0	200	30/100	7	
Pit B	- 7 - 2021		Rain / Fine	0	0	0	204	30/10/2	34	
		16:05		0	0	0	20.9	30/1012	3.6	
,								/		
								/		
								/		
								/		

Name & Designation

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Field Operator:

Tam Hoi Keung [RenoPipe) CP

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Signature

Laboratory Staff:

Checked by:

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ENVIRONMENTAL RESOURCES MANAGEMENT

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	25-9-2021	225	Rain / Fine	0	0	0	229	30/1013	25
		13:45.		O.	0	0	264	30/1012	25
CH.FC 0+46	28- 7 - 2021	960	Rain / Fine	8	0	0	2089	30/10/2	2,5
		16:00		0	0	0	200	30/1012	25
Pit D	- 7 - 2021	9115	Rain / Fine	0	0	0	209	30/1012	2.5
	<u> </u>	10011		0	0	L 0	DOM	30/1012	2.5
Pit C	- 2021	905	Rain / Fine	0	0	0	209	30/1002	2
		1405	20	0	D	0	200	30/1012	X
137 Pit C	- 2021	9:45	Rain //Fine	0	0		2269	30/18/2	
		1445		0	0		200	30/10/2	-2
137 Pit B	26-9 -2021	4:55	Rain / Fine	L_O		0	2009	30/1012	126
		1/60/55		0.	0		209	30/1012	15
137 Pit A	- 202	10:05	Rain / Fine	<u> </u>	0	0	201	30/10/2	2.3
		1505					209	30/10/2	23

Name & Designation

Signature

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / S			vells / Surface G	Surface Gas Emission			
			Weather	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	27 - 9 - 2021 27 - 9 - 2021 27 - 9 - 2021	13:30	Rain (Fine) Rain (Fine) Rain (Fine)	0 0	0	0 0	20.9 20.9 20.9	30/10/0 30/18/0 30/100	\$,5- \$\str	
Area B	27 - 9 - 2021 27 - 9 - 2021 27 - 9 - 2021	13465	Rain / Fine) Rain / Fine) Rain / Fine)	0	0 0	0	20.9 20.9 20.9	20//000	2,5	
								/		

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Taux

27-9-2021

Laboratory Staff:

Checked by:

翟偉傑 Chak Wai Kit

ENVIRONMENTAL RESOURCES MANAGEMENT

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27/9/2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated	
PGM-2500 (QRAE III)	28 Jul 2021	

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	2 - 7 - 2021	10:5	Rain / Fine	0	0	0	20-9	3011010	24	
		1545		0	0	0	2009	30/100	24	
WPR 2	7 - 7 - 2021	16:25	Rain / Fine	0	0	0	5009	30/100	2.2	
		1525	Carrie	0	0	0	20.9	30/(010	24	
WPR 3	2) - 9 - 2021	10.65	Rain / Fine	0	0	0	2009	30/100	5.2	
		1545		0	0	0	20.9	30/1010	24	
Pit A	2 /- 9-2021	10155	Rain / Fine	0	0	0	500.9	30/1010	5	
		15135		0	Q	0	209	30/10/0		
Pit B	2/-5-2021		Rain / Fine	0	U	0	209	30/1010	3.46	
		16:05		0	D	Q	2009	30/1010	3.60	
								/		
								/		
								/		
								/		

Name & Designation

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time			Monitoring w	vells / Surface G	as Emission		
	`		Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	27 - 9 - 2021	8:55	Rain //Fine	0	0	0	70.9	30/10/0	7.5
		13:55 .		0	0	0	70.9	20/ /010	2,(
CH.FC 0+46	27-9 -2021	9:00	Rain / Fine	0	0	0	20.9	30 / 10 10	2.5
		14:00		0	0	0	20.9	30/1010	2.5
Pit D	27 - 9 - 2021		Rain /Eine	0	0	0	20:9	30//0/0	2.5
		14:15		0	0	0	20.9	30/10/0	2.5
Pit C	2/- /-2021	9:25	Rain / Fine	0	0	0		30/1010	8
	h	14:25		0	0	0	20.9	50/1010	8
137 Pit C	2/2021		Rain / Fine	0	0	0	20.9	30/10/0	7
		(4.45		0	0	0	70.9	50/1010	7
137 Pit B	2 - 9 - 2021		Rain / Eine	0	0	0	20.9	30/1010	86
		14:55		0	٥	0	20.9	30/1010	8.6
137 Pit A	2/2021		Rain / Fine	0	0	0	20.9	30/1010	8.3
		15:05		0	0	0	20.9	30/10/0	8.3

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

20 - 27

27 - 9-2021

Laboratory Staff:

Checked by:

翟偉傑 Chak Wai Kit

ENVIRONMENTAL RESOURCES MANAGEMENT

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	,		Monitoring w	vells / Surface G	as Emission		
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
Area A	78- 9-2021	8:30	Rain Æine	O	O	0	20.9	30/1011	5.5
	28 - 9 - 2021	13:30	Rain / Eine	0	0	0	20.9	30/104	5.5
	28 - 9 - 2021	\$7:00	Rain / Fine	6	Ö	0	20.9	30/184	5.5
Area B	78-9-2021 28-9-2021 28-9-2021	13145	Rain / Fine Rain / Fine Rain / Fine	0	0	0	20.9	30/184	2.5
								/	

Name & Designation

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:

翟偉傑 Chak Wai Kit



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	2021	10:15	Rain / Fine	0		0	2027	3-01/011	5.4	
	, ,	15115	2.5	0	0	0	20.9	30/1011	24	
WPR 2	DJ- 7-2021	1075	Rain / Fine	0	0	0	D009	36/1011	3,5	
		151.55		0	0	0	20.9	30/1001	3.5	
WPR 3	- 7 - 2021		Rain / Fine	0		0	20.9	30/1011	21	
	1 1	15165	1	0	0	0	20.9	30/1011	24	
Pit A	7 - 2021	10/25	Rain / Fine	0	0	0	20-5	30/1011	5	
	- LO	15/5		0	0	0	20.5	30/1801	5	
Pit B	2 - 9 - 2021		Rain / Fine	0		0	20.5	30/1011	316	
	l l	16-05		0	0	0	20.9	30/1061	3.6	
							C			
								/		
								/		

Name & Designation

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time		nace and a more according to the second and a	Monitoring w	vells / Surface G	as Emission		44
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	28 - 9 - 2021	8:55	Rain / Eine	0	0	0	20.9	3011011	7-5
		13:55.		0	0	0	209	30 11011	7.5
CH.FC 0+46	28-9-2021	9,00	Rain / Fine	0	0	0	26.9	30 /101/	2.5
	f	14,00		0	0,	0	209	30/1011	2.5
Pit D	28- 9-2021	9:0810	Rain / Fine	0	Ó	0	70.9	30 /101/	2.5
	(	14.0815		0	0	0	26 9	30/1011	7-15
Pit C	28- 9-2021	9:25	Rain /Fine	0	0	0	26.9	30/101/	8
		14:25		0	0	0	20.9	30/1.0/1	8
137 Pit C	28 - 9 - 2021		Rain / Eine	0	0	0	26.9	30/1011	7
	2	14:45		0	0	Q	20.9	36/1011	7
137 Pit B	78- 9-2021	9:55	Rain / Fine	0	0	0	70.9	30/1011	8,6
		14:55		0	0	0	20,0	30/1011	8.6
137 Pit A	18-9-2021		Rain / Kine		0	0	20.9	30/1011	8.3
		15:05		0	0	0	20,9	30/10/1	5.3

Name & Designation

Signature

<u>Date</u>

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	To price place from the content of the destrict of the destrict of the content of	Monitoring wells / Surface Gas Emission					
	,	~	Weather	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
Area A	29 - 9 - 2021	8:30	Rain / Fine	0	0	0	20.0	2011011	5.5
	79-9-2021	13:30	Rain / Fine	0	0	0	20.9	30/10/1	5.5
	29 - 9 - 2021	17:00	Rain /Fine	0	0	0	20.9	30/1011	5.5
								/	
Area B	L9- 9-2021	212	Rain Æine	0	0	0	20.9	30/1011	2.5
	29-9-2021		Rain (Fine)	0	0	0	20,9	30/1011	2.5
	79- 9-2021	16,405	Rain / Fine	0	0	0	20,9	30/16()	2.5
								/	
Land to the same of the same o								/	

Name & Designation

Signature

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

ENVIRONMENTAL RESOURCES MANAGEMENT

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
WPR 1	27-9 -2021	10:15	Rain / Fine	0	0	0	500	301/201	74	
		1505	Carrent	0	0	D?	20.9	30/101	52	
WPR 2	27- 7-2021	10125	Rain / Fine	0	0	0	>0.9	30/1011	3,5	
		(たこ) (ニ		0	0	O	50.9	30/1011	3,6	
WPR 3	7 - 2021	10:45	Rain / Fine	0	0	0	2019	301100	2.1	
		15145		0	0	0	200	30/ 1001	5.4	
Pit A	2 - 9 - 2021	10155	Rain / Fine	0	0	0	50.9	30/1011	5	
		LILLE		0	0	0	50,9	30/1011	7	
Pit B	27 - 7 - 2021	1165	Rain //Fine	<i>O</i>	0	0	20.8	301/00	7.6	
	(·	16:05		0	0		Dech	30/1011	3.6	
-								/		
								/		
								/		
								/		

Name & Designation

Signature

<u>Date</u>

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:

ENVIRONMENTAL RESOURCES MANAGEMENT

13



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring –Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time			Monitoring w	vells / Surface G	as Emission		
			Weather condition	Balance gas (%)	Flammable gas	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
					(methane %)				
CH.FC 8+38	179-9-2021	81,55	Rain / Fine	0	0	0	20.9	30/1011	2.5
		13.55		0	0	0	20.9	SO 11.0 M	2.5
CH.FC 0+46	29-9-2021	9:00	Rain / Fine	0	0	0	20,9	30//01/	2.5
		14:00		0	0	0	20 9	30 11011	21)
Pit D	29- 9-2021	9:15	Rain / Fine	0		0	20 9	30 /101/	2.5
		14:15		0	0	0	20.9	30/1011	25
Pit C	29-9-2021	9:25	Rain / Fine	0	0	0	20.9	30/10/1	8
	1	14:25		0	0	0	20:9	30/10/1	8,
137 Pit C	29- 9-2021	9:45	Rain Æine		0	0	20.9	26 11011	
		14145					20.9	3011011	7.
137 Pit B	29- 9-2021	9:55	Rain / Fine	0	0	0	70.9	36/1011	8%
		(4:55		0	0	0	20.9	30/1011	8.6
137 Pit A	14 - 9-202		Rain / Fine		0	0	70-9	30//011	8.5
		15:05		0	0	0	2009	30/1011	8.7

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

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29-9-202

Laboratory Staff:

Checked by:

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ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	Monitoring wells / Surface Gas Emission							
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)	
Area A	30 - 9 - 2021	. 4 / /3	Rain / Eine	0	0	0	20.9	30/1012	5.5	
	30-9-2021 30-9-2021		Rain / Fine	Ö	0	0	26.9 76.9	30/(012	5.5	
Area B	30-9-2021	Has	Rain / Fine	0	0	0	) 0.9	301/012	2.5	
	50- 9-2021 50- 9-2021	-	Rain / Fine Rain / Fine	0	0	0	20.9	30/10/2	2.5	
								/		
								//		

Name & Designation

Signature

<u>Date</u>

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time	, ,						
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
WPR 1	39- 7-2021	16:15	Rain / Fine	0	0	0	2007	30/1002	7.8
		(1)	i	0.	0	01	20-9	20/1002	3.1
WPR 2	30-9-2021	0035	Rain / Fine	0	0	0	70.9	30/1012	3.5
		15,25		0	0	8	20.5	30/100	3,5
WPR 3	BB - 7 - 2021	10:45	Rain / Fine	0	0	0	20.9	30/10/2	D.R.
		1495		0	0	0'	200	30/1002	3,8
Pit A	70-7-2021	10:55	Rain / Fine	0	0	0	20.5	3011012	6
		15:35		0	07	0	209	30/10/2	5
Pit B	B) - 9 -2021	11:05	Rain /Fine	0	0	O O	20.9	30/1012	3.6
	- L	16:05		0	0	0	30.9	30/1012	3,6
								/	
								/	
								/	
								/	

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

n 30.9.

Laboratory Staff:

Checked by:

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ENVIRONMENTAL RESOURCES MANAGEMENT



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring -Field Measurement Recording Sheet

Name of site:

13/WSD/16 - Mainlaying in Tseung Kwan O

Date of measurement:

Sampling equipment used:	Dates calibrated
PGM-2500 (QRAE III)	28 Jul 2021

Sample location	Date of measurement	Sampling time		Monitoring wells / Surface Gas Emission					
			Weather condition	Balance gas (%)	Flammable gas (methane %)	Carbon monoxide(%)	Oxygen (%)	Temp (°C) / Pressure (mbar)	Remark Depth (m)
CH.FC 8+38	30- 9-2021	8:55	Rain / Fine	0	0	0	26.9	30/10/2	2.5
		13:55		0	0	-0	209	30/10/2	2,5
CH.FC 0+46	30-9-2021	9,60	Rain / Fine	0	0	0	50.9	30 / 1012	2,5
		14:00		0	0	0	20.9	50 11012	2.5
Pit D	30- 9-2021	9:15	Rain / Fine		0	0	20.9	30 11612	2.5
		14:15		0	0	0	70.9	30/16/2	2.5
Pit C	30- 9-2021	4:25	Rain /Fine	0		0	10.9	30 11017	8
		14,25		0	0	0	20.9	30/10/2	8
137 Pit C	302021		Rain / Fine		0	0	20.9	20/1012	7
		14:994	\$	<u> </u>	0	0	20.9	30/10/2	7
137 Pit B	30- 7-2021	9:65	Rain / Fine	0	0	0	20.9	30/10/2	8.6
	12	14:55		0	0	2	20.9	30/10/2	8.6
137 Pit A	70 202		Rain / Fine	0	0		20,9.	30/10/2	8.3
	,	15:05		0			20.9	30/1012	8.3

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe) CP

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
		2.22	<del></del>		+
Area A	1 -9-2021	8:30	0,042	5.5	
		13:30	0.0427		
		17:00	0.0432		
Area B	-9-2021	8:45	0.0447	2.5	ļ
		13:45	0.0419		ļ
		16:45	0.0436		
Londstill stage is	1 -9-2021	8:55	3.0426	2.5	
NFZ		13:55	٥, ولاله)		
Lordfill Stage 1	1 -9-2021	9:00	0,0439	2.5	
WF1		14:00	0.0416		
Pit D	l -9-2021	9:15	6.5433	215	ĺ
		14:15	9,8442		
Pît C	-9-2021	9:25	6.5427	8	
		14:25	0.0422		
137 Pit C	} -9-2021	9:45	0.0447	7	
		14:45	5.043 1		
137 Pit B	; -9-2021	9:55	0.0426	8.6	
		14:55	0,04!9		
137 Pit A	, -9-2021	10:05	0.0436	8.3	
		. 15:05	1540.0		

Name & Designation

Field Operator.

Tam Hoi Keung [RenoPipe] (CP)

- 9 - 2021

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
WPR 1   -9-2021	-9-2021	10:15	5,543,5		
		15:15	0.0427	2.8	
WPR 2	WPR 2 ! -9-2021	10:25	6.0429		
	15:25	0.0426	3.5		
WPR 3	! -9-2021	. 10:45	0,0439		
į		15:45	0,0427	2-8	
Pit A	-9-2021	10:55	0.0416	3	
		15:55	2.5423		
Pit B	-9-2021	11:05	0.0437	3. 0	
		16:05	०.०५५५.		
					+

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Date

- 9 - 2021



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-5208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	2 -9-2021	8:30	3.0426		
		13:30	6.645.0	5.5	
		17:00	0.0427	<b>0.3</b>	
Area B	2 -9-2021	8:45	0.0439		
		13:45	0.0411	25	
		16:45	. C) VO., a	2.5	
Langfall stage 1	2-9-2021	8:55	0.0429		
WFI		13:55	9140.0	2.5	
Londotti stoge 1	2 -9-2021	9:00	6.0417		
WF1.		14:00	0.0422	2.5	
Pit D	2-9-2021	9:15	9,9437		
[		14:15	0.0426	2.5	
Pit C	2-9-2021	9:25	0.0425	8	
		14:25	0.0424	9	
137 Pit C	29-2021	9:45	8540.0		
		14:45	0,0412	٦	
137 Pit B	29-2021	9:55	0.0415	8.6	
		14:55	0.0436		
137 Pít A	29-2021	10:05	0.0429	8.3	
	15:05	15:05	0 0478	8.7	

Name & Designation

Signature

Data

Field Operator:

Tam Hoi Keung [RenoPipe] (CP)

2 - 9 - 2021

Laboratory Staff: Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	2 -9-2021	10:15	2.0436		1
	15:15	6.543.9	2.8		
WPR 2	<u> 1 -9-2021</u>	10:25	6,0444		
		15:25	0.0422	3.5	
WPR 3	2 -9-2021	10:45	0 0416	2-8	
		15:45	5.0425	7-8	
Pit A 2-9-2021	² -9-2021	10:55	0.8415	5	
		15:55	0.0419		
Pit B	2-9-2021	11:05	6.0431	3, 6.	
		16:05	0,0428		<u> </u>
-					
					+

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Date

2\_-9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	3 -9-2021	8:30	0,0416		
1		13:30	0,0437	2.2	
		17:00	0.0422	3-3	
Area B	Area B 3 -9-2021	8:45	c.0५ <u>১</u> .५		
		13:45	0.0406	2.5	
		16:45	6.0439.		
Landfill Stage 1.	3 -9-2021	8:55	0.0440	2.5	
WFI		13:55	0.0432		
Landfill strige 1		9:00	0.0410	5'2	
1461		14:00	0.0469		
Pit D	3 -9-2021	9:15	8,400	2.5	
Ţ		14:15	U.0428		
Pit C	3 -9-2021	9:25	0.0(43)		
		14:25	0.0430	8	
137 Pit C	3-9-2021	9:45	0.044	~	
		14:45	5,9429		
137 Pit B	3 3-9-2021 9:55 2,0436 86	8,6			
		14:55	6,040 7		
137 Pit A	3 -9-2021	10:05	6,2 <sup>1</sup> +10	8.3	
	15:05	15:05	0.0446	0.)	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

<u>Date</u>

Field Operator: Laboratory Staff: 3-9-2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan C

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	3-9-2021	10:15	0.0419	- 0	
	15:15	0.0426	78		
WPR 2	<i>5</i> -9-2021	10:25	0.3431	. 7	i
1		15:25	aolio	3.2	
WPR 3	3 -9-2021	10:45	0.0450	Z. 5	
		15:45	6,5447	<u> </u>	
Pit A	Pit A >-9-2021	10:55	0,0449	5	
1		15:55	0,0418		
Pit B	3-9-2021	11:05	0.0416	3.6	
		16:05	0.04/2		
				<del>_</del>	<del></del>

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

<u>Date</u>

3 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	4 -9-2021	8:30	0.0426		
		13:30	0.0433	5.5	
		17:00	0.0421		
Area B	4 -9-2021	8:45	0.0439		
ì		13:45	0,0428	2.5	
		16:45	0.0416		
Landtill stoge 1	4-9-2021	8:55	1540.0	7 E	
NF2		13:55	5.5406	2.5	
Land Fill stage I	4 -9-2021	9:00	0, 541	2.5	
WF1	ı	14:00	0.0412		
Pit D	4 -9-2021	9:15	9,040,0	7.5	
		14:15	0.0426		
Pit C	4 -9-2021	9:25	6,0431	8	
		14:25	0.042		
137 Pit C	4 -9-2021	9:45	0.0432	-	
		14:45	6.04[6	7	
137 Pit B	4-9-2021	9:55	0,3405	0.1	
		14:55	5 فرياه. ه	8.6	
137 Pit A	4 -9-2021	10:05	5.2432	0.2	
	15:05	15:05	0.042	8.3	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

4 - 9 - 2021



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	4 -9-2021	10:15	0.0441		
1771	. 4	15:15	5.0436	2-8	
WPR 2	4 -9-2021	10:25	0.0429		
,,,,_		15:25	0.04/47	3.5	
WPR 3	4 -9-2021	10:45	0.0423		
	,	15:45	9.0434	2-8	
Pit A	4 -9-2021	10:55	0,0414	5	
		15:55	و منه ام		
Pit B	4 -9-2021	11:05	0,0402	3.6.	
		16:05	0.0421		

Name & Designation

Tam Hci Keung [RenoPipe] (CP)

4-9-2021

Field Operator: Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

	_ , , , , ,
Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	<b>6</b> -9-2021	8:30	0.0422		
1		13:30	0.0443	5.5	
		17:00	0.0439	3.3	
Area B	5 -9-2021	8:45	0.0425		
	_	13:45	5.0434	,	ļ
		16:45	7170.c	2.5	_
landed The 1	<b>\$</b> -9-2021	8:55	0.0418		
WEZ		13:55	0.8426	2.5	
Landfill stage 1	6 -9-2021	9:00	0.045/r	2.5	
WF1.		14:00	0.0436	2-3	
Pit D	6 -9-2021	9:15	5.041	2.5	
		14:15	0.0408	2.5	
Pít C	6-9-2021	9:25	8/410.0	a.	
		14:25	0.0431	8	
137 Pit C	6 -9-2021	9:45	0.045+0	_	
		14:45	0-0419	7	
137 Pit B	6 -9-2021	9:55	0.0426	2/	
		14:55	8040.0	26	
137 Pit A	โ -9-2021	10:05	0.0422	8-3	
		15:05	0,0423	8->	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Field Operator: Laboratory Staff:

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

0	Date of Sam Measurement	Sampling time	Monitoring wells/ Surface Gas Emission	Depth (m)	Remark
Sampling Location		Sampling time	Carbon Dioxide (%)		
WPR 1	6 -9-2021	10:15	0.0438	2-8	
		15:15	6.0426	Z-0	
WPR 2	£ -9-2021	10:25	5.0414		
		15:25	0.0412	3.5	
WPR 3	6 -9-2021	10:45	0.0405	2.8	1
ľ		15:45	6.0405		
Pit A	6 -9-2021	10:55	5.54:4	5	
		15:55	0.0416		
Pit B	6 -9-2021	11:05	ر جبار. <del>ه</del>	3.6	1
		16:05	8 D/4 2		
					1
		<u> </u>			
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Name & Designation
Tam Hoi Keung [RenoPipe] (CP)

Signature

<u>Date</u>

6 -9-2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	7 -9-2021	8:30	0,0447		
		13:30	0.0438	\$.5	
·		17:00	0.0421		
Area B	7-9-2021	8:45	0.049		
		13:45	0.84,38	2.ડ	
		16:45	0.0426		
landstill stage 1	7-9-2021	8:55	0.0436		
พะร		13:55	0,0443	2.5	
Lendfill Stage A	7-9-2021	9:00	6.0416		1
rikt		14:00	0.0450.	5.5	
Pit D	7 -9-2021	9:15	6.0452		
		14:15	0.0429	15	
Pit C	7 -9-2021	9:25	0.5431	8	
		14:25	0,0416		
137 Pit C	η-9-2021	9:45	0.0472	7	
	,	14:45	0.0430		
137 Pit B	7-9-2021	9:55	0.0410	0.(	
		14:55	٩٤٠١٥. ٥	8-6	
137 Pit A	7 -9-2021	10:05	و تعاجدته	- 1	
		15:05	0.5429	8->	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

7 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
MC1C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	7-9-2021	10:15	3.04467	^	1
	•	15:15	3.0450	7.8	
WPR 2	7 -9-2021	10:25	0.0433		ĺ
		15:25	5.0424	3.5	
WPR 3	7 -9-2021	10:45	0.0447	- 0	
		15:45	2.0462	2-8	
Pit A	7 -9-2021	10:55	9.5429	5	
		15:55	3-04-16		
Pit B	7-9-2021	11:05	0.02/7	3.6	
		16:05	0.0456.		
					-

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

7 - 9 - 2021



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
Area A	8 -9-2021	8:30	0,d+29		
		13:30	0.0440	5,5	
		17:00	o. 0433		
Area B	§ -9-2021	8:45	0.043		
		13:45	0.0411	2.5	
		16:45	9540.0		
Londall stage 1	8 -9-2021	8:55	0,8427		
WFZ	WFZ	13:55	0,0461	2.5	
Land-Bill Staged	8 -9-2021	9:00	0.0424	3 =	
WF1		14:00	0.0437	J·2	
Pit D	8 -9-2021	9:15	5.0419	2.5	
Ī		14:15	8,0444		
Pit C	8 -9-2021	9:25	6.1434	0	
		14:25	0.0429	8	
137 Pit C	8 -9-2021	9:45	8/1/2.0		
		14:45	0.0412	٦	
137 Pit B	8 -9-2021	9:55	0.947.6	- · ·	
		14:55	7540.0	8.6	
137 Pit A	<b></b>	10:05	0.0452		
		15:05	७.८५५५	8-2	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Field Operator: Laboratory Staff:

8-9-2021



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	γ -9-2021	10:15	0.0423	0	
	8 5 25	15:15	0.0413	2.8	
WPR 2	8 -9-2021	10:25	8,54,48		
		15:25	0.0452	3.5	
WPR 3	° -9-2021	10:45	0.9459.		
		15:45	0.0436	7-8	
Pit A	8 -9-2021	10:55	0.0431	5	
		15:55	0.0421		
Pit B	8 -9-2021	11:05	822 410.0	3.6	
		16:05	0.0456		_
		ļ <u>.</u>			
		<u></u>			

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Jate

8 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Dates calibrated
6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	9 -9-2021	8:30	5.0437		
		13:30	0.5452	5.5	
		17:00	0.0431		
Area B	े -9-2021	8:45	6-0449		
		13:45	6.0432	2.5	
		16:45	0.0456		
Landfill stage 1	9 -9-2021	8:55	ر ۱۹۵۰ و		
WFZ		13:55	0.0431	5.5	
Landsid may 2	¶ -9-2021	9:00	0.8421		
. N. 2	,	14:00	9.0423	25	
Pit D	9-9-2021	9:15	5.0429		
		14:15	σ.ςH3ο	2.5	
Pit C	9 -9-2021	9:25	0.0412		
		14:25	٥٠٥٤٥ ٦	<i>D</i> .	
137 Pit C	٩ -9-2021	9:45	o. 244 (		
		14:45	5.8439	7	
137 Pit B	Ŷ-9-2021	9:55	0,0457		
		14:55	0.475	8-6	
137 Pit A	ዓ -9-2021	10:05	0.0432		
		15:05	0.0416	8-3	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

Field Operator: Laboratory Staff:

Checked by:

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Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Dates calibrated
6/4/2021
(

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	9 -9-2021	10:15	0.0422	- 0	1
		15:15	0.0418	2 8	
WPR 2	9-9-2021	10:25	0.0417		
		15:25	0.3432	3.5	
WPR 3	9 -9-2021	10:45	0.0439		
		15:45	0.0426	र-8	
Pit A	9 -9-2021	10:55	0.0454		Į.
	15:55	0.0412	5		
Pit B	9-9-2021	11:05	9.0433	3.6	
		16:05	0.0455		
					ļ.——·

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

9-9-2021

Field Operator: Laboratory Staff:

Checked by:



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	lo -9-2021	8:30	6,042-3		
		13:30	P140.0	5.5	
		17:00	0.0444		
Area B	10 -9-2021	8:45	6.0453		
		13:45	ه.۵۴۱۹		
		16:45	0.0421	2.5	
Londital Stages	lo -9-2021	8:55	0.0427	_	
WES .	•	13:55	0.0450	2.5	
und 50 50 1	lo-9-2021	9:00	9,040 \$		
WFJ.		14:00	5.0443	2,5	
Pit D	l=-9-2021	9:15	2,0472		
Ţ		14:15	a.s458	2.5	
Pit C	lo -9-2021	9:25	0-0434		
		14:25	7640.0	8	
137 Pit C	o -9-2021	9:45	0.0429		
		14:45	6.0436	7	
137 Pit B	lo -9-2021	9:55	0.0451	0.4	
}		14:55	0.6437	8.8	
137 Pit A	lo -9-2021	10:05	0.0429	8-3	
		15:05	0.0459.	6-5	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Field Operator: Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	10 -9-2021	10:15	5.0437	2	
		15:15	0.0454	2-8	<u> </u>
WPR 2	lo -9-2021	10:25	0,5426		
		15:25	0.045!	3.5	
WPR 3	lo -9-2021	10:45	0.0438		
ļ		15:45	ويلياه.٥	2.8	
Pit A	lo -9-2021	10:55	0.8456	5	
		15:55	0.0(40 )		
Pit B	(o -9-2021	11:05	0.0422	_	ļ
		16:05	o.045L	3,6	_
				<del></del>	

Name & Designation
Tam Hoi Keung [RenoPipe] (CP)

Signature

<u>Date</u>

Field Operator: Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	11 -9-2021	8:30	0.0432		
į	•	13:30	ه چ ۲۵۰ ه	5.5	
		17:00	٥ ، ولها ٢		
Area B	11 -9-2021	8:45	0.2450		
		13:45	3.0421	2.5	
		16:45	. 9540. 0		
Land Still Stage 1	11 -9-2021	8:55	0.043z	_	
WFL		13:55	0.0415	2-5	
hand \$ 111 Stage 1	11 -9-2021	9:00	0.0453	15	
WFI		14:00	0.04; 2	1.0	
Pit D	lt -9-2021	9:15	0.0423	2.5	
Ī		14:15	0.0449		
Pit C	! -9-2021	9:25	0.0452		
İ		14:25	8.04/2	8	
137 Pit C	11 -9-2021	9:45	0.0433	7	
		14:45	7.5436	t	
137 Pit B	11 -9-2021	9:55	٥ .هنونې ۲	<b>c</b> (	
		14:55	با 5 ياه. ه	8-6	
137 Pit A	11-9-2021	10:05	9,640,0	8.3	
		15:05	0,0417	8-3	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Date

Field Operator: Laboratory Staff:

11 - 9 - 2021

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

O	Date of	Sampling time	Monitoring wells/ Surface Gas Emission	Depth (m)	Remark
Sampling Location Measur	Measurement	Measurement Sampling lime	Carbon Dioxide (%)	Берат (т.)	
WPR 1 it -9-2021	10:15	3.0422	•		
	•	15:15	P\$ 40.0	2.8	
WPR 2	11-9-2021	10:25	0,0436	2 C	
		15:25	0.044,1	3.5	
WPR 3	11 -9-2021	10:45	6.0429	- 6	
		15:45	0.0417	2-8	
Pit A 11-9-2021	11-9-2021	10:55	0.8453	_	
		15:55	9,0440	5	
Pit B	(1-9-2021	11:05	3,0420		
	-	16:05	هېان. ه	3, 6	
,					
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Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Field Operator: Laboratory Staff:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
Area A	13 -9-2021	8:30	3.0423		
		13:30	0.0456	5.3	
		17:00	تهام ه		
Area B	3 -9-2021	8:45	6.5479		
ĺ		13:45	0.0436	2.5	
		16:45	5.9442		
Landfill Stage 1	13 -9-2021	8:55	6,0433	_	
14F2		13:55	0.9419	2-5	
Landill Stoge 1	13 -9-2021	9:00	0.0429	2.5	
WEI.		14:00	0.0427		
Pit D	13-9-2021	9:15	0.0436	1.5	
		14:15	5.0427		
Pit C	13-9-2021	9:25	و پهانۍ و		
		14:25	0.5429	8	
137 Pit C	[3-9-2021	9:45	0.0426	_	
		14:45	0.0434	7	
137 Pit B	\7 -9-2021	9:55	0,0454	0.4	
1		14:55	5.0429	8.6	
137 Pit A	13-9-2021	10:05	7)40.0	7.8	
1		15:05	2,646	8.7	

Name & Designation

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ate

Field Operator:

Tam Hoi Keung [RenoPipe] (CP)

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13 - 9 - 2021

Laboratory Staff: Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-5208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	I}-9-2021	10:15	5.0429		
		15:15	6.0414	2.8	
WPR 2	WPR 2 (3 -9-2021	10:25	0.042.6		
	.,	15:25	0.0436	3.5	
WPR 3	13-9-2021	10:45	o.0429		
1		15:45	6,0416	2.§	
Pit A (3 -9-2021	(3-9-2021	10:55	0.03434	2	
		15:55	૦.૧૫૩૦૧		
Pit B	\7-9-2021	11:05	0.844.7	3, 6	
		16:05	0.0476		
					-

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

<u>Date</u>

13 - 9 - 2021

Checked by:

Field Operator:

Laboratory Staff:



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Ernission Carbon Dioxide (%)	Depth (m)	Remark
Area A	14 -9-2021	8:30	0-04/8		
Ì		13:30	ا ۱۲ ما ه	\$4 <u>\$</u>	
		17:00	0.4477		
Area B	(4-9-2021	8:45	6.3444		
		13:45	0.0022	25	
		16:45	0.0451		
Land 5th state 1	14 -9-2021	8:55	0.0430	_	
WF2.		13:55	0,0437	2.5	
Landfill Style 1.	14-9-2021	9:00	0.0433	- ·-	
MET		14:00	0.434	2.5	
Pit D	14 -9-2021	9:15	0.0621	2.5	
		14:15	0.6429		
Pit C	14 -9-2021	9:25	0.0437		
		14:25	5.034.2	8	
137 Pit C	انز <del>-9-</del> 2021	9:45	0.0429	7	
		14:45	0-04.08		
137 Pit B	(Կ -9-2021	9:55	آبانان ه	•	
		14:55	0.0453	8.6	
137 Pit A	14 -9-2021	10:05	6,0428		
		15:05	0.0454	8->	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Data

Field Operator: Laboratory Staff:

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14-9-2021



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	زلږ -9-2021	10:15	0.8434		
	, '7	15:15	1140.0	2.8	
WPR 2	14 -9-2021	10:25	0.0414		
	•	15:25	0.0455	3.5	
WPR 3	4-9-2021	10:45	6,0424		
İ		15:45	0.3439	7.8	
Pit A 14 - 9	14 -9-2021	10:55	8140.0	\$	
1		15:55	9.0429		
Pit B	14 -9-2021	11:05	0.0444	3.6	
		16:05	0.0427		_

Name & Designation

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Date

14-9-2021

Field Operator: Laboratory Staff: Checked by:

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
Area A	15 -9-2021	8:30	0.04 7		
		13:30	6.04(2	5.5	
		17:00	0.9437	J.J	
Area B	15 -9-2021	8:45	0.420.0		
		13:45	0.0449	2.5	Ì
		16:45	0.0438		
handtill Stogen	i5 -9-2021	8:55	4 دياه. ه	_	į
WES	WES	13:55	0.0435	2.5	
Landth Stope 1	15 -9-2021	9:00	5.0442	- 6	
UFA.		14:00	0.0414	1.5	
Pit D	15 -9-2021	9:15	7140.0	۲-۶	
		14:15	0.0429		
Pit C	5 -9-2021	9:25	8840.0		
		14:25	8340.0	\$	
137 Pit C	15 -9-2021	9:45	0.04.12	,	
		14:45	a-04/ d		
137 Pit B	15 -9-2021	9:55	\$240.0	8.6	
		14:55	2540.0	9.6	
137 Pit A	15 -9-2021	10:05	2-24-48	0.3	
	15:05	15:05	9,8452	8.3	

Name & Designation

Field Operator.

Tam Hoi Keung [RencPipe] (CP)

15 - 9 - 2021

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	15 -9-2021	10:15	2.0433	2-8	
		15:15	0.0438		
WPR 2	VPR 2 15 -9-2021	10:25	ه ۱۹۵٫ ه		
,		15:25	0.0442	3.5	
WPR 3	15 -9-2021	10:45	9.04S3	- 0	
1	_	15:45	824c.o	2-8	
Pit A 15 -9-2021	·5 -9-2021	10:55	2,0421	_	
	,	15:55	0.0418	2	
Pit B	15 -9-2021	11:05	9,240.0	3.6	ļ
		16:05	ه د مار د گ		
				<del></del>	-
					<del>-</del>
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Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

Field Operator: Laboratory Staff:

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Contract no. 13/WSD/16
Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
Area A	∜ -9-2021	8:30	6.0438		
		13:30	1640.0	\$. <del>5</del>	
*		17:00	0.04ኒኒ		
Area B	is -9-2021	8:45	0.045		
		13:45	0.0424	25	
		16:45	a.o(407	45	
Land Sill Stope 1	!% -9-2021	8:55	0.0415	_	
MF2		13:55	c.040 S	2.5	
Landini stage I	b -9-2021	9:00	0.0437		
uF1.		14:00	8.0401	2.5	
Pit D	:5 -9-2021	9:15	0.0462		
		14:15	2.0401	2.5	
Pít C	16 -9-2021	9:25	١٤٠١ ٥ . ماديا		
		14:25	o.cuen	\$	
137 Pit C	16 -9-2021	9:45	0.0US (	_	
		14:45	0.4133	7	
137 Pit B	16 -9-2021	9:55	0.0435	n (	
		14:55	0-047	8.6	
137 Pit A	¹७ -9-2021	10:05	0.0433	<b>.</b> .	
		15:05	0,0439	8.3	

Name & Designation

<u>Signature</u>

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16-9-2021

Field Operator.

Tam Hoi Keung [RenoPipe] (CP)

Laboratory Staff:

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Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	/6-9-2021	10:15	0.0429		
***		15:15	0.0438	7.8	
WPR 2	lis _9-2021	10:25	0.0441	2 -	
		15:25	2.0429	3.5	
WPR 3	ე6 -9-2021	10:45		. 0	
•		15:45	0.0429	1.8	
Pit A 16 -9-2021	10:55	&F <sup>1</sup> 6.0			
		15:55		5	
Pit B	16 -9-2021	11:05	0.6415	,	
		16:05	5 { ye.e	3.6	
					İ
-					

Name & Designation
Tam Hoi Keung [RenoPipe] (CP)

Signature

<u>Date</u>

ib - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	17 -9-2021	8:30	ته پذور د		
		13:30	0.0431	5.5	
		17:00	9.0422		
Area B	17 -9-2021	8:45	ه مهنداند		
		13:45	6.4453	2.5	
		16:45	5-0+29		
Landstill Stage A	17 -9-2021	8:55	6.8434		
WF2		13:55	0.0419	2.5	
Landill Flogs I	9-2021 ج	9:00	5.01.18	3.14	
UF1		14:00	e 2433	2-5	
Pît D	7 -9-2021	9:15	6.912		
		14:15	0.0404	2.5	
Pit C	17 -9-2021	9:25	0.0448		
		14:25	0.0461	8	
137 Pit C	-9-2021	9:45	0.0418		
		14:45	8440.0	7	
137 Pit B		6.6240			
		14:55	0.3451	8.6	
137 Pit A	17 -9-2021	10:05	0.0418	0.7	
	15:05	15:05	9.0H25	8.}	1

Name & Designation

Field Operator.

Tam Hoi Keung [RenoPipe] (CP)

17 - 9 - 2021

Laboratory Staff:

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	7 -9-2021	10:15	0.0451		
	(	15:15	80,000	2.8	
WPR 2	i <del>7</del> -9-2021	10:25	0.0447	_	
	1,025	15:25	0.0423	3.5	
WPR 3	i7-9-2021	10:45	8140.0	. 6	
1		15:45	9.0451	2.8	
Pit A	Pit A 17-9-2021	10:55	٥ - ٢٠ ٢٠ م	5	
,		15:55	0.0425		
Pit B	9-2021 רו	11:05	0,0437	3.6	
, ,, =		16:05	5.570.0	3.6	
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Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Date

17 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	/8 -9-2021	8:30	٥٠ ونها 8		ļ
		13:30	0.043	5.5	1
		17:00	6.0429		
Area B	18 -9-2021	8:45	a.04+06		
		13:45	ø.o431	2.5	
		16:45	7540.0		
landilil siyatı	ış <b>-9-202</b> 1	8:55	0.0418		
NFZ	4	13:55	g.0 <sup>4</sup> 33	2.5	
Landtill Sloge 1	18 -9-2021	9:00	0-9442		
WFI.		14:CO	8446.0	2.5	
Pit D	18 -9-2021	9:15	0.0452	7-5	
1		14:15	ا باراد. ه		
Pit C	18 -9-2021	9:25	2.0+2.0	8	
		14:25	U.C437		
137 Pit C	18 -9-2021	9:45	8 4 16. c	7	
	14:45	14:45	o,g4}6		
137 Pit B	18 -9-2021	9:55	0.0.4/3		
		14:55	0.0425	8.6	
137 Pit A	I \$ -9-2021	10:05	e . 1975		
		15:05	8/40.0	8.3	

Name & Designation

Signature

Date

Field Operator:

Tam Hoi Keung [RenoPipe] (CP)

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18 - 9 - 2021

Laboratory Staff: Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	18 -9-2021	10:15	2.54-18	~ 0	
	15:15	0.0429	58		
WPR 2	s -9-2021	10:25	85+20.0	3.5	
		15:25	0.0445	5.5	
WPR 3	/8 -9-2021	10:45	a_0452	2.8	
		15:45	० लेखी	L_0	
Pit A	18 -9-2021	1C:55	0.0438	_	
		15:55	0.0405	2	
Pit B	18 -9-2021	11:05	[HO.0	2.1	
		16:05	0.0432	3,6,	
		-			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
		ļ			-
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Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

8 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	Zo -9-2021	8.30	3.0416		
		13:30	9.4446	5.5	
•		17:00	6,04 7		
Area B	zo -9-2021	8:45	0.0439		
		13:45	0.042	2.5	i i
		16:45	0.04 1 6.		
Landfill Stye2	Jo -9-2021	8:55	9.0442		
มหว		13:55	0.0438	25	
Loyd III Stored	20-9-2021	9:00	0.0427		
WF1.		14:00	0,0436	2.5	
Pit D	2o -9-2021	9:15	9,200	- <	
		14:15	0.8433	2.5	
Pit C	<u> 2</u> -9-2021	9:25	3.0454	_	
		14:25	رة بارة . م القائد	8	
137 Pit C	2º -9-2021	9:45	ه ماده		
		14:45	0.3433	7	
137 Pit B	20 -9-2021	9:55	0.643	8.6	
		14:55	8.0449	ø. b	
137 Pit A	20-9-2021	10:05	0.3457	0.2	
		15:05	7540.0	8.3	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Field Operator. Laboratory Staff:

20 - 9 - 2021

Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	9-2021 ر	10:15	0.0438		
		15:15	0.9427	2-8	
WPR 2	<sub>20</sub> -9-2021	10:25	0:0413		
	15:25	0.04,04	3.5		
WPR 3	20-9-2021	10:45	0.0274		
		15:45	0.0435	8. 5	
Pit A 20 -9-2021	20 -9-2021	10:55	8,940,0	5	
		15:55	0.6430		
Pit B	2° -9-2021	11:05	o. 54A	3.6	
		16:05	0.0446		
				· · · · · · · · · · · · · · · · · · ·	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

20 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	21 -9-2021	8:30	0.141?		
		13:30	8,6428	5.5	
		17:00	2.0(464		
Area B	ว.เ -9-2021	8:45	1140.0		
		13:45	0.0425	25	
-		16:45	٥.٥٠٤ [		
Landsill Stage 1	9-2021 -9-2021	8:55	9.0452	_	
MES.		13:55	9.04-6	2.5	
Landfill stoge 1	บ -9-2021	9:00	8149.0		
WF1.	9 0 2021	14:00	8 min. 8	2.5	
Pit D	과 -9-2021	9:15	0,0426	2 <b>S</b>	
Ĭ		14:15	0,0402		
Pit C	11-9-2021	9:25	٥.٥٤٦٩		
		14:25	0.0428	8	
137 Pit C	9-2021- إير	9:45	0.0413	י	
		14:45	0.0LX18		
137 Pit B	21-9-2021	9:55	6.0423	~ (	
		14:55	0.0433	8.6	
137 Pit A	21-9-2021	10:05	أ مِلْو.ه	8.3	
1		15:05	6.4.39	3, 7	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

Field Operator: Laboratory Staff:

Checked by:



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Dates calibrated
6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	z i -9-2021	10:15	0.0423	- 0	
		15:15	6.0428	2.8	
WPR 2	WPR 2 21-9-2021	10:25	6.040 <sup>3</sup>	2 6	
		15:25	0,0429	3.5	
WPR 3	zı -9-2021	10:45	0.0411		
		15:45	8440.0	2.8	
Pit A z.1 -9-2	zi -9-2021	10:55	2.0407	5	
	- '	15:55	6.0439		
Pit B	21-9-2021	11:05	9.0421	2 (	
	<u> </u>	16:05	0.0446	3.6	-

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

Field Operator: Laboratory Staff:

Checked by:



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Life, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	23 -9-2021	8:30	3.64}\$		
		13:30	0.0401	5.5	
		17:00	0.0438		
Area B	23 -9-2021	8:45	0.0478		ļ
		13:45	0,9443	2.5	1
		16:45	0.0419.		
Landsill stage 1	23 <b>-</b> 9-2021	8:55	9.0465		
WFZ.	WFZ.	13:55	o.eu39	2.5	
Landtill Stage I	25 -9-2021	9:00	0.043		
NF1.		14:00	0.0643	2.5	
Pit D	2>-9-2021	9:15	0.0429		
		14:15	Ø.o <sup>(</sup> / <sub>0</sub> \S	2.5	
Pit C	<u> こ</u>	9:25	0.5436	0	
		14:25	0.0410		
137 Pit C	13-9-2021	9:45	2, <u>e</u> 464	7	i
		14:45	0.9423		
137 Pit B	13 -9-2021	9:55	0.0429	8-18	
		14:55	a.a438	5-3	
137 Pit A	นัว -9-2021	10:05	૦. કધ્યા	0.5	
		15:05	૭.૭૫ <sup>કુલ</sup>	8.3	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Data

Field Operator: Laboratory Staff:

Checked by:

T Qu 27, - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	23 -9-2021	10:15	0.0442		
	15:15	o.e4o5	2.8		
WPR 2	23 -9-2021	10:25	5,04;3		
		15:25	5.0434	3.5	
WPR 3	ኒን -9-2021	10:45	0.0446	2.6	
		15:45	۲۲۶۰۰ و	7.8	
Pit A	Pit A 23 -9-2021	10:55	0.0435	5	
•		15:55	6,0422		
Pit B	13-9-2021	11:05	71100.0		
		16:05	8,040.0	3.6	
	,				

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Date

23-9-2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dloxide (%)	Depth (m)	Remark
Area A	չ4 -9-2021	8:30			
1		13:30	P. 4.0	5,5	
		17:00	ع، منه کام		
Area B	14 -9-2021	8:45	0.8429		
		13:45	0.0441	2.5	
		16:45	0,0428		
Lund Fill Stoge L	14-9-2021	8:55	3.2412	_	
MEZ		13:55	0.0417	2.5	
Landstill Stope I	<u> </u>	9:00	6.0432	L-5	
WF1.	27-9-2021	14:00	o.a424	<u></u>	
Pit D	24 -9-2021	9:15	0.0439	2.5	
ſ		14:15	9.0418	4.5	
Pit C	24 -9-2021	9:25	0.0429	Şe	
		14:25	To+0.0	e	
137 Pit C	<u>14 -9-2021</u>	9:45	0.0426	٦	
		14:45	€۲۰۰۵ و	1	
137 Pit B	24 -9-2021	9:55	0.0417	2.	
1		14:55	૦ .૦૫ૄૅધ્	8.6	
137 Pit A	24 -9-2021	10:05	8,540.0	<b>a</b> 2	
1	'	15:05	9.52.0	8.3	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Date

Field Operator:

Laboratory Staff: Checked by:

24-9-2021



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of	Sampling time	Monitoring wells/ Surface Gas Emission	Depth (m)	Remark
	Measurement		Carbon Dioxide (%)		
WPR 1	24 -9-2021	10:15	0.34.24	z§	
		15:15	0.0429	2 -0	
WPR 2	WPR 2 14-9-2021	10:25	0.0438	٠	
	,	15:25	6.5418	7.2	
WPR 3	14-9-2021	10:45	ક. લેપેટ જે		
	•	15:45	০.৩২১	7-8	
Pit A 24 -9-2021	29-9-2021	10:55	8240.2	5	
		15:55	3.8412		
Pit B	14-9-2021	11:05	0.0437	ط.3	
	,	16:05	0.04:6		
					1
•					

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

2년 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	25 -9-2021	8:30	15431		
		13:30	5.0421	5.5	
		17:00	o.aHli		
Area B	<b>Հ</b> 5 -9-2021	8:45	0,3478		
{		13:45	0.0431	5-2	1
		16:45	0.0419		
Landfill Stage 1	25 -9-2021	8:55	٥.۶٤٫٦٥		
	W?-2	13:55	0.043	2-5	
Land till stage 1	25 -9-2021	9:00	0.0430		
WFL.	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	14:00	ə . ઇ <del>ન્</del> વા	2.5	
Pit D	25 -9-2021	9:15	0.0419	1.5	
		14:15	6, <sub>0</sub> 41e		
Pit C	L5 -9-2021	9:25	الأعراه، و	0	
		14:25	8140.0	8	
137 Pit C	25 -9-2021	9:45	Тина	7	
		14:45	0,8438		
137 Pit B	15 -9-2021	9:55	0.0412	2.	
		14:55	6.0426	8.6	
137 Pit A	υς -9-2021	10:05	0.0439	2.2	
		15:05	8 140,0	8.3	

Name & Designation

Signature

Field Operator. Laboratory Staff: Tam Hoi Keung [RenoPipe] (CP)

75 - 9 - 2021



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Cas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	25-9-2021	10:15	s, o <sup>द</sup> रकी		
	/	15:15	81440.0	1.8	
WPR 2	25 -9-2021	10:25	85,100	_	
	-,	15:25	0.0726	3.5	
WPR 3	<sub>2</sub> S -9-2021	10:45	9,0419	. 6	
	-,	15:45	0.8422	2.8	
Pit A 25 -9-2021	25 -9-2021	10:55	_o.aH30	5	
ľ		15:55	0.0419		
Pit B	ıs -9-2021	11:05	5.04.28	3.6	
		16:05	0.0448		

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

<u>Date</u>

45-9-2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208 M01C031772	6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	27 -9-2021	8:30	0.04/19		
		13:30	0.0428	5.5	ļ
*		17:00	٥٠٥٤٤٠ ا		
Area B	17 -9-2021	8:45	0,0402		ŀ
		13:45	0.0431	2.5	
		16:45	5,0433.		
Lands listings 1	ኒ7 -9-2021	8:55	0.0456	ኒ.ຽ	ļ
Lif≥		13:55	6.0427	-13	
Landsillithral	27-9-2021	9:00	0.5417	<b>.</b>	
WFS.		14:00	o-s 439	2.5	
Pit D	9-2021 רַּב	9:15	1.0403	2.8	
		14:15	0.0428		
Pit C	C 27 -9-2021 9:25 0.433		1		
		14:25	0.8424	8	
137 Pit C	27-9-2021	9:45	0.g\{\i\]	7	
		14:45	4,0416		
137 Pit B	ኒ፣ -9-2021	9:55	340.0	8-6	
		14:55	0.0 439	ত-ত 	
137 Pit A	27-9-2021	10:05	0.0427	8.3	
	15:05	15:05	0.0431	8. >	

Name & Designation

Field Operator:

Tam Hoi Keung [RenoPipe] (CP)

Z7 - 9 - 2021

Laboratory Staff:



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	27 -9-2021	10:15	3.04(5		
		15:15	0.0409	2-8	
WPR 2	z7 -9-2021	10:25	0.0427	3.5	
		15:25	0.0421		
WPR 3	27 -9-2021	10:45	0.0420	. 6	
		15:45	0,1410	1-8	
Pit A	<b>२</b> 7 -9-2021	10:55	0.3445	5	
		15:55	0.0415	>	
Pit B	วา -9-2021 11:05 16:05	11:05	0.0427	3.6	
		16:05	0.0423		
					ļ

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Date

oPipe] (CP)

27-9-2021

Field Operator: Laboratory Staff:



Contract no. 13/WSD/16

Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
Area A	18 -9-2021	8:30	0. ° ° 28.		
		13:30	0.0402	<i>5.</i> 5	
·		17:00	ر ا <sup>باه. ه</sup>		
Area B	28 -9-2021	8:45	9,0408		
		13:45	9.9434	2.5	
		16:45	0.0414		
Londolli Stage 1	78 -9-2021	8:55	6.0429		
WF2	· ·	13:55	0.04(3	2.5	
London Step 1	28 -9-2021	9:00	0.0423		
WF.L.		14:00	0.04/9	2.5	
Pit D	28 -9-2021	9:15	0.0429		Ì
		14:15	0.0445	15	
Pit C	28 -9-2021	9:25	0.8429	- 8	
		14:25	0.5442		
137 Pit C	28 -9-2021	9:45	ઝ. હ <b>પ્</b> તુપ્	_	
		14:45	9,0444	7	
137 Pit B	z§ -9-2021	9:55	o. ୬ <b>ଧ୍</b> ନ		
		14:55	2.0428	8.6	
137 Pit A	28 -9-2021	10:05	0.0410	٥٦	
		15:05	0.0 <sup>U</sup> 55	8.}	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

<u>Date</u>

Field Operator: Laboratory Staff:

Checked by:

28-9-2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	z& -9-2021	10:15	5, 0421	- D	
		15:15	ودبارد.ه	2-8	
WPR 2	28 -9-2021	10:25	0.0425		İ
		15:25	0.0420	3.5	
WPR 3	9-2021 פּב	10:45	0.0411		1
		15:45	8.040 L	2.8	
Pít A	28 -9-2021	10:55	٥٫٥١٤٢١		
		15:55	a.0465	5	
Pit B	2 <sub>8</sub> -9-2021 11:05 16:05	11:05	c . 04!}		
		0.0416	3,6		
		1		<u></u>	
					ļ

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Date

78-9-2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Dates calibrated
6/4/2021

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission  Carbon Dioxide (%)	Depth (m)	Remark
Area A	য় <u>৭ -9-2021</u>	8:30	0.0422		
		13:30	0.041)	5.5	
		17:00	9.0417		
Area B	zq -9-2021	8:45	0,0445		
		13:45	٥,٥٤٤٥	2.5	
			2.0446		
Landfill Styge 1.	<b>Հ</b> Գ -9-2021	8:55	0.0428		
M72		13:55	0.0413	2-5	
Landtill Stone 1	<sup>2</sup> 9 -9-2021	9:00	0.0409	_	
edet.		14:00	ع ، ت کیال	2-5	
Pit D	ર૧ -9-2021	9:15	0-0414		
		14:15	0.0444	2.5	
Pit C	ટ૧ -9-2021	9:25	0.8425	0	+
		14:25	17.0449	8	1
137 Pit C	19 -9-2021	9:45	9.04 29	7	!
!		14:45	21400		
137 Pit B	হ <b>৭</b> −9–2021	9:55	Po 112.0	۶. <u>۶</u>	İ
		14:55	0.0415	<i>ن</i> . بح	
137 Pit A	<u> </u>	10:05	0.0410	&-3	
		15:05	0,0405	۷->	

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

Signature

Field Operator. Laboratory Staff:

29 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dloxide (%)	Depth (m)	Remark
WPR 1	z9 -9-2021	10:15	a. 64 c 1	_	
		15:15	6.045	2.8	
WPR 2	29 -9-2021	10:25	0.0402	3	
		15:25	9.0412	3.5 	
WPR 3	19 -9-2021	. 10:45	5.0404		
i	,	15:45	0.0415	Ζ-&	
Pit A	չԳ -9-2021	10:55	6.0424	_	
		15:55	0.0409	5	
Pit B	zη -9-2021	11:05	6.5410	3.6	
		16:05	٥.٥٤١٤		

Name & Designation

Tam Hoi Keung [RenoPipe] (CP)

<u>Signature</u>

Date

Field Operator: Laboratory Staff:

Checked by:

29 - 9 - 2021



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Compliant Location	Date of Measurement Sampling time	Compling time	Monitoring wells/ Surface Gas Emission	Depth (m)	Remark
Sampling Location		Sampling unle	Carbon Dioxide (%)		
Area A	3e -9-2021	8:30	Ø,04 <b>%</b>		
		13:30	0.0433	5,5	
'		17:00	b.049 <sup>†</sup>		
Area B	<del>ኔ</del> ኈ -9-2021	8:45	a.ou48		
		13:45	2.8H3C	2.5	
		16:45	٥،٥٠٤٢		
Land All Sing 1	3 <sub>°</sub> -9-2021	8:55	0,0455	_	
WF2.	WF2	13:55	0.7431	2.5	
Londfill Stoges	3° -9-2021	9:00	4.0 نوانه	-	
HES.		14:00	0.9439	2.5	
Pit D	3° -9-2021	9:15	0,5415	2.5	
		14:15	0,0441	2.5	
Pit C	3° -9-2021	9:25	3,0425	8	
		14:25	6.01.5		
137 Pit C	39-2021	9:45	0.0448	7	
		14:45	0.0451	· · · · · · · · · · · · · · · · · · ·	
137 Pit B	30 -9-2021	9:55	; 5 <i>N</i> 0.e	~ (	
		14:55	0.0415	8.6	
137 Pit A	3° -9-2021	10:05	0.0605	9.3	
		15:05	0_043	8.3	

Name & Designation

Field Operator.

Tam Hoi Keung [RenoPipe] (CP)

30-9-2021

Laboratory Staff: Checked by:



Contract no. 13/WSD/16 Mainlaying in Tseung Kwan O

Penta-Ocean - Concentric Joint Venture

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of site: 13/WSD/16 - Mainlaying in Tseung Kwan O

Sampling equipment used:	Dates calibrated
MultiRAE Lite, PGM-6208	6/4/2021
M01C031772	

Sampling Location	Date of Measurement	Sampling time	Monitoring wells/ Surface Gas Emission Carbon Dioxide (%)	Depth (m)	Remark
WPR 1	39-2021	10:15	0.0436	3.0	
		15:15	0.0425	2.8	
WPR 2	ჯ <sub>ი</sub> -9-2021	10:25	0.0435		
		15:25	0.0432	3.5	
WPR 3	3∞ -9-2021	10:45	o 20 HH }		
		15:45	a.04;4	2-8	
Pit A	کە -9-2021	10:55	اللهاه، ه		
	•	15:55	0.045 ~	5	
Pit B	ॐ -9-2021	11:05	0.9432		
		16:05	0.04:9	3.6	

Name & Designation Sign
Field Operator: Tam Hoi Keung [RencPipe] (CP)
Laboratory Staff:

Signature

Date

30 - 9 - 2021



Appendix K

Complaint Log and Regulatory Compliance Proforma



## **Statistical Summary of Environmental Complaints**

Reporting Period	Environmen	tal Complaint Statistics	
	Frequency	Cumulative	Complaint Nature
01 September 2021 - 30 September 2021	0	3	N/A

#### **Statistical Summary of Environmental Summons**

Reporting Period	Environmental Sum	mons Statistics	
	Frequency	Cumulative	Details
01 September 2021 - 30 September 2021	0	0	N/A

#### **Statistical Summary of Environmental Prosecution**

Reporting Period	Environmental Pros	ecution Statistics	
	Frequency	Cumulative	Details
01 September 2021 - 30 September 2021	0	0	N/A



# Appendix L

Site Inspection Proforma



	Contract no. 13/WSD/16 Mainlaying in Ts  WEEKLY ENVIRONMENTAL INSPECTION	_			
Insuect	ion Date: 52(39/1452) Inspected by: ET. Charlint (disposition) Time: 59:30-11-30			e Kin Fa	ut.
	ion Time: 09:30-11-30 Contractor San Ag	HEC:_	MIB		
Weath		Sto		Hazy	
	crature 3.0 C Humidity Itigh Moderate				
Lwina	Z aun Jagn Breeze Stiong				
		N/A	Yes	Ne	Photo/Remarks
0.00	General				
0.01	Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?		1		
0.02	Is ET Leader's log-book kept readily available for inspections?		7		
					-
1.00	Construction Dust  Are dusty materials, such as exervated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?				obs (2
1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty construction works for dust suppression?				/ Enclusive / Sweens
1.03	Are fumes or smoke emitting plants or construction activities shielded by a screen?				Mofume Smoke co
1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?				
1.05	Is wheel-washing provided to all vehicles leaving the site?				
1.06	Are road section near the site exit free from dusty material?	П	7	П	
1.07	Are all main haul roads inside the site paved or sprayed with water to minimize dust				paved.
1.08	emission during vehicle movement?  Are water spraying provided 'mm'ediately prior to any loading or transfer of dusty materials?				menty most
1.09	Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?				Timit du
	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of	1/			
1.10	boulders, poles, pillars sprayed with water to maintain the entire surface wer?  Is exposed earth properly treated within six months after the last construction activity on				
1.10	boulders, poles, pillars sprayed with water to maintain the entire surface wer?				/ WREMMI



	O: 2333-6823   F: 2333-1316   E: gene  Contract no. 13/WSD/16 Mainlaying in Te				
	and the state of t	V/A	Yes	No	Photo/Remarks
1.1	Are vehicles travelling at speed not exceeding 15km/hr within the site?			П	
1.1-	Are stock of more than 20 pags of cement or day PFA covered or sheltered on top and 3 pides?				
1.1	Are de-bagging, batching and mixing processes of bagged coment carried out in sheltered areas?				
1.16	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?				
1.17					
2.01		П	T	ГТ	/ Drime (al
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive niose?				7 18(1-1) 44
2.03	The state of the s				
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?	7			2 Novisiato
2.05	Are moveable barriers provided to screen NSRs from plan; or noisy operations?				near to ms
2.06	portion to paints,	Q	Tues		
2.07	Are the acods, cover panels and inspection hatches of PMEs closed during operation?  Are purposely-built site hoarding construction with appropriate materials provided along				
	the site boundary?  Are noisy operation properly scheduled to minimize exposure and cumulative impacts to				
	nearby sensitive receivers?  Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	Ш			
	Are valid noise emission label(s) affixed to all air compressors operating on site?		믈		
2.12	Are all construction noise permit(s) applied for percusaive piling work?				
2.13	Are construction noise permit(s) applied for general construction works during restricted hours?				
	Are valid construction noise permit(s) displayed at all vehicular exits?		Z		
00000	Water Quality  Is effluent discharge license obtained for wastcwater discharge from site?			П	
3.02	s effluent discharged according to the effluent discharge license?				ryowater
3.03	Is wastewater discharge from site properly treated prior to discharge?	Z			checked.
0	409				
					Page 2 of



Г	Contract no. 13/WSD/16 Mainlaying in Tse	N/A	Yes	No	Photo/Remarks
3.04	Are perimeter channels provided to intercept storm runoff from outside the size?		1	П	Tampelle (
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment busing previded to remove sand/silt particles from runoff?		Z		reminaler
3.06	Is surface runoff diverted to sedimentation facilities?	Z			discharge
3.07	Is the drainage system properly maintained?				obs (3)
3.08	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?		1		
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil crosion?		7		
3.10	Are temporary access roads protected by crushed gravel?				
3.11	Are exposed slope surface properly protected?			П	
3.12	Is trench exeavation avoided in the wet season as far as practicable, or if necessary, back filled in short sections after exeavation?		T		
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric	Ħ	n		oluth
3.14	during construction? Is runoff from wheel-washing facilities avoided?		H	$\exists$	
3.15	Is oil leakage or spillage prevented?				را) کام
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage		믐		
3.17	system?  Are the oil interceptors/ grease traps properly maintained?		౼		obstij
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to			믐	
3.19	avoid them entering the streams?  Are all fuel tanks and storage areas provided with locks and be sited on sealed areas.			블	
	within bunds of capacity equal to 110% of the storage capacity of the largest tank?  Are tanks, containers, storage area bunded and the locations locked as far as possible from	ᆜ		ᆜ	
	the sensitive watercourse and stormwater drains?  Are sufficient chemical toilets provided on site to handle sewage from construction work.			Ш	
3.21	force?				
2 22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors?				-
		-/1			
3.23	is concrete washing water properly collected and treated prior to discharge?  Waste Management		Ш.	Щ.	

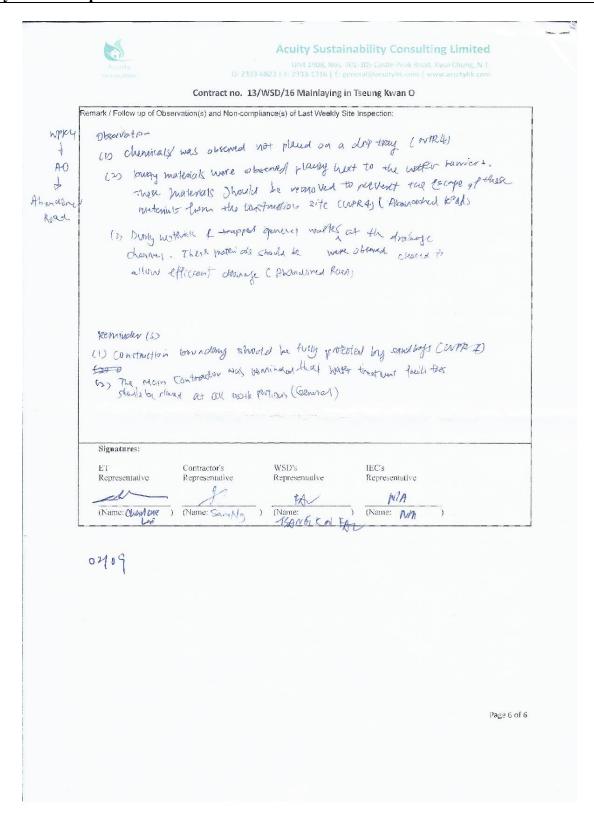


	Contract no. 13/WSD/16 Mainlaying in Ts	N/A	Yes	No	Photo/Remarks
4.02	is a recording system implemented to record the amount of wastes generated, recycled and disposed of?		7	П	
4.03	Is the Contractor registered as a chemical waste producer?				
4.04	Are chemical waste separated from other waste and collected by a licensed chemical waste				
4.05	collector?  Are trip tickets for chemical waste disposal available for inspection?	7			
4.06	s chemical waste reused and recycled on site as far as practicable?				
4.07	Are all containers for chemical waste properly labelled?			H	
4.08	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?			$\frac{\square}{\square}$	
4.09	Are incompatible chemical wastes stored in different areas?				
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?			ㅁ	
4.11	Is an impermeable floor and burding, of capacity to accommodate 110% of the volume of the				
112	argest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?  Are a routine cleaning and maintenance programme implemented for drainage systems, sump		الكا		
	pits, and oil interceptors?				ob (3)
	Are sufficient general refuse disposal/collection points provided on site?				
	is general refuse disposed of properly and regularly?				-
	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?		7		
	Are individual collectors for aluminum cans, plastic bottles and packaging materia, and office paper provided to encourage waste segrepation?				
	Are C&D wastes sorted on site?				
	Are C&D waste disposed of properly?				
	Are unused C&D mate lists or chemicals recycled or reused to reduce the quantity of waste?				
	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
	Are the construction materials stored properly to minimize the potential for damage or contamination?				0/5(2)
4.22	Is a dumping license obtained to deliver public fill to public filling areas?				
	2108				
•	2109				Page 4



	G: 2333-6823   F: 2333-1316   E: gener  Contract no. 13/WSD/16 Mainlaying in Ts				
	Contract no. 15/ WSD/16 Walmaying in 15	N/A	Yes	No	Photo/Remark
5.00	Landscape and Visual		-		-
1	Are Is site hoarding provided?		П		
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
5.03	Is construction light oriented away from the sensitive receivers?			믐	
			Ш	Ш	
5.04	is grass hydroseeding provided to slopes as soon as the completion of works?	1			
5.05	Are damages to trees outside site boundary due construction works avoided?		7		
5.06	is excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees?	7	П		
5.07	Are the retained and transplanted (ree(s) properly protected and in good conditions?			一一	
5.08	Are surgery works carried out for damaged trees?				
0.00			Ш	Ш	
	Ecology Is site runoff preperly treated to prevent any silly runoff?	7	П	П	po noter
6.02	Are silt trap installed and well-maintained?		$\overline{\Box}$		
6.03	Are stockailes properly covered to avoid generating silty runoff?	Ħ	$\overline{\Box}$	H	obs 12
6.04	Are construction works restricted to works area which are clearly defined?			H	_ UPS UP
7.00	Overall				
7.01	Is the EM&A properly implemented in general?		Z		-
94	07				
					Page







1.04 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 Is wheel-washing provided to all vehicles leaving the site?  1.06 Are road section near the site exit free from dusty material?  1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?		Contract no. 13/WSD/16 Mainlaying in T	seung Kwan U
Continuous   State		WEEKLY ENVIRONMENTAL INSPECTIO	N CHECKLIST
Temperature    Samp   Time   Devecant   Delizate   Rein   Samp   Itany	Inspec	ion Time: 0930-1200 Contractor: Sum Ng	
N/A Yes No PhotoRemarks   N/A Yes No Photo			Stomi
N/A Yes No PhotoRemads   0.00 General   0.01 Is the current Eavironmental Permit displayed conspicuously at all vehicle site envirances/exits for public's information at any time?   0.02 Is 15T Leader's log-book kept readily available for inspections?   0.02 Is 15T Leader's log-book kept readily available for inspections?   0.02 Is 15T Leader's log-book kept readily available for inspections?   0.03 Is 15T Leader's log-book kept readily available for inspections?   0.04 Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are fitness or smoke emitting plants or construction activities shielded by a screen?   0.05 Are	Temp	erature 20 C Humidity High Moders	tle Low
0.00   General   0.01   Is the current Environmental Permit displayed conspicuously at all vehicle site envirances/exits for public's information at any time?   0.02   Is ET Lender's log-book kept readily available for inspections?   0.02   Is ET Lender's log-book kept readily available for inspections?   0.00   Construction Dust   0.00   Construction Dust   0.00   Construction Dust   0.00   Construction Dust   0.00   Construction Dust   0.00   Construction and exists, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?   0.00   Construction works for dust suppression?   0.00   Construction works	Wind	Calm Light Breeze Strong	
0.01   Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?			N/A Yes No Photo/Remarks
0.01   Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?	0.00	General General	
1.00 Construction Dust 1.01 Are dusty materials, such as executated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission? 1.02 Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty construction works for dust suppression? 1.03 Are fitness or smoke emitting plants or construction activities shielded by a screen? 1.04 Are wheel-washing facilities with high-pressure water jets provided at all site exits? 1.05 is wheel-washing provided to all vehicles leaving the site? 1.06 Are road section near the site exit free from dusty material? 1.07 Are all main haul roads inside the site peved or sprayed with water to minimize dust emission during vehicle movement? 1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials? 1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site? 1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?		Is the current Environmental Permit displayed conspicuously at all vehicle site	
1.01 Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?  1.02 Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty construction works for dust suppression?  1.03 Are fumes or smoke emitting plants or construction activities shielded by a screen?  1.04 Are wheel-washing facilities with high-prossure water jets provided at all site exits?  1.05 is wheel-washing provided to all vehicles leaving the site?  1.06 Are road section near the site exit free from dusty material?  1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?			
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1.04 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 Is wheel-washing provided to all vehicles leaving the site?  1.06 Are road section near the site exit free from dusty material?  1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?	1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty	entoure
1.04 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 is wheel-washing provided to all vehicles leaving the site?  1.06 Are road section near the site exit free from dusty material?  1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?	1.03	Are fumes or smoke emitting plants or construction activities shielded by a screen?	smolu emita plant / condn
1.08 Are road section near the site exit free from dusty material?  1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?	1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?	
1.07 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and caving the site?	1.05	ls wheel-washing provided to all vehicles leaving the site?	
emission during vehicle movement?  1.08 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?			
materials?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.09 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?		emission during vehicle movement?	D pared
loaving the site?  No clover to Mean and an admit tracks carrying dusty marcrials when entering and loaving the site?		naterials?	-frankler of dusty
130			Meterials objects  No clong this  New observes
1.10 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?		Are the working areas for uproofing of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?	
1.11 Is exposed earth properly treated within six months after the last construction activity on site?	1.11 I	s exposed earth properly treated within six months after the last construction activity on its?	
1.12 Does the operation of plants on site free form dark smoke emission?	1.12	Does the operation of plants on site free form dark smoke emission?	Manu Cary



		N/A	Yes	No	Photo/Remarks
1.13	Are vehicles travelling at speed not exceeding 15km/hr within the site?		$\overline{\Box}$		
				<u>Ш</u>	
1.14	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?				2
1.15	Are de-bagging, batching and mixing processes of bagged coment carried out in sheltered areas?				
1.16	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?				
1.17	ts open burning prohibited?		7	П	
2.00	Construction Noise (Airhorne)				
2.01	Are quiet plants adopted on site?				I Nose land &
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive niose?				(Kyster invreotion
2.03	Are plants throttled down or turned off when not in use?	П	7	П	
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				I no roit to W
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?		$\overline{\sqcap}$	$\overline{\Box}$	July 10
2.06	Are silencers, mufflers and enclosures provided to plants?		一	一	
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?			一	
2.08	Are purposely-built site hoarding construction with appropriate materials provided along			一	-
	the site boundary?				
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?				
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?				
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?	Z			
2.12	Are all construction noise permit(s) applied for percussive piling work?				
2.13	Are construction noise permit(s) applied for general construction works during restricted hours?				
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?		Q		
	Water Quality				
3.01	Is effluent discharge license obtained for wastewater discharge from site?	Ш		Ш	
3.02	Is offluent discharged according to the effluent discharge license?				
3.03	ls wastewater discharge from site properly treated prior to discharge?				perminoles (2)



		N/A Yes No Photo/Remarks
		TO NO PHOTO/Remarks
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?	
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to remove sand/silt particles from runoff?	
3.06	Is surface runoff diverted to sedimentation facilities?	
3.07	Is the drainage system properly maintained?	Okeyols(
3.08	Are construction works carefully programmed to minimize soil excavation works during tainy seasons?	
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of	
3.10	soil crosion?  Are temporary access roads protected by crushed gravel?	
3.11	Are exposed stope surface properly protected?	
3.12	Is tronch excavation avoided in the wel season as far as practicable, or if necessary.	
	backfilled in short sections after excavation?  Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric	
	during construction?	
	Is runoff from wheel-washing facilities avoided?	700
3.15	Is oil leakage or spillage prevented?	[ ] (4)
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage system?	Obs (3)(4)
3.17	Are the oil interceptors/ grease traps properly maintained?	
	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?	
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas.	
3.20	within bunds of capacity equal to 110% of the storage capacity of the largest tank?  Are tanks, containers, storage area bunded and the locations locked as far as possible from	
	the sensitive watercourse and stormwater drains?  Are sufficient chemical toilets provided on site to handle sewage from construction work	
	force?  Are sewage disposal and toilet maintenance of the portable chemical toilets provided by	
ľ	the licensed contractors?	
	s concrete washing water properly collected and treated prior to discharge?  Waste Management	
4.01	waste Management s a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public llling facilities and landfills?	

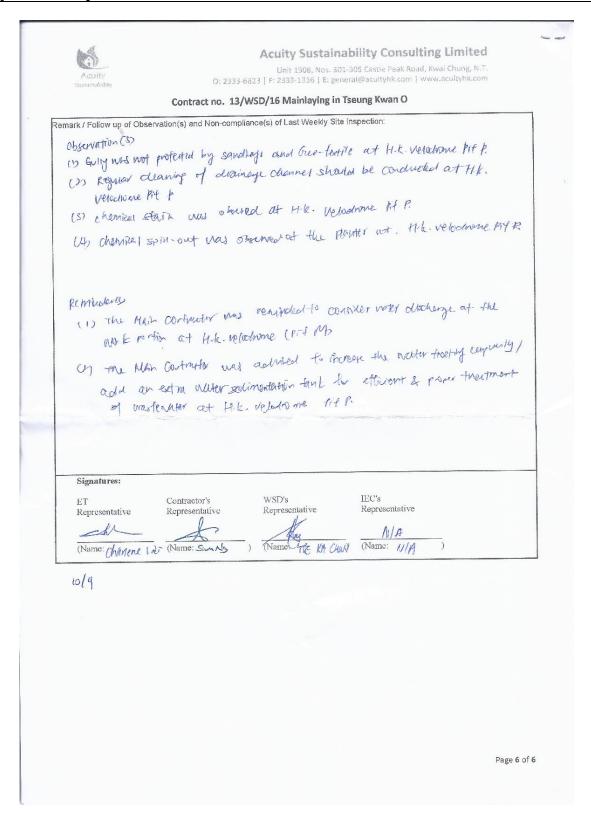


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	Contract no. 13/WSD/16 Mainlaying in Ts	eung Kwa	n O Yes	No	Photo/Romarks
		NA	1 08	INO	Photo Remarks
4.02	is a recording system implemented to record the amount of wastes generated, recycled and	П	7	П	
	disposed of?			느	
4.03	ls the Contractor registered as a chemical waste producer?				
4.04	Are chemical waste separated from other waste and collected by a licensed chemical waste		$\Box$	П	
	pollector?			ᆜ	
4.05	Are trip tickets for chemical waste disposal available for inspection?			Ш	
4.06	is chemical waste reused and recycled on site as far as practicable?	[7]	П	П	And a second second second second second second second second second second second second second second second
	1 (1.1.1.2)	<u></u>			
4.07	Are all containers for chemical waste properly labelled?				***************************************
4.08	is chemical waste storage area used solely for storage of chemical waste and properly labelled?	П	TX	П	40.69.750007
1.00	the state of the s		4		
4.09	Are incompatible chemical wastes stored in different areas?	4			
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?	П		П	
	1, 1100 54 1 54				
4.11	is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area, whichever is the				
	greatest, provide?				
4.12	Are a routine cleaning and maintenance programme implemented for drainage systems, sump			П	SPS (2)
4 13	pits, and oil interceptors?  Are sufficient general refuse disposal/collection points provided on site?			$\overline{\Box}$	
				Ш	
4.14	is general refuse disposed of properly and regularly?				
4.15	Are appropriate measures adopted to minimize windblown litter and dust during transportation of				
	waste?			Ш	
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?				
4.17	Are C&D wastes sorted on site?		7		
				Ш	
4.18	Are C&D waste disposed of properly?				
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?				
				Ш	
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
4.21	Are the construction materials stored properly to minimize the potential for damage or				10
	contamination?				abist 37 01
4.22	is a dumping license obtained to deliver public fill to public filling areas?				
	olq				



	Contract no. 13/WSD/16 Mainlaying in Ts	ouna Viv	· · · ·		
	Contract no. 15/ W3D/16 Mannaying in 15	N/A	Yes	No	Photo/Remarks
5.00	Landscape and Visual				
	Are Is site hoarding provided?				
5.02			<u> </u>		
3.02	Are vegetation disturbance minimized or soil protected to reduce potential soil crossion?		2		MATERIAL PROPERTY AND ADDRESS OF THE PARTY AND
5.03	is construction light oriented away from the sensitive receivers?				
5.04	Is grass hydrosceding provided to slopes as soon as the completion of works?				W-SA-A-PRODUCTION OF THE SA-A-PRODUCTION OF T
5.05	Are damages to trees outside site boundary due construction works avoided?		Q		
5.06	Is excavation works carried out manually instead of machinery operation within 2.5m visinity of	TX	П		
5.07	any preserved trees?  Are the retained and transplanted tree(s) properly protected and in good conditions?		<u> </u>		
		Ш			
	Are surgery works carried out for damaged trees?				
	Ecology  Is site runoff properly treated to prevent any silly runoff?	П		П	veminder
6.02	Are silt trap installed and well-maintained?				V Dyvango.
6.03	Are stockpiles properly covered to avoid generating silty runoff?			Ш	
0.00	rae seesthus hoberty covered to avoid generating sing (until)?				-
6.04	Are construction works restricted to works area which are clearly defined?		Q		
	Overall		_		***************************************
7.01	Is the EM&A properly implemented in general?				***************************************
10	/4				
			5.0		







	Contract no. 13/WSD/16 Mainlaying in T	Seung Kwan O
	WEEKLY ENVIRONMENTAL INSPECTIO	
	ction Date: 171091267 Inspected by: ET: Charlene La	WSD. Toury kin Fay
Wes	· ·	
Con	dition Summy Fine Overcest Orizzie Rein	Storm Hazy
1	perature 20 C Humidity High Moder	ate Low
Win	Sahn sjeht sreeze strong	
		N/A Yes No Photo/Remark
0.0	General	
0.0	The state of the s	
0.03	entrances/exits for public's information at any time?  Its ET Leader's log-book kept readily available for inspections?	to the second se
	and the state of t	
	Construction Dust	pusty maro
	Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?	bruty made over legs in the first legs in the control of the contr
1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty construction works for dust suppression?	Suremy
	constituent works for dust suppression?	
1.03	Are fumes or smoke emitting plants or construction activities shielded by a screen?	
		D D wolumils
1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?	autivitiés
1.05	Is wheel-washing provided to all vehicles leaving the site?	ИПП
1.06	Are road section near the site exit free from dusty material?	
1.07	Are all main haul roads inside the site paved or sprayed with water to minimize dust	
	emission during vehicle movement?	[ ] paver
1.08	Are water spraying provided immediately prior to any loading or transfer of dusty materials?	ИПП
1.09	Are covers provided to all dump trucks carrying dusty materials when entering and	No climy trul
1.10	leaving the site?	masts 2 aw
	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?	
1.11	Is exposed earth properly treated within six months after the last construction activity on	
1.12	site?  Does the operation of plants on site free form dark smoke emission?	
	WHE SHOW SHEDSWIFT	- LANMIA



	N. IF	ünit 1908,	Nos. 301-305	5 Castle P	eak Road	, Kwai Ch	ung, N.T.
	Spetimadelite	O: 2333-6823   F: 2333-1316					
	С	ontract no. 13/WSD/16 Mainla	ying in Tseu	ing Kwa	in O		
				N/A	Yes	No	Photo/Remarks
1.13	Are vehicles travelling at speed no	t exceeding 15km/hr within the site?					
1.14	Are stock of more than 20 bags o	f coment or day PFA covered or sheltered o	on top and 3				
1.15	Are de-bagging, batching and mixi areas?	ing processes of bagged cement carried out i	n sheltcred				
1.16	Are hoarding of at least 2.4m high accessible by the public?	provided along the site boundary adjoining	arcas				
1.17	is open burning prohibited?						
	Construction Noise (Airborne)  Are quiet plants adopted on site?						(noxelabel
2.02	Are the PMEs operating on site we niose?	ell-maintained to minimize the generation of	excessive				Inspection
2.03	Are plants throttled down or turned	d off when not in use?		_			
2.04	Are the plants known to emit noise NSRs?	e strongly in one direction oriented to face as	way from	/			tranory y
2.05	Are moveable barriers provided to	screen NSRs from plant or noisy operations	?		П		nivitorisk
2.06	Are silencers, mufflers and enclose	ures provided to plants?					
2.07	Are the hoods, cover panels and in	spection hatches of PMEs closed during ope	eration?		Z		
2.08	Are purposely-built site hoarding of the site boundary?	construction with appropriate materials provi	ided along				
2.09	Are noisy operation properly sched nearby sensitive receivers?	duled to minimize exposure and cumulative	impacts to		Z		
2.10	Are valid noise emission label(s) a	illixed to all hand-held breakers operating or	site?	力			
2.11		flixed to all air compressors operating on sit	le?	口			-
2.12		applied for percussive piling work?					here was a second and a second
2.13	Are construction noise permit(s) a hours?	pplied for general construction works during	restricted		Z		***************************************
	-	it(s) displayed at all vehicular exits?			力		
3.00 3.01	Water Quality ts effluent discharge license obtain	ned for wastewater discharge from site?					***************************************
3.02	Is effluent discharged according to	the effluent discharge license?					0/25(21)
3.03	Is wastewater discharge from site	properly freated prior to discharge?					063(2)
	1719,						
	-						Page 2 of



	Sustainable 0: 2333-5823   F: 2333-1316   E: gener	al@acuity	hk.com	www.act	lityhk.com
_	Contract no. 13/WSD/16 Mainlaying in Ts		W-12-14-15-16-16-16-16-16-16-16-16-16-16-16-16-16-		
		N/A	Yes	No	Photo/Remarks
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?				Eminum Transporter 1.
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to remove sand/silt particles from runoff?				
3.06	Is surface runoff diverted to sedimentation facilities?		7		
3.07	Is the drainage system properly maintained?				rominater
3.08	Are construction works carefully programmed to minimize soil excavation works during				*
3.09	rainy seasons?  Are exposed soil surface protected by paving as soon as possible to reduce the potential of				
	soil erosion?				
3.10	Are temporary access roads protected by crushed gravel?				
3.11	Are exposed slope surface properly protected?				
3.12	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?				
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction?	П		П	
3.14	Is runoff from wheel-washing facilities avoided?			H	
3.15	is oil leakage or spillage prevented?			H	061(1)
3.15	Are there any measures to prevent the release of oil and grease into the storm drainage system?				0/01/1)
3.17	Are the oil interceptors/ grease traps properly maintained?		一		
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?			一	
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?		7		
3.20	Are tanks, containers, storage area bunded and the locations locked as far as possible from				
3.21	the sensitive watercourse and stormwater drains?  Are sufficient chemical toilets provided on site to handle sewage from construction work				
	force?		Z		
	Are sawage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors?		7	П	
3.23	Is concrete washing water properly collected and treated prior to discharge?	A			
	Waste Management				
	is a trip ticket system implemented to monitor the disposal of C&O and solid wastes at public filling facilities and landfills?				
	709	100			

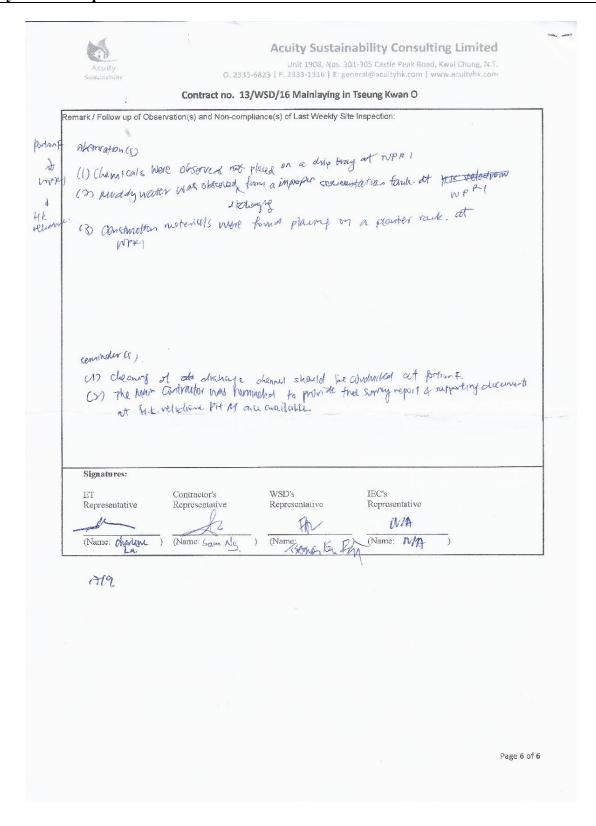


	Contract no. 13/WSD/16 Mainlaying in Ts	eung Kwa	ın O		
		N/A	Yes	No	Photo/Romarks
4.02	is a recording system implemented to record the amount of wastes generated, recycled and	П	N	П	
4.03	disposed of?  Is the Contractor registered as a chemical waste producer?				
4.04	Are chemical waste separated from other waste and collected by a licensed chemical waste collector?				
4.05	Are trip fickets for ohemical waste disposal available for inspection?				
4.06	is chemical waste reused and recycled on site as far as practicable?				
4.07	Are all containers for chemical waste properly labelled?				
4.08	is chemical waste storage area used solely for storage of chemical waste and properly labelled?			П	
4.09	Are incompatible chamical wastes stored in different areas?		ph		4.000
4.10	is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.11	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the targest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?				
4.12	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pils, and oil interceptors?				reminderer
4.13	Are sufficient general refuse disposal/collection points provided on site?		Z		
4.14	Is general refuse disposed of properly and regularly?		d		Processor Const.
4.15	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?				Manager Company
4.16	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?				Martings of the second
4.17	Are C&D wastes sorted on site?				
4.18	Are C&D waste disposed of properly?				
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?				
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?		1		
4.21	Are the construction materials stored properly to minimize the potential for damage or pontamination?				n/s (3)
4.22	is a dumping license obtained to deliver public fill to public filling areas?				



	2333-6823   F: 2333-1316   E: 8			NE 431 247 CH2 CI	regressions
П	Contract no. 13/WSD/16 Mainlaying i	n Tseung Kw	an O	No	Photo/Remarks
	dscape and Visual				***************************************
5.01 Are i	Is site hoarding provided?		П		
5.02 Are v	vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
5.03 Is co	nstruction light oriented away from the sensitive receivers?				B0000000000000000000000000000000000000
5.04 Is gro	ass hydroscoding provided to slopes as soon as the completion of works?			П	
5.05 Are d	damages to trees outside site boundary due construction works avoided?	$+\Box$	7	П	
5.06 Is exc	cavation works carried out manually instead of machinery operation within 2.5m vicini	y of			National Control of the Control of t
any p	preserved trees?				
5.07 Are ti	he retained and transplanted tree(s) properly protected and in good conditions?				reminell
5.08 Are s	surgery works carried out for damaged trees?				
6.00 Ecole					
6.01 ls site	e runoff properly treated to prevent any silly runoff?			П	obs (2)
6.02 Are st	tlt trap installed and well-maintained?				
6.03 Are st	tockpiles properly covered to avoid generating silty runoff?	1		Ш	Marine and the second
	company property develor to avoid generating stilly runous				
6.04 Are se	onstruction works restricted to works area which are clearly defined?	十一	7		
7.00 Over	all				
7.01 Is the	EM&A properly implemented in general?				
171	9				
. 10					







	Contract no. 13/WSD/16 Mainlaying in Ts	
	WEEKLY ENVIRONMENTAL INSPECTION	
Inspect	Inspected by: ET: Contractor: SYN Ag	WSD: OK Y P  IEC: Louis Evan
Inspect	ion time: U 234 11 2	
Condi		Storm
Temp	crature ZOC Humidity High Moderat	te Low
Wind	Calm Light Breeze Strong	
		N/A Yes No Photo/Remarks
0.00	General  Is the current Environmental Permit displayed conspicuously at all vehicle site	
0.01	entrances/exits for public's information at any time?	
0.02	Is ET Leader's log-book kept readily available for inspections?	
4.00	Constantion Dust	
1.00	Construction Dust  Are dusty materials, such as excavated materials, building debris and construction	asty protope were per me ment ductor
	materials, and exposed earth surface properly covered to prevent dust emission?	Z Grant over the
1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty	daty meterial
	construction works for dust suppression?	wat aust en
1.03	Are fumes or smoke emitting plants or construction activities shielded by a screen?	A Notine/sma
		ometing clant/
1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?	was observed
	The filed stating articles will high pressure that jet pressure at an article stating	
1.05	ts wheel-washing provided to all vehicles leaving the site?	
1.06	Are road section near the site exit free from dusty material?	
1.07	Are all main haul roads inside the site paved or sprayed with water to minimize dust	
	emission during vehicle movement?	parkol parkol
1.08	Are water spraying provided immediately prior to any loading or transfer of dusty	Design west west
1.09	materials?  Are covers provided to all dump trucks carrying dusty materials when entering and	Moling-full
	leaving the site?	West Elderve
1.10	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?	
1.11	ls exposed earth properly treated within six months after the last construction activity on	
	site?	
1.12	Does the operation of plants on site free form dark smoke emission?	



	Acuity Unit 1908, Nos. 301-3 Sustamability O: 2333-6823   F: 2333-1316   E: gener									
	Contract no. 13/WSD/16 Mainlaying in Ts	eung Kwa	n O							
	N/A Yes No Photo/Remarks									
					*					
1.13	Arc vehicles travelling at speed not exceeding 15km/hr within the site?									
1.14	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3		AA							
	sides?	<i>K</i> - 2		Ш						
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?									
1.16	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas		П	П	1,000					
	accessible by the public?			Щ						
1.17	Is open burning prohibited?		1							
2.00	Construction Noise (Airborne)				NRMMaber					
2.01	Arc quiet plants adopted on site?				/miss low					
2.02	Are the PMEs operating on site well-maintained to minimize the generation of excessive				Resilar					
	niose?	Ш			magnetion					
2.03	Are plants throttled down or turned off when not in use?									
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from		$\overline{\Box}$		( Noinspetis					
	NSRs?		Щ		Thomas					
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?				HONER					
2.06	Are silencers, mufflers and enclosures provided to plants?									
2.07	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?		d							
2.08	Are purposely-built site hoarding construction with appropriate materials provided along		П	П						
	the site boundary?	4		ш	(404)					
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?									
2.10	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?			$\overline{\Box}$						
2.11	Are valid noise emission label(s) affixed to all air compressors operating on site?	7		一						
				ᆜ						
2.12	Are all construction noise permit(s) applied for percussive piling work?		ĮŽ.							
2.13	Are construction noise permit(s) applied for general construction works during restricted hours?		Z							
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?									
3.00	Water Quality									
3.01	Is effluent discharge license obtained for wastewater discharge from site?									
3.02	is effluent discharged according to the effluent discharge license?			Ī	Clienter					
3.03	Is wastewater discharge from site properly treated prior to discharge?				Johnsenea					



	Contract no. 13/WSD/16 Mainlaying in Ts				
		N/A	Yes	No	Photo/Remarks
3.04	Are perimeter channels provided to intercept storm runoff from outside the site?				
3.05	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to remove sand/silt particles from runoff?		Į.		reminded U.
3.06	is surface runoff diverted to sedimentation facilities?				
3.07	is the drainage system properly maintained?		Q		(ominoter(2)
3.08	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?	4			
3.09	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil erosion?				
3.10	Are temporary access roads protected by crushed gravel?				
3.11	Are exposed slope surface properly protected?				
3.12	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?		7		
3.13	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction?				
3.14	Is runoff from wheel-washing facilities avoided?	一		$\overline{\Box}$	
3.15	Is oil leakage or spillage prevented?		Tal V		forcherica!
3.16	Are there any measures to prevent the release of oil and grease into the storm drainage system?				ed obac
3.17	Are the oil interceptors/ grease traps properly maintained?			П	
3.18	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?	Ī		Ī	
3.19	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?				
3.20	Are tanks, containers, storage area bunded and the locutions locked as far as possible from the sensitive watercourse and stormwater drains?			$\overline{\Box}$	
3.21	Are sufficient chemical toilets provided on site to handle sewage from construction work	一		一	
3.22	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by	一		$\overline{\Box}$	
3.23	the licensed contractors?  Is concrete washing water properly collected and treated prior to discharge?				
	Waste Management  Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public				
1.01	filling facilities and landfills?				
	2419				

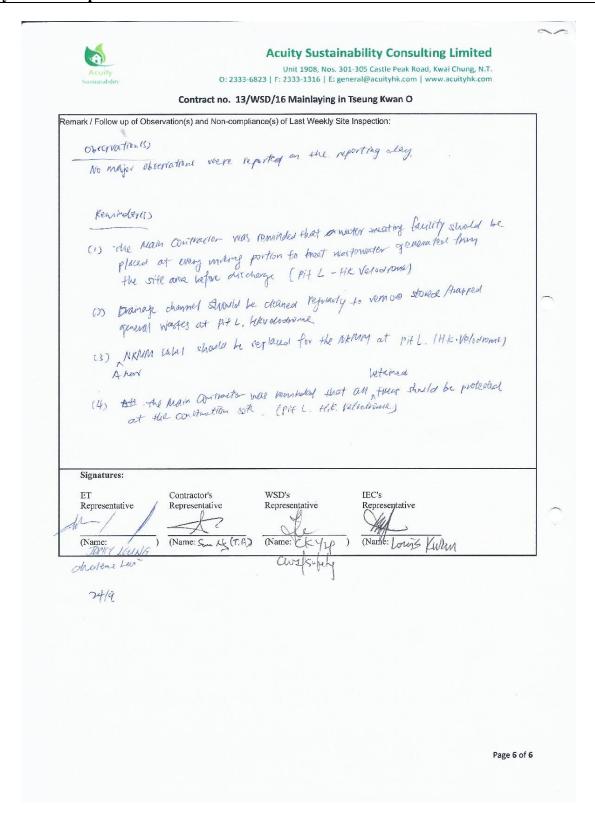


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	Contract no. 13/WSD/16 Mainlaying in Ts				
		N/A	Yes	No	Photo/Remarks
4.02	is a recording system implemented to record the amount of wastes generated, recycled and disposed of?		Z		
4.03	is the Contractor registered as a chemical waste producer?				
4.04	Are chemical waste separated from other waste and collected by a licensed chemical waste collector?	Z			
4.05	Are trip tickets for chemical waste disposal available for inspection?				
4.06	is chemical waste reused and recycled on site as far as practicable?				
4.07	Are all containers for chemical waste properly labelled?				
4.08	is chemical waste storage area used solely for storage of chemical waste and properly labelled?				
4.09	Are incompatible chemical wastes stored in different areas?				
4.10	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.11	is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?				-
4.12	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?		Z		reminder (25
4.13	Are sufficient general refuse disposal/collection points provided on site?				
4.14	is general refuse disposed of properly and regularly?				
4.15	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?				15m3
4.16	Are individual collectors for aluminum cans, plastic hottles and packaging material and office paper provided to encourage waste segregation?		2		
4.17	Are C&D wastes sorted on site?		7		***************************************
4.18	Are C&D waste disposed of properly?				
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?	$\square$			
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				timber
4.21	Are the construction materials stored properly to minimize the potential for damage or contamination?		2		
4.22	ls a dumping license obtained to deliver public fill to public filling areas?		7		
	24/19				
					Page 4 of



	Contract no. 13/WSD/16 Mainlaying in Ts	eung Kwa	n O		
	Contract III. 13/ W3D/10 Walinaying III I3	N/A	Yes	No	Photo/Remarks
5.00	Landscape and Visual			-	
5.01	Are Is site hoarding provided?				
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil crosion?				reminder (4)
5.03	is construction light oriented away from the sensitive receivers?		П		
5.04	Is grass hydroseeding provided to slopes as soon as the completion of works?			$\overline{\Box}$	
5.05	Are damages to trees outside site boundary due construction works avoided?			一	pensider (4)
5.06	Is excavation works carried out manually instead of machinery operation within 2.5m vicinity of		7	H	Territoria (1)
5.07	any preserved trees?  Are the retained and transplanted tree(s) properly protected and in good conditions?				
5.08	Are surgery works carried out for damaged trees?				
	Y		Ш	Ш	
6.00	Ecology  Is site runoff properly treated to prevent any silly runoff?				No water discharge
6.02	Are silt trap installed and well-maintained?				
6.03	Are stockpiles properly covered to avoid generating silty runoff?	, 	Joseph		No express
6.04	Are construction works restricted to works area which are clearly defined?				observed
822777	Overall  Is the EM&A properly implemented in general?				
7	409				
					Page 5







	Contract no. 13/WSD/16 Mainlaying in Ts  WEEKLY ENVIRONMENTAL INSPECTION	
	ion Date: 30/64/1971 Inspected by: ET. Chamier (a)	
Inspec	ion Thue: 09773710745	EC:
Cond	tion Summy Fine Overcast Octazel Rain erature State Humidity Righ Moderat	Steem Hazy
		N/A Yes No Photo/Remarks
0.00		
0.02	Is ET Leader's log-book kept readily available for inspections?	
1.00	Construction Dust  Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?	
1.02	Are screenings, enclosures, water spraying or vacuum cleaning devices provided to dusty construction works for dust suppression?	surrings
1.03	Are fumes or smoke emitting plants or construction activities shielded by a screen?	No furn /s male equitive plants or acquired
1.04	Are wheel-washing facilities with high-pressure water jets provided at all site exits?	
1.05	Is wheel-washing provided to all vehicles leaving the site?	<b>7</b> 0 0
1.06	Are road section near the site exit free from dusty material?	
1.07	Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?	PAVEOL
1.08	materials?	duty marketall until the fear from Sheet & Congrated
1.09	Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?	Nochump trucks of St
1.10	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?	
1.11	is exposed earth properly treated within six months after the last construction activity on site?	
1.12	Does the operation of plants on site free form dark smoke emission?	ARMM INDU
20/9		Page 1 of 6



		pility Consulting Limited 805 Castle Peak Road, Kwai Chung, N.T. al@acuitynk.com   www.acuityhk.com
	Contract no. 13/WSD/16 Mainlaying in Ts	
		N/A Yes No Photo/Remarks
1.13	Are vehicles travelling at speed not exceeding 15km/hr within the site?	
1.14	Are stock of more than 20 bags of coment or day PFA covered or sheltered on top and 3 sides?	
1.15	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	
1.16	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	
	Is open burning prohibited?	
	Construction Noise (Airborne) Are quiet plants adopted on site?	Onythe One
2.02	Are the PMEs operating on sile well-maintained to minimize the generation of excessive niose?	/ Capital Magazina
2.03	Are plants throttled down or turned off when not in use?	
2.04	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?	Moviet to
2.05	Are moveable barriers provided to screen NSRs from plant or noisy operations?	murto nex
2.06	Are sileneers, mufflers and enclosures provided to plants?	Ø 0 0
2.07	Are the hoods, cover panels and inspection hatches of PMHs closed during operation?	
2.08	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?	Z
2.09	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?	
	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	700
	Are valid noise emission label(s) affixed to all air compressors operating on site?	
	Are all construction noise permit(s) applied for percussive piling work?	
2.13	Are construction noise permit(s) applied for general construction works during restricted hours?	
2.14	Are valid construction noise permit(s) displayed at all vehicular exits?	
3.00 3.01	Water Quality  Is effluent discharge license obtained for wastewater discharge from site?	
3.02	Is effluent discharged according to the effluent discharge license?	1 1 1 Constant
3.03	is wastewater discharge from site properly treated prior to discharge?	locus churge



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		Contract no. 13/WSD	/16 Mainlaying in Ts	eung Kwa	Yes	No	Photo/Remarks
3.04	Are perimeter channels provided	to intercept storm runoff from	outside the site?				
				Ш		Ш	-
3.05	Are sand/silt removal facilities su remove sand/silt particles from ru		nent basins provided to	Jacob V	Z		No nyater dish
3.06	Is surface runoff diverted to sedin	nentation facilities?					
3.07	Is the drainage system properly m	aintained?		П		П	
3.08	Are construction works carefully	programmed to minimize soil	excavation works during		7	一	
0.00	rainy seasons?				4		
3.09	Are exposed soil surface protected soil crosion?	i by paving as soon as possib	le to reduce the potential of				Compation
3,10	Are temporary access roads prote	cted by crushed gravel?					-
3.11	Are exposed slope surface proper	ly protected?		Lose	T	П	
3.12	Is trench excavation avoided in th	e wet season as far as practical	able, or if necessary,		7		
3.13	backfilled in short sections after o Are open stockpiles of construction		v tamaulin or similar fabric			<u> </u>	
	during construction?		-			Ш	
3.14	is runoff from wheel-washing fac	ilities avoided?					
3.15	Is oil leakage or spillage prevente	d?					aks U)
3.16	Are there any measures to preven	t the release of oil and grease	into the storm drainage	П	П	П	aks(1)
3.17	system? Are the oil interceptors/ grease tra	ups properly maintained?					3,03,0
3 18	Are debris and rubbish generated	on site collected handled and	disposed of property to			ᆜ	
0.10	avoid them entering the streams?		and property as		4		***************************************
3.19	Are all fuel tanks and storage area	s provided with locks and be	sited on scaled areas,			$\Box$	
	within bunds of capacity equal to				4	Ш	***************************************
3.20	Are tanks, containers, storage are the sensitive watercourse and stor		cked as far as possible from				
3.21	Are sufficient chemical toilets pro		ge from construction work		7		
	force?				$\Box$	Ш	
3.22	Are sewage disposal and toilet me the licensed contractors?	nintenance of the portable che	mical toilets provided by				
3.23	Is concrete washing water properly	y collected and treated prior	to discharge?	1			
4.00	Waste Management						
4.01	Is a trip-ticket system implemented filling facilities and landfills?	to monitor the disposal of C&	¿D and solid wastes at public				***************************************
					*	North Control of the	
3019	5 5						
							Page 3 c
							- mo - mo - 1880

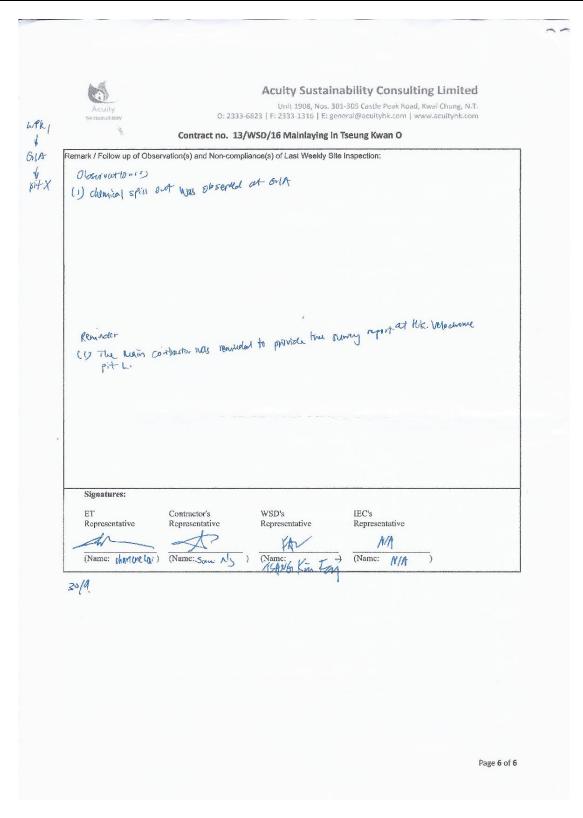


	Acuity Sustainal Acuity Unit 1908, Nos. 301- Suraamabhry 0: 2333-6823 [ F: 2333-1316 ] E: gener	305 Castle P	eak Roac	, Kwai Ch	ung, N.T.
	Contract no. 13/WSD/16 Mainlaying in Ts	eung Kwa	n O		
		N/A	Yes	No	Photo/Remarks
4.02	is a recording system implemented to record the amount of wastes generated, recycled and dispused of?				
4.03	is the Contractor registered as a chemical waste producer?				
4.04	Are chemical waste separated from other waste and collected by a licensed chemical waste collector?				***
4.05	Are trip tickets for chemical waste disposal available for inspection?	4			*****
4.06	is chemical waste reused and recycled on site as far as practicable?				
4.07	Are all containers for chemical waste properly labelled?				
4.08	is chemical waste storage area used solely for storage of chemical waste and properly labelled?				
4.09	Are incompatible chemical wastes stored in different areas?				
4.10	is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.11	is an impermeable floor and bunding, of capacity to accommodate 116% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area; whichever is the greatest, provide?	- 🔲 -	Ø		
4.12	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?		Z		
4.13	Are sufficient general refuse disposal/collection points provided on site?				
4.14	is general refuse disposed of properly and regularly?				
4,15	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?		d		
4.16	Are individual collectors for aluminum caus, plastic bottles and packaging material and office paper provided to encourage waste segregation?				8-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
4.17	Are C&D wastes sorted on site?				
	Are C&D waste disposed of properly?		Z		
4.19	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?				
4.20	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?		Ø		tinker
4.21	Are the construction materials stored properly to minimize the potential for damage or contamination?				<u> 645(1)</u>
4.22	is a dumping license obtained to deliver public fill to public filling areas?				



	Contract no. 13/WSD/16 Mainlaying in Ts	eung Kwa N/A	n O Yes	No	Photo/Remarks
<b>5.00</b> 5.01	Landscape and Visual  Are Is site hoarding provided?				
5.02	Are vegetation disturbance minimized or soil protected to reduce potential soil crosson?	Ó			
5.03	Is construction light oriented away from the sensitive receivers?				
5.04	is grass hydroseeding provided to slopes as soon as the completion of works?				
5.05	Are damages to trees outside site boundary due construction works avoided?		Z		
5.06	is excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees?	Image: section of the content of the			
5.07	Are the retained and transplanted tree(s) properly protected and in good conditions?				
5.08	Are surgery works carried out for damaged trees?				
1	Ecology Is site runoff properly treated to prevent any silly runoff?		П	П	No majoralische
6.02	Are silt trap installed and well-maintained?				
6.03	Are stockpiles properly covered to avoid generating silty runoff?				
6.04	Are construction works restricted to works area which are clearly defined?				
	Overall Is the EM&A properly implemented in general?		<u></u>		
<b>I.</b>					
					Page 5 c







### Appendix M

# Proactive Environmental Protection Proforma



#### **Proactive Environmental Protection for the Next Reporting Month**

Reporting Period	Activity	Major Environmental Impact	Environmental Mitigation Measure
1 October 2021 - 31 October 2021	<ul> <li>Excavation of trench</li> <li>Mainlaying of pipe</li> <li>Sheetpiling</li> <li>Backfilling of the trench</li> <li>Work fronts for open trench</li> <li>Work fronts for pipe jacking</li> </ul>	Construction dust and noise generation; construction wastes; impact of water quality	<ul> <li>Dust suppression by regular wetting and water spraying</li> <li>Reduction of noise from equipment and machinery on-site</li> <li>Sorting and storage of general refuse and construction waste</li> <li>Treatment of water with water treatment facilities before discharge</li> </ul>



### Appendix N

Impact Monitoring Schedule of Next Reporting Month (Tentative)



			Oct-21			
Sun	Mon	Tue		Thu	Fri	Set
					1	2
			6	7	Noise Impact Monitoring	9
10	11	12	13	14	Noise Impact Monitoring	16
17	18	19	20	Noise Impact Monitoring	22	23
	zs	26	27	28	Noise Impact Monitoring	30
31						

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)



## Appendix O

Academic Calendar(s)



	_	DE/	\TI\/	E 61	-00	ND/	DV	SCHOOL CALENDAR 2021-2022	
	Su	Mo	Tu	We	Th	Fr	Sa	SCHOOL CALENDAR 2021-2022	1
August	15	16	17	18	19	20	21	19-20 Orientation Day	+
August	22	23	24	25	26	27	28	23/08 First School Day	+
	_			23	20	21	20	25/00 Tilat School Day	+
0	29	30	31	-		•			+
September		_	_	1	2	3	4		-
	5	6	7	8	9	10	11		-
	12	13	14	15	16	17		17/9 Swimming Gala	
	19	20	21	22	23	24	25	22/9 The following Day of Mid-Autumn Festival	
	26	27	28	29	30			25/9 School Open Day 30/9 1st PD day	
October							2	1/10 National Day of the People's Republic of China	
	3	4	5	6	7	8	9		
	10	11	12	13		15	16	14/10 Chung Yeung Festival	
	17	18	19	20	21	22	23	15-23/10 Term break	
	24	25	26	27	28	29	30		
	31						- 50		1
Nevember	31	4	2	2	4	-	_	4/11 University Fair	+
November	7	1	2	3		5	6	4/11 Onliversity Fall	+
		8	9	10	11	12	13	45/44 0 . 1 PD D 40/44 0 1 P	+
<del>                                     </del>	14	15	16	17	18	19	20	15/11 2nd PD Day, 19/11 Sports Day	+
<b> </b>	21	22	23	24	25	26	27		-
ļļ_	28	29	30						4
December				1	2	3	4		
	5	6	7	8	9	10	11	11/12 Musical Performance	
	12	13	14	15	16	17	18	17/12 Creative Christmas Festival	
	19	20	21	22	23	24	25	25/12 Christmas Holiday. 20/12-3/1 Christmas & New Year Holiday	
<del>                                     </del>	26	27	28	29	30	31		27/12 The first weekday after Christmas Day	1
January							1	1/1 New Year's Day	1
ouridary	2	3	4	5	6	7	8		1
<del>                                     </del>	_	_							+
	9	10	11	12	13	14	15		_
	16	17	18	19	20	21	22		
	23	24	25	26	27	28	29	28/1 Creative Chinese Festival	
	30	31							
February						4	<u>5</u>	1-3/2 Chinese Lunar New Year	
	6	7	8	9	10	11	12	31/1-9/2 Chinese Lunar New Year Holiday	
	13	14	15	16	17	18	19		
	20	21	22	23	24	25	26		1
	27	28		23	24	25	20		+
Manak	21	20	-	_	_		-		+
March		_	1	2	3	4	5		+
-	6	7	8	9	10	11	12	10 10 0 1 11 11	+
	13	14	15	16	17	18	19	12-19/3 Creative Week	
	20	21	22	23	24	25	26		
	27	28	29	30	31				
April						1	2		
	3	4	5	6	7	8	9	5/4 Ching Ming Festival	
	10	11	12	13	14	15	16	15/4 Good Friday. 16/4 Holy Saturday	
	17	18	19	20	21	22	23	18/4 Easter Monday.15/4-22/4 Easter Holiday.	
<del>                                     </del>	24	25	26	27	28	29	30	25/4-03/05 HKDSE Core subjects Exam	1
May	1	2	3	4	5	6	7	2/5 Labour Day	1
	8	9	10	11	12	13	14	9/5 Buddha's Birthday	1
<del>                                     </del>	_	_					_	oro badana o biranday	+
<del>                                     </del>	15	16	17	18	19	20	21	25/5 Cahaal Calf Evaluation Day	+
	22	23	24	25	26	27	28	25/5 School Self-Evaluation Day.	+
<del>                                     </del>	29	30	31						4
				1	2	3	4	3/6 Tuen Ng Festival. 2/6 Graduation	
June	5	6	7	8	9	10	11		
	12	13	14	15	16	17	18		
	19	20	21	22	23	24	25		
	26	27	28	29	30			30/6 Achievement Celebration	
						1	2	01/07 HKSAR Establishment Day	
July	3	4	5	6	7	8	9	4/7-14/8 Summer Holiday	1
	10	11	12	13	14	15	16		1
	17	18	19	20	21				1
<del>                                     </del>	_					22	23		+
	24	<u>25</u>	<u>26</u>	<u>27</u>	28	<u>29</u>	<u>30</u>		+
	<u>31</u>								-
August		1	2	3	4	5	6		
	7	8	9	10	11	12	13	12/08 New Staff Meeting	
	14	15	16	17	18	19	20	16-17/08 Staff Meeting	
	21	22	23	24	25	26	27		
	28	30	31	<u> </u>		<u> </u>	-		1
	20	30	31						1
	1					. 11:2			+
	c .	-114 - 2							
		ol Holi		nt Day	Publi	HOIR	Jay		_

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