Agreement No. CE 20/2004(EP) North East New Territories (NENT) Landfill Extension

Quarterly Environmental Monitoring and Audit Report (No. 3) – July to September 2023

2023-10-13

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Our Ref.: CL/91823/0737-VES
Date: 13 October 2023

By Email

Veolia Hong Kong Holding Limited
40/F, One Taikoo Place
979 King's Road
Quarry Bay
Hong Kong

Attn.: Mr. Colin Mitchell

Dear Sir

Re: Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
Quarterly Environmental Monitoring and Audit Report (No.3) – July to September 2023

I refer to Section 2.6 to 2.10 and Section 12.3 of the Environmental Monitoring and Audit Manual, regarding the submission of a quarterly Environmental Monitoring and Audit report. I hereby verify the captioned "Quarterly Environmental Monitoring and Audit Report (No.3) – July to September 2023" dated 13 October 2023.

Should you have any queries, please do not hesitate to contact the undersigned at 2859 5409.

Yours faithfully
MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD

Claudine Lee
Independent Environmental Checker

Aurecon Hong Kong Limited
Unit 1608, 16/F, Tower B,
Manulife Financial Centre,
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Ref: P521530-0000-REP-NN-0074

By Email

13 October 2023

Meinhardt Infrastructure & Environment Ltd.
10/F Genesis
33-35 Wong Chuk Hand Road
Hong Kong

Attn: Ms. Claudine Lee,

Dear Claudine,

Re: Contract No. EP/SP/77/15
Northeast New Territories Landfill Extension
Quarterly Environmental Monitoring and Audit Report (No. 3) – July to September 2023

In accordance with the requirement specified in Section 2.6 to 2.10 & Section 12.3 of Environmental Monitoring and Audit (EM&A) Manual, we are pleased to submit the certified "Quarterly Environmental Monitoring and Audit Report (No. 3) – July to September 2023" dated 13 October 2023 for your verification.

Should you require any further information or clarification, please do not hesitate to contact the undersigned or our Mr. Keith Chau on 3664 6788.

Yours faithfully,
For and on behalf of
Aurecon Hong Kong Limited

Fredrick Leong
Environmental Team Leader

Encl.
1. Quarterly Environmental Monitoring and Audit Report (No. 3) – July to September 2023

cc.
1. IEC - Ms. Claudine Lee (By email: claudinelee@meinhardt.com.hk)
2. IEC Representative – Ms. Echo Hung (By email: echohung@meinhardt.com.hk)

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Approval			
Reviewer's signature		Approver's signature	
Name	Keith Chau	Name	Fredrick Leong
Title	Associate, Environmental	Title	Environmental Team Leader

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Executive Summary

Aurecon Hong Kong Limited (Aurecon) was appointed to undertake the role of Environmental Team (ET) and carry out Environmental Monitoring and Audit for the North East New Territories (NENT) Landfill Extension.

The construction phase and EM&A programme of the Project commenced on 1 December 2022.

This 3rd Quarterly EM&A Report presents the EM&A works conducted from 1 July to 30 September 2023 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during Report Period

The major construction works undertaken during the reporting period include:

Construction Activities Undertaken	Reporting Month		
	Jul 2023	Aug 2023	Sep 2023
- Material loading and unloading, site traffic	✓	✓	✓
- Permanent site office foundation works with pouring of concrete	✓	✓	
- Construction of site buildings			✓
- Site clearance	✓	✓	✓
- Installation of permanent fencing	✓	✓	✓
- Site formation	✓	✓	✓
- Tree felling	✓	✓	✓
Shotcreting (Permanent and Temporary)			✓

Environmental Exceedance

Air Quality, Noise & Landfill Gas Monitoring
No exceedance of the Action and Limit Levels were recorded at designated monitoring stations during the reporting period.

Surface Water Quality Monitoring
No exceedance of the Action and Levels was recorded at designated monitoring stations in July 2023. One DO exceedance of the Action Level was recorded at Surface Water Quality Monitoring (WQM) Location WM1 in August 2023. No exceedance of the Limit Level was recorded at Surface WQM Location WM1 in August 2023. No exceedance of the Action and Limit Levels were recorded at Surface WQM Location WM2 in August 2023. No exceedance of the Action and Levels was recorded at designated monitoring stations in September 2023.

Environmental Non-conformance/Compliant/Summons and Prosecution

One warning regarding suspected non-compliance event with Condition 1.7 and 2.15(a) of the EP & Condition 1.7 and 2.13(a) of the FEP-01 & FEP-02 was recorded during the reporting period. The related rectified actions are being taken in progress by the contractor.

No summons/prosecutions were recorded and received in this reporting period.

Three Complaint received on 3 and 18 August 2023 & 14 September 2023 were recorded during the reporting period. For the complaint received on 3 August 2023, the further mitigation measures and enhancement of the temporary surface water drainage system were advised to implement by contractor. For the complaint received on 18 August & 14 September 2023, The related rectified actions should be conducted by the contractor as soon as possible.

1. Introduction

1.1. Background

1.1.1. The North East New Territories Landfill Extension (the NENTX Project) is located adjacent to the existing North East New Territories (NENT) Landfill at Ta Kwu Ling. The extension site is located in a valley covering mainly the existing NENT Landfill Stockpile and Borrow Area that was formed to the east of the existing landfill as part of the original site development of the landfill, and layout plan shown in **Figure 1**.

1.1.2. The NENTX is a designated project. The Environmental Impact Assessment (EIA) Report (AEIAR-111/2007) and an Environmental Monitoring and Audit Manual were approved on 20 September 2007. The project is governed by an Environmental Permit (EP) (EP-292/2007) which was granted on 26 November 2007. A further of EP (FEP) was applied and the FEP (FEP-01/292/2007) was subsequently granted on 28 April 2022. Another further of EP (FEP-02/292/2007) was subsequently granted on 23 August 2023.

1.1.3. In accordance with the requirements specified in Section 2.6 to 2.10 and Section 12.3 of the approved Environmental Monitoring and Audit (EM&A) Manual, Quarterly EM&A report should be submitted to the Director of Environmental Protection (DEP) within 10 working days after the end of the reporting quarter. The submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC).

1.1.4. The construction phase and EM&A programme of the Project commenced on 1 December 2022.

1.2. Nature, Scale and Scope of the captioned Designated Project

1.2.1 The Nature, Scale and Scope of the captioned Designated Project is presented in **Table 1-1**.

Table 1-1 Nature, Scale and Scope of the captioned Designated Project

Item(s)	Content
Nature of Designated Project	Construction and operation of a landfill for waste as defined in the "Waste Disposal Ordinance" (Cap. 354)
Scale and Scope of Designated Project	The Project mainly consists of the followings: - Construction and operation of a landfill extension of about 70 hectares with a target void space of at least 19 million cubic metres on the eastern side of the existing NENT Landfill, including the followings: - i. Site formation and preparation; ii. Installation of liner system; iii. Installation of leachate collection, treatment and disposal facilities; iv. Installation of gas collection, utilization and management facilities; v. Utilities provisions and drainage diversion; vi. Landfilling operation; vii. Restoration and aftercare in subsequent stages; and viii. Measures to mitigate environmental impacts as well as environmental monitoring and auditing to be implemented.

1.3. Purpose of this Report

1.3.1. This is the 3rd Quarterly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 01 July to 30 September 2023.

1.4. Structure of the Report

1.4.1. The structure of the report is as follows:

Section 1 – Introduction
- details the background, purpose and structure of the report.

Section 2 – Project Information
- summarises background and scope of the Project, site description, project organization and contact details, construction programme, the construction works undertaken and the status of Environmental Permit(s)/License(s) during the reporting period.

Section 3 – Air Quality Monitoring

- Construction Dust

Section 4 – Noise Monitoring

Section 5 – Water Quality Monitoring

- Groundwater Monitoring

- Surface Water Monitoring

Section 6 – Waste Management

Section 7 – Landfill Gas Monitoring

Section 8 – Landscape and Visual

Section 9 – Cultural Heritage

Section 10 – Ecological Monitoring

Section 11 – Site Inspection and Audit

Section 12 – Environmental Non-Conformance

Section 13 – Implementation Status on Environmental Mitigation Measures

Section 14 – Conclusion

2. Project Information

2.1. Construction Activities

2.1.1. A summary of the major construction activities undertaken in this reporting period is shown in **Table 2-1**. Construction programme is illustrated in **Appendix A**. Detailed construction activities are summarized in **Appendix B**.

Table 2-1 Major Construction Activities Undertaken in the Reporting Period

Construction Activities Undertaken	Reporting Month		
	Jul 2023	Aug 2023	Sep 2023
- Material loading and unloading, site traffic	✓	✓	✓
- Permanent site office foundatio works with pouring of concrete	✓	✓	
- Construction of site buildings			✓
- Site clearance	✓	✓	✓
- Installation of permanent fencing	✓	✓	✓
- Site formation	✓	✓	✓
- Tree felling	✓	✓	✓
Shotcreting (Permanent and Temporary)			✓

2.2. Project Organization & Management Structure

2.2.1. The Project Organization Chart & Management Structure are shown in **Appendix C**. The key personnel contact information is summarized in **Table 2-2**.

Table 2-2 Contact Information of Key Personnel

Party	Name	Contact Number
Contractor (Veolia Hong Kong Holding Ltd.)	Mr. Matt Choy	2902 5296
Independent Environmental Checker (IEC) (Meinhardt Infrastructure and Environment Ltd.)	Ms. Claudine Lee	2859 5409
Environmental Team Leader (ETL) (Aurecon Hong Kong Limited)	Mr. Fredrick Leong	3664 6888

2.3. Status of Submission required under the FEP & EP during reporting period

2.3.1. The status of statutory environmental compliance with the EP conditions under the EIAO, submission status under the FEP & EP during reporting period are presented in **Table 2-3**. The detail status of statutory environmental compliance with the EP conditions under the EIAO, submission status under the FEP & EP for NENTX project are shown in **Appendix D**.

Table 2-3 Status of Submissions required under the FEP & EP during reporting period

FEP Condition	EP Condition	Submission / Measures	Status
2.1	2.3	Management Organization of Main Construction Companies	Submitted
2.2	2.4	Setting up of Community Liaison Group	Community Liaison Group was set up.
2.3	2.5	Submission of EM&A Manual	Submitted
2.5	2.7	Submission of Vegetation Survey (Transplantation Proposal)	Submitted
2.6	2.8	Submission of translocation proposal	Submitted
2.7	2.9	Submission of Transplantation Report and Post-Transplantation Monitoring	Submitted 12th monitoring (18 Jul 2023) 13th monitoring (11 Aug 2023) 14th monitoring (15 Sep 2023)
2.8	2.10	Submission of Translocation Report and Post-Translocation Monitoring	Translocation was carried out and the report submitted. 12th monitoring (12 Jul 2023)
2.9	2.11	Submission of Detailed Landfill Gas Hazard Assessment Report	Submitted
2.10	2.12	Submission of Waste Management Plan	Submitted
3.2	3.2	Submission of Baseline Monitoring Report	Submitted
3.3	3.3	Submission of Monthly EM&A Report	8th report (Jul 2023) 9th report (Aug 2023) 10th report (Sep 2023)

2.4. Status of Environmental Approval Document

2.4.1. A summary of the relevant valid permits, licences, and/or notifications on environmental protection for this Project since the granting of the EP is presented in **Table 2-4**.

Table 2-4 Summary of the relevant valid permits, licences, and/or notifications on environmental protection

Permit / Licenses / Notification	Reference	Expiry Date	Remark
Environmental Permit (EP)	EP-292/2007	Throughout the Contract	Permit granted on 26 November 2007
Further Environmental Permit (FEP)	FEP-01/292/2007	Throughout the Contract	Permit granted on 28 April 2022
Further Environmental Permit (FEP)	FEP-02/292/2007	Throughout the Contract	Permit granted on23 August 2023
Notification of Construction Works as required under Air Pollution Control (Construction Dust) Regulation	479809	Throughout the Construction Phase	Notified on 13 May 2022
Registration of Waste Producer under Waste Disposal Ordinance	7043692	Throughout the Contract	Registered on 13 April 2022
Registration as Chemical Waste Producer	5213-642-P1034-18	Throughout the Contract	Registered on 11 July 2022
Construction Noise Permit	GW-RN0619-23	22 September 2023	Permit granted on 16 June 2023
Construction Noise Permit	GW-RN1012-23	22 December 2023	Permit granted on 22 September 2023 (Replaced CNP No. GW-RN0619-23)
Effluent Discharge License under Water Pollution Control Ordinance	WT00042301-2022	31 October 2027	Permit granted on 18 October 2022 Variation of Licence (Permit granted on 7 February 2023)

3. Air Quality Monitoring

3.1 Construction Dust

3.1.1 Monitoring Requirement

3.1.1.1 In accordance with the EM&A Manual, 1-hr & 24-hr Total Suspended Particulates (TSP) levels should be measured at the designated air quality monitoring stations in every 6 days to ensure that any deteriorating air quality could be readily detected, and timely action shall be undertaken to rectify such situation. For 1-hr TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs. The specific time to start and stop the 24- hr TSP monitoring shall be clearly defined for each location.

3.1.2 Monitoring Parameters, Frequency and Location

3.1.2.1 According to the EM&A Manual, three monitoring stations namely AM(D)1, AM(D)2 and AM(D)3 are selected for the impact monitoring.

3.1.2.2 A baseline monitoring plan has been submitted to IEC and EPD on 31 May 2022 including the proposal with justification of change of monitoring locations. Due to limited access to the original monitoring locations at AM(D)1, AM(D)2 and AM(D)3, the adjusted stations at AM1, AM2 and AM3 were agreed with IEC prior to the baseline and impact monitoring. The locations of adjusted dust monitoring locations are shown in **Figure 2**.

3.1.2.3 The locations of dust monitoring stations are shown in **Table 3-1**. The monitoring parameters, frequency and duration are shown in **Table 3-2**.

Table 3-1 Locations of Dust Monitoring Stations

Monitoring Station	Representative for	Monitoring Parameters
AM1	Tung Lo Hang	1-hr and 24-hr TSP
AM2	Heung Yuen Wai	1-hr and 24-hr TSP
AM3	Wo Keng Shan Tsuen	1-hr and 24-hr TSP

Remarks:

The contractor passed correspondence including original monitoring locations specified on the Approved EM&A Manual to the village representatives on 26 April 2022. After a meeting with Ta Kwu Ling District Rural Committee (RC) Chairman, representative from the RC and a few villagers on 1 May 2022, all the Village Heads of Wo Keng Shan Tsuen, Heung Yuen Wai and Lin Ma Hang verbally refused to accept our proposal for installation of dust and / or noise monitoring equipment within or next to their villages, for the baseline & impact monitoring.

AM(D)1 Tung Lo Hang, AM(D)2 Heung Yuen Wai, AM(D)3 Wo Keng Shan Tsuen are the air monitoring stations for the construction phase EM&A programme as identified in the approved EM&A Manual for the Project. The access to Tung Lo Hang, Heung Yuen Wai and Wo Keng Shan Tsuen were denied. A search for alternative air monitoring locations (AM1, AM2 & AM3) was carried out during the site visit.

The Baseline Monitoring Plan has been submitted to IEC and EPD including the proposal of change of monitoring locations on 31 May 2022. This arrangement was conducted between baseline and impact monitoring and has been agreed by the Independent Environmental Checker (IEC) and no comment received from EPD.

Due to the adjustment of the location of AM(D)1, AM(D)2 & AM(D)3to AM1, AM2 & AM3, the measured air quality levels at AM1, AM2 & AM3 would represent the air quality levels at AM(D)1, AM(D)2 & AM(D)3.

Table 3-2 Dust Impact Monitoring Parameters, Frequency and Duration

Monitoring Station	Parameter	Frequency and Duration
AM1, AM2, AM3	1-hr TSP	At least 3 times per 6 days
	24-hr TSP	1 time per 6 days

3.1.3 Monitoring Results

3.1.3.1 The impact dust monitoring results are summarized in **Table 3-3** and **Table 3-4.** The graphical presentations of monitoring data are presented in **Appendix E**.

Table 3-3 Summary of Impact 1-hr TSP Monitoring Results

Dust Monitoring Station	Average 1-hr TSP Concentration, µg/m³ (Range)			Action Level, µg/m³	Limit Level, µg/m³
	Jul 2023	Aug 2023	Sep 2023		
AM1	35 (21 – 46)	33 (20 – 40	44 (36 – 54)	>285	>500
AM2	34 (21 – 48)	35 (29 – 40)	39 (36 – 42)	>279	>500
AM3	32 (21 – 44)	39 (29 – 50)	45 (36 – 53)	>285	>500

Table 3-4 Summary of Impact 24-hr TSP Monitoring Results

Dust Monitoring Station	Average 24-hr TSP Concentration, µg/m³ (Range)			Action Level, µg/m³	Limit Level, µg/m³
	Jul 2023	Aug 2023	Sep 2023		
AM1	36 (17 – 60)	29 (19 – 37)	40 (32 – 48)	>164	>260
AM2	34 (25 – 48)	33 (27 – 43)	41 (30 – 53)	>152	>260
AM3	30 (22 – 40)	40 (27 – 63)	51 (36 – 67)	>163	>260

3.1.3.2 The Summary of Impact 1-hr & 24-hr TSP Exceedance are shown in **Table 3-5**.

Table 3-5 Summary of Impact 1-hr & 24-hr TSP Exceedance

Dust Monitoring Station	Parameter / Level Exceedance	1-hr TSP	Exceedance Count	Accumulate of project	24-hr TSP	Exceedance Count	Accumulate of project
AM1	Action	0	0	0	0	0	2*
	Limit	0	0	0	0	0	3*
AM2	Action	0	0	0	0	0	0
	Limit	0	0	0	0	0	0
AM3	Action	0	0	0	0	0	4*
	Limit	0	0	0	0	0	3*

Remarks: * equal to non-project related

3.1.3.3 No Action / Limit Level exceedance for 1-hr & 24-hr TSP impact monitoring at AM1, AM2 & AM3 was recorded during the reporting period. The Notification of Environmental Quality Limits Exceedances are presented in **Appendix F**.

3.1.4 Recommended Mitigation Measures

3.1.4.1 The recommended dust mitigation measures from EIA report are listed as followed:

- The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.
- Dust emission from construction vehicle movement is confined within the worksites area.
- Watering facilities will be provided at every designated vehicular exit point.
- Good site practice is recommended during construction phase.

3.1.5 Event and Action Plan

3.1.5.1 Should non-compliance of the criteria occur, action in accordance with the action plan in **Table 3-6** shall be carried out.

Table 3-6 Event and Action Plan for dust impact

Event	ET	IEC	Contractor
Exceedance of Action Level			
Exceedance for one sample	• Identify source • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurement to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below action level	• Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor on proposed remedial measures	• Rectify any unacceptable practice • Amend working methods if appropriate
Exceedance for two or more consecutive samples	• Identify source • Prepare Notification of Exceedance • Inform Contractor and IEC • Repeat measurements to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below action level • Discuss with IEC for remedial action required • Ensure remedial measures are properly implemented • Continue monitoring at daily intervals if exceedance is due to the Project • If no exceedance for 3 consecutive days, cease additional monitoring	• Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor on proposed remedial measures • Review with analysed results submitted by ET • Review the proposed remedial measures by Contractor • Supervise the implementation of remedial measures	• Submit proposals for remedial actions to IEC within 3 working days of notification • Implement the agreed proposals • Amend proposal if appropriate

Event	ET	IEC	Contractor
Exceedance of Limit Level			
Exceedance for one sample	• Identify source • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurement to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below limit level • Assess effectiveness of Contractor's remedial actions and keep EPD and IEC informed of the results	• Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor potential remedial actions • Supervise the implementation of remedial measures	• Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC within 3 working days of notification • Implement the agreed proposals • Amend proposal if appropriate
Exceedance for two or more consecutive samples	• Identify source • Prepare Notification of Exceedance • Inform IEC and EPD the causes and actions taken for the exceedances • Discuss with IEC for remedial action required • Ensure remedial measures are properly implemented • Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and informed of the results • Increase monitoring frequency to confirm findings • If exceedance stops, cease additional monitoring	• Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss amongst ET and Contractor on the potential remedial actions. • Review Contractor's remedial actions whenever necessary to assure their effectiveness • Supervise the implementation of remedial measures	• Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC of notification • Implement the agreed proposals • Resubmit proposals if problem still not under control • Stop the relevant activity of works until the exceedance is abated

4 Noise Monitoring

4.1 Monitoring Requirement

4.1.1 In accordance with the EM&A manual, noise impact monitoring shall be carried out at 2 monitoring stations NM1 and NM2 once a week during normal construction working hour (0700-1900 Monday to Saturday). The minimum logging interval shall be 30 minutes with average of 6 consecutive Leq 5 mins. L10 and L90 shall also be measured at 5 mins intervals.

4.2 Monitoring Locations, Parameters and Frequency

4.2.1 According to the EM&A Manual, two monitoring stations namely NM1 and NM2 are selected for the impact monitoring.

4.2.2 A baseline monitoring plan has been submitted to IEC and EPD on 31 May 2022 including the proposal with justification of change of monitoring locations. Due to limited access to the original monitoring locations at NM1 and NM2, the adjusted stations at NM1a and NM2a were agreed with IEC prior to the baseline and impact monitoring. The noise monitoring locations are summarized in **Table 4-1** and shown in **Figure 2**. The frequency and duration are shown in **Table 4-2**.

Table 4-1 Noise Monitoring Locations

Monitoring Station	Representative for	Type of Measurement
NM1a	Wo Keng Shan Tsuen	Free field
NM2a	Lin Ma Hang	Free field

Remarks:

The contractor passed correspondence including original monitoring locations specified on the Approved EM&A Manual to the village representatives on 26 April 2022. After a meeting with Ta Kwu Ling District Rural Committee (RC) Chairman, representative from the RC and a few villagers on 1 May 2022, all the Village Heads of Wo Keng Shan Tsuen, Heung Yuen Wai and Lin Ma Hang verbally refused to accept our proposal for installation of dust and / or noise monitoring equipment within or next to their villages, for the baseline & impact monitoring.

NM1 Wo Keng Shan Tsuen & NM2 Lin Ma Hang are the noise monitoring stations for the construction phase EM&A programme as identified in the approved EM&A Manual for the Project. The access to Tung Lo Hang, Heung Yuen Wai and Wo Keng Shan Tsuen were denied. A search for alternative noise monitoring locations (NM1a & NM2a) was carried out during the site visit.

The Baseline Monitoring Plan has been submitted to IEC and EPD including the proposal of change of monitoring locations on 31 May 2022. This arrangement was conducted between baseline and impact monitoring and has been agreed by the Independent Environmental Checker (IEC) and no comments received from EPD. Noise measurement at NM1a & NM2a will be considered as free-field and a correction of +3dB(A) would be made to the noise monitoring results.

Due to the adjustment of the location of NM1 & NM2 to NM1a & NM2a, the measured noise levels at NM1 & NM2 would represent the noise levels at NM1 & NM2.

Table 4-2 Noise Monitoring Parameters, Frequency and Duration

Monitoring Station	Parameter	Frequency and Duration
NM1a and NM2a	L_{Aeq} (30mins) average of 6 consecutive L_{eq} (5min); L10 (5min) & L90 (5min)	once a week during normal construction working hour (0700-1900 Monday to Saturday)

4.3 Monitoring Results

4.3.1 The impact noise monitoring results are summarized in **Table 4-3**. The graphical presentations of monitoring data are presented in **Appendix E**.

Table 4-3 Summary of Noise Monitoring Results during normal working hours (07:00-19:00, Monday to Saturday)

Noise Monitoring Station	Average Leq, 30min, dB(A) (Range)			Action Level	Limit Level
	Jul 2023	Aug 2023	Sep 2023		
NM1a	62.1 (61.0 – 63.7)	52.5 (51.3 – 53.1)	58.3 (56.6 – 59.3)	When one documented complaint is received	>75dB(A)
NM2a	56.3 (54.2 – 58.2)	51.1 (47.3 – 54.5)	53.6 (49.8 – 54.7)		

Remark:

(1) * A correction of +3 dB(A) was made to the free field measurements

(2) If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

4.3.2 No exceedance of Action and Limit Levels of construction noise was recorded during the reporting period. Therefore, there was no record of Notification of Environmental Quality Limits Exceedance in the **Appendix F**.

4.3.3 No particular observations are identified near the monitoring stations during the monitoring period.

4.4 Recommended Mitigation Measures

4.4.1 The recommended dust mitigation measures from EIA report are listed as followed:

1. Use of good site practices to limit noise emissions by considering the following:
    - Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;
    - Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;
    - Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;
    - Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works;

- Mobile plant should be sited as far away from NSRs as possible and practicable;
- Material stockpiles, mobile container site officer and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.

2. Select “Quiet plants” which comply with the BS 5228 Part 1 or TM standards.

4.5 Event and Action Plan

4.5.1 Should non-compliance of the criteria occurs, action in accordance with the action plan in **Table 4-4** shall be carried out.

Table 4-4 Event and action plan for construction noise monitoring

Event	ET	IEC	Contractor
Exceedance of Action Level	• Identify source, investigate the causes of exceedance • Prepare Notification of Exceedance • Inform IEC and Contractor • Report the results of investigation to IEC, and Contractor • Discuss with Contractor and IEC for formulate remedial measures • Ensure remedial measures are properly implemented • Have additional monitoring if exceedance is due to the Project. If exceedance stops, cease additional monitoring	• Verify the Notification of Exceedance • Review the analysed results submitted by ET • Discuss with ET, and Contractor on the potential remedial actions • Review the proposed remedial measures • Supervise the implementation of remedial measures	• Submit noise mitigation proposals to IEC • Implement the agreed noise mitigation proposals
Exceedance of Limit Level	• Identify source, investigate the causes of exceedance • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurements to confirm findings • Discuss with Contractor and IEC for remedial measures • Ensure remedial measures are properly implemented • Assess effectiveness of Contractor's remedial actions and keep IEC and EPD informed of the results • Have additional monitoring if exceedance is due to the Project. If exceedance stops, cease additional monitoring	• Verify the Notification of Exceedance • Review the analysed results submitted by ET • Discuss with ET, and Contractor on the potential remedial actions • Review the proposed remedial measures • Supervise the implementation of remedial measures	• Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC of notification • Implement the agreed proposals • Resubmit proposals if problem still not under control • Stop the relevant portion of works as determined by project proponent until the exceedance is abated.

5 Water Quality Monitoring

5.1 Groundwater Monitoring

5.1.1 Monitoring Requirement

5.1.1.1 In accordance with the EM&A manual, groundwater quality monitoring shall be carried out at least once per month at the 35 designated groundwater monitoring locations (i.e ED1 to ED35). Based on the existing construction programme, site clearance and site formation works for future landfilling area are in progress. The groundwater monitoring locations ED1 to ED35 will be installed after the site formation work of the landfilling area. No groundwater monitoring is required before the completion of site formation work of the landfilling area.

5.2 Surface Water Monitoring

5.2.1 Monitoring Requirement

5.2.1.1 In accordance with the EM&A manual, impact surface water quality monitoring was carried out at the two designated surface water discharge points (i.e WM1 and WM2) for once per month from commencement of construction works of the Project.

5.2.2 Monitoring Locations, Parameters and Frequency

5.2.2.1 Impact surface water monitoring was carried out at WM1 and WM2. Additional surface water monitoring was carried out at WM2 and GR3 (EPD Monitoring Location). The monitoring locations are indicated in **Table 5-1** and **Figure 2**.

5.2.2.2 The monitoring parameters, frequency and duration of surface water quality monitoring are summarized in **Table 5-2**. The additional parameters, frequency and duration of surface water quality monitoring are summarized in **Table 5-3.**

Table 5-1 Surface water quality monitoring locations

Monitoring Station	Location	Coordinates (HK Grid)	
		Easting	Northing
WM1	Upstream of Lin Ma Hang River	836665	845020
WM2	Ping Yuen River	835592	844186
GR3*	Ping Yuen River	835361	844134

Remarks:

"*" The monitoring location only conducted based on the environmental complaint.

Table 5-2 Surface water quality monitoring Parameters, Frequency and Duration

Parameter	Frequency
pH, Electrical conductivity, DO, Turbidity, SS, Alkalinity, COD, BOD_5, TOC, Ammonia-nitrogen, TKN, Nitrate, Sulphate, Sulphite, Phosphate, Chloride, Sodium, Mg, Ca, K, Fe, Ni, Zn, Mn, Cu, Pb, Cd, Coliform Count, Oil and Grease	Once per month

Table 5-3 Additional surface water quality monitoring Parameters, Frequency and Duration

Parameter	Frequency
pH, Electrical conductivity, DO, Turbidity, SS, COD, BOD5, Ammonia-nitrogen, Chloride, Fe, Zn, and Coliform Count	Based on the case of Environmental Complaint

5.2.3 Monitoring Results

5.2.3.1 The summary of monitoring results is presented in **Table 5-4**, **Table 5-5** & **Table 5-6**. Detailed graphical presentations at each monitoring station of surface water quality (DO, SS and Turbidity) at the monitoring stations are given in **Appendix E.**

Table 5-4 Summary of Impact Surface Water Monitoring Results at WM1

Monitoring Parameter(s)	Monitoring Station WM1				
	Monitoring Results			Action Level	Limit Level
	Jul 2023	Aug 2023	Sep 2023		
pH	7.2	6.7	7.2	>7.7	>7.8
Electrical Conductivity in µS/cm	99	68	47	---	---
DO in mg/L	7.5	6.5	7.8	<7.4	<4
Turbidity in NTU	6.1	7.4	4.3	>9.2	>9.5
SS in mg/L	2.0	7.2	3.0	>9.7	>11.4
Alkalinity	18	19	11	---	
COD	12	6	9		
BOD_5	<2	<2	<2		
TOC	3	<1	2		
Ammonia-nitrogen	0.03	0.02	0.04		
TKN	0.4	0.2	0.4		
Nitrate	0.53	0.05	0.05		
Sulphate	7	2	4		
Sulphite	<2	<2	<2		
Phosphate	0.01	<0.01	0.02		
Chloride	7	5	6		
Sodium	8350	7740	6340		
Mg	660	560	430		
Ca	19400	3740	<0.2		
K	690	460	680		
Fe	780	780	270		
Ni	<1	<1	<1		
Zn	72	15	14		
Mn	72	46	32		
Cu	2.0	<1	1		
Pb	<1	<1	<1		
Cd	<0.2	<0.2	<0.2		
Coliform Count	56	68	240		
Oil and Grease	<5	<5	<5		

Remarks:
"TBC" equal to To Be Confirm

Table 5-5 Summary of Impact Surface Water Monitoring Results at WM2

Monitoring Parameter(s)	Monitoring Station WM2				
	Monitoring Results			Action Level	Limit Level
	Jul 2023	Aug 2023	Sep 2023		
pH	7.1	6.8	7.2	>7.6	>7.7
Electrical Conductivity in µS/cm	137	133	125	---	---
DO in mg/L	50.2	32.2	7.6	<5	<4
Turbidity in NTU	7.3	7.0	12	>108.3	>108.9
SS in mg/L	16.8	30.8	7.6	>94.7	>94.7
Alkalinity	38	35	31	---	
COD	9	7	6		
BOD_5	<2	<2	<2		
TOC	2	<1	2		
Ammonia-nitrogen	0.07	0.08	0.13		
TKN	0.3	0.4	0.3		
Nitrate	0.26	0.24	0.24		
Sulphate	13	17	20		
Sulphite	<2	<2	<2		
Phosphate	<0.01	<0.01	<0.01		
Chloride	7	6	4		
Sodium	6120	5840	4680		
Mg	1330	1480	1290		
Ca	15600	16100	<0.2		
K	2130	2140	1450		
Fe	2370	2710	670		
Ni	2.0	4	<1		
Zn	26	68	10		
Mn	757	1160	563		
Cu	2	2	<1		
Pb	3	4	1		
Cd	<0.2	<0.2	<0.2		
Coliform Count	850	290	290		
Oil and Grease	<5	<5	<5		

Remarks:
"TBC" equal to To Be Confirm

Table 5-6 Summary of Additional Impact Surface Water Monitoring Results in September 2023

Monitoring Parameter(s)	Monitoring Station			
	WM2			GR3 (EPD Monitoring Location)
	Monitoring Results	Action Level	Limit Level	Monitoring Results
pH	7.5	>7.6	>7.7	7.4
DO in mg/L	7.8	<5	<4	7.6
Turbidity in NTU	8.8	>108.3	>108.9	13.1
Electrical Conductivity in µS/cm	71	---	---	108
SS in mg/L	5.5	>94.5	>94.7	4.9
COD in mg/L	<5			6
BOD_5 in mg/L	<2			<2
Ammonia-nitrogen in mg/L	2			2
Chloride in mg/L	0.12			0.10
Iron in µg/L	910			670
Zinc in µg/L	13			20
Coliform Count in cfu/100mL	3400			380

Remarks:
"TBC" equal to To Be Confirm

5.2.3.2 No exceedance of Action Levels of surface water monitoring was recorded in July 2023.

5.2.3.3 One DO exceedance of Action Level of surface water quality at WM1 was recorded in August 2023. The Notification of Environmental Quality Limits Exceedance is presented in **Appendix G**. In summary of the investigation, the DO exceedance in Action Level of Surface Water Quality at WM1 may involve the vary of temperature under the hot weather. Therefore, the exceedance is not related to project. No exceedance of Limit Level of surface water monitoring at WM1 was recorded in August 2023. No exceedance of Action Levels and Limit Level of surface water monitoring at WM2 were recorded in August 2023.

5.2.3.4 No exceedance of Action and Limit Levels of surface water monitoring was recorded in September 2023.

5.2.3.5 The Summary of Impact Surface Water Quality Exceedance are shown in **Table 5-7**. The Notification of Environmental Quality Limits Exceedances will be presented in the report after the investigation.

Table 5-7 Summary of Impact Surface Water Quality Exceedance during the reporting period

Water Quality Monitoring Station	Parameter / Level Exceedance	pH	DO	Turbidity	SS	Exceedance Count
WM1	Action	0	1*	0	0	1*
	Limit	0	0	0	0	0
WM2	Action	0	0	0	0	0
	Limit	0	0	0	0	0

Remarks:

(1) # The investigation results will be presented in the report after the investigation.

(2) * equal to non-project related

5.2.4 Recommended Mitigation Measure

5.2.4.1 The recommended surface water mitigation measures from EIA report are listed as followed:

- Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities.
- The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows.
- The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silts and sediment traps should be 5 minutes under maximum flow conditions.
- All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads.
- Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts.
- Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.

5.2.5 Event and Action Plan

5.2.5.1 Should non-compliance of the criteria occurs, action in accordance with the action plan in **Table 5-8** shall be carried out.

Table 5-8 Event and Action Plan for Water Quality

Event	ET	IEC	Contractor
Action level being exceeded by one sampling day	• Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor • Check monitoring data, all plant, equipment and Contractor's working methods • Repeat measurement on next day of exceedance	• Verify Notification of Exceedance • Check monitoring data and Contractor's working methods	• Rectify unacceptable practice • Amend working methods if appropriate
Action level being exceeded by two or more consecutive sampling days	• Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss with Contractor and IEC for remedial measures • Ensure mitigation measures are implemented • Increase the monitoring frequency to daily until no exceedance of Action level • Repeat measurement on next day of exceedance	• Verify Notification of Exceedance • Check monitoring data and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures	• Submit proposal of additional mitigation measures to IEC of notification • Implement the agreed mitigation measures • Amend proposal if appropriate

Event	ET	IEC	Contractor
Limit Level being exceeded by one sampling day	• Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor; • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss mitigation measures with IEC and Contractor • Ensure mitigation measure are implemented	• Verify Notification of Exceedance • Check monitoring data submitted By ET and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures	• Critically review the working method • Rectify unacceptable practice • Take immediate corrective actions to avoid further exceedance • Submit proposal of mitigation measures to IEC • Implement the agreed mitigation measures
Limit level being exceeded by two or more consecutive sampling days	• Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC, contractor and EPD • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss mitigation measures with IEC and Contractor • Ensure mitigation measure are implemented	• Verify Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures	• Critically review the working method • Rectify unacceptable practice • Take immediate corrective actions to avoid further exceedance • Submit proposal of mitigation measures to IEC • Implement the agreed mitigation measures • Resubmit proposals if problem still not under control • Slow down or to stop relevant activity until exceedance is abated

6 Waste Management

6.1 Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D materials were made up of general refuse, steels and paper/cardboard packaging materials. Steel materials generated from the Project were 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 **Appendix G**.

6.2 The recommended waste management mitigation measures from EIA report are listed as followed:

- Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and verified in accordance with DEVB TC(W) No. 6/2010.
- Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills.
- Proper areas should be designated for waste segregation and storage wherever site conditions permit.
- Maximise the use of reusable steel formwork to reduce the amount of C&D material.
- Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement.
- On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste.
- The sorted public fill and C&D waste should be properly reused.
- Excavated slope, stockpiled material and bund walls should be covered by tarpaulin until used in order to prevent wind-blown dust during dry weather, and to reduce muddy runoff during wet weather.

7 Landfill Gas Monitoring

7.1 Monitoring Requirement during Construction

Monitoring for Construction Works

7.1.1 Intrinsically safe portable gas detectors should be used during excavation or when working in any confined spaces, which have the potential for presence of LFG and risk of explosion or asphyxiation. The monitoring equipment should alarm, both audibly and visually, when the concentrations of the following gases were exceeded:

- CH_4: >10% Lower Explosion Limit (LEL);
- CO_2: >0.5%; and
- O_2: <18% by volume.

7.2 Monitoring Location

7.2.1 During the construction works within the NENT Landfill Extension site with excavation of 1m deep or more, LFG concentrations should be monitored before entry and periodically during the progress of works. If drilling is required, the procedures for safety management and working procedures as stipulated in EPD's Landfill Gas Hazard Assessment – Guidance Note should be strictly adopted.

7.2.2 The monitoring frequency and areas to be monitored should be set down prior to commencement of groundworks by the Safety Officer. All measurements in excavations should be made with the monitoring tube located not more than 10mm from the exposed ground surface. Monitoring of excavations should be undertaken as follows:

7.2.3 For excavation works deeper than 1m, measurements should be made:

• at ground surface prior to excavation;
• immediately before any worker enters the excavation;
• at the beginning of each working day for the entire period the excavation remains open; and
• periodically through the working day whilst workers are in the excavation.

7.2.4 For excavation between 300mm and 1m deep, measurements should be made:

• directly after the excavation has been completed; and
• periodically whilst the excavation remains open.

7.2.5 For excavations less than 300mm deep, monitoring may be omitted, at the discretion of the Safety Officer.

7.2.6 The locations of LFG monitoring locations during reporting period are shown in **Table 7-1**. The Site formation layout plan is shown in **Figure 2** and the Layout of LFG monitoring locations is presented in **Figure 3**.

Table 7-1 Locations of LFG Monitoring during reporting period

Monitoring Period	Monitoring Location	Type of works
Jul to Sep 2023	Portion A +50 mpD to 70 mpD Platform	Excavation Works

7.3 Monitoring Results

7.3.1 The LFG monitoring was conducted at Portion A +50 mpD to 70 mpD Platform (Conducted on working days) from July to September 2023. The LFG monitoring results are summarized in **Table 7-2.**

Table 7-2 Summary of LFG Monitoring Results

LFG Monitoring Station	Monitoring Date	Monitoring Parameter(s)			
		CH_4 in %	LEL in %/v	CO_2 in %	O_2 in %
		Average Monitoring Results (Range)			
Portion A +50 mpD to 70 mpD Platform	Jul 2023	0	0	0	20.1 (20.0 – 20.2)
	Aug 2023	0	0	0	20.2 (20.1– 20.4
	Sep 2023	0	0	0	20.2 (20.1 – 20.2)
Action Level		>10% LEL	---	>0.5%** CO_2	<19%

* LEL: Lower Explosive Limit - concentrations in air below which there is not enough fuel to continue an explosion.

** This Limit Level of CO_2 at 0.5% is set for reference only, assuming no CO_2 emission from a particular location.

7.3.2 No exceedance of Limit Levels of LFG was recorded during the reporting period. Therefore, there was no record of Notification of Environmental Quality Limits Exceedance in the **Appendix F**.

7.3.3 No effect that arose from the other special phenomena and work progress of the concerned site was noted during the current monitoring month.

7.4 Recommended Mitigation Measures

7.4.1 The recommended landfill gas mitigation measures from EIA report are listed as followed:

- Special LFG precautions should be taken due to close proximity of NENT landfill extension site to existing landfill to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity).
- Prominent safety warning signs should be erected on-site to alert all personnel and visitors of LFG hazards during excavation works.
- No smoking or burning should be permitted on-site.
- Prominent 'No smoking' and ‘No Naked Flames’ signs should be erected on-site.
- No worker should be allowed to work alone at any time in excavated trenches or confined areas on-site.
- Adequate fire fighting equipment should be provided on-site.
- Construction equipment should be equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors.
- Electrical motors and extension cords should be explosion-proof and intrinsically safe for use on-site.
- ’Permit to Work' system should be implemented.

- Welding, flame-cutting or other hot works should be conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works.

7.5 Event and Action Plan (EAP)

7.5.1 Should non-compliance of the criteria occur, action in accordance with the action plan in **Table 7-3** shall be carried out.

Table 7-3 Action Plan for the monitoring during construction phase

Parameter	Monitoring Result	Action
Oxygen (O_2)	Action Level <19% O_2	Ventilate trench/void to restore O_2 to >19%
	Limit Level <18% O_2	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore O_2 to >19%
Methane (CH_4)	Action Level >10% LEL*	Prohibit hot works Increase ventilation to restore CH_4 to <10% LEL
	Limit Level >20% LEL*	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore CH_4 to <10% LEL
Carbon dioxide (CO_2)	Action Level** >0.5%** CO_2	Ventilate to restore CO_2 to <0.5%
	Limit Level >1.5% CO_2	Stop works Evacuate personnel / prohibit entry Increase ventilation to restore CO_2 to <0.5%

* LEL: Lower Explosive Limit - concentrations in air below which there is not enough fuel to continue an explosion.

** This Action Level of CO_2 at 0.5% is set for reference only, assuming no CO_2 emission from a particular location.

Depending on the baseline CO_2 levels, the Action Level at a particular location will be changed.

8 Landscape and Visual

8.1 Monitoring Requirement

8.1.1 In order to monitor the landscape and visual impact after providing mitigation measures effectively, all the specified and affected LCAs, LRs and VSRs should be monitored. Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.

8.1.2 All relevant environmental mitigation measures listed in the approved EIA Report and the EM&A Manual, and their implementation status are summarised in **Appendix H**.

8.2 Result and Observation

8.2.1 Measures to mitigate the landscape and visual impacts during the construction phase has been checked to ensure compliance with the intended aims of the measures within the reporting period. The progress of the engineering works are regularly reviewed on site to identify the earliest practical opportunities for the landscape works to be undertaken.

8.2.2 In order to monitor the landscape and visual impact after providing mitigation measures effectively, all the specified and affected LCAs, LRs and VSRs should be monitored. Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.

9 Cultural Heritage

9.1.1 The Mitigation measures for preservation of the cultural landscape feature located within the project area was conducted before commencement of construction of the project based on the requirement of Survey Report and Mapping Records for Boulder Paths BP1 & 2 & Conditions of G2, G4, G5 G6, G7, G8, G14, G15, G25, G26 and G27 within NENTX.

9.1.2 The survey and mapping works carried out on 25 April 2022 and the verification works carried out on 23 August 22 confirmed that both 2 boulder paths BP1 and BP2 are fall outside the site boundary and the Project area.

9.1.3 All the affected graves within the waste boundary have been removed in accordance with section 119(1) of the Public Health and Municipal Services Ordinance (Cap 132). Removal of the graves as shown on Figure 2 attached to the FEP was proven by the visit of graves on 22 August 2022. All the graves as shown on Figure 2 attached to the FEP were abandoned and removed and no mitigation or preservation measures is necessary.

9.1.4 The Survey Report and Mapping Records for Boulder Paths BP1 & 2 was certified by ET on 10 Oct 2022, was verified by IEC and submitted to EPD on 12 Oct 2022. The Conditions of G2, G4, G5 G6, G7, G8, G14, G15, G25, G26 and G27 within NENTX was certified by ET, was verified by IEC and submitted to EPD on 15 Oct 2022. No later than four weeks before commencement of construction of the project in accordance with Condition 2.4 of the FEP-01/292/2007.

9.1.5 Implementation of the mitigation measures such as permanent fencing to protect the boulder path and setting up warning notices during construction phase of the Project has been monitored through the regular site inspection/audit. The permanent fencing locations are shown in **Appendix I**. In case of any presence of undiscovered grave during construction phase, AMO will be informed as soon as possible.

10 Ecological Monitoring

10.1.1 The post-transplantation monitoring was conducted on 18 Jul, 11 Aug & 15 Sep 2023 based on the requirement of the approved Transplantation Proposal for Plant Species of Conservation Importance (Rev.1). The 12th to 14th Post-transplantation Monitoring and Audit Reports (18th July to 15th September 2023) present the details of requirements, monitoring results and site inspection with photos. During the reporting period, the numbers, measurements, and health conditions of the transplanted plant species are recorded.

10.1.2 In the reporting period, the post-translocation monitoring for the Endemic Freshwater Crab *Somanniathelphusa zanklon* was conducted on 12 Jul 2023 based on the requirement of the approved Revised Translocation Proposal for the Endemic Freshwater Crab *Somanniathelphusa zanklon*. The 12th Post-Translocation Monitoring Report (July 2023) presents the details of requirements, monitoring results and site inspection with photos. During the reporting period, no *S. zanklon* individual is identified.

10.1.3 The details of requirements, monitoring results and site inspection with photos for the post-translocation monitoring and post-transplantation monitoring would be reported separately.

10.1.4 The milestone of the ecological monitoring is presented in **Table 10-1.** The softcopies of the submissions are provided in https://www.nentx-ema.com/ep-submissions/.

Table 10-1 Milestone of the Ecological Monitoring

Type of Monitoring	Monitoring Event No.	Monitoring Date
Post-transplantation Monitoring	1st	24 Nov 2022
	2nd	9 Dec 2022
	3rd	21 Dec 2022
	4th	13 Jan 2023
	5th	26 Jan 2023
	6th	8 Feb 2023
	7th	24 Feb 2023
	8th	20 Mar 2023
	9th	21 Apr 2023
	10th	12 May 2023
	11th	16 Jun 2023
	12th	18 Jul 2023
	13th	11 Aug 2023
	14th	15 Sep 2023
Post-translocation Monitoring	1st (Nov 2022)	24 Nov 2022
	2nd (Dec 2022)	9 Dec 2022
	3rd (Dec 2022)	21 Dec 2022
	4th (Jan 2022)	13 Jan 2023
	5th (Jan 2022)	26 Jan 2023
	6th (Feb 2023)	8 Feb 2023
	7th (Feb 2023)	24 Feb 2023
	8th (Mar 2023)	20 Mar 2023
	9th (Apr 2023)	21 Apr 2023
	10th (May 2023)	12 May 2023
	11th (Jun 2023)	11 Jun 2023
	12th (Jul 2023)	12 Jul 2023

11 Site Inspection and Audit

11.1.1 Site Inspection and audits were carried out by ET on weekly basis to monitor the implementation of proper environmental management practices and mitigation measures in the Project Site.

11.1.2 Total 13 weekly environmental site inspections were conducted during the reporting period. 4 of them were the joint environmental site inspections with the representatives of ER, Contractor, IEC and ET. There was no noncompliance recorded during the site inspections.

11.1.3 Details of observations and recommendations are summarized in **Table 11-1**.

Table 11-1 Observations and Recommendations of Site Audit

Parameter	Date	Observation and Reminders	Follow-up Action Taken
Air Quality	3 Jul 2023	**Observation:** Dusty stockpiles in Portion A shall be covered with impervious sheets when they are not in used.	The Contractor was reminded to cover the dusty stockpile with impervious sheets.
	31 Jul 2023	**Observation:** The slope surface at the Portion E4 shall be coved by impervious sheet.	The contractor was recommended that the exposed slope at the Portion E4 should be covered by impervious sheet. The exposed slope at the Portion E4 should be treated with shotcrete for long term.
	31 Jul 2023	**Observation:** The assess road at the Portion E4 was dry.	The contractor was advised that the assess road at the Portion E4 should be sprayed with water when the assess road is dry to minimize the dust suppression. The water sprinkler should be considered to establish at the assess road of the Portion E4.
	28 Aug 2023	**Observation:** The work area in Portion A was dry and dusty.	The contractor was advised to schedule watering in the work area and review the coverage of the water sprinkler.
	4 Sep 2023	**Observation:** Dust drift was found at the assess road of Portion A when vehicle moving.	The contractor was advised to increase the frequency of water spraying at the assess road of Portion A.
	11 Sep 2023	**Observation:** The dusty stockpile in SBA should be covered with impervious sheet when the rainfall is forecast.	The Contractor was advised to cover the stockpiles with impervious sheet when they are idle.

Parameter	Date	Observation and Reminders	Follow-up Action Taken
Air Quality	18 Sep 2023	**Observation:** The demolished tree, shrub or vegetation in Portion B2 should be covered with impervious sheets or placed within a shelter.	The Contractor was reminded to cover the demolished tree, shrub or vegetation with impervious sheets or placed within a shelter.
	18 Sep 2023	**Observation:** The dry PFA in Portion B2 should be covered entirely with impervious sheets.	The Contractor was reminded to cover dry PFA entirely with impervious sheets.
	18 Sep 2023	**Observation:** The metal plate at the vehicle entrance in Portion B2 should cover unpaved road surface in Portion B2.	Vehicle entrance should be paved with concrete, bituminous materials, hardcore or metal plates, and kept clear of dusty materials.
	18 Sep 2023	**Observation:** The main haul road in Portion E4 was dry ad dusty.	The Contractor was advised to schedule watering and recommended to install water sprinklers or mist spray in long term.
	25 Sep 2023	**Observation:** The main haul road and work site should be wetted regularly to minimize the dust dispersion.	The Contractor was reminded to switch on the water sprinklers along the haul road in SBA and to schedule watering for unpaved haul road and work area. The Contractor has been advised to increase the frequency of watering if necessary under the hot weather condition to minimize dust dispersion.
Noise	No specific observation was identified in the reporting period.		
Water Quality	3 Jul 2023	**Observation:** Muddy water was observed at the vehicular entrance in Portion A.	The Contractor was reminded to clear the muddy water and divert the muddy water to wastewater treatment facility.
	12 Jul 2023	**Observation:** The stagnant water, floating leaves, deposited silt and grit were found at the sedimentation basin near the wheel washing facilities at the Portion B1.	The contractor was recommended that the stagnant water should be collected to silt removal facilities for treatment before reusing for wheel washing. The floating leaves, deposited silt and grit should be removed regularly.
	12 Jul 2023	**Observation:** The exposed slope surfaces were not covered by tarpaulin sheets or treated with shotcrete at the Portion E3-1.	The contractor was recommended to implement the cover works of exposed slope surfaces by tarpaulin sheets or shotcrete at the Portion E3-1 to minimise the potential high concentration construction runoff to silt removal facilities.

Parameter	Date	Observation and Reminders	Follow-up Action Taken
Water Quality	18 Jul 2023	**Observation:** The earth bund along the edge of the slope in Portion A was collapsed. The earth bund along the edge of the slope in Portion A should be reconstructed to prevent surface runoff flowing outside the site boundary.	The Contractor was reminded to review the height of the earth bund to ensure the surface runoff should not flow outside the site boundary.
	24 Jul 2023	**Observation:** Dusty materials was entering in the exist channel in Portion A.	Earth bund or sand barriers shall be provided along the existing channels in Portion A.
	24 Jul 2023	**Observation:** Earth bund shall be constructed at the edge of the slope to prevent surface runoff flowing outside the site in Portion A.	The contractor was recommended to construction earth bund along the edge of the slope in Portion A.
	24 Jul 2023	**Observation:** The accumulated silt and grit were found near the sandbags barriers of the Portion E3-1 silt removal facilities.	The contractor was advised that the silt and grit should be removed near the sandbags barriers of the Portion E3-1 silt removal facilities after heavy rain.
	24 Jul 2023	**Reminder:** The accumulated silt in sedimentation basin Portion E3 shall be removed regularly.	The Contractor was reminded to clear up the accumulated silt regularly to ensure the proper function of the sedimentation basin.
	31 Jul 2023	**Reminder:** The contractor was reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94.	The contractor was reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94.
	31 Jul 2023	**Observation:** Earth bunds and ditches should be established at the boundary of the +52 mpd Platform of the Portion A.	The contractor was advised that the earth bunds and ditches should be constructed at the boundary of the +52 mpd Platform of the Portion A. The sandbags barriers or other control of surface runoff measures should be provided at the boundary in short term to avoid the surface runoff flow to the earth bunds at the boundary of the +38 mpd platform directly.
	07 Aug 2023	**Reminder:** Earth bunds, sand barriers or alternative shall be provided to prevent sand or silt entering the existing channel through the gaps in Portion A.	The contractor was advised to set up barriers or other measures to prevent sand and silt getting into the channel.

Parameter	Date	Observation and Reminders	Follow-up Action Taken
Water Quality	07 Aug 2023	**Reminder:** The contractor was reminded to ensure the silt removal facility functioning properly in Portion A.	The contractor was reminded that silt removal facility should be checked to ensure that they can function properly.
	07 Aug 2023	**Observation:** Flocs and fine particles are floating on the water surface in sedimentation tank of the silt removal facility while sand and silt were accumulated in the outlet in Portion E3.	The Contractor was advised to schedule cleaning works for the silt removal facility in Portion E3.
	14 Aug 2023	**Observation:** The accumulated surface runoff at the lower elevation in Portion D should be diverted to the silt removal facility for wastewater treatment after the rainfall.	The contractor was advised to pump out the accumulated surface runoff and divert to silt removal facility.
	14 Aug 2023	**Observation:** Silt was observed in the existing channel at Portion A. The existing channel should be kept away from sand, silt and surface runoff.	The contractor was recommended to construct earth bund with shotcrete along the existing channel in order to prevent surface runoff entering the channel in Portion A.
	14 Aug 2023	**Observation:** The mixture of silt, sand, rotten leaves and stagnant water in the drip tray should be cleared off after the rainfall.	The contractor was reminded to clear the drip trays after the rainfall.
	14 Aug 2023	**Observation:** The accumulated silt near the fencing in Portion A should be cleared off before and after rainstorm.	The contractor was advised to clear the accumulated silt near the fencing in Portion A and sedimentation basin in Portion E3 before and after rainstorm.
	14 Aug 2023	**Observation:** The accumulated silt in the sedimentation basin at Portion E3 should be regularly removed, especially before and after the rainstorm.	The contractor was advised to clear the accumulated silt near the fencing in Portion A and sedimentation basin in Portion E3 before and after rainstorm.
	14 Aug 2023	**Observation:** The mixture of silt, sand, rotten leaves and stagnant water in the drip tray should be cleared off after the rainfall.	The contractor was reminded to clear the drip trays after the rainfall.

Parameter	Date	Observation and Reminders	Follow-up Action Taken
Water Quality	14 Aug 2023	**Observation:** The silt removal facility was malfunctioned in Portion E3 and flocs are observed on the surface of silt removal facility in both Portion A and Portion E3. The collected wastewater should undergo sufficient mixing to ensure the discharged wastewater should comply with the requirement of WPCO license.	The Contractor has been advised to stop the discharge of wastewater from the malfunctioned silt removal facility immediately. The wastewater should be stored or treated by another silt removal facility temporarily before the original silt removal facility is functioning properly. The Contractor should ensure the discharged wastewater to comply with the requirement of WPCO license.
	14 Aug 2023	**Observation:** The untreated wastewater was leaked into the channel at Portion E3. The channel should be kept away from untreated wastewater and general waste.	The contractor was also recommended to increase the number of silt removal facility so as to increase the capacity of wastewater treatment for long term.
	14 Aug 2023	**Reminder:** The Contractor was reminded to check silt removal facilities, channels and manholes to ensure that they can function properly for the upcoming rainfall in this week.	The contractor was advised to seal the leakage point(s) and place sandbag barriers along the channel to stop the discharge of untreated wastewater in the channel immediately. The accumulated silt and general waste in the channel should be removed. The Contractor has been recommended to review the design of the sedimentation basin to prevent this situation from happening again in the future.
	21 Aug 2023	**Observation:** Earth bond shall be constructed at the edge of the slope to prevent surface runoff flowing outside the site in Portion A.	The contractor was recommended to construction earth bund along the edge of the slope in Portion A.
	28 Aug 2023	**Observation:** Dusty materials was entering in the exist channel in Portion A.	Earth bund or sand barriers shall be provided along the existing channels in Portion A.
	4 Sep 2023	**Observation:** Surface runoff should be intercepted to avoid direct discharge into the channel at Portion E3.	The Contractor should review the effectiveness of setting up sandbag barriers and modify measures to prevent the discharge of surface runoff in both short term and long term. The Contractor was advised to stop the discharge of surface runoff to channel immediately by using any mitigation measures they found appropriate. In long term, the Contractor has been recommended to construct earth bund along the channel to prevent this situation happening again.

Parameter	Date	Observation and Reminders	Follow-up Action Taken
Water Quality	4 Sep 2023	**Observation:** The condition of silt fence in SBA should be reviewed after the heavy rainfall over the few days and should be replaced when it is broken.	The broken or collapsed silt fence should be replaced and properly set up after the heavy rainfall from last week.
	25 Sep 2023	**Observation:** The exposed slope surface along the channel should be paved to reduce SS level in the wastewater.	The Contractor was recommended to shotcrete the exposed slope surface along the channel to reduce SS level in the wastewater.
	25 Sep 2023	**Observation:** The accumulated sand or silt in the outlet of the silt removal facility at Portion A should be removed.	The Contractor was advised to clear the accumulated sand or silt in the outlet of the silt removal facility at Portion A.
Waste and Chemical Management	3 Jul 2023	**Observation:** Chemical containers in SBA shall be stored properly to prevent any potential of chemical leakage and generation of chemical waste.	The contractor has been reminded to provide proper chemical storage area on site.
	12 Jul 2023	**Observation:** Full loading of the rubbish skips for general waste at the Portion D and lack of waste separation were found.	The contractor was recommended that accumulation of waste should be avoid, the waste should be disposed regularly & the general waste should be collected properly by using the waste separation facilities for paper, aluminium cans and plastic bottles etc.
	12 Jul 2023	**Observation:** The high amount of deposited silt was found at the silt removal facilities at the Portion E3-1.	The contractor was advised that the deposited silt should be removed and regularly and increase the checking frequency of it, and the silt removal facilities should be maintained at good condition to maintain the high effectiveness of it.
	18 Jul 2023	**Observation:** The stagnant water in the drip trays should be cleared off In Portion A.	The Contractor was reminded to clear the drip tray after the rainfall.
	07 Aug 2023	**Observation:** The mixture of silt and stagnant water in the drip tray should be cleared off in Portion E3.	The contractor was recommended to clear the drip tray.

Parameter	Date	Observation and Reminders	Follow-up Action Taken
Waste and Chemical Management	14 Aug 2023	**Observation:** Oil drums in SBA are observed without drip tray.	Drip tray should be provided to the oil drums and all chemical container in the site.
	21 Aug 2023	**Observation:** The mixture of silt and stagnant water in the drip tray should be cleared off in Portion E3.	The contractor was reminded to clear the drip tray.
	21 Aug 2023	**Observation:** Enclosed bins or compaction units should be provided to separate general waste with chemical waste and construction waste in Portion A.	The contractor was recommended to provide enclosed bins or compaction units in Portion A.
	21 Aug 2023	**Observation:** Chemical containers should be placed within the drip trays in Portion E4.	The contractor was reminded to provide drip tray for all chemical containers.
	4 Sep 2023	**Observation:** Over loading of accumulated waste was found at the waste skip of Portion D.	The contractor was recommended to increase the frequency of waste collection and the amount of waste skip to avoid over loading condition of waste skip at Portion D.
	18 Sep 2023	**Observation:** General refuse and non-inert waste should be stored in enclosed bins or compaction unit.	General waste generated on-site should be stored in enclosed bins or compaction units separately from the construction and chemical wastes.
	18 Sep 2023	**Observation:** Empty chemical containers in Portion E3 should be properly stored before the disposal.	The Contractor was reminded to properly store empty chemical container before disposal.
	25 Sep 2023	**Observation:** Chemical spillage was observed at Portion E4 and chemical containers should be placed on the drip tray.	The Contractor was reminded to dispose chemical waste and provide drip tray for all chemical containers.
Landscape and Visual Impact	No specific observation was identified in the reporting period.		
Permit / Licenses	No specific observation was identified in the reporting period.		

11.1.4 Five general site inspection on 31 July, 4 & 21 August 2023, and 7 & 13 September 2023 were conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG).

12 Environmental Non-conformance

12.1 Summary of Monitoring Exceedance

Air Quality, Noise & Landfill Gas Monitoring

12.1.1 No Action / Limit Level exceedance impact monitoring was recorded at designated monitoring stations during the reporting period.

12.1.2 The Summary of Impact 1-hr & 24-hr TSP Exceedance are shown in **Table 12-1**.

Table 12-1 Summary of Impact 1-hr & 24-hr TSP Exceedance during the reporting period

Dust Monitoring Station	Parameter / Level Exceedance	1-hr TSP	Exceedance Count	Accumulate of project	24-hr TSP	Exceedance Count	Accumulate of project
AM1	Action	0	0	0	0	0	2*
	Limit	0	0	0	0	0	3*
AM2	Action	0	0	0	0	0	0
	Limit	0	0	0	0	0	0
AM3	Action	0	0	0	0	0	4*
	Limit	0	0	0	0	0	3*

Remarks: * equal to non-project related

Surface Water Quality Monitoring

12.1.3 No exceedance of Action Levels of surface water monitoring was recorded in July 2023.

12.1.4 One DO exceedance of Action Level of surface water quality at WM1 was recorded in August 2023. The Notification of Environmental Quality Limits Exceedance is presented in **Appendix G**. In summary of the investigation, the DO exceedance in Action Level of Surface Water Quality at WM1 may involve the vary of temperature under the hot weather. Therefore, the exceedance is not related to project. No exceedance of Limit Level of surface water monitoring at WM1 was recorded in August 2023. No exceedance of Action Levels and Limit Level of surface water monitoring at WM2 were recorded in August 2023.

12.1.5 No exceedance of Action and Limit Levels of surface water monitoring was recorded in September 2023.

12.1.6 The Summary of Impact Surface Water Quality Exceedance are shown in **Table 12-2**

Table 12-2 Summary of Impact Surface Water Quality Exceedance during the reporting period

Water Quality Monitoring Station	Parameter / Level Exceedance	pH	DO	Turbidity	SS	Exceedance Count
WM1	Action	0	1*	0	0	1*
	Limit	0	0	0	0	0
WM2	Action	0	0	0	0	0
	Limit	0	0	0	0	0

Remarks:

(1) # The investigation results will be presented in the report after the investigation.

(2) * equal to non-project related

12.2 Summary of Environmental Non-compliance

12.2.1 One warning regarding suspected non-compliance event with Condition 1.7 and 2.15(a) of the EP & Condition 1.7 and 2.13(a) of the FEP-01 & FEP-02 was recorded during the reporting period. The related rectified actions are being taken in progress by the contractor.

12.3 Summary of Environmental Complaint

12.3.1 No environmental complaint was recorded from July 2023.

12.3.2 One complaint received from EPD-RNG on 3 August 2023 and another one complaint received from EPD-RNG on 18 August 2023 were recorded in August 2023. The complaint on 3 August 2023 & complaint on 18 August 2023 were investigated by related parties.

12.3.3 One complaint received from EPD-RNG on 14 September 2023 was recorded in September 2023. The complaint on 14 September 2023 was investigated by related parties.

Environmental Complaint on 3 August 2023

12.3.4 The complaint about the water aspect was received by ET on 3 August 2023 at 17:45 via EPD-RNG email. The main content of the complaint mentioned the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Point from EPD). In summary of the investigation, the muddy water caused from multi-potential sources while the runoff from the box culvert under the Wo Keng Shan Road is the major source including runoff from Existing channel near Portion E3-1, discharge water from the silt removal facilities at Portion E3-1 of the project, runoff from branch near the entrance of Portion E3-1, runoff from weighting plaza of NENT Landfill & natural stream near Wo Keng Shan & Shui Ngau Tso etc.. Hence, the project is a part of factor causing the high turbidity muddy water. To minimise the potential impact of construction runoff from the project, the further mitigation measures and enhancement of the temporary surface water drainage system were advised to implement by contractor.

Environmental Complaint on 18 August 2023

12.3.5 The complaint about the water aspect was received by ET on 18 August 2023 at 16:51 via EPD-RNG email. The main content of the complaint mentioned the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Point from EPD). In summary of the investigation, the complaint is project related. It viewed that muddy water arising from wheel washing water from the site entrance at Portion E4 & Runoff from Existing Channel near Portion E3-1 & discharge water from the silt removal facilities at Portion E3-1 eventually flows into the

box culvert under Wo Keng Shan Road, WM2 and ultimately to GR3. The related rectified actions should be conducted by the contractor as soon as possible.

Environmental Complaint on 14 September 2023

12.3.6 The complaint about the water aspect was received by ET on 14 September 2023 at 17:17 via EPD-RNG email. The main content of the complaint mentioned the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Point from EPD). In summary of the investigation, the complaint is project related. It viewed that muddy water arising from wheel washing water from the site entrance at Portion E4 & Runoff from Existing Channel near Portion E3-1 & discharge water from the silt removal facilities at Portion E3-1 eventually flows into the box culvert under Wo Keng Shan Road, WM2 and ultimately to GR3. The related rectified actions should be conducted by the contractor as soon as possible.

12.3.7 The cumulative statistics on environmental complaints are presented in **Table 12-3.**

Table 12-3 Cumulative Statistics on Environmental Complaints

Reporting Period	Environmental Aspects					No. of Environmental Complaints
	Air Quality	Noise	Water Quality	Waste	Ecology	
Jul 2023	0	0	0	0	0	0
Aug 2023	0	0	2	0	0	0
Sep 2023	0	0	1	0	0	0
Total	0	0	3	0	0	0
Accumulate of project	1*	0	5(1*)	0	0	6(2*)

Remarks:

(1) * equal to non-project related after the investigation

(2) # equal to the investigation results will be presented in the report after the investigation.

12.3.8 Cumulative complaint / enquiry log, Summaries of complaints and enquiries & Environmental complaint reports are presented in **Appendix J**. The investigation results will be presented when the investigation was finished.

12.4 Summary of Environmental Summons and Successful Prosecution

12.4.1 No summons and prosecution were received during the reporting period

13 Implementation Status on Environmental Mitigation Measures

13.1.1 The Contractor has generally implemented part of environmental mitigation measures and requirements as stated in the EIA Report, the EP and EM&A Manual and the contract documents. The implemented mitigation measures are considered effective. The implementation status during the reporting period is summarized in **Appendix H**.

14 Conclusion

14.1.1 1-hr & 24-hr TSP impact monitoring was carried out in the reporting month. No Action / Limit Level exceedance for 1-hr & 24-hr TSP impact monitoring at AM1, AM2 & AM3 was recorded during the period.

14.1.2 Construction noise monitoring was carried out in the reporting month. No Action / Limit Level exceedance at NM1a & NM2a was recorded during the period.

14.1.3 Site clearance of future landfilling area is in progress. The installation of groundwater monitoring boreholes will be installed after the site formation work of the landfilling area. The target commencement period of groundwater monitoring will be in 2026. No groundwater monitoring is required before the completion of site formation work of the landfilling area.

14.1.4 Surface water monitoring was carried out in the reporting month. No exceedance of Action Levels of surface water monitoring was recorded in July 2023. One DO exceedance of Action Level of surface water quality at WM1 was recorded in August 2023. In summary of the investigation, the DO exceedance in Action Level of Surface Water Quality at WM1 may involve the vary of temperature under the hot weather. Therefore, the exceedance is not related to project. No exceedance of Limit Level of surface water monitoring at WM1 was recorded in August 2023. No exceedance of Action Levels and Limit Level of surface water monitoring at WM2 were recorded in August 2023. No exceedance of Action and Limit Levels of surface water monitoring was recorded in September 2023.

14.1.5 Landfill Gas Monitoring was carried out in the reporting month. No exceedance of Limit Levels of LFG was recorded during the reporting period.

14.1.6 In terms of cultural heritage, implementation of the mitigation measures such as permanent fencing to protect the boulder path and setting up warning notices during construction phase of the Project has been monitored through the regular site inspection/audit in the reporting period. All the mitigation measures are in order.

14.1.7 Post-translocation Monitoring was carried out in the reporting period. No *S. zanklon individual* was found. Post-transplantation monitoring was carried out in the reporting period. The numbers, measurements and health conditions of the transplanted species are recorded.

14.1.8 13 environmental site inspections were carried out in the reporting month. Recommendations on mitigation measures for Permit/ Licenses were given to the Contractor for remediating the deficiencies identified during the site inspections.

14.1.9 No environmental complaint was recorded from July 2023. One complaint received from EPD-RNG on 3 August 2023 and another one complaint received from EPD-RNG on 18 August 2023 were recorded in August 2023. For the complaint from EPD-RNG on 3 August 2023, the further mitigation measures and enhancement of the temporary surface water drainage system were advised to implement by contractor. For the complaint received from EPD-RNG on 18 August 2023, the related rectified actions should be conducted by the contractor as soon as possible. One complaint received from EPD-RNG on 14 September 2023 was recorded in September 2023. The related rectified actions should be conducted by the contractor as soon as possible.

14.1.10 One warning regarding suspected non-compliance event with Condition 1.7 and 2.15(a) of the EP & Condition 1.7 and 2.13(a) of the FEP-01 & FEP-02 was recorded during the reporting period. The related rectified actions are being taken in progress by the contractor.

14.1.11 No notification of summons and prosecution was received during the reporting period.

Comment and Recommendations

14.1.12 The recommended environmental mitigation measures, as proposed in the EIA reports and EM&A Manuals shall be effectively implemented to minimize the potential environmental impacts from the Project. The EM&A programme would effectively monitor the environmental impacts generated from the construction activities and ensure the proper implementation of mitigation measures.

14.1.13 According to the environmental audit performed in the reporting period, the following recommendations were made:

Air Quality Impact

- The Contractor was reminded to cover the dusty stockpile with impervious sheets.
- The Contractor was recommended that the exposed slope should be covered by impervious sheet. The exposed slope should be treated with shotcrete for long term.
- The Contractor was advised that the assess road should be sprayed with water when the assess road is dry to minimize the dust suppression. The water sprinkler should be considered to establish at the assess road.
- The Contractor was advised to schedule watering in the work area and review the coverage of the water sprinkler.
- The Contractor was advised to increase the frequency of water spraying at the assess road.
- The Contractor was advised to cover the stockpiles with impervious sheet when they are idle.
- The Contractor was reminded to cover the demolished tree, shrub or vegetation with impervious sheets or placed within a shelter.
- The Contractor was reminded to cover dry PFA entirely with impervious sheets.
- Vehicle entrance should be paved with concrete, bituminous materials, hardcore or metal plates, and kept clear of dusty materials.

Construction Noise Impact

- No specific observation was identified in the reporting period.

Water Quality Impact

- The Contractor was reminded to clear the muddy water and divert the muddy water to wastewater treatment facility.
- The Contractor was recommended that the stagnant water should be collected to silt removal facilities for treatment before reusing for wheel washing. The floating leaves, deposited silt and grit should be removed regularly.
- The Contractor was recommended to implement the cover works of exposed slope surfaces by tarpaulin sheets or shotcrete to minimise the potential high concentration construction runoff to silt removal facilities.
- The Contractor was reminded to review the height of the earth bund to ensure the surface runoff should not flow outside the site boundary.
- The Contractor was recommended to construction earth bund along the edge of the slope.
- The Contractor was advised that the silt and grit should be removed near the sandbags barriers of the Portion E3-1 silt removal facilities after heavy rain.
- The Contractor was reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94.

- The Contractor was advised that the earth bunds and ditches should be constructed at the boundary of the +52 mpd Platform of the Portion A. The sandbags barriers or other control of surface runoff measures should be provided at the boundary in short term to avoid the surface runoff flow to the earth bunds at the boundary of the +38 mpd platform directly.
- The Contractor was reminded that silt removal facility should be checked to ensure that they can function properly.
- The Contractor was advised to pump out the accumulated surface runoff and divert to silt removal facility.
- The Contractor was reminded to clear the drip trays after the rainfall.
- The Contractor was advised to clear the accumulated silt near the fencing in Portion A and sedimentation basin in Portion E3 before and after rainstorm.
- The Contractor was recommended to construction earth bund along the edge of the slope in Portion A.
- Earth bund or sand barriers shall be provided along the existing channels in Portion A.
- The Contractor should review the effectiveness of setting up sandbag barriers and modify measures to prevent the discharge of surface runoff in both short term and long term. The Contractor was advised to stop the discharge of surface runoff to channel immediately by using any mitigation measures they found appropriate. In long term, the Contractor was recommended to construct earth bund along the channel to prevent this situation happening again.
- The broken or collapsed silt fence should be replaced and properly set up after the heavy rainfall from last week.
- The Contractor was advised to reconstruct the demolished sedimentation basin to act as silt trap and to achieve 5 minutes of retention time under maximum flow condition.
- The Contractor was recommended to shotcrete the exposed slope surface along the channel to reduce SS level in the wastewater.
- The Contractor was advised to clear the accumulated sand or silt in the outlet of the silt removal facility at Portion A The Contractor has been advised to stop the discharge of wastewater from the malfunctioned silt removal facility immediately. The wastewater should be stored or treated by another silt removal facility temporarily before the original silt removal facility is functioning properly. The Contractor should ensure the discharged wastewater to comply with the requirement of WPCO license.
- The Contractor was also recommended to increase the number of silt removal facility so as to increase the capacity of wastewater treatment for long term.
- The Contractor was advised to seal the leakage point(s) and place sandbag barriers along the channel to stop the discharge of untreated wastewater in the channel immediately. The accumulated silt and general waste in the channel should be removed. The Contractor has been recommended to review the design of the sedimentation basin to prevent this situation from happening again in the future.

<u>Waste and Chemical Management</u>

- The Contractor has been reminded to provide proper chemical storage area on site.
- The Contractor was recommended that accumulation of waste should be avoid, the waste should be disposed regularly & the general waste should be collected properly by using the waste separation facilities for paper, aluminium cans and plastic bottles etc.
- The Contractor was advised that the deposited silt should be removed and regularly and increase the checking frequency of it, and the silt removal facilities should be maintained at good condition to maintain the high effectiveness of it.
- The Contractor was reminded to clear the drip tray after the rainfall.

- Drip tray should be provided to the oil drums and all chemical container in the site.
- The contractor was recommended to provide enclosed bins or compaction units in Portion A.
- The contractor was recommended to increase the frequency of waste collection and the amount of waste skip to avoid over loading condition of waste skip at Portion D.
- General waste generated on-site should be stored in enclosed bins or compaction units separately from the construction and chemical wastes.
- The Contractor was reminded to properly store empty chemical container before disposal.
- The Contractor was reminded to dispose chemical waste and provide drip tray for all chemical containers.

Landscape and Visual Impact

- No specific observation was identified in the reporting period.

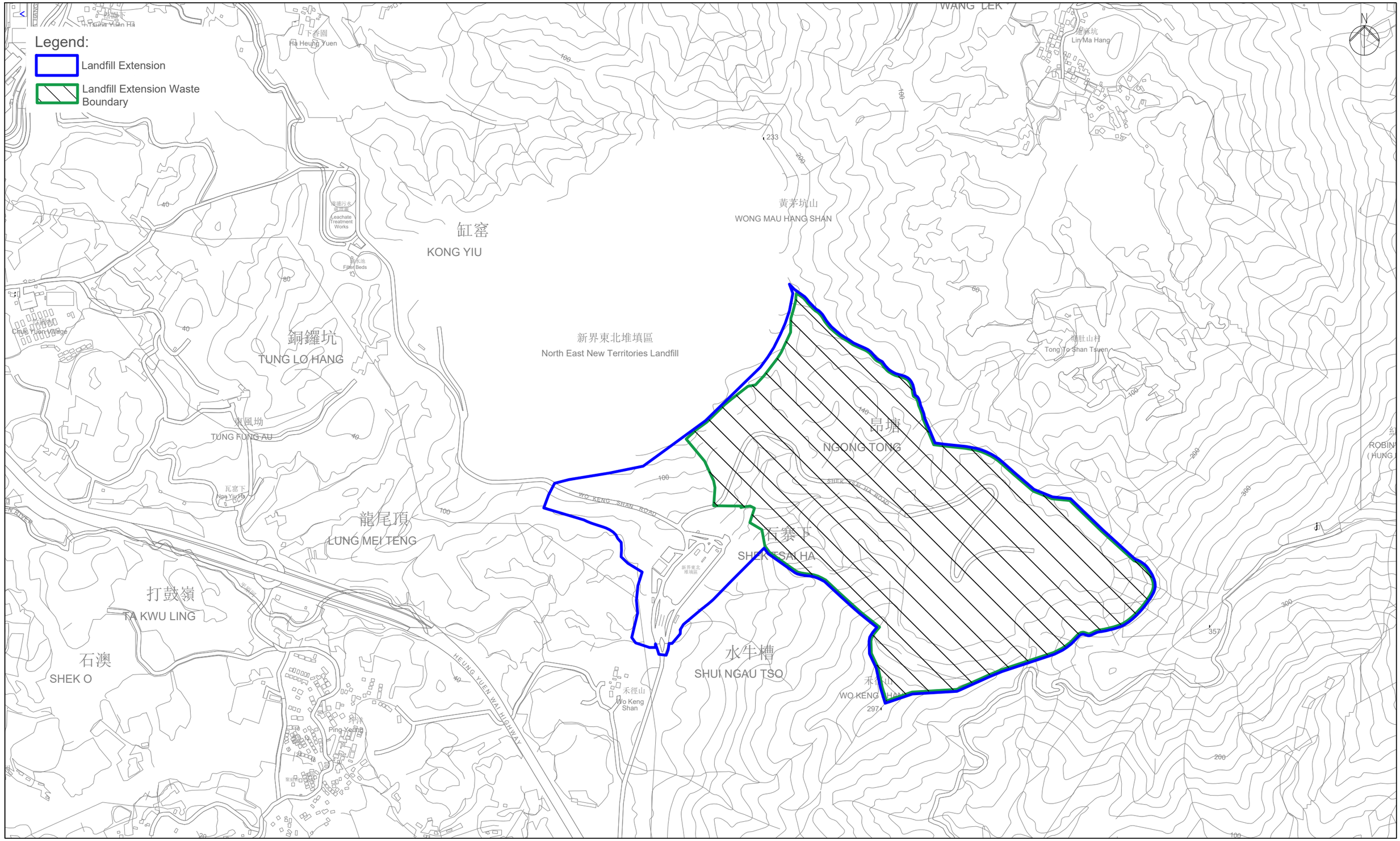
Permit / Licenses

- No specific observation was identified in the reporting period.

14.1.14 The Contractor has generally implemented environmental mitigation measures and requirements as stated in the EIA Report, the EP and EM&A Manual and the contract documents. The implemented mitigation measures are considered effective.

14.1.15 The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Figure 1 Location of the Project Site



aurecon Aurecon Hong Kong Limited	North-East New Territories (NENT) Landfill Extension Location Plan of the Project Site	Figure 1.1 Scale: 1:10000

Figure 2 Impact Air, Noise & Surface Water Quality Monitoring Locations

Legend

- Existing NENT landfill
- NENTX Project Site
- Air Monitoring Location
- Noise Monitoring Location
- Water Monitoring Location
- Additional Water Monitoring Location

AM2
AM1
AM3
NM1a
WM2
WM1
NM2a
GR3 (Monitoring Point from EPD)

缸窑 KONG YIU
銅鑼坑 TUNG LO HANG
新界東北堆填區 North East New Territories Landfill
橫灘 WANG LEK
黃茅坑山 WONG MAU HANG SHAN
昂塘 NGONG TONG
龍尾頂 LUNG MEI TENG
石寨下 SHEK TSAI HA
打鼓嶺 TA KWU LING
石澳 SHEK O
水生槽 SHUI NGAU TSO
禾徑山 WO KENG SHAN
紅花嶺 ROBIN'S NEST (HUNG FA LENG)
東風坳 TUNG FUNG AU
上禾徑山 Sheung Wo Keng Shan
下禾徑山 Ha Wo Keng Shan
Leachate Treatment Works
Filter Beds
Club Yuen Long Golf Course
Heung Yuen Wai
Ha Heung Yuen
Lin Ma Hang
Tong Yo Shan Tsuen
Tong Fong
Shui Hau
Ping Yeung
Wo Keng Shan
Yuen Wai Ho Highway
Ping Che Road
Ping Yuen River
Castle Peak Road

0m 200m 400m 600m 800m 1000m

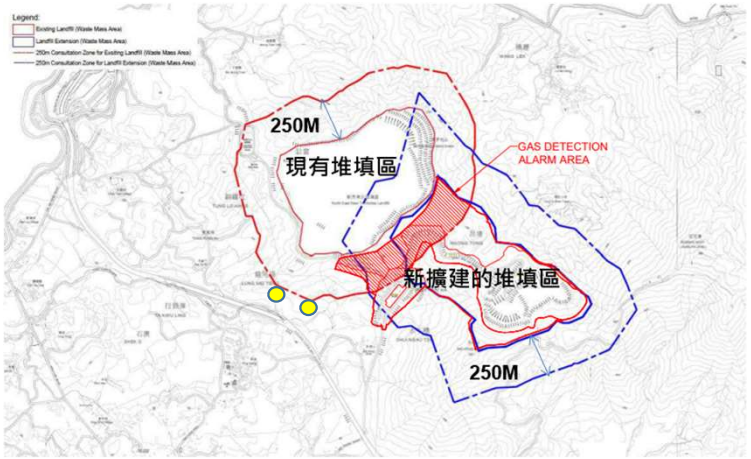
N

aurecon Aurecon Hong Kong Limited	North East New Territories (NENT) Landfill Extension Impact Monitoring Location	Figure 2

Figure 3 Landfill Gas Monitoring Locations

Gas Monitoring Point

Monitoring Frequency: 2 times per day



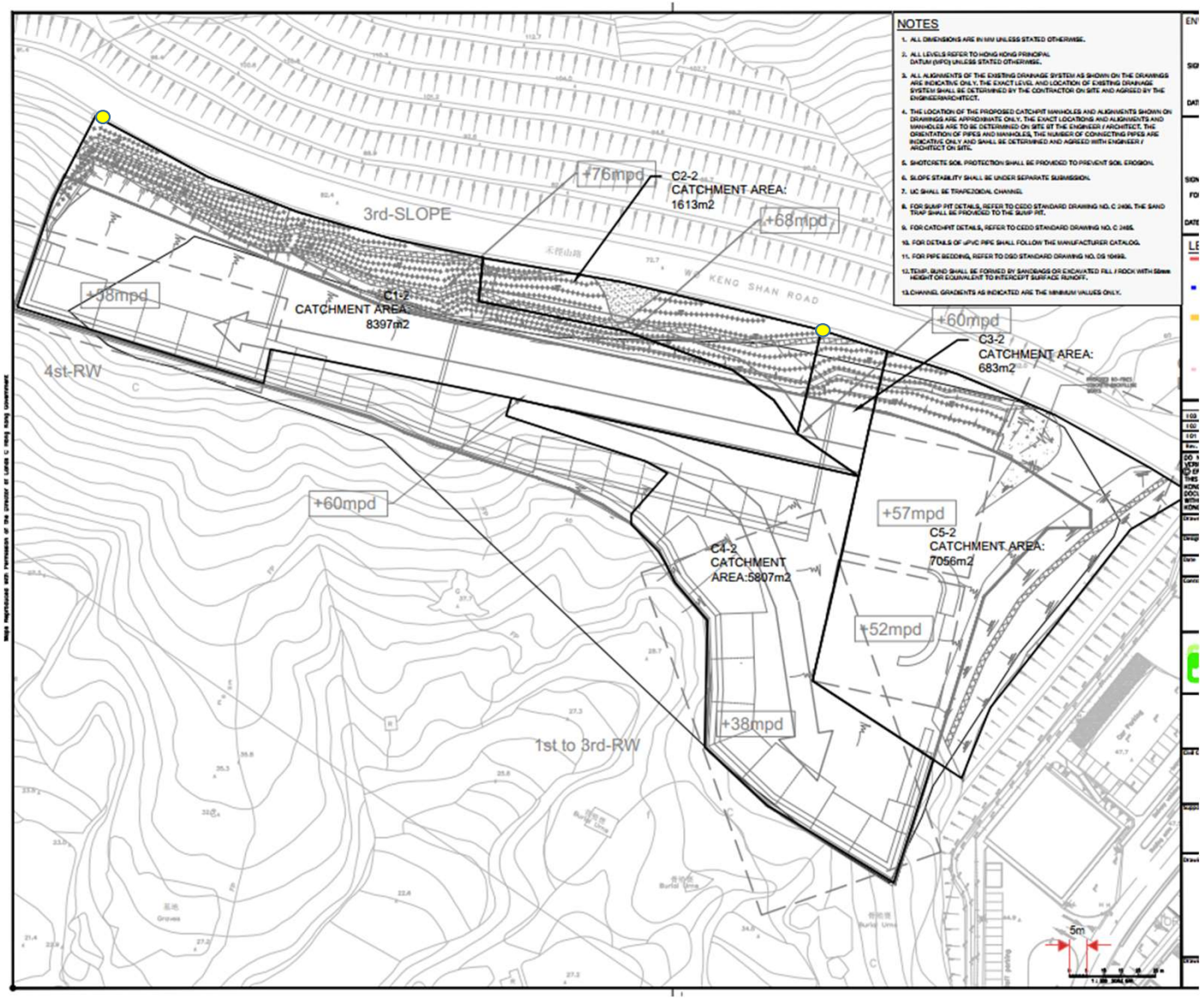
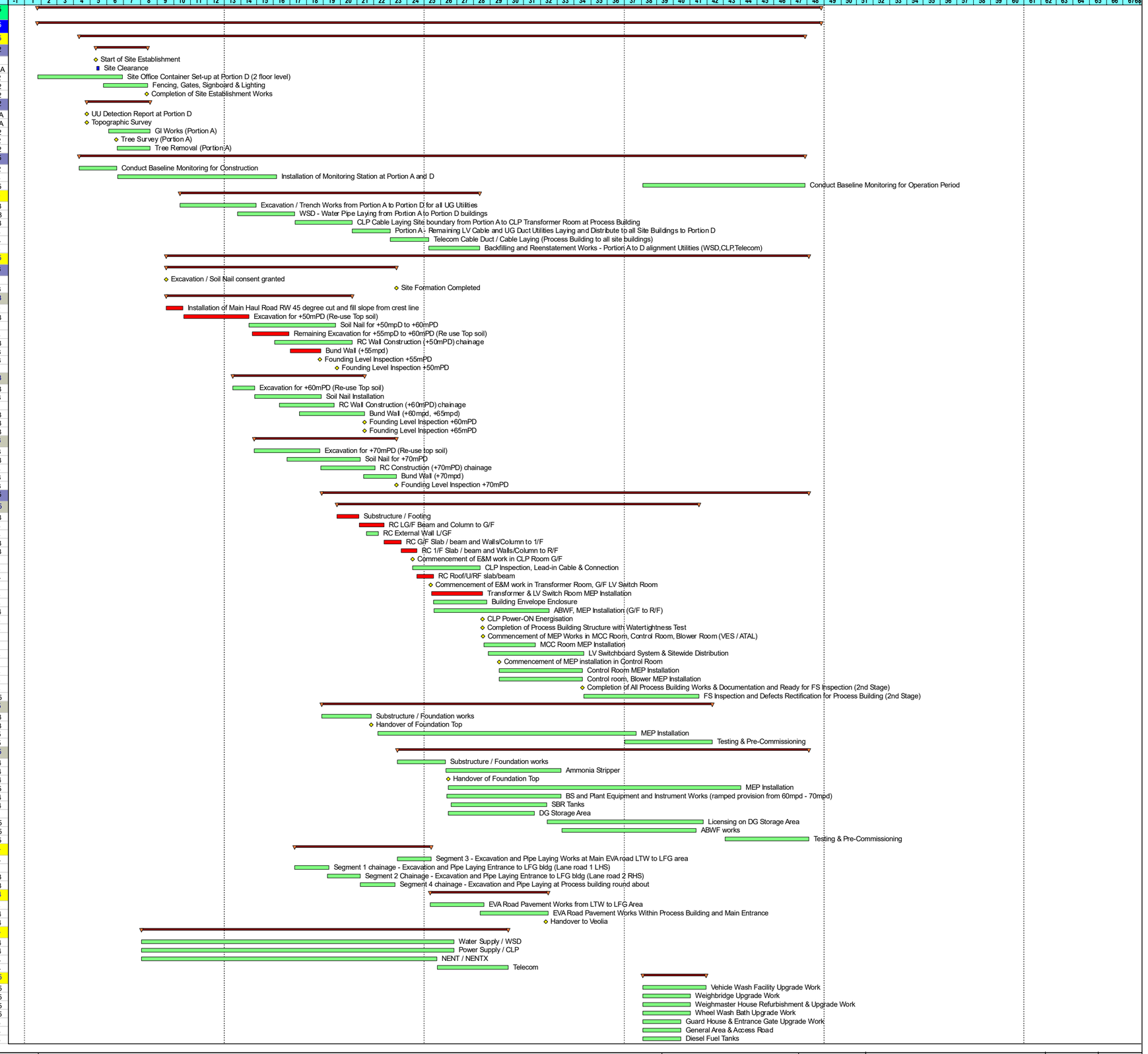


Figure 3 Landfill Gas Monitoring Locations

Appendix A Construction Programme

Activity ID	Activity Name	OD	Start	Finish
NENTX		1432	25-Jan-22 A	27-Dec-25
CONSTRUCTION - INITIAL WORKS PHASE 1		1432	25-Jan-22 A	27-Dec-25
PORTION A - Advance Works & Site Establishment		1403	11-Apr-22 A	27-Nov-25
SITE ESTABLISHMENT AND MOBILISATION		202	12-May-22 A	14-Aug-22
05-0001	Start of Site Establishment	0	12-May-22 A	
05-0002	Site Clearance	12	13-May-22 A	18-May-22 A
05-0003	Site Office Container Set-up at Portion D (2 floor level)	60	13-May-22 A	29-Jun-22
05-0004	Fencing, Gates, Signboard & Lighting	80	25-May-22	14-Aug-22
05-0005	Completion of Site Establishment Works	0		12-Aug-22
SITE SURVEY & INVESTIGATION WORKS		75	25-Apr-22 A	18-Aug-22
05-0007	UU Detection Report at Portion D	0		25-Apr-22 A
05-0008	Topographic Survey	0		25-Apr-22 A
05-0009	GI Works (Portion A)	75	04-Jun-22	18-Aug-22
05-0010	Tree Survey (Portion A)	0		17-Jun-22
05-0011	Tree Removal (Portion A)	59	19-Jun-22	18-Aug-22
ENVIRONMENTAL MONITORING		1138	11-Apr-22	27-Nov-25
05-0018	Conduct Baseline Monitoring for Construction	60	11-Apr-22	18-Jun-22
05-0019	Installation of Monitoring Station at Portion A and D	250	20-Jun-22	06-Apr-23
05-0020	Conduct Baseline Monitoring for Operation Period	255	04-Feb-25	27-Nov-25
SITEWIDE Underground UTILITIES (Portion A to Portion D)		470	12-Oct-22	11-Apr-24
05-0012	Excavation / Trench Works from Portion A to Portion D for all UG Utilities	120	12-Oct-22	28-Feb-23
05-0013	WSD - Water Pipe Laying from Portion A to Portion D buildings	90	25-Jan-23	09-May-23
05-0014	CLP Cable Laying Site boundary from Portion A to CLP Transformer Room at Process Building	90	10-May-23	22-Aug-23
05-0015	Portion A - Remaining LV Cable and UG Duct Utilities Laying and Distribute to all Site Buildings t	60	22-Aug-23	31-Oct-23
05-0016	Telecom Cable Duct / Cable Laying (Process Building to all site buildings)	60	31-Oct-23	09-Jan-24
05-0017	Backfilling and Reenstatement Works - Portion A to D alignment Utilities (WSD,CLP,Telecom)	80	09-Jan-24	11-Apr-24
PORTION A - Infrastructure Treatment Area		1174	17-Sep-22	04-Dec-25
SITE FORMATION		397	17-Sep-22	11-Nov-23
05-0021	Excavation / Soil Nail consent granted	0	17-Sep-22	
05-0022	Site Formation Completed	0		11-Nov-23
Soil Ground Platform at +50mPD/+55mPD		320	17-Sep-22	22-Aug-23
05-0023	Installation of Main Haul Road RW 45 degree cut and fill slope from crest line	28	17-Sep-22	17-Oct-22
05-0024	Excavation for +50mPD (Re-use Top soil)	111	19-Oct-22	15-Feb-23
05-0025	Soil Nail for +50mpD to +60mPD	150	15-Feb-23	23-Jul-23
05-0026	Remaining Excavation for +55mpD to +60mPD (Re use Top soil)	64	21-Feb-23	29-Apr-23
05-0027	RC Wall Construction (+50mPD) chainage	134	03-Apr-23	22-Aug-23
05-0028	Bund Wall (+55mpd)	54	02-May-23	26-Jun-23
05-0029	Founding Level Inspection +55mPD	0		24-Jun-23
05-0030	Founding Level Inspection +50mPD	0		26-Jul-23
Soil Ground Platform at +60mPD (LTW Plant)		229	17-Jan-23	14-Sep-23
05-0031	Excavation for +60mPD (Re-use Top soil)	36	17-Jan-23	25-Feb-23
05-0032	Soil Nail Installation	115	25-Feb-23	27-Jun-23
05-0033	RC Wall Construction (+60mPD) chainage	96	12-Apr-23	20-Jul-23
05-0034	Bund Wall (+60mpd, +65mpd)	117	18-May-23	14-Sep-23
05-0035	Founding Level Inspection +60mPD	0		14-Sep-23
05-0036	Founding Level Inspection +65mPD	0		14-Sep-23
Soil Ground Platform at +70mPD (LTW Plant)		248	25-Feb-23	11-Nov-23
05-0037	Excavation for +70mPD (Re-use top soil)	113	25-Feb-23	24-Jun-23
05-0038	Soil Nail for +70mPD	130	26-Apr-23	06-Sep-23
05-0039	RC Construction (+70mPD) chainage	96	26-Jun-23	03-Oct-23
05-0040	Bund Wall (+70mpd)	56	13-Sep-23	11-Nov-23
05-0041	Founding Level Inspection +70mPD	0		11-Nov-23
PROCESS TREATMENT AREA		891	28-Jun-23	04-Dec-25
Process Building (+50mpd)		661	26-Jul-23	17-May-25
05-0042	Substructure / Footing	40	26-Jul-23	04-Sep-23
05-0043	RC LG/F Beam and Column to G/F	42	05-Sep-23	20-Oct-23
05-0044	RC External Wall L/GF	18	18-Sep-23	09-Oct-23
05-0045	RC G/F Slab / beam and Walls/Column to 1/F	30	20-Oct-23	20-Nov-23
05-0046	RC 1/F Slab / beam and Walls/Column to R/F	29	20-Nov-23	19-Dec-23
05-0047	Commencement of E&M work in CLP Room G/F	0	11-Dec-23	
05-0048	CLP Inspection, Lead-in Cable & Connection	107	11-Dec-23	12-Apr-24
05-0050	RC Roof/L/RF slab/beam	27	19-Dec-23	18-Jan-24
05-0051	Commencement of E&M work in Transformer Room, G/F LV Switch Room	0	13-Jan-24	
05-0052	Transformer & LV Switch Room MEP Installation	80	15-Jan-24	17-Apr-24
05-0053	Building Envelope Enclosure	90	18-Jan-24	25-Apr-24
05-0054	ABWF, MEP Installation (G/F to R/F)	180	19-Jan-24	16-Aug-24
05-0055	CLP Power-ON Energisation	0		17-Apr-24
05-0056	Completion of Process Building Structure with Watertightness Test	0		17-Apr-24
05-0057	Commencement of MEP Works in MCC Room, Control Room, Blower Room (VES / ATAL)	0	18-Apr-24	
05-0058	MCC Room MEP Installation	80	19-Apr-24	22-Jul-24
05-0059	LV Switchboard System & Sitewide Distribution	150	27-Apr-24	19-Oct-24
05-0060	Commencement of MEP installation in Control Room	0	17-May-24	
05-0061	Control Room MEP Installation	130	17-May-24	16-Oct-24
05-0062	Control room, Blower MEP Installation	130	17-May-24	16-Oct-24
05-0063	Completion of All Process Building Works & Documentation and Ready for FS Inspection (2nd S	0		16-Oct-24
05-0064	FS Inspection and Defects Rectification for Process Building (2nd Stage)	180	19-Oct-24	17-May-25
LFG Plant (+55mpd)		678	28-Jun-23	10-Jun-25
05-0065	Substructure / Foundation works	90	28-Jun-23	26-Sep-23
05-0066	Handover of Foundation Top	0		26-Sep-23
05-0067	MEP Installation	450	08-Oct-23	22-Jan-25
05-0068	Testing & Pre-Commissioning	150	02-Jan-25	10-Jun-25
LTW Plant (+60mpd, +70mpd)		753	13-Nov-23	04-Dec-25
05-0069	Substructure / Foundation works	86	13-Nov-23	09-Feb-24
05-0070	Ammonia Stripper	180	10-Feb-24	07-Sep-24
05-0071	Handover of Foundation Top	0		14-Feb-24
05-0072	MEP Installation	510	14-Feb-24	01-Aug-25
05-0073	BS and Plant Equipment and Instrument Works (ramped provision from 60mpd - 70mpd)	180	12-Feb-24	07-Sep-24
05-0074	SBR Tanks	150	19-Feb-24	12-Aug-24
05-0075	DG Storage Area	150	14-Feb-24	20-Jul-24
05-0076	Licensing on DG Storage Area	270	13-Aug-24	25-May-25
05-0077	ABWF works	210	09-Sep-24	12-May-25
05-0078	Testing & Pre-Commissioning	150	04-Jul-25	04-Dec-25
PORTION A - Undergound Drainage and Process Pipeworks		240	09-May-23	14-Jan-24
05-0079	Segment 3 - Excavation and Pipe Laying Works at Main EVA road LTW to LFG area	60	13-Nov-23	14-Jan-24
05-0080	Segment 1 chainage - Excavation and Pipe Laying Entrance to LFG bldg (Lane road 1 LHS)	60	09-May-23	11-Jul-23
05-0081	Segment 2 Chainage - Excavation and Pipe Laying Entrance to LFG bldg (Lane road 2 RHS)	60	08-Jul-23	06-Sep-23
05-0082	Segment 4 chainage - Excavation and Pipe Laying at Process building round about	60	06-Sep-23	09-Nov-23
PORTION A - EVA Road Paving Works		203	12-Jan-24	14-Aug-24
05-0067.01	EVA Road Pavement Works from LTW to LFG Area	90	12-Jan-24	19-Apr-24
05-0067.02	EVA Road Pavement Works Within Process Building and Main Entrance	120	12-Apr-24	14-Aug-24
05-0067.03	Handover to Veolia	0		10-Aug-24
SITEWIDE Interfacing and Coordination		633	03-Aug-22	02-Jun-24
05-0083	Water Supply / WSD	540	03-Aug-22	24-Feb-24
05-0084	Power Supply / CLP	540	03-Aug-22	24-Feb-24
05-0085	NENT / NENTX	513	03-Aug-22	24-Jan-24
05-0086	Telecom	120	25-Jan-24	02-Jun-24
PORTION C - Waste Reception Area		100	04-Feb-25	30-May-25
05-0087	Vehicle Wash Facility Upgrade Work	100	04-Feb-25	30-May-25
05-0089	Weighbridge Upgrade Work	75	04-Feb-25	01-May-25
05-0091	Weighmaster House Refurbishment & Upgrade Work	75	04-Feb-25	01-May-25
05-0092	Wheel Wash Bath Upgrade Work	75	04-Feb-25	01-May-25
05-0093	Guard House & Entrance Gate Upgrade Work	60	04-Feb-25	14-Apr-25
05-0094	General Area & Access Road	60	04-Feb-25	14-Apr-25
05-0095	Diesel Fuel Tanks	60	04-Feb-25	14-Apr-25



環境保護署
Environmental Protection Department

- Remaining Level of Effort
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- Remaining Work
- Critical Remaining Work
- Milestone
- Summary

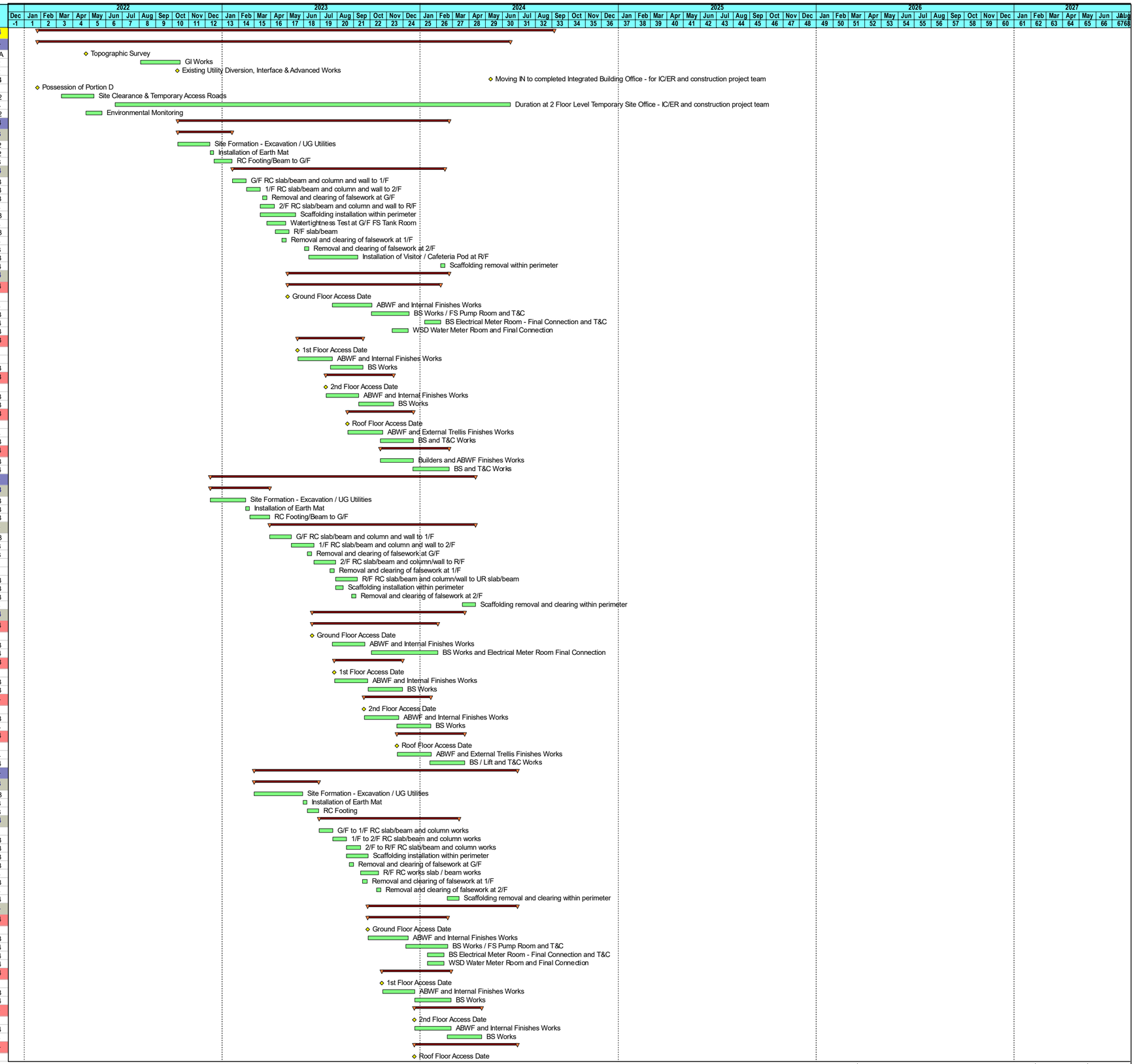
NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)

VEOLIA

Date	Revision	Checked	Approved
08-Jul-22	EXTRACTED - ISSUED 14JAN2023	DW	AY

Activity ID	Activity Name	OD	Start	Finish
PORTION D - Accomodation Buildings		954	25-Jan-22 A	04-Sep-24
Advanced Works		822	25-Jan-22 A	15-Jun-24
05-00100	Topographic Survey	0		25-Apr-22 A
05-00101	GI Works	70	04-Aug-22	15-Oct-22
05-00102	Existing Utility Diversion, Interface & Advanced Works	0		10-Oct-22
05-00104	Moving IN to completed Integrated Building Office - for IC/ER and construction project team	0		10-May-24
05-0096	Possession of Portion D	0	25-Jan-22	
05-0097	Site Clearance & Temporary Access Roads	52	11-Mar-22	09-May-22
05-0098	Duration at 2 Floor Level Temporary Site Office - IC/ER and construction project team	690	18-Jun-22	15-Jun-24
05-0099	Environmental Monitoring	26	25-Apr-22	24-May-22
FIRE SERVICE BUILDING		501	11-Oct-22	24-Feb-24
Substructure		95	11-Oct-22	19-Jan-23
05-00105	Site Formation - Excavation / UG Utilities	60	11-Oct-22	09-Dec-22
05-00106	Installation of Earth Mat	7	10-Dec-22	16-Dec-22
05-00107	RC Footing/Beam to G/F	28	17-Dec-22	19-Jan-23
Superstructure		393	20-Jan-23	16-Feb-24
05-00108	G/F RC slab/beam and column and wall to 1/F	22	20-Jan-23	14-Feb-23
05-00109	1/F RC slab/beam and column and wall to 2/F	25	15-Feb-23	12-Mar-23
05-00110	Removal and clearing of falsework at G/F	8	16-Mar-23	24-Mar-23
05-00111	2/F RC slab/beam and column and wall to R/F	25	12-Mar-23	07-Apr-23
05-00112	Scaffolding installation within perimeter	65	12-Mar-23	16-May-23
05-00113	Watertightness Test at G/F FS Tank Room	35	24-Mar-23	28-Apr-23
05-00114	R/F slab/beam	24	09-Apr-23	04-May-23
05-00115	Removal and clearing of falsework at 1/F	8	21-Apr-23	29-Apr-23
05-00116	Removal and clearing of falsework at 2/F	8	02-Jun-23	10-Jun-23
05-00117	Installation of Visitor / Cafeteria Pod at R/F	90	10-Jun-23	08-Sep-23
05-00118	Scaffolding removal within perimeter	8	08-Feb-24	16-Feb-24
ABWF & E&M		298	01-May-23	24-Feb-24
Ground Floor		283	01-May-23	08-Feb-24
05-00119	Ground Floor Access Date	0	01-May-23	
05-00120	ABWF and Internal Finishes Works	70	23-Jul-23	04-Oct-23
05-00121	BS Works / FS Pump Room and T&C	70	03-Oct-23	12-Dec-23
05-00122	BS Electrical Meter Room - Final Connection and T&C	30	09-Jan-24	08-Feb-24
05-00123	WSD Water Meter Room and Final Connection	30	10-Nov-23	10-Dec-23
1st Floor		121	20-May-23	18-Sep-23
05-00124	1st Floor Access Date	0	20-May-23	
05-00125	ABWF and Internal Finishes Works	60	21-May-23	23-Jul-23
05-00126	BS Works	60	20-Jul-23	18-Sep-23
2nd Floor		125	11-Jul-23	13-Nov-23
05-00127	2nd Floor Access Date	0	11-Jul-23	
05-00128	ABWF and Internal Finishes Works	60	12-Jul-23	10-Sep-23
05-00129	BS Works	60	10-Sep-23	13-Nov-23
Roof Floor		122	20-Aug-23	20-Dec-23
05-00130	Roof Floor Access Date	0	20-Aug-23	
05-00131	ABWF and External Trellis Finishes Works	60	21-Aug-23	24-Oct-23
05-00132	BS and T&C Works	60	20-Oct-23	20-Dec-23
Visitor Cafeteria POD		119	20-Oct-23	24-Feb-24
05-00331	Builders and ABWF Finishes Works	60	20-Oct-23	20-Dec-23
05-00332	BS and T&C Works	60	19-Dec-23	24-Feb-24
INTEGRATED OFFICE BUILDING		489	10-Dec-22	12-Apr-24
Substructure		101	10-Dec-22	29-Mar-23
05-00133	Site Formation - Excavation / UG Utilities	57	10-Dec-22	13-Feb-23
05-00134	Installation of Earth Mat	7	13-Feb-23	20-Feb-23
05-00135	RC Footing/Beam to G/F	37	21-Feb-23	29-Mar-23
Superstructure		379	30-Mar-23	12-Apr-24
05-00136	G/F RC slab/beam and column and wall to 1/F	35	30-Mar-23	08-May-23
05-00137	1/F RC slab/beam and column and wall to 2/F	40	09-May-23	19-Jun-23
05-00138	Removal and clearing of falsework at G/F	8	07-Jun-23	15-Jun-23
05-00139	2/F RC slab/beam and column/wall to R/F	38	19-Jun-23	29-Jul-23
05-00140	Removal and clearing of falsework at 1/F	8	19-Jul-23	27-Jul-23
05-00141	R/F RC slab/beam and column/wall to UR slab/beam	40	29-Jul-23	07-Sep-23
05-00142	Scaffolding installation within perimeter	14	29-Jul-23	12-Aug-23
05-00143	Removal and clearing of falsework at 2/F	8	28-Aug-23	05-Sep-23
05-00144	Scaffolding removal and clearing within perimeter	24	19-Mar-24	12-Apr-24
ABWF & E&M		281	16-Jun-23	23-Mar-24
Ground Floor		232	16-Jun-23	03-Feb-24
05-00145	Ground Floor Access Date	0	16-Jun-23	
05-00146	ABWF and Internal Finishes Works	60	23-Jul-23	21-Sep-23
05-00147	BS Works and Electrical Meter Room Final Connection	120	03-Oct-23	03-Feb-24
1st Floor		126	27-Jul-23	30-Nov-23
05-00148	1st Floor Access Date	0	27-Jul-23	
05-00149	ABWF and Internal Finishes Works	60	28-Jul-23	26-Sep-23
05-00150	BS Works	60	27-Sep-23	30-Nov-23
2nd Floor		124	19-Sep-23	21-Jan-24
05-00151	2nd Floor Access Date	0	19-Sep-23	
05-00152	ABWF and Internal Finishes Works	60	20-Sep-23	23-Nov-23
05-00153	BS Works	60	19-Nov-23	21-Jan-24
Roof Floor		125	19-Nov-23	23-Mar-24
05-00154	Roof Floor Access Date	0	19-Nov-23	
05-00155	ABWF and External Trellis Finishes Works	60	20-Nov-23	22-Jan-24
05-00156	BS / Lift and T&C Works	60	19-Jan-24	23-Mar-24
OPERATION AND MAINTENANCE BUILDING		487	01-Mar-23	29-Jun-24
Substructure		113	01-Mar-23	28-Jun-23
05-00157	Site Formation - Excavation / UG Utilities	84	01-Mar-23	29-May-23
05-00158	Installation of Earth Mat	7	30-May-23	06-Jun-23
05-00159	RC Footing	21	07-Jun-23	28-Jun-23
Superstructure		259	29-Jun-23	13-Mar-24
05-00160	G/F to 1/F RC slab/beam and column works	25	29-Jun-23	24-Jul-23
05-00161	1/F to 2/F RC slab/beam and column works	25	24-Jul-23	18-Aug-23
05-00162	2/F to R/F RC slab/beam and column works	26	18-Aug-23	13-Sep-23
05-00163	Scaffolding installation within perimeter	40	18-Aug-23	27-Sep-23
05-00164	Removal and clearing of falsework at G/F	8	23-Aug-23	31-Aug-23
05-00165	R/F RC works slab / beam works	30	13-Sep-23	16-Oct-23
05-00166	Removal and clearing of falsework at 1/F	8	17-Sep-23	25-Sep-23
05-00167	Removal and clearing of falsework at 2/F	8	13-Oct-23	21-Oct-23
05-00168	Scaffolding removal and clearing within perimeter	22	20-Feb-24	13-Mar-24
ABWF & E&M		277	26-Sep-23	29-Jun-24
Ground Floor		148	26-Sep-23	21-Feb-24
05-00169	Ground Floor Access Date	0	26-Sep-23	
05-00170	ABWF and Internal Finishes Works	70	27-Sep-23	10-Dec-23
05-00171	BS Works / FS Pump Room and T&C	70	06-Dec-23	21-Feb-24
05-00172	BS Electrical Meter Room - Final Connection and T&C	30	15-Jan-24	14-Feb-24
05-00173	WSD Water Meter Room and Final Connection	30	15-Jan-24	14-Feb-24
1st Floor		128	22-Oct-23	27-Feb-24
05-00174	1st Floor Access Date	0	22-Oct-23	
05-00175	ABWF and Internal Finishes Works	60	24-Oct-23	22-Dec-23
05-00176	BS Works	60	22-Dec-23	27-Feb-24
2nd Floor		125	21-Dec-23	24-Apr-24
05-00177	2nd Floor Access Date	0	21-Dec-23	
05-00178	ABWF and Internal Finishes Works	60	22-Dec-23	27-Feb-24
05-00179	BS Works	60	20-Feb-24	24-Apr-24
Roof Floor		191	21-Dec-23	29-Jun-24
05-00180	Roof Floor Access Date	0	21-Dec-23	



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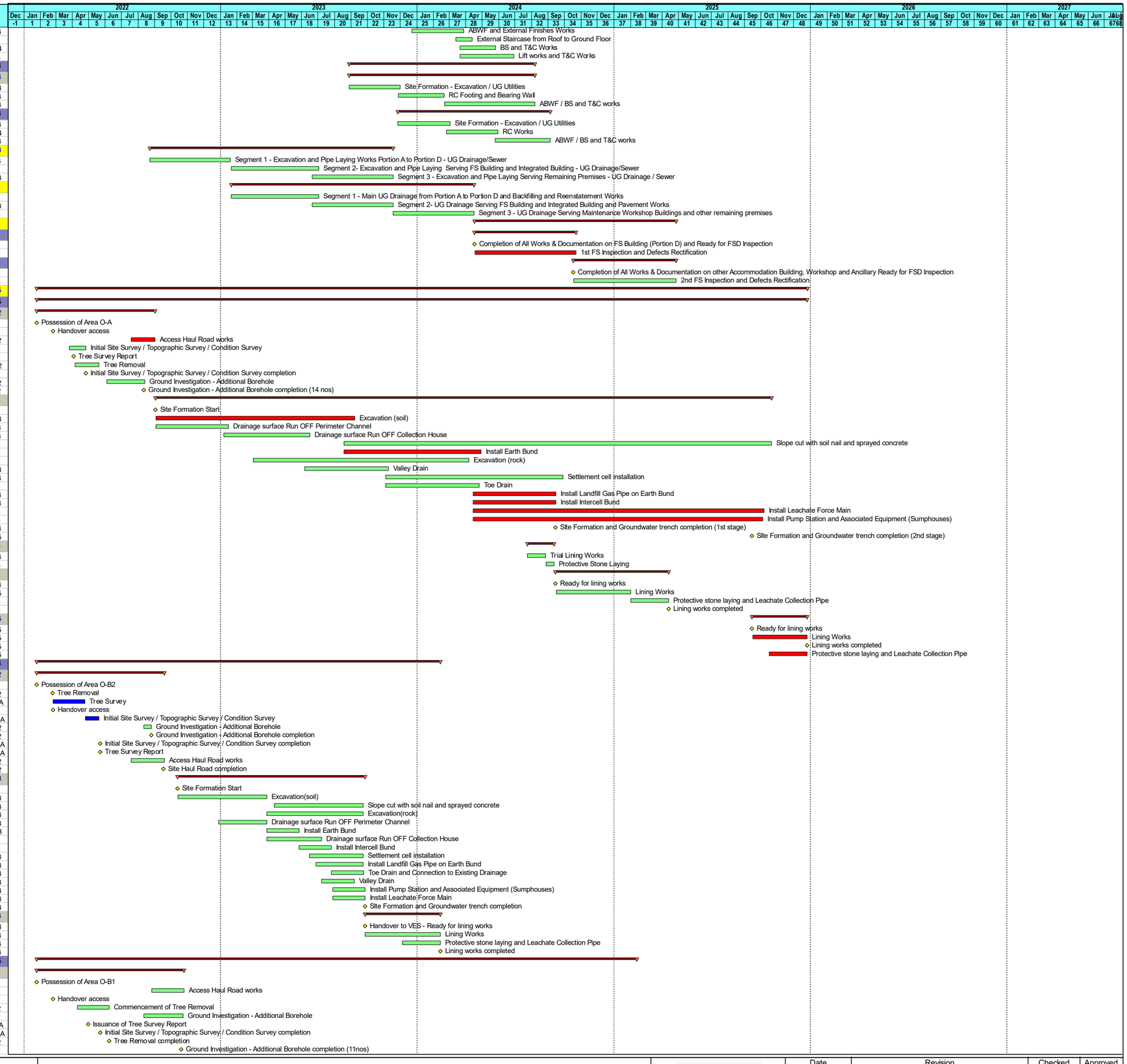
NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)

VEOLIA

Date	Revision	Checked	Approved
08-Jul-22	EXTRACTED - ISSUED 14JAN2023	DW	AY

Activity ID	Activity Name	OD	Start	Finish
05-00181	ABWF and External Finishes Works	90	22-Dec-23	28-Mar-24
05-00182	External Staircase from Roof to Ground Floor	30	13-Mar-24	12-Apr-24
05-00183	BS and T&C Works	60	21-Mar-24	26-May-24
05-00184	Lift works and T&C Works	100	21-Mar-24	29-Jun-24
MAINTENANCE WORKSHOP		326	28-Aug-23	07-Aug-24
Vehicle		326	28-Aug-23	07-Aug-24
05-00185	Site Formation - Excavation / UG Utilities	90	28-Aug-23	30-Nov-23
05-00186	RC Footing and Bearing Wall	79	27-Nov-23	20-Feb-24
05-00187	ABWF / BS and T&C works	160	21-Feb-24	07-Aug-24
ANCILLARY BUILDINGS (PORTION D)		268	26-Nov-23	04-Sep-24
05-00188	Site Formation - Excavation / UG Utilities	90	26-Nov-23	02-Mar-24
05-00189	RC Works	90	24-Feb-24	30-May-24
05-00190	ABWF / BS and T&C works	100	25-May-24	04-Sep-24
PORTION D - Underground Drainage and Pipe Laying Works		428	22-Aug-22	17-Nov-23
05-00191	Segment 1 - Excavation and Pipe Laying Works Portion A to Portion D - UG Drainage/Sewer	142	22-Aug-22	19-Jan-23
05-00192	Segment 2- Excavation and Pipe Laying Serving FS Building and Integrated Building - UG Drai	150	21-Jan-23	02-Jul-23
05-00193	Segment 3 - Excavation and Pipe Laying Serving Remaining Premises - UG Drainage / Sewer	144	20-Jun-23	17-Nov-23
PORTION D - EVA Road Road Pavement Works		424	21-Jan-23	16-Apr-24
05-1818	Segment 1 - Main UG Drainage from Portion A to Portion D and Backfilling and Reenstatement	150	21-Jan-23	02-Jul-23
05-1819	Segment 2- UG Drainage Serving FS Building and Integrated Building and Pavement Works	144	20-Jun-23	17-Nov-23
05-1820	Segment 3 - UG Drainage Serving Maintenance Workshop Buildings and other remaining prem	140	17-Nov-23	16-Apr-24
FS Inspection Stages		357	17-Apr-24	26-Apr-25
Stage 1 FS Inspection		181	17-Apr-24	22-Oct-24
05-00194	Completion of All Works & Documentation on FS Building (Portion D) and Ready for FSD Inspec	0		17-Apr-24
05-00195	1st FS Inspection and Defects Rectification	180	18-Apr-24	22-Oct-24
Stage 2 FS Inspection		180	17-Oct-24	26-Apr-25
05-00196	Completion of All Works & Documentation on other Accommodation Building, Workshop and An	0		17-Oct-24
05-00197	2nd FS Inspection and Defects Rectification	180	18-Oct-24	26-Apr-25
Landfill Area (Portion E3, E4, E1, B1 & B2)		1402	25-Jan-22 A	27-Dec-25
AREA 0-A (E4 & B1)		1371	25-Jan-22 A	25-Dec-25
Advanced Works		150	25-Jan-22 A	01-Sep-22
05-00251	Possession of Area O-A	0	25-Jan-22 A	
05-00252	Handover access	0	24-Feb-22 A	
05-00253	Access Haul Road works	44	19-Jul-22	01-Sep-22
05-00254	Initial Site Survey / Topographic Survey / Condition Survey	27	26-Mar-22	25-Apr-22
05-00255	Tree Survey Report	0		03-Apr-22
05-00256	Tree Removal	38	06-Apr-22	20-May-22
05-00257	Initial Site Survey / Topographic Survey / Condition Survey completion	0		25-Apr-22
05-00258	Ground Investigation - Additional Borehole	70	04-Jun-22	13-Aug-22
05-00259	Ground Investigation - Additional Borehole completion (14 nos)	0		11-Aug-22
Landfill Site Formation and Groundwater Trench		1086	02-Sep-22	20-Oct-25
05-00260	Site Formation Start	0	02-Sep-22	
05-00261	Excavation (soil)	349	03-Sep-22	07-Sep-23
05-00262	Drainage surface Run OFF Perimeter Channel	126	03-Sep-22	15-Jan-23
05-00263	Drainage surface Run OFF Collection House	150	07-Jan-23	16-Jun-23
05-00264	Slope cut with soil nail and sprayed concrete	756	18-Aug-23	20-Oct-25
05-00265	Install Earth Bund	240	18-Aug-23	29-Apr-24
05-00266	Excavation (rock)	378	03-Mar-23	06-Apr-24
05-00267	Valley Drain	150	06-Jun-23	09-Nov-23
05-00267.01	Settlement cell installation	314	03-Nov-23	28-Sep-24
05-00268	Toe Drain	163	03-Nov-23	25-Apr-24
05-00269	Install Landfill Gas Pipe on Earth Bund	150	14-Apr-24	15-Sep-24
05-00270	Install Intercell Bund	150	14-Apr-24	15-Sep-24
05-00271	Install Leachate Force Main	518	14-Apr-24	06-Oct-25
05-00272	Install Pump Station and Associated Equipment (Sumphouses)	516	14-Apr-24	04-Oct-25
05-00273	Site Formation and Groundwater trench completion (1st stage)	0		14-Sep-24
05-00273.01	Site Formation and Groundwater trench completion (2nd stage)	0		14-Sep-25
Landfill Trial Area		50	24-Jul-24	11-Sep-24
05-00223	Trial Lining Works	35	24-Jul-24	27-Aug-24
05-00224	Protective Stone Laying	15	28-Aug-24	11-Sep-24
Landfill Liner Stage 1-3 (Portion E4, & B1) - 1st Stage		210	14-Sep-24	12-Apr-25
05-00274	Ready for lining works	0		14-Sep-24
05-0167	Lining Works	120	16-Sep-24	01-Feb-25
05-0168	Protective stone laying and Leachate Collection Pipe	60	01-Feb-25	12-Apr-25
05-0169	Lining works completed	0		12-Apr-25
Landfill Liner Stage 1-3 (Portion E4, & B1) - 2nd Stage		102	14-Sep-25	25-Dec-25
05-00275	Ready for lining works	0		14-Sep-25
05-1815	Lining Works	87	16-Sep-25	25-Dec-25
05-1816	Lining works completed	0		25-Dec-25
05-1817	Protective stone laying and Leachate Collection Pipe	60	16-Oct-25	25-Dec-25
AREA 0-B2 (Portion E3, B1 & E4)		719	25-Jan-22 A	13-Feb-24
Advanced Works		196	25-Jan-22 A	18-Sep-22
05-00198	Possession of Area O-B2	0	25-Jan-22 A	
05-00199	Tree Removal	0		23-Feb-22
05-00200	Tree Survey	58	24-Feb-22 A	24-Apr-22 A
05-00201	Handover access	0	24-Feb-22 A	
05-00202	Initial Site Survey / Topographic Survey / Condition Survey	29	25-Apr-22 A	20-May-22 A
05-00203	Ground Investigation - Additional Borehole	14	11-Aug-22	25-Aug-22
05-00204	Ground Investigation - Additional Borehole completion	0		25-Aug-22
05-00205	Initial Site Survey / Topographic Survey / Condition Survey completion	0		23-May-22 A
05-00206	Tree Survey Report	0		23-May-22 A
05-00207	Access Haul Road works	60	19-Jul-22	18-Sep-22
05-00208	Site Haul Road completion	0		17-Sep-22
Landfill Site Formation and Groundwater Trench		331	13-Oct-22	26-Sep-23
05-00209	Site Formation Start	0	13-Oct-22	
05-00210	Excavation(soil)	156	14-Oct-22	28-Mar-23
05-00211	Slope cut with soil nail and sprayed concrete	162	11-Apr-23	23-Sep-23
05-00212	Excavation(rock)	172	28-Mar-23	23-Sep-23
05-00213	Drainage surface Run OFF Perimeter Channel	84	28-Dec-22	28-Mar-23
05-00214	Install Earth Bund	54	28-Mar-23	27-May-23
05-00215	Drainage surface Run OFF Collection House	94	28-Mar-23	08-Jul-23
05-00216	Install Intercell Bund	58	27-May-23	26-Jul-23
05-00216.01	Settlement cell installation	98	15-Jun-23	23-Sep-23
05-00217	Install Landfill Gas Pipe on Earth Bund	88	27-Jun-23	23-Sep-23
05-00218	Toe Drain and Connection to Existing Drainage	60	26-Jul-23	24-Sep-23
05-00219	Valley Drain	60	08-Jul-23	06-Sep-23
05-00220	Install Pump Station and Associated Equipment (Sumphouses)	60	28-Jul-23	26-Sep-23
05-00221	Install Leachate Force Main	60	28-Jul-23	26-Sep-23
05-00222	Site Formation and Groundwater trench completion	0		26-Sep-23
Landfill Liner Stages 1&2 (Portion E3, B1 & E4)		140	26-Sep-23	13-Feb-24
05-00225	Handover to VES - Ready for lining works	0		26-Sep-23
05-0191	Lining Works	120	26-Sep-23	13-Feb-24
05-0192	Protective stone laying and Leachate Collection Pipe	60	05-Dec-23	13-Feb-24
05-0193	Lining works completed	0		13-Feb-24
AREA 0-B1 (Portion E3)		1040	25-Jan-22 A	12-Feb-25
Advanced Works		187	25-Jan-22 A	25-Oct-22
05-00226	Possession of Area O-B1	0	25-Jan-22 A	
05-00227	Access Haul Road works	58	26-Aug-22	25-Oct-22
05-00228	Handover access	0	24-Feb-22 A	
05-00229	Commencement of Tree Removal	52	10-Apr-22	08-Jun-22
05-00230	Ground Investigation - Additional Borehole	70	11-Aug-22	23-Oct-22
05-00231	Issuance of Tree Survey Report	0		30-Apr-22 A
05-00232	Initial Site Survey / Topographic Survey / Condition Survey completion	0		23-May-22 A
05-00233	Tree Removal completion	0		08-Jun-22
05-00234	Ground Investigation - Additional Borehole completion (11nos)	0		20-Oct-22



環境保護署
Environmental Protection Department

Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

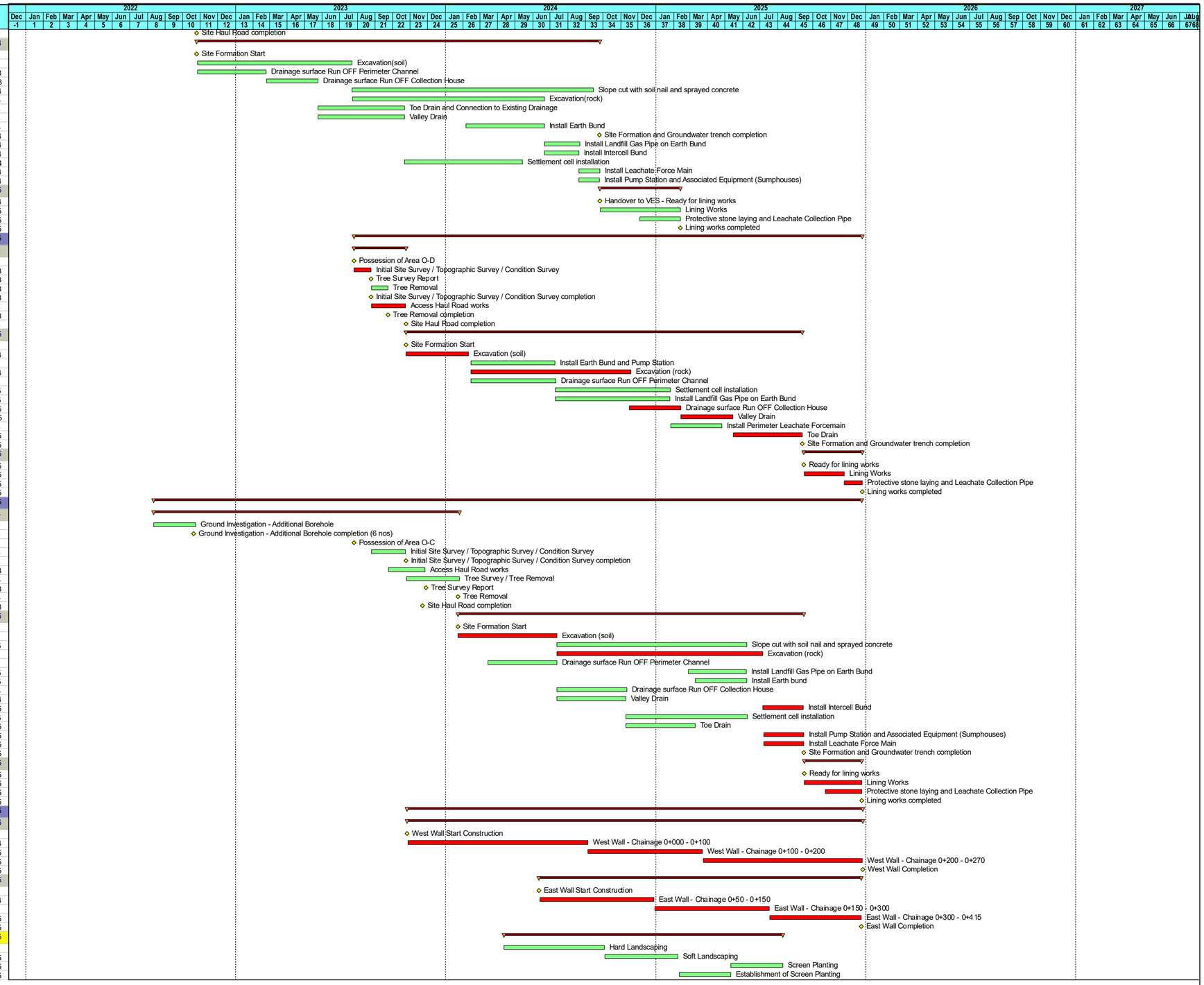
NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)

VEOLIA

Date	Revision	Checked	Approved
08-Jul-22	EXTRACTED - ISSUED 14JAN2023	DW	AY

Activity ID	Activity Name	OD	Start	Finish
05-00235	Site Haul Road completion	0		25-Oct-22
Landfill Site Formation and Groundwater Trench		664	25-Oct-22	25-Sep-24
05-00236	Site Formation Start	0	25-Oct-22	
05-00237	Excavation(soil)	252	27-Oct-22	22-Jul-23
05-00238	Drainage surface Run OFF Perimeter Channel	111	27-Oct-22	23-Feb-23
05-00239	Drainage surface Run OFF Collection House	85	24-Feb-23	24-May-23
05-00240	Slope cut with soil nail and sprayed concrete	401	22-Jul-23	14-Sep-24
05-00241	Excavation(rock)	317	23-Jul-23	21-Jun-24
05-00242	Toe Drain and Connection to Existing Drainage	144	24-May-23	21-Oct-23
05-00243	Valley Drain	144	24-May-23	21-Oct-23
05-00244	Install Earth Bund	126	05-Feb-24	21-Jun-24
05-00245	Site Formation and Groundwater trench completion	0		24-Sep-24
05-00246	Install Landfill Gas Pipe on Earth Bund	60	21-Jun-24	21-Aug-24
05-00247	Install Intercell Bund	59	21-Jun-24	20-Aug-24
05-00247.01	Settlement cell installation	192	21-Oct-23	13-May-24
05-00248	Install Leachate Force Main	35	20-Aug-24	25-Sep-24
05-00249	Install Pump Station and Associated Equipment (Sumphouses)	34	20-Aug-24	24-Sep-24
Landfill Liner Stage 1-2 (Portion E3)		140	25-Sep-24	12-Feb-25
05-00250	Handover to VES - Ready for lining works	0		25-Sep-24
05-0143	Lining Works	120	26-Sep-24	12-Feb-25
05-0144	Protective stone laying and Leachate Collection Pipe	60	04-Dec-24	12-Feb-25
05-0145	Lining works completed	0		12-Feb-25
Area 0-D (Portion E1 & B2)/ Access Road)		884	26-Jul-23	25-Dec-25
Advanced Works		86	26-Jul-23	24-Oct-23
05-00301	Possession of Area O-D	0	26-Jul-23	
05-00302	Initial Site Survey / Topographic Survey / Condition Survey	30	26-Jul-23	24-Aug-23
05-00303	Tree Survey Report	0		24-Aug-23
05-00304	Tree Removal	30	25-Aug-23	23-Sep-23
05-00305	Initial Site Survey / Topographic Survey / Condition Survey completion	0		24-Aug-23
05-00306	Access Haul Road works	56	25-Aug-23	23-Oct-23
05-00307	Tree Removal completion	0		23-Sep-23
05-00308	Site Haul Road completion	0		24-Oct-23
Landfill Site Formation and Groundwater Trench		690	24-Oct-23	12-Sep-25
05-00309	Site Formation Start	0	24-Oct-23	
05-00310	Excavation (soil)	106	24-Oct-23	10-Feb-24
05-00311	Install Earth Bund and Pump Station	140	14-Feb-24	09-Jul-24
05-00312	Excavation (rock)	268	14-Feb-24	18-Nov-24
05-00313	Drainage surface Run OFF Perimeter Channel	141	14-Feb-24	11-Jul-24
05-00313.01	Settlement cell installation	200	10-Jul-24	26-Jan-25
05-00314	Install Landfill Gas Pipe on Earth Bund	193	10-Jul-24	25-Jan-25
05-00315	Drainage surface Run OFF Collection House	84	16-Nov-24	13-Feb-25
05-00316	Valley Drain	84	13-Feb-25	14-May-25
05-00317	Install Perimeter Leachate Forcemain	82	27-Jan-25	25-Apr-25
05-00318	Toe Drain	118	15-May-25	12-Sep-25
05-00319	Site Formation and Groundwater trench completion	0		12-Sep-25
Landfill Liner Stage 1&2 (Portion E1 & B2)		101	15-Sep-25	25-Dec-25
05-00320	Ready for lining works	0		15-Sep-25
05-0232.04	Lining Works	60	16-Sep-25	24-Nov-25
05-0232.05	Protective stone laying and Leachate Collection Pipe	27	24-Nov-25	25-Dec-25
05-0232.06	Lining works completed	0		25-Dec-25
AREA 0-C (Portion E1,B1 & E4)		1231	11-Aug-22	25-Dec-25
Advanced Works		505	11-Aug-22	25-Jan-24
05-00276	Ground Investigation - Additional Borehole	70	11-Aug-22	23-Oct-22
05-00277	Ground Investigation - Additional Borehole completion (6 nos)	0		20-Oct-22
05-00278	Possession of Area O-C	0	26-Jul-23	
05-00279	Initial Site Survey / Topographic Survey / Condition Survey	56	25-Aug-23	23-Oct-23
05-00280	Initial Site Survey / Topographic Survey / Condition Survey completion	0		24-Oct-23
05-00281	Access Haul Road works	60	24-Sep-23	26-Nov-23
05-00282	Tree Survey / Tree Removal	90	25-Oct-23	25-Jan-24
05-00283	Tree Survey Report	0		28-Nov-23
05-00284	Tree Removal	0		22-Jan-24
05-00285	Site Haul Road completion	0		22-Nov-23
Landfill Site Formation and Groundwater Trench		572	23-Jan-24	15-Sep-25
05-00286	Site Formation Start	0	23-Jan-24	
05-00287	Excavation (soil)	160	23-Jan-24	13-Jul-24
05-00288	Slope cut with soil nail and sprayed concrete	314	13-Jul-24	08-Jun-25
05-00289	Excavation (rock)	341	13-Jul-24	06-Jul-25
05-00290	Drainage surface Run OFF Perimeter Channel	112	15-Mar-24	13-Jul-24
05-00291	Install Landfill Gas Pipe on Earth Bund	95	26-Feb-25	07-Jun-25
05-00292	Install Earth bund	83	10-Mar-25	08-Jun-25
05-00293	Drainage surface Run OFF Collection House	118	13-Jul-24	11-Nov-24
05-00294	Valley Drain	117	13-Jul-24	10-Nov-24
05-00295	Install Intercell Bund	70	06-Jul-25	14-Sep-25
05-00295.01	Settlement cell installation	198	10-Nov-24	09-Jun-25
05-00296	Toe Drain	114	10-Nov-24	10-Mar-25
05-00297	Install Pump Station and Associated Equipment (Sumphouses)	70	07-Jul-25	15-Sep-25
05-00298	Install Leachate Force Main	70	07-Jul-25	15-Sep-25
05-00299	Site Formation and Groundwater trench completion	0		15-Sep-25
Landfill Liner Stage 1&2 (Portion E1, B1 & E4)		100	16-Sep-25	25-Dec-25
05-00300	Ready for lining works	0		16-Sep-25
05-0215	Lining Works	86	16-Sep-25	25-Dec-25
05-0216	Protective stone laying and Leachate Collection Pipe	55	22-Oct-25	25-Dec-25
05-0217	Lining works completed	0		25-Dec-25
Geotechnical Retaining Structure & Access Road		756	26-Oct-23	27-Dec-25
West Wall		756	26-Oct-23	27-Dec-25
05-00321	West Wall Start Construction	0	26-Oct-23	
05-00322	West Wall - Chainage 0+000 - 0+100	298	28-Oct-23	04-Sep-24
05-00323	West Wall - Chainage 0+100 - 0+200	190	05-Sep-24	22-Mar-25
05-00324	West Wall - Chainage 0+200 - 0+270	265	24-Mar-25	25-Dec-25
05-00325	West Wall Completion	0		27-Dec-25
EAST Wall		540	11-Jun-24	24-Dec-25
05-00326	East Wall Start Construction	0	11-Jun-24	
05-00327	East Wall - Chainage 0+50 - 0+150	193	13-Jun-24	28-Dec-24
05-00328	East Wall - Chainage 0+150 - 0+300	188	30-Dec-24	17-Jul-25
05-00329	East Wall - Chainage 0+300 - 0+415	157	18-Jul-25	24-Dec-25
05-00330	East Wall Completion	0		24-Dec-25
Landscape Works		485	12-Apr-24	09-Aug-25
05-0242	Hard Landscaping	150	12-Apr-24	03-Oct-24
05-0243	Soft Landscaping	110	04-Oct-24	08-Feb-25
05-0252	Screen Planting	88	11-May-25	09-Aug-25
05-0262	Establishment of Screen Planting	84	10-Feb-25	11-May-25



環境保護署
Environmental Protection Department

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NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)

VEOLIA

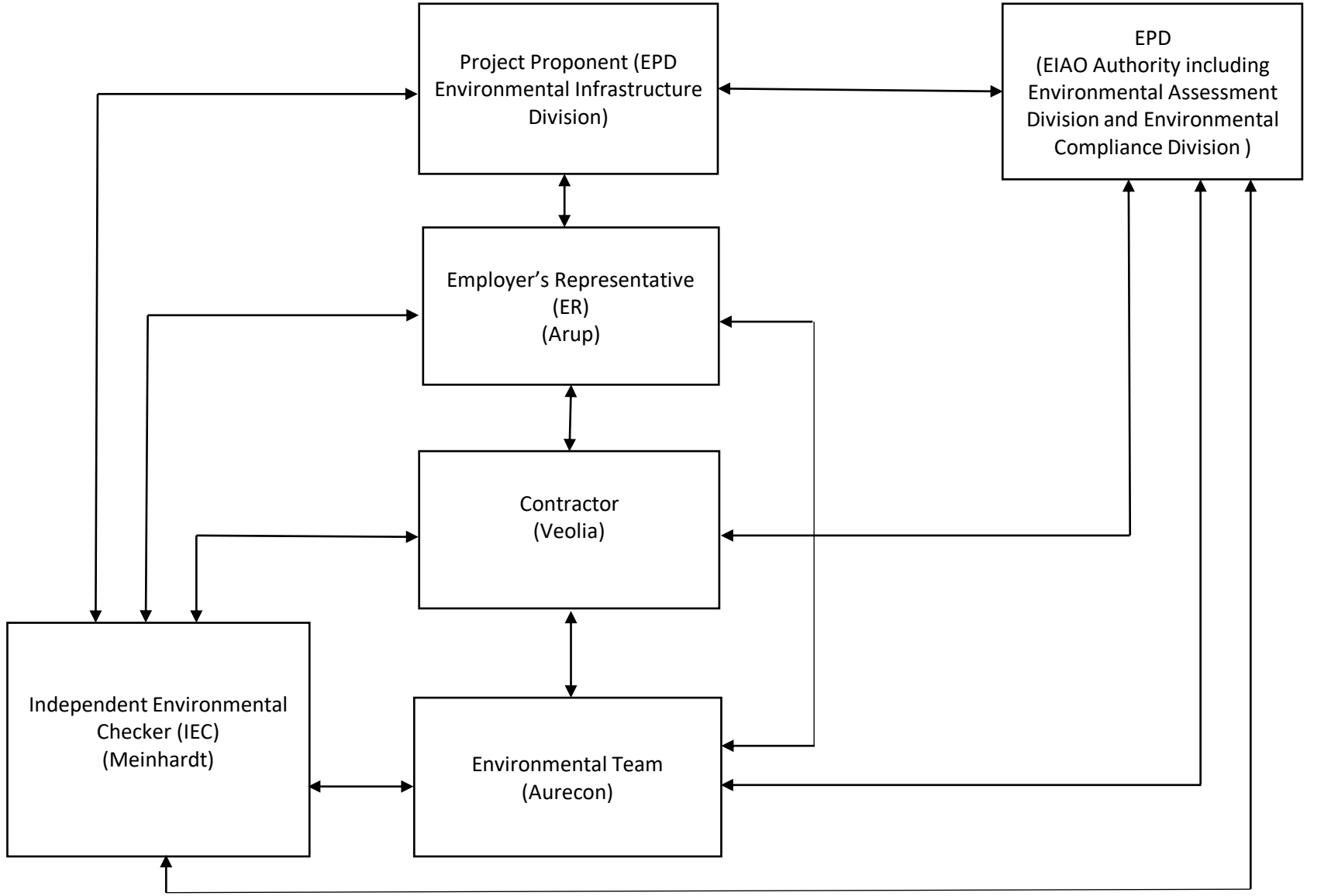
Date	Revision	Checked	Approved
08-Jul-22	EXTRACTED - ISSUED 14JAN2023	DW	AY

Appendix B Construction Site Activities

Construction Activities	Where	Who	What - ENV Impacts	Mitigation Measures
Material loading and unloading, site traffic	Portion A, SBA to Alternative Disposal Ground	PYE	Dust, bringing mud to the common haul road	Speed limit, covering of materials and water spraying, lorry washing at the exit of the site
Construction of Site buildings	Portion D	PYE	Washout flowing to site water discharge point, dust emissions	Avoid the spillage of concrete, lorry washing at designated area, operation and maintenance of water treatment facility at discharge point
Site clearance	Portion A, Portion E3-1, Portion E4, Portion E1/B2	PYE	Wash out going to surface water channel and site water discharge point, generation of yard waste	Cover exposed slope by tarpaulin, diversion of surface water, operation and maintenance of water treatment facility at discharge point, implementation of trip ticket system
Installation of permanent fencing	Portion A, Portion B1, Portion E4	PYE	Dust	Covering of cement storage area, enclosure of mixing area
Site formation	Portion A, Portion E3-1	PYE	Generation of C&D waste	Implementation of trip ticket system, waste recycling, internal waste transfer
Tree Felling	Portion E3-1, E4, E1/B2	PYE	Generation of yard waste	Implementation of trip ticket system, waste recycling, internal waste transfer
Shotcreting (permanent and temporary)	Whole site	PYE	Dust	Covering of cement storage area, enclosure of mixing area

Remark:
PYE is the Sub-contractor for this project

Appendix C Project Organization Chart & Management Structure



Notes:
EPD - Environmental Protection Department
Arup – Ove Arup & Partners Limited
Veolia - Veolia Environmental Services Hong Kong Limited
Meinhardt - Meinhardt Infrastructure And Environment Limited
Aurecon - Aurecon Hong Kong Limited

Line of Communication

Appendix D Detail Status of FEP & EP Submission

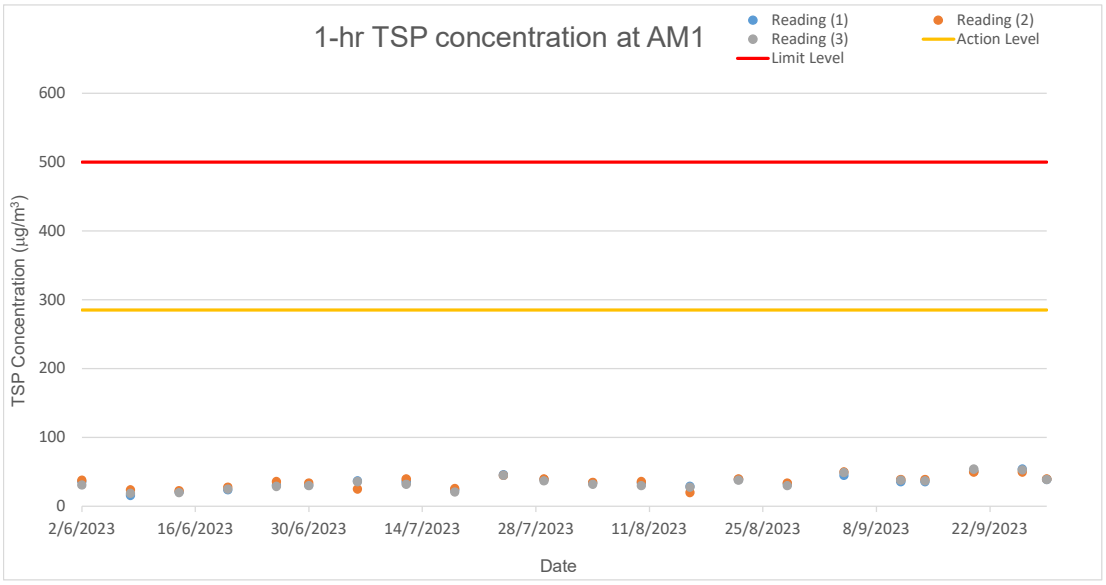
Detail Status of Submissions required under the FEP & EP

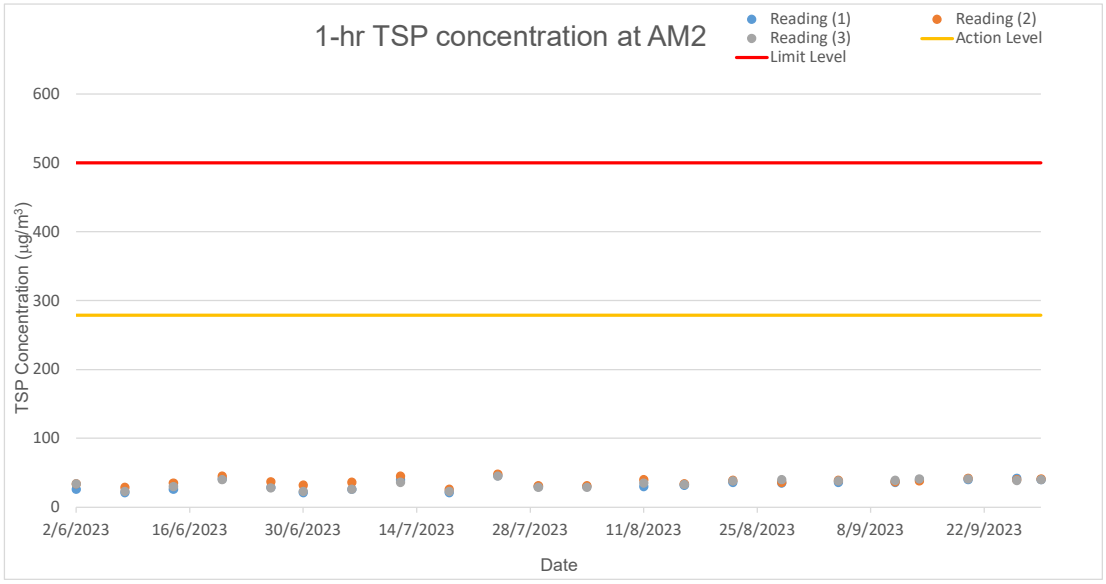
FEP Condition	EP Condition	Submission / Measures	Status
2.1	2.3	Management Organization of Main Construction Companies	Submission Date (12 Oct 2022)
2.2	2.4	Setting up of Community Liaison Group (CLG)	Submission Date (12 Oct 2022) 1st CLG meeting (12 Jan 2023)
2.3	2.5	Submission of EM&A Manual	Submission Date (12 Oct 2022)
2.4	2.6	Submission of Preservation of Cultural Landscape Features	Survey and Preservation of Grave Records: Submission Date (15 Oct 2022) Survey and Preservation of Boulder Paths: Submission Date (12 Oct 2022)
2.5	2.7	Submission of Vegetation Survey (Transplantation Proposal)	Submission Date (2 September 2022)
2.6	2.8	Submission of translocation proposal	Submission Date (8 July 2022)
2.7	2.9	Submission of Transplantation Report and Post-Transplantation Monitoring	Submission Date (19 Jan 2023) 1st monitoring (24 Nov 2022) 2nd monitoring (9 Dec 2022) 3rd monitoring (21 Dec 2022) 4th monitoring (13 Jan 2023) 5th monitoring (26 Jan 2023) 6th monitoring (8 Feb 2023) 7th monitoring (24 Feb 2023) 8th monitoring (20 Mar 2023) 9th monitoring (21 Apr 2023) 10th monitoring (17 May 2023) 11th monitoring (16 Jun 2023) 12th monitoring (18 Jul 2023) 13th monitoring (11 Aug 2023) 14th monitoring (15 Sep 2023)

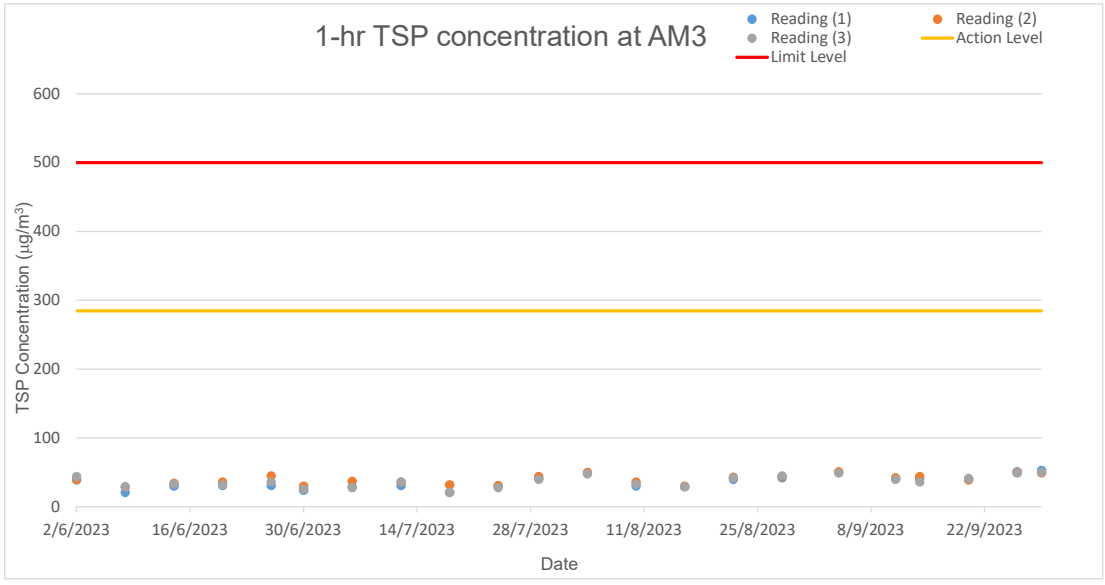
FEP Condition	EP Condition	Submission / Measures	Status
2.8	2.10	Submission of Translocation Report and Post-Translocation Monitoring	Translocation was carried out in July 2022 Submission Date (27 December 2022) 1st monitoring (29 Aug 2022) 2nd monitoring (28 Sep 2022) 3rd monitoring (28 Oct 2022) 4th monitoring (28 Oct 2022) 5th monitoring (29 Dec 2022) 6th monitoring (30 Jan 2023) 7th monitoring (24 Feb 2023) 8th monitoring (20 Mar 2023) 9th monitoring (19 Apr 2023) 10th monitoring (12 May 2023) 11th monitoring (7 Jun 2023) 12th monitoring (12 Jul 2023)
2.9	2.11	Submission of Detailed Landfill Gas Hazard Assessment Report	Submission Date (6 Oct 2022)
2.10	2.12	Submission of Waste Management Plan	Submission Date (30 December 2022)
3.2	3.2	Submission of Baseline Monitoring Report	Submission Date (30 Nov 2022)
3.3	3.3	Submission of Monthly EM&A Report	1st report (Dec 2022) 2nd report (Jan 2023) 3rd report (Feb 2023) 4th report (Mar 2023) 5th report (Apr 2023) 6th report (May 2023) 7th report (Jun 2023) 8th report (Jul 2023) 9th report (Aug 2023) 10th report (Sep 2023)

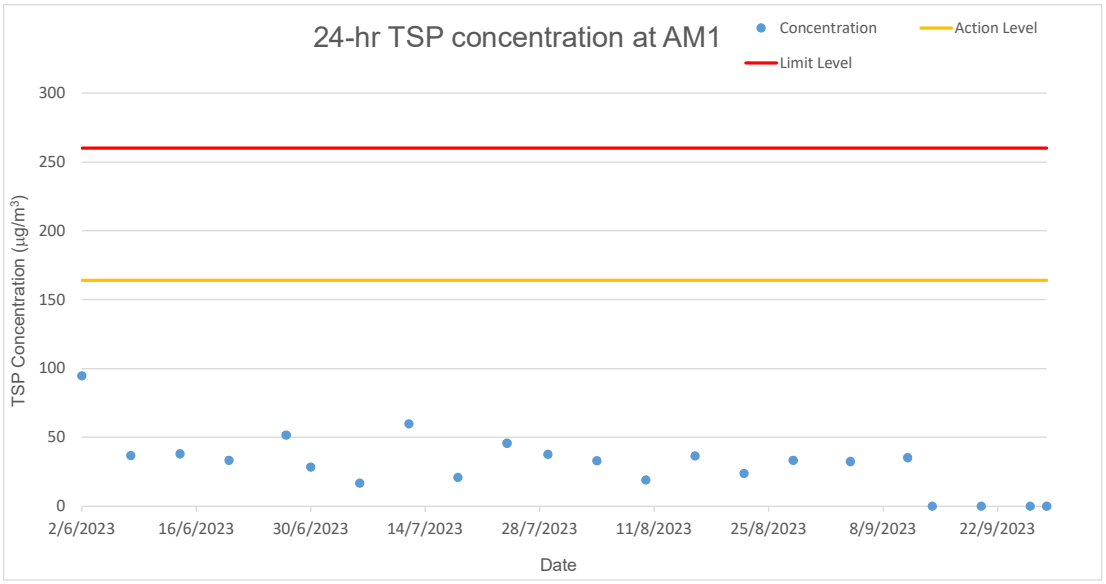
Appendix E Graphical Presentations

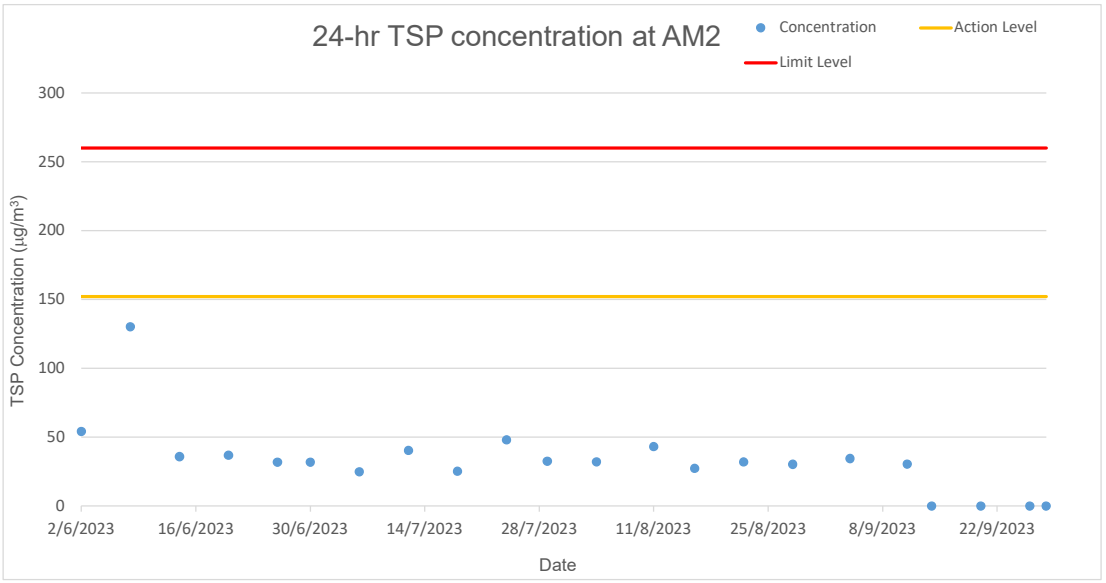
Air Quality

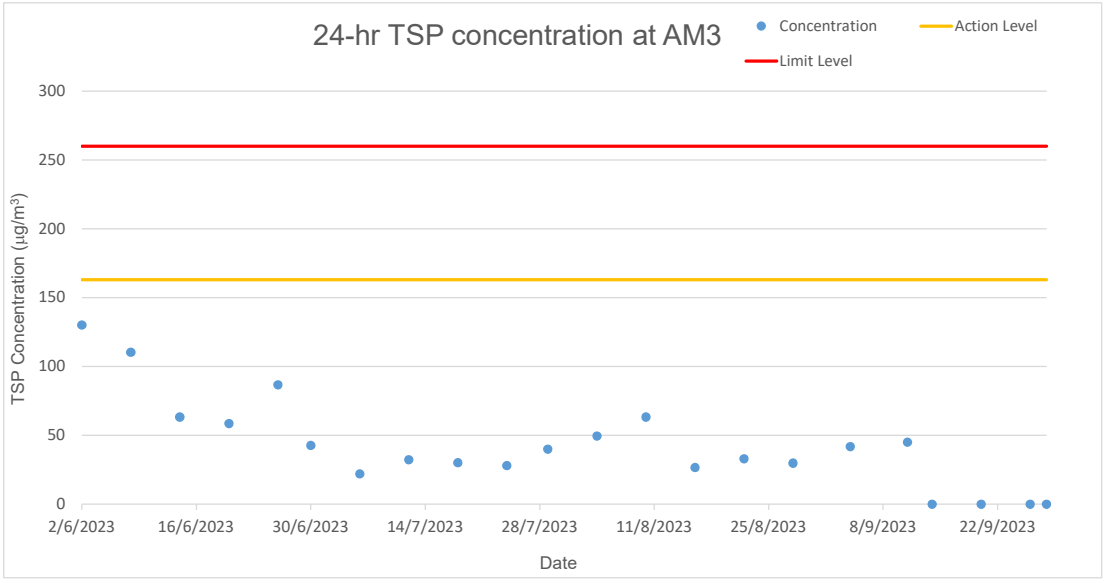

1-hr TSP concentration at AM1
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/6/2023
16/6/2023
30/6/2023
14/7/2023
28/7/2023
11/8/2023
25/8/2023
8/9/2023
22/9/2023
Date


1-hr TSP concentration at AM2
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/6/2023
16/6/2023
30/6/2023
14/7/2023
28/7/2023
11/8/2023
25/8/2023
8/9/2023
22/9/2023
Date

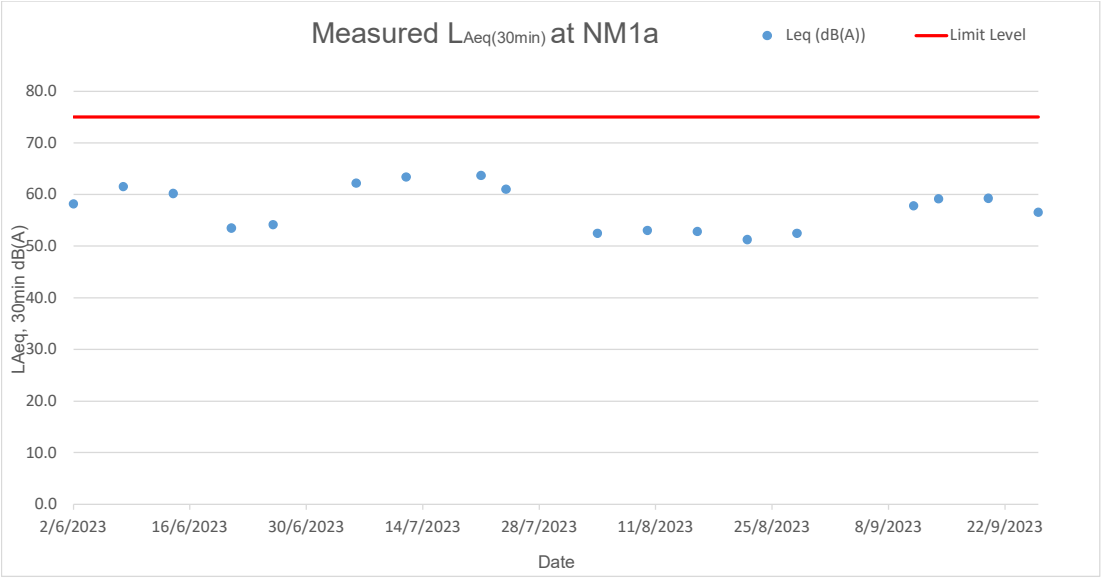

1-hr TSP concentration at AM3
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/6/2023
16/6/2023
30/6/2023
14/7/2023
28/7/2023
11/8/2023
25/8/2023
8/9/2023
22/9/2023
Date


24-hr TSP concentration at AM1
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
2/6/2023
16/6/2023
30/6/2023
14/7/2023
28/7/2023
11/8/2023
25/8/2023
8/9/2023
22/9/2023
Date


24-hr TSP concentration at AM2
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
2/6/2023
16/6/2023
30/6/2023
14/7/2023
28/7/2023
11/8/2023
25/8/2023
8/9/2023
22/9/2023
Date


24-hr TSP concentration at AM3
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
2/6/2023
16/6/2023
30/6/2023
14/7/2023
28/7/2023
11/8/2023
25/8/2023
8/9/2023
22/9/2023
Date

Noise


Measured LAeq(30min) at NM1a
Leq (dB(A))
Limit Level
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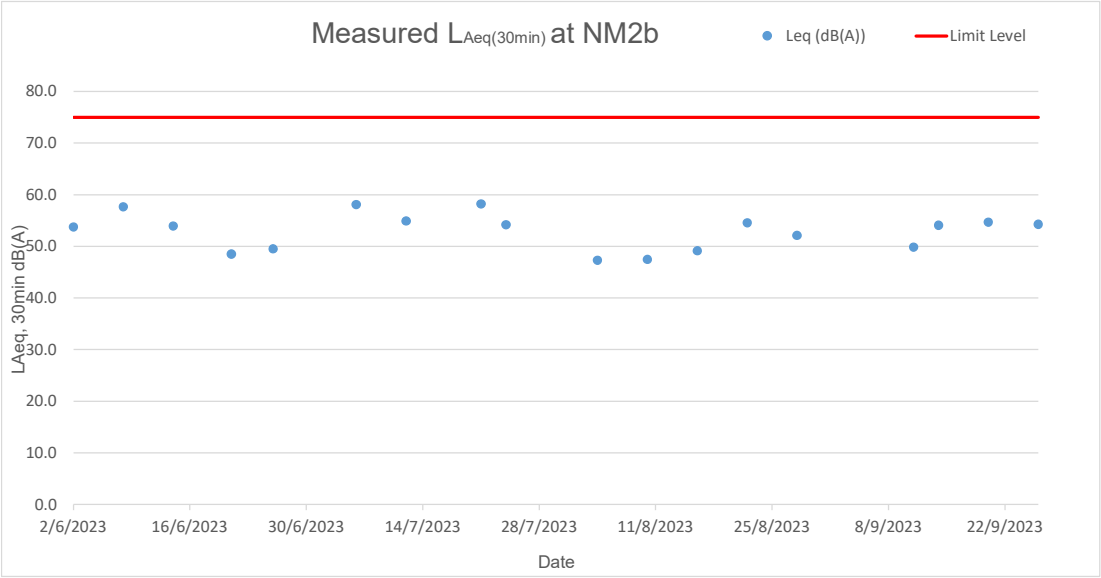
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
LAeq, 30min dB(A)
2/6/2023
16/6/2023
30/6/2023
14/7/2023
28/7/2023
11/8/2023
25/8/2023
8/9/2023
22/9/2023
Date


Measured LAeq(30min) at NM2b
Leq (dB(A))
Limit Level
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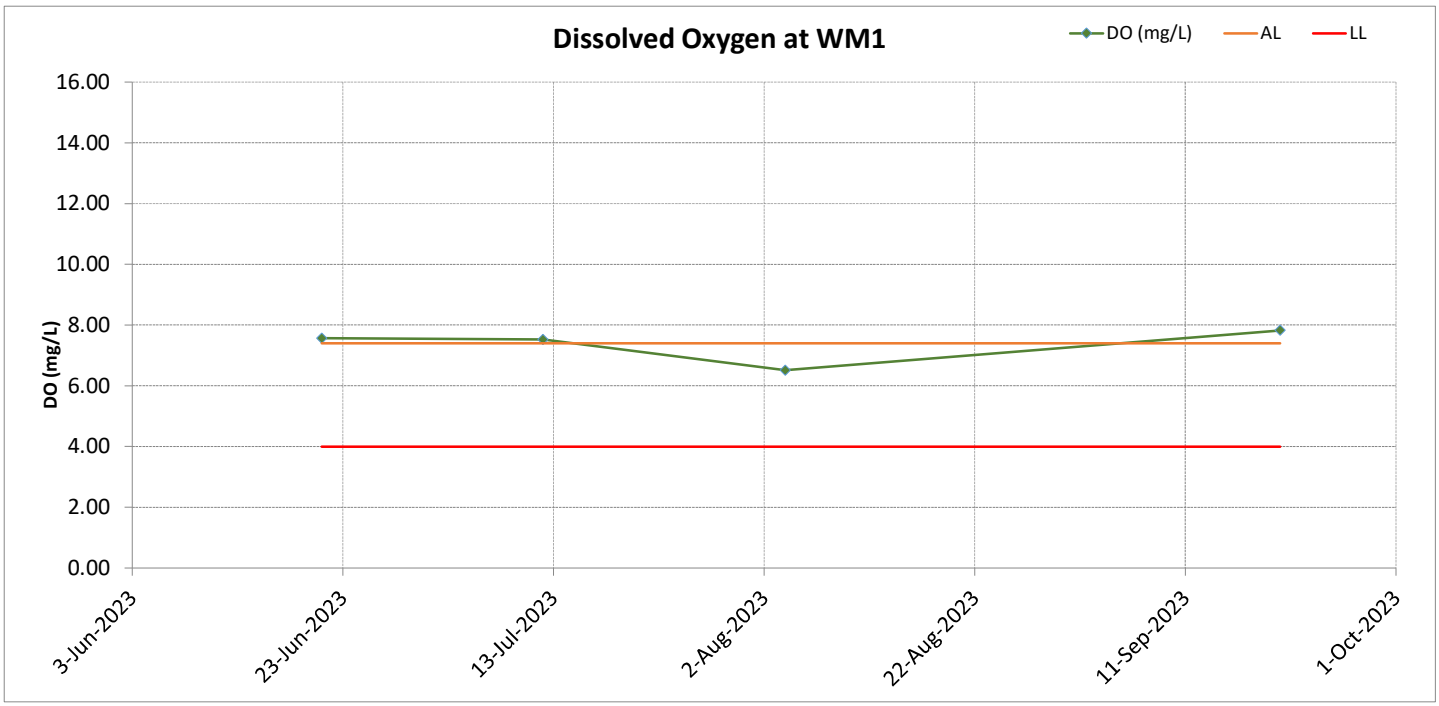
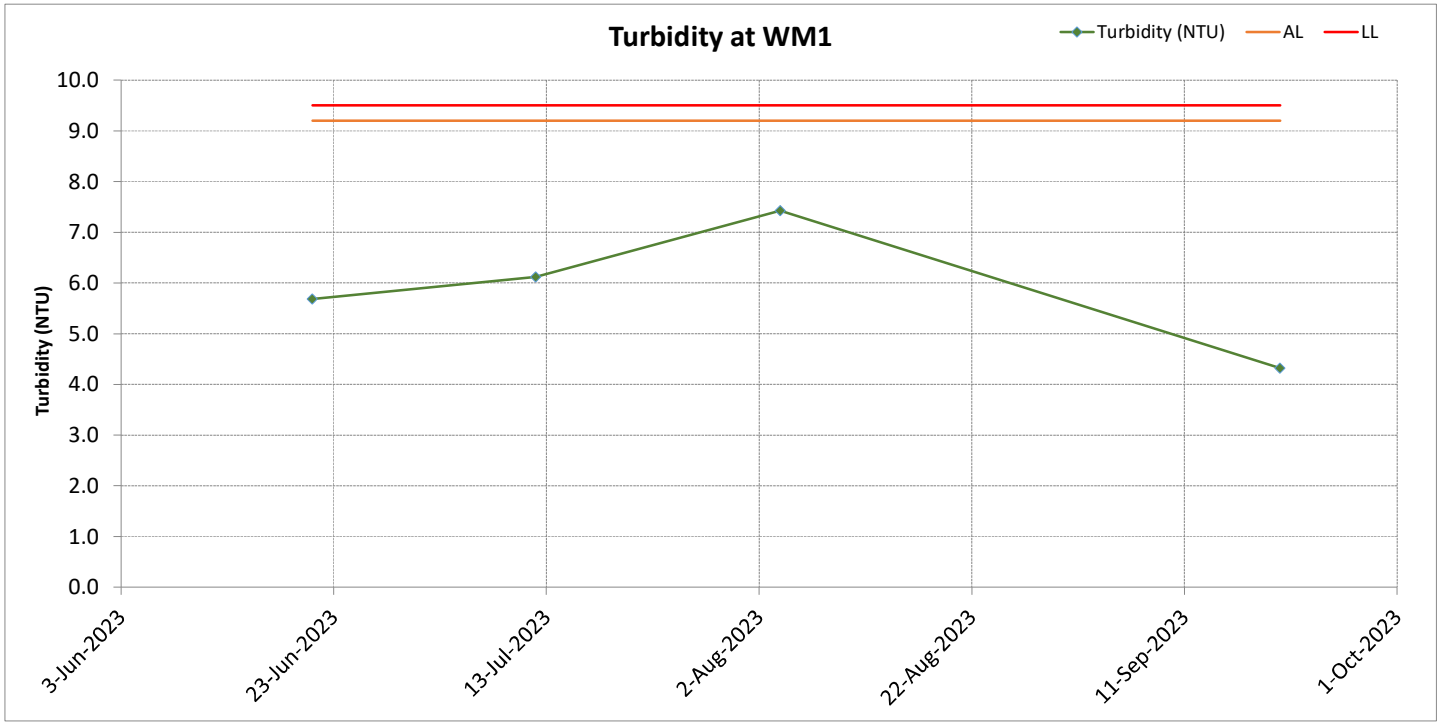
50.0
40.0
30.0
20.0
10.0
0.0
LAeq, 30min dB(A)
2/6/2023
16/6/2023
30/6/2023
14/7/2023
28/7/2023
11/8/2023
25/8/2023
8/9/2023
22/9/2023
Date

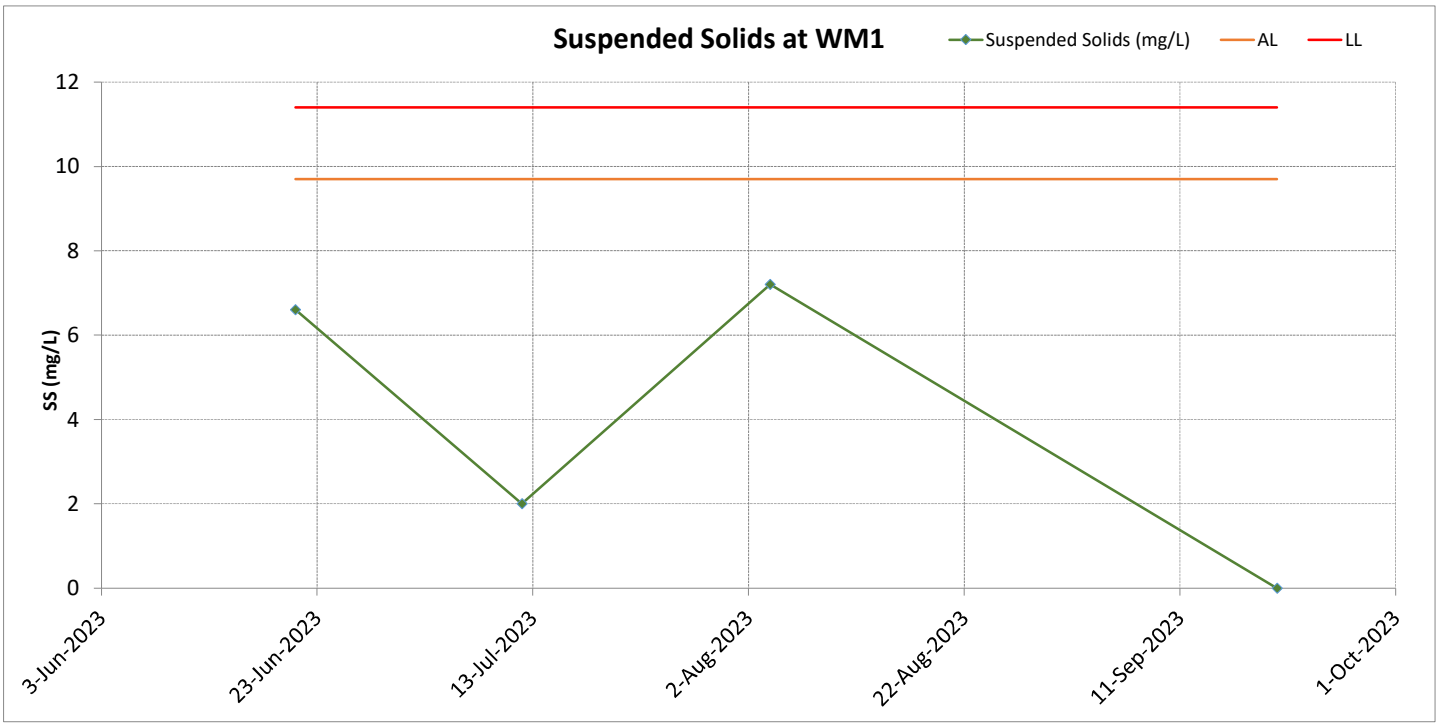
Water Quality

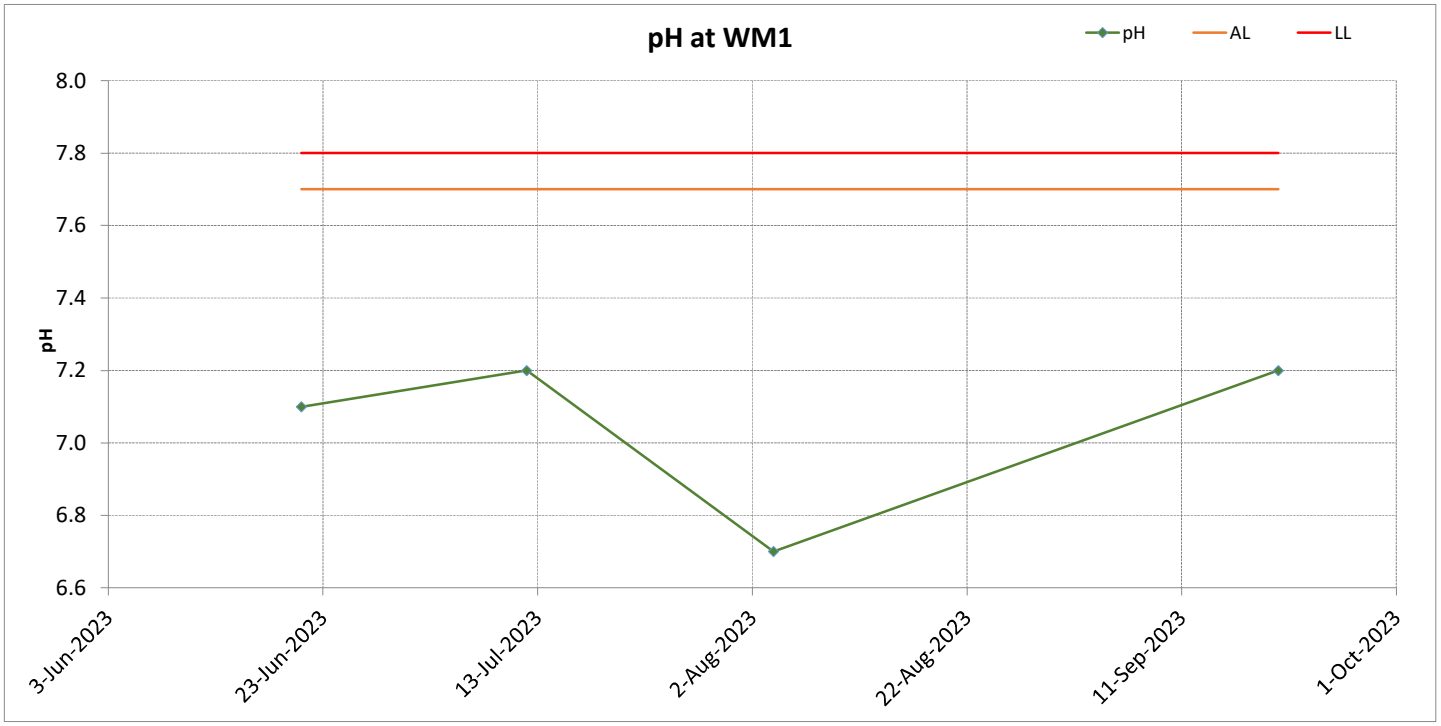
Surface Water Monitoring Results at WM1



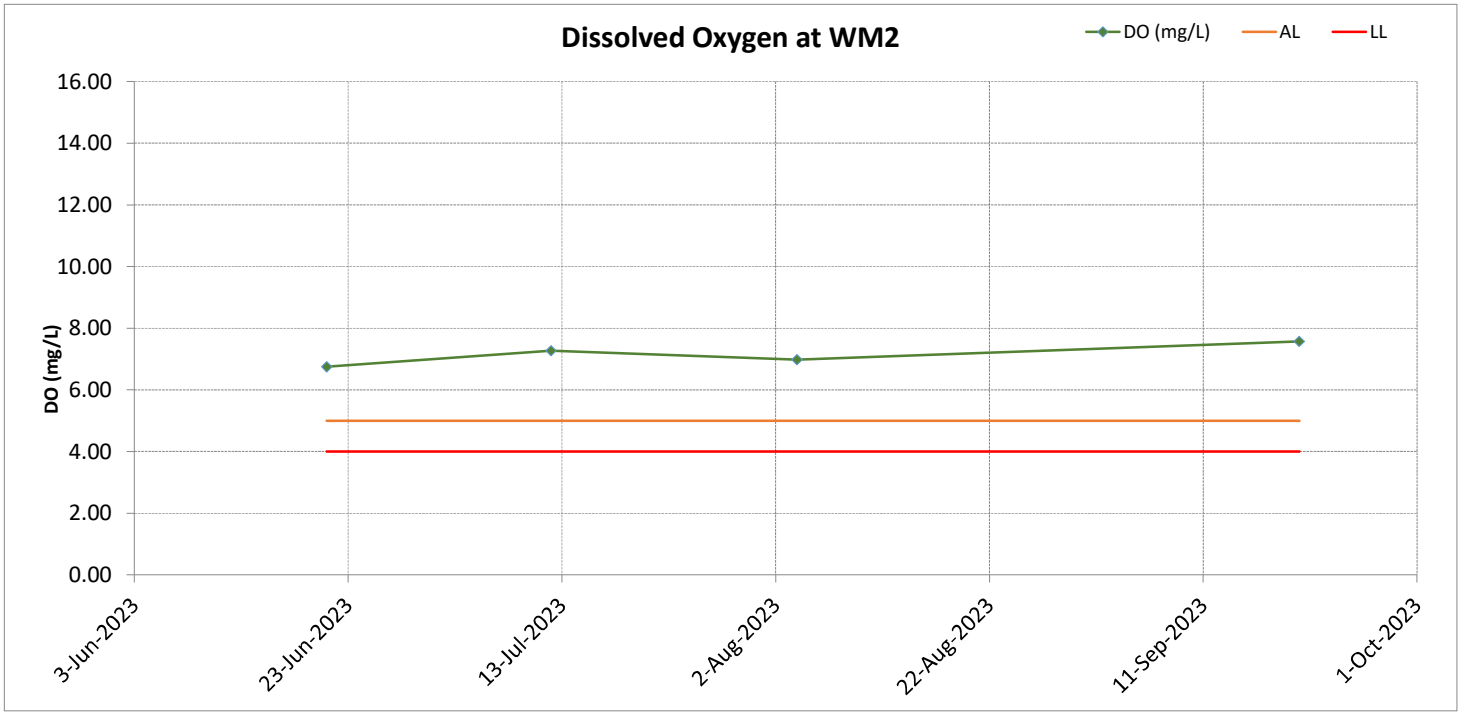


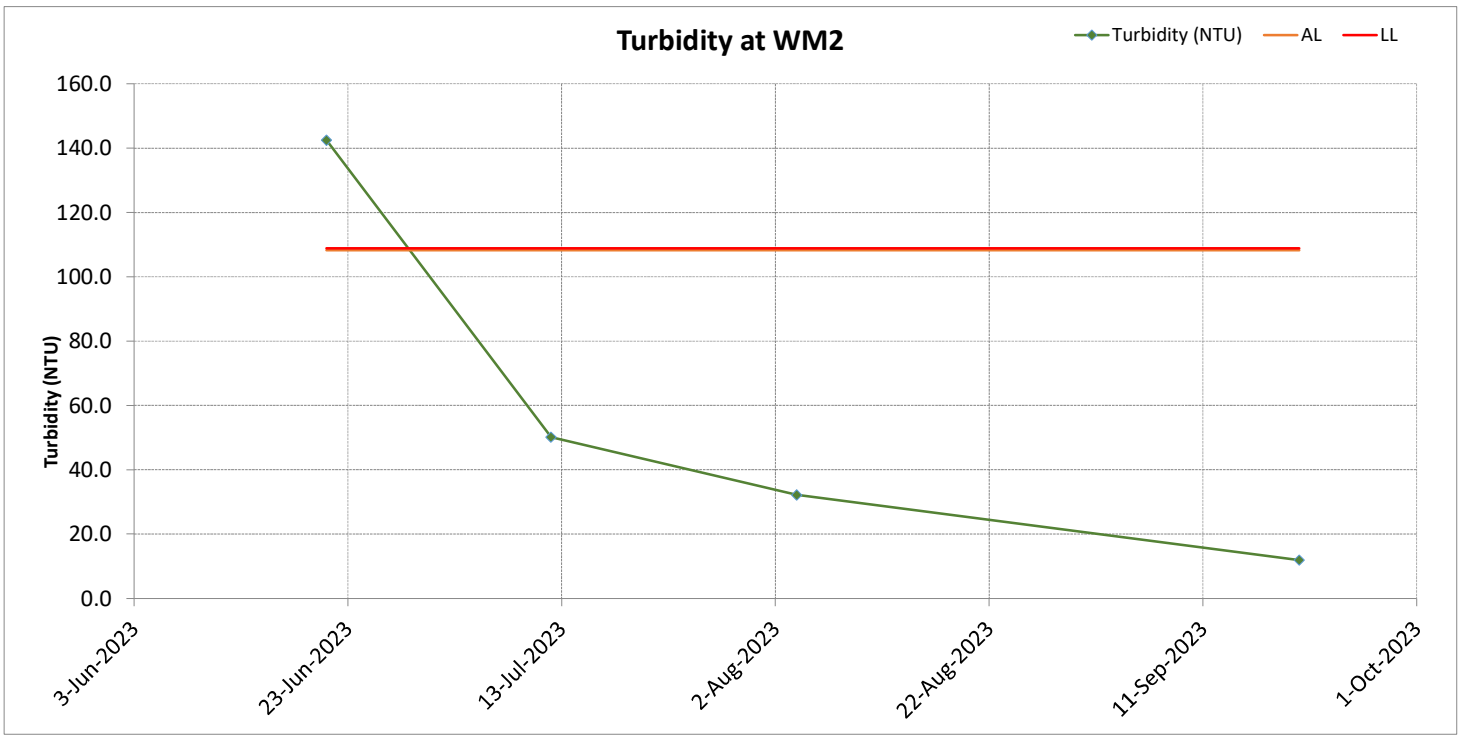
Surface Water Monitoring Results at WM1



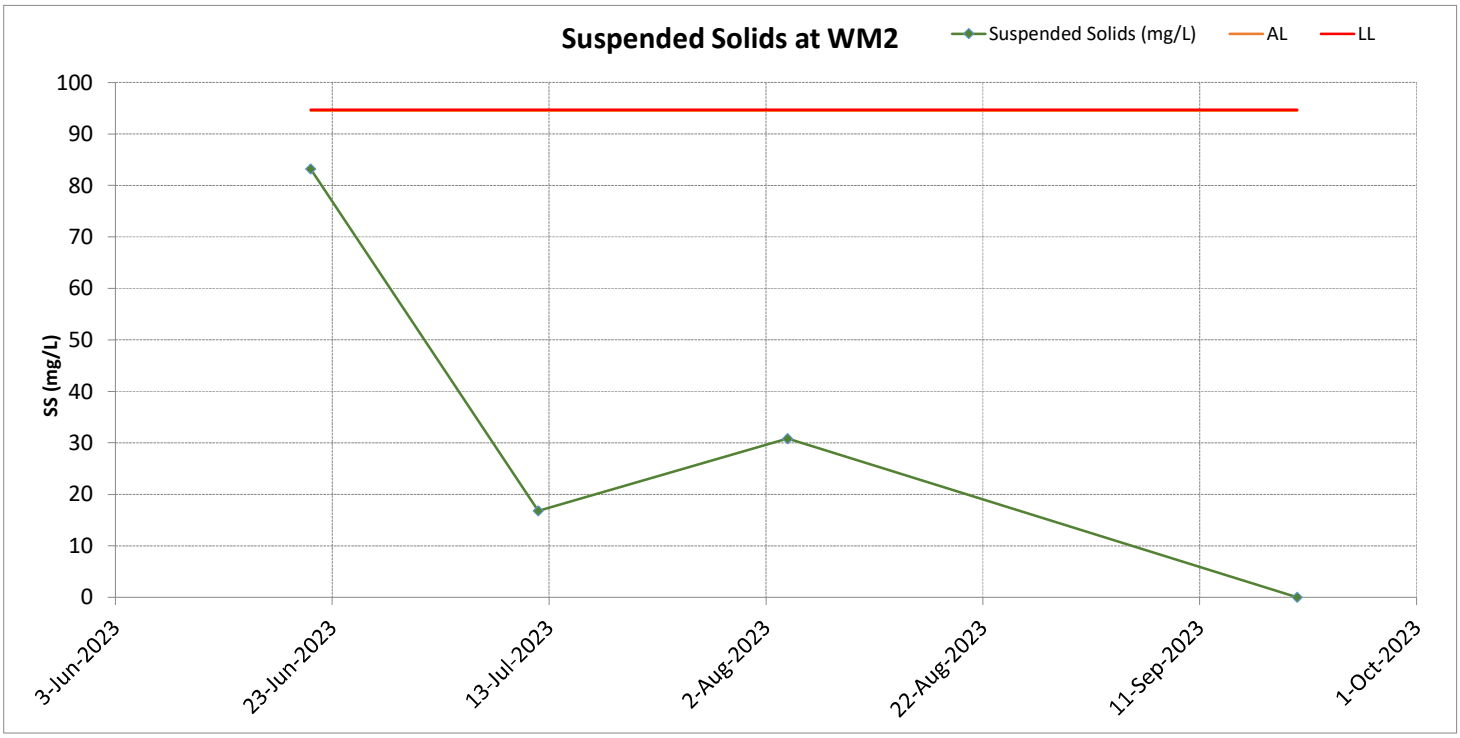


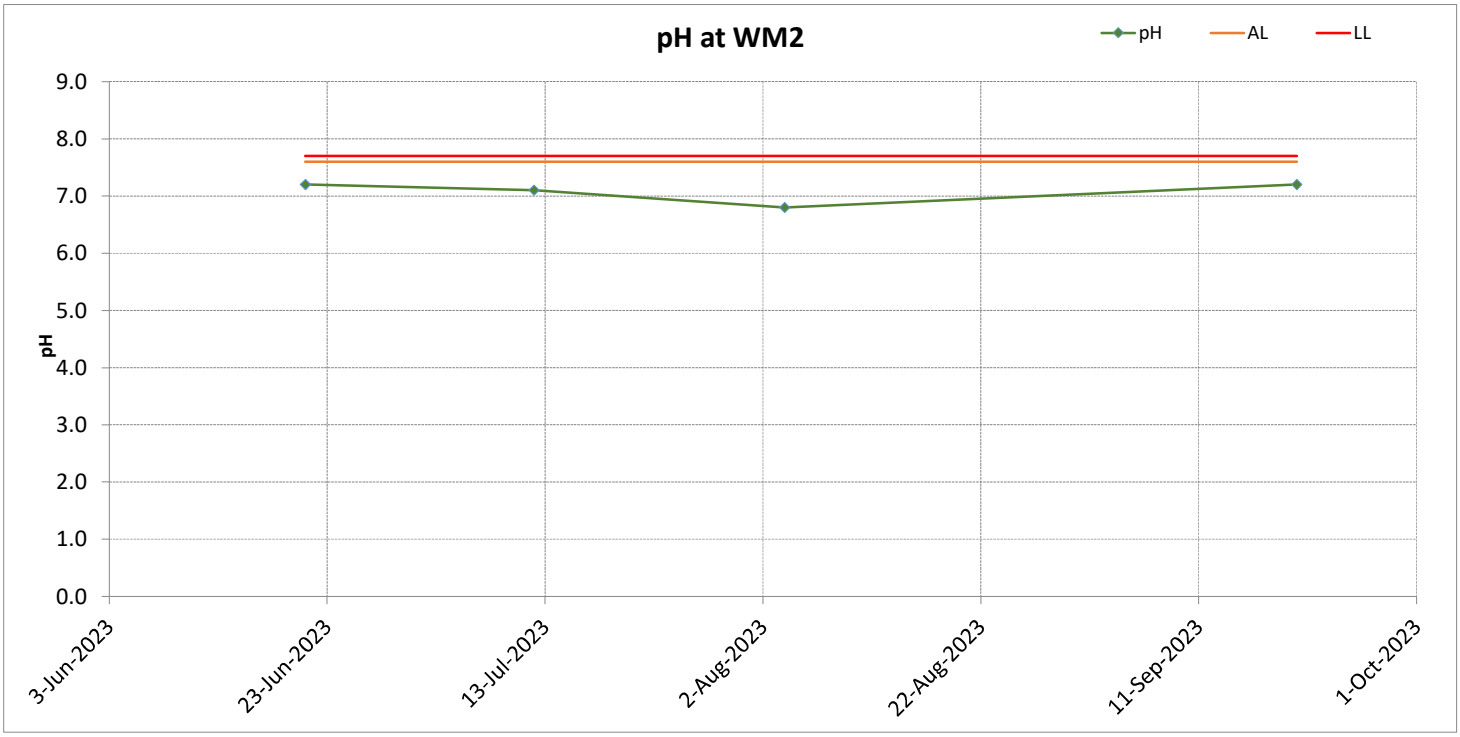
Surface Water Monitoring Results at WM2





Surface Water Monitoring Results at WM2





Appendix F Notification of Environmental Quality Limits Exceedance

Notification of Environmental Quality Limits Exceedance

Air Quality Monitoring - Construction Dust

Dust Monitoring Station	Level Exceedance	Monitoring Parameter (s)		1-hr TSP Exceedance Count				24-hr TSP Exceedance Count			
				Reporting period		Accumulate project to date		Reporting period		Accumulate project to date	
		1-hr TSP	24-hr TSP	Project related	Non-project related	Project related	Non-project related	Project related	Non-project related	Project related	Non-project replated
AM1	Action	0	0	0	0	0	0	0	0	0	2
	Limit	0	0	0	0	0	0	0	0	0	3
AM2	Action	0	0	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0	0	0
AM3	Action	0	0	0	0	0	0	0	0	0	4
	Limit	0	0	0	0	0	0	0	0	0	3

Noise Monitoring

Noise Monitoring Station	Level Exceedance	Monitoring Parameter	LAeq (30mins) Exceedance Count			
			Reporting period		Accumulate project to date	
		LAeq (30mins)	Project related	Non-project related	Project related	Non-project related
NM1a	Action	0	0	0	0	0
	Limit	0	0	0	0	0
NM2a	Action	0	0	0	0	0
	Limit	0	0	0	0	0

Notification of Environmental Quality Limits Exceedance

Surface Water Monitoring

Surface Water Quality Monitoring Station	Level Exceedance	Monitoring Parameter (s)				Exceedance Count															
						Reporting period								Accumulate project to date							
						Project related				Non-project replated				Project related				Non-project replated			
		DO	pH	Turb	SS	DO	pH	Turb	SS	DO	pH	Turb	SS	DO	pH	Turb	SS	DO	pH	Turb	SS
WM1	Action	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WM2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Remarks:

1. “DO” equal to Dissolved Oxygen
2. “Turb” equal to Turbidity
3. “SS” equal to Suspended Solids

Landfill Gas (LFG) Monitoring

LFG Monitoring Station	Monitoring Parameter(s)	No. of Exceedance
		Limit Level
Portion A +50 mpD to +70 mpD Platform	CH_4	0
	CO_2	0
	O_2	0

Appendix G Waste Flow Table

Waste Flow Table

Month	Total Quantity Generated	Total Quantities of Inert C&D Materials to be Generated from the Contract					Total Quantities of Recyclables Generation				Total Quantities of C&D Materials to be Generated from the Contract		
		Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics	Yard Waste (to Y-Park)	Chemical Waste	General Refuse	Others, e.g. non-recyclable yard waste
	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in '000L)	(in tonne)	(in tonne)
Dec-22	84.77	0	0	0	0	0	0	0	0	11.49	0	7.53	65.75
Jan-23	24.51	0	0	0	0	0	0	0	0	0	0	24.51	0
Feb-23	506.45	0	0	0	0	0	0	0	0	3.16	0	5.85	497.44
Mar-23	9,581.15	0	0	9,187	0	0	0	0	0	3.69	0	6.96	383.5
Apr-23	18,532.07	0	0	18,466	0	0	0	0	0	1.97	0	5.81	58.29
May-23	28,889.61	0	0	28,473	0	0	0	0	0	0	0	7.45	409.16
Jun-23	11,574.89	0	0	11,211	0	0	0	0	0	2.38	0	14.69	346.82
Jul-23	50,595.49	0	0	50,307	0	0	0	0	0	0	0	25.54	262.95
Aug-23	63,178.52	0	0	63,076	0	0	0	0	0	0	0	30.77	71.75
Sep-23	42,709.75	0	0	42,676	0	0	0	0	0	0	0	33.38	0
Total	225,677.21	0.00	0.00	223,396.37	0.00	0.00	0.00	0.00	0.00	22.69	0.00	162.49	2,095.66

Note:

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. Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

Appendix H Environmental Mitigation Implementation Schedule (EMIS)

EIA Ref.	EM&A Log Ref.	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Air Quality								
S3.8.1	S3.1.8	B7 – B36	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.	Contractor	Entire NENT Landfill Extension site	To control the dust impact to within the criteria of EIA Report (Register No. AEIAR-111/2007)	# (Refer to Appendix J (1) 25 Sep 2023 Weekly site inspection Observation 1)
		B4, B15 & B18	• Dust emission from construction vehicle movement is confined within the worksites area.					✓
		B11 – B12	• Watering facilities will be provided at every designated vehicular exit point.					✓ Vehicle washing facilities provided at vehicular exit point in Portion A, B1-2, D & E4
		-	• Good site practice is recommended during construction phase.					✓
Construction Noise								
S4	S4.9	C1	1) Use of good site practices to limit noise emissions by considering the following: (a) Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;	Control construction airborne noise by means of good site practices	Contractor	Entire construction site	Noise Control Ordinance	✓
		C2	(b) Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;					✓
		C3	(c) Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;					✓
		C4	(d) Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works;					N/A
		C5	(e) Mobile plant should be sited as far away from NSRs as possible and practicable;					✓
		C6	(f) Material stockpiles, mobile container site officer and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.					✓
S4	S4.9	C11 – C13	2) Select “Quiet plants” which comply with the BS 5228 Part 1 or TM standards.	Reduce the noise levels of plant items	Contractor	Entire construction site	Noise Control Ordinance & its TM Annex 5, TM-EIA	✓
Construction Runoff								
S5.8.1	S5.2.1	D1	<u>Construction on Site Runoff</u> (a) At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. (b) Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities.	Control construction runoff and erosion from site surface, drainage channel, stockpiles, wheel washing facilities, etc to minimize water quality during construction stage	Contractor	Entire Construction site	ProPECC PN 1/94 Water Pollution Control Ordinance	(a) The perimeter cut-off drains are establishing in progress, related measure will be implemented before or on 31 Oct 2023. (b) ✓
		D2	• (a) The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. (b) Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. (c) The sediment/silt traps should be incorporated in the permanent drainage channels to enhance deposition rates.					(a) N/A (b) N/A
		D3	• The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silts and sediment traps should be 5 minutes under maximum flow conditions.					# (Refer to Appendix J (1) 18 Sep 2023 Weekly site inspection Observation 6)
		D4	• (a) Construction works should be programmed to minimize surface excavation works during the rainy seasons (April to September). (b) All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. (c) If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.					(a) N/A (b) ✓ (c) # (Refer to Appendix J 10 Jul 2023 Weekly site inspection Observation 5)

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Construction Runoff (Cont'd)								
S5.8.1	S5.2.1	D5	• (a) The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and all traffic areas and access roads protected by coarse stone ballast. (b) An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows.	Control construction runoff and erosion from site surface, drainage channel, stockpiles, wheel washing facilities, etc to minimize water quality during construction stage	Contractor	Entire Construction site	ProPECC PN 1/94 Water Pollution Control Ordinance	(a) N/A (b) N/A
		D6	• (a) All drainage facilities and erosion and sediment control structures should be regularly inspected and (b) maintained to ensure proper and efficient operation at all times and particularly following rainstorms. (c) Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas.					(a) ✓ (b) ✓ (c) ✓
		D7	• (a) Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. (b) Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.					(a) N/A (b) N/A
		D8	• Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50 m3 should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.					N/A
		D9	• (a) Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as (b) to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.					(a) ✓ (b) ✓
		D10	• Precautions to be taken at any time of year when rainstorms are likely, 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. Particular attention should be paid to the control of silly surface runoff during storm events, especially for areas located near steep slopes.					# (Refer to Appendix J (1) 25 Sep 2023 Weekly site inspection Observation 3 (2) 11 Sep 2023 Weekly site inspection Observation 2)
		D11	• (a) All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. (b) An adequately designed and sited wheel washing bay should be provided at every construction site exit. (c) Wash-water should have sand and silt settled out and removed at least on a weekly basis (d) to ensure the continued efficiency of the process. (e) The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silly water to public roads and drains.					(a) ✓ (b) ✓ (c) ✓ (d) ✓ (c) ✓
		D12	• (a) Oil interceptors should be provided in the site drainage system downstream of any oil/fuel pollution sources. (b) The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. (c) A bypass should be provided for the oil interceptors to prevent flushing during heavy rain.					(a) N/A (b) N/A (c) N/A
		D13	• Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. Requirements for solid waste management are detailed in Section 6 of this Report.					✓
		D14	• All fuel tanks and storage areas should be provided with docks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby.					N/A
		D15	• To prevent pollution risks arising from works area (waste reception area) and haul roads, intercepting bund or barrier along the roadside should be constructed.					N/A

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Construction Runoff (Cont'd)								
S5.8.1	S5.2.1	D19	<u>Sewage Effluent from Workforce</u> • (a) Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. (b) A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Control sewage effluent arising from the sanitary facilities provided for the on-site construction workforce	Contractor	On-site sanitary facilities	ProPECC PN 1/94 Water Pollution Control Ordinance Waste Disposal Ordinance	✓
		D20	• Notices will be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project.					N/A
		-	• Regular environmental audit on the construction site can provide an effective control of any malpractices and can achieve continual improvement of environmental performance on site.					✓
S5.8.1	S5.2.1	D21	<u>Accidental Spillage of Chemical</u> • (a) Any service workshop and maintenance facilities shall be located within a bunded area, and sumps and oil interceptors shall be provided. (b) Maintenance of equipment involving activities with potential for leakage and spillage will only be undertaken within the areas.	Control of chemical leakage	Contractor	Service workshop and maintenance facilities	ProPECC PN 1/94 Water Pollution Control Ordinance Waste Disposal Ordinance	(a) N/A (b) N/A
Erosion Control Measures								
S5.8.2	S5.2.2	-	<u>Erosion Control /Measures</u> a. Preserve Natural Vegetation This Best Management Practices will involve preserving natural vegetation to the greatest extent possible during the construction process. and after construction where appropriate. Maintaining natural vegetation is the most effective and inexpensive form of erosion prevention control.	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	To be implemented
		-	b. Provision of Buffer Zone A buffer zone consists of an undisturbed area or strip of natural vegetation or an established suitable planting adjacent to a disturbed area that reduces erosion and runoff. The rooted vegetation holds soils acts as a wind break and filters runoff that may leave the site.					✓
		-	c. Seeding (Temporary/Permanent) A well-established vegetative cover is one of the most effective methods of reducing erosion. Vegetation should be established on construction sites as the slopes are finished, rather than waiting until all the grading is complete. Besides, Hydroseeding will be applied on the surface of stockpiled soil and on temporary soil covers for inactive tipping areas to prevent soil erosion during rainy season.					✓
		-	d. Ground Cover Ground Cover is a protective layer of straw or other suitable material applied to the soil surface. Straw mulch and/or hydromulch are also used in conjunction with seeding of critical areas for the establishment of temporary or permanent vegetation. Ground cover provides immediate temporary protection from erosion. Mulch also enhances plant establishment by conserving moisture, holding fertilizer, seed, and topsoil in place, and moderating soil temperatures.					To be implemented
		-	e. Hydraulic Application Hydraulic application is a mechanical method of applying erosion control materials to bare soil in order to establish erosion-resistant vegetation on disturbed areas and critical slopes. By using hydraulic equipment, soil amendments, mulch, tackifying agents, Bonded Fiber Matrix (BFM) and liquid co-polymers can be uniformly broadcast, as homogenous slurry, onto the soil. These erosion and dust control materials can often be applied in one operation.					To be implemented
			f. Sod Establishes permanent turf for immediate erosion protection and stabilizes rainageways.					To be implemented
			g. Matting There are numerous erosion control products available that can be described in various ways, such as matting, blankets, fabric and nets. These products are referred as matting. A wide range of materials and combination of materials are used to produce matting including, but not limited to: straw, jute, wood fiber, coir (coconut fiber), plastic netting, and Bonded Fiber Matrix. The selection of matting materials for a site can make a significant difference in the effectiveness of the Best Management Practices.					To be implemented

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Erosion Control Measures (Cont'd)								
S5.8.2	S5.2.2		h. Plastic Sheeting Plastic Sheeting will provide immediate protection to slopes and stockpiles. However, it has been known to transfer erosion problems because water will sheet flow off the plastic at high velocity. This is usually attributable to poor application, installation and maintenance.	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	✓
		-	i. Dust Control Dust Control is one preventative measure to minimize the wind transport of soil, prevent traffic hazards and reduce sediment transported by wind and deposited in water resources.					✓
Surface Water Drainage System								
S5.8.2	S5.2.2	D22	• (a) Temporary surface water drainage system will be provided to manage runoff during construction and operation. (b) This system will consist of channels as constructed around the perimeter of the site area. (c) This system will collect surface water from the areas of higher elevations to those of lower elevations and ultimately to the point of discharge. (d) Erosion will therefore be minimised.	Surface Water Management/ Control run off	Contractor	Surface water system Construction	Water Pollution Control Ordinance TM-water	(a) ✓ (b) ✓ (c) ✓ (d) ✓
		D23	• (a) The temporary surface water drainage system will include the use of a silt fence around the soil stockpile areas to prevent sediment from entering the system. (b) Regular cleaning will be carried out to prevent blockage of the passage of water flow in silt fence.					(a) # (Refer to Appendix J 11 Sep 2023 Weekly site inspection Observation 3) (b) ✓
		-	• Intermediate drainage system will be installed for filled cell/phase. The major purpose of the intermediate drainage system is to prevent the clean surface water run-off from the filled phases coming into contact with the waste mass in active cell and to prevent excessive surface water infiltration through the intermediate cover, thus contribute to increasing volume of leachate. The intermediate drainage system will collect the clean surface water run-off and divert it to the permanent discharge channels connected to the public drainage system.					N/A
		-	• In addition, surface flow from the haul road (especially near the wheel washing facility) will be collected to a dry weather flow interceptor and conveyed to the on-site leachate treatment plant for further treatment.					N/A
Waste Management								
S6	WM1	-	<u>C&D Materials</u> • Implement proper waste management measures during construction phase as stipulated in the Environmental Management Plan (EMP) in accordance with the ETWB TC(W) No. 19/2005 Environmental Management in Construction Sites.	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as possible	Contractor	Entire construction site	Waste Disposal Ordinance ETWB TC(W) No. 19/2005 DEVB TC(W) No. 6/2010	✓
		-	• Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and verified in accordance with DEVB TC(W) No. 6/2010. Copies/counterfoils from trip-tickets (with quantities of C&D Materials off-site) should be kept for record purposes.					✓
		-	• Appropriate waste management should be implemented in accordance with the ETWB TC(W) No. 19/2005.					✓
		E4	• (a) Make provisions in Contract documents to allow and promote the use of recycled aggregates where appropriate. Ensure material balance in terms of excavated C&D materials in the design of NENT landfill extension project. (b) The contract specifications should specify no excavated materials should be removed from the landfill extension site, but should be fully reused.					(a) ✓ (b) ✓
		E5	• Careful design, planning and good site management to minimise over-ordering and waste materials such as concrete, mortars and cement grouts. (a)(b) The design of formwork should maximise the use of standard wooden panels so that high reuse levels can be achieved. (c) Alternatives such as steel formwork or plastic fencing should be considered to increase the potential for reuse.					(a) ✓ (b) ✓ (c) ✓
		E6	• (a) The Contractor should recycle as much as possible the C&D waste on-site through proper waste segregation on-site. (b) Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills. (c) Proper areas should be designated for waste segregation and storage wherever site conditions permit. (d) Maximise the use of reusable steel formwork to reduce the amount of C&D material.					(a) ✓ (b) ✓ (c) ✓ (d) ✓

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Waste Management (Cont'd)								
S6	WM1	E7	• (a) Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement. On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste. (b) The sorted public fill and C&D waste should be properly reused.	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as possible	Contractor	Entire construction site	Waste Disposal Ordinance ETWB TC(W) No. 19/2005 DEVB TC(W) No. 6/2010	(a) ✓ (b) ✓
		E8	• (a) Excavated slope, stockpiled material and bund walls should be covered by tarpaulin until used in order to prevent wind-blown dust during dry weather, and to reduce muddy runoff during wet weather. (b)(c) Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers					(a) # (Refer to Appendix J 10 Jul 2023 Weekly site inspection Observation 5) (b) ✓ (c) ✓
		E9	• If any topsoil-like materials need to be stockpiled for any length of time, consideration should be given to hydroseeding of the topsoil on the stockpile to improve its visual appearance and prevent soil erosion.					N/A
		E10	• Nomination of approved personnel to be responsible for good site practices and making arrangements for collection of all wastes generated on-site and effective disposal.					✓
		E11	• Training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concepts.					✓
		E12	• Regular cleaning and maintenance programme systems, sumps and oil interceptors.					✓
		E13	• (a) Prior to disposal of C&D waste, wood, steel and other metals should be separated for re-use and/or recycling to minimise the quantity of waste to be disposed of to landfill. (b)(c) Proper storage and site practices should be implemented to minimise the potential for damage or contamination of construction materials.					(a) ✓ (b) ✓ (c) N/A
			• Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. Minimise excessive ordering of concrete, mortars and cement grout by doing careful check before ordering.					✓
S6	WM2	E16 – E23	<u>Chemical Waste</u> • Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	Ensure proper disposal of chemical waste generated on-site to minimise the associated hazards on human health and environment	Contractor	Entire construction site	Waste Disposal (Chemical Waste) General Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	# (Refer to Appendix J (1) 18 Sep 2023 Weekly site inspection Observation 5 (2) 25 Sep 2023 Weekly site inspection Observation 2)
		-	• Plant/equipment maintenance schedule should be designed to optimise maintenance effectiveness and to minimise the generation of chemical wastes. Where possible, chemical wastes (e.g. waste lube oil) should be recycled by licensed treatment facilities					✓
		E17 & E18	• Containers used for storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450 liters unless the specification has been approved by the EPD. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulation.					✓
		E19	• (a) The storage area for chemical wastes should be clearly labelled and used solely for storage of chemical waste, (b) enclosed with at least 3 sides, having an impermeable floor and bund of sufficient capacity to accommodate 110% of volume of the largest container or 20 % of total volume of waste stored in that area, (c)(d) whichever is the greatest, having adequate ventilation, being covered to prevent rainfall entering, and being arranged so that incompatible materials are adequately separated.					(a) ✓ (b) N/A (c) N/A (d) N/A
		E20	• Chemical waste should be collected by licensed waste collectors and disposed of at licensed facility, e.g. Chemical Waste Treatment Centre.					✓

Remarks:

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*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Waste Management (Cont'd)								
S6	WM3	E1	<u>General Refuse</u> • General refuse generated on-site should be properly stored in enclosed bins or compaction units separately from construction and chemical wastes.	Minimise generation of general refuse to avoid odour, pest and visual nuisance	Contractor	Entire construction site	Waste Disposal Ordinance	✓
		E2	• (a) All recyclable materials (separated from the general waste) should be stored on-site in appropriate containers with cover prior to collection by a local recycler for subsequent reuse and recycling. Residual, non-recyclable, general waste should be stored in appropriate containers to avoid odour. (b)(c)(d) Regular collection should be arranged by an approved waste collector in purpose-built vehicles that minimise environmental impacts during transportation					(a) ✓ (b) ✓ (c) ✓ (d) ✓
		-	• Reputable waste collector should 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. Burning of refuse on construction sites is prohibited by law.					✓
		-	• Aluminium cans should be separated from general waste stream and collected by recyclers. Proper collection bins should be provided on- site to facilitate the waste sorting.					✓
		-	• Office waste paper should recycled if the volume warrant collection by recyclers. Participation in community waste paper recycling programme should be considered by the Contractor, including waste paper, aluminium cans, plastic bottles, waste batteries, etc.					✓
LFG								
Within NENT Landfill Extension								
S7	LFG1	F1	Special LFG precautions should be taken due to close proximity of NENT landfill extension site to existing landfill to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity).	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97)	N/A
	LFG2	F2	Prominent safety warning signs should be erected on-site to alert all personnel and visitors of LFG hazards during excavation works.					✓
	LFG3	F3	No smoking or burning should be permitted on-site.				F&IU (Confined Spaces) Regulations	✓
	LFG4	F4	Prominent 'No smoking' and 'No Naked Flames' signs should be erected on-site.					✓
	LFG5	F5	No worker should be allowed to work alone at any time in excavated trenches or confined areas on-site.				Code of Practice on Safety and Health at Work in Confined Spaces	✓
	LFG6	F6	Adequate fire fighting equipment should be provided on-site.					✓
	LFG7	F7	Construction equipment should be equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors.					✓
	LFG8	F8	Electrical motors and extension cords should be explosion-proof and intrinsically safe for use on-site.					✓
	LFG9	F9	'Permit to Work' system should be implemented.					✓
	LFG10	F10	Welding, flame-cutting or other hot works should be conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works.					✓
	LFG11	F11	(a) For piping assembly or conduit construction, all valves and seals should be closed immediately after installation to avoid accumulation and migration of LFG. (b) If installation of large diameter pipes (diameter >600mm) is required, the pipe ends should be sealed on one side during installation. (c) Forced ventilation is required prior to operation of installed pipeline. (d) Forced ventilation should also be required for works inside trenches deeper than 1m.					(a) N/A (b) N/A (c) N/A (d) N/A
	LFG12	F12	Frequency and location of LFG monitoring within excavation area should be determined prior to commencement of works. LFG monitoring in excavations should be conducted at no more than 10mm from exposed ground surface.					✓
	LFG13	F13	For excavation works, LFG monitoring should be conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation.					✓
	LFG14	F14	Any cracks on ground level encountered on-site should be monitored for LFG periodically. Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.					✓
	LFG15	F15	(a) LFG precautionary measures involved in excavation and piping works should be provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase. (b) Temporary offices or buildings should be located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm.					(a) N/A (b) N/A

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
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EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
LFG (Cont'd)								
Within NENT Landfill Extension								
S7	LFG16	F16	For large development such as NENT landfill extension, a Safety Officer trained in the use of gas detection equipment and LFG- related hazards should be present on-site throughout the groundwork phase. The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH_4: 0-100% and LEL: 0-100%/v •CO_2: 0-100% •O_2: 0-21%	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97) F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces	✓
	LFG17	F17	(a) Periodically during groundwork construction, the works area should be monitored for CH_4 CO_2 and O_2 using appropriately calibrated portable gas detection equipment. The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person. (b) Routine monitoring should be carried out in all excavations, manholes, created by temporary storage of building materials on-site. (c) All measurements in excavations should be made with monitoring tube located not more than 10mm from exposed ground surface.					(a) N/A (b) N/A (c) N/A
	LFG18	F18	For excavations deeper than 1m, measurements should be conducted: • At ground surface before excavation commences; • Immediately before any worker enters the excavation; • At the beginning of each working day for entire period the excavation remains open; and Periodically throughout the working day whilst workers are in excavation.					✓
	LFG19	F19	For excavations between 300mm and 1m, measurements should be conducted: • Directly after excavation has been completed; and Periodic all whilst excavation remains open.					✓
	LFG20	F20	For excavations less than 300mm, monitoring may be omitted at the discretion of Safety Officer or appropriately qualified person.					✓
Landscape and Visual Phases								
S8	LV1	G4	<u>Advanced screening tree planting</u> • Early planting using fast growing trees and tall shrubs at strategic locations within site to block major view corridors to the site from the VSRs, and to locally screen haul roads, excavation works and site preparation works. • Roadside planter and shrub planting design in front of Cheung Shan Temple.	To minimise the impact on existing vegetation retained by personnel in construction To provide initiation on permanent landscape and visual mitigation measures	Contractor	Entire construction site	DEVB TC(W) No. 4/2020 - Tree Preservation DEVB TC(W)) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features DEVB TC(W) No. 6/2011 - Maintenance of Man-made Slopes and Emergency Repair on Stability of Land	✓
S8	LV2	G5	<u>Boundary Green Belt planting</u> Considerable planting belts proposed around the site perimeter and the construction of temporary soil bunds will screen the landfill operations to a certain degree. Fast growing and fire resistant plant species will be used.					To be implemented during operation phase
S8	LV3	G6	<u>Temporary landscape treatment as green surface cover</u> For certain areas where landfilling operations would have to be suspended temporarily for periods of years, simple temporary landscape treatment such as hydroseeding should be considered. During construction and operational phases, grass hydroseeding or synthetic covering material of green colour should also be used as a temporary slope cover if applicable.					✓
S8	LV4	G7	<u>Existing tree preservation</u> Transplant existing trees and vegetation, which are identified as ecologically significant in Ecological Impact Assessment and as rare tree species recorded in the tree survey, under circumstances where technically feasible. For all affected trees, the principle of avoidance of tree felling and tree transplanting of tree before felling should apply whenever possible. A tree felling application should be submitted to DEVB-GLTMS and be approved before any trees are felled or transplanted.					✓

Remarks:

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N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Ecology								
General Protection Measures:								
S10	E1	-	Restriction of construction activities to the work areas that would be clearly demarcated.	To minimise environmental impacts and therefore potential ecological impacts within and near the construction site	Contractor	Entire construction site	Practice Note for Professional Persons (ProPECC), Construction Site Drainage (PN1/94) Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes, EPD (1992) ETWB TC(W)) No. 33/2002 Management of Construction and Demolition Material Including Rock DEVB TC(W) No. 6/2010 Trip Ticket System for Disposal of Construction and Demolition Materials ETWB TC(W)No.19/2005 Environmental Management on Construction Sites	✓
	E2	-	Reinstatement of the work areas immediately after completion of the works.					✓
	E3	-	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.					✓
	E4	-	Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.					✓
	E5	-	Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs.					✓
	E6	-	Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works.					N/A
	E7	-	Mobile plant should be sited as far away from NSRs as possible and practicable.					✓
	E8	-	Material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.					✓
	E9	-	Use of “quiet” plant and working methods.					✓
	E10	-	Construction phase mitigation measures in the Practice Note for Professional Persons on Construction Site Drainage.					✓
	E11	-	Design and set up of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction.					✓
	E12	-	Design and incorporation of silt/sediment traps in the permanent drainage channels to enhance deposition rates and regular removal of reposited silt and grit.					✓
	E13	-	Minimization of surface excavation works during the rainy seasons (April to September), and in particular,control of silty surface runoff during storm events, especially for areas located near steep slopes.					N/A
	E14	-	Regular inspection and maintenance of all drainage facilities and erosion and sediment control structures to ensure proper and efficient operation at all times and particularly following rainstorms.					✓
	E15	-	Provision of oil interceptors in the drainage system downstream of any oil/fuel pollution sources					N/A

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
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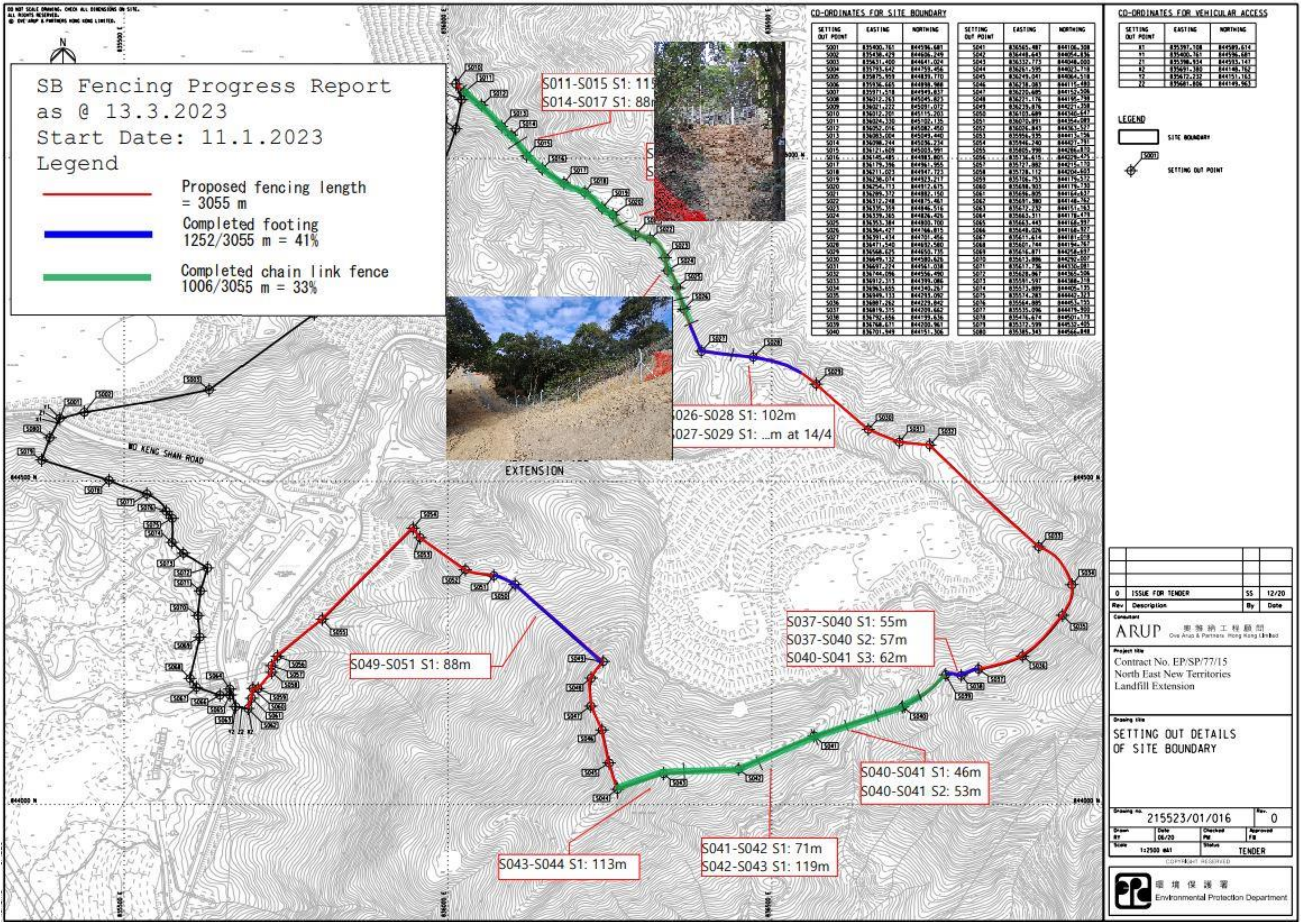
Appendix I Mitigation Measures of Cultural Landscape Features


SB Fencing Progress Report
as @ 13.3.2023
Start Date: 11.1.2023
Legend
Proposed fencing length = 3055 m
Completed footing 1252/3055 m = 41%
Completed chain link fence 1006/3055 m = 33%
S011-S015 S1: 115
S014-S017 S1: 88m
026-S028 S1: 102m
027-S029 S1: ...m at 14/4
EXTENSION
WO KENG SHAN ROAD
S049-S051 S1: 88m
S037-S040 S1: 55m
S037-S040 S2: 57m
S040-S041 S3: 62m
S040-S041 S1: 46m
S040-S041 S2: 53m
S041-S042 S1: 71m
S042-S043 S1: 119m
S043-S044 S1: 113m
CO-ORDINATES FOR SITE BOUNDARY
CO-ORDINATES FOR VEHICULAR ACCESS
LEGEND
SITE BOUNDARY
SETTING OUT POINT
0 ISSUE FOR TENDER SS 12/20
ARUP
Contract No. EP/SP/77/15
North East New Territories
Landfill Extension
SETTING OUT DETAILS
OF SITE BOUNDARY
215523/01/016
TENDER
環境保護署
Environmental Protection Department

Appendix J Cumulative complaint / enquiry log, Summaries of complaints and enquiries & Environmental complaint reports

Environmental Complaints Log

Complaint Ref. No.	Date of Complaint Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
C001_20221220	21 Dec 2022	Veolia (Contractor)	ET	Air Quality (Construction Dust)	5, 12 & 19 Dec 2022	It was noted from Veolia's email to the ET on 20 December 2022 that Veolia received complaint lodged regarding presenting much dusty materials at roundabout at Wo Keng Shan Road & dusty flying problem at Kowloon-bound traffic at Lung Shan Tunnel. No dusty materials and wastes were transported out from the NENTX site during the complaint period. During the regular weekly site inspection on 5, 12 & 19 December 2022, it was observed that the wheel washing facilities with high-pressure water jets have been provided at all site exits of NENTX and cleaned all vehicles before allowing them to leave the construction site to ensure that no mud or debris would be brought to the public area. All site vehicles of NENTX are also required to go through the auto wheel washing facility, which is managed by the operator of the NENT landfill, before entering the public area. The road section between the washing facilities and the exit point was paved with concrete, or bituminous materials were implemented in all site entrances. No mud generated from vehicles under the NENTX project after exiting the site entrance was observed. In conclusion, there is no direct evidence showing that the complaint is likely related to the NENTX project.	5 Jan 2023
C002_20230614	14 Jun 2023	EPD-RNG	ET	Water Quality	16, 21 Jun, 24, 25 Jul & 2 Aug 2023	It was noted from EPD-RNG's email to the ET on 14 Jun 2023 that EPD received complaint lodged regarding the muddy water was observed at Lin MA Hang International Bridge. In summary of the investigation, the pollutant water appeared crimson colour with bubbles ay the LMH-OP01 (Monitoring Point from EPD). The colour and pattern of pollutant water is different from the runoff at surface WQM monitoring location WM1. Hence, the project is not the major source causing the pollutant water. To minimise the potential impact of the project, the enhancement of mitigation measures at north boundary were advised to implement by contractor.	29 Jun & 21 Aug 2023

Complaint Ref. No.	Date of Complaint Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
C003_20230615	15 Jun 2023	EPD-RNG	ET	Water Quality	16, 19, 21 Jun, 18 Jul 2023	It was noted from EPD-RNG's email to the ET on 15 June 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD). In summary of the investigation, the muddy water caused from multi-potential sources while the runoff from the box culvert under the Wo Keng Shan Road is the major source including runoff from Existing channel near Portion E3-1, discharge water from the silt removal facilities at Portion E3-1 of the project, runoff from branch near the entrance of Portion E3-1, runoff from weighting plaza of NENT Landfill & natural stream near Wo Keng Shan & Shui Ngau Tso etc.. Hence, the project is a part of factor causing the high turbidity muddy water. To minimise the potential impact of construction runoff from the project, the further mitigation measures and enhancement of the temporary surface water drainage system were advised to implement by contractor.	15 Jun, 21 Aug 2023
C004_20230803	3 Aug 2023	EPD-RNG	ET	Water Quality	18 Jul 2023	It was noted from EPD-RNG's email to the ET on 3 Aug 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD). In summary of the investigation, the muddy water caused from multi-potential sources while the runoff from the box culvert under the Wo Keng Shan Road is the major source including runoff from Existing channel near Portion E3-1, discharge water from the silt removal facilities at Portion E3-1 of the project, runoff from branch near the entrance of Portion E3-1, runoff from weighting plaza of NENT Landfill & natural stream near Wo Keng Shan & Shui Ngau Tso etc.. Hence, the project is a part of factor causing the high turbidity muddy water. To minimise the potential impact of construction runoff from the project, the further mitigation measures and enhancement of the temporary surface water drainage system were advised to implement by contractor.	14 Aug 2023

Complaint Ref. No.	Date of Complaint Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
C005_20230818	18 Aug 2023	EPD-RNG	ET	Water Quality	18 Sep 2023	It was noted from EPD-RNG's email to the ET on 18 August 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD) on 14 August 2023. In summary of the investigation, the complaint is project related. It viewed that muddy water arising from wheel washing water from the site entrance at Portion E4 & Runoff from Existing Channel near Portion E3-1 & discharge water from the silt removal facilities at Portion E3-1 eventually flows into the box culvert under Wo Keng Shan Road, WM2 and ultimately to GR3. The related rectified actions should be conducted by the contractor as soon as possible.	13 October 2023
C006_20230914	14 Sep 2023	EPD-RNG	ET	Water Quality	18 Sep 2023	It was noted from EPD-RNG's email to the ET on 14 September 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD) on 11 September 2023. In summary of the investigation, the complaint is project related. It viewed that muddy water arising from wheel washing water from the site entrance at Portion E4 & Runoff from Existing Channel near Portion E3-1 & discharge water from the silt removal facilities at Portion E3-1 eventually flows into the box culvert under Wo Keng Shan Road, WM2 and ultimately to GR3. The related rectified actions should be conducted by the contractor as soon as possible.	13 October 2023

Remarks:

1. "ET" equal to "Environmental Team"
2. "EPD-RNG" equal to "Environmental Protection Department-Regional Office (North)"
3. "TBC" equal to "To Be Confirm"

Environmental Enquiries Log

Enquiry Ref. No.	Date of Enquiry Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
NA	NA	NA	NA	NA	NA	NA	NA

Remarks:

1. "ET" equal to "Environmental Team"
2. "EPD-RNG" equal to "Environmental Protection Department-Regional Office (North)"
3. "NA" equal to "Not Applicable"

Cumulative Statistics on Complaints

Aspects	Cumulative No. Brought Forward	No. of Complaints This Month	Cumulative Project-to-Date
Air Quality	1	0	1
Noise	0	0	0
Water Quality	0	1	5
Waste Management	0	0	0
Total	1	1	6

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