

FORM 5
ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE
(CHAPTER 499)
SECTION 13(1)

Application for Variation of an Environmental Permit

PART A PREVIOUS APPLICATIONS

No previous application for variation of an environmental permit.

The environmental permit was previously amended.

Application No. : VEP-563/2019

PART B DETAILS OF APPLICANT

B1. Name : (person or company)

Civil Engineering and Development Department

[Note : In accordance with section 13(1) of the Ordinance, the person holding an environmental permit or a person who assumes responsibility for the designated project may apply for variation of the environmental permit.]

B2. Business Registration No. :

(if applicable)

B3. Correspondence Address :

B4. Name of Contact Person :

B5. Position of Contact Person :

B6. Telephone No. :

B7. Fax No. :

B8. E-mail Address : (if any)

PART C DETAILS OF CURRENT ENVIRONMENTAL PERMIT

C1. Name of the Current Environmental Permit Holder :

Civil Engineering and Development Department

C2. Application No. of the Current Environmental Permit : VEP-563/2019 (EP-134/2002/N)

C3. The Current Environmental Permit was Issued in : month / year

08 | 2019

Important Notes : Please submit the application together with
(a) 3 copies of this completed form; and
(b) appropriate fee as stipulated in the Environmental Impact Assessment (Fees) Regulation to the Environmental Protection Department at the following address :
The EIA Ordinance Register Office,
27th floor, Southorn Centre, 130 Hennessy Road,
Wan Chai, Hong Kong.

Tick (✓) the appropriate box

PART D PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL PERMIT

D1. Condition(s) in the Current Environmental Permit :	D2. Proposed Variation(s) :	D3. Reason for Variation(s) :	D4. Describe the environmental changes arising from the proposed variation(s) :	D5. Describe how the environment and the community might be affected by the proposed variation(s) :	D6. Describe how and to what extent the environmental performance requirements set out in the EIA report previously approved or project profile previously submitted for this project may be affected :	D7. Describe any additional measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variation(s) and to meet the requirements in the Technical Memorandum on Environmental Impact Assessment Process :
<p>Part B, Scale and Scope of Designated Project "The project site covers an area of approximately 104 hectares."</p> <p>Part C, Condition 2.15 ".... During the operation-removal overlapping phase (October 2003 to December 2021)...."</p> <p>Part C, Condition 2.16 "The fill bank shall not receive further public fill from 1st January 2022."</p> <p>Figure 1 and Figure 3</p>	<p>Part B, Scale and Scope of Designated Project "The project site covers an area of approximately <u>90</u> hectares."</p> <p>Part C, Condition 2.15 ".... During the operation-removal overlapping phase (October 2003 to December <u>2026</u>)...."</p> <p>Part C, Condition 2.16 "The fill bank shall not receive further public fill from 1st January <u>2027</u>."</p> <p>Revised Figure 1 and Figure 3</p>	<p>An area of about 14 hectares in the temporary fill bank has been handed over to the EPD for SENT Landfill extension in 2018.</p> <p>Extension of land use for temporary fill bank at TKO Area 137 up to end 2026 to meet the needs for temporary stockpiling of public fill.</p>	<p>There is no material change to the environmental impact associated with the operation of the temporary fill bank during the extended period. The facilities and daily operation remain unchanged for the next 5 years.</p>	<p>To verify no potential impacts on the environment and the community, potential air quality impact, noise impact and water quality impact have been reviewed and are concluded compliance with the relevant environmental standards set out in the approved EIA Report (AEIAR-060/2002) and the Technical Memorandum on EIA Process, as shown in the Environmental Review Report.</p>	<p>The environmental performance requirements set out in the approved EIA Report will not be violated and will comply with the Technical Memorandum on EIA Process.</p>	<p>Two new air quality monitoring stations proposed to be set up at the newly established site offices for the SENT Landfill extension and the Tseung Kwan O Desalination Plant respectively. In accordance with EP Condition 3.1, the proposed change to the EM&A programme will be justified by the ET Leader and verified by the IEC as conforming to the requirements set out in the EM&A Manual. Prior approval shall be sought from the Director of Environmental Protection before implementation.</p>

PART E DECLARATION BY APPLICANT

E1. I hereby certify that the particulars given above are correct and true to the best of my knowledge and belief. I understand the environmental permit may be suspended, varied or cancelled if any information given above is false, misleading, wrong or incomplete.



Signature of Applicant



Full Name in Block Letters



Position

on behalf of Civil Engineering and Development Department

Company Name and Chop (as appropriate)

9 November 2021

Date

NOTES :

1. A person who constructs or operates a designated project in Part I of Schedule 2 of the Ordinance or decommissions a designated project listed in Part II of Schedule 2 of the Ordinance without an environmental permit or contrary to the permit conditions commits an offence under the Ordinance and is liable to a maximum fine of \$5,000,000 and to a maximum imprisonment for 2 years.
2. A person for whom a designated project is constructed, operated or decommissioned and who permits the carrying out of the designated project in contravention of the Ordinance commits an offence and is liable to a maximum fine of \$5,000,000 and to a maximum imprisonment for 2 years.

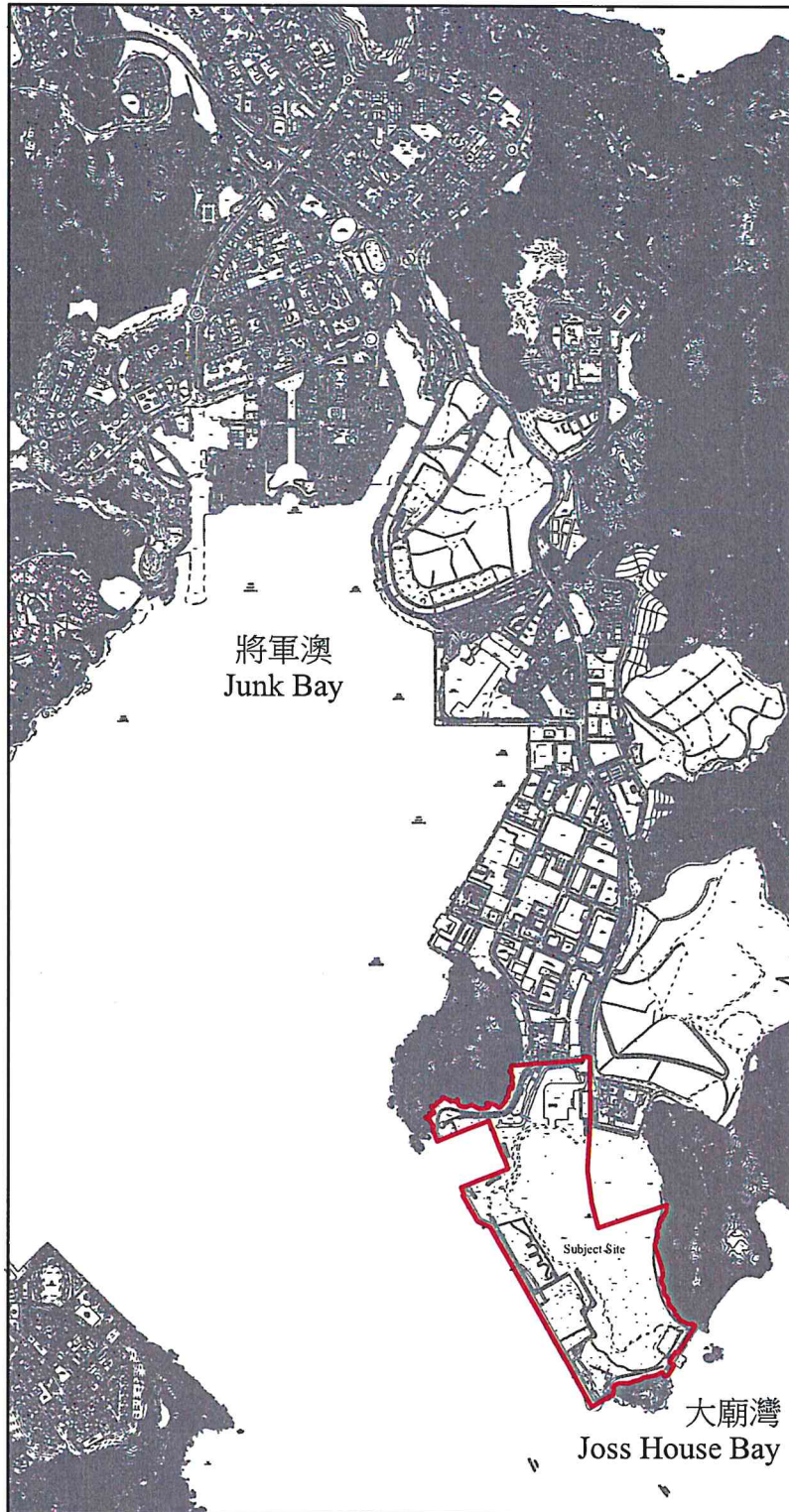


Figure 1: Location of Project Site in Area 137, Tseung Kwan O
圖1: 在將軍澳第137區的工程項目地點

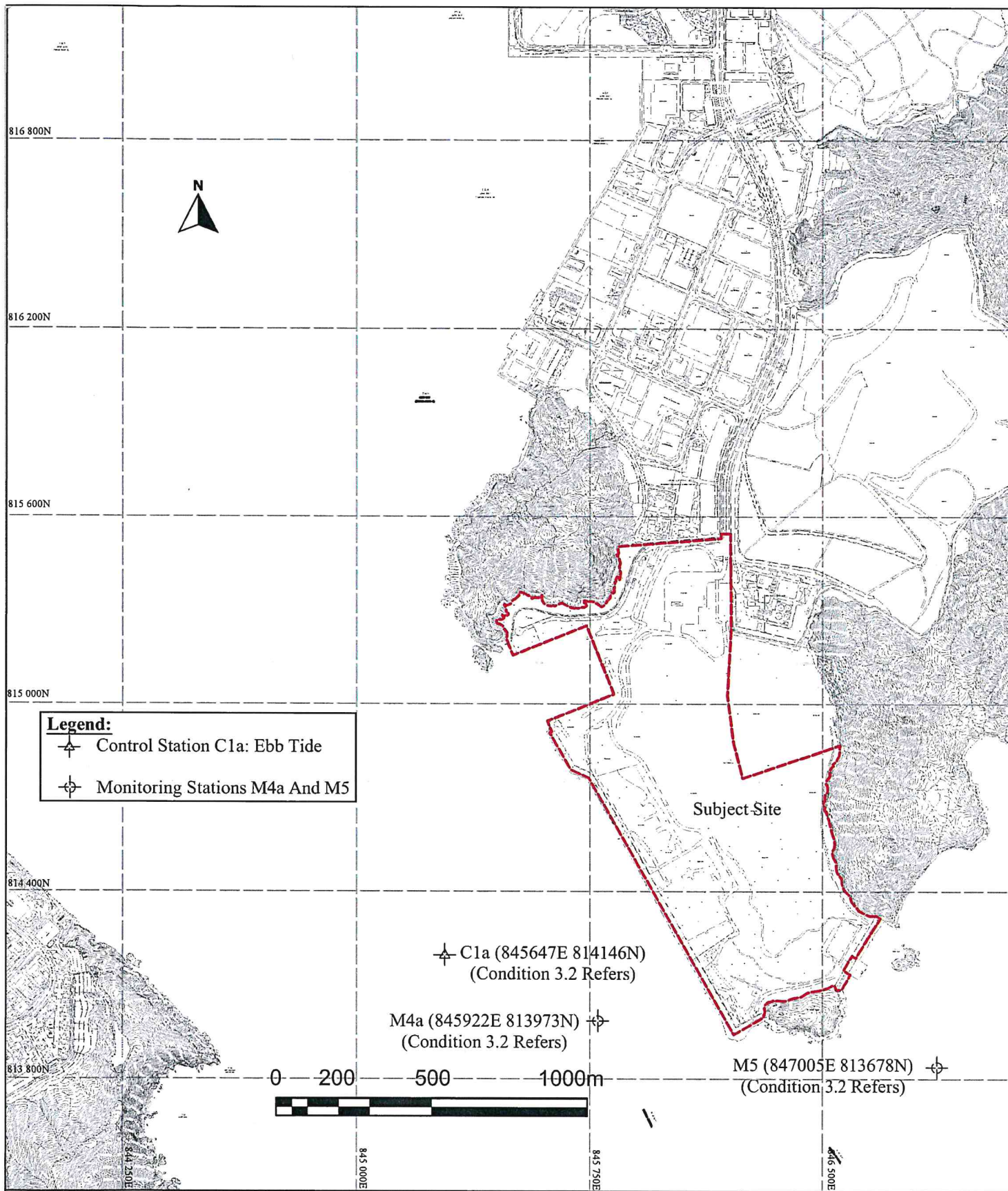


Figure 3: Locations of Water Control Station C1a and Water Monitoring Stations M4a and M5
 圖3: 水質對照站C1a及水質監察站M4a及M5的位置



Agreement No. FM 05/2020

Environmental Review and Traffic Impact Assessment for Extension of Operation of Fill Bank at Tseung Kwan O Area 137 – Investigation

Environmental Review Report

Prepared by:

Acuity Sustainability Consulting Limited

Document No.

ASCL	/	200168135	/	ERR	/	7
Publisher		Project Code		Sequential No.		Revision Index

	Prepared by:	Checked by:	Certified by:
Name	TSANG, Fan Cheong	Kevin Li	Jacky Leung
Position	Technical Manager	Senior Project Manager	Project Director
Signature			
Date:	8 November 2021	8 November 2021	8 November 2021

Revision History

Rev.	Description of Modification	Date	Author	Reviewer	Approver
1	First Issue	20 July 2021	F. C. Tsang	Kevin Li	Jacky Leung
2	Second Issue	30 July 2021	F. C. Tsang	Kevin Li	Jacky Leung
3	Third Issue	10 Sep 2021	F. C. Tsang	Kevin Li	Jacky Leung
4	Fourth Issue	11 Oct 2021	F. C. Tsang	Kevin Li	Jacky Leung
5	Fifth Issue	19 Oct 2021	F. C. Tsang	Kevin Li	Jacky Leung
6	Sixth Issue	31 Oct 2021	F. C. Tsang	Kevin Li	Jacky Leung
7	Seventh Issue	8 Nov 2021	F. C. Tsang	Kevin Li	Jacky Leung



Content

1. INTRODUCTION	1
1.1 Project Background	1
1.2 Purpose of this Report	1
2. PROPOSED VARIATIONS AND ASSOCIATED ENVIRONMENTAL CHANGES	2
2.1 Proposed Changes of Scope and Conditions under the Environmental Permit.....	2
2.2 Key Projects and Developments in the Vicinity of the TKOFB during the Extended Period.....	2
3. AIR QUALITY	4
3.1 Air Emission Sources Associated with the Operation of the TKOFB	4
3.2 Identification of Material Change to the Environment Impact	4
3.3 EM&A Requirements	5
4. NOISE.....	6
4.1 Noise Emission Associated with the Operation of the TKOFB	6
4.2 Identification of Material Change to the Environment Impact	6
4.3 EM&A Requirements	7
5. WATER QUALITY	8
5.1 Water Quality Impacts Associated with the Operation of the TKOFB	8
5.2 Identification of Material Change to the Environment Impact	8
5.3 EM&A Requirements	8
6. CONCLUSION.....	10

APPENDICES

Appendix 3.1	Air quality monitoring results of the TKOFB between May 2018 and August 2021
Appendix 4.1	Noise monitoring results of the TKOFB between May 2018 and August 2021
Appendix 5.1	Marine water quality monitoring results of the TKOFB between May 2018 and August 2021



1. INTRODUCTION

1.1 Project Background

- 1.1.1 The Fill Bank at Tseung Kwan O Area 137 (TKOFB) has been commissioned since 2002. It is a designated waste disposal facility under the Waste Disposal (Designated Waste Disposal Facility) Regulation to receive and temporarily store public fill generated from local construction industry for beneficial use in future.
- 1.1.2 The TKOFB is a designated project by virtue of C.11 of Schedule 2, Part I of the Environmental Impact Assessment Ordinance (EIAO), which specifies that a public dumping area of not less than 2 ha in size is a designated project. An Environmental Permit (EP) is currently held by the Civil Engineering and Development Department (CEDD) for the TKOFB (No. EP-134/2002/N).
- 1.1.3 The operation of TKOFB is proposed to be extended for 5 years from 1 January 2022 to 31 December 2026 (hereinafter referred to as “the extended period”). Acuity Sustainability Consulting Limited (ASCL) has been appointed by the CEDD to review any material change to the environmental impact due to the extended operation of the TKOFB.

1.2 Purpose of this Report

- 1.2.1 According to Section 7.6 of “A Guide to the EIA Ordinance” issued by the Environmental Protection Department (EPD), a variation of the environmental permit would be issued without the need for an environmental impact assessment report if the Director of Environment is satisfied that there is no material change to the environmental impact of the designated project with mitigation measures in place and the designated project complies with the requirements in the Technical Memorandum on Environmental Impact Assessment Process. This Environmental Review (ER) is prepared to demonstrate that there is no material change to the environmental impact associated with the operation of the TKOFB during the extended period. It will be used as a supporting document for the application of VEP under the EIAO as mentioned in Section 1.1.3 above.



2. PROPOSED VARIATIONS AND ASSOCIATED ENVIRONMENTAL CHANGES

2.1 Proposed Changes of Scope and Conditions under the Environmental Permit

2.1.1 In contrast to the current Environmental Permit (No. EP-134/2002/N), variations to the scope and conditions for the operation of the TKOFB are proposed (**Table 2.1**) to cope with the need of temporary storage of public fill in coming years.

Table 2.1 Proposed Variations of the current Environmental Permit

Condition No.	Current conditions	Proposed conditions after variation
Part B: Scale and Scope of the Designated Project	“The project site covers an area of approximately 104 hectares.”	“The project site covers an area of approximately <u>90</u> hectares.” (Figure 2.1 and Figure 2.2)
Part C: Condition 2.15	“... During the operation-removal overlapping phase (October 2003 to December 2021) ...”	“... During the operation-removal overlapping phase (October 2003 to December <u>2026</u>) ...”
Part C: Condition 2.16	“The fill bank shall not receive further public fill from 1 st January 2022.”	“The fill bank shall not receive further public fill from 1 st January <u>2027</u> .”

2.1.2 Considering the proposed variations shown in **Table 2.1**, the environmental aspects which require further review for the extended period of TKOFB include the air quality impact, noise impact and water quality impact. They are presented in **Section 3** to **Section 6**.

2.2 Key Projects and Developments in the Vicinity of the TKOFB during the Extended Period

Extension of South East New Territories (SENT) Landfill

2.2.1 The existing SENT Landfill (**Figure 2.3**) is located to the north-east and east of the TKOFB. It accepts construction waste since 6 January 2016 and is being operated under the management of the EPD. About 14 ha of the TKOFB has been handed over to the EPD for the construction and operation of the SENT Landfill Extension in 2018. Upon commissioning of the SENT Landfill Extension (“SENTX Landfill”) in the second half of 2021, the landfilling operation will then be switched from the existing SENT Landfill to the SENTX Landfill (**Figure 2.3**).



Tseung Kwan O Desalination Plant

- 2.2.2 The Water Supplies Department (WSD) is constructing the first stage of Tseung Kwan O Desalination Plant (**Figure 2.3**) to the south of the proposed SENTX Landfill with a site area of about 10 ha in Tseung Kwan O Area 137 (TKO137) under Contract No. 13/WSD/17. The desalination plant is scheduled for completion and commissioning in mid-2023.
- 2.2.3 The implementation schedule of the second stage of the desalination plant is yet to be determined.

Cross Bay Link and Tseung Kwan O – Lam Tin Tunnel

- 2.2.4 Cross Bay Link (CBL) will connect Tseung Kwan O – Lam Tin Tunnel (TKO-LTT) to Wan Po Road in Area 86 of Tseung Kwan O (TKO) to provide an alternative access route to the south-eastern part of TKO, so as to cope with the anticipated traffic demand in TKO. The project includes a 1.8 km long dual two-lane carriageway with cycle track and footpath across Junk Bay mainly on viaduct. The construction commenced in July 2018 and will be completed in 2022.
- 2.2.5 Tseung Kwan O – Lam Tin Tunnel is a dual two-lane highway approximately 3.8 km long. It connects TKO at Po Shun Road in the east with the proposed Trunk Road T2 at Kai Tak Development in the west. About 2.2 km of the highway is in the form of tunnel. Part of the highway, approximately 2.6 km long, is designed as a tunnel. The construction commenced in July 2016 and will be completed in 2022.



3. AIR QUALITY

3.1 Air Emission Sources Associated with the Operation of the TKOFB

3.1.1 Potential key air emission sources within the TKOFB include:

- Dust emissions from the TKOFB operational activities including fill materials handling at stockpiling areas and barging points, truck movements on major haul roads, as well as wind erosion from stockpiling areas;
- Emissions from the operation of the Construction and Demolition Material Crushing Facility (C&DMCF), the Construction and Demolition Material Sorting Facilities (C&DMSFs) and diesel generators within the TKOFB;
- Vehicular emissions from internal roads within the TKOFB (incoming trucks and internal trucks); and
- Emissions from marine vessels (e.g. barges, derrick lighters, tug boats) during berthing and manoeuvring for exporting and importing fill materials.

3.1.2 Comparing with the information presented in the ER Report (July 2019)⁽¹⁾, there would be no major change in the operation mode during the extended period of the TKOFB. Thus, there would be no additional dust and exhaust gas emissions generated from the operation of the TKOFB during the extended period.

3.1.3 As the CEDD will continue to promote marine delivery of public fill, daily road traffic flow to and from the TKOFB during the extended period would be similar to the current situation. Thus, air emissions associated with vehicle movement to and from the TKOFB would be similar to the current situation during the extended period.

3.2 Identification of Material Change to the Environment Impact

3.2.1 As discussed in **Section 3.1**, there will be no change in the scope and extent of the operation of the TKOFB during the extended period in contrast with the settings presented in the ER Report (July 2019). Proper implementation of the mitigation measures as recommended in the ER Report (July 2019) will be continued during the extended period. As such, no material change to the environment impact in terms of air quality is identified during the extended period of the TKOFB.

3.2.2 After commissioning of the CBL, part of the trucks and vehicles to the TKOFB would travel along the CBL and Road D9 at Tseung Kwan O Area 86. The potential air quality impact associated with the operation of the CBL was assessed in the approved EIA Report (EIAO Register No. AEIAR-172/2013). The assessment accounted for the cumulative impact of the identified air pollution sources at Tseung Kwan O, including the TKOFB during the extended period. The assessment results concluded that the relevant Air Quality Objectives and Criteria for Air Quality Assessment of the TM-EIAO would be complied during the operation phase of CBL. As such, air quality

(1) ERM-Hong Kong Ltd. (July 2019). “Proposed Change of Operation of the Construction and Demolition Material Sorting Facilities and the Barging Points at TKO Fill Bank” *Environmental Review Report* (for application No. VEP-563/2019)



impact from the traffic of TKOFB along Road D9 is considered acceptable during the extended period.

3.3 EM&A Requirements

- 3.3.1 An air quality (1-hour and 24-hour TSP) monitoring programme is being conducted at the site egress (TKO-A1) and the site office near Wan Po Road (TKO-A2a) under the fill bank operation contracts since 2003 (**Figure 3.1**). According to the monitoring records, there have been no project-related exceedances of the action and limit levels of air quality at these locations over the past three years (**Appendix 3.1**). Air quality monitoring at these stations will be continued during the extended period.
- 3.3.2 Following the commission of the SENTX Landfill in the second half of 2021 and the Tseung Kwan O Desalination Plant in 2023, two new TSP monitoring stations (TKO-A3 and TKO-A4) are proposed to be set up at the site offices of these facilities for monitoring the TSP levels during the extended period of the TKOFB. The exact locations of the proposed TKO-A3 and TKO-A4 as shown in **Figure 3.1** are subject to review by the Environmental Team (ET) as part of the EM&A programme. The monitoring frequency and equipment used for the 1-hour and 24-hour TSP monitoring as per current EM&A programme will remain unchanged. In accordance with EP Condition 3.1, the proposed change to the EM&A programme will be justified by the ET Leader and verified by the IEC as conforming to the requirements set out in the EM&A Manual. Prior approval shall be sought from the Director of Environmental Protection before implementation.



4. NOISE

4.1 Noise Emission Associated with the Operation of the TKOFB

Fixed Plant Noise

- 4.1.1 Noise will continue to arise from the operation of powered mechanical equipment (PME) on site during the extended period, including the machineries in C&DMCF and C&DMSFs, diesel generators, activities at barging points, and movement of trucks and vehicles within the TKOFB.
- 4.1.2 Comparing with the ER Report (July 2019), there would be no major change in the operation of the TKOFB during the extended period. As the nearest identified noise sensitive receiver (NSR) at Tseung Kwan O is more than 1.5 km away from the site boundary of the TKOFB, adverse noise impact from the PME and site activities is not anticipated.

Road Traffic Noise

- 4.1.3 As the CEDD will continue to promote marine delivery of public fill, daily road traffic flow to and from the TKOFB during the extended period would be similar to the current situation. Thus, there would be no additional road traffic noise impact on the NSRs along Wan Po Road due to vehicle movement to and from the TKOFB during the extended period.

4.2 Identification of Material Change to the Environment Impact

- 4.2.1 As discussed in **Section 4.1**, there will be no change in the scope and extent of the operation of the TKOFB during the extended period in contrast with the settings presented in the ER Report (July 2019). As such, no material change to the environmental impact in terms of noise is identified during the extended period of the TKOFB.
- 4.2.2 After commissioning of the CBL, part of the trucks and vehicles to the TKOFB would travel along the CBL and Road D9 at Tseung Kwan O Area 86. The potential road traffic noise impact associated with the operation of the CBL was assessed in the approved EIA Report (EIAO Register No. AEIAR-172/2013). Semi-enclosure and low noise road surface are recommended in the approved EIA Report of CBL as noise mitigation measures along Road D9 connecting the CBL. With the implementation of these practicable mitigation measures, noise sensitive receivers of LOHAS Park development at Tseung Kwan O Area 86 would be protected from unacceptable road traffic noise impact. The assessment results, which took account of the maximum predicted traffic flow within 15 years after the commissioning of the CBL, indicated that the mitigated noise levels at all noise sensitive receivers would meet the relevant noise criteria during the operation phase of the CBL. Given that the traffic flow at Road D9 during the extended period would be lower than that in the approved EIA Report of CBL, the mitigated noise levels at all noise sensitive receivers along Road D9 would meet the relevant noise criteria. The noise impact from the road traffic of



TKOFB along Road D9 and near the CBL is considered acceptable during the extended period.

4.3 EM&A Requirements

- 4.3.1 A noise monitoring programme is being conducted at a monitoring station outside the site egress at Wan Po Road under the fill bank operation contracts since 2003. According to the monitoring records, there have been no project-related exceedances of the action and limit levels of operation noise at this location over the past three years (**Appendix 4.1**). Noise monitoring at this station will be continued during the extended period of the TKOFB.



5. WATER QUALITY

5.1 Water Quality Impacts Associated with the Operation of the TKOFB

- 5.1.1 During the operation of the TKOFB, key activities being undertaken within the site and the barging points include handling, processing, transfer and stockpiling of the fill materials. Potential water quality impacts from these site activities could be resulted from erosion of stockpiled materials, non-point source discharge of surface runoff (usually associated with rainfall) contaminated with high level of suspended solids, and accidental dropping of materials to the sea from the fill bank and/or the barges.
- 5.1.2 Comparing with the information presented in the ER Report (July 2019), there would be no major change in the operation mode during the extended period of the TKOFB. Thus, there would be no additional water quality impact generated from the operation of the TKOFB during the extended period.

5.2 Identification of Material Change to the Environmental Impact

- 5.2.1 As discussed in **Section 5.1**, there will be no change in the scope and extent of the operation of the TKOFB during the extended period in contrast with the settings presented in the ER Report (July 2019). As such, no material change to the environmental impact in terms of water quality is identified during the extended period of the TKOFB.

5.3 EM&A Requirements

- 5.3.1 Construction effluent discharged from the TKOFB is currently controlled via an effluent discharge licence issued by the EPD. Marine water quality monitoring programme is being conducted at Tathong Channel and Tai Miu Wan under the fill bank operation contracts. As there will be no significant changes in the activities within the TKOFB, no water quality impact on the marine waters at Tathong Channel and Tai Miu Wan is anticipated during the extended period provided the existing mitigation measures will continue to be properly implemented. According to the monitoring records, there have been no project-related exceedances of the action and limit levels of water quality at marine waters near the TKOFB over the past three years (**Appendix 5.1**).
- 5.3.2 In particular, the water intake of the Tseung Kwan O Desalination Plant (TKODP) will be located near Kwun Tsai at Tai Miu Wan. It is considered that the monitoring data obtained from the existing water quality monitoring stations at Tai Miu Wan could be adopted to project the potential water quality impact during the operation of the TKODP. Up to August 2021, all records of Total Suspended Solids levels at Tai Miu Wan are lower than the target limit of 40 mg/L (**Appendix 5.1**) as required by the WSD. Thus, no unacceptable water quality impact associated with the operation of the TKOFB is anticipated. As major infrastructural works such as Three-runway System of the Hong Kong International Airport and Integrated Waste Management Facilities projects will be continued during the extended period, the CEDD will continue to encourage



and facilitate the delivery of public fill to and from the TKOFB by barges during the extended period of the TKOFB. To prevent water pollution due to transportation of fill materials by barges, all of the existing environmental control and mitigation measures will continue to be properly implemented during the extended period of the TKOFB. Good practices for handling and disposal of construction site discharges as stipulated in the EPD's ProPECC Note PN 1/94 *Construction Site Drainage* will be followed.

- 5.3.3 The existing water quality monitoring programme is considered effective and will remain unchanged. It is recommended that the monitoring parameters, frequency, and equipment will be maintained as the existing monitoring programme.



6. CONCLUSION

- 6.1.1 The CEDD proposes to extend the operation of the TKOFB for five years from 1 January 2022 to 31 December 2026.
- 6.1.2 This environmental review was carried out to assess the environmental aspects associated with the operation of the TKOFB during the extended period. The ER Report (July 2019) prepared for the last VEP application was referred to compare any change to the operation of TKOFB during the extended period (from 1 January 2022 to 31 December 2026) and to identify any material change to the environment in terms of air quality, noise and water quality. The review concluded that, with proper implementation of mitigation measures, no additional environmental impacts would be generated during the extended period.
- 6.1.3 Overall, during the extended period of the TKOFB, the environmental performance requirements set out in the EIA Report (EIAO Register No. AEIAR-060/2002) would be complied with the mitigation measures in place. The proposed changes would not constitute material change to the operation of the TKOFB during the proposed extended period. Thus, it is considered that these changes could be incorporated into the EP of the TKOFB via an application of the variation of the existing EP under the EIAO.

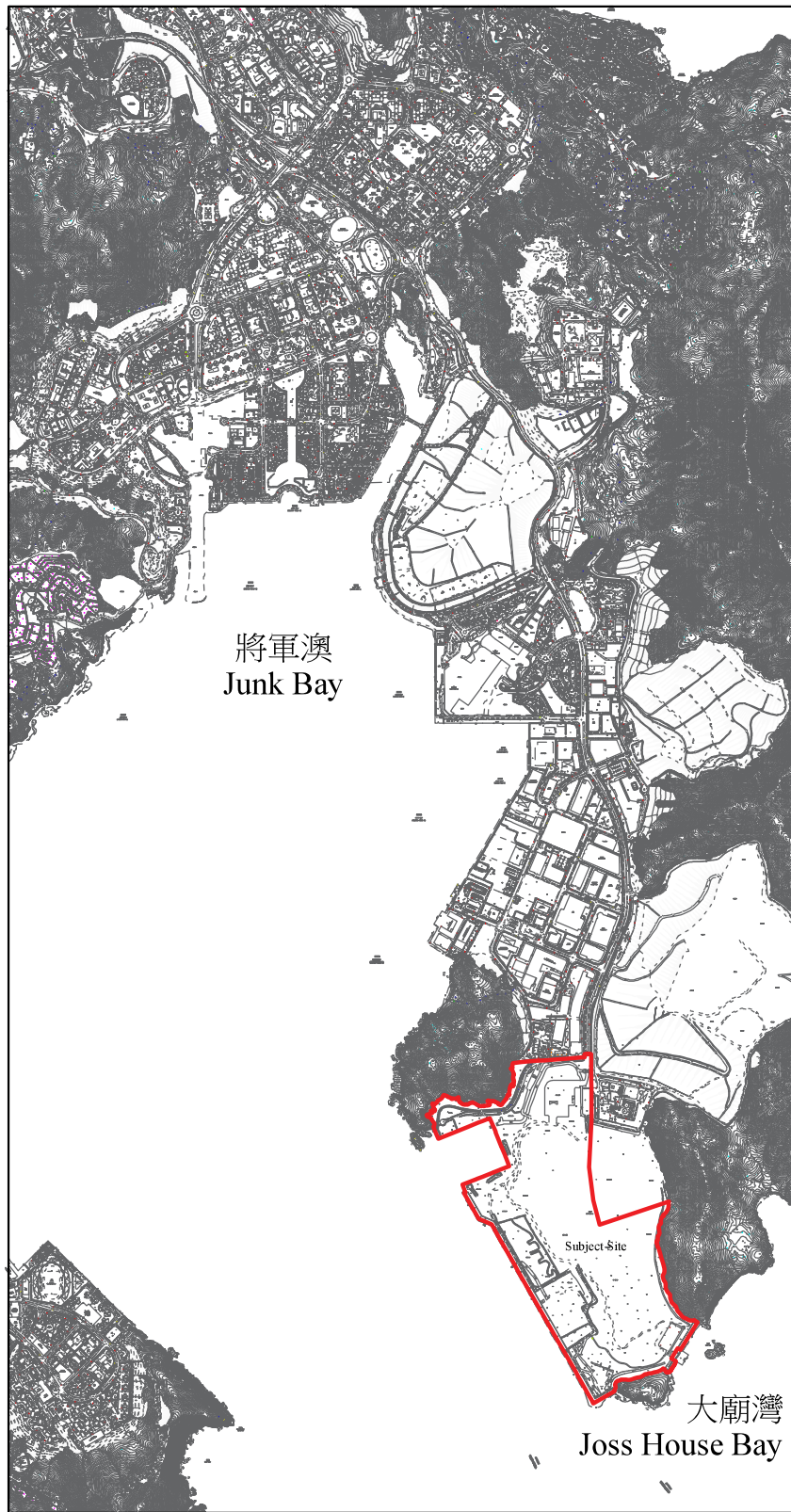


Figure 2.1: Location of Project Site in Area 137, Tseung Kwan O

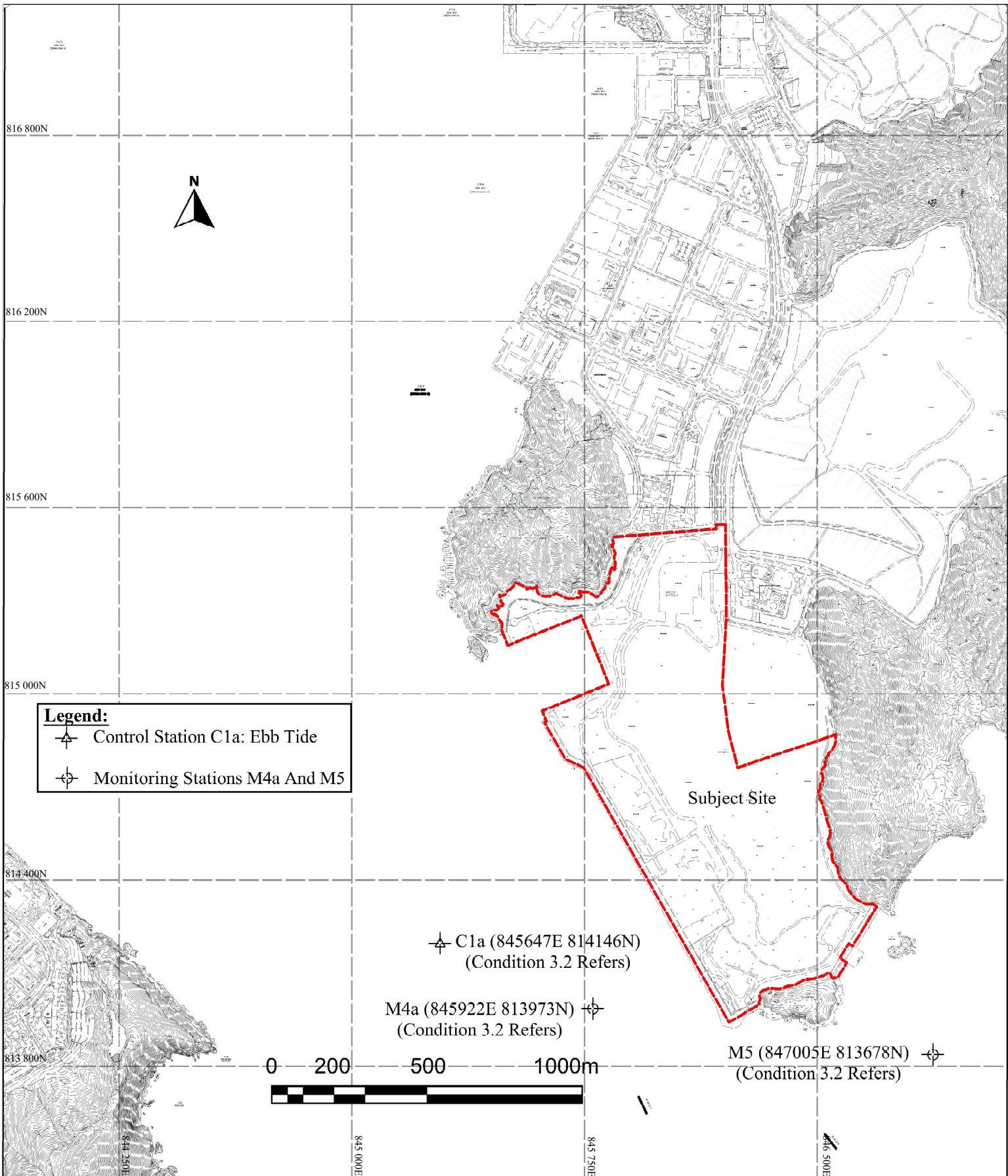


Figure 2.2: Locations of Water Control Station C1a and Water Monitoring Stations M4a and M5

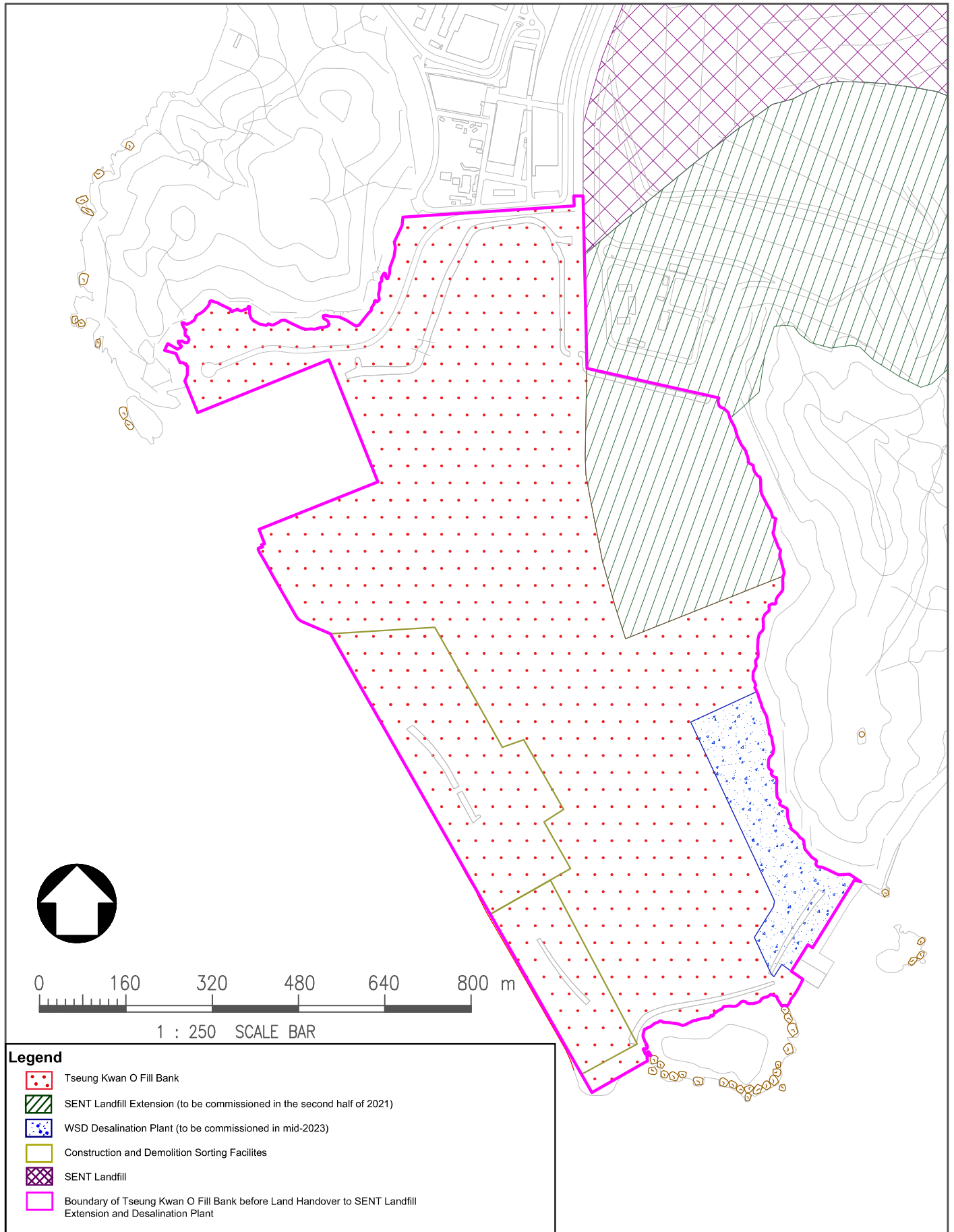
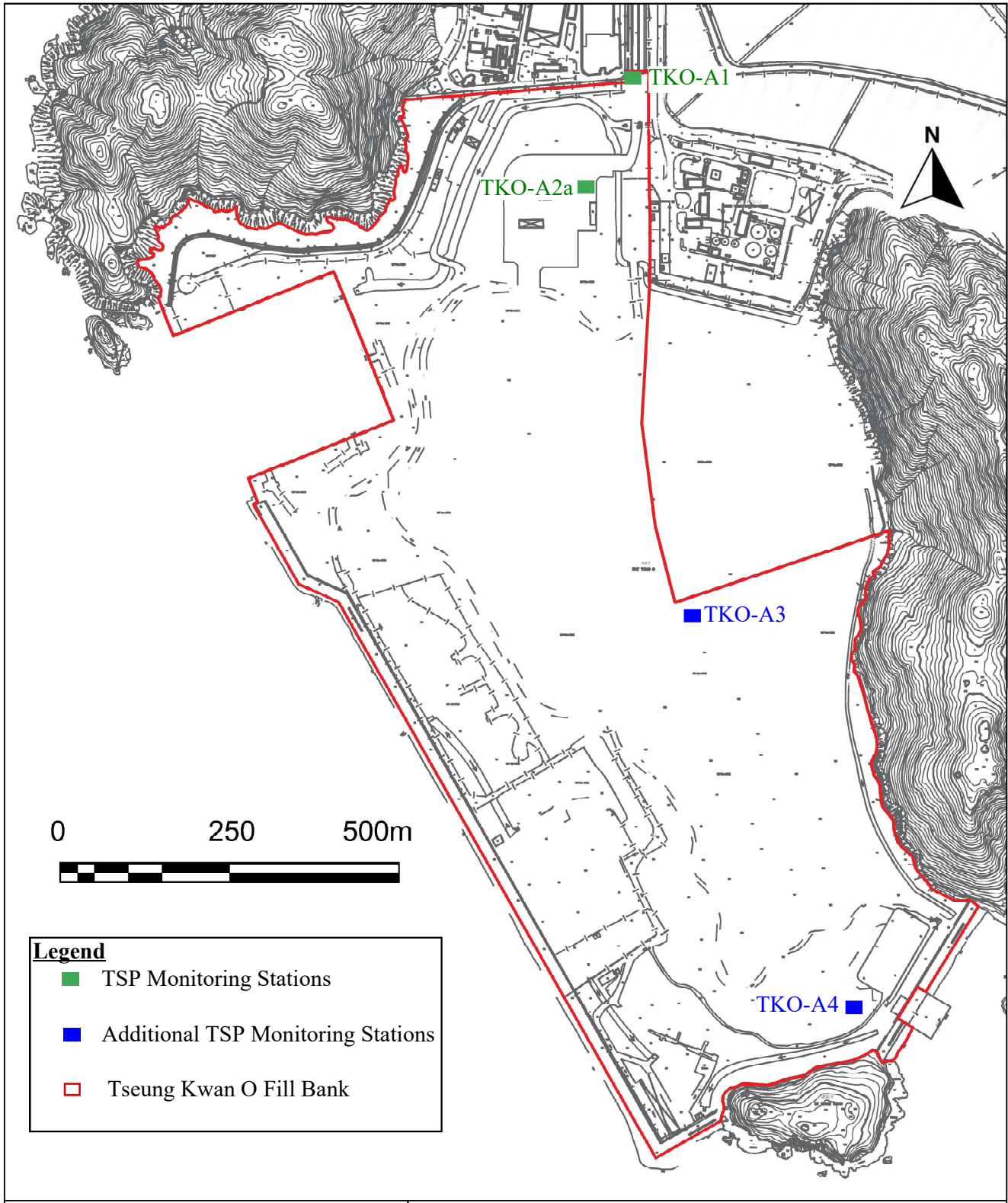


Figure 2.3

Layout Plan of the Facilities in the vicinity of the TKOFB

Date: 11/10/2021





Legend	
■	TSP Monitoring Stations
■	Additional TSP Monitoring Stations
□	Tseung Kwan O Fill Bank

Sheet No. Figure 3.1		Drawing Title Locations of Air Quality Monitoring Stations at Tseung Kwan O Area 137 Fill Bank	
Date 19/Oct/2021	Scale.	Project: Agreement No. FM 05/2020 Environmental Review and Traffic Impact Assessment for Extension of Operation of Fill Bank at Tseung Kwan O Area 137 – Investigation	
No.	Revision/Issue	Date	



Appendix 3.1 Air quality monitoring results of the TKOFB between May2018 and August2021

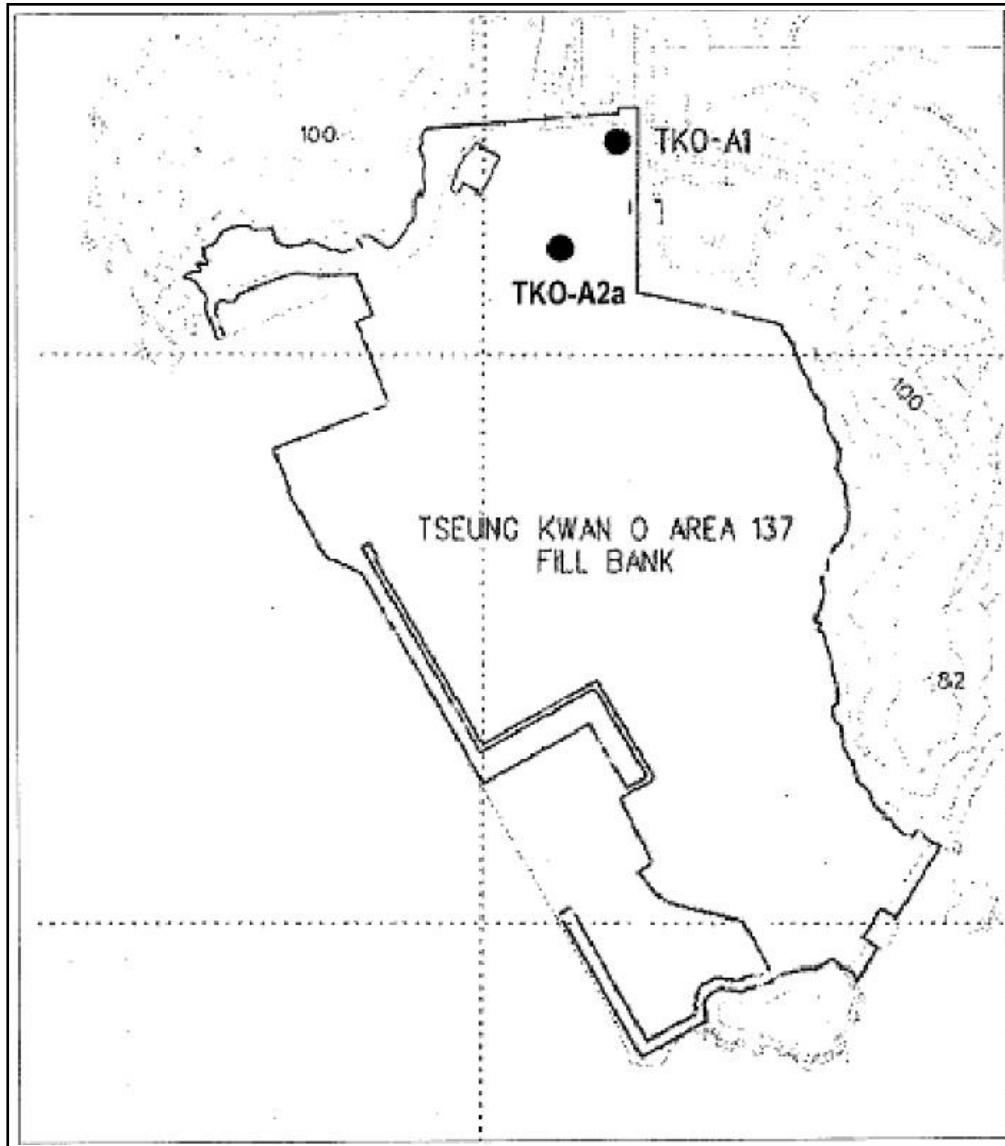
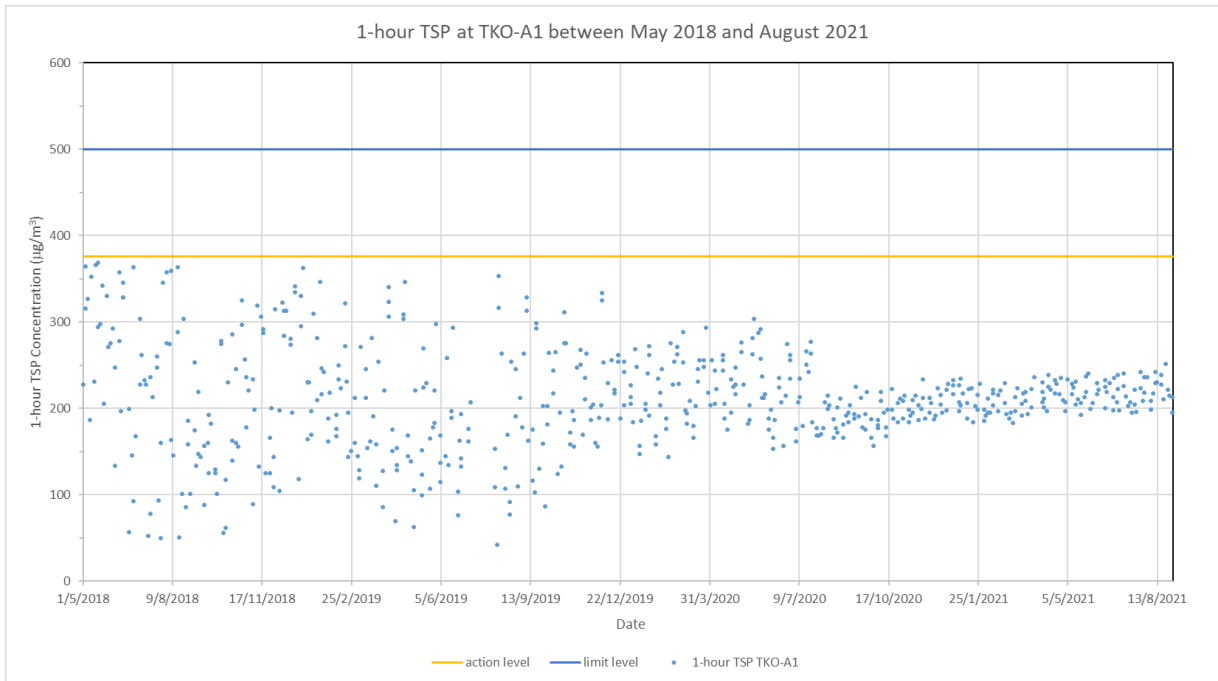
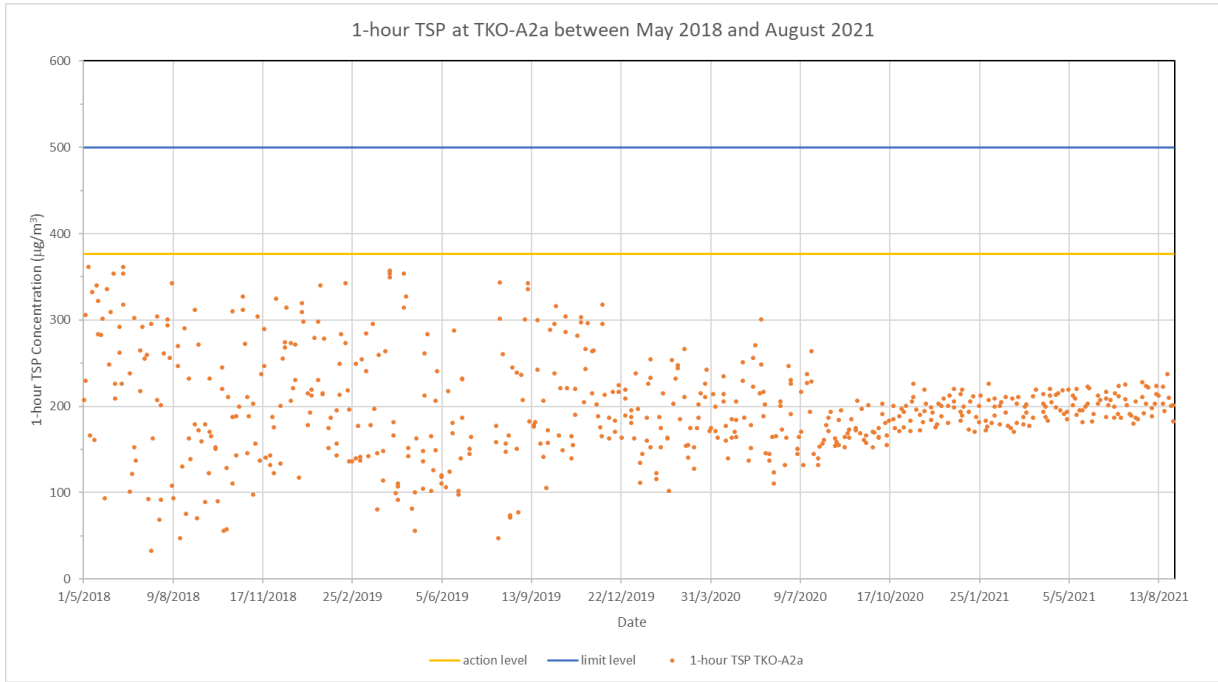
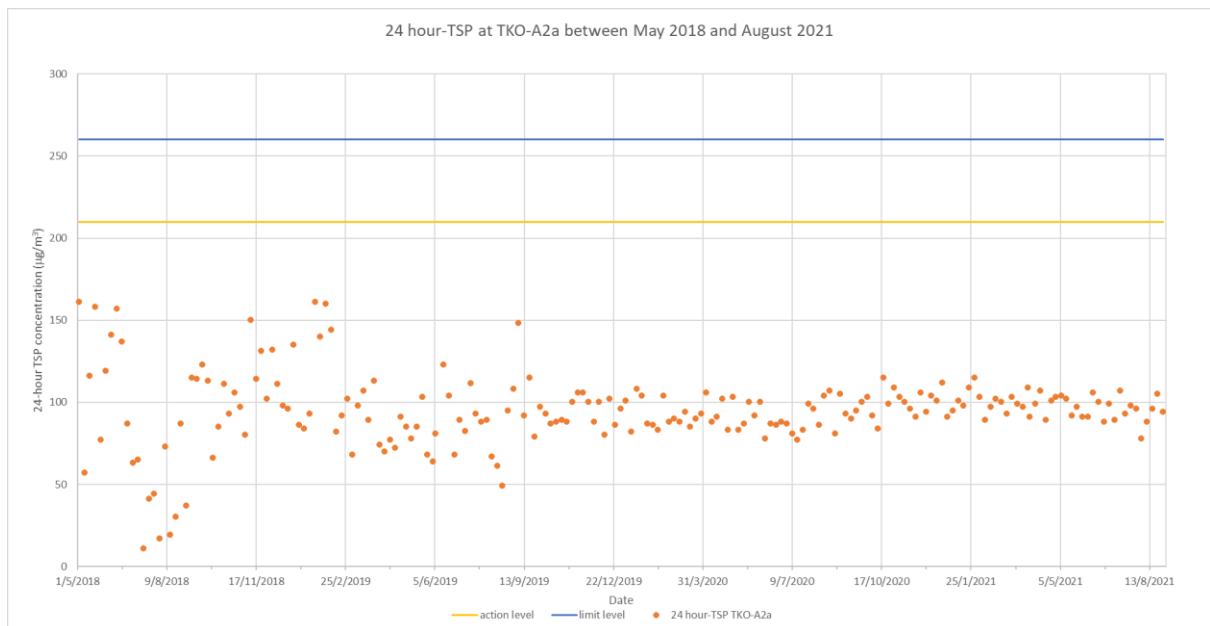
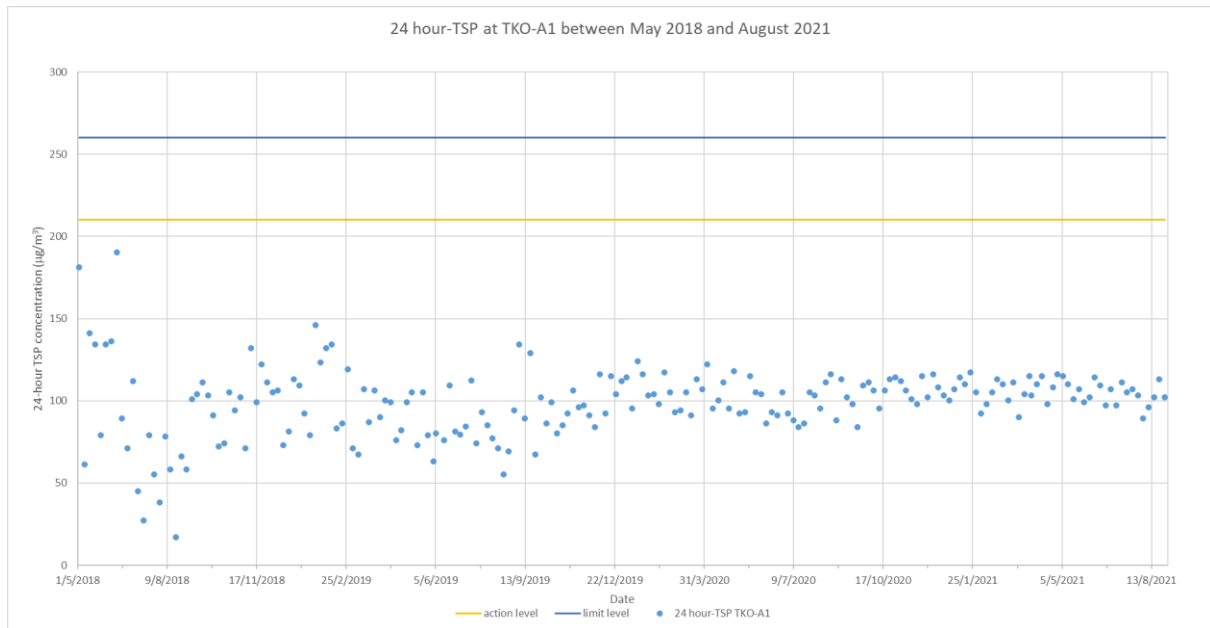


Figure A3.1 Locations of Existing Air Quality Monitoring Stations at TKOFB under the current EM&A Programme

(Source: Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No. 51 (July 2021) under Contract No.: CV/2015/07 Handling of Surplus Public Fill (2016-2018))







Appendix 4.1 Noise monitoring results of the TKOFB between May 2018 and August 2021

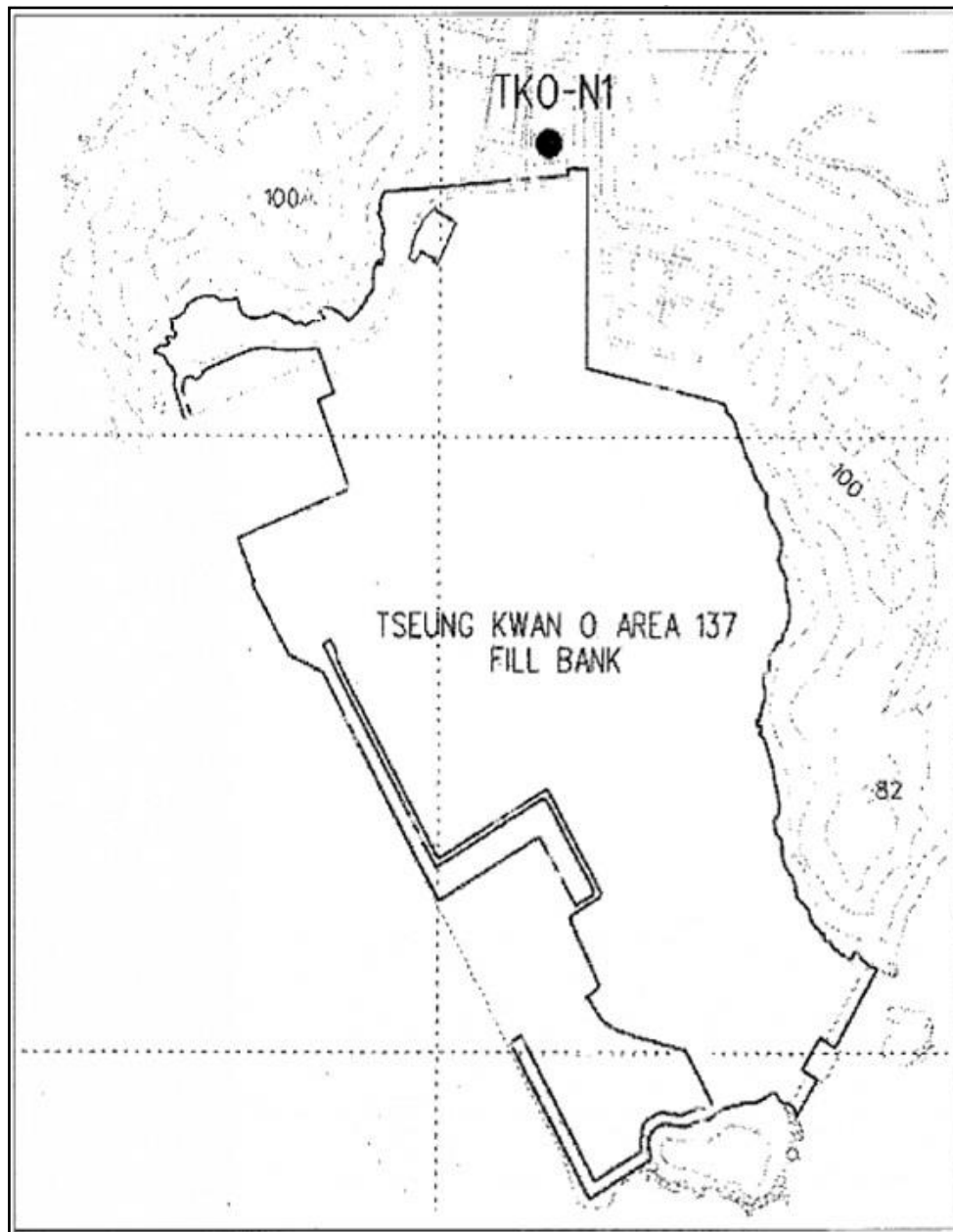
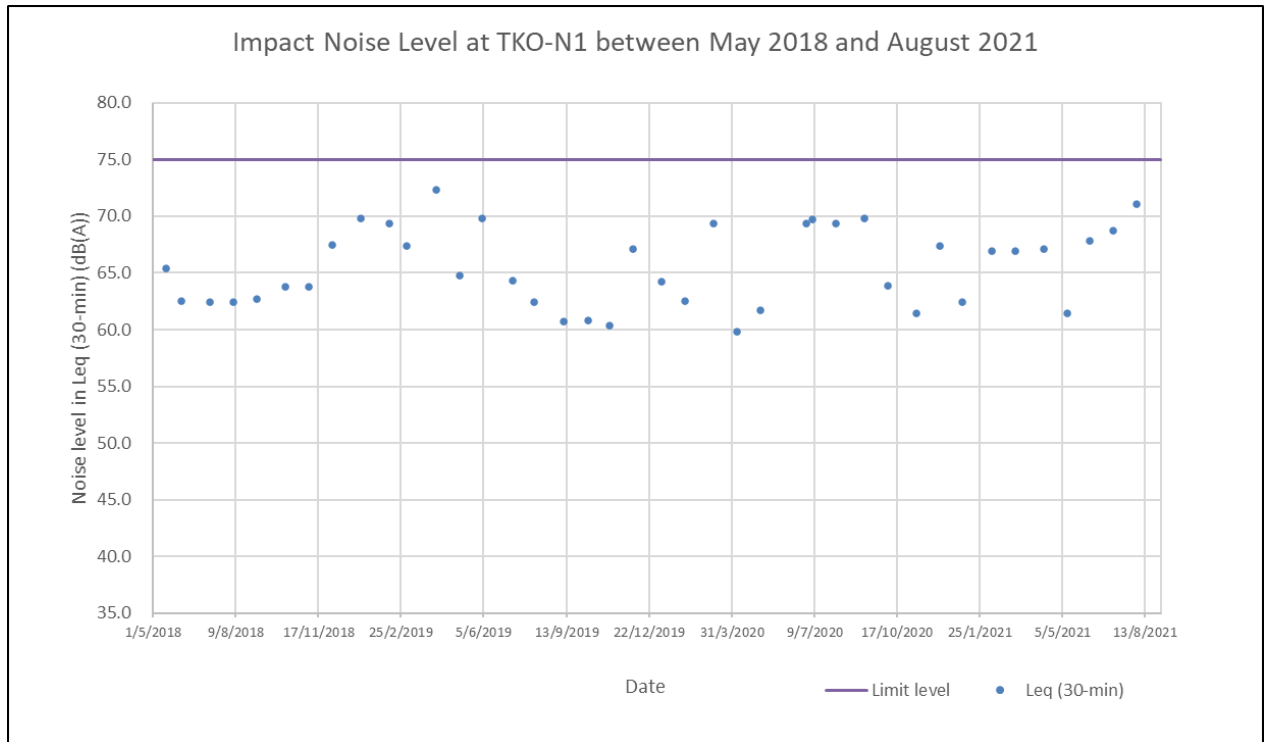


Figure A4.1 Locations of the Existing Noise Monitoring Station near the TKOFB under the current EM&A Programme

(Source: Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No. 51 (July 2021) under Contract No.: CV/2015/07 Handling of Surplus Public Fill (2016-2018))





**Appendix 5.1 Marine water quality monitoring results of the TKOFB between May
2018 and August 2021**

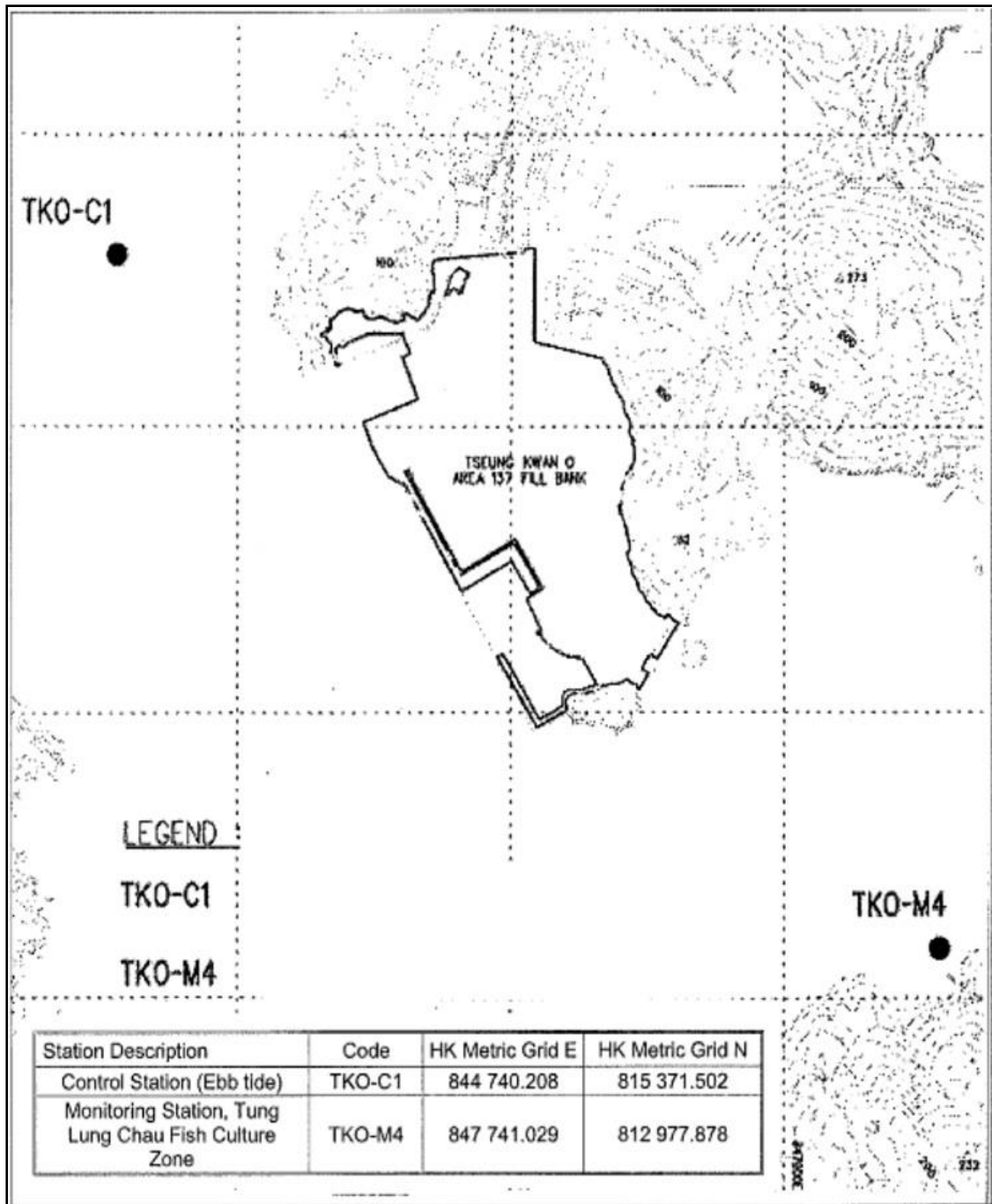


Figure A5.1 Locations of the existing Water Quality Monitoring Stations near the TKOFB under the current EM&A Programme

(Source: Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No. 51 (July 2021) under Contract No.: CV/2015/07 Handling of Surplus Public Fill (2016-2018))

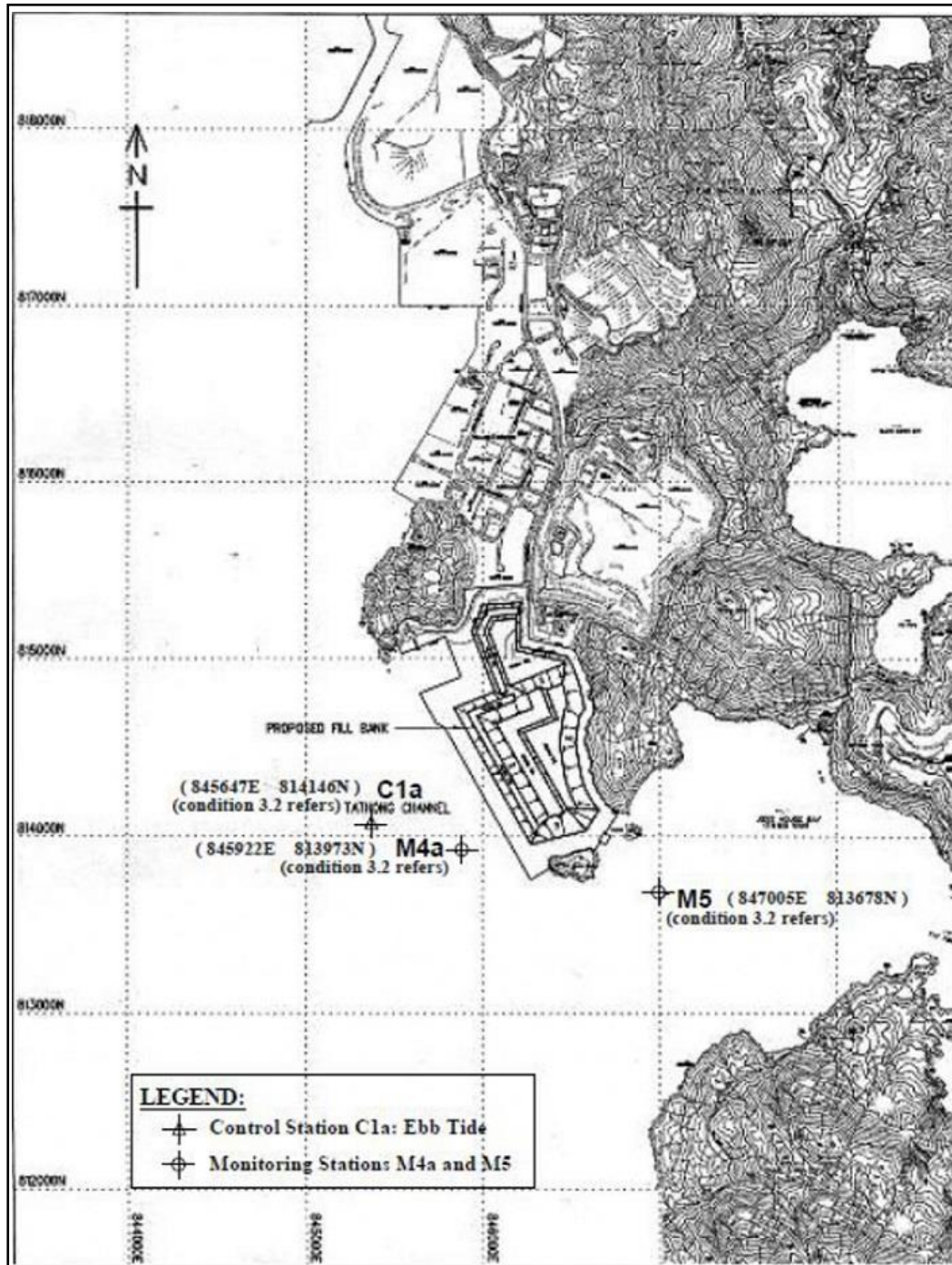
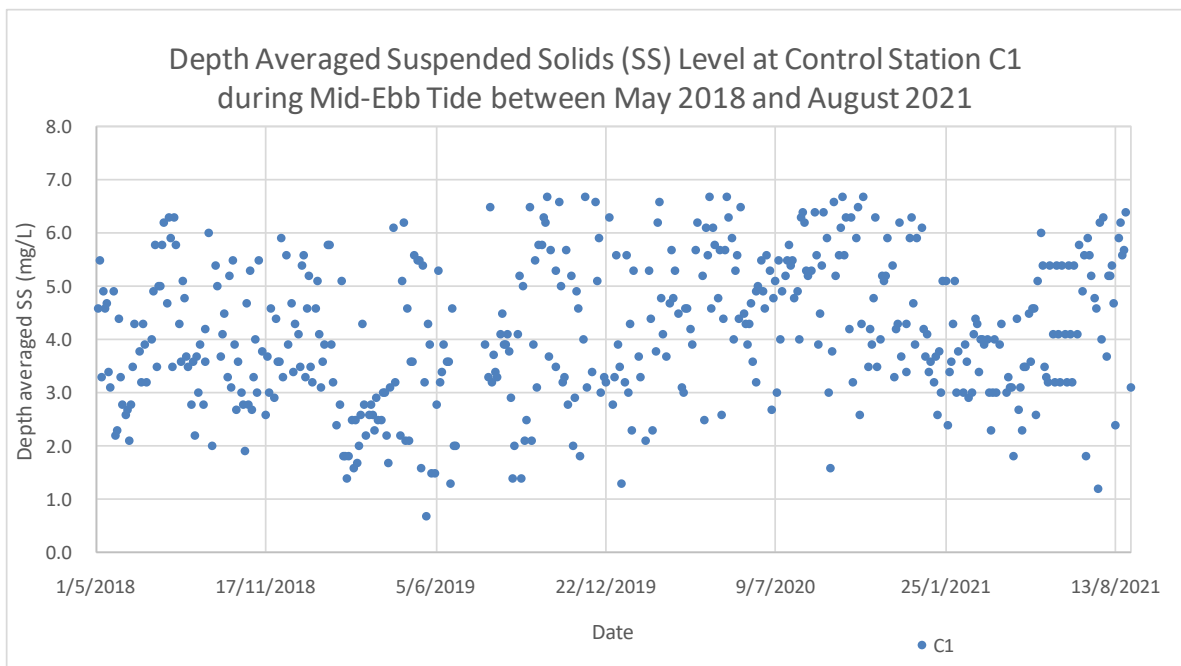
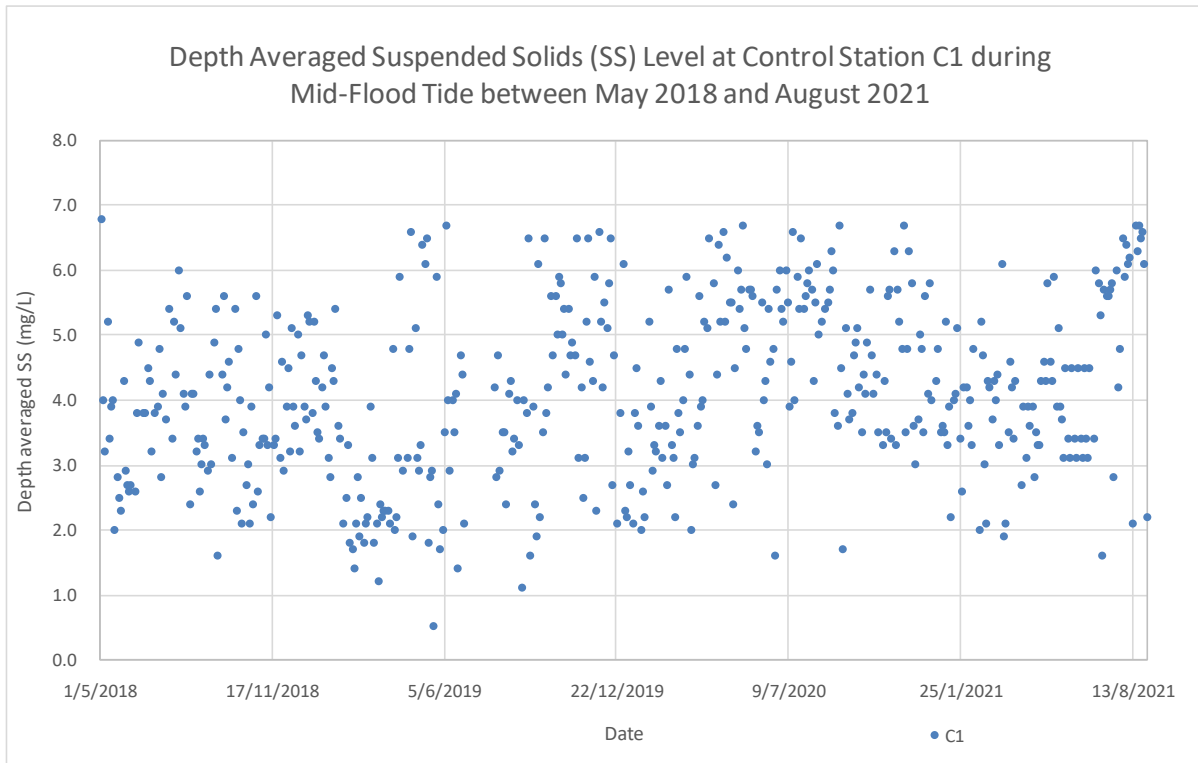
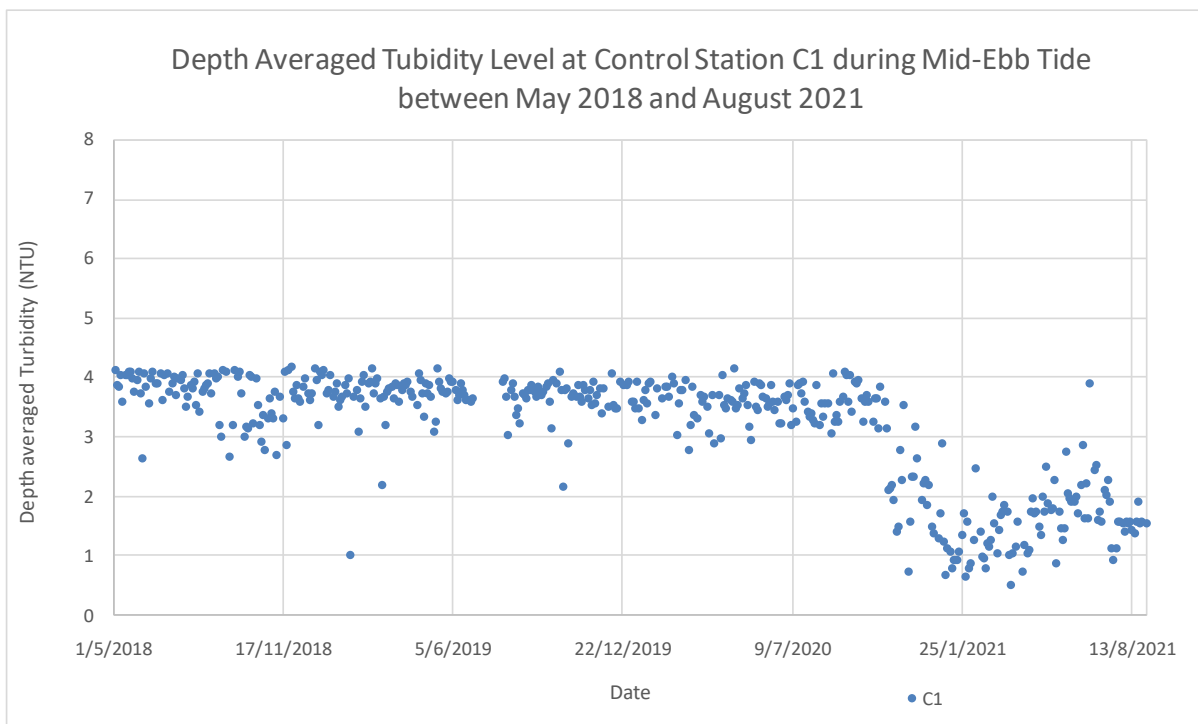
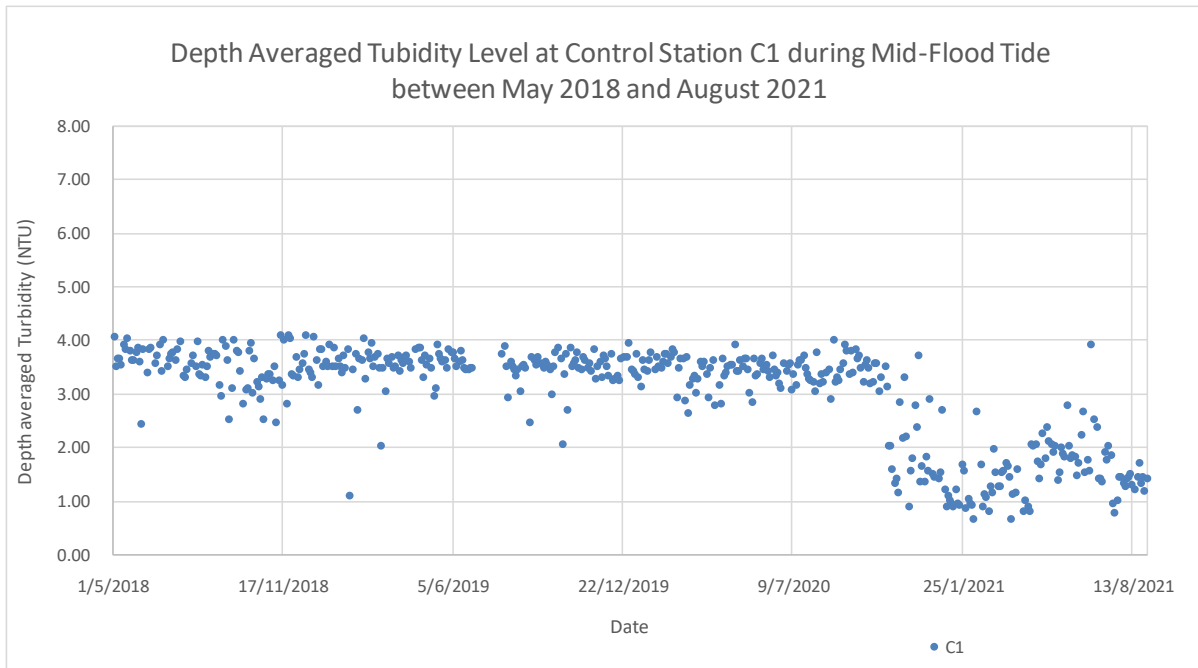
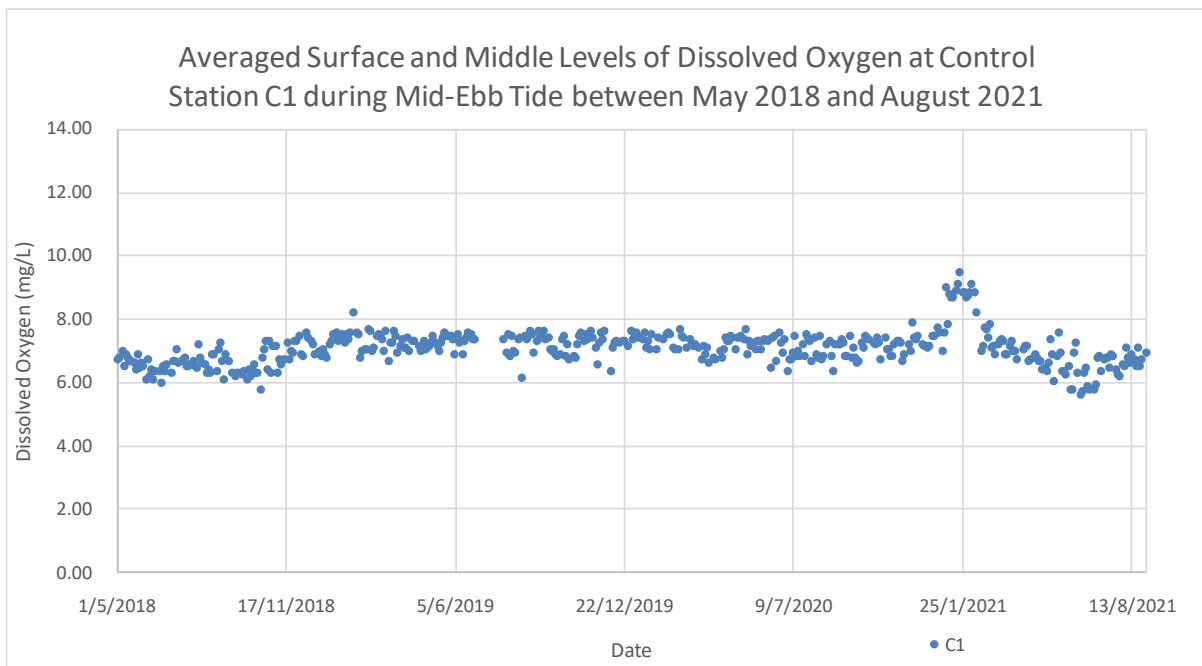
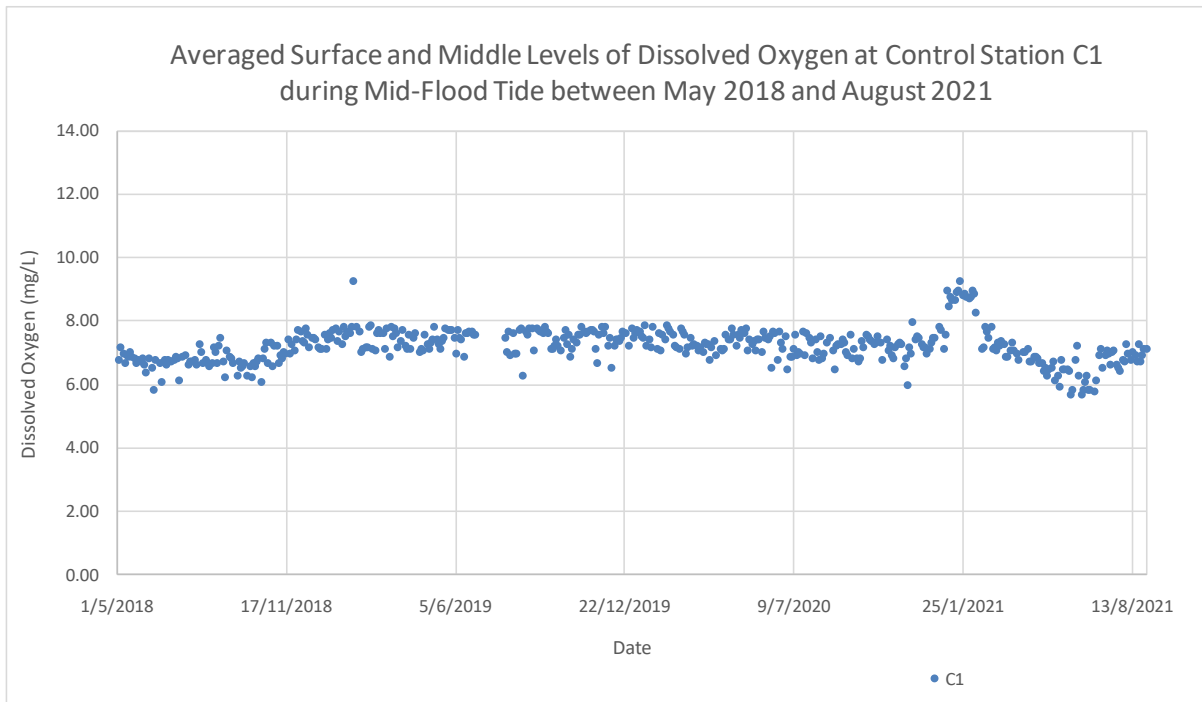


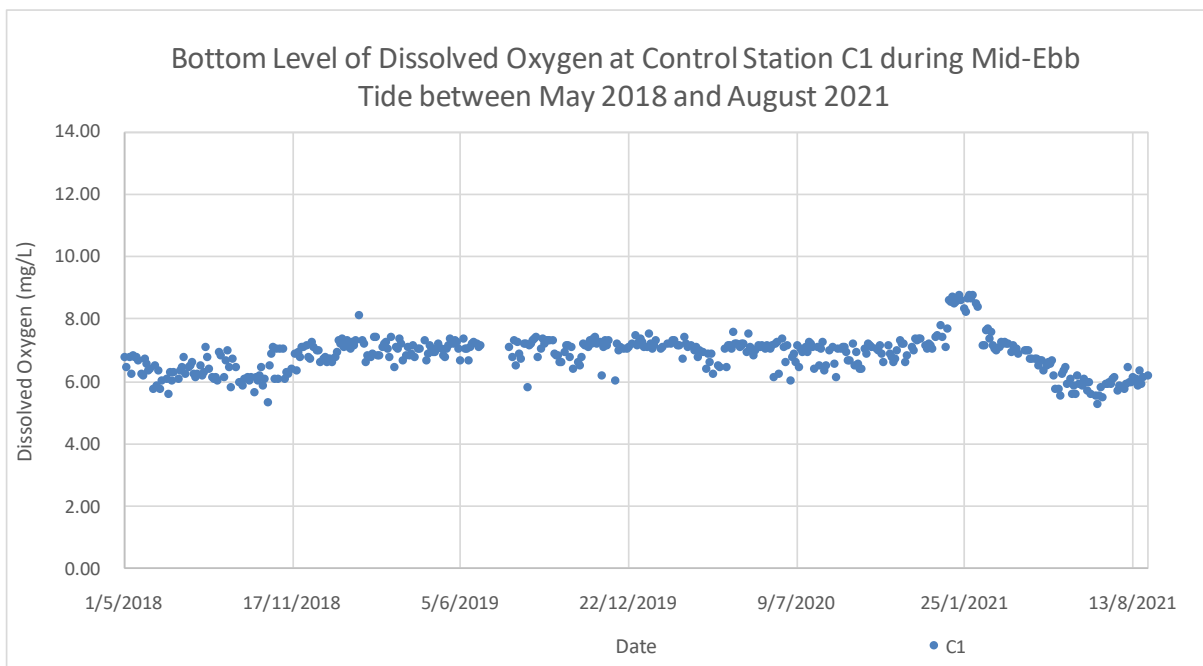
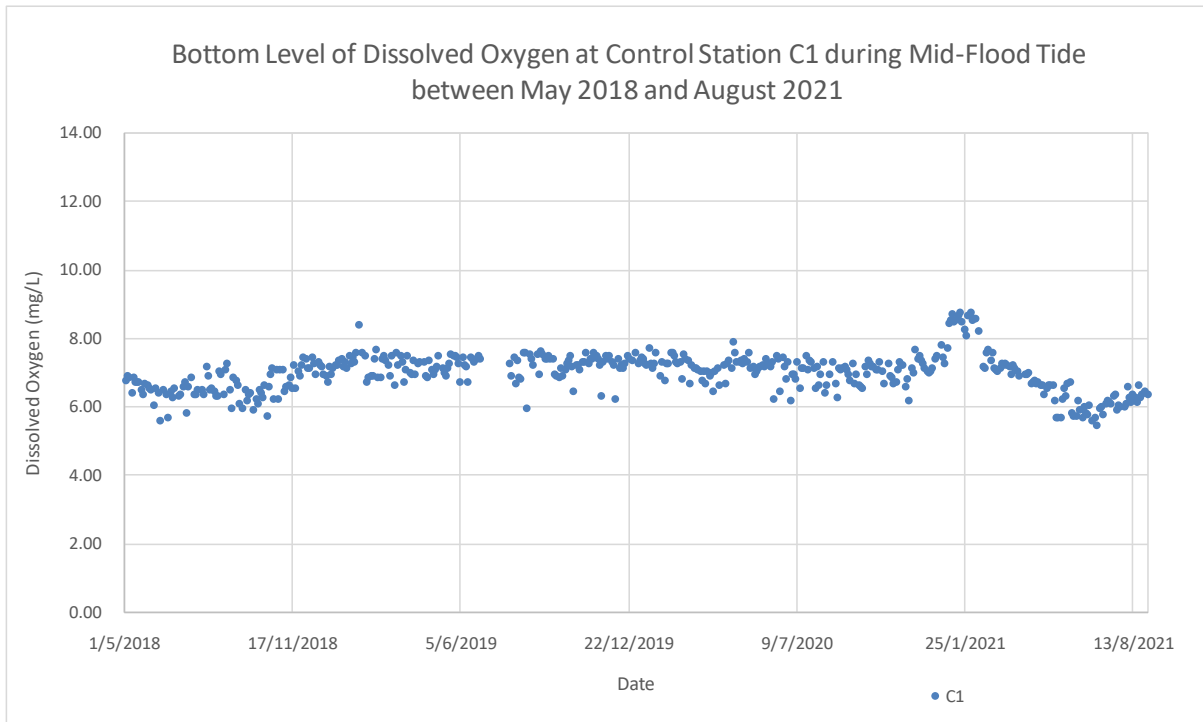
Figure A5.1 Locations of the Additional Water Quality Monitoring Stations (3RS Project) under the current EM&A Programme of the TKOFB

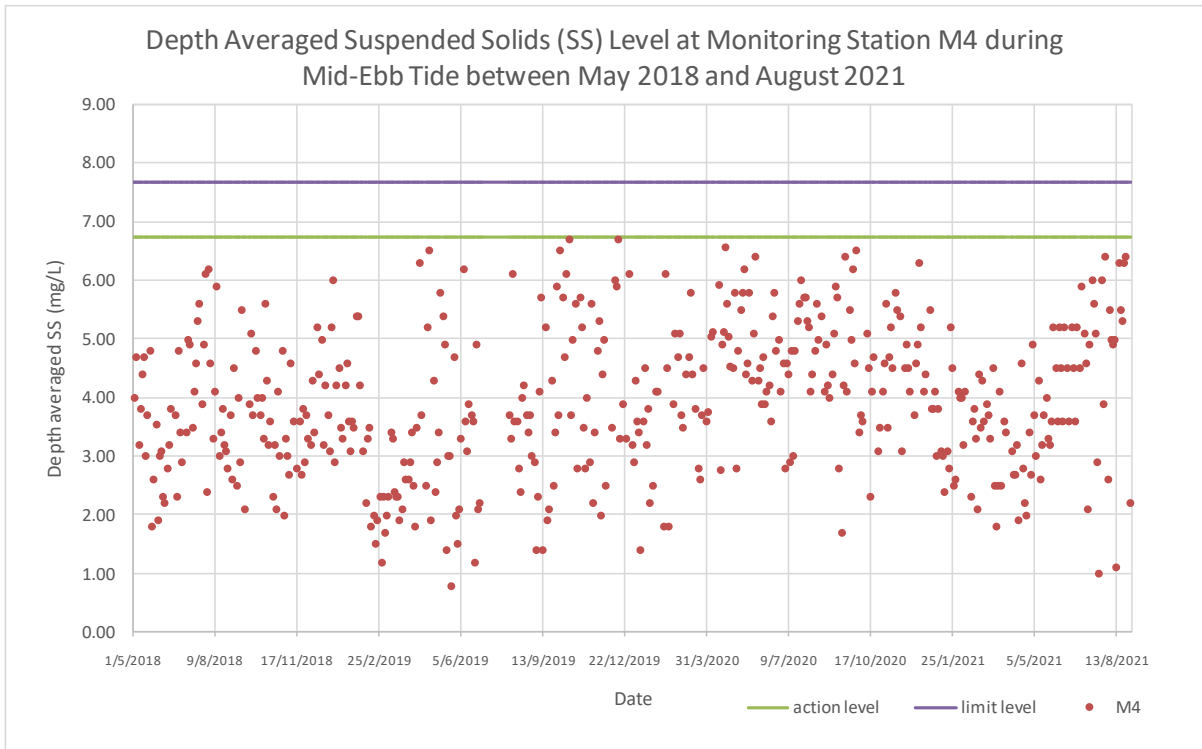
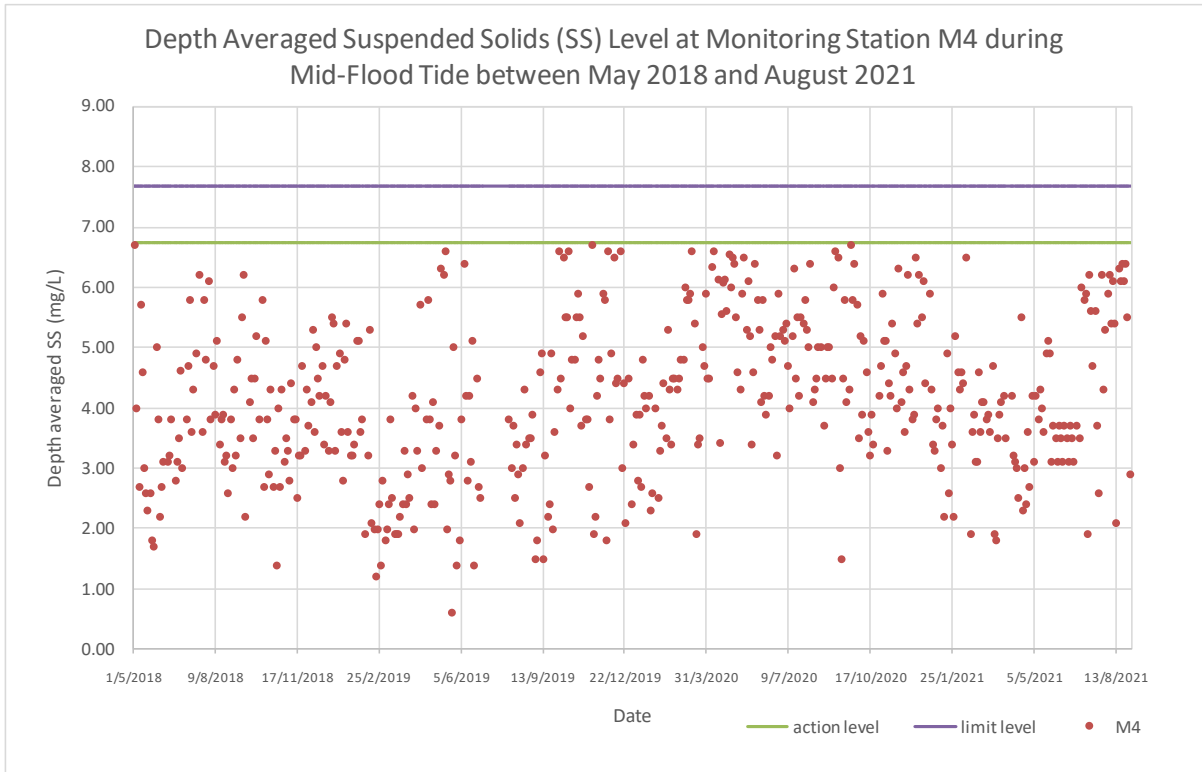
(Source: Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No. 51 (July 2021) under Contract No.: CV/2015/07 Handling of Surplus Public Fill (2016-2018))

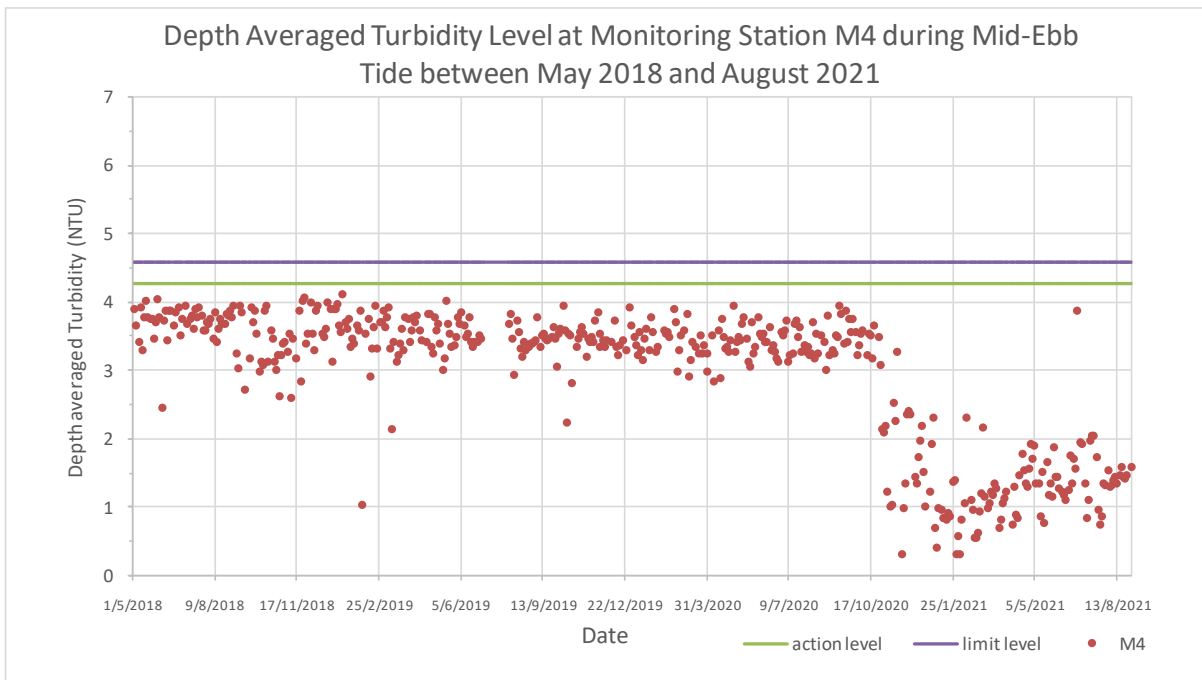
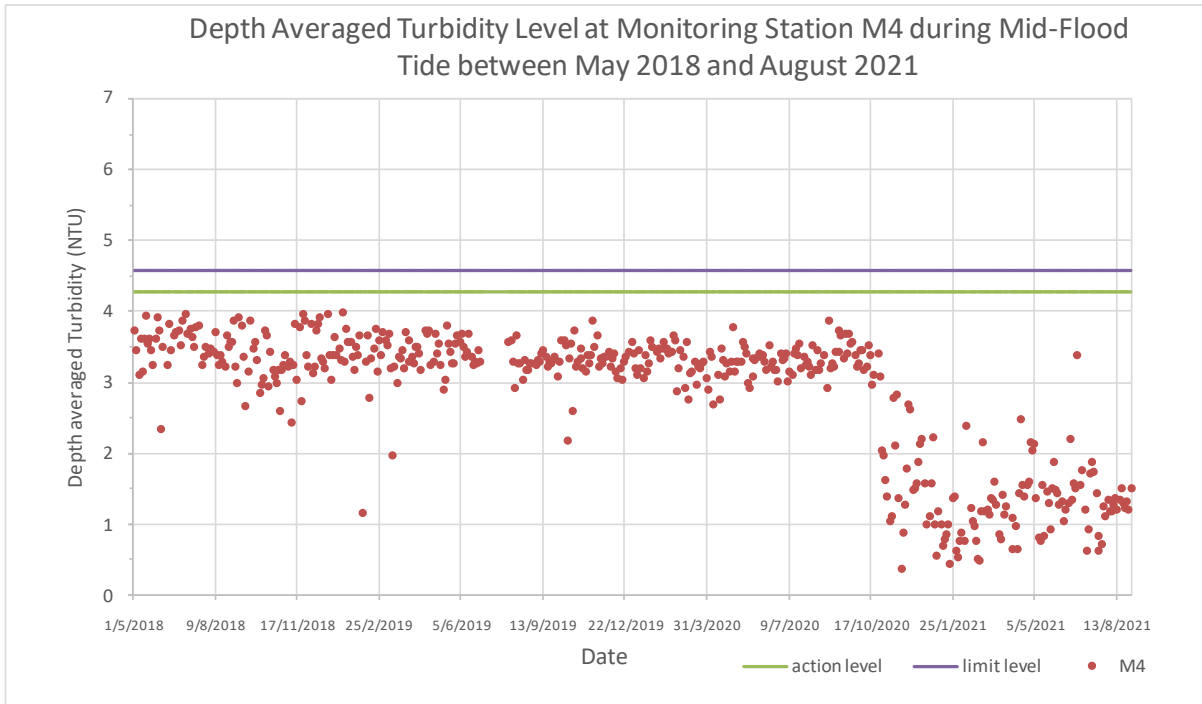


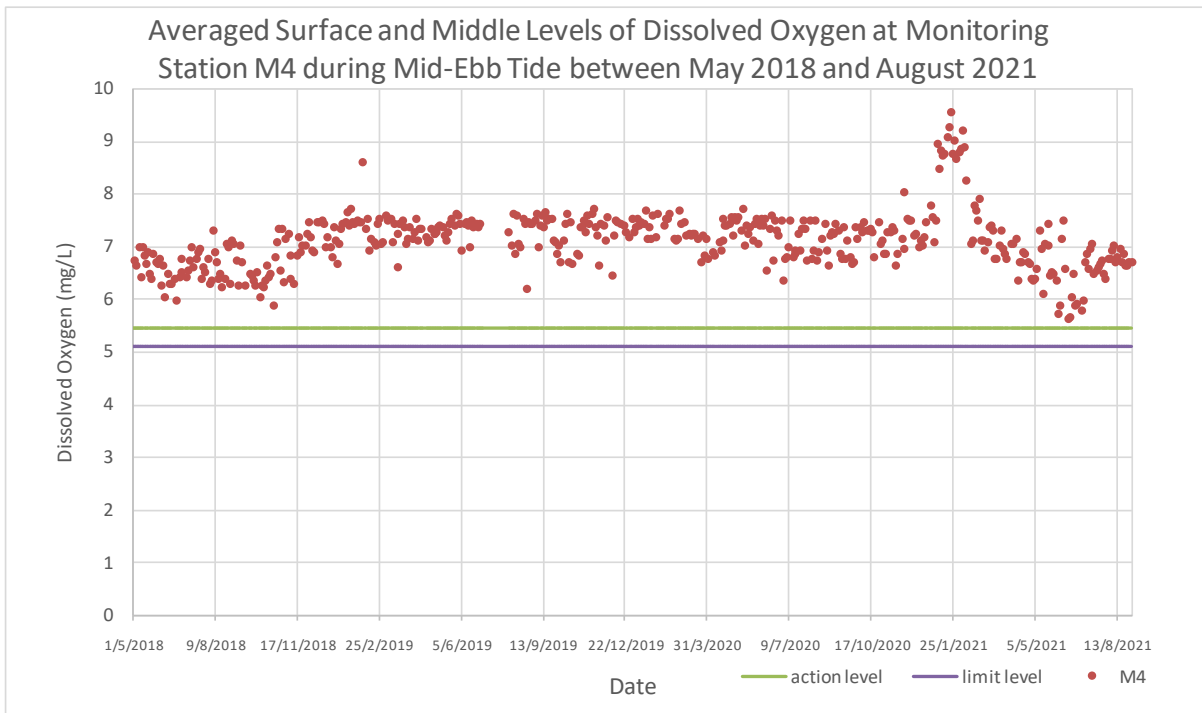
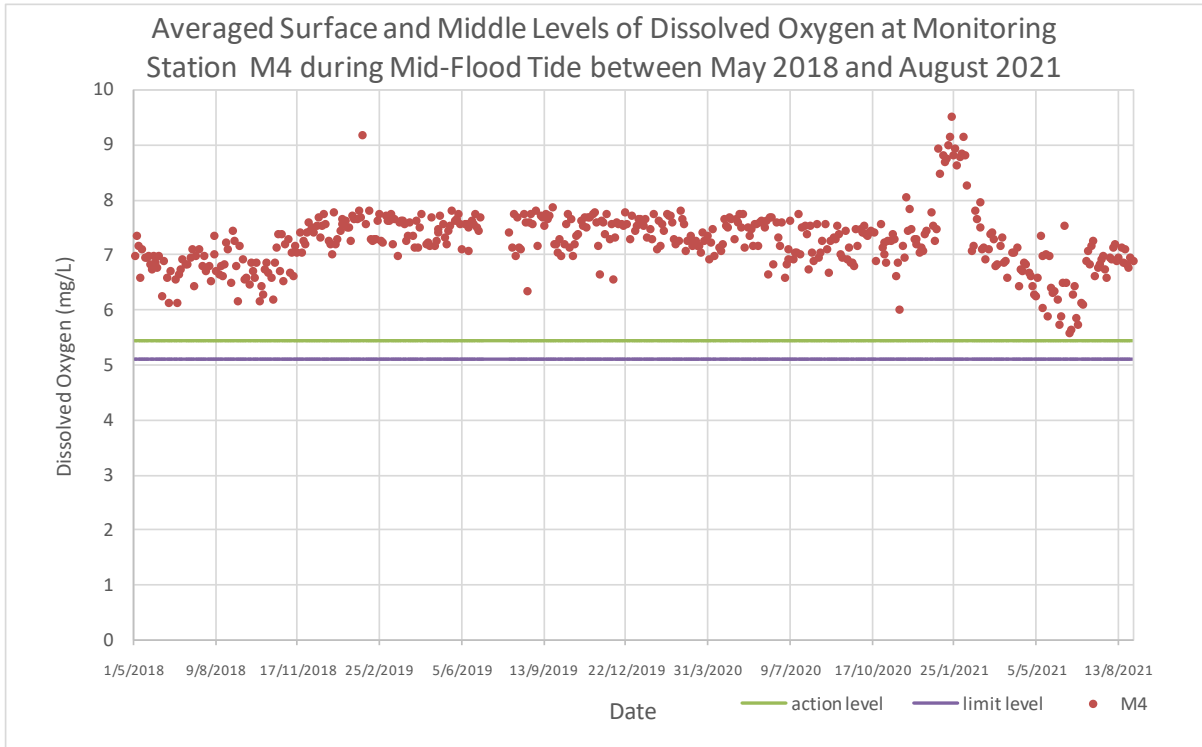


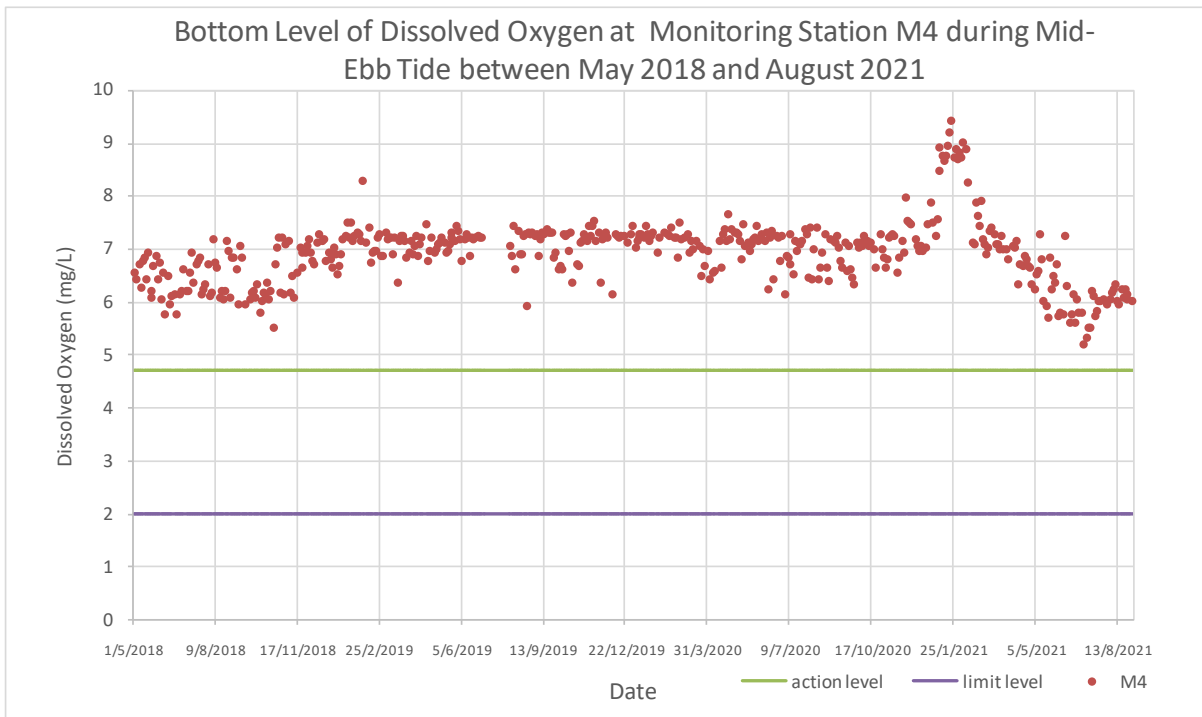
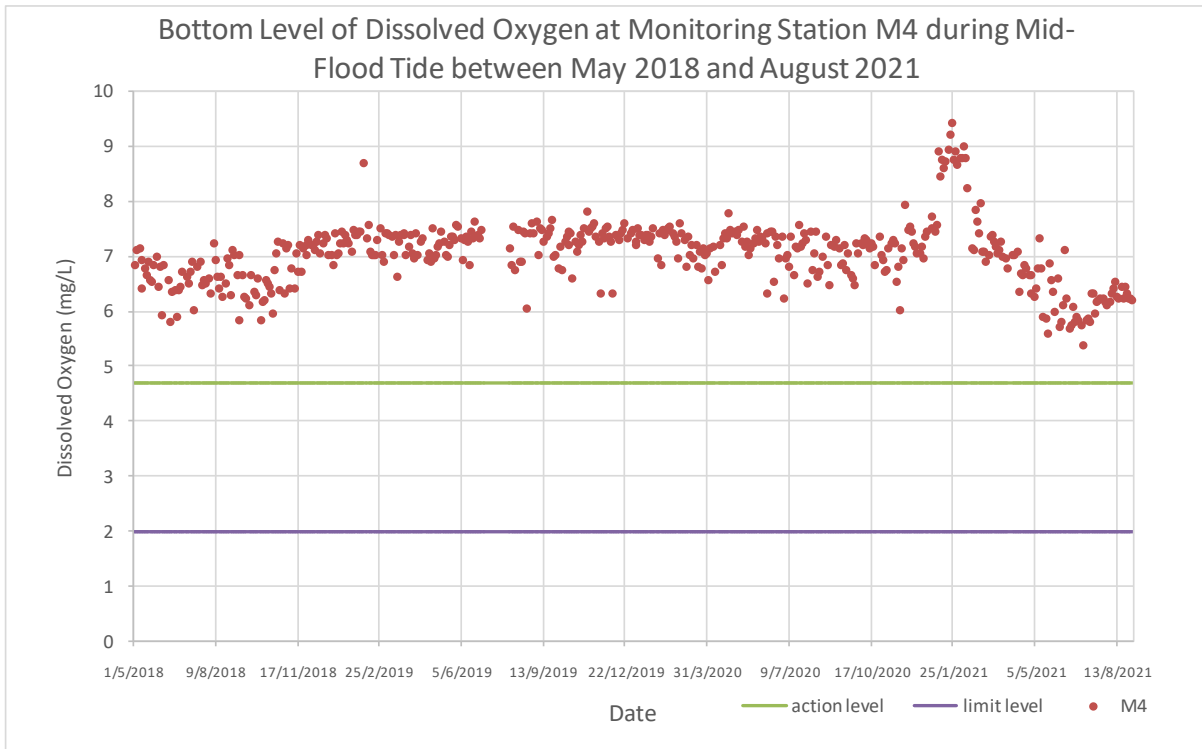


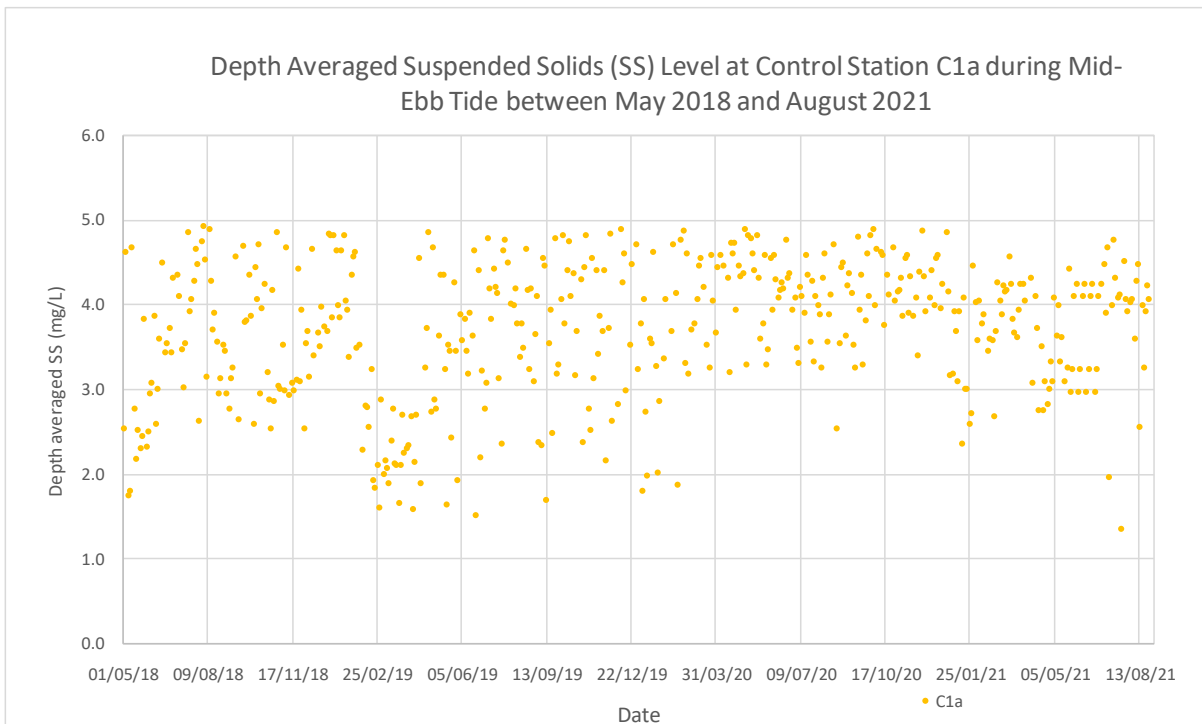
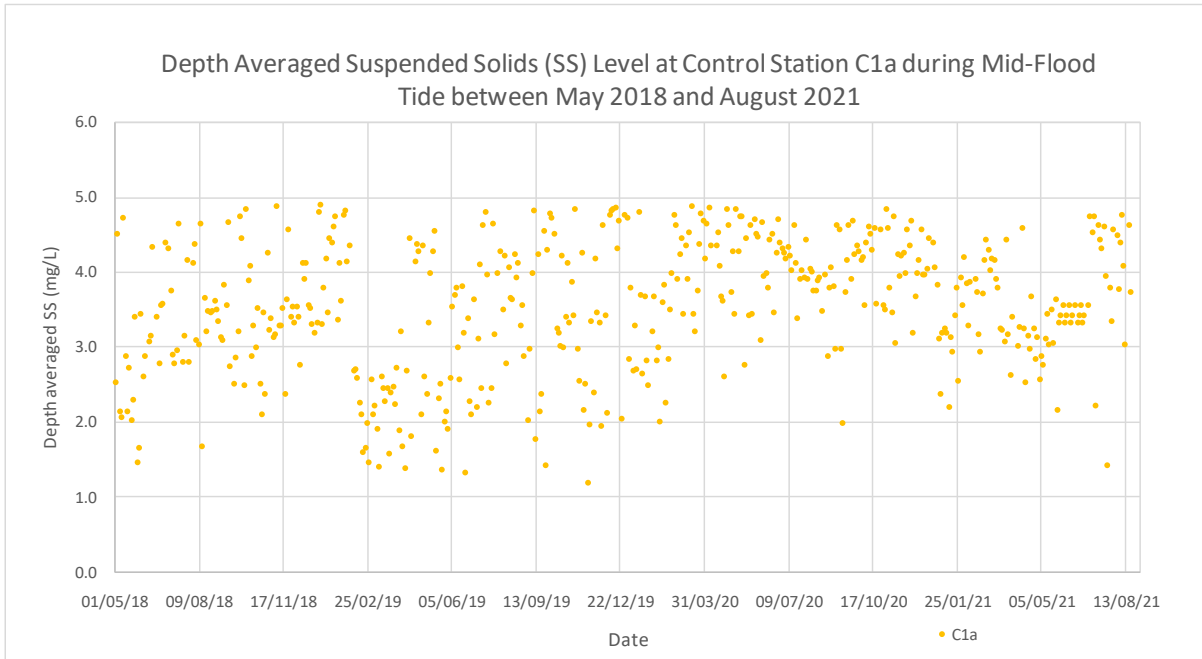






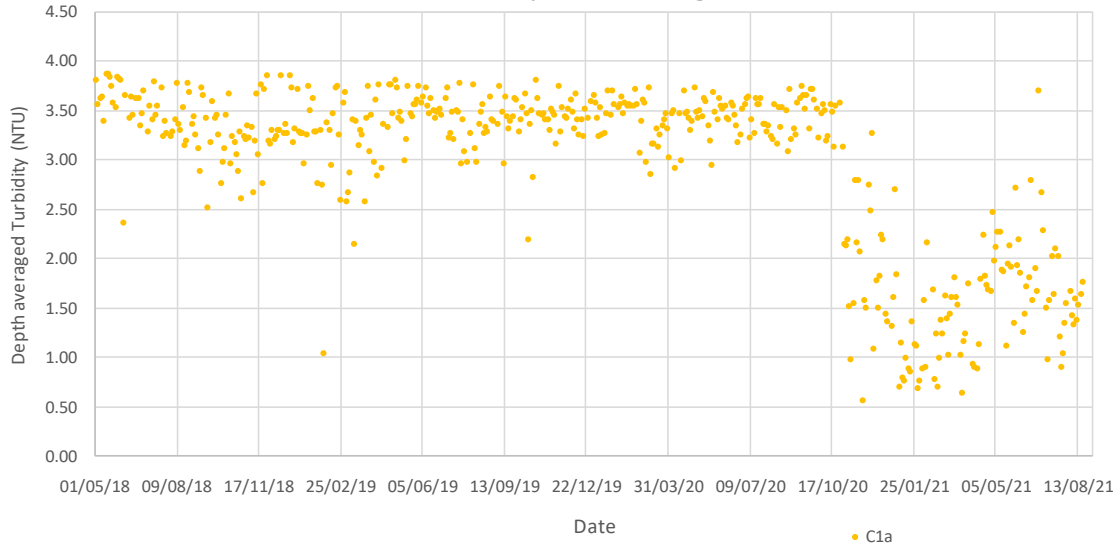








Depth Averaged Turbidity Level at Control Station C1a during Mid-Flood Tide
between May 2018 and August 2021



Depth Averaged Turbidity Level at Control Station C1a during Mid-Ebb Tide
between May 2018 and August 2021

