

Appendix 3E Marine Emission Sources

A) Marine Vessels Arrival and Departure Timetable^[7]

Vessel	Berth	Mode	HR 01	HR 02	HR 03	HR 04	HR 05	HR 06	HR 07	HR 08	HR 09	HR 10	HR 11	HR 12	HR 13	HR 14	HR 15	HR 16	HR 17	HR 18	HR 19	HR 20	HR 21	HR 22	HR 23	HR 24
IETS ^[1]	A/B/C ^[4]	Idling ^[5]	1	1	1	1	1	1	1	1	1	1	1	1	1						1	1	1	1	1	1
		Manoeuvring														1						1				
IWTS ^[1]	A/B/C ^[4]	Idling ^[5]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				1	1	1
		Manoeuvring																						1		
TETS ^[1] (Territories East Transfer Station)	A/B/C ^[4]	Idling ^[5]								1	1	1	1	1	1	1	1	1	1	1						
		Manoeuvring								1											1					
IPARK2 ^[1] (Incinerator Bottm Ash (IBA))	A/B/C ^[4]	Idling ^[5]													1	1	1	1	1							
		Manoeuvring														1				1						
IPARK1 ^[1] (Bottom Ash)	IWMF	Idling ^[5]									1	1	1	1	1	1										
		Manoeuvring										1					1									
IPARK1 ^[1] (Fly Ash)	IWMF	Idling ^[5]						1	1	1	1	1														
		Manoeuvring						1				1														
OITF ^{[1][2]}	OITF	Idling ^[5]	1	1	1	1	1												1	1	1	1	1	1	1	1
		Manoeuvring ^[2]					1												1							
NLTS ^{[1][2]}	NLTS	Idling ^[5]								1	1	1	1	1	1	1	1									
		Manoeuvring ^[2]									1							1								
HATS ^[1]	HATS	Idling ^[5]	1	1	1						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Manoeuvring				1					1															
Tugboat for WENTX Construction Barges ^[3]	Tsang Kok	Idling ^[5]								1	1	1	1	1	1	1	1	1	1	1	1					
		Manoeuvring ^[6]									2	2	2	2	2	2	2	2	2	2	2	2				
Explosive Delivery Vessel of WENTX ^[3]	WENTX	Idling											1	1	1	1	1	1	1	1						
		Manoeuvring												1	1	1	1	1	1	1						

Notes:

[1] The marine traffic schedule is provided by the Engineer as confirmed with relevant parties.

[2] Electric vessels (Electricity) will be adopted during manoeuvring for vessels from OITF and NLTS (no manoeuvring emissions).

[3] The schedule was made reference to the approved "Final Air Quality Impat Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension" and the latest information at the time of the I-Park2 EIA.

[4] Based on latest information, no designated berth for vessels from IETS, IWTS, TETS and IPARK2(IBA). It is assumed that all vessels would manoeuvre to either one of Berth A/B/C. There will not be more than 2 vessels manoeuvring to Berths A, B and C at the same time and hence no manoeuvring to Berth B is a conservative approach as the ASRs are either located closer to Berths A or C.

[5] On-shore electricity supply will be provided during loading/unloading for vessels from IETS, IWTS, TETS, IPARK2(IBA), IPARK1(Bottom Ash), IPARK1(Fly Ash), OITF, NLTS, HATS and construction barges (no idling emissions).

[6] Only one construction barge will be idling at each berth concurrently. For conservative assessment, it is assumed that two construction barges will manoeuvre (arrive and depart) concurrently at each berth every hour.

[7] There would be no marine vessel emissions other than those associated with IPark2, IPark1 and WENTx within the assessment area according to our Marine Traffic Impact Assessment Report. The marine schedule is predicted based on best available information from WENTX and TDG. No change in operation schedule is proposed for year 2030 and afterwards.

Appendix 3E Marine Emission Sources

B) Calculations of Vessels Time-In-Mode (TIM)

Vessel (Route)	Vessel Type	Length of Sailing Route [1]	Speed under various Mode (knots) [2]		Speed under various Mode (m/s) [3]		Time-In-Mode (minutes)	
			Idling	Manoeuvring	Idling	Manoeuvring	Idling [4]	Manoeuvring [5][6]
IETS	Barge	1600	0.0	6.0	0.00	3.09	N/A	8.64
IWTS	Barge	1600	0.0	6.0	0.00	3.09	N/A	8.64
TETS	Barge	1600	0.0	6.0	0.00	3.09	N/A	8.64
IPARK1 (Bottom Ash)	Barge	2890	0.0	6.0	0.00	3.09	N/A	15.60
IPARK1 (Fly Ash)	Barge	2890	0.0	6.0	0.00	3.09	N/A	15.60
IPARK2 (IBA)	Barge	1600	0.0	6.0	0.00	3.09	N/A	8.64
OITF	Barge	2790	0.0	6.0	0.00	3.09	N/A	N/A
NLTS	Barge	2790	0.0	6.0	0.00	3.09	N/A	N/A
HATS	Barge	3090	0.0	8.0	0.00	4.12	N/A	12.51
Tugboat for Construction Barge at Tsang Kok (WX1-WX6) [2]	Tugboat	2360	0.00	5.00	0.00	2.57	N/A	15.29
Explosive Delivery Vessel at WENTX Berth (WX7) [2]	Explosive Delivery Vessel	2890	0.00	5.00	0.00	2.57	60	17.43

Notes:

- [1] Approximate length of manoeuvring route considered within the assessment area.
- [2] Reference was made to the approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension (WENTX)" and the latest information at the time of the I-Park2 EIA.
- [3] Given that 1 knot = 0.51444 m/s.
- [4] On-shore electricity supply will be provided during loading/unloading for vessels from IETS, IWTS, TETS, IPARK1 (Fly Ash), IPARK1 (Bottom Ash), IPARK2(IBA), OITF, NLTS, HATS and construction barges (no idling emissions).
- [5] TIM = Length of manoeuvring route / Speed under manoeuvring mode
- [6] Electric vessels (Electricity) will be adopted during manoeuvring for vessels from OITF and NLTS (no manoeuvring emissions).

C) Emission Factor for Vessels

Vessel	Vessel Type	Engine Type [1]	Total Engine Power [1] (KW)	Loading Factor [2]		Time-in-Mode (minutes)		Emission Factor (g/kWh)					
				Idling	Manoeuvring	Idling	Manoeuvring	NOx [3]	RSP [3]	FSP [3]	SO ₂ [4]	CO [3]	
													N/A
IETS	Barge	Main Engine	1324	N/A	0.30	0	8.64	10.00	0.30	0.29	0.21	1.50	
IWTS	Barge	Main Engine	1324	N/A	0.30	0	8.64	10.00	0.30	0.29	0.21	1.50	
TETS	Barge	Main Engine	1324	N/A	0.30	0	8.64	10.00	0.30	0.29	0.21	1.50	
IPARK1 (Bottom Ash)	Barge	Main Engine	2237	N/A	0.30	0	15.60	10.00	0.30	0.29	0.21	1.50	
IPARK1 (Fly Ash)	Barge	Main Engine	2237	N/A	0.30	0	15.60	10.00	0.30	0.29	0.21	1.50	
IPARK2 (IBA)	Barge	Main Engine	2237	N/A	0.30	0	8.64	10.00	0.30	0.29	0.21	1.50	
OITF	Barge	Main Engine	970	N/A	N/A	0	0	N/A	N/A	N/A	N/A	N/A	
		Auxiliary Engine	447	N/A	N/A	0	0	N/A	N/A	N/A	N/A	N/A	
NLTS	Barge	Main Engine	1000	N/A	N/A	0	0	N/A	N/A	N/A	N/A	N/A	
		Auxiliary Engine	526	N/A	N/A	0	0	N/A	N/A	N/A	N/A	N/A	
HATS	Barge	Auxiliary Engine	2131	N/A	0.43	0	12.51	10.00	0.40	0.39	0.21	1.70	
Tugboat for Construction Barge at Tsang Kok (WX1-WX6) [1]	Tugboat	Main Engine	634	N/A	0.30	0	15.29	13.20	0.72	0.70	0.21	1.10	
Explosive Delivery Vessel at WENTX Berth (WX7) [1]	Explosive Delivery Vessel	Main Engine	1194	N/A	0.30	60	17.43	10.00	0.30	0.29	0.21	1.50	
		Auxiliary Engine	48	0.43	0.30	60	17.43	10.00	0.40	0.39	0.21	1.70	

Notes:

- [1] Reference was made to the approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension (WENTX)" and the latest information at the time of the I-Park2 EIA.
- [2] Loading Factor - Referenced to Table 4-7 and Table 4-10 of EPD's Study on Marine Vessels Emissions Inventory, February 2012.
- [3] On-shore electricity supply will be provided during loading/unloading for vessels from IETS, IWTS, TETS, IPARK1 (Fly Ash), IPARK1 (Bottom Ash), IPARK2(IBA), OITF, NLTS, HATS and construction barges (no idling emissions).
- [4] Electric vessels (Electricity) will be adopted during manoeuvring for vessels from OITF and NLTS (no manoeuvring emissions).
- [5] Emission Factor for Main Engine and Auxiliary Engine - Reference to Table 4-16 of EPD's Study on Marine Vessels Emissions Inventory, engine type of ME(Cat.1) for main engine of RTVs and explosive delivery vessel, ME(Cat.2) for main engine of tugboat and AE for auxiliary engine.
- [6] The emission factor of SO₂ is corrected with the fuel sulphur content according to Section 4.2.31 of EPD's Study on Marine Vessels Emissions Inventory using the following equation:
 $SO_2 \text{ Emission Factor} = BSFC \times 2 \times 0.97753 \times \text{Fuel Sulphur Fraction}$
 where
 $BSFC$ of the vessel is referenced to Section 4.2.27 of EPD's Study on Marine Vessels Emissions Inventory, i.e. 213 g/kWh.
 Fuel Sulphur Fraction refers to the fuel sulphur content limit of the MLD i.e. 0.05% with effective of the Air Pollution Control (Marine Light Diesel) Regulation on 1st April, 2014.
 Therefore, SO_2 Emission Factor = $213 \times 2 \times 0.97753 \times (0.05/100) = 0.21$ g/kWh

D) Calculation of Emission Rate

Vessel	Vessel Type	Engine Type	Emission Rate (g/s) [1]										
			NO _x	RSP	Idling			Manoeuvring					
					FSP	SO ₂	CO	NO _x	RSP	FSP	SO ₂	CO	
IETS	Barge	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.59E-01	4.77E-03	4.61E-03	3.31E-03	2.38E-02
IWTS	Barge	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.59E-01	4.77E-03	4.61E-03	3.31E-03	2.38E-02
TETS	Barge	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.59E-01	4.77E-03	4.61E-03	3.31E-03	2.38E-02
IPARK1 (Bottom Ash)	Barge	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.85E-01	1.45E-02	1.41E-02	1.01E-02	7.27E-02
IPARK1 (Fly Ash)	Barge	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.85E-01	1.45E-02	1.41E-02	1.01E-02	7.27E-02
IPARK2 (IBA)	Barge	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.89E-01	8.05E-03	7.79E-03	5.59E-03	4.05E-02
OITF	Barge	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NLTS	Barge	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Auxiliary Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HATS	Barge	Auxiliary Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.31E-01	2.12E-02	2.07E-02	1.11E-02	9.02E-02
Tugboat for Construction Barge at Tsang Kok (WX1)	Tugboat	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.78E-01	6.93E-03	6.43E-03	2.80E-03	1.46E-02
Explosive Delivery Vessel at WENTX Berth (WX7)	Explosive Delivery Vessel	Main Engine	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.89E-01	8.67E-03	8.38E-03	6.02E-03	4.34E-02
		Auxiliary Engine	5.733E-02	2.293E-03	2.236E-03	1.194E-03	9.747E-03	1.16E-02	4.65E-04	4.53E-04	2.42E-04	1.98E-03	

Notes:

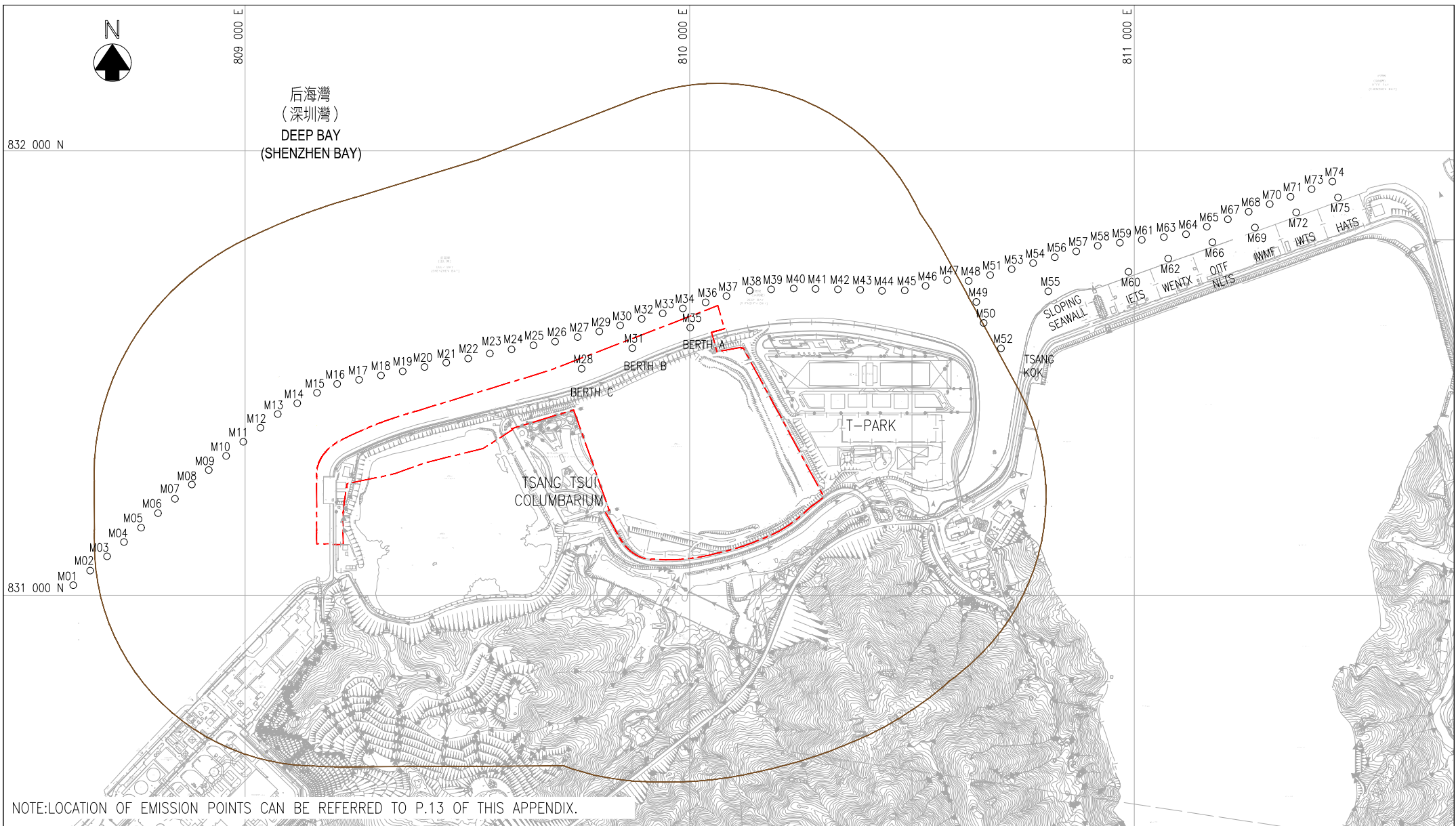
- [1] Emission Rate = Engine Power * Loading Factor * Emission Factor * Time-in-mode

E) Marine Emission Inventory






Source	Activity	Type	Base Elevation (mpd)	Release Height [1] (mAG)	Internal Diameter [1] (m)	Exit Velocity [1] (m/s)	Exit Temperature [1] (K)	Emission Rate (g/s) at each emission point [2]					Emission Points
								NO _x	RSP	FSP	SO ₂	CO	
RTS Vessel (IETS)	Manoeuvring	POINT	0	8	0.30	8	531	4.8142E-03	1.4443E-04	1.3961E-04	1.0024E-04	7.2213E-04	33
RTS Vessel (IWTS)	Manoeuvring	POINT	0	8	0.30	8	493	4.8142E-03	1.4443E-04	1.3961E-04	1.0024E-04	7.2213E-04	33
RTS Vessel (TETS)	Manoeuvring	POINT	0	3.5	0.20	8	425	4.8142E-03	1.4443E-04	1.3961E-04	1.0024E-04	7.2213E-04	33
RTS Vessel (IPARK1(Bottom Ash))	Manoeuvring	POINT	0	12	0.27	8	873	8.2175E-03	2.4653E-04	2.3831E-04	1.7110E-04	1.2326E-03	59
RTS Vessel (IPARK1(Fly Ash))	Manoeuvring	POINT	0	12	0.27	8	873	8.2175E-03	2.4653E-04	2.3831E-04	1.7110E-04	1.2326E-03	59
RTS Vessel (IPARK2(IBA))	Manoeuvring	POINT	0	12	0.27	8	873	8.1340E-03	2.4402E-04	2.3588E-04	1.6936E-04	1.2201E-03	33
RTS Vessel (OITF)	Manoeuvring	POINT	0	3.5	0.20	8	425	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	57
	(by Main Engine)	POINT	0	11	0.20	8	699	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	57
RTS Vessel (NLTS)	Manoeuvring	POINT	0	11	0.20	8	588	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	57
	(by Auxiliary Engine)	POINT	0	12	0.14	8	623	8.4264E-03	3.3705E-04	3.2863E-04	1.7545E-04	1.4325E-03	63
Tugboat for WENTX Construction Barge at Tsang Kok (WX1 - WX6)	Manoeuvring	POINT/HOR	0	9	0.15	8	795	3.7029E-03	2.0198E-04	1.9637E-04	5.8409E-05	3.0858E-04	48
[3]	Idling	POINT	0	9	0.15	8	795	5.7333E-02	2.2933E-03	2.2360E-03	1.1938E-03	9.7467E-03	1
WENTX Explosive Delivery Vessel at WENTX Berth (WX7)	Manoeuvring	POINT	0	9	0.15	8	795	5.4667E-03	1.6611E-04	1.6069E-04	1.1382E-04	8.2423E-04	55

Notes:


- [1] Reference was made to the Approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension" and the latest information at the time of the I-Park2 EIA.
- [2] Emission rate at each emission point = emission rate / no. of emission points
- [3] For conservative assessment, it is assumed that two construction barges will manoeuvre (arrive and depart) concurrently at each berth every hour. The emission rate at each mission point for WX1-WX6 is doubled in the model.



NOTE: LOCATION OF EMISSION POINTS CAN BE REFERRED TO P.13 OF THIS APPENDIX.

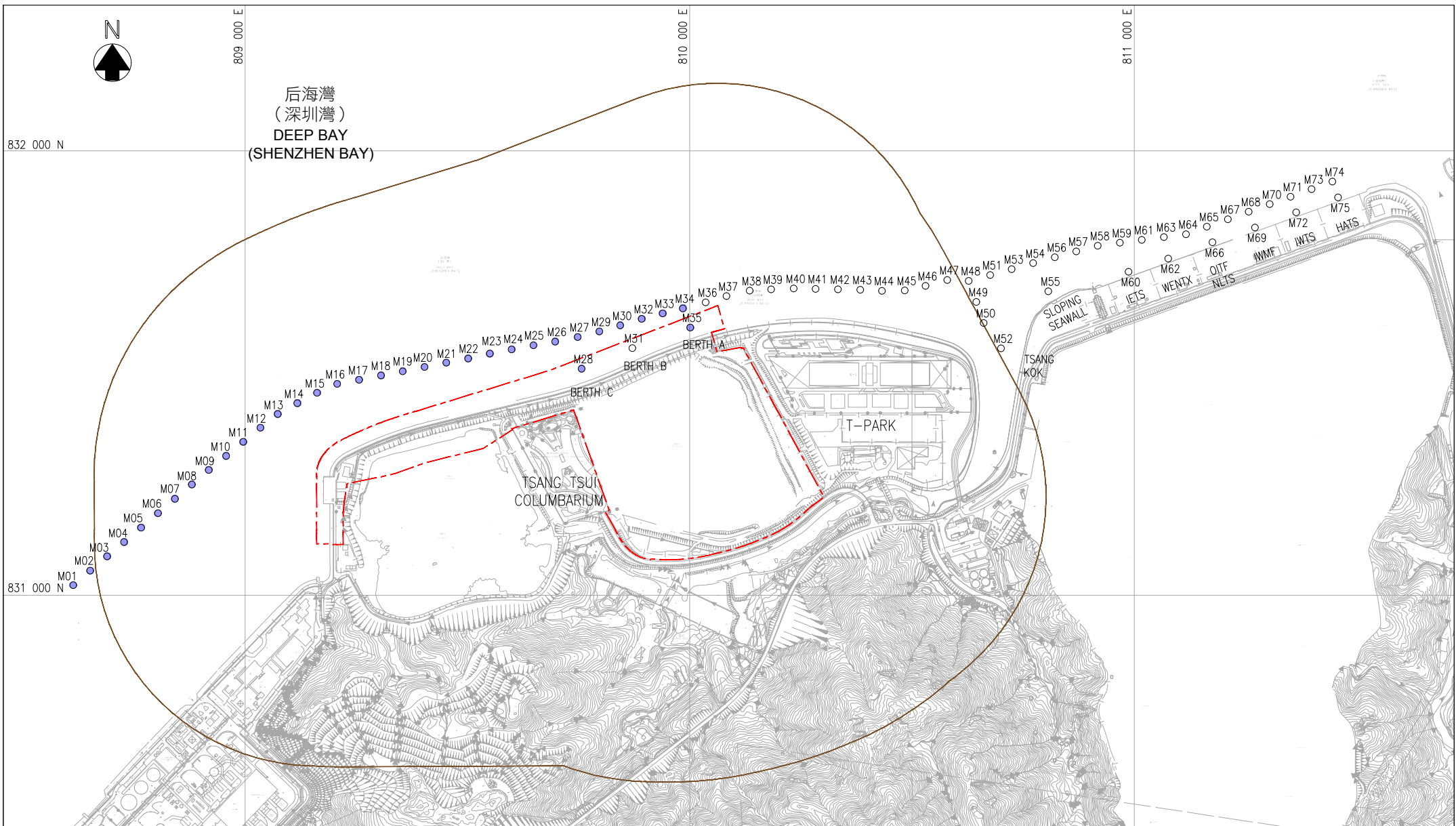
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	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title	INDEX PLAN MARINE EMISSION
	3/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION		Figure no. APPENDIX 3E-1	
 Environmental Protection Department The Government of the Hong Kong Special Administrative Region		Prepared SZ	Checked VL
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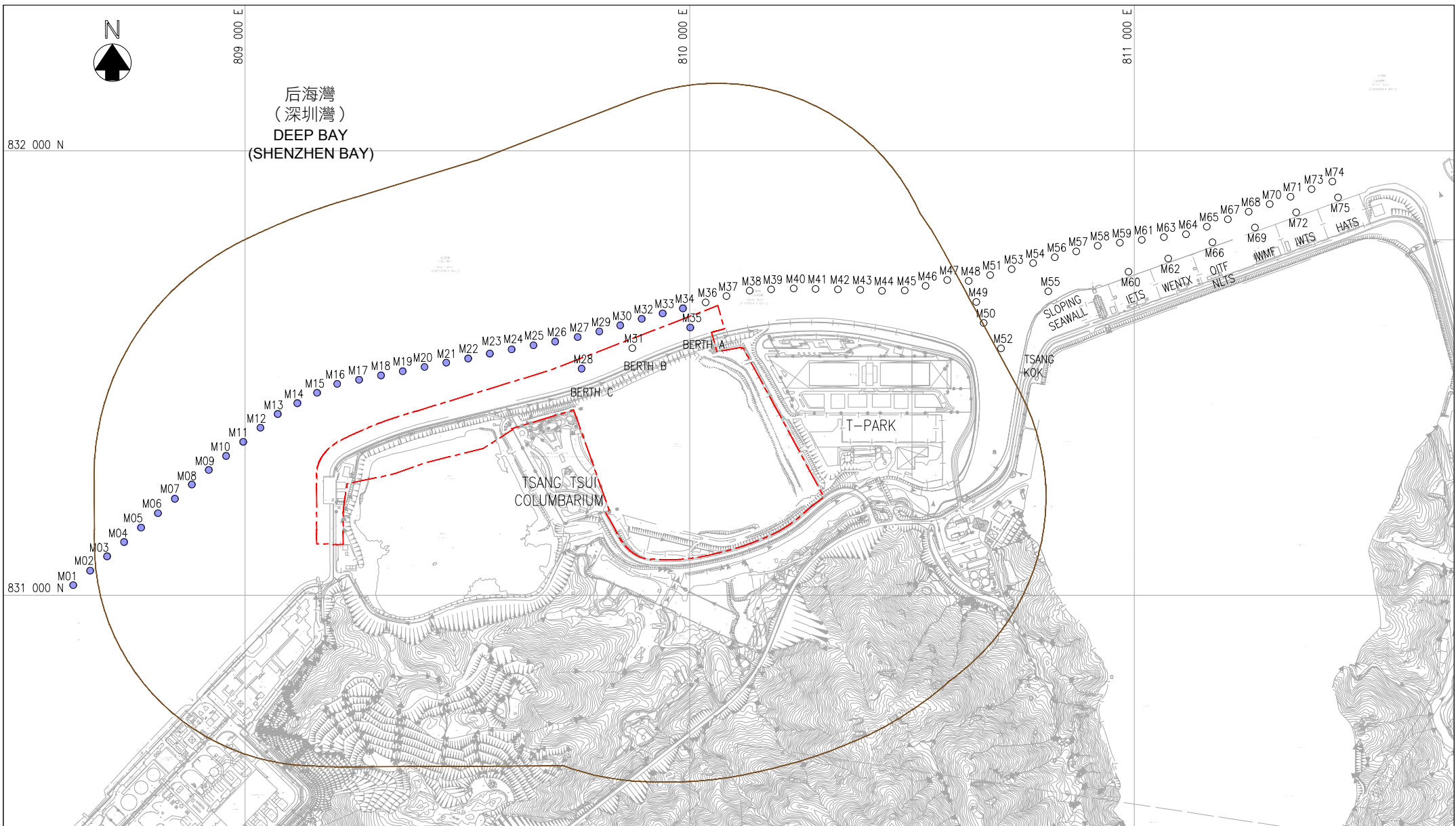


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	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title
MARINE EMISSIONS FROM RTS VESSEL(IETS) MANOEUVRING PERIOD: HR13 & HR19
4/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION		Figure no. APPENDIX 3E-1a	
 Environmental Protection Department The Government of the Hong Kong Special Administrative Region		Prepared SZ	Checked VL
 BINNIES HONG KONG LIMITED 寶后新工程顧問有限公司		Date 05/24	Scale 1:12000(A4)

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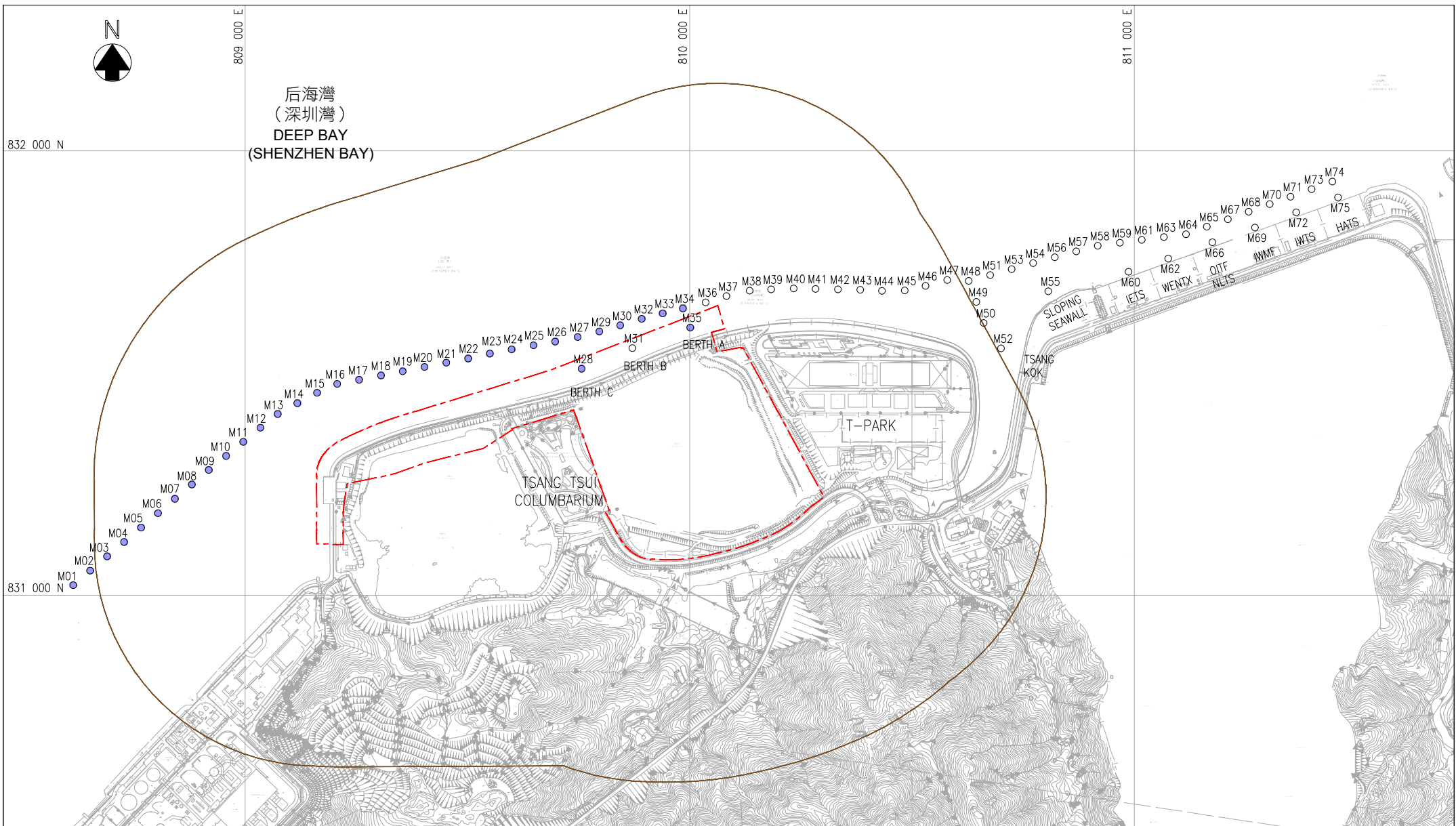
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	PROJECT BOUNDARY
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	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title
MARINE EMISSIONS FROM RTS VESSEL(IWTS) MANOEUVRING PERIOD: HR18 & HR22
5/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION		Figure no. APPENDIX 3E-1b	
 Environmental Protection Department The Government of the Hong Kong Special Administrative Region		Prepared SZ	Checked VL
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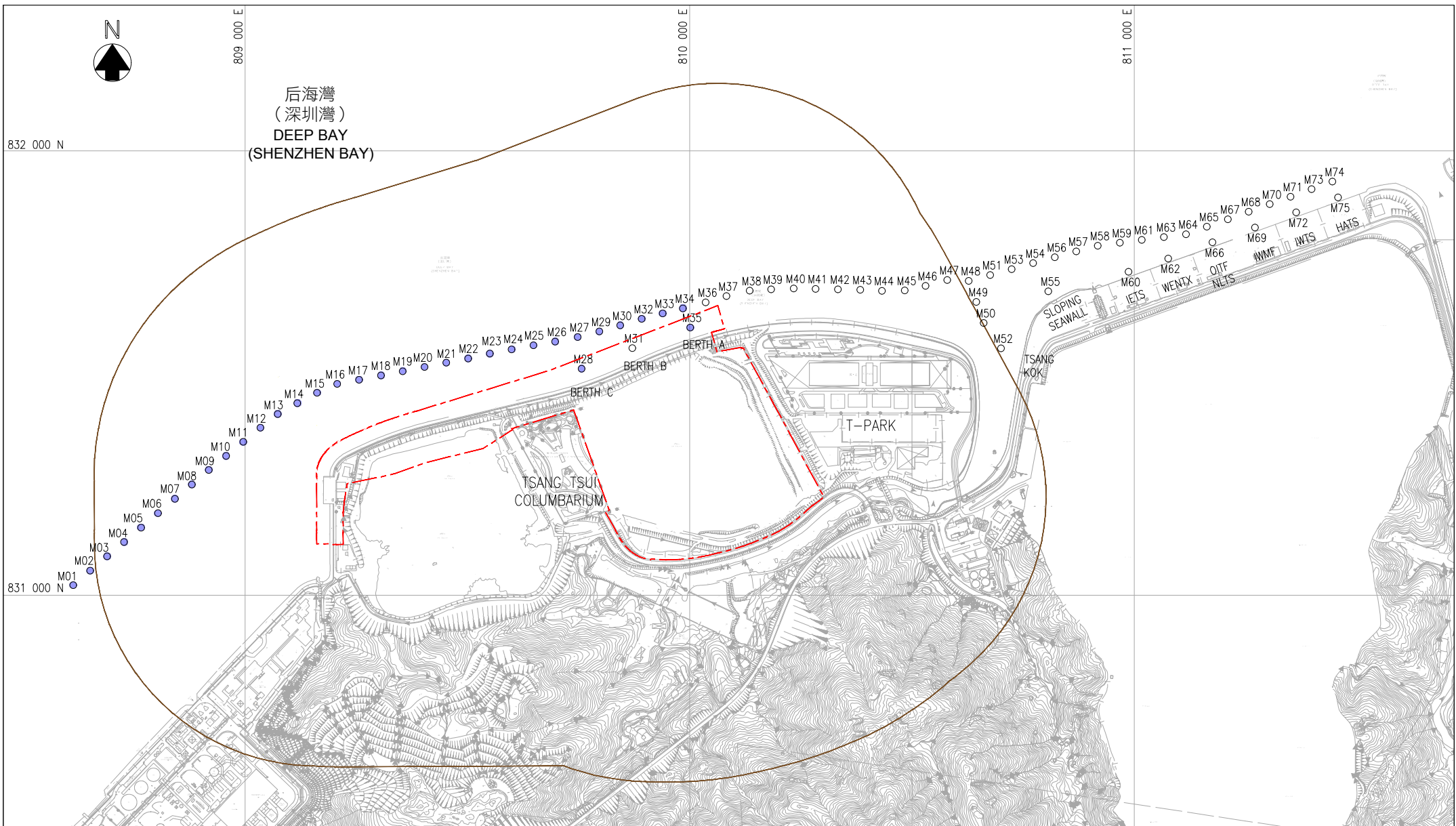
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	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title	AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION
MARINE EMISSIONS FROM RTS VESSEL(TETS) MANOEUVRING PERIOD: HR08 & HR18	Figure no. APPENDIX 3E-1c
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	Date 05/24
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 Environmental Protection Department The Government of the Hong Kong Special Administrative Region	
 BINNIES HONG KONG LIMITED 寶后新工務顧問有限公司	

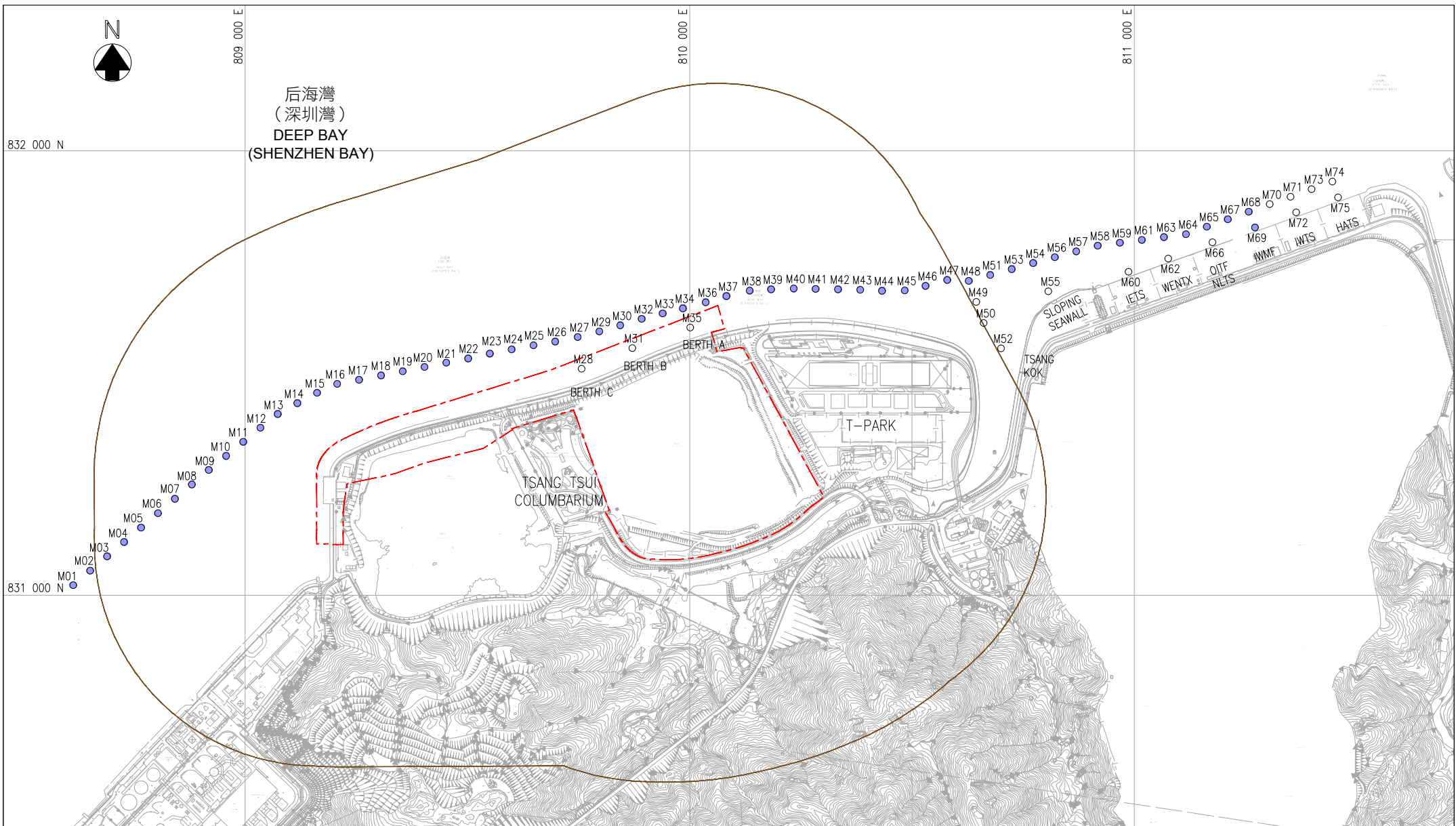


LEGEND:	
	PROJECT BOUNDARY
	500m BOUNDARY
	POINT WITHOUT MANOEUVRING/IDLING EMISSION
	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title	MARINE EMISSIONS FROM RTS VESSEL(IPARK2(IBA)) MANOEUVRING PERIOD: HR14 & HR17
Page No.	7/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION		Figure no. APPENDIX 3E-1d	
 Environmental Protection Department The Government of the Hong Kong Special Administrative Region		Prepared SZ	Checked VL
 BINNIES HONG KONG LIMITED 寶后新工程顧問有限公司		Date 05/24	Scale 1:12000(A4)

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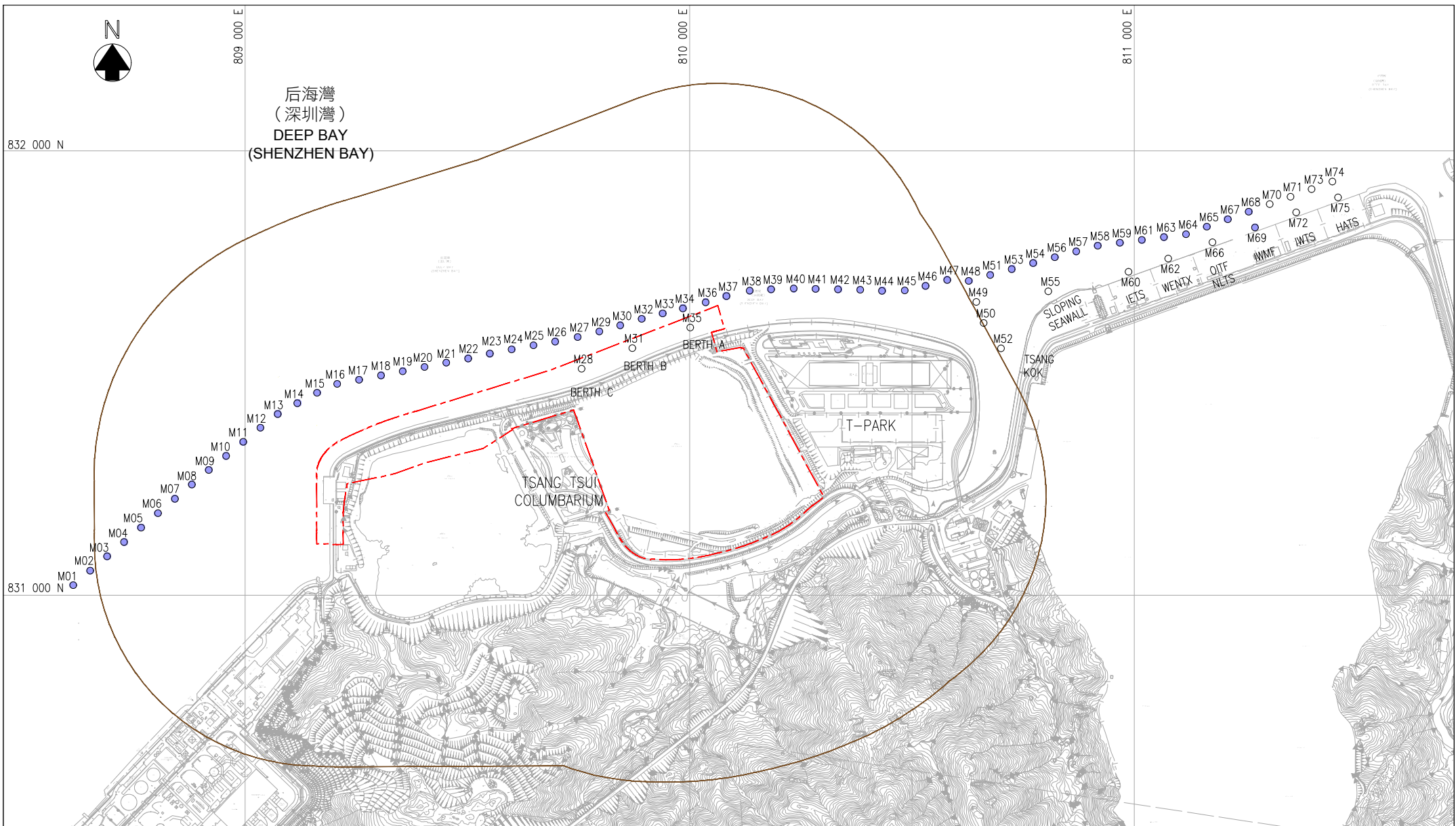


LEGEND:	
	PROJECT BOUNDARY
	500m BOUNDARY
	POINT WITHOUT MANOEUVRING/IDLING EMISSION
	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title	MARINE EMISSIONS FROM RTS VESSEL (IPARK1(BOTTOM ASH)) MANOEUVRING PERIOD: HR11 & HR15
	8/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION		Figure no. APPENDIX 3E-1e	
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 BINNIES HONG KONG LIMITED 賽后斯工程顧問有限公司		Date 05/24	Scale 1:12000(A4)

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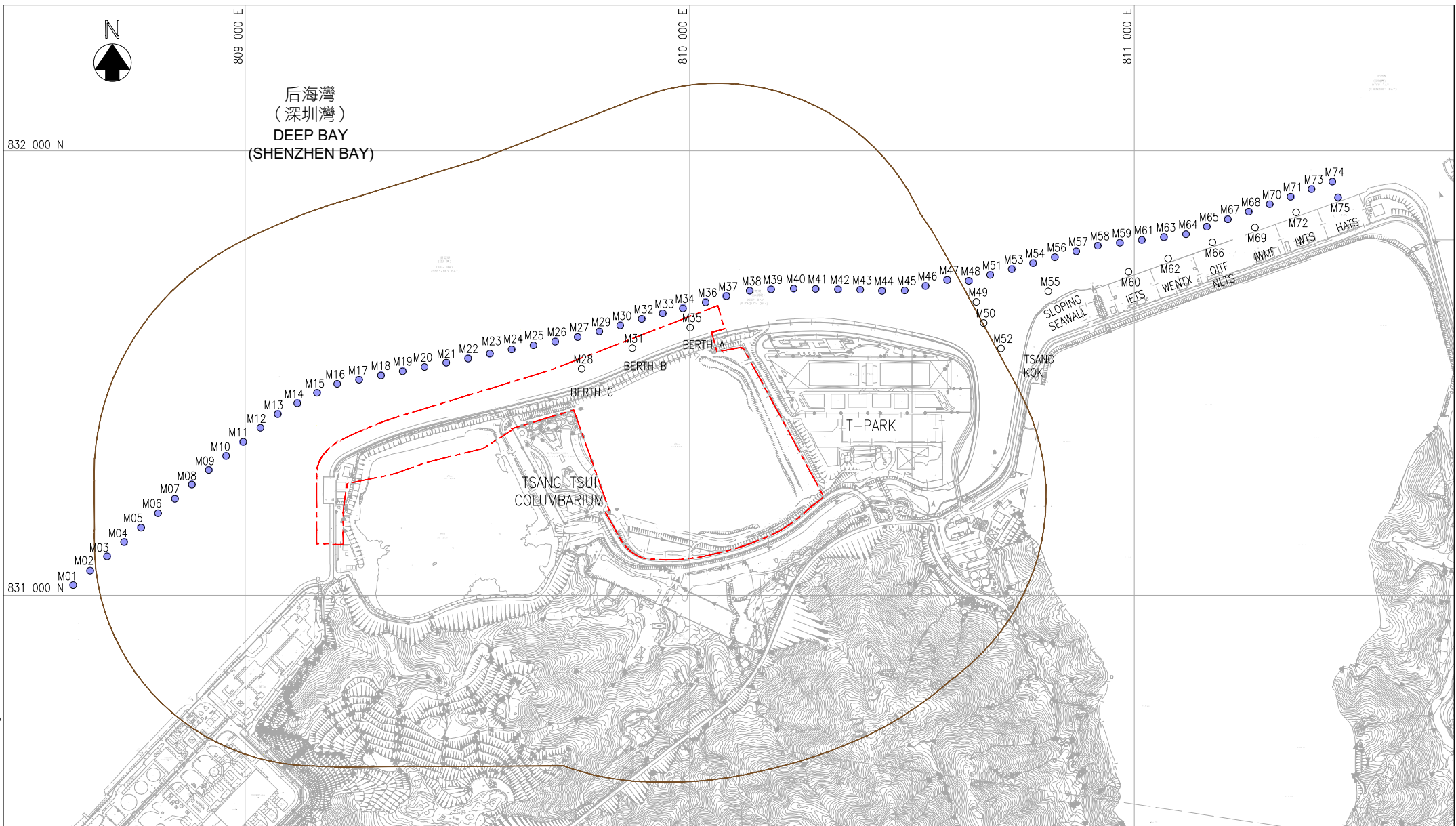


LEGEND:	
	PROJECT BOUNDARY
	500m BOUNDARY
	POINT WITHOUT MANOEUVRING/IDLING EMISSION
	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title
MARINE EMISSIONS FROM RTS VESSEL (IPARK1(FLY ASH)) MANOEUVRING PERIOD: HR06 & HR10
9/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION		Figure no. APPENDIX 3E-1f	
 Environmental Protection Department The Government of the Hong Kong Special Administrative Region		Prepared SZ	Checked VL
 BINNIES HONG KONG LIMITED 寶后新工程顧問有限公司		Date 05/24	Scale 1:12000(A4)

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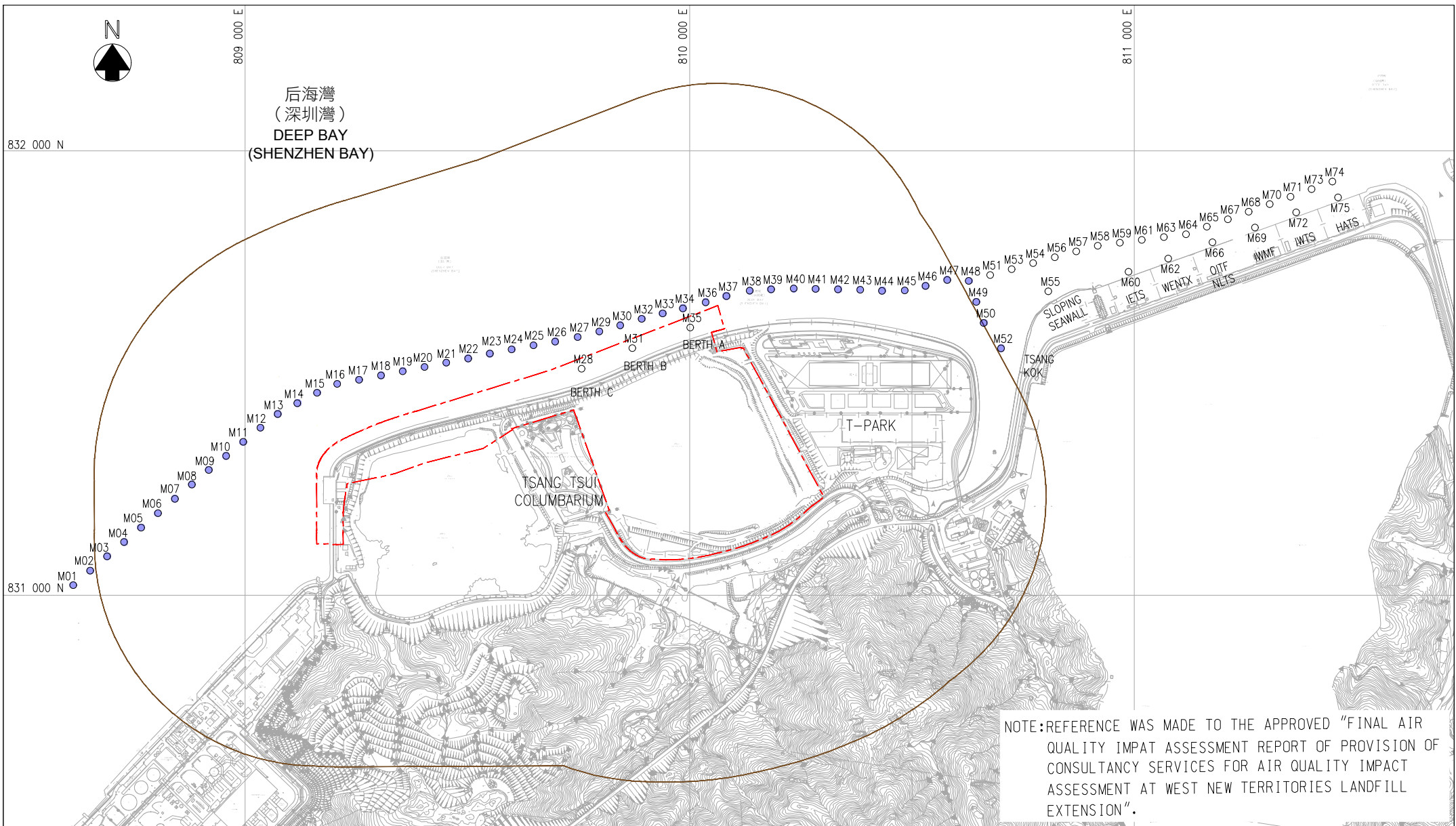
LEGEND:

	PROJECT BOUNDARY
	500m BOUNDARY
	POINT WITHOUT MANOEUVRING/IDLING EMISSION
	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title
MARINE EMISSIONS FROM RTS VESSEL(HATS) MANOEUVRING PERIOD: HR04 & HR08
10/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION		Figure no. APPENDIX 3E-1g	
 Environmental Protection Department The Government of the Hong Kong Special Administrative Region		Prepared SZ	Checked VL
 BINNIES HONG KONG LIMITED 寰后斯工程顧問有限公司		Date 05/24	Scale 1:12000(A4)

User name: Chen, Anle | Date: 2024/5/8 17:11 | 16:56:11
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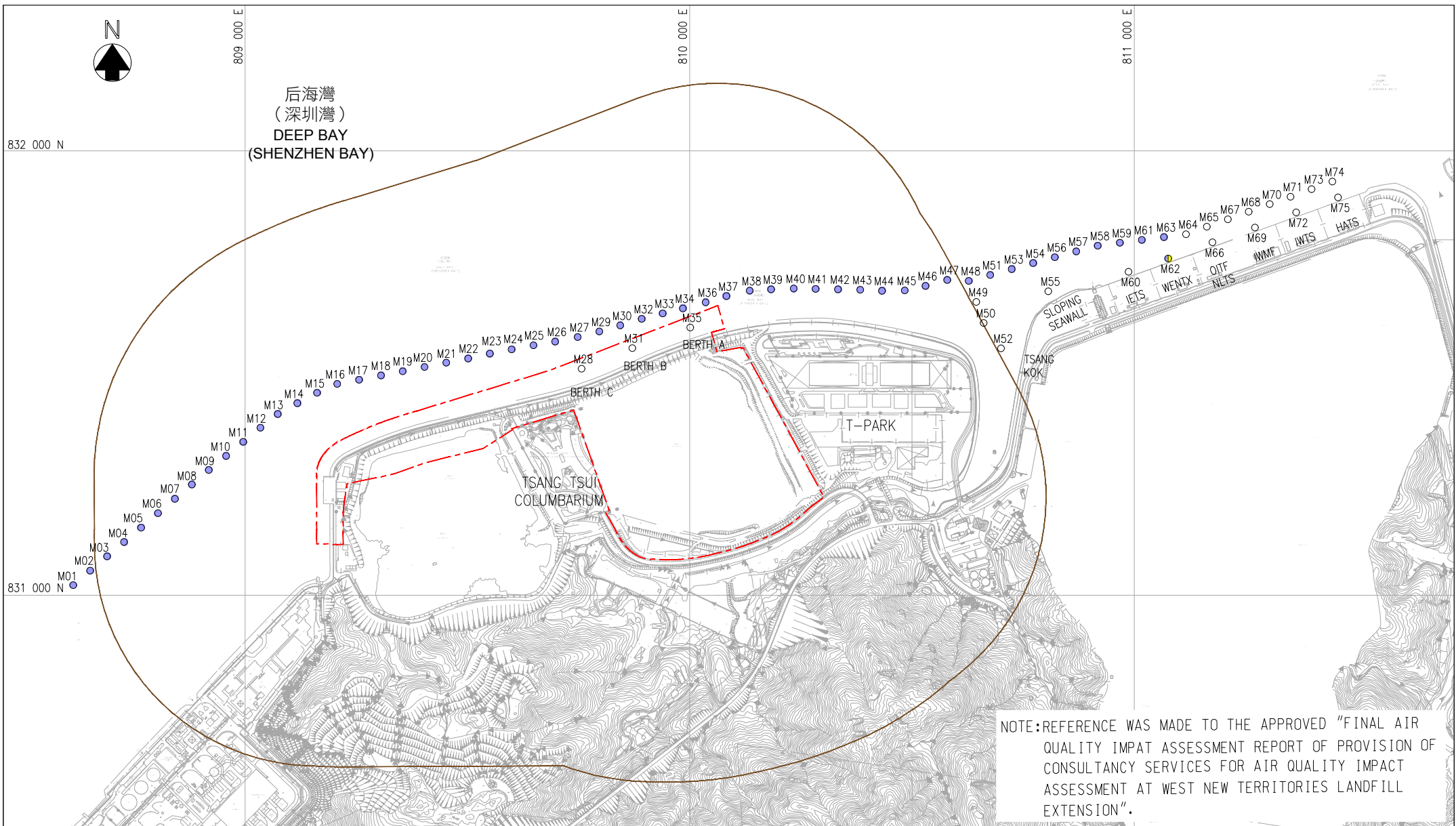
LEGEND:	
	PROJECT BOUNDARY
	500m BOUNDARY
	POINT WITHOUT MANOEUVRING/IDLING EMISSION
	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title

MARINE EMISSIONS FROM TUGBOAT WENTX CONSTRUCTION BARGE AT TSANG KOK(WX1-WX6)
MANOEUVRING PERIOD: HR08 TO HR19

11/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION		Figure no. APPENDIX 3E-1h	
 Environmental Protection Department The Government of the Hong Kong Special Administrative Region		Prepared SZ	Checked VL
 BINNIES HONG KONG LIMITED 寰后新工務顧問有限公司		Date 05/24	Scale 1:12000(A4)



NOTE: REFERENCE WAS MADE TO THE APPROVED "FINAL AIR QUALITY IMPACT ASSESSMENT REPORT OF PROVISION OF CONSULTANCY SERVICES FOR AIR QUALITY IMPACT ASSESSMENT AT WEST NEW TERRITORIES LANDFILL EXTENSION".

LEGEND:	
	PROJECT BOUNDARY
	500m BOUNDARY
	POINT WITHOUT MANOEUVRING/IDLING EMISSION
	POINT WITH MANOEUVRING EMISSION
	POINT WITH MANOEUVRING & IDLING EMISSION

Title
MARINE EMISSIONS FROM EXPLOSIVE DELIVERY VESSEL AT WENTX BERTH(WX7) MANOEUVRING PERIOD: HR11 TO HR18 IDLING PERIOD: HR11 TO HR18
12/14

AGREEMENT NO. CE 26/2022 (EP) DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT FACILITIES PHASE 2 – INVESTIGATION, DESIGN AND CONSTRUCTION	Figure no. APPENDIX 3E-1i	
 Environmental Protection Department The Government of the Hong Kong Special Administrative Region	Prepared SZ	Checked VL
 BINNIES HONG KONG LIMITED 賽后新工務顧問有限公司	Date 05/24	Scale 1:12000(A4)

User name: Chen, Anle | Date: 2024/5/8 17:11 | File name: Y:\Daily Work\20240510\dwg\4110377-BIN-APPENDIX 3E-1

Appendix 3E Marine Emission Sources

F) Location of Emission Point

Location ID	x	y
M01	808613	831023
M02	808651	831055
M03	808690	831087
M04	808728	831120
M05	808766	831152
M06	808804	831184
M07	808842	831217
M08	808880	831249
M09	808918	831281
M10	808957	831313
M11	808996	831345
M12	809034	831377
M13	809073	831408
M14	809117	831432
M15	809162	831455
M16	809207	831475
M17	809256	831485
M18	809305	831494
M19	809354	831504
M20	809403	831513
M21	809453	831523
M22	809502	831533
M23	809550	831544
M24	809599	831553
M25	809649	831562
M26	809697	831570
M27	809748	831581
M28	809757	831510
M29	809797	831593
M30	809844	831607
M31	809871	831556
M32	809892	831622
M33	809939	831634
M34	809985	831645
M35	810001	831602
M36	810036	831659
M37	810082	831673
M38	810135	831685
M39	810183	831688
M40	810234	831690
M41	810283	831689
M42	810333	831688
M43	810383	831687
M44	810432	831685
M45	810483	831686
M46	810530	831696
M47	810579	831709
M48	810628	831707
M49	810645	831660
M50	810661	831613
M51	810676	831721
M52	810700	831556
M53	810724	831734
M54	810773	831747
M55	810807	831684
M56	810821	831760
M57	810869	831774
M58	810918	831786
M59	810967	831793
M60	810987	831728
M61	811017	831799
M62	811076	831758
M63	811067	831806
M64	811116	831812
M65	811163	831829
M66	811176	831794
M67	811210	831846
M68	811257	831863
M69	811271	831827
M70	811304	831880
M71	811352	831897
M72	811364	831861
M73	811399	831914
M74	811446	831930
M75	811458	831895

