

Contract No. EP/SP/66/12 Integrated Waste Management Facilities, Phase 1 24<sup>th</sup> Quarterly EM&A Report



吉寶西格斯-振華聯營公司 KEPPEL SEGHERS - ZHEN HUA JOINT VENTURE

# Quarterly EM&A Report No.24 (Period from 1 April to 30 June 2024)

(Clause 3.3, Further Environmental Permit FEP-01/429/2012/A)

KSZHJV	/	312	/	Quarterly	/	00024	/	Α
				EM&A				
Issuer		Project Code		Type of Document		Sequential No.		Revision Index

# **Document No.**

	Prepared by:	Certified by:	Verified by:
Name	Joe Ho	F.C Tsang	Mandy To
Position	Environmental Team Member	Environmental Team Leader	Independent Environmental Checker
Signature	J.	Toang Fandbearg	Mandy 2.
Date:	30 July 2024	30 July 2024	30 July 2024

© This document contains confidential and proprietary information belonging to Keppel Seghers - Zhen Hua Joint Venture and/or its affiliates. The contents of this document shall not be used for any other purpose than that for which they were provided. Any disclosure, copying, distribution or the taking of any action in reliance on the contents of this document is strictly prohibited. This document confers upon the recipient no right or license of whatsoever nature based on the information as described herein. If you have received this document in error, please immediately arrange for the return to Keppel Seghers - Zhen Hua Joint Venture or destruction of this document.

# **Revision History**

Α	First Submission	31 July 2024
Rev.	<b>DESCRIPTION OF MODIFICATION</b>	DATE

# CONTENT

1.	Basic Project Information	1
2.	Marine Water Quality Monitoring	6
3.	Noise Monitoring	. 10
4.	Waste	. 15
5.	Coral	.17
6.	Marine Mammal	.25
7.	White-Bellied Sea Eagle	.31
	Summary of Monitoring Exceedance, Complaints, Notification of Summons a	
9.	EM&A Site Inspection	. 34
10.	Conclusion and Recommendations	.35

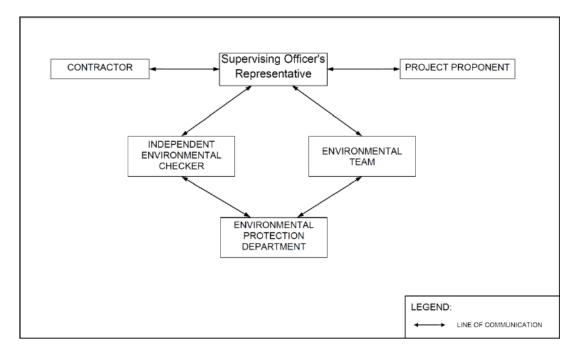
Appendix A	Master Programme
Appendix B	Summary of Implementation Status of Environmental Mitigation
Appendix C	Noise Monitoring Data Trending
Appendix D	Waste Flow Table
Appendix E	Photo Records for Coral Monitoring
Appendix F	Photo Records for White-bellied Sea Eagle Monitoring
Appendix G	Complaint Log

## **EXECUTIVE SUMMARY**

- A1. The Project, Integrated Waste Management Facility (IWMF), is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO) and is currently governed by a Further Environmental Permit (FEP No. FEP-01/429/2012/A) for the construction and operation of the Project.
- A2. In accordance with the Updated Environmental Monitoring and Audit (EM&A) Manual for the Project, EM&A works for marine water quality, noise, waste management and ecology should be carried out by Environmental Team (ET), Acuity Sustainability Consulting Limited (ASCL), during the construction phase of the Project.
- A3. This is the 24<sup>th</sup> Quarterly EM&A Report, prepared by ASCL, for the Project summarizing and concluding the monitoring results and audit findings of the EM&A programme at and around Shek Kwu Chau (SKC) during the reporting period from 1 April 2024 to 30 June 2024.
- A4. The EM&A works for construction noise, water quality, construction waste, coral, marine mammal and White-Bellied Sea Eagle (WBSE) were conducted during the reporting period in accordance with the Updated EM&A Manual.
- A5. Weekly site inspections of the construction works were carried out by ET to audit the mitigation measures implementation status. Monthly joint site inspections were carried out by ET and IEC.
- A6. As confirmed with Contractor, no marine construction work will be carried out from April to June 2024 tentatively. An updated EM&A arrangement to extend the temporary suspension of water quality and line-transect monitoring from April to June 2024 was submitted to EPD on 27 February 2024. EPD advised no objection on the extension on 18 March 2024. Temporary suspension of water quality and line-transect monitoring were extended from 31 March 2024 onward. A two-week advance notice will be made by the Contractor prior to resumption of marine construction works. The water quality monitoring and line-transection monitoring will be resumed upon the resumption of marine construction works with updated EM&A schedule within one day after receiving the notification from contractor.

## 1. BASIC PROJECT INFORMATION

- 1.1. The Reporting Scope
- 1.1.1 This is the 24<sup>th</sup> Quarterly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 April 2024 to 30 June 2024.
- 1.2. Project Organization
- 1.2.2 The Project Organization structure for Construction Phase is presented in **Figure 1.1**.



**Figure 1.1 Project Organization Chart** 

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

Table 1.1 Contact Details of Key Tersonner					
Party	Position Name		Telephone no.		
Environmental Protection Department	Project Proponent Cheng Tak-Kuen		2594-6111		
Keppel Seghers – Zhen Hua Joint Venture	Project Manager	Peter Chung	2192-0603		
Acuity Sustainability Consulting Limited	Environmental Team Leader	F.C. Tsang	2698-6833		
ERM-Hong Kong, Limited	Independent Environmental Checker	Mandy To	2271-3000		

Table 1.1	Contact	Details	of Key	Personnel
-----------	---------	---------	--------	-----------

### 1.3. Summary of Construction Works

1.3.1 Details of the major construction activities undertaken in this reporting period are shown in **Table 1.2** below. The construction programme is presented in **Appendix A**.

Table 1.2 Summary of the Construction Activities Undertaken during the
<b>Reporting Period</b>

Location of works	Construction activities undertaken	Remarks on progress
Reclamation area	• Pile cap construction	On-going
	• Structural steel work	On-going
	• Superstructure construction	• On-going
Seawall portion	• Caisson extension works, from +3mPD to +6mPD, at Seawall A and B	On-going
	• Construction of wave wall along the vertical seawall above +3mPD	• On-going

#### 1.3.2 The status for all environmental aspects is presented in **Table 1.3**.

# Table 1.3 Summary of Status for Key Environmental Aspects under the UpdatedEM&A Manual

Parameters	Status
Water Quality	
Baseline Monitoring under Updated EM&A Manual and Detailed Plan on DCM	The baseline water quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under FEP Condition 3.4
Impact Monitoring	As confirmed with Contractor, no marine construction work will be carried out from April to June 2024 tentatively. An updated EM&A arrangement to extend the temporary suspension of water quality and line-transect monitoring from April to June 2024 was submitted to EPD on 27 February 2024. EPD advised no objection on the extension on 18 March 2024. Temporary suspension of water quality and line-transect monitoring were extended from 31 March 2024 onward. A two-week advance notice will be made by the Contractor prior to resumption of marine construction works. The water quality monitoring and line-transection monitoring will be resumed upon the resumption of marine construction works. ET will notify the resumption of marine construction works with updated EM&A schedule within one day after receiving the notification from contractor.
Regular DCM Monitoring	All DCM was completed on 14 October 2020, regular DCM monitoring for further 4 weeks (i.e from 16 October 2020 to 14 November 2020) was completed according to the approved Detailed Plan on Deep Cement Mixing
Initial Intensive DCM Monitoring	Conducted from 11 February 2019 to 10 March 2019, had not been resumed since there was no DCM related parameter exceeding the AL/LL.
Baseline Water Quality of wet season	Completed over 13 August 2018 to 7 September 2018
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under FEP Condition 3.4
Impact Monitoring	On-going
Waste Management	
Mitigation Measures in Waste Monitoring Plan	On-going
Coral	
Pre-translocation Survey and Coral Mapping	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12
Coral Translocation	Completed on 28 March 2018
Post-Translocation Coral Monitoring	Survey affected by missing of translocated and tagged coral colonies after typhoons in September 2018, completed on 28 March 2019.
Pre-construction Coral Survey and Tagging	Completed on 26 June 2018
Tagged Coral Monitoring	Survey obstructed due to missing of tagged coral colonies after typhoons in September 2018

Parameters	Status		
Coral Survey and Re-	Re-tagging at Indirect Impact Site was conducted on 23		
tagging	November and Re-tagging at Control Site was conducted on 3		
	December 2018.		
Post Re-tagging Coral	On-going		
Quarterly Monitoring			
Marine Mammal			
Baseline Monitoring	The baseline marine mammal monitoring result has been		
	reported in Baseline Monitoring Report and submitted to EPD under FEP Condition 3.4		
Impact Monitoring	Temporarily suspended since 30 March 2023, as no marine		
	construction works as defined in the approved EIA report		
	(AEIAR-163/2012) and the Updated EM&A Manual was		
	conducted in this reporting period.		
Land-based Theodolite	30 days of theodolite surveys were started on 21 Feb 2019 and		
Tracking	completed in May 2019.		
Passive Acoustic	30 days of PAM surveys were started on 1 May 2019 and		
Monitoring	completed at the end of May 2019.		
White-bellied Sea Eagle			
Baseline Monitoring	The baseline WBSE monitoring result has been reported in		
	Baseline Monitoring Report and submitted to EPD under FEP		
	Condition 3.4		
Impact Monitoring	On-going, since incubation activity was observed on 27		
	December 2023, the frequency of impact monitoring was		
	changed to weekly monitoring. No incubation activity nor		
	chick was observed during the monitoring event on 27 March		
	2024. Thus, the monitoring frequency will return to twice per		
	month in April 2024.		
Environmental Audit			
Site Inspection covering	On-going		
Measures of Air Quality,			
Noise Impact, Water			
Quality, Waste,			
Ecological Quality,			
Fisheries, Landscape and			
Fisheries, Landscape and Visual			
Fisheries, Landscape and Visual Mitigation Measures in	Installation of caisson No.19 was completed on 18 March 2021,		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal	which the reclamation area had been totally enclosed by		
Fisheries, Landscape and Visual Mitigation Measures in	which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal	which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal	which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP)	which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021,</li> </ul>		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in Detailed Monitoring	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by</li> </ul>		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in Detailed Monitoring Programme on Finless	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access</li> </ul>		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in Detailed Monitoring	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be</li> </ul>		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in Detailed Monitoring Programme on Finless	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works</li> </ul>		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in Detailed Monitoring Programme on Finless Porpoise (DMPFP)	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> </ul>		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in Detailed Monitoring Programme on Finless Porpoise (DMPFP) Mitigation Measures in Vessel Travel Details	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>On-going</li> </ul>		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in Detailed Monitoring Programme on Finless Porpoise (DMPFP) Mitigation Measures in Vessel Travel Details Daily Site Audit and	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> </ul>		
Fisheries, Landscape and Visual Mitigation Measures in Marine Mammal Watching Plan (MMWP) Mitigation Measures in Detailed Monitoring Programme on Finless Porpoise (DMPFP) Mitigation Measures in Vessel Travel Details	<ul> <li>which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.</li> <li>On-going</li> </ul>		

- 1.3.3 Other than the EM&A works by ET, environmental briefings, trainings and regular environmental management meetings were conducted, in order to enhance environmental awareness and closely monitor the environmental performance of the contractors.
- 1.3.4 The EM&A programme has been implemented in accordance with the recommendations presented in the approved EIA Report and the Updated EM&A Manual. A summary of updated implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix B**.

## 2. MARINE WATER QUALITY MONITORING

- 2.1 Water Quality Parameters
- 2.1.1 Measurement of Dissolved Oxygen (DO), Turbidity, Suspended Solids (SS), Salinity and pH have been undertaken at the eleven monitoring stations during general water quality monitoring.
- 2.1.2 DO, temperature, salinity, turbidity and pH were measured in-situ and the SS was assayed in a HOKLAS laboratory.
- 2.1.3 In associate with the water quality parameters, other relevant data were also measured, such as monitoring location/position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or work underway nearby were also recorded.
- 2.1.4 Impact water quality monitoring was conducted 3 days per week in the reporting period. All parameters were monitored during mid-flood and mid-ebb tides at three water depths for water quality monitoring. The interval between two sets of monitoring has not been less than 36 hours.
- 2.1.5 **Table 2.1** summarizes the monitoring parameters, frequency and duration of the impact water quality monitoring.

Parameter, unit	Frequency	No. of Depths
<ul> <li>Water Depth(m)</li> <li>Temperature(°C)</li> <li>Salinity(ppt)</li> <li>pH (pH unit)</li> <li>Dissolved Oxygen (DO)(mg/L and % of saturation)</li> <li>Turbidity(NTU)</li> <li>Suspended Solids (SS), mg/L</li> <li>Current velocity (m/s)</li> <li>Direction (in NESW)</li> </ul>	General water quality monitoring: 3 days per week, at mid-flood and mid-ebb tides	<ul><li>3 water depths: 1m below sea surface, mid-depth and 1m above sea bed.</li><li>If the water depth is less than 3m, mid-depth sampling only.</li><li>If water depth is less than 6m, mid-depth may be omitted.</li></ul>

Table 2.1 Water Quality Monitoring Parameters, Frequency and Duration

- 2.2 Water Quality Monitoring Locations
- 2.2.1 Impact water quality monitoring was conducted at eleven monitoring locations (i.e. B1-B4, H1, C1A, C2A, F1A, CR1, CR2 and M1) during general water quality monitoring as shown in **Figure 2.1**.

#### Contract No. EP/SP/66/12 Integrated Waste Management Facilities, Phase 1 24<sup>th</sup> Quarterly EM&A Report

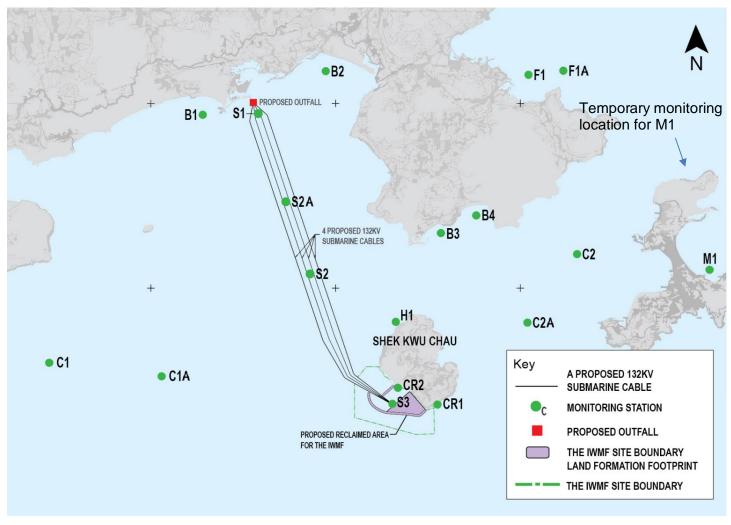


Figure 2.1 Water monitoring locations at Artificial Island near SKC

#### 2.3 Action and Limit Levels

2.3.1 Based on the baseline monitoring data and the derivation criteria presented in the Baseline Monitoring Report, the Action/Limit Levels have been derived and are presented in **Table 2.2** and **Table 2.3** for both dry seasons (October – March) and wet seasons (April – September).

Table 2.2 Derived Action and Limit Levels for Water Quality Monitoring (Dry Season)

Parameters	Action	Limit					
Construction Phase Impact Monitoring							
DO in mg/L	≤ 7.13	≤ 4					
SS in mg/L	$\geq$ 8 or 120% of control station's SS	$\geq$ 10 or 130% of control station's SS at					
	at the same tide of the same day of	the same tide of the same day of					
	measurement, whichever is higher	measurement, whichever is higher					
Turbidity in NTU	$\geq$ 5.6 or 120% of control station's	$\geq$ 12.81 or 130% of control station's					
	turbidity at the same tide of the same	turbidity at the same tide of the same					
	day of measurement, whichever is	day of measurement, whichever is					
	higher	higher					
Temperature in <sup>°</sup> C	1.8°C above the temperature recorded at representative control station at the same tide of the same day	2°C above the temperature recorded at representative control station at the same tide of the same day					

Notes:

i. "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.

ii. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
iii. For turbidity, SS and Salinity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

Parameters	Action	Limit					
Construction Phase Impact Monitoring							
DO in mg/L	≤ 5.28	≤ 4					
SS in mg/L	$\geq$ 12 or 120% of control station's SS	$\geq$ 14 or 130% of control station's SS at					
	at the same tide of the same day of	the same tide of the same day of					
	measurement, whichever is higher	measurement, whichever is higher					
Turbidity in NTU	$\geq$ 4.0 or 120% of control station's	$\geq$ 4.3 or 130% of control station's					
	turbidity at the same tide of the same	turbidity at the same tide of the same					
	day of measurement, whichever is	day of measurement, whichever is					
	higher	higher					
Temperature in <sup>o</sup> C	1.8°C above the temperature recorded at representative control station at the same tide of the same day	2°C above the temperature recorded at representative control station at the same tide of the same day					

#### Table 2.3 Derived Action and Limit Levels for Water Quality (Wet Season)

Notes:

i. "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.

ii. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.

iii. For turbidity, SS and Salinity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

#### 2.4 Monitoring Results and Observations

2.4.1 As confirmed by the Contractor on 14 October 2020, all DCM works was completed on 14 October 2020, the post DCM water quality monitoring was completed for further 4 weeks (i.e. from 16 October 2020 to 14 November 2020) according to the approved Detailed Plan on Deep Cement Mixing. As all DCM work and post DCM water quality monitoring were completed, no water quality monitoring was conducted at S1, S2A and S3 from 14 November 2020 onward. As no marine construction work will be carried out from April to June 2024 and EPD had no comment on temporary suspension of water quality monitoring on 18 March 2024, the water quality was then temporarily suspended from 31 March 2024 onward.

# 3. NOISE MONITORING

- 3.1 Noise Monitoring Parameters
- 3.1.1 Impact noise monitoring was conducted weekly in the reporting period between 0700 and 1900 hours on normal weekdays. Additional impact noise monitoring was conducted weekly in the reporting period between 1900 and 0700 hours on all days as well as public holidays and Sundays.
- 3.1.2 Construction noise level measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{Aeq}$ ).  $L_{eq 30min}$  was used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays.  $L_{eq 5min}$  was used as the monitoring parameter for the time period between 1900 and 0700 hours as well as public holidays and Sundays. **Table 3.1** summarizes the monitoring parameters, frequency and duration of the impact noise monitoring and additional impact noise monitoring.

Monitoring Station	Time	Time Duration			
	Day time: 0700-1900 hrs (during normal weekdays)	Once per week $L_{eq 5min}/L_{eq 30min}$ (average of 6 consecutive $L_{eq 5min}$ )	L <sub>eq</sub> , L <sub>10</sub> & L <sub>90</sub>		
M1/ N_S1, M2/ N_S2, M3/ N_S3	Evening time: 1900-2300 hrs (including normal weekdays, also public holidays and Sundays)	Once per week $L_{eq 5min}$ (3 sets of $L_{eq 5min}$ )	L <sub>eq</sub> , L <sub>10</sub> & L <sub>90</sub>		
	Night time: 2300-0700 hrs (including normal weekdays, also public holidays and Sundays)	Once per week L <sub>eq 5min</sub> (3 sets of L <sub>eq 5min</sub> )	L <sub>eq</sub> , L <sub>10</sub> & L <sub>90</sub>		

 Table 3.1 Noise Monitoring Parameters, Time, Frequency and Duration

- 3.2 Noise Monitoring Locations
- 3.2.1 Three noise monitoring locations for impact monitoring and additional impact monitoring at the nearby sensitive receivers are shown in **Figure 3.1**

Contract No. EP/SP/66/12 Integrated Waste Management Facilities, Phase 1 24<sup>th</sup> Quarterly EM&A Report

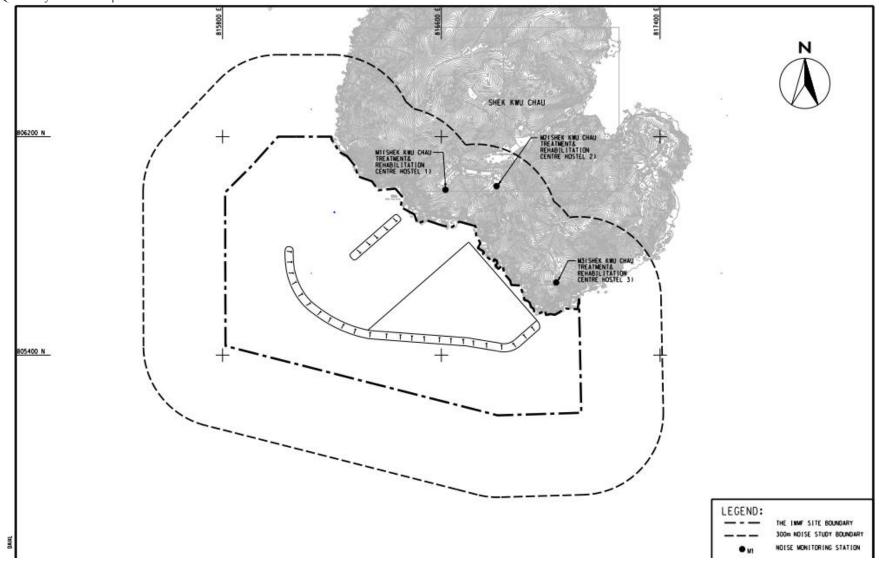


Figure 3.1 Noise monitoring locations at SKC

- 3.2.2 M1, M2 and M3 are Shek Kwu Chau Treatment and Rehabilitation Centre Hostel 1, 2 and 3 respectively of The Society for the Aid and Rehabilitation of Drug Abusers (SARDA) located at southern part of Shek Kwu Chau.
- 3.2.3 Measurements at M1 & M3 were conducted at a point 1m from the exterior of the sensitive receivers building façade and at a position 1.2m above the ground. Measurement setup at M3 has been varying with minor adjustment to minimize the disturbance to the users of Treatment Centre. Measurement at M2 was conducted at a point 1m from building façade of the ceiling of 1st floor level for avoidance of mutual disturbance with users of Treatment Centre. The minor adjustment of monitoring locations, which were in favour to mutual convenience with the users of Treatment Centre, were found with no effect on monitoring result based on on-site observation and experience from the Baseline monitoring of the Project.
- 3.2.4 The noise monitoring stations are summarized in **Table 3.2** below.

Station	NSR ID in EIA Report	Noise Monitoring Location	Type of sensitive receiver(s)	Measurement Type
M1	N_S1	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 1	Residential	Façade
M2	N_S2	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 2	Residential	Façade
M3	N_S3	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 3	Residential	Façade

**Table 3.2 Noise Monitoring Location** 

- 3.3 Action and Limit Levels
- 3.3.1 The Action/Limit Levels in line with the criteria of Practice Note for Professional Persons (ProPECC PN 2/93) "Noise from Construction Activities Non-statutory Controls" and Technical Memorandum on Environmental Impact Assessment Process issued by HKSAR Environmental Protection Department ["EPD"] under the Environmental Impact Assessment Ordinance, Cap 499, S.16 is presented in **Table 3.3**.

Table 3.3 Action and Limit Levels for 1	Noise per Updated EM&A Manual
---	-------------------------------

Time Period	Action	Limit (dB(A))
0700-1900 hrs on normal	When one documented	$75 dD(\Lambda)$
weekdays	complaint is received	75 dB(A)

Notes: If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

- 3.4 Monitoring Results and Observations
- 3.4.1 Impact monitoring for noise impact for daytime was conducted in the reporting period. The impact noise levels at Noise Monitoring Stations at SKC (i.e. M1/ N\_S1 to M3/ N\_S3) are summarized in Table 3.5. Additional impact monitoring during restricted hours was conducted in the reporting period. The additional impact noise levels at Noise Monitoring Stations at SKC (i.e. M1/ N\_S1 to M3/ N\_S3) are summarized in Table 3.6 and Table 3.7 respectively. Trending of the noise monitoring results is presented graphically in Appendix C.

- 3.4.2 Major construction activity, major noise source and extreme weather which might affect the results were recorded during the impact monitoring.
- 3.4.3 According to our field observations, the major noise source identified at the noise monitoring station in the reporting quarter are summarised in **Table 3.4**. Sound from the intermittent piling work was the noticeable noise source for monitoring stations M1, M2 and M3. Air conditioning units were also observed at station M3 during the impact monitoring.

Monitoring Station	Major Noise Source
M1	NA
M2	Cicada Chirping
M3	Operation of nearby Air Quality Monitoring Station Construction works of Signal Tower

3.4.4 No data from impact monitoring during daytime had exceeded the stipulated limit level at 75 dB(A).

# Table 3.5 Summary of Impact Noise Monitoring Results during Daytime (0700 – 1900 hrs)

	Noise in dB(A)								
Location	Range of Leq 30min			Range of L <sub>10 30min</sub>			Range of L <sub>90 30min</sub>		
	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun
M1	57.9 -	56.3 –	60.8 -	59.4 –	58.6 -	61.9 –	56.1 –	53.1 –	55.1 –
M1	58.8	65.6	67.1	60.9	67.4	70.9	56.9	56.7	60.2
M2	53.9 -	52.8 -	57.3 –	55.6 -	54.2 -	59.2 –	51.9 –	51.1 –	54.3 –
IVIZ	58.6	65.6	63.9	60.0	69.7	64.5	55.3	59.1	54.6
M3	59.6 -	55.4 -	52.3 -	61.0 -	57.8 -	54.4 -	57.3 –	47.0 -	50.9 -
	60.2	66.5	69.4	61.7	66.7	69.9	58.2	62.0	62.7

- 3.4.5 Applicable mitigation measures for construction works are fully implemented as shown in **Appendix B**, where double-glazed windows and air conditioning system were also installed and confirmed operable for the NSRs (N\_S1, N\_S2 & N\_S3).
- 3.4.6 During the noise monitoring event, frontline staff of ET have inquired the treatment centre users on any noise disturbance from the construction activities at evening and night time, where no complaint and adverse opinions was received.
- 3.4.7 Data from impact monitoring during evening time and night time were compared with the NCO criteria. Where site inspection and auditing on Contractor's record have shown that the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority for construction works during restricted hours were followed. No inappropriate practice were spotted during evening time and night time construction works, thus the stipulated requirement on noise impact control during night time and evening time was achieved.

	Noise in dB(A)									
Location	Range of Leq 5min			Range of L <sub>105min</sub>			Range of L90 5min			
	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun	
N/L1	48.1 -	47.1 –	51.0 -	49.0 -	49.4 –	52.5 -	47.0 -	45.9 -	49.6 -	
M1	56.3	55.4	58.3	57.4	56.1	59.2	55.1	54.8	56.7	
M2	49.6 -	52.7 -	51.7 -	50.0 -	53.7 –	52.1 -	49.2 -	51.6 -	51.2 -	
112	55.1	61.5	53.8	55.8	63.5	54.9	54.4	59.1	52.2	
М3	48.3 –	50.1 -	51.3 –	49.3 –	51.6 -	51.5 -	46.5 -	48.1 -	50.9 -	
	56.0	58.2	65.2	58.3	59.4	67.8	55.1	57.1	62.3	

# Table 3.6 Summary of the Additional Impact Noise Monitoring Results during Evening Time (1900-2300 hrs)

Table 3.7 Summary of Additional Impact Noise Monitoring Results during Night Time
(2300 – 0700 hrs)

	Noise in dB(A)								
Location	Range of Leq 5min			Range of L <sub>105min</sub>			Range of L90 5min		
	Apr	May	Jun	Apr	May	Jun	Apr	May	Jun
M1	46.0 -	43.6 -	47.9 –	46.6 -	44.4 –	49.1 –	44.9 –	42.7 -	46.4 -
1011	57.7	54.3	62.0	59.0	56.0	65.1	56.3	51.5	56.4
M2	48.1 -	50.0 -	49.2 -	48.5 -	50.7 -	49.5 –	47.9 –	49.4 –	48.9 -
IVIZ	55.2	59.6	59.0	56.9	60.8	61.6	54.3	58.4	53.7
M3	45.5 -	46.5 -	51.9 -	47.8 -	47.4 –	53.1 -	43.5 -	45.1 -	50.9 -
	55.9	58.3	65.5	51.2	58.9	66.6	48.6	57.3	64.4

## 4. WASTE

- 4.1 The waste generated from this Project includes inert construction and demolition (C&D) materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials.
- 4.2 As advised by the Contractor, 5,045.3 m<sup>3</sup> inert C&D materials were generated on site in the reporting period. No metal was generated and collected by registered recycling collector. 653 kg of paper was collected by the registered recycling collector. No plastic waste was collected by registered recycling collector. No chemical waste was collected by the licensed chemical waste collector. 1,826.5 m<sup>3</sup> of other types of wastes (e.g. general refuse) was disposed of at designated landfill. 512 m<sup>3</sup> of fill rock was imported during the reporting quarter.
- 4.3 Chemical waste generated from land-based construction activities was stored in the chemical waste cabinet for temporary storage.
- 4.4 With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting period are summarised in **Table 4.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix D**.
- 4.5 The Contractor is advised to sort and store any solid and liquid waste on-site properly prior to disposal.

Reporting Period		Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Sand	Imported Fi Public Fill	ll Rock	Metals	Paper / cardboard packaging	Plastics (see Note 2)	Chemica	Chemical Waste	
	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )		(in ,000m <sup>3</sup> )	)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000L)	(in ,000m <sup>3</sup> )
Apr 2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5915
May 2024	0	0	0	0	0	0	0	0	0	0.6530	0	0	0	0.7410
Jun 2024	5.0453	0	0	0	5.0453	0	0	0.5120	0	0	0	0	0	0.4940

Notes:

1. Broken concrete for recycling into aggregates.

2. Plastic refers to plastic bottles / containers, plastic sheets / foam from packaging materials.

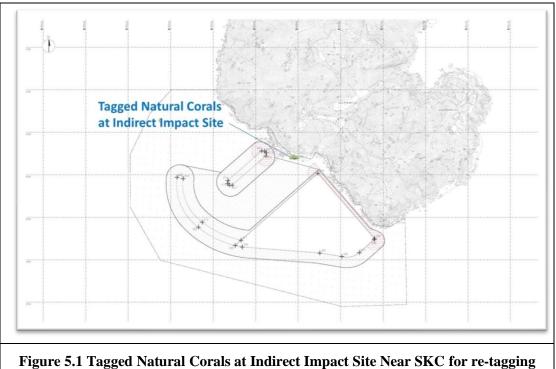
3. Use the conversion factor: 1 full load of dumping truck being equivalent to  $6.5 \text{ m}^3$  by volume.

4. Use the conversion factor: rock density =  $2 T/m^3$ .

# 5. CORAL

- 5.1 Coral Monitoring Parameters
- 5.1.1 Ten (10) tagged coral colonies at each site of suggested control site and indirect impact site are being monitored weekly for the first month and followed by monthly monitoring for three months. The selected Control Site is located at Yuen Kong Chau of Soko Islands about 7 km away from the project area. After the hitting of super typhoon Mangkhut in mid-September 2018, the coral re-tagging activities at indirect impact site and control site were conducted in November and December 2018 respectively. Tagged coral colonies at the proposed recipient site are being monitored quarterly for one year and the last post-translocation coral monitoring was completed on 28 Mar 2019. The selected recipient site R3 is located the opposite side of the Project area at about 2 km away.
- 5.1.2 Monitoring recorded the following parameters (using the same methodology adopted during the pre-translocation survey); the size, presence, health conditions (percentage of mortality/bleaching) and percentage of sediment of each trans-located coral colony. The general environmental conditions including weather, sea, and tidal conditions of survey sites were monitored.
- 5.1.3 Health status of coral was assessed by the following criteria: Hard coral: Percentage of surface area exhibiting partial mortality and blanched/bleached area of each coral colony and degree of sedimentation.
- 5.2 Coral Monitoring Locations

Location of the ten tagged coral colonies at each of the proposed indirect impact site, control site, the recipient site R3 and REA transect at proposed indirect impact site are shown in **Figure 5.1**, **Figure 5.2** and **Figure 5.3** respectively:



after typhoon Mangkhut



Figure 5.2 Tagged Natural Corals at Control Site Near Yuen Kong Chau for retagging after typhoon Mangkhut



Figure 5.3 Tagged Translocation Corals at Recipient Site R3 near SKC

5.2.1 The GPS coordinates of the tagged coral colonies and retagged coral colonies at both indirect impact site, control site and recipient site R3 were shown in **Table 5.1**, **Table 5.2** and **Table 5.3** respectively.

Coral # note i	GPS	Coordinates
1	N22°09'45.96"	E113°54'57.81"
2R	N22°11'29.12"	E113°59'09.01"
3	N22°09'45.81"	E113°54'57.78"
4	N22°09'45.70"	E113°54'57.95"
5R	N22°11'29.10"	E113°59'09.18"
6	N22°09'45.75"	E113°54'58.02"
7R	N22°11'29.17"	E113°59'08.86"
7	N22°09'45.65"	E113°54'57.94"
8	N22°09'45.53"	E113°54'57.90"
9	N22°09'46.23"	E113°54'54.70"
10R	N22°11'29.18"	E113°59'08.91"

# Table 5.1 Tagged Natural Corals during Baseline and Re-tagged Natural Corals afterTyphoon Manghkut at Control Site near Yuen Long Chau

Notes:

i. The re-tagged corals were marked as ##**R**.

#### Table 5.2 Re-tagged Natural Corals after Typhoon Manghkut at Indirect Impact Site near SKC

Coral # note i	GPS	Coordinates
11R	N22°11'29.14"	E113°59'08.92"
12R	N22°11'29.12"	E113°59'09.01"
13R	N22°11'29.11"	E113°59'09.07"
14R	N22°11'29.13"	E113°59'09.12"
15R	N22°11'29.10"	E113°59'09.18"
16R	N22°11'29.07"	E113°59'09.23"
17R	N22°11'29.17"	E113°59'08.86"
18R	N22°11'29.14"	E113°59'08.94"
19R	N22°11'29.20"	E113°59'08.81"
20R	N22°11'29.18"	E113°59'08.91"

Notes:

i. The re-tagged corals were marked as ##**R**.

Site	GPS Coordinates					
R3	N22°11'43.69"	E113°28.99"				

5.3 Action and Limit Levels

5.3.1 Monitoring result was reviewed and compared against the below Action Level and Limit Level (AL/LL) as set with the below **Table 5.4** and **Table 5.5**.

Parameter	Action Level	Limit Level		
	If during Impact Monitoring	If during Impact Monitoring a		
	a 15% increase in the	25% increase in the		
	percentage of partial	percentage of partial		
	mortality on the corals	mortality on the corals occurs		
	occurs at more than 20% of	at more than 20% of the		
Mortality	the tagged indirect impact	tagged indirect impact site		
	site coral colonies that is not	coral colonies that is not		
	recorded on the tagged	recorded on the tagged corals		
	corals at the control site,	at the control site, then the		
	then the Action Level is	Limit Level is exceeded.		
	exceeded.			

### Table 5.4 Action and Limit Levels for Construction Phase Coral Monitoring

### Table 5.5 Action and Limit Levels for Post-Translocation Coral Monitoring

Parameter	Action Level	Limit Level		
Mortality	If during Post-Translocation Monitoring a 15% increase in the percentage of partial mortality on the corals occurs at more than 20% of the translocated coral colonies that is not recorded on the original corals in the recipient site, then the Action Level is exceeded.	If during Post-Translocation Monitoring a 25% increase in the percentage of partial mortality on the corals occurs at more than 20% of the translocated coral colonies that is not recorded on the original corals in the recipient site, then the Limit Level is exceeded.		

#### 5.4 Monitoring Results and Observations

- 5.4.1 Ten (10) hard coral colonies were monitored at each site of Control and Indirect Impact sites as suggested in the Construction Phase Monitoring Plan. The general health conditions (size, mortality, bleaching and sediment) were recorded and summarized in **Table 5.7** and **Table 5.8**. Photos of each tagged coral colonies were taken during the monitoring activities and shown in **Appendix E.**
- 5.4.2 The 22<sup>nd</sup> quarterly coral monitoring during construction phase at both Indirect Impact Site and Control Site was conducted on 28 June 2024 and the weather condition was summarized in **Table 5.6**.

# Table 5.6 Weather Condition for the 22<sup>nd</sup> Quarterly Coral Monitoring during Construction Phase at both Indirect Impact Site and Control Site

Date	Condition	Average Underwater Visibility		
28 June 2024	<ul><li>Southwest wind force 3 to 4</li><li>Sunny</li></ul>	Less than 20 cm		

Coral #	Species	Size (cm) – Max. Diameter	Con l'élon	Mortali	ty (%)	Bleachin	ng (%)	Sediment (%)		
Corar#			Condition	Baseline (26 Jun 2018 & 3 Dec 2018)	28 Jun 2024	Baseline (26 Jun 2018 & 3 Dec 2018)	28 Jun 2024	Baseline (26 Jun 2018 & 3 Dec 2018)	28 Jun 2024	
1	Goniopora stutchburyi	25	Good	0	0	0	0	0	0	
2R	Goniopora stutchburyi	10	Good	0	0	0	0	0	0	
3	Psammocora superficialis	18	Good	0	0	0	0	0	0	
4	Turbinaria peltata	13	Good	0	0	0	0	0	0	
5R	Goniopora stutchburyi	18	Good	0	0	0	0	0	0	
6	Cyphastrea serailia	43	Good	0	0	0	0	0	0	
7R	Coscinaraea sp.	15	Good	0	0	0	0	0	0	
8	Goniopora stutchburyi	21	Good	0	0	0	0	0	0	
9	Goniopora stutchburyi	11	Good	0	0	0	0	0	0	
10R	Goniopora stutchburyi	20	Good	0	0	0	0	0	0	

# Table 5.7 Sizes, Condition, Mortality, Bleaching and Sediment of 10 Natural Coral Colonies at Control Site of 22<sup>nd</sup> Quarterly Coral Monitoring (28 June 2024) during 70<sup>th</sup> to 72<sup>nd</sup> Monthly Construction Phase Monitoring

Notes:

i. The re-tagged corals were marked as ##R.

Coral #	Species	Size (cm) – Max. Diameter	Condition	Mortal	ity (%)	Bleach	ing (%)	Sediment (%)	
		Diameter		Baseline (23 Nov 2018)	28 Jun 2024	Baseline (23 Nov 2018)	28 Jun 2024	Baseline (23 Nov 2018)	28 Jun 2024
11R	Cyphastrea serailia	48	Good	0	0	0	0	0	0
12R	Favites chinensis	27	Good	0	0	0	0	0	0
13R	Turbinaria peltata	21	Good	0	0	0	0	0	0
14R	Favites chinensis	8	Good	0	0	0	0	0	0
15R	Goniopora stutchburyi	11	Good	0	0	0	0	0	0
16R	Psammocora superficialis	27	Good	0	0	0	0	0	0
17R	Favites chinensis	15	Good	0	0	0	0	0	0
18R	Psammocora superficialis	39	Good	0	0	0	0	0	0
19R	Psammocora superficialis	42	Good	0	0	0	0	0	0
20R	Psammocora superficialis	29	Good	0	0	0	0	0	0

# Table 5.8 Sizes, Condition, Mortality, Bleaching and Sediment of 10 Natural Coral Colonies at Indirect Impact Site of 22<sup>nd</sup> Quarterly Coral Monitoring (28 June 2024) during 70<sup>th</sup> to 72<sup>nd</sup> Monthly Construction Phase Monitoring

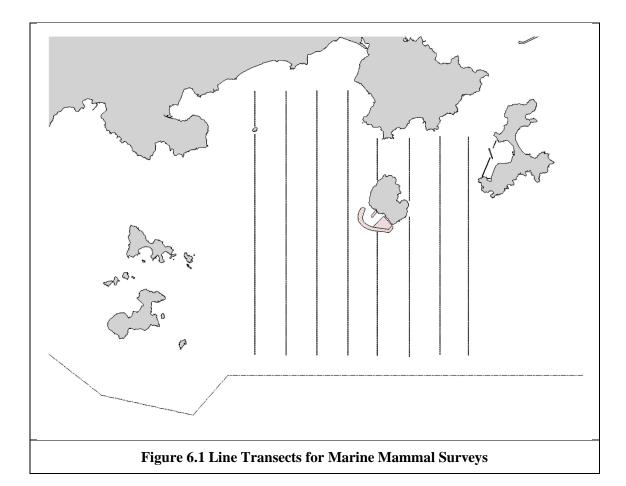
Notes:

i. The re-tagged corals were marked as ##R.

- 5.4.3 The re-tagging activity had been done at both Indirect Impact Site and Control Site in November 2018 and December 2018 respectively. A total of 20 tagged coral colonies (10 at control site and 10 at indirect impact site including the re-tagged coral colonies) were monitored. Similar to the baseline results performed in June, November and December 2018 and the results of the previous quarterly coral monitoring during construction phase, the health condition of all tagged and re-tagged coral colonies at Indirect Impact Site and Control site were good in general. No increased mortality was recorded during the survey in June 2024.
- 5.4.4 No sediment, bleaching or increased mortality in the general condition of coral colonies were observed during the 22<sup>nd</sup> quarterly coral monitoring period. No deterioration of the coral community was observed in the ecological monitoring results when compared with the baseline ecological monitoring results. There is no AL/LL exceedance during the monitoring period.

## 6. MARINE MAMMAL

- 6.1 Survey Methods
- 6.1.1 Vessel-based Line-transect Survey
- 6.1.1.1 For the vessel-based marine mammal surveys, the monitoring team adopted the standard line-transect method (Buckland et al. 2001) as same as that adopted during the EIA study and pre-construction phase monitoring to allow fair comparison of marine mammal monitoring results.
- 6.1.1.2 Eight transect lines are set at Southeast Lantau survey area, including Shek Kwu Chau, waters between Shek Kwu Chau and the Soko Islands, inshore waters of Lantau Island (e.g. Pui O Wan) as well as southwest corner of Cheung Chau as shown in **Figure 6.1** below:



- 6.1.1.3 In comparison to the baseline monitoring results, results from the analyzed construction phase monitoring data would allow the detection of any changes of their usage of habitat, in response to the scheduled construction works.
- 6.1.2 Passive Acoustic Monitoring (PAM)
- 6.1.2.1 The PAM aims to study the usage of an area by Finless Porpoise by using an array of automated static porpoise detectors (e.g. C-POD) which would be deployed at different locations to detect the unique ultra-high frequency sounds produced by

Finless Porpoise. During the construction period, the PAM survey will be conducted including placement of two passive porpoise detectors outside the Project Area as control site (i.e. within Pui O Wan and to the south of Tai A Chau) and one porpoise detector within the Project Area (i.e. near Shek Kwu Chau) as shown in **Figure 6.2** below.

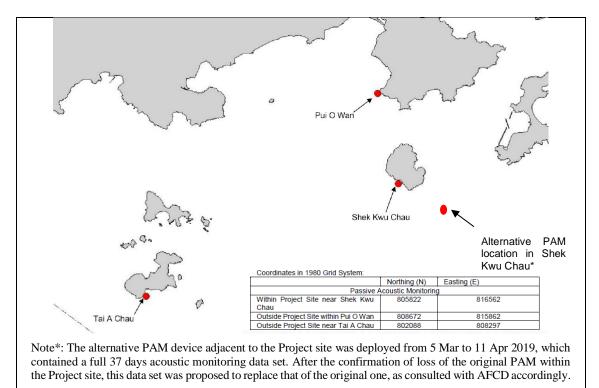


Figure 6.2 Locations of Passive Acoustic Monitoring

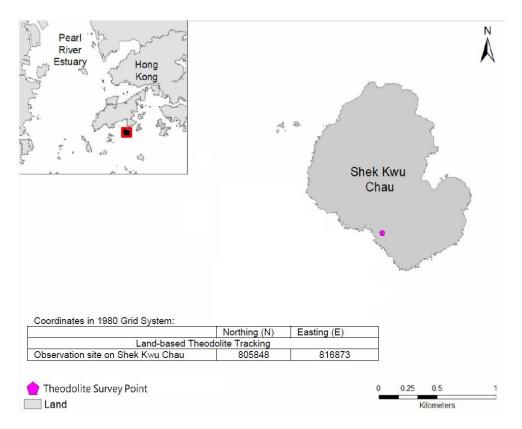
6.1.2.2 These three detectors will be deployed on-site to carry out 24-hours monitoring for a period listed as **Table 6.1** below during the construction phase.

Season	Months	Deployment Period
Peak Season	December, January, February,	At least 30 days during the peak
	March, April or May	months of porpoise occurrence
		in South Lantau waters

- 6.1.2.3 The automated static porpoise detectors shall detect the presence and number of finless porpoise and Chinese White Dolphins respectively over the deployment period, with the false signal such as boat sonar and sediment transport noise distinguished and filtered out. The detectors shall be deployed and retrieved by professional dive team on the seabed of the three selected location shown in **Figure 6.2**. During each deployment, the C-POD unit serial numbers as well as the time and date of deployments shall be recorded. Information including the GPS positions and water depth at each of the deployment locations shall also be obtained.
- 6.1.2.4 The diel patterns (i.e. 24-hour activity pattern) of finless porpoise occurrence among the three sites at Shek Kwu Chau, Tai A Chau and Pui O Wan shall be analyzed. Peaks and troughs of finless porpoise occurrence per hour of day would be identified and compared with the results obtained from pre-construction monitoring.

#### 6.1.3 Land-based Theodolite Tracking

6.1.3.1 The Land-based Theodolite Tracking study would use the same station as in the AFCD monitoring study(same as the baseline monitoring location), which is situated at the southwest side of Shek Kwu Chau (GPS position: 22°11.47' N and 113°59.33' E) as shown in below Figure 6.3. The station was selected based on its height above sea level (at least 20 metres), close proximity to shore, and relatively unobstructed views of the entire Project Area to the southwest of Shek Kwu Chau. The height of the Shek Kwu Chau Station established by the HKCRP team is 74.6 m high at mean low water, and only a few hundred metres to the IWMF reclamation site, which is ideal for the purpose for the present behavioural and movement monitoring of finless porpoises as well during construction phase considering there as an un-obstructed vantage point at a height above the Project Site.



#### Figure 6.3 Locations of Land-based Theodolite Tracking

6.1.3.2 During the construction phase, Land-based Theodolite Tracking will be carried out for approximately six hours of tracking for each day of field work for a period listed as **Table 6.2** below, preferably at the initial stage of the construction period (i.e. December 2018 to May 2019).

Season	Months	Survey Period
Peak Season	December, January, February,	30 days during the peak months
	March, April or May	of porpoise occurrence in South
		Lantau waters

#### Table 6.2 Land-based Theodolite Tracking Survey Period

6.1.3.3 The monitoring period for land-based theodolite tracking will be proposed to be overlapped with the PAM. The monitoring team consists of one experienced theodolite operator and at least two field observers for assistance. To conduct

theodolite tracking, the observers will search systematically for Finless Porpoise using the unaided eye and 7 x 50 handheld binoculars on each survey day throughout the study area. When an individual or group of porpoises is located, a theodolite tracking session will be initiated and focal follow methods will be used to track the porpoise(s). Behavioural state data (i.e. resting, milling, travelling, feeding and socializing) shall also be recorded every 5 minutes for the focal individual or group. Positions of porpoises and boats shall be measured using a digital theodolite connected to a laptop computer. This tracking survey will be conducted during the peak season between December 2018 and May 2019 for 30 surveys spanning across 15-16 weeks during the peak season to provide good temporal coverage during the initial stage of the construction period.

- 6.2 Specific Mitigation Measures
- 6.2.1 Monitored exclusion zones
- 6.2.1.1 During the installation/re-installation/relocation process of floating type silt curtains, in order to avoid the accidental entrance and entrapment of marine mammals within the silt curtains, a monitored exclusion zone of 250 m radius from silt curtain should be implemented and monitored by competent Marine Mammal Observers (MMOs). Marine Mammal Exclusion Zone (MMEZ) would also be implemented for precautionary purpose for DCM works.
- 6.2.2 Marine mammal watching plan
- 6.2.2.1 Upon the completion of silt curtain installation/re-installation/relocation, marine mammal watching plan would be implemented to observe the presence of any marine mammal around the localized silt curtain or being trapped by the localized silt curtain.
- 6.3 Results and Observations
- 6.3.1 Vessel-based Line-transect Survey
- 6.3.1.1 As confirmed with Contractor and Project Supervising Officer, no marine construction work will be carried out from April and June tentatively. An updated EM&A arrangement to propose the temporary suspension of line transect monitoring from April to June 2024 was submitted to EPD on 27 February 2024 and EPD had no comment on the updated EM&A arrangement on 18 March 2024. The line transect monitoring was then temporarily suspended from 31 March 2024 onward.
- 6.3.2 PAM and Land-based Theodolite Tracking
- 6.3.2.1 30 days of PAM surveys were started at 1 May 2019 and completed until the end of May 2019. Multiple PAM systems were deployed at three sites. The PAM system located at the IWMF was lost, however, an alternative data set has been identified. The PAM systems at the two control sites Tai A Chau and Pui O were recovered on 3 August 2019. A summary of marine mammal detections shows that porpoise were recorded every day of deployment at each site, but at varying frequencies. The detailed theodolite result was presented in 17<sup>th</sup> Monthly EM&A report (November 2019) while detailed PAM result was presented in 18<sup>th</sup> Monthly EM&A report (December 2019).
- 6.3.2.2 For the baseline study, the DPM for each site was 11,160 (Shek Kwu Chau), 16,089 (Tai A Chau) and 3645 (Pui O Wan), totalling 30,894 DPM across all three sites,

compared to DPMs of 4740 (Shek Kwu Chau), 7725 (Tai A Chau) and 23,986 (Pui O Wan), totalling 36,451 DPM, for the impact phase study. As the impact phase study was longer than the baseline study, it is not appropriate to directly compare total counts of DPM, however, the DPM rate (the average number of detections per day) for each site can be more directly compared. During the baseline study, Shek Kwu Chau averaged 338.2 DPM per day compared to 124.8 DPM per day, during the impact phase study. This showed a decrease in the daily average of porpoise detection at Shek Kwu Chau. During the baseline study, Tai A Chau averaged 487.6 DPM per day compared to 179.7 DPM per day, during the impact phase study. This showed a decrease in the daily average of porpoise detection at Tai A Chau. During the baseline study, Pui O Wan averaged 98.5 DPM per day compared to 557.8 DPM per day, during the impact phase study. This showed a significant increase in the daily average of porpoise detections at Pui O Wan (**Table 6.3**).

6.3.2.3 Overall, the PAM study showed that porpoise continue to consistently utilise the Shek Kwu Chau habitat immediately adjacent to the IWMF construction activities, although to a lesser degree than that prior to construction activities. In addition, the Pui O Wan site, which is 2.5 km away from the IWMF construction area, was also consistently utilised during the impact phase PAM study. A continued assessment of fine scale habitat use, particularly through PAM which yields large quantities of data, would allow a more comprehensive assessment of the EIA predictions.

			Baseline data						
Site	Unit ID	Start	End	Days	DPD % Days	Total DPM	DPM /Day	% False Positive DPM	Time Lost %
Shek Kwu Chau	2891	2018/02/09	2018/03/13	32.11	100	11160	338.2	0.0	1.00
Tai A Chau	2868	2018/02/09	2018/03/13	32.5	100	16089	487.6	1.0	2.00
<u>Pui</u> O Wan	2891	2018/03/13	2018/04/17	34.85	97.3	3645	98.5	2.0	31.87
Total				99.01		30894	312.0		
			Impact Phase						
Site	Unit ID	Start	End	Days	DPD % Days	Total DPM	DPM /Day	% False Positive DPM	Time Lost %
Shek Kwu Chau	IWMF_BU_20190305_01	2019/03/05	2019/04/11	37.91	100	4740	124.8	0.0	0
Tai A Chau	IWMF_20190411_02	2019/04/11	2019/05/23	41.94	100	7725	179.7	0.0	0
Pui O Wan	IWMF_20190411_01	2019/04/11	2019/05/23	42.02	100	23986	557.8	0.0	0
Total				121.9		36451	299.1		

# Table 6.3 Summary Statistic Comparison of Baseline (2018) and Impact Phase (2019) Passive Acoustic Monitoring

- 6.3.2.4 Theodolite surveys were completed in May 2019. In total, 34 days of theodolite tracking were completed between February May 2019, comprising 167 hours and 49 minutes of observation. No Chinese white dolphin was observed and only one finless was recorded. The finless porpoise encounter rate was calculated as 0.006 finless porpoise per hour, in all weather conditions.
- 6.3.2.5 A total of 2620 vessels of ten different types were observed and tracked within or in the proximity of the IWMF construction site. These comprised fishing boats (236), speed boats (29), container boats (155), government boats (22), high speed ferries (53), others (13) and IWMF-Related construction platforms (974), tug boats(240), transportation boats (363), construction boats (531) and approximately 8 buoys were present marking the site boundary. The detailed Land-based Theodolite Tracking Report was presented in 5<sup>th</sup> Quarterly EM&A report and 17<sup>th</sup> Monthly EM&A report.
- 6.3.2.6 The baseline theodolite tracking was conducted immediately prior to and during the site preparation activities of the site. The baseline data records a decrease in porpoise

sightings as site preparation activities commenced and notes that the decrease was most likely due to the onset of site preparation activities. The impact theodolite tracking conducted for this study records a marked increase in the number of Project related vessels and platforms and, in agreement with baseline conclusions, shows a concomitant decrease in finless porpoise sightings.

# 7. WHITE-BELLIED SEA EAGLE

### 7.1 WBSE Monitoring Parameters

- 7.1.1 The objective of the construction phase monitoring should be to verify the utilisation of the area by WBSE, their responses to construction disturbance, as well as the effectiveness of the proposed mitigation measures. Throughout the construction phase, field surveys should be conducted twice per month during their core breeding season (from December to May), and once per month outside their core breeding season (from June to November). The monitoring frequency should be increased to weekly during the incubation period of each year. In order to confirm their foraging ground near the construction site, it is necessary to conduct daily monitoring during the first week of nestling period in each year.
- 7.1.2 Since the location of the WBSE nest was located at the southwest of SKC within the hillside shrubland, it is impossible to observe the eggs during incubation period. Therefore, monitoring with increased frequency during incubation period could not be carried out. Daily monitoring will be carried out once any chick is recorded during the monitoring day.
- 7.2 Results and Observations
- 7.2.1 Two adult WBSEs were recorded near Shek Kwu Chau area in April, May and June 2024. No abnormal behaviours of the adults were recorded during April, May and June 2024 construction phase monitoring. All construction works during the monitoring period did not show any impact to the WBSE.
- 7.2.2 Since there is no landing point along the western part of SKC, boat survey was used for the monitoring survey. In order to increase the chance of finding the WBSEs, monitoring survey was carried out either early in the morning or later in the afternoon. The weather conditions of monitoring survey were shown in **Table 7.1**.

Date	Condition	Temperature (°C)
11 April 2024	<ul><li>East wind force 4 to 5</li><li>Sunny Day</li></ul>	23
25 April 2024	<ul><li>East force 4</li><li>Raining and Thunderstorm</li></ul>	26
16 May 2024	<ul><li>South wind force 4 to 5</li><li>Sunny</li></ul>	29
29 May 2024	<ul><li>East force 3 to 4</li><li>Mainly cloudy with a few showers</li></ul>	27
28 June 2024	<ul><li>Southwest wind force 3 to 4</li><li>Sunny</li></ul>	29

 Table 7.1 Weather Conditions during the WBSE Monitoring (Monthly)

7.2.3 The juvenile recorded in 2022 and 2023 has not been observed since monitoring event in September 2022 and September 2023 respectively, it is suggested that the juvenile left the nest at SKC and nesting in other area outside our monitoring boundary.

7.2.4 No disturbances from anthropogenic activities on the island were recorded during the monitoring survey. No invasion of other fauna species was recorded as well.



Figure 7.1 Location of WBSE Nest on SKC

- 7.2.5 No invasion of other fauna species was recorded and no sign of using the construction site as a foraging ground was recorded as well.
- 7.2.6 Photo records of the WBSE taken during the reporting period are presented in **Appendix F**.

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

- 8.1 No exceedance of the Action and Limit Levels of the regular construction noise, coral and WBSE monitoring was recorded during the reporting period.
- 8.2 No environmental complaint was received in the reporting period.
- 8.3 No notification of summon or prosecution was received since commencement of the Contract.
- 8.4 Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix G**.

# 9. EM&A SITE INSPECTION

- 9.1 Site inspections were carried out on weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. Site inspections were carried out at the Site Portions 1, 1A, 1B during the reporting period. Portions 1, 1A & 1B were the sites near SKC within the Site boundary.
- 9.2 Joint site inspection with IEC was carried out on monthly basis.
- 9.3 Minor deficiencies were observed during weekly site inspection. Key observations during the site inspections are summarized below:
  - Prevention actions for oil/chemical spillage were not carried out properly;
  - Chemical was not stored properly at designated storage place;
  - Non-road Mobile Machinery (NRMM) label was not displayed properly;
  - Chemical label was not displayed properly;
  - Wastewater was not treated before discharge;
  - Prevention actions for site runoff were not carried out properly;
  - C&D waste and general waste was not stored separately;
  - Insufficient maintenance and cleaning for internal drainage works;
  - Insufficient dust suppression measure to main haul road; and
  - General waste was not stored inside the enclosed rubbish bin and housekeeping was not maintained.
- 9.4 The Contractor had rectified all the observations identified during environmental site inspections in the reporting period.
- 9.5 According to the EIA Study Report, Environmental Permit, contract documents and Updated EM&A Manual, the mitigation measures detailed in the documents, except the silt curtain system, are implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix B**.

# **10.** CONCLUSION AND RECOMMENDATIONS

- 10.1 This 24<sup>th</sup> Quarterly Environmental Monitoring and Audit (EM&A) Report summarizes the EM&A works undertaken during the period from 1 April 2024 to 30 June 2024 in accordance with the Updated EM&A Manual and the requirement under EP- 429/2012/A and FEP-01/429/2012/A.
- 10.2 Construction noise, water quality, construction waste, coral, marine mammal and White-Bellied Sea Eagle (WBSE) monitoring were carried out in the reporting period. No project-related exceedance of the Action and Limit Levels was recorded during the reporting period.
- 10.3 Weekly environmental site inspections were conducted during the reporting period. Environmental deficiencies were observed during site inspection and were rectified.
- 10.4 According to the environmental site inspections performed in the reporting period, the Contractor was reminded to pay attention on on-site housekeeping, the proper storage of the chemicals, chemical waste and construction waste, dust control measure for main haul road, proper NRMM labelling and proper wastewater handling.
- 10.5 As confirmed with Contractor, no marine construction work will be carried out from April 2024 to June 2024 tentatively. Temporary suspension of water quality and line-transect monitoring were continued from 31 March 2024 onwards. The water quality monitoring and line-transection monitoring will be resumed upon the resumption of marine construction works.
- 10.6 No environmental complaint was received in the reporting period.
- 10.7 No notification of summon or prosecution was received since commencement of the Contract.
- 10.8 The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix A Master Programme

Keppel Seghers	2
吉 省 西 格 府 - 根 華 聯 ·	중 쇼 경
KEPHIL SUGHURS - ZHEN HUA JOINT	VENTURE

Integrated	Waste M	anagem

ty ID	Adivity Name		emaining Duration	Activity % Current Start Complete	Current Finis	h Late Start	Late Finish	Total Float	M76 Remarks	Mar 76	Apr 77
<u> </u>	Design and Construction Works WP7-M76 - 3-Month	2317	321			08-Oct-23					
Key Dates		0	0	31-Mar-24		30-Jan-24					
Dates of Site Poss 01-1160	Possession of Portion 3	0	0	31-Mar-24 0%	31-Mar-24	30-Jan-24	29-Jui-26 30-Jan-24	851 -60			Possession of Portion 3
01-1170	Possession of Portion 4 (To be removed from the Programme - Pending for the Issuance of EC)	0	0		31-Mar-24		29-Jul-26	851			Possession of Portion 4 (To be rem
_icense/Permit Ap	pplications	271	180	04-Jan-24 A	26-Sep-24	18-Dec-23	11-Nov-24	46			
License Application	on for Brine Discharge	82	82	15-Apr-24	05-Jul-24	16-May-24	05-Aug-24	31			
03-3950(7)	Brine Discharge License Application Submissions to EPD	0	0	0% 15-Apr-24*		16-May-24		31		-	Brine Di
03-3960(7) 03-3970(7)	Review by EPD Re-Submission of Application to EPD	28	28 14	0% 15-Apr-24 0% 13-May-24	12-May-24	16-May-24 13-Jun-24		31 31		-	
03-3980(7)	Issuance of Temporary License by EPD	0	0	0%	26-May-24	13-341-24	26-Jun-24	31			 
03-3990(7)	Public Consultation	40	40	0% 27-May-24	,	27-Jun-24		31			
DG Licence		120	120	30-May-24	26-Sep-24	25-Feb-24	11-Nov-24	46			
	Oil Storage (Cat 5)	120	120	30-May-24		25-Feb-24		-95			
03-1400	General Building Plans and FSI Provision Design Submission to FSD (Cat 5) DGD and VD Review and Approval of Submission	30	30 90	,	28-Jun-24	25-Feb-24		-95 -95			
Chemical Stores		90	90	0% 29-Jun-24 30-May-24		26-Mar-24 24-Jul-24	11-Nov-24	-95			
03-1480	Plans and FSI Provision Design Submission to FSD	21	21	0% 30-May-24	19-Jun-24	24-Jul-24		55			
03-1490	DGD and VD Review and Approval of Submission	90	90	0% 20-Jun-24		14-Aug-24		55			
Fire Services Insta	allations (FSI) Certificate	60	60	31-Mar-24	29-May-24	27-Dec-23	24-Feb-24	-95			
Fire Engineering		60	60	31-Mar-24		27-Dec-23		-95			
05-4460(7)	Submission of Revised FER (comment by FSD in Nov 2023)	30	30			27-Dec-23		-95		-	
05-4470 Fire Services Inst	FSD review and approval of General Building Plan tallations Certificate Inspection	30	30 0	0% 30-Apr-24 29-May-24	,	26-Jan-24 24-Feb-24		-95 -95			
03-1555-1(5a)	Approval of General Building Plans and FSI Provision Design Submission	0	0	0%	29-May-24	2110021	24-Feb-24				
	trol (Specified Processes) License	271	180	04-Jan-24 A	,	02-Mar-24					
03-1760(3)	Public Consultation	60	29	51.67% 04-Jan-24 A	28-Apr-24	02-Apr-24	30-Apr-24	2	Remove Constraints "As Late As Possible"		
03-1780(3)	Preparation and Submission for Trial Plan	90	90	0% 31-Mar-24	28-Jun-24		30-May-24			-	
03-1790(3)	Review and approval of Trial Plan by EPD Licensing Department	90	90	0% 29-Jun-24		31-May-24	ů.				
Lifts or Escalators 03-1060		0	0	02-May-24 0% 02-May-24	02-iviay-24	18-Dec-23	18-Dec-23	-136			
Design Submissio	Notification of Commencement of Works Involving Installation or Maintenance	2253	302	,	26-Jan-25	28-Oct-23	29-Nov-25				
General Building F		1034	60					36			
04-1600(M42)	Process Building & Wastewater Treatment Plant	135	30			26-Jan-24		-65			
04-1610(M42)	Turbine Hall Building	135	30			26-Jan-24	24-Feb-24	-65			a
04-1620(M42)	Compressor & CCCW Building	135	30			26-Jan-24	24-Feb-24	-65			4
04-1630(M42)	Chimney	135	30			26-Jan-24	24-Feb-24	-65			
04-1640(M42) 04-1650(M42)	Mechanical Treatment Plant & Water Treatment Plant Reception Pavilion	135	30 30			26-Jan-24 26-Jan-24	24-Feb-24 24-Feb-24	-65 -65			
04-1660(M42)	Administration Building and Viewing Gallery	135	30			26-Jan-24	24-Feb-24	-65			
04-1670(M42)	Elevated Drive Way and Associated Structures	135	30	77.78% 03-Mar-21 A	29-Apr-24	26-Jan-24	24-Feb-24	-65			
04-1680(M42)	IWMF Substation	135	30	77.78% 03-Mar-21 A		26-Jan-24	24-Feb-24	-65			
04-1690(M46) 04-1700	ACC Equipment Structure Vessel Offloading Point	135 60	30 60	77.78% 03-Mar-21 A 0% 31-Mar-24		26-Jan-24 21-Feb-24		-65 -39			
04-1700	Vehicle Fuel Filling Station	60	60	0% 31-Mar-24	29-May-24 29-May-24			-37			
04-1720	Fuel Filling Kiosk	60	60	0% 31-Mar-24	-	06-May-24		36			
04-1730	Weighbridge	135	22	83.7% 22-Apr-22 A	· · ·	25-Mar-24		-5			
04-1740	Seawater Intake Structure	60	30	50% 23-Feb-23 A		02-Jan-24		-89 389			1
AIP Design Packag		1956 90	220 29	23-Apr-19 A 30-Sep-19 A				157			
	s installation design (2.3.05)	90	29					157			
Turbine Hall Buil 05-5420-1(M22)	FS schematics (2.3.05.03.03)	90	29			04-Sep-24		157			
	Treatment Plant Building (2.4)	432	41	1		26-Dec-23		43			
05-1670	Electrical and instrumentation works design (2.4.03)	190	41	78.42% 08-Aug-23 A	10-May-24	26-Dec-23	04-Feb-24	-96			
Building service	es design (excluding fire services installation design) (2.4.06)	135	30	18-Jan-22 A	29-Apr-24	24-May-24	22-Jun-24	54			
05-1700	LV and Emergency Power Distribution Design	135	30			24-May-24		54			
AIP Roads and U		60	60	31-Mar-24	-	11-Feb-24		-49			
	rstem design on the Artificial Island (2.10.04)	60	60	31-Mar-24		11-Feb-24		-49			
05-2360	Water Tanks (2.10.04.05) Commissioning (2.12)	60 1931	60 195	0% 31-Mar-24 23-Apr-19 A	5	11-Feb-24 03-Jun-24	10-Apr-24 14-Dec-24	-49 64			
05-2650-1(5)	Factory Acceptance Testing plan (2.12.01.02-07) (8 Packages)	1651	31				11-Sep-24	134			
05-2670	System commissioning plan (2.12.0.3)	90	90	0% 31-Mar-24	28-Jun-24	-	31-Aug-24	64		-	
05-2680	Plant commissioning plan (2.12.04)	105	105	0% 29-Jun-24	11-Oct-24	01-Sep-24	14-Dec-24	64			
AIP Miscellaneou		220	220	31-Mar-24	05-Nov-24			389			
05-2710	Existing onshore crane replacement works at Portion 2	220	220	0% 31-Mar-24*	05-Nov-24	24-Apr-25		389			
	Int Systems (2.16)	90	90		28-Jun-24	07-Jan-24	18-Jul-24	20			
05-2760 05-2770	Maintenance workshops (2.16.01) Vehicle Fuel Filling Station (2.16.02)	90	90 90	0% 31-Mar-24 0% 31-Mar-24	28-Jun-24 28-Jun-24	11-Apr-24 07-Jan-24	09-Jul-24 05-Apr-24	-84		-	
05-2780	Stores systems (2.16.03)	90	90		28-Jun-24	20-Apr-24		20		-	
AIP O&M Package		850	210	06-Jun-22 A	26-Oct-24	07-Jan-24		123			
05-8010(6E)	Warehouse (O&M Scope)	185	29	84.32% 04-Jul-22 A	28-Apr-24	02-Jul-24	30-Jul-24	93			
B-Month Re PAGE 1 OF 15	olling Programme (March 2024)								Actual Work	Critical Remaining V rk 🔷 🔷 Milestone	Work  Actu Critic

ntract No	D. EP/SP/66/12	環	境保護署
nent Fac	cilities, Phase 1 🛛 🚺	Er	vironmental Protection Department
	May 78		Jun 79
ved from the Pro	ogramme - Pending for the Issuance of EC)		
harge License A	Application Submissions to EPD Review by EPD		
			ce of Temporary License by EPD
			Plans and FSI P
	Submission of Revised FER (comment by F		2023) SD review and approval of General Building Plan
		<b>♦</b> A	pproval of General Building Plans and FSI Provision
Pu	blic Consultation		ī
	<ul> <li>Notification of Commencement of Work</li> </ul>	s Involving	Installation or Maintenance
	Process Building & Wastewater Treatment F Turbine Hall Building Sompressor & CCCW Building Chimney Alechanical Treatment Plant & Water Treatn Reception Pavilion Administration Building and Viewing Gallery Elevated Drive Way and Associated Structu WMF Substation ACC Equipment Structure	nent Plant	
			essel Offloading Point ehicle Fuel Filling Station
Weighbridge	Seawater Intake Structure		del Filling Klosk
FS	schematics (2.3.05.03.03) Electrical and instrumen	tation work	s design (2.4.03)
	V and Emergency Power Distribution Desk		ater Tanks (2.10.04.05)
	Factory Acceptance Testing plan (2.12.01	.02-07) (8	Packages)
Wa	arehouse (O&M Scope)		:
l Milestone Milestone	9		

Keppel Se 古育品格有- KEPME SIGHORS - 20	eghers - 使单度 会 符 accauto poler vectore										Inteara	Conti nted Waste Manageme
Adivity ID	Activity Name		Original Duration		Activity % Current Start Complete	Current Finis	h Late Start	Late Finish	Total Float	M76 Remarks	Mar	Apr
05-8020(6E)	Workshop (O&M Scope)		150	29		28-Apr-24	02-Jul-24	30-Jul-24	93		76	77
05-8030(6E)	Ash & Residues Container (O&M	Scope)	160	90	43.75% 06-Jun-22 A	28-Jun-24	03-May-24	31-Jul-24	33			
05-8050(6E)	Other Mobile Plants (O&M Scope	3)	210			26-Oct-24	01-Aug-24		123			
05-8050-1(M55)	Design of (pilot) Electric Vehicle		150 2253	148 302		25-Aug-24 26-Jan-25			-84 184	Update Actual Start Date		
DDA Design Package DDA Process and La			768		·				141			
	cess design for mechanic	al treatment (2.1.14)	181		·	11-May-24			217			
05-3500	Mechanical Treatment Plant (2.1	· · ·	181					14-Dec-24				
	ent design for MSW and As		105		25-Sep-21 A	,	29-Jan-24		-62			
05-4410	Mechanical Shredder	· · · ·	105	118	0% 25-Sep-21 A	26-Jul-24	29-Jan-24	25-May-24	-62			
DDA Ground Treatm	nent, Reclamation, Seawall	, Breakwater, Berth (2.2)	1957	60	20-Jan-19 A	29-May-24	06-Jan-24	22-Nov-24	177			
05-3450	Seawall design (2.2.20)		60						-85			Seaw
05-3470-1(M37) 05-3480	Mooring Dolphins Onshore crane Facility (2.2.23)		60		0% 31-Mar-24 50% 01-Feb-24 A	29-May-24		24-Apr-24 26-Jul-24	-35	Update Actual Start Date		
05-3490	Onshore vessel power supply sys	stem (2.2.24)	90					20-Jul-24 22-Nov-24	178			
DDA Incineration Pla			2041	150		27-Aug-24			226			
Structural design (2	2.3.14)		59	30	01-Oct-23 A	29-Apr-24	10-Jan-24	08-Feb-24	-81			
05-3280-1(M55)	Sky Deck		59	30	50% 01-Oct-23 A	29-Apr-24	10-Jan-24	08-Feb-24	-81	Update Progress Percent		
	umentation works design	(2.3.15)	2041	90		28-Jun-24		22-Aug-24	55			
E&IC Package 1 (Proce		at Vard (2.2.15.02.00)	105			29-May-24			-82			
05-3390-13(M55) 05-3390-6(M55)	Electrical Works E&I Installation a Electrical Works Instrumentation		105		70.48% 07-May-22 A 70.48% 15-Oct-21 A			08-Mar-24 08-Mar-24	-53 -53			
	Electrical works CEMS and Proce		105					08-Mar-24	-83			
E&IC Package 2 (Powe			348			30-Apr-24	28-Oct-23	14-Dec-23	-138			
	Electrical Works Design (2.3.15.0		105					14-Dec-23	-138			1
05-3390-4(M46) Operation Managemen	Generator Related Equipment (2 of System (2 3 15 04)	.3. 15.03.08)	105 2041	31 90	70.48% 29-Jun-21 A	30-Apr-24 28-Jun-24	28-Oct-23 31-Jan-24	27-Nov-23	-155 55			
05-5400-1(M22)	Automatic Traffic Control System	(ATCS)	90		0% 31-Mar-24	28-Jun-24			55			
05-7400(6E)	Automatic License Plate and Cor	ntainer Recognition System (ALPCRS)	90	31	65.56% 05-Sep-18 A	30-Apr-24	26-Jun-24	26-Jul-24	87			
2.3.15.04.03 2.3.15.04.03.02			167			30-Apr-24		01-Mar-24	-60 -58			
05-3390-13(M58)	OMS/SCADA/DCS - Panel Desig	n for Power Island and Plant Common (2.3.15.04.03.02)	105 105		v	28-Apr-24 28-Apr-24	02-Feb-24 02-Feb-24	01-Mar-24 01-Mar-24	-58			
2.3.15.04.03.03			105	31		30-Apr-24		01-Mar-24	-60			
05-3390-14(M55)	OMS/SCADA/DCS - Server Pane	el Design (2.3.15.04.03.03)	105					01-Mar-24	-60			
2.3.15.04.06 05-3390-9(6D)	Process Related 3rd Party Syste	m (2 3 15 04 06 01 01)	105			30-Apr-24 30-Apr-24		01-Mar-24 01-Mar-24	-60 -60			
2.3.15.05			105			30-Apr-24	07-Feb-24	10-Jun-24	41			
05-3390-15(M55)	Balance of Plant LV Switchgear I	-	105		,				-53			
	Electrical and Instrumentation We	orks - Ash Crane (2.3.15.05.05)	105		5	· ·	11-May-24		41			
Mechanical works of	design (2.3.16)		1796			27-Aug-24 27-Aug-24			-78 -78			
Plant and Equipment 05-3390-4(M55)	Electrical and Instrumentation We	orks - Waste Crane and Grapple System (2.3.15.05.04)	1790				10-Dec-23 11-May-24		-76			
05-3600	Mechanical Shredder		105		70.48% 05-May-22 A		29-Jan-24		-62			
05-3610	Incineration System (9 Packages	·	105		0% 28-Feb-19 A			07-May-24				
05-3790	Flue Gas Treatment System (12	-	105			-		08-Mar-24	-70 -66			
05-3800	Boiler ash and APC residue hand installation design (2.3.17)	•	105		58.1% 09-Jun-20 A 22-Sep-22 A	13-May-24 13-May-24		08-Mar-24 17-Oct-24	-00			
05-3660	Fire Systems (same package with		60					17-Oct-24	186			Fire Systems (s
05-3680	FS schematics (same package w		60	15					157			
Building services d	design (excluding fire servi	ces installation design) (2.3.18)	242	90	25-Oct-21 A	28-Jun-24	18-Jan-24	20-Oct-24	114			
05-3690	Electrical Services and Lighting (	7 Packages)	60					09-Mar-24				
05-3700 05-3710	MVAC Odour Control		90		68.89% 26-Oct-21 A 0% 31-Mar-24	27-Apr-24 28-Jun-24	21-Sep-24 21-Jul-24	18-Oct-24 18-Oct-24	174 112			
05-3720	Plumbing (7 Packages)		90				14-Sep-24	12-Oct-24	167			
05-3730	Drainage (7 Packages)		90	29	67.78% 10-Mar-22 A	28-Apr-24	14-Sep-24	12-Oct-24	167			
05-3740	ELV (7 Packages)		60		50% 25-Oct-21 A				174			
05-3750 05-3770	Lifts and Escalators Building Management System (B	MS)	90		67.78% 13-Jul-23 A 50% 14-Jun-22 A		18-Jan-24 10-Mar-24	15-Feb-24 08-Apr-24	-73 -21			;
05-3780	Vehicle & Container Wash System		60		50% 28-Apr-23 A		11-Apr-24	10-May-24	11			
05-3780-2(M20)	Water Cannon System		90	90	· · ·	28-Jun-24	· · ·	17-Oct-24	111			
General Layout Dra	awings and Fire Safety Stra		637		31-Jul-21 A	31-May-24	19-Apr-24	10-Apr-25	314			
05-3290	Process Building & Wastewater 1	Treatment Plant	60					18-Aug-24				Process Building
05-3330 05-3340	Chimney Elevated Drive Way and Associa	ted Structures	60		,		22-Jul-24 18-Jun-24	18-Aug-24 18-Aug-24	113 79			
05-4170	Administration Building and View		60		40.95% 31-Jul-21 A 0% 15-Dec-22 A		18-Jun-24 19-Apr-24	18-Aug-24 19-Jun-24	19			
05-4800	IWMF Site Wide Architectural De	• • • •	105					10-Apr-25	314			
05-5160	Mechanical Treatment Plant & W		60	28			05-Jun-24	02-Jul-24	66			
	eatment Plant Building (2.4	•	516			26-Sep-24		07-Jul-24	-81			
05-5190	Electrical and instrumentation wo		180	180 152	0% 31-Mar-24*		26-Dec-23		-96			
05-5200 05-5210	Mechanical works design (2.4.16 Fire services installation design (		135		20% 14-Aug-23 A 51.67% 21-Apr-23 A		19-Nov-23 04-Jun-24	· ·	-133 65			
	•	ices installation design) (2.4.18)	395			06-May-24			62			
05-3850	LV and Emergency Power Distrib	<b>3</b> , <b>1</b>	90		68.89% 20-Sep-22 A	27-Apr-24	26-May-24	22-Jun-24	56			<u> </u>
05-3860	MVAC		90	29	67.78% 14-Feb-23 A	28-Apr-24	06-May-24	03-Jun-24	36			

3-Month Rolling Programme (March 2024)
PAGE 2 OF 15

Actual Work Remaining Work

Critical Remaining Work 🔶 🔷 🔷 Milestone

٠ Critical

Management Fa	cilities, Phase 1   🛄 💷	境保護署 ivironmental Protection Department
Apr 20	May	Jun
77	78 Vorkshop (O&M Scope)	79
) \		,
	Mechanical Treatment Plant (2.1.	14)
Seawall design (	2.2.20)	
		ooring Dolphins
	Onshore crane Facility (2.2.23)	hore vessel power supply system (2.2.24)
		nore vesser power supply system (z.z.z4)
	Sky Deck	
	Electrical Works E&I Installation at Yard (2.3.15.02.0	<sup>(8)</sup>
	Electrical Works Instrumentation (2.3.15.02.06)	ectrical works CEMS and Process Analyzers (2.3.1)
	Electrical Works Design (2.3.15.03.01 to 04)	
	Generator Related Equipment (2.3.15.03.08)	
	Automatic License Plate and Container Recognition	system (ALPCRS)
	·	·····
	MS/SCADA/DCS - Panel Design for Power Island and	Plant Common (2 3 15 04 03 02)
	OMS/SCADA/DCS - Server Panel Design (2.3.15.04.	03.03)
	Process Related 3rd Party System (2.3.15.04.06.01.0	)))
	Balance of Plant LV Switchgear Design (2.3.15.05.01	
	Electrical and Instrumentation Works - Ash Crane (2.	3.15.05.05)
	Electrical and Instrumentation Works - Waste Crane	and Grapple System (2.3.15.05.04)
	Mechanical Shredder	
	Flue Gas Treatment Sy	/stem (12 Packages)
	Boiler ash and APC residue h	
Fire Systems (same pack	-	
	FS schematics (same packag	e with 05-3660)
	Electrical Services and Lighting (7 Packages)	
M	/AC	
	Numbing (7 Packages)	
	Drainage (7 Packages) ELV (7 Packages)	
	ifts and Escalators	
	Building Management System (BMS)	
	Vehicle & Container Wash System	
		``
Process Building & Wastew	ater Treatment Plant	
Ch	imney	
		Elevated Drive Way and Associated Structures Administration Building and Viewing Gallery (2.7.:
	:	IWMF Site Wide Architectural Details
Me	chanical Treatment Plant & Water Treatment Plant (2.4	
		·
F	ire services installation design (2.6.17)	
LV	and Emergency Power Distribution Design	
N	WAC	
Actrual Milestor		
<ul> <li>Actrual Milestor</li> <li>Critical Mileston</li> </ul>		

	Adivity Name	Original Duration	Remaining Duration		Current Finis	h Late Start	Late Finish	Total M76 Remarks Float	Mar	
870	Odour Control	90	14		13-Anr-24	21-May-24	03- lun-24	51	76	
880	Plumbing	60	30			05-May-24		35		
890	Drainage	60	29	51.67% 24-Apr-23 A	28-Apr-24	06-May-24	03-Jun-24	36		<b>.</b>
900	Lighting and small power	90	29		· ·	25-May-24		55		
910	Lifts and Escalators	90		58.89% 13-Jul-23 A	,	,		39		
910-1	Building Management System (BMS) Treatment Plant (2.5)	60 760	29 92			09-Jun-24 08-Dec-23		70 35		
50	Electrical and instrumentation works design (2.5.15)	60	92				08-Mar-24	-114		
60	Mechanical works design (2.5.16) (5 Packages)	232	92				18-May-24	-43		
70	Fire services installation design (2.6.17) (2 Packages)	60	30	50% 21-Apr-23 A	29-Apr-24	22-Mar-24	20-Apr-24	-9		
ling service:	s design (excluding fire services installation design) (2.5.18)	416	90	10-Mar-22 A	28-Jun-24	06-Jan-24	04-Aug-24	37		
980	LV and Emergency Power Distribution Design for IWMF Waste Water Treatment Plant	90	28	68.89% 20-Sep-22 A	27-Apr-24	11-Feb-24	09-Mar-24	-49		
90	MVAC	90	30		· ·		04-Apr-24	-25		
000	Odour Control	90	90		28-Jun-24			-85		
)10 )20	Plumbing Drainage	90 105	30 30		· ·	06-Jul-24 06-Jul-24	04-Aug-24 04-Aug-24	97 97		
)20	ELV	90	30		· ·	09-Feb-24	•	-51		
	ment Plant Building (2.6)	513	60	· · · ·				34		
	Mechanical works design (2.6.16)	90	60	,				-48		
00	Fire services installation design (2.6.17)	60	30			03-Jun-24		64		
ing service:	s design (excluding fire services installation design) (2.6.18)	455	30	· ·		05-May-24		39		
10	Electrical Services and Lighting	90	30	66.67% 20-Sep-22 A	29-Apr-24	09-May-24	07-Jun-24	39		<b>.</b>
20	MVAC	90	30			05-May-24		35		<b>a</b>
40	Plumbing	60	30		· ·	05-May-24		35		
50	Drainage	60	30			-	03-Jun-24	35		
60 Aministrati	ELV	90 395	30 37			09-May-24		39 150		
<mark>aministrati</mark> 10	ion Building (2.7) Electrical and instrumentation works design (2.7.13)	60	20	· · · · · ·	-			4		
0	Electrical and instrumentation works design (2.7.13) Fire services installation design (2.7.14)	60	20		· · ·	04-Apr-24 21-May-24	23-Apr-24 19-Jun-24	51		
	s design (excluding fire services installation design) (2.7.15)	395	30			,		150		
20	Electrical Services and Lighting	90	30	· · · ·			23-Apr-24	-6		- -
30	MVAC	90	30			22-May-24		52		
50	Plumbing	90	30			04-Sep-24		157		<mark>ه</mark> لب
60	Drainage	90	30	,		04-Sep-24		157		
70	ELV	90	30			25-Mar-24		-6		
80	Lifts and Escalators	90	37					39		
80-1	Building Management System (BMS)	90 274	30 30			10-Mar-24 02-Apr-24	08-Apr-24	-21 173		
WMF Subst 10		60	30					50		Fire services installation
	Fire services installation design (2.8.17) s design (excluding fire services installation design) (2.8.18)	151	30				-	173		
111 <b>9</b> Sel Vice: 190	Electrical Services and Lighting	90	30					173		_ <u>_ i</u>
00	MVAC	90	30		· ·		17-Oct-24	172		
010	Plumbing	90	30					2		<b>.</b>
020	Drainage	90	30			02-Apr-24	-	2		<b>4</b>
30	ELV	90	30			19-Sep-24		173		<u> </u>
30-1	Building Management System (BMS)	90		66.67% 25-Oct-21 A	-			159		
	strumentation works design (2.8.15)	90	0					32		
5.06	Electrical and instrumentation under the inv (0.0.45.07.044, 40)	90	0			,	,	32		Electrical and instrum
320	Electrical and instrumentation works design (2.8.15.06.01 to 40)	90 60	0 14			-	,	32 115		
	ndensers Equipment (2.3.06)	60	14					115		-
ing service: 40	s design (excluding fire services installation design) (2.3.06)									
	Building Management System (BMS)	60 121	14 90			24-Jul-24 29-Mar-24	06-Aug-24	115 52		
Chimney 0-2(6D)	Ein convices installation design		22				°			
	Fire services installation design s design (excluding fire services installation design)	29 121	22 90			28-Jul-24 29-Mar-24	-	119 52		
00-1(5a)	Electrical Services and Lighting	90	5			03-Jul-24	, v	94		Electrical Serv
10(5a)	MVAC	60	60		· ·	21-Jun-24		82		
20-1(5a)	Plumbing	90	90					-2	_	; ,
50-1(5a)	Lít	90	37	58.89% 13-Jul-23 A	06-May-24	09-May-24	14-Jun-24	39		<b>a</b> ( <u>†</u>
60-1(5a)	Building Management System (BMS)	60	24				06-Aug-24	105		■L
	ive Way and Associated Structures Foundation	410	48		-		-	96		
D-3(6D)	Fire services installation design	60	30				-	111		<mark>ال</mark>
	s design (excluding fire services installation design)	105	48				-	96		
50	Building Management System (BMS)	90	37				06-Aug-24	92		
50 50	Electrical Services and Lighting MVAC	90 105	37 48				21-Aug-24	107 94		
70	Plumbing	105		54.29% 22-Aug-22 A 54.29% 23-Jun-23 A			19-Aug-24 13-Aug-24	88		
30	Drainage	105	40		-		13-Aug-24	88		
90	ELV	105	48		-		21-Aug-24	96		<b>.</b>
eception P		410	48		-		-	66		
0	Foundation Design	90	30	66.67% 15-Dec-22 A	29-Apr-24	12-Apr-24	11-May-24	12		•
0-4(6D)	Fire services installation design	60	30		29-Apr-24	23-Jun-24	22-Jul-24	84		<b>4</b>
nasonvico	s design (excluding fire services installation design)	105	48	20-Jul-22 A	17-May-24	03-Jun-24	20-Jul-24	64		

20.		nvironmental Protection Departmen
	May 78	Jun 79
	Plumbing	
	rainage ghting and small power	
	gnting and small power Lifts and Escalators	
В	ulding Management System (BMS)	
	Fire services installation design (2.6.17) (2 Packages)	
LV	and Emergency Power Distribution Design for IWMF V	Vaste Water Treatment Plant
	MVAC	
	Plumbing	
	Drainage	
	ELV	
		/ //echanical works design (2.6.16)
	Fire services installation design (2.6.17)	
	Electrical Services and Lighting WVAC	
	Plumbing	
	brainage	
	ELV	
cal and ins	rumentation works design (2.7.13)	
	Fire services installation design (2.7.14)	
	Electrical Services and Lighting	
	MVAC	
	Plumbing	
	Prainage ELV	
	Lifts and Escalators	
	Building Management System (BMS)	
	Electrical Services and Lighting MVAC	
	Plumbing	
	Drainage	
	ELV Building Management System (BMS)	
(0.0.1E		
gn (2.8. 15.	06.01 to 40)	
	, 	
nent Syste	m (BMS)	
- loop k		
Services I	stallation design	
	N	MVAC
	Lift	
Building M	anagement System (BMS)	
	Fire services installation design	
	Building Management System (BMS)	
	Electrical Services and Lighting	
	MVAC Plumbing	
	Drainage	
	ELV	
<u></u>	Foundation Dealers	
	Foundation Design	
	Fire services installation design	
	Fire services installation design	

	Adivity Name	Original	Remaining		Current Finis	h Late Start	Late Finish	Total M76 Remarks		grated Waste Mana
F 0100 1	Duilding Management Content (MC)	Duration	Duration		12 4 24	07 1-1-24	20.1-1-24	Float	Mar 76	Apr 77 Buildin
5-2130-1 5-7310	Building Management System (BMS) MVAC	60 105	22			07-Jul-24 29-Jun-24	20-Jul-24 20-Jul-24	98		
5-7330	Drainage	105	48					64		
A CCCW Build	-	365	30		29-Apr-24			159		
-5540-5(6D)	Fire services installation design	60	30	50% 08-Dec-22 A	29-Apr-24	21-May-24	19-Jun-24	51		
uilding service:	es design (excluding fire services installation design)	60	30	14-Jun-22 A	29-Apr-24	06-Sep-24	05-Oct-24	159		
5-2130-2	Building Management System (BMS)	60	30			06-Sep-24		159		
A Roads and L		698	120				22-Aug-24	25		
	works layout on the Artificial Island (2.10.13)	90	45	ÿ	1		22-Aug-24	100		
5-4480	Road signage and markings	90	45					100 Update Progress Percent		
5-5400	Roads and hardstandings layout n on the Artificial Island (2.10.14)	90 395	45 30		29-Apr-24			70 Update Progress Percent		
5-4430	Foul Sewerage	60	30				27-Dec-23	-124		
5-4440	Contaminated Sewerage (Site Wide Sewerage System)	60	30				27-Dec-23	-124		
5-4440-2(M55)	Ship-to-shore Sewage Transfer System for Passenger Ferry	90	30			15-Jul-24		106		
rainage system	n design on the Artificial Island (2.10.15)	90	23	22-Feb-23 A	22-Apr-24	05-Dec-23	27-Dec-23	-117		
5-5310	Surface water Drainage System	90	23		22-Apr-24		27-Dec-23	-117		
	stem design on the Artificial Island (2.10.16)	698	120	· · · · · · · · · · · · · · · · · · ·		26-Feb-24		-49		
5-5250	Potable Water Distribution System	105	105		13-Jul-24		09-Jun-24	-34		
5-5260 5-5270	Reuse Water System Irrigation System	90 90	90 90		28-Jun-24 28-Jun-24	12-Mar-24 12-Mar-24	09-Jun-24 09-Jun-24	-19 -19		
5-5270 5-5280	Rainwater harvesting System	90	90		28-Jun-24 28-Jun-24	12-Mar-24		-19		
5-5290	Water Tanks	60	60		28-Jul-24	11-Apr-24	09-Jun-24	-49		
5-5300	External FS Systems	60	60	0% 31-Mar-24	29-May-24	11-Apr-24	09-Jun-24	11		
5-5300-1(M24)	E&M system for seawater intake (2.10.16.07)	105	14			27-May-24	-	57		E&M
5-5300-3(5a)	Chemical scrubber system for odour control (2.10.16.10)	105	105		13-Jul-24	26-Feb-24		-34		
•	mmunication and other utilities (2.10.18)	607	90					-65		
5-4580 5-4590	Power Distribution System concept / schematics Site Lighting Concept / Schematics	75 90	75 90		13-Jun-24 28-Jun-24	08-Jan-24 26-Jan-24		-83		:
5-4600	Lightning Protection System concept / schematics	90	90		28-Jun-24 28-Jun-24	26-Jan-24	-	-65		
5-4610	Site ELV Network System - Communications System concept / schematics	75	30			26-Mar-24	· ·	-5		
5-4620	Site ELV Network System - Security Systems concept / schematics	75	30	60% 14-Jun-22 A	29-Apr-24	26-Mar-24	24-Apr-24	-5		
5-4630	Site ELV Network System - Navigation aids concept / schematics	60	60		29-May-24		24-Apr-24	-35		
5-4640	Microwave transmission of FS direct link	105	3	5		22-Apr-24		22		Microwave transmission
5-4650	Fuel Handling System concept / schematics	60 90	60 45		-	25-Feb-24 13-Dec-23		-35		
5-5040	ebridges design (2.10.26) Design of Pipe / Utilities Trenches concept	90	29			29-Dec-23		-107		
5-5050	Sitewide Utilities Trenches Design	90	45			13-Dec-23		-109 Update Progress Percent		
	al, Finishes and Landscaping Works (2.11)	638	90		,	16-Feb-24		226		
	ernal finishes design	516	29	15-Jun-21 A	28-Apr-24	16-Feb-24	10-Jan-25	257		
5-4670	External and internal finishes design for Incineration Plant Building (2.11.15.01)	90	28	68.89% 19-Sep-22 A	27-Apr-24	17-May-24	13-Jun-24	47		
5-4720	External and internal finishes design for Reception Pavilion (2.11.01.05)	90	28		· ·		10-Jan-25	258		
5-4730	External and internal finishes design for MT Plant Building (2.11.16)	60	29	5	· · ·		16-Aug-24	110		
5-4740	External and internal finishes design for the Wastewater Treatment Plant (2.11.17)	60	29			09-Mar-24	· ·	-22		
5-4750 5-4760	External and internal finishes design for the Water Treatment Plant Building (2.11.08) External and internal finishes design for the Administration Building (2.11.19)	60	29 29	5		16-Feb-24 21-May-24	15-Mar-24	-44		
5-5430	External and internal finishes design for Elevated Driveway	90	29			09-Jun-24		70		
andscaping Wo		105	5		05-Apr-24			311		
5-4780	Landscape Masterplan & Landscape Design for Water Feature (2.11.19.01)	105	5	95% 26-Jan-23 A	05-Apr-24	04-Feb-25	09-Feb-25	311		Landscape Maste
acade Structura	al Design	181	90	01-Dec-23 A	28-Jun-24	09-Mar-24	09-Feb-25	226		
5-8040(6D)	Reception Pavilion (2.3.14.07.01)	90	90		28-Jun-24		09-Feb-25	226		
5-8050(6D)	Mechanical Treatment Plant & Desalination Plant Building (2.4.14.01)	90	14			19-Jun-24		81		Me
5-8060(6D)	Administration Building and Viewing Gallery (2.7.12.01)	60	8		· ·	13-Jun-24		74		Administration
5-8080(6D) 5-8090(6D)	Elevated Driveway and Associated Structures Sky Deck near Administration Building Structural Design	90	90 90		28-Jun-24 28-Jun-24	09-Mar-24 13-Sep-24	06-Jun-24 11-Dec-24	-22		1
	Commissioning (2.12)	837	180		_	13-Sep-24 13-Nov-23		65		
-4810-1(5a)	Factory Acceptance Testing plan (2.12.09.02-07) (8 Packages)	90	31	· · ·			11-Sep-24	134		
-4810-2(M55)	FAT of DCS - Software SIL FAT Plant for Process Island (2.12.09.03.01)	105	10	· · · ·	· ·	21-Jan-24		-70		FAT of DO
4820	Sile Acceptance Testing plan (2.12.10)	90	57	36.67% 28-Nov-23 A	26-May-24	13-Nov-23	08-Jan-24	-139		
4830	System commissioning plan (2.12.11)	90	90			02-Sep-24		65		
•	ion Facilities for the Operation (2.13)	240	60		-	-		426		
4860	Design of marine vessels for the use of the Employer and visitors (2.13.06)	240	60		-	,		426		
	Design of violation and environmental education facilities (2.14.04)	241	241	,	26-Jan-25	12-Oct-24		134		
4880	Design of visitors and environmental education facilities (2.14.06)	241 123	241 123	,	26-Jan-25 31-Jul-24	12-Oct-24 24-Nov-23	09-Jun-25	-8		
<mark>4 Miscellaneo</mark> 4890	bus Detailing (2.15) Covered walkway at passenger berth (2.15.06)	90	90		28-Jun-24		23-Jul-24 24-May-24	-35		
4890 4900	Gatehouses (2.15.07)	60	90			25-Feb-24 25-May-24	,	-35		
4910	Weighbridge office (2.15.08)	123	123		31-Jul-24	-	25-Mar-24	-128		
	ant Systems (2.16)	760	180			08-Jan-24		20		
4920	Maintenance workshops (2.16.04)	0	0	0% 29-Jun-24	29-Jun-24	09-Jul-24	09-Jul-24	11		
4930	Vehicle Fuel Filling Station (2.16.05)	90	90		26-Sep-24			-84		
						-				1.1
4940	Stores systems (2.16.06)	90	90	0% 29-Jun-24	26-Sep-24	19-Jul-24	16-Oct-24	20		

3-Month Rolling	Programme	(March 2024)
PAGE 4 OF 15		

Remaining Work 🔷 🛇 Milestone

Critical

	o. EP/SP/66/12 cilities, Phase 1	境保護署 ivironmental Protection Department
202	24	lun
	May 78	Jun 79
agement Syste MVAC	Drainage	
	Fire services installation design	
	Building Management System (BMS)	
	Road signage and markings Roads and hardstandings la	
	Foul Sewerage Contaminated Sewerage (Site Wide Sewerage System Ship-to-shore Sewage Transfer System for Passenger	
Surface wate	r Drainage System	
		[
for seawater in	ake (2.10.16.07)	ternal FS Systems
		Power Distribution System
	Site ELV Network System - Communications System c Site ELV Network System - Security Systems concept /	
rect link		
	F	uel Handling System concept / schematics
D	esign of Pipe / Utilities Trenches concept Silewide Utilities Trenches D	lesign
Extension Extensio Extension Extension Extension Extension Extension Extensi	rnal and internal finishes design for Incineration Plant rnal and internal finishes design for Reception Pavilio ternal and internal finishes design for MT Plant Buildin ternal and internal finishes design for the Wastewater ternal and internal finishes design for the Water Treatr ternal and internal finishes design for the Administratic ternal and internal finishes design for Elevated Drivew in for Water Feature (2.11.19.01)	g (2.11.01.05) g (2.11.16) Treatment Plant (2.11.17) nent Plant Building (2.11.08) n Building (2.11.19)
	& Desalination Plant Building (2.4.14.01) illery (2.7.12.01)	
	Factory Acceptance Testing plan (2.12.09.02-07) (8 I Int for Process Island (2.12.09.03.01)	ackages)
		ceptance Testing plan (2.12.10)
	D	esign of marine vessels for the use of the Employer
	C	
	G	atehouses (2.15.07)
		1
	IWMF Laboratory (2.16.08)	Ξ
l Milestone Milestone	e	i

Keppel Seghers	N
古官西格对一派单联一	* & 4

Integrated Waste Managem

	Adivity Name		Original Duration	Remaining	Activity % Current Start	Cullent Fillis	n Late Start	Late Finish	Total Float		Mar	Apr
F 4040 2/F=)				Duration	Complete	20 4== 24	1/ 6-= 24	14 0-1-24			76	77
	Hoisting systems (2.16.10) EOTC System (2.16.11)		180	31 31	82.78% 24-May-23 A 65.56% 26-Apr-22 A				169 -83			
O&M Packages			270	270			03-Feb-24		33			
0	Warehouse (O&M Scope)		181	181	0% 29-Apr-24	26-Oct-24	31-Jul-24	27-Jan-25	93			
8080(6E)	Workshop (O&M Scope)		181	181	0% 29-Apr-24	26-Oct-24	31-Jul-24	27-Jan-25	93	Update OD		
8090(6E)	Ash & Residues Container (O&M Scope)		180	180	0% 29-Jun-24	25-Dec-24	01-Aug-24	27-Jan-25	33			
	Other Mobile Plants (O&M Scope)		180	180	0% 31-Mar-24	-	01-Aug-24		123			
8110-1(M55) curement of Majo	Design of (pilot) Electric Vehicle		180 972	180 302	0% 27-Apr-24		03-Feb-24 06-Nov-23		-84 -130			
	f Incineration Modules		972	302				18-Sep-24				
prication of Modul			972	302	22-May-22 A			18-Sep-24	-130			
Fab 1- Line 1			702	93				· · ·	72			
&I Installation (On-site	e Installation)		583	16	,	15-Apr-24			97			
Electrical	· · · · · · · · · · · ·		302	16	04-Aug-23 A	-			97			
	PFab 1-Line 1 - Electrical Cable Pulling and Termin	ition	180	16			06-Jul-24		97			PFab 1
	PFab 1-Line 1 - Electrical Equipment Installation		180		99.44% 04-Aug-23 A				-7			PFab 1-Line 1 - Electrical Equipm
nstrument 06-TPU-1-1310	PFab 1-Line 1 - Instrument Cable Pulling and Term	nation	583 180	10 10	25-Nov-22 A 94.44% 25-Dec-22 A		11-Jul-24 11- Jul-24	21-Jul-24 21-Jul-24	103 103			PFab 1-Line 1 - I
	PFab 1-Line 1 - Instrument Equipment Installation		180	1				19-Jul-24	110			PFab 1-Line 1 - Instrument Equipr
06-TPU-1-1330	PFab 1-Line 1 - Instrument Tubing Installation		180	1	99.44% 01-Oct-23 A	31-Mar-24	19-Jul-24	19-Jul-24	110			PFab 1-Line 1 - Instrument Tubing
sulation			698	62		-	11-Jun-24	-	72			
	PFab 1-Line 1 - Insulation		698		91.12% 23-May-22 A	-		-	72			
ecommissioning 6-TPU-1-1030	PFab 1-Line 1 - Pre-commissioning		92	92 92			12-Jun-24		72 72	Update OD		
ab 1- Line 2			716	92 107					58	· ·		
Installation (On-site	e Installation)		180	46	,	15-May-24			-22			
lectrical			180	31		,	24-Mar-24		-7			
06-TPU-2-1270	PFab 1-Line 2 - Electrical Cable Pulling and Termin	ition	180	31	82.78% 18-Oct-23 A	30-Apr-24	24-Mar-24	23-Apr-24	-7			
	PFab 1-Line 2 - Electrical Equipment Installation		112	16					-7			PFab
nstrument 06-TPU-2-1300	PFab 1-Line 2 - Instrument Cable Pulling and Term	nation	180 180	46 46		15-May-24 15-May-24			-22 -22			
	PFab 1-Line 2 - Instrument Equipment Installation		112	29		-			-7			
	PFab 1-Line 2 - Instrument Tubing Installation		112	29		-			-7			
sulation			698	77	22-May-22 A	15-Jun-24	28-May-24	12-Aug-24	58			
	PFab 1-Line 2 - Insulation		698		88.97% 22-May-22 A		,	ů	58			
recommissioning 16-TPU-2-1020	PFab 1-Line 2 - Pre-commissioning		107 107	107 107	31-Mar-24 0% 31-Mar-24		28-May-24 28-May-24		58	Update OD		
Fab 1- Line 3	Trab PEnc 2 - Tre-continussioning		769	239	23-May-22 A		-	-	-86	opuale ob		
&I Installation			201	201	08-Apr-24		31-Jan-24	-	-68			
Electrical			201	201	08-Apr-24	25-Oct-24		Ű	-68			
	PFab 1-Line 3 - Electrical Cable Pulling and Termin	ition	180	180	0% 29-Apr-24		21-Feb-24	-	-68			
06-TPU-3-1280	PFab 1-Line 3 - Electrical Equipment Installation		180	180	0% 08-Apr-24*		31-Jan-24		-68			
	PFab 1-Line 3 - Instrument Cable Pulling and Term	nation	201	201 180	08-Apr-24 0% 29-Apr-24		31-Jan-24 21-Feb-24		-68 -68			
06-TPU-3-1310	PFab 1-Line 3 - Instrument Equipment Installation		180	180	0% 08-Apr-24	04-Oct-24	31-Jan-24	28-Jul-24	-68			
06-TPU-3-1320	PFab 1-Line 3 - Instrument Tubing Installation		180	180	0% 08-Apr-24	04-Oct-24	31-Jan-24	28-Jul-24	-68			
sulation			769	239			05-Jan-24	-	-86			
	PFab 1-Line 3 - Insulation		769	239 255	,			-	-86			
Fab 1- Line 4 &I Installation			194	194	01-May-24		20-Dec-23	-	-102 -84			
Electrical			194	194	01-May-24			<b>J</b>	-84			
06-TPU-4-1270	PFab 1-Line 4 - Electrical Cable Pulling and Termin	ition	180	180	0% 15-May-24		21-Feb-24	-	-84			
	PFab 1-Line 4 - Electrical Equipment Installation		180	180	0% 01-May-24*	27-Oct-24	07-Feb-24	04-Aug-24	-84			
Instrument	DEab 1 Line 4 Jackward Cable Dulling and Tran		194	194	01-May-24		07-Feb-24	•	-84			
	PFab 1-Line 4 - Instrument Cable Pulling and Term PFab 1-Line 4 - Instrument Equipment Installation	121001	180	180 180	0% 15-May-24 0% 01-May-24	27-Oct-24	21-Feb-24 07-Feb-24	-	-84 -84			
	PFab 1-Line 4 - Instrument Tubing Installation		180	180	0% 01-May-24			-	-84			
sulation	5		767	255	,		20-Dec-23	v	-102			
06-TPU-4-1010	PFab 1-Line 4 - Insulation		767	255	66.75% 25-May-22 A	10-Dec-24	20-Dec-23	30-Aug-24	-102			
ab 1- Line 5			822	287	04-Jun-22 A	11-Jan-25	21-Nov-23	18-Sep-24	-115			
&I Installation			194	194	01-Jun-24	11-Dec-24		18-Sep-24	-84			
Electrical 06-TPU-5-1270	PFab 1-Line 5 - Electrical Cable Pulling and Termir	tion	194 180	194 180	01-Jun-24 0% 15-Jun-24	11-Dec-24 11-Dec-24	09-Mar-24 23-Mar-24		-84 -84			
	PFab 1-Line 5 - Electrical Equipment Installation		180	180	0% 01-Jun-24*	27-Nov-24			-84			
nstrument			194	194	01-Jun-24	11-Dec-24			-84			
	PFab 1-Line 5 - Instrument Cable Pulling and Term	nation	180	180	0% 15-Jun-24	11-Dec-24	23-Mar-24		-84			
	PFab 1-Line 5 - Instrument Equipment Installation		180	180	0% 01-Jun-24	27-Nov-24			-84			
06-TPU-5-1320 sulation	PFab 1-Line 5 - Instrument Tubing Installation		180 822	180 287	0% 01-Jun-24	27-Nov-24 11-Jan-25	09-Mar-24 21-Nov-23		-84 -131			
	PFab 1-Line 5 - Insulation		822	287			21-Nov-23		-131			
ab 1- Line 6			761	302	08-Jul-22 A			02-Sep-24	-146			
nsulation			761	302	08-Jul-22 A	26-Jan-25		02-Sep-24	-146			
06-TPU-6-1010	PFab 1-Line 6 - Insulation		761	302	60.32% 08-Jul-22 A	26-Jan-25		02-Sep-24	-146			
brication of Modu	le (FGC)		834	286	25-May-22 A	10-Jan-25	22-Nov-23	18-Sep-24	-114			
			(01	92	25-May-22 A	30- Jun-24	12 Jun 24	11-Son-24	73			
Fab 2 - Line 1			681	72	20 May 22 M	50-5ull-2-4	12-Juli-24	11-5cp-24	13			

ntract No.	EP/S	SP/66/12	2
nent Facil	liti≙s	Phase 1	1



11011 F 202		
	May 78	Jun 79
	Hoisting systems (2.16.10)	
	EOTC System (2.16.11)	
		L
	Cable Pulling and Termination	
nt Installation		
	Pulling and Termination	
ent Installation nstallation		
		PFab 1-Line 1 - Insulation
	PFab 1-Line 2 - Electrical Cable Pulling and Terminal	ion
	Equipment Installation	
		Cable Dulling and Tormin-4
P	PFab 1-Line 2 - Instrument Fab 1-Line 2 - Instrument Equipment Installation	Cable Pulling and Termination
	Fab 1-Line 2 - Instrument Tubing Installation	
		PFab 1-Line 2 - Insulati
		rrad i-Line 2 - Insulati
	i	i
l Mileston		
Milestone	;	

	Adivity Name	Original			Current Start	Current Finis	n Late Start	Late Finish		M76 Remarks	Mar	ated Waste Manage
&I Installation		Duration 134		· ·		15-Apr-24	06- Jul-24	21-Jul-24	Float 97		76	77
Electrical		134	16		04-Aug-23 A	15-Apr-24	06-Jul-24	21-Jul-24	97			DE-h
06-FGC-1-1250 06-FGC-1-1260	PFab 2-Line 1 - Electrical Cable Pulling and Termination PFab 2-Line 1 - Electrical Equipment Installation	120			% 18-Sep-23 A % 04-Aug-23 A			21-Jul-24 06-Jul-24	97 97			PFab D PFab 2-Line 1 - Electrical E quipr
nstrument		134	16	1	01-Oct-23 A	15-Apr-24		21-Jul-24	97			
06-FGC-1-1280 06-FGC-1-1290	PFab 2-Line 1 - Instrument Cable Pulling and Termination PFab 2-Line 1 - Instrument Equipment Installation	120			% 01-Oct-23 A			21-Jul-24 06-Jul-24	97 97			PFab PFab 2-Line 1 - Instrument Equ
06-FGC-1-1290	PFab 2-Line 1 - Instrument Equipment Installation	120			% 05-Nov-23 A % 01-Oct-23 A			06-Jul-24	97			PFab 2-Line 1 - Instrument Tub
sulation		666	62		-	31-May-24		12-Aug-24	73			
6-FGC-1-1130 recommissioning	PFab 2-Line 1 - Insulation	666	62 17		% 25-May-22 A 14-Jun-24	-	12-Jun-24 26-Aug-24	-	73 73			
06-FGC-1-1190	PFab 2-Line 1 - Pre-commissioning	17			% 14-Jun-24		26-Aug-24	-	73			
ab 2 - Line 2		473	107		10-Feb-23 A	15-Jul-24	28-May-24	11-Sep-24	58			
&I Installation Electrical		134				15-May-24 30-Apr-24		21-Jul-24 21-Jul-24	67 82			
06-FGC-2-1250	PFab 2-Line 2 - Electrical Cable Pulling and Termination	120			18-Oct-23 A				82			
06-FGC-2-1260	PFab 2-Line 2 - Electrical Equipment Installation	59			% 06-Jan-24 A	· ·			67			PFa
nstrument 06-FGC-2-1280	PFab 2-Line 2 - Instrument Cable Pulling and Termination	134			01-Nov-23 A % 01-Nov-23 A	15-May-24 15-May-24		21-Jul-24 21-Jul-24	67 67			
06-FGC-2-1290	PFab 2-Line 2 - Instrument Equipment Installation	112	29		% 06-Jan-24 A	-		04-Jul-24	67			
06-FGC-2-1300	PFab 2-Line 2 - Instrument Tubing Installation	112			% 06-Jan-24 A	· ·			67			1
isulation 06-FGC-2-1010	PFab 2-Line 2 - Insulation	405 405			10-Feb-23 A % 10-Feb-23 A		28-May-24 28-May-24	-	58 58			
recommissioning		29	29	1	17-Jun-24	15-Jul-24	14-Aug-24	11-Sep-24	58			
06-FGC-2-1020 Fab 2 - Line 3	PFab 2-Line 2 - Pre-commissioning	29 201	29 201		% 17-Jun-24 08-Apr-24	15-Jul-24 25-Oct-24	14-Aug-24 13-Jan-24		-68	Update OD		
AD Z - Line S		201	201		08-Apr-24	25-Oct-24	13-Jan-24	, v				
Electrical		201	201		08-Apr-24	25-Oct-24	13-Jan-24	18-Aug-24	-68			
06-FGC-3-1250 06-FGC-3-1260	PFab 2-Line 3 - Electrical Cable Pulling and Termination PFab 2-Line 3 - Electrical Equipment Installation	180	180 180		% 29-Apr-24 % 08-Apr-24*	25-Oct-24 04-Oct-24	21-Feb-24 13-Jan-24	18-Aug-24 10-Jul-24	-68 -86			
nstrument	Prad 2-Line 5 - Electrical Equipment installation	201	201		08-Apr-24	25-Oct-24		31-Jul-24	-86			
06-FGC-3-1280	PFab 2-Line 3 - Instrument Cable Pulling and Termination	180	180		% 29-Apr-24		03-Feb-24		-86			
06-FGC-3-1290 06-FGC-3-1300	PFab 2-Line 3 - Instrument Equipment Installation PFab 2-Line 3 - Instrument Tubing Installation	180	180 180		% 08-Apr-24 % 08-Apr-24			10-Jul-24 10-Jul-24	-86 -86			
Fab 2 - Line 4		194			01-May-24			18-Aug-24	-84			
&I Installation		194	194		01-May-24	10-Nov-24	20-Jan-24	18-Aug-24	-84			
Electrical 06-FGC-4-1250	PFab 2-Line 4 - Electrical Cable Pulling and Termination	<b>194</b> 180	194 180		01-May-24 % 15-May-24			18-Aug-24	-84 -84			
06-FGC-4-1250 06-FGC-4-1260	PFab 2-Line 4 - Electrical Equipment Installation	180	180		% 01-May-24*		21-Feb-24 20-Jan-24	-	-04			
nstrument		194	194		01-May-24		20-Jan-24		-102			
06-FGC-4-1280 06-FGC-4-1290	PFab 2-Line 4 - Instrument Cable Pulling and Termination PFab 2-Line 4 - Instrument Equipment Installation	180	180 180		% 15-May-24 % 01-May-24	10-Nov-24 27-Oct-24		31-Jul-24 17-Jul-24	-102 -102			
06-FGC-4-1300	PFab 2-Line 4 - Instrument Tubing Installation	180	180		% 01-May-24				-102			
ab 2 - Line 5		770	286	1	30-Jun-22 A	10-Jan-25	22-Nov-23	18-Sep-24	-114			
&I Installation Electrical		194			01-Jun-24		09-Mar-24					
06-FGC-5-1250	PFab 2-Line 5 - Electrical Cable Pulling and Termination	194 180	<b>19</b> 4 180		01-Jun-24 % 15-Jun-24			18-Sep-24 18-Sep-24	-84 -84			
06-FGC-5-1260	PFab 2-Line 5 - Electrical Equipment Installation	180	180	0.09	% 01-Jun-24*	27-Nov-24		04-Sep-24	-84			
nstrument 06-FGC-5-1280	PFab 2-Line 5 - Instrument Cable Pulling and Termination	194 180			01-Jun-24 % 15-Jun-24		09-Mar-24 23-Mar-24	18-Sep-24	-84 -84			
06-FGC-5-1290	PFab 2-Line 5 - Instrument Equipment Installation	180		0.00	% 01-Jun-24		09-Mar-24		-84			
06-FGC-5-1300	PFab 2-Line 5 - Instrument Tubing Installation	180	180		% 01-Jun-24	27-Nov-24		04-Sep-24	-84			
sulation )6-FGC-5-1200	PFab 2-Line 5 - Insulation	736			30-Jun-22 A % 30-Jun-22 A		22-Nov-23 22-Nov-23					
	of Turbine Modules	30			25-Apr-24		14-Nov-23		-163			
prication of Modu	ule (Power Island)	30	30		25-Apr-24	24-May-24	14-Nov-23	13-Dec-23	-163			
rbine Module 2		30		)	25-Apr-24		14-Nov-23		-163			
-4280(6)	Turbine Module 2 - Delivery	30 30			% 25-Apr-24* 25-Apr-24	-	14-Nov-23 14-Nov-23		-163 l	Update OD		
Irbine Module 3 6-4480(6)	Turbine Module 3 - Delivery	30					14-Nov-23			Update OD		
curement for AC		84				,	18-Nov-23					
1150	Factory Acceptance Test (FAT) for ACC-3	16			% 30-Mar-24 A		02-Dec-23	17-Dec-23	-120 l	Update Actual Start Date		Fa
1160	Delivery to Site ACC-1	11			% 06-Dec-23 A % 04-Apr-24		18-Nov-23		-134			Delivery to Site
190	Delivery to Site ACC-2 Delivery to Site ACC-3	21	21		% 04-Api-24 % 02-May-24		04-Dec-23 03-Jan-24		-122 -120			
curement for CC	CW Building Equipment	38	38		08-Apr-24	3	31-Dec-23		-99			
420-1(1)	Delivery to Site	38			% 08-Apr-24	3	31-Dec-23			Update OD		
	chanical Treatment Plant Building Plant Equipment	61					19-Mar-24					
1180 curement for Wa:	Delivery to Site stewater Treatment Plant Equipment	61 518				,	19-Mar-24 06-Feb-24	-				
200-1(1)	Mechanical Equipment Procurement (Incl. FAT)	210			% 01-Sep-22 A			-	-54			
200-2(1)	Pipe Material Procurement (Incl. FAT)	210	62	70.48	% 01-Sep-22 A	31-May-24	06-Feb-24	07-Apr-24	-54			
200-3(1)	Electrical and Instrumentation Material Procurement (Incl. FAT)	210	62 90		% 01-Sep-22 A	-			-54	Undate Actual Start Date		
220	Delivery to Site sal & Demin Plant Equipment	584			% 15-Jan-24 A 21-Apr-22 A			,	-54 ( -108	Update Actual Start Date		

PAGE 6 OF 15

Contract No	0. EP/SP/66/12 🏼 💽 🔢	<b>環境保護署</b>
ement Fac	cilities, Phase 1   🛄 📫	vironmental Protection Department
202	May	Jun
	78	79
9 2-Line 1 - Electrica ment Installation	Cable Pulling and Termination	
2 lino 1 Instrumo	nt Cable Dulling and Termination	
ipment Installation ing Installation	nt Cable Pulling and Termination	
		PFab 2-Line 1 - Insulation
	PFab 2-Line 2 - Electrical Cable Pulling and Termina Equipment Installation	tion
Z-LITIC Z - Electrica		
		Cable Pulling and Termination
	ab 2-Line 2 - Instrument Equipment Installation	
PI	ab 2-Line 2 - Instrument Tubing Installation	
		PFab 2-Line 2 - Insulati
_		
		• •
		:
	Turbine M	odule 2 - Delivery
	Turbine M	odule 3 - Delivery
ory Acceptance Test	(FAT) for ACC-3	
CC-1	. ,	
Delivery	o Site ACC-2	
	Delivery to Si	e all-3
	Delivery to Site	
		Delivery to Site
		Mechanical Equipment Procurement (Incl. FAT) Pipe Material Procurement (Incl. FAT)
		Electrical and Instrumentation Material Procureme
ual Mileston	9	
cal Milestone		
	<i>,</i>	

KEPPEL SEGRERS - ZHEN BUA JOINT VENTURE		1 01 1	Dome		Curront Class	Current First		Lot- Etch	Tatal M76 Domotic	Integr	rated Waste Ma
Activity Name		Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finis	h Late Start	Late Finish	Total M76 Remarks Float	Mar 76	A
240-1(1) Mechanical Equipment Procurement	. ,	576			01-Jun-22 A			11-Feb-24	-79		
240-2(1)         Pipe Material Procurement (Incl. FAT           240-3(1)         Electrical and Instrumentation Material		150			01-Sep-22 A 01-Sep-22 A		12-Jan-24	11-Feb-24 11-Feb-24	-79		
260 Delivery to Site		55			15-Feb-24 A				-108		
260-1(M55) WTP chemical storage tank Material		120		75%	21-Apr-22 A	29-Apr-24	14-Dec-23	12-Jan-24	-108		
260-2(M55) WTP chemical storage tank Procurer		180			22-Apr-22 A				-108		-
260-3(M55) Chemical storage tank delivery to Site curement for HV Transformers and Associated		60 215			30-May-24 01-Jan-23 A			11-Apr-24 26-Feb-24	-108 -96		
curement of EDG	Equipment	60						11-Feb-24			
1300 Delivery to Site		60	60	0%	31-Mar-24	29-May-24	14-Dec-23	11-Feb-24	-108		
curement of IS Limiter		215	63		01-Jan-23 A	02-Jun-24	25-Dec-23	26-Feb-24	-96		
1270(7) IS Limiter Design Approval		4	26		01-Jan-23 A			27-Jan-24	-89		
1280(7) Manufacturing of IS Limiter		90			31-Dec-23 A	,			-96 -96		
1290(7) Factory Acceptance Test (FAT) 1300(7) Delivery to Site		15			03-May-24 18-May-24	-		11-Feb-24 26-Feb-24	-96		
curement for Control SCADA Systems		92						01-Mar-24	-90		
330 Factory Acceptance Test (FAT)		30	30	0%	30-Nov-23 A	29-Apr-24	01-Jan-24	30-Jan-24	-90		
340 Delivery to Site		31						01-Mar-24	-90 Update OD		
curement for Onshore Crane at Berth		607			04-Dec-22 A						Supplier Submission a
350         Supplier Submission and Approval           360         Material & Equipment Procurement		60			04-Dec-22 A 02-Apr-24			15-Dec-23 12-Jun-24	-108		
curement and Off-site Fabrication of Pipe Bridg	ges (Incl. Pipings)	23			23-Apr-24			27-Feb-24	-78		
rication of Pipe Bridge C		23	23		23-Apr-24	-		27-Feb-24	-78		
be Bridge C between Turbine Hall & ACC -3		23	23		23-Apr-24	15-May-24	05-Feb-24	27-Feb-24	-78		
-5520(6) ACC-1 to 3 Load out & ready to ship		6	-		23-Apr-24*	28-Apr-24		10-Feb-24	-78		
-5530(6) Pipe Bridge C - ACC1 to 3 Delivery		17			29-Apr-24			27-Feb-24	-78		
curement for Cranage Equipment		30			31-Mar-24			08-Mar-24	-52		
st System           8330(M57)         Monorail Hoist Delivery to Site		30 30			31-Mar-24 31-Mar-24	29-Apr-24		08-Mar-24 08-Mar-24	-52		
curement for Weighbridge System		30						31-May-24	-52		
240(1) Delivery to Site (EIAC Equipment)		31					-	31-May-24	0		
urement for Truck Wash System		150	150		,	,		08-Aug-24	-19		
290(1) Material Submission and Approval		60	60	0%	31-Mar-24	29-May-24	12-Mar-24	10-May-24	-19		
300(1) Material & Equipment Procurement		90			30-May-24	27-Aug-24	,	08-Aug-24	-19		
curement for Curtain Wall Materials		210			31-Mar-24			12-Aug-24	-75		
2200(6D) Material Submission and Approval 2210(6D) Material & Equipment Procurement		60			31-Mar-24 30-May-24	29-May-24 26-Sep-24		15-Mar-24 13-Jul-24	-75 -75		
220(6D) Factory Acceptance Test (FAT)		120			29-Jun-24	· ·		12-Aug-24	-75		
site Precasting of Facade Panels		524	127		14-Feb-23 A	04-Aug-24	12-Dec-23	28-Aug-24	24		
8040(6D) Procurement of Precast Concrete Wa	II Panel Moulding & Fabrication	205			14-Feb-23 A			18-Dec-23			Procurement
MF Substation		90	90		06-Apr-24	05-Jul-24		28-Aug-24	54		
8070(6D)         Precasting of Concrete Panels           8080(6D)         Factory Acceptance Test (FAT)		60	60 60		06-Apr-24 06-May-24	05-Jun-24 05-Jul-24	31-May-24	29-Jul-24 28-Aug-24	54		
vated Drive Way		90	90		06-Apr-24	05-Jul-24		07-May-24	-59		
8100 Precasting of Concrete Panels		60	60		06-Apr-24	05-Jun-24		07-Apr-24	-59		
8110 Factory Acceptance Test (FAT)		60	60	0%	06-May-24	05-Jul-24	09-Mar-24	07-May-24	-59		
bine Hall		90	90		06-Apr-24	05-Jul-24	09-Jan-24		-89		
8130         Precasting of Concrete Panels           8140         Factory Acceptance Test (FAT)		45			06-Apr-24	,		22-Feb-24	-89		
8140         Factory Acceptance Test (FAT)           8150         Delivery to Site		45			06-May-24 05-Jun-24	20-Jun-24 05-Jul-24		23-Mar-24 07-Apr-24	-89 -89		
cess Building		90	90		06-Apr-24	05-Jul-24		07-Apr-24	-89		
8160 Precasting of Concrete Panels		60	60	0%	06-Apr-24	05-Jun-24	09-Jan-24	08-Mar-24	-89		
8170 Factory Acceptance Test (FAT)		60			21-Apr-24	20-Jun-24	24-Jan-24		-89		
8180 Delivery to Site		30	30 90		05-Jun-24	05-Jul-24		07-Apr-24	-89		
Chanical Treatment Plant           8190         Precasting of Concrete Panels		60			06-Apr-24 06-Apr-24	05-Jul-24 05-Jun-24		02-Jun-24 03-May-24	-33 -33		
8200 Factory Acceptance Test (FAT)		60			06-May-24	05-Jul-24 05-Jul-24		03-10ay-24 02-Jun-24	-33		
ministration Building		90			06-Apr-24	05-Jul-24		17-Mar-24	-110		
8250 Precasting of Concrete Panels		60			06-Apr-24	05-Jun-24		16-Feb-24			
8260 Factory Acceptance Test (FAT)		60			06-May-24	05-Jul-24	18-Jan-24		-110		
mney		120			06-Apr-24	04-Aug-24		14-May-24	-82		
8280 Steel Claddings Fabrication 8290 Factory Acceptance Test (FAT)		90			06-Apr-24 05-Jun-24	05-Jul-24 04-Aug-24		14-Apr-24 14-May-24	-82 change dur to 90 -82		
ronmental Works		365			01-Feb-24 A	-		30-Nov-24	-60		
eline Air Quality Monitoring Works		365	305		01-Feb-24 A	29-Jan-25	31-Jan-24	30-Nov-24	-60		
220 Carry out baseline Air Quality monito	ing at Portion 3 (Alternative Location)	365		16.44%	01-Feb-24 A	29-Jan-25	31-Jan-24	30-Nov-24	-60 Update Actual Start Date		
240 Carry out baseline Air Quality monito	-	365			01-Feb-24 A		_		-60 Update Actual Start Date		
time Works		1793	210		30-Nov-19 A	26-Oct-24	18-Dec-23	09-Jun-25	226		
ne Construction		1793			30-Nov-19 A			09-Jun-25	226		
ase I - Construction of Perimeter Seawalls		1793			30-Nov-19 A			09-Jun-25	226		
awall and Berth at DCM Area		1793	210		30-Nov-19 A	26-Oct-24	18-Dec-23	23-Jul-24	-95		

ntract No. EP/SP/66/12 nent Facilities, Phase 1	環境保護署 Environmental Protection Department
2024 May	Jun or
78 Mechanical Equipment Procurer Pipe Material Procurement (Incl. Electrical and Instrumentation M	FAT) aterial Procurement (Incl. FAT)
WTP chemical storage tank Mater	Pelivery to Site al Submission and Approval WTP chemical storage tank Procurement (Incl. FAT)
	Delivery to Site
IS Limiter Design Approval Manufacturing of IS Limiter	actory Acceptance Test (FAT)
Factory Acceptance Test (FAT)	Delivery to Site
	Delivery to Site
ACC-1 to 3 Load out & ready to ship	
Pipe E	3ridge C - ACC1 to 3 Delivery
Monorail Hoist Delivery to Site	Delivery to Site (EIAC Equipment)
	Material Submission and Approval
	Material Submission and Approval
Concrete Wall Panel Moulding & Fabrication	•
	Precasting of Concrete Panels
	Precasting of Concrete Panels
	Precasting of Concrete Panels Factory Accept
	Precasting of Concrete Panels
	Factory Accept
	Precasting of Concrete Panels
	Precasting of Concrete Panels
l Milestone Milestone	

Keppel Seghers	N
吉寶西格斯一根華曆	분 쇼 위
KEPME SEGHERS-ZHEN HEA JOINT	VENTURE

Intonrotod	11/0010	1100000
Integrated	WASIP	Manade
mogratou	110010	manago

	zaniš nuk polist vestuni		0-1-1	Dome	A	mont Ci	Current First	h Lot- Ch.	Late First	T-1 11.	M74 Demotio	In	tegrated Wast	e Manager
ctivity ID	Adivity Name		Original Duration	Remaining Duration	Activity % Cu Complete	irrent Start	Current Finis	h Late Start	Late Finish	Total N Float	M76 Remarks	Mar 76		Apr 77
Seawall Structural Wo			1793				26-Oct-24			-95				(
08-1115(3) Remain Works	Caisson infill, Solid ballast, toe p	rotection, precast concrete blocksetc Laying	250 1113				17-Apr-24 26-Oct-24	08-Mar-24 18-Dec-23		-23 -95				Caissor
08-1120	Construction of Seawall and Wav	ve Wall Extension from +3mPD to Deck Level for Seawall A	220	1				22-Feb-24	-	-38				
08-1120-1(6)		ve Wall Extension from +3mPD to Deck Level for Seawall B	220					13-Apr-24		13				Construction of Se
08-1120-2(M55) 08-1120-4(M55)		ve Wall Extension from +3mPD to Deck Level for Seawall B No. C1 & C2 (Caisson A2 & / ve Wall Extension from +3mPD to Deck Level for Seawall B No. C73 & C73C1	60 60					31-Mar-24 18-Dec-23		-103				
08-1320(6)	Construction of Rear Wall Buttres		180				· ·	26-Jan-24		-95				
Seawall at Dredgin	ng Area		160	12	11	-Jul-22 A	11-Apr-24	29-May-25	09-Jun-25	424				
Remain Works			160					29-May-25		424				Construction of Se
08-1170 Phase II - Reclamat	tion, Breakwater and Berth	ve Wall Extension from +3mPD to Deck Level (Bay 1 to Bay 8)	160 543					29-May-25 02-Jan-24		424 -39				
Reclamation			65				28-Jul-24	28-Feb-24	-	-87				
Reclamation Works			65	65				28-Feb-24		-87				
Surcharge Filling			5	5	20			28-Feb-24	1	-87				
08-3060-2(M57) Surcharge Period	Fill up +7.5 to +15mPD at West E	Edge Area (Area 7B2) (30,700m3 @ 2500m3/d)	5 60				29-May-24 28-Jul-24	28-Feb-24 04-Mar-24		-87 -87				
08-3120-3(M57)	Loading @ +12mPD at West Edg	ge Area (Area 7B2)	60					04-Mar-24	,	-87				
Seawall and Berth	at Marine Access		543	180	22	-Mar-23 A	26-Sep-24	02-Jan-24	18-Aug-24	-39				
Remain Works	Construction of Consumily and Max	u Well Estandard from AmDD to Dark Land	30					26-Mar-24		-5				
08-1330(2) Seawater Intake Struc		ve Wall Extension from +3mPD to Deck Level	30 90			-Mar-24 -Mar-23 A	·	26-Mar-24 02-Jan-24		-5 -89				
08-2400(6D)	Construction of Seawater Intake		90					02-Jan-24		-89				Construction of Sea
Fire Boat Access			120			,		21-Apr-24	5	-39				
08-2500(6D)	Construction of Fire Boat Access	3	120 90			-May-24		21-Apr-24 25-Apr-24		-39 -35				
Mooring Dolphins	Mooring Dolphins Piling Works		90			-	-	25-Apr-24		-35				
Foundation Works	wooning bolphins I lining works		301					28-Nov-23		32				
	ewing Gallery Bld Foundati	ion	90	7	17	-Aug-23 A	07-Apr-24	12-Jan-24	19-Jan-24	-78				
	/iewing Gallery Bld Pile Cap		90	7	17	-Aug-23 A	07-Apr-24	12-Jan-24	19-Jan-24	-78				
09-1110	Pile Caps Construction		90	7	92.22% 17	-Aug-23 A	07-Apr-24	12-Jan-24	19-Jan-24	-78			Pile	e Caps Construction
Sky Deck Foundatio	on		58	58	31	-Mar-24	27-May-24	13-Dec-23	08-Feb-24	-109				
Sky Deck Pile Caps			58	58		-Mar-24		13-Dec-23		-109				<u>-</u>
09-2730(M62)	Excavation to Pile Cap Formation		21	21		-Mar-24		13-Dec-23		-109 -109				Ex
09-2740(M62) 09-2750(M62)	Pile Cut-off & Capping Plate (2 V Pile Caps Construction	veiders @ zni/d)	30			-Apr-24 -Apr-24	· ·	20-Dec-23 10-Jan-24			Change duration to 30d			
. ,	Waste Bunker & Tipping Ha	II BId Foundation	301				-	16-Dec-23		32				
Process Building P	Pile Cap Construction		301	91	05	-Aug-23 A	29-Jun-24	16-Dec-23	31-Jul-24	32				
Pile Cap Stage 3 (N	Module 3 Between Grid PB	22 to PB32)	26	2	05	-Aug-23 A	02-Apr-24	16-Dec-23	18-Dec-23	-106				
Process Building (Mo	-		26					16-Dec-23		-106			Dilo Conc or	ad Daft Foundation Cor
09-1260 Pile Cap Stage 4 (H		Construction (60m x 24m 4set@100m2/7day)	26			•		16-Dec-23 02-Jun-24		-106 32			Prie Caps ar	nd Raft Foundation Cor
09-2800(7)		ction Between Grid PB11 to PB12	60					02-Jun-24		32				
09-3810(7)	· · ·	ction Between Grid PB21 to PB22	60					02-Jun-24		32				
ACC Equipment Fou	undation		201	51	01	-Oct-23 A	20-May-24	28-Nov-23	17-Jan-24	-124				
ACC Pile Cap Cons			196	32			· · ·	28-Nov-23		-124				
09-1710-1(M58)		n and construction (Module 2 & 3)	30					28-Nov-23		-124			Excava	ation to Pile Caps form
09-1710-2(M58) ACC Equipment Str	Tie Beams & Slab Construction (	(Module 2 & 3 @+6.5mPD)	30 45				-	04-Dec-23 04-Dec-23		-124 -124				
09-1720-1(M58)	Base Slab Construction (Module	2 & 3 @+6.5mPD)	45					04-Dec-23		-124				
Mechanical Treatme	ent Plant & Water Treatmen	t Plant Bld Foundation	223	31	14	-Oct-23 A	30-Apr-24	18-Dec-23	25-Jan-24	-96				
Mechanical Treatme	ent Plant & Water Treatmer	nt Plant Bld Pile Cap Construction	223	31	14	-Oct-23 A	30-Apr-24	18-Dec-23	25-Jan-24	-96				
Mechanical Treatm	nent Plant Pile Cap Constru	iction	78	31	22	-Jan-24 A	30-Apr-24	26-Dec-23	25-Jan-24	-96				
09-1920	Excavation to Pile Cap Formation		39				15-Apr-24				Update Actual Start Date			Excavation
09-1930 09-1940	Pile Cut-off & Capping Plate (410 Pile Caps Construction	)nrs, @20/d)	21				· ·	05-Jan-24 26-Dec-23			Update Actual Start Date Update Actual Start Date			Pl
	Plant Pile Cap Construction		84				· ·	18-Dec-23		-104	opuale Actual Start Date			
09-1950	Excavation to Pile Cap Formation		28	3	90% 14	-Oct-23 A	02-Apr-24	18-Dec-23	20-Dec-23	-104			Excavation t	
09-1970	Pile Caps Construction		60					23-Dec-23		-104				Pile Caps C
	and Associated Structures	Foundation	81					06-Dec-23		-67				
	y Pile Cap Construction		81	31				06-Dec-23		-67 114				
Elevated Drive Wa 09-2060(M57)			68 30	31 24				08-Dec-23 08-Dec-23		-114				
09-2060(M57) 09-2070(M57)	Pile Cut-off & Capping Plate Pile Caps Construction		30	24				08-Dec-23 08-Dec-23		-114				
Elevated Drive Wa			28				· ·	29-Jan-24		-62				
09-2740(M57)	Excavation to Pile Cap Formation	n	14					29-Jan-24		-62				Excavation to Pile
09-2750(M57)	Pile Cut-off & Capping Plate		14					05-Feb-24		-62				Pile Cu
09-2760(M57) Elevated Drive Wa	Pile Caps Construction		21 51					05-Feb-24 06-Dec-23		-62 -116				
09-2710(M57)	Excavation to Pile Cap Formation	n	30					06-Dec-23			Remove Actual Finish Date			Excavation to Pile
09-2720(M57)	Pile Cut-off & Capping Plate		30		43.33% 18		· ·				Remove Actual Finish Date			Pile C
	III D	$m_{0}$ (Marab 2024)									Actual Work	Critical Remai	ning Work 🔶	♦ Actrual

3-Month Rolling Programme (March 2024) PAGE 8 OF 15

Actual Work Remaining Work

Critical Remaining Work 🔶 ♦ Milestone ٠

Contract N Management Fac		<b>R</b> 環	境保護署 wironmental Protection Department
Apr	May		Jun
77 Caisson infill, Solid ba	78 Illast, toe protection, precast conc	rete blocksetc Layir	79 9 Construction of Seawall and Wave Wall Extensic
Construction of	1	n from +3mPD to Dec	
Construction of Seawall and Wa	ve Wall Extension from +3mPD t	o Deck Level (Bay 1 to	Bay 8)
		Fi	ll up +7.5 to +15mPD at West Edge Area (Area 7B2
	Construction of Seawall and Wav	e Wall Extension from	+3mPD to Deck Level
onstruction of Seawater Intake			
ps Construction			
Excavation to P	le Cap Formation Cut-off & Capping Plate (2 Weld	ers @ 2nr/d)	
_			aps Construction
aft Foundation Construction (60	n x 24m 4set@100m2/7day)		
to Pile Caps formation and con	struction (Module 2 & 3)	ion (Modulo 2 & 2 @u	5 5mPD)
			uction (Module 2 & 3 @+6.5mPD)
	prmation apping Plate (410nrs, @20/d) Pile Caps Construction		
le Cap Formation			
Pile Cut-of	& Capping Plate Pile Caps Construction		
Excavation to Pile Cap Formatio Pile Cut-off & Cappi Pile Ca			
Excavation to Pile Cap Formatic Pile Cut-off & Capp	ng Plate		
<ul> <li>Actrual Mileston</li> <li>Critical Milestone</li> </ul>			

	Adivity Name	Original Duration	Remaining Duration		Current Finis	h Late Start	Late Finish	Total M76 Remarks Float	Mar	Ap
09-2730(M57)	Pile Caps Construction	21	19	9.52% 30-Dec-23 A	25-Apr-24	13-Dec-23	31-Dec-23	-116 Remove Actual Finish Date	76	77
avy Load Acces	26	3	3	09-Jun-24	11-Jun-24	24-Feb-24	26-Feb-24	-106		
emolition		3	3		11-Jun-24		26-Feb-24			
9-3040(6D) <mark>perstructure W</mark>	Removal of Sub Base & Road Base & Foundation Works (Stage 3)	489			11-Jun-24 30-Aug-24		26-Feb-24 04-Jul-24			
	Viewing Gallery Bld Structure	100	100	, in the second se	, in the second se		12-Apr-24	-87		
-1000	Ground Slab to +6.0mPD	21	16	23.81% 14-Mar-24 A	15-Apr-24	04-Jan-24	19-Jan-24	-87 Change Relationship from Predecessor 09-1110 FS7 to FF0; Update Actual Start Date		
-1010	Column & Wall to +11.5mPD	21	21	· · ·	06-May-24		09-Feb-24	-87		
-1020 -1030	Beam & Slab to +11.5mPD Column & Wall to +17.0mPD	21	21	,	27-May-24 17-Jun-24		01-Mar-24 22-Mar-24	-87		
-1040	Beam & Slab to + 17.0mPD	21	21		08-Jul-24		12-Apr-24	-87		
y Deck Structur		60	60	,	26-Jul-24		08-Apr-24	-109		
-2310 (M55)	Construction of RC Column (16nr, 0.9m Dia x 11m, 3 pours @ 5d/pour with 4 formwork sets)	60 319	60 153	,			08-Apr-24 03-Jun-24	-109 -88		
	- Waste Bunker & Tipping Hall Bld Structure Iker Bld Structure	319	153	, , , , , , , , , , , , , , , , , , ,	J					
	g (Module 1) Waste & Ash Bunker Bld Structure	131	40	, , , , , , , , , , , , , , , , , , ,	, v					
10-1150	Column & Wall to +33.5mPD	30	3		· · ·		06-Nov-23		Colun	mn & Wall to +3
10-1170	Beam & Slab to + 33.5mPD	30	17				20-Nov-23	-148		
10-1180	Column, Wall & Beam to +41.0mPD	21	19				20-Nov-23	Relationship on Predecessor from FS0 to FF0		
10-1190 Process Building	Column & Wall to +53.7mPD (Module 2) Waste & Ash Bunker Bld Structure	21 268	21 102	· · ·	-		11-Dec-23 27-Jan-24	-150 -165		
10-1230	Column & Wall to +20.0mPD (Ash Bunker)	17	14	5			02-Nov-23	-163		(
10-1250	Beam & Slab to +20.0mPD (Ash Bunker)	14	21	0% 10-Jan-24 A	20-Apr-24	13-Oct-23	02-Nov-23	-170 Change Relationship on Predecessor from FS0 to FF0		
10-1260	Column & Wall to +33.5mPD	30	30	0% 21-Apr-24	20-May-24	08-Nov-23	07-Dec-23	-165		
10-1280	Beam & Slab to +33.5mPD	30	30	,	19-Jun-24		06-Jan-24	-165		
10-1290 Process Building	Column, Wall & Beam to +41.0mPD	21	21 102		10-Jul-24		27-Jan-24 04-Feb-24	-165 -157		
10-1340	g (Module 3) Waste & Ash Bunker Bid Structure Column & Wall to +20.0mPD (Ash Bunker)	14	14				28-Oct-23	-168		
10-1360	Beam & Slab to +20.0mPD (Ash Bunker)	7	7		20-Apr-24		04-Nov-23			
10-1370	Column & Wall to +33.5mPD	30	30	· · ·	20-May-24		04-Dec-23			
10-1390 10-1400	Beam & Slab to +33.5mPD Column, Wall & Beam to +41.0mPD	30	30	,	19-Jun-24 10-Jul-24		14-Jan-24 04-Feb-24			
rocess Building	g Waste & Ash Bunker Bld Structural Steel Roof	113	113			22-Dec-23	10-May-24			
10-2080	Structural Steel Roof Erection	90	90				10-May-24			
10-2330 (M63) <mark>pping Hall Bld S</mark>	Facade Structural Frame Installation at Module 1	60 59	60 59	,				-140		
	g (Module 1) Tipping Hall Bld Structure	35	23		-			-111		
10-1540(7)	Column, Beam & Slab to +38.9mPD (Control Room Area)	35	23	34.29% 08-Feb-24 A	22-Apr-24	11-Dec-23	02-Jan-24			
	g (Module 2) Tipping Hall Bld Structure	42	53							
10-1500 10-1510	Beam & Slab to +17.5mPD Column & Wall to +27.28mPD	14	11				21-Oct-23 11-Nov-23	-172 Update Actual Start Date -172		Beam
10-1520	Beam & Slab to +27.28mPD	21	21	· · ·	3					
Process Building	g (Module 3) WWTP & Tipping Hall Structure	57	57	19-Mar-24 A	28-May-24	18-Dec-23	03-Jun-24	6		
10-3070-3M63)	Column & Wall to +17.5mPD	21	7				24-Dec-23			Column
10-3070-4M63) 10-3070-5(7)	Beam & Slab to +17.5mPD Column & Wall to +27.28mPD	15	15		· ·	25-Dec-23 30-Apr-24	08-Jan-24 20-May-24	-106		
10-3070-6(7)	Beam & Slab to +27.28mPD	14	14	0% 15-May-24	28-May-24	21-May-24	03-Jun-24	6		
Ŭ	- Boiler & Flue Gas Treatment Bld Structure	458	133	, , , , , , , , , , , , , , , , , , ,	-			-37		
eel Structure	Stool Structure	453 453	133 133	Ŭ	-			-37 -73		
Boiler Building S Process Building (N	Module 1) Steel Structure Erection	493	28	, , , , , , , , , , , , , , , , , , ,	°					
10-1640	Roof Cladding Installation	60	28	53.33% 21-Aug-23 A	28-Apr-24	17-Jan-24	14-Feb-24	-73		
Process Building (N 10-1680	Module 2) Steel Structure Erection	60 60	50 50		-	-	-			
	Roof Cladding Installation  Module 3) Process Building Steel Structure Erection	60	50		22-Jun-24		-	-73		
10-1720	Roof Cladding Installation	60	55	8.33% 12-Dec-23 A	22-Jun-24	15-Feb-24	10-Apr-24	-73		
	ent Bid Steel Structure	93						34		
10-1760	Module 1) Steel Structure Erection Roof Cladding Installation	30 30	2				17-Nov-23 17-Nov-23		Roof C	Cladding Insta
Process Building (N	Nodule 2) Steel Structure Erection	30	30	29-Nov-23 A	01-Jun-24	05-Jun-24	04-Jul-24	34		
10-1800 Process Building (N	Roof Cladding Installation Module 3) Steel Structure Erection	30	30 30			05-Jun-24 16-Feb-24	04-Jul-24	34		
10-1840	Roof Cladding Installation	30	30		02-May-24 02-May-24		16-Mar-24 16-Mar-24			
	Internal Partition Wall and Staircase	120	120		31-Jul-24		16-Mar-24			
0-1850	RC Partition and Staircase at Module 1	60	60		01-Jun-24		16-Jan-24	-136		
0-1860 rbine Hall Bld S	RC Partition and Staircase at Module 2	60 43	60 30		31-Jul-24 29-Apr-24		16-Mar-24 27-Feb-24			
	trical Bld	15								



ID	Adivity Name	Original Duration	Remaining		Current Finis	sh Late Start	Late Finish	Total Float	M76 Remarks	Mar	ated Waste Manag
10-2070(M64)	Column & Wall to +32.45mPD	Duration	Duration 9		08-Apr-24	12-Feb-24	20-Feb-24		Update Actual Start Date	76	77 Column & Wall to
10-2080(M64)	Beam & Slab to +32.45mPD	7	7		15-Apr-24		27-Feb-24	-48			Bea
Turbine Hall TBS2	2 & 3	43	30	21-Mar-24 A	29-Apr-24	20-Oct-23	18-Nov-23	-163			
10-2340(7)	Turbine Hall #3 Column & Wall to +26.5mPD	43	23				11-Nov-23	-163			<b> </b> 
10-2350(7) Compressor & CCO	Turbine Hall #3 Beam & Slab to +28.0mPD	7	7 21	and the second	29-Apr-24 20-Apr-24		18-Nov-23 07-Jan-24	-163 -104			
10-2210	Concrete Plinth & install anchor bolts @+15.0mPD	21	21			18-Dec-23					
Chimney Structure		75	56	26-Jan-24 A	26-May-24	13-Dec-23	07-Feb-24	-108			
10-2060	Chimney RC Structure (1st to 46th Pour)	75	56		-						
	nent Plant Bld Structure	63	63	,				-96			
10-2090 10-2095	Ground Slab @+6.5mPD Column & Wall to +13.5mPD	21	21	,	21-May-24 11-Jun-24		15-Feb-24 07-Mar-24	-96 -96			
10-2096	1/F Slab @+13.5mPD	21	21	,	02-Jul-24		28-Mar-24	-96			
Nater Treatment P	Iant Bld Structure	95	91	08-Dec-23 A	29-Jun-24	16-Dec-23	15-Mar-24	-106			
10-2310(6F)	Ground Slab @+6.5mPD	21	11				03-Jan-24	-104			
10-2320(6F) 10-2330(6F)	Column & Wall to +13.5mPD 1/F Slab @+13.5mPD	21	13 21				05-Jan-24 05-Jan-24	-104 -106			
10-2340(6F)	Column & Wall to +17.5mPD	21	21		24-Apr-24		09-Jan-24	-106			
10-2350(6F)	2/F Slab @+17.5mPD	21	21		27-Apr-24		12-Jan-24	-106			
10-2360(6F)	Column & Wall to +23.0mPD 3/F Slab @+23.0mPD	21	21 21		18-May-24		02-Feb-24 23-Feb-24	-106 -106			
10-2370(6F) 10-2390(6F)	3/F Slab @+23.0mPD Parapet Wall	21	21	,	08-Jun-24 29-Jun-24		23-Feb-24 15-Mar-24	- 106			
	y and Associated Structures	90	90		24-Jul-24		30-Mar-24				
-	ay RSA to RSG (42.8m)	75	75	01-May-24	14-Jul-24	08-Jan-24	22-Mar-24	-114			
10-2210(M57)	G/F Base Slab	45	45	,	14-Jun-24		21-Feb-24	-114			
10-2220(M57)	Wall & Column to +12.5mPD Mezzanine Level	30	30 30		14-Jul-24		22-Mar-24	-114			
10-2310(M57)	ay RSG to RSU (100m) G/F Base Slab	30	30		15-Jul-24 15-Jul-24		24-Mar-24 24-Mar-24	-112 -112			
	ay RSU to RSAF (99m)	90	90		24-Jul-24		30-Mar-24	-116			
10-2360(M57)	G/F Base Slab	45	45	0% 26-Apr-24	09-Jun-24	01-Jan-24	14-Feb-24	-116			
10-2370(M57)	Wall & Column to +13mPD Mezzanine Level	45	45		24-Jul-24		30-Mar-24	-116			
Pipebridge Structu	ire	150	150		27-Aug-24		27-Apr-24	-122			
Pipe Rack		10	10		09-Apr-24		23-Oct-23	-169			Eroction of F
10-2340(6) Pipe Bridge B	Erection of Pipe Rack 3 (Pipe Rack D2 to ACC & C3)	10	10 138		09-Apr-24 27-Aug-24		23-Oct-23 27-Apr-24	-169			Erection of P
10-2300-1(6D)	Erection of Pipe bridge B1 on the Roof of Turbine Hall	90	90	· · · ·	10-Jul-24		27-Feb-24	-134			
10-2300-2(6H)	Erection of Pipe bridge B2 on the Roof of Turbine Hall	90	90			29-Jan-24		-122			
Pipe Bridge C		22	22					-76			
Connect to ACC		3	3	16-May-24	18-May-24	28-Feb-24	01-Mar-24				
10-2310(6)	Erection of Pipebridge C between Turbine Hall & ACC 1	3	3		18-May-24 03-Jun-24		01-Mar-24 19-Mar-24	-78	Deleted successor 13-2000-1(M63)		
Connect to ACC 1 10-2310-1(M63)	Z Erection of Pipebridge C between Turbine Hall & ACC 2	3	3		03-Jun-24		19-Ivial-24				
Connect to ACC		3	3		06-Jun-24		22-Mar-24	-76			
10-2310-2(M63)	Erection of Pipebridge C between Turbine Hall & ACC 3	3	3	0% 04-Jun-24	06-Jun-24		22-Mar-24	-76			
ACC Yard		106	106	08-Apr-24	22-Jul-24	26-Nov-23	07-Mar-24	-137			
13-2000	Delivery and Erection of ACC Steel Structure & Steel Structure Support of Condensate Tank (Module 1)	45	45		22-May-24		09-Jan-24	-134			
13-2040 13-2080	Delivery and Erection of ACC Steel Structure & Steel Structure Support of Condensate Tank (Module 2) Delivery and Erection of ACC Steel Structure & Steel Structure Support of Condensate Tank (Module 3)	45	45 45		15-Jul-24		06-Feb-24	-160 -137			
	Jense Works & Finishes	45 341	45 250		22-Jul-24 05-Dec-24		07-Mar-24 10-Apr-25				
	Waste Bunker & Tipping Hall Bld ABWF Works	281	250	· · · · · · · · · · · · · · · · · · ·				-39			
11-1060	Door, Roller Shutter, Windows and Louvers Installation	180	180		05-Dec-24		27-Oct-24	-39			
11-1070	Metal Railings, Platforms, Gratings, Cable trench covers Installations	115	115	0% 31-Mar-24	23-Jul-24	15-Dec-23	07-Apr-24	-107			
11-1080	Internal Wall and Floor Finishes	230	195				26-Jul-24	-77			
11-1090 11-1100	False ceiling and Raise Floor installation (in CCR) External Finishes, Curtain Walls and Roof Waterproofing	45 90	45	,	20-Jun-24		01-Mar-24 06-Apr-24		changed dur to 60 Update Progress Percent		
11-1530(M63)	Facade Panels Erection for Module 1 (612pcs. @8pcs/d)	70	77		24-Aug-24			_	Change relation with 10-2330(m63) to FS-		
Process Building -	Boiler & Flue Gas Bld ABWF Works	180	180	02-Apr-24	29-Sep-24	10-Nov-23	05-Jul-24	-85			
11-1130	Internal Wall and Floor Finishes	180	180	· · ·	29-Sep-24		05-Jul-24		Changed relation with 16-1550 to FS-90d		
11-1560(7) 11-1570(7)	Transformer Room 1 & 2 Blockwork and Finishes Transformer Room 3 & 4 Blockwork and Finishes	30	30 30	,	01-Jun-24		09-Dec-23	-175 -173			
11-1580(7)	Transformer Room 5 & 6 Blockwork and Finishes	30	30	,	01-Jun-24 01-Jul-24		11-Dec-23 22-Jan-24	-1/3			
urbine Hall Bld Al		171	171				25-Jun-24	-84			
Electrical Bld ABV	NF Works	123	123	09-Dec-23 A	31-Jul-24	29-Oct-23	25-Jun-24	-36			
11-1150	Door, Windows and Louvers Installation	90	90	· · ·	01-Jul-24		26-May-24	-36			
11-1160 11-1170	Metal Railings, Platforms, Gratings, Cable trench covers Installations	90	90	· · ·	01-Jul-24		25-Jun-24	-6	Update Progress Percent		
11-11/0	Internal Wall and Floor Finishes False ceiling and Raise Floor installation	90	79 90		30-Jun-24 28-Jun-24	· ·	25-Jun-24 26-Jan-24	-4			
11-1190	External Finishes, Roof Waterproofing	90	90		31-Jul-24		25-Jun-24	-36			
11-1540	Facade Panels Erection (167pcs. @8pcs/d)	23	23	,	21-Jun-24		25-Jun-24	4			
Furbine Hall ABW		163	163		17-Sep-24		03-Jun-24	-106			
11-1200	Door, Roller Shutter, Windows and Louvers Installation Metal Railings Platforms, Cratings, Cable tranch covers Installations	60	60		18-Aug-24		25-Apr-24	-115 -94			
11-1210	Metal Railings, Platforms, Gratings, Cable trench covers Installations	90	90	0% 30-Apr-24	28-Jul-24	∠r-Jan-24	25-Apr-24	-94		1	13



Ke	ppel <mark>S</mark>	eghers	. 22
古背	而格对 SIGHURS-2	- 統 第 J	# 분 상 위 NTVINTUR

												ated waste Managem
ivity ID	Adivity Name		Origina Duratior			Current Finis	h Late Start	Late Finish	Total Float	I M76 Remarks	Mar	Apr
11-1220	Internal Wall and Floor Finishes fo	n remain area	90	90	0% 30-Apr-24	28-Jul-24	27-Jan-24	25-Apr-24	-94		76	77
11-1240	External Finishes, Curtain Walls a		120				05-Feb-24		-106			
11-1540-1(M63)	Facade Structural Frame Erection		52	52	,		15-Dec-23		-115			
11-1550	Facade Panels Erection (207pcs.	@4pcs/d)	51	51	0% 30-May-24	19-Jul-24	05-Feb-24	26-Mar-24	-115			
Compressor & CC	CW Bld ABWF Works		126	126	31-Mar-24	03-Aug-24	28-Mar-24	25-Jul-24	-9			
11-1250	Door, Roller Shutter, Windows and	d Louvers Installation	90	90	0% 31-Mar-24	28-Jun-24	27-Apr-24	25-Jul-24	27			
11-1260	• •	s, Cable trench covers Installations	90		, .		27-Apr-24		-9			
11-1270	Internal Wall and Floor Finishes	- H- K	90			04-Jul-24	27-Apr-24		21			
11-1280	False ceiling and Raise Floor insta External Finishes and Roof Water		90			04-Jul-24 04-Jul-24	27-Apr-24 28-Mar-24		21 -9			
Chimney ABWF W		prooning	120				08-Feb-24		-28			
10-2240	Erection of Steel Grating Platform		90				08-Feb-24	-	-108			
11-1000	Installation of Metal Staircase, Rai		90		,	23-Sep-24				Remove successor 16-1550c added		
		5						a ag		successor 16-1970(6G)		
Mechanical Treatm	nent Plant & Water Treatment	Plant Bld ABWF Works	120	120	28-May-24	24-Sep-24	25-Feb-24	13-Jul-24	-73	l		
Water Treatment	Plant ABWF Works		120	120	28-May-24	24-Sep-24	25-Feb-24	13-Jul-24	-73	۱ 		
11-1610(7)	Metal Railings, Platforms, Gratings	s, Cable trench covers Installations	120	120	0% 28-May-24	24-Sep-24	09-Mar-24	06-Jul-24	-80			
11-1620(7)	Internal Wall and Floor Finishes		120			24-Sep-24			-73			
11-1640(7)	Facade Structural Frame Erection		90				25-Feb-24	,	-105			
IWMF Substation A			279		· · · · · · · · · · · · · · · · · · ·	03-Aug-24			250			
11-1340	Door, Roller Shutter, Windows and Motal Bailings, Platforms, Crating		60				•	28-Sep-24 29-Feb-24		Remove Predecessor 11-1560-2(M63) FS0		
11-1360	Internal Wall and Floor Finishes	s, Cable trench covers Installations	90							Update Progress Percent Update Progress Percent		
11-1370	False ceiling and Raise Floor insta	allation	90						-116			1
11-1380	External Finishes and Roof Water		86			01-Jul-24		10-Apr-25	283			
11-1560-1(M63)	Facade Structural Frame Installati	on	64	64	0% 31-Mar-24	02-Jun-24	26-Jul-24	27-Sep-24	117			
IWMF Substation	- CLP Equipment Room ABW	F Works	60	20	12-Dec-23 /	19-Apr-24	15-Nov-23	04-Dec-23	-137			
11-1660(7)	ABWF Works for CLP Equipment I	Room	60	20	66.67% 12-Dec-23 A	19-Apr-24	15-Nov-23	04-Dec-23	-137			ABW
Seawater Intake Cl	hamber ABWF Works		60	60	10-May-24	09-Jul-24	12-Feb-24	11-Apr-24	-89			
11-1670(7)	Floor, wall and ceiling finishes		30		,			12-Mar-24	-89			
11-1680(7)	Steel platforms, metal covers, cat	ladder and staircase	30			09-Jul-24	_	11-Apr-24	-89			
Building Services	Installation		302	270	20-May-227	25-Dec-24	10-Mar-24	29-Jul-26	581			
Administration & \	Viewing Gallery Bld BS Works		180	180	27-Jun-24	23-Dec-24	09-Apr-24	20-Oct-24	-64			
12-1030	Electrical and Lighting System		180				24-Apr-24		-64			
12-1040	CCTV & Surveillance System		180				09-Apr-24		-79			
	- Waste Bunker & Tipping Hall	BId BS Works	240				10-Mar-24		37			
12-1060	Plumbing & Drainage System MVAC & OCS System		180			26-Oct-24	•	31-Jan-25	97			
12-1070	Fire Service System (Waste Bunke	er and Tipping Hall)	180			25-Dec-24 26-Oct-24	05-Apr-24 21-Apr-24		-85 -9			
12-1090	Electrical and Lighting System		180			26-Oct-24		05-Sep-24	-51			
12-1100	Security, Surveillance & Communi	ication System	180		· ·				-51			
Process Building -	- Boiler & Flue Gas Bld BS Wo	vrks	286	171	20-May-22	28-Nov-24	03-May-24	29-Jul-26	609			
12-1120	MVAC System		180	153	15% 14-Oct-23 A	28-Nov-24	19-May-24	18-Oct-24	-40			
12-1140	Electrical and Lighting System		180	171	5% 18-Oct-23 A	28-Nov-24	03-May-24	20-Oct-24	-38			
12-1580(6E)	Earthing and Lightning Protection	System	180		,			_	609			
Turbine Hall Bld B			144			28-Jul-24			82			
Electrical Bld BS	Works		144	120		28-Jul-24	20-Jun-24	17-Oct-24	81			
12-1270	Plumbing & Drainage System		60				20-Jun-24			Remove Predecessor 11-1150 SS0		
12-1280	MVAC System	9 P. X	120					29-Sep-24	81			
12-1290 12-1300	Fire Service System (Electrical Bu Electrical and Lighting System	iliding)	120				20-Jun-24 26-Jun-24		81 87			
12-1310	Security, Surveillance & Communi	ication System	90					05-Oct-24	87			
Turbine Hall BS V	-		123			10-Jul-24	08-Jul-24	18-Oct-24	100			
12-1320	Plumbing & Drainage System		90	28	68.89% 11-Oct-23 A	09-May-24	20-Jul-24	16-Aug-24	99			
12-1330	MVAC System		90	90		10-Jul-24		18-Oct-24	100			
12-1340	Fire Service System (Turbine Hall)	)	90	90	0% 12-Apr-24	10-Jul-24	20-Jul-24	17-Oct-24	99			
12-1350	Electrical and Lighting System		90	28	68.89% 11-Oct-23 A	09-May-24	25-Aug-24	21-Sep-24	135			
12-1360	Security, Surveillance & Communi	ication System	90			28-Jun-24			99			
	CW Bld BS Works		161			27-Aug-24			52			
12-1370	Plumbing & Drainage System		60			29-May-24		•	81			
12-1380	MVAC System Fire Service System (CCCW Bld)		120			28-Jul-24 27-Aug-24	21-Jun-24		82 51			
12-1370	Electrical and Lighting System		120				20-Jun-24		81			
12-1410	Security, Surveillance & Communi	ication System	90				31-Aug-24		81			
	nent Plant & Water Treatment		120			08-Sep-24	0		39			
Water Treatment I			120	120					39			
12-1580(7)	Plumbing & Drainage System		120				04-Jun-24		23			
12-1600(7)	Fire Service System		107		,		03-Jul-24		52			
	Electrical and Lighting System		120	120	0% 12-May-24		08-Jun-24		27			
12-1610(7)		ication System	90	90	0% 11-Jun-24	08-Sep-24	08-Jul-24	05-Oct-24	27			
12-1610(7) 12-1620(7)	Security, Surveillance & Communi					· ·						t a
12-1620(7) IWMF Substation E	BS Works		120	36	10-Oct-23 A	07-Jul-24	14-Apr-24	19-Oct-24	104			
12-1620(7)		anon ayaran		36 18	10-Oct-23 A 80% 10-Oct-23 A	07-Jul-24 19-Jun-24	14-Apr-24 14-Apr-24	19-Oct-24 01-May-24	104 -49 112			

3-Month Rolling Programme (March 2024)
PAGE 11 OF 15

Actual Work 

Critical Remaining Work 🔶

ntract No. EP/SP/66/12
nent Facilities, Phase 1



2 Apr 77	acilities, Phase 1		Jun 79
	10		17
	-	F	acade Structural Frame Erection
		-	
			ļ
			i 
			1
			r, Roller Shutter, Windows and Louvers Installation
		Doc	, Roller Shuller, windows and Louvers installation
			Internal
			Facade Structural Frame Installation
ABWF WORKS TO	r CLP Equipment Room		
			Floor, wall and ceiling finishes
			_
			i
	Plumbing & Drainage System		
			Electrical and Lighting System
	Plumbing & Dra	inage System	
	Electrical and Li	ighting System	
		P	umbing & Drainage System
			Plumbing & Drai
Actrual Milestor	 າຍ		
<ul> <li>Critical Mileston</li> </ul>			
	-		

ID	Adivity Name	Original	Remainin	g Activity 9	% Current Start	Current Finis	Late Start	Late Finish	Total	M76 Remarks	Integrate	ed Waste Mar
U		Duration				Guirent Fillis	Late Start	Late I III SII	Float	W/ O KGHAIKS	Mar 76	Apr 77
12-1490	Fire Service System (IWMF Substation)	90			% 12-Oct-23 A		14-Apr-24	,				
12-1500 12-1510	Electrical and Lighting System Security, Surveillance & Communication System	90			% 10-Oct-23 A % 20-Nov-23 A		22-Sep-24 22-Sep-24	19-Oct-24 05-Oct-24	113 113			
	Structure BS Works	90				27-Aug-24			157			
12-1580(5a)	Plumbing & Drainage System	60	6	0 09	% 30-May-24	28-Jul-24	03-Dec-24	31-Jan-25	187			
12-1590(5a)	MVAC System	90			% 30-May-24		21-Jul-24	18-Oct-24	52			
12-1600(5a) 12-1610(5a)	Fire Service System (Equipment/Appliance) Electrical and Lighting System	60			% 30-May-24 % 30-May-24	28-Jul-24 28-Jul-24	19-Aug-24 02-Oct-24		81 125			
12-1620(5a)	Security, Surveillance & Communication System	60		_	% 30-May-24	28-Jul-24	07-Aug-24		69			
Seawater Intake (	Chamber BS Works	60	6	0	09-Jun-24	08-Aug-24	01-May-24	18-Oct-24	71			
12-1630(7)	Plumbing & Drainage System	60	6	0 09	% 09-Jun-24	08-Aug-24	01-May-24	29-Jun-24	-40			
12-1640(7)	MVAC System	60			% 09-Jun-24	08-Aug-24	20-Aug-24		71			
12-1650(7) 12-1660(7)	Fire Service System (Equipment/Appliance) Electrical and Lighting System	60			% 09-Jun-24 % 09-Jun-24		19-Aug-24 01-May-24		-40			
	ent Installation	417		_	_	27-Oct-24	-					
<u> </u>	g - Waste Bunker & Tipping Hall Bld Process Equipment Installation	356	21	0	20-Sep-23 A	26-Oct-24	17-Oct-23	17-Sep-24	-39			
	ing and Instrument Installation and Connection Works	292			20-Sep-23 A		17-Oct-23		-105			
Process Buildin		144		4	31-Mar-24	21-Aug-24	17-Oct-23		-166			
12-3010(6F)	Piping Installation Works	120		0 09	% 31-Mar-24	28-Jul-24	17-Oct-23					
12-3020(6F)	Pipe Testing	60			% 23-Jun-24	21-Aug-24	09-Jan-24	08-Mar-24	-166			
Process Buildin		141				19-Sep-24			-165			
12-3040(6F)	Embedded Piping Installation	60			% 02-Jan-24 A		03-Feb-24					
12-3050(6F)	Piping Installation Works	120	12	0 09	% 23-May-24	19-Sep-24	03-Dec-23	31-Mar-24		Change Relationship on Predecessor 10-1250 from FS60 to FS30		
12-3075(M71)	Equipment Installation at Bassin Area at +6.5mPD (included Boiler Drainage Tanks)	120	12	0 09	% 02-May-24	29-Aug-24	10-Dec-23	07-Apr-24	-144			
Process Buildin	ng (Module 3)	120	12	0	05-Feb-24 A	17-Oct-24	07-Mar-24	04-Jul-24	-105			
12-3080(6F)	Embedded Piping Installation	60			% 05-Feb-24 A		12-Apr-24		-69			
12-3090(6F)	Piping Installation Works	120			% 20-Jun-24	17-Oct-24 01-Jun-24	07-Mar-24		-105			
Process Buildir 12-3160(6F)	Embedded Piping Installation	60			20-3ep-23 A % 20-Sep-23 A		09-Jan-24					
	Equipment (Module 1)	120			10-Mar-24 A		22-Dec-23		-100			
12-4000(6G_R1)	Deliver and installation of Ash Treatment Equipments	120			% 10-Mar-24 A		22-Dec-23			Change Relationship from Predecessor	•	
										from FS30 to FF0		
	Equipment (Module 2)	120			20-Jun-24	17-Oct-24	27-Feb-24		-114			
12-4010(6G_R1)	Deliver and installation of Ash Treatment Equipments	120			% 20-Jun-24 24-May-24		27-Feb-24 08-Dec-23		-114			
12-4020(6G R1)	Equipment (Module 3) Deliver and installation of Ash Treatment Equipments	120			24-May-24 % 24-May-24		08-Dec-23					
	g (Cranes and Shredder)	120		_	,	31-Aug-24			17			
Process Buildin		123	15	3	15-Mar-24 A	31-Aug-24	29-Jan-24	17-Sep-24	17			
13-1000-1(6)	Ash Crane Installation @+15.3mPD	70	7	0 09	% 01-May-24*		11-May-24		10			
13-1000-2(6)	Shredder Installation	70	7	0 09	% 04-Jun-24	12-Aug-24	29-Jan-24	07-Apr-24	-127			
13-1000-3(6)	Hoist Installation	70			% 08-May-24	16-Jul-24		17-Sep-24				
13-1000-5(6B) 13-1000-6(6B)	EOTC & Monorail Hoist System installation in Waste Crane Control Room (+33.5 & 36.5mPD) EOTC & Monorail Hoist System installation in Ash Crane Control Room (+15.8mPD & +19.9mPD)	70			% 10-May-24 % 31-May-24	18-Jul-24 08-Aug-24	10-Jul-24	17-Sep-24 17-Sep-24				
13-1000-7(6B)	EOTC & Monorail Hoist System installation in Mechanical Shredder Area +28.5mPD	70			% 23-Jun-24	31-Aug-24		17-Sep-24	17			
13-1000-8(6B)	Monorail Hoist System installation in CCR Electrical Switch room +13.75mPD	60	6	0 09	% 23-Jun-24	21-Aug-24	01-May-24	29-Jun-24	-53			
13-1000-9(6B)	Monorail Hoist System installation in CCR Electrical Switch room +23mPD	60			% 09-Jun-24	-	01-May-24		-39			
13-1010(6B)	EOTC Hoist System installation in Main Workshop & Store +15.3mPD	60			% 15-Mar-24 A				140 29	Update Actual Start Date		
Process Buildir 13-1004-1(M71)	Ash Crane Installation @+15.3mPD	70			31-May-24 % 31-May-24	19-Aug-24	10-Jun-24	17-Sep-24				
13-1004-1(M71) 13-1004-6(M71)	EOTC & Monorail Hoist System installation in Ash Crane Control Room (+15.8mPD & +19.9mPD)	70			% 11-Jun-24	19-Aug-24		17-Sep-24				
Process Building	g (WWTP)	211	15			26-Oct-24			-112			
13-1010-1(6)	WWTP Piping and instrument installation	120	12	0 09	% 27-Nov-23 A	26-Oct-24	09-Mar-24	06-Jul-24	-112			
WWTP Mechani	ical equipment installation	120	12	0	24-May-24	20-Sep-24	08-Feb-24	06-Jun-24	-106			
13-1010-12(M63)	Equipments for Bio-Tank Area @+3.3mPd	120			% 24-May-24		08-Feb-24					
13-1010-13(M63)	Equipments for Centrate Area, Inlet Sump & EQ Tank Area @+2.0mPd	120			-	20-Sep-24						
13-1010-5(6B) 13-1010-6(6B)	EOTC Hoist System installation in WWTP +6.5 Monorail Hoist System installation in WWTP +10mPD & +13.3mPD	60			% 24-May-24 % 24-May-24	22-Jul-24 22-Jul-24	09-Mar-24 09-Mar-24					
13-1010-0(0B) 13-1010-7(6B)	LVSG 6A/6B @ WWTP Switch room +13.3mPD	60				22-Jul-24 22-Jul-24	09-Mar-24					
13-1010-8(6B)	UPS DB @ WWTP Switch room @13.3mPd	60	6				09-Mar-24					
13-1020(6F)	Equipment Installation for Equipment Rm, Sludge Dewatering Rm & Chemical Rm Area @+6.5mPd	120			% 24-May-24		08-Feb-24		-106			
13-1030(6F)	Equipment Installation for MBR Tank, DAF & Chemical Tank Area @+10.0mPd	60			% 29-Jun-24	-	09-Mar-24					
13-1040(6F)	Equipment for Pretreatment, Chemical Tank, RO, MBR, AQP, MCC & Control Area @+12.5mPd	60 145			-	22-Jul-24 01-Oct-24	09-Mar-24	,	-76			
13-1010-3(6B)	g (Central Control System Installation) Mechanical equipment installation (Control Room 2 +36.5mPD)	145			10-May-24 % 10-May-24		20-Feb-24		-80			
13-1980	Control Systems Installation at CCR	90			% 21-Jun-24		02-Mar-24					
13-1990	Cable laying and Termination	90			% 21-Jun-24	· ·	02-Mar-24					
13-2160(6B)	DCS Installation	90		0 09	% 21-Jun-24	18-Sep-24	02-Mar-24	30-May-24	-111			
13-2210(6B)	CMMS Installation	90			% 21-Jun-24		02-Mar-24					
13-2260(6B)	IDMS installation	90			% 21-Jun-24	· ·	02-Mar-24	,				
	OMS Installation											
13-2270(6B) 13-2280(6D)	OMS Installation Monorail Hoist System installation in CCR Electrical Switch room +13.75mPD	90			% 21-Jun-24 % 21-Jun-24		02-Mar-24 01-Apr-24					

<b>3-Month Rolling</b>	Programme	(March	2024)
PAGE 12 OF 15			

Critical Remaining Work 🔶

٠ Critical

Contract No Management Fac	o. EP/SP/66/12 cilities, Phase 1	R	表示 化 我 我 我 我 我 我 我 我 我 我 我 我 我 我 我 我 我 我
202 Apr 77	24 May 78		Jun
77	78		79
			Security, Surveillance &
			· · · · · · · · · · · · · · · · · · ·
			Embedded Piping Insta
			Embedded Piping Installation
		[	
	EOTC Hoist System installation	in Main Workshop •	Store +15 3mPD
	COTO HOISE SYSTEM INSTANDUN	i in want work shup &	prote that and the
		r	
		L	
<ul> <li>Actrual Milestone</li> </ul>			
<ul> <li>Critical Milestone</li> </ul>	9		

ID	Adivity Name	Original	Remaining	Activity % Current Start	Current Finis	h Late Start	Late Finish		M76 Remarks		grated Waste Manage
		Duration	Duration	Complete			05.1.01	Float		Mar 76	Apr 77
13-1000-4(6B) 13-1010-4(6B)	Waste Crane Switch room E&I Equipment installation @+29.5mPd, inclusive of Control Chair and Junction by Mechanical equipment installation (Switch Room +28.25mPD)	00 bx in WCCR 60 145	60 145	,	29-Jul-24 06-Oct-24		25-Jun-24 25-Jun-24	-34			
13-2280(6B)	Transformer @ Process Bldg. switch room x4 Nos. @+13.3 mPD	90	90					-54			
13-2280-1(6B)	LVSG 1A/1B and 2A/2B (below Toilet/Server Room - Process building Switch room)	90	90					-64			
13-2280-2(6B)	UPS @ Process Building Switch room and Battery room	90	90	0% 11-May-24	08-Aug-24	28-Mar-24	25-Jun-24	-44			
Process Building	- Boiler House & Flue Gas Treatment Bld Process Equipment Installation	357	205	15-Aug-23 A	21-Oct-24	08-Oct-23	29-Sep-24	-22			
Process Building	(Installation TPU Module)	357	205	15-Aug-23 A	21-Oct-24	08-Oct-23	29-Sep-24	-22			
TPU Train 1		305	153	15-Aug-23 A	30-Aug-24	08-Oct-23	20-Apr-24	-132			
13-1040	Boiler Condition Check and Repair	70	70	0% 10-Apr-24*	18-Jun-24	30-Jan-24	08-Apr-24	-71			
13-1050	Remaining Equipment Installation at GL	120	17				03-Nov-23	-165			Ren
13-1060	Pipe Connection to FGT Unit	120	57		-		03-Dec-23	_			
13-1070	Pipe Insulation Works	60	60		25-Jul-24		07-Apr-24	-109			
13-1080 13-1090	Electrical instrument and Cabling Works Boiler Pressure Test	90	90 15		30-Aug-24 30-Jun-24		08-Mar-24 20-Apr-24	-175			
TPU Train 2	DOIGH FIGSSOLG LESK	305	153								
13-1130	Boiler Condition Check and Repair	70	70		18-Jun-24	11-Feb-24		-59			
13-1140	Remaining Equipment Installation at GL	120	35			14-Oct-23	· ·				
13-1150	Pipe Connection to FGT Unit	120	60	5	,						
13-1160	Pipe Insulation Works	60	60		28-Jul-24		07-Apr-24	-112		1	
13-1170	Electrical instrument and Cabling Works	90	90	0% 02-Jun-24	30-Aug-24	10-Dec-23	08-Mar-24	-175			
TPU Train 3		211	167	27-Nov-23 A	13-Sep-24	24-Nov-23	29-Sep-24	16			
13-1220	Boiler Condition Check and Repair	71	71	0% 31-Mar-24	09-Jun-24		05-May-24	-35			
13-1230	Remaining Equipment Installation at GL	121	54				16-Jan-24	-128			
13-1240	Pipe Connection to FGT Unit	121	85				24-Feb-24				
13-1250	Pipe Insulation Works	120	108				29-Sep-24				
13-1260	Electrical instrument and Cabling Works	90	90		13-Sep-24	17-Jan-24		-151			
TPU Train 4		181	167		13-Sep-24						
13-1310	Boiler Condition Check and Repair	70	70		08-Jun-24		20-May-24				2
13-1320 13-1330	Remaining Equipment Installation at GL Pipe Connection to FGT Unit	120	31 68		,		28-Dec-23 26-Feb-24				
13-1340	Pipe Insulation Works	120	120		30-Jul-24		20-Feb-24 29-Sep-24				
13-1350	Electrical instrument and Cabling Works	90	90	'	13-Sep-24		15-Apr-24	-151			
TPU Train 5	Jan State	204	204		20-Oct-24	15-Oct-23		-138			
13-1490	Boiler Condition Check and Repair	70	70	0% 31-Mar-24	08-Jun-24	27-Mar-24	04-Jun-24	-4			
13-1500	Remaining Equipment Installation at GL	120	114			15-Oct-23					····
13-1510	Pipe Connection to FGT Unit	120	114	5% 27-Mar-24 A	20-Sep-24	14-Dec-23	05-Apr-24	-168		_	
13-1520	Pipe Insulation Works	120	120	0% 23-Jun-24	20-Oct-24	07-Jan-24	05-May-24	-168			
TPU Train 6		236	205	22-Dec-23 A	21-Oct-24	14-Oct-23	19-Jun-24	-124			
13-1395(M63)-2	TPU-6 Welding to Base Plate	20	1	95% 22-Dec-23 A	31-Mar-24	14-Oct-23	14-Oct-23	-169			TPU-6 Welding to Base Plate
13-1400	Boiler Condition Check and Repair	70	70		08-Jun-24	11-Apr-24	19-Jun-24	11			
13-1410	Remaining Equipment Installation at GL	120	114	5% 31-Mar-24 A			05-Feb-24			_	
13-1420	Pipe Connection to FGT Unit	120	114			14-Dec-23		-169			
13-1430	Pipe Insulation Works	120	120		21-Oct-24		,				
J	(Installation of Flue Gas Module)	327	175		21-Sep-24		-				
FGC Train 1		305	153		30-Aug-24						
13-1580	FGC Unit Condition Check and Repair	70	70		08-Jun-24						Remaining Ed
13-1590 13-1600	Remaining Equipment Installation at GL	90	12 57		· ·		03-Nov-23				Remaining E
13-1610	Pipe Connection Works to TPU and Pipebridge Pipe Insulation Works	90	57 90		-		03-Dec-23 05-Jan-24				
13-1620	Electrical instrument and Cabling Works	90	90				08-Mar-24		Changed relation to 16-1540 to FF+70		
FGC Train 2		305	153		30-Aug-24				•		
13-1650	FGC Unit Condition Check and Repair	70	70	0% 31-Mar-24	08-Jun-24	31-Oct-23	08-Jan-24	-152			
13-1655(6A)	Installation 4 nos. of Transformers for Process Module 1	14	14		01-Jun-24		09-Dec-23				
13-1660	Remaining Equipment Installation at GL	90	25	71.67% 15-Aug-23 A	25-Apr-24	16-Oct-23	10-Nov-23	-166			
13-1670	Pipe Connection Works to TPU and Pipebridge	90	45	50% 01-Jan-24 A	29-May-24	27-Oct-23	10-Dec-23	-171			
13-1680	Pipe Insulation Works	90	90	0% 31-Mar-24	28-Jun-24	08-Oct-23	05-Jan-24	-175			
13-1690	Electrical instrument and Cabling Works	90	90		0		08-Mar-24	_	Changed relation to 16-1540 to FF+70		
FGC Train 3		173	167		13-Sep-24						
13-1720	FGC Unit Condition Check and Repair	70	70				27-Mar-24				
13-1730 13-1740	Remaining Equipment Installation at GL	90	51 90		-		16-Dec-23 24-Feb-24				
13-1740	Pipe Connection Works to TPU and Pipebridge Pipe Insulation Works	90	90 90		29-Jun-24 29-Jul-24		24-Feb-24 27-Mar-24				
13-1750	Electrical instrument and Cabling Works	90	90				27-1viar-24 24-Mar-24				
FGC Train 4		198	167		13-Sep-24						
13-1790	FGC Unit Condition Check and Repair	70	70		08-Jun-24		27-Mar-24				
13-1795(6A)	Installation 4 nos. of Transformers for Process Module 2	14	14		15-Jun-24		25-Dec-23			1	
13-1800	Remaining Equipment Installation at GL	90	61					_			
13-1810	Pipe Connection Works to TPU and Pipebridge	90	72				26-Feb-24				<b></b>
13-1820	Pipe Insulation Works	90	90	0% 01-May-24	30-Jul-24	29-Dec-23	27-Mar-24	-124			
13-1830	Electrical instrument and Cabling Works	90	90	0% 16-Jun-24	13-Sep-24	26-Dec-23	24-Mar-24	-173			
FGC Train 5		206	175	10-Feb-24 A	21-Sep-24	14-Oct-23	05-May-24	-139			
13-1855(M63)-1	Removal of Temporary Steel from Prefab from FGC-5	14	7	50% 10-Feb-24 A	06-Apr-24	14-Oct-23	20-Oct-23	-169			Removal of Temporar
13-1855(M63)-2	FGC-5 Welding to Base Plate	14	2	85% 16-Mar-24 A	02 Apr 24	12-Nov-23	14 Nov 22	140			FGC-5 Welding to Base Pla

3-Month Rolling Programme (March 2024)	
PAGE 13 OF 15	

Critical Remaining Work 🔶 ♦ ♦ Milestone

٠



)	Activity Name	Original			% Current Star	t Current Finis	n Late Start	Late Finish		M76 Remarks	Mar	Α
		Duration		Comple	_		015101		Float		76	Apr 77
13-1860 13-1870	FGC Unit Condition Check and Repair Remaining Equipment Installation at GL	70 90			% 02-Apr-24		26-Feb-24 26-Nov-23	05-May-24	-36 -128			
13-1880	Pipe Connection Works to TPU and Pipebridge	90			% 24-Jun-24	21-Sep-24			-169			
GC Train 6	Letter and the second later of the second	174	174					05-May-24	-138			
13-1925(M63)-1	Removal of Temporary Steel from Prefab from FGC-6	14	2	85.71	% 06-Feb-24	A 01-Apr-24	14-Oct-23	15-Oct-23	-169			Removal of Temporary Steel
13-1930	FGC Unit Condition Check and Repair	70	70	0	% 31-Mar-24	08-Jun-24	26-Feb-24	05-May-24	-34			
13-1940	Remaining Equipment Installation at GL	90				A 24-Jun-24		05-Feb-24	-140			
13-1950	Pipe Connection Works to TPU and Pipebridge	90 144			% 23-Jun-24 08-Apr-24		12-Jan-24 26-Nov-23		-163 -61			
CC Equipment In		144				-			-57			
CC Equipment 1					08-Apr-24		26-Nov-23					
3-2000-1(M63) 3-2010	Condensate Tank & Equipments Delivery and installation (Module 1) Piping and Instrument Installation and Connection Works	80 80			% 08-Apr-24 % 08-May-24	26-Jun-24 26-Jul-24	26-Nov-23 11-Feb-24		-134 -87			
13-2020	Pipe Insulation Works	80			% 07-Jun-24		11-Apr-24	· ·	-57			
3-2030	Cable Laying and Termination Works	80	80	0	% 07-Jun-24	25-Aug-24	11-Apr-24	29-Jun-24	-57			
CC Equipment 2	Installation	90	90		01-Jun-24	29-Aug-24	24-Dec-23	22-Mar-24	-160			
3-2040-1(M63)	Condensate Tank & Equipments Delivery and installation (Module 2)	90			% 01-Jun-24	ů		22-Mar-24	-160			
	quipment Installation	218				A 03-Oct-24			-96			
	ule 1 Installation	181				A 27-Aug-24			-154			
3-2120-2(7)	Install temporary external enclosure for STG unpacking and assembly	30			% 31-Mar-24	· ·		27-Nov-23	-154			
3-2120-3(7)	STG Module 1 unpack and assembly	30			% 30-Apr-24	,		27-Dec-23	-154			
3-2130 3-2140	Equipment, Piping and Instrument Installation and Connection Works Turbine Hall Piping Insulation Works	60 60			% 30-May-24 % 29-Jun-24			25-Feb-24 26-Mar-24	-154 -154			++
3-2150	Turbine Electrical installation and instrumentation Works	120			% 30-Apr-24			26-Mar-24	-154			
3-2160(6)	Install Maintenance Girder & Crane at Module 1 @+22.247mPd	60				A 05-Apr-24			-130			Install Maintenance
urbine Hall Modu	ule 2 Installation	168	168		19-Apr-24	03-Oct-24	19-Nov-23	25-Apr-24	-161			
13-2170	STG Module 2 transport to final position	7	7	0	% 30-Apr-24	06-May-24	21-Nov-23	27-Nov-23	-161			
3-2170-1(11)	TBS Tower 2 Delivery	0	0		%	30-May-24		22-Dec-23	-160			
3-2170-1(6H)	TBS Tower 2 transport to final position	8	8	-	% 31-May-24		23-Feb-24		-98			
13-2170-2(7) 13-2170-3(7)	Install temporary external enclosure for STG unpacking and assembly STG Module 2 unpack and assembly	30			% 07-May-24 % 06-Jun-24	05-Jun-24 05-Jul-24	28-Nov-23 28-Dec-23		-161 -161			
3-2200	Turbine Electrical installation and instrumentation Works	120			% 06-Jun-24		28-Dec-23		-161			
3-2210(6)	Install Maintenance Girder & Crane at Module 2 @+22.247mPd	21	21	0	% 19-Apr-24	09-May-24	19-Nov-23	09-Dec-23	-152	changed dur to 21d		
urbine Hall Modu	ule 3 Installation	50	50		19-May-24	07-Jul-24	08-Dec-23	26-Jan-24	-163			
3-2220	STG Module 3 transport to final position	7			% 24-May-24	,	13-Dec-23	19-Dec-23	-163			
13-2220-1(11)	TBS Tower 3 Delivery	0	0	-	%	30-May-24	00.0	19-Dec-23	-163			
3-2220-1(6H) 3-2220-2(7)	TBS Tower 3 Transport to final position Install temporary external enclosure for STG unpacking and assembly	8	30		% 31-May-24 % 08-Jun-24	07-Jun-24 07-Jul-24	20-Dec-23 28-Dec-23		-163 -163			
13-2260(6)	Install Maintenance Girder & Crane at Module 3 @+22.247mPd	21			% 19-May-24			28-Dec-23		added predecessor 10-2350(7), Changed		
										dur to 21d		
	irical Room Equipment Installation	162			31-Mar-24	08-Sep-24						
13-2280-1(6A)	Transport and Position 4 nos. of Transformers @ 1F (ZH)	30			% 01-May-24	,	_	27-Dec-23				
3-2300 3-2310	Other Associated Equipment Installation Cable Laying and Termination for Module 1	90 90			% 01-May-24 % 31-May-24				-155 -155			
	code caying and reminiation of module f	150		-	31-Mar-24				-59			
13-2290-1(6B)	Switchgear & electrical equipment Installation 1F - I&C room (I/O, Server, Control Panel, Workstation)	150		0	% 31-Mar-24		28-Jan-24		-63			
13-2290-2(6B)	Switchgear & electrical equipment Installation 1F - Generator Control Room (GPP,SP,DC batter Charger,Generator control	150			% 31-Mar-24		28-Jan-24		-63			
13-2290-3(6B)	Switchgear & electrical equipment Installation 1F - Battery Room (AC UPS, DC Battery Charger)	150	150	0	% 31-Mar-24	27-Aug-24	28-Jan-24	25-Jun-24	-63			
13-2290-4(6B)	Switchgear & electrical equipment Installation 1F - HV Switch room (GCB)	150			% 31-Mar-24		28-Jan-24		-63			
13-2290-5(6B)	Monorail Hoist System installation in Turbine Hall (1st Floor @+15)	90 132			% 30-Apr-24		01-Apr-24 27-Feb-24		-29 -71			
	trical Room @+23.50mPD Installation 6 nos, of Transformers @ Turbine Hall Electrical Room 3F 23.5mPD	132			30-Apr-24 % 12-May-24				-71			
3-2280-2(6A) 3-2290	Switchgear & electrical equipment Installation 3F (MCC-7,8,9,14,15,16, VSD ,soft starter,UPS)	120			% 12-1viay-24 % 12-May-24	· ·	27-Feb-24		-75			
13-2290-6(6B)	Monorail Hoist System installation in Turbine Hall (3rd Floor @+23.5)	90			% 30-Apr-24	28-Jul-24			-29			
	CW Bld Equipment Installation	151				A 28-Aug-24			-60			
	Equipment Installation	141	141			A 18-Aug-24			-50			
3-2320	Air Compressor Rm Equipment installations	90	81	10			10-Feb-24		-50			
3-2700(M62)	Piping installation and connections	90			% 21-Apr-24	19-Jul-24	02-Mar-24	,	-50			
3-2710(M62)	Electrical Instrumentation and Insulation Installations	90			% 21-May-24	•	01-Apr-24	_	-50			
-2720(M62)	Cable Laying and Termination Works for Air Compressor	90			% 21-May-24		01-Apr-24		-50			
	nent Installation	100			21-May-24	, , , , , , , , , , , , , , , , , , ,		16-May-24	-104			
-2330	CCCW Equipment Installation	100 161			% 21-May-24	28-Aug-24 27-Oct-24		16-May-24	-104	Changed dur to 100		
2390	Mechanical Equipment and Piping Installation	150			% 30-May-24		12-Feb-24		- 108			
2410	Electrical and instrumentation Installation	150			% 19-May-24				- 108			
410-1(6D)	Transformer @ WTP Bldg Switchroom +6.5mPD	150			% 30-May-24		12-Feb-24		-108			
2410-3(6D)	Delivery and fabrication of Water Tank @+6.5mPD	90			% 28-May-24				-76			
2410-4(6B)	EOTC & Monorall Hoist System installation in WTP +6.5mPD	90			% 28-May-24				23			
2410-5(6B)	Monorail Hoist System installation in WTP +13.5mPD	90			% 28-May-24				-51			
2410 (((D)	MCC-12 @ WTP Switch Room	90	90	0	% 29-Jun-24	26-Sep-24	01-Apr-24	29-Jun-24	-89			13
		00	00	^	% 20 lun 24	26 Car 24	01 Apr 24	20 Jun 24	00			
2410-6(6B) 2410-7(6B) 2410-8(6B)	DB for MCC-12 @ WTP Switch Room UPS DB @ WTP Switch room @+6.5mPd	90			% 29-Jun-24 % 29-Jun-24	· · ·	01-Apr-24 01-Apr-24		-89 -89			

3-Month Rolling Programme (March 2024)
PAGE 14 OF 15

Critical Remaining Work 🔶

Critical

٠

Contract No Management Fac	o. EP/SP/66/12 cilities, Phase 1	<b>P</b> <sup>₽</sup>	境保護署 vironmental Protection Department
202 Apr 77	24 <u>May</u> 78		Jun 79
			FGC Unit Condition Check and Remaining Equipment Insta
orary Steel from Prefab from FG	C-6		
			FGC Unit Condition Check and Rep Remain
			Con
	nstall temporary external enclosu		
		S	G Module 1 unpack and assembly
itenance Girder & Crane at Mod	ule 1 @+22.247mPd		
	STG Module 2 transp		
		+	TBS Tower 2 Delivery TBS Tower 2 transport to final position
			Install temporary external enclosure for S
	Install Maintena	nce Girder & Crane a	Module 2 @+22.247mPd
			STG Module 3 transport to final position
		•	TBS Tower 3 Delivery TBS Tower 3 Transport to final positic
			Install Maintenance Girder & Crane
			Transport and Position 4 nos. of Transformers @ 1F
			Air Compressor
	Deliver and Position of 11kV Tran	s formers @+6 5mPD	(KS)
Actrual Milestone			
<ul> <li>Critical Milestone</li> </ul>	;		

D	Adivity Name	Original R	omaining	Activity % Curre	nt Start Curren	nt Finish I at	to Start Lato F	Finish	Total M76 Remarks	integr	rated Waste Management Facilities, Phase 1	
			Duration	Complete					Float	Mar 76	Apr May	Jun
-2440	132kV GIS Switch Gear @+6.5mPD	110	110	0% 02-J	in-24 19-Se	p-24 07-	-Feb-24 26-M	Nay-24	-116	10	11 10	17
3-2450	GIS Insulation Switchboard installation	110	110	0% 02-J	in-24 19-Se	p-24 07-	-Feb-24 26-M	Nay-24	-116			
-2460	Main Switch Board Installation	110	110	0% 02-J			-Feb-24 26-M	-				
-2470	Other Associated Equipment Installation	110	110		ay-24 31-Au	•		,			EOTC Hoist System installation in Substation @+14.1mPD	
-2630(6B) -2640(7)	EOTC Hoist System installation in Substation @+14.1mPD Deliver and Position of EDGs	30	30	98% 31-L 0% 02-J	ec-23 A 31-Ma				-83			
water Intake (		90	30 90		in-24 01-Jui in-24 07-Se		-Feb-24 07-M					
2540-1(6B)	Monorail Hoist System installation in Sea Water Intake Pump Area	90	90	0% 09-J			-Apr-24 29-Ju					
ernal Process		174	174		ar-24 20-Se							
		148	148		ar-24 25-Au							
	n-process Piping Works	140	127			•	-Jan-24 07-A					
3-2550	dule 1 to Turbine Bld Piping Installation Works	60	60			•	-Jan-24 07-A		-119 -82 Added predecessor 10-2320(6) &			tping Installation Works
13-2000	Piping instantation works	00	00	0% 31-N	ai-24 29-ivia	IY-24 09-	-Jan-24 08-IVI	/idl-24	-82 Added predecessor 10-2320(6) & 10-2330(6), change relation with 10-2300(6) FS+0			
13-2560	Piping Pressure Test	60	60	0% 06-J	in-24 04-Au	g-24 08-	I-Feb-24 07-A	Apr-24	-119			
Pipe Rack Pipin	ig from Module 2 & 3 to Turbine Bld	60	60	30-A	or-24 28-Ju	n-24 13-	-Nov-23 11-Ja	lan-24	-169			
13-2580	Piping Installation Works	60	60	0% 30-A					-169 Added predecessor, removed predecessor 13-2550			
	Piping from Turbine Bld 1 to CCCW Bld	60	60			•	-Jan-24 05-M					
13-2670	Piping Installation Works	60	60		in-24 21-Au	•						I
	iping from Turbine Bld to ACC 1	90	90		ay-24 25-Au	°		-				
13-2640	Piping Installation Works	60	60						-87 Added predecessor 13-2010 FF+0			
13-2650	Piping Pressure Test	60 110	60 110	0% 27-J		•	-Apr-24 30-M -Mar-24 26-Ju	-				
13-2510(7)	as Ducting Works Fabrication and Delivery of Chimney Flue Gas Duct	110	110		in-24* 20-Se							
	radication and Denvery of Children Public Gas Duck	930	321		or-22 A 14-Fe							
<u> </u>		930	321		or-22 A 14-Fe							
dernal Utilities												
xternal Utilities		290	290		ay-24 14-Fe							
4-1055(7) 4-4000(7)	Cable Duct and Drawpit Utility Trench Construction Section UT1 (27nr Semi-precast segments @3nrs/5d)	290	290 60		ay-24 14-Fel ay-24* 29-Jur		-Nov-23 12-Si I-Nov-23 26-Ja					
4-4000(7)	Utility Trench Construction Section UT1 (27hr Semi-precast segments @3hrs/5d) Utility Trench Construction Section UT2 (27hr Semi-precast segments @3hrs/5d)	60	60		ay-24 29-Jui ay-24 29-Jui		-Dec-23 26-Fe					
4-4020(7)	Utility Trench Construction Section UT3a (14nr Semi-precast segments @2nrs/5d)	45	45	0% 01-N	3		-Jan-24 12-M					
4-4025(7)	Utility Trench Construction Section UT3b (11nr Semi-precast segments @2nrs/5d)	45	45	0% 08-J			-Feb-24 22-M					
4-4040(7)	Utility Trench Construction Section UT5 (29nr Semi-precast segments @3nrs/5d)	60	60	0% 15-N	ay-24 13-Jul	-24 27-	-Feb-24 26-A	Apr-24	-78			
rainage Works		290	290	30-A	or-24 13-Fel	b-25 28-	-Dec-23 12-O	Oct-24	-124			
Overtopping Dra	ain System	62	62	07-J	in-24 07-Au	g-24 15-	-Jan-24 16-M	Nar-24	-144			
West Culvert (2.5n		62	62	07-J	in-24 07-Au	g-24 15-	-Jan-24 16-M	Aar-24	-144			
14-3010	Pipe Section (69m @5m/d)	62	62	0% 07-J	in-24 07-Au	g-24 15-	-Jan-24 16-M	Nar-24	-144			
J/G Storm Drain	nge System	290	290	30-A	or-24 13-Fe	b-25 28-	-Dec-23 12-0	Oct-24	-124			
14-1000(6D)	External Drainage System Construction Works (Common trench construction Utility Trench)	290	290	0% 30-A	or-24 13-Fe	b-25 28-	-Dec-23 12-0	Oct-24	-124			
U/G Wastewate	r Drainage System	290	290	30-A	or-24 13-Fel	b-25 28-	I-Dec-23 12-0	Oct-24	-124			
14-1000-1(M55)10		290	290		or-24 13-Fe				-			
arthing System		180	106		or-22 A 15-Jul							
16-1900-2(6)	Installation of Ground Earthing Mesh	180			or-22 A 15-Jul							
rks By CLP		381	290	30-N	ov-23 A 14-Jai	n-25 05-	-Dec-23 30-A	Aug-24	-137			
stallation of Tra	insmission System	162	71	30-N	ov-23 A 10-Ju	n-24 05-	-Dec-23 02-Fe	eb-24	-128			
-0800	450 days Prior to Commencement of System Commissioning Test	0	0	0% 10-J			-Dec-23		-175			<ul> <li>450 days Prior to Cor</li> </ul>
-1000	Construction of Transmission System	90	60		ov-23 A 29-Ma							Construction of Transmission System
emaining Install	lation Works by CLP	270	270	20-A	or-24 14-Jan	n-25 05-	-Dec-23 30-A	Aug-24	-137			
5-1005	Availability of CLP Equipment Room for Equipment Installation (no later than 10 mths before energization)	0	0	0% 20-A			-Dec-23		-137		<ul> <li>Availability of CLP Equipment Room for Equipment Installation (no late</li> </ul>	rthan 10 mths before energization)
5-1007	Telecom / Digital / Security / Metering Equipment Installation	210	210	0% 19-J	in-24 14-Jai	n-25 03-	-Feb-24 30-A	Aug-24	-137			

Actual Work 

Critical Remaining Work 🔶

•

# Appendix B Summary of Implementation Status of Environmental Mitigation

# <u>Appendix B</u>

Table B.1	Implementation Schedule for Air Quality Measures for the IWMF at the artificial island near SKC

				Imple	ementa	ation S	tages*	Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Status and Remarks
S3b.8.1	<ul> <li><u>Air Pollution Control (Construction Dust)</u> <u>Regulation &amp; Good Site Practices</u></li> <li>Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.</li> <li>Use of frequent watering for particularly dusty construction areas and areas close to ASRs.</li> <li>Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.</li> <li>Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs.</li> <li>Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</li> <li>Establishment and use of vehicle wheel and body washing facilities at the exit points of the site.</li> <li>Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading</li> </ul>	Work site / During the construction period	Contractor					Air Pollution Control (Construction Dust) Regulation	Implemented N/A for dust control measures for transportation outside site boundary

Keppel Seghers – Zhen Hua Joint Venture

				Imple	ementa	ation S	stages*	Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Status and Remarks
	<ul> <li>points, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods.</li> <li>Imposition of speed controls for vehicles on unpaved site roads. Ten kilometers per hour is the recommended limit.</li> <li>Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs</li> <li>Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.</li> </ul>								
S3b.6.3	<ul> <li>Odour Removal by Deodorizers</li> <li>Deodorizers with 95% odour removal efficiency would be installed for the air ventilated from the mechanical treatment plant before discharge to the atmosphere</li> </ul>	Waste reception halls, the waste storage area, the mechanical treatment plant / During design & operation phase	IWMF Operator	~		✓		EIAO-TM	N/A
S3b.8.2	Air Pollution Control and Stack Monitoring	IWMF stack emissions / During	IWMF Operator	✓		~		EIAO-TM, Supporting Document for	N/A

Keppel Seghers – Zhen Hua Joint Venture

				Imple	ementa	ation S	tages*	Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	ο	Dec	Legislation and Guidelines	Status and Remarks
	<ul> <li>Air pollution control and stack monitoring system will be installed for the IWMF to ensure that the emissions from the IWMF stack will meet the proposed target emission limits.</li> <li>Voluntary Enhancement Measures in Flue Gas Cleaning and Emission Monitoring:         <ol> <li>Two-stage bag filter system with reagent recirculation;</li> <li>In addition to SCR, provide SNCR for removal of NO<sub>x</sub>; tighten emission limit for halfhourly and daily NO<sub>x</sub> to 160 mg/m<sup>3</sup> and 80 mg/m<sub>3</sub> respectively;</li> <li>Well-mixed feed waste: to minimize the fluctuation of pollutant loading on the flue gas treatment system;</li> <li>Two more AQMSs would be set up at South Lantau and Shek Kwu Chau respectively;</li> <li>Limit levels will be set under the IWMF DBO contract to require that waste feed shall cease if any of the air pollutant has exceeded 95% of the emission concentration limit as stipulated in the Special Process license;</li> </ol> </li> </ul>	design & operation phase						Application for Variation of Environmental Permit (EP- 429/2012)	

	Environmental Protection			Imple	ementa	ation S	stages*	Relevant	Implementation Status and Remarks
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	ο	Dec	Legislation and Guidelines	
	<ol> <li>Each incineration chamber shall be fitted with auxiliary burners to ensure complete burn out of the combustion gases.</li> </ol>								
-	<ul> <li>Treated Fly Ash and Air Pollution Control Residues:</li> <li>During testing and commissioning, the Contractor shall sample and test every container of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria shown in Table 2 of the Environmental Permit. If a test result confirms that any one of the samples does not conform to the limits and the criteria, the Contractor shall be required to sample and test every container of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and test every container of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria for the next six months.</li> <li>During the first six months of operation, if the requirements in (a) could be fully conformed with, the Contractor shall sample and test every shipload of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria for the next six months.</li> </ul>	IWMF stack emissions / During design & operation phase	IWMF Operator					Supporting Document for Application for Variation of Environmental Permit (EP- 429/2012)	N/A

				Imple	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	of the Environmental Permit. The								
	Contractor shall take two samples								
	from each shipload for testing and								
	the Contractor shall not dispose of								
	any of that shipload of treated fly ash								
	and air pollution control residues until								
	the test results confirm that the two								
	samples conform to the limits and the								
	criteria. If a test result confirms that								
	any one of the two samples does not								
	conform to the limits and the criteria,								
	the Contractor shall be required to								
	sample and test every shipload of								
	treated fly ash and air pollution								
	control residues for conformance to								
	the Incineration Residue Pollution								
	Control Limits and leachability								
	criteria for the next six months. The								
	Contractor shall make due allowance								
	in the Design and the Operation for								
	the time to sample and test treated fly								
	ash and air pollution control residues								
	before disposal.								
	<ul> <li>Provided that there is no non-</li> </ul>								
	conformance to the Incineration								
	Residue Pollution Control Limits and								
	leachability criteria shown in Table 2								
	of the Environmental Permit								
	throughout a continuous sixmonth								
	period in the Operation Period, the								
	testing frequency shall be reduced to								
	monthly interval.Two samples from								
	one shipload of treated fly ash and air								

				Imple	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	pollution control residues shall be collected and tested for conformance to the Incineration Residue Pollution Control Limits and leachability criteria. The Contractor shall not dispose of any of the treated fly ash and air pollution control residues in the shipload which the samples are taken until the test results confirm that the samples conform to the limits and the criteria. If the test result confirm that any one of the samples does not conform to the limits and the criteria, the Contractor shall be required to sample and test every shipload of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria shown in Table 2 of the Environmental Permit for the next six months.								
- <u></u>	<ul> <li>During testing and commissioning, the Contractor shall sample and test every container of bottom ash for conformance to the leachability criteria shown in Table 2 of the Environmental Permit. If a test result confirms that any one of the samples does not conform to the criteria, the Contractor shall be required to sample and test every</li> </ul>	IWMF stack emissions / During design & operation phase	IWMF Operator	×		v		Supporting Document for Application for Variation of Environmental Permit (EP- 429/2012)	N/A

				Imple	ementa	ation S	stages*	Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Status and Remarks
	container of bottom ash for								
	conformance to the leachability								
	criteria for the next six months.								
	• During the first six months of								
	operation, if the requirements in (d)								
	could be fully conformed with, the Contractor shall sample and test								
	one shipload of bottom ash each								
	month for conformance to the								
	leachability criteria shown in Table 2								
	of the Environmental Permit. The								
	Contractor shall take two samples								
	from the shipload for testing and the								
	Contractor shall not dispose of any								
	of that shipload of bottom ash until								
	the test results confirm that the two								
	samples conform to the criteria. If a								
	test result confirms that any one of								
	the two samples does not conform								
	to the criteria, the Contractor shall								
	be required to sample and test each								
	shipload of bottom ash for conformance to the leachability								
	criteria for the next six months. The								
	Contractor shall make due								
	allowance in the Design and the								
	Operation for the time to sample and								
	test bottom ash before disposal.								
	<ul> <li>Provided that there is no non-</li> </ul>								
	conformance to the leachability								
	criteria shown in Table 2 of the								
	Environmental Permit throughout a								
	continuous six month period in the								

Keppel Seghers – Zhen Hua Joint Venture

				Imple	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation C	Des	С	0	Dec	Legislation and Guidelines	
	Operation Period, the Contractor shall be allowed to take two samples from any one shipload of bottom ash once every six months for conformance to the leachability criteria. The Contractor shall not dispose of any of the bottom ash in the shipload which the samples are taken until the test results confirm that the samples conform to the criteria. If the test result confirm that any one of the samples does not conform to the criteria, the Contractor shall be required to sample and test one shipload of bottom ash each month for conformance to the leachability criteria shown in Table 2 of the Environmental Permit for the next six months as stipulated above.								

\* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

#### Table B.2 Implementation Schedule for Noise Impact Measures for the IWMF at the artificial island near SKC

					Imple	ementa	ation S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent		Des			Dec	Legislation and Guidelines	Implementation Status and Remarks
S4b.8	Good site practices to limit noise emissions a source and use of quiet plant and working methods, whenever practicable.	Work Sites / Construction Period	EPD and contractors	its		~			EIAO-TM	Implemented
& S4b.8	<ul> <li>All the ventilation fans installed in the below will be provided with silencers or acoustics treatment.</li> <li>(i) Stack of the incinerator</li> <li>(ii) Ventilation systems within the IWMF Enclosure and discharge silencer or other acoustic treatment equipment should be installed in the air-cooled chillers</li> <li>Other than provision of silencer or other acoustic treatment equipment for the stack of the incinerator and ventilation system, the detailed design should incorporate the following good practice in order to minimize the nuisance on the neighboring NSRs.</li> <li>(i) The exhaust of the ventilation system and any opening of the building should be located facing away from any NSRs; and</li> </ul>	Within IWMF area / Construction Period	EPD and contractors	its	~		<b>v</b>		EIAO-TM	N/A
	<ul> <li>(ii) Louver or other acoustic treatment equipment could also be applied to the exhaust of the ventilation system.</li> </ul>									

Keppel Seghers – Zhen Hua Joint Venture

				Impl	ementa	ation S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Timing Agent Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks	
-	<ul> <li><u>Voluntary Enhancement Measure</u></li> <li>Provision of air-conditioner and double glazed windows to nearby NSR at Shek Kwu Chau (i.e. SARDA) as precautionary measures.</li> </ul>	IWMF site	Design team, contractor, IWMF operator	•	~			Supporting Document for Application for Variation of Environmental Permit (EP- 429/2012)	Implemented

\* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

#### Table B.3 Implementation Schedule for Water Quality Measures for the Artificial Island near SKC

				Impl	ementa	ation S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
S5b.8.1.1		Work site / During the construction period	Contractor					Guidelines EIAO-TM; ProPECC PN 2/23; WPCO	Deficiency of Mitigation Measures but rectified by the Contractor

				Imple	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 2/23, which states that the retention time for silt/sand traps should be 5 minutes under maximum flow conditions. The detailed design of the sand/silt traps shall be undertaken by the contractor prior to the commencement of construction.								
	<ul> <li>Water pumped out from foundation piles must be discharged into silt removal facilities.</li> </ul>								
	<ul> <li>Measures should be taken to minimize the ingress of site runoff and drainage into excavations. Drainage water pumped out from excavations should be discharged into storm drains via silt removal facilities.</li> </ul>								
	• During rainstorms, exposed slope/soil surfaces should be covered by a tarpaulin or other means, as far as practicable. Other measures that need to be implemented before, during and after rainstorms are summarized in ProPECC PN 2/23.								
	<ul> <li>Exposed soil areas should be minimized to reduce potential for increased siltation and contamination of runoff.</li> </ul>								

				Impl	ementa	tion S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	Ο	Dec	Legislation and Guidelines	
	<ul> <li>Earthwork final surfaces should be well compacted and subsequent permanent work or surface protection should be immediately performed.</li> <li>Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or site should be covere</li></ul>								
S5b.8.1.2	similar fabric during rainstorms.General Construction ActivitiesConstruction solid waste should be collected, handled and disposed of properly to avoid entering to the nearby watercourses and public drainage system. Rubbish and litter from construction sites should also be collected to prevent spreading of rubbish and litter from the site area.Itis recommended to clean the construction sites on a regular basis.	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO	Implemented

Keppel Seghers – Zhen Hua Joint Venture

				Impl	ementa	ation S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
S5b.8.1.3	There is a need to apply to EPD for a discharge license for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge license. All the run-off and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression and general cleaning etc., can minimize water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO license which is under the ambit of regional office of EPD.	During the construction	Contractor		×			EIAO-TM; ProPECC PN 2/23; WPCO	Implemented Discharge License was issued on 15/02/2022
S5b.8.1.4	Accidental Spillage Contractor must register as a chemical waste producer if chemical wastes would be produced from construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	Work site / During the construction period	Contractor		~			EIAO-TM; ProPECC PN 2/23; WPCO; WDO	Deficiency of Mitigation Measures but rectified by the Contractor
S5b.8.1.5		During the construction	Contractor		~			EIAO-TM; ProPECC PN 2/23; WPCO; WDO	Implemented

Keppel Seghers – Zhen Hua Joint Venture

				Impl	ementa	tion S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	appropriately equipped to control these discharges.								
S5b.8.1.6	Oils and fuels should only be used and stored in designated areas which have pollution prevention facilities. All fuel tanks and storage areas should be sited on sealed areas in order to prevent spillage of fuels and solvents to the nearby watercourses. All waste oils and fuels should be collected in designated tanks prior to disposal.	During the	Contractor		~				Deficiency of Mitigation Measures but rectified by the Contractor
S5b.8.1.7		construction	Contractor		~				Deficiency of Mitigation Measures but rectified by the Contractor
	<ul> <li>Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport.</li> <li>Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents.</li> <li>Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.</li> </ul>								

				Implem	enta	tion S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
S5b.8.1.8	Temporary sanitary facilities, such as	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO	Implemented
S5b.8.1.9	<ul> <li><u>Reclamation and Construction of</u> <u>Breakwaters</u></li> <li>The proposed dredging and reclamation should be commenced in phases. The breakwaters and seawalls should be constructed and the reclamation should be started within the enclosed breakwaters after the completion of the breakwater. Silt curtain should be applied around caissons / blockwork during the filling of the cell to prevent the loss of fine in the filling material.</li> <li>The maximum production rate for dredging for the anti-scouring protection layer shall not exceed the permitted maximum daily dredging rate and carried out within its respective distance from the nearest non-translocatable coral community by the dredging contractor as specified in S.2.18 of the Further Environmental Permit (no.:FEP-01/429/2012/A). It is recommended to employ closed grab with small capacity of 2 m<sup>3</sup> to control the dredging rate.</li> </ul>	Work site / During the marine construction period	Contractor		~			EIAO-TM; WPCO, Supporting Document for Application for Variation of Environmental Permit (EP- 429/2012) Further Environmental Permit No. FEP- 01/429/2012/A	N/A
	<ul> <li>Any gap that may need to be provided for marine access will be located at the middle</li> </ul>								

				Impl	ementa	ation S	Stages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	of the North Western seawall, away from the identified coral communities and will be shielded by silt curtains systems to control sediment plume dispersion.								
	• The silt curtain system at marine access opening should be closed as soon as the barges passes through the marine access opening in order to minimize the period of curtain opening. Filling should only be carried out behind the silt curtain when the silt curtain is completely closed.								
	• To enhance the effectiveness of the silt curtain at the marine access, the northern breakwater would be built before the commencement of the reclamation to reduce the current velocity towards the marine access opening.								
	<ul> <li>The silt curtain system at marine access opening should be regularly checked and maintained to ensure proper functioning.</li> </ul>								
	• Where public fill is proposed for filling below +2.5mPD, the fine content in the public fill will be controlled to 25% which is in line with the CEDD's General Specification;								
	• The filling for reclamation should be carried out behind the seawall. The filling material should only consist of public fill, rock and sand. The filling composition and filling rates at each filling area should follow those delineated in Table 1 of the FEP-01/429/2012/. The filling above high watermark is not restricted:								

				Impl	ementa	ation S	stages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	<ul> <li>No dredging should be carried out within 16m to the nearest non-translocatable coral community;</li> </ul>								
	• Daily site audit including full-time on-site monitoring by the ET is recommended during the dredging for anti-scouring protection layer for checking the compliance with the permitted no. of grab;								
	<ul> <li>Closed grab dredger should be used to minimize the loss of sediment during the raising of the loaded grabs through the water column;</li> </ul>								
	<ul> <li>Frame-type silt curtains should be deployed around the dredging operations;</li> </ul>								
	<ul> <li>Floating-type silt curtains should be used to surround the circular cell during the sheetpiling work;</li> </ul>								
	<ul> <li>The descent speed of grabs should be controlled to minimize the seabed impact speed;</li> </ul>								
	<ul> <li>Barges should be loaded carefully to avoid splashing of material;</li> </ul>								
	<ul> <li>All barges used for the transport of dredged materials should be fitted with tight bottom seals in order to prevent leakage of material during loading and transport;</li> </ul>								
	<ul> <li>All barges should be filled to a level which ensures that material does not spill over during loading and transport to the disposal site and that adequate freeboard is</li> </ul>								

				Impler	nenta	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	maintained to ensure that the decks are not washed by wave action.								
	• No DCM works should be carried out within 100m to the nearest non-translocatable coral colony / colonies.								
	• Silt curtains should be employed to enclose DCM field trial and any full scale DCM work to minimize the potential impacts on water aspect.								
	<ul> <li>A sand blanket is to be placed on top of the marine deposit using tremie pipes prior to the DCM ground treatment to avoid seabed sediment disturbance.</li> </ul>								
S5b.8.2.3	<u>Operational Phase Discharges</u> A pipeline drainage system will serve the development area collecting surface runoff from paved areas, roof, etc. Sustainable drainage principle would be adopted in the drainage system design to minimize peak surface runoff, maximize permeable surface and maximize beneficial use of rainwater.	Within IWMF site / During the operational phase	IWMF Operator	~		~		WPCO	N/A
S5b.8.2.4	Oil interceptors should be provided in the drainage system of any potentially contaminated areas (such as truck parking area and maintenance workshop) and regularly cleaned to prevent the release of oil products into the storm water drainage system in case of accidental spillages. Accidental spillage should be cleaned up as soon as practicable and all waste oils and fuels should be collected and handled in	site / During the operational	IWMF Operator	×		✓		WPCO; WDO	N/A

				Imple	ementa	tion St	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing		Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	compliance with the Waste Disposal Ordinance.								
S5b.8.2.5	<u>Refuse Entrapment</u> Collection and removal of floating refuse should be performed at regular intervals for keeping the water within the Project site boundary and the neighboring water free from rubbish.	Within the Project site / During the operational phase	IWMF Operator			✓		WPCO	N/A
S5b.8.2.6		Transportat ion of Incineration Ash / During the operational phase	IWMF Operator			~			N/A

\* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

#### Table B.4 Implementation Schedule for Waste Management Measures for the IWMF at the artificial island near SKC

		Environmental Protection					tages*	Relevant		
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks	
6b.5.1.2	<ul> <li><u>Good Site Practices</u></li> <li>Adverse environmental impacts in relation to waste management are not expected, provided that good site practices are strictly followed. Recommendations for good site practices during the construction activities would include:</li> <li>Obtain relevant waste disposal permits from appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354) and subsidiary Regulations and the Land (Miscellaneous Provisions) Ordinance (Cap. 28);</li> <li>Provide staff training for proper waste management and chemical handling procedures;</li> <li>Provide sufficient waste disposal points and regular waste collection;</li> <li>Provide appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; and</li> <li>Carry out regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;</li> <li>Separate chemical wastes for special handling and disposed of to licensed facility for treatment; and</li> <li>Employ licensed waste collector to collect waste.</li> </ul>	Work Site/ During Construction Period	Contractor					WDO; LDO; ETWB TCW	Deficiency of Mitigation Measures but rectified by the Contractor	

	Environmental Protection			Impl	ement	ation S	Stages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
6b.5.1.3	<ul> <li>Waste Reduction Measures</li> <li>Good management and control can prevent the generation of a significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices.</li> <li>Recommendations to achieve waste reduction include:</li> <li>Design foundation works that could minimize the amount of excavated material to be generated.</li> <li>Provide training to workers on the importance of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling;</li> <li>Sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.);</li> <li>Segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> <li>Encourage the collection of aluminum cans by providing separate labelled bins to enable this waste to be segregated from other general refuse generated by the work force;</li> <li>Proper storage and site practices to minimize the potential for damage or contamination of construction materials; and</li> </ul>	Work Site/ During Design & Construction Period	Contractor						Deficiency of Mitigation Measures but rectified by the Contractor N/A for demolition items

					Impl	ementa	ation S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementat Agent	Implementation Agent		С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	<ul> <li>Plan and stock construction materials carefully to minimize amount of waste to be generated and to avoid unnecessary generation of waste.</li> </ul>									
6b.5.1.7	Dredged Sediment – Application of Dumping Permit The project proponent should agree in advance with MFC of CEDD on the site allocation. The project proponent or contractor for the dredging works shall then apply for the site allocations of marine sediment disposal based on the prior agreement with MFC/CEDD. The project proponent or contractor should also be responsible for the application of all necessary permits from relevant authorities, including the dumping permit as required under DASO from EPD, for the disposal of dredged sediment prior to the commencement of the dredging works.	Seawall and Reclamation site / Construction Period	EPD and contractor	its	✓	~			DASO ETWB TCW 34/2002	Implemented
6b.5.1.8	Dredged Sediment – Sediment Quality Report The project proponent or contractor will need to satisfy the appropriate authorities that the quality of the marine sediment to be dredged has been identified according to the requirements of ETWB TCW 34/2002. This should be completed well before the dredging works and would include at least the submission of a formal Sediment Quality Report under Tier I of ETWB TCW No. 34/2002 to DEP for approval. Subject to advice from DEP, it is possible that further marine SI in	Seawall and Reclamation site / Construction Period	EPD and contractor	its	✓				DASO ETWB TCW 34/2002	Implemented

				Impl	ementa	ation Stages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	O Dec	Legislation and Guidelines	
	accordance with ETWB TCW 34/2002 might be necessary for the application of dumping permit under DASO. In such case, a sediment sampling and testing proposal shall be submitted to and approved by DEP before the additional marine SI works.							
6b.5.1.9	Dredged Sediment – Sediment <u>Transportation</u> The barge transporting the sediments to the designated disposal sites should be equipped with tight fitting seals to prevent leakage and should not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP.	Seawall and Reclamation site / Construction Period	EPD and its contractor				DASO ETWB TCW 34/2002	Implemented
6b.5.1.10		Work Site/ During Design & Construction Period	Contractor	V	×		ETWB TCW No. 19/2005	Implemented

				Implementation Stages*				Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	(EMP), should be prepared in accordance with ETWB TCW No.19/2005;								
	<ul> <li>A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be adopted for easy tracking; and</li> </ul>								
	• In order to monitor the disposal of C&D materials at public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be adopted (refer to <i>ETWB TCW No. 31/2004</i> ).								
1 – 6b.5.1.12	The Contactor should prepare and implement an EMP in accordance with ETWB TCW No.19/2005, which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from construction activities. Such a management plan should incorporate site specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval. The Contractor should implement waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor, preferably on a monthly basis.	Work Site/ During Design & Construction Period	Contractor					ETWB TCW No. 19/2005	Implemented

				Impl	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
6b.5.1.13	All surplus C&D materials arising from or in connection with construction works should become the property of the Contractor when it is removed unless otherwise stated. The Contractor would be responsible for devising a system to work for on-site sorting of C&D materials and promptly removing all sorted and process materials arising from the construction activities to minimize temporary stockpiling on-site. The system should be included in the EMP identifying the source of generation, estimated quantity, arrangement for on-site sorting, collection, temporary storage areas and frequency of collection by recycling Contractors or frequency of removal off-site. <u>Chemical Wastes</u> Should chemical wastes be produced at the construction site, the Contractor would be required to register with EPD as a Chemical Waste Producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste (such as explosive, flammable, oxidizing, irritant, toxic, harmful, or corrosive). The Contractor should employ a	Work Site/ During Construction Period	Contractor		×			Waste Disposal (Chemical Waste) (General) Regulation	Implemented.

				Impl	ementa	ation S	stages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	licensed collector to transport and dispose of the chemical wastes, to either the Chemical Waste Treatment Centre at Tsing Yi, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.								
6b.5.1.14	<u>General Refuse</u> General refuse should be stored in enclosed bins or compaction units separate from C&D materials. A licensed waste collector should be employed by the Contractor to remove general refuse from the site, separately from C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	Work Site/ During Construction Period	Contractor		~			and Municipal	Deficiency of Mitigation Measures but rectified by the Contractor
6b.5.1.1 6 – 6b.5.1.33	<ul> <li><u>Biogas Generation</u></li> <li>The Contractor shall review the data and analysis results, and the data from further Site Investigation, if any. Subject to the review findings, the following gas protection measures may be considered if necessary: <ul> <li>gas monitoring after reclamation;</li> <li>passive ventilation;</li> <li>gas impermeable membrane;</li> <li>ventilation with "at risk" rooms;</li> <li>protection of utilities or below ground services;</li> </ul></li></ul>	Reclamation site (if dredging at the reclamation site is not required) / Design & Construction Period	Designer and/or contractor	✓	✓			EPD/TR8/97	N/A

				Impl	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	Ο	Dec	Legislation and Guidelines	
6b.5.2.1	<ul> <li>precautions during construction works;</li> <li>precautions prior to entry of belowground services</li> <li><u>Good Site Practices</u></li> </ul>	IWMF Site/During	IWMF Operator			✓		Waste Disposal	N/A
	<ul> <li>It is recommended that the following good operational practices should be adopted to minimise waste management impacts:</li> <li>Obtain the necessary waste disposal permits from the appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354) and Waste Disposal (Chemical Waste) (General) Regulation;</li> <li>Nomination of an approved person to be responsible for good site practice, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site;</li> <li>Use of a waste haulier licensed to collect specific category of waste;</li> <li>A trip-ticket system should be included as one of the contractual requirements and implemented by the Environmental Team to monitor the disposal of solid wastes at landfills, and to control fly tipping. Reference should be made to ETWB TCW No. 31/2004.</li> </ul>	Site/During Operation Period						Ordinance (Cap.354); Waste Disposal (Chemical Waste) (General) Regulation; ETWB TCW No. 1/2004	

				Implem	nenta	tion S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	C	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	<ul> <li>Training of site personnel in proper waste management and chemical waste handling procedures;</li> <li>Separation of chemical wastes for special handling and appropriate treatment at a licensed facility;</li> <li>Routine cleaning and maintenance programme for drainage systems, sumps and oil interceptors;</li> <li>Provision of sufficient waste disposal points and regular collection for disposal;</li> <li>Adoption of appropriate measures to minimize windblown litter and dust during transportation of waste, such as covering trucks or transporting wastes in enclosed containers; and</li> <li>Implementation of a recording system for the amount of wastes generated, and disposed of (including recycled the disposal sites).</li> </ul>								
6b.5.2.2	<ul> <li>Waste Reduction Measures</li> <li>Good management and control can prevent the generation of significant amounts of waste. It is recommended that the following good operational practices should be adopted to ensure waste reduction:</li> <li>Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> </ul>	IWMF Site/ During Operation Period	IWMF Operator			✓			Implemented

				Implem	nenta	tion S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	C	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	<ul> <li>Encourage collection of aluminum cans, plastic bottles and packaging material (e.g. carton boxes) and office paper by individual collectors. Separate labelled bins should be provided to help segregate this waste from other general refuse generated by the work force; and</li> <li>Any unused chemicals or those with remaining functional capacity should be reused as far as practicable.</li> </ul>								
6b.5.2.3	Storage, Handling, Treatment, Collection and Disposal of Incineration By-Products The following measures are recommended for the storage, handling and collection of the incineration by- products:	IWMF Site/ During Operation Period	IWMF Operator			•		Incineration Residue Pollution Control Limits	N/A
	• Ash should be stored in storage silos;								
	<ul> <li>Ash should be handled and conveyed in closed systems fully segregatedfrom the ambient environment;</li> </ul>								
	<ul> <li>Ash should be wetted with water to control fugitive dust, where necessary;</li> </ul>								
	<ul> <li>All fly ash and APC residues should be treated, e.g. by cement solidification or chemical stabilization, for compliance with the proposed Incineration Residue Pollution Control Limits and leachability criteria prior to disposal;</li> </ul>								

				Impl	ement	ation S	Stages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	• The ash should be transported in covered trucks or containers to the designated landfill site.								
	The Contractor should provide EPD with chemical analysis results of the bottom ash, and treated fly ash and APC residues to confirm that the ash/residue can comply with the proposed Incineration Residue Pollution Control Limits before disposal.								
6b.6.3.1	<ul> <li>Fuel Oil Tank Construction and Test</li> <li>The fuel tank to be installed should be of specified durability.</li> <li>Double skin tanks are preferred.</li> <li>Underground fuel storage tank should be placed within a concrete pit.</li> <li>The concrete pit shall be accessible to allow regular tank integrity tests to be carried out at regular intervals.</li> <li>Tank integrity tests should be conducted by an independent</li> </ul>	Fuel Oil Storage Tank/ During Design, Construction and Operation Periods	IWMF Contractor	×	V	×			N/A
	<ul> <li>qualified surveyor or structural engineer.</li> <li>Any potential problems identified in the test should be rectified as soon as possible.</li> </ul>								

				Impl	ementa	ation S	stages*	Relevant	n Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
6b.6.3.1	<ul> <li>Fuel Oil Pipeline Construction and Test</li> <li>Installation of aboveground fuel oil pipelines is preferable; if underground pipelines are unavoidable, concrete lined trenches should be constructed to contain the pipelines.</li> <li>Double skin pipelines are preferred.</li> </ul>	Fuel Oil Pipelines/ During Design, Construction and Operation Periods	IWMF Contractor	V	~	~			N/A
	<ul> <li>Distance between the fuel oil refuelling points and the fuel oil storage tank shall be minimized.</li> </ul>								
	<ul> <li>Integrity tests for the pipelines should be conducted by an independent qualified surveyor or structural engineer at regular intervals.</li> <li>Any potential problems identified in the test should be rectified as soon as possible.</li> </ul>								
6b.6.3.1	<ul> <li>Fuel Oil Leakage Detection</li> <li>Installation of leak detection device at storage tank and pipelines.</li> <li>Installation and use of pressure gauges (e.g. at the two ends of a filling line) in fuel filling, which allows unexpected pressure drop or difference and sign of leakage to be detected.</li> </ul>	Fuel Oil Storage Tank and Pipelines/ During Design, Construction and Operation Periods	IWMF Contractor	~	✓				N/A
6b.6.3.1	Fuel Oil Storage Tank Refuelling	Fuel Oil Refuelling Point/	IWMF Operator			✓			N/A

				Impl	ementa	ation S	stages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	Ο	Dec	Legislation and Guidelines	Implementation Status and Remarks
	<ul> <li>Storage tank refuelling (from road tanker) should only be conducted by authorized staff of the oil company using the company's standard procedures.</li> </ul>	During Operation Period							
6b.6.3.1	Fuel Oil Spillage Response An Oil Spill Response Plan should be prepared by the operator to document the appropriate response procedures for oil spillage incidents in detail. General procedures to be taken in case of fuel oil spillage are presented below.	IWMF Site/ During Operation Period	IWMF Operator			~			N/A
	Training								
	<ul> <li>Training on oil spill response actions should be given to relevant staff. The training shall cover the followings:</li> </ul>								
	<ul> <li>Tools &amp; resources to combat oil spillage and fire, e.g. locations of oil spill handling equipment and fire fighting equipment;</li> <li>General methods to deal with oil spillage and fire incidents;</li> <li>Procedures for emergency drills in the event of oil spills and fire; and</li> <li>Regular drills shall be carried out.</li> </ul>								
	Communication								
	-Establish communication channel with the Fire Services Department (FSD) and EPD to report any oil spillage incident								

				Imple	menta	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	so that necessary assistance from relevant department can be quickly sought.								
	Response Procedures								
	-Any fuel oil spillage within the IWMF site should be immediately reported to the Plant Manager with necessary details including location, source, possible cause and extent of the spillage.								
	<ul> <li>Plant Manager should immediately attend to the spillage and initiate any appropriate action to confine and clean up the spillage. The response procedures shall include the following:</li> <li>&gt;Identify and isolate the source of spillage as soon as possible.</li> <li>&gt;Contain the oil spillage and avoid infiltration into soil/ groundwater and discharge to storm water channels.</li> <li>&gt;Remove the oil spillage.</li> </ul>								
	≻Clean up the contaminated area.								
	<ul> <li>If the oil spillage occurs during storage tank refuelling, the refueling operation should immediately be stopped.</li> <li>Recovered contaminated fuel oil and the associated material to remove the spilled oil should be considered as chemical waste.</li> </ul>								

				Impl	ementa	ation S	tages*	Relevant
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation Implementation Status and and Remarks Guidelines
	procedures for chemical wastes are discussed in the following paragraphs.							
6b.6.3.2	<ul> <li><u>Chemicals and Chemical Wastes Handling &amp; Storage</u></li> <li>Chemicals and chemical wastes should only be stored in suitable containers in purpose-built areas.</li> <li>The storage of chemical wastes should comply with the requirements of the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.</li> <li>The storage areas for chemicals and chemical wastes shall have an impermeable floor or surface. The impermeable floor/ surface shall possess the following properties:         <ul> <li>Not liable to chemically react with the materials and their containers to be stored.</li> <li>Able to withstand normal loading and physical damage caused by container handling</li> <li>The integrity and condition of the impermeable floor or surface should be inspected at regular intervals to ensure that it is satisfactorily maintained</li> <li>For liquid chemicals and</li> </ul> </li> </ul>	Chemicals and Chemical Wastes Storage Area / During Operation Period	IWMF Operator					N/A
	satisfactorily maintained							

				Imple	ementa	ation S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	storage area should be bunded to contain at least 110% of the storage capacity of the largest containers or 20% of the total quantity of the chemicals/chemical wastes stored, whichever is the greater.								
	Storage containers shall be checked at regular intervals for their structural integrity and to ensure that the caps or fill points are tightly closed.								
	Chemical handling shall be conducted by trained workers under supervision.								
6b.6.3.2	Chemicals and Chemical Wastes Spillage ResponseA Chemicals and/ or Chemical Wastes Spillage Response Plan shall be prepared by the operator to document in detail the appropriate response procedures for chemicals or chemical wastes spillage incidents. General procedures to be undertaken in case of chemicals/ chemical waste spillages are presented below.• Training - Training on spill response actions	IWMF Site/ During Operation Period	IWMF Operator			✓			N/A
	should be given to relevant staff. The training shall cover the followings:								

				Impl	ementa	ation Stages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	O Dec	Legislation and Guidelines	and Remarks
	Tools & resources to handle spillage, e.g. locations of spill handling equipment;							
	<ul> <li>General methods to deal with spillage; and</li> </ul>							
	Procedures for emergency drills in the event of spills.							
	Communication							
	<ul> <li>Establish communication channel with FSD and EPD to report the spillage incident so that necessary assistance from relevant department can be quickly sought.</li> </ul>							
	Response Procedures							
	<ul> <li>Any spillage within the IWMF site should be reported to the Plant Manager.</li> </ul>							
	<ul> <li>Plant Manager shall attend to the spillage and initiate any appropriate actions needed to confine and clean up the spillage. The response procedures shall include the followings:</li> </ul>							
	Identify and isolate the source of spillage as soon as possible;							
	Contain the spillage and avoid infiltration into soil/							

				Imple	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	groundwater and discharge to storm water channels (in case the spillage occurs at locations out of the designated storage areas);								
	Remove the spillage; the removal method/ procedures documented in the Material Safety Data Sheet (MSDS) of the chemicals spilled should be observed;								
	Clean up the contaminated area (in case the spillage occurs at locations out of the designated storage areas); and								
	The waste arising from the cleanup operation should be considered as chemical wastes.								
6b.6.3.3	<ul> <li>Preventive Measures for Incineration By- products Handling</li> <li>The recommended measures listed below can minimize the potential contamination to the surrounding environment due to the incineration by-products:</li> <li>Ash should be stored in storage silos;</li> <li>Ash should be handled and conveyed in closed systems fully segregated</li> </ul>	Storage, Handling & Collection of Incineration Ash at IWMF/ During Operation Period	IWMF Operator			V			N/A

				Imple	ementa	ation S	tages*	Relevant	
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	from the ambient environment;								
	<ul> <li>Ash should be wetted with water to control fugitive dust, where necessary;</li> </ul>								
	<ul> <li>All fly ash and APC residues should be treated, e.g. by cement solidification or chemical stabilization, for compliance with the proposed Incineration Residue Pollution Control Limits and leachability criteria prior to disposal;</li> </ul>								
	<ul> <li>The ash should be transported in covered trucks or containers to the designated landfill site.</li> </ul>								
6b.6.3.4 -6b.6.3.6	Incident Record After any spillage, an incident report should be prepared by the Plant Manager. The incident report should contain details of the incident including the cause of the incident, the material spilled and estimated spillage amount, and also the response actions undertaken. The incident record should be kept carefully and able to be retrieved when necessary. The incident report should provide sufficient details for the evaluation of any environmental impacts due to the spillage and assessment of the effectiveness of measures taken.	IWMF Site/ During Operation Period	IWMF Operator			✓		Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management and the Guidance Note for Contaminated Land and Remediation.	N/A

Keppel Seghers – Zhen Hua Joint Venture

	Environmental Protection			Impl	ement	ation S	stages*	Relevant	
EIA Ref		Timing Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks	
	In case any spillage or accidents results in significant land contamination, EPD should be informed immediately and the IWMF operator should be responsible for the cleanup of the affected area. The responses procedures described in <b>Section 6b.6.3.1</b> and <b>Section 6b.6.3.2</b> of EIA report should be followed accordingly together with the land contamination assessment and remediation guidelines stipulated in the <i>Guidance Manual for Use</i> of <i>Risk-based Remediation Goals for</i> <i>Contaminated Land Management and the</i> <i>Guidance Note for Contaminated Land and</i> <i>Remediation.</i>								

\* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

	Environmental Protection			Imple	ementa	tion S	tages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
7b.8.2.1	<ul> <li>Measures to avoid direct loss of intertidal habitat</li> <li>The site boundary has been proposed to avoid direct contact with the intertidal natural rocky shore of Shek Kwu Chau. It avoids direct loss of intertidal communities and the existing natural rocky shore habitat, where Reef Egret and White-bellied Sea Eagle have been recorded within and in the vicinity of this habitat.</li> </ul>	IWMF site	Design team	<ul> <li>Image: A start of the start of</li></ul>				EIAO-TM	N/A
7b.8.2.2	<ul> <li>Measures to minimise loss of coastal subtidal habitat</li> <li>Extensive coral colonies were recorded at the coastal hard bottom habitat at Shek Kwu Chau. To avoid and minimise the extensive direct impact on the coral colonies, the proposed reclamation area has been moved further offshore to minimise loss of subtial habitat near shore.</li> </ul>	IWMF site	Design team	•				EIAO-TM	N/A
7b.8.2.3	<ul> <li>Zero Discharge Scheme</li> <li>The design scheme of the Project has avoided discharge of wastewater into the marine environment.         <ul> <li>A zero discharge scheme would be adopted during the operation of the Project.</li> <li>An on-site wastewater treatment plant would be</li> </ul> </li> </ul>	IWMF site	Design team, IWMF operator	~		~		WPCO	N/A

#### Table B.5 Implementation Schedule for Ecological Quality Measures for the IWMF at the artificial island near SKC

Integrated Waste Management Facilities, Phase 1

	Environmental Protection				Impl	ementa	ation S	tages*	Relevant	land and a first of the other
EIA Ref	Measures / Mitigation Measures	Location / Implementation Timing Agent			Des	С	ο	Dec	Legislation and Guidelines	Implementation Status and Remarks
	provided to treat the wastewater generated from the IWMF (mainly human sewage). The treated effluent would be re-used in the incineration plant and mechanical treatment plant, or for onsite washdown and landscape.									
7b.8.2.4	<ul> <li><u>Measures to avoid loss of plant</u> <u>species of conservation importance</u></li> <li>Landing portal construction works would not cause direct lost to the recorded individual of protected plant species,</li> <li>Aquilaria sinensis, at the coastal shrubland habitat at Cheung Sha. As a precautionary measure, the plant should be tagged with eye- catching tape and fenced off prior to works, in order to avoid any damage by workers.</li> </ul>	Cheung Sha landing portal	Design Contractor	team,	✓	~		✓	EIAO-TM	N/A
7b.8.3.1 - 7b.8.3.1 5	<ul> <li>Measures to minimise water quality impact</li> <li>Measures for water quality as recommended in Section 5b of the EIA Report should be implemented.</li> </ul>	Work site	Design contractor, operator	team, IWMF	•	~	~	~	EIAO-TM; ProPECC PN 2/23; WPCO	Implemented
7b.8.3.1 6 - 7b.8.3.3 0	Measures to minimise disturbance on Finless Porpoise Minimisation of Habitat Loss for Finless Porpoise	IWMF site, work site, marine traffic route	-	team, IWMF	✓	✓	✓	•	EIAO-TM, Supporting Document for Application for Variation of the Environmental	Implemented for avoidance or construction works that may produce underwater acoustic disturbance, Vessel Travel Route implementation, training of staff; N/A for other

	Environmental Protection			Imple	ement	ation S	stages*	Relevant	Implementation Status and Remarks
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	<ul> <li>Substantial revision has been made on the layout plan and form of the breakwater, in order to minimise the potential loss of important habitat for Finless Porpoise. The revision has greatly reduced the size of the embayment area, as well as the Project footprint. As a result, the size of habitat loss for Finless Porpoise has reduced from the original ~50 ha, down</li> </ul>							Permit (EP- 429/2012)	
	to ~31 ha. Avoidance of peak season for finless porpoise occurrence • To minimise potential acoustic								
	disturbance from construction activities on Finless Porpoise, construction works that may produce underwater acoustic disturbance should be scheduled outside the months with peak Finless Porpoise occurrence (December to May), including:								
	<ul> <li>sheet piling works for construction of cofferdam surrounding the reclamation area (Phase 1);</li> <li>sheet piling works for construction of the shorter section of breakwater (Phase 1);</li> </ul>								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Imple	ementa	ation S	stages*	Relevant	Implementation Status and Remarks
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	<ul> <li>sheet piling works for construction of the remaining section of breakwater (Phase 3) and</li> <li>bored piling works for berth area (Phase 3)</li> </ul>								
	Such works should be restricted within June to November. This approach would not only avoid the peak season for Finless Porpoise occurrence, the magnitude of impacts arise from acoustic disturbance would also be minimised.								
	• Since the DCM ground treatment and the installation of precast seawalls and breakwaters should generate no underwater acoustic disturbance to Finless Porpoise, no specific mitigation measures are required.								
	Opt for quieter construction methods and plants								
	<ul> <li>Considering the sensitivity of marine mammals to underwater acoustic disturbance, instead of the previously proposed conventional breakwater and reclamation peripheral structure,</li> </ul>								
	which requires noisy piling works, the current circular cells structure for								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Impl	emen	tation S	Stages*	Relevant	Implementation Status and Remarks
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	ο	Dec	Legislation and Guidelines	
	<ul> <li>breakwater and reclamation peripheral structure is proposed. A quieter sheet piling method using vibratory hammer or hydraulic impact hammer, should be adopted for the installation of circular cells for cellular cofferdam and northern breakwater during Phase 1, and southern breakwater Phase 3;</li> <li>Non-percussive bore piling method would be adopted for the installation of</li> </ul>								
	tubular piles for the berth construction during Phase 3.								
	Monitored exclusion zones								
	During the installation/re-								
	installation/relocation process of floating type silt curtains, in order to								
	avoid the accidental entrance and								
	entrapment of marine mammals within								
	the silt curtains, a monitored exclusion								
	zone of 250 m radius from silt curtain								
	should be implemented. The								
	exclusion zone should be closely monitored by an experienced marine								
	mammal observer at least 30 minutes								
	before the start of installation/re-								
	installation/relocation process. If a								
	marine mammal is noted within the								
	exclusion zone, all marine works								
	should stop immediately and remain								
	idle for 30 minutes, or until the								

Integrated Waste Management Facilities, Phase 1

Environmental Protection				Imple	ementa	ation S	tages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	exclusion zone is free from marine mammals.								
	• The experienced marine mammal observer should be well trained to detect marine mammals. Binoculars should be used to search the exclusion zone from an elevated platform with unobstructed visibility. The observer should also be independent from the project proponent and has the power to call-off construction activities.								
	<ul> <li>In addition, as marine mammals cannot be effectively monitored within the proposed monitored exclusion zone at night, or during adverse weather conditions (i.e. Beaufort 5 or above, visibility of 300 meters or below), marine works should be avoided under weather conditions with low visibility.</li> </ul>								
	Marine mammal watching plan								
	Upon the completion of the installation/re- installation/relocation of floating type silt curtain, all marine works would be conducted within a fully enclosed environment within the silt curtain, hence exclusion zone monitoring would no longer								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Impl	ementa	ation §	Stages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	be required. Subsequently, a marine mammal watching plan should be implemented.								
	The plan should include regular inspection of silt curtains, and visual inspection of the waters surrounded by the curtains. Special attention should be paid to Phase 2 (reclamation) where the floating type still curtain would be opened occasionally for vessel access, leaving a temporary 50 m opening. An action plan should be devised to cope with any unpredicted incidents such as the case when marine mammals are found within the waters surrounded by the silt curtains.								
	Small openings at silt curtains								
	• The openings for vessel access at the silt curtains should be as small as possible to minimise the risk of accidental entrance.								
	Adoption of regular travel route								
	• During construction and operation, captains of all vessels should adopt regular travel route, in order to minimize the chance of vessel collision with								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Imple	ement	tation S	Stages*	Relevant	and Remarks
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	ο	Dec	Legislation and Guidelines	
	marine mammals, which may otherwise result in damage to health or mortality. The regular travel route should avoid areas with high sighting density of Finless Porpoise as much as possible.								
	Vessel speed limit								
	<ul> <li>The frequent vessel traffic in the vicinity of works area may increase the chance of mammal mammals being killed or seriously injured by vessel collision. A speed limit of ten knots should be strictly enforced within areas with high density of Finless Porpoise.</li> <li>Passive acoustic monitoring and land-based theodolite monitoring surveys should be adopted to verify the predicted impacts and effectiveness of the proposed mitigation measures.</li> </ul>								
	Training of Staff								
	<ul> <li>Staff, including captains of vessels, should be aware of the guidelines for safe vessel operations in the presence of cetaceans during construction and operation phases. Adequate trainings should be provided</li> </ul>								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection				Impl	ement	ation S	stages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent		Des C O		Dec	Legislation and Guidelines	Implementation Status and Remarks	
7b.8.3.3 1 - 7b.8.3.3 4	Measures to minimise impact on corals Coral translocation	IWMF site	Design contractor, operator	team, IWMF	~	~	<b>√</b>	~	EIAO-TM	Implemented, tagged coral found missing after hitting by typhoons
	<ul> <li>Coral communities within and in proximity to the proposed dredging sites would be disturbed by the Project due to the dredging operations. In order to minimise direct loss of coral communities, translocation of corals that are attached to movable rocks with diameter less than 50 cm are recommended. In order to avoid disturbance to corals during the spawning period, the spawning season of corals (June to August) should be avoided; and that translocation should be carried out during the winter season (November- March).</li> </ul>									Re-tagging of 10 coral colonies at indirect impact site and control site were conducted in November and December 2018 respectively.
	• The REA survey results suggest that the 198 directly affected coral colonies were attached to movable rocks (less than 50 cm in diameter). It is technically feasible to translocate them to avoid direct loss.									
	<ul> <li>Prior to coral translocation, a more detailed baseline survey, including a coral mapping survey, is recommended to further confirm the</li> </ul>									

	Environmental Protection			Imple	ement	ation S	Stages*	Relevant	Implementation Status and Remarks
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	Ο	Dec	Legislation and Guidelines	
	exact number and location of coral colonies within the potentially affected area. A more detailed coral translocation plan, including selection of suitable recipient site, plan for coral translocation, and event / action plan for coral monitoring should be submitted upon approval of this Project, prior to commencement of construction works. Advice from relevant governmental departments (i.e. AFCD) and professionals would be sought after, in order to identify a desirable location for the relocation of coral communities. Post-translocation monitoring on the translocated corals should also be considered.								
	• A coral monitoring programme is recommended to assess any adverse and unacceptable impacts to the coral communities at the coasts of Shek Kwu Chau during construction of the Project.								
	Phasing of Works								
	• To minimize environmental impacts, the proposed phasing of construction works has been carefully designed to								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Impl	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Measures / Mitigation Measures	Location / Timing	Indicincination	Des	С	0	Dec	Legislation and Guidelines	
	reduce the amount of concurrent works, hence minimize SS elevation and the associated impacts on corals.								
7b.8.3.3 5 - 7b.8.3.4 1	<ul> <li><u>Specific measures to minimize</u> <u>disturbance on breeding White-bellied</u> <u>Sea Eagle</u></li> <li>Avoidance of noisy works during the breeding season of White-bellied Sea Eagle</li> <li>To minimize potential noise disturbance from construction activities or WBSE, noisy construction works should be scheduled outside their breeding season (December to May) to minimise potential degradation in breeding ground quality and breeding activities, including:</li> <li>sheet piling works for construction of cofferdam surrounding the reclamation area (Phase 1);</li> <li>sheet piling works for construction of the shorter section of breakwater (Phase 1);</li> <li>sheet piling works for construction of the remaining section of breakwater (Phase 3); and</li> <li>bored piling works for berth area (Phase 3).</li> </ul>		Design Team, Contractor, IWMF operator					EIAO-TM	Implemented

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Impl	ementa	ation S	tages*	Relevant	Implementation Status and Remarks
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	
	Opt for quieter construction methods and plants								
	<ul> <li>To minimise potential construction noise disturbance on WBSE, quieter construction methods and plants should be adopted. The recommended noise mitigation measures in the Noise chapter (Section 4b.8 of the EIA Report) should be implemented to minimise potential noise disturbance to acceptable levels.</li> </ul>								
	Restriction on vessel access near the nest of White-bellied Sea Eagle								
	• During construction and operation, in order to minimize disturbance on the existing WBSE nest, a pre-defined practical route to restrict vessel access near the nest should be adopted to keep vessels and boats as far away from the nest as possible.								
	White-bellied Sea Eagle monitoring programme								
	<ul> <li>A WBSE monitoring programme is recommended to assess any adverse and unacceptable impacts to the breeding activities of WBSE during construction and operation of the</li> </ul>								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Imple	ementa	ation S	tages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	Project. Monitoring surveys for WBSE would include pre-construction phase (twice per month for duration of three months during their breeding season -between December and May, immediately before the commencement of works), construction phase, and operation phase (two years after the completion of construction works).								
	<ul> <li>Surveys should be conducted twice per month during their breeding season (from December to May); and once per month outside breeding season (June to November). More details on monitoring for WBSE are presented in the EM&amp;A Manual.</li> </ul>								
	Education of staff								
	• Staff, including captains of all vessels during construction and operation phases, should be aware of the ecological importance of WBSE. Awareness should be raised among staff to minimise any intentional or unintentional disturbance to the nest.								
1	Minimisation of Glare Disturbance								

	Environmental Protection			Impl	ementa	ation Stag	les* Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Implementation Timing Agent		Des	С	0 [	Dec Legislation and Guidelines	and Remarks
	<ul> <li>To minimise glare disturbance on WBSE, which may cause disorientation of birds by interfering with their magnetic compass, and disruption in behavioural patterns such as reproduction, fat storage and foraging pattern, any un-necessary outdoor lighting should be avoided, and in-ward and down-ward pointing of lights should be adopted.</li> </ul>							
-	<ul> <li><u>Construction of Seawall/Breakwaters</u></li> <li>To widen the open channel between the Artificial Island and Shek Kwu Chau.</li> <li>To design the precast concrete seawall with environmental friendly features.</li> </ul>	IWMF site	Design team, contractor, IWM operator	=	V		Supporting Document for Application for Variation of Environmenta Permit (EP- 429/2012)	
7b.8.3.42	<ul> <li>Opt for Quieter Construction Methods and Plants</li> <li>Quieter construction methods and plants should be used to minimise disturbance to the nearby terrestrial habitat and the associated wildlife.</li> </ul>	Work site	Design team, contractor, IWM operator	=	<b>v</b>	*	✓ EIAO-TM	Implemented
7b.8.3.43	<ul> <li>Measures to minimize impacts from artificial lighting</li> <li>Unnecessary lighting should be avoided, and shielding of lights should be provided to minimize disturbance from light pollution on fauna groups.</li> </ul>	IWMF site	Design team contractor, IWM operator		V	×	EIAO-TM	Implemented

	Environmental Protection			Impl	ement	ation S	Stages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	ο	Dec	Legislation and Guidelines	Implementation Status and Remarks
7b.8.3.4 4 - 7b.8.3.4 5	<ul> <li>Measures to minimize accidental spillage</li> <li>Regular maintenance of vessels, vehicles and equipment that may cause leakage and spillage should only be undertaken within predesignated areas, which are appropriately equipped to control the associated discharges.</li> <li>Oils, fuels and chemicals should be contained in suitable containers, and only be used and stored in designated areas which have pollution prevention facilities. All fuel tanks and storage areas should be sited on sealed areas in order to prevent spillage of fuels and solvents to the nearby watercourses. All waste oils and fuels should be collected in designated tanks prior to disposal.</li> </ul>	Work site	Contractor, IWMF operator		✓	×	×	EIAO-TM	Deficiency of Mitigation Measures but rectified by the Contractor.
7b.8.3.46	<ul> <li>Measures to minimise sewage effluent</li> <li>Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce.</li> </ul>	Work site	Contractor		~			EIAO-TM	N/A
7b.8.3.47	Measures to minimise drainage and construction runoff	Work site	Contractor		~		~	EIAO-TM	N/A

	Environmental Protection			Imple	ementa	ation S	tages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	•		Agent						
	runoff. - Earthwork final surfaces should be well compacted. Subsequent permanent surface protection								
	should be immediately performed.								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Impl	ementa	ation S	tages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	<ul> <li>Open stockpiles of construction materials, and construction wastes on- site should be covered with tarpaulin or similar fabric during rainstorms.</li> </ul>								
7b.8.3.48	<ul> <li>Measures to minimise impacts from general construction activities</li> <li>To avoid the entering of construction solid waste into the nearby habitats, construction solid waste should be collected, handled and disposed of properly to avoid entering to the nearby habitats. It is recommended to clean the construction sites on a regular basis.</li> </ul>	Work site	Contractor		~			EIAO-TM	Implemented
7b.8.3.49	<ul> <li><u>Pest Control</u></li> <li>Good waste management practices should be adopted at the IWMF in order to minimise the risk of introduction of pest to the island: <ul> <li>Transportation of wastes in enclosed containers</li> <li>Waste storage area should be well maintained and cleaned</li> <li>Waste should only be disposed of at designated areas</li> <li>Timely removal of the newly arrived waste</li> <li>Removal of items that are capable of retaining water</li> </ul> </li> </ul>	IWMF site	IWMF operator			•			N/A

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Impl	ementa	ation St	tages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	ο	Dec	Legislation and Guidelines	Implementation Status and Remarks
	<ul> <li>Rapid clean up of any waste spillages</li> <li>Maintenance of a tidy and clean site environment</li> <li>Regular application of pest control</li> <li>Education of staff the importance of site cleanliness</li> </ul>								
7b.8.3.50	Control of Marine Habitat Quality during Operation Phase	IWMF site	IWMF operator			~		EIAO-TM; WPCO	N/A
	<ul> <li>Depending on the seabed condition of the approach channel for marine vessels during operation phase of the IWMF, maintenance dredging may be required to ensure safe access. In order to avoid degradation in water quality due to elevation in SS and dispersion of sediment plume due to dredging works, it is recommended that any future maintenance dredging works should not be carried out within 100 m from the shore, similar to that of the dredging for anti-scouring protection layer during construction phase. All maintenance dredging works should be carried out with the implementation of silt curtain to control the dispersion of SS. The production rate should comply with the permit dredging rate and number of grab per hour.</li> </ul>								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Impl	ementa	ation S	tages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
7b.8.4. 1 – 7b.8.4. 8	<ul> <li>Measures</li> <li><u>Compensation of loss of important habitat of Finless Porpoise</u></li> <li><i>Designation of Marine Park</i></li> <li>The Project Proponent has made a firm commitment to seek to designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, in accordance with the statutory process stipulated in the Marine Parks Ordinance, as a compensation measure for the habitat loss arising from the construction of the IWMF at the artificial island near SKC.</li> <li>The Project Proponent shall seek to complete the designation by 2018 to tie in with the operation of the IWMF at the artificial island near SKC.</li> <li>A further study should be carried out to review relevant previous studies and collate available information on the ecological characters of the proposed area for marine park designation; and</li> </ul>	Waters between Shek Kwu Chau and Soko Islands	•	v					And Remarks
	review available survey data for Finless Porpoise, water quality, fisheries, marine traffic and planned development projects in the vicinity. Based on the findings, ecological profiles of the proposed area for								

Integrated Waste Management Facilities, Phase 1

	Environmental Protection			Impl	ementa	ation Sta	ges*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	marine park designation should be established, and the extent and location of the proposed marine park be determined. The adequacy of enhancement measures should also be reviewed.								
	<ul> <li>In addition, a management plan for the proposed marine park should be proposed, covering information on the responsible departments for operation and management (O&amp;M) of the marine park, as well as the O&amp;M duties of each of the departments involved.         Consultation with relevant government departments and stakeholders should be conducted under the study. The study should be submitted to Director of Environmental Protection (DEP) for approval before the commencement of construction works.</li> </ul>								
	• The Project Proponent should provide assistance to AFCD during the process of the marine park designation.								
7b.8.5. 1 – 7b.8.5. 4	<ul> <li><u>Additional Enhancement or</u> <u>Precautionary Measures</u> <u>Deployment of Artificial Reefs</u></li> <li>Deployment of artificial reefs (ARs) is an enhancement measure for the</li> </ul>	Within the proposed marine parl under this study	(	<b>v</b>		•		EIAO-TM	N/A

Integrated Waste Management Facilities, Phase 1

Keppel Seghers – Zhen Hua Joint Venture

	Environmental Protection			Impl	ementa	ation S	stages*	Relevant	
EIA Ref	Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Implementation Status and Remarks
	<ul> <li>marine habitats. ARs are proposed to be deployed within the proposed marine park under this Project. The exact location, dimension and type of ARs to be deployed are to be further investigated along with the further study of the proposed marine park under this Project. The proposed ARs would be deployed at the same time as the complete designation of marine park.</li> <li><i>Release of Fish Fry at Artificial Reefs and Marine Park</i></li> <li>Release of fish fry at the proposed marine park under this study, should enhance the fish resources in the nearby waters, and subsequently food sources for Finless Porpoise. The proposed ARs with various micro-habitats would have the potential to provide shelter and nursery ground for the released fish fry.</li> </ul>							Guideiines	
	The frequency and quantity of fry to be released should be agreed by AFCD.								

\* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

					Imple	ementa	ation S	Stages*	Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent		Des C O		Dec	Legislation and Guidelines	Status and Remarks	
8b.8.1.2	<ul> <li><u>Measure to minimize loss of and disturbance</u> on fisheries resources</li> <li>Alteration to the phasing of works, construction method, and layout plan of the IWMF at the artificial island near SKC has</li> </ul>	IWMF site	Design contractor	team,	✓ 	~		✓	EIAO-TM	N/A
	been made. The total fishing ground to be permanently lost due to the project has been significantly reduced from ~50 ha to ~31 ha. By adopting the current circular cells instead of the conventional seawall construction method, SS elevation would be greatly reduced, minimizing adverse impact on the health of fisheries resources.									
8b.8.1.3	Measure to minimize impingement and entrainment	IWMF site	Design contractor, operator	team, IWMF	<b>√</b>	~	~		EIAO-TM	N/A
	<ul> <li>Provision of a screen at the water intake point for desalination plant would be essential to minimize the risk of impingement and entrainment of fisheries resources (including fish, larvae and egg) through the intake point.</li> </ul>									

#### Table B.6 Implementation Schedule for Fisheries Measures for the IWMF at the artificial island near SKC

#### Keppel Seghers – Zhen Hua Joint Venture

				Impl	ementa	ation S	Stages*	Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Status and Remarks
8b.8.1.4- 8b.8.1.6	<ul> <li>Measures to control water quality</li> <li>No wastewater effluent, anti-fouling agent, heavy metals and other contaminants would be released during operation phase of the Project.</li> <li>Mitigation measures recommended in the water quality impact assessment during construction and operation would serve to protect fisheries resources from indirect impacts resulted from the Project</li> </ul>	Work site, IWMF site	Design team, contractor, IWMF operator			✓		EIAO-TM	Implemented
8b.8.1.7 - 8b.8.1.8	<ul> <li>Additional Enhancement / Precautionary Measures</li> <li>Artificial Reefs (ARs) are proposed to be deployed within the proposed marine park under this Project as an enhancement measure for the marine habitats. This enhancement feature would bring positive impacts to the previously identified important spawning and nursery ground for fisheries resources.</li> <li>Release of Fish Fry at Artificial Reefs</li> <li>Release of fish fry has been proposed under this Project. The proposed deployment of ARs within the proposed marine park would provide shelter and nursery ground for the released fish fry. The frequency and quantity of fry to be released should be agreed by AFCD.</li> </ul>	Within the proposed marine park in the waters between Soko Islands and Shek Kwu Chau		<b>~</b>		<b>~</b>		EIAO-TM	N/A

\* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

I able B.7 Implementation Schedule for Landscape and Visual Measures for the IWMF at the artificial Island near SK	Table B.7	Implementation Schedule for Landscape and Visual Measures for the IWMF at the artificial island near SKC
--	-----------	--

				Imple	ementa	ation S	stages*	Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Timing Agent		Des	С	0	Dec	Legislation and Guidelines	Status and Remarks
S10b.10 MLVC- 01	Grass-hydroseeded bare soil surface and stock pile area	Work site / During construction phase	Contractor		<b>~</b>				N/A
S10b.10 MLVC-02	<ol> <li>Landscape Design         <ol> <li>Early planting using fast grow trees and tall shrubs at strategic locations within site as buffer to block view corridors to the site from the VSRs, and to locally screen haul roads, excavation works and site preparation works.</li> <li>Use of tree species of dense tree crown to serve as visual barrier.</li> <li>Hard and soft landscape treatment (e.g. trees and shrubs) of open areas within development to provide a background for the outdoor containers from open view, shade and shelter, and a green appearance from surrounding viewpoints.</li> <li>Planting strip along the periphery of the project site.</li> <li>Selected tree species suitable for the coastal condition.</li> </ol> </li> </ol>	Work site / During design & construction phases	Contractor		Ý				N/A

				Imple	Implementation Stages*			Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Status and Remarks
S10b.10 MLVC-03	<ul> <li><u>Adoption of Natural Features of the Existing</u> <u>Shoreline</u></li> <li>1) Use of boulders in different sizes and with the similar textures of the existing rocky shores for the construction of breakwater and artificial shoreline in order to blend into the existing natural shoreline.</li> </ul>	Work site / During construction phase	Contractor		<ul> <li>Image: A start of the start of</li></ul>				N/A
	2) Use of cellular cofferdam together with the natural boulders to form a curvature shoreline for the reclamation area to echo with the natural shoreline of SKC.								
S10b.10 MLVC-04	<ul> <li><u>Greening Design (Rooftop &amp; Vertical Greening)</u></li> <li>1) Implementation of rooftop and vertical greening (vertical building envelope) along the periphery of each building block to increase the amenity value of the work, moderate temperature extremes and enhance building energy performance. The greening appearance of the building shall enhance its visual harmony with the natural surroundings as well as reduce the apparent visual mass of the structure.</li> </ul>	Work site / During design & construction phases	Contractor		<				N/A
	<ol> <li>Sufficient space between concrete enclosure and stack to minimize heat transfer.</li> </ol>								
	3) Introduction of landscape decks at the stack to further enhance the overall natural and green concept unique for this site.								

				Imple	ementa	ation S	stages*	Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Des C O D Agent			Dec	Legislation and Guidelines		
S10b.10	Visual Mitigation and Aesthetic Design	Structures in IWMF /	Contractor	~	✓				N/A
MVC-01	<ol> <li>Use of natural materials with recessive color to minimize the bulkiness of the building.</li> </ol>	During design & constructio							
	<ol> <li>Adoption of innovative aesthetic design to the chimney to minimize or visually mitigate the massing of the chimney so as to reduce its visual impact to the surroundings.</li> </ol>	n phases							
	<ol> <li>Color of the chimney in a gradual changing manner to match with the color of the sky.</li> </ol>								
	<ol> <li>Provision of observation deck for public enjoyment at the top of the chimney to diminish the feeling of chimney.</li> </ol>								
	<ul> <li>5) Provision of sky gardens between the two stacks to allow additional greening for enhancing the aesthetic quality. Maintenance access (elevator and staircase) from the ground floor to the sky gardens will be provided to allow maintenance of the sky gardens.</li> </ul>								
	<ol> <li>Integration of the visitor's walkway with different material façade design of incinerator plant to enhance the aesthetic quality.</li> </ol>								
S10b.10 MVC-02	Control of the security floodlight for construction areas at night to avoid excessive glare to the surrounding receiver.	Work site / During construction phase	Contractor		✓				Implemented

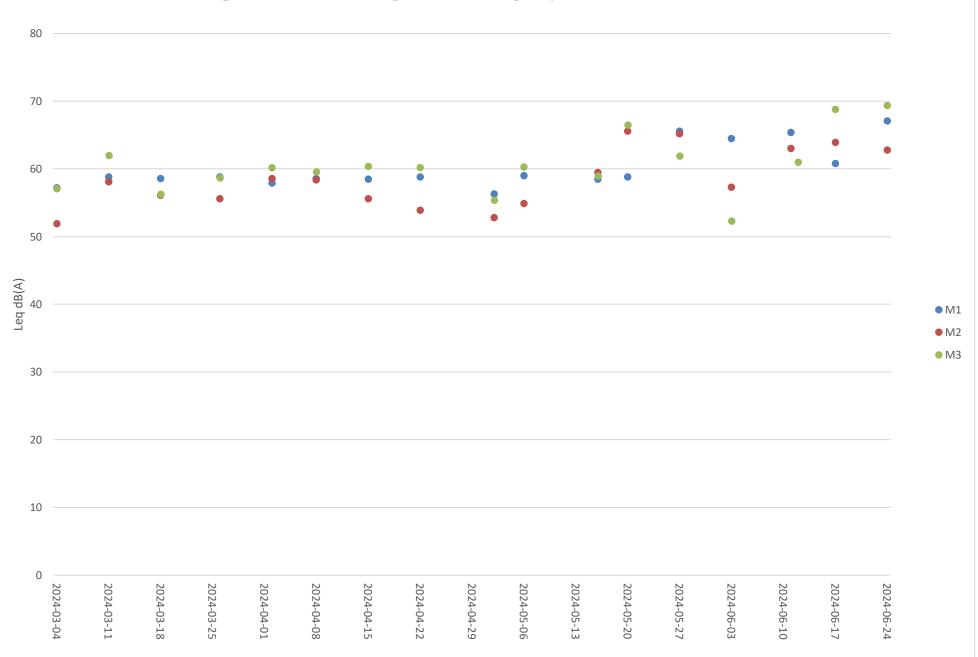
				Imple	Implementation Stages*			Relevant	Implementation		
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation and Guidelines	Status and Remarks		
S10b.10 MVC-03	Optimization of the construction sequence and construction programme to minimize the duration of impact.	Work site / During design & construction phases	Contractor	~	~				Implemented		
S10b.10 MVC-04	Storage of the backfilling materials for site formation & construction materials / wastes on site at a maximum height of 2m, covered with an impermeable material of visually un- obtrusive material (in earth tone).	Work site / During construction phase	Contractor		~				N/A		
S10b.10 MVC-05	Reduction of the number of construction traffic at the site to practical minimum.	Work site / During construction phase	Contractor		~				Implemented		
S10b.10 MLVO-01	Planting Maintenance Provision of proper planting maintenance and replacement of defective plant species on the new planting areas to enhance aesthetic and landscape quality.	Project site / During Operation phase	Contractor			✓			N/A		
S10b.10 MVO-01	Environmental Education Centre Development of an Environmental Education Center, in which regular exhibitions and lectures to promote environmental awareness and waste reduction concept would be provided, as a part of the IWMF for the general public to alleviate negative public perceptions of the development.	Project site / During Operation phase	Contractor			×			N/A		
S10b.10 MVO-02	Control of Light Control the numbers of lights and their intensity to a level that is good enough to meet the safety requirements at night but not excessive.	Project site / During Operation phase	Contractor			<b>~</b>			N/A		

Keppel Seghers – Zhen Hua Joint Venture

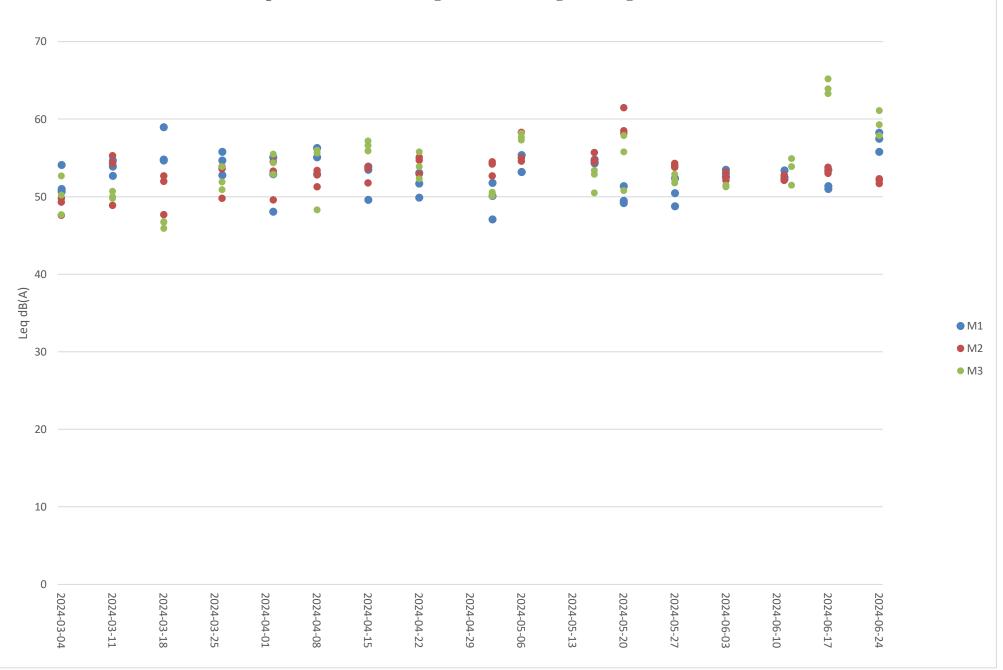
				Imple	ementa	mentation Stages*		Relevant	Implementation
EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Des	С	0	Dec	Legislation "" and Guidelines	Status and Remarks
S10b.10 MVO-03	Control of Operation Time	Project site / Durina	Contractor			~			N/A
	Minimization of the frequency of waste transportation to practical minimum (e.g. limit the reception of MSW from 8 am to 8 pm)	Operation							

\* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

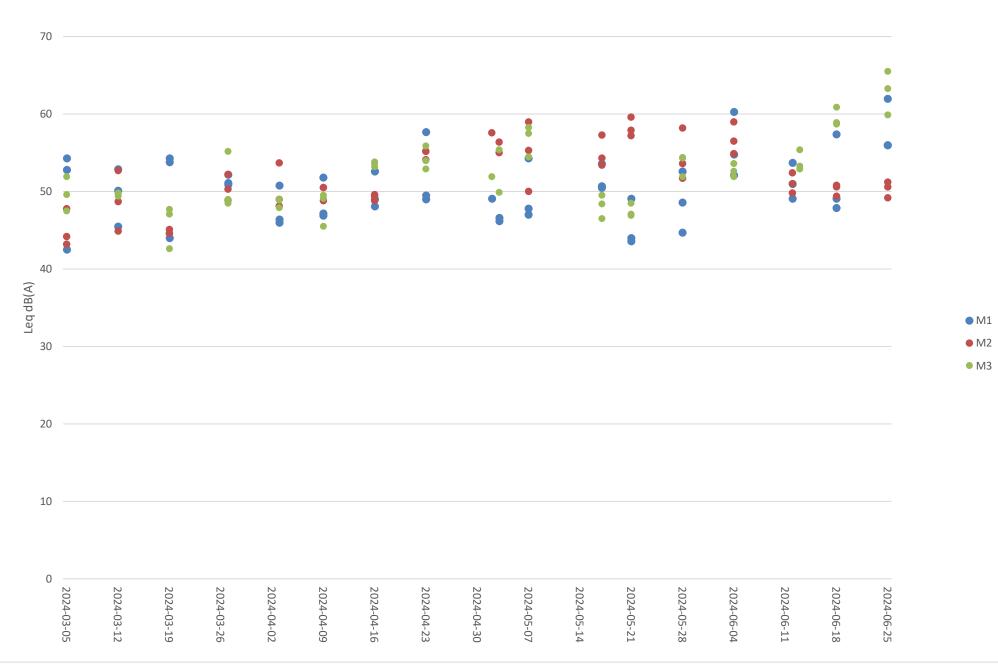
# Appendix C Noise Monitoring Data Trending



## **Impact Noise Monitoring Results during Day Time (0700 - 1900 hours)**



## Additional Impact Noise Monitoring Results during Evening Time (1900 - 2300 hours)



## Additional Impact Noise Monitoring Results during Night Time (2300 - 0700 hours)

Location of works	Construction activities undertaken	Remarks on progress		
Reclamation area	• Pile cap construction	• On-going		
	• Structural steel work	• On-going		
	Superstructure construction	• On-going		
Seawall portion	• Caisson extension works, from +3mPD to +6mPD, at Seawall A and B	On-going		
	• Construction of wave wall along the vertical seawall above +3mPD	• On-going		

### Summary of the Construction Activities Undertaken during the Reporting Period

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 1 (M1 / $N_S1$ )
Monitoring date:	02, 08, 15 and 22 April 2024 (Daytime)
	02&03, 08&09, 15&16 and 22&23 April 2024 (Evening & Nighttime)
Parameter :	L <sub>eq 30min</sub> (Daytime), L <sub>eq 5min</sub> (Evening & Night time)
Noise source other than construction activities from the Project:	Nil

Date	Start time		End time	Weather	L <sub>eq 30min</sub> dB(A) / L <sub>eq 5min</sub> dB(A)	Sound Level Meter Used	Calibrator Used	
02 Apr 2024	13:44	-	14:14	Fine	57.9	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)	
02 4	19:04	-	19:09		55.1		Diam NG 75	
02 Apr 2024	20:09	-	20:14	Fine	52.9	SVAN 971 (Serial No. C119577)	Rion NC-75	
2024	21:04	-	21:09		48.1	NO. C119377)	(No.34724243)	
02 4	1:14	-	1:19		46.0	SVAN 071 (Seriel	Rion NC-75	
03 Apr 2024	3:14	-	3:19	Fine	46.4	SVAN 971 (Serial No. C119577)	(No.34724243)	
2024	5:59	-	6:04		50.8	100. C119377)	(1N0.34724243)	
08 Apr 2024	13:46	-	14:16	Fine	58.6	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)	
09 1	19:16	-	19:21		55.1	SVAN 071 (Seriel	Rion NC-75	
08 Apr 2024	20:06	-	20:11	Fine	56.3	SVAN 971 (Serial No. C119577)	(No.34724243)	
2024	21:36	-	21:41		52.9	NO. C119377)	(100.54724245)	
00 4	1:06	-	1:11		46.9	QUANO71 (Quintal	Rion NC-75	
09 Apr 2024	3:11	-	3:16	Fine	47.2	SVAN 971 (Serial No. C119577)	(No.34724243)	
2024	5:06	-	5:11		51.8	100. C119377)	(110.3+72+2+3)	
15 Apr 2024	13:37	-	14:07	Fine	57.9	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)	
15 Apr	19:12	-	19:17		55.1	SVAN 971 (Serial	Rion NC-75	
15 Apr 2024	20:02	-	20:07	Fine	52.9	No. C119577)	(No.34724243)	
2024	21:42	-	21:47		48.1	NO. C119577)	(10.34724243)	
16 Apr	1:12	-	1:17		46.0	SVAN 971 (Serial	Rion NC-75	
16 Apr 2024	3:27	-	3:32	Fine	46.4	No. C119577)	(No.34724243)	
2024	5:07	-	5:12		50.8	NO. C119577)	(10.34724243)	
22 Apr 2024	13:14	-	13:44	Cloudy	58.8	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)	
22 1 22	19:09	-	19:14		51.7	SVAN 971 (Serial	Rion NC-75	
22 Apr 2024	20:04	-	20:09	Fine	53.1	No. C119577)	(No.34724243)	
2024	21:04	-	21:09		49.9	NO. C117577)	(1NO.34/24243)	
23 Apr	1:44	-	1:49	]	49.5	SVAN 971 (Serial	Rion NC-75	
23 Apr 2024	3:14	-	3:19	Fine	49.0	No. C119577)	Rion NC-75 (No.34724243)	
2024	5:04	-	5:09		57.7	100.0117377)		

Noise Monitoring Data:

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 2 (M2 / N_S2)
Monitoring date:	02, 08, 15 and 22 April 2024 (Daytime)
	02&03, 08&09, 15&16 and 22&23 April 2024 (Evening & Nighttime)
Parameter :	Leq 30min (Daytime), Leq 5min (Evening & Night time)
Noise source other than construction activities from the Project:	Nil

Date	Start time		End time	Weather	$\frac{L_{eq 30min} dB(A) /}{L_{eq 5min} dB(A)}$	Sound Level Meter Used	Calibrator Used
02 Apr 2024	13:58	-	14:28	Fine	58.6	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
02 4	19:03	-	19:08		54.5		Diam NO 75
02 Apr	20:08	-	20:13	Fine	53.3	SVAN 971 (Serial	Rion NC-75 (No.34724243)
2024	21:08	-	21:13		49.6	No. 96063)	(1N0.34724243)
02 4	1:13	-	1:18		49.0	$\mathbf{G}\mathbf{V}\mathbf{A}\mathbf{N}\mathbf{O}71$	Diam NC 75
03 Apr	3:13	-	3:18	Fine	48.1	SVAN 971 (Serial	Rion NC-75
2024	5:53	-	5:58		53.7	No. 96063)	(No.34724243)
08 Apr 2024	13:30	-	14:00	Fine	58.4	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
00 1	19:15	-	19:20		53.4	$\mathbf{G}\mathbf{V}\mathbf{A}\mathbf{N}\mathbf{O}71$	Diam NC 75
08 Apr 2024	20:10	-	20:15	Fine	52.8	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
2024	21:35	-	21:40		51.3	NO. 90003)	
00 4	1:05	-	1:10	<b>F</b> ine	48.8	SVAN 071 (Samal	Rion NC-75
09 Apr 2024	3:10	-	3:15	Fine	50.5	SVAN 971 (Serial No. 96063)	
2024	5:05	-	5:10		50.5	NO. 90003)	(No.34724243)
15 Apr 2024	13:45	-	14:15	Fine	58.6	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
15 4	19:15	-	19:20		54.5	QVAN 071 (0 1	
15 Apr	20:05	-	20:10	Fine	53.3	SVAN 971 (Serial	Rion NC-75
2024	21:40	-	21:45		49.6	No. 96063)	(No.34724243)
16.4	1:10	-	1:15		49.0		D: NO 75
16 Apr	3:25	-	3:30	Fine	48.1	SVAN 971 (Serial	Rion NC-75
2024	5:05	-	5:10		53.7	No. 96063)	(No.34724243)
22 Apr 2024	13:26	-	13:56	Cloudy	53.9	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
22 A	19:06	-	19:11		52.9	QUAN 071 (Q 1	D: NG 75
22 Apr	20:01	-	20:06	Fine	54.7	SVAN 971 (Serial	Rion NC-75
2024	21:06	-	21:11		55.1	No. 96063)	(No.34724243)
22.4	1:31	-	1:36		55.2	QUAN 071 (0 1	Diam NG 75
23 Apr	3:36	-	3:41	Fine	54.1	SVAN 971 (Serial	Rion NC-75
2024	5:31	-	5:36		55.2	No. 96063)	(No.34724243)

Noise Monitoring Data:

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 3 (M3 / $N_S3$ )
Monitoring date:	02, 08, 15 and 22 April 2024 (Daytime)
	02&03, 08&09, 15&16 and 22&23 April 2024 (Evening & Nighttime)
Parameter :	L <sub>eq 30min</sub> (Daytime), L <sub>eq 5min</sub> (Evening & Night time)
Noise source other than construction activities from the Project:	Operation of nearby Air Quality Monitoring Station

Date	Start time		End time	Weather	$\frac{L_{eq 30min} dB(A)}{L_{eq 5min} dB(A)}$	Sound Level Meter Used	Calibrator Used	
02 Apr 2024	13:34	-	14:04	Fine	60.2	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
02 4	19:04	-	19:09		55.5	SVAN 071 (Carial	Dian NC 75	
02 Apr 2024	20:09	-	20:14	Fine	52.9	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
2024	21:09	-	21:14		54.4	100. C152201)	(100.54724245)	
02 4	1:39	-	1:44		48.9	SVAN 071 (Seriel	Dian NC 75	
03 Apr 2024	3:14	-	3:19	Fine	49.0	SVAN 971 (Serial	Rion NC-75	
2024	5:49	-	5:54		47.9	No. C132261)	(No.34724243)	
08 Apr 2024	13:38	-	14:08	Fine	59.6	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
00.4	19:18	-	19:23		55.6	QUAN 071 (Q 1	D: NO 75	
08 Apr	20:08	-	20:13	Fine	56.0	SVAN 971 (Serial	Rion NC-75 (No.34724243)	
2024	21:38	-	21:43		48.3	No. C132261)		
00.4	1:13	-	1:18	г.	49.5	QUAN 071 (Q 1	Dian NC 75	
09 Apr	3:18	-	3:23	Fine	45.5	SVAN 971 (Serial No. C132261)	Rion NC-75	
2024	5:13	-	5:18		49.1	NO. C152201)	(No.34724243)	
15 Apr 2024	13:33	-	14:03	Fine	60.2	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
15 1	19:13	-	19:18		55.5	SVAN 971 (Serial	Rion NC-75	
15 Apr 2024	20:08	-	20:13	Fine	52.9	No. C132261)	(No.34724243)	
2024	21:53	-	21:58		54.4	NO. C152201)	(10.34724243)	
16 1 mm	1:03	-	1:08		48.9	SVAN 071 (Seriel	Rion NC-75	
16 Apr 2024	3:48	-	3:53	Fine	49.0	SVAN 971 (Serial No. C132261)	(No.34724243)	
2024	5:08	-	5:13		47.9	100. C152201)	(10.34724243)	
22 Apr 2024	13:35	I	14:05	Cloudy	60.2	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
22 4 mm	19:15	-	19:20		52.3	SVAN 071 (Seriel	Rion NC-75	
22 Apr 2024	20:10	-	20:15	Fine	55.8	SVAN 971 (Serial No. C132261)		
2024	21:10	-	21:15		53.9	INU. C152201)	(No.34724243)	
22 1	1:25	-	1:30		52.9	SVAN 071 (Carial	Rion NC-75	
23 Apr	3:40	-	3:45	Fine	54.0	SVAN 971 (Serial No. C132261)		
2024	5:30	-	5:35		55.9	100. C152201)	(No.34724243)	

Noise Monitoring data:

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 1 (M1 / N_S1)
Monitoring date:	02, 06, 16, 20 and 27 May 2024 (Daytime)
	02&03, 06&07, 16&17 and 27&28 May 2024 (Evening & Nighttime)
Parameter :	L <sub>eq 30min</sub> (Daytime), L <sub>eq 5min</sub> (Evening & Night time)
Noise source other than construction activities from the Project:	Nil

Noise Monitoring Data:

Date	Start time		End time	Weather	$\frac{L_{eq 30min} dB(A)}{L_{eq 5min} dB(A)}$	Sound Level Meter Used	Calibrator Used
02 May 2024	13:26	-	13:56	Cloudy	56.3	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
02 Ман	19:11	-	19:16		50.1	QUANO71 (Carial	Diam NC 75
02 May	20:21	-	20:26	Fine	51.8	SVAN 971 (Serial	Rion NC-75
2024	21:16	-	21:21		47.1	No. C119577)	(No.34724243)
02.14	1:11	-	1:16		46.6		D: NO 75
03 May	3:16	-	3:21	Fine	46.2	SVAN 971 (Serial	Rion NC-75
2024	5:11	-	5:16		49.1	No. C119577)	(No.34724243)
06 May 2024	13:18	-	13:48	Fine	59.0	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
06 Mari	19:08	-	19:13		55.4	SVAN 071 (Carial	Rion NC-75
06 May 2024	20:08	-	20:13	Fine	53.2	SVAN 971 (Serial	(No.34724243)
2024	21:08	-	21:13		53.2	No. C119577)	(10.34/24243)
07 May	1:13	-	1:18		47.0	SVAN 971 (Serial	Rion NC-75
07 May 2024	3:23	-	3:28	Fine	47.8	No. C119577)	(No.34724243)
2024	5:18	-	5:23		54.3		
16 May 2024	13:55	-	14:25	Fine	58.5	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
16 M	19:15	-	19:20		54.8	SVAN 071 (Carial	Diam NO 75
16 May 2024	20:05	-	20:10	Fine	54.5	SVAN 971 (Serial	Rion NC-75
2024	21:05	-	21:10		54.3	No. C119577)	(No.34724243)
17 M	1:15	-	1:20		50.5	$\mathbf{GVAN} = 0.71 (0 + 0.71)$	D' NO 75
17 May 2024	3:10	-	3:15	Fine	50.7	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
2024	5:15	-	5:20		53.6		(10.54/24245)
20 May 2024	13:54	-	14:24	Cloudy	58.8	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
20.14	19:14	-	19:19		51.4		D' NO 75
20 May	20:19	-	20:24	Fine	49.5	SVAN 971 (Serial	Rion NC-75
2024	21:04	-	21:09	]	49.2	No. C119577)	(No.34724243)
21 M	1:04	-	1:09		43.6	QUAN 071 (0	Dian NO 75
21 May 2024	3:09	-	3:14	Fine	44.0	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
2024	5:04	-	5:09		49.1	INU. C119577)	(110.34724243)

Date	Start time		End time	Weather	L <sub>eq 30min</sub> dB(A) / L <sub>eq 5min</sub> dB(A)	Sound Level Meter Used	Calibrator Used
27 May 2024	14:00	-	14:30	Cloudy	65.6	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
27 Mar	19:25	-	19:30	Fine	50.5	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
27 May 2024	20:15	-	20:20		52.4		
2024	21:15	-	21:20		48.8		
29 Mari	1:10	-	1:15		48.6	SVAN 071 (Carial	Diam NC 75
28 May 2024	3:20	-	3:25	Fine	44.7	SVAN 971 (Serial	Rion NC-75
	5:25	-	5:30		52.6	No. C119577)	(No.34724243)

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 2 (M2 / N_S2)
Monitoring date:	02, 06, 16, 20 and 27 May 2024 (Daytime)
	02&03, 06&07, 16&17 and 27&28 May 2024 (Evening & Nighttime)
Parameter :	L <sub>eq 30min</sub> (Daytime), L <sub>eq 5min</sub> (Evening & Night time)
Noise source other than construction activities from the Project:	Cicada Chirping

Noise Monitoring Data:

Date	Start time		End time	Weather	L <sub>eq 30min</sub> dB(A) / L <sub>eq 5min</sub> dB(A)	Sound Level Meter Used	Calibrator Used
02 May 2024	13:36	-	14:06	Cloudy	52.8	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
02 M	19:21	-	19:26		54.2		Diam NO 75
02 May	20:26	-	20:31	Fine	52.7	SVAN 971 (Serial	Rion NC-75
2024	21:21	-	21:26		54.5	No. 96063)	(No.34724243)
02.14	1:11	-	1:16		55.0		D: NG 75
03 May	3:16	-	3:21	Fine	56.4	SVAN 971 (Serial	Rion NC-75
2024	5:11	-	5:16		57.6	No. 96063)	(No.34724243)
06 May 2024	13:26	-	13:56	Fine	54.9	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
06 14	19:06	-	19:11		55.0		D: NO 75
06 May 2024	20:11	-	20:16	Fine	58.3	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
2024	21:06	-	21:11		54.6		
07 Mar	1:11	-	1:16		55.3	SVAN 071 (Carial	Rion NC-75
07 May 2024	3:21	-	3:26	Fine	50.0	SVAN 971 (Serial No. 96063)	(No.34724243)
2024	5:16	-	5:21		59.0		
16 May 2024	14:02	-	14:32	Fine	59.5	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
16 M	19:17	-	19:22	Fine	54.7	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
16 May	20:07	-	20:12		55.7		
2024	21:07	-	21:12		54.5		
17 M	1:12	-	1:17		53.4	$\mathbf{GVAN} = 0.71 (0 + 0.71)$	D' NO 75
17 May 2024	3:12	-	3:17	Fine	54.3	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
2024	5:12	-	5:17		57.3	NO. 90003)	(100.34/24243)
20 May 2024	13:31	-	14:01	Cloudy	65.6	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
20.14	19:16	-	19:21		58.5		D: NO 75
20 May 2024	20:21	-	20:26	Fine	61.5	SVAN 971 (Serial	Rion NC-75
2024	21:06	-	21:11		58.2	No. 96063)	(No.34724243)
21 M.	1:06	-	1:11		57.9		Disc NO 75
21 May 2024	3:11	-	3:16	Fine	57.2	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
2024	5:01	-	5:06		59.6	NO. 90003)	(1N0.34/24243)

Date	Start time		End time	Weather	L <sub>eq 30min</sub> dB(A) / L <sub>eq 5min</sub> dB(A)	Sound Level Meter Used	Calibrator Used
27 May 2024	14:41	-	15:11	Cloudy	65.2	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
27 Mar	19:26	-	19:31	Fine	54.0	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)
27 May 2024	20:16	I	20:21		54.3		
2024	21:11	1	21:16		53.8		
29 Mar.	1:06	-	1:11		51.7	SVAN 071 (Seriel	Diam NC 75
28 May 2024	3:31	-	3:36	Fine	53.6	SVAN 971 (Serial	Rion NC-75
	5:11	-	5:16		58.2	No. 96063)	(No.34724243)

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 3 (M3 / N_S3)		
Monitoring date:	02, 06, 16, 20 and 27 May 2024 (Daytime)		
	02&03, 06&07, 16&17 and 27&28 May 2024 (Evening & Nighttime)		
Parameter :	L <sub>eq 30min</sub> (Daytime), L <sub>eq 5min</sub> (Evening & Night time)		
Noise source other than construction activities from the Project:	Operation of nearby Air Quality Monitoring Station		

Noise Monitoring data:

Date	Start time		End time	Weather	L <sub>eq 30min</sub> dB(A) / L <sub>eq 5min</sub> dB(A)	Sound Level Meter Used	Calibrator Used
02 May 2024	13:29	-	13:59	Cloudy	55.4	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)
02.14	19:29	-	19:34		50.4		D: NG 75
02 May	20:24	-	20:29	Fine	50.1	SVAN 971 (Serial	Rion NC-75
2024	21:19	-	21:24		50.6	No. C132261)	(No.34724243)
02.14	1:19	-	1:24		55.4		D: NG 75
03 May	3:14	-	3:19	Fine	49.9	SVAN 971 (Serial	Rion NC-75
2024	5:19	-	5:24		51.9	No. C132261)	(No.34724243)
06 May 2024	13:15	-	13:45	Fine	60.3	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)
06 Mar	19:05	-	19:10		58.2	QUANO71 (Carial	Diam NO 75
06 May 2024	20:10	-	20:15	Fine	57.7	SVAN 971 (Serial	Rion NC-75
2024	21:10	-	21:15		57.3	No. C132261)	(No.34724243)
07 Mar	1:10	-	1:15		57.5	SVAN 071 (Carial	Dian NC 75
07 May 2024	3:20	-	3:25	Fine	58.3	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)
2024	5:10	-	5:15		54.5		
16 May 2024	13:46	-	14:16	Fine	59.0	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)
1614	19:11	-	19:16		53.4		D: NO 75
16 May	20:01	-	20:06	Fine	52.9	SVAN 971 (Serial	Rion NC-75
2024	21:11	-	21:16		50.5	No. C132261)	(No.34724243)
17 М	1:16	-	1:21		48.4	QUANO71 (Carial	Dian NO 75
17 May 2024	3:06	-	3:11	Fine	46.5	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)
2024	5:16	-	5:21		49.5	NO. C152201)	(1N0.34/24243)
20 May 2024	16:16	-	16:46	Cloudy	66.5	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)
	19:36	-	19:41		50.8		D' NO 75
20 May	20:41	-	20:46	Fine	57.9	SVAN 971 (Serial	Rion NC-75
2024	21:16	-	21:21	]	55.8	No. C132261)	(No.34724243)
21 M.	1:11	-	1:16		46.9		Diam NO 75
21 May 2024	3:11	-	3:16	Fine	47.1	SVAN 971 (Serial No. C132261)	Rion NC-75
2024	5:16	-	5:21		48.5	100. C152201)	(No.34724243)

Date	Start time		End time	Weather	Leq 30min dB(A) / Leq 5min dB(A)	Sound Level Meter Used	Calibrator Used
27 May 2024	14:16	-	14:46	Cloudy	61.9	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)
27 May 2024	19:26 20:11	-	19:31 20:16	Fine	52.9 51.8	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)
2024	21:11	-	21:16		52.2	NO. C132201)	(110.54/24243)
28 May	1:06	-	1:11		54.3	SVAN 971 (Serial	Rion NC-75
2024	3:36	-	3:41	Fine	51.9	No. C132261)	(No.34724243)
	5:06	-	5:11		54.4	NO. C152201)	(100.34724243)

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 1 (M1 / N_S1)			
Monitoring date:	03, 11, 17 and 24 June 2024 (Daytime)			
	03&04, 11&12, 17&18 and 24&25 June 2024 (Evening & Nighttime)			
Parameter :	Leq 30min (Daytime), Leq 5min (Evening & Night time)			
Noise source other than construction activities from the Project:	Nil			

Noise Monitoring Data:

Date	Start time		End time	Weather	L <sub>eq 30min</sub> dB(A) / L <sub>eq 5min</sub> dB(A)	Sound Level Meter Used	Calibrator Used
02 June 2024	13:58	-	14:28	Cloudy	64.5	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
02 1	19:28	-	19:33		53.5	$\mathbf{GVAN} = 0.71 (0 + 0.71)$	D' NO 75
02 June 2024	20:23	-	20:28	Fine	53.0	SVAN 971 (Serial	Rion NC-75 (No.34724243)
2024	21:23	-	21:28		52.6	No. C119577)	(1N0.34/24243)
02.1	1:23	-	1:28		52.1		D: NO 75
03 June 2024	3:23	-	3:28	Fine	54.8	SVAN 971 (Serial	Rion NC-75
2024	5:18	-	5:23		60.3	No. C119577)	(No.34724243)
11 June 2024	13:41	-	14:11	Fine	65.4	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
11 June	19:41	-	19:46		53.4	SVAN 071 (Seriel	Rion NC-75
2024	20:21	-	20:26	Fine	52.5	SVAN 971 (Serial No. C119577)	(No.34724243)
2024	21:16	-	21:21		52.3	NO. C119577)	(10.34724243)
12 June	1:11	-	1:16		51.0	SVAN 971 (Serial	Rion NC-75
2024	3:11	-	3:16	Fine	49.1	No. C119577)	(No.34724243)
2024	5:11	-	5:16		53.7		
17 June 2024	13:37	-	14:07	Sunny	60.8	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
17 I	19:22	-	19:27		53.5	SVAN 071 (Seriel	Dian NC 75
17 June 2024	20:27	-	20:32	Fine	51.0	SVAN 971 (Serial	Rion NC-75 (No.34724243)
2024	21:17	-	21:22		51.4	No. C119577)	(100.34724243)
18 June	1:07	-	1:12		49.1	SVAN 071 (Seriel	Rion NC-75
2024	3:17	-	3:22	Fine	47.9	SVAN 971 (Serial No. C119577)	(No.34724243)
2024	4:57	-	5:02		57.4	NO. C119377)	(10.34724243)
24 June 2024	14:17	-	14:47	Fine	67.1	SVAN 971 (Serial No. C119577)	Rion NC-75 (No.34724243)
24 1	19:47	-	19:52		55.8	GVAN 071 (Carial	Diam NC 75
24 June	20:27	-	20:32	Fine	58.3	SVAN 971 (Serial	Rion NC-75
2024	21:52	-	21:57		57.5	No. C119577)	(No.34724243)
25 June -	1:17	-	1:22		56.0	QUANO71 (Contral	Dian NC 75
25 June 2024	3:17	-	3:22	Fine	56.0	SVAN 971 (Serial No. C119577)	Rion NC-75
2024	5:02	-	5:07		62.0	INU. C119577)	(No.34724243)

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 2 (M2 / N_S2)
Monitoring date:	03, 11, 17 and 24 June 2024 (Daytime)
	03&04, 11&12, 17&18 and 24&25 June 2024 (Evening & Nighttime)
Parameter :	Leq 30min (Daytime), Leq 5min (Evening & Night time)
Noise source other than construction activities from the Project:	Nil

Noise Monitoring Data:

Date	Start time		End time	Weather	$\frac{L_{eq \ 30min} dB(A) /}{L_{eq \ 5min} dB(A)}$	Sound Level Meter Used	Calibrator Used	
02 June 2024	14:08	-	14:38	Cloudy	57.3	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)	
02 1	19:23	-	19:28		52.5		D: NO 75	
02 June 2024	20:28	-	20:33	Fine	52.1	SVAN 971 (Serial No. 96063)	Rion NC-75	
2024	21:28	-	21:33		53.2	INO. 90005)	(No.34724243)	
02 1	1:23	-	1:28		54.9	QUAN 071 (Carial	Diam NC 75	
03 June 2024	3:28	-	3:33	Fine	56.5	SVAN 971 (Serial	Rion NC-75	
2024	5:33	-	5:38		59.0	No. 96063)	(No.34724243)	
11 June 2024	13:54	-	14:24	Fine	63.0	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)	
11 <b>T</b>	19:44	-	19:49		52.8		Rion NC-75	
11 June 2024	20:24	-	20:29	Fine	52.2	SVAN 971 (Serial No. 96063)	(No.34724243)	
2024	21:14	-	21:19		52.1	INO. 90005)		
10 June	1:14	-	1:19		51.0	SVAN 071 (Seriel	Rion NC-75	
12 June 2024	3:14	-	3:19	Fine	49.8	SVAN 971 (Serial	(No.34724243)	
2024	5:19	-	5:24		52.4	No. 96063)	(10.34724243)	
17 June 2024	13:48	-	14:18	Sunny	63.9	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)	
17 I	19:28	-	19:33		53.8	QUAN 071 (Q 1	Dian NC 75	
17 June 2024	20:33	-	20:38	Fine	53.0	SVAN 971 (Serial	Rion NC-75 (No.34724243)	
2024	21:18	-	21:23		53.3	No. 96063)		
10 I	1:08	-	1:13		50.6	$\mathbf{GVAN} = 0.71 (0 + 0.71)$	Rion NC-75 (No.34724243)	
18 June 2024	3:18	-	3:23	Fine	49.4	SVAN 971 (Serial		
2024	4:58	-	5:03		50.8	No. 96063)		
24 June 2024	14:26	-	14:56	Fine	62.8	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)	
	19:41	-	19:46		52.3		D: NO 75	
24 June 2024	20:26	-	20:31	Fine	52.1	SVAN 971 (Serial	Rion NC-75	
2024	21:51	-	21:56	]	51.7	No. 96063)	(No.34724243)	
25 I	1:16	-	1:21		50.6		Disc NO 75	
25 June	3:16	-	3:21	Fine	49.2	SVAN 971 (Serial No. 96063)	Rion NC-75 (No.34724243)	
2024	5:11	-	5:16	]	51.2	NO. 90003)		

Location:	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 3 (M3 / $N_S3$ )
Monitoring date:	03, 12, 17 and 24 June 2024 (Daytime)
	03&04, 12&13, 17&18 and 24&25 June 2024 (Evening & Nighttime)
Parameter :	L <sub>eq 30min</sub> (Daytime), L <sub>eq 5min</sub> (Evening & Night time)
Noise source other than construction activities from the Project:	Operation of nearby Air Quality Monitoring Station, Construction works of Signal Tower

Noise Monitoring data:

Date	Start time		End time	Weather	$\frac{L_{eq\;30min}dB(A)}{L_{eq\;5min}dB(A)}$	Sound Level Meter Used	Calibrator Used	
02 June 2024	13:50	-	14:20	Cloudy	52.3	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
0.2 1	19:20	-	19:25		51.3		Dian NO 77	
02 June 2024	20:25	-	20:30	Fine	51.5	SVAN 971 (Serial	Rion NC-75	
2024	21:20	-	21:25		51.3	No. C132261)	(No.34724243)	
02.1	1:25	-	1:30		51.9		D: NO 75	
03 June 2024	3:15	-	3:20	Fine	53.6	SVAN 971 (Serial	Rion NC-75	
2024	5:30	-	5:35		52.6	No. C132261)	(No.34724243)	
12 June 2024	13:44	-	14:14	Fine	61	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
10 June	19:44	-	19:49		51.5	SVAN 071 (Seriel	Rion NC-75 (No.34724243)	
12 June 2024	20:24	-	20:29	Fine	54.9	SVAN 971 (Serial No. C132261)		
2024	21:24	-	21:29		53.9	NO. C152201)		
13 June	1:34	-	1:39		53.3	SVAN 071 (Seriel	Rion NC-75	
2024	3:29	-	3:34	Fine	52.9	SVAN 971 (Serial No. C132261)	(No.34724243)	
2024	5:19	-	5:24		55.4	100. C152201)	(110.34724243)	
17 June 2024	11:37	-	12:07	Sunny	68.8	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
17 T	19:47	-	19:52		65.2	QVAN071 (0 1	Diam NO 75	
17 June 2024	20:32	-	20:37	Fine	63.9	SVAN 971 (Serial	Rion NC-75 (No.34724243)	
2024	21:17	-	21:22		63.3	No. C132261)		
10 I	1:32	-	1:37		58.7	$\mathbf{GVAN} = 0.71 (0 \cdot 0.71)$	Rion NC-75 (No.34724243)	
18 June 2024	3:07	-	3:12	Fine	58.9	SVAN 971 (Serial		
2024	5:02	-	5:07		60.9	No. C132261)		
24 June 2024	13:10	-	13:40	Fine	69.4	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34724243)	
24 June 2024	19:45	-	19:50		61.1		Rion NC-75 (No.34724243)	
	20:20	-	20:25	Fine	57.9	SVAN 971 (Serial		
2024	21:20	-	21:25		59.3	No. C132261)		
25 I	1:20	-	1:25		65.5	SVAN 071 (Cariel	Rion NC-75 (No.34724243)	
25 June 2024	3:40	-	3:45	Fine	59.9	SVAN 971 (Serial No. C132261)		
2024	5:05	-	5:10		63.3	100. C152201)		

Appendix D Waste Flow Table



吉寶西格斯 - 振華聯營公司 Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for \_\_\_\_\_

<u>2018 (year)</u>

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

	Actual Quantities of Inert C&D Materials Generated Monthly										Actual Quantities of C&D Wastes Generated Monthly					
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)		
	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup>	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )			(in ,000 kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000L)	(in ,000 m <sup>3</sup> )		
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Jul	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0065		
Sep	0	0	0	0	0	2.9619	0	0	0	0	0	0	0	0		
Oct	0	0	0	0	0	3.0771	0	0	0	0	0	0	0	0.0130		
Nov	0	0	0	0	0	6.7871	0	0	0	0	0	0	0	0		
Dec	0	0	0	0	0	59.0709	0	0	0	0	0	0.2000	0.8700	0		
Total	0	0	0	0	0	71.8970	0	0	0	0	0	0.2000	0.8700	0.0195		

Notes:

(1) Broken concrete for recycling into aggregates.

(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.

(3) Use the conversion factor : 1 full load of dumping truck being equivalent to  $6.5m^3$  by volume.

(4) Use the conversion factor: sand density =  $1.6T/m^3$ , public fill density =  $1.8T/m^3$  and rock density =  $2T/m^3$ 

(5) Materials recycled.



吉寶西格斯 - 振華聯營公司 **Keppel Seghers - Zhen Hua Joint Venture** 

Monthly Summary Waste Flow Table for



2019

(year)

Project : In	Project : Integrated Waste Management Facilities, Phase 1										Contract No.: EP/SP/66/12					
		Actual	Quantities of	Inert C&D	Materials Gei	nerated Mon	thly	Actual Quantities of C&D Wastes Generated Monthly								
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects	Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Fill Public fill (see Note 4)	,	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemica	l Waste	Others, e.g. general refuse (see Note 3)		
	(in ,000m <sup>3</sup> )	$(in,000m^3)$	$(in,000m^3)$	(in ,000m <sup>3</sup>	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )			(in ,000 kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000L)	$(in,000 m^3)$		
Jan	0	0	0	0	0	82.6139	0	0	0	0	0	0	0	0.0065		
Feb	0	0	0	0	0	46.7821	0	0	0	0	0	0	0	0		
Mar	0	0	0	0	0	97.1000	0	0.7552	0	0.2560	0	0	0	0		
Apr	0	0	0	0	0	58.0413	0	0	0	0	0	0	0	0		
May	0	0	0	0	0	14.5625	0	1.4648	0	0	0	0	0	0.0065		
Jun	0	0	0	0	0	0	0	6.8421	0	0	0	0	0	0		
Sub-total	0	0	0	0	0	299.0998	0	9.0621	0	0.2560	0	0	0	0.0130		
Jul	0	0	0	0	0	0	0	0.4289	0	0	0	0	8.4000	0.0130		
Aug	0	0	0	0	0	2.5775	0	10.5600	0	0	0	0	0	0		
Sep	0	0	0	0	0	6.1081	0	8.4704	0	0.3530	0	0	0	0.0065		
Oct	0	0	0	0	0	9.8875	0	7.1900	0	0	0	0	0	0		
Nov	0	0	0	0	0	38.3088	0	19.3105	0	0	0	0	0	0.0195		
Dec	0	0	0	0	0	54.3469	0	26.9807	0	0	0	0	0	0.0910		
Total	0	0	0	0	0	410.3286	0	82.0026	0	0.6090	0	0	8.4000	0.1430		

Broken concrete for recycling into aggregates. Notes: (1)

Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials. (2)

Use the conversion factor : 1 full load of dumping truck being equivalent to  $6.5m^3$  by volume. (3)

Use the conversion factor: sand density =  $1.6T/m^3$ , public fill density =  $1.8T/m^3$  and rock density =  $2T/m^3$ (4)

(5) Materials recycled.



Monthly Summary Waste Flow Table for \_\_\_\_\_



2020

(year)

Project : Integrated Waste Management Facilities, Phase 1 Contract No.: EP/SP/66/12 Actual Quantities of Inert C&D Materials Generated Monthly Actual Quantities of C&D Wastes Generated Monthly Imported Imported Imported Hard Rock Paper/ Fill Fill Fill and Large Reused in Disposed as Others, e.g. general Metals cardboard Total Reused in Plastics Month Broken Public Rock Sand Public Fill refuse packaging Chemical Waste the other (see Note (see Note 2, Quantity Concrete fill (see Note (see Note (see Note Generated Contract Projects 5) 5) (see Note 4) (see Note 3) (see Note 4) (see Note 4) 5) 1) 4)  $(in,000m^3)$   $(in,000m^3)$   $(in,000m^3)$   $(in,000m^3)$  $(in, 000m^3)$  $(in, 000m^3)$ (in ,000kg) (in ,000kg) (in ,000 kg) (in ,000kg) (in ,000L)  $(in, 000 \text{ m}^3)$ 0 0 0 0 0 37.1550 25.0812 0 0 0 0 0 0.0065 Jan 0 27.7910 Feb 0 0 0 0 0 0 18.8300 0 0 0 0 0 0.0065 0 0 0 0 0 22.5669 0 26.1586 0 0 0 0 7.2000 0.0065 Mar 0 0 0 0 0 0 0 0 0 12.7800 0 10.1825 0 0.0195 Apr 0 0 0 0 0 16.1138 0 24.3740 0 0.4220 0 0 0 0.0195 May 0 0 0 0 0 31.5177 0 28.3030 0 0 0 0 0 0.0065 Jun 0 0 Sub-total 0 0 0 0 0 147.9244 132.9293 0 0.4220 0 7.2000 0.0650 0 0 0 0 0 0 34.7856 17.0606 35.1800 0 0 0 0 0.0195 Jul 65.5667 0 0 0 0 0 27.1375 27.9335 0 0 0 0 0 0 Aug 110.1328 43.5435 Sep 0 0 0 0 0 11.9813 0 0 0 0 0 0.0195 0 0 0 0 0 2.8213 131.6600 22.5415 0 0 0 0 0 0.0130 Oct 0 0 0 0 0 Nov 0 0 162.1811 44.6475 0.4090 0 0 0.4000 0.0130 174.9800 57.8380 0 0 0 Dec 0 0 0 0 0 0 0 0 0.0130 0 0 224.6501 661.5812 364.6133 0 0 0 0 0.8310 0 0 7.6000 Total 0.1430

(1) Broken concrete for recycling into aggregates.

(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.

(3) Use the conversion factor : 1 full load of dumping truck being equivalent to  $6.5m^3$  by volume.

(4) Use the conversion factor: sand density =  $1.6T/m^3$ , public fill density =  $1.8T/m^3$  and rock density =  $2T/m^3$ 

(5) Materials recycled.



Monthly Summary Waste Flow Table for \_\_\_\_\_

<u>2021 (year)</u>

Project : Integrated Waste Management Facilities, Phase 1 Contract No.: EP/SP/66/12 Actual Quantities of Inert C&D Materials Generated Monthly Actual Quantities of C&D Wastes Generated Monthly Hard Rock Imported Imported Imported Paper/ and Large Fill Fill Fill Reused in Disposed as Metals Others, e.g. general Total Reused in cardboard Plastics Month Broken Public fill Sand Rock refuse Public Fill packaging Chemical Waste Quantity the other (see Note (see Note 2. Concrete (see Note (see Note (see Note (see Note 5) 5) Generated Contract Projects (see Note 4) (see Note 3) (see Note 4) 4) 4) 5) 1)  $(in,000m^3)$   $(in,000m^3)$   $(in,000m^3)$   $(in,000m^3)$   $(in,000m^3)$   $(in,000m^3)$  $(in,000m^3)$ (in ,000 kg) (in ,000kg) (in ,000kg) (in ,000kg)  $(in,000 \text{ m}^3)$ (in .000L) 0 0 0 0 0 0 198.1311 0 0 0 0 0 36.4775 0.0065 Jan 0 0 0 0 0 0 0 0 0 0 0 Feb 143.9511 20.9960 0.6305 0 0 0 0 0 0 103.1833 23.4510 0 0 0 0 0 0.0130 Mar 0 0 0 0 0 0 161.2956 0 Apr 27.2810 0 0 0 0 0.0130 0 0 0 0 0 0 0 0 0 193.3300 0 0 0.0715 May 20.5265 0 0 0 0 0 23.7825 0 0 0 0 141.5728 0 0.2440 0.0455 Jun 0 0 0 0 0 0 941.4639 152.5145 0 0.2440 0 0 0 0.7800 Sub-total 0 0 0 0 0 0 105.1083 30.6065 0 0 0 0 0 0.0195 Jul 0 0 0 0 0 0 0 11.1822 7.5180 0 0 0 0 0.0130 Aug 0 0 0 Sep 0 0 0 0 5.7575 0 0 0 0 0.6000 0.0390 0 0 0 0 0 0 0 0 0 0 0 0 6.8885 0 Oct 0 0 0 0 0 0 0 0 6.2975 0 0.1610 0 0 0.0130 Nov Dec 0 0 0 0 0 0 0 5.9235 0 0 0 0 0 0 0 0 0 Total 0 0 0 1057.7544 215.5060 0 0.4050 0 0 0.6000 0.8645

(1) Broken concrete for recycling into aggregates.

(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.

(3) Use the conversion factor : 1 full load of dumping truck being equivalent to  $6.5m^3$  by volume.

(4) Use the conversion factor: sand density =  $1.6T/m^3$ , public fill density =  $1.8T/m^3$  and rock density =  $2T/m^3$ .

(5) Materials recycled.



Monthly Summary Waste Flow Table for



2022

(year)

Project : In	ntegrated W	aste Manag	gement Faci	ilities, Phas	e 1						Con	tract No.: EP	/SP/66/12	
	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					lonthly	
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects (see Note 4)	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemica	l Waste	Others, e.g. general refuse (see Note 3)
	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup>	$(in,000m^3)$		$(in,000m^3)$	T	(in ,000 kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000L)	(in ,000 m <sup>3</sup> )
Jan	0	0	0	0	0	0	4.9389	2.7070	0	0.1550	0	0	0	0.0715
Feb	0	0	0	0	0	0	3.2478	4.0290	0	0	0	0.4000	0.2250	0
Mar	0	0	0	0	0	0	2.3422	2.7820	0	0	0	0	0	0.0780
Apr	0	0	0	0	0	0	18.2189	5.8100	0	0.3120	0	0	0	0.1495
May	0.0648	0	0	0	0.0648	0	16.7711	17.2320	0	0	0	0	0	0.0975
Jun	0.0037	0	0	0	0.0037	0.2115	1.1128	14.1470	36.3000	0.3890	0	0	1.7250	0.0975
Sub-total	0.0685	0	0	0	0.0685	0.2115	46.6317	46.7070	36.3000	0.8560	0	0.4000	1.9500	0.4940
Jul	25.7183	0	0	25.7183	0	0.1125	0.8333	17.5210	0	0.6400	0.0060	0	0	0.1235
Aug	13.2494	0	0	13.2494	0	0	0	24.5210	76.0300	1.8870	0	0	0	0.1170
Sep	24.9072	0	0	24.8494	0.0578	0	0	16.2815	72.0600	0.3060	0	0	0	0.1885
Oct	13.3139	0	0	13.3006	0.0133	0	0	11.8665	78.1000	0.5800	0	0	0	0.2405
Nov	26.5583	0	0	26.5583	0	0	0	7.2055	0	0	0	0	0	0.1105
Dec	29.1411	0	0	29.1411	0	0	0	3.5174	0	0	0	0	0	0.2535
Total	132.9567	0	0	132.8171	0.1396	0.3240	47.4650	127.6199	262.4900	4.2690	0.0060	0.4000	1.9500	1.5275

(1) Broken concrete for recycling into aggregates.

(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.

(3) Use the conversion factor : 1 full load of dumping truck being equivalent to  $6.5m^3$  by volume.

(4) Use the conversion factor: sand density =  $1.6T/m^3$ , public fill density =  $1.8T/m^3$  and rock density =  $2T/m^3$ .

(5) Materials recycled.



Monthly Summary Waste Flow Table for \_



2023

(year)

Project : Ir	ntegrated W	aste Manag	gement Faci	ilities, Phas	e 1				1		Con	tract No.: EP	/SP/66/12	
	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly						
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects (see Note 4)	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemica	l Waste	Others, e.g. general refuse (see Note 3)
	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	$(in,000m^3)$	(in ,000m <sup>3</sup>	$(in,000m^3)$		$(in,000m^3)$	1	(in ,000 kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000L)	(in ,000 m <sup>3</sup> )
Jan	24.6728	0	0	24.6728	0	0	0	1.3545	0	0.3150	0	0	0	0.1365
Feb	26.7206	0	0	26.7206	0	0	0	1.8990	11.1501	0	0.0007	0	0	0.1235
Mar	22.1089	0	0	22.1089	0	0	0	0.9025	0	0	0	0	0	0.1105
Apr	36.0011	0	0	36.0011	0	0	0	0	0	0.2150	0	0	0	0.1365
May	21.8900	0	0	21.8900	0	0	0	0	0	0.3160	0	0	0	0.1495
Jun	8.8878	0	0	8.8878	0	0	0	0	0	0	0	0	0	0.1950
Sub-total	140.2812	0	0	140.2812	0	0	0	4.1560	11.1501	0.8460	0.0007	0	0	0.8515
Jul	2.2233	0	0	2.2233	0	0	0	0	0	0.3870	0	0	0	0.1495
Aug	4.4200	0	0	4.4200	0	0	0	0	0	0	0	0	0	0.2015
Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2860
Oct	0	0	0	0	0	0	0	0.4025	0	0.3770	0	0	0	0.2405
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3510
Dec	0	0	0	0	0	0	0	0.4960	0	0	0	0	0	0.3835
Total	146.9245	0	0	146.9245	0	0	0	5.0545	11.1501	1.6100	0.0007	0	0	2.4635

(1) Broken concrete for recycling into aggregates.

(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.

(3) Use the conversion factor : 1 full load of dumping truck being equivalent to  $6.5m^3$  by volume.

(4) Use the conversion factor: sand density =  $1.6T/m^3$ , public fill density =  $1.8T/m^3$  and rock density =  $2T/m^3$ .

(5) Materials recycled.



Monthly Summary Waste Flow Table for \_



2024

(year)

Project : In	ntegrated W	aste Manag	gement Faci	lities, Phas	e 1						Con	tract No.: EP	/SP/66/12	
	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly						
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Projects (see Note 4)	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemica	l Waste	Others, e.g. general refuse (see Note 3)
	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup> )	(in ,000m <sup>3</sup>	$(in,000m^3)$		$(in,000m^3)$	1	(in ,000 kg)	(in ,000kg)	(in ,000kg)	(in ,000kg)	(in ,000L)	$(in,000 m^3)$
Jan	0	0	0	0	0	0	0	0	22.8700	0	0	0	0	0.4940
Feb	1.9433	0	0	1.9433	0	0	0	0	0	0.3190	0	0	0	0.2665
Mar	4.4367	0	0	4.4367	0	0	0	0	0	0	0	0	0	0.3640
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5915
May	0	0	0	0	0	0	0	0	0	0.6530	0	0	0	0.7410
Jun	5.0453	0	0	0	5.0453	0	0	0.5120	0	0	0	0	0	0.4940
Sub-total	11.4253	0	0	6.3800	5.0453	0	0	0.5120	22.8700	0.9720	0	0	0	2.9510
Jul														
Aug														
Sep														
Oct														
Nov														
Dec														
Total	11.4253	0	0	6.3800	5.0453	0	0	0.5120	22.8700	0.9720	0	0	0	2.9510

(1) Broken concrete for recycling into aggregates.

(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.

(3) Use the conversion factor : 1 full load of dumping truck being equivalent to  $6.5m^3$  by volume.

(4) Use the conversion factor: sand density =  $1.6T/m^3$ , public fill density =  $1.8T/m^3$  and rock density =  $2T/m^3$ .

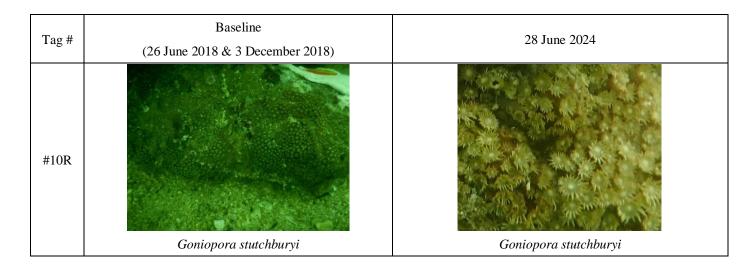
(5) Materials recycled.

## Appendix E Photo Records for Coral Monitoring

# Baseline Tag # 28 June 2024 (26 June 2018 & 3 December 2018) #1 Goniopora stutchburyi Goniopora stutchburyi #2R Goniopora stutchburyi Goniopora stutchburyi #3 Psammocora superficialis Psammocora superficialis #4 Turbinaria peltata Turbinaria peltata

#### Photo Plate for Tagged and Re-tagged Corals at Control Site during the 22<sup>nd</sup> Quarterly Coral Monitoring during Construction Phase on 28 June 2024

Tag #	Baseline (26 June 2018 & 3 December 2018)	28 June 2024
#5R	Goniopora stutchburyi	Goniopora stutchburyi
#6	Cyphastrea serailia	Cyphastrea serailia
#7R	<i>Coscinaraea</i> sp.	<i>Coscinaraea</i> sp.
#8	Goniopora stutchburyi	Goniopora stutchburyi
#9	Goniopora stutchburyi	Goniopora stutchburyi



Notes:

i. The re-tagged corals were marked as ##**R**.

Tag #	Baseline (23 November 2018)	28 June 2024
#11R	Cyphastrea serailia	Cyphastrea serailia
#12R	Favites chinensis	Favites chinensis
#13R	Turbinaria peltata	Turbinaria peltata
#14R	Favites chinensis	Favites chinensis

#### Photo Plate for Re-tagged Corals at Indirect Impact during the 22<sup>nd</sup> Quarterly Coral Monitoring during Construction Phase on 28 June 2024

Tag #	Baseline (23 November 2018)	28 June 2024
#15R	Goniopora stutchburyi	Goniopora stutchburyi
#16R	Psammocora superficialis	Psammocora superficialis
#17R	Favites chinensis	Favites chinensis
#18R	Psammocora superficialis	Psammocora superficialis
#19R	Psammocora superficialis	Psammocora superficialis

Tag #	Baseline (23 November 2018)	28 June 2024		
#20R	Psammocora superficialis	Psammocora superficialis		

Notes:

i. The re-tagged corals were marked as **##R**.

#### Appendix F Photo Records for White-bellied Sea Eagle Monitoring

Photo Plate for 70<sup>th</sup> Monthly WBSE monitoring



Photo Plate for 71<sup>st</sup> Monthly WBSE monitoring



One Adult WBSE was recorded staying near the nest on 29 May 2024

Photo Plate for 72<sup>nd</sup> Monthly WBSE monitoring



One adult WBSE was recorded staying near the nest on 28 June 2024

## Appendix G Complaint Log

Integrated Waste Management Facilities, Phase 1

Reporting	Environmental Complaint Statistics							
Period	Frequency	Cumulative	Complaint Nature					
1 Apr 2024- 30 Apr 2024	0	4	N/A					
1 May 2024- 31 May 2024	0	4	N/A					
1 June 2024- 30 June 2024	0	4	N/A					

Statistical Summary of E	nvironmental Complaints

#### Statistical Summary of Environmental Summons **Environmental Summons Statistics** Reporting Period Cumulative Details Frequency 1 Apr 2024-0 0 N/A 30 Åpr 2024 1 May 2024-0 0 N/A 31 May 2024 1 June 2024-0 0 N/A 30 June 2024

Reporting	Environmental Prosecution Statistics								
Period	Frequency	Cumulative	Details						
1 Apr 2024- 30 Apr 2024	0	0	N/A						
1 May 2024- 31 May 2024	0	0	N/A						
1 June 2024- 30 June 2024	0	0	N/A						

#### . . 10 . 1 D .