

Environmental Monitoring Report

Project No. 51077-003
Quarterly Report
October 2021

Maldives: Greater Malé Waste-to-Energy Project

Prepared by Ministry of Environment, Climate Change and Technology, Government of Maldives
for the Asian Development Bank.

This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Environmental Monitoring Report

Project number: 51077-003
Period: July – September 2021
Submission Date: October 2021

GREATER MALÉ WASTE-TO-ENERGY(WTE) PROJECT

This report was prepared by Ministry of Environment, Climate Change and Technology, Government of Maldives for the Asian Development Bank. This document is made publicly available in accordance with ADB's Access to Information Policy and does not necessarily reflect the views of ADB.

This quarterly environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "terms of use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Prepared by the GMEIWMP, MoECT for the Asian Development Bank.

CURRENCY EQUIVALENTS

(As of September 2021)

Currency unit	–	Equivalent
1 MVR	=	\$ 0.06485
\$1.00	=	MVR15.42

ABBREVIATIONS

ADB	– Asian Development Bank
WTE	– Waste-to-Energy
EPA	– Environmental Protection Authority
PMDSC	– Project Management Design Construction Supervision Consultants
MTCC	– Maldives Transport and Contracting Company
DBO	– Design Build Operate
EIA	– Environmental Impact Assessment
MoECT	– Ministry of Environment, Climate Change and Technology
MoFT	– Ministry of Finance and Treasury
PMU	– Project Management Unit
EMP	– Environmental Management Plan
CVRA	– Climate vulnerability and risk assessment
IEE	– Initial Environmental Examination
WAMCO	– Waste Management Corporation
EA	– Executing Agency
IA	– Implementing Agency
NSC	– National Steering Committee
APC	– Air Pollution Control

WEIGHTS AND MEASURES

°C	degree centigrade
dB	Decibels
tpd	Tons per day
PM	ParticulateMatter
Cm	centimetres
Km	Kilometres
Kg	Kilograms
MW	Megawatt
kW	kilowatt
USD	United States Dollars
O&M	Operation and Maintenance

NOTE

In this report, "\$" refers to United States dollars.

TABLE OF CONTENTS

I.	INTRODUCTION	1
	A. Greater Male Waste-to-Energy Project	1
	B. Project Outcome and Outputs	1
	C. Environmental Category	2
	D. About this Report	2
II.	PROJECT IMPLEMENTATION ARRANGEMENTS	4
	A. Project & Safeguards Implementation Arrangements	4
	B. Status of mobilization of staff resources	4
III.	PROJECT IMPLEMENTATION STATUS	5
	A. Status of Bidding and Contract Award	5
	B. Implementation Status	6
IV.	COMPLIANCE STATUS WITH NATIONAL /STATE/LOCAL STATUTORY ENVIRONMENTAL REQUIREMENTS	6
	A. Status of Clearances	6
	B. Compliance with Clearance Conditions	7
V.	COMPLIANCE STATUS WITH ENVIRONMENTAL LOAN COVENANTS	9
	A. Compliance with Loan Covenants	9
	B. Status of Environmental Assessment, Reports and Approval	10
	C. Status of Disclosure of Safeguard Documents	10
	D. Safeguards in Bid Documents and Contracts	11
VI.	STATUS OF EMP IMPLEMENTATION	18
	A. Details of site visits / field verifications by Safeguard Staff	18
	B. DBO Plant Contract Package	18
	C. Best practices / environment improvement activities	25
	D. Unanticipated Impacts	25
VII.	IMPLEMENTATION OF HEALTH & SAFETY COVID-19 PLAN	25
	A. H&S COVID-19 Plan Preparation	25
	B. H&S COVID-19 Plan Implementation	25
VIII.	ENVIRONMENTAL MONITORING	25
	A. DBO Contract	25
	B. Monitoring Results	30
IX.	TRAINING AND CAPACITY BUILDING ACTIVITES	30
X.	PUBLIC CONSULTATIONS	31
XI.	GRIEVANCE REDRESS MECHANISM	31
	A. Grievance Redress Mechanism	31
	B. Complaints received	32
	C. GRC Meetings	32
XII.	FINDINGS & RECOMMENDATION	33
	A. Findings and Recommendations	33
	B. Remedial Measures	33

LIST OF APPENDICES

Appendix 1: Clearances and Permits

I. INTRODUCTION

A. Greater Male Waste-to-Energy Project

1. The project will establish a sustainable regional solid waste treatment system in the Greater Malé capital region by (i) developing treatment (proven waste-to-energy [WTE] technology), recycling and disposal infrastructure; (ii) strengthening institutional capacities for sustainable solid waste services delivery and environmental monitoring; and (iii) improving public awareness on WTE and reduce-reuse-recycle (3R).
2. The project will be designed to reduce disaster risk and improve climate change resilience while creating a cleaner environment and reducing greenhouse gas emissions.
3. The Greater Malé capital region and its outer islands (project area) suffer from severe environmental pollution and deteriorating livability because of inadequate collection and haphazard disposal of solid waste. The project area covers 35 inhabited islands in the North Ari Atoll (Alifu Alifu Atoll), South Atoll (Alifu Dhaalu Atoll), Malé' Atoll (Kaafu Atoll) and Vaavu Atoll, including the capital city of Malé, with a total population of 216,000 (51% of Maldives).
4. Lack of a sustainable system to manage the 774 tons per day (tpd) of solid waste generated in the project area results in waste spillage into the ocean, and open dumping and burning of garbage at the 30-year old 10-hectare dumpsite on Thilafushi Island which has no pollution control measures creating a public health and an environmental hazard. Plumes of smoke visible from the capital Malé, the international airport and nearby resorts compromise air quality and pose nuisance to residents and tourists, while leachate and plastics contaminate the surrounding marine environment. This poses a critical threat to tourism and fisheries, both of which rely heavily on the country's pristine environment and are cornerstones to Maldives' economy.

B. Project Outcome and Outputs

5. The project will have two outputs, Output 1: Disaster- and climate-resilient regional waste management facility developed. This will include (i) a 500 tons per day (tpd) WTE plant with 15-year O&M contract, including two treatment lines of 250 tpd each, energy recovery and air pollution control (APC) system; and (ii) a landfill for safe disposal of APC residues and non-marketable bottom ashes. The facility is expected to generate 8WM of electricity and will be designed to accommodate a third 250 tpd treatment line, required to respond to further demand increase. All facilities will adopt disaster- and climate-resilient features such as raised floor elevations, flood proof mechanical and electrical equipment and landfill cells, and enhanced drainage systems.
6. Output 2: Institutional capacity in sustainable SWM services delivery (WTE) and environmental monitoring strengthened, and public awareness on WTE and 3R improved. This will include (i) capacity building support in monitoring sustainable WTE operations, including MOE and EPA institutional capacity strengthening and training to monitor WTE O&M and environmental standards; (ii) public awareness on WTE and 3R in Greater Malé improved; and (iii) project management and supervision consultant support provided.

Table 1: Subprojects/Packages

No.	Subproject / package	Type of contract
1	Waste to Energy Plant and balance of plant with 15 years O&M contract.	Design-Build-Operate (DBO)
2	Project management and supervision	Consulting Services contract
3	Community Awareness consultant	Consulting Services contract
4	Individual Environmental Monitor	Consulting Services contract
5	Joint Crediting Mechanism Auditor	Consulting Services contract

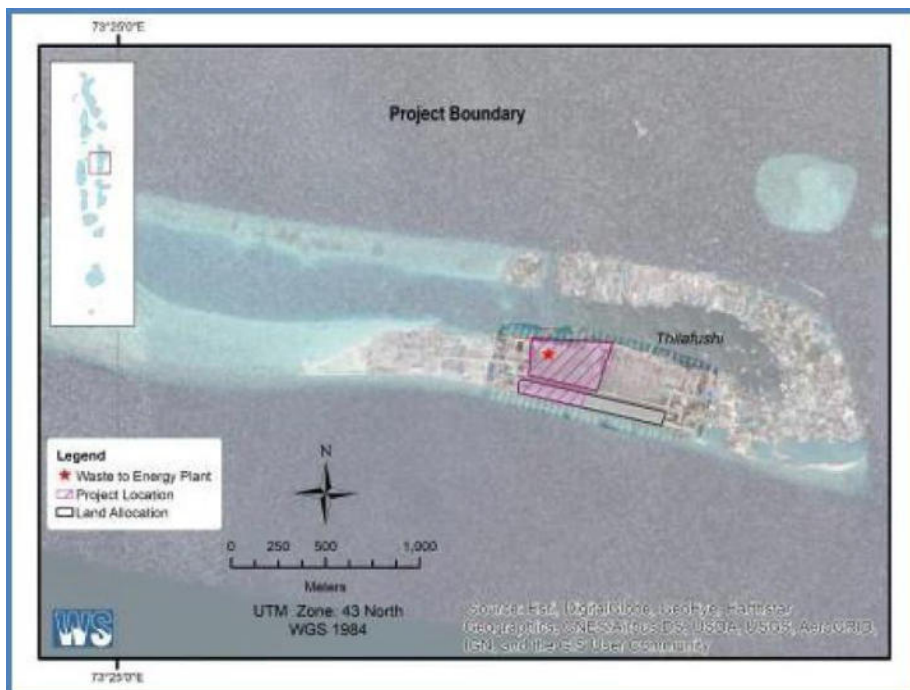
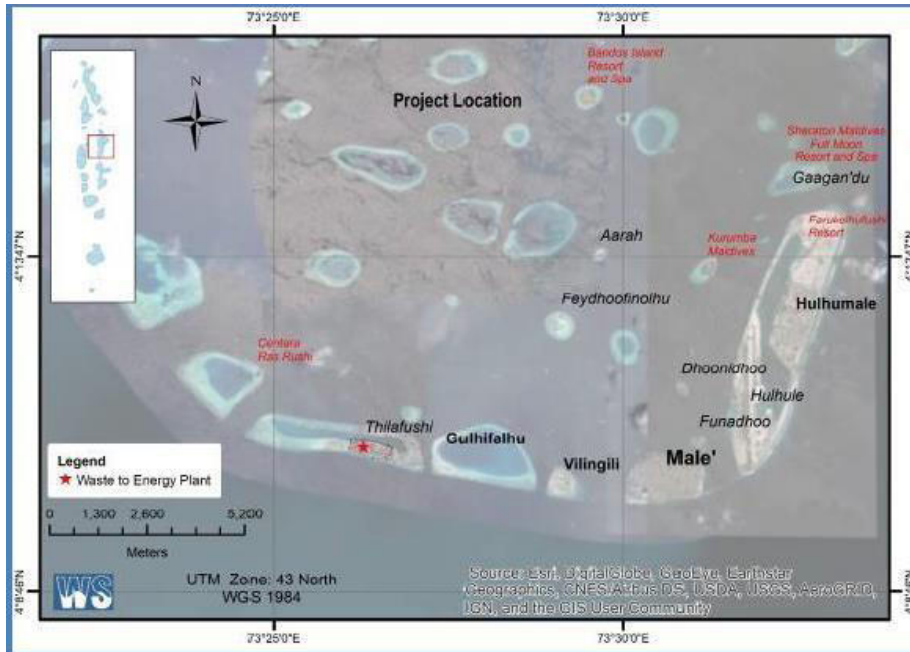
C. Environmental Category

7. The project is classified as environmental category A per ADB SPS due to construction and operation of a large WTE facility which may have potential significant adverse impacts. This project is classified as a Schedule D project as per the EIA Regulation of Maldives. Approval / Decision Statement has been received from EPA for this project.

D. About this Report

8. This is the Quarterly Environmental Monitoring Report (QEMR) prepared by PMU for the monitoring period of July 1, 2021 – September 30, 2021 (Q3-2021). This QEMR provides the status of project, presents preparation and implementation of environmental management, mitigation and monitoring actions, and reports status of compliance with Environmental Management Plans (EMPs) and loan covenants. This report covers the contract packages implemented under this project.

Figure 1: Project Implementation Area



II. PROJECT IMPLEMENTATION ARRANGEMENTS

A. Project & Safeguards Implementation Arrangements

9. The Project's Executing Agency (EA) is the Ministry of Finance (MoF), while the Implementing Agency (IA) is the Ministry of Environment, Climate Change and Technology (MoECT). A project-specific management, coordination, and implementation unit (PMU) at the MoECT will assist in: (i) project management; and (ii) function as project implementation unit to assist in day-to-day project implementation and operation of water supply, water resource management, and capacity building components.

10. A National Steering Committee (NSC), with membership comprising officials of relevant ministries, representatives from other relevant institutions/agencies, oversees the Project at national level and advises and guides the Project on strategic and policy decisions.

11. MoECT, through the PMU, is responsible in ensuring the project's compliance with loan covenants. Headed by Project Director, PMU is responsible for the day-to-day implementation of the Project. The PMU is staffed with technical, financial, safeguards, capacity building/governance and procurement officers to manage all technical, procurement, safeguards and loan account administration. PMU key technical and managerial staff are supported by consultants (Project Management Design Construction Supervision Consultant, PMDCSC).

12. PMU is responsible for implementation of project in compliance with ADB Safeguard Policy Statement 2009 and applicable government rules and regulations. PMU, through an Safeguards Specialist, oversees implementation and monitoring of environmental safeguards and will be responsible for implementation, monitoring, reporting and compliance with safeguards related loan covenants. PMU is supported by various experts, and the details of consultants, DBO contractor and monitoring experts involved in the contract are given below:

- (i) Consultants for implementation and monitoring. PMU is assisted by Environmental Officer of PMDCSC in environmental safeguards.
- (ii) DBO contractor. The WtE plant will be designed, constructed, operated and maintained by a single contractor using design-build-operate (DBO) contract. The operation and maintenance (O&M) period under the DBO contract will be 15 years. DBO contractor is responsible for implementation of EMP at all stages of the project. DBO contractor personnel include a full time Environmental Specialist with extensive experience.
- (iii) External monitoring. As per ADB SPS requirement, an individual Environmental Monitoring Specialist will be required to conduct external monitoring to verify monitoring information of this Category A Project.

B. Status of mobilization of staff resources

13. **Current status.** Following table shows environmental safeguards staff engaged at all levels of the project including project agencies, consultants, contractors and monitoring personnel engaged in the project. As of end of reporting period, only PMU safeguards specialist has been mobilized.

Table 2: Environmental Safeguards Team

No	Positions	Name of the expert / staff	Contact Number & Email	If not mobilized yet, indicate reason and likely date mobilization
A	PMU			
1	Social and Environmental Safeguards Specialist	Mohamed Asif	7785277 mohamed.asif@environment.gov.mv	
B	PMDSC			
1	Environmental Officer			Not mobilized yet. Evaluation ongoing.
C	DBO Contractor			
1	Environmental Specialist			Not mobilized yet. Evaluation ongoing.
D	External Monitoring			
1	Individual environmental monitoring expert			Not mobilized yet. Evaluation ongoing.

III. PROJECT IMPLEMENTATION STATUS

A. Status of Bidding and Contract Award

14. The project has five contract packages. Details of contract packages are given in Table 3.

Table 3: Status of Contract Packages

S. No.	Package Number / Name	Project components	Current status	Name of contractor	Duration of contract	Contract start and end date
1	Design, Build and Operate a Waste to Energy Plant in Thilafushi	Waste to Energy (WTE) plant and balance of plant with 15 years O&M	Evaluation ongoing	-	-	-
2	Project management, design and construction supervision	Project management, design and construction supervision	Evaluation ongoing	-	-	-
3	Community Awareness consultant	Community Awareness consultant	Not advertised yet			

4	Individual Environmental Monitor	Independent environmental monitor given Category A for Environment safeguards	Evaluation ongoing			
5	Joint Crediting Mechanism Auditor	To validate proposed JCM project and verify greenhouse gas emission reductions	Not advertised yet			

B. Implementation Status

15. 15. Implementation status of awarded contract packages is presented in Table 4. The activities / works conducted under each package during the reporting period are presented in detail after Table 4.

Table 4: Implementation Status of Contract Packages

S. No.	Package	Progress during reporting period	Cumulative progress as of Sept 30, 2021	Components completed till date	List of main activities/works conducted during reporting period
1	Waste to Energy (WTE) plant and balance of plant with 15 years O&M.	-	-	-	• Evaluation ongoing
2	Project management, design and construction supervision	-	-	-	• Evaluation ongoing
3	Community Awareness consultant	-	-	-	-
4	Individual Environmental Monitor	-	-	-	• Evaluation ongoing
5	Joint Crediting Mechanism Auditor	-	-	-	-

16. Details of activities / works conducted during the reporting period (1-July to 30-Sept2021): **Include Appendix showing some photographs of activities being conducted** Evaluation of IEM

IV. COMPLIANCE STATUS WITH NATIONAL /STATE/LOCAL STATUTORY ENVIRONMENTAL REQUIREMENTS

A. Status of Clearances

17. Details of clearances, permit and approvals required for implementation of the subprojects / packages, current status and further actions required for compliance are presented in Table 5.

18. Summarize on overall status of clearances, what is pending etc. Attach copies of clearances in appendix 1

Table 5: Status of Statutory Clearances

Clearance/Permit Required	Current status	Further Actions / Remarks
DBO Contract		
Environmental Clearance from EPA	Obtained on 21 st Jan 2020 and extended until December 2021	-

B. Compliance with Clearance Conditions

19. 19. Following table shows the guidelines, conditions etc., stipulated in the clearances / permits issued by respective regulatory agencies along with current implementation and compliance status of the same.

Table 6: Statuary Clearance / Permit Requirement and Compliance Status

Clearance / Permit	Conditions of Clearance / Permit	Status of Compliance
DBO Contract		
Environmental Clearance issued by EPA on 21 st Jan 2020	<p>Given on the Decision statement attached.</p> <p>In the event the project has not commenced with in one year from the date of issue, or if the duration of the DS has not been extended, the DS shall be considered null and void. In order to extend the duration, the proponent shall write to the Minister for an extension according to the clause 14 of EIA regulation 2012.</p> <p>In the event the project activities have been delayed for more than one year due to unforeseen circumstances, the Ministry shall have the discretion to extend the duration of the DS or to terminate it. In such circumstances the proponent shall write to the Minister for and extension clearly stating the reasons for the delay.</p> <p>The Minister or his designate may</p>	complied

Clearance / Permit	Conditions of Clearance / Permit	Status of Compliance
	<p>issue a cessation order requiring persons working on a development proposal to cease working until the order is withdrawn, if: the DS has been withdrawn or,</p> <p>There has been a breach of the conditions of this DS.</p> <p>It is the developers responsibility to undertake all project activities in accordance with the relevant laws and regulations of the Maldives. The developer shall submit environmental monitoring report as outlined in para 8 of the DS. Failure to submit may result in the suspension or revocation of the permit under this DS.</p> <p>The developer is aware that under the environmental protection act, and EIA regulation the ministry reserves right to terminate any activity without compensation if found that such an activity has caused significant irreversible impacts on the environment. All mitigation measures proposed in the EIA report for all the phases of the project shall be fully implemented.</p> <p>The monitoring program outlined in the EIA shall be undertaken and implemented and summary environmental monitoring reports shall be submitted to the Ministry. The date of expiry stated in the DS is the duration given to commence the project activities approved under this DS.</p> <p>Once the project activities have started, the proponent must inform the EPA the date of commencement of activities.</p>	

V. COMPLIANCE STATUS WITH ENVIRONMENTAL LOAN COVENANTS

A. Compliance with Loan Covenants

20. Status of compliance with environmental safeguard related loan covenants is given in the below Table 11. All loan covenants are being complied with. Action is being initiated to appoint staff and consultants to ensure full compliance with the loan covenant on Human and financial resources to implement safeguards requirements (Loan Agreement Schedule 5, Item 6).

Table 7: Status of Compliance with Loan Covenants

Environmental Safeguards related Loan Covenants	Compliance status	Proposed actions, if any
<p><i>Schedule 4-4 Environment</i></p> <p>The Borrower, through the Project Executing Agency and the Implementing Agency, shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the EIA, the EMP, and any corrective or preventative actions set forth in a safeguards Monitoring Report.</p>	<p>Being complied. PMU (Project Management Unit) is continuously ensuring that all sub projects are in compliance with all laws and regulations and the Safeguards specialist of the PMU ensures that all measures and requirements set forth in the EIA and EMP are complied</p>	
<p><i>Schedule 4-6 Human and Financial Resources to Implement Safeguards Requirements</i></p> <p>The borrower shall make available necessary budgetary and human resources to fully implement the EMPs.</p>	<p>Being complied. The MOFT has approved the post of Safeguards Specialist for the PMU so that all necessary safeguards issues are complied.</p>	
<p><i>Schedule 4 – 7 Safeguards-Related Provisions in Bidding Documents and Works Contracts</i></p> <p>A- comply with the measures relevant to the contractor set forth in the EIA and the EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report; B- make available a budget for all such environmental measures; and C- provide the Recipient with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the EIA and the EMP.</p>	<p>All bidding documents related to the project will have the EIA/EMP included and compliance will be ensured by the safeguards specialist.</p>	

Environmental Safeguards related Loan Covenants	Compliance status	Proposed actions, if any
<p><i>Schedule 4 – 8 Safeguards Monitoring and Reporting</i></p> <p>A-submit quarterly Safeguards monitoring Reports to ADB during construction of the project facilities and semi- annual Safeguards Monitoring Reports thereafter, and disclose relevant information from such reports to affected persons promptly upon submission: B- if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the EIA and the EMP, promptly inform ADB of this occurrence of each risks or impacts, with detailed</p>	<p>Will be complied. Monitoring reports will be submitted to ADB accordingly. Any breach or potential breach will be reported.</p>	
<p>description of the event and proposed corrective action plan; C- no later than 3 months after the Effective Date, engage qualified and experienced external experts or qualified NGOs under a selection process and terms of reference acceptable to ADB, to verify information produced through the project monitoring process and facilitate the carrying out of any verification activities by such external experts; and D- report any actual or potential breach of compliance with the measures and requirements set forth in the EMP promptly after becoming aware of the breach</p>		

B. Status of Environmental Assessment, Reports and Approval

- 21. DBO contractor not mobilized yet.
- 22. EIA has been approved by ADB and will be updated during the detailed design by DBO Contractor and will be submitted to ADB for approval and disclosure prior to start of construction.

Table 8: Status of EIA Reports

S. No	Package	Current Status	Draft EIA Approved by ADB	Final/updated EIA Submitted by PMU	Final EIA Approved by ADB	Remarks
1	Waste to Energy (WTE) plant	Evaluation on going / contractor not yet mobilized	Yes October 2019	yes	yes	

C. Status of Disclosure of Safeguard Documents

- 23. Status of disclosure of safeguard documents presented in the following Table 9. All the documents have been disclosed in websites and project offices.

Table 9: Status of Disclosure of EIA

S. No	Package	ADB web Site	Project Website	Disclosure of translated summary in project offices/site
1	Waste to Energy (WTE) plant	Disclosed https://www.adb.org/projects/documents/mld-51077-003-eia-2	https://www.environment.gov.mv/v2/en/download/10368	Contract not yet mobilized

D. Safeguards in Bid Documents and Contracts

24. The EIA is included in the bid documents and will be included in the contract as well. Following table lists the contract clauses related to environmental safeguards including health and safety.

Table 10: Status of Disclosure of EIA

S. No	Package	List of Contract Clauses related environment, health and safety, including core labour standards (CLS)
1	Waste to Energy (WTE) plant	<ul style="list-style-type: none"> Section 6 Employers Requirements / 5.11, 6.5 (contract clauses listed below)

5.11 Contractors EMP:

1.	General	<p>The Contractor shall prepare a Contractors Environmental Management Plan (CEMP) describing specific design features that will ensure environmental protection and setting out the working methods, management, and mitigation and monitoring measures that will be put in place, for each of the various construction activities, during the implementation of the Works.</p> <p>The scope of the CEMP shall address all of the issues itemised in the project EMP contained with the Environmental Impact Assessment as listed in Appendix 3.2. The CEMP shall be consistent with the environmental management plan (EMP) in the EIA report of the project. The CEMP shall have the same level or stricter set of measures than those included in the EMP.</p> <p>The CEMP shall consider ISO 14001 when detailing the environmental management system in place.</p>
----	---------	--

2.	Environmental Manager and Officers	<p>The Contractor shall appoint an Environmental Manager who shall be permanently based on the Site for the full duration of the Works from the date of the Contractor's mobilization until the commissioning of Works has been completed. In addition, the Contractor shall appoint at least one Environmental Officer for every shift during construction period that shall be trained accordingly. The Contractor shall ensure that no construction activities shall be without the Environmental Manager and/or one Environmental Officer on duty.</p>
3.	Commitment	<p>The Contractor shall ensure that his Project Manager, Environmental Manager, and all key personnel including but not limited to professional engineers, site supervisors and all persons responsible for directing work on the site are provided with appropriate training to ensure their understanding and compliance with the requirements of the CEMP.</p>
4.	Submission of CEMP	<p>The CEMP shall be submitted to the Employer's Representative on the date indicated in sub-chapter 5.5 (Phasing Requirements) and no construction work shall be carried out on Site until the</p>

		<p>CEMP has been approved by the Employer's Representative.</p> <p>If the Contractor fails to apply the CEMP or in any way fails to exercise due care of the natural environment, the Employer's Representative will arrange necessary measures to be implemented by others and to recover the cost from payments due to the Contractor.</p> <p>This section of the specification shall prevail over any other section in the event of ambiguity or conflict in requirements for environmental protection or treatment of social issues.</p>
5.	Equipment	<p>The Contractor shall mobilize on-site the required field equipment for environmental monitoring as necessary to demonstrate compliance with the requirements of the CEMP.</p> <p>All laboratory and test equipment shall comply with the relevant standards of the International Standards Organization (ISO).</p>

6.	Content of the CEMP	<p>The CEMP shall, inter alia:</p> <ul style="list-style-type: none"> ● Describe the features of the Contractor’s design that will ensure environmental protection; ● Describe how the Contractor will address all the issues and recommendations of the project EMP; ● Identify the key environmental risks associated with all aspects the Contractor’s construction activities, including: <ul style="list-style-type: none"> ○ dust emissions ○ emissions from equipment and vehicles ○ noise and vibration impacts from construction traffic ○ risks from exploitation of sand, aggregates and rip rap materials ○ risks from spills/contamination of soil and groundwater ○ risks from soil handling ○ risks to surface water quality; ● Detail all site-specific measures that the Contractor will implement during construction to manage and mitigate the identified environmental risks; ● Describe the Contractor’s procedures for monitoring and reporting compliance with the CEMP; ● Detail the members of the Contractor’s staff who will responsible for implementing the mitigation measures in the CEMP and monitoring compliance; <p>Describe the Contractor’s stakeholder grievance mechanism for environmental matters.</p>
7.	Monitoring and Reporting	<p>The CEMP shall be monitored on a monthly basis. The Contractor shall include a report on compliance with the CEMP in its Monthly progress reports.</p> <ul style="list-style-type: none"> ● Should any environmental incidents be observed or reported by the workers, this shall be reported to the Employer’s Representative immediately.

5.12 Health and Safety Plan:

1.	General	<p>The Contractor shall prepare a Health and Safety plan (H&S plan) describing all specific features that will ensure the health and safety of the Contractor's Personnel and Employer's Personnel on Site and persons who may visit the Site. The H&S plan shall be aligned with ISO 45001.</p> <p>The plan will cover all types of construction activities during the implementation of the Works. The scope of the H&S plan shall address all of the issues itemised and committed in the National legal context with regard to :</p> <ul style="list-style-type: none"> ● Labour ● Occupational and Community Health and Safety <p>and shall be aligned with international best practice standards.</p> <p>A H&S plan shall be in force at all times during the Contract.</p>
8.	Health and Safety Manager and Officers	<p>The Contractor shall appoint a Health and Safety Manager who shall be permanently based on the Site for the full duration of the Works from the date of the Contractor's mobilization until the commissioning of Works has been completed. In addition, the Contractor shall appoint at least one full time Health and Safety Officer (or equivalent) for every shift during the construction period and during the full duration of the Operation Service. The Contractor shall ensure that no construction activities or plant operation shall be without the Health and Safety Manager and/or one Health and Safety Officer on duty.</p> <p>The Health and Safety Manager holds the power within the Contractor's organization to be able to suspend the Works if considered necessary in the event of health and safety nonconformities, and to allocate all resources, personnel and equipment required to take any corrective action considered necessary.</p>
9.	Commitment	<p>The Contractor shall ensure that all the personnel on site comply with the requirements of the approved H&S Plan.</p> <p>The Contractor shall provide H&S training to the Contractor's Personnel and Employer's Personnel as necessary to ensure safe practices and compliance with the requirements of the H&S</p>
		Plan.

10. The H&S plan	<p>The H&S plan shall detail all site-specific measures the Contractor shall implement during the construction period to identify, manage and reduce all risks to health and safety. The H&S Plan shall include measures to prevent accidents, arrangements for first aid and arrangements for emergency response. The plan shall be designed to ensure the protection of all Contractor's Personnel, the Employer's Personnel and all other persons who may visit the Site. The H&S Plan shall be consistent with the EIA report and applicable IFC EHS Guidelines.</p> <p>The Health and Safety Plan shall include, but not be limited to, a description of how the Contractor will,</p> <ul style="list-style-type: none"> a) Carry out all its health and safety responsibilities as required under the applicable law; b) Provide medical staff; first aid facilities and supplies; sick bay and means of emergency transfer to hospital facilities c) Provide ongoing health and safety training for the Contractor's Personnel and Employer's Personnel; d) Develop and manage all required health and safety monitoring and reporting procedures; e) Manage all health and safety claims. <p>The H&S plan shall be submitted to the Employer's Representative on the date indicated in Section 5.6 (Contractor's documents) and no physical work shall be carried out until the H&S plan has been approved by the Employer's Representative.</p>
11. Measures to be taken in event of H&S noncompliance	<p>If the Contractor fails to apply the H&S plan or in any way fails to exercise due care, the Employer's Representative will arrange necessary health and safety measures to be implemented by others and to recover the cost from payments due to the Contractor.</p>
12. Reporting	<p>The Contractor shall include a report on accidents on site, and health and safety compliance in its monthly progress reports.</p> <p>Should any Health and Safety incidents be observed or reported by the workers, this shall be reported to the Employer's Representative immediately.</p>

6.5 Health, Safety, Environmental and Social Requirements

6.5.1 Health and Safety on Site

1. Health and Safety on Site	<p>The Contractor undertakes to comply, and to ensure its subcontractors comply, with the Health and Safety Plan (Operations).</p>
------------------------------	--

	<p>The contents of the Health and Safety Plan (Operations) shall be as described in Chapter 6.4.10.</p>
<p>2. H&S Manager</p>	<p>The Contractor shall appoint a Health & Safety Manager (the “H&S Manager”) who shall be permanently based on the Site for the full duration of the Operation Service. The H&S Manager shall fulfil the role of Accident Prevention Officer under GCC sub clause 6.7 (Health and Safety) and shall also oversee medical personnel, first aid arrangements and supplies, sick bay and readiness to evacuate serious cases.</p> <p>The H&S Manager shall have the authority within the Contractor’s organization to be able to allocate such any resources, personnel and equipment as are required to correct H&S relating deficiencies.</p> <p>During the shift cycles, the H&S Manager shall be represented by a suitably trained shift staff that shall be supervising all H&S related matters.</p>
<p>3. Health and Safety ad Emergency Response Training</p>	<p>The Contractor shall provide health and safety training for each of the Contractor’s Personnel (including the staff of its subcontractors) and shall keep records of such training.</p> <p>The training activities shall be as specified in the approved Health and Safety Plan and approved Emergency Response Plan. They shall include (as applicable):</p> <ol style="list-style-type: none"> a) Induction training for all Contractor’s Personnel; b) Ongoing job-specific technical training; c) Emergency response training; and d) First aid training for designated first aid staff.
<p>4. Firefighting</p>	<p>The Contractor shall</p> <ol style="list-style-type: none"> a) Prepare and be able to implement a fire response plan (which will form part of the Emergency Preparedness Plan); b) Regularly inspect, test and maintain all firefighting installations and equipment; c) Provide sufficient firefighting water according to the legal requirements; and d) Train and inform periodically its staff, the Employer’s dedicated staff and other authorities about the implemented firefighting measures and plans.

6.5.2 Contractor’s Environmental Management Plan (Operations)

<p>1. CEMP (Operations)</p>	<p>The Contractor shall update the Environmental Management Plan presented in the project Environmental Impact Assessment (EIA) in Appendix 3.2 in order to make it relevant to the Operation Service.</p> <p>The Operation Service activities described in the CEMP shall follow the structure, norms, and standards defined in Chapter 5.1 and 6.1. and shall be consistent with and shall not relax conditions and requirements as per the EMP included in the EIA.</p>
<p>2. Environmental Manager</p>	<p>The Contractor shall appoint an Environmental Manager who shall be permanently based on the Site for the full duration of the Operation Service. The Environmental Manager shall fulfil the role defined under GCC sub clause 4.18 (Protection of the Environment) and in addition, be responsible for accident and illness response arrangements.</p> <p>During the shift cycles, the Environmental Manager shall be represented by a suitably trained shift staff that shall be supervising all environmental related matters.</p> <p>The roles Health and Safety Manager and Environmental Manager as well as the corresponding shift members (described in Chapter 6.5.1) may be vested in a single individual.</p> <p>The Environmental Manager shall ensure that all key Contractor's personnel including but not limited to professional engineers, site supervisors and all persons responsible for directing work on the site are familiar with the CEMP and are required to adhere to its requirements.</p>
<p>3. Provisions to be included in the CEMP</p>	<p>The Contractor shall consider the particular environment and location of the Site and shall pay particular attention shall be included, but not limited, to the following items below:</p> <ul style="list-style-type: none"> a) Air emissions and dust control; b) Noise & vibration control; c) Effluent management; d) Waste management; e) Hazardous substance handling and storage management, including spill contingency; f) Erosion, soil & vegetation management; g) Traffic management; h) Recruitment and labour management, including the skills development and local procurement; i) Flooding and natural hazards j) Storm water management.

VI. STATUS OF EMP IMPLEMENTATION

A. Details of site visits / field verifications by Safeguard Staff

25. Following table provides the details of field / construction site visits conducted by environmental safeguards officers / experts for supervision and monitoring (including external monitoring expert). Include few photographs of site visit in appendix.

Table 11: Field Verification Visits by Safeguards Supervision & Monitoring staff

No	Position of env. Safeguards staff / expert	Name	Date of visit	Name of work sites visited	Indicate if the onsite environmental staff of contractor available on site during the visit
	Waste to Energy (WTE) plant				
	Contractor not mobilized yet.	-	-	-	-

B. DBO Plant Contract Package

1. Design / Pre-Construction Stage EMP

26. This is a DBO type contract, where in which the detailed designs will be developed by the DBO contractor based on the preliminary project design. The design and pre-construction stage EMP is to be implemented and mitigation measures shall be duly integrated into the project design.

2. Construction Stage EMP

27. Contractor not mobilized yet.

3. Operation Stage EMP

28. Operation stage EMP will be implemented during the project operation.

Table 12: Design / Pre-Construction Mitigation Measures Implementation & Compliance

(please include all design and preconstruction mitigation measures from the approved EMP of EIA Report)

Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		
<i>Bidding documents are issued without the EMP and/or the EIA prepared for the project</i>				
No bidding documents shall be issued without having the mitigation measures and monitoring requirements in the EIA report included in the safeguard clauses of technical specifications in bidding and contract documents.	PMU	MoE	Bidding docs issued with EMP and EIA	complied
<i>Damage to reef and marine ecology around Thilafushi island due to high temperature and high concentration</i>				
If necessary, undertake coral and benthic study following Reef Check protocol. Confirm that the pre-identified best location for intake and outfall is acceptable to the DBO Contractor. If changes are planned, the DBO Contractor shall ensure that withdrawal cooling water and discharge of cooling water will have no or minimum impact to underwater ecosystem. Contract documents to include performance guarantee by the facility that hot water discharge shall have maximum temperature difference of 3 degrees Celsius from the ambient temperature. Undertake hot water dispersion modeling along the planned area of discharge. Ensure that this area is with no or least marine species that could be affected based on the underwater ecology study (as described above). If there will be changes in the location of cooling water discharge location, the DBO Contractor shall conduct confirmatory numerical modeling for brine discharge– both near and far-field, covering all 4 seasons (2 monsoon and 2,inter-monsoon) to ensure the location of discharge will not have significant impact to marine environment. Ensure that design considers achievement of proper mixing and rapid dilution within a small area around the outfall. Consider in the design the combined outfall for hot water and treated wastewater to minimize impact to marine ecosystem.	DBO contractor through a preapproved agency	PMU	Contractor not mobilized yet.	Will be complied
<i>Improper locations of sampling locations leading to underestimated ambient air Quality condition and health risk to people.</i>				

Contract documents to include performance guarantee for the facility that emissions comply with applicable standards. Conduct wind data gathering for various seasons of the year to map projected wind directions at any season during plant operations. Design smokestacks with height that will ensure emissions will have no or minimum impact to surrounding receptors within the direct and indirect impact zones. Undertake baseline ambient air quality data gathering with due consideration of the direction of flow of smoke from the existing	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied
Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		
dumpsite.				
<i>Consents, permits, clearances, no objection certificate (NOC), etc.</i>				
Stoppage of activities due to lack of permits or clearances from the local and national governments.	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied
<i>Port congestion at Thilafushi due to transport of construction equipment and raw materials at site.</i>				
Identify a separate berth location for loading and unloading construction heavy equipment and raw materials that will not disrupt day-to-day activities in the island. Avoid use of the common ports being used by locals. If no other areas available, execute agreement with WAMCO to use WAMCO's berths/docking ports when delivering heavy equipment and big-sized construction materials to the site.	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied
<i>Port congestion at Thilafushi due to transport of construction equipment and raw materials at site.</i>				
Failure of site to withstand proposed project infrastructures.	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied
<i>Failure of site to withstand climate change, including extreme weather events.</i>				
Undertake and include results of climate vulnerability and risk assessment (CVRA) in the design of the project. Provide site protections based on the risks identified in the CVRA	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied

Table 13: Construction Mitigation Measures Implementation & Compliance

(please include all construction mitigation measures from the approved EMP of EIA Report, this table may be included once the preconstruction works starts)

Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		
Contractor not mobilized yet.				
Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		

Table 14: Operation Mitigation Measures Implementation & Compliance

(please include all operation mitigation measures from the approved EMP of EIA Report, this table may be included once the construction completes and trail run starts)

Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		
Contractor not mobilized yet.				

Table 15: Pre-Construction and Construction Mitigation Measures Implementation & Compliance

(please include all pre and construction mitigation measures from the approved IEE Report and present status of implementation and compliance)

Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		
<i>Bidding documents are issued without the EMP and/or the EIA prepared for the project</i>				
No bidding documents shall be issued without having the mitigation measures and monitoring requirements in the EIA report included in the safeguard clauses of technical specifications in bidding and contract documents.	PMU	MoE	Bidding docs issued with EMP and EIA	complied
<i>Damage to reef and marine ecology around Thilafushi island due to high temperature and high concentration</i>				
If necessary, undertake coral and benthic study following Reef Check protocol. Confirm that the pre-identified best location for intake and outfall is acceptable to the DBO Contractor. If changes are planned, the DBO Contractor shall ensure that withdrawal cooling water and discharge of cooling water will have no or minimum impact to underwater ecosystem. Contract documents to include performance guarantee by the facility that hot water discharge shall have maximum temperature difference of 3 degrees Celsius from the ambient temperature. Undertake hot water dispersion modeling along the planned area of discharge. Ensure that this area is with no or least marine species that could be affected based on the underwater ecology study (as described above). If there will be changes in the location of cooling water discharge location, the DBO Contractor shall conduct confirmatory numerical modeling for brine discharge— both near and far-field, covering all 4 seasons (2 monsoon and 2, inter-monsoon) to ensure the location of discharge will not have significant impact to marine environment. Ensure that design considers achievement of proper mixing and rapid dilution within a small area around the outfall. Consider in the design the combined outfall for hot water and treated wastewater to minimize impact to marine ecosystem.	DBO contractor through a preapproved agency	PMU	Contractor not mobilized yet.	Will be complied
<i>Improper locations of sampling locations leading to underestimated ambient air Quality condition and health risk to people.</i>				
Contract documents to include performance guarantee for the facility that emissions comply with applicable standards. Conduct wind data gathering for various seasons of the year to map projected wind directions at any season during plant operations. Design smokestacks with height that will ensure	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied

Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		
emissions will have no or minimum impact to surrounding receptors within the direct and indirect impact zones. Undertake baseline ambient air quality data gathering with due consideration of the direction of flow of smoke from the existing dumpsite.				
<i>Consents, permits, clearances, no objection certificate (NOC), etc.</i>				
Stoppage of activities due to lack of permits or clearances from the local and national governments.	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied
<i>Port congestion at Thilafushi due to transport of construction equipment and raw materials at site.</i>				
Identify a separate berth location for loading and unloading construction heavy equipment and raw materials that will not disrupt day-to-day activities in the island. Avoid use of the common ports being used by locals. If no other areas available, execute agreement with WAMCO to use WAMCO's berths/docking ports when delivering heavy equipment and big-sized construction materials to the site.	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied
<i>Port congestion at Thilafushi due to transport of construction equipment and raw materials at site.</i>				
Failure of site to withstand proposed project infrastructures.	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied
<i>Failure of site to withstand climate change, including extreme weather events.</i>				
Undertake and include results of climate vulnerability and risk assessment (CVRA) in the design of the project. Provide site protections based on the risks identified in the CVRA	DBO contractor	PMU	Contractor not mobilized yet.	Will be complied

Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		
O1: xxxxxxxx				

XXXXXX				
--------	--	--	--	--

Table 16: Operation Mitigation Measures Implementation & Compliance

(Please include all operation mitigation measures from the approved IEE Report, this table may be included once the construction completes and trail run starts)

Impacts/ Mitigation Measures	Agency responsible		Implementation status of mitigation measures	Status of Compliance
	implement	monitor		

C. Best practices / environment improvement activities

29. Activities conducted at the sites are part of EMP

D. Unanticipated Impacts

30. Lock down due to increase in COVID cases.

1. Design / Pre-Construction Stage EMP

VII. IMPLEMENTATION OF HEALTH & SAFETY COVID-19 PLAN

A. H&S COVID-19 Plan Preparation

31. Status of preparation and approval of Health and Safety COVID-19 Plan is provided below.

Contract is not yet awarded, will ensure the COVID19 plan is prepared and approved.

Table 17: Status of H&S COVID-19 Plan

H&S COVID-19 Plan	Project level	Contractor	Remarks
Preparation			
Approval			
Update			

Provide information with dates of submission and approval

B. H&S COVID-19 Plan Implementation

32. Will monitor the H&S COVID19 plan implementation when the plan is approved.

- measures implemented
- Good practices
- Incidents, if any, recorded/reported in the project
- Findings
- Any actions for improvement

Include an appendix showing implementation of COVID 19 measures

VIII. ENVIRONMENTAL MONITORING

A. DBO Contract

1. Monitoring Activities - Proposed and Conducted

2. The monitoring surveys for ambient, air, water, noise, flora and fauna etc., stipulated in the EIA and EMP is provided in the following table for design / preconstruction phase (Table 18) and construction phase (Table 19). Summarize the status of monitoring as per the details provided in the below tables. Provide documentary evidence of monitoring activities in appendix.

Table 18: Design / Pre-Construction Stage Environmental Monitoring Plan & Status

(Update this table from approved EIA report, and complete the status and remarks)

Monitoring field	Monitoring Parameters	Monitoring Location	Frequency	Status of monitoring	Remarks
Invitation for Bids	Bidding and contract documents include safeguard provisions	-	During drafting of bidding and contract documents Before the issuance of bidding documents for IFB Before awarding of contracts	Complied. Safeguards provisions included in bidding docs. Contract being drafted, will ensure contract docs include as well.	
Locating intake and outfall of cooling/thermal water.	Planned and implemented Numerical modeling output for 4 seasons	Project thilafushi site	Once to review modeling output. Once during finalization of outfall configuration	Will be complied.	
Locating ambient air quality monitoring stations	Ambient air monitoring station site map	Project thilafushi site	Once of during the detail design stage	Will be complied.	
Locating proper drainage system around the facility	Geotechnical study report. Recommendations of geotechnical study integrated in detailed design. CVRA report Recommendations of the CVRA report integrated in detailed design	Project thilafushi site	Continuing during detailed design stage.	Will be complied.	

Monitoring field	Monitoring Parameters	Monitoring Location	Frequency	Status of monitoring	Remarks
------------------	-----------------------	---------------------	-----------	----------------------	---------

Work program and pre-approved plans	Work plans included in the final detailed design of the project Work schedule for each plan included in the overall schedule of project implementation.	-	Once prior to start of construction works.	Will be complied.	
Consents, permits, clearances, no objection certificate (NOC), etc.	• Clearances and approvals	-	Once prior to start of construction.	Will be complied. EIA DS already issued.	
Shifting of Utilities	Maps showing utilities and likely disruptions	-	Once prior to start of construction.	Will be complied.	
Locating sites for construction work camps, areas for stockpile, storage and disposal	List of preapproved sites for construction work camps, areas for stockpile, storage and disposal Construction Waste Management Plan	Project thilafushi site	One-off : Baseline prior to start of construction work	Will be complied.	
Sourcing of construction materials	Permits issued to quarries/sources of materials	Project thilafushi site	Once prior to start of construction	Will be complied.	
Delivery route for construction materials and equipment	Maps showing delivery routes.	Project thilafushi site	Once prior to mobilization by DBO Contractor	Will be complied.	
Final Detailed Design Components	Detailed design that uses recommendations of the EIA report.	-	Continuing during detailed design stage.	Will be complied.	
Additional Baseline Data Gathering	Results of monthly ambient air quality measurements (TSP, PM10, PM2.5, SOx, NOx). Results of quarterly marine water quality analysis (to follow parameters used in the first sampling activities). Results of quarterly marine underwater ecology survey (to	Project thilafushi site	Monthly sampling (air quality) and quarterly sampling (marine water quality and underwater ecology survey) for minimum of 1 year after DBO contractor mobilization (to establish baseline	Will be complied.	

Monitoring field	Monitoring Parameters	Monitoring Location	Frequency	Status of monitoring	Remarks
	follow parameters, methodologies and locations used in the first set of surveys in the EIA process).		conditions prior to works).		

Table 19: Construction Stage Environmental Monitoring Plan & Status

Contract not awarded yet. Will update this section when required.

Monitoring field	Monitoring Parameters	Monitoring Location	Frequency	Status of monitoring	Remarks
Ambient air quality sampling and monitoring	TSP, PM ₁₀ , PM _{2.5} , SO _x , NO _x	Pre-identified monitoring stations at Thilafushi Island (the same sampling locations as during baseline data gathering). Other additional location/s as may be needed and identified during construction stage.	Quarterly (24hour at sampling locations used during baseline data gatherin)	Contract not awarded yet. Will update this section when required.	
Noise level monitoring	Day time and nighttime noise levels dB(A)	West side boundary (nearest establishments) of the WTE plant (the same locations as used during baseline data gathering). Other additional preidentified noise level monitoring site/s at Thilafushi Island.	Once prior to start of construction works (both day time and night time); Once during conduct heavy construction work expected to generate high noise level (either or both day time and night time, depending on when such heavy construction work is undertaken); Monthly during normal construction activities	Contract not awarded yet. Will update this section when required.	

Monitoring field	Monitoring Parameters	Monitoring Location	Frequency	Status of monitoring	Remarks
			(both day time and night time)		
Marine water quality monitoring	BOD, DO, TSS, Oil and Grease, Fecal Coliform	Pre-identified sampling locations at the northern and southern sides of the construction site	Once every quarter	Contract not awarded yet. Will update this section when	
Monitoring field	Monitoring Parameters	Monitoring Location	Frequency	Status of monitoring	Remarks
		(same sampling points as used during baseline data gathering).		required.	
Groundwater quality monitoring	Oil and Grease, Fecal Coliform, Presence of petroleum and other chemicals use in the baseline data.	Pre-identified sampling wells, as used during baseline data gathering.	Once every quarter	Contract not awarded yet. Will update this section when required.	
Condition of disposal areas	General condition of area, estimated capacity of disposed spoils, estimated remaining capacity that can be accommodated.	All designated disposal areas	Weekly or monthly depending on the frequency of spoil disposal	Contract not awarded yet. Will update this section when required.	
Condition at construction camp sites	All good housekeeping practices as specified in the EMP.	Construction camp site.	Weekly	Contract not awarded yet. Will update this section when required.	
Assessment of occupational health and safety measure implementation	All occupation health and safety measures as specified in the EMP	(i) Construction work site; and (ii) Construction camp site.	Weekly	Contract not awarded yet. Will update this section when required.	
Assessment of community health and safety measure implementation	All community health and safety measures as specified in the EMP	Vicinity of construction work site and around Thilafushi Island.	Weekly	Contract not awarded yet. Will update this section when required.	

Monitoring field	Monitoring Parameters	Monitoring Location	Frequency	Status of monitoring	Remarks
Construction of cooling water lines, intake, and discharge points.	Exact locations if complying with pre-approved and recommended locations per EIA report.	Construction site and previously identified alignment and location of cooling water lines, intake location and outfall location.	Continuous as the construction progresses (by DBO contractor). Random inspection by PMU but at least once a week.	Contract not awarded yet. Will update this section when required.	

B. Monitoring Results

33. Results of monitoring surveys are presented and discussed in the sections below separately under each head. The monitoring values are compared with baseline / previous monitoring/ ambient standards where applicable, and inferences are drawn accordingly. **Include survey results, monitoring data, methodology, photographs, details etc. in appendix.**

Contract not awarded yet. Will update this section when required.

IX. TRAINING AND CAPACITY BUILDING ACTIVITIES

34. Trainings on environmental safeguards, core labor standards, and OSH will be provided in the next applicable reporting period.

35. Trainings, workshops and awareness programs will be conducted by PACCB2 Consultant. PACCB2 Consultancy recruitment is yet to be initiated.

36. As stipulated in the IEE/EIA and EMP of respective subproject/package, various training and capacity building programs (workshops, seminars, on/off-site trainings etc.) will be conducted specific to environmental safeguards and implementation of EMPs. **(include all trainings conducted on-site, off-site, including COVID19 related awareness/training programs also)** 7. Summarize the trainings conducted.

Table 20: Training / Capacity Building Activities Conducted

No	Date	Training Activity	Training objective	Venue and duration	Target group	Number of participants (male, female)
1						
2						
3						
4						

37. The PMU will also be supported by a public awareness and community capacity building (PACCB) consultant, a consulting firm that will help generate awareness and strengthen skills in waste collection, segregation, composting, recycling, and O&M targeting the poor and women, including community awareness campaign for strengthening disaster risk reduction and climate change readiness. PACCB is responsible for the IEC initiatives and public awareness on waste-to-energy as described in the Project Administration Manual.

X. PUBLIC CONSULTATIONS

38. As stipulated in the IEE/EIA and EMP of respective subproject/package, public consultation activities will be conducted when contractor is mobilized. No consultations conducted during this reporting period. When the

39. MOE, through the PMU, will continue to conduct meaningful consultations.

Table 21: Training / Capacity Building Activities Conducted

No	Date	Consultation purpose	Consultation type	Target group	Number of participants (male, female)	Consultation outcome / stakeholder feedback
1						•
2						•
3						•

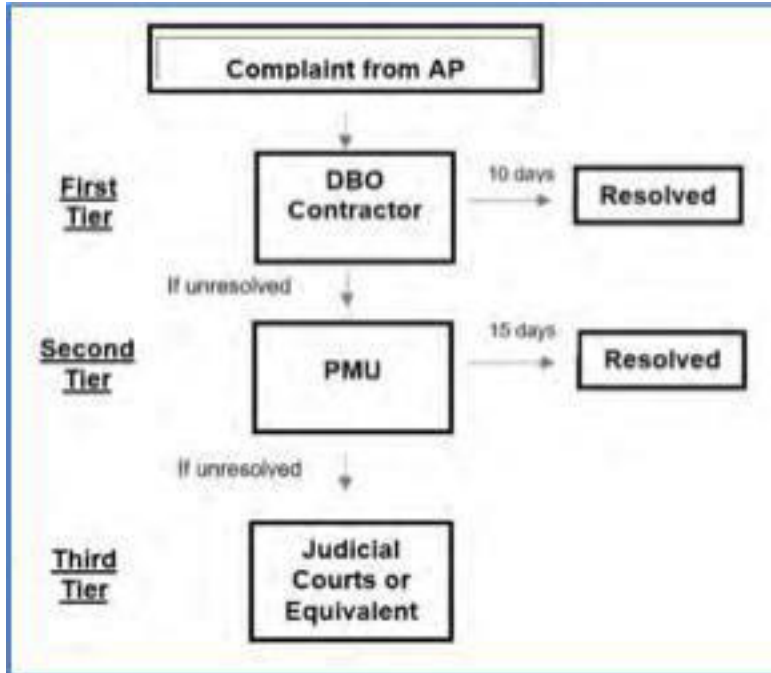
Meaningful consultation will be a continuing activity in order to establish a foundation of mutual trust and provide a forum for the exchange of information, through which any issues can be raised with the project team and addressed by agreed action where necessary. This will involve:

- (i) Public meetings as the main forum through which the local community will be informed about the progress of the project and any elements that may affect them (such as temporary restrictions in access during the construction period, the timing of deliveries of large equipment items, etc.). These meetings would be held according to need, and the program will be agreed in advance and published on government gazette and in the local press.
- (ii) Additional meetings will be held on an ad hoc basis with institutional stakeholders, including government officials where necessary. The aim will be to inform all relevant agencies of project progress and allow discussion and resolution of any specific issues as they may arise.
- (iii) Focus group sessions would be held with the local community when needed, to discuss and organize specific activities and to deal with any issues that can be handled in this way.

XI. GRIEVANCE REDRESS MECHANISM

A. Grievance Redress Mechanism

40. GRM for phase 2 WtE project was drafted and sent to ADB for comments. When approved, will be published and notification of GRM will be included in the appendix.



B. Complaints received

41. No complains received for this reporting period.

42. Complaints received during the reporting period, including pending complaints, if any, are provided in the following table with current status of redress. (include records / details of complaints in appendix)

Table 22: Status of Complaints Received

No	Date of complaint	Details of complaint	Current status	Remarks
1				•
2				•
3				•
4				•

C. GRC Meetings

43. No GRC meetings conducted in this reporting period.

44. Provide details of GRC meeting conducted during the reporting period in the table below and summarize the outcome in this paragraph. Include some photographs of GRC meetings in appendix

Table 23: GRC Meetings Conducted

No	Date of GRC Meeting	Meeting purpose	Venue & Participants	Outcome
1				•
2				•
3				•
4				•
5				•

XII. FINDINGS & RECOMMENDATION

A. Findings and Recommendations

45. 15. All activities going as planned. Environmental Permits received and extended.

B. Remedial Measures

46. None on this reporting period.

47. Following action plan is developed to address the issues of concerns raised in this report. **If there are no issues of concerns, no remedial actions are required. No issues of concern for this reporting period.**

Table 24: Key Issues and Proposed Remedial Actions


Key issue / concern	Proposed remedial / Corrective action	Timeline	Responsibility	Remarks
			•	•
			•	•
			•	•


APPENDICES


Appendix 1: Clearances and Permits

Environmental Protection Agency

Green Building, 3rd Floor, Handhuvaree Hingun
Male', Rep. of Maldives, 20392

 +960 333 5949

 +960 798 0379

 secretariat@epa.gov.mv

 www.epa.gov.mv

ދިވެހިސަރުކާރުގެ ގެޒެޓްގައި ބަޔާންކޮށްފައިވާ ގޮތުން
އިތުރު މަޢުލޫމާތު ހޯއްދެވުމަށް ފޯމު ފުރިހަމަކުރުމަށް ދަންނަވަމެވެ.
މާލެ، ދިވެހިރާއްޖޭގެ ޖުމްހޫރިއްޔާ، 20392

Translation of the Decision Statement/EIA Approval Extension Letter for the Thilafushi Regional Waste Management Center EIA

From: Environmental Protection Agency

15th December 2020

H.E. Dr. Hussain Rasheed Hassan,

Minister of Environment,

Dear Minister,

Reg: Extension of Decision Statement for K. Thilafushi Regional Waste Management Center EIA

With Reference to your letter number 438-WMPC/203/2020/76, as requested, we hereby approve the extension of the Decision Statement/EIA Approval for the Thilafushi Regional Waste Management Center EIA till 31st December 2021”.

Yours Sincerely,

(Signed and stamped)

Ibrahim Naeem,
Director General,
Environmental Protection Agency

To: Ministry of Environment

Male', Maldives

SOUTH ASIA REGIONAL DEPARTMENT
SAUW Quarterly Environmental Monitoring Report Log Sheet

Project title:	MLD: Greater Malé Waste-to-Energy Project		
Loan Number:	3954	Project Number:	51077-003
Overall Project Description and Objectives	The project will establish a sustainable regional solid waste management (SWM) system for the Greater Male region and its neighboring outer islands by (i) developing treatment (proven waste-to-energy [WTE] technology), recycling, and disposal infrastructure; (ii) strengthening institutional capacities for sustainable solid waste services delivery and environmental monitoring; and (iii) improving public awareness on WTE and reduce-reuse-recycle (3R). The project will be designed to reduce disaster risk and improve climate change resilience while creating a cleaner environment and decreasing greenhouse gas emissions.		
Approved Categorization	<input checked="" type="checkbox"/>	Category A	Category C
	<input type="checkbox"/>	Category B	FI
Loan Effectivity Date:	8 December 2020	Frequency of Reporting	Quarterly
Project Officer	Luca Di Mario	Project Analyst	Krizelda Marie L. Songco
Reporting Year	2021	Coverage Period	Jul-Sep 2021

Item	Findings in the QEMR	Comments	Action/s Required	Response by PMU¹, if required
A. Project Safeguards Team (check loan agreement and PAM requirements)				
PMU ²	PMU is supported by environment specialist staff.	This is consistent with the PAM.	None.	
Consultants	Hiring of Project Management, Design and Supervision Consultant (PMDSC) firm and individual environmental monitoring expert is ongoing.	This is consistent with the PAM.	None.	
B. Overall Project and Subproject Description (summarize number and type of packages) ³				
Number of Packages with civil works (check if consistent with latest procurement plan)	1 package on for the DBO Contract for the WTE Plant.	None.	None.	
Number of DB/DBO packages and status	1 DBO package – not yet awarded			
Number of civil works packages and status	Package 1 (Waste to Energy (WTE) plant and balance of plant with 15 years O&M.) – under bidding process			

¹ PMU to provide detailed response. This log sheet will be attached to the QEMR and disclosed on ADB website.

² PMU – project management unit

³ DB/DBO – design-build or design, build, and operate or where contractor will finalize the detailed engineering design; civil works contract – sufficient details of the package is known and used as basis for bid/contract's Technical Specification

Item	Findings in the QEMR	Comments	Action/s Required	Response by PMU ¹ , if required
EIA cleared for awarded package?	Package 1 is still under bidding process, but draft EIA already cleared by ADB.	As Cat A for Environment, clearance and disclosure of draft EIA needs to be complied with per ADB SPS requirements.	None.	
Safeguard documents disclosed on project website?	Draft EIA disclosed on project website		None.	
QEMR information on implementation phase (bidding, on-going, construction, completed, under operation, others)	No information yet since the DBO Package is still under bidding process.	None.	None.	
QEMR information on construction activities progress	No information yet since the DBO Package is still under bidding process.	None.	None.	
C. Status of compliance with statutory clearances (check EIA for the complete list, summarize the findings for each package – obtained/under application and if obtained, specify validity period)				
Environmental Clearance (EC)	Decision Statement issued by the Maldives EPA is valid until 31December 2021.	None.	None.	
Forest Clearance	Not required.	None.	None.	
No Objection Certificate/Letter	Not required.	None	None.	
Site location clearance	Not required.	None	None.	
Permit/Consent to Construct (or equivalent)	Not required.	None	None.	
Permit/Consent to Operate (or equivalent)	Not required.	None	None.	
Road-cutting permit	Not required.	None	None.	
Utilities shifting permit	Not required.	None	None.	
Tree-cutting permit	Not required.	None	None.	
Others (specify)				
D. Status of Compliance with loan agreements/covenants (verify items in QEMR with project loan agreement)				
The Borrower, through the Project Executing Agency and the Implementing Agency, shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the EIA, the EMP, and any corrective or preventative actions set forth in a safeguards Monitoring Report.	Included.	It is understood that reporting of status is N/A yet for the reporting period.	None.	

Item	Findings in the QEMR	Comments	Action/s Required	Response by PMU ¹ , if required
The borrower shall make available necessary budgetary and human resources to fully implement the EMPs	Included. PMDSC and Independent environmental monitoring expert recruitment is ongoing.	None.	None.	
The Borrower, through the Project Executing Agency and the Implementing Agency, shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to: (a) comply with the measures relevant to the contractor set forth in the EIA and the EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report; (b) make available a budget for all such environmental measures; and (c) provide the Recipient with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the EIA and the EMP.	The EIA is included in the bid documents and will be included in the contract as well. Contract clauses on environment, health and safety are also provided in the report.	None.	None.	
The Borrower, through the Project Executing Agency and the Implementing Agency, shall do the following: (a) submit quarterly Safeguards monitoring Reports to ADB during construction of the project facilities and semiannual Safeguards Monitoring Reports thereafter, and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the EIA and the EMP, promptly inform ADB of this occurrence of each risks or impacts, with detailed description of the event and proposed corrective action plan; (c) no later than 3 months after the Effective Date, engage qualified and experienced external experts or qualified NGOs under a	Included.	The QEMR is the third environmental monitoring report submitted for the project. The first and second QEMR were already cleared and disclosed. It is understood that reporting of status for (b) to (c) is N/A yet for the reporting period.	None.	

Item	Findings in the QEMR	Comments	Action/s Required	Response by PMU ¹ , if required
<p>selection process and terms of reference acceptable to ADB, to verify information produced through the project monitoring process and facilitate the carrying out of any verification activities by such external experts; and</p> <p>(d) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP promptly after becoming aware of the breach</p>				
E. Contractors Compliance with Environmental Safeguards Requirements				
Appointment of Environment, Health and Safety (HSE) and/or nodal person	N/A yet for the reporting period.	It is understood that no information provided yet since there is still no contractor, and that the DBO Package is still at bidding process.	None.	
Submission of site-specific EMPs	N/A yet for the reporting period.			
Submission of CEMP/SEMP implementation report (<i>specify in comments frequency – daily, weekly, monthly or quarterly basis</i>)	N/A yet for the reporting period.			
Site verification by PMU or consultants (<i>verification report should be attached to the QEMR</i>)	N/A yet for the reporting period.			
QEMR compliance matrix on mitigation measures implementation (matrixes are based on approved CEMPs/SEMPs)	N/A yet for the reporting period.			
Other information				
F. Environmental Monitoring				
Rationale				
Parameters to be monitored are commensurate to the impacts, mitigation measures, and project/subproject/package	N/A yet for the reporting period.	It is understood that no environmental monitoring has been conducted yet since the DBO Package is still at bidding process.	None.	
Sampling locations identified and appropriate				
Sampling frequency identified and appropriate				
Sampling collection and analysis are in accordance with internationally-accepted practices				
Standards and performance indicators are compliant with ADB SPS requirements ⁴				

⁴ ADB SPS (Appendix 1 para 33) requires projects to apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines (<https://www.ifc.org/ehsguidelines>). These standards contain performance levels and measures that are normally acceptable and applicable to projects. When host country regulations differ from these levels and measures, the borrower/client will achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the borrower/client will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented ADB SPS.

Item	Findings in the QEMR	Comments	Action/s Required	Response by PMU ¹ , if required
(provide justification if less stringent standards are used)				
G. Environmental monitoring results (narrative based on presented results)				
Air quality results	N/A yet for the reporting period.	It is understood that no environmental monitoring has been conducted yet since the DBO Package is still at bidding process.	None.	
Water quality results				
Noise quality results				
Others				
H. Consultations and/or FGDs during the reporting period				
Number	N/A yet for the reporting period.	It is understood that no consultations or FGDs has been conducted yet since the DBO Package is still at bidding process.	None.	
Reason/s for consultations/FGDs				
Number of participants				
Number of female participants				
I. Trainings, Workshops, Seminars during the reporting period				
Number	N/A yet for the reporting period.	It is understood that no trainings has been conducted yet since the DBO Package is still at bidding process.	None.	
Topics				
Number of participants				
Number of female participants				
J. Grievance Redress Mechanism				
GRM per PAM or EIA established	The GRM has been drafted and awaiting clearance from ADB.	None.	None.	
GRM notified via publication or notice boards				
GRM members identified				
GRM members have capacity to address project-related complaints (<i>detailed information on capacity development of GRM members such as trainings, workshops, briefings, etc should be attached in the QEMR</i>)				
Number of meetings conducted (<i>attach minutes of the meeting</i>)				
K. Complaints Received (detailed information on nature of complaints, summary and status of resolution)				
Number of complaints	No complaints received during the period.	None.	None.	
Nature (<i>provide summary of issues/concerns</i>)				
Status of resolution				
L. Summary of Issues and Corrective Actions				
Major issues/concerns (specify)		None.	None.	

Item	Findings in the QEMR	Comments	Action/s Required	Response by PMU ¹ , if required
Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified	N/A yet for the reporting period.			
M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)				
	N/A	N/A	N/A	
N. Appendixes				
Photos	N/A yet for the reporting period.	It is understood that no photos are included since the DBO Package is still at bidding process. No field level activities yet.	None.	
Summary of consultations	N/A yet for the reporting period.	N/A	None.	
Copies of environmental clearances and permits	Copy of the Decision Statement is included as attachment.	None.	None.	
Contractor's EMP or Site-specific EMPs	N/A yet for the reporting period.	None.	None.	
Checklists	N/A yet for the reporting period.	None.	None.	
O. Other Issues	None	-	-	
P. References	July-September 2021 QEMR Greater Male Waste-To-Energy (WTE) Project			